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Assessment Report on the 2016 Drilling Program

Brookbank Project
Greenstone Gold Mines GP Inc.

Beardmore Area, Thunder Bay Mining Division
Irwin Township
NTS Sheets 42 E/12

Prepared by:
Darren Leduchowski, G.I.T.

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1.0 Summary

Between July 17th, 2016 and December 16th, 2016, Greenstone Gold Mines GP Inc. completed three (3) exploration drilling programs on their Brookbank property (hereafter simply referred to as "the Property") located 15 kilometres' northeast of the town of Beardmore, Ontario in the municipality of Greenstone. A total of fourteen (14) holes totaling 6377.39 metres were drilled between the 3 drilling programs. 1 hole was drilled by Confederation College of Thunder Bay, Ontario and the remaining 13 holes were drilled by Forage G4 Drilling based in Val-d'Or, Quebec. Exploration activity at Greenstone Gold was halted for 2017 and plans to continue exploration have yet to be initiated.

The first program was performed between July 17th, 2016 and early August (exact date of completion unknown). The exploration drill program was designed to test geological model hypotheses and as a training program for Animbiigoo Zaagi igan Anishinaabek (AZA) and Biinjitiwaabik Zaaging Anishinaabek (BZA) first nations organized in conjunction with Greenstone Gold Mines GP Inc. and Confederation College. A total of 116.3 metres were drilled by Confederation College.

The second program was performed between October 24th, 2016 and December 4th, 2016. Six (6) holes were drilled by Forage G4 drilling totaling 3081.39 metres. The exploration drilling program was designed to increase confidence in the resource and to test geological model hypotheses. Results from the program have confirmed that the geological hypotheses are correct and the confidence in the resource have increased.

The third program was performed concurrently with the second program between November 8th, 2016 to December 16th, 2016 east of the main resource that was drilled by the second drilling program. Seven (7) holes were drilled by Forage G4 drilling for a total of 3179.7 metres, however, one of the holes was abandoned and restarted for a total of 6 exploration holes drilled. The purpose of the holes was to test geological model hypotheses that were interpreted from historic drill logs, and observed on outcrop by a field visit in late July 2016 at Brookbank East. Significant results are outlined in the conclusion (see section 6.3) below.

2.0 Property Description, Access, Climate and Physiography

The Brookbank property is located 15 kilometres' northeast of the town of Beardmore, Ontario in the municipality of Greenstone. The property is located within the townships of Irwin, Sandra, Walters, Leduc and Legault on NTS Map sheets 42E/11 and 42E/12 (Figure 1). All work referred to in this report was completed in Irwin Township.

The closest major city is Thunder Bay Ontario which is located approximately 180 kilometres southwest of the property. The city of Thunder Bay has a population of 109,000 and provides support services, equipment and skilled labour for both the mineral exploration and mining industry. Rail, national highway, port, and international airport services are also available out of Thunder Bay.

The land surrounding the property is Crown Land, with limited access that is used primarily for recreation. Seasonal cottages, situated on Windigokan Lake are located approximately seven kilometres west of the Brookbank Zone. The property can be directly accessed through Windigokan Lake Road, which runs off highway 11 just over 13 kilometres' northeast of Beardmore, Ontario. Windigokan Lake Road is a gravel road that must be plowed in the winter to access the property year-round.

The property is located within the Lake Nipigon Eco-region of the Boreal Shield Eco- zone. The climate is characterized by warm summers and cold, snowy winters. The temperature range for the winter months (November to March) is on average -40°C to 5°C, whereas in the summer months (June to September) the temperature range is on average 30°C to 5°C. Precipitation is variable from year to year, with the bulk of the yearly total occurring as showers and thunderstorms in the summer months. The area is snow covered for approximately 5 months of the year. Weather conditions rarely become severe in the area and exploration activities can persist throughout the year with the only weather related issues pertain to heavy snowfall or spring breakup.

The topography of the property is characterized by rolling hills and east-west rocky ridges, with intervening swampy ground and lakes. Relief does exceed 100 metres in certain areas of the property; however, it is generally less than 10 metres.

The climate can be classified as humid continental and supports a wide range of vegetation. The dominant tree species in the area are typically of mixed forest including; balsam fir, black spruce, jack pine, and poplar. Ground cover consists of moss and lichen. Hummocky bedrock outcrops covered with this acidic moraine deposits, fluvial lacustrine silts, and sands dominate the landscape.

Drainage within the northern portion of the property is via the Namewaminikan River which eventually drains into Lake Nipigon to the west. The southern portion of the property drains south to the Blackwater River, which flows westerly.

Figure 1 Property Location Map.

3.0 Land Tenure

The Brookbank property consists of 613 unpatented mining claims and 77 mining leases totaling to 690 mining claims. The Brookbank property covers 15,847.89 ha which includes the Brookbank, Cherbourg and Foxear zones.

Greenstone Gold Mines (hereafter referred to as “the company”) wholly owns 18 leased mining claims and 5 unpatented mining claims. Two joint ventures with Metalore Resources make up the rest of the property. 240 mining claims are 74% owned by Greenstone Gold Mines and 26% owned by Metalore Resources. The second joint venture is 79% Greenstone Gold Mines and 21% Metalore which makes up 427 mining claims.

Claim details for the entire Brookbank property is given in Appendix A. Figure 2 shows the Brookbank claim block land tenure.

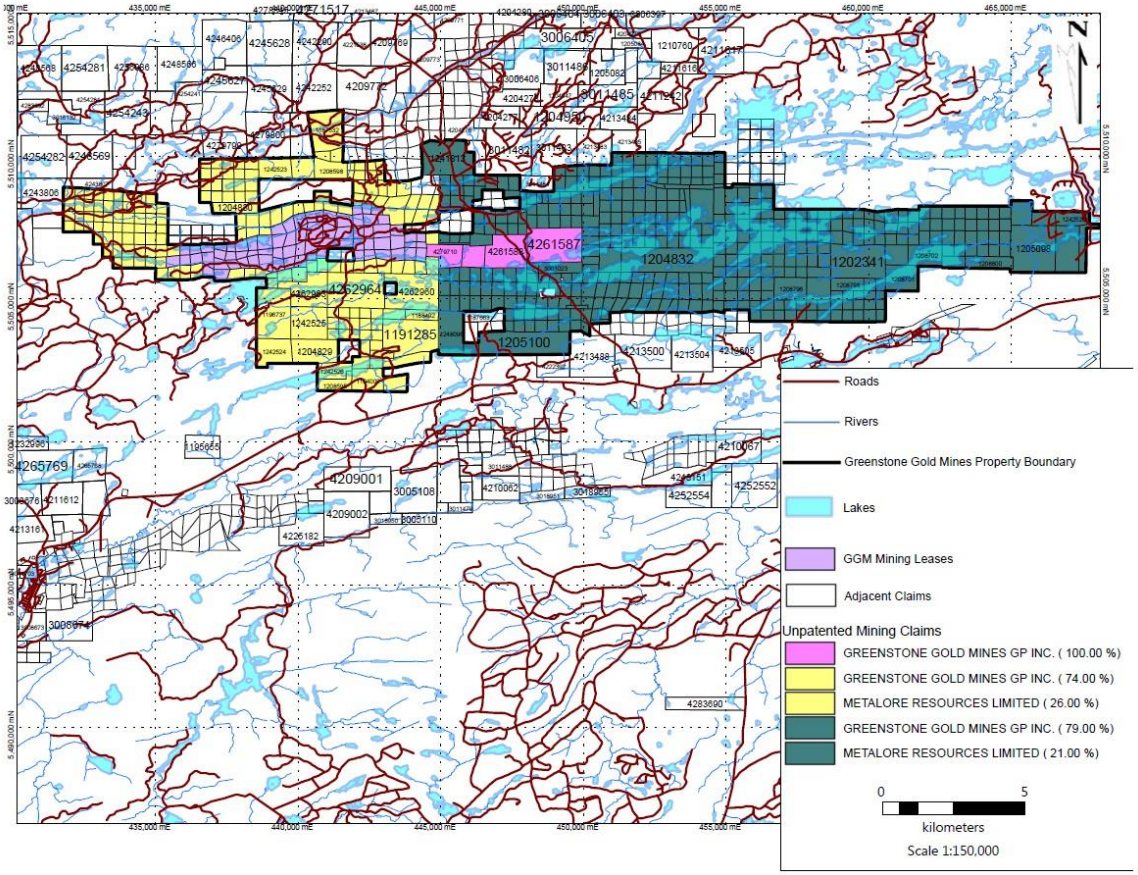

Figure 2 Land tenure of the Brookbank claim block, including joint venture agreements.

The work detailed in this report was conducted on a combined 5 mining leased claims. The claims are 100% owned by Greenstone Gold Mines. See table 1 for claim information.

Table 1 Greenstone Gold Mines' claim holdings at the Brookbank Property where drilling was performed, 2016

Township	Claim ID	Lease	Recording Date	Claim Due Date	Claim Type	Percent Option
Irwin	TB29029	109291	2012-Jun-01	2033-May-31	Lease	100% GGM
Irwin	TB29030	109291	2012-Jun-01	2033-May-31	Lease	100% GGM
Irwin	TB29038	109291	2012-Jun-01	2033-May-31	Lease	100% GGM
Irwin	TB29039	109291	2012-Jun-01	2033-May-31	Lease	100% GGM
Irwin	TB29041	109291	2012-Jun-01	2033-May-31	Lease	100% GGM

4.0 Geological Setting

4.1 Regional Geology

The Brookbank deposit lies within the Beardmore-Geraldton Greenstone Belt (BGGB), which is an Archean metavolcanic-metasedimentary terrane. It lies at the boundary between the Quetico Subprovince and the eastern Wabigoon Subprovince, both being located within the Superior Province. The BGGB can be further sub-divided into east striking sub belts, all greenschist facies of metamorphic grade.

The overall structure of BGGB appears to be one of six stacked, imbricated, internally northward younging sheets which have been interpreted as the product of accretionary wedge tectonics. Large scale D1 thrusting occurred along the southern margin of the Wabigoon Subprovince in the Beardmore Geraldton area between 2696 Ma and 2691 Ma. A comprehensive D2 event (2692 Ma to 2686 Ma) steepened the beds to a near vertical position, forming large scale fold structures, resulting in what was to become the current structure of the belt (Smyk, M., Fralick, P., and Hart, T., 2005).

The following is taken verbatim from Blakely and Moreton (2009).

The Brookbank Project lies near the southern boundary of the east-trending, isoclinally folded Wabigoon Subprovince of the Superior Structural Province (Figure 3). The Wabigoon Subprovince (Wabigoon) is a 900 km long, 150 km wide, granite greenstone strip that consists of metamorphosed volcanic and subordinate sedimentary rocks, ranging in age from about 3 to 2.71 billion years old. These units are cut by circa 3 to 2.69-billion-year-old granitoid batholiths, gabbroic sills and stocks. The Wabigoon has been divided by Blackborn et al. (1991) into three regions, each with differing structural styles and proportions of the major units. The Brookbank Project is located within the eastern region of the Wabigoon where the geology largely consists of isolated greenstone septa surrounded by granitoid units. The Wabigoon has been subjected to at least two major structural events, the first of which is an early aggregation of supracrustal assemblages. The second deformation relates to the interaction of the Wabigoon with its neighbouring geology; this results in contrasting patterns between the interior and margins of the subprovince (Blackburn et al., 1991).

The Wabigoon is bordered to the south by the Quetico Subprovince, a linear strip of dominantly metasedimentary rocks, with migmatitic and anatectic derivatives, that has a relatively consistent width of 70 km. It extends from Minnesota in the southwest, eastwards across Ontario for nearly 1,000 km. It consists predominantly of metamorphosed turbiditic wacke, largely derived from, and deposited during and after, the volcanic climax in the neighbouring Wawa, Wabigoon and Abitibi subprovinces, during the period from 2.70 to 2.69 billion years. The southern margin of the Wabigoon displays a linear structural grain manifested by repetitive volcanic and sedimentary sequences in which stratigraphic facing may be inward, outward or inconsistent. Major transcurrent faults occur at, and adjacent to, the southern margin of the Wabigoon, paralleling the structural grain. The subprovince boundaries are presently considered to be predominantly tectonic but in some

places, may originally have been depositional (Williams, 1991).

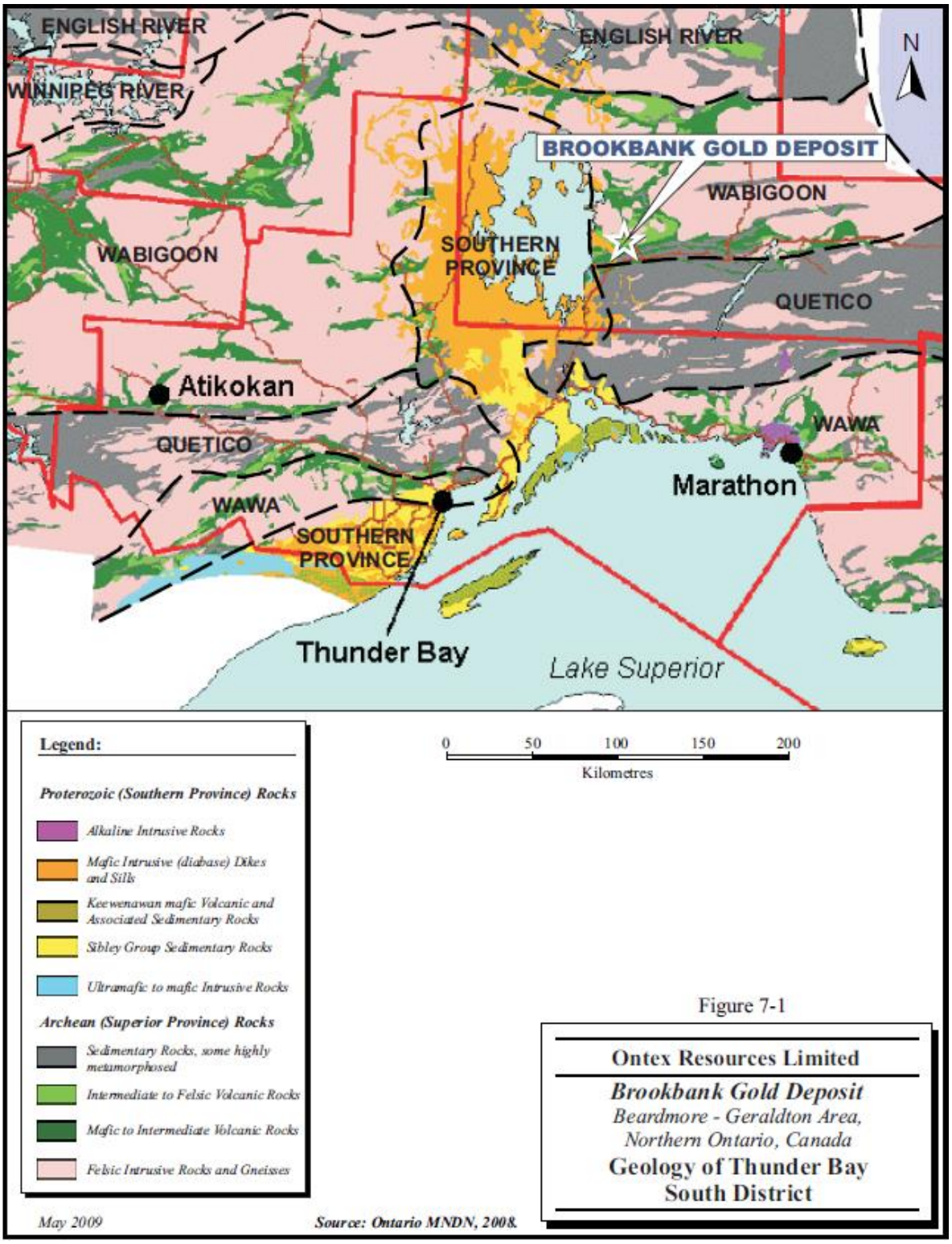

Figure 3 Regional Geology (from Blakely and Moreton, 2009).

4.2 Local Geology

The following is also taken verbatim from Blakely and Moreton (2009).

The Brookbank Project lies near the southern margin of the Beardmore-Geraldton greenstone belt (BGGB). The BGGB is a Neoarchean metavolcanic-metasedimentary terrane at the boundary of the eastern Wabigoon Subprovince and the Quetico Subprovince. The following description is taken from Smyk et al. (2005).

The BGGB can be subdivided into six east-striking sub-belts, all of greenschist facies metamorphic grade. These are the northern metasedimentary sub-belt (NMB), northern volcanic sub-belt (NVB), central metasedimentary sub-belt (CMB), central volcanic subbelt (CVB), southern metasedimentary sub-belt (SMB) and the southern volcanic sub-belt (SVB) (Devaney and Williams, 1989; see also Figure 4).

Although these sub-belts are fault-bounded, current consensus suggests that they probably reflect an original sedimentary assemblage deposited on a cratonic margin in environments ranging from alluvial fan-braid plain in the NMB, through fan delta-braid delta in the CMB to a submarine fan/ramp in the SMB. Original continuity of this succession is supported by consistent stratigraphic trends and sedimentary structures that mostly young to the north. Isoclinal folds notwithstanding, the overall structure of the BGGB appears to be initially one of stacked, imbricate, internally northward-younging sheets which have been interpreted as the product of accretionary wedge tectonics.

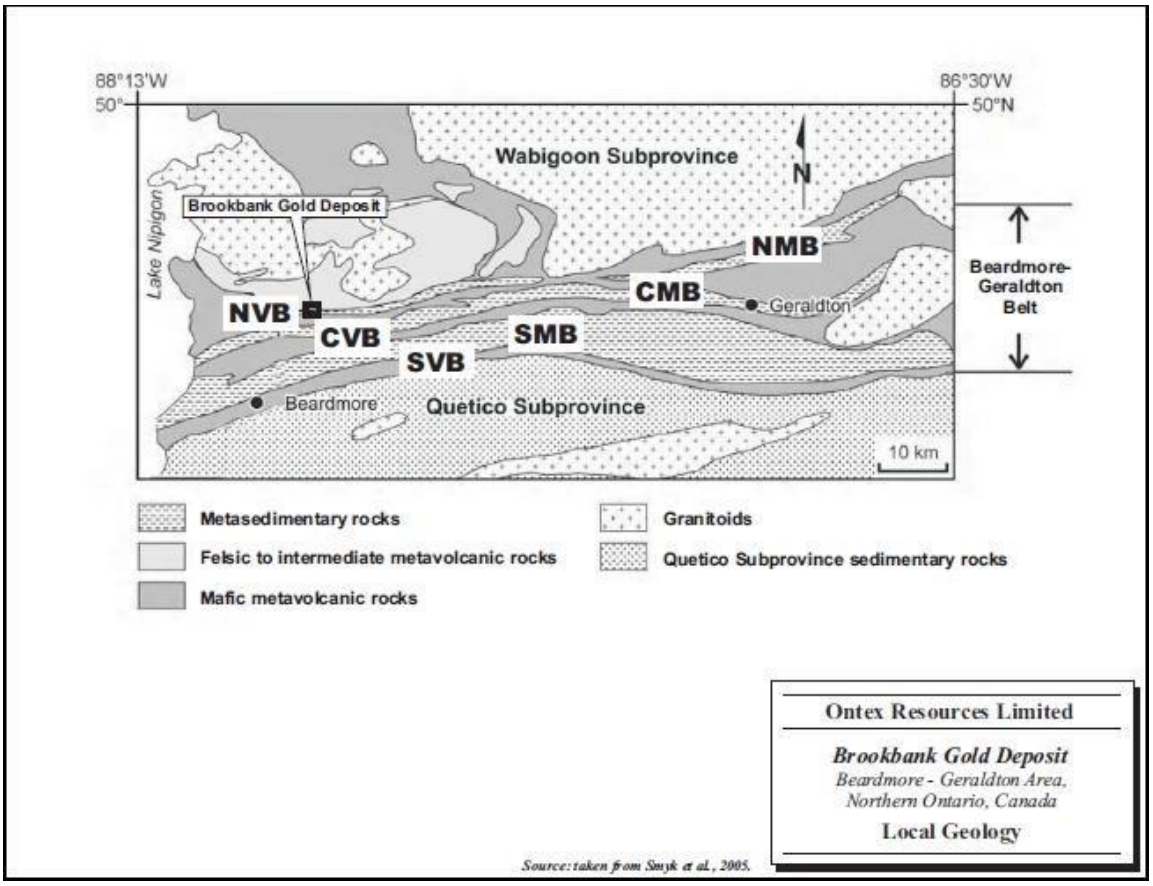

Figure 4 Local Geology (from Blakely and Moreton, 2009).

4.3 Igneous Rock

The following is taken verbatim from Blakely and Moreton (2009).

Mafic metavolcanic rocks of the SVB consist of massive and pillowed flows, with minor tuffs, lapilli tuffs and tuff breccias with associated interflow chert-magnetite iron formations. The CVB consists of intermediate massive and pillowed flows with significant tuffs, lapilli tuffs and tuff breccias and minor interflow chert-magnetite iron formation. The NVB is subdivided into the northern Bish Bay assemblage (BBA) and southern Poplar Point assemblage (PPA).

The BBA is composed of east striking mafic pillowed to massive flows and rare tuffs resembling the SVB. The PPA consists of northwest striking intermediate flows, tuff breccias and tuffs resembling the CVB, with subordinate mafic massive and pillowed flows.

A number of igneous rock types intrude the supracrustal rocks of the BGGB. These include a series of mafic to ultramafic, synvolcanic rocks, intermediate to felsic synvolcanic rocks, mafic post-tectonic intrusions and diabase dykes. The synvolcanic gabbroic rocks form thin sills sub-parallel to the strike of the mafic metavolcanic rocks of the SVB and the BBA. A large composite intrusion within the BBA displays both gabbroic and peridotitic phases in its southern and

northern parts, respectively. A series of intermediate to felsic dikes and sills, ranging from massive granodiorite to quartzporphyritic, feldspar-porphyritic and feldspar-quartz-porphyritic phases, occurs within the metavolcanic rocks of the PPA. These units appear to have been emplaced along the regional foliation, although some bodies are sub-horizontal in orientation. A feldsparporphyritic granodiorite dike intrudes the mafic flows of the SVB and resembles the dikes of the PPA. Late, post-tectonic diorite sills predominantly occur within the metasedimentary and metavolcanic rocks along the contact between the SSB and CVB. Additional intrusions located along the northern and southern contacts of the PPA are generally undeformed diorite sills that display chilled contacts with the metasedimentary rocks. A swarm of narrow, generally north-striking diabase dikes intrudes the supracrustal rocks and appears to be predominantly Paleoproterozoic in age. A series of Mesoproterozoic diabase sills of the Nipigon Sill Complex intrude all other supracrustal rocks of the BGGB.

4.4 Sedimentary Rock

The following is taken verbatim from Blakely and Moreton (2009).

The NMB, the northern (uppermost) third of the CMB, and the northernmost portion of the SMB are dominated by a conglomeratic assemblage with minor amounts of sandstone. The clast-supported conglomerates are poorly to moderately sorted, and almost always non-graded with a poorly to moderately sorted sand matrix. Bedding is defined by variations in average or maximum clast size between units, but it is commonly indistinct. Scouring is locally preserved, but most other primary features such as imbrication have been destroyed by deformation. Sandstones interbedded with the conglomerates commonly appear massive, but in some outcrops planar lamination and cross-stratification are present. They have different forms ranging from lenses in conglomeratic beds; thin, irregular sheets blanketing conglomeratic beds; wedges abutting conglomeratic beds; and thicker units separating conglomerate layers. Clast types in the conglomerates are almost exclusively igneous, representing a suite of rocks like those present in the Onaman-Tashota volcanic terrane to the north.

The turbiditic association of the SMB can be divided into a clastic association and a chemical association, the latter with a high proportion of oxide-facies, banded iron formation (BIF) layers. In the chemical association, clastic interbeds are generally less than several centimeters thick, and range in grain size from silt to coarse sand. Upward- thickening and upward-coarsening trends over several metres are locally present, as at Solomon's Pillars and the Leitch Mine near Beardmore. Within the overall upward trend, oscillations between silts, sands, and iron formation occur. Depending on the relations between these types of beds, four iron formation lithofacies associations (IFLA) can be defined.

Conglomerates contain mainly mafic to felsic volcanic and granitic clasts. Although flattened clasts indicate that IFLA outcrops are tectonically thinned, their associations are primary, with the conglomeratic units erosively cutting down into BIF- sandstone packages. Transitions between various IFLA types can be gradual or abrupt.

Some silt-sand successions containing iron formation exhibit intervals of thicker and well-

graded clastic beds. They form structured sections up to several metres thick within successions that are otherwise generally disorganized.

Clastic units in the lower two thirds of the CMB and the SMB are divisible into three lithofacies associations: a thin-bedded, turbidite-dominated association (LA2); a medium bedded, turbidite-dominated association (LA3); and a thick-bedded association (LA4). LA2 consists mostly of graded, less than 10 cm thick siltstone and/or sandstone beds that are either unstructured or thin and fine upwards over one metre to three metres. LA3 is divisible into two types, LA3a and LA3b. LA3a consists of medium- to coarse- grained sandstones with sharp bottom and top contacts. Parallel lamination is present near the tops of some of the otherwise massive beds. These successions are unstructured. LA3b is similar to LA3a except these beds are organized into either upward-thickening or upward-thinning trends. Thick, poorly graded sandstones dominate LA4. The beds typically have a coarse sand or pebbly base, grading into a thick, poorly sorted, massive central area. They are often abruptly capped by thin, fine-grained sandstone. Irregular, erosional bases and scattered rip-up clasts are common.

Structured, upward-thinning and upward-fining sequences, metres to tens of metres thick, are present in the area south of Beardmore (Figure 3). The successions are topped by Bouma-style CDE and/or DE turbidites (where C is a cross-laminated sand unit, D is a parallel laminated silt unit and E is a mud layer). These are abruptly overlain by massive grain flows/high-density turbidites with internal inverse- to normal-graded, conglomeratic bands. Pebbles present in the conglomerates are mainly felsic igneous rocks (extrusive and intrusive), while rip-up clasts are not the expected mudstone or siltstone, but rather clay- and silt-rich, fine-grained sandstone. Load structures are ubiquitous throughout the area. Commonly, the base of one unit sags into the underlying beds. Locally, multiple internal loads are developed, usually in the B division (parallel laminated sands). These loads sag into the A division (sands and/or coarser-grains), in places extending into the underlying beds.

4.5 Structure

The following is taken verbatim from Blakely and Moreton (2009).

After deposition of the clastic succession, the area was subjected to thrust faulting, regional folding and dextral shearing. Thrust faulting imbricated the regional volcanic and sedimentary packages into thrust stacks (Devaney and Williams, 1989). This D1 thrusting may be associated with uncommon, early, F1 folds. The youngest detrital zircon recovered from the sedimentary units is 2690 +/- 2 Ma and this puts a maximum age on the thrusting event.

The D2 event is characterized by tight to isoclinal folds and a flattening strain fabric identified by transposed bedding and flattened clasts and/or pillows. A homoclinal, north younging sequence of regional extent developed at this time and it appears to represent the sheared-off southern limb of a larger syncline. D2 deformation also affects altered and gold-mineralized porphyry dykes in the syn-tectonic Croll Lake stock which has a UPb age-date of 2691+3/-2 Ma. An age of 2699±1 Ma for a gold-mineralized feldspar porphyry dyke at the Hardrock Mine and

identical ages of 2690±1 Ma for two phases of the Croll Lake stock put constraints on the timing of major deformation and hydrothermal activity in the belt.

The final event, D3, occurred as regional transpression developed in the compressive framework of the area. Vertical bed orientations developed during D2 did not refold but rather were overprinted by a steeply dipping, regional cleavage. Partitioning of the strain, during east-west dextral shear, between less competent argillites and more competent sandstones and porphyries resulted in cleavage refraction near lithological contacts. The pervasive cleavage developed in the Paint Lake shear zone at this time shows a progressive rotation towards the orientation of the zone. This is in contrast to the Barton Bay Lithotectonic Zone (BBLZ) where the S2 fabric was reactivated to accommodate the D3 shear. Some folds were generated during this interval but they tend to be smaller Z- folds, overprinting limbs of regional F2 folds. Shear zones active at this time were dextral with nearly horizontal displacements.

4.6 Property Geology

The Brookbank Property is in a dextral shear zone localized between the metasediments and metavolcanics. The ore zone is hosted in a steeply dipping shear zone at the contact between the footwall polymictic conglomerate and the hanging-wall-calc- alkaline arc basalt (DeWolfe et al., 2006).

During the early stages of shearing the basalt acted as a structural and chemical trap that localized brittle deformation, veining, and gold deposition (DeWolfe et al., 2006). The mineralized zone is approximately 20 metres wide and extends from the sheared contact up into the meta-basalt. Auriferous quartz-carbonate veins occur in the mineralized zone along with a wide ankerite alternation zone. The mineralization itself is finely disseminated pyrite and arsenopyrite filling the folded and boudinaged quartz-carbonate veins and within the sheared meta-basalt host rock.

The following is taken from Thompson (2006).

The Brookbank property is underlain predominantly by east-west trending and steeply south to vertically dipping metavolcanic and metasedimentary rocks (Figure 5). Metavolcanic rocks consist of massive and pillowed, locally amygdaloidal, flows of basaltic composition along with related tuffaceous rocks. Pillowed flows exhibit tops to the north. They are locally intercalated with coarser-grained rocks of similar composition that have been interpreted as either intrusions or coarse-grained phases at the centre of thicker basaltic flows. The metavolcanic rocks are locally intruded by quartz-feldspar porphyritic dykes.

Mafic metavolcanic rocks are fault-bounded against domains of metasedimentary rocks. The northern domain consists of polymictic conglomerate with pebble- to boulder- sized, rounded to sub-rounded clasts in a feldspar-quartz-sericite matrix. Clasts consist of volcanic and intrusive rock types of various compositions, quartz pebbles and jasper, the latter suggesting affinity with Timiskaming Formation conglomerates in the Timmins (Porcupine) Mining District.

Metasedimentary domains south of Windigokan Lake also contain polymictic conglomerate as well as feldspathic and quartzose sandstone and wacke, siltstone, minor argillite and hematitic iron formation.

Felsic to intermediate pyroclastic rocks and flows occur in the north part of the property and are fault-bounded with mafic metavolcanic rocks across the Paint Lake Fault. They consist of tuff breccia, pyroclastic breccia and tuff, and massive to porphyritic rhyolite flows.

Intermediate to mafic intrusions cut the metavolcanic and metasedimentary rocks in the central part of the Brookbank property. They consist of quartz diorite, diorite and gabbro. North-trending, flat-lying, locally porphyritic diabase dykes of Keweenawan age cut the metavolcanic and metasedimentary rocks along the western boundary of the property in Sandra Township and along the western boundary of Irwin Township.

The Brookbank property is transected by an east-west trending zone of extensive heterogeneous brittle and ductile deformation and hydrothermal alteration and is referred to as the “Brookbank Shear Zone”. Deformation is locally more than one kilometer wide and consists of anastomosing bands of intense fissile shearing, quartz veining and fracturing with associated ductile deformation around domains of less deformed metavolcanic and metasedimentary rocks. The deformation can be traced for a minimum of ten kilometres along strike through Irwin Township and remains open in either direction.

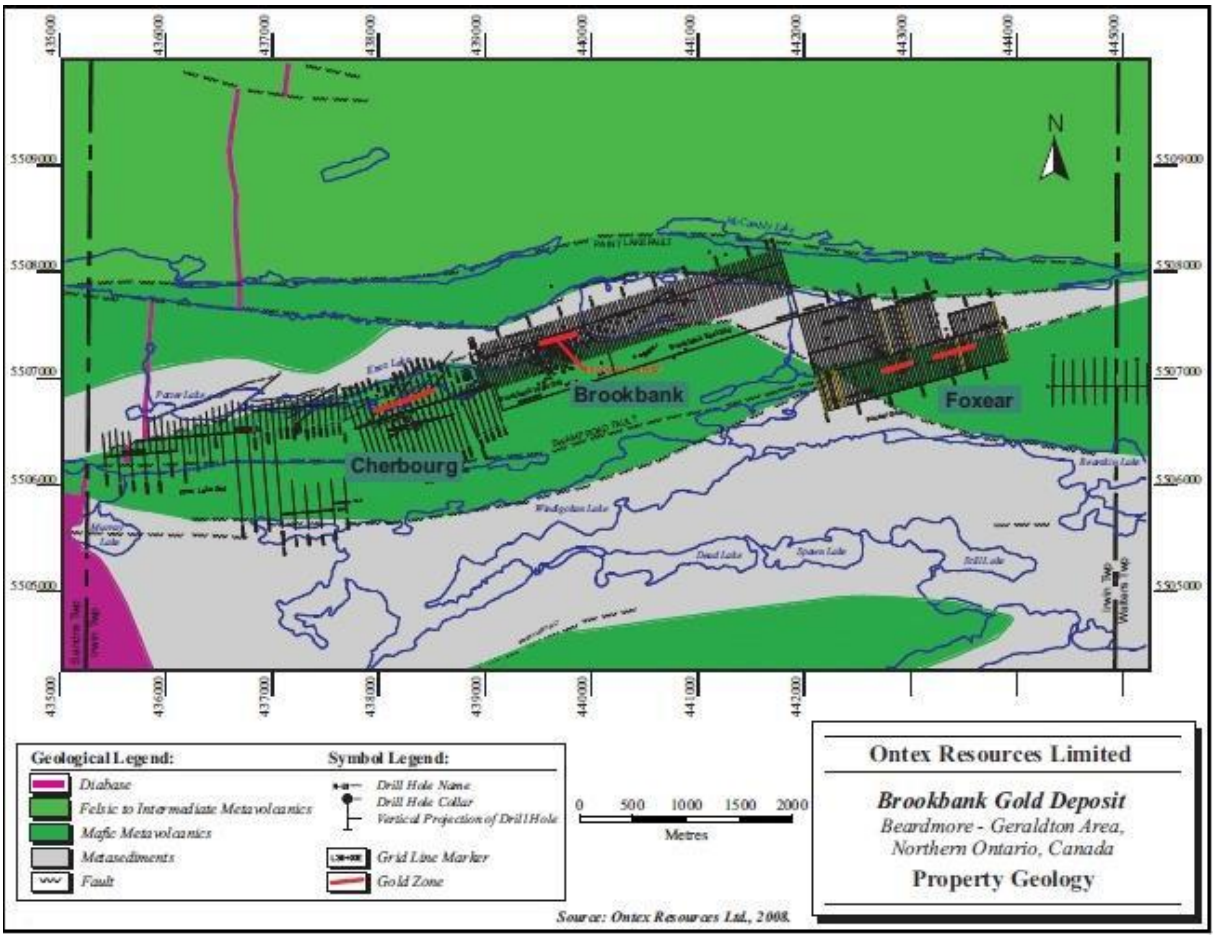

Figure 5 Property Geology (from Blakely and Moreton, 2009).

5.0 Exploration History

The following summary of exploration activities on the property is adapted from Thompson (2006) and is restricted to those leases and claims covering the Brookbank, Cherbourg and Foxear zones.

1934	Connell Mining and Exploration Co. Ltd's program of a total of 17 trenches, plus numerous test pits, exposed a rusty shear zone in mafic flows over a strike length of 396 m. Gold values from samples in this zone were low and erratic, and the results for the diamond drilling are not known. Work was suspended in late 1935.
1944	Noranda Exploration Company Limited (Noranda) completed detailed mapping, trenching and 1,860 m of X-ray diamond drilling in 40 holes to test the Brookbank Zone.
1950	Brookbank-Sturgeon Mines Limited (Brookbank-Sturgeon), a predecessor company to Ontex, acquired the claims covering the current property in 1950; however, there is no record of the work performed (if any) by Brookbank-Sturgeon.
1974-1975	Lynx Canada Explorations Limited (Lynx) completed geological mapping, ground magnetic surveys and diamond drilling over a portion of the property. Lynx carried out surface mapping and a magnetometer survey on the eastward extension of the Noranda showing. In the following year, Lynx completed six drill holes totalling 376 m to test a thin siliceous band along the metavolcanic-metasedimentary contact.
1981	Metalore optioned the property from Brookbank-Sturgeon and completed line-cutting followed by an electromagnetic (EM) survey over the entire grid and a very low frequency electromagnetic (VLF-EM) survey over selected portions of the property. Metalore subsequently drilled 30 holes totalling 3,567 m.
1982-1983	Metalore drilled three widely spaced holes totaling 330 m to test the metavolcanic-metasedimentary contact on the Brookbank West property and one 453 m hole on the Foxear property.
1984	Metalore completed an additional 62 drill holes totaling 6,946 m, including four wedges. Metalore commissioned a combined helicopter-borne magnetometer, gamma ray spectrometer and VLF survey over its holdings in Sandra, Irwin and Walters townships, including the Brookbank property.
1984-1985	Metalore drilled 23 holes, including 14 wedges, on the Brookbank Zone totalling 4,421 m, six holes on the Cherbourg Zone totalling 6,684 m, and 26 holes on the Foxear Zone totalling 2,202 m.
1986	Metalore concentrated on the Cherbourg Zone and completed 43 drill holes for a total of 4,368 m. On October 1, 1986, Metalore entered into an exploration and development agreement with Hudson Bay Mining and Smelting Co., Ltd. (Hudson Bay).
1987	Hudson Bay drilled 44 holes for a total of 11,203 m on Brookbank and 10

	holes for a total of 2,777 m on Foxear. Mineralogical studies and preliminary metallurgical testing was completed on one mineralized sample and approximately 70 drill collars were located and surveyed.
1988	Metalore's agreement with Hudson Bay was terminated in 1988 because of an ownership dispute between Metalore and Ontex. In October 1998, Ontex acquired a release of Metalore's right to earn an interest in the Brookbank leases, subject to a 1% Net Smelter Royalty (NSR) due to Metalore upon production.
1989	Placer Dome Inc. (Placer) and Metalore signed an option agreement to which Ontex was not a party. From early August to late November of that year, Placer completed a program consisting of power stripping/trenching, detailed geological mapping, channel sampling, and diamond drilling. Placer exposed an area of about 650m by 15 m and took 215 channel samples totalling 244 linear metres. Detailed mapping was completed at an imperial scale of one inch to ten feet. During 1989, drilling at the Brookbank Zone consisted of 18 holes totalling 7,010 m to test the lateral and down-dip extensions to a vertical depth of 670 m. A Sperry Sun gyro- log system was used to confirm downhole deviations for 13 of the 1989 holes and 15 of the pre-existing holes. Additional Placer drilling at Cherbourg consisted of five holes totalling 1,437 m with a further two holes totalling 984 m drilled at Foxear. Placer dropped its option due to ongoing litigation between Ontex and Metalore.
1990-1996	The Brookbank property was the subject of Superior Court of Ontario litigation between Ontex and Metalore (Ontex Resources Ltd. v. Metalore Resources Ltd. (1990), 75 O.R. (2d) 513 (Gen. Div.), with an appeal allowed in part (1993) 13 O.R. (3d) 229, 103 D.L.R. (4th) 158, 12 B.L.R. (2d) 226 (C.A.)). Costs were subsequently awarded to Ontex ((1996), 45 C.P.C. (3d) 237 (Ont. Assmt. Officer)).
1993-1994	Metalore completed four holes totalling 533 m on the Brookbank Zone, fifteen holes totalling 2,107 m at Cherbourg and seven holes (including one wedge) totalling 3,323 m at Foxear. In 1994, reviews of the data by both Micon International Ltd. and J.R. Trussler & Associates, on behalf of Metalore, were positive and additional work was recommended by both companies. However, the ongoing litigation between Ontex and Metalore precluded work being done.
1998	Ontex and Metalore announced a settlement whereby Ontex acquired a release of Metalore's right to earn an interest in the Brookbank leases and Ontex took over as the operator of the Brookbank Deposit and all of the Metalore property in the area.
1999	Ontex drilled 35 diamond drill holes for a total of 11,299 m, of which 17 holes (including one wedge) totalling 4,730 m were drilled on the Brookbank Zone, 15 holes (including three wedges) totalling 5,724 m on the Cherbourg Zone, and three holes totaling 795 m on the Foxear Zone.

2000	Ontex drilled 58 holes for a total of 19,929 m of which 33 holes totaling 10,607 m were drilled on the Brookbank Zone (including eight wedges) and 25 holes totaling 9,322 m on the Foxear Zone. In the spring of 2000, Ontex undertook a GPS survey to accurately locate all drill hole collars and compiled all available diamond drill hole data in a single database.
2001	Ontex drilled nine holes (2,523 m) in the Cherbourg Zone and a further 12 holes in the Foxear Zone (4,530 m).
2002	Ontex drilled 28 holes for a total of 3,890 m in areas outside of the Brookbank, Cherbourg and Foxear Zones.
2006	Ontex drilled 14 holes for a total of 3,000
m. 2007	7 holes were drilled for a total of 1,208 m.
2008	Ontex drilled 18 holes on the Brookbank Zone (5,703 m in total) and nine holes on the Cherbourg deposit (3,823 m in total). No drilling was performed on Foxear. Six holes on Brookbank West were abandoned after less than 55 m was drilled although all six holes were restarted in a slightly different location. This drill metreage (193 m) is included in the Brookbank total. Major Drilling Group International, based in Moncton, New Brunswick (Major Drilling), drilled the first few holes of the 2008 campaign, while the balance was drilled by Chibougamau Diamond Drilling, based in Chibougamau, Quebec.
2009	48 hole drill program was completed on the property for Goldstone Resources Inc. A total of 19,633 metres were drilled and 1878 samples were taken. The program targeted the main Brookbank Deposit; a target in the volcanics located a few hundred metres to the east of the Brookbank, as well as the Brookbank East Showing (BBE). Results of the drill program were encouraging and warrant further drilling.
2012-2013	2 hole drill program was completed on the Brookbank project by Premier Gold Mines, totalling 1,393 metres. These holes were designed to target IP anomalies near the known gold deposit at Brookbank.

6.0 2016 Drill Program

6.1 Drilling Programs

Three (3) drilling programs were completed on the Brookbank property between July 17th and December 16th, 2016: Brookbank exploration training program, Brookbank deposit drilling and Brookbank East drilling. The drilling took place on 5 leased mining claims, outlined in Table 1. In total, 14 holes (1 abandoned, therefore 13 exploration holes) were drilled by the 3 drilling programs (see Table 2 for drill hole information). 1 hole was drilled by Confederation College and the remaining 13 holes were drilled by Forage G4 drilling. Exploration activity at Greenstone Gold was halted for 2017 and plans to continue exploration have yet to be initiated. Drill hole logs can be found in Appendix C, assay certificates in Appendix H, and drill sections in Appendix D.

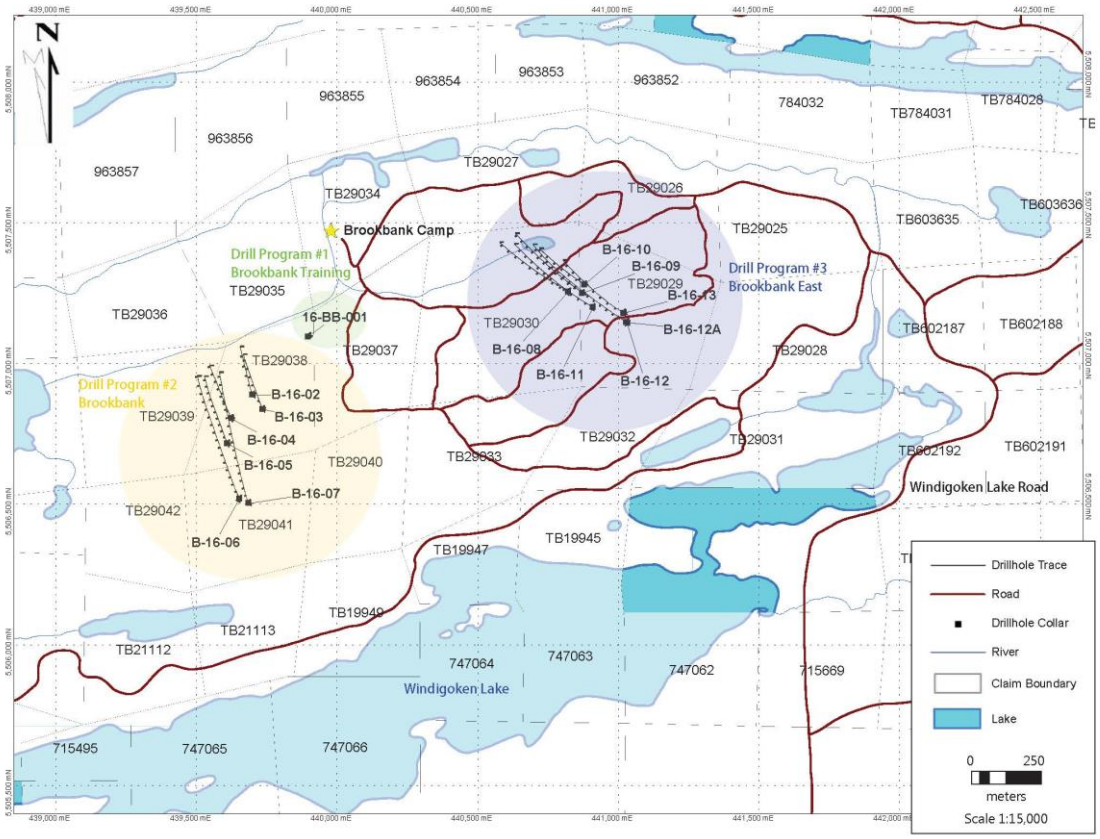

Figure 6 Drill traces of 3 drilling campaigns performed at Brookbank in 2016 (green – Brookbank training, blue – Brookbank East, yellow – Brookbank).

The Brookbank exploration training program was performed between July 17th, and early August 2016 and was a joint organization between Greenstone Gold and Confederation College. The program had 2 purposes: (1) to follow up exploration on an economical historic drill hole and (2) to act as a training opportunity for the first nation communities of AZA and BZA. Specifically, the training program was designed to give students an

overview of drilling, how the drill works and driller helping. Seven students were trained by Greg Smith on a drill owned and operated by Confederation College. A total of 116.3 metres were drilled. Results from the drilling program were economic and confirmed historic results from a 1980's drillhole.

The second exploration program at Brookbank included 6 holes, totalling 3081.39 metres drilled between October 24th, 2016 and December 4th, 2016 and targeted the main Brookbank resource. All drilling was done by Forage G4 drilling based out of Val-d'Or, Quebec. The program was designed to increase confidence in the resource and to test geological model hypotheses. Results from the drilling program were economical, and localized the area of greater uncertainty within the deposit, and defined targets at depth to prepare for future pre-feasibility.

The third exploration program at Brookbank was performed between November 8th to December 16th, 2016. The drilling took place at Brookbank East, approximately 1 kilometre east of the second exploration program. Seven (7) holes were drilled by Forage G4 drilling for a total of 3179.7 metres, however, one of the holes was abandoned and restarted for a total of 6 exploration holes drilled. The purpose of the program was to test the intersection of the main mineralized iron-carbonate shear zone and many oblique structures observed at outcrop and interpreted from the detailed magnetics. This was motivated by a field visit in late July 2016 that observed promising geological structures at surface. Significant Au intersections are outlined in the conclusion below (section 6.3), however not all of the data has been validated. As it stands, structural measurements on oriented core need to be processed and analyzed in the future.

Table 2 Drill Hole Information.

Hole_ID	Campaign	Lease_ID	Easting	Northing	Elevation	Max_Depth	Dip	Azimuth	Completed
16-BB-001	Training	TB29038	439898.18	5507319.87	329.14	116.3			10/09/2016
B-16-02	Brookbank	TB29038	439700.80	5507113.75	325.43	247	-47.1	344.3	29/10/2016
B-16-03	Brookbank	TB29038	439736.64	5507063.21	325.93	333	-54	339.8	29/10/2016
B-16-04	Brookbank	TB29038	439625.63	5507031.01	326.17	353.5	-57	336.9	02/11/2016
B-16-05	Brookbank	TB29038	439612.08	5506940.66	334.57	524.89	-61	338.7	07/11/2016
B-16-06	Brookbank	TB29041	439654.62	5506744.99	350.23	801	-57.1	337.7	17/11/2016
B-16-07	Brookbank	TB29041	439686.76	5506729.01	349.37	822	-57.3	343.8	04/12/2016
B-16-08	BB East	TB29030	440824.35	5507480.94	350.54	466.7	-50	300	15/11/2016
B-16-09	BB East	TB29029	440872.47	5507474.93	354.73	561	-55	305.2	25/11/2016
B-16-10	BB East	TB29029	440880.71	5507505.90	354.70	303	-50.3	304.7	01/12/2016
B-16-11	BB East	TB29029	440911.09	5507425.11	352.37	597	-55.3	299.8	09/12/2016
B-16-12	BB East	TB29029	441030.06	5507372.27	340.75	36; abandoned			06/12/2016
B-16-12A	BB East	TB29029	441030.06	5507372.27	340.75	784	-57	303	16/12/2016
B-16-13	BB East	TB29029	441020.30	5507405.18	345.99	432	-50	300.2	15/12/2016

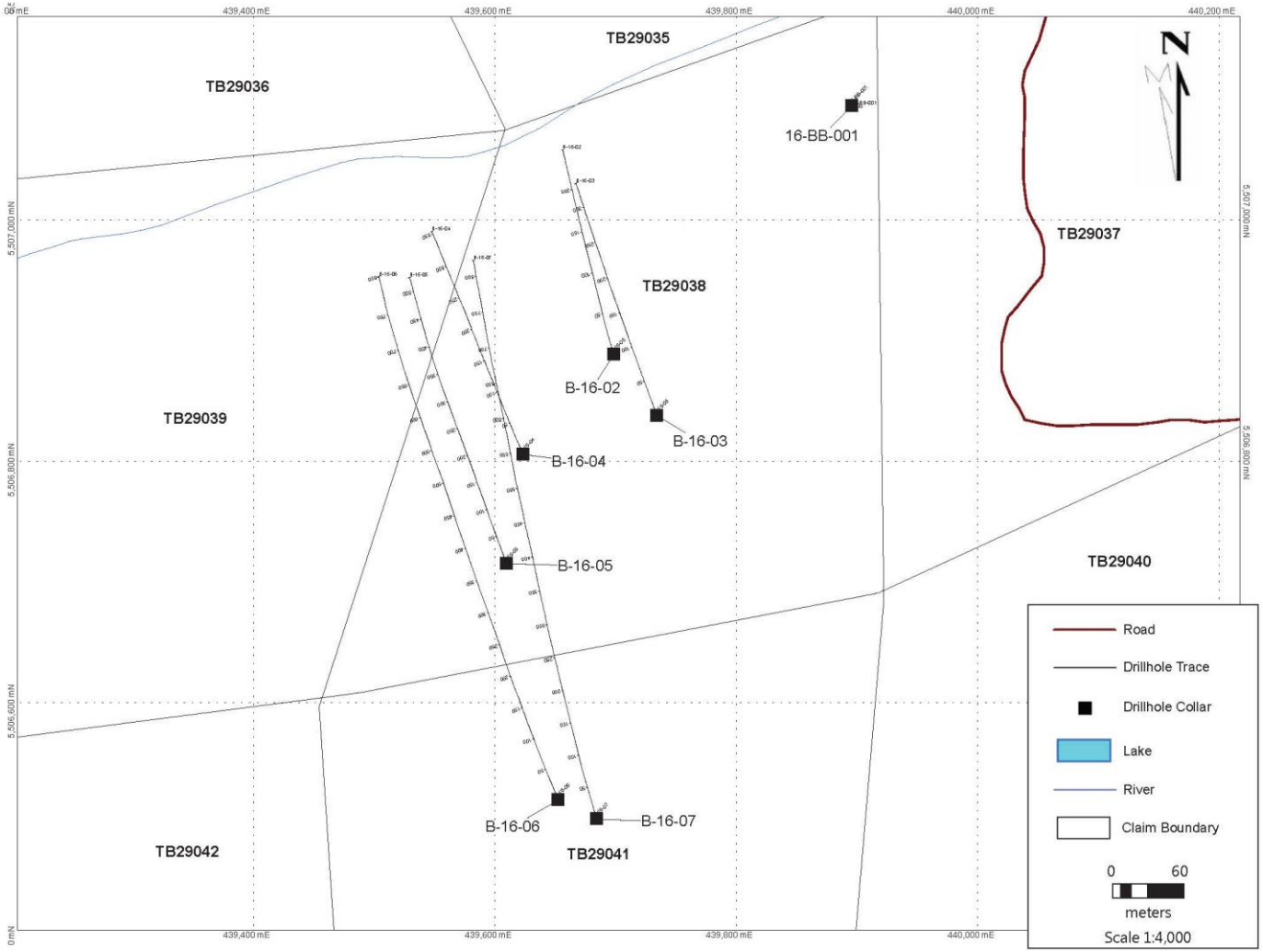

Figure 7 Brookbank 2016 drillhole collars and traces. Claim boundaries and numbers shown.

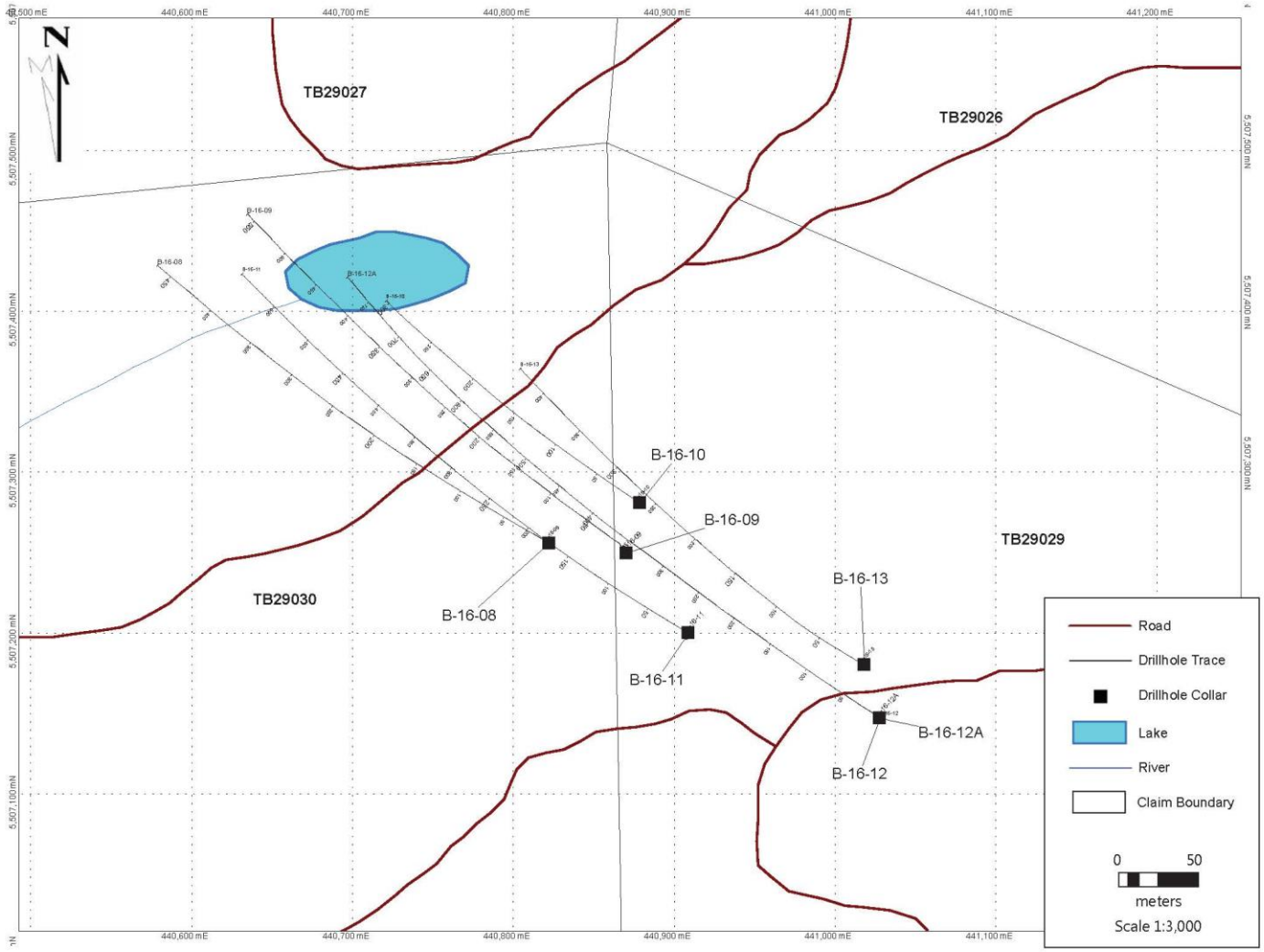

Figure 8 Brookbank East 2016 drillhole collars and traces. Claim boundaries and numbers shown.

6.1.1 Logging and Collection of Data

The intent of the 2016 Brookbank drill program was to extract as much data as possible from the drilling. Consequently, the entire logging software that GGM used was updated to collect more detailed information using DataShed by Maxwell GeoServices. The program captured information on: lithology, veining, structures, surveying, assays (gold and trace elements) and magnetic susceptibility. The core drilled for the training program was NQ (47.6 mm diameter), while all the other core drilled was HQ (63.5 mm diameter). Competent core was oriented (see section 6.1.2), allowing for comprehensive structural measurements. Magnetic susceptibility was collected every meter downhole using the MPP susceptibility meter from GDD Instruments based out of Quebec City, Quebec. See Appendix F for magnetic susceptibility details.

6.1.2 Oriented Core

The ACTIII Tool was used by Forage G4 drilling to provide orientation marks ("ori-marks") on drilled core. The drillers provided the ori-marks and core was then oriented by geotechnicians and geologists at the logging site to obtain alpha and beta mesurements and ultimately strike and dip of geological structures. Although core recovery for the program was very good, the high fracture zones (HFZs) encountered in every hole meant that only approximately 60% of the core could be oriented.

6.1.3 Surveying

Drills were surveyed approximately every 10 metres by Forage G4 drilling using a TN14 instrument for singleshot surveys and a EZ-Gyro for multishot surveys. The surveys are included in the drill logs in Appendix C, however, please note that no surveys were completed on the training hole (16-BB-001) and the Brookbank East hole that was abandoned (B-16-12).

6.1.4 Petrographic Study

A petrographic study was performed on a suite of ten altered volcanic rocks from the Brookbank deposit by Eva S. Schandl Geoconsulting. The purpose of the report was to (1) provide geologists with a better understanding of textures and mineralogy of the altered volcanic rocks, (2) to identify the major alteration types present at Brookbank and Brookbank East and (3) to distinguish between potassium (K-) feldspar altered and carbonate altered rocks, which the geologists had difficulty distinguishing while logging. Refer to Appendix G for the full petrographic report.

6.1.5 Sample Preparation and Analysis

Drill core was (generously) selectively sampled by the logging geologist. Quality control samples were inserted into the sampling stream for all completed diamond drilling. For every 34 samples, a minimum of 2 standards, a blank and a duplicate were used. A blank was used before zone rock was encountered to ensure quality assurance and quality control (QA/QC).

5152 samples were tested for Au by fire assay at Activation Laboratories Ltd. in Geraldton, Ontario. Samples that reached the upper Au limit were reassayed by fire assay gravimetrics. A complete list of assay certificates is included in Appendix H.

1165 of the 5152 samples were sent to Ancaster, Ontario for Inductively Coupled Plasma Mass Spectrometry (ICP-MS) to test for trace elements. All of the samples from holes BB-16-01 and B-16-02 were tested for trace elements by ICP-MS and part of hole B-16-03 was tested. However, due to the ICP assay costs, a portable X-Ray Fluorescence (XRF) machine (pXRF) was rented from REFLEX, and trialed during November and December 2016 by geotechnicians at the logging site. REFLEX recommended a subset of samples be analyzed using a whole rock fusion + trace element package to additionally help calibrate the pXRF data. Approximately, 20 pulp samples from each of the 12 drill holes (all excluding BB-16-01 and B-16-12) were sent for whole rock XRF and trace element analysis (see assays). All of the samples from holes B-16-02, B-16-03 and B-16-04 were tested by the XRF. A complete list of XRF data can be found in Appendix E.

6.2 Work Dispersion Over Individual Claims

Drilling was performed on a total of 5 leased mining claims on the property, all of which are in the division of Thunder Bay. The following table outlines the surface projections and total drilled metres on each of the mining leases. This table will be used as a reference for all expenditures that are presented as a cost per metre.

Table 3 Drilling performed on mining claims, Brookbank Property 2016 (reference table). Metres drilled on each mining lease are shown.

Drilling Performed on Mining Claims, Brookbank Property 2016															
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Total metres drilled/ claim (m)
TB29029									10	30	90	36	370	305	841
TB29030								466.7	551	273	507		414	127	2338.7
TB29038	116.3	247	333	269.5	380	400	567								2312.8
TB29039				84	144.89	181									409.89
TB29041						220	255								475
													Total Metres Drilled (m)		**6377.39**

The following table outlines all drill expenditures from Forage G4 drilling. This includes the cost of drilling and surveying, operating costs and wages. The cost is averaged over all the holes as a cost per metre, taken by dividing the total cost by the total metres drilled.

Total drill cost before tax = $ 491083.86
Total metres drilled = 6377.39 m

Drilling cost / metre = $Total\ drill\ cost\ before\ tax \div Total\ metres\ drilled$

$$= \frac{491083.86}{6377.39}$$

Drilling cost / metre = $\$77.00\ /\ metre$

Table 4 Drilling cost per hole and claim (black) and reference table as shown above (grey). Drill cost is calculated at $77/metre.

	Metres drilled per Hole and Claim (m)														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Total metres drilled (m)
TB29029									10	30	90	36	370	305	841
TB29030								466.7	551	273	507		414	127	2338.7
TB29038	116.3	247	333	269.5	380	400	567								2312.8
TB29039				84	144.89	181									409.89
TB29041						220	255								475
														Total metres drilled (m)	**6377.39**
	Drilling Cost per Hole and Claim @ $77.00 per metre (before HST)														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Total drill expense per claim ($)
TB29029									770.0389	2310.117	6930.35	2772.14	28491.44	23486.19	64760
TB29030								35937.72	42429.15	21022.06	39040.97		31879.61	9779.494	180089
TB29038	8955.553	19019.96168	25642.3	20752.55	29261.48	30801.56	43661.21								178095
TB29039				6468.327	11157.09	13937.7									31563
TB29041						16940.86	19635.99								36577
														Total drilling cost ($)	**491084**

The following tables outlines the manpower requirements for the 3 Brookbank drilling campaigns. This includes work from geotechnicians, geologists (company geologists in addition to consulting geologists), core cutters and occasionally, a geotechnician operating the XRF machine. The amounts are based on daily wages, equipment provided/used, and transportation. The total man power costs are calculated as a cost per metre. This is determined by dividing the total manpower costs by the total drilled metres. The total man power costs are then calculated per claim and hole using the reference table (see table X).

Geologist - $600/day
Geo-technician - $300/day
Core cutter - $300/day
XRF operator - $300/day
Senior Consulting Geologist - $1200/day

Total man days: 471 days
Total metres drilled: 6377.39 m
Total man power cost: $208,500

Man power cost / metre: $\frac{208500}{6377.39}$ **= $32.69363 / metre**

Table 5 Manpower outline for 2016 Brookbank drilling. Manpower is broken down by roles. Costs are listed at bottom.

Date	Geologist	Geotech	Consultant	Core Cutters	XRF
23-Sep-16		1			
24-Sep-16	1	1			
25-Sep-16				1	
26-Sep-16				1	
29-Oct-16	1	2			
30-Oct-16	1	2			
31-Oct-16	1	2		2	
1-Nov-16	1	2		2	
2-Nov-16		2			
3-Nov-16	1	2		2	
4-Nov-16	1	2			
5-Nov-16	1	2		2	
6-Nov-16	2	2		2	
7-Nov-16	2	2		2	
8-Nov-16	2	2		2	
9-Nov-16	2	2		2	
10-Nov-16	2	2		2	
11-Nov-16	2	2			
12-Nov-16	2	2		2	
13-Nov-16	2	2			
14-Nov-16	3	2		1	
15-Nov-16	2	2		2	
16-Nov-16		2		2	
17-Nov-16	2	2		2	
18-Nov-16	1	2		2	
19-Nov-16		2			
20-Nov-16		2			
21-Nov-16	1	2		2	
22-Nov-16		2		2	
23-Nov-16		2		2	
24-Nov-16	1	3	1	1	
25-Nov-16	1	3	1		1
26-Nov-16	1	3	1		1
27-Nov-16		3	1		
28-Nov-16	2	3	1	2	
29-Nov-16	3	3	1	2	
30-Nov-16	3	3	1	2	
01-Dec-16	1	3	1	2	2
02-Dec-16	2	3	1	2	2
03-Dec-16	1	3	1	2	1
04-Dec-16	2	3	1		1

05-Dec-16		3	1	2	1
06-Dec-16	2	3	1	2	1
07-Dec-16	1	3	2	2	
08-Dec-16	2	3	2	2	1
09-Dec-16	2	3	2	1	1
10-Dec-16		3	1	1	
11-Dec-16	3	3	2	3	
12-Dec-16	2	3	2	2	
13-Dec-16		3		1	
14-Dec-16		3		2	
15-Dec-16	2	3	1	3	
16-Dec-16	3	3	1	2	
17-Dec-16	3	3	1	1	
18-Dec-16	3	3	1	1	
19-Dec-16	2	3	1	2	
20-Dec-16	2	3	1	2	
21-Dec-16	2	3	1	2	
22-Dec-16	2	3	1	2	
23-Dec-16	2	2		2	
24-Dec-16					
25-Dec-16					
26-Dec-16					
27-Dec-16					
28-Dec-16					
29-Dec-16					
30-Dec-16					
31-Dec-16					
01-Jan-17					
02-Jan-17					
03-Jan-17	2	2		2	
04-Jan-17	2	2		1	
05-Jan-17	2	2		1	
06-Jan-17	2	2		2	
07-Jan-17	2	2		1	
08-Jan-17	3	2		2	
09-Jan-17	3	2		2	
10-Jan-17	3	2		2	
11-Jan-17	3	2		2	
12-Jan-17	3	2		2	
13-Jan-17	2	2		2	
14-Jan-17	1	2		2	
15-Jan-17	1	2		2	
16-Jan-17	1	2		2	
17-Jan-17	1	2		2	
18-Jan-17	1	2		2	

19-Jan-17	1	2		2	
20-Jan-17	1			2	
21-Jan-17	1			2	
22-Jan-17	1			2	
23-Jan-17	1				
24-Jan-17	1				
25-Jan-17	1				
26-Jan-17	1				
27-Jan-17	1				
28-Jan-17	1				
29-Jan-17	1				
30-Jan-17	1				
31-Jan-17	1				
total days	**128**	**177**	**32**	**122**	**12**
daily rate ($)	600	300	1200	300	300
total expenses ($)	**76800**	**53100**	**38400**	**36600**	**3600**
Grand total ($)	**208500**				

Table 6 Manpower cost (black) and reference table (grey). Costs are outlined per hole and claim number and are calculated at $32.69/metre (see above calculation).

	Metres drilled per Hole and Claim (m)														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Total metres drilled
TB29029									10	30	90	36	370	305	841
TB29030								466.7	551	273	507		414	127	2338.7
TB29038	116.3	247	333	269.5	380	400	567								2312.8
TB29039				84	144.9	181									409.89
TB29041						220	255								475
														Total metres drilled (m)	**6377.39**
	Man Power Cost per Hole and Claim Number @ $32.69 per metre (before HST)														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Total drill expense per claim
TB29029									326.9363	980.8088	2942.426	1176.971	12096.64	9971.556	27495
TB29030								15258.11	18014.19	8925.36	16575.67		13535.16	4152.09	76461
TB29038	3802.27	8075.33	10886.977	8810.93206	12424	13077.45	18537.29								75614
TB29039				2746.26454	4737	5917.546									13401
TB29041						7192.598	8336.874								15529
														Total Man Power Costs ($)	**208500**

The following tables outline the assay costing for each hole that was drilled. In table 7, "1A2-50" refers to a test for Au, while "1EX/MA200" and "1F2" refer to ICP-MS total digestion. The total costs per hole are divided by the total length of hole and a cost per metre is determined for each (see Table 8). The assay cost per metre is multiplied by the amount of drilling on each claim to determine the total assay cost for each claim (see Table 7). This is based on the drilling reference table.

Table 7 Assay costing per drillhole. Test "1A2-50" denotes Au. Test "1EX/MA200" and "1F2" denote ICP.

Hole ID	Batch #	Test 1	Test 2	Cost Before Tax ($)	Total Cost per Hole ($)
16-BB-001	A16-10709	1A2-50	1EX/MA200	1173.50	3570.51
16-BB-001	A16-10714	1A2-50	1EX/MA200	1198.50	
16-BB-001	A16-10718	1A2-50	1EX/MA200	1198.50	
B-16-02	A16-11538	1A2-50	1EX/MA200	1024.00	10383.00
B-16-02	A16-11641	1A2-50	1EX/MA200	4553.00	
B-16-02	A16-11706	1A2-50	1EX/MA200	2171.00	
B-16-02	A16-11780	1A2-50	1EX/MA200	2094.00	
B-16-02	A16-11784	1A2-50	1EX/MA200	541.00	
B-16-03	A16-11781	1A2-50	1F2	2304.00	12248.50
B-16-03	A16-11798	1A2-50	1F2	866.00	
B-16-03	A16-11899	1A2-50	1F2	1316.00	
B-16-03	A16-11977	1A2-50	1F2	1198.00	
B-16-03	A16-12074	1A2-50	1F2	1915.00	
B-16-03	A16-12079	1A2-50	1F2	1705.00	
B-16-03	A16-12250	1A2-50	1F2	1747.00	
B-16-03	A16-12325	1A2-50	1F2	801.00	
B-16-03	A16-12328	1A2-50	1F2	396.50	
B-16-04	A16-11907	1A2-50	1F2	1610.00	12736.02
B-16-04	A16-11975	1A2-50	1F2	717.00	
B-16-04	A16-12075	1A2-50	1F2	984.50	
B-16-04	A16-12167	1A2-50	1F2	1377.00	
B-16-04	A16-12248	1A2-50	1F2	1816.00	
B-16-04	A16-12327	1A2-50	1F2	2148.00	
B-16-04	A16-12366	1A2-50	1F2	1312.50	
B-16-04	A16-12425	1A2-50	1F2	480.50	
B-16-04	A16-12633	1A2-50	1F2	2290.50	
B-16-05	A16-12426	1A2-50		878.00	9998.02
B-16-05	A16-12463	1A2-50		766.00	
B-16-05	A16-12538	1A2-50		649.00	
B-16-05	A16-12775	1A2-50		1052.00	
B-16-05	A16-12858	1A2-50		1088.50	
B-16-05	A16-12905	1A2-50		1085.00	
B-16-05	A16-12954	1A2-50		696.50	
B-16-05	A16-13025	1A2-50		1462.50	

B-16-05	A16-13070	1A2-50		526.00	
B-16-05	A16-13193	1A2-50		1794.50	
B-16-06	A16-12957	1A2-50		716.50	7147.54
B-16-06	A16-13189	1A2-50		713.00	
B-16-06	A16-13196	1A2-50		157.50	
B-16-06	A16-13547	1A2-50		302.50	
B-16-06	A16-13583	1A2-50		348.00	
B-16-06	A16-13636	1A2-50		894.50	
B-16-06	A16-13716	1A2-50		203.50	
B-16-06	A16-13771	1A2-50		749.50	
B-16-06	A16-13822	1A2-50		568.00	
B-16-06	A17-00099	1A2-50		236.50	
B-16-06	A17-00159	1A2-50		1288.50	
B-16-06	A17-00209	1A2-50		650.50	
B-16-06	A17-00252	1A2-50		319.00	
B-16-07	A16-13229	1A2-50		306.00	6227.51
B-16-07	A16-13402	1A2-50		352.00	
B-16-07	A17-00132	1A2-50		434.50	
B-16-07	A17-00158	1A2-50		1714.00	
B-16-07	A17-00210	1A2-50		1072.50	
B-16-07	A17-00251	1A2-50		695.00	
B-16-07	A17-00283	1A2-50		671.00	
B-16-07	A17-00328	1A2-50		982.50	
B-16-08	A16-12539	1A2-50		1019.00	9796.53
B-16-08	A16-12632	1A2-50		953.00	
B-16-08	A16-12777	1A2-50		1723.00	
B-16-08	A16-12837	1A2-50		364.50	
B-16-08	A16-12881	1A2-50		157.50	
B-16-08	A16-12902	1A2-50		2102.50	
B-16-08	A16-12904	1A2-50		322.50	
B-16-08	A16-12927	1A2-50		1402.50	
B-16-08	A16-12956	1A2-50		311.50	
B-16-08	A16-13024	1A2-50		667.00	
B-16-08	A16-13028	1A2-50		575.50	
B-16-08	A16-13029	1A2-50		198.00	
B-16-09	A16-13027	1A2-50		782.50	8729.01
B-16-09	A16-13075	1A2-50		1732.00	
B-16-09	A16-13194	1A2-50		513.00	
B-16-09	A16-13238	1A2-50		700.00	
B-16-09	A16-13823	1A2-50		460.00	
B-16-09	A17-00015	1A2-50		1156.50	
B-16-09	A17-00052	1A2-50		2366.00	
B-16-09	A17-00097	1A2-50		874.00	
B-16-09	A17-00133	1A2-50		145.00	
B-16-10	A16-13072	1A2-50		592.00	

B-16-10	A16-13188	1A2-50		691.00	6204.88
B-16-10	A16-13192	1A2-50		812.00	
B-16-10	A16-13228	1A2-50		1325.00	
B-16-10	A16-13396	1A2-50		716.50	
B-16-10	A16-13398	1A2-50		1743.00	
B-16-10	A16-13400	1A2-50		148.50	
B-16-10	A16-13546	1A2-50		176.88	
B-16-11	A16-13190	1A2-50		588.50	10264.66
B-16-11	A16-13396	1A2-50		9.00	
B-16-11	A16-13399	1A2-50		828.50	
B-16-11	A16-13483	1A2-50		667.00	
B-16-11	A16-13546	1A2-50		836.62	
B-16-11	A16-13582	1A2-50		1979.50	
B-16-11	A16-13637	1A2-50		707.50	
B-16-11	A16-13718	1A2-50		641.50	
B-16-11	A16-13770	1A2-50		430.50	
B-16-11	A16-13821	1A2-50		1184.00	
B-16-11	A17-00016	1A2-50		1092.50	
B-16-11	A17-00051	1A2-50		1299.50	
B-16-12	A17-00098	1A2-50		592.00	592.00
B-16-12A	A17-00098	1A2-50		517.00	11348.01
B-16-12A	A17-00131	1A2-50		1627.50	
B-16-12A	A17-00157	1A2-50		2366.00	
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B-16-12A	A17-00284	1A2-50		828.50	
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B-16-13	A17-00314	1A2-50		289.50	
B-16-13	A17-00360	1A2-50		1741.00	
B-16-13	A17-00562	1A2-50		368.50	
B-16-13	A17-00627	1A2-50		1545.00	
B-16-13	A17-00699	1A2-50		729.50	

Table 8 Assay cost per metre and drill hole, Brookbank 2016 drilling.

Hole_ID	Hole_Length (m)	Assay cost per hole ($)	Assay cost per metre ($)
16-BB-001	116.3	3570.5	30.7
B-16-02	247	10383.0	42.0
B-16-03	333	12248.5	36.8
B-16-04	353.5	12736.0	36.0
B-16-05	524.89	9998.0	19.0
B-16-06	801	7147.5	8.9
B-16-07	822	6227.5	7.6
B-16-08	466.7	9796.5	21.0
B-16-09	561	8729.0	15.6
B-16-10	303	6204.9	20.5
B-16-11	597	10264.7	17.2
B-16-12	36	592.0	16.4
B-16-12A	784	11348.0	14.5
B-16-13	432	5183.0	12.0

Table 9 Assay cost per drillhole and claim number (black) and reference table (grey). Metres in reference table are multiplied by cost per metre for each hole in Table 8.

	Metres drilled per Hole (m)														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Total metres drilled (m)
TB29029									10	30	90	36	370	305	841
TB29030								466.7	551	273	507		414	127	2338.7
TB29038	116.3	247	333	269.5	380	400	567								2312.8
TB29039				84	144.89	181									409.89
TB29041						220	255								475
													Total Metres Drilled (m)		6377.39
	Assay Cost per Hole ($)														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Assay cost per claim ($)
TB29029									155.5973	614.345	1547.435	592	5355.565	3659.3	11924
TB29030								9796.530973	8573.412	5590.539	8717.22		5992.443	1523.709	40194
TB29038	3570.513274	10383	12248.50442	9709.637	7238.18	3569.308276	4295.6								51015
TB29039				3026.38	2759.84	1615.111995									7401
TB29041						1963.119552	1931.9								3895
													Total Assay Cost ($)		**114429.20**

The final table outlines the cost of renting the XRF machine from Reflex. The XRF machine was operated on 3 of the drill holes at Brookbank (B-16-02, B-16-03, B-16-04) and the cost was divided evenly over those 3 holes. The cost per hole was then divided by the total length of each drill hole to determine a cost per metre for each drill hole. The cost per metre was then used to determine the XRF cost per claim.

Total cost of XRF rental = $1455

XRF was performed on 3 holes, so cost is divided by 3. = $1455/3 = $485 per hole.

B-16-02 depth: 247 m
B-16-03 depth: 333 m
B-16-04 depth: 353.5 m

Cost per metre (B-16-02):

$$\text{Cost per metre per hole} = Cost\ per\ hole/Total\ metres$$

$$= 485/247$$

$$= \$1.96/metre$$

Cost per metre (B-16-03):

$$\text{Cost per metre per hole} = Cost\ per\ hole/Total\ metres$$

$$= 485/333$$

$$= \$1.46/metre$$

Cost per metre (B-16-04):

$$\text{Cost per metre per hole} = Cost\ per\ hole/Total\ metres$$

$$= 485/353.5$$

$$= \$1.37/metre$$

Table 10 XRF cost per drillhole and claim (black) and reference table (grey). Metres are multiplied by cost per metre in equations above.

	Metres drilled per Hole and Claim														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	Total metres drilled (m)
TB29029															
TB29030															
TB29038		247	333	269.5											849.5
TB29039				84											84
TB29041															
													Total metres (m)		933.5
	Metres drilled														
Claim #	16-BB-001	B-16-02	B-16-03	B-16-04	B-16-05	B-16-06	B-16-07	B-16-08	B-16-09	B-16-10	B-16-11	B-16-12	B-16-12A	B-16-13	XRF cost per claim
TB29029															
TB29030															
TB29038		485	485	369.7525											1340
TB29039				115.2475											115
TB29041															
														Total XRF cost ($)	**1455**

The remaining associated costs were evenly distributed over each claim. See Appendix I for a list of invoices, and overview of associated costs.

Total associated costs = **294976**

Number of leased mining claims work was performed on = 5

Cost per claim = $Total\ associated\ costs\ /\ Number\ of\ claims$

$= 294976/5$

$=\$\ 58995.20\ per\ claim$

Table 11 Brookbank 2016 total drill costing per claim number.

Total Costs Per Claim							
Claim #	**Metres drilled (m)**	**Drilling Cost ($)**	**Man Power Cost ($)**	**Assay Cost ($)**	**XRF Cost ($)**	**Associated Costs ($)**	**Total ($)**
TB29029	841	64760	27495	10925		58995	162175
TB29030	2338.7	180089	76461	41193		58995	356738
TB29038	2312.8	178095	75614	51015	1340	58995	365059
TB29039	409.89	31563	13401	7401	115	58995	111475
TB29041	475	36577	15529	3895		58995	114996
Total	6377.39	**491084**	**208500**	**114429**	**1455**	**294976**	**1110444**

6.3 Conclusions and Recommendations

Between July and December 2016, three exploration drilling programs were completed on Greenstone Gold Mines' Brookbank property. These are (1) the Brookbank exploration training program, (2) Brookbank deposit drilling and (3) Brookbank East drilling. Fourteen (14) diamond drill holes were drilled totaling 6377.39 metres on 5 leased mining claims. In mid December 2016, exploration activity at Greenstone Gold was halted for 2017 and further plans have yet to be initiated.

The Brookbank exploration training program was performed between July 17th, and early August 2016. The drilling program had 2 purposes, specifically, it was designed as a training program for the First Nation communities of AZA and BZA and tested results of an economic drill hole from the 1980's. In total, seven students from AZA and BZA participated in the program and were trained by Greg Smith of Confederation College. The total depth of the hole was 116.3 metres, and a Au-mineralized volcanic was intersected starting at 17.3 metres depth. Significant Au intersections are outlined in Table 12.

Table 12 Significant Au interesections Brookbank drill training program 2016.

	From (m)	To (m)	Grade (g/t)	Horizontal Width (m)	Comments
	17.3	22.11	1.59	4.81	Brecciated mafic volcanic with abundant sulphides
incl.	20.85	22.11	5.66	1.26	
	33.17	40.78	2.52	7.61	Sheared mafic volcanic, silicified and sulphidized
incl.	36.15	37.65	7.27	1.5	
	65.2	67.2	5.19	2	Brecciated, silicified mafic volcanic with abundant sulphides
incl.	66.3	67.2	9.97	0.9	
	75.7	77.5	4.5	1.8	Brecciated, silicified mafic volcanic with abundant sulphides
incl.	76.5	77.5	7.2	1	

The second exploration program at Brookbank included 6 diamond drill holes, totaling 3081.39 metres. The program confirmed and defined various new targets, and more specifically, targets were defined at depth while uncertainty within the centre of the deposit was reduced. These results will prepare GGM for future pre-feasibility at Brookbank. A recommendation is to continue exploration at depth to slightly increase the resource. More specifically, more lenses could be found at >200 metre depth, as most of the corridor of the deposit is not drilled. Significant Au intersections are outlined in Table 13 for each hole. All results intersect the main Brookbank shear zone.

Table 13 Significant Au intersections Brookbank 2016 drill program.

DDH	Horizontal Width (m)	Grade (g/t)
B-16-02	3.5	1.83
incl.	2.5	6.34
B-16-03	7.5	9.49
B-16-04	3.5	1.76
B-16-05	2	9.84
B-16-06	2	0.16
B-16-07	2	2.08

The Brookbank East drill program totaled 3179.7 metres. Seven holes were drilled, however one was abandoned and restarted, resulting in a total of six exploration holes at Brookbank East. Significant assay results are outlined in Table 14. As it stands, structural measurements on oriented core need to be processed and analyzed by geologists in the future. This may define new structures that were previously not observed.

Table 14 Significant Au intersections Brookbank East 2016 drill program.

Hole No.	**From (m)**	**To (m)**	**Core Length (m)**	**Au (g/t)**	**Description**
B-16-08	165.8	167.6	2	0.34	Strongly silicified fault breccia with 7% pyrite in dark grey silicified quartz-carbonate veins This may be northerly offset of main Fe-carb shear zone. Primary target was expected
B-16-08	252.7	253.5	0.8	1.66	Vuggy qz-fe carb+calcite veins with 5% py
B-16-08	328.6	328.9	0.3	1.29	8cm wide vuggy qz-fe carb+calcite veins with 5% py
B-16-08	408.9 Incl. *408.9*	414 *411*	5.1 *2.1*	0.66 *1.19*	Sheared metavolcanic at contact with conglomerate. Sericite, specularite, Fe-carb, grey calcite+silicification. Locally brecciated
B-16-09	217.5	218.15	1	0.276	Specular hematite and magnetite altered mafic volcanic. Brecciated interval in 12m wide high fracture and schistose zone with up to 10% py replacing magnetite and hematite. This high fracture/schistose zone is

					likely the targeted main Fe-carb shear zone.
B-16-09	242	243	1	0.63	Sheared pillowed volcanic. Trace py.
B-16-09	472	475	3	1.42	Sheared volcanic near conglomerate contact. Alteration consists of qz-carb +-calcite veining and specular hematite
B-16-10 *Incl.*	109.4 *109.4*	112.3 *109.8*	2.9 *0.4*	0.67 *3.06*	Mineralized interval in Au anomalous altered zone (13.3m core length). Alteration consists of bleaching and reddish hue likely pervasive Fe-carb alteration as well as specular hematite replacement of magnetite. Fe-carb veining present (10%). Shearing is strong from 113 to 121m and is interpreted as extension of main Fe-carb zone observed on surface.
B-16-10	118.5	119.3	0.8	1.05	Silicified, fe-carb+sericite altered interval near end of shear zone
B-16-11	546.8	550.75	3.95	0.39	Incl 0.32 m of lost core
B-16-12A	738.1	739.25	1.15	0.38	Sheared fe-carb veins in mvolc near contact with seds
B-16-13					No sig. assay results

6.3.1 Logging and Collection of Data

The drilling program captured information on: lithology, veining, structures, surveying, assays (gold and trace elements), and magnetic susceptibility using DataShed by Maxwell GeoServices. Information on lithology, veining, structures, surveying and gold assays can be found in the drill logs (Appendix C). Currently, not all of the drill logs have been properly validated due to an early termination of the logging program in January 2017.

Magnetic Susceptibility was collected every metre downhole using the MPP susceptibility metre from GDD Instruments. The susceptibility has an apparent, high visual correlation with the volcanic stratigraphy. Pillowed basalts have higher susceptibility than the massive flows, typically over 10. In outcrop, magnetic alteration in the pillow selvages was commonly observed. As such, magnetic susceptibility is a good proxy for lithology and can be used to differentiate between massive and pillowed flows. The highest susceptibility units seem to be associated with “flow breccia” units. See Appendix F for magnetic susceptibility data.

6.3.2 Oriented Core

It was decided by GGM technical staff to orient the core to obtain comprehensive structural measurements. Drillers put ori-marks on the core using the ACTIII Tool and GGM staff oriented the core at the logging facility. Although core recovery for the program was very good, the high fracture zones (HFZs) encountered in every hole made the orientation process only partially successful. The early termination of the exploration program in January 2017 meant that the 2016 drill logs could not be properly validated or edited to minimize discrepancies (build consistency) in terminology between logging geologists. Thus, structural data have not been checked to see if they are the result of multiple populations or errors in measurement. This exercise could be done by either going back to the split core which should preserve the ori-line or by examination of the core photos.

6.3.3 Petrogaphic Study

A petrographic study was performed by Eva S. Schandl Geoconsulting on a suite of 10 rocks at Brookbank. The study showed that there were only trace amounts of potassium feldspar in the rocks, and that potassium feldspar was being mistaken for iron carbonate. Additionally, one of the samples had 5 percent ilmenite which is possibly an indication of high titanium basalts. These high titanium basalts are present with basaltic komatiites and Fe-tholeiites in the volcanic sequence (see section 2.3.4). As it stands, potassium feldspar in the unvalidated logs needs to be corrected.

6.3.4 Whole Rock Geochemistry

Pulp samples from each of the 6 Brookbank holes and 6 Brookbank East holes were sent for whole rock XRF and trace element analysis. Preliminary observations showed that many of the samples have pervasive carbonate alteration due to elevated loss on ignition. This is consistent with the petrographical study described in section 6.1.4 above. Observations also showed that 3 of the 69 volcanic samples may be considered basaltic komatiites (MgO values were up to 13%) based on a Jensen classification. The remaining volcanic rock samples are Fe-tholeiites, and no samples plot in the calc-alkaline field (see Figure 15). A subset of Fe-tholeiites are high titanium basalts, and correlate with the visual observation of leucoxene in drill core and have elevated TiO_2 values.

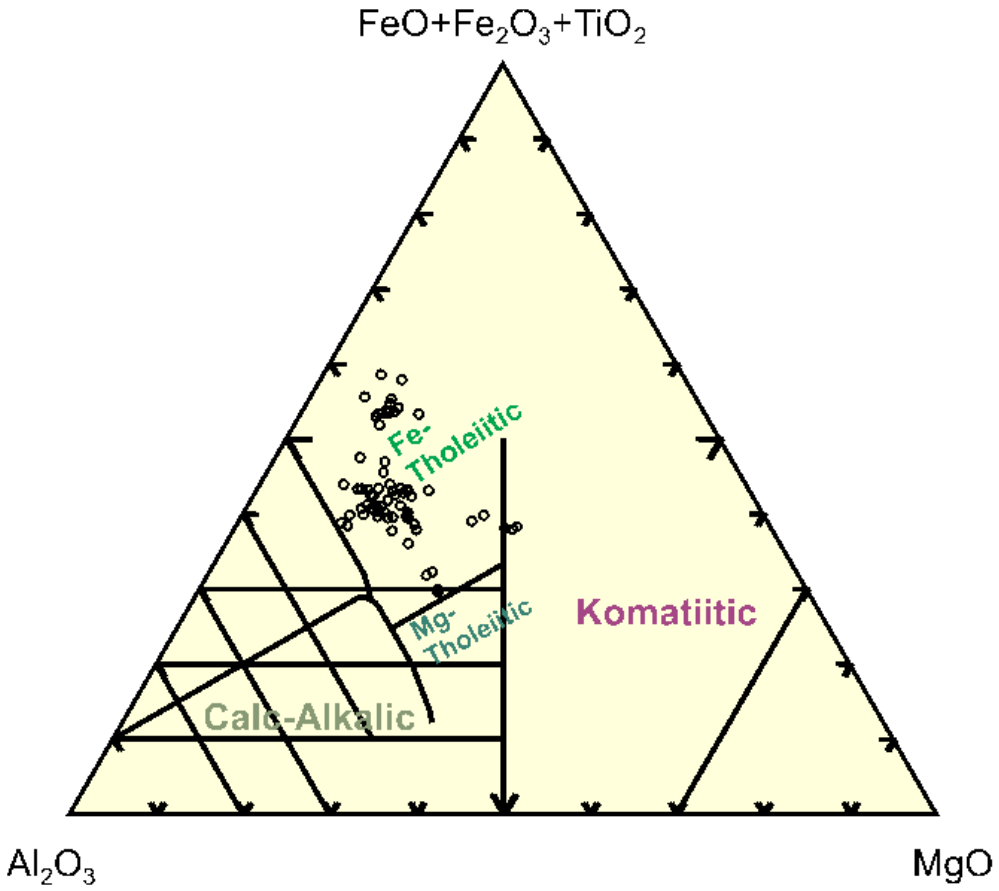

Figure 9 Jensen plot of whole rock geochemical analysis received to the end of January 2017. Volcanic Rocks only.

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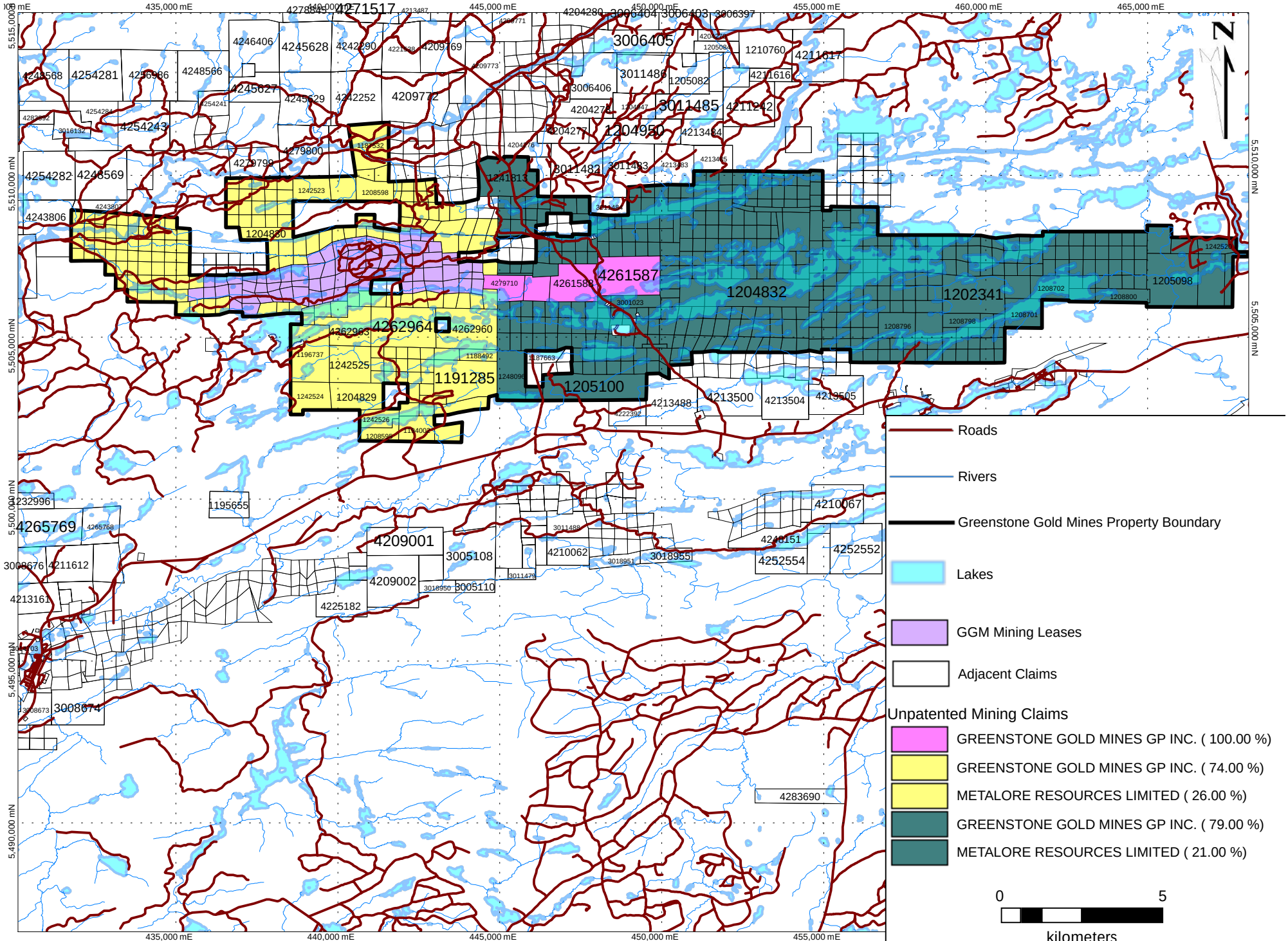
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Roads
Rivers
Greenstone Gold Mines Property Boundary
Lakes
GGM Mining Leases
Adjacent Claims
Unpatented Mining Claims
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GREENSTONE GOLD MINES GP INC. (74.00 %)
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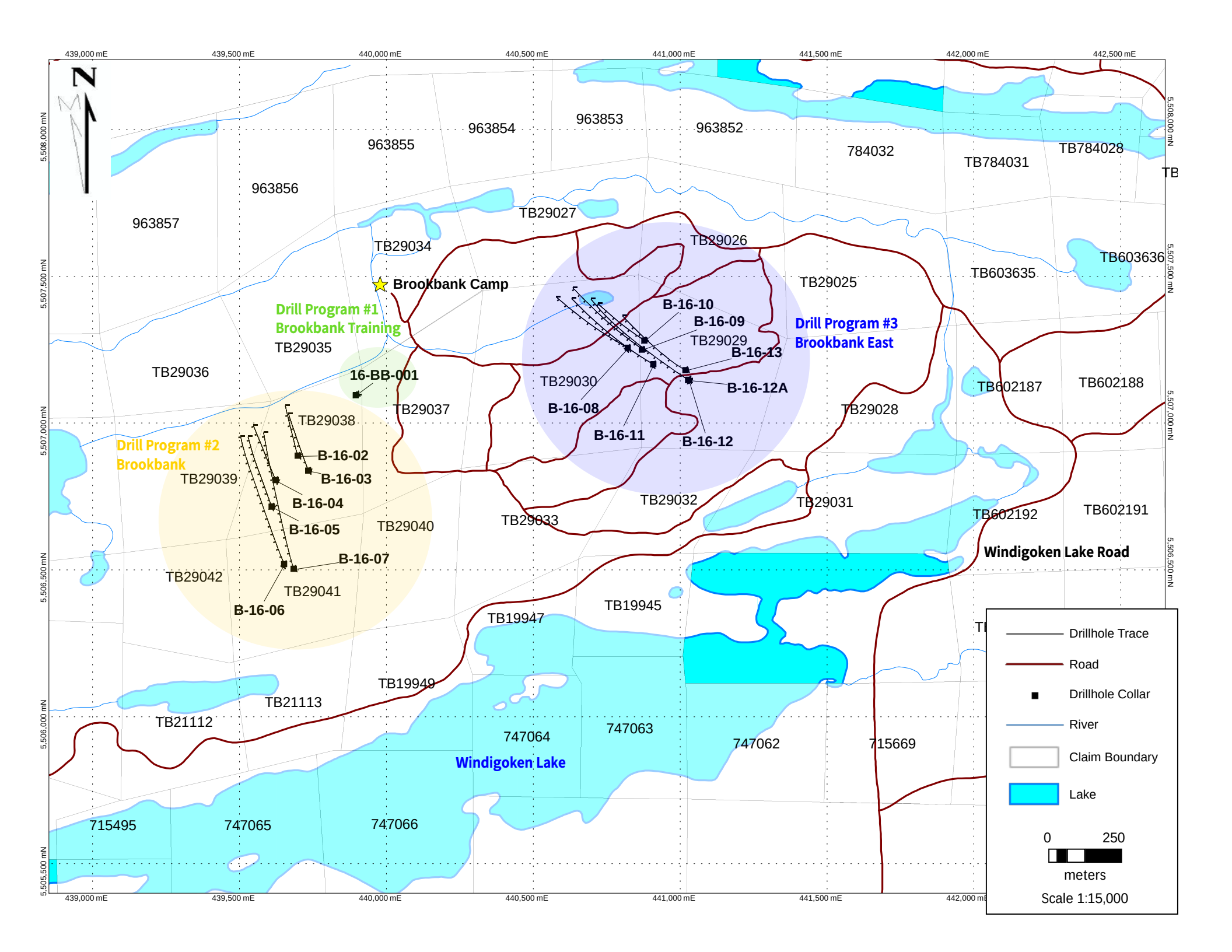
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B-16-09
TB29029
B-16-13
Drill Program #3
Brookbank East
TB29036
16-BB-001
TB29030
B-16-12A
TB602187
TB602188
TB29037
B-16-08
TB29028
TB29038
B-16-11
B-16-12
Drill Program #2
Brookbank
B-16-02
TB29039
B-16-03
B-16-04
TB29032
TB29031
TB602192
TB602191
B-16-05
TB29040
TB29033
Windigoken Lake Road
B-16-07
TB29042
TB29041
B-16-06
TB19945
TB19947
TB19949
TB21113
TB21112
747064
747063
747062
715669
Windigoken Lake
715495
747065
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Drillhole Trace
Road
Drillhole Collar
River
Claim Boundary
Lake
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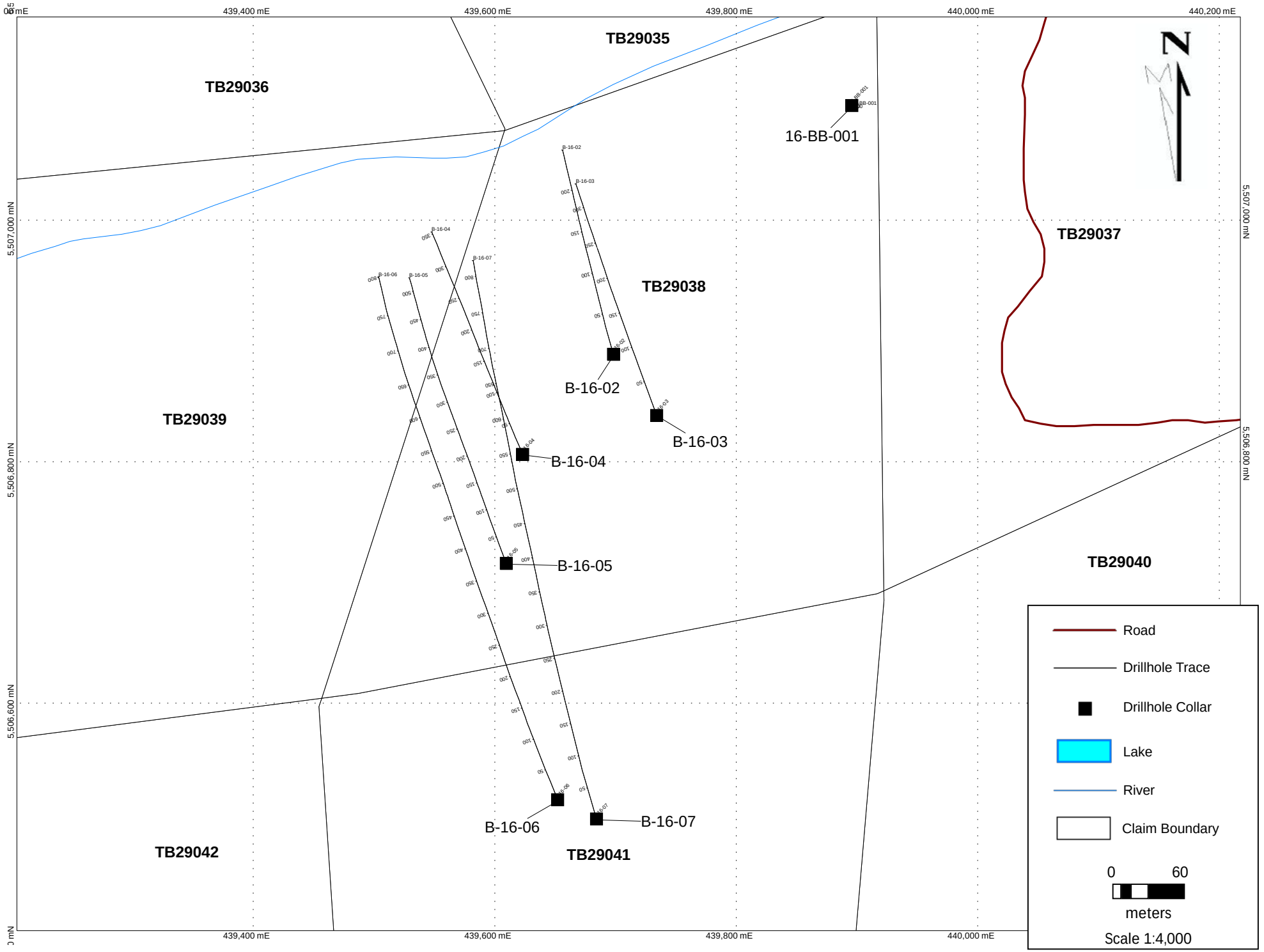
250
meters
Scale 1:15,000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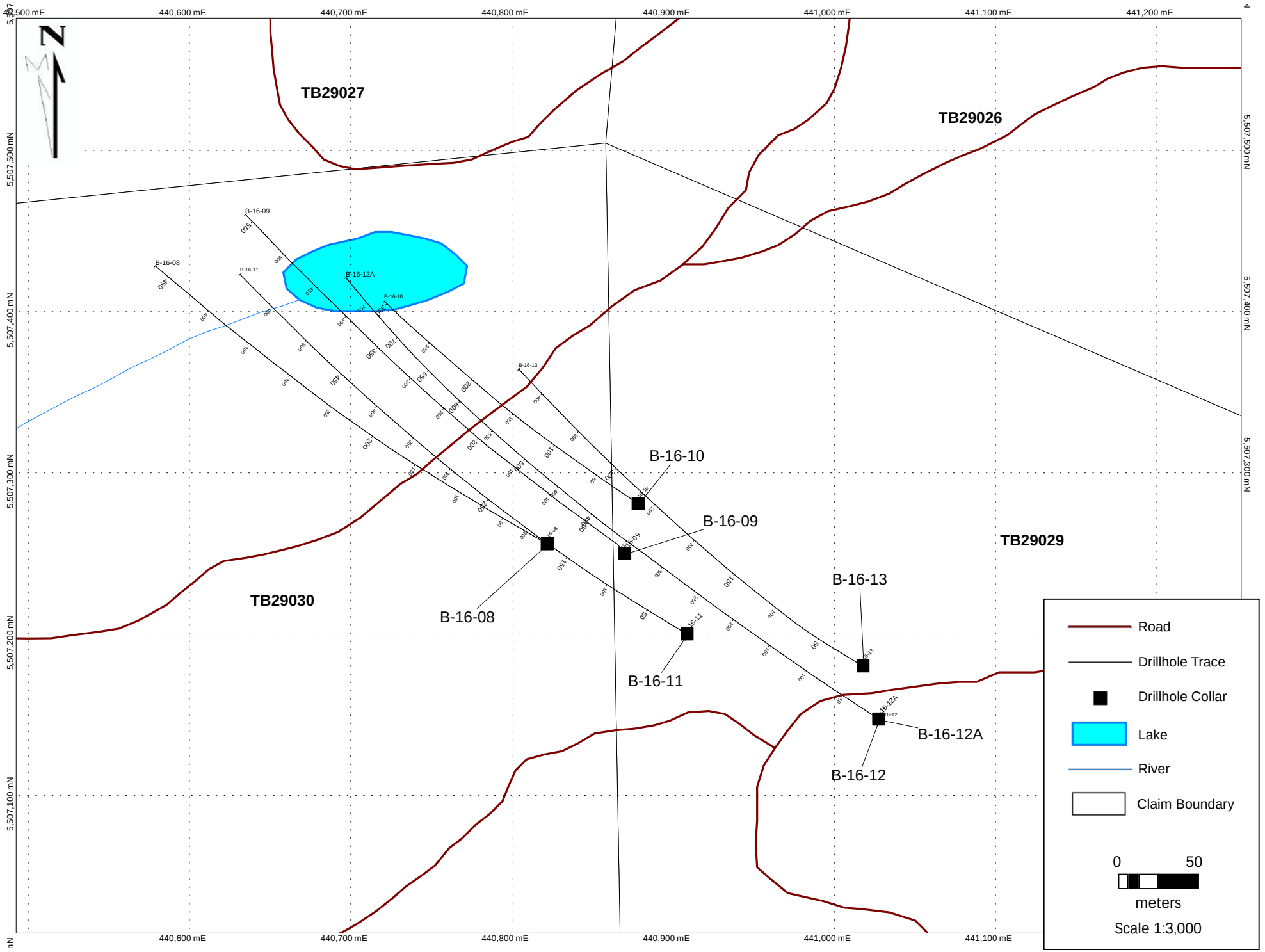
TB29039
TB29040
TB29041
TB29042
16-BB-001
B-16-02
B-16-03
B-16-04
B-16-05
B-16-06
B-16-07
N
Road
Drillhole Trace
Drillhole Collar
Lake
River
Claim Boundary
0
60
meters
Scale 1:4,000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5,507,300 mN
5,507,200 mN
5,507,100 mN
TB29027
TB29026
TB29029
TB29030
B-16-08
B-16-09
B-16-10
B-16-11
B-16-12
B-16-12A
B-16-13
Road
Drillhole Trace
Drillhole Collar
Lake
River
Claim Boundary
0
50
meters
Scale 1:3,000

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: 16-BB-001 DataSet: Brookbank Program: Development

Hole Status:	COMPLETE	**Hole Length (m):**	116.3	**Logged By:**	N/A
Hole Type:	Surface Drill Hole	**Dip (º):**	N/A	**Date Log Started:**	9/24/2016
Date Drill Started:	9/1/2016	**Azimuth:**	N/A	**Date Log Completed:**	9/24/2016
Date Drill Completed:	9/10/2016	**Survey Instrument**	N/A		

Prospect:	Brookbank	**Company:**	Greenstone Gold Mines
Grid ID:	UTM NAD 83 Zone 16N	**Drill Contractor:**	Greenstone Gold Mines
UTM East (m)	439,898.2	**Hole Diameter:**	N/A
UTM North (m):	5,507,319.9	**Casing Size:**	N/A
Elevation (masl):	329.141	**Casing Depth (m):**	N/A
Tenement ID:	TB29038	**Core Storage:**	Old Arena Road
Survey Instrument:	Trimble RTK		
Date Surveyed:	11/4/2016		
Surveyed By:	D. Grabiec		
Tenement Type:	Lease		

Purpose: Drill helper training hole.

Comments: Casing Removed. Surveyed the hole in Ground with Picket. Start and end date estimated no records found.

Downhole Data Available:

Max Survey Depth (m): No Surveys in Database **Max Sample Depth (m):** 116.3

Depth Logged To (m) 116.3 **Meters Sampled** 113.3

Total Samples 104 **# Assay** 91 **# QAQC:** 13

Geology Summary

meters From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
3	15.95	12.95		E1	Mafic Volcanic	Pillowed	
15.95	22.11	6.16		E1	Mafic Volcanic	Brecciated	
22.11	33.17	11.06		E1	Mafic Volcanic	Amygdular / Amygdaloidal	
33.17	40.78	7.61		E1	Mafic Volcanic	Brecciated	
40.78	49.3	8.52		E1	Mafic Volcanic	Pillowed	
49.3	84.05	34.75		E1	Mafic Volcanic	Sheared / highly strained	
84.05	94.3	10.25		E1	Mafic Volcanic		
94.3	94.79	0.49		FLT	Fault Zone	Faulted	
94.79	116.3	21.51		S4B	Polymictic Conglomerate	Supported - matrix	

DataSet: Brookbank
HoleID: 16-BB-001
meters

Hole Length (m): 116.3
Log Length (m): 116.3

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
3	**15.95**	12.95		**E1**	**Mafic Volcanic**	Pillowed		

Med green with local dark grey-purple;FG;Weak foliation;generally weak magnetic with local mod-strong sections; local clusters of carb infilled amygdules; pervasive moderate chlorite alteration with local "pulses" of magnetite alteration in 1-2m sections that also exhibit weak silica overprint, moderate epidote associated with preserved selvages in pillowed metavolcanics.~5% mineralized qtz- fe crb veins with up to 1% scattered pyrite and regular hematite veinlets along the margins, moderate ankerite alteration and local silicifcation assocociated with veins. 2-3% barren fracture filled qtz-crb veins and epidote-kspar veins related to selvages.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
8.3	10	1:	Magnetite	Moderate (26-50%)	Localized	Local magnetite alteration proximal to series of mineralized qtz-fe crb veins

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
4.18	9.1	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	
9.9	15.95	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
3	5	1:	Quartz-Fe-Carbonate	Stockwork Veins			2.8	
5	8	1:	Quartz-Fe-carbonate	Stockwork Veins			2.2	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			0.6	
8	11	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			1.9	
		2:	Quartz-Fe-carbonate	Stockwork Veins			1.3	
11	14	1:	Quartz-Fe-Carbonate	Stockwork Veins			2.2	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			0.6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
15.95	**22.11**	6.16		**E1**	**Mafic Volcanic**	Brecciated		

Med-dark grey with purple hue fading to med beige-orange;FG;Weak-moderate foliation changing to later brittle deformation based on gradually increasing/more frequent brecciated texture towards lower contact; Weakly magnetic near top of interval where pillowed texture is dominant(local carb filled amygdules here) Local magnetite alteration at top of interval that fades out, Moderate hematite/ankerite staining with increasing sericite and sulphidization towards lower contact. Sulphides occur as scattered grains and disseminated stringers of pyrite (more abundant with depth) clusters and veinlets of hematite throughout exhibiting cross-cutting relationships to most features. Mineralized veining accounts for 15% with up to 3% pyrite and more intense alteration.Variable

DataSet: Brookbank
HoleID: 16-BB-001

Hole Length (m): 116.3
Log Length (m): 116.3

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

silcification throughout, gradually becoming stronger.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
20.8	22.1	1:	Sericite	Strong (51-75%)	Pervasive	Moderate-strong sericite alteration throughout with local weak hematite staining all overprinted by weak silicification
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Silicified	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
15.95	22.11	1:	Pyrite	Fine grained	Stringers	3	
VG: No		2:	Hematite	Fine grained	Veinlet	1	

Structures

From	To	Code	Structure Type	Comments
17.8	22.1	SHD	Shear / mylonitic foliation	Moderate to high strain shown by brecciated to sheared texture

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
17	20	1:	Quartz-Fe-carbonate	Stockwork Veins			2.4	

22.11	**33.17**	11.06	**E1**	**Mafic Volcanic**	Amygdular / Amygdaloidal

Med-light green;FG with sporadic clusters of med grained mafic grains that appear to be amygdules; weak-moderate foliation throughout;patchy very weak magnetic; pervasive weak chlorite alteration(sparse mm scale bands of pure chlorite) with local whispy sericite alteration that appears to be associated with preserved selvages; and patchy weak-moderate silicification showing preference to some veining and sericite alt'd sections.Minor blebs of pyrite in groundmass (up to 1cm). 3-4% qtz-crb veins(locally silcified and minor fe content) mineralized with up to 0.5% pyrite occurring as scattered subhedral grains and disseminated stringers along the vein margins.Sericite alteration is proximal to veining. 2% barren fracture filled qtz-crb veins.

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
27.95	30.8	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
23	26	1:	Quartz-Fe-carbonate	Stockwork Veins			3.8	

DataSet: Brookbank

HoleID: 16-BB-001

Hole Length (m): 116.3

Log Length (m): 116.3

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
26	29	1	Quartz-Fe-carbonate	Stockwork Veins			2.8	
29	32	1	Quartz-Fe-carbonate	Stockwork Veins			4.6	

33.17	**40.78**	7.61	**E1**	**Mafic Volcanic**	Brecciated

Brecciated/sheared interval composed of a variety of colours based on alteration(mainly orange-beige-grey)Fine grained; Weak-moderate pervasive silicification; local weak magnetic; variable intensity of sericite-hematite/ankerite and minor chlorite alteration with sulphidization occurring 2-3% throughout as disseminated stringers of pyrite.1% veinlets/stringers of specular hematite associated with increased qtz-fe crb veining. ~5% silicified qtz-(fe) crb veining

Alteration

From	To	#	Alteration	Intesity	Style	Comments
33.17	40.78	1	Hematite	Moderate (26-50%)	Patches	Variable hematite alteration/staining associated with clastic material in brecciated sections with accompanied sericite alteration that is also variable all overprinted by weak silicification
		2	Sericite	Moderate (26-50%)	Patches	
		3	Silicified	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
33.17	40.78	1	Pyrite	Fine grained	Disseminated	1	
VG: No		2	Hematite	Fine grained	Veinlet	0.5	

Structures

From	To	Code	Structure Type	Comments
33.17	40.78	SHD	Shear / mylonitic foliation	Moderate to high strain shown by brecciated to sheared texture

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
35	38	1	Quartz-Fe-carbonate	Stockwork Veins			1.1	

40.78	**49.3**	8.52	**E1**	**Mafic Volcanic**	Pillowed

Med-dark grey green with local pinkish-purple hue; FG; weak-moderate foliation; variable magnetism(up to moderate),pervasive chlorite alteration with local magnetite, hematite-ankerite, and minor epidote alteration associated with well preserved selvages in pillowed metavolcanics with local brecciated sections(5-30cm). ~10% qtz- fe crb veins mineralizd with up to 3% pyrite occurring as euhedral to subhedral scattered grains and disseminated stringers. local bands of chlorite along some vein margins. 1% local specular hematite associated with some veins.

Alteration

DataSet: Brookbank
HoleID: 16-BB-001

Hole Length (m): 116.3
Log Length (m): 116.3

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Alteration	Intesity	Style	Comments
40.78	49.3	1:	Magnetite	Moderate (26-50%)	Pervasive	Pervasive but variable intesity magnetite and chlorite alteration with patchy/local hematite staining associated with preserved selvages
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Chlorite	Moderate (26-50%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
41.75	47.28	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	
48.82	48.93	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No							

Structures

From	To	Code	Structure Type	Comments
41.85	42.04	CV	Vein contact	Significant width. Silcified qtz- fe crb vein lined with chlorite and mineralized with up to 1% pyrite.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
41	44	1:	Quartz-Fe-carbonate	Stockwork Veins			1.4	
44	47	1:	Quartz-Fe-Carbonate	Stockwork Veins			2.3	

49.3	**84.05**	34.75	**E1**	**Mafic Volcanic**	Sheared / highly strained

Main host is pillowed metavolcanic. Alternating intervals of ~1-2m of similar unit as 33.17-40.78m (brecciated&silicified, mod-strong hematite/ankerite and sericite alteration and patchy areas of hematite where groundmass is composed of soft hematite. Sulphidization throughout producing 2-3% disseminated pyrite along cleavage planes and vein margins as stringers as well as euhedral-subhedral scattered grains proximal to qtz- fe crb veins. silicifed qtz-fe crb veins account for 7-8%) with med green, FG mod foliated metavolcanics (mod magnetic; mod chlorite and local magnetite and minor epidote alteration associated to moderately preserved selvages. 5% qtz-fe crb veins with variable pyrite, up to 1% as scattered grains)1-2% local hematite veinlets seen proximal to increased veining. Faulted sections (5-10cm) marked by late milky qtz-crb veins @ 61.5m,76m,78m

Alteration

From	To	#	Alteration	Intesity	Style	Comments
49.3	50	1:	Hematite	Weak (1-25%)	Patches	Patchy weak hematite alteration/staining with very weak sericite alteration affecting slightly brecciated host
		2:	Sericite	Weak (1-25%)	Patches	

DataSet: Brookbank
HoleID: 16-BB-001

Hole Length (m): 116.3
Log Length (m): 116.3

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
50.5	56.32	1: Hematite 2: Magnetite 3: Sericite		Moderate (26-50%) Weak (1-25%) Weak (1-25%)	Patches Localized Patches	Weak-moderate patchy hematite and weak sericite alteration proximal to veining with local weak magnetite alteration associated with more "fresh" volcanic host
57.7	62.63	1: Hematite 2: Magnetite 3: Sericite		Moderate (26-50%) Weak (1-25%) Weak (1-25%)	Patches Localized Patches	Weak-moderate patchy hematite and weak sericite alteration proximal to veining with local weak magnetite alteration also associated with veining.
63.45	69.52	1: Hematite 2: Sericite		Moderate (26-50%) Moderate (26-50%)	Patches Patches	Patchy moderate hematite and sericite alteration/staining associated with increased qtz-fe crb veining in brecciated section
71.44	73.23	1: Sericite 2: Hematite		Moderate (26-50%) Moderate (26-50%)	Patches Patches	Moderate to strong bleaching/alteration by more dominant sericite alteration with secondary hematite alteration based on colour
74	78.4	1: Hematite 2: Magnetite 3: Sericite		Moderate (26-50%) Weak (1-25%) Weak (1-25%)	Patches Localized Patches	Weak-moderate patchy hematite and weak sericite alteration proximal to veining with local weak magnetite alteration also associated with veining.
79.94	83.6	1: Hematite 2: Sericite 3: Magnetite		Weak (1-25%) Weak (1-25%) Weak (1-25%)	Pervasive Pervasive Patches	Pervasive weak hematite and sericite alteration based on light beige-pink colour throughout with weak magnetite alteration with slight variation in intensity throughout

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
49.3	49.96	1:	Pyrite	Fine grained	Disseminated	0.5	
VG: No							
50.57	56.31	1:	Pyrite	Fine grained	Disseminated	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	
56.84	67.44	1:	Pyrite	Fine grained	Disseminated	1	
VG: No		2:	Hematite	Fine grained	Veinlet	1	
67.87	68.15	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							

DataSet: Brookbank
HoleID: 16-BB-001

Hole Length (m): 116.3
Log Length (m): 116.3

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
69.18	70.71	1:	Pyrite	Fine grained	Stringers	1	
VG: No							
71.67	78.28	1:	Pyrite	Fine grained	Stringers	1	
VG: No		2:	Hematite	Fine grained	Veinlet	1	
79.95	83.58	1:	Pyrite	Fine grained	Disseminated	0.3	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	

Structures

From	To	Code	Structure Type	Comments
50.48	61.45	SHD	Shear / mylonitic foliation	Patches of moderate to high strain throughout interval. Defined by brecciated to sheared texture.
61.45	61.83	FLT2	Fault - breccia	Faulted/brecciated and filled with qtz- fe crb veins. Silica overprint
64.25	67.4	SHD	Shear / mylonitic foliation	Moderate to high strain defined by brecciated to sheared texture.
75.96	76.15	FLT2	Fault - breccia	Faulted/brecciated and filled with qtz-fe crb veins. silica overprint
77.35	77.94	FLT2	Fault - breccia	Faulted/slightly brecciated and filled with a series of qtz crb veins. Silica overprint
83.96	84.04	FLT1	Fault - Black line	Fault that resembles black line fault with 1-2cm brecciated margins. silica overprint

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
50	53	1:	Quartz-Fe-Carbonate	Stockwork Veins			6.3	
53	56	1:	Quartz-Fe-Carbonate	Stockwork Veins			2.1	
56	59	1:	Quartz-Fe-Carbonate	Stockwork Veins			2.2	
59	62	1:	Quartz-Fe-Carbonate	Stockwork Veins			1.9	
62	65	1:	Quartz-Fe-Carbonate	Stockwork Veins			3.4	
65	68	1:	Quartz-Fe-Carbonate	Stockwork Veins			3.6	
68	71	1:	Quartz-Fe-Carbonate	Stockwork Veins			3.8	
71	74	1:	Quartz-Fe-Carbonate	Stockwork Veins			3.3	
74	77	1:	Quartz-Fe-carbonate	Stockwork Veins			5.9	
77	80	1:	Quartz-Fe-carbonate	Stockwork Veins			3.9	

DataSet: Brookbank
HoleID: 16-BB-001

Hole Length (m): 116.3
Log Length (m): 116.3

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
80	83	1:	Quartz-Fe-carbonate	Stockwork Veins			7.1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
84.05	**94.3**	10.25		**E1**	**Mafic Volcanic**			

Med-pale green;FG; moderate foliation; local very weak magnetic; pervasive moderate chlorite alteration with local whispy sericite alt'd sections that displays a semi-banded texture, sheared metavolcanics, no evidence of pillow selvages. 3-4% qtz-crb veins. locally mineralized with up to 2% disseminated stringers of pyrite, mineralization associated to sericite alt'd halos around veins. Trace local pyrite stringers along cleavage planes in host. 2 ~5cm Faults marked by "black fault" material @ upper contact and 88.9m

Structures

From	To	Code	Structure Type	Comments
88.87	88.95	FLT1	Fault - Black line	Fault that resembles black line fault with 1-2cm brecciated margins. silica overprint

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
86	89	1:	Quartz-Fe-carbonate	Vein > 3"			9.2	
		2:	Quartz-Fe-carbonate	Stockwork Veins			12.1	
89	92	1:	Quartz-Fe-carbonate	Stockwork Veins			2.7	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
94.3	**94.79**	0.49		**FLT**	**Fault Zone**	Faulted		

Silicified black fault material, very fine grained and cross cut with a series of qtz (crb) veins that pre-date silicification. Very trace disseminated pyrite.

Structures

From	To	Code	Structure Type	Comments
94.3	94.79	FLT1	Fault - Black line	Black Fault. Very fine grained black baterial cut with numerous qtz-crb veins. Silica overprint

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
94.79	**116.3**	21.51		**S4B**	**Polymictic Conglomerate**	Supported - matrix		

Med green; FG matrix; moderate to locally strong foliation; non magnetic; moderate to strong chlorite and minor local sericite alteration; polymictic martrix supported conglomerate with 30% semi round and flattened, various litho clasts up to 10cm (mainly granitoid, chert, qtz) 2% barren qtz-crb veins throughout. very trace disseminated stringers of pyrite along some cleavage planes. One mineralized clast/ possible boudin at 115m (med grey, silicifed qtz/ chert?. 11cm wide. 0.5% pyrite as scattered grains

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
115.01	115.14	1:	Pyrite	Fine grained	Stringers	1	

DataSet: Brookbank
HoleID: 16-BB-001

Hole Length (m): 116.3
Log Length (m): 116.3

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
VG: No							

Structures

From	To	Code	Structure Type	Comments
94.79	116.3	FOL	Foliation	Moderate to strong foliation with increasing intesity with depth throughout conglomerate

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
95	98	1:	Quartz-Fe-carbonate	Stockwork Veins			3.3	
98	101	1:	Quartz-Fe-carbonate	Stockwork Veins			11.6	
101	104	1:	Quartz-Fe-carbonate	Stockwork Veins			6.5	
104	107	1:	Quartz-Fe-carbonate	Stockwork Veins			4.3	
107	110	1:	Quartz-Fe-carbonate	Stockwork Veins			5.3	
110	113	1:	Quartz-Fe-carbonate	Stockwork Veins			5.6	
113	116	1:	Quartz-Fe-carbonate	Vein > 3"			14.9	
116	116.3	1:	Quartz-Fe-carbonate	Stockwork Veins			3.1	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 116.3**

HoleID: 16-BB-001 **Max Samp Depth (m): 116.3**

Total meters Sampled: 113.3

Primary Assay Samples:	91	87.5 %
Field Duplicate Samples:	3	2.88 %
Standard/Blank Samples:	10	9.62 %
Total Samples:	104	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
3	4.5	1.5	178785	HCORE			A16-10709	<0.005	
		0	178786	Blank		Blank	A16-10709	<0.005	
4.5	6	1.5	178787	HCORE			A16-10709	<0.005	
6	7.25	1.25	178788	HCORE			A16-10709	<0.005	
7.25	8.4	1.15	178789	HCORE			A16-10709	<0.005	
8.4	9.8	1.4	178790	HCORE			A16-10709	0.513	
9.8	10.83	1.03	178791	HCORE			A16-10709	<0.005	
10.83	12.3	1.47	178792	HCORE			A16-10709	0.005	
12.3	13.75	1.45	178793	HCORE			A16-10709	<0.005	
		0	178794	STD		CDN_GS_P4B	A16-10709	0.392	
13.75	14.9	1.15	178795	HCORE			A16-10709	<0.005	
14.9	15.95	1.05	178796	HCORE			A16-10709	<0.005	
15.95	17.3	1.35	178797	HCORE			A16-10709	0.007	
17.3	18.4	1.1	178798	HCORE			A16-10709	0.434	
18.4	19.35	0.95	178799	HCORE			A16-10709	1.35	
19.35	20.85	1.5	178800	HCORE			A16-10709	0.013	
20.85	22.11	1.26	178801	HCORE			A16-10709	5.66	
22.11	23.5	1.39	178802	HCORE			A16-10709	0.194	
		0	178803	DUP	178802		A16-10709	0.139	
23.5	25	1.5	178804	HCORE			A16-10709	0.14	
25	26.5	1.5	178805	HCORE			A16-10709	0.065	
26.5	27.3	0.8	178806	HCORE			A16-10709	0.7	
27.3	28.5	1.2	178807	HCORE			A16-10709	0.176	
28.5	29.75	1.25	178808	HCORE			A16-10709	0.029	
29.75	30.8	1.05	178809	HCORE			A16-10709	0.006	
30.8	32	1.2	178810	HCORE			A16-10709	<0.005	
32	33.17	1.17	178811	HCORE			A16-10709	<0.005	
		0	178812	STD		CDN_GS_5K	A16-10709	3.83	
33.17	34.35	1.18	178813	HCORE			A16-10709	0.721	

34.35	35.2	0.85	178814	HCORE			A16-10709	3.02
35.2	36.15	0.95	178815	HCORE			A16-10709	0.024
36.15	37.65	1.5	178816	HCORE			A16-10709	7.27
37.65	38.6	0.95	178817	HCORE			A16-10709	2.25
38.6	39.4	0.8	178818	HCORE			A16-10709	1.45
39.4	40.78	1.38	178819	HCORE			A16-10714	4.46
		0	178820	Blank		Blank	A16-10714	<0.005
40.78	41.76	0.98	178821	HCORE			A16-10714	<0.005
41.76	43	1.24	178822	HCORE			A16-10714	0.016
43	44.45	1.45	178823	HCORE			A16-10714	0.008
44.45	45.7	1.25	178824	HCORE			A16-10714	<0.005
45.7	47.2	1.5	178825	HCORE			A16-10714	0.005
47.2	48.3	1.1	178826	HCORE			A16-10714	0.006
48.3	49.3	1	178827	HCORE			A16-10714	0.013
		0	178828	STD		CDN_GS_P4B	A16-10714	0.383
49.3	50	0.7	178829	HCORE			A16-10714	1.18
50	51.5	1.5	178830	HCORE			A16-10714	0.057
51.5	53	1.5	178831	HCORE			A16-10714	0.008
53	54	1	178832	HCORE			A16-10714	<0.005
54	55.15	1.15	178833	HCORE			A16-10714	0.008
55.15	56.25	1.1	178834	HCORE			A16-10714	0.096
56.25	57.7	1.45	178835	HCORE			A16-10714	0.024
57.7	59.2	1.5	178836	HCORE			A16-10714	0.077
		0	178837	DUP	178836		A16-10714	0.086
59.2	60.4	1.2	178838	HCORE			A16-10714	0.136
60.4	61.4	1	178839	HCORE			A16-10714	0.097
61.4	62.75	1.35	178840	HCORE			A16-10714	0.13
62.75	64.1	1.35	178841	HCORE			A16-10714	0.027
64.1	65.2	1.1	178842	HCORE			A16-10714	0.258
65.2	66.3	1.1	178843	HCORE			A16-10714	0.403
66.3	67.2	0.9	178844	HCORE			A16-10714	9.97
67.2	68.3	1.1	178845	HCORE			A16-10714	0.254
		0	178846	STD		CDN_GS_5K	A16-10714	3.81
68.3	69.5	1.2	178847	HCORE			A16-10714	0.016
69.5	71	1.5	178848	HCORE			A16-10714	0.201
71	72.25	1.25	178849	HCORE			A16-10714	0.269

72.25	73.25	1	178850	HCORE			A16-10714	2.52
73.25	74.75	1.5	178851	HCORE			A16-10714	0.096
74.75	75.7	0.95	178852	HCORE			A16-10714	0.073
75.7	76.5	0.8	178853	HCORE			A16-10714	0.907
		0	178854	Blank		Blank	A16-10718	<0.005
76.5	77.5	1	178855	HCORE			A16-10718	7.2
77.5	78	0.5	178856	HCORE			A16-10718	0.167
78	79	1	178857	HCORE			A16-10718	0.006
79	79.95	0.95	178858	HCORE			A16-10718	<0.005
79.95	81.3	1.35	178859	HCORE			A16-10718	0.066
81.3	82.7	1.4	178860	HCORE			A16-10718	2.59
82.7	84.05	1.35	178861	HCORE			A16-10718	0.381
		0	178862	STD		CDN_GS_P4B	A16-10718	0.38
84.05	85.5	1.45	178863	HCORE			A16-10718	0.014
85.5	87	1.5	178864	HCORE			A16-10718	0.268
87	88.5	1.5	178865	HCORE			A16-10718	<0.005
88.5	90	1.5	178866	HCORE			A16-10718	0.008
90	91.5	1.5	178867	HCORE			A16-10718	0.719
91.5	92.9	1.4	178868	HCORE			A16-10718	0.618
92.9	94.3	1.4	178869	HCORE			A16-10718	0.038
94.3	94.79	0.49	178870	HCORE			A16-10718	0.07
		0	178871	DUP	178870		A16-10718	0.041
94.79	96	1.21	178872	HCORE			A16-10718	0.008
96	97.3	1.3	178873	HCORE			A16-10718	0.013
97.3	98.5	1.2	178874	HCORE			A16-10718	0.006
98.5	100	1.5	178875	HCORE			A16-10718	0.025
100	101.5	1.5	178876	HCORE			A16-10718	<0.005
101.5	103	1.5	178877	HCORE			A16-10718	0.008
103	104.5	1.5	178878	HCORE			A16-10718	0.007
104.5	106	1.5	178879	HCORE			A16-10718	0.008
		0	178880	STD		CDN_GS_5K	A16-10718	3.81
106	107.5	1.5	178881	HCORE			A16-10718	0.075
107.5	109	1.5	178882	HCORE			A16-10718	0.037
109	110.5	1.5	178883	HCORE			A16-10718	<0.005
110.5	112	1.5	178884	HCORE			A16-10718	0.014
112	113.5	1.5	178885	HCORE			A16-10718	0.024

113.5	115	1.5	178886	HCORE			A16-10718	0.028
115	116.3	1.3	178887	HCORE			A16-10718	0.02
		0	178888	Blank		Blank	A16-10718	<0.005

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-02 DataSet: Brookbank Program: Development

Hole Status:	COMPLETE	**Hole Length (m):**	247	**Logged By:**	K. Leupen
Hole Type:	Surface Drill Hole	**Dip (º):**	-47.1	**Date Log Started:**	10/29/2016
Date Drill Started:	10/25/2016	**Azimuth:**	344.3	**Date Log Completed:**	11/4/2016
Date Drill Completed:	10/29/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	439,700.8	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,113.8	**Date Surveyed:**	11/4/2016
Elevation (masl):	325.428	**Surveyed By:**	D. Grabiec
Tenement ID:	TB29038	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3
Core Storage:	Old Arena Road

Purpose: To test transition from 1 zone (bottom West) to 2 zones (Upper East).

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 231 **Max Sample Depth (m):** 247

Depth Logged To (m) 247 **Meters Sampled** 243.05

Total Samples 305 **# Assay** 269 **# QAQC:** 36

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-47.1	344.3	TN14	SINGLESHOT	G4	10/26/2016		Yes
6	-46.64	343.82	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
8	-46.29	344.78	EZ-GYRO	SINGLESHOT	G4	10/25/2016		Yes
15	-46.53	344.01	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
24	-46.38	344.23	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
33	-46.22	345.28	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
41	-45.69	346.01	EZ-GYRO	SINGLESHOT	G4	10/26/2016		Yes
42	-46.08	346.14	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
51	-46.04	345.77	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
60	-46.05	345.92	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
69	-46.02	346	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
78	-45.9	345.93	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
104	-45.05	346.15	EZ-GYRO	SINGLESHOT	G4	10/27/2016	retake of measurement at same depth	Yes
105	-45.42	346.06	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
114	-45.25	345.65	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
123	-45.1	345.52	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
132	-44.89	345.43	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
141	-44.8	345.86	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
150	-44.73	346.23	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
153	-44.51	347.2	EZ-GYRO	SINGLESHOT	G4	10/27/2016	retake of measurement at same depth	Yes
159	-44.58	346.84	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
168	-44.49	346.61	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
177	-44.35	346.9	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
186	-44.22	346.97	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
195	-44.12	346.62	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
204	-44.06	346.45	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
213	-43.78	346.68	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
222	-43.45	346.63	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes
231	-43.16	346.82	EZ-GYRO	MULTISHOT	G4	10/30/2016		Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	3	3		CS	Casing		
3	50.15	47.15		E1	Mafic Volcanic	Pillowed	Fine grained
50.15	65	14.85		E1	Mafic Volcanic	Pillowed	Fine grained
65	80.44	15.44		E1	Mafic Volcanic	Massive	Medium grained
80.44	88.7	8.26		E1	Mafic Volcanic	Pillowed	Fine grained
88.7	115	26.3		E1	Mafic Volcanic	Massive	Medium grained
115	148.86	33.86		E1	Mafic Volcanic	Pillowed	Fine grained
148.86	199.49	50.63		E1	Mafic Volcanic	Pillowed	Fine grained
199.49	215.66	16.17		E1	Mafic Volcanic		Fine grained
215.66	216.4	0.74		FLT	Fault Zone		Fine grained
216.4	247	30.6		S4	Conglomerate		Coarse grained

DataSet: Brookbank

HoleID: B-16-02

Hole Length (m): 247

Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**3**	3		**CS**	**Casing**			K. Leupen
3	**50.15**	47.15		**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Pillowed metavolcanics. Med green with pulses of med grey where magnetite alteration is present. Fine grained, local weak-moderate magnetic; local clusters of carb and epidote amygdules(minor pyrite associated), Moderate carb alteration associated with higher magnetics. Epidote and minor pyrite replacement of magnetite as scattered stringers present where selvages are visible. Weakly silcified from ~4 to 6m where 2-3% mineralized qtz-fe crb veins are present with up to 1% pyrite and minor chalcopyrite, exhibiting weak-moderate sericite-ankerite alteration halos, section cut by series of later thin specular hematite veinlets (cutting veins&throughout litho). Interval as a whole veined with 2% qtz- fe crb calcite veins(vuggy) and mineralized with up to 0.5% pyrite and contain hematite. Minor sulphide replaced sevlages(containing magnetite) sparse throughout as mentioned. 1-2% qtz(+/- fe)crb extension veins throughout

Alteration

From	To	#	Alteration	Intesity	Style	Comments
3.5	6.2	1:	Specular hematite	Moderate (26-50%)	Spotted	1% hematite veinlets exhibitng cross cutting relationships to previous features. Local weak-moderate sericite-ankerite halos around qtz-fe crb veins. Weak silicification
		2:	Sericite	Moderate (26-50%)	Localized	
		3:	Ankerite	Weak (1-25%)	Localized	
		4:	Silicified	Weak (1-25%)	Pervasive	
13.8	18.8	1:	Magnetite	Moderate (26-50%)	Pervasive	Weak-moderate magnetite and mod-strong crb alteration throughout interval. 1% hematite veinlets crosscutting previous features/veins
		2:	Specular hematite	Moderate (26-50%)	Spotted	
		3:	Fe-Carbonate	Strong (51-75%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
3.78	6.13	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No		2:	Hematite	Fine grained	Veinlet	1	
		3:	Chalcopyrite	Fine grained	Blebs	0.1	
8	12.15	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	
15.73	19.88	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	
21.5	23.8	1:	Pyrite	Fine grained	Scattered grains	0.3	
VG: No							
27.38	32.84	1:	Pyrite	Medium grained	Scattered grains	1	Pyrite in veins as well as groundmass
VG: No							
34.36	36.73	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No							

DataSet: Brookbank
HoleID: B-16-02

Hole Length (m): 247
Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
43.88	47.15	1:	Pyrite	Fine grained	Scattered grains	0.3	
VG: No		2:	Hematite	Fine grained	Veinlet	0.3	

Structures

From	To	Code	Structure Type	Comments
7.8	22	HFZ	High fracture zone	
36.15	36.3	CV	Vein contact	Epidote-FeCrb vein/altered selvage cut by mineralized qtz-fe crb calcite vein
46.3	48	HFZ	High fracture zone	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
3	6	1:	Quartz-Fe-Carbonate	Extension Vein			2.1	
6	9	1:	Quartz-Fe-Carbonate	Extension Vein			2.8	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.3	
9	12	1:	Quartz-Fe-Carbonate	Extension Vein			2.5	
12	15	1:	Quartz-Fe-Carbonate	Extension Vein			2.2	
15	18	1:	Quartz-Fe-Carbonate	Extension Vein		50	2	
		2:	Quartz-Fe-carbonate	Extension Vein			1.7	
18	21	1:	Quartz-Fe-Carbonate	Extension Vein			3	
21	24	1:	Quartz-Fe-carbonate	Extension Vein			2.4	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.5	
24	27	1:	Quartz-Fe-carbonate	Extension Vein		45	3.2	
27	30	1:	Quartz-Fe-carbonate	Extension Vein			3.4	
		2:	Quartz-Fe-Carbonate	Extension Vein			0.8	
30	33	1:	Quartz-Fe-Carbonate	Extension Vein			1.8	
		2:	Quartz-Fe-carbonate	Extension Vein			1.1	
33	36	1:	Quartz-Fe-carbonate	Extension Vein		40	2	
		2:	Quartz-Fe-Carbonate	Extension Vein			0.2	
36	39	1:	Quartz-Fe-Carbonate	Extension Vein			2.1	
39	42	1:	Quartz-Fe-Carbonate	Extension Vein			1.2	

DataSet: Brookbank
HoleID: B-16-02

Hole Length (m): 247
Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
50.15	**65**	14.85		**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Pillowed metavolcanics with moderate to strong sericite-ankerite altaeration halos associated with weakly silicifed and mineralized qtz- fe crb veins(specific to start of interval to 55.5m)Med green-grey colour with patchy beige and pink hue proximal to veins. 2-3% weakly silicified qtz- fe crb veins with up to 1% pyrite mainly along vein margins in alteration halos. Series of hematite veinlets cutting litho and veins Rest of interval is simialr to above unit (

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
42	45	1:	Quartz-Fe-carbonate	Extension Vein			3.2	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			2	
45	48	1:	Quartz-Fe-carbonate	Extension Vein			3.2	
		2:	Quartz-Fe-Carbonate	Extension Vein			0.6	

Alteration

From	To	#	Alteration	Intesity	Style	Comments
51.55	55.5	1:	Sericite	Moderate (26-50%)	Localized	Local weak-moderate sericite-ankerite alteration halos associated with mineralized qtz-fe crb veins. 1-2% hematite veinlets cutting previous features throughout interval. Weak silica overprint
		2:	Specular hematite	Moderate (26-50%)	Spotted	
		3:	Ankerite	Weak (1-25%)	Localized	
		4:	Silicified	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
51.39	55.23	1:	Hematite	Fine grained	Veinlet	1	
VG: No		2:	Pyrite	Fine grained	Scattered grains	0.5	
55.34	63.95	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.3	

Structures

From	To	Code	Structure Type	Comments
56	63	HFZ	High fracture zone	
64.25	64.6	FLT	Fault	Ground fault material/ rubble
64.8	65	CT	Litho contact - tectonic (sheared / faulted)	Sheared contact

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
51	55	1:	Quartz-Fe-Carbonate	Extension Vein		40	3.4	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.2	
55	58	1:	Quartz-Fe-Carbonate	Extension Vein			2.4	

DataSet: Brookbank
HoleID: B-16-02

Hole Length (m): 247
Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
58	61	1:	Quartz-Fe-carbonate	Extension Vein			2.1	
		2:	Quartz-Fe-Carbonate	Extension Vein			0.5	
61	64	1:	Quartz-Fe-carbonate	Extension Vein			2	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
65	**80.44**	15.44		**E1**	**Mafic Volcanic**	Massive	Medium grained	K. Leupen

Massive metavolcanics with few and far between pillow selvages that are weakly defined. Med green; medium grained massive texture that becomes weakly foliated with depth. Weak magnetic that fades with depth.1-2% qtz fe crb extension veins that are slightly vuggy, very trace to insignificant pyrite occuring in groundmass proximal to veins. minor epidote veinlets cutting groundmass throughout. Interval becomes altered/sheared from 78.5m to end of interval where colour becomes lighter green and fades to a beige-grey colour with depth where it is cut by a series of hematite veinlets/ filled tension fractures. One weakly silicified/sulphide replaced 7cm qtz-crb vein containing 2-3% pyrite locally, as well as 1% sheared qtz-fe crb veins that are weakly mineralized.Sparse euhdral pyrite scattered in groundmass. Lower contact is sharp and near vertical in core

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
78.8	80.44	1:	Pyrite	Fine grained	Scattered grains	2	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	

Structures

From	To	Code	Structure Type	Comments
78	80.44	SHD	Shear / mylonitic foliation	Transition to stronger foliation that gradually increases to 79.4 then gets weaker up to contact

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
67	70	1:	Quartz-Fe-Carbonate	Extension Vein			2.7	
70	73	1:	Quartz-Fe-Carbonate	Extension Vein		60	3.5	
73	76	1:	Quartz-Fe-Carbonate	Extension Vein			2.6	
		2:	Quartz-Fe-carbonate	Extension Vein		20	1.2	
76	79	1:	Quartz-Fe-Carbonate	Extension Vein			3.2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
80.44	**88.7**	8.26		**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Magnetite altered pillowed metavolcanics. Med-dark grey green colour with local pink-purple hue, moderate to strong magnetic and moderate patchy carb alteration proximal to increased qtz- fe crb veining. 2-3% mineralized qtz- fe crb/calcite (vuggy) veins with up to 0.5% pyrite and hematite mainly along the vein margins. 1% pyrite replaced stringers where selvages have higher magnetite

DataSet: Brookbank
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Hole Length (m): 247
Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

content. 1% hematite and chlorite filled tension fractures and veinlets throughout that exhibit cross-cutting relationship to earlier features. Minor qtz-crb +/- fe extension veinlets throughout

Alteration

From	To	#	Alteration	Intesity	Style	Comments
80.44	88.7	1:	Magnetite	Strong (51-75%)	Pervasive	Pervasive mod-strong magnetite alteration with slight variance in intesity. Moderate to strong carb alteration where more qtz-fe crb veins are present, with weak sericite-ankerite alteration halos at veins. Series of hematite veinlets throughout interval
		2:	Fe-Carbonate	Strong (51-75%)	Patches	
		3:	Specular hematite	Moderate (26-50%)	Spotted	
		4:	Sericite	Weak (1-25%)	Localized	
		5:	Ankerite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
81.2	88.7	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
82	85	1:	Quartz-Fe-carbonate	Extension Vein			1.7	
85	88	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
88.7	**115**	26.3		**E1**	**Mafic Volcanic**	Massive	Medium grained	K. Leupen

Massive metavolcanics with few and far between pillow selvages. Med-dark green with slight grey hue, medium grained massive texture. Variable magnetite alteration (weak to insignificant) throughout interval. <1% mineralized qtz- fe crb veins with up to 0.5% pyrite and minor sericite-ankerite alteration halos. Significant width vein (97.53m-97.9m) where vuggy qtz-fe crb vein cuts epidote altered selvage. Broken up and mineralized with 1% pyrite. 1% epidote-kspar veins and 1% qtz-crb(+/- epidote) extension veins throughout.

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
91.63	91.7	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							
97.26	98	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
91	94	1:	Quartz-Fe-carbonate	Extension Vein			2.8	

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Hole Length (m): 247
Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.8	
94	97	1	Quartz-Fe-carbonate	Extension Vein			4.5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			0.5	
97	100	1	Quartz-Fe-Carbonate/Epidote	Extension Vein		50	4.5	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.4	
100	103	1	Quartz-Fe-carbonate	Extension Vein			1.6	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.8	
103	106	1	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.6	
		2	Quartz-Fe-carbonate	Extension Vein			0.5	
106	109	1	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			0.4	
109	112	1	Quartz-Fe-Carbonate/Epidote	Shear Vein			2	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.5	
112	115	1	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.6	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
115	**148.86**	33.86	**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Pillowed metavolcanics. Med green with patched of med grey colour from weak magnetite alteration(proximal to increased qtz-fe crb veins), fine grained, weak foliation, variably magnetic throughout (very weak to moderate). Frequent epidote alteration of selvages with minor magnetite rich margins that are sparsely replaced with pyrite stringers. 2-3% mineralized qtz fe crb/calcite veins(usually vuggy) with up to 0.5% pyrite, minor hematite and minor sericite-ankerite alteration halos. Rare qtz- fecrb(+/- epidote-kspar) that contain trace pyrite. 1-2% barren epidote-Fe crb (previously logged as kfp)and qtz-crb(+/-epidote) extension veins

Alteration

From	To	#	Alteration	Intesity	Style	Comments
145	145.6	1	Silicified	Weak (1-25%)	Pervasive	Weakly silicifed interval. Weak magnetite alteration with local very weak sericite-ankerite alteration halos around qtz-fe crb veins
		2	Magnetite	Weak (1-25%)	Pervasive	
		3	Sericite	Weak (1-25%)	Localized	
		4	Ankerite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
115.06	115.6	1	Pyrite	Fine grained	Scattered grains	0.3	
VG: No							

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Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
118.18	133.73	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.3	
136.09	137.31	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							
138.37	146.23	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.2	

Structures

From	To	Code	Structure Type	Comments
118.2	127.2	HFZ	High fracture zone	Short sections(20-60cm) of highly fractured core in this interval
130.3	133.2	HFZ	High fracture zone	Short sections(20-60cm) of highly fractured core in this interval. Some influence from vuggy veins

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
115	118	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.7	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.6	
118	121	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			4.6	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
121	124	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			2.8	
124	127	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			3	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.2	
127	130	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			4	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
130	133	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			5.2	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.4	
133	136	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			3	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.6	
136	139	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			3.2	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.2	
139	142	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.8	

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HoleID: B-16-02

Hole Length (m): 247

Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
142	145	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			5.5	
		2:	Quartz-Fe-Carbonate	Extension Vein			3.5	
145	148	1:	Quartz-Fe-Carbonate	Extension Vein			3.6	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
148.86	**199.49**	50.63		**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Magnetite altered pillowed metavolcanics. Med green colour with local grey/pinkish hue coloured sections. Weak-strong magnetic throughout(more intense in grey-pinkish areas, more veining in these sections)2-3% mineralized qtz fe crb veins(vuggy) with up to 0.5% pyrite and hematite veinlets with weak sericite-ankerite alteration halos. Minor sulphide replacement of magnetite rich selvages. 2% barren extension veins(qtz crb(+/- epidote&fe) and 2% selvage related epidote-Fe crb (previously logged as kfp) veins. Short sections(20cm-1m) of highly broken core, see structures table for exact intervals.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
149	154	1:	Magnetite	Strong (51-75%)	Pervasive	Mod-strong magnetite and carb altered section with increased qtz fe crb veins. Hematite veinlets throughout
		2:	Fe-Carbonate	Strong (51-75%)	Pervasive	
		3:	Specular hematite	Moderate (26-50%)	Spotted	
166.5	176.8	1:	Magnetite	Strong (51-75%)	Pervasive	Mod-strong magnetite and carb altered section with increased qtz fe crb veins. minor hematite veinlets
		2:	Fe-Carbonate	Strong (51-75%)	Pervasive	
		3:	Hematite	Weak (1-25%)	Spotted	
195	199.49	1:	Magnetite	Strong (51-75%)	Pervasive	Mod-strong magnetite and carb altered section with increased qtz fe crb veins. Hematite veinlets throughout with concentration towards lower contact. Gradual weak sericite alteration/bleaching for last ~2m of interval up to lower contact.
		2:	Fe-Carbonate	Strong (51-75%)	Pervasive	
		3:	Specular hematite	Weak (1-25%)	Spotted	
		4:	Sericite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
149.07	155.25	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	
158.27	160	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							
162.5	176.9	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.3	

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Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
179.53	180.89	1:	Pyrite	Fine grained	Scattered grains	0.3	
VG: No		2:	Hematite	Fine grained	Veinlet	0.3	
181.75	188.48	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.1	
190.08	199.49	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	

Structures

From	To	Code	Structure Type	Comments
169	176.5	HFZ	High fracture zone	Short sections (20cm-1m) of highly fractured to rubbly core
198.7	199.49	SHD	Shear / mylonitic foliation	Transitonal shear that gets stronger with depth leading up to "shear zone"

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
151	154	1:	Quartz-Fe-Carbonate	Extension Vein			4	
154	157	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	
		2:	Quartz-Fe-Carbonate	Extension Vein			3	
157	160	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			5	
		2:	Quartz-Fe-Carbonate	Extension Vein			1	
160	163	1:	Quartz-Fe-carbonate	Extension Vein			2	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
163	166	1:	Quartz-Fe-carbonate	Extension Vein			3.6	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.5	
166	169	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.6	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.4	
169	172	1:	Quartz-Fe-Carbonate	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.4	
172	175	1:	Quartz-Fe-Carbonate	Extension Vein			4.4	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.8	
175	178	1:	Quartz-Fe-Carbonate	Extension Vein			3.2	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			2.8	

DataSet: Brookbank
HoleID: B-16-02

Hole Length (m): 247
Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
199.49	**215.66**	16.17		**E1**	**Mafic Volcanic**		Fine grained	D. Leduchowski

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
178	181	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			3.6	
		2:	Quartz-Fe-Carbonate	Extension Vein			2.6	
181	184	1:	Quartz-Fe-Carbonate	Extension Vein			4.4	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			2.8	
184	187	1:	Quartz-Fe-Carbonate	Extension Vein			3.1	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			2.2	
187	190	1:	Quartz-Fe-Carbonate/Epidote	Shear Vein			3.8	
		2:	Quartz-Fe-Carbonate	Extension Vein			3	
190	193	1:	Quartz-Fe-Carbonate	Extension Vein			2.5	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			0.8	
193	196	1:	Quartz-Fe-Carbonate	Extension Vein			3.2	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			1.6	
196	199	1:	Quartz-Fe-Carbonate	Extension Vein			8	

Re-examined core. Higher Au values not controlled by alteration (geochemical), rather structural. Highest Au values in fold hinges of zone, where shearing is not as transposed. Increase in PY where Au is high.
Brookbank shear zone (sheared metavolcanic). Strong mylonitic shearing and foliation TCA 65 degrees. Pulses of pink, green and white with grey. Brecciated, shear, extension veins, vuggy qz-Fe-crb veins throughout. Sct-dis PY throughout and along shear planes. Lcl PY sct in and along veins. Nonmagnetic (inc in sil). Pervasive strong silicification throughout. Bands of specular hematite. Mod Fe-crb alteration haloes. Pervasive silicification associated with patchy sericite and sericite banding (increasing towards lower contact).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
199.49	205.4	1:	Silicified	Strong (51-75%)	Pervasive	Mod silicified. Banded ser alt'n assoc w/sil. Banded spc (some hem) alt'n throughout. Patchy Fe-Crb alt'n haloes, increased near veining (previously logged as some KFP).
		2:	Sericite	Strong (51-75%)	Banding	
		3:	Specular hematite	Strong (51-75%)	Banding	
		4:	Ankerite	Strong (51-75%)	Patches	
205.4	215.66	1:	Silicified	Moderate (26-50%)	Patches	Less silicified. More clay rich. Patchy mod sil. Banded v. str ser and chl alt'n. Banded str spc. Patchy Ank in host and around vns.
		2:	Sericite	Very strong (76-99%)	Banding	
		3:	Chlorite	Moderate (26-50%)	Banding	
		4:	Specular hematite	Strong (51-75%)	Banding	
		5:	Ankerite	Strong (51-75%)	Patches	

Minerals

DataSet: Brookbank

HoleID: B-16-02

Hole Length (m): 247

Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Mineral	GrainSize	Style	%	Comments
199.49	203	1:	Pyrite	Fine grained	Disseminated	0.6	hematite is specular hematite
VG: No		2:	Hematite	Fine grained	Veinlet	0.5	

Structures

From	To	Code	Structure Type	Comments
199.49	215.66	SHD	Shear / mylonitic foliation	Shear zone

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
202	205	1:	Quartz-Fe-Carbonate	Extension Vein		57	45	
		2:	Specular Hematite	Shear Vein			0.7	
205	208	1:	Quartz-Fe-Carbonate	Extension Vein			35	
		2:	Quartz-Fe-Carbonate	Vein > 3"			6.6	
208	211	1:	Quartz-Fe-Carbonate	Extension Vein			37	
		2:	Quartz-Fe-Carbonate	Shear Vein		65	0.7	
211	214	1:	Quartz-Fe-Carbonate	Extension Vein			40	

215.66	**216.4**	0.74	**FLT**	**Fault Zone**		Fine grained	D. Leduchowski
			E1	Mafic Volcanic		Fine grained	

Black fault. Very strongly silicified and brecciated. "Black" material is very fine-grained. Local 1cm bands of sericite. Barren. Increase in veining from above - extension veins (some at low angle). Upper contact of ~75 degrees.

Structures

From	To	Code	Structure Type	Comments
215.66	216.4	FLT4	Fault - cataclasite	Black fault. Strongly brecciated.

216.4	**247**	30.6	**S4**	**Conglomerate**		Coarse grained	D. Leduchowski

Sheared polymictic conglomerate. Light-dark grey. Quartz-carb-feldspar and jasper clasts ranging from <2mm to 3cm in size. Clasts vary subrounded to angular. Strongly sheared. Matrix varies from fine-grained to coarse-grained. Ser and chl alt'n in bands in matrix. Weak-mod ank alteration haloes near veining. PY Barren.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
216.5	219	1:	Chlorite	Moderate (26-50%)	Banding	Patchy Fe-crb alt'n haloes associated with veins. Mod banded ser alt'n in conglomerate.
		2:	Sericite	Moderate (26-50%)	Banding	
		3:	Ankerite	Moderate (26-50%)	Patches	

DataSet: Brookbank
HoleID: B-16-02

Hole Length (m): 247
Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
219	223.68	1: Chlorite 2: Ankerite 3: Sericite		Moderate (26-50%) Weak (1-25%) Strong (51-75%)	Banding Localized Banding	Localized ankerite. Pervasive, banded ser along shear planes in matrix of conglomerate.
223.68	235.64	1: Chlorite 2: Ankerite 3: Sericite		Moderate (26-50%) Weak (1-25%) Very strong (76-99%)	Banding Localized Banding	Lcl very weak ank w. veins. Pervasive very strong sericite bands associated with shearing in matrix of conglomerate.
235.64	247	1: Chlorite 2: Sericite		Moderate (26-50%) Strong (51-75%)	Banding Pervasive	Lcl Fe-crb associated with veins. Pervasive strong sericite bands along shear planes.

Structures

From	To	Code	Structure Type	Comments
216.4	247	FOL	Foliation	Strongly foliated and sheared. Proximal to shear zone lower contact.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
217	220	1: Quartz-Fe-Carbonate		Extension Vein			62.4	
220	223	1: Quartz-Fe-Carbonate 2: Quartz-Fe-carbonate		Extension Vein Shear Vein			21.1 2.8	
223	226	1: Quartz-Fe-Carbonate 2: Quartz-Fe-Carbonate		Extension Vein Vein > 3"			27.1 0.25	
226	229	1: Quartz-Fe-Carbonate		Extension Vein			70	
229	232	1: Quartz-Fe-Carbonate 2: Quartz-Fe-carbonate		Extension Vein Shear Vein			40 1.2	
232	235	1: Quartz-Fe-Carbonate		Extension Vein			25	
235	238	1: Quartz-Fe-carbonate 2: Quartz-Fe-carbonate		Extension Vein Vein > 3"			18 16	
238	241	1: Quartz-Fe-carbonate 2: Quartz-Fe-carbonate		Extension Vein Shear Vein			29.3 3.4	
241	244	1: Quartz-Fe-carbonate 2: Quartz-Fe-carbonate		Extension Vein Vein > 3"			12.6 37	

DataSet: Brookbank

HoleID: B-16-02

Hole Length (m): 247

Log Length (m): 247

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
244	247	1	Quartz-Fe-carbonate	Extension Vein			32.5	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 247**

HoleID: B-16-02 **Max Samp Depth (m): 247**

Total meters Sampled: 243.05

Primary Assay Samples:	269	88.2 %
Field Duplicate Samples:	10	3.28 %
Standard/Blank Samples:	26	8.52 %
Total Samples:	305	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
3	3.78	0.78	263001	HCORE			A16-11538	0.006	
3.78	4.7	0.92	263002	HCORE			A16-11538	0.009	2-3% qtz- fe crb veins. 1% pyrite and hematite veinlets. Weakly silicified. Sericite-ankerite alteration
4.7	5.55	0.85	263003	HCORE			A16-11538	0.087	2-3% qtz- fe crb veins. 1% pyrite and hematite veinlets. Weakly silicified. Sericite-ankerite alteration
		0	263004	STD		CDN_GS_P7J	A16-11538	0.652	
5.55	6.2	0.65	263005	HCORE			A16-11538	0.046	
6.2	7.2	1	263006	HCORE			A16-11538	0.005	
7.2	8.5	1.3	263007	HCORE			A16-11538	0.005	
8.5	9.8	1.3	263008	HCORE			A16-11538	0.005	
9.8	11	1.2	263009	HCORE			A16-11538	0.005	
11	12	1	263010	HCORE			A16-11538	0.009	10% vuggy qtz fe crb veins. 0.5% pyrite and hematite
		0	263011	Blank		Blank	A16-11538	<0.005	
12	13	1	263012	HCORE			A16-11538	0.005	
13	14	1	263013	HCORE			A16-11538	<0.005	
14	15	1	263014	HCORE			A16-11538	0.005	
15	16	1	263015	HCORE			A16-11538	<0.005	
16	16.6	0.6	263016	HCORE			A16-11538	0.009	
16.6	17.5	0.9	263017	HCORE			A16-11538	0.013	
17.5	18.5	1	263018	HCORE			A16-11538	<0.005	
18.5	19.3	0.8	263019	HCORE			A16-11538	0.007	
19.3	19.88	0.58	263020	HCORE			A16-11538	0.005	
19.88	20.85	0.97	263021	HCORE			A16-11538	<0.005	
20.85	21.8	0.95	263022	HCORE			A16-11538	<0.005	
21.8	22.8	1	263023	HCORE			A16-11538	<0.005	
		0	263024	DUP	263023		A16-11538	<0.005	
22.8	23.8	1	263025	HCORE			A16-11538	0.007	
23.8	24.8	1	263026	HCORE			A16-11538	<0.005	

24.8	25.8	1	263027	HCORE			A16-11538	0.005	
25.8	26.8	1	263028	HCORE			A16-11538	<0.005	
26.8	27.65	0.85	263029	HCORE			A16-11538	0.005	
27.65	28.6	0.95	263030	HCORE			A16-11538	0.005	
28.6	29.6	1	263031	HCORE			A16-11641	<0.005	
29.6	30.5	0.9	263032	HCORE			A16-11641	0.005	
30.5	31.5	1	263033	HCORE			A16-11641	<0.005	
31.5	32.3	0.8	263034	HCORE			A16-11641	<0.005	
		0	263035	STD		CDN_GS_P4B	A16-11641	0.475	
32.3	33.3	1	263036	HCORE			A16-11641	<0.005	
33.3	34.3	1	263037	HCORE			A16-11641	<0.005	
34.3	35.3	1	263038	HCORE			A16-11641	<0.005	
35.3	36.05	0.75	263039	HCORE			A16-11641	0.013	
36.05	36.36	0.31	263040	HCORE			A16-11641	0.006	15cm epidote vein (selvage related) cut by qtz fe crb vein and mineralized with 1% pyrite.
36.36	37.1	0.74	263041	HCORE			A16-11641	<0.005	
37.1	38	0.9	263042	HCORE			A16-11641	<0.005	
38	39	1	263043	HCORE			A16-11641	<0.005	
39	40	1	263044	HCORE			A16-11641	<0.005	
		0	263045	DUP	263044		A16-11641	<0.005	
40	41	1	263046	HCORE			A16-11641	<0.005	
41	42	1	263047	HCORE			A16-11641	<0.005	
42	43	1	263048	HCORE			A16-11641	<0.005	
43	43.85	0.85	263049	HCORE			A16-11641	<0.005	
43.85	44.85	1	263050	HCORE			A16-11641	<0.005	
44.85	45.78	0.93	263051	HCORE			A16-11641	<0.005	
45.78	46.75	0.97	263052	HCORE			A16-11641	0.006	
46.75	47.3	0.55	263053	HCORE			A16-11641	0.007	
		0	263054	STD		CDN_GS_P7J	A16-11641	0.655	
47.3	48.3	1	263055	HCORE			A16-11641	<0.005	
48.3	49.3	1	263056	HCORE			A16-11641	<0.005	
49.3	50.15	0.85	263057	HCORE			A16-11641	<0.005	
50.15	50.55	0.4	263058	HCORE			A16-11641	0.005	
50.55	51.55	1	263059	HCORE			A16-11641	0.005	
51.55	52.1	0.55	263060	HCORE			A16-11641	0.031	2-3% weakly silicified qtz- fe crb veins with moderate to strong sericite-ankerite halos. 0.5-1% pyrite and 1% hematite veinlets

		0	263061	Blank		Blank	A16-11641	<0.005	
52.1	52.75	0.65	263062	HCORE			A16-11641	0.056	2-3% weakly silicified qtz- fe crb veins with moderate to strong sericite-ankerite halos. 0.5-1% pyrite and 1% hematite veinlets
52.75	53.75	1	263063	HCORE			A16-11641	<0.005	
53.75	54.5	0.75	263064	HCORE			A16-11641	0.006	2-3% weakly silicified qtz- fe crb veins with moderate to strong sericite-ankerite halos. 0.5-1% pyrite and 1% hematite veinlets
54.5	55.5	1	263065	HCORE			A16-11641	0.007	2-3% weakly silicified qtz- fe crb veins with moderate to strong sericite-ankerite halos. 0.5-1% pyrite and 1% hematite veinlets
55.5	56.5	1	263066	HCORE			A16-11641	<0.005	
56.5	57.5	1	263067	HCORE			A16-11641	<0.005	
57.5	58.5	1	263068	HCORE			A16-11641	<0.005	
		0	263069	STD		CDN_GS_P4B	A16-11641	0.399	
58.5	59.5	1	263070	HCORE			A16-11641	<0.005	
59.5	60.5	1	263071	HCORE			A16-11641	<0.005	
60.5	61.4	0.9	263072	HCORE			A16-11641	<0.005	
61.4	62.4	1	263073	HCORE			A16-11641	<0.005	
62.4	63.4	1	263074	HCORE			A16-11641	<0.005	
63.4	64.15	0.75	263075	HCORE			A16-11641	<0.005	
		0	263076	DUP	263075		A16-11641	<0.005	
64.15	65	0.85	263077	HCORE			A16-11641	<0.005	
65	66	1	263078	HCORE			A16-11641	<0.005	
66	67	1	263079	HCORE			A16-11641	<0.005	
67	68	1	263080	HCORE			A16-11641	0.018	
68	69	1	263081	HCORE			A16-11641	<0.005	
69	70	1	263082	HCORE			A16-11641	<0.005	
70	71	1	263083	HCORE			A16-11641	<0.005	
71	72	1	263084	HCORE			A16-11641	<0.005	
72	73	1	263085	HCORE			A16-11641	<0.005	
		0	263086	STD		CDN_GS_P7J	A16-11641	0.819	
73	74	1	263087	HCORE			A16-11641	<0.005	
74	75	1	263088	HCORE			A16-11641	<0.005	
75	76	1	263089	HCORE			A16-11641	<0.005	
76	77	1	263090	HCORE			A16-11641	<0.005	
77	78	1	263091	HCORE			A16-11641	<0.005	

78	78.8	0.8	263092	HCORE			A16-11641	<0.005	
78.8	79.4	0.6	263093	HCORE			A16-11641	0.067	scattered-disseminated pyrite throughout interval. 7cm silicified qtz-crb vein with 2% local pyrite
		0	263094	Blank		Blank	A16-11641	0.005	
79.4	80.44	1.04	263095	HCORE			A16-11641	0.008	
80.44	81.4	0.96	263096	HCORE			A16-11641	<0.005	
81.4	81.9	0.5	263097	HCORE			A16-11641	<0.005	
81.9	82.73	0.83	263098	HCORE			A16-11641	<0.005	
82.73	83.7	0.97	263099	HCORE			A16-11641	<0.005	
83.7	84.4	0.7	263100	HCORE			A16-11641	<0.005	
84.4	85.15	0.75	263101	HCORE			A16-11641	0.01	
85.15	85.7	0.55	263102	HCORE			A16-11641	0.009	
		0	263103	STD		CDN_GS_P4B	A16-11641	0.37	
85.7	86.3	0.6	263104	HCORE			A16-11641	0.006	
86.3	87.3	1	263105	HCORE			A16-11641	<0.005	
87.3	88	0.7	263106	HCORE			A16-11641	0.006	
88	88.7	0.7	263107	HCORE			A16-11641	0.034	
88.7	89.5	0.8	263108	HCORE			A16-11641	0.005	
89.5	90.5	1	263109	HCORE			A16-11641	<0.005	
90.5	91.5	1	263110	HCORE			A16-11641	<0.005	
91.5	92.5	1	263111	HCORE			A16-11641	0.012	
		0	263112	DUP	263111		A16-11641	0.01	
92.5	93.5	1	263113	HCORE			A16-11641	<0.005	
93.5	94.5	1	263114	HCORE			A16-11641	0.023	
94.5	95.5	1	263115	HCORE			A16-11641	0.008	
95.5	96.4	0.9	263116	HCORE			A16-11641	0.005	
96.4	97.25	0.85	263117	HCORE			A16-11641	<0.005	
97.25	98.05	0.8	263118	HCORE			A16-11641	0.027	
		0	263119	STD		CDN_GS_P7J	A16-11641	0.706	
98.05	99	0.95	263120	HCORE			A16-11641	<0.005	
99	100	1	263121	HCORE			A16-11641	<0.005	
100	101	1	263122	HCORE			A16-11641	<0.005	
101	102	1	263123	HCORE			A16-11641	<0.005	
102	103	1	263124	HCORE			A16-11641	<0.005	
103	104	1	263125	HCORE			A16-11641	<0.005	
104	105	1	263126	HCORE			A16-11641	<0.005	

105	106	1	263127	HCORE			A16-11641	0.006
106	107	1	263128	HCORE			A16-11641	<0.005
		0	263129	Blank		Blank	A16-11641	<0.005
107	108	1	263130	HCORE			A16-11641	<0.005
108	109	1	263131	HCORE			A16-11641	<0.005
109	110	1	263132	HCORE			A16-11641	<0.005
110	111	1	263133	HCORE			A16-11641	0.021
111	112	1	263134	HCORE			A16-11641	<0.005
112	113	1	263135	HCORE			A16-11641	<0.005
113	114	1	263136	HCORE			A16-11641	<0.005
114	115	1	263137	HCORE			A16-11641	0.005
115	115.7	0.7	263138	HCORE			A16-11641	0.018
115.7	116.7	1	263139	HCORE			A16-11641	<0.005
116.7	117.7	1	263140	HCORE			A16-11641	<0.005
117.7	118.5	0.8	263141	HCORE			A16-11641	0.006
		0	263142	STD		CDN_GS_P4B	A16-11641	0.438
118.5	119.5	1	263143	HCORE			A16-11641	0.006
119.5	120.5	1	263144	HCORE			A16-11641	<0.005
120.5	121.25	0.75	263145	HCORE			A16-11641	<0.005
121.25	122	0.75	263146	HCORE			A16-11641	<0.005
122	123	1	263147	HCORE			A16-11641	0.032
123	123.35	0.35	263148	HCORE			A16-11641	0.005
123.35	124.3	0.95	263149	HCORE			A16-11641	<0.005
124.3	125.25	0.95	263150	HCORE			A16-11641	<0.005
125.25	126.2	0.95	263151	HCORE			A16-11641	<0.005
126.2	127.2	1	263152	HCORE			A16-11641	<0.005
127.2	128	0.8	263153	HCORE			A16-11641	<0.005
128	129	1	263154	HCORE			A16-11641	<0.005
		0	263155	DUP	263154		A16-11641	<0.005
129	129.85	0.85	263156	HCORE			A16-11641	<0.005
129.85	130.85	1	263157	HCORE			A16-11641	<0.005
130.85	131.65	0.8	263158	HCORE			A16-11641	0.013
131.65	132.5	0.85	263159	HCORE			A16-11641	0.012
132.5	133.5	1	263160	HCORE			A16-11641	<0.005
133.5	134.5	1	263161	HCORE			A16-11641	<0.005
134.5	135.33	0.83	263162	HCORE			A16-11641	<0.005

135.58	136.3	0.72	263163	HCORE			A16-11641	<0.005	
		0	263164	STD		CDN_GS_P7J	A16-11641	0.7	
136.3	137.3	1	263165	HCORE			A16-11706	0.018	
137.3	138.1	0.8	263166	HCORE			A16-11706	<0.005	
138.1	139	0.9	263167	HCORE			A16-11706	<0.005	
139	139.75	0.75	263168	HCORE			A16-11706	<0.005	
139.75	140.2	0.45	263169	HCORE			A16-11706	<0.005	
		0	263170	Blank		Blank	A16-11706	<0.005	
140.2	141.1	0.9	263171	HCORE			A16-11706	<0.005	
141.1	142.1	1	263172	HCORE			A16-11706	<0.005	
142.1	143.1	1	263173	HCORE			A16-11706	0.024	
143.1	144	0.9	263174	HCORE			A16-11706	0.007	
144	145	1	263175	HCORE			A16-11706	<0.005	
145	145.6	0.6	263176	HCORE			A16-11706	0.014	
		0	263177	STD		CDN_GS_P4B	A16-11706	0.375	
145.6	146.3	0.7	263178	HCORE			A16-11706	0.015	
146.3	147.3	1	263179	HCORE			A16-11706	<0.005	
147.3	148.2	0.9	263180	HCORE			A16-11706	<0.005	
148.2	148.86	0.66	263181	HCORE			A16-11706	<0.005	
148.86	149.8	0.94	263182	HCORE			A16-11706	<0.005	
149.8	150.7	0.9	263183	HCORE			A16-11706	0.006	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
150.7	151.1	0.4	263184	HCORE			A16-11706	0.086	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
151.1	152	0.9	263185	HCORE			A16-11706	0.008	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
		0	263186	DUP	263185		A16-11706	0.007	
152	153	1	263187	HCORE			A16-11706	0.014	
153	154	1	263188	HCORE			A16-11706	0.005	
154	155	1	263189	HCORE			A16-11706	0.005	
155	156	1	263190	HCORE			A16-11706	<0.005	
156	157	1	263191	HCORE			A16-11706	<0.005	
157	158	1	263192	HCORE			A16-11706	0.024	
158	159	1	263193	HCORE			A16-11706	0.015	
159	160	1	263194	HCORE			A16-11706	0.007	
		0	263195	STD		CDN_GS_P7J	A16-11706	0.763	
160	161	1	263196	HCORE			A16-11706	<0.005	
161	161.75	0.75	263197	HCORE			A16-11706	<0.005	

161.75	162.5	0.75	263198	HCORE			A16-11706	<0.005	
162.5	163	0.5	263199	HCORE			A16-11706	0.024	
163	163.9	0.9	263200	HCORE			A16-11706	<0.005	
163.9	164.5	0.6	263201	HCORE			A16-11706	<0.005	
164.5	165.5	1	263202	HCORE			A16-11706	0.014	
165.5	166.45	0.95	263203	HCORE			A16-11706	<0.005	
166.45	167	0.55	263204	HCORE			A16-11706	<0.005	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
		0	263205	Blank		Blank	A16-11706	<0.005	
167	167.9	0.9	263206	HCORE			A16-11706	0.009	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
167.9	168.8	0.9	263207	HCORE			A16-11706	0.109	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
168.8	169.8	1	263208	HCORE			A16-11706	0.122	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
169.8	170.8	1	263209	HCORE			A16-11706	0.494	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
170.8	171.8	1	263210	HCORE			A16-11706	0.18	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
171.8	172.5	0.7	263211	HCORE			A16-11706	0.034	5% vuggy qtz-fe crb veins. 0.5% pyrite&hematite
		0	263212	STD		CDN_GS_P4B	A16-11706	0.382	
172.5	173.1	0.6	263213	HCORE			A16-11706	<0.005	
173.1	174	0.9	263214	HCORE			A16-11706	<0.005	
174	175	1	263215	HCORE			A16-11706	<0.005	
175	175.8	0.8	263216	HCORE			A16-11706	<0.005	
176.5	177	0.5	263217	HCORE			A16-11706	<0.005	
177	178	1	263218	HCORE			A16-11706	0.019	
		0	263219	DUP	263218		A16-11706	0.016	
178	179	1	263220	HCORE			A16-11706	0.005	
179	180	1	263221	HCORE			A16-11706	<0.005	
180	181	1	263222	HCORE			A16-11706	<0.005	
181	182	1	263223	HCORE			A16-11706	<0.005	
182	183.1	1.1	263224	HCORE			A16-11706	<0.005	
183.1	184	0.9	263225	HCORE			A16-11706	<0.005	
184	184.93	0.93	263226	HCORE			A16-11706	<0.005	
184.93	185.62	0.69	263227	HCORE			A16-11706	0.017	
		0	263228	STD		CDN_GS_P7J	A16-11706	0.759	
185.62	186.85	1.23	263229	HCORE			A16-11780	0.012	
186.85	187.5	0.65	263230	HCORE			A16-11780	<0.005	

187.5	188.5	1	263231	HCORE			A16-11780	<0.005	
188.5	189.33	0.83	263232	HCORE			A16-11780	<0.005	
189.33	190.08	0.75	263233	HCORE			A16-11780	<0.005	
190.08	190.55	0.47	263234	HCORE			A16-11780	<0.005	
		0	263235	Blank		Blank	A16-11780	<0.005	
190.55	191.27	0.72	263236	HCORE			A16-11780	<0.005	
191.27	192.25	0.98	263237	HCORE			A16-11780	<0.005	
192.25	193.25	1	263238	HCORE			A16-11780	<0.005	
193.25	194.1	0.85	263239	HCORE			A16-11780	<0.005	
194.1	195.1	1	263240	HCORE			A16-11780	<0.005	
195.1	195.7	0.6	263241	HCORE			A16-11780	<0.005	
195.7	196.7	1	263242	HCORE			A16-11780	<0.005	
196.7	197.7	1	263243	HCORE			A16-11780	<0.005	
197.7	198.5	0.8	263244	HCORE			A16-11780	<0.005	
198.5	199.49	0.99	263245	HCORE			A16-11780	<0.005	
		0	263246	DUP	263245		A16-11780	<0.005	
199.49	200.5	1.01	263247	HCORE			A16-11780	4	0.5% very fine-grained PY sct along shear in zone
200.5	201.5	1	263248	HCORE			A16-11780	10.5	0.75% very fine-grained PY sct along shear and around rare silicified qz veins in zone
201.5	202.25	0.75	263249	HCORE			A16-11780	3.93	0.5% very fine-grained to fine-grained PY sct along shear and around silicified qz veins in zone
202.25	203.06	0.81	263250	HCORE			A16-11780	0.474	0.5% very fine-grained to fine-grained PY sct along shear and around silicified qz veins in zone
203.06	204	0.94	263251	HCORE			A16-11780	0.222	0.5% very fine-grained PY sct-ban in shear zone
204	204.68	0.68	263252	HCORE			A16-11780	0.534	0.5% very fine-grained PY sct-ban in shear zone
		0	263253	STD		CDN_GS_5K	A16-11780	3.89	
204.68	205.4	0.72	263254	HCORE			A16-11780	0.017	0.5% very fine-grained PY sct along shear and near spc threads in zone
205.4	206	0.6	263255	HCORE			A16-11780	0.005	0.75% fine-med grained PY sct along shear in zone
206	206.5	0.5	263256	HCORE			A16-11780	0.075	0.5% fine-grained PY sct along shear and near spc threads in zone
206.5	206.95	0.45	263257	HCORE			A16-11780	<0.005	0.75% fine-med grained PY sct along shear in zone
206.95	208	1.05	263258	HCORE			A16-11780	0.214	
208	209	1	263259	HCORE			A16-11780	0.497	
		0	263260	Blank		Blank	A16-11780	<0.005	

209	210	1	263261	HCORE			A16-11780	0.1	Trc fine-grained PY sct along shear
210	211	1	263262	HCORE			A16-11780	0.239	
211	212	1	263263	HCORE			A16-11780	0.321	
212	213	1	263264	HCORE			A16-11780	2.18	
213	214	1	263265	HCORE			A16-11780	0.109	
		0	263266	STD		CDN_GS_P4B	A16-11780	0.49	
214	215	1	263267	HCORE			A16-11780	0.022	
215	215.66	0.66	263268	HCORE			A16-11780	6.65	1.5% very fine grained PY sct along shear. Near contact with black fault.
215.66	216.5	0.84	263269	HCORE			A16-11780	0.266	Strongly silicified black flt (cataclasite). Barren.
216.5	217.5	1	263270	HCORE			A16-11780	0.011	
217.5	218.5	1	263271	HCORE			A16-11780	0.022	
218.5	219.5	1	263272	HCORE			A16-11780	<0.005	
		0	263273	DUP	263272		A16-11780	<0.005	
219.5	220.5	1	263274	HCORE			A16-11780	0.017	
220.5	221.47	0.97	263275	HCORE			A16-11780	0.121	
221.47	222.5	1.03	263276	HCORE			A16-11780	0.038	
222.5	223.5	1	263277	HCORE			A16-11780	<0.005	
223.5	224	0.5	263278	HCORE			A16-11780	<0.005	
224	225	1	263279	HCORE			A16-11780	0.043	
225	226	1	263280	HCORE			A16-11780	0.046	
		0	263281	STD		CDN_GS_P7J	A16-11780	0.65	
226	227	1	263282	HCORE			A16-11780	0.027	
227	228	1	263283	HCORE			A16-11780	0.009	
228	229	1	263284	HCORE			A16-11780	0.005	
229	230	1	263285	HCORE			A16-11780	0.117	
230	231	1	263286	HCORE			A16-11780	0.017	
231	232	1	263287	HCORE			A16-11780	0.028	
		0	263288	Blank		Blank	A16-11780	<0.005	
232	233	1	263289	HCORE			A16-11780	<0.005	
233	234	1	263290	HCORE			A16-11784	1.04	Silicified qz-crb veins.
234	235	1	263291	HCORE			A16-11784	0.011	
235	236	1	263292	HCORE			A16-11784	0.027	
236	237	1	263293	HCORE			A16-11784	0.015	
		0	263294	STD		CDN_GS_P4B	A16-11784	0.417	
237	238	1	263295	HCORE			A16-11784	0.014	

238	239	1	263296	HCORE			A16-11784	0.007
239	240	1	263297	HCORE			A16-11784	0.015
240	241	1	263298	HCORE			A16-11784	0.075
241	242	1	263299	HCORE			A16-11784	0.01
242	243	1	263300	HCORE			A16-11784	0.011
243	244	1	263301	HCORE			A16-11784	0.014
		0	263302	DUP	263301		A16-11784	0.012
244	245	1	263303	HCORE			A16-11784	0.009
245	246	1	263304	HCORE			A16-11784	0.012
246	247	1	263305	HCORE			A16-11784	0.01

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-03 DataSet: Brookbank Program: Development

Hole Status:	COMPLETE	**Hole Length (m):**	333	**Logged By:**	S. Molloy
Hole Type:	Surface Drill Hole	**Dip (º):**	-54	**Date Log Started:**	11/3/2016
Date Drill Started:	10/26/2016	**Azimuth:**	339.8	**Date Log Completed:**	3/15/2017
Date Drill Completed:	10/29/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	439,736.6	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,063.2	**Date Surveyed:**	11/4/2016
Elevation (masl):	325.933	**Surveyed By:**	D. Grabiec
Tenement ID:	TB29038	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3
Core Storage:	Old Arena Road

Purpose: Test footwall hanging wall split zone.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 329 **Max Sample Depth (m):** 333

Depth Logged To (m) 333 **Meters Sampled** 328.17

Total Samples 406 **# Assay** 356 **# QAQC:** 50

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-54	339.8	TN14	SINGLESHOT	G4	10/26/2016		Yes
5	-53.32	339.54	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
14	-53.18	339.86	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
23	-53.14	340.06	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
32	-53.11	340.33	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
41	-53.08	340.21	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
50	-53.1	340.21	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
59	-53.08	339.46	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
68	-53.02	339.71	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
77	-53	339.82	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
95	-52.94	340.03	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
104	-52.93	340.54	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
113	-52.9	340.68	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
128	-52.83	340.14	EZ-GYRO	SINGLESHOT	G4	10/26/2016		Yes
140	-52.8	340.15	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
158	-52.67	340.54	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
167	-52.6	340.01	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
176	-52.43	340.62	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
179	-52.33	340.56	EZ-GYRO	SINGLESHOT	G4	10/26/2016		Yes
185	-52.32	340.85	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
194	-52.26	341.84	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
203	-52.18	341.46	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
221	-52.03	341.92	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
230	-52.01	341.1	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
239	-51.97	340.11	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
248	-51.84	341.15	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
257	-51.74	341.96	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
266	-51.72	340.51	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
275	-51.54	341.2	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
284	-51.51	341.71	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
293	-51.39	341.87	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
302	-51.22	342.65	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
311	-51.07	341.76	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
320	-50.82	342.29	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes
329	-50.65	341.43	EZ-GYRO	MULTISHOT	G4	10/29/2016		Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	4.2	4.2		OB	Overburden		
4.2	11.31	7.11		E1	Mafic Volcanic		Fine grained
11.31	12.88	1.57		E1A	Basalt		Fine grained
12.88	15.98	3.1	50	E1	Mafic Volcanic		Fine grained
15.98	20.47	4.49		E1A	Basalt	Pillowed	Fine grained
20.47	24.96	4.49		E1A	Basalt		Fine grained
24.96	63.53	38.57		E1A	Basalt	Pillowed	Fine grained
63.53	66.96	3.43		E1	Mafic Volcanic	Brecciated	Fine grained
66.96	101.58	34.62		E1A	Basalt	Pillowed	Fine grained
101.58	103.92	2.34	80	E1A	Basalt		Fine grained
103.92	141.25	37.33		E1A	Basalt	Pillowed	Fine grained
141.25	148.54	7.29	94	E1A	Basalt		Medium grained
148.54	162.34	13.8		E1	Mafic Volcanic		Fine grained
162.34	170.9	8.56		E1A	Basalt	Massive	Fine grained
170.9	175.77	4.87		E1A	Basalt	Massive	Fine grained
175.77	182.67	6.9		E1A	Basalt	Massive	Fine grained
182.67	184.55	1.88		E1A	Basalt	Massive	Fine grained
184.55	208.77	24.22		E1A	Basalt	Pillowed	Fine grained
208.77	215.5	6.73		E1A	Basalt		Fine grained
215.5	218.57	3.07		E1A	Basalt		Medium grained

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
218.57	229.13	10.56		E1A	Basalt	Brecciated	Fine grained
229.13	238.42	9.29		E1A	Basalt	Pillowed	Fine grained
238.42	242.54	4.12		E1A	Basalt	Schistose	Fine grained
244.93	284.5	39.57		E1A	Basalt	Pillowed	Fine grained
284.5	287.28	2.78		E1A	Basalt	Pillowed	Medium grained
287.28	290.6	3.32		E1	Mafic Volcanic	Brecciated	Fine grained
290.6	296.32	5.72		E1	Mafic Volcanic	Brecciated	Medium grained
296.32	306.93	10.61		E1A	Basalt	Schistose	Fine grained
306.93	307	0.07		FLT	Fault Zone	Brecciated	Fine grained
307	333	26		S4B	Polymictic Conglomerate	Supported - matrix	Fine grained

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**4.2**	4.2		**OB**	**Overburden**			S. Molloy

Overburden - blocky

Alteration

From	To	#	Alteration	Intesity	Style	Comments
1	2	1:	Hematite	Strong (51-75%)	-	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
4.2	**11.31**	7.11		**E1**	**Mafic Volcanic**		Fine grained	S. Molloy

Shear Zone. Very altered; beige-grey in colour with areas of pink and green. Some areas are darker grey and magnetic (these kind of look like a breccia @ 5.2-5.5m). Very sheared. Veins are frequent and chaotic (shear veins, minor extension veins, and stockwork veins). Localized minor folds most likely caused by veins (folds occur next to veins)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
4.2	11.31	1:	Ankerite	Moderate (26-50%)	Patches	Moderate fe-crb in patches; spec stringers; strong ser throughout (poss ser) unit; magnetite occurs in dark grey "brecciated" like areas near top of hole (@5.2-5.5m). Did not see epidote
		2:	Specular hematite	Weak (1-25%)	Localized	
		3:	Magnetite	Moderate (26-50%)	Localized	
		4:	Sericite	Strong (51-75%)	Pervasive	

Structures

From	To	Code	Structure Type	Comments
4.2	11.31	SHD	Shear / mylonitic foliation	Shear zone

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
4.2	6	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		65	7.5	Stringers are in different directions
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.5	
6	9	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			10.4	Stringers are in different directions
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			7.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
11.31	**12.88**	1.57		**E1A**	**Basalt**		Fine grained	S. Molloy

Basalt; Fine grained with medium grained white/yellow phenos (feldspar? Subhedral to anhedral; <1-3mm in size; mostly tabular); strongly foliated; light green in colour with darker green threads throughout with local black threads. Non magnetic. possibly just texture change rather than litho change

Alteration

From	To	#	Alteration	Intesity	Style	Comments

DataSet: Brookbank

HoleID: B-16-03

Hole Length (m): 333

Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
11.31	12.88	1:	Ankerite	Weak (1-25%)	Patches	unknown black stringers @12.2 m (non magnetic, not soft); Minor ank in qtz-crb veining. Poss ser near qtz-crb vns. Specularite stringers.
		2:	Specular hematite	Weak (1-25%)	Localized	
		3:	Sericite	Moderate (26-50%)	Patches	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
12.88	**15.98**	3.1	50	**E1**	**Mafic Volcanic**		Fine grained	S. Molloy
			50	V2	Quartz-Fe-Carbonate Vein			

Brookbank zone. Very altered; beige-grey in colour with areas of pink. Quartz-carbonate veining prominant and darker grey areas appear to be silicified. Not really foliated, just very altered. Non magnetic. Some veins are shear veins, extension veins and stock work veins. Some argentite visible (along with mod PY).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
12.88	15.87	1:	Ankerite	Moderate (26-50%)	Patches	Moderate ank assoc w/ qtz-crb; mod sil; weak spec in amygdules
		2:	Silicified	Moderate (26-50%)	Patches	
		3:	Specular hematite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
12.88	15.98	1:	Pyrite	Medium grained	Scattered grains	2	
VG: No		2:	Argentite	Medium grained	Blebs	0.7	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
15.98	**20.47**	4.49	**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt, dark grey-green in colour; epd selvages w/ fe-crb; frequent stringers (most likely extension veins); moderately magnetic; has amygdaloids and vesicles (qtz & fe-crb filled amygdaloids). Foliation not visible.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
17.17	20.47	1:	Magnetite	Moderate (26-50%)	Patches	Epd in selvages; ank in veins and selvages; mod mag patches; loc specthreads
		2:	Epidote	Weak (1-25%)	Localized	
		3:	Specular hematite	Weak (1-25%)	Localized	
		4:	Ankerite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
15.98	20.47	1:	Pyrite	Medium grained	Scattered grains	1.7	
VG: No							

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
20.47	24.96	4.49		E1A	Basalt		Fine grained	S. Molloy

Very altered mafic volcanic - beige/light green in colour with mod pink (ankerite) near qtz-crb veining; non magnetic; foliation only visible in some sections of unit. some stringers have specularite along their boundaries & some stringers have beige alteration on their boundaries. Larger veins also present. Colour becomes darker green toward end of unit (24-24.96m; alteration dies out gradually).

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments

Alteration

From	To	#	Alteration	Intesity	Style	Comments
20.47	23.8	1:	Ankerite	Moderate (26-50%)	Localized	Ank assoc w/ vns & epd. Weak loc hem and specularite. mod-strong bleaching (beige rock - feldspar?)
		2:	Epidote	Moderate (26-50%)	Localized	
		3:	Specular hematite	Weak (1-25%)	Localized	
		4:	Hematite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
20.47	24.3	1:	Pyrite	Coarse grained	Scattered grains	7	Coarse grained PY (about 2%) assoc w/ beige alteration (bleached); finer grained sct/diss PY in veins and groundmass.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
21	24	1:	Quartz vein	Veinlet Zone - vein 1/4" to 3"			15	Qtz veinlets have fe-crb in them.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			16.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
24.96	63.53	38.57		E1A	Basalt	Pillowed	Fine grained	S. Molloy

Pillowed basalt; medium green in colour with bright green epd selvages and pink fe-crb (mostly assoc w/ veining) throughout unit. moderately magnetic; foliation not visible. unit has epd & qtz amygdaloids im patches. core is blockier than previous units (especially near lower end of unit).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
57.54	63.53	1:	Magnetite	Moderate (26-50%)	Pervasive	Epd in pillow selvages; fe-crb in veins & hem (with some specularite) surrounding some stringers
		2:	Epidote	Moderate (26-50%)	Localized	
		3:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		4:	Hematite	Weak (1-25%)	Localized	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
57.8	61.4	HFZ	High fracture zone	High fracture zone with areas that are more competent in between. Around 2-2.5m of fractured rock.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
27	30	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			4.4	Qtz-crb veinlets have fe-crb in them. Some stringers are qtz-crb-epd.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			10.5	
30	33	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.2	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6.1	
33	36	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			9.1	Some stringers are just qtz-crb.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			6.7	
36	39	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.9	
39	42	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			9.5	Some stringers have epd-ank and most stringers are chaotic (all different directions; stockwork?); veinlets are also in different directions
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			8.8	
42	45	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3.1	One qtz-crb vein which has a very low angle to the core axis (~10deg) has hem/specularite and some magnetite.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	
45	48	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			8.7	Most of the qtz-crb stringers are extension veins and the others are chaotic; most of the qtz-crb-epd stringers are in all different directions
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.4	
48	51	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			3.5	Some stringers are also qtz-crb-epd and most stringers are in all different directions (some qtz-crb stringers are extension); Veinlets are in similar directions (different core angles)
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6.7	
51	54	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4.1	Most of stringers are qtz-crb & extension veins. The other stringers are all over the place and some of them are qtz-crb-epd
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			8.8	
54	57	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			7.5	About half of the qtz-crb stringers are extension veins (the rest are in all different directions); the qtz-crb-epd are choatic.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.4	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
57	60	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.3	Most qtz-crb veining appears to be extension veins; rest of veining is chaotic
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.8	
60	63	1:	Quartz-Fe-carbonate	Extension Vein			4.5	Majority of veins are qtz-crb; minor epd veins present.
		2:	Quartz-Fe-carbonate	Stockwork Veins			7.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
63.53	**66.96**	3.43		**E1**	**Mafic Volcanic**	Brecciated	Fine grained	S. Molloy

Altered Zone; mafic volcanic; dark grey/pink in colour with light beige/orange sections (fe-crb alteration); moderate to strong foliation in places. Non magnetic until end of unit (gradational contact) Stockwork veins present. Core is blocky at 65-65.25m. grainsize ranges from fine grained to medium grained in groundmass around 66.2-m. possible shear zone (or fault with alteration halo or breccia (local clasts present between 64.2-66m or veining gives brecciated appearance); 3cm qtz-crb vein near beginning of blocky core.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
63.53	66.96	1:	Ankerite	Moderate (26-50%)	Patches	Possible local silicification & ser; hem clasts; Fe-crb occurs in qtz-crb veining but may also be present in the groundmass (pinky-purple and grey groundmass)
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Magnetite	Weak (1-25%)	Localized	
		4:	Silicified	Weak (1-25%)	Pervasive	
		5:	Sericite	Weak (1-25%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
63.53	66.96	1:	Pyrite	Fine grained	Scattered grains	6	1% SMA PY assoc w/ qtz-crb & felds veins. 4% sct-diss PY
VG: No							

Structures

From	To	Code	Structure Type	Comments
63.53	66.96	FLT4	Fault - cataclasite	Altered zone (dark grey/pink with local beige/orange) with local foliation. Possibly a fault (cataclasite).

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
66.96	**101.58**	34.62		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed Basalt; Fine grained; medium grey-green; magnetic; pillow selvages present (w/ epidote); Amygdules present in patches throughout unit (filled with epidote or qtz-ank); Large qtz-crb vuggy vein at 71.15-71.75m (5cm avg thickness; low angle to core axis); no visible foliation; extension veinlets and stockwork veins present throughtout; 4-5% PY. Core is blocky in places.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
66.96	101.58	1:	Epidote	Strong (51-75%)	Localized	Loc hem threads (and around some veins); local spec threads (and around veins); Moderate-strong epidote in selvages and amygdules. fe-crb in veining, amygdules and in selvages; mod magnetite patches
		2:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		3:	Magnetite	Moderate (26-50%)	Patches	
		4:	Specular hematite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
66.96	73.3	1:	Pyrite	Medium grained	Scattered grains	4.5	3% of PY is associated with veining; 1% of PY is associated with selvages and rest of PY is in groundmass.
VG: No							
73.3	101.58	1:	Pyrite	Medium grained	Scattered grains	4	4% PY associated with selvages and veining; rest of PY is in groundmass.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
69	72	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			12.1	Some stringers are stockwork, others are extension; some veinlets are extension.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	
72	75	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			12.6	Veinlets are extension; some stringers are extension and others are stockwork.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6.2	
75	78	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5	
		2:	Quartz-Fe-carbonate	Extension Vein			4.1	
78	81	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.5	Veinlets are qtz-crb some stringers have epd.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.4	
81	84	1:	Quartz-Fe-carbonate	Extension Vein		73	7.8	Veinlets have ank in them. There are also stockwork veins present. Extension veins range from stringers to veinlets
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			8.5	
84	87	1:	Quartz-Fe-carbonate	Extension Vein		65	6	Some of the veinlets are qtz-fe-crb+/-epd
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.5	
87	90	1:	Quartz-Fe-carbonate	Extension Vein		70	7	All veins have some fe-crb in them (pinky)
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.4	
90	93	1:	Quartz-Fe-carbonate	Extension Vein		25	7.2	2cm of stockwork veins also.
		2:	Quartz-Fe-carbonate	Extension Vein			3.3	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
93	96	1:	Quartz-Fe-carbonate	Extension Vein		27	3.9	plus an addition 2cm in veinlets that were not a part of these two vein sets.
		2:	Quartz-Fe-carbonate	Extension Vein		75	4.8	
96	99	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.6	
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			4.1	

101.58	**103.92**	2.34	80	**E1A**	**Basalt**		Fine grained	S. Molloy
			20	V2	Quartz-Fe-Carbonate Vein			

Mafic volcanic; altered; no pillow selvages visible but could have been overprinted by alteration; F-MG in places; most intense alteration is near qtz-crb vein (@ 102m); Light-med green/grey with pink-orange and darker grey alteration. Local qtz-fecrb-epd amygdules; 2-3% PY assoc w/ veining & alteration. Not magnetic except for small section around 103.25-103.5m.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
101.58	103.92	1:	Ankerite	Moderate (26-50%)	Patches	Both Hem and Spec are present as threads. Orange coloured alteration present also (fe-crb)
		2:	Epidote	Weak (1-25%)	Patches	
		3:	Hematite	Weak (1-25%)	Localized	
		4:	Specular hematite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
101.58	103.92	1:	Pyrite	Medium grained	Scattered grains	3	PY assoc w/ veining.
VG: No							

103.92	**141.25**	37.33		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; medium green-grey; bright green epidote selvages visible; moderately magnetic (patchy); FG w/ epd/qtz/ank amygdules near selvages; blocky & broken in places (high fracture zones); non foliated; extension & stockwork veins present. folded qtz-fe-crb vein @ 109.8-109m (avg 1cm thick). Core becomes blockier towards end of unit (starting at 129m). Alteration halo at end of unit (contact with qtz-crb vein; alteration halo is between 25-70cm (pink & beige/orange altn for 25cm next to qtz but up to 70cm before vein is silicified and med grey; very FG; looks different then rest of unit); pillow top breccia with magnetite groundmass at 140m

Alteration

From	To	#	Alteration	Intesity	Style	Comments
103.92	141.25	1:	Epidote	Moderate (26-50%)	Localized	Epd in selvages; fe-crb in selvages and veining. Hem occurs as threads. Weak lcl SIL near end of unit
		2:	Ankerite	Moderate (26-50%)	Localized	
		3:	Magnetite	Moderate (26-50%)	Patches	
		4:	Hematite	Weak (1-25%)	Localized	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
103.92	141.25	1:	Pyrite	Fine grained	Scattered grains	3	Py sct throughout unit but concentrated around veining and in selvages.
VG: No							

Structures

From	To	Code	Structure Type	Comments
105.6	111	HFZ	High fracture zone	High fracture zone in pillowed basalt; some sections are blockier than others.
111	129	HFZ	High fracture zone	High fracture zone in pillowed basalt; does not have any areas with very broken rock unlike previous section, but is still quite fractured.
129	140.12	HFZ	High fracture zone	High fracture zone in pillowed basalt; Areas of very blocky rock.
140.12	140.22	FLT4	Fault - cataclasite	Possible cataclasite in pillow selvage (pillow top breccia; cohesive). Green angular clasts ranging from <1mm-8mm with a dark fine grained groundmass. Groundmass is hard and magnetic (magnetite). Minor PY occurs within this unit along the boundaries of a qtz-crb-kfp veinlet.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
105	108	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.7	Most veins are extension veins but some are stockwork.
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2.6	
108	111	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.9	pink in colour
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3	
111	114	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.1	most veining has ank or ank&epd.
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3	
114	117	1:	Quartz-Fe-carbonate	Extension Vein			3.7	
		2:	Quartz-Fe-carbonate	Stockwork Veins			1.8	
117	120	1:	Quartz-Fe-carbonate	Stockwork Veins			4.9	some stringers are qtz-crb-epd
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.2	
120	123	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.3	
		2:	Quartz-Fe-carbonate	Stockwork Veins			5.4	
123	126	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.9	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.8	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
126	129	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			8.1	Some veining is qtz-crb-epd
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.2	
129	132	1:	Quartz-Fe-carbonate	Stockwork Veins			9.5	some of the veins are vuggy.
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.6	
132	135	1:	Quartz-Fe-carbonate	Extension Vein			5.1	some veining is vuggy
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
135	138	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			7.7	some veinlets are vuggy. Stringers include extension veins and stockwork veins
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.9	
138	141	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			7.9	
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			4.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
141.25	**148.54**	7.29	94	**E1A**	**Basalt**		Medium grained	S. Molloy
			6	V2	Quartz-Fe-Carbonate Vein			

Mafic volcanic; medium grained with 55cm qtz-crb vein at upper contact. Vein has alteration halo on both boundaries (pink &orange/beige alteration and lighter grey in colour; FG; 30cm alteration halo). Moderately foliated at beginning and end of unit; pervasive carb throughout unit; medium-dark green/grey in colour grading into lighter green at top and bottom of unit; non magnetic; frequent extension veins and very little mineralization except at upper contact near large vein.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
141.25	148.54	1:	Fe-Carbonate	Moderate (26-50%)	Pervasive	
		2:	Ankerite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
141.25	142	1:	Pyrite	Medium grained	Semi-massive	5	4-5% SMA-sct PY assoc w/ large qtz-crb veining and alteration halo.
VG: No							
142	148.54	1:	Pyrite	Fine grained	Scattered grains	0.1	trc sct PY assoc w/ veining in gabbro.
VG: No							

Structures

From	To	Code	Structure Type	Comments
141.25	141.71	CV	Vein contact	Large qtz-crb vein at beginning of intrusive (gabbro).

Veins

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
144	147	1:	Quartz-Fe-carbonate	Extension Vein		57	7.5	
		2:	Quartz-Fe-carbonate	Extension Vein		20	6.9	

148.54	**162.34**	13.8	**E1**	**Mafic Volcanic**	Fine grained	S. Molloy

Altered mafic volcanic (assumed to be mafic volcanic); FG w/ phenocrystic sections (specularite & poss feldspar); non foliated; mod magnetic patches near beginning of unit. Light-medium grey w/ pink/beige pulses. Core looks "cooked" at litho contacts and locally throughout unit. Specularite occurs in bands and in veining. Extension veins and stockwork veins present. Qtz-crb vein (4cm wide) at contact with medium grained basalt (upper contact). Near upper contact specularite and chlorite bands look stockwork (filling small chaotic fractures). 1-2% coarser grained blebby to euhedral/subhedral PY throughout unit but concentrating along vein boundaries. Unit is moderately silicified.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
148.54	151.45	1:	Silicified	Moderate (26-50%)	Pervasive	
		2:	Specular hematite	Moderate (26-50%)	Localized	
		3:	Ankerite	Weak (1-25%)	Halo-Vein Related	
151.45	154.82	1:	Magnetite	Moderate (26-50%)	Pervasive	
		2:	Silicified	Moderate (26-50%)	Pervasive	
		3:	Ankerite	Weak (1-25%)	Halo-Vein Related	
154.82	162.34	1:	Magnetite	Moderate (26-50%)	Patches	
		2:	Specular hematite	Moderate (26-50%)	Localized	
		3:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		4:	Silicified	Weak (1-25%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
148.54	162.34	1:	Pyrite	Medium grained	Scattered grains	2	2-3% sct PY (fine to coarse grained PY); CG PY ranges from blb to subhedral.
VG: No							

Structures

From	To	Code	Structure Type	Comments
148.54	162.34	CG	Litho contact - transitional (gradational)	Altered mafic volcanic

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
150	153	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			7.7	both extension and stockwork veins present
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			10.6	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
153	156	1:	Quartz-Fe-carbonate	Extension Vein		55	3.5	
		2:	Quartz-Fe-carbonate	Extension Vein		71	3.9	
156	159	1:	Quartz-Fe-carbonate	Extension Vein		67	6.6	
		2:	Quartz-Fe-carbonate	Extension Vein		23	3.1	
159	162	1:	Quartz-Fe-carbonate	Extension Vein		40	11.8	
		2:	Quartz-Fe-carbonate	Stockwork Veins			3.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
162.34	**170.9**	8.56		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Massive basalt; FG. non foliated. moderately magnetic; minor thin extension veins and minor stockwork veins. 1% PY throughout but concentrated about veins. Rock has pinkish colour in sections (fe-crb altn/staining). No visible selvages.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
162.34	170.9	1:	Magnetite	Moderate (26-50%)	Pervasive	
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Specular hematite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
162.34	170.9	1:	Pyrite	Medium grained	Scattered grains	1.5	1-2% sct-str PY mostly assoc around veining.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
165	168	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6.6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
170.9	**175.77**	4.87		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Massive basalt; altered; FG; light-medium grey/pink with green and darker grey sections; non magnetic; some areas look bleached and some veins have bleached halos. non foliated; chlorite stringers/veinlets present; extension veins present; large qtz-crb vein ~20cm @ 173m. Pyrite throughout unit. Silicified.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
170.9	175.77	1:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		2:	Silicified	Weak (1-25%)	Pervasive	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		3	Magnetite	Weak (1-25%)	Patches	
		4	Specular hematite	Moderate (26-50%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
170.9	175.77	1	Pyrite	Medium grained	Scattered grains	1.5	Mostly assoc w/ veining
VG: No							

Structures

From	To	Code	Structure Type	Comments
172.92	173.12	CV	Vein contact	Qtz-carb vein. silicified, bleached & light grey/pink/beige in colour; from 170.9-172.92 & 173.12-175.77m

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
171	174	1	Quartz-Fe-carbonate	Vein > 3"			19.5	
		2	Quartz-Fe-carbonate	Extension Vein			3.7	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
175.77	**182.67**	6.9		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Massive basalt; FG; non foliated; magnetic throughout; extension and stockwork veins present. weakly silicified; dark to medium grey in colour; minor epidote stringers present (concentrated @ 180.8m - not selvages). Pyrite mostly assoc with veining.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
175.77	182.67	1	Magnetite	Moderate (26-50%)	Pervasive	
		2	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3	Silicified	Weak (1-25%)	Pervasive	
		4	Epidote	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
175.77	182.67	1	Pyrite	Medium grained	Scattered grains	2.5	Mostly assoc w/ veining
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments

DataSet: Brookbank

HoleID: B-16-03

Hole Length (m): 333

Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
177	180	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6.1	stringers include extension and stockwork veins
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
182.67	**184.55**	1.88		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Altered mafic volcanic rock similar to unit 170.90-175.77m Light grey in colour with bleached areas concentrated around veining; non foliated; non magnetic; silicified; Pyrite throughout. Extension and stockwork veins present.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
182.67	184.55	1:	Ankerite	Moderate (26-50%)	Halo-Vein Related	Specularite veinlets
		2:	Silicified	Moderate (26-50%)	Pervasive	
		3:	Magnetite	Weak (1-25%)	Patches	
		4:	Specular hematite	Moderate (26-50%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
182.67	184.55	1:	Pyrite	Medium grained	Semi-massive	3	mostly assoc w/ veining; ranges from SMA-SCT
VG: No							

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
184.55	**208.77**	24.22		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; medium grey in colour; FG; magnetic throughout; non foliated; locally altered (pink/biege in colour around some veins); minor sporadic epidote selvages present. Extension and stockwork veins present.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
184.55	208.77	1:	Magnetite	Moderate (26-50%)	Pervasive	
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Epidote	Weak (1-25%)	Localized	
		4:	Hematite	Weak (1-25%)	Fracture Filled	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
184.55	193	1:	Pyrite	Medium grained	Scattered grains	1.5	
VG: No							
193	197	1:	Pyrite	Medium grained	Semi-massive	5	ranges from fine to medium grained and from scattered to semi massive
VG: No							

DataSet: Brookbank

HoleID: B-16-03

Hole Length (m): 333

Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
197	208.77	1:	Pyrite	Medium grained	Blebs	3	blebby to scattered; mostly assoc w/ veining
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
186	189	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.8	
189	192	1:	Quartz-Fe-carbonate	Extension Vein			3	
		2:	Quartz-Fe-carbonate	Stockwork Veins			1.5	
192	195	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6.4	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.9	
195	198	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			7.1	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.4	
198	201	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4.6	
		2:	Quartz-Fe-carbonate	Stockwork Veins			3.3	
201	204	1:	Quartz-Fe-carbonate	Extension Vein			3.5	
		2:	Quartz-Fe-carbonate	Stockwork Veins			3.4	
204	207	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			9.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.8	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
208.77	**215.5**	6.73	**E1A**	**Basalt**		Fine grained	S. Molloy

Altered mafic volcanic; Light beige/grey/pink in colour getting more orange towards assumed contact (change starts roughly around 214.3m; no sharp contact); only locally magnetic (mag sus 0-221) ; non foliated to minor foliation around 215.1-215.5; specularite bands present crosscutting previous veining or filling fractures (late occurrence); Pyrite throughout unit; F-MG; Extension and stock veins present; Large qtz-crb vein around 214m (~30cm wide)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
208.77	210	1:	Magnetite	Moderate (26-50%)	Pervasive	
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
210	215.5	1:	Specular hematite	Moderate (26-50%)	Spotted	Fe-crb is assoc with veining as well asweakly pervasive
		2:	Ankerite	Moderate (26-50%)	Patches	
		3:	Magnetite	Weak (1-25%)	Localized	
		4:	Silicified	Weak (1-25%)	Patches	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
208.77	212.8	1:	Pyrite	Fine grained	Semi-massive	6	Ranges from fine grained to coarse grained and from scattered to semi massive
VG: No							
212.8	214.5	1:	Pyrite	Fine grained	Disseminated	10	7-10% diss-SMA PY
VG: No							
214.5	215.5	1:	Pyrite	Medium grained	Scattered grains	0.7	
VG: No							

Structures

From	To	Code	Structure Type	Comments
208.77	215.5	CG	Litho contact - transitional (gradational)	silicified; biege/bleached/purple/greyish in colour and becomes darker orange near contact.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
210	213	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			10.9	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	

From	To					
215.5	**218.57**	3.07	**E1A**	**Basalt**	Medium grained	S. Molloy

Mafic volcanic (albite alteration? mottled/spotted looking; white grains); F-MG; weak-mod foliation; Med grey-pink 'contact' gradually turns into dark grey/green. locally magnetic (mag sus 22.5-55.6); vuggy qtz-Fe crb veins present. Vein assoc PY present. dark chlorite stringers present.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
215.5	218.57	1:	Ankerite	Weak (1-25%)	Pervasive	
		2:	Magnetite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
215.5	218.57	1:	Pyrite	Medium grained	Scattered grains	1	
VG: No							

Structures

From	To	Code	Structure Type	Comments
215.5	218.57	CG	Litho contact - transitional (gradational)	hard to tell precise contact due to gradational colour change. colour may be albite alteration

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
218.57	**229.13**	10.56		**E1A**	**Basalt**	Brecciated	Fine grained	S. Molloy

Brecciated mafic volcanic; cohesive; Light-medium green and pink. Lighter green and pink clasts; pervasive carbonate alteration; vuggy qtz-Fe-crb veins and qtz-crb extension veins present. appears weakly foliated in sections; sct PY throughout, but mostly associated with veining; qtz filled tension gashes/fractures within clasts; FG groundmass; locally magnetic (mag sus ranges 0.2-57.4)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
218.57	228.13	1:	Epidote	Moderate (26-50%)	Patches	
		2:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		3:	Magnetite	Moderate (26-50%)	Patches	
		4:	Fe-Carbonate	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
218.57	224	1:	Pyrite	Medium grained	Scattered grains	0.5	
VG: No							
224	225	1:	Pyrite	Fine grained	Disseminated	7	7-10% sct-diss PY
VG: No							
225	228.13	1:	Pyrite	Medium grained	Scattered grains	2	
VG: No							

Structures

From	To	Code	Structure Type	Comments
218.57	228.13	FLT2	Fault - breccia	brecciated basalt.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
219	222	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			1.5	
		2:	Quartz-Fe-carbonate	Extension Vein			3.3	
222	225	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			9	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.8	
225	228	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
229.13	**238.42**	9.29		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; FG; epidote pillow selvages present throughout unit. locally magnetic (mag sus 5.35-75); non foliated; medium grey-green in colour; vuggy ankerite veins present; kspar-epd amygdules present near selvages.

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
236	238	HFZ	High fracture zone	blocky core.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
231	234	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			8	some veins are qtz-Fe-crb; vuggy veins
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.4	
234	237	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6.7	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.9	

238.42 **242.54** 4.12 **E1A** **Basalt** Schistose Fine grained S. Molloy

Basalt; FG; med-dark grey/green; foliated/sheared in places; vuggy qtz-Fe-crb veins present; pyrite throughout mostly assoc w/ veining; stockwork and extension veins also present. locally pervasive crb alteration. locally magnetic (mag sus 49-63.2); silicification of veins occuring; fe-crb filled amygdules present; tension gashes (filled w/ qtz) are present in crb-qtz veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
238.42	242.54	1:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		2:	Fe-Carbonate	Weak (1-25%)	Pervasive	
		3:	Magnetite	Moderate (26-50%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
238.42	242.54	1:	Pyrite	Medium grained	Scattered grains	1.5	
VG: No							

244.93 **284.5** 39.57 **E1A** **Basalt** Pillowed Fine grained S. Molloy

Pillowed basalt; FG; medium grey-green in colour with epidote selvages present throughout unit; locally magnetic (mag sus 0.57-97.4); non foliated; epidote & fe-crb filled amygdules present (aappear to be concentrated near selvages). extension and stockwork veins present. Pyrite throughout but mostly assoc w/ veining; core is blockier than previous unit (HFZ); Core loss @ 283.87-284.5m. Pillow top breccia at 266m (cohesive)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
244.93	284.5	1:	Epidote	Strong (51-75%)	Localized	
		2:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		3:	Hematite	Weak (1-25%)	Localized	
		4:	Magnetite	Moderate (26-50%)	Patches	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
246	255.5	HFZ	High fracture zone	high fracture zone in pillowed basalt.
259.3	262	HFZ	High fracture zone	high fracture zone in pillowed basalt.
268.97	269.6	FLT2	Fault - breccia	possible cohesive brecciated zone within pillowed basalt.
273	279	HFZ	High fracture zone	high fracture zone in pillowed basalt.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
246	249	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.2	some veins are vuggy
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.9	
249	252	1:	Quartz-Fe-carbonate	Extension Vein			7.3	some vuggy veins
		2:	Quartz-Fe-carbonate	Stockwork Veins			3.9	
252	255	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.8	some vuggy veins present
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.5	
255	258	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5.7	vuggy veins present; some of the qtz-crb stringers also have epd in them
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.1	
258	261	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.9	Some of the Vein2's are qtz-crb-epd; Vein1's are vuggy.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.3	
261	264	1:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			3.8	Vein2's - some are vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.7	
264	267	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2	Some of the stringers are qtz-crb epidote and stringers are a combination of both extension and stockwork veins
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
267	270	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			5.1	Thickness (true thickness) for qtz-calcite vein (Vein1) is not accurate - vein was broken apart
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
270	273	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			1.5	Vein1 veinlet is qtz-Fe-crb; some of Vein2 are vuggy veins; 1.5cm of qtz-crb (+/- calcite) stringers present (some are vuggy)
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5.3	
273	276	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			3.5	vein3 thickness:2.5cm; vein1 are vuggy and most of vein3 are vuggy
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.5	
276	279	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6.2	vein3 thickness: 4.5cm; vein1 are vuggy; some of vein2 are vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.8	

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
279	282	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.7	vein3 thickness: 3.5cm; vein1 veins
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			1.6	vuggy

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
284.5	**287.28**	2.78	**E1A**	**Basalt**	Pillowed	Medium grained	S. Molloy

Pillowed basalt; dark green; pillow selvages present (not as many as in previous pillow units; only a few (2)); texture change from previous unit (244.93-284.5), coarser grained and darker colour; moderate foliation at 284.5-285.3m (1-2cm qtz-Fe-crb veins @ 285m) and weak fol at pillow selvage (286.4m); magnetic in foliated sections and in finer grained areas; Finer grained areas seen surrounding pillow selvages. Pyrite associated w/ qtz-Fe-crb veining at 285m; extension and stockwork veins present. core loss at 283.87-284.5m

Alteration

From	To	#	Alteration	Intesity	Style	Comments
284.5	287.28	1:	Ankerite	Moderate (26-50%)	Halo-Vein Related	Magnetite concentrated in fine grained portions near pillow selvages and in foliated section at 284.5-285.7m
		2:	Epidote	Weak (1-25%)	Localized	
		3:	Fe-Carbonate	Weak (1-25%)	Localized	
		4:	Magnetite	Moderate (26-50%)	Patches	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
287.28	**290.6**	3.32	**E1**	**Mafic Volcanic**	Brecciated	Fine grained	S. Molloy

Mafic volcanic; crb veinlets give core brecciated look; no pillows present; moderately magnetic; dark grey to grey-green in colour; FG; increased chlorite alteration; softer; abundant qtz-crb extenstion stringers; foliated; Fe-crb present assoc w/ veining; highly fractured unit. Fe-crb is deep orange/red in colour (288.2, 288.5 and 288.9m); Pyrite occurs in groundmass and with veining; majority of PY is associated with qtz-Fe-crb veining.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
287.28	290.6	1:	Ankerite	Moderate (26-50%)	Halo-Vein Related	
		2:	Chlorite	Very strong (76-99%)	Pervasive	
		3:	Fe-Carbonate	Weak (1-25%)	Patches	
		4:	Magnetite	Moderate (26-50%)	Pervasive	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
290.6	**296.32**	5.72	**E1**	**Mafic Volcanic**	Brecciated	Medium grained	S. Molloy

Mafic volcanic; increased chlorite alteration (similar amount to previous unit 287.28-290.6m; soft) abundant qtz-crb tension gashes/extension stringers; F-MG; no pillows present; highly fractured w/ very broken rock at beginning of unit (290.6-290.8m; small broken pieces); moderately magnetic; minor vuggy qtz-calcite veins; minor epd/ank veins. trace Fe-crb present. veining gives brecciated appearance

Alteration

From	To	#	Alteration	Intesity	Style	Comments

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
290.6	295.8	1: Chlorite 2: Fe-Carbonate 3: Ankerite 4: Magnetite 5: Epidote		Very strong (76-99%) Moderate (26-50%) Weak (1-25%) Moderate (26-50%) Weak (1-25%)	Pervasive Localized Halo-Vein Related Patches Localized			
295.8	296.32	1: Chlorite 2: Fe-Carbonate 3: Ankerite 4: Magnetite		Strong (51-75%) Moderate (26-50%) Moderate (26-50%) Moderate (26-50%)	Pervasive Localized Halo-Vein Related Pervasive	lighter colour than previous unit (more med grey-green)		

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
291	294	1: Quartz-Fe-carbonate 2: Quartz-Fe-carbonate		Extension Vein Stockwork Veins			10.5 9.3	extension veins/tension gashes and stockwork veining in strongly chlorite altered mafic volcanic.

296.32	**306.93**	10.61	**E1A**	**Basalt**	Schistose	Fine grained	S. Molloy

Shear zone, mafic volc (BB Zone); strongly sheared/mylonitic; colour ranges from med pink-grey/green to light pink-grey-green; FG; minor sil from 302.2-303m; sericite alteration assoc w/ shearing in BB contact shear zone between mafic volc and conglom. Ser from potassic alteration (see equation 3 or 8 from MP139); increased Fe-crb compared to previous units; ser altn is parallel to fol; where ser is abundant, chlorite decreases and vice versa (less ser-more chl at 297.6-299m; equation 3&8 in MP139). non magnetic; at upper contact fol is more chaotic. Possible folding at 302-303m (chaotic fol and poss fold hinge at 302.3m: clasts of grey rock in biege groundmass; fol stops/goes around clasts).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
296.32	297	1: Ankerite 2: Sericite 3: Chlorite		Strong (51-75%) Weak (1-25%) Weak (1-25%)	Halo-Vein Related Banding Banding	Brookbank shear zone
297	299.15	1: Chlorite 2: Sericite 3: Ankerite		Strong (51-75%) Moderate (26-50%) Moderate (26-50%)	Banding Banding Banding	Increase in chlorite and decrease in sericite.
299.15	302.05	1: Sericite 2: Ankerite 3: Chlorite		Moderate (26-50%) Strong (51-75%) Weak (1-25%)	Banding Banding Banding	Brookbank Shear Zone
302.05	304.3	1: Silicified 2: Sericite 3: Ankerite		Weak (1-25%) Weak (1-25%) Weak (1-25%)	Pervasive Banding Banding	Weakly to moderately silicified Brookbank Shear Zone with areas of ser and ankerite alteration (302.3-303.5, 302.9-303.3m)

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
304.3	305.9	1:	Ankerite	Moderate (26-50%)	Banding	Small bands of chlorite alteration.
		2:	Sericite	Strong (51-75%)	Banding	
		3:	Chlorite	Weak (1-25%)	Banding	
305.9	306.93	1:	Sericite	Strong (51-75%)	Banding	Increase in chlorite content and a decrease in ankerite.
		2:	Ankerite	Weak (1-25%)	Localized	
		3:	Chlorite	Moderate (26-50%)	Banding	

Structures

From	To	Code	Structure Type	Comments
296.32	302	SHD	Shear / mylonitic foliation	strong mylonitic foliation.
302	303	AXP	Axial plane	possible fold within shear zone; there is a slight foliation change but the rock looks 'chaotic' and there are small clasts concentrated at 302.3.
303	306.93	SHD	Shear / mylonitic foliation	strong mylonitic foliation.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
297	300	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			13.5	some veins of each type (vein/vein2) are vuggy; in shear zone
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			7.7	
300	303	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			20.3	Some stringers are vuggy in shear zone.
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			6.9	
303	306	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			14.4	vein3 thickness:11cm; very few vuggy stringers (vein3); in main shear zone.
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			20	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
306.93	**307**	0.07		**FLT**	**Fault Zone**	Brecciated	Fine grained	S. Molloy

Cohesive microbreccia at contact with conglomerate and mafic volcanic (7cm thick): FG; black w/ white qtz clasts; part of a qtz vein remained in tact; mod sil; non magnetic. no visible mineralization.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
306.93	307	1:	Silicified	Strong (51-75%)	Pervasive	Cohesive microbreccia; silicified with minor chlorite threads at 307m.
		2:	Chlorite	Weak (1-25%)	Localized	

Structures

From	To	Code	Structure Type	Comments

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
306.93	307	FLT2	Fault - breccia	cohesive microbreccia; proceeded the shearing of previous unit (296.32-306.86m).

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
307	**333**	26		**S4B**	**Polymictic Conglomerate**	Supported - matrix	Fine grained	S. Molloy

Conglomerate; granitoid, jasper and dark grey clasts in a variety of sizes; matrix supported with 15-20% clasts; starts off with dark grey and grades to light-medium grey around 324m; strongly foliated; non magnetic. frequent qtz-crb veins that follow foliation; mod-strong sericite and chlorite bands; trace PY. EOH.

Alteration

From	To	# Alteration	Intesity	Style	Comments
307	319	1: Chlorite 2: Sericite 3: Ankerite	Strong (51-75%) Weak (1-25%) Weak (1-25%)	Banding Banding Halo-Vein Related	Strong chlorite alteration and weaker sericite alteration in bands following foliation.
319	327.25	1: Chlorite 2: Sericite	Strong (51-75%) Moderate (26-50%)	Banding Banding	Strong chl and mod-strong ser bands.
327.25	333	1: Sericite 2: Chlorite 3: Fuchsite	Strong (51-75%) Moderate (26-50%) Weak (1-25%)	Banding Banding Patches	scattered bands of poss fuchsite, usually next to qtz-crb veining (determined to be fuchsite based on colour and hardness); Increased sericite and decreased chlorite alteration

Structures

From	To	Code	Structure Type	Comments
307	333	SHD	Shear / mylonitic foliation	Strong mylonitic foliation in conglomerate.

Veins

From	To	# Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
309	312	1: Quartz-Fe-carbonate 2: Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3" Stringer Zone - vein <1/4"			15.3 9.4	Vein1 some veinlets have weak ankerite. most veins follow foliation; but some crosscut
312	315	1: Quartz-Fe-carbonate 2: Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3" Stringer Zone - vein <1/4"			10 6.9	Mostly follow foliation but some crosscut.
315	318	1: Quartz-Fe-carbonate 2: Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3" Stringer Zone - vein <1/4"			23.4 9	Some veinlets have weak ankerite; some veinlets and stringers crosscut foliation.

DataSet: Brookbank
HoleID: B-16-03

Hole Length (m): 333
Log Length (m): 333

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
318	321	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8.3	veining follows foliation
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			14	
321	324	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			17.4	veining follows foliation
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			10.5	
324	327	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			14.4	veining follows foliation
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			7.4	
327	330	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			17	vein3 thickness: 14cm; most veins follow foliation but some crosscut it.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			16.5	
330	333	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			14.5	veins follow foliation. EOH
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			13.5	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 333**

HoleID: B-16-03 **Max Samp Depth (m): 333**

Total meters Sampled: 328.17

Primary Assay Samples:	356	87.68 %
Field Duplicate Samples:	12	2.96 %
Standard/Blank Samples:	38	9.36 %
Total Samples:	406	

meters

From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
4.2	5	0.8	246001	HCORE			A16-11781	0.007	0.5% sct-blb PY in 5% qtz-crb veining.
5	6	1	246002	HCORE			A16-11781	0.01	0.9% PY in sheared altered zone and in 3% qtz-crb veining
6	7	1	246003	HCORE			A16-11781	0.005	1% sct-str PY in sheared alt zone and in 3% qtz-crb veining
7	8	1	246004	HCORE			A16-11781	0.005	1.5% blb-str PY in sheared alt zone and in 6% qtz-crb veining
8	9	1	246005	HCORE			A16-11781	0.01	0.8% str-sct PY in sheared alt zone and in 7% qtz-crb veining
9	10	1	246006	HCORE			A16-11781	0.005	0.7% blb-sct/diss PY. Diss PY in sheared alt host rock; blb PY assoc w/ hem & kspar qtz-crb veining.
		0	246007	STD		CDN_GS_5K	A16-11781	3.47	
10	10.8	0.8	246008	HCORE			A16-11781	0.008	0.4% diss-blb PY; Diss PY in host sheared alt rock; blb PY assoc w/ veining.
10.8	11.31	0.51	246009	HCORE			A16-11781	0.243	0.4% blb PY assoc w/ 10% qtz-crb veining in shear zone; mod-strong ser altn (increased amount from previous sample); minor hem stringers assoc w/ qtz-crb veining
11.31	12	0.69	246010	HCORE			A16-11781	0.05	0.1% sct PY in gabbro dyke.
12	12.88	0.88	246011	HCORE			A16-11781	0.091	0.8% SMA-sct PY in gabbro dyke. SMA PY assoc w/ 7-8% qtz-crb veining
12.88	13.8	0.92	246012	HCORE			A16-11781	0.008	5% SMA-sct PY in very altered zone rock; 20% qtz-crb veining. SMA and some sct PY assoc w/ veining.
13.8	14.25	0.45	246013	HCORE			A16-11781	0.209	5% SMA-sct PY in very altered zone rock; minz are associated with veining
		0	246014	Blank		Blank	A16-11781	<0.005	
14.25	15	0.75	246015	HCORE			A16-11781	0.25	7-8% SCT-SMA PY assoc w/ altered zone rock and veining. 1% Argentite assoc w/ qtz veining
15	15.98	0.98	246016	HCORE			A16-11781	0.312	6% SMA-sct PY assoc w/ veining; 0.5% Argentite assoc w/ veining. Very altered zone
15.98	17	1.02	246017	HCORE			A16-11781	0.006	0.3% sct PY in pillowed basalt.
17	18	1	246018	HCORE			A16-11781	0.008	1.5% sct PY in pillowed basalt and veining.

18	19	1	246019	HCORE			A16-11781	0.007	0.4% sct PY in pillowed basalt and veining.
19	19.7	0.7	246020	HCORE			A16-11781	0.009	1.5% sct PY assoc w/ veining in pillowed basalt.
		0	246021	STD		CDN_GS_P7J	A16-11781	0.685	
19.7	20.47	0.77	246022	HCORE			A16-11781	0.005	1% sct PY assoc w/ veining and in host rock.
20.47	21.2	0.73	246023	HCORE			A16-11781	0.179	5% sct PY (2% CG; 3% FG); assoc w/ some pink veins but mostly in altered host rock.
21.2	22	0.8	246024	HCORE			A16-11781	0.305	3% sct PY (2% CG; 1% FG); some assoc w/ pink veins but mostly in altered host rock; spec stringers being crosscut by kspar-qtz veins; silicified; mod ser
22	23	1	246025	HCORE			A16-11781	0.16	5% sct PY (2% CG; 3%FG); some assoc w/ pink veining; mostly within altered host rock.
23	24	1	246026	HCORE			A16-11781	1.29	4-5% diss PY in altered zone rock. 10-15% qtz-crb-kspar veining (+/- ank). The kspar (or ank) is concentrated around the margins of the veining with some inclusions within the veins. PY is mostly around the margins of the veining with some being included in smaller veinlets that are crosscut by larger qtz-crb veins
24	24.96	0.96	246027	HCORE			A16-11781	0.121	3% sct-diss PY in altered zone rock. Some PY assoc w/ quartz-filled amygdules, or along vein boundaries.
24.96	26	1.04	246028	HCORE			A16-11781	0.006	0.7% sct PY in pillowed basalt and assoc w/ veining.
		0	246029	DUP	246028		A16-11781	0.007	
26	27	1	246030	HCORE			A16-11781	0.018	
27	28	1	246031	HCORE			A16-11781	0.006	0.2% sct PY assoc w/ veining in pillowed basalt
28	29	1	246032	HCORE			A16-11781	0.008	
29	30	1	246033	HCORE			A16-11781	0.012	
30	31	1	246034	HCORE			A16-11781	0.008	
31	32	1	246035	HCORE			A16-11781	0.005	0.2% sct PY assoc w/ veining in pillowed basalt.
32	33	1	246036	HCORE			A16-11781	0.006	
		0	246037	STD		CDN_GS_P4B	A16-11781	0.474	
33	34	1	246038	HCORE			A16-11781	<0.005	0.1% sct PY in pink veining in pillowed basalt
34	35	1	246039	HCORE			A16-11781	<0.005	0.8% sct PY in pink veining and in pillow selvages.
35	36	1	246040	HCORE			A16-11781	0.005	0.5% blb PY in pillow selvages.
36	37	1	246041	HCORE			A16-11781	<0.005	0.3% sct PY in pillow selvages & veining.
37	38	1	246042	HCORE			A16-11781	0.005	

38	39	1	246043	HCORE			A16-11781	<0.005	1% sct PY in pillow selvages.
39	40	1	246044	HCORE			A16-11781	0.005	0.3% sct PY in pillow selvages and in some veins.
40	41	1	246045	HCORE			A16-11781	0.005	1.5% sct PY mostly assoc w/ qtz-crb-kspar veining.
		0	246046	Blank		Blank	A16-11781	0.005	
41	42	1	246047	HCORE			A16-11781	0.008	2% sct-diss PY; sct PY assoc w/ veining; Diss PY assoc w/ host rock.
42	43	1	246048	HCORE			A16-11781	0.005	0.5% sct PY in host rock.
43	44	1	246049	HCORE			A16-11781	0.005	2% sct PY assoc w/ epd& ksp selvages & veining.
44	45	1	246050	HCORE			A16-11781	0.006	
45	46	1	246051	HCORE			A16-11781	<0.005	1% sct PY assoc w/ pink vein in pillow selvage.
46	47	1	246052	HCORE			A16-11781	0.005	0.7% sct PY assoc w/ ksp-epd-qtz-crb veining (in selvages)
47	48	1	246053	HCORE			A16-11781	0.005	0.2% sct PY in pillow selvages
		0	246054	STD		CDN_GS_P7J	A16-11781	0.726	
48	49	1	246055	HCORE			A16-11781	0.005	0.1% blb PY in selvages
49	50	1	246056	HCORE			A16-11781	0.006	0.1% sct PY in host rock
50	51	1	246057	HCORE			A16-11781	0.006	1.7% sct PY in kspar-epd selvages and in pink veins
51	52	1	246058	HCORE			A16-11781	0.008	0.4% sct PY in host rock and in selvages
52	53	1	246059	HCORE			A16-11781	0.005	1.5% blb PY in kspar qtz-crb veining and in selvages. 0.1% Argentite along kspar/epd qtz-crb stringer
53	54	1	246060	HCORE			A16-11781	0.005	0.1% sct PY in veining and in selvages
54	55	1	246061	HCORE			A16-11781	0.005	0.3% sct-blb PY in veining and in selvages
		0	246062	DUP	246061		A16-11781	0.005	
55	56	1	246063	HCORE			A16-11781	0.005	0.4% diss PY in host rock; 0.2% sct PY in veining
56	57	1	246064	HCORE			A16-11781	0.005	0.6% sct PY in host rock and in qtz-crb stringers
57	58	1	246065	HCORE			A16-11781	0.005	1% sct-str PY in host rock and in qtz-crb veining.
58	59	1	246066	HCORE			A16-11781	0.006	
59	60	1	246067	HCORE			A16-11781	0.009	
60	61	1	246068	HCORE			A16-11781	0.007	0.2% sct-blb PY in host rock
61	62	1	246069	HCORE			A16-11781	0.006	2% sct PY in host rock and assoc w/ veining.
		0	246070	STD		CDN_GS_P4B	A16-11781	0.528	
62	62.85	0.85	246071	HCORE			A16-11781	0.006	3% sct PY in host rock and assoc w/ veining.

62.85	63.53	0.68	246072	HCORE			A16-11781	0.005	1% sct PY; mostly in host rock but some assoc w/ veining.
63.53	64.5	0.97	246073	HCORE			A16-11781	0.019	5-7% sct-SMA PY in altered zone (possible cataclasite). Most PY assoc w/ kspar-qtz-crb veining
64.5	65.3	0.8	246074	HCORE			A16-11781	0.017	1.5-2% PY in altered zone (possible cataclasite). Py assoc w/ veining
65.3	66	0.7	246075	HCORE			A16-11781	0.008	1% PY in altered zone (possible cataclasite). PY assoc w/ veining
66	66.96	0.96	246076	HCORE			A16-11781	0.007	1% PY in altered zone (possible cataclasite). Py assoc w/ veining and in groundmass.
66.96	68	1.04	246077	HCORE			A16-11781	0.007	2% sct-SMA PY in pillowed basalt. PY in groundmass and assoc w/ veining.
		0	246078	Blank		Blank	A16-11798	<0.005	
68	69	1	246079	HCORE			A16-11798	<0.005	0.7% sct PY in pillowed basalt.
69	70	1	246080	HCORE			A16-11798	<0.005	0.2% sct PY in veining in host rock.
70	71	1	246081	HCORE			A16-11798	<0.005	0.6% sct-SMA PY assoc w/ veining and in groundmass.
71	71.8	0.8	246082	HCORE			A16-11798	0.051	7-10% SMA-sct PY; predominantly assoc w/ veining (some diss in groundmass)
71.8	72.6	0.8	246083	HCORE			A16-11798	0.005	3-4% SMA-diss PY; predominantly assoc w/ veining but some diss in groundmass.
72.6	73.6	1	246084	HCORE			A16-11798	<0.005	1.5% sct PY
73.6	74.5	0.9	246085	HCORE			A16-11798	<0.005	0.75% sct PY mostly assoc w/ veining
		0	246086	STD		CDN_GS_P7J	A16-11798	0.718	
74.5	75.4	0.9	246087	HCORE			A16-11798	<0.005	0.5% sct PY mostly assoc w/ veining
75.4	76	0.6	246088	HCORE			A16-11798	0.013	3-4% sct PY mostly assoc w/ veining
76	77	1	246089	HCORE			A16-11798	<0.005	1% SMA-sct PY; mostly assoc w/ veining.
77	78	1	246090	HCORE			A16-11798	<0.005	1% sct PY; mostly assoc w/ veining.
78	79	1	246091	HCORE			A16-11798	<0.005	1% sct PY in veining & groundmass.
79	80	1	246092	HCORE			A16-11798	<0.005	1.5% sct PY in veining & groundmass.
80	81	1	246093	HCORE			A16-11798	<0.005	0.6% sct PY
		0	246094	DUP	246093		A16-11798	<0.005	
81	81.65	0.65	246095	HCORE			A16-11798	<0.005	0.4% diss PY
81.65	82.56	0.91	246096	HCORE			A16-11798	0.06	1.5% sct PY predominantly assoc w/ veining.
82.56	83.3	0.74	246097	HCORE			A16-11798	0.126	2-3% SMA-sct PY predominantly assoc w/ veining; possible fault at 85.86m with strong ksp and poss hem staining.
83.3	84	0.7	246098	HCORE			A16-11798	<0.005	0.7% sct PY assoc w/ veining
84	85	1	246099	HCORE			A16-11798	<0.005	0.7% sct PY assoc w/ veining & pillow selvages

85	86	1	246100	HCORE			A16-11798	<0.005	0.5% sct PY assoc w/ veining
86	87	1	246101	HCORE			A16-11798	0.005	2% sct PY assoc w/ veining & pillow selvages
		0	246102	STD		CDN_GS_P4B	A16-11798	0.44	
87	88	1	246103	HCORE			A16-11798	<0.005	0.4% sct PY assoc w/ veins & selvages
88	89	1	246104	HCORE			A16-11798	<0.005	1-2% sct PY assoc w/ pillow selvages & veining
89	90	1	246105	HCORE			A16-11798	0.005	1% sct PY assoc w/ veining
90	91	1	246106	HCORE			A16-11798	<0.005	0.7% sct PY assoc w/ veining.
91	92	1	246107	HCORE			A16-11899	<0.005	0.5% sct PY in groundmass and veining
92	93	1	246108	HCORE			A16-11899	<0.005	0.3% sct PY in veining
93	94	1	246109	HCORE			A16-11899	<0.005	0.75% sct PY assoc w/ veining
		0	246110	Blank		Blank	A16-11899	<0.005	
94	95	1	246111	HCORE			A16-11899	<0.005	0.5% sct PY assoc w/ veining.
95	96	1	246112	HCORE			A16-11899	<0.005	0.3% sct PY assoc w/ veining.
96	97	1	246113	HCORE			A16-11899	<0.005	0.3% sct PY in groundmass and veining
97	98	1	246114	HCORE			A16-11899	<0.005	0.3% sct PY in groundmass and selvages.
98	99	1	246115	HCORE			A16-11899	<0.005	0.5% sct PY in selvages and groundmass.
99	100	1	246116	HCORE			A16-11899	<0.005	1% sct PY assoc w/ veining and in groundmass & selvages.
100	100.85	0.85	246117	HCORE			A16-11899	<0.005	1-2% sct PY mostly in pillow selvages but also assoc w/ some veining.
		0	246118	STD		CDN_GS_P7J	A16-11899	0.685	
100.85	101.58	0.73	246119	HCORE			A16-11899	<0.005	0.8% diss PY.
101.58	102.4	0.82	246120	HCORE			A16-11899	0.048	3-4% sct-SMA PY in altered basalt; mostly assoc w/ large vein.
102.4	103.25	0.85	246121	HCORE			A16-11899	0.038	1.5% sct PY assoc w/ veining in altered basalt.
103.25	103.92	0.67	246122	HCORE			A16-11899	0.011	0.5% sct PY assoc w/ veining.
103.92	105	1.08	246123	HCORE			A16-11899	0.146	1% sct-diss PY. 0.4% of the PY is concentrated near qtz extension veinelets (+/- kspar); spec hem stringers are oblique to veining
105	106	1	246124	HCORE			A16-11899	<0.005	0.1% sct PY in pillowed basalt.
106	107	1	246125	HCORE			A16-11899	<0.005	0.4% sct PY assoc w/ selvages.
		0	246126	DUP	246125		A16-11899	<0.005	
107	108	1	246127	HCORE			A16-11899	<0.005	2% sct PY mostly assoc w/ pillow selvages
108	109	1	246128	HCORE			A16-11899	<0.005	0.5% sct PY assoc w/ veining and selvages
109	110	1	246129	HCORE			A16-11899	<0.005	0.3% sct PY assoc w/ veining and selvages
110	111	1	246130	HCORE			A16-11899	<0.005	0.7% sct PY

111	112	1	246131	HCORE			A16-11899	<0.005	1% sct-blb PY assoc w/ veining and selvages.
112	113	1	246132	HCORE			A16-11899	<0.005	0.3% sct PY
113	114	1	246133	HCORE			A16-11899	<0.005	0.7-1% sct-str PY in veining and selvages
		0	246134	STD		CDN_GS_P4B	A16-11899	0.367	
114	115	1	246135	HCORE			A16-11899	<0.005	0.5-0.7% sct-diss PY in veining/selvages and groundmass
115	116	1	246136	HCORE			A16-11899	<0.005	0.4% blb PY assoc w/ veining
116	117	1	246137	HCORE			A16-11899	<0.005	0.5% sct PY assoc w/ veining
117	118	1	246138	HCORE			A16-11899	<0.005	0.7% sct PY
118	119	1	246139	HCORE			A16-11899	<0.005	0.5% sct-blb PY assoc w/ veining
119	120	1	246140	HCORE			A16-11899	<0.005	0.4% sct PY
120	121	1	246141	HCORE			A16-11899	<0.005	0.7% sct PY assoc w/ veining and amygdules
		0	246142	Blank		Blank	A16-11899	<0.005	
121	122	1	246143	HCORE			A16-11899	<0.005	0.2% blb PY assoc w/ veining and amygdules
122	123	1	246144	HCORE			A16-11899	<0.005	1% sct-blb PY assoc w/ veining
123	124	1	246145	HCORE			A16-11899	<0.005	0.8% sct PY assoc w/ veining
124	125	1	246146	HCORE			A16-11899	<0.005	0.5% sct-blb PY
125	126	1	246147	HCORE			A16-11899	<0.005	0.2-0.3% sct-blb PY assoc w/ veining and selvages
126	127	1	246148	HCORE			A16-11899	<0.005	0.4% sct-str PY
127	128	1	246149	HCORE			A16-11899	<0.005	1.5% sct-blb PY assoc w/ veining/selvages and amygdules
		0	246150	STD		CDN_GS_P7J	A16-11899	0.887	
128	129	1	246151	HCORE			A16-11977	0.005	0.5% sct PY in veining and selvages
129	130	1	246152	HCORE			A16-11977	<0.005	0.3% sct-blb PY assoc w/ veining/selvages
130	131	1	246153	HCORE			A16-11977	<0.005	0.4-0.5% sct-blb PY in veining/selvages
131	132	1	246154	HCORE			A16-11977	0.005	0.5% sct-diss PY
132	133	1	246155	HCORE			A16-11977	0.032	0.6% sct PY in veining/selvages
133	134	1	246156	HCORE			A16-11977	<0.005	1.5% sct PY mostly assoc w/ veining.
134	135	1	246157	HCORE			A16-11977	0.005	2-3% sct-SMA PY assoc w/ veining.
		0	246158	DUP	246157		A16-11977	<0.005	
135	136	1	246159	HCORE			A16-11977	<0.005	no visible PY
136	137	1	246160	HCORE			A16-11977	<0.005	0.3-0.5% sct PY assoc w/ veining
137	138	1	246161	HCORE			A16-11977	<0.005	0.3% sct PY in veining and amygdules
138	139	1	246162	HCORE			A16-11977	<0.005	0.3% sct PY in veining and amygdules
139	140	1	246163	HCORE			A16-11977	<0.005	1% sct PY in veining and selvages

140	140.6	0.6	246164	HCORE			A16-11977	<0.005	0.4% sct PY in veining and selvages
140.6	141.25	0.65	246165	HCORE			A16-11977	<0.005	0.7-1% sct PY in veining
		0	246166	STD		CDN_GS_P4B	A16-11977	0.4	
141.25	142	0.75	246167	HCORE			A16-11977	0.057	2-3% SMA-sct PY assoc w/ veining.
142	143	1	246168	HCORE			A16-11977	0.005	0.3% sct PY assoc w/ veining in gabbro
143	144	1	246169	HCORE			A16-11977	<0.005	no visible PY in gabbro
144	145	1	246170	HCORE			A16-11977	<0.005	no visible PY in gabbro
145	146	1	246171	HCORE			A16-11977	<0.005	no vis PY
146	147	1	246172	HCORE			A16-11977	0.005	no vis PY
147	147.8	0.8	246173	HCORE			A16-11977	<0.005	0.1% blb PY in gabbro assoc w/ veining
		0	246174	Blank		Blank	A16-11977	<0.005	
147.8	148.54	0.74	246175	HCORE			A16-11977	0.017	0.3% blb PY in gabbro
148.54	149.1	0.56	246176	HCORE			A16-11977	0.086	1-2% blb PY in "cooked" altered rock (chill margin)
149.1	150	0.9	246177	HCORE			A16-11977	0.04	1-2% blb PY in cooked altered rock
150	151	1	246178	HCORE			A16-11977	0.036	0.7-1% sct-blb PY
151	152	1	246179	HCORE			A16-11977	0.017	1% diss-str PY
152	153	1	246180	HCORE			A16-11977	0.005	2% diss-SMA PY
153	154	1	246181	HCORE			A16-11977	0.012	1% sct-diss PY (some grains are euhedral-subhedral and CG)
		0	246182	STD		CDN_GS_P7J	A16-11977	0.682	
154	155	1	246183	HCORE			A16-11977	0.006	2-3% diss-sct PY (some assoc w/ veining)
155	156	1	246184	HCORE			A16-11977	0.007	2-3% sct-blb PY
156	157	1	246185	HCORE			A16-11977	0.008	1-2% sct-blb PY
157	158	1	246186	HCORE			A16-11977	0.08	1-2% sct-blb PY
158	159	1	246187	HCORE			A16-11977	0.011	1-2% blb-diss PY
159	160	1	246188	HCORE			A16-11977	0.024	1-2% sct-SMA PY
160	161	1	246189	HCORE			A16-11977	0.023	1% diss PY (CG and subhedral)
		0	246190	DUP	246189		A16-11977	0.02	
161	161.7	0.7	246191	HCORE			A16-12074	0.012	0.7-1% diss PY (subhedral and CG)
161.7	162.34	0.64	246192	HCORE			A16-12074	0.026	1-2% sct-blb PY; some assoc w/ veining.
162.34	163.1	0.76	246193	HCORE			A16-12074	0.011	2% sct-str PY
163.1	164	0.9	246194	HCORE			A16-12074	<0.005	2% str-sct PY in groundmass and veining
164	165	1	246195	HCORE			A16-12074	0.006	2% scst-str PY; some CG and subhedral)
165	166	1	246196	HCORE			A16-12074	0.009	2-3% sct-diss PY; some assic w/ veining
166	167	1	246197	HCORE			A16-12074	0.022	2% sct PY mostly assoc w/ veining
		0	246198	STD		CDN_GS_P4B	A16-12074	0.418	

167	168	1	246199	HCORE			A16-12074	0.103	0.3% sct PY
168	169	1	246200	HCORE			A16-12074	0.024	0.3% sct PY
169	170	1	246201	HCORE			A16-12074	0.018	2% sct-str PY
170	170.9	0.9	246202	HCORE			A16-12074	0.008	0.7% sct PY
170.9	171.9	1	246203	HCORE			A16-12074	0.146	1-2% sct PY assoc w/ veining
171.9	172.63	0.73	246204	HCORE			A16-12074	0.008	0.5% blb PY assoc w/ stringers
172.63	173.34	0.71	246205	HCORE			A16-12074	0.113	2-3% sct-SMA PY assoc w/ veining
		0	246206	Blank		Blank	A16-12074	<0.005	
173.34	174	0.66	246207	HCORE			A16-12074	0.007	0.7% sct-diss PY
174	174.98	0.98	246208	HCORE			A16-12074	0.013	1% sct-SMA PY assoc w/ veining
174.98	175.77	0.79	246209	HCORE			A16-12074	0.016	0.8% coarse grained-fine grained PY assoc w/ veining
175.77	176.5	0.73	246210	HCORE			A16-12074	0.012	0.5% str-sct PY
176.5	177	0.5	246211	HCORE			A16-12074	0.006	1-2% sct PY; mostly coarse grained
177	178	1	246212	HCORE			A16-12074	0.009	2% sct PY - mostly coarse grained and subhedral
178	179	1	246213	HCORE			A16-12074	0.009	2-3% sct PY; some coarse grained and subhedral
		0	246214	STD		CDN_GS_P7J	A16-12074	0.717	
179	180	1	246215	HCORE			A16-12074	0.006	1-2% sct PY
180	181	1	246216	HCORE			A16-12074	0.005	1.5% sct PY mostly assoc w/ veining
181	182	1	246217	HCORE			A16-12074	0.008	2% blb-sct PY assoc w/ veining
182	182.67	0.67	246218	HCORE			A16-12074	0.006	0.5% blb-diss PY
182.67	183.53	0.86	246219	HCORE			A16-12074	0.008	3-5% sct-SMA PY assoc w/ veining
183.53	184.55	1.02	246220	HCORE			A16-12074	0.019	4-5% SMA-sct PY assoc w/ veining and in groundmass
184.55	185.5	0.95	246221	HCORE			A16-12074	0.005	0.8% sct PY
		0	246222	DUP	246221		A16-12074	0.006	
185.5	186.25	0.75	246223	HCORE			A16-12074	0.007	0.9% sct-blb PY in veining
186.25	187	0.75	246224	HCORE			A16-12074	0.006	1% blb-diss PY
187	188	1	246225	HCORE			A16-12074	0.007	0.8% blb-sct PY
188	189	1	246226	HCORE			A16-12074	0.018	1-1.5% sct PY assoc w/ veining and in groundmass
189	190	1	246227	HCORE			A16-12074	0.007	1% str-blb PY assoc w/ veining
190	191	1	246228	HCORE			A16-12074	0.007	1% sct PY assoc w/ veining
191	192	1	246229	HCORE			A16-12074	0.009	1-2.5% sct PY
		0	246230	STD		CDN_GS_P4B	A16-12074	0.374	
192	193	1	246231	HCORE			A16-12074	0.008	0.5% sct-blb PY
193	194	1	246232	HCORE			A16-12074	0.023	5-7% SMA-blb PY mostly assoc w/ veining

194	195	1	246233	HCORE			A16-12074	0.012	1-3% blb PY mostly concentrated near start of sample
195	196	1	246234	HCORE			A16-12074	0.012	3-5% blb-sct PY mostly assoc w/ veining
196	197	1	246235	HCORE			A16-12074	0.007	2-3% SMA-sct PY
197	198	1	246236	HCORE			A16-12074	0.013	1% blb-sct PY
198	199	1	246237	HCORE			A16-12074	0.006	0.5-0.7% sct PY
		0	246238	Blank		Blank	A16-12074	0.005	
199	200	1	246239	HCORE			A16-12074	0.018	2-3% blb PY assoc w/ veining
200	201	1	246240	HCORE			A16-12074	0.025	0.7-1% blb-sct PY
201	202	1	246241	HCORE			A16-12074	0.014	1% blb-sct PY assoc w/ veining
202	203	1	246242	HCORE			A16-12074	0.015	2% sct-SMA PY assoc w/ veining
203	204	1	246243	HCORE			A16-12074	0.009	1% sct PY
204	205	1	246244	HCORE			A16-12074	0.026	1-2% sct PY assoc w/ veining
205	206	1	246245	HCORE			A16-12074	0.016	0.7-1% sct PY assoc w/ veining
		0	246246	STD		CDN_GS_P7J	A16-12074	0.705	
206	207	1	246247	HCORE			A16-12074	0.009	2% blb-sct PY assoc w/ veining
207	208	1	246248	HCORE			A16-12074	0.039	3-4% sct-blb PY assoc w/ veining
208	208.77	0.77	246249	HCORE			A16-12074	0.023	2-3% sct PY assoc w/ veining
208.77	209.5	0.73	246250	HCORE			A16-12074	0.08	1.5% sct PY
209.5	210.15	0.65	246251	HCORE			A16-12074	0.026	2-3% sct-diss PY; mostly assoc w/ veining
210.15	211	0.85	246252	HCORE			A16-12074	0.084	4-6% diss-sct PY mostly assoc w/ veining
211	212	1	246253	HCORE			A16-12074	0.07	5-7% diss-sct PY mostly assoc w/ veining
		0	246254	DUP	246253		A16-12074	0.095	
212	213	1	246255	HCORE			A16-12079	0.121	1.5-2% diss-sct PY assoc w/ spec hem and also thin qtz-crb stringers; spec hem in qtz veining; spec stringers also cut qtz veinlets; silicified host rock; weak ser patches in veining.
213	214	1	246256	HCORE			A16-12079	0.133	10-15% diss-SMA PY assoc w/ large vein and diss in host rock; 25% white qtz-crb veining +/- kspar along margins of smaller veinlets; silicified host rock that is pinkish in colour (pervasive kspar?)
214	214.7	0.7	246257	HCORE			A16-12079	0.153	3-4% sct-SMA PY in altered host rock; 3-5% white qtz-crb veining (+/- kspar); spec stringers cutting qtz-crb stringers. PY is present in stringers, is assoc w/ vein margins and diss in host rock.
214.7	215.5	0.8	246258	HCORE			A16-12079	0.045	0.3% blb PY assoc w/ veining
215.5	216.3	0.8	246259	HCORE			A16-12079	0.006	0.7% blb PY
216.3	217	0.7	246260	HCORE			A16-12079	<0.005	2% sct PY assoc w/ veins
217	218	1	246261	HCORE			A16-12079	<0.005	0.5% sct PY assoc w/ veins

		0	246262	STD		CDN_GS_P4B	A16-12079	0.501	
218	218.57	0.57	246263	HCORE			A16-12079	<0.005	0.7% sct-blb PY assoc w/ veining
218.57	219	0.43	246264	HCORE			A16-12079	0.699	1-2% sct-blb PY assoc w/ white-pink qtz-crb/ank veining (3-5% veining); veining is small stringers or veinlets with PY assoc w/ them. stringers are more linear whereas veinlets are more 'chaotic' and non linear. stringers are 1-2mm wide and veinlets are 0.5-1.5cm wide. mod pervasive chl (soft)
219	220	1	246265	HCORE			A16-12079	0.726	0.3% sct PY in groundmass and veining; 2-4% veining (white-pink in colour; ranges from 1mm-10mm wide); majority of PY assoc w/ qtz-crb veinlets (white in colour) and rest of PY is in host rock or assoc w/ pink kspar stringers. mod-strong chl; weakly foliated
220	221	1	246266	HCORE			A16-12079	0.005	0.3-0.5% sct-diss PY (subhedral grains)
221	222	1	246267	HCORE			A16-12079	<0.005	0.3% sct PY assoc w/ veining
222	223	1	246268	HCORE			A16-12079	<0.005	1% sct-blb mostly assoc w/ kspar veining
223	224	1	246269	HCORE			A16-12079	<0.005	1-2% sct-blb PY mostly assoc w/ kspar-ank-qtz veining
		0	246270	Blank		Blank	A16-12079	<0.005	
224	225	1	246271	HCORE			A16-12079	0.199	5-7% diss PY
225	226	1	246272	HCORE			A16-12079	<0.005	0.8% sct PY assoc w. qtz-ank/ksp veining
226	227	1	246273	HCORE			A16-12079	0.005	1.5% sct PY mostly assoc w/ veining
227	227.7	0.7	246274	HCORE			A16-12079	<0.005	0.4% subhedral PY
227.7	228.13	0.43	246275	HCORE			A16-12079	<0.005	0.5% blb PY assoc w/ kspar/qtz veining
228.13	229.18	1.05	246276	HCORE			A16-12079	<0.005	1% sct PY mostly assoc w. veining
229.18	230	0.82	246277	HCORE			A16-12079	<0.005	0.4% sct PY assoc w/ qtz-ank & qtz-kspar veining
		0	246278	STD		CDN_GS_P4B	A16-12079	0.418	
230	231	1	246279	HCORE			A16-12079	<0.005	0.5% blb PY mostly assoc w/ pillow selvages
231	232	1	246280	HCORE			A16-12079	<0.005	0.5% blb-sct PY assoc w/ qtz-ksp and qtz-ank/calcite veining
232	233	1	246281	HCORE			A16-12079	<0.005	1-2% sct PY mostly assoc w/ qtz-crb/ank veining
233	234	1	246282	HCORE			A16-12079	<0.005	1% sct PY assoc w/ qtz-kspar and qtz-ank veining
234	235	1	246283	HCORE			A16-12079	<0.005	1.5% sct-blb PY assoc w/ qtz-crb-kspar-epd and qtz-ank veining
235	236	1	246284	HCORE			A16-12079	<0.005	0.5% blb PY assoc w/ qtz-ksp-epd veining
236	237	1	246285	HCORE			A16-12079	<0.005	0.7-1% sct PY assoc w/ veining.
		0	246286	DUP	246285		A16-12079	<0.005	

237	238	1	246287	HCORE		A16-12079	<0.005	0.7% sct-blb PY assoc w/ qtz-crb-ank veining and pillow selvages.
238	238.42	0.42	246288	HCORE		A16-12079	<0.005	2% sct PY assoc w/ qtz-crb veining and pillow selvages
238.42	239	0.58	246289	HCORE		A16-12079	<0.005	2% sct PY assoc w/ qtz-crb veining
239	240	1	246290	HCORE		A16-12079	<0.005	2% sct-str PY assoc w/ qtz-ank veining
240	241	1	246291	HCORE		A16-12079	<0.005	0.9% sct PY assoc w/ qtz-crb and qtz-ank vuggy veins
241	242	1	246292	HCORE		A16-12079	<0.005	3% sct-diss PY assoc w/ qtz-ank-kfp veins
242	242.54	0.54	246293	HCORE		A16-12079	<0.005	2% diss-sct PY assoc w/ vuggy qtz-ank veins
		0	246294	STD	CDN_GS_2P	A16-12079	2.03	
242.54	243	0.46	246295	HCORE		A16-12079	<0.005	1-2% sct PY near qtz-kfp veining
243	244	1	246296	HCORE		A16-12079	<0.005	1-2% blb-sct PY mostly assoc w/ veining
244	244.93	0.93	246297	HCORE		A16-12079	<0.005	0.3% sct PY assoc w/ qtz-crb veining
244.93	245.5	0.57	246298	HCORE		A16-12079	<0.005	1-2% sct-SMA PY assoc w/ qtz-crb/ank veining
245.5	246	0.5	246299	HCORE		A16-12079	<0.005	0.3% blb PY assoc w/ qtz-ank vuggy veins
246	247	1	246300	HCORE		A16-12079	<0.005	0.5% sct PY
247	248	1	246301	HCORE		A16-12079	<0.005	0.5% sct PY assoc w/ qtz-crb-ank/kspar veining and pillow selvages
		0	246302	Blank	Blank	A16-12079	<0.005	
248	249	1	246303	HCORE		A16-12079	<0.005	0.2% sct PY assoc w/ veining
249	250	1	246304	HCORE		A16-12079	<0.005	0.8% sct-blb PY assoc w/ pillow selvages and qtz-crb veining
250	251	1	246305	HCORE		A16-12079	<0.005	0.5% sct PY assoc qtz-crb/ank veining
251	252	1	246306	HCORE		A16-12079	<0.005	0.5% sct PY assoc w/ qtz-crb/ank veining and pillow selvages
252	253	1	246307	HCORE		A16-12079	<0.005	0.4% sct PY assoc w/ epidote veins/selvages
253	254	1	246308	HCORE		A16-12079	<0.005	0.5% sct PY assoc w/ veining
254	255	1	246309	HCORE		A16-12079	0.005	0.3% blb PY assoc w/ selvages and qtz-crb veining within selvages
		0	246310	STD	CDN_GS_P7J	A16-12079	0.616	
255	256	1	246311	HCORE		A16-12079	0.006	0.5% sct PY assoc w/ qtz-crb/ank and epidote
256	257	1	246312	HCORE		A16-12250	<0.005	0.5% sct PY assoc w/ qtz-crb/calcite/ank veining (vuggy)
257	258	1	246313	HCORE		A16-12250	<0.005	0.3% sct PY assoc w/ qtz-ksp/epd veining, selvages and qtz-crb vein
258	259	1	246314	HCORE		A16-12250	<0.005	0.7% blb-sct PY assoc w/ qtz-crb veining and pillow selvages

259	260	1	246315	HCORE			A16-12250	<0.005	1-2% blb-sct PY assoc w/ pillow selvages and qtz-fe-crb veining (vuggy)
260	260.97	0.97	246316	HCORE			A16-12250	<0.005	2-3% sct PY assoc w/ qtz-Fe-crb veining (vuggy) and qtz-crb-kspar-epd veining
260.97	262	1.03	246317	HCORE			A16-12250	<0.005	0.8% sct PY assoc w/ pillow selvages and qtz-Fe-crb veining
		0	246318	DUP	246317		A16-12250	<0.005	
262	263	1	246319	HCORE			A16-12250	<0.005	0.2% blb PY in qtz-crb veining
263	264	1	246320	HCORE			A16-12250	<0.005	0.5% sct PY in groundmass of pillowed basalt
264	265	1	246321	HCORE			A16-12250	<0.005	0.2% sct PY in groundmass of pillowed basalt
265	266	1	246322	HCORE			A16-12250	<0.005	1.5% sct PY assoc w/ pillow selvages and qtz-crb veining
266	267	1	246323	HCORE			A16-12250	<0.005	1% sct PY assoc w/ pillow selvages and groundmass
267	268	1	246324	HCORE			A16-12250	<0.005	no visible mineralization; qtz-crb/fe-crb stringers
268	268.95	0.95	246325	HCORE			A16-12250	<0.005	0.2% sct PY assoc qtz-crb stringers (slightly vuggy) at contact of possible cohesive breccia zone
		0	246326	STD		CDN_GS_P4B	A16-12250	0.546	
268.95	269.57	0.62	246327	HCORE			A16-12250	0.037	3-4% sct PY assoc w/ qtz-crb veining; somewhat vuggy
269.57	270.1	0.53	246328	HCORE			A16-12250	<0.005	0.3% sct PY assoc w/ qtz-crb stringers (slightly vuggy)
270.1	271	0.9	246329	HCORE			A16-12250	<0.005	0.8% sct PY assoc w/ qtz-crb and qtz-fe-crb in kspar/epd selvage; the qtz-ank vein in the pillow selvage is slightly vuggy
271	272	1	246330	HCORE			A16-12250	<0.005	0.8% sct PY assoc w/ qtz-crb-epd and qtz-fe-crb veining
272	273	1	246331	HCORE			A16-12250	0.008	1-1.5% sct PY assoc w/ qtz-fe-crb/kspar (+ epd) and qtz-crb veining; mineralization also in groundmass
273	274	1	246332	HCORE			A16-12250	0.005	0.7% sct PY in qtz-crb/calcite (+epd) and qtz-fe-crb/kspar veining; both vein types are vuggy
274	275	1	246333	HCORE			A16-12250	<0.005	0.7% sct PY in qtz-crb/calcite veining (+ank); vuggy
		0	246334	Blank		Blank	A16-12250	<0.005	
275	276	1	246335	HCORE			A16-12250	0.005	1% sct PY assoc w/ qtz-fe-crb/kspar vuggy veining and qtz-crb/calcite vuggy veins.
276	277	1	246336	HCORE			A16-12250	0.005	1% sct PY assoc w/ qtz-fe-crb/calcite, qtz-crb-epd, qtz-crb-kspar/epd veining; most veins are vuggy
277	278	1	246337	HCORE			A16-12250	0.005	2-3% blb-sct PY assoc w/ selvages and qtz-fe-crb veining (vuggy)

278	279	1	246338	HCORE			A16-12250	0.006	0.9% sct PY assoc w/ vuggy qtz-crb/calcite veining
279	280	1	246339	HCORE			A16-12250	0.005	1.5% sct PY assoc w/ qtz-fe-crb-kspar (+/- epd) veining
280	281	1	246340	HCORE			A16-12250	0.005	0.7% str-sct PY assoc w/ qtz-fe-crb/kspar (+/- epd) veining.
281	282	1	246341	HCORE			A16-12250	<0.005	2% sct-blb PY assoc w/ vuggy qtz-crb/fe-crb veining
		0	246342	STD		CDN_GS_P7J	A16-12250	0.738	
282	282.9	0.9	246343	HCORE			A16-12250	0.005	0.7% sct PY assoc w/ vuggy qtz-fe-crb/calcite veining
282.9	283.87	0.97	246344	HCORE			A16-12250	0.01	2-3% sct-SMA PY assoc w/ qtz-fe-crb/calcite veining (vuggy, all broken up)
284.5	285.13	0.63	246345	HCORE			A16-12250	0.01	3-4% sct PY assoc w/ qtz-fe-crb/kspar veining in foliated mafic volcanic
285.13	286	0.87	246346	HCORE			A16-12250	0.122	0.8% sct PY assoc w/ qtz-fe-crb/kspar veining
286	286.9	0.9	246347	HCORE			A16-12250	0.006	no visible mineralization; epd veinlets and qtz-fe-crb vuggy veining with epd along boundaries present
286.9	287.28	0.38	246348	HCORE			A16-12250	0.006	no visible mineralization in pillowed basalt; qtz-crb extension stringers w/ small stringer of qtz-fe-crb/kspar (1mm)
287.28	288	0.72	246349	HCORE			A16-12250	0.167	1.5% sct PY in groundmass of strong chl altered mafic volc; some PY near qtz-crb tension gashes (white; some are vuggy)
288	289	1	246350	HCORE			A16-12250	0.291	2% sct PY assoc w/ qtz-crb (+/- Fe-crb &kspar) veining. Vuggy (Fe-crb veins). In strong chl altered mafic volc; spec hem present along boundaries of thinner qtz-fe-crb (vuggy) veinlets that cross cut other vein sets.
289	290	1	246351	HCORE			A16-12250	12.5	0.5% sct PY assoc w/ pink qtz-crb veining (+/- kspar&Fe-crb); few veins are vuggy (around 289.95m); PY assoc w/ vuggy vein, thin white qtz-crb stringers, and qtz-crb-kspar (+/- ank) veinlets; host rock is chlorite altered and foliated; weak bleaching (or ser?) near beginning of sample (289.05m) along dark grey/purple veinlet qtz veinlet w/ weak spec hem.
		0	246352	DUP	246351		A16-12250	12.1	
290	290.6	0.6	246353	HCORE			A16-12250	0.081	0.1% sct PY in groundmass of strong chlorite altered mafic volc
290.6	291.5	0.9	246354	HCORE			A16-12250	0.139	0.1% sct PY assoc w/ qtz-fe-crb/kspar stringers
291.5	292	0.5	246355	HCORE			A16-12250	0.092	no visible mineralization; qtz-crb veining; some are vuggy (possible fe-crb present in vuggy vein)

292	293	1	246356	HCORE		A16-12250	0.042	0.1% sct PY assoc w/ qtz-crb tension stringers
293	294	1	246357	HCORE		A16-12250	0.079	0.1% blb-sct PY assoc w/ qtz-crb/calcite veining (vuggy)
294	295	1	246358	HCORE		A16-12250	0.035	0.2% sct PY assoc w/ qtz-crb/calcite veining (vuggy)
295	295.59	0.59	246359	HCORE		A16-12250	0.145	0.3% sct PY assoc w/ qtz-fe-crb veining (vuggy)
		0	246360	STD	CDN_GS_P4B	A16-12250	0.393	
295.59	296.32	0.73	246361	HCORE		A16-12250	2.61	0.2% sct PY assoc w/ white-pink qtz-crb veining; veining look like possible tension gashes; possible hem staining or kspar at 295.8m.
296.32	296.77	0.45	246362	HCORE		A16-12250	3.05	1% fine grained diss PY in shear zone; Py assoc w/ strong Fe-crb-qtz veining (+/- kspar); weak sericite; core is brighter pink then previous sample; poss VG assoc w/ PY @ 296.45m; core is not foliated like rest of core, its more 'chaotic'.
296.77	297.59	0.82	246363	HCORE		A16-12250	4.95	3% diss-str PY (FG) in shear zone; increased chl alt'n; weak-mod ser; weak Fe-crb; less pink and more foliated than previous sample. thin spec hem stringers; PY occurs as stringers that follow veinlets and foliation.
297.59	298.28	0.69	246364	HCORE		A16-12250	0.036	0.7% sct-diss PY (FG) in shear zone; increased chl alt'n. mod ser; Py assoc w/ qtz-crb/Fe-crb stringers
298.28	299.25	0.97	246365	HCORE		A16-12250	0.072	2-3% sct-diss PY (FG) in shear zone; increased chlorite; increased Fe-crb. PY assoc w/ qtz-Fe-crb veining
299.25	300	0.75	246366	HCORE		A16-12250	24.3	7-9% diss-str PY (FG) in shear zone; increased Fe-crb and ser; decreased chl; PY stringers follow beige/brown threads. PY assoc w/ qtz-Fe-crb veining; less foliated then previous samples and more chaotic (similar to sample 246362); veining is white/grey and pink. Spec hem is present in blebs assoc w/ veining (looks brecciated) @ 299.7m;
300	301	1	246367	HCORE		A16-12250	11.8	6-7% str-diss PY (FG) in shear zone; PY assoc w/ white/grey-pink/orange qtz-Fe-crb veining; PY stringers follow brown threads (mostly along vein boundaries); increased chl altn; decrease in Fe-crb and ser; increased foliation compared to sample 246366. soec hem blebs (brecciated?) assoc w/ veining near beginning of sample (@ 300.2m; also less foliated here - fol increases down
		0	246368	Blank	Blank	A16-12250	<0.005	

301	302	1	246369	HCORE		A16-12325	2.37	3-4% sct-str PY (FG) in shear zone; increased chl; mod-strong Fe-crb-qtz veining; PY assoc w/ Fe-crb; spec hem stringers present; veining is white/grey-pink in colour; strongly foliated; some qtz-crb veins are vuggy w/ PY assoc. qtz veining is more folded and 'chaotic'
302	302.91	0.91	246370	HCORE		A16-12325	28.3	10-15% diss-str PY (FG) in shear zone; silicified (and possibly folded). PY disseminated throughout and stringers follow foliation. Low Fe-crb and ser; darker grey and pink-orange in colour; silicified; fold hinge; pale pink-orange fe-crb or ksp (?) and foliated between chaotic section @302.6m
302.91	303.4	0.49	246371	HCORE		A16-12325	15	7-9% str-diss PY (FG) in shear zone; increase in Fe-crb compared to previous sample. PY assoc w/ qtz-fe-crb veining and follows weak foliation (chaotic in sections); some milky veinlets are folded; foliation increases near end of sample
303.4	304.3	0.9	246372	HCORE		A16-12325	24.3	7-9% str-diss PY (F-MG) in shear zone; increase in Fe-crb and ser; weakly silicified; PY assoc w/ qtz-crb(+/- Fe-crb) veining and in stringers following foliation; stronger foliation compared to previous sample but some qtz-crb veins (grey-white) are folded or pinch and swell; weak ser present; possible folding at 303.5m (chaotic); grades from darker grey to lighter grey-pink-green
304.3	305	0.7	246373	HCORE		A16-12325	1.22	2-3% str-sct PY (FG) in shear zone; strong ser and mod-strong Fe-crb; PY assoc w/ qtz-crb/Fe-crb veining; non silicified (soft); qtz-crb veins (white-grey-pink) are folded;very minor spec hem stringer following fol
305	305.8	0.8	246374	HCORE		A16-12325	4.55	1.5% str-sct PY assoc w/ qtz-fe-crb veining. Strong Fe-crb and mod ser. Pink-green-beige in colour; non silicified (soft); qtz-crb veins are creamy white and range from being more linear to folded.
305.8	306.6	0.8	246375	HCORE		A16-12325	5.73	0.5% sct PY assoc w/ qtz-Fe-crb veining; Increased chl and decreased Fe-crb and ser. Darker in colour than previous sample. strongly foliated; qtz-crb veins are creamy white and are either linear or pinch and swell.
		0	246376	STD	CDN_GS_6C	A16-12325	5.72	

306.6	307	0.4	246377	HCORE			A16-12325	10.8	1% str PY assoc w/ qtz-crb veining; mod-strong chl and weak ser and weak Fe-crb alternation. Cohesive microbreccia does not have any visible mineralization. strongly foliated; qtz-crb veins are milky white or white-grey and are linear or pinch and swell; fine grained PY follows foliation along veining and may be assoc w/ ser
307	308	1	246378	HCORE			A16-12325	0.31	0.2% sct PY assoc w/ qtz-crb veining in conglomerate; qtz-crb veins are white-grey and are folded or pinch and swell; moderate ser follows foliation
308	309	1	246379	HCORE			A16-12325	0.013	0.1% sct PY assoc w/ silicified brown clast (fine grained)
309	310	1	246380	HCORE			A16-12325	0.01	0.1% sct PY near qtz-crb stringer near jasper clast
310	311	1	246381	HCORE			A16-12325	0.008	0.1% sct PY in conglomerate
311	312	1	246382	HCORE			A16-12325	0.018	0.1% sct PY in conglomerate
312	313	1	246383	HCORE			A16-12325	0.013	no visible mineralization
313	314	1	246384	HCORE			A16-12325	0.012	0.1% sct PY in conglomerate
		0	246385	DUP	246384		A16-12325	0.01	
314	315	1	246386	HCORE			A16-12325	0.017	no visible mineraliztion
315	316	1	246387	HCORE			A16-12325	0.016	0.2-0.3% sct PY assoc w/ qtz-crb veining
316	317	1	246388	HCORE			A16-12325	0.012	0.1% sct PY assoc w/ jasper clast
317	318	1	246389	HCORE			A16-12325	0.019	0.2% sct PY assoc w/ jasper clast and ser alteration
318	319	1	246390	HCORE			A16-12325	0.035	0.5% sct PY assoc w/ ser altn banding and qtz-crb veining
319	320	1	246391	HCORE			A16-12325	0.178	0.1% sct PY assoc w/ ser altn banding and qtz-crb veining
320	321	1	246392	HCORE			A16-12325	0.023	0.8% sct PY assoc w/ qtz-crb veining and ser alt'n banding
		0	246393	STD		CDN_GS_P7J	A16-12325	0.716	
321	322	1	246394	HCORE			A16-12328	0.018	0.3% sct PY assoc w/ qtz-crb veining and ser altn banding
322	323	1	246395	HCORE			A16-12328	0.026	0.1% sct PY assoc w/ qtz-crb veining
323	324	1	246396	HCORE			A16-12328	0.029	0.1% sct PY assoc w/ qtz-crb veining
324	325	1	246397	HCORE			A16-12328	0.009	0.2% sct PY assoc w/ qtz-crb veining
325	326	1	246398	HCORE			A16-12328	0.017	0.1% sct PY assoc w/ qtz-crb veining and ser altn
326	327	1	246399	HCORE			A16-12328	0.01	no visible mineralization
		0	246400	Blank		Blank	A16-12328	<0.005	
327	328	1	246401	HCORE			A16-12328	0.024	no visible mineralization
328	329	1	246402	HCORE			A16-12328	0.016	no visible mineralization

329	330	1	246403	HCORE			A16-12328	0.058	no visible mineralization
330	331	1	246404	HCORE			A16-12328	0.061	no visible mineralization
331	332	1	246405	HCORE			A16-12328	0.088	0.1% sct PY assoc w/ qtz-crb veining
332	333	1	246406	HCORE			A16-12328	0.036	0.1% sct PY assoc w/ qtz-crb veining

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-04 DataSet: Brookbank Program: Development

Hole Status:	COMPLETE	**Hole Length (m):**	353.5	**Logged By:**	D. Leduchowski
Hole Type:	Surface Drill Hole	**Dip (º):**	-57	**Date Log Started:**	11/6/2016
Date Drill Started:	10/30/2016	**Azimuth:**	336.9	**Date Log Completed:**	1/29/2017
Date Drill Completed:	11/2/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	439,625.6	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,031.0	**Date Surveyed:**	11/4/2016
Elevation (masl):	326.165	**Surveyed By:**	D. Grabiec
Tenement ID:	TB29038	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3
Core Storage:	Old Arena Road

Purpose: Check continuity of high grade, close to one bad hole. + DDH patern loose.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 348 **Max Sample Depth (m):** 353.22

Depth Logged To (m) 353.22 **Meters Sampled** 350.22

Total Samples 426 **# Assay** 366 **# QAQC:** 60

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-57	336.9	TN14	SINGLESHOT	G4			Yes
6	-56.31	336.77	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
15	-56.31	336.74	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
24	-56.3	336.5	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
33	-56.29	337.87	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
42	-56.29	337.19	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
51	-56.26	337.6	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
59	-56.23	338.04	EZ-GYRO	SINGLESHOT	G4	10/30/2016		Yes
60	-56.25	337.39	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
69	-56.23	338.33	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
96	-56.12	337.71	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
114	-56.06	337.87	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
123	-56.03	337.96	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
132	-56.05	337.22	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
133	-56.09	337.34	EZ-GYRO	SINGLESHOT	G4	10/30/2016	retake of measurement at same depth	Yes
141	-56.04	337.47	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
150	-56.06	338.51	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
168	-55.96	337.78	EZ-GYRO	MULTISHOT	G4	11/2/2016		Yes
177	-55.96	338.84	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
195	-55.88	337.98	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
200	-55.7	338.23	EZ-GYRO	SINGLESHOT	G4	10/31/2016		Yes
200.01	-55.7	338.28	EZ-GYRO	SINGLESHOT	G4	10/31/2016	retake of measurement at same depth; 0.01m added to depth	Yes
204	-55.91	339.05	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
213	-55.9	338.09	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
222	-55.96	338.5	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
231	-55.85	338.37	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
240	-55.81	337.27	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
250	-55.54	337.95	EZ-GYRO	SINGLESHOT	G4	10/31/2016		Yes
258	-55.65	337.74	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
267	-55.5	336.8	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
276	-55.37	337.37	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
285	-54.94	337.35	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
289	-54.96	338.74	EZ-GYRO	MULTISHOT	G4	11/1/2016	retake of measurement at same depth	Yes
294	-54.81	337.15	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
321	-54.49	338.01	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
330	-54.35	338.31	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
339	-54.23	337.38	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes
346	-54.15	337.2	EZ-GYRO	MULTISHOT	G4	11/1/2016	retake of measurement at same depth	Yes
348	-54.05	338.18	EZ-GYRO	MULTISHOT	G4	11/1/2016		Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	3	3		OB	Overburden		
3	34.69	31.69		E1A	Basalt	Pillowed	Fine grained
34.69	37.39	2.7		E1A	Basalt	Brecciated	Fine grained
37.39	49.12	11.73		E1A	Basalt	Pillowed	Fine grained
49.12	50.4	1.28		E1A	Basalt	Brecciated	Fine grained
50.4	97.75	47.35		E1A	Basalt	Pillowed	Fine grained
97.75	103	5.25		E1A	Basalt		Fine grained
103	130.94	27.94		E1A	Basalt	Pillowed	Fine grained
130.94	131.88	0.94		E1A	Basalt		Fine grained
131.88	151	19.12		E1A	Basalt	Pillowed	Fine grained
151	156.55	5.55		E1A	Basalt	Massive	Fine grained
156.55	169.41	12.86		E1A	Basalt		Fine grained
169.41	183.35	13.94		E1A	Basalt	Pillowed	Fine grained
183.35	226.12	42.77		E1A	Basalt	Massive	Medium grained
226.12	236.44	10.32		E1	Mafic Volcanic		Fine grained

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
236.44	257.3	20.86		E1A	Basalt		Fine grained
257.3	264.07	6.77		E1A	Basalt		Fine grained
264.07	280.7	16.63		E1A	Basalt		
280.7	284.49	3.79		E1	Mafic Volcanic		Fine grained
284.49	286	1.51		C2	Iron Formation	Banded	Fine grained
286	292.55	6.55		E1A	Basalt	Massive	Fine grained
292.55	297.75	5.2		I1A	Gabbro		Medium grained
297.75	303	5.25		E1A	Basalt	Massive	Fine grained
303	313	10		E1A	Basalt	Pillowed	Fine grained
313	319	6		E1A	Basalt		Fine grained
319	323.25	4.25		E1A	Basalt		
323.25	323.27	0.02		FLT	Fault Zone		Fine grained
323.27	328.95	5.68		E1A	Basalt		Fine grained
328.95	328.97	0.02		FLT	Fault Zone		Fine grained
328.97	353.22	24.25		S4	Conglomerate		Coarse grained

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**3**	3		**OB**	**Overburden**			D. Leduchowski
Overburden								
3	**34.69**	31.69		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed basalt. light-med green-grey. fg. weakly to moderately magnetic throughout. amygdules filled with quartz-carbonate and epidote. epd at pillow selvages. PY dis-sct in pillows and in and around quartz-carb vein. PY also associated with Ksp and Epd. Mod-str Ksp, Epd and Fe-crb alteration. Pervasive disseminated magnetite throughout. Very trc to no hematite. Qz-crb and qz-Fecrb +/- epd veins extension and stockwork veins. Well mineralized vuggy qz-crb-ksp veins

Alteration

From	To	#	Alteration	Intesity	Style	Comments
3	34.69	1:	Ankerite	Moderate (26-50%)	Patches	Fe-Carb and epd associated with veins and pillows. Magnetite dis throughout host and in veins. Pervasive carb alteration.
		2:	Epidote	Moderate (26-50%)	Patches	
		3:	Magnetite	Strong (51-75%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
3	6.5	1:	Pyrite	Fine grained	Disseminated	0.3	vein associated
VG: No							
6.5	11	1:	Pyrite	Fine grained	Disseminated	1	associated with vuggy qz-crb veins and pillow selvages
VG: No							
12	16	1:	Pyrite	Medium grained	Scattered grains	0.5	PY scattered in and around pillow selvages and in vuggy qz-crb veins
VG: No							
16	17	1:	Pyrite	Fine grained	Disseminated	1.5	fg PY dis in vuggy qz-crb vns
VG: No							
17	20	1:	Pyrite	Fine grained	Scattered grains	0.3	
VG: No							
20	25	1:	Pyrite	Fine grained	Scattered grains	0.5	PY sct in and around pillow selvages and vuggy qz-crb vns.Also sct in host.
VG: No							
25	28	1:	Pyrite	Fine grained	Disseminated	0.5	in pillows and vuggy qz-crb vns
VG: No							
28	29	1:	Pyrite	Fine grained	Disseminated	2	in pillows and vuggy qz-crb vns
VG: No							

Veins

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
3	6	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4.5	
		2:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			1	
6	9	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			9	vuggy quartz-carb-epd-ksp veins with PY
		2:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			1.5	
9	12	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			7.2	
		2:	Quartz-Fe-Carbonate	Stockwork Veins			3	
12	15	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			0.5	
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			1.1	
15	18	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			1	vuggy quartz-carb-epd-ksp veins with PY
		2:	Quartz-Fe-Carbonate	Stockwork Veins			3	
18	21	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			2	
		2:	Quartz-Fe-Carbonate	Stockwork Veins			1	
21	24	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			5	
24	27	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"	0		5.3	vuggy qz-crb-epd-ksp veins with PY
		2:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			0.8	
27	30	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			3.7	
30	33	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			2.3	
		2:	Quartz-Fe-Carbonate	Stockwork Veins			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
34.69	**37.39**	2.7		**E1A**	**Basalt**	Brecciated	Fine grained	D. Leduchowski

Brittle-ductile fault zone in basalt. Basalt is strongly brecciated and more strongly altered than unit above. Med green-grey. Fg. weak-mod magnetic. Upper contact of fault is ~50 TCA. Inc in qz-crb veins. Weak silicifcation. Mod patchy epd and Fe-Carb associated with veining and pillows. Pervasive dis mag in unit as above. 1% PY dis-sct throughout in and around vuggy qz-crb veins and in pillow selvages.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
34.69	37.39	1:	Fe-Carbonate	Moderate (26-50%)	Pervasive	Alteration zone associated with fault. Mod carb alteration throughout.
		2:	Magnetite	Moderate (26-50%)	Pervasive	
		3:	Epidote	Moderate (26-50%)	Patches	

Structures

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	Code	Structure Type	Comments
34.69	37.39	FLT2	Fault - breccia	Brittle-ductile fault zone, fault breccia.
34.69	37.39	FLT4	Fault - cataclasite	cataclasite, strong brecciation in basalt, brittle-ductile

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
37.39	**49.12**	11.73		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed basalt. High fracture zones throughout ranging from .15 to .80m wide. Very incompetent core. FG. Alteration same as above + fracture related hem alt'n. 2mm sized amygdules filled with qz-crb and epd. Lcl 1% PY dis-sct in vuggy qz-calcite-Fecrb vein. Vuggy Qz-cal-Fecrb extension veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
37.39	49.12	1:	Hematite	Moderate (26-50%)	Patches	Fecrb and epd associated with veins and pillows. Magnetite dis throughout host and in veins. Hem associated with fractures.
		2:	Epidote	Moderate (26-50%)	Patches	
		3:	Magnetite	Strong (51-75%)	Pervasive	
		4:	Ankerite	Strong (51-75%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
43	45	1:	Pyrite	Fine grained	Disseminated	1	very fg dis PY in vuggy qz-crb in HFZ
VG: No							

Structures

From	To	Code	Structure Type	Comments
40	49.12	HFZ	High fracture zone	high fracture zones in basalt ranging from .15m to .80m wide

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
39	42	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			5.3	
		2:	Quartz-Fe-Carbonate	Stockwork Veins			4	
42	45	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			5.5	
		2:	Quartz-Fe-Carbonate	Stockwork Veins			2	
45	48	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			2.1	
		2:	Quartz-Fe-Carbonate	Stockwork Veins			5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
49.12	**50.4**	1.28		**E1A**	**Basalt**	Brecciated	Fine grained	D. Leduchowski

Brittle-ductile fault zone in basalt. Basalt is strongly brecciated and more strongly altered than unit above. Med grey-green. Fg. weak-mod magnetic. Irregular upper contact, lower contact is still irregular, but appears subvertical (~80 TCA). Strong pervasive Fe-crb and

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

calcite alteration. Strong patchy epd and Fe-crb associated with veining and pillows. Pervasive dis mag in unit as above. 1% PY dis-sct throughout in and around vuggy qz-crb veins and in pillow selvages.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
49.12	50.4	1:	Ankerite	Very strong (76-99%)	Pervasive	Alteration zone associated with fault. Strong Fecrb+cal alteration throughout. Magnetite alteration.
		2:	Calcite	Strong (51-75%)	Pervasive	
		3:	Magnetite	Moderate (26-50%)	Pervasive	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
50.4	**97.75**	47.35		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed basalt. light med green-grey. fg. mod magnetic. epd, FeCrb associated with veining and pillow selvages (as above). Rare amygdules filled with epd-qz-crb. Hematite threads associated with qz-crb veining. Pervasive Fe-crb alteration and magnetite. Trc PY sct-dis throughout basalt. Lcl 0.5-1% PY dis in vuggy qz-cal-crb vns. Qz-Crb/FeCrb extension and stockwork veins. Lcl specularite bands.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
50.4	54	1:	Ankerite	Strong (51-75%)	Pervasive	FeCrb and epd associated with veins and pillows. Magnetite dis throughout host and in veins.
		2:	Epidote	Moderate (26-50%)	Patches	
		3:	Magnetite	Moderate (26-50%)	Pervasive	
54	61.39	1:	Specular hematite	Strong (51-75%)	Banding	specularite banding; dis mag throughout basalt; pervasive Fe-crb;epd pillow selvages
		2:	Magnetite	Strong (51-75%)	Pervasive	
		3:	Ankerite	Strong (51-75%)	Pervasive	
		4:	Epidote	Moderate (26-50%)	Localized	
61.39	69	1:	Magnetite	Strong (51-75%)	Pervasive	mag dis throughout; pervasive Fe-crb; epd lcl at pillow selvages
		2:	Ankerite	Moderate (26-50%)	Pervasive	
		3:	Epidote	Moderate (26-50%)	Localized	
69	72	1:	Silicified	Strong (51-75%)	Patches	recrystallized rock near fracture zones. magnetite alt'n. FeCrb alteration haloes.
		2:	Ankerite	Strong (51-75%)	Patches	
		3:	Magnetite	Strong (51-75%)	Localized	
72	97.75	1:	Magnetite	Strong (51-75%)	Pervasive	perv dis magnetite; FeCrb alteration haloes; patchy epd at pillow selvages.
		2:	Ankerite	Moderate (26-50%)	Patches	
		3:	Epidote	Moderate (26-50%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
51	55	1:	Pyrite	Fine grained	Scattered grains	0.1	

DataSet: Brookbank
HoleID: B-16-04
meters

Hole Length (m): 353.5
Log Length (m): 353.22

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
VG: No							
55	60.8	1	Pyrite	Fine grained	Scattered grains	0.3	PY sct in and around vns
VG: No							
60.8	62.5	1	Pyrite	Fine grained	Disseminated	0.75	0.75% dis-sct PY associated with vuggy qz-crb vns
VG: No							
62.5	66	1	Pyrite	Fine grained	Scattered grains	0.3	PY sct in and around vuggy qz-crb vns and throughout host
VG: No							
66	69	1	Pyrite	Fine grained	Blebs	0.5	PY blebs-dis in and around vuggy qz-crb vns
VG: No							
69	70	1	Pyrite	Fine grained	Disseminated	0.75	PY dis-sct in vein and in and around vuggy qz-crb vns
VG: No							
70	89.5	1	Pyrite	Fine grained	-	0.3	PY sct-dis throughout basalt and in and around vns
VG: No							
89.5	92	1	Pyrite	Fine grained	Disseminated	0.75	PY dis-sct in and around vuggy qz-crb vns and associated with pillow margins in basalt
VG: No							
92	97.75	1	Pyrite	Medium grained	Blebs	0.3	
VG: No							

Structures

From	To	Code	Structure Type	Comments
64	70	HFZ	High fracture zone	high fracture zones in basalt ranging from .10-.15 m

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
51	54	1	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			2	
		2	Quartz-Fe-Carbonate	Stockwork Veins			3	
54	57	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			2.2	
		2	Quartz-Fe-Carbonate/Epidote	Stockwork Veins			2	
57	60	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			0.9	vuggy qz-crb extensionveins
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			1.8	

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
60	63	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			8.1	
		2:	Quartz-Fe-carbonate	Stockwork Veins			5	
63	66	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			6.5	
		2:	Quartz-Fe-carbonate	Stockwork Veins			5	
66	69	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2	
		2:	Quartz-Fe-carbonate	Stockwork Veins			4	
69	72	1:	Quartz-Fe-carbonate	Vein with wall rock fragments			15	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			5	
72	75	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	-			9.4	vuggy qz-crb veins
		2:	Quartz-Fe-carbonate	Stockwork Veins			4	
75	78	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			0.9	
78	81	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			4.5	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			1.5	
81	84	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			1.9	
		2:	Quartz-Fe-carbonate	Stockwork Veins			0.4	
84	87	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			3.5	extension veins, angle varies from approximately 30 to 60degrees
		2:	Quartz-Fe-carbonate	Stockwork Veins			2	
87	90	1:	Quartz-Fe-Carbonate	Extension Vein			4.5	
		2:	Quartz-Fe-carbonate	Stockwork Veins			2	
90	93	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			2.5	
		2:	Quartz-Fe-carbonate	Stockwork Veins			1.5	
93	96	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			9.3	
		2:	Quartz-Fe-Carbonate	Stockwork Veins			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
97.75	**103**	5.25		**E1A**	**Basalt**		Fine grained	D. Leduchowski

Altered basalt. Beige-pink-grey. FG. Nonmagnetic. Gradational upper and lower contacts. Pervasive strong ser alt'n and silicification. Lcl patchy Fe-carb alteration associated with veining. <1cm wide hem and chl threads/bands.1-2% dis PY throughout rock and assoc

DataSet: Brookbank
HoleID: B-16-04
meters

Hole Length (m): 353.5
Log Length (m): 353.22

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

with ser and sil. White qz-crb extension/stockwork veins and vuggy qz-crb-ksp veins. Amygdules with dis PY along margins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
97.75	103	1:	Silicified	Strong (51-75%)	Pervasive	Alteration zone. Strong pervasive ser and sil throughout. Patchy FeCrb assoc with veins. Banded chl+hem.
		2:	Sericite	Strong (51-75%)	Pervasive	
		3:	Ankerite	Strong (51-75%)	Patches	
		4:	Hematite	Moderate (26-50%)	Banding	
		5:	Chlorite	Moderate (26-50%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
97.75	103	1:	Pyrite	Fine grained	Disseminated	1	Very fg dis PY dis throughout alt'n zone

VG: No

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
99	102	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	vuggy qz-cb-cal veins w/PY. Quartz-cb-kfp veinlets and extension veins throughout.
		2:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			18.6	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
103	**130.94**	27.94	**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed basalt. Med green-grey. FG. Mod magnetic throughout basalt and in pillow selvages. Very weak foliation. Patchy Fe-Crb around vuggy veins. Lcl sil and ser alt'n. EPD assoc/ w/pillow selvages. Str perv magnetite throughout. Lcl hem (spc) threads/veins. Qz-FeCrb +/- cal (where vuggy) extension/stockwork veins. Lcl PY associated with vuggy qz-crb vns.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
103	104.76	1:	Silicified	Moderate (26-50%)	Localized	Lcl ser and sil near vein margins. Patchy carb in and along vuggy veins.
		2:	Sericite	Moderate (26-50%)	Localized	
		3:	Ankerite	Moderate (26-50%)	Patches	
104.76	118.87	1:	Magnetite	Strong (51-75%)	Pervasive	Pervasive mag dis throughout. Patchy FeCrb assoc w veins. Lcl hem threads and fracture related hem. EPD @ pillow selvages.
		2:	Ankerite	Moderate (26-50%)	Patches	
		3:	Hematite	Moderate (26-50%)	Localized	
		4:	Epidote	Moderate (26-50%)	Localized	
118.87	119.68	1:	Silicified	Strong (51-75%)	Pervasive	Pervasive sil and ser alt'n. Localized hem blebs in veins. Hem stringers also crosscutting FeCrb. FeCrb in vuggy veins.
		2:	Sericite	Strong (51-75%)	Pervasive	
		3:	Hematite	Moderate (26-50%)	Localized	
		4:	Ankerite	Moderate (26-50%)	Patches	

DataSet: Brookbank
HoleID: B-16-04
meters

Hole Length (m): 353.5
Log Length (m): 353.22

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
119.68	127.76	1:	Magnetite	Strong (51-75%)	Pervasive	
		2:	Ankerite	Moderate (26-50%)	Patches	
		3:	Epidote	Moderate (26-50%)	Patches	
127.76	130.94	1:	Specular hematite	Moderate (26-50%)	Patches	spc hem blebs in qz-crb-ksp vein
		2:	Ankerite	Moderate (26-50%)	Patches	
		3:	Magnetite	Moderate (26-50%)	Localized	
		4:	Epidote	Moderate (26-50%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
103	109	1:	Pyrite	Fine grained	Scattered grains	0.3	trc PY sct in host and in around vuggy qz-crb vns
VG: No							
109	112	1:	Pyrite	Fine grained	Disseminated	1	PY dis in vuggy qz-crb-kfp veins. Rare PY sct in host.
VG: No							
112	119	1:	Pyrite	Fine grained	Disseminated	0.5	PY dis in vuggy qz-crb-kfp veins and along margins
VG: No							
119	120	1:	Pyrite	Fine grained	Disseminated	2	PY dis-sct throughout. Associated with qz-crb-kfp vuggy veins.
VG: No							
120	123.71	1:	Pyrite	Fine grained	Disseminated	0.3	trc PY dis in host and in and along margins of vuggy qz-crb-kfp
VG: No							
123.71	130.94	1:	Pyrite	Fine grained	Disseminated	0.5	PY dis-sct-blb in host and mostly around vuggy qz-crb vns
VG: No							

Structures

From	To	Code	Structure Type	Comments
108.9	130.94	HFZ	High fracture zone	high fracture zones in basalt ranging from 0.10 to 0.70m in size

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
105	108	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	vuggy qz-crb-cal veins w/PY.
		2:	Quartz-Fe-Carbonate	Stockwork Veins			3	

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
108	111	1: Quartz-Fe-Carbonate 2: Quartz-Fe-carbonate		Veinlet Zone - vein 1/4" to 3" Vein > 3"			10	Vuggy qz-crb-cal veins incorporated into V2F veins.Large 30cm white qz-crb vein w/dis-sct PY.
111	114	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate /		Veinlet Zone - vein 1/4" to 3" Extension Vein			10.6 3.8	Vuggy qz-crb-cal-ksp veins with PY. Silicified qz-crb extension veins.
114	117	1: Quartz-Fe-Carbonate 2: Quartz-Fe-carbonate		Veinlet Zone - vein 1/4" to 3" Stockwork Veins			10.4 5.5	Vuggy qz-crb-kf-cal veins (logged as V2F). Stockwork qz-crb veins.
117	120	1: Quartz-Fe-Carbonate / K-Feldspar-epidote 2: Quartz-Fe-carbonate		Veinlet Zone - vein 1/4" to 3" Stockwork Veins			10 10	more stockwork veins
120	123	1: Quartz-Fe-Carbonate 2: Quartz-Fe-carbonate		Veinlet Zone - vein 1/4" to 3" Extension Vein			7.1 4.6	vuggy qz-crb-kfp-cal veins logged as V2F
123	126	1: Quartz-Fe-Carbonate 2: Quartz-Fe-carbonate		Veinlet Zone - vein 1/4" to 3" Stockwork Veins			10.6 3	vuggy qz-crb-kfp-cal veins logged as V2F
126	129	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-carbonate		Veinlet Zone - vein 1/4" to 3" Stockwork Veins			5.4 0.8	vuggy qz-crb-cal veins

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
130.94	**131.88**	0.94	**E1A**	**Basalt**		Fine grained	D. Leduchowski

Altered basalt. Beige-pink-grey. FG. Nonmagnetic. Pervasive strong ser alt'n and silicification. Lcl patchy Fe-carb alteration associated with veining. Hem and chl threads.1-2% dis PY throughout rock and assoc with ser and sil. White silicified qz-crb extension/stockwork veins and qz-FeCrB veins. Increased chlorite at contact of altered zone. Chlorite is very dark, soft.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
130.94	131.88	1: Silicified		Strong (51-75%)	Pervasive	Strong pervasive ser and sil throughout. Patchy FeCrb assoc with veins. Chl Hem threads.
		2: Sericite		Strong (51-75%)	Pervasive	
		3: Ankerite		Moderate (26-50%)	Patches	
		4: Chlorite		Moderate (26-50%)	Banding	
		5: Hematite		Moderate (26-50%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
130.94	131.88	1: Pyrite		Fine grained	Disseminated	2	
VG: No							

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
131.88	**151**	19.12	**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Pillowed basalt. Med grey-green. FG. Weak-mod magnetic throughout. Chlorite alteration most prominent near altered zone contact (where sericite is highest). Fe crb alteration associated with veining. Calcite in vuggy qz-crb veins. Specularite crosscut by qz-FeCrb vein at 134.75m. PY mineralization is most prominent in and along vuggy veins. High fracture zones throughout unit ranging 0.10 to 1.2m in size. Cohesive fault breccia at 139.22m.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
131.88	132.5	1:	Chlorite	Very strong (76-99%)	Pervasive	Increased chlorite alteration after alteration zone. Very dark and soft. Pervasive mag.
		2:	Magnetite	Strong (51-75%)	Pervasive	
132.5	151	1:	Magnetite	Moderate (26-50%)	Pervasive	Pervasive mod mag alt'n. Early spc threads in basalt - they are cut by vuggy qz-FeCrb veins at approx. 134.75m. Qz+FeCrb+cal associated with vuggy veins. EPD at pillow selvages.
		2:	Ankerite	Strong (51-75%)	Patches	
		3:	Epidote	Moderate (26-50%)	Localized	
		4:	Specular hematite	Moderate (26-50%)	Localized	

Structures

From	To	Code	Structure Type	Comments
135	139.2	HFZ	High fracture zone	HFZ's in basalt.
139.2	139.5	FLT2	Fault - breccia	cohesive fault breccia in basalt

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
132	135	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			1.8	Vein 3 thickness is 0.5cm. Low anglular specular hematite veins.
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5.6	
135	138	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			1.8	quartz-carb extension veins; vuggy qz-crb-kfp-cal veins with minz.Vein 3 thickness is 1.3cm (not listed).
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.6	
138	141	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2	Quartz-carb extension veins and quartz-carb-kfp veins(some vuggy)
		2:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			20	
141	144	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7.8	vuggy qz-crb-kfp-cal veins with minz.
144	147	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15.1	vuggy qz-crb-kfp-cal veins with minz.
147	150	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13.6	vuggy qz-crb-kfp-cal veins with minz
		2:	Quartz-Fe-Carbonate	Stockwork Veins			2.6	

151	**156.55**	5.55	**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Massive basalt. Med grey with tint of green. FG. Weak to mod magnetic throughout.Strong FeCrb alteration associated with veining (calcite where veins become vuggy). Tension gashes and stockwork qz-crb veins throughout appearing relatively unmineralized. Gradational contact to altered/mineralized basalt.

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
151	156.55	1:	Magnetite	Moderate (26-50%)	Pervasive	Massive section of basalt
		2:	Ankerite	Strong (51-75%)	Patches	
		3:	Calcite	Moderate (26-50%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
153	156	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	vein 3 thickness 2.9cm. Tension gashes logged as extension veins.
		2:	Quartz-Fe-carbonate	Extension Vein			3.8	

From	To					
156.55	**169.41**	12.86	**E1A**	**Basalt**	Fine grained	D. Leduchowski

Altered basalt. Beige-pink-grey. FG. Nonmagnetic. Gradational upper and lower contacts. Pervasive strong ser alt'n and silicification. Lcl patchy Fe-carb alteration associated with veining. Strong chl and hem/spc threads. 1-2% dis PY throughout rock and assoc with ser and sil. White silicified qz-crb veinlets and qz-FeCrb veins. Brecciated white quartz-carb veinlets at 163.1 to 164

Alteration

From	To	#	Alteration	Intesity	Style	Comments
156.55	167	1:	Silicified	Strong (51-75%)	Pervasive	Pervasive sil and ser alt'n. Ser alt'n is banded and parallel to shear. Patchy FeCrb alt'n haloes. Local specularite/hem + chl threads.
		2:	Sericite	Strong (51-75%)	Banding	
		3:	Ankerite	Strong (51-75%)	Patches	
		4:	Specular hematite	Moderate (26-50%)	Banding	
		5:	Chlorite	Moderate (26-50%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
156.72	169.41	1:	Pyrite	Fine grained	Disseminated	1.5	Alteration zone. PY dis-sct-blb in altered rock associated with ser and sil. Mostly F-MG PY dis throughout host, but some portions are more scattered/blebby.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
159	162	1:	Quartz-Fe-Carbonate/K-Feldspar	Breccia Veins			6	
165	168	1:	Quartz-Fe-Carbonate	Breccia Veins			119	Milky white brecciated quartz-carb vein with dis-sct PY. Quartz-crb-kfp veins crosscut brecciated veins.
		2:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			1.3	

DataSet: Brookbank

HoleID: B-16-04

Hole Length (m): 353.5

Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
169.41	**183.35**	13.94		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed basalt. Colour varies locally from dark to light green w/portions more pink. F-MG. Weakly to mod. magnetic throughout. Fe-Crb strongest from 177.3 to 183.45m. Magnetite bands up to 2cm in thickness (explains high values in mag susc). EPD @ pillow selvages and associated with veining.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
171	174	1:	Quartz-Fe-Carbonate	Extension Vein			3	
174	177	1:	Quartz-Fe-Carbonate	Extension Vein			3.1	Extension veins + vuggy qz-crb-cal veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			1.8	
177	180	1:	Quartz-Fe-Carbonate	Breccia Veins			15	V2P is 1cm thick. Brecciated milky white quartz-carb vein. Extension veins and tension gashes throughout.
		2:	Quartz-Fe-Carbonate	Extension Vein			6.1	
180	183	1:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			3.7	V2P cut by V2F veinlets. V2F veinlets are low angle.
		2:	Quartz-Fe-Carbonate/K-	Veinlet Zone - vein 1/4" to 3"			2.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
183.35	**226.12**	42.77		**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Massive basalt. Spotted appearance. Dark and light green in colour. Weakly magnetic (with mag sus values <1 or around 1). Rare EPD, which may be related to pillow selvages. Rare amygdules filled with EPD. Ksp + Fe-crb + Silicified portions near qz-crb veins. Increase in silicification at 207.62 to 208.8m, 214.14 to 215.35m. Pervasive carb alteration from 220.7m to 226.12m with increase towards lower contact. Relatively unmineralized (lcl trc sct PY) compared to pillowed basalt. Quartz-FeCrb extension veins and veinlets throughout.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
183.35	207.62	1:	Ankerite	Moderate (26-50%)	Localized	Local mod FeCrb associated with veining in massive basalt
207.62	208.8	1:	Silicified	Strong (51-75%)	Pervasive	Pervasive silicification in basalt. Patchy FeCrb and local EPD.
		2:	Ankerite	Moderate (26-50%)	Patches	
		3:	Epidote	Weak (1-25%)	Localized	
208.8	214.14	1:	Ankerite	Moderate (26-50%)	Localized	Local mod ksp and Fe-crb associated with veining in massive basalt
214.14	215.35	1:	Silicified	Strong (51-75%)	Pervasive	Pervasive silicification in basalt. Local FeCrb near veins.
		2:	Ankerite	Moderate (26-50%)	Localized	
215.35	220.7	1:	Ankerite	Strong (51-75%)	Localized	Local mod FeCrb

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Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
220.7	226.12	1:	Ankerite	Strong (51-75%)	Pervasive	Pervasive carb alteration in basalt. Kfp and Fe-crb associated with veins.Specularite threads in last 1m of interval.
		2:	Specular hematite	Moderate (26-50%)	Localized	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
186	189	1:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			2.9	
		2:	Quartz-Fe-Carbonate/Calcite	-			0.2	
189	192	1:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			5.7	Quartz-carb-kfp extension veins (some with EPD at margins)
192	195	1:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein		38	1.3	Quartz-carb-kfp extension veins and quartz-carb veinlets
		2:	Quartz-Fe-Carbonate	Veinlet Zone - vein 1/4" to 3"			4.5	
195	198	1:	Quartz-Fe-Carbonate/K-Feldspar	Veinlet Zone - vein 1/4" to 3"			10	Vein 3 has thickness of 4cm. Vuggy quartz-carb-kfp veins with mineralization.
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6.1	
198	201	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2.5	Low angle stringer. Vuggy quartz-cal vein.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1	
201	204	1:	Quartz-Fe-carbonate	Extension Vein			1.3	Extension veins
		2:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			1.3	
204	207	1:	Quartz-Fe-Carbonate	Extension Vein			2.4	
207	210	1:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			3.1	Vein 3 is 10cm thick-white qz-crb-kfp veinlet.
		2:	Quartz-Fe-carbonate	Extension Vein			2.5	
210	213	1:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			3	Quartz-carb-kfp and quartz-carb extension veins
		2:	Quartz-Fe-carbonate	Extension Vein			2.5	
213	216	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			2	
		2:	Quartz-Fe-carbonate	Extension Vein			4.4	
216	219	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			1.05	

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Hole Length (m): 353.5

Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
219	222	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.2	vuggy qz-crb-calvein
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	
222	225	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
226.12	**236.44**	10.32		**E1**	**Mafic Volcanic**		Fine grained	D. Leduchowski

Altered basalt. First 40cm of contact is marked by white quartz-carb-ksp vein. Dark beige-grey. Fg. Strongly magnetic. Pervasive very strong silicification and ser alt'n throughout. Pervasive dis magnetite throughout as well as cm wide magnetite bands. Lcl Patchy specularite blebs and mm wide threads. Strongly silicified quartz/quartz-carb extension veins hosting up to 2% PY, and lcl vuggy qz-crb-kfp veins in areas with less sil. ~1% dis-sct PY throughout assoc w sil/ser.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
226.12	236.44	1:	Silicified	Very strong (76-99%)	Pervasive	Banded spc. Pervasive strong silicifcation and ser (associated with minz). Strong mag throughout. Patchy kfp near some veins.
		2:	Sericite	Strong (51-75%)	Pervasive	
		3:	Magnetite	Strong (51-75%)	Pervasive	
		4:	K-feldspar	Moderate (26-50%)	Patches	
		5:	Specular hematite	Strong (51-75%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
226.12	234.7	1:	Pyrite	Fine grained	Disseminated	1	PY dis-sct throughout alteration zone. Sections of mineralized zone vary in mineralization from trace to up to 3%, but on average ~1%.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
228	231	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			10	Strongly silicified qz-crb extension veins
231	234	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			11.2	Silicified quartz-carb extension veins/tension gashes. Qz-crb-kfp vein.
		2:	Quartz-Fe-Carbonate/K-Feldspar	Veinlet Zone - vein 1/4" to 3"			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
236.44	**257.3**	20.86		**E1A**	**Basalt**		Fine grained	D. Leduchowski

Altered basalt. Weakly magnetic and more strongly ser alt'd compared to above. Colour varies from patchy beige-grey-pink to green-beige. Nonmagnetic in str ser alt'd beige areas and mod magnetic in darker brown/green areas. F-mg. Very strongly silicified and ser

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Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

alt'd. Patchy magnetite alteration. Prv FeCrb in host (pinkish) and mod FeCrb near some veins. Lcl specularite and chl bands/blebs in host and some at vein margins. Very strongly silicified qz-crb extension veins +/- FeCrb and lcl milky white quartz-carb vein. 1% dis-sct PY throughout host and in/around vns.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
236.44	245.85	1:	Silicified	Strong (51-75%)	Pervasive	More sericitized than above. Strong pervasive sil and sericite. Banded lcl spc. Local ank in veins.
		2:	Sericite	Very strong (76-99%)	Pervasive	
		3:	Specular hematite	Strong (51-75%)	Banding	
		4:	Ankerite	Moderate (26-50%)	Localized	
245.85	257.3	1:	Silicified	Very strong (76-99%)	Pervasive	Pervasive very strong sil. Strong ser. Patchy str mag where colour is dark. Banded spc and chl (not listed). Loc FECrb in vein.
		2:	Sericite	Strong (51-75%)	Patches	
		3:	Magnetite	Strong (51-75%)	Patches	
		4:	Specular hematite	Moderate (26-50%)	Banding	
		5:	Ankerite	Moderate (26-50%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
236.44	256	1:	Pyrite	Fine grained	Disseminated	1.25	Mineralization is strongest from 245 to 256m. PY dis-sct throughout host rock and along vein margins. Py sct-dis inside some silicified qz-crb veins. Mineralization varies from trc to up to 3% in some sections.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
237	240	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			8	Strongly silicified qz-crb extension veins/tension gashes
240	243	1:	Quartz-Fe-Carbonate / Silicified	-			4.5	Strongly silicified qz-crb extension veins/tension gashes
243	246	1:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			3.5	Vein 3 thickness of 10cm. qz-crb-kfp veins and sil qz-crb veins.
		2:	Quartz-Fe-Carbonate / Silicified	Extension Vein			3	
246	249	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			6	Silcified quartz-carb extension veins/tension gashes. Vuggy qz-crb-cal vein.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	

DataSet: Brookbank
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Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
249	252	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			5	Silicified qz-crb extension veins/tension gashes. Qz-crb-kfp veins.
		2:	Quartz-Fe-Carbonate/K-Feldspar	Veinlet Zone - vein 1/4" to 3"			4.5	
252	255	1:	Quartz-Fe-Carbonate/K-Feldspar	Breccia Veins			8.5	Vein 3 thickness 3 cm. Brecciated quartz-carb-kfp vein at 252.84m.
		2:	Quartz-Fe-Carbonate/K-Feldspar	Veinlet Zone - vein 1/4" to 3"			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
257.3	**264.07**	6.77		**E1A**	**Basalt**		Fine grained	D. Leduchowski

Mod altered basalt. Med green-beige. F-mg. Lcl magnetite scattered. Mod ser+sil alt'n haloes near qz-crb veins. Lcl mod bands of spc. Lcl FeCrb associated with veins. Relatively unmineralized (trc PY) compared to above. Quartz-carbonate extension veins (some silificied) and stockwork veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
257.3	264.07	1:	Silicified	Moderate (26-50%)	Patches	Mod sil near veins. Patchy sericite near vein margins. Str magnetite in darker coloured areas. Str spc bands. Pervasive FECrB in host and in veins.
		2:	Sericite	Moderate (26-50%)	Patches	
		3:	Magnetite	Strong (51-75%)	Patches	
		4:	Specular hematite	Strong (51-75%)	Localized	
		5:	Ankerite	Strong (51-75%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
258	261	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			3.5	
		2:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			3	
261	264	1:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			4	
		2:	Quartz-Fe-Carbonate / Silicified	Extension Vein			2.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
264.07	**280.7**	16.63		**E1A**	**Basalt**			D. Leduchowski

Altered basalt. Alteration varies from strong to weak, but grouped as entire lithology. Varies in colour from dark green (in less altered areas) to beige-pink. Mod mag throughout. Possible silicified fault breccia @ 265.05m (fine-grained, brecciated, str sil, cohesive). F-mg. Patchy alteration zones. Alteration consists of str sil, FeCrb, and ser often assoc. w/vein margins. Prv mag alt'n throughout. Spc and chl bands and threads. Silicified qz-crb extension veins and tension gashes throughout + qz-FeCrb veins. Trc PY to up to 3% PY dis-

DataSet: Brookbank
HoleID: B-16-04
Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

sct and assoc with sil/ser alt'n.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
264.07	265.85	1:	Silicified	Very strong (76-99%)	Pervasive	V. strongly silicified (fault zone?). Patchy ser and fecrb. Prv str mag.
		2:	Magnetite	Strong (51-75%)	Pervasive	
		3:	Sericite	Strong (51-75%)	Patches	
		4:	Ankerite	Moderate (26-50%)	Patches	
265.85	272	1:	Silicified	Moderate (26-50%)	Patches	Less silicified than above. Spc bands ~1cm wide.
		2:	Sericite	Strong (51-75%)	Patches	
		3:	Ankerite	Moderate (26-50%)	Patches	
		4:	Specular hematite	Strong (51-75%)	Banding	
		5:	Magnetite	Strong (51-75%)	Pervasive	
272	277.8	1:	Magnetite	Strong (51-75%)	Pervasive	Pervasive mod-str mag. Prv crb alt'n throughout host and at veins
		2:	Ankerite	Moderate (26-50%)	Pervasive	
277.8	280.7	1:	Silicified	Strong (51-75%)	Pervasive	Pervasive str sil. Patchysericite+FeCrb at vein margins. Local mod mag. Lcl mod spc threads.
		2:	Sericite	Strong (51-75%)	Patches	
		3:	Ankerite	Moderate (26-50%)	Patches	
		4:	Magnetite	Moderate (26-50%)	Localized	
		5:	Specular hematite	Moderate (26-50%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
278	280.1	1:	Pyrite	Fine grained	Disseminated	2	2% dis-sct PY associated with ser/sil alt'd zone.
VG: No		2:	Argentite	Fine grained	-	0.5	Mineralization is in host and at vein margins (rare trc PY inside of vein). 0.5% sct ARG in milky white qz-crb vein.

Structures

From	To	Code	Structure Type	Comments
265.05	265.85	FLT2	Fault - breccia	Cohesive, silicified fault breccia. Very fine-grained.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
267	270	1:	Quartz-Fe-carbonate	Vein > 3"			20	Vein 3 thickness = 2cm. Milky white qz-crb vein at 269.3m - difficult to measure true thickness.
		2:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			2.2	

DataSet: Brookbank

HoleID: B-16-04

Hole Length (m): 353.5

Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
270	273	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			8	SIlicified qz-crb extension veins and tension gashes. Carb rich stringers.
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			1.5	
273	276	1:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			2.5	Carb rich stringers
276	279	1:	Quartz-Fe-carbonate	Vein > 3"			50	Vein 3 thickness = 2cm. Large, white milky qz-crb vein (difficult to determine true thickness). Qz-crb-kfp extension veins.
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			3	

280.7 **284.49** 3.79 **E1** **Mafic Volcanic** Fine grained D. Leduchowski

Possible mudstone? Uncommon. Dark grey-slight green. VFG(dark grey areas) to FG (lighter grey areas). Possible bedding? Pervasive mod mag. Mod chl alt'd. Lcl FeCrb alt'n around veins. Qz-FeCrb extension veins and qz-crb stockwork veins. Lcl sct PY.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
280.7	284.49	1:	Magnetite	Moderate (26-50%)	Pervasive	
		2:	Ankerite	Moderate (26-50%)	Pervasive	
		3:	Chlorite	Strong (51-75%)	Pervasive	

284.49 **286** 1.51 **C2** **Iron Formation** Banded Fine grained D. Leduchowski

Possible banded iron formation? Uncommon. Dark grey-maroon. FG. Locally mod banded. Pervasive mod mag. Banded jasper in groundmass.Str silcified throughout. FeCrb associated with veins. 1% banded PY. Qz-FeCrb extension veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
284.49	286	1:	Magnetite	Strong (51-75%)	Pervasive	Pervasive str mag. Patchy mod FeCrb associated with veins.
		2:	Ankerite	Moderate (26-50%)	Patches	

286 **292.55** 6.55 **E1A** **Basalt** Massive Fine grained D. Leduchowski

Massive basalt. Dark grey-green with pinkish hue. F-mg. Weakly foliated. Mod mag throughout. Patchy FeCrb alteration associated with veins and vein margins. Qz-FeCrb +/- cal extension veins (some vuggy and mineralized). Lcl 0.5% PY sct-dis around veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
286	292.55	1:	Magnetite	Moderate (26-50%)	Pervasive	Pervasive mag. Patchy carb around veins.
		2:	Ankerite	Strong (51-75%)	Patches	

DataSet: Brookbank
HoleID: B-16-04
meters

Hole Length (m): 353.5
Log Length (m): 353.22

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
288	291	1:	Quartz-Fe-Carbonate	Extension Vein			10	Pinkish qz-crb extension veins. Vuggy qz-crb-cal veins.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
292.55	**297.75**	5.2		**I1A**	**Gabbro**		Medium grained	D. Leduchowski

Gabbro. Dark green-grey. MG. Dark grey phenocrysts. Mod foliation. Nonmagnetic. V. str chl alt'n throughout. Pervasive mod carb alt'n. Unmineralized. Qz-crb veinlets/stringers. Low angle upper and lower contact (12.5 and 15 TCA).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
292.55	297.75	1:	Chlorite	Very strong (76-99%)	Pervasive	V. str prv chl alt'n in gabbro. Pervasive str crb throughout.
		2:	Fe-Carbonate	Strong (51-75%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
294	297	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	Quartz-carb stringers and vuggy qz-carb veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
297.75	**303**	5.25		**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Massive basalt. Med-dark grey-green w/pinkish hue coloured haloes associated with veining. F-mg. Mod pervasive mag. Strongly fractured from 297.75 to 301m. Pervasive mod mag alt'n. Strong FeCrb alt'n associated with vns and vn margins. Lcl mod spc bands (<1cm). Qz-crb and qz-cal-FeCrB extension veins (some vuggy). Lcl 0.5% PY sct near vns (often near vuggy vns).

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
297.75	301.7	1:	Pyrite	Fine grained	Scattered grains	1	High fracture zone. Pyrite associated within calcite veining and <1cm halos into host rock. Varying from 0.5-2%.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
300	303	1:	Quartz-Fe-carbonate	Extension Vein			15	
		2:	Quartz-Fe-Carbonate/K-Feldspar	Extension Vein			20	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
303	**313**	10		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed basalt. Greener than above. Strongly fractured. HFZ's throughout entire lithology. Med-dark green-grey. Selvages contain

DataSet: Brookbank
HoleID: B-16-04

Hole Length (m): 353.5
Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

FeCrb, epd. Local mod-str mag in pillows/lcl mod mag outside pillows. Lcl mod ser alt'n. Qz-FeCrb +/- cal extension veins/stringers (some vuggy). Trc to 1% sct PY associated with vuggy vns.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
303	306	1:	Quartz-Fe-carbonate	Extension Vein			7.5	Some vuggy qz-crb-kfp-cal veins
		2:	Quartz-Fe-Carbonate/K-Feldspar	Veinlet Zone - vein 1/4" to 3"			2.5	
306	309	1:	Quartz-Fe-carbonate	Extension Vein			4	Some vuggy qz-crb-kfp-cal veins
		2:	Quartz-Fe-Carbonate/K-Feldspar	Veinlet Zone - vein 1/4" to 3"			2.5	
309	312	1:	Quartz-Fe-carbonate	Extension Vein			5	Vuggy qz-crb-kfp-cal veins
		2:	Quartz-Fe-Carbonate/K-Feldspar	Veinlet Zone - vein 1/4" to 3"			6	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
313	**319**	6	**E1A**	**Basalt**		Fine grained	D. Leduchowski

Basalt. Med-dark green-grey. F-mg. Moderately sheared. No longer mag. Beige-yellow patches of str silicified Fe-crb. Str spc threads. Brittle-ductile brecciation/shearing throughout. lcl patchy mod ser and chl alt'n. Qz-FeCrb extension veins. Trc sct PY, lcl 1% PY at 317.3m.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
313	319	1:	Ankerite	Strong (51-75%)	Patches	Silicified patchy FeCrb, ser areas. Str spc bands.
		2:	Sericite	Moderate (26-50%)	Patches	
		3:	Specular hematite	Strong (51-75%)	Banding	
		4:	Silicified	Strong (51-75%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
317	319	1:	Pyrite	Fine grained	Scattered grains	1	1% sct PY associated within veinlet halos (halos are strong ser/ksp alteration; 2-5cm wide).
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
315	318	1:	Quartz-Fe-Carbonate	Breccia Veins			30	Brecciated qz-crb and qz-crb extension veins
		2:	Quartz-Fe-carbonate	Extension Vein			10	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
319	**323.25**	4.25	**E1A**	**Basalt**			D. Leduchowski

DataSet: Brookbank
HoleID: B-16-04
meters

Hole Length (m): 353.5
Log Length (m): 353.22

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Shear zone. Sheared metavolcanic. Beige-pink-orange to green-grey. Very strong shearing and alteration compared to outside zone. Brittle-ductile shearing. Nonmagnetic. Strong silicification associated with beige orange FeCrb-ser, sil dec. in pink kfp areas. Bands of str spc. Str Fe-crb, sericite. Qz-FeCrb extension/brecciated veins. 0.5% v.fg to mg PY sct along shear and along vein margins.

323.25	**323.27**	0.02		**FLT**	**Fault Zone**		Fine grained	D. Leduchowski
2.5cm transposed black fault								
323.27	**328.95**	5.68		**E1A**	**Basalt**		Fine grained	D. Leduchowski
				FLT	Fault Zone		Fine grained	

Sheared metavolcanic with black fault. Black fault is seen 3 times in zone-ranges from 0.2cm-3cm, folded, black, vfg. Black flt is brecciating sheared host @324.3m. Black flt post-dates main brittle-ductile shear. Banded green-pink in colour. FG. Inc in ser alt'n from above. V. str. banded ser. Beige-orange-pink sections of str silicified kfp-carb-ser. Qz-crb and qz-crb-kfp extension/brecciated veins. 1% vfg sct-dis PY along shear

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
324	327	1:	Quartz-Fe-carbonate	Extension Vein			40	Strained, qz-crb extension veins

328.95	**328.97**	0.02		**FLT**	**Fault Zone**		Fine grained	D. Leduchowski
2.5cm transposed black fault								
328.97	**353.22**	24.25		**S4**	**Conglomerate**		Coarse grained	D. Leduchowski

Sheared conglomerate. Med-dark grey-green. Quartz-carb-feldspar and jasper clasts ranging from <2mm to 15cm in size. Clasts vary subrounded to angular. Strongly sheared. Matrix varies from fine-grained to coarse-grained. Str ser and chl alt'n in bands in matrix. Barren.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
330	333	1:	Quartz-Fe-carbonate	Extension Vein			10	
333	336	1:	Quartz-Fe-carbonate	Extension Vein			12	
336	339	1:	Quartz-Fe-carbonate	Extension Vein			4	
339	342	1:	Quartz-Fe-carbonate	Extension Vein			6	
342	345	1:	Quartz-Fe-carbonate	Extension Vein			7	
345	348	1:	Quartz-Fe-carbonate	Vein > 3"			11	
		2:	Quartz-Fe-carbonate	Extension Vein			37	

DataSet: Brookbank

HoleID: B-16-04

Hole Length (m): 353.5

Log Length (m): 353.22

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
348	353.22	1:	Quartz-Fe-carbonate	Extension Vein			5	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 353.5**

HoleID: B-16-04 **Max Samp Depth (m): 353.22**

Total meters Sampled: 350.22

Primary Assay Samples:	366	85.92 %
Field Duplicate Samples:	14	3.29 %
Standard/Blank Samples:	46	10.8 %
Total Samples:	426	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
3	4	1	263306	HCORE			A16-11907	<0.005	
4	5	1	263307	HCORE			A16-11907	<0.005	
5	6	1	263308	HCORE			A16-11907	<0.005	
		0	263309	STD		CDN_GS_P7J	A16-11907	0.748	
6	7	1	263310	HCORE			A16-11907	<0.005	1% PY dis-sct in pillow selvage
7	8	1	263311	HCORE			A16-11907	<0.005	
8	9	1	263312	HCORE			A16-11907	<0.005	
9	10	1	263313	HCORE			A16-11907	<0.005	
10	11	1	263314	HCORE			A16-11907	<0.005	
11	12	1	263315	HCORE			A16-11907	<0.005	
		0	263316	Blank		Blank	A16-11907	<0.005	
12	13	1	263317	HCORE			A16-11907	<0.005	
13	14	1	263318	HCORE			A16-11907	<0.005	
14	15	1	263319	HCORE			A16-11907	<0.005	
15	16	1	263320	HCORE			A16-11907	<0.005	
16	17	1	263321	HCORE			A16-11907	<0.005	
17	18	1	263322	HCORE			A16-11907	<0.005	
		0	263323	STD		CDN_GS_P4B	A16-11907	0.688	
18	19	1	263324	HCORE			A16-11907	<0.005	
19	20	1	263325	HCORE			A16-11907	<0.005	
20	21	1	263326	HCORE			A16-11907	<0.005	1% PY dis-sct in pillow selvage
21	22	1	263327	HCORE			A16-11907	<0.005	
22	23	1	263328	HCORE			A16-11907	<0.005	1% PY dis-sct in vuggy qz-crb vn
23	24	1	263329	HCORE			A16-11907	<0.005	
		0	263330	DUP	263329		A16-11907	<0.005	
24	25	1	263331	HCORE			A16-11907	<0.005	
25	26	1	263332	HCORE			A16-11907	<0.005	1% PY dis-sct in pillow selvage
26	27	1	263333	HCORE			A16-11907	<0.005	
27	28	1	263334	HCORE			A16-11907	<0.005	

28	29	1	263335	HCORE			A16-11907	<0.005	
29	30	1	263336	HCORE			A16-11907	<0.005	
		0	263337	STD		CDN_GS_P7J	A16-11907	0.651	
30	31	1	263338	HCORE			A16-11907	<0.005	
31	32	1	263339	HCORE			A16-11907	<0.005	
32	33	1	263340	HCORE			A16-11907	<0.005	
33	33.84	0.84	263341	HCORE			A16-11907	<0.005	
33.84	34.69	0.85	263342	HCORE			A16-11907	<0.005	1% PY dis-sct in pillow selvage
34.69	35.5	0.81	263343	HCORE			A16-11907	<0.005	
		0	263344	Blank		Blank	A16-11907	<0.005	
35.5	36.5	1	263345	HCORE			A16-11907	0.005	1% PY dis in vuggy qz-crb vn in fault zone
36.5	37.39	0.89	263346	HCORE			A16-11907	0.005	1% PY dis in vuggy qz-crb vn in fault zone
37.39	38	0.61	263347	HCORE			A16-11907	<0.005	
38	39	1	263348	HCORE			A16-11907	<0.005	
39	40	1	263349	HCORE			A16-11907	<0.005	
40	41	1	263350	HCORE			A16-11907	<0.005	
41	42	1	263351	HCORE			A16-11907	<0.005	
		0	263352	STD		CDN_GS_P4B	A16-11907	0.37	
42	43	1	263353	HCORE			A16-11907	<0.005	
43	44	1	263354	HCORE			A16-11907	<0.005	
44	45	1	263355	HCORE			A16-11907	<0.005	
45	46	1	263356	HCORE			A16-11907	<0.005	
46	47	1	263357	HCORE			A16-11907	<0.005	
47	48	1	263358	HCORE			A16-11907	<0.005	
		0	263359	DUP	263358		A16-11907	<0.005	
48	49.12	1.12	263360	HCORE			A16-11975	<0.005	
49.12	50	0.88	263361	HCORE			A16-11975	<0.005	
50	50.4	0.4	263362	HCORE			A16-11975	0.11	
50.4	51	0.6	263363	HCORE			A16-11975	<0.005	
51	52	1	263364	HCORE			A16-11975	0.006	
52	53	1	263365	HCORE			A16-11975	<0.005	
		0	263366	STD		CDN_GS_P7J	A16-11975	0.715	
53	54	1	263367	HCORE			A16-11975	<0.005	
54	55	1	263368	HCORE			A16-11975	<0.005	
55	56	1	263369	HCORE			A16-11975	<0.005	
56	57	1	263370	HCORE			A16-11975	<0.005	

57	58	1	263371	HCORE			A16-11975	0.005	
58	59	1	263372	HCORE			A16-11975	0.005	
		0	263373	Blank		Blank	A16-11975	<0.005	
59	60	1	263374	HCORE			A16-11975	<0.005	
60	61	1	263375	HCORE			A16-11975	0.006	
61	62	1	263376	HCORE			A16-11975	0.01	1.5% PY dis in vuggy qz-cal-FeCrb vns and along margins. Associated with mod ser alt'n.
62	63	1	263377	HCORE			A16-11975	0.007	0.5% PY dis-sct in vuggy qz-cal-FeCrb vns
63	64	1	263378	HCORE			A16-11975	0.005	
64	65	1	263379	HCORE			A16-11975	0.015	0.5% PY dis-sct in vuggy qz-cal-FeCrb vns
		0	263380	STD		CDN_GS_P4B	A16-11975	0.374	
65	66	1	263381	HCORE			A16-11975	0.011	
66	67	1	263382	HCORE			A16-11975	0.008	
67	68	1	263383	HCORE			A16-11975	0.008	
68	69	1	263384	HCORE			A16-12075	<0.005	
69	70	1	263385	HCORE			A16-12075	0.005	1% PY sct in white quartz vein and in and along vuggy qz-crb-ksp veins
70	71	1	263386	HCORE			A16-12075	<0.005	
		0	263387	DUP	263386		A16-12075	<0.005	
71	72	1	263388	HCORE			A16-12075	<0.005	
72	73	1	263389	HCORE			A16-12075	<0.005	
73	74	1	263390	HCORE			A16-12075	<0.005	
74	75	1	263391	HCORE			A16-12075	<0.005	
75	76	1	263392	HCORE			A16-12075	<0.005	
76	77	1	263393	HCORE			A16-12075	<0.005	
		0	263394	STD		CDN_GS_P7J	A16-12075	0.751	
77	78	1	263395	HCORE			A16-12075	<0.005	
78	79	1	263396	HCORE			A16-12075	0.014	
79	80	1	263397	HCORE			A16-12075	0.01	
80	81	1	263398	HCORE			A16-12075	<0.005	
81	82	1	263399	HCORE			A16-12075	<0.005	
82	83	1	263400	HCORE			A16-12075	<0.005	
83	84	1	263401	HCORE			A16-12075	0.005	
		0	263402	Blank		Blank	A16-12075	<0.005	
84	85	1	263403	HCORE			A16-12075	<0.005	
85	86	1	263404	HCORE			A16-12075	<0.005	
86	87	1	263405	HCORE			A16-12075	<0.005	

87	88	1	263406	HCORE			A16-12075	<0.005	
88	89	1	263407	HCORE			A16-12075	<0.005	
89	90	1	263408	HCORE			A16-12075	<0.005	
		0	263409	STD		CDN_GS_P4B	A16-12075	0.415	
90	91	1	263410	HCORE			A16-12075	0.016	
91	92	1	263411	HCORE			A16-12075	<0.005	
92	93	1	263412	HCORE			A16-12075	<0.005	
93	94	1	263413	HCORE			A16-12075	<0.005	
94	95	1	263414	HCORE			A16-12075	0.012	
95	96	1	263415	HCORE			A16-12075	<0.005	
		0	263416	DUP	263415		A16-12075	<0.005	
96	97	1	263417	HCORE			A16-12167	<0.005	
97	97.75	0.75	263418	HCORE			A16-12167	<0.005	
97.75	98.5	0.75	263419	HCORE			A16-12167	0.062	1% dis-sct PY associated with ser alt'n and present along vein margins
98.5	99	0.5	263420	HCORE			A16-12167	0.009	
99	100	1	263421	HCORE			A16-12167	0.104	1.5% dis-sct PY associated with ser alt'n and present in and around veins
100	101	1	263422	HCORE			A16-12167	0.086	2.5% dis-sct PY associated with ser alt'n and present in and around veins
		0	263423	STD		CDN_GS_5K	A16-12167	3.61	
101	102	1	263424	HCORE			A16-12167	0.279	2.5% dis-sct PY associated with ser alt'n and present in and around veins
102	103	1	263425	HCORE			A16-12167	0.234	
103	104	1	263426	HCORE			A16-12167	0.006	
104	105	1	263427	HCORE			A16-12167	0.014	
105	106	1	263428	HCORE			A16-12167	<0.005	
106	107	1	263429	HCORE			A16-12167	<0.005	
		0	263430	Blank		Blank	A16-12167	<0.005	
107	108	1	263431	HCORE			A16-12167	0.022	
108	108.9	0.9	263432	HCORE			A16-12167	0.006	
108.9	110	1.1	263433	HCORE			A16-12167	0.012	1% PY sct in milky white qz-crb vein and dis in vuggy qz-cal-FeCrb veins
110	111	1	263434	HCORE			A16-12167	0.028	
111	112	1	263435	HCORE			A16-12167	0.015	1% PY dis-sct in and around qz-FeCrb veins
112	113	1	263436	HCORE			A16-12167	0.006	1% PY dis-sct in and around qz-FeCrb veins
		0	263437	STD		CDN_GS_P4B	A16-12167	0.422	
113	114	1	263438	HCORE			A16-12167	0.014	1% PY blb-sct in qz-FeCrb vein

114	115	1	263439	HCORE			A16-12167	<0.005	0.5% PY dis-sct in and around qz-FeCrb veins
115	116	1	263440	HCORE			A16-12167	<0.005	0.5% PY dis-sct in and around qz-FeCrb veins
116	117	1	263441	HCORE			A16-12167	<0.005	0.5% PY dis-sct in and around qz-FeCrb veins
117	118	1	263442	HCORE			A16-12167	0.01	0.5% PY dis-sct in and around qz-FeCrb veins
118	119	1	263443	HCORE			A16-12167	0.006	0.5% PY dis-sct in and around qz-FeCrb veins
		0	263444	DUP	263443		A16-12167	<0.005	
119	120	1	263445	HCORE			A16-12167	0.008	2% dis-sct PY throughout basalt and associated with vuggy qz-cal-FeCrb veins
120	121	1	263446	HCORE			A16-12167	<0.005	
121	122	1	263447	HCORE			A16-12167	<0.005	
122	123	1	263448	HCORE			A16-12167	<0.005	
123	124	1	263449	HCORE			A16-12167	<0.005	1.5% dis-sct PY throughout basalt and associated with vuggy qz-cal-FeCrb veins
		0	263450	STD		CDN_GS_P7J	A16-12167	0.716	
124	125	1	263451	HCORE			A16-12167	<0.005	
125	126	1	263452	HCORE			A16-12167	<0.005	
126	127	1	263453	HCORE			A16-12167	<0.005	
127	128	1	263454	HCORE			A16-12167	<0.005	
128	129	1	263455	HCORE			A16-12167	<0.005	
129	130	1	263456	HCORE			A16-12167	<0.005	
		0	263457	Blank		Blank	A16-12167	<0.005	
130	130.94	0.94	263458	HCORE			A16-12167	0.007	
130.94	131.88	0.94	263459	HCORE			A16-12167	0.086	2% dis-sct PY associated with sil and ser in alt'n zone in basalt
131.88	132.5	0.62	263460	HCORE			A16-12167	<0.005	Strongly chloritized after alt'n zone
132.5	133	0.5	263461	HCORE			A16-12167	<0.005	
133	134	1	263462	HCORE			A16-12167	<0.005	Lcl 0.5% euhedral PY sct in basalt and diss in and around vuggy qz-cal-FeCrb veins
134	135	1	263463	HCORE			A16-12248	<0.005	Lcl 0.5% euhedral PY sct in basalt and diss in and around vuggy qz-cal-FeCrb veins
		0	263464	STD		CDN_GS_P4B	A16-12248	0.424	
135	136	1	263465	HCORE			A16-12248	<0.005	
136	137	1	263466	HCORE			A16-12248	0.007	0.5% dis PY in basalt and at vuggy qz-cal-FeCrb veins
137	138	1	263467	HCORE			A16-12248	<0.005	1% sct-dis PY associated with qz-cal-FeCrb veins in basalt

138	139	1	263468	HCORE			A16-12248	<0.005	0.5% sct PY associated with vuggy qz-cal-FeCrb veins in basalt
139	140	1	263469	HCORE			A16-12248	<0.005	
140	141	1	263470	HCORE			A16-12248	<0.005	0.5% sct PY associated with vuggy qz-cal-FeCrb veins in basalt
		0	263471	DUP	263470		A16-12248	<0.005	
141	142	1	263472	HCORE			A16-12248	<0.005	0.5% blb-sct PY associated with vuggy qz-cal-FeCrb veins in basalt
142	143	1	263473	HCORE			A16-12248	<0.005	
143	144	1	263474	HCORE			A16-12248	<0.005	Trc sct PY in basalt and associated with pillow selvages and vuggy veins
144	145	1	263475	HCORE			A16-12248	<0.005	Trc sct PY in basalt and associated with pillow selvages and vuggy veins
145	146	1	263476	HCORE			A16-12248	<0.005	
146	147	1	263477	HCORE			A16-12248	<0.005	0.5% sct-dis PY associated with vuggy veins in basalt
		0	263478	STD		CDN_GS_P7J	A16-12248	0.675	
147	148	1	263479	HCORE			A16-12248	<0.005	0.5% sct-dis PY associated with vuggy veins in basalt
148	149	1	263480	HCORE			A16-12248	<0.005	1.5% sct-dis PY associated with vuggy veins in basalt
149	150	1	263481	HCORE			A16-12248	<0.005	0.5% sct-dis PY associated with vuggy veins in basalt
150	151	1	263482	HCORE			A16-12248	0.02	Trc dis PY around vuggy veins in basalt
151	152	1	263483	HCORE			A16-12248	<0.005	
152	153	1	263484	HCORE			A16-12248	<0.005	
		0	263485	Blank		Blank	A16-12248	<0.005	
153	154	1	263486	HCORE			A16-12248	<0.005	0.5% sct-dis PY in basalt and associated with vuggy qz-crb-kfp veins
154	155	1	263487	HCORE			A16-12248	<0.005	0.5% sct-dis PY in basalt and associated with vuggy qz-crb-kfp veins
155	156	1	263488	HCORE			A16-12248	0.006	0.5% sct-dis PY in basalt and associated with vuggy qz-crb-kfp veins
156	156.55	0.55	263489	HCORE			A16-12248	<0.005	Trc sct-dis PY in basalt
156.55	157.45	0.9	263490	HCORE			A16-12248	<0.005	0.5% dis-sct PY in and around vns in alteration zone
157.45	158	0.55	263491	HCORE			A16-12248	<0.005	0.5% dis-sct PY in and around vns in alteration zone
		0	263492	STD		CDN_GS_2P	A16-12248	1.94	
158	159	1	263493	HCORE			A16-12248	0.052	0.5% mg PY sct in alteration zone
159	160	1	263494	HCORE			A16-12248	0.074	Trc dis-sct PY in alteration zone
160	161	1	263495	HCORE			A16-12248	0.133	2% dis PY in and around brecciated and qz-crb-kfp veins in alterationzone

161	162	1	263496	HCORE			A16-12248	0.171	Trc dis-sct PY in alteration zone
162	163	1	263497	HCORE			A16-12248	0.081	0.5% dis PY in alteration zone. Clay rich area.
163	164	1	263498	HCORE			A16-12248	0.082	0.5% dis-sct PY in strongly brecciated white quartz-carb vein
		0	263499	DUP	263498		A16-12248	0.075	
164	164.6	0.6	263500	HCORE			A16-12248	0.254	0.5% dis-sct PY in strongly brecciated white quartz-carb vein
164.6	165	0.4	263501	HCORE			A16-12248	0.17	0.5% dis-sct PY in alteration zone
165	166	1	263502	HCORE			A16-12248	0.127	0.75% dis PY in alteration zone and sct in white quartz-carb vein
166	167	1	263503	HCORE			A16-12248	0.024	1% dis PY in alteration zone
167	167.63	0.63	263504	HCORE			A16-12248	0.055	1% dis-sct PY in brecciated/vuggy qz-crb vein
167.63	168.31	0.68	263505	HCORE			A16-12248	0.073	2% dis-sct PY in brecciated/vuggy qz-crb vein
		0	263506	STD		CDN_GS_P4B	A16-12248	0.397	
168.31	169.41	1.1	263507	HCORE			A16-12248	0.106	
169.41	170	0.59	263508	HCORE			A16-12248	<0.005	
170	171	1	263509	HCORE			A16-12248	0.014	
171	172	1	263510	HCORE			A16-12248	0.023	1% dis PY associated with vuggy qz-crb-kfp veins in basaslt
172	173	1	263511	HCORE			A16-12248	<0.005	0.5% dis PY associated with vuggy qz-crb-kfp veins in basaslt
173	174	1	263512	HCORE			A16-12248	<0.005	
		0	263513	Blank		Blank	A16-12248	<0.005	
174	175	1	263514	HCORE			A16-12248	<0.005	
175	176	1	263515	HCORE			A16-12248	<0.005	
176	177	1	263516	HCORE			A16-12248	<0.005	
177	178	1	263517	HCORE			A16-12248	0.007	0.5% dis PY associated with vuggy qz-crb-kfp
178	179	1	263518	HCORE			A16-12248	<0.005	0.5% sct-dis at quartz-carb vein margins
179	180	1	263519	HCORE			A16-12248	<0.005	
		0	263520	STD		CDN_GS_P7J	A16-12248	0.61	
180	181	1	263521	HCORE			A16-12248	0.006	
181	182	1	263522	HCORE			A16-12248	<0.005	
182	182.7	0.7	263523	HCORE			A16-12248	<0.005	
182.7	183.35	0.65	263524	HCORE			A16-12327	<0.005	
183.35	184	0.65	263525	HCORE			A16-12327	0.009	1% sct-dis PY near vuggy qz-crb vein
184	185	1	263526	HCORE			A16-12327	<0.005	
		0	263527	DUP	263526		A16-12327	<0.005	

185	186	1	263528	HCORE			A16-12327	<0.005	
186	187	1	263529	HCORE			A16-12327	<0.005	
187	188	1	263530	HCORE			A16-12327	<0.005	
188	189	1	263531	HCORE			A16-12327	<0.005	
189	190	1	263532	HCORE			A16-12327	<0.005	
190	191	1	263533	HCORE			A16-12327	<0.005	
		0	263534	STD		CDN_GS_P4B	A16-12327	0.356	
191	192	1	263535	HCORE			A16-12327	<0.005	
192	193	1	263536	HCORE			A16-12327	<0.005	
193	194	1	263537	HCORE			A16-12327	<0.005	
194	195	1	263538	HCORE			A16-12327	<0.005	
195	196	1	263539	HCORE			A16-12327	0.005	1% sct-dis PY near vuggy qz-crb-kfp vein
196	197	1	263540	HCORE			A16-12327	<0.005	
		0	263541	Blank		Blank	A16-12327	<0.005	
197	198	1	263542	HCORE			A16-12327	0.005	
198	199	1	263543	HCORE			A16-12327	0.005	
199	200	1	263544	HCORE			A16-12327	0.005	
200	201	1	263545	HCORE			A16-12327	<0.005	
201	202	1	263546	HCORE			A16-12327	0.005	
202	203	1	263547	HCORE			A16-12327	0.005	
		0	263548	STD		CDN_GS_P7J	A16-12327	0.704	
203	204	1	263549	HCORE			A16-12327	<0.005	
204	205	1	263550	HCORE			A16-12327	0.005	0.5% PY dis-sct in and around epd-ksp-crb veins
205	206	1	263551	HCORE			A16-12327	0.005	
206	207	1	263552	HCORE			A16-12327	0.005	
207	208	1	263553	HCORE			A16-12327	0.007	0.5% PY dis-sct in and around white quartz-carb-kfp vein and at vein margins
208	209	1	263554	HCORE			A16-12327	0.006	
		0	263555	DUP	263554		A16-12327	0.005	
209	210	1	263556	HCORE			A16-12327	0.005	
210	211	1	263557	HCORE			A16-12327	0.006	
211	212	1	263558	HCORE			A16-12327	0.005	
212	213	1	263559	HCORE			A16-12327	0.005	0.5% PY sct-dis at margins of qz-crb-ksp vein
213	214	1	263560	HCORE			A16-12327	<0.005	Trc PY sct in basalt
214	215	1	263561	HCORE			A16-12327	0.005	
		0	263562	STD		CDN_GS_P4B	A16-12327	0.386	

215	216	1	263563	HCORE			A16-12327	0.005	
216	217	1	263564	HCORE			A16-12327	0.005	
217	218	1	263565	HCORE			A16-12327	<0.005	
218	219	1	263566	HCORE			A16-12327	0.005	
219	220	1	263567	HCORE			A16-12327	0.005	
220	221	1	263568	HCORE			A16-12327	0.005	
		0	263569	Blank		Blank	A16-12327	<0.005	
221	222	1	263570	HCORE			A16-12327	0.005	
222	223	1	263571	HCORE			A16-12327	<0.005	
223	224	1	263572	HCORE			A16-12327	0.005	
224	225	1	263573	HCORE			A16-12327	0.008	
225	226.12	1.12	263574	HCORE			A16-12327	0.005	Trc PY sct in and around vuggy qz-crb-kfp veins; near alteration zone
226.12	226.7	0.58	263575	HCORE			A16-12327	0.033	35cm wide white quartz-carb vein (with portions silicified). 1% dis PY mostly along vein margins and in smaller extension veins.
		0	263576	STD		CDN_GS_P7J	A16-12327	0.616	
226.7	227.3	0.6	263577	HCORE			A16-12327	0.02	0.5% sct PY in veins and in host rock
227.3	228	0.7	263578	HCORE			A16-12327	0.009	Trc sct PY in host rock
228	229	1	263579	HCORE			A16-12327	0.005	0.5% sct PY in host rock
229	230	1	263580	HCORE			A16-12327	0.008	0.75% dis-sct PY along vein margins and in host rock
230	231	1	263581	HCORE			A16-12327	0.007	Trc dis PY in host rock
231	232	1	263582	HCORE			A16-12327	0.085	2% dis-sct PY in and around vein margins and inhost
		0	263583	DUP	263582		A16-12327	0.071	
232	233	1	263584	HCORE			A16-12327	0.006	0.5% sct-dis PY in and around vein margins and in host
233	234.1	1.1	263585	HCORE			A16-12327	0.008	Trc dis-sct PY in and along vein margins and in host
234.1	234.7	0.6	263586	HCORE			A16-12327	0.008	3% dis-sct PY associated with vuggy qz-crb-vein in silicified rock
234.7	235.5	0.8	263587	HCORE			A16-12327	0.006	Trc sct PY in host rock
235.5	236.44	0.94	263588	HCORE			A16-12327	0.006	Trc sct PY in host rock
236.44	237.2	0.76	263589	HCORE			A16-12327	1.31	1% sct-dis PY in str ser alt'd rock
		0	263590	STD		CDN_GS_2P	A16-12327	1.76	
237.2	237.7	0.5	263591	HCORE			A16-12327	0.037	1% sct-dis PY in str ser alt'd rock
237.7	238.8	1.1	263592	HCORE			A16-12327	0.007	0.5% sct-dis PY in str ser alt'd rock
238.8	240	1.2	263593	HCORE			A16-12327	0.234	1% sct-dis PY at vein margins and throughout host in str sil/ser alt'd rock

240	241	1	263594	HCORE			A16-12327	0.011	
241	242	1	263595	HCORE			A16-12327	0.008	
242	243	1	263596	HCORE			A16-12366	0.217	0.5% PY sct at vein margins
		0	263597	Blank		Blank	A16-12366	<0.005	
243	243.85	0.85	263598	HCORE			A16-12366	0.04	1% dis-sct PY in str sil/ser alt'd rock and at vein margins
243.85	245	1.15	263599	HCORE			A16-12366	0.04	1% dis-sct PY in host and in and around silicified white qz-crb vein
245	246	1	263600	HCORE			A16-12366	0.009	1% dis-sct PY in host and in and along vein margins
246	247	1	263601	HCORE			A16-12366	0.043	0.75% dis-sct PY in host and in and along vein margins
247	248	1	263602	HCORE			A16-12366	0.021	1.5% dis-sct PY in host and in and along extension vein margins. PY also dis-sct in vuggy qz-crb-cal vein.
248	249	1	263603	HCORE			A16-12366	0.014	0.5% sct-dis PY in host and along vein margins
		0	263604	STD		CDN_GS_P7J	A16-12366	0.707	
249	250	1	263605	HCORE			A16-12366	0.083	1.5% dis-sct PY in host and along vein margins
250	251	1	263606	HCORE			A16-12366	0.009	
251	252	1	263607	HCORE			A16-12366	0.21	3% PY (mixture of FG dis PY in host and in veins, and coarse grained euhedral PY)
252	253	1	263608	HCORE			A16-12366	0.127	1.5% dis-sct PY throughout host and in and along veins
253	254	1	263609	HCORE			A16-12366	0.584	3% dis-sct PY throughout host and in and along veins
254	254.65	0.65	263610	HCORE			A16-12366	0.425	0.5 dis-sct PY throughout host and in and along veins
		0	263611	DUP	263610		A16-12366	0.338	
254.65	255.5	0.85	263612	HCORE			A16-12366	0.547	0.5% mg sct-dis PY throughout host and in and along veins
255.5	256.5	1	263613	HCORE			A16-12366	0.037	0.5% dis-sct PY associated with ser/sil and along vein margins
256.5	257.3	0.8	263614	HCORE			A16-12366	0.102	Trc sct-dis PY in host and along vein margins
257.3	258	0.7	263615	HCORE			A16-12366	0.008	
258	259	1	263616	HCORE			A16-12366	0.007	
259	260	1	263617	HCORE			A16-12366	0.006	
		0	263618	STD		CDN_GS_P4B	A16-12366	0.358	
260	261	1	263619	HCORE			A16-12366	0.064	Trc dis-sct PY at vein margins associated with ser alt'n
261	262	1	263620	HCORE			A16-12366	0.007	
262	263	1	263621	HCORE			A16-12366	0.009	

263	264.07	1.07	263622	HCORE			A16-12366	0.007	
264.07	265	0.93	263623	HCORE			A16-12366	0.014	Trc sct PY in host and in and around vein margins
265	265.65	0.65	263624	HCORE			A16-12366	0.266	0.75% PY sct-dis in silicified zone and in and along vein margins
		0	263625	Blank		Blank	A16-12366	0.005	
265.65	266.5	0.85	263626	HCORE			A16-12366	0.012	Trc PY sct-dis in host and in and along veins
266.5	267.5	1	263627	HCORE			A16-12366	0.006	Trc PY sct-dis in host
267.5	268.2	0.7	263628	HCORE			A16-12366	0.007	Trc PY sct in host
268.2	269.15	0.95	263629	HCORE			A16-12366	0.008	Trc PY sct-dis along vein margins
269.15	269.6	0.45	263630	HCORE			A16-12366	0.247	1% dis-sct in host rock and along vein margins of milky white qz-crb vein.
269.6	270.5	0.9	263631	HCORE			A16-12366	0.008	Trc PY sct in host
		0	263632	STD		CDN_GS_P7J	A16-12366	0.645	
270.5	271.5	1	263633	HCORE			A16-12366	<0.005	Trc PY sct in host
271.5	272.5	1	263634	HCORE			A16-12366	<0.005	Trc PY sct in host
272.5	273.5	1	263635	HCORE			A16-12366	<0.005	
273.5	274.5	1	263636	HCORE			A16-12366	<0.005	
274.5	275.5	1	263637	HCORE			A16-12366	<0.005	
275.5	276.5	1	263638	HCORE			A16-12366	<0.005	
		0	263639	DUP	263638		A16-12366	<0.005	
276.5	277.8	1.3	263640	HCORE			A16-12425	<0.005	
277.8	279	1.2	263641	HCORE			A16-12425	0.016	2% dis-sct PY. PY sct in host and assciated with sil/ser. PY dis along vein margins of white qz-crb vein. 0.5% ARG sct in vein.
279	280	1	263642	HCORE			A16-12425	0.022	2% dis-sct PY. PY sct in host and assciated with sil/ser. PY dis along vein margins of white qz-crb vein. Trc PY sct in vein.
280	281	1	263643	HCORE			A16-12425	0.015	Trc sct PY in host and along vein margins
281	282	1	263644	HCORE			A16-12425	<0.005	Trc sct PY in host and along vein margins
282	283	1	263645	HCORE			A16-12425	0.005	
		0	263646	STD		CDN_GS_P4B	A16-12425	0.447	
283	283.7	0.7	263647	HCORE			A16-12425	<0.005	
283.7	284.49	0.79	263648	HCORE			A16-12425	0.018	0.75% dis-sct PY in host and around vuggy qz-crb-cal vein
284.49	285	0.51	263649	HCORE			A16-12425	0.034	1% banded PY in IF(?). 0.5% sct PY in host and around vns
285	286	1	263650	HCORE			A16-12425	<0.005	Trc PY sct in IF
286	287	1	263651	HCORE			A16-12425	<0.005	Trc PY sct in basalt
287	288	1	263652	HCORE			A16-12425	<0.005	

		0	263653	Blank		Blank	A16-12425	<0.005	
288	289	1	263654	HCORE			A16-12425	<0.005	
289	290	1	263655	HCORE			A16-12425	0.019	Trc PY sct around vuggy qz-crb-cal veins in basalt
290	291	1	263656	HCORE			A16-12633	0.005	
291	292	1	263657	HCORE			A16-12633	<0.005	
292	292.55	0.55	263658	HCORE			A16-12633	0.006	Trc PY sct-dis in and around vuggy qz-crb-ksp veins
292.55	293.3	0.75	263659	HCORE			A16-12633	<0.005	
		0	263660	STD		CDN_GS_P7J	A16-12633	0.684	
293.3	294	0.7	263661	HCORE			A16-12633	<0.005	
294	295	1	263662	HCORE			A16-12633	<0.005	
295	296	1	263663	HCORE			A16-12633	<0.005	
296	297	1	263664	HCORE			A16-12633	<0.005	
297	297.75	0.75	263665	HCORE			A16-12633	<0.005	
297.75	299	1.25	263666	HCORE			A16-12633	0.005	HFZ. Three <1cm wide calcite veinlet with hematite halos (10cm wide). Within halos and along veinlet margin is upwards of 5% sct PY. Trace PY in Host.
		0	263667	DUP	263666		A16-12633	0.005	
299	300	1	263668	HCORE			A16-12633	0.005	HFZ. 1-2mm wide hematite/calcite stringers with 1cm wide hematite staining halos. Trace sct PY in halos.
300	301	1	263669	HCORE			A16-12633	0.006	Seven 1-2cm wide calcite/hematite veinlets with 1-2cm wide hematite staining halos. Weakly silicified. Subhedral PY along veinlet margins and within halos.
301	302	1	263670	HCORE			A16-12633	0.005	Three 1cm wide calcite veinlets with 1cm wide hematite staining halos. 10% PY within ~2cm wide vein/halo.
302	303	1	263671	HCORE			A16-12633	<0.005	Trace sct PY assc w/ calcite veinlets (10%; <1-2cm wide; weak hem staining)
303	304	1	263672	HCORE			A16-12633	<0.005	Barren
304	305	1	263673	HCORE			A16-12633	<0.005	Barren
		0	263674	STD		CDN_GS_P4B	A16-12633	0.443	
305	306	1	263675	HCORE			A16-12633	<0.005	Trace sct PY assc w/ calcite veinlets (5%; <1cm wide)
306	307	1	263676	HCORE			A16-12633	0.018	Trace sct PY assc w/ calcite veinlets (5%; <1cm wide)
307	308	1	263677	HCORE			A16-12633	<0.005	Trace sct PY assc w/ calcite veinlets (3% <1cm wide; hem staining; epidote)
308	309	1	263678	HCORE			A16-12633	<0.005	Trace sct PY assc w/ calcite veinlets (3% <1cm wide; hem staining; epidote)

309	310	1	263679	HCORE			A16-12633	<0.005	Trace sct PY assc w/ calcite veinlets (1% <1cm wide; hem staining)
310	311	1	263680	HCORE			A16-12633	0.008	Local 15cm area at end of sample (broken/fractured) with one ~4cm wide calcite vein with very strong hematite staining of host. 10% diss PY in hematite staining.
311	312	1	263681	HCORE			A16-12633	0.007	Calcite veinlets (2% <1-4cm wide; weak hem staining). Trace sct PY in hem staining.
		0	263682	Blank		Blank	A16-12633	<0.005	
312	313	1	263683	HCORE			A16-12633	0.006	10cm calcite veinlets (including one 7cm vein; others <1cm wide; weak hem staining halos (<1cm); vuggy). FG diss PY in along vein margins and haloing (up to 3cm) into Mafic Volcanic.
313	314	1	263684	HCORE			A16-12633	0.01	10cm qtz/calcite veining (<1-2cm wide; <1-2cm wide hematite staining haloes; weakly silicified; <1cm wide hematite stringers). Trace sct PY within vein halos.
314	315	1	263685	HCORE			A16-12633	0.013	20cm qtz/calcite veining (<1-2cm wide; <1-2cm wide hematite staining haloes; weakly silicified; <1cm wide hematite stringers). Trace sct PY within vein halos.
315	316	1	263686	HCORE			A16-12633	0.064	25cm qtz/calcite veining (<1-3cm wide; <1cm wide hematite staining halos; weakly silicified; <1cm wide hematite stringers). Trace sct PY within vein halos.
316	317	1	263687	HCORE			A16-12633	0.006	7cm qtz/calcite veining (<1.5cm wide; <1cm wide hematite staining halos; weakly silicified) Trace sct PY within vein halos.
317	318	1	263688	HCORE			A16-12633	0.006	3cm hematite stringers (<.5cm) 10cm qtz/calcite veining (<1cm wide; <1-2cm wide hematite staining halos; weakly silicified). 0.5 to 1% PY sct PY within vein halos.
318	319	1	263689	HCORE			A16-12633	0.006	7cm qtz/calcite veining (<1cm wide). Rare PY.
319	320.1	1.1	263690	HCORE			A16-12633	0.131	8cm qtz/calcite veining (<1cm wide); <1cm wide hematite staining halos;
		0	263691	Blank		Blank	A16-12633	0.005	
320.1	320.9	0.8	263692	HCORE			A16-12633	0.051	hematite(3cm)/qtz/crb(5cm)stringers (<1cm; 1cm wide hematite staining halos; weakly silicified; parallel to shear) Trace sct PY within hem halos.
320.9	321.5	0.6	263693	HCORE			A16-12633	0.054	3cm hematite stringers (<.3cm wide); 4cm qz/crb veinlets (<1cm wide); One 7cm qtz vein. Pervasive hematite staining; PY along vein margins and into host rock (1cm).

321.5	322.28	0.78	263694	HCORE			A16-12633	0.012	3cm hematite stringers (<.3cm wide) 10cm qtz/crb veinlets (<1.5cm). Pervasive hematite staining; PY along veinlet margins and into host (<1cm).
322.28	323.25	0.97	263695	HCORE			A16-12633	0.048	5cm hematite stringers (<.5cm wide); 10cm qtz/crb veinlets (<2cm wide. Pervasive hematite staining; Py along veinlet margins and into host (<2cm).
323.25	324.12	0.87	263696	HCORE			A16-12633	0.994	323.25-323.29m brecciated black fault (no minz). 323.29-323.4m Very strongly silicified/brecciated vein (no minz). 323.4-324.12m 25cm shear veinlets (strong pervasive hem; 3% sct PY in hem stained host rock and along vein margins.
324.12	325	0.88	263697	HCORE			A16-12633	1.68	10cm black fault (<.5cm stringers to 2cm wide brecciating host; parralel to shear and crosscutting; no minz) 8cm qtz/crb shear veinlets (<1cm wide). Pervasive hematite staining. Trace sct PY in Host.
325	325.9	0.9	263698	HCORE			A16-12633	1.15	5cm black fault (<.3cm wide stringers). 16cm qtz/crb shear veinlets (<2cm wide). Pervasive sericite and hematite staining halos. Trace sct PY in halos.
		0	263699	STD		CDN_GS_6C	A16-12633	5.54	
325.9	326.6	0.7	263700	HCORE			A16-12633	0.589	18cm qtz/crb shear veinlets (<1.5cm wide) Pervasive sericite and hematite staining halos. Trace sct PY in halos.
326.6	327.2	0.6	263701	HCORE			A16-12633	0.074	8cm qtz/crb shear veinlets (<1.5cm wide) Pervasive sericite and hematite staining halos. Trace sct PY in halos.
327.2	328.1	0.9	263702	HCORE			A16-12633	2.65	4cm qtz/crb shear veinlets (<1.5cm wide) Pervasive sericite and weak hematite staining halos. Trace sct PY in halos.
		0	263703	Blank		Blank	A16-12633	<0.005	
328.1	328.95	0.85	263704	HCORE			A16-12633	3.71	328.1-328.8 25cm of qtz/crb shear veinlets (<2cm wide) Very strong sericite alteration. 1% stringer/diss PY along vein margins. 328.8-328.95 15cm of black fault; no minz.
328.95	330	1.05	263705	HCORE			A16-12633	0.02	Conglomerate; no minz.
330	331	1	263706	HCORE			A16-12633	0.008	Conglomerate; no minz.
331	332	1	263707	HCORE			A16-12633	0.142	Conglomerate; no minz.
332	333	1	263708	HCORE			A16-12633	0.044	Conglomerate; no minz.
333	334	1	263709	HCORE			A16-12633	0.023	Conglomerate; no minz.
334	335	1	263710	HCORE			A16-12633	0.025	Conglomerate; no minz.
335	336	1	263711	HCORE			A16-12633	0.051	Conglomerate; no minz.
		0	263712	DUP	263711		A16-12633	0.049	
336	337	1	263713	HCORE			A16-12633	0.013	Conglomerate; no minz.

337	338	1	263714	HCORE			A16-12633	0.007	Conglomerate; no minz.
338	339	1	263715	HCORE			A16-12633	0.008	Conglomerate; no minz.
339	340	1	263716	HCORE			A16-12633	0.008	Conglomerate; no minz.
340	341	1	263717	HCORE			A16-12633	0.02	Conglomerate; no minz.
341	342	1	263718	HCORE			A16-12633	0.024	Conglomerate; no minz.
342	343	1	263719	HCORE			A16-12633	0.011	Conglomerate; no minz.
		0	263720	STD		CDN_GS_P7J	A16-12633	0.664	
343	344	1	263721	HCORE			A16-12633	0.017	Conglomerate; no minz.
344	345	1	263722	HCORE			A16-12633	0.022	Conglomerate; no minz.
345	346	1	263723	HCORE			A16-12633	0.017	Conglomerate; no minz.
346	347	1	263724	HCORE			A16-12633	0.013	Conglomerate; no minz.
347	348	1	263725	HCORE			A16-12633	0.032	Conglomerate; no minz.
348	349	1	263726	HCORE			A16-12633	0.025	Conglomerate; no minz.
349	350	1	263727	HCORE			A16-12633	0.01	Conglomerate; no minz.
		0	263728	Blank		Blank	A16-12633	0.005	
350	351	1	263729	HCORE			A16-12633	0.016	Conglomerate; no minz.
351	352	1	263730	HCORE			A16-12633	0.046	Conglomerate; no minz.
352	353.22	1.22	263731	HCORE			A16-12633	0.015	Conglomerate; no minz. EOH.

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-05 DataSet: Brookbank Program: Development

Hole Status:	COMPLETE	**Hole Length (m):**	524.89	**Logged By:**	D. Grabiec
Hole Type:	Surface Drill Hole	**Dip (º):**	-61	**Date Log Started:**	11/12/2016
Date Drill Started:	11/2/2016	**Azimuth:**	338.7	**Date Log Completed:**	3/20/2017
Date Drill Completed:	11/7/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	439,612.1	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,506,940.7	**Date Surveyed:**	12/20/2016
Elevation (masl):	334.571	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29038	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3
Core Storage:	Old Arena Road

Purpose: To test a high grade pocket at depth and convert from inferred to indicated.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 520 **Max Sample Depth (m):** 524.89

Depth Logged To (m) 524.89 **Meters Sampled** 522.39

Total Samples 626 **# Assay** 552 **# QAQC:** 74

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-61	338.7	TN14	SINGLESHOT	G4	11/3/2016		Yes
7	-62.06	338.55	EZ-GYRO	MULTISHOT	G4	11/7/2016	Optimised	Yes
7.01	-62.05	339.42	EZ-GYRO	MULTISHOT	G4	11/7/2016	retake measurement at same depth; 0.01m added to depth	No
10	-61.98	339.39	EZ-GYRO	SINGLESHOT	G4	11/2/2016		Yes
16	-62	338.77	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
25	-61.96	339.7	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
34	-61.88	339.82	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
52	-61.79	340	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
70	-61.73	339.71	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
79	-61.7	340.18	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
88	-61.71	341.03	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
106	-61.69	340.39	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
109	-61.66	340.25	EZ-GYRO	SINGLESHOT	G4	11/2/2016		Yes
115	-61.68	340.24	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
124	-61.69	340.45	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
133	-61.67	340.74	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
142	-61.64	339.92	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
151	-61.68	340.47	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
160	-61.64	340.6	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
166	-61.59	340.29	EZ-GYRO	SINGLESHOT	G4	11/3/2016		Yes
169	-61.62	340.34	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
178	-61.6	340.4	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
187	-61.59	340.32	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
196	-61.59	339.86	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
205	-61.57	339.09	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
214	-61.58	339.04	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
223	-61.58	339.49	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
229	-61.37	340.43	EZ-GYRO	SINGLESHOT	G4	11/3/2016	retake measurement at same depth	Yes
232	-61.58	340.38	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
241	-61.58	340.32	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
250	-61.61	339.55	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
259	-61.64	339.67	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
268	-61.6	338.81	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
274	-61.57	340.23	EZ-GYRO	SINGLESHOT	G4	11/4/2016		Yes
277	-61.59	339.57	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
286	-61.52	340.15	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
304	-61.4	339.67	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
313	-61.45	339.89	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
322	-61.48	340.23	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
331	-61.51	340.51	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
340	-61.55	340.93	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
349	-61.6	341.62	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
358	-61.57	341.56	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
367	-61.5	342.08	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
376	-61.54	341.69	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
385	-61.51	343.18	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
394	-61.46	343.15	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
400	-61.3	343.78	EZ-GYRO	SINGLESHOT	G4	11/6/2016	retake measurement at same depth	Yes
403	-61.44	343.11	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
412	-61.44	342.63	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
421	-61.4	344.32	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
430	-61.44	344.33	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
433	-61.33	343.87	EZ-GYRO	SINGLESHOT	G4	11/6/2016	retake measurement at same depth	Yes
439	-61.47	343.94	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
448	-61.46	344.72	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
457	-61.41	344.23	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
466	-61.42	344.51	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
475	-61.43	344.88	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
484	-61.34	344.31	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
493	-61.24	345.04	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
502	-61.13	345.84	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
511	-61	344.44	EZ-GYRO	MULTISHOT	G4	11/7/2016		Yes
520	-60.81	343.25	EZ-GYRO	MULTISHOT	G4	11/7/2016	Optimised	Yes

Geology Summary

	meters						
From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	2.3	2.3		OB	Overburden		
2.3	21.61	19.31		E1A	Basalt	Pillowed	Fine grained
21.61	37.16	15.55		E1A	Basalt	Massive	Fine grained
37.16	41.6	4.44		E1	Mafic Volcanic	Brecciated	Fine grained
41.6	128.36	86.76		E1A	Basalt	Pillowed	Fine grained
128.36	132.22	3.86		E1A	Basalt	Massive	Fine grained
132.22	150.48	18.26		E1A	Basalt	Pillowed	Fine grained
150.48	155.45	4.97		E1A	Basalt	Massive	Fine grained
155.45	171.9	16.45		E1A	Basalt	Pillowed	Fine grained
171.9	227.45	55.55		E1A	Basalt	Pillowed	Fine grained
227.45	263.15	35.7		E1A	Basalt	Massive	Fine grained
263.15	270.75	7.6		E1A	Basalt	Schistose	Fine grained
270.75	303	32.25		E1A	Basalt	Pillowed	Fine grained
303	329	26		E1A	Basalt	Massive	Fine grained
329	351	22		E1A	Basalt	Pillowed	Fine grained
351	395	44		E1A	Basalt	Pillowed	Fine grained
395	432.55	37.55		E1A	Basalt	Pillowed	Fine grained
432.55	463	30.45		E1A	Basalt	Pillowed	Fine grained
463	478.25	15.25		E1A	Basalt	Massive	Medium grained
478.25	504.43	26.18		E1A	Basalt	Pillowed	Fine grained
504.43	507.42	2.99		E1	Mafic Volcanic	Schistose	Fine grained
507.42	507.46	0.04		FLT	Fault Zone	Brecciated	Fine grained
507.46	524.89	17.43		S4	Conglomerate	Supported - matrix	Fine grained

DataSet: Brookbank

HoleID: B-16-05

Hole Length (m): 524.89

Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**2.3**	2.3		**OB**	**Overburden**			K. Leupen
2.3	**21.61**	19.31		**E1A**	**Basalt**	Pillowed	Fine grained	K. Leupen

Pillowed metavolcanics. med green colour with local grey hue, fine grained,local weak-moderate magnetite alteration and moderately altered pillow selvages (epidote).Minor sulphide replacement of magnetite rich selvages. 1-2% qtz fe crb veins mineralized with up to 0.5% pyrite and exhibiting weak sericite/ankerite alteration halos. Local hematite veinlets lining vein margins and crosscutting, some associated chlorite blebs. 2% qtz (+/- fe) crb extension veinlets and minor epidote-ankerite veins.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
2.3	6	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
6	9	1	Quartz-Fe-Carbonate	Extension Vein			3.5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.5	
9	12	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.5	
12	15	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
		2	Quartz-Fe-carbonate	Extension Vein			2.5	
15	18	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.8	
		2	Quartz-Fe-carbonate	Extension Vein			2	
18	21	1	Quartz-Fe-carbonate	Extension Vein			5	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
21.61	**37.16**	15.55		**E1A**	**Basalt**	Massive	Fine grained	K. Leupen

Massive flow metavolcanics. Dark green colour with local whisps of dark grey-black (magnetite), fine-med grained, Local weak-moderate magnetic, moderate chlorite&carbonate alteration (softer than normal volcanics), <1% qtz fe crb veins with trace pyrite. 2-3% barren qtz-crb extension veins throughout

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
24	27	1	Quartz-Fe-carbonate	Extension Vein			10	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.2	
27	30	1	Quartz-Fe-carbonate	Extension Vein			7.5	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
30	33	1	Quartz-Fe-carbonate	Extension Vein			8	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
33	36	1	Quartz-Fe-carbonate	Extension Vein			7	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
37.16	**41.6**	4.44		**E1**	**Mafic Volcanic**	Brecciated	Fine grained	K. Leupen

Sheared/brecciated and altered metavolcanics. Med green-grey colour fading to med beige with pink hue. Moderate to strong sheared texture throughout with local patches of moderate brecciation. Weak-moderate sericite and ankerite alteration with weak-moderate silica overprint. 1-2% mineralized qtz- fe crb veins with up to 0.5% pyrite. 2-3% silicified qtz-crb veins with up to 3% pyrite as scattered grains and stringers. Minor sulphide replacement of magnetite rich selvages (coarse grained sct-stringer pyrite) minor barren qtz (+/- fe) crb extension veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
37.16	41.6	1	Sericite	Moderate (26-50%)	Localized	Weak-moderate sericite-ankerite alteration/discolouring local to mineralized qtz +/- fe crb veins, all overprinted by weak-moderate (variable) silicification
		2	Ankerite	Moderate (26-50%)	Localized	
		3	Silicified	Moderate (26-50%)	Pervasive	

Structures

From	To	Code	Structure Type	Comments
37.6	41.6	SHD	Shear / mylonitic foliation	Sheared/altered interval with local brecciated sections

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
41.6	**128.36**	86.76		**E1A**	**Basalt**	Pillowed	Fine grained	K. Leupen

Pillowed metavolcanics. Med green colour with local 1-2m sections of med grey colour where magnetite alteration is dominant. weak-moderate magnetic throughout with increases in areas as just mentioned. higher magnetics are associated with increased qtz fe crb veining. Healed fault (soft but competent material) from 48.95 to 49.82m (magnetite altered and mineralized with 1% pyrite). 2% qtz fe crb (+/- calcite) veins mineralized with up to 0.5% pyrite and exhbiting thin ankerite-sericite alteration halos. Minor sulphide replacement as coarser grained stringers of pyrite at magnetite rich selvages. 2% qtz (+/- fe) crb extension veins and epidote-ankerite veins throughout interval.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
48.95	49.82	1	Magnetite	Moderate (26-50%)	Pervasive	Local moderate to strong magnetite and carb alteration in healed fault
		2	Fe-Carbonate	Moderate (26-50%)	Pervasive	

Structures

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	Code	Structure Type	Comments
48.95	49.82	FLT2	Fault - breccia	Sheared fault breccia with "gouge" texture (soft with porous texture)
83.4	83.8	HFZ	High fracture zone	
94.5	96.3	HFZ	High fracture zone	
119.58	120.46	CV	Vein contact	Qtz- fe crb calcite vein with silcified core, running close to core axis

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
42	45	1:	Quartz-Fe-Carbonate/Calcite	Shear Vein			8.5	
		2:	Quartz-Fe-carbonate	Extension Vein			4	
45	48	1:	Quartz-Fe-Carbonate/Calcite	Shear Vein			14	
		2:	Quartz-Fe-Carbonate /Sulphides	Extension Vein			2.5	
48	51	1:	Quartz-Fe-Carbonate/Calcite	Shear Vein			12	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			2	
51	54	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	
		2:	Quartz-Fe-Carbonate	Extension Vein			2.5	
54	57	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2:	Quartz-Fe-Carbonate	Extension Vein			1.5	
57	60	1:	Quartz-Fe-Carbonate/Calcite	Shear Vein			4	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
60	63	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	
		2:	Quartz-Fe-carbonate	Extension Vein			2.5	
63	66	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			1.2	
66	69	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			1.5	
69	72	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			3	
72	75	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			2	
75	78	1:	Quartz-Fe-Carbonate/Calcite	Shear Vein			6	
		2:	Quartz-Fe-Carbonate	Extension Vein			3	

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
78	81	1	Quartz-Fe-Carbonate/Epidote	Shear Vein			10	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
81	84	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.2	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			2.5	
84	87	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.2	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			3.5	
87	90	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.2	
		2	Quartz-Fe-carbonate	Extension Vein			2	
90	93	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			2.5	
93	96	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.8	
		2	Magnetite / Sulphides	Shear Vein			1.5	
96	99	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.2	
		2	Quartz-Fe-Carbonate	Shear Vein			3.8	
99	102	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			2	
102	105	1	Quartz-Fe-Carbonate/Calcite	Shear Vein			5.5	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
105	108	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.2	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			3.5	
108	111	1	Quartz-Fe-Carbonate/Calcite	Shear Vein			3	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	
111	114	1	Quartz-Fe-Carbonate	Extension Vein			2.2	
		2	Quartz-Fe-Carbonate/Calcite	Shear Vein			1.2	
114	117	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			2.5	
117	120	1	Quartz-Fe-Carbonate/Calcite	Shear Vein			8	
		2	Quartz-Fe-Carbonate/Epidote	Shear Vein			3	
120	123	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
		2	Quartz-Fe-carbonate	Extension Vein			2	
123	126	1	Quartz-Fe-Carbonate/Epidote	Shear Vein			7.5	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.8	

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
128.36	**132.22**	3.86		**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive flow metavolcanics. No epidote. Med-dark greenish grey; mod magnetic throughout; faintly foliated; calcite veinlets (<1-3cm wide; VA to CA; become vuggy when >.5cm; trace sct py on vein margins). 130.43-130.63m mod calcite veinlets and sericite and is mod brecciated and 2% sct PY.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
128.36	130.43	1:	Calcite	Moderate (26-50%)	Patches	Calcite veinlets.
130.43	131.15	1:	Sericite	Moderate (26-50%)	Pervasive	Brecciating qtz veinlets with moderate ser halos. Cal in veins. Weakly silicified.
		2:	Calcite	Moderate (26-50%)	Pervasive	
		3:	Silicified	Weak (1-25%)	Pervasive	
131.15	132.22	1:	Calcite	Moderate (26-50%)	Patches	Calcite veinlets.

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
128.36	130.43	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY on vein margins of calcite veinlets.
VG: No							
130.43	131.15	1:	Pyrite	Fine grained	Scattered grains	2	2% scattered PY on vein margins of calcite veinlets and into sericite halos.
VG: No							
131.15	131.85	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY on vein margins of calcite veinlets.
VG: No							
131.85	132.09	1:	Pyrite	Fine grained	Scattered grains	1	1% scattered PY within host volcanic with vuggy calcite veins and weak hem staining.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
129	132	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		35	25	143 alpha veins being crosscut by 35 alpha veins.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		143	5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
132.22	**150.48**	18.26		**E1A**	**Basalt**	Pillowed	Fine grained	D. Grabiec

Pillowed metavolcanics. Strong epiodote on pillow margins (2-4cm wide; calcite veining within) with micro epidote veinlets fracturing from calcite/epidote. No mineralization. Mod magnetic. Calcite filling of vessicles.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

DataSet: Brookbank

HoleID: B-16-05

Hole Length (m): 524.89

Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype		Texture	GrainSize	Logged By
132.22	150.48	1: Epidote		Moderate (26-50%)	Patches		Epidote along pillow salvages; calcite in veins.		
		2: Calcite		Weak (1-25%)	Patches				

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
136.49	137.1	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY on vein margins of vuggy calcite veinlets. Weak hem staining.
VG: No							
137.1	139.82	1:	Barren	-	-	-	
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
135	138	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		153	3	Vein 3 Thickness: 2cm. L veins are on pillow margins.
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
138	141	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	L veins are pillow margins.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		145	30	
141	144	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Vein 3 thickness: 2.5cm.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		141	3	
144	147	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		74	2	Vein 3 Thickness: 1cm.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		161	1	
147	150	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	2	

150.48	**155.45**	4.97	**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive flow metavolcanics. No epidote. Med-dark greenish grey; mod magnetic throughout; locally faintly foliated; calcite veinlets (<1-4cm wide; VA to CA; become vuggy when <.5cm). From 152.9 to 153.73 increase in weakly silicified area with qtz/calcite (15-20%; <1-4cm wide; very weak ser) with 1-5% PY assoc w/ vuggy veins and into host rock).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
150.48	152.9	1:	Calcite	Moderate (26-50%)	Fracture Filled	Calcite veinlets and a 10cm area at 151.7 of epidote.
		2:	Epidote	Weak (1-25%)	Localized	
152.9	153.73	1:	Sericite	Weak (1-25%)	Localized	Weak-moderate calcite veinlets w/ weak sericite halos. Weak hematite staining.
		2:	Calcite	Weak (1-25%)	Patches	
		3:	Silicified	Weak (1-25%)	Pervasive	

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
153.73	155.45	1:	Calcite	Weak (1-25%)	Localized	Calcite veinlets.

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
152.9	153.2	1:	Pyrite	Fine grained	Scattered grains	5	5% sct PY associated within 20cm of calcite veinlets and haloing into host rock.
VG: No							
153.2	153.73	1:	Pyrite	Fine grained	Scattered grains	1	1% scattered PY associated within 7cm of calcite veinlets and haloing into host rock.
VG: No							
153.73	154.33	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace scattered PY in calcite veinlets.
VG: No							
154.33	154.87	1:	Pyrite	Fine grained	Scattered grains	1	1% scattered PY associated with vuggy calcite veinlets.
VG: No							
154.87	155.45	1:	Pyrite	Fine grained	Scattered grains	2	2% scattered PY associated with qtz/calcite veinlets.
VG: No							

Structures

From	To	Code	Structure Type	Comments
152.9	153.73	FLT2	Fault - breccia	Weakly brecciated/sheared interval. Mineralized up to 5% PY. CA ~160 degrees.

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
155.45	**171.9**	16.45	**E1A**	**Basalt**	Pillowed	Fine grained	D. Grabiec

Pillowed metavolcanics. Strong epiodote on pillow margins (2-4cm wide; calcite veining within) with micro epidote veinlets fracturing from calcite/epidote. Trace sct PY assc with vuggy calcite. Local 2% PY from 157.75 to 158.45m with 10% calcite veinlets. Increasing Strain and Foliation at 169.08-171.9 (Up to 3% PY locally) Mod magnetic.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
155.45	163.45	1:	Epidote	Weak (1-25%)	Localized	Weak-mod epidote in pillow salvages with associated calcite.
		2:	Calcite	Weak (1-25%)	Localized	
163.45	163.89	1:	Calcite	Weak (1-25%)	Pervasive	Moderate pervasive calcite alteration. Locally silicified.
		2:	Silicified	Weak (1-25%)	Localized	
163.89	169.08	1:	Epidote	Weak (1-25%)	Patches	Epidote on pillow salvages. Calcite in veinlets.
		2:	Calcite	Weak (1-25%)	-	

DataSet: Brookbank

HoleID: B-16-05

Hole Length (m): 524.89

Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
169.08	170.6	1: Epidote 2: Calcite		Weak (1-25%) Weak (1-25%)	Patches Fracture Filled	Epidote on pillow salvages. Moderate calcite veining.
170.6	171.9	1: Calcite		Weak (1-25%)	Pervasive	Moderate calcite alteration in strongly strained zone.

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
155.45	157.75	1: Pyrite		Fine grained	Scattered grains	0.3	Trace scattered PY in vuggy calcite veinlets..
VG: No							
157.75	158.45	1: Pyrite		Fine grained	Scattered grains	2	2% scattered PY associated with 11cm of vuggy qtz/calcite veinlets
VG: No							
158.45	162.87	1: Pyrite		Fine grained	Scattered grains	0.3	Trace sct PY associated with vuggy calcite veinlets.
VG: No							
162.87	163.18	1: Pyrite		Fine grained	Scattered grains	0.3	Trace sct PY in vuggy calcite veinlets.
VG: No							
163.18	163.45	1: Pyrite		Fine grained	Scattered grains	0.3	Trace sct PY in calcite veinlets.
VG: No							
163.45	163.89	1: Pyrite		Fine grained	Scattered grains	1	1% scattered PY in soft brecciated; clay rich fault.
VG: No							
163.89	164.47	1: Pyrite		Fine grained	Scattered grains	0.3	Trace sct PY in calcite veinlets.
VG: No							
164.47	165.42	1: Pyrite		Fine grained	Scattered grains	2	2% sct PY in vuggy calcite veinlets.
VG: No							
165.42	169.08	1: Pyrite		Fine grained	Scattered grains	0.3	Trace sct PY in calcite veinlets.
VG: No							
169.08	169.75	1: Pyrite		Fine grained	Scattered grains	3	3% sct PY in calcite veinlets (15cm).
VG: No							
169.75	170.64	1: Pyrite		Fine grained	Scattered grains	0.3	Trace sct PY in calcite veinlets.
VG: No							
170.64	171.9	1: Pyrite		Fine grained	Scattered grains	1	1% scattered PY in calcite veinlets (12cm) and into host. Strongly strained zone with parallel veinlets.
VG: No							

DataSet: Brookbank

HoleID: B-16-05

Hole Length (m): 524.89

Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
163.45	163.89	FLT2	Fault - breccia	Soft fault breccia.
170.6	171.9	FLT5	Fault - gouge	Soft fault breccia. Strongly Strained.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
156	159	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	Vein 1 is close to perpendicular.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	3	
159	162	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		140	3	75ca veins are mineralized.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	4	
162	165	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	24	75ca veins are mineralized.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		250	2	
165	168	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Randomly oriented fracture fill calcite veining.
168	171	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	28	75ca veins are mineralized.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		130	4	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
171.9	**227.45**	55.55	**E1A**	**Basalt**	Pillowed	Fine grained	D. Grabiec

Pillowed Metavolcanics. Med green colour, fine grained, pervasive weakly magnetic; altered pillow salvages (epidote(1-3 per meter). 5% calcite veinlets (<1-2cm wide; varying vuggy; high angles to CA; Pyrite in veinlets; weak hematite rimming on calcite veinlets).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
171.9	209	1:	Epidote	Weak (1-25%)	Localized	Moderate epidote alteration on pillow salvages. Moderate calcite veinlets. Very weak hematite halos on calcite veins.
		2:	Calcite	Weak (1-25%)	Patches	
		3:	Hematite	Weak (1-25%)	Localized	
209	227.45	1:	Epidote	Weak (1-25%)	Patches	Weak epidote alteration on pillow salvages. Weak calcite veinlets associted with pillow salvages.
		2:	Calcite	Weak (1-25%)	-	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
171.9	227.45	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace scattered PY in vuggy calcite veinlets.
VG: No							

Veins

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
174	177	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	9cm of high angle vuggy calcite veinlets.
177	180	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	12cm of high angle vuggy calcite veinlets.
180	183	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	12cm of high angle vuggy calcite veinlets.
183	186	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	4	4cm of high angle vuggy calcite veinlets
186	189	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	7cm of high angle vuggy calcite veinlets.
189	192	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	7cm of high angle vuggy calcite veinlets. 2cm of ~45and ~135CA crossing veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		2		
192	195	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	9	9cm of high angle vuggy calcite veinlets .
195	198	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	15cm of high angle vuggy calcite veinlets.
198	201	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			14	14cm of high angle vuggy calcite veinlets.
201	204	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	8cm of high angle vuggy calcite veinlets.
204	207	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	15cm of high angle vuggy calcite veinlets.
207	210	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of high angle vuggy calcite veinlets.
210	213	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of high angle vuggy calcite veinlets.
213	216	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	13cm of high angle vuggy calcite veinlets.
216	219	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			17	17cm of vuggy calcite veinlets.
219	222	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			17	15cm of vuggy calcite veinlets.
222	225	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	11cm of vuggy calcite veinlets.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
227.45	**263.15**	35.7		**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Massive flow metavolcanics. Greenish grey color. Fine Grained; pervasively varying weak-mod magnetic. Varying weak-mod magnetic. Rare PY within calcite veinlets. 1-2% thin qtz/calcite veinlets. High fracture zones (227.45-238m;248.5-262m; 265-). Epd veining (could possibly be pillow selvages).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
227.45	263.15	1:	Epidote	Weak (1-25%)	Patches	Weak calcite alteration in veining. Localized patches of epidote every 2-5 meters.
		2:	Calcite	Weak (1-25%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
227.45	263.15	1:	Pyrite	Fine grained	Scattered grains	0.1	Rare sct PY associated with some calcite veinlets. One speck of CP at 246.2m
VG: No		2:	Chalcopyrite	Fine grained	Specks	0.01	

Structures

From	To	Code	Structure Type	Comments
227.45	238	HFZ	High fracture zone	Highly fracture zone.
248.5	262	HFZ	High fracture zone	Highly fracture zone.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
228	231	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm of calcite veinlets.
231	234	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm of calcite veinlets.
234	237	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of calcite veinlets.
237	240	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm of calcite veinlets.
240	243	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	2cm of calcite veinlets.
243	246	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	7cm of calcite veinlets.
246	249	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of calcite veinlets.
249	252	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm of calcite veinlets.
252	255	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	2cm of calcite veinlets.

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
255	258	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm of calcite veinlets.
258	261	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	7cm of calcite veinlets.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
263.15	**270.75**	7.6		**E1A**	**Basalt**	Schistose	Fine grained	D. Grabiec

Strained massive flow metavolcanics. Reddish grey-green color. Fine grained; mod magnetic; weakly silicified; moderate hematite staining; 3% qtz/cal veining parallel to foliation (<1cm wide); trace sct PY assc with vuggy calcite veinlets; weakly silicified. Very blocky core(high fracture zone 265-270.75m)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
263.15	270.75	1:	Calcite	Weak (1-25%)	Patches	Weak calcite alteration in veining. Weakly silicified in strain zone.
		2:	Silicified	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
263.15	270.75	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY associated with strained unit. PY is associated to calcite veinlets. HFZ.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
264	267	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		52	6	6cm of qtz/calcite veinlets. In strained zone.
267	270	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	HFZ. Rusty qtz/calcite veinlets.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
270.75	**303**	32.25		**E1A**	**Basalt**	Pillowed	Fine grained	D. Grabiec

Pillowed metavolcanics. Greenish grey color. Fine Grained; pervasively varying weak-mod magnetic; patches of epidote every 1-3m (pillow selvages with amygdules near by). Varying weak-mod magnetic. Trace sct PY within calcite veinlets. 1-2% thin qtz/calcite veinlets. High fracture zone (264.9-297.46)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
270.75	303	1:	Epidote	Weak (1-25%)	Patches	Weak calcite alteration in veining. Localized patches of epidote every 1-2m.
		2:	Calcite	Weak (1-25%)	Localized	

DataSet: Brookbank
HoleID: B-16-05
meters

Hole Length (m): 524.89
Log Length (m): 524.89

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
273	276	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	HFZ. Rusty qtz/calcite veinlets.
276	279	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	HFZ. Rusty qtz/calcite veinlets.
279	282	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	HFZ. Rusty qtz/calcite veinlets.
282	285	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	HFZ. Rusty qtz/calcite veinlets.
285	288	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	HFZ. Rusty qtz/calcite veinlets.
288	291	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	HFZ. Rusty qtz/calcite veinlets.
291	294	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	HFZ. Rusty qtz/calcite veinlets.
294	297	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	HFZ. Rusty qtz/calcite veinlets.
297	300	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	165CA <1cm qtz/calcite veinlets. 3cm is a folded qtz vein.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		165	2	
300	303	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		80	5	165CA <1cm qtz/calcite veinlets. 80CA is 1-2cm wide wth minor brecciation and strain.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		165	3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
303	**329**	26		**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive flow metavolcanics. Greenish grey color. Fine Grained to medium grained; pervasively varying weak-mod magnetic; localized epidote alteration (every 3-6m; no amygdules). Varying weak-mod magnetic. Trace sct PY within calcite veinlets. 1-2% thin qtz/calcite veinlets.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
303	329	1:	Epidote	Weak (1-25%)	Patches	Weak calcite alteration in veining. Localized patches of epidote every 3-6m.
		2:	Calcite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
305.9	318	1: Pyrite		Fine grained	Scattered grains	2	Locally 1-3% sct PY associated with qtz/calcite veinlets.	
VG: No								

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
303	306	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		80	4	165CA <1cm qtz/calcite veinlets. 80CA is 1-2cm wide wth minor brecciation and strain.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		165	3	
306	309	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		80	6	165CA <1cm qtz/calcite veinlets. 80CA is 1-2cm wide wth minor brecciation and strain.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		165	1	
309	312	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	13	70CA <1-3cm qtz/calcite veinlets. Mineralized along vein margins.
312	315	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	7	70CA <1-2cm qtz/calcite veinlets. Mineralized along vein margins.
315	318	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	12	70CA <1-2cm qtz/calcite veinlets. Mineralized along vein margins.
318	321	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	2	70CA <1-4cm qtz/calcite veinlets. Mineralized along vein margins. 120CA is not mineralized.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		120		
321	324	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		120	12	120CA <1-2cm qtz/calcite veinlets. Not mineralized.
324	327	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		120	10	120CA <1-2cm qtz/calcite veinlets. Not mineralized.

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
329	**351**	22	**E1A**	**Basalt**	Pillowed	Fine grained	D. Grabiec

Pillowed Metavolcanics. Med green-grey colour, fine grained, non mag to weakly magnetic; altered pillow salvages (epidote(1-2 per meter). 5% calcite veinlets at various angles (<1-3cm wide; Pyrite in veinlets that are ~70CA).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
329	351	1:	Epidote	Weak (1-25%)	Patches	Weak calcite alteration in veining. Localized epidote alteration along pillow margins (>1 per meter)
		2:	Calcite	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
330	333	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		73	6	73CA <1-3cm qtz/calcite veinlets;

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	mineralized. 6cm qtz/calcite veinlets.
333	336	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		120	4	120CA <1-2cm qtz/calcite veinlets; not mineralized. One 0.5cm mineralized vein at 70CA
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	0.5	
336	339	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		130	8	130CA <1-2cm qtz/calcite veinlets; not mineralized. 70CA mineralized.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	2	
339	342	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		140	7	Conjugate set of veins.
		2:	Fe-Carbonate Vein	Extension Vein		50	1	
342	345	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	2	60CA <1cm qtz/calcite veinlets. Mineralized along vein margins.
345	348	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	5	60CA <1cm qtz/calcite veinlets. Mineralized along vein margins. 130CA veinlets not mineralized.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		130	2	
348	351	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	7	60CA <1cm qtz/calcite veinlets. Mineralized along vein margins.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
351	**395**	44		**E1A**	**Basalt**	Pillowed	Fine grained	D. Grabiec

Pillowed Metavolcanics. Med green-grey colour, fine grained, pervasively mod magnetic; altered pillow salvages (epidote (>2/ meter). Increase in ankerite alteration and decrease in calcite alteration in veining. 5% qtz/cal/crb veining at various angles to CA. Trace sct PY assoc with qtz/crb/cal/epd veining.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
351	395	1:	Epidote	Weak (1-25%)	Patches	Weak calcite alteration in veining. Increase in ankerite. Epidote in pillow margins.
		2:	Ankerite	Moderate (26-50%)	Localized	
		3:	Calcite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
375	376	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY and CP on vein margins of qtz/calcite.
VG: No		2:	Chalcopyrite	Medium grained	Scattered grains	0.3	
376	395	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY associated with qtz/cal/ank veining along vein margins.
VG: No							

Veins

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
351	354	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	15	70CA <1-4cm qtz/cal/ank veinlets. Mineralized along vein margins.
354	357	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	7	25CA qtz/cal/ank veinlets (<1-2cm wide) not mineralized.
357	360	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	6	25CA qtz/cal/ank veinlets (<1-2cm wide) not mineralized.
360	363	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	12	25CA qtz/cal/ank veinlets (<1-2cm wide) not mineralized.
363	366	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	6	25CA qtz/cal/ank veinlets (<1-2cm wide) not mineralized.
366	369	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	7	25CA qtz/cal/ank veinlets (<1-2cm wide) not mineralized. 55CA qtz/cal/ank/epd; trace sct PY along vein margins.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	4	
369	372	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		58	9	58CA qtz/cal/ank veinlets (<1-3cm wide) not mineralized. 67CA veins <1cm wide. Trace PY on vein margins.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		67	2	
372	375	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	16	60CA qtz/cal/ank veinlets (<1-4cm wide) not mineralized.
375	378	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		36	12	36CA qtz/cal veinlets (<1cm wide; PY/CP mineralized). 135CA veins are qtz/cal/ank and assoc with only PY.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		135	9	
378	381	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	15cm of Various angled qtz/cal/ank veinlets. Trace sct PY.
381	384	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	15cm of various angled qtz/cal/ank veinlets. 60CA are only qtz/cal veinlets. Trace sct PY assoc with ank veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	3	
384	387	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			17	17cm of various angled qtz/cal/ank veinlets 15cm of various qtz/cal veinlets. Trace sct PY assoc with ank veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	
387	390	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			28	28cm of vaious angled qtz/cal/ank veinlets. 4cm of qtz/cal veining with associated CG Chalcopyrite. 5cm of calcite veining at VA.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		135	4	
390	393	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			17	17cm of various angled qtz/cal/ank veinlets. 8cm of various angled qtz/cal veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
395	432.55	37.55		E1A	Basalt	Pillowed	Fine grained	D. Grabiec

Pillowed Metavolcanics. Med green-grey colour, fine grained, non to locally weakly magnetic; altered pillow salvages (epidote (1-2/ meter; increase to moderate epidote alteration from 412.7m to 419m). Decrease in ankerite alteration from 412.7-432.55m. Decrease in veining 1-2% qtz/cal/ank veining at various angles to CA. Trace sct PY assoc with qtz/crb/cal veining. 1cm of <0.2cm wide hematite veinlets from 422m to lower contact.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
395	412	1:	Ankerite	Weak (1-25%)	Localized	Weak calcite/ank alteration in veining. Epidote along pillow margins.
		2:	Calcite	Weak (1-25%)	Localized	
		3:	Epidote	Weak (1-25%)	-	
412.7	422	1:	Epidote	Weak (1-25%)	Patches	Moderate pervasive epidote alteration. Ankerite veining encompassed by epidote alteration. White calcite veinlets.
		2:	Ankerite	Weak (1-25%)	Localized	
		3:	Calcite	Weak (1-25%)	Patches	
422	432.55	1:	Epidote	Weak (1-25%)	Localized	Increase in Iron content with ankerite veining and approx 1% <0.2cm wide hematite veinlets.
		2:	Calcite	Weak (1-25%)	Localized	
		3:	Ankerite	Weak (1-25%)	Localized	
		4:	Hematite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
421.5	432.55	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY associated with ank veinlets (within; margins; and into host).
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
396	399	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1	1cm of <.5cm qtz/cal veinlets.
399	402	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	11cm of various angled qtz/cal veinlet <1cm wide and one 8cm veinlet.
402	405	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of qtz/cal veinlets.
405	408	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	8cm of qtz/cal veinlets.
408	411	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	8cm of qtz/cal veinlets.
411	414	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm of qtz/cal veinlets.

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
414	417	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	12cm of qtz/cal/ank veinlets. 3cm of qt/zcal veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
417	420	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm of qtz/cal veinlets.
420	423	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	7cm of qtz/cal veinlets. 9cm of qtz/cal/ank veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	
423	426	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm of qtz/cal/ank veinlets. 4cm of qtz/cal veinlets. .3cm of hematite veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
426	429	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm of qtz/cal/ank veinlets.
429	432	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	8cm of qtz/cal/ank veinlets. 2cm of qtz/cal veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
432.55	**463**	30.45		**E1A**	**Basalt**	Pillowed	Fine grained	K. Leupen

Pillowed metavolcanics with local sericite-ankerite alt'd vein halos. Pillow selvages are darker in colour (less epd then previous units). Med grey-green colour with local beige-pink patches. fine grained w/ texture change to medium grained/mottled w/ white clasts (@ 448-463m, weakly magnetic; weak foliation, clusters of mafic/carb filled vesicles throughout. 2% silicified qtz fe crb veins that exhibit 1-2cm wide sericite-ankerite alteration halos and mineralized with up to 1% pyrite mainly in the alteration. local hematite veinlets that exhibit corsscutting relationships and concetrated in well veined/altered sections. 1-2% barren qtz-crb +/- fe extension veins at various angles.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
432.55	443.9	1:	Sericite	Weak (1-25%)	Halo-Vein Related	Local moderate sericite-ankerite alteration halos along mineralized qtz fe crb veins. Pervasive but variable magnetite and carb alteration throughout. Local hematite filled veins/fractures.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Fe-Carbonate	Weak (1-25%)	Pervasive	
		4:	Magnetite	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
432.55	443.9	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No							
445.38	447.79	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							
451.34	455.68	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
459.74	461.86	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							

Structures

From	To	Code	Structure Type	Comments
457.33	463	FOL	Foliation	Increase in foliation in metavolcanics

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
435	438	1:	Quartz-Fe-Carbonate	Extension Vein			6.5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
438	441	1:	Quartz-Fe-Carbonate	Extension Vein			4	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
441	444	1:	Quartz-Fe-Carbonate	Extension Vein			6.5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.2	
444	447	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	
		2:	Quartz-Fe-Carbonate	Extension Vein			3	
447	450	1:	Quartz-Fe-Carbonate	Extension Vein			3.5	
		2:	Quartz-Fe-carbonate	Extension Vein			2.5	
450	453	1:	Quartz-Fe-Carbonate	Extension Vein			4.5	
		2:	Quartz-Fe-carbonate	Extension Vein			2.5	
453	456	1:	Quartz-Fe-Carbonate	Extension Vein			3.5	
		2:	Quartz-Fe-carbonate	Breccia Veins			3	
456	459	1:	Quartz-Fe-carbonate	Extension Vein			4	
		2:	Quartz-Fe-Carbonate	Extension Vein			1.2	
459	462	1:	Quartz-Fe-Carbonate	Extension Vein			5	
		2:	Quartz-Fe-carbonate	Extension Vein			4	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
463	**478.25**	15.25	**E1A**	**Basalt**	Massive	Medium grained	K. Leupen

Massive flow metavolcanics. Med to coarse grained with slight variance where rare pillow selvages occur (finer grained). Med green colour, weak to non magnetic, with consistent epidote alteration throughout (concentrated along qtz fe crb vein margins). 3-4% qtz fe crb veins with minor epidote content and mineralized with up to 1% pyrite mainly in host along the vein margins. Mineralized veins occur at low angles TCA. 2% barren qtz crb +/- epidote veins.

Minerals

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Mineral	GrainSize	Style	%	Comments
463.82	474.64	1:	Pyrite	Fine grained	Scattered grains	0.5	
VG: No							

Structures

From	To	Code	Structure Type	Comments
468.8	469.2	CV	Vein contact	Mineralized qtz fe crb +/- epidote vein

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
465	468	1:	Quartz-Fe-carbonate	Extension Vein			4.5	
		2:	Quartz-Fe-Carbonate	Shear Vein			4	
468	471	1:	Quartz-Fe-Carbonate	Shear Vein			8	
		2:	Quartz-Fe-carbonate	Extension Vein			3.5	
471	474	1:	Quartz-Fe-Carbonate	Extension Vein			10	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
474	477	1:	Quartz-Fe-Carbonate	Extension Vein			4.5	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
478.25	**504.43**	26.18	**E1A**	**Basalt**	Pillowed	Fine grained	K. Leupen

Magnetite altered pillowed metavolcanics. Med grey colour, moderate to strong magnetic,fine grained; weak foliation, weak carb alt'n throughout and local weak silicification occuring at mineralized veins. 1-2% weakly silicified qtz fe crb veins with up to 2% pyrite. Replacement of mag rich selvages as loose stringers of F-MG pyrite throughout interval. 2% barren qtz fe crb extension veins/ fragments. Foliation increases closer to lower contact.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
478.25	504.43	1:	Magnetite	Strong (51-75%)	Pervasive	Moderate to strong pervasive magnetite and weak carb altered pillowed metavolcanics
		2:	Fe-Carbonate	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
482.92	491.4	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No							
501.8	502.6	1:	Pyrite	Fine grained	Stringers	3	Semi massive stringers of pyrite replacing mag rich selvages as well as sct stringers proximal to silicified qtz fe crb veins
VG: No							

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
501.8	504.43	SHD	Shear / mylonitic foliation	Gradational increase in foliation up to lower contact

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
480	483	1:	Quartz-Fe-carbonate	Extension Vein			6	
		2:	Quartz-Fe-Carbonate	Extension Vein			1	
483	486	1:	Quartz-Fe-carbonate	Extension Vein			6	
		2:	Quartz-Fe-Carbonate	Extension Vein			1.2	
486	489	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-Carbonate	Extension Vein			2	
489	492	1:	Quartz-Fe-Carbonate	Extension Vein		45	6.5	
		2:	Quartz-Fe-carbonate	Extension Vein			6	
492	495	1:	Quartz-Fe-Carbonate	Extension Vein		45	10	
		2:	Quartz-Fe-carbonate	Extension Vein			4	
495	498	1:	Quartz-Fe-carbonate	Extension Vein			6	
		2:	Quartz-Fe-Carbonate	Extension Vein		45	4.5	
498	501	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-Carbonate	Extension Vein			4	
501	504	1:	Quartz-Fe-Carbonate	Extension Vein			5.5	
		2:	Quartz-Fe-carbonate	Extension Vein			4.5	

From	To						
504.43	**507.42**	2.99	**E1**	**Mafic Volcanic**	Schistose	Fine grained	K. Leupen

Brookbank shear zone. Striped med-light beige with shades of pink and grey, strong mylonitic foliation from 40 deg. shallowing to 35 deg. TCA with depth. mod-strong sericite alteration throughout with patches of hematite as bands and ankerite halos associated with mineralized veins. All subject to weak silicification. qtz fe crb veining accounts for 15%. 2-3% pyrite throughout as fine grained stringers in and along veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
504.43	507.42	1:	Sericite	Moderate (26-50%)	Pervasive	Pervasive moderate sericite altered and weakly silicified shear zone with local bands of hematite and local ankerite alteration halos associated with some mineralized qtz fe crb veins.
		2:	Hematite	Weak (1-25%)	Banding	
		3:	Ankerite	Weak (1-25%)	Localized	
		4:	Silicified	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments

DataSet: Brookbank
HoleID: B-16-05

Hole Length (m): 524.89
Log Length (m): 524.89

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
504.43	507.42	1:	Pyrite	Fine grained	Stringers	3	2-3% fine grained stringers of pyrite throughout shear zone, mainly along qtz fe crb vein margins.
VG: No							

Structures

From	To	Code	Structure Type	Comments
504.43	507.42	SHD	Shear / mylonitic foliation	Mineralized shear zone

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
507.42	**507.46**	0.04	**FLT**	**Fault Zone**	Brecciated	Fine grained	S. Molloy

3.5cm black fault (cohesive microbreccis), lower contact 35 deg. TCA. not mineralized

Structures

From	To	Code	Structure Type	Comments
507.42	507.46	FLT1	Fault - Black line	Black fault marking end of shear zone; cohesive microbreccia

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
507.46	**524.89**	17.43	**S4**	**Conglomerate**	Supported - matrix	Fine grained	K. Leupen

Sheared conglomerate, increase in strain and alteration instensity with depth defined by gradual schistosity. non magnetic. Moderate chlorite alteration throughout with sudden sericite occurring at 519.4m and on. 25% round to flat clasts of various litho (0.5-12cm,mainly granitoid, qtz, chert) 2% qtz crb veins. Rare pyrite mineralization occuring along vein and clast margins.

Structures

From	To	Code	Structure Type	Comments
519	524.89	FOL	Foliation	Increase on strength of foliation

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
510	513	1:	Quartz-Fe-carbonate	Extension Vein		38	6	
513	516	1:	Quartz-Fe-carbonate	Extension Vein		38	12	
516	519	1:	Quartz-Fe-carbonate	Extension Vein		40	6	
519	522	1:	Quartz-Fe-carbonate	Extension Vein		40	5	
522	524.89	1:	Quartz-Fe-carbonate	Extension Vein		40	4	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 524.89**

HoleID: B-16-05 **Max Samp Depth (m): 524.89**

Total meters Sampled: 522.39

Primary Assay Samples:	552	88.18 %
Field Duplicate Samples:	19	3.04 %
Standard/Blank Samples:	55	8.79 %
Total Samples:	626	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
2.3	3	0.7	228501	HCORE			A16-12426	<0.005	
3	4	1	228502	HCORE			A16-12426	0.017	
4	5	1	228503	HCORE			A16-12426	0.015	
5	6	1	228504	HCORE			A16-12426	0.005	
		0	228505	DUP	228504		A16-12426	0.006	
6	7	1	228506	HCORE			A16-12426	<0.005	
7	8	1	228507	HCORE			A16-12426	0.01	
8	9	1	228508	HCORE			A16-12426	<0.005	
9	10	1	228509	HCORE			A16-12426	<0.005	
10	11	1	228510	HCORE			A16-12426	<0.005	
11	12	1	228511	HCORE			A16-12426	<0.005	
12	13	1	228512	HCORE			A16-12426	<0.005	
		0	228513	STD		CDN_GS_P4B	A16-12426	0.46	
13	14	1	228514	HCORE			A16-12426	0.007	
14	15	1	228515	HCORE			A16-12426	<0.005	
15	16	1	228516	HCORE			A16-12426	0.005	
16	17	1	228517	HCORE			A16-12426	<0.005	
17	18	1	228518	HCORE			A16-12426	0.013	
18	19	1	228519	HCORE			A16-12426	<0.005	
19	20	1	228520	HCORE			A16-12426	0.006	
20	20.8	0.8	228521	HCORE			A16-12426	<0.005	
20.8	21.6	0.8	228522	HCORE			A16-12426	<0.005	
		0	228523	Blank		Blank	A16-12426	<0.005	
21.6	22.5	0.9	228524	HCORE			A16-12426	0.008	
22.5	23.5	1	228525	HCORE			A16-12426	0.019	
23.5	24	0.5	228526	HCORE			A16-12426	0.024	
24	25	1	228527	HCORE			A16-12426	<0.005	
25	26	1	228528	HCORE			A16-12426	<0.005	
26	27	1	228529	HCORE			A16-12426	<0.005	

27	28	1	228530	HCORE			A16-12426	0.01	
28	29	1	228531	HCORE			A16-12426	0.005	
29	30	1	228532	HCORE			A16-12426	<0.005	
		0	228533	STD		CDN_GS_P7J	A16-12426	0.626	
30	31	1	228534	HCORE			A16-12426	<0.005	
31	32	1	228535	HCORE			A16-12426	<0.005	
32	33	1	228536	HCORE			A16-12426	0.006	
33	34	1	228537	HCORE			A16-12426	0.008	
34	35	1	228538	HCORE			A16-12426	<0.005	
35	35.8	0.8	228539	HCORE			A16-12426	<0.005	
35.8	36.5	0.7	228540	HCORE			A16-12426	<0.005	
36.5	37.16	0.66	228541	HCORE			A16-12426	0.008	
37.16	37.7	0.54	228542	HCORE			A16-12426	0.006	
		0	228543	DUP	228542		A16-12426	0.006	
37.7	38.5	0.8	228544	HCORE			A16-12426	<0.005	
38.5	39.1	0.6	228545	HCORE			A16-12426	0.029	
39.1	39.9	0.8	228546	HCORE			A16-12426	0.779	
39.9	40.7	0.8	228547	HCORE			A16-12426	0.049	
40.7	41.6	0.9	228548	HCORE			A16-12426	0.076	
		0	228549	STD		CDN_GS_2P	A16-12426	1.93	
41.6	42.3	0.7	228550	HCORE			A16-12426	0.021	
42.3	43	0.7	228551	HCORE			A16-12426	0.01	
43	44	1	228552	HCORE			A16-12426	0.006	
44	45	1	228553	HCORE			A16-12426	0.007	
45	46	1	228554	HCORE			A16-12426	0.017	
46	47.05	1.05	228555	HCORE			A16-12426	0.02	
47.05	48.16	1.11	228556	HCORE			A16-12463	<0.005	
48.36	48.9	0.54	228557	HCORE			A16-12463	<0.005	
48.9	49.9	1	228558	HCORE			A16-12463	0.026	healed fault with 5% veining and 1% pyrite
		0	228559	Blank		Blank	A16-12463	<0.005	
49.9	50.7	0.8	228560	HCORE			A16-12463	0.008	
50.7	51.7	1	228561	HCORE			A16-12463	<0.005	
51.7	52.7	1	228562	HCORE			A16-12463	<0.005	
52.7	53.7	1	228563	HCORE			A16-12463	<0.005	
53.7	54.7	1	228564	HCORE			A16-12463	0.034	
54.7	55.7	1	228565	HCORE			A16-12463	<0.005	

55.7	56.7	1	228566	HCORE			A16-12463	<0.005
56.7	57.4	0.7	228567	HCORE			A16-12463	<0.005
57.4	58.1	0.7	228568	HCORE			A16-12463	<0.005
		0	228569	STD		CDN_GS_P7J	A16-12463	0.69
58.1	59	0.9	228570	HCORE			A16-12463	<0.005
59	60	1	228571	HCORE			A16-12463	<0.005
60	61	1	228572	HCORE			A16-12463	<0.005
61	61.95	0.95	228573	HCORE			A16-12463	<0.005
61.95	63	1.05	228574	HCORE			A16-12463	0.006
63	64	1	228575	HCORE			A16-12463	0.016
64	65	1	228576	HCORE			A16-12463	<0.005
65	66	1	228577	HCORE			A16-12463	<0.005
		0	228578	DUP	228577		A16-12463	<0.005
66	67	1	228579	HCORE			A16-12463	0.054
67	68	1	228580	HCORE			A16-12463	<0.005
68	69	1	228581	HCORE			A16-12463	<0.005
69	69.6	0.6	228582	HCORE			A16-12463	0.006
69.6	70.6	1	228583	HCORE			A16-12463	0.009
70.6	71.6	1	228584	HCORE			A16-12463	<0.005
71.6	72.6	1	228585	HCORE			A16-12463	<0.005
72.6	73.2	0.6	228586	HCORE			A16-12463	0.005
		0	228587	STD		CDN_GS_P4B	A16-12463	0.425
73.2	74	0.8	228588	HCORE			A16-12463	<0.005
74	74.75	0.75	228589	HCORE			A16-12463	<0.005
74.75	75.5	0.75	228590	HCORE			A16-12463	<0.005
75.5	76	0.5	228591	HCORE			A16-12463	0.781
		0	228592	Blank		Blank	A16-12463	0.01
76	77	1	228593	HCORE			A16-12463	<0.005
77	78	1	228594	HCORE			A16-12463	0.026
78	79	1	228595	HCORE			A16-12463	0.01
79	80	1	228596	HCORE			A16-12463	<0.005
80	81	1	228597	HCORE			A16-12463	0.005
81	82	1	228598	HCORE			A16-12463	<0.005
82	83	1	228599	HCORE			A16-12463	0.01
83	84	1	228600	HCORE			A16-12463	<0.005
84	85	1	228601	HCORE			A16-12463	<0.005

85	86	1	228602	HCORE			A16-12463	<0.005	
		0	228603	STD		CDN_GS_P7J	A16-12463	0.912	
86	87	1	228604	HCORE			A16-12538	<0.005	
87	87.7	0.7	228605	HCORE			A16-12538	<0.005	
87.7	88.5	0.8	228606	HCORE			A16-12538	<0.005	
88.5	89.5	1	228607	HCORE			A16-12538	<0.005	
89.5	90.5	1	228608	HCORE			A16-12538	<0.005	
90.5	91.5	1	228609	HCORE			A16-12538	<0.005	
91.5	92.5	1	228610	HCORE			A16-12538	<0.005	
92.5	93.5	1	228611	HCORE			A16-12538	<0.005	
93.5	94.4	0.9	228612	HCORE			A16-12538	<0.005	
94.4	95.4	1	228613	HCORE			A16-12538	<0.005	
95.4	96.4	1	228614	HCORE			A16-12538	<0.005	
96.4	97.3	0.9	228615	HCORE			A16-12538	<0.005	
97.3	98.3	1	228616	HCORE			A16-12538	<0.005	10% qtz fe crb (+/- silicification) veining with 1% pyrite
		0	228617	DUP	228616		A16-12538	0.013	
98.3	99.3	1	228618	HCORE			A16-12538	<0.005	10-15% vuggy qtz fe crb veins with 0.5% pyrite
99.3	100	0.7	228619	HCORE			A16-12538	<0.005	
100	101	1	228620	HCORE			A16-12538	<0.005	
101	102	1	228621	HCORE			A16-12538	<0.005	
102	103	1	228622	HCORE			A16-12538	<0.005	
103	104	1	228623	HCORE			A16-12538	<0.005	
104	105	1	228624	HCORE			A16-12538	<0.005	
105	106	1	228625	HCORE			A16-12538	<0.005	
106	107	1	228626	HCORE			A16-12538	<0.005	
		0	228627	STD		CDN_GS_P4B	A16-12538	0.443	
107	108	1	228628	HCORE			A16-12538	0.049	
108	109	1	228629	HCORE			A16-12538	0.007	
109	110	1	228630	HCORE			A16-12538	<0.005	
110	111	1	228631	HCORE			A16-12538	<0.005	
111	112	1	228632	HCORE			A16-12538	<0.005	
112	113	1	228633	HCORE			A16-12538	0.011	
113	114	1	228634	HCORE			A16-12538	<0.005	
114	115	1	228635	HCORE			A16-12538	0.013	
115	116	1	228636	HCORE			A16-12538	0.066	

116	117	1	228637	HCORE			A16-12538	<0.005	
		0	228638	Blank		Blank	A16-12538	<0.005	
117	118	1	228639	HCORE			A16-12538	<0.005	
118	118.7	0.7	228640	HCORE			A16-12538	<0.005	
118.7	119.5	0.8	228641	HCORE			A16-12538	0.01	
119.5	120.5	1	228642	HCORE			A16-12538	0.016	
120.5	121.5	1	228643	HCORE			A16-12538	0.022	
121.5	122.5	1	228644	HCORE			A16-12775	<0.005	
		0	228645	STD		CDN_GS_P7J	A16-12775	0.737	
122.5	123.5	1	228646	HCORE			A16-12775	<0.005	
123.5	124.5	1	228647	HCORE			A16-12775	<0.005	
124.5	125.5	1	228648	HCORE			A16-12775	<0.005	
125.5	126.5	1	228649	HCORE			A16-12775	<0.005	
126.5	127.5	1	228650	HCORE			A16-12775	<0.005	
127.5	128.36	0.86	228651	HCORE			A16-12775	<0.005	
128.36	129.2	0.84	228652	HCORE			A16-12775	<0.005	Trace PY assc w/ calcite veinlets.
129.2	129.85	0.65	228653	HCORE			A16-12775	<0.005	Trace PY assc / vuggy calcite veinlets. Mod hematite staining.
		0	228654	DUP	228653		A16-12775	<0.005	
129.85	130.43	0.58	228655	HCORE			A16-12775	<0.005	Trace PY assc / calcite veinlets. Weak hematite staining.
130.43	131.15	0.72	228656	HCORE			A16-12775	0.027	7cm of calcite veinlets (<1-2m wide). Mod sericite halos. Weakly silicified. Mod brecciated. 2% sct PY within ser halos.
131.15	131.85	0.7	228657	HCORE			A16-12775	<0.005	Trace PY assc / calcite veinlets. Weak hematite staining.
131.85	132.22	0.37	228658	HCORE			A16-12775	0.007	1% PY assc / calcite veinlets (weakly vuggy) and haloing into host. Mod hematite staining.
132.22	133	0.78	228659	HCORE			A16-12775	<0.005	Barren.
133	134	1	228660	HCORE			A16-12775	<0.005	Barren.
134	135	1	228661	HCORE			A16-12775	<0.005	Barren.
135	136	1	228662	HCORE			A16-12775	<0.005	Barren.
		0	228663	STD		CDN_GS_P4B	A16-12775	0.372	
136	136.49	0.49	228664	HCORE			A16-12775	<0.005	Barren.
136.49	137.1	0.61	228665	HCORE			A16-12775	0.014	7cm of calcite veinlets. Vuggy. Trace sct PY assc w/ veinlets.
137.1	138	0.9	228666	HCORE			A16-12775	0.012	Barren.
138	139	1	228667	HCORE			A16-12775	0.007	Barren.
139	139.82	0.82	228668	HCORE			A16-12775	<0.005	Barren.

139.82	140.37	0.55	228669	HCORE			A16-12775	<0.005	4cm of calcite veinlets. Vuggy. Trace sct PY assc w/ veinlets.
140.37	141.25	0.88	228670	HCORE			A16-12775	<0.005	2cm of calcite veinlets. Rare PY grains.
		0	228671	Blank		Blank	A16-12775	<0.005	
141.25	142.08	0.83	228672	HCORE			A16-12775	0.005	0.5cm wide calcite veinlet. Trace sct PY assc w/ veinlet.
142.08	142.93	0.85	228673	HCORE			A16-12775	0.011	0.5cm wide calcite veinlet. Trace sct PY assc w/ veinlet.
142.93	143.32	0.39	228674	HCORE			A16-12775	0.009	Two 1cm wide calcite veinlets. Vuggy. Trace sct PY assc w/ veinlet.
143.32	144	0.68	228675	HCORE			A16-12775	0.011	0.5cm wide calcite veinlet. Vuggy. Trace sct PY assc w/ veinlet.
144	145	1	228676	HCORE			A16-12775	0.009	2cm of calcite veinlets. Vuggy. Trace sct PY assc w/ veinlets.
145	146	1	228677	HCORE			A16-12775	0.011	Rare sct PY in host volcanic.
146	147	1	228678	HCORE			A16-12775	0.005	0.5cm wide calcite veinlet. Vuggy. Trace sct PY assc w/ veinlet.
147	148	1	228679	HCORE			A16-12775	<0.005	Two 0.5cm wide calcite veinlet. Vuggy. Trace sct PY assc w/ veinlet.
		0	228680	STD		CDN_GS_P7J	A16-12775	0.776	
148	149	1	228681	HCORE			A16-12775	<0.005	Two 1cm vuggy calcite veinlet with Trace sct PY assc w/ veinlet.
149	149.7	0.7	228682	HCORE			A16-12775	<0.005	One 1cm vuggy calcite veinlet with Trace sct PY assc w/ veinlet.
149.7	150.48	0.78	228683	HCORE			A16-12775	<0.005	Two 1cm vuggy calcite veinlet with Trace sct PY assc w/ veinlet.
150.48	151.27	0.79	228684	HCORE			A16-12775	<0.005	8cm of vuggy calcite veinlets with trace sct PY assc w/ veinlets.
151.27	152.3	1.03	228685	HCORE			A16-12775	<0.005	2cm of vuggy calcite veinlets with trace sct PY assc w/ veinlets.
152.3	152.9	0.6	228686	HCORE			A16-12775	<0.005	Trace sct PY in host volcanic.
152.9	153.2	0.3	228687	HCORE			A16-12775	0.027	10cm of vuggy calcite veinlets (<1-4cm wide). Weak ser. Weakly silicified. 5% PY sct throughout veinlets and into host.
153.2	153.73	0.53	228688	HCORE			A16-12775	<0.005	7cm of vuggy calcite veinlets (<1-2cm wide). Weak ser. Weakly silicfied. 1% PY sct throughout veinlets and into host.
		0	228689	DUP	228688		A16-12775	<0.005	
153.73	154.33	0.6	228690	HCORE			A16-12775	<0.005	Trace sct PY in host volcanic.
154.33	154.87	0.54	228691	HCORE			A16-12775	<0.005	7cm of vuggy calcite veinlets (<1cm wide). PY assoc w/ veinlets.
154.87	155.45	0.58	228692	HCORE			A16-12775	<0.005	6cm of calcite veinlets (<1-4cm wide). PY along vein margins and into host rock.
155.45	156.23	0.78	228693	HCORE			A16-12775	0.007	Barren.

156.23	156.75	0.52	228694	HCORE		A16-12775	<0.005	4c of vuggy calcite veinlets <1cm wide. PY assoc w/ veinlets.
156.75	157.75	1	228695	HCORE		A16-12775	<0.005	Barren.
157.75	158.45	0.7	228696	HCORE		A16-12775	<0.005	2% scattered PY associated with 11cm of vuggy qtz/calcite veinlets (<1-2cm wide).
		0	228697	STD	CDN_GS_P4B	A16-12775	0.449	
158.45	159.5	1.05	228698	HCORE		A16-12775	<0.005	One <1cm wide calcite vein with hematite halos. Trace sct PY on vein margins of vein.
159.5	160.5	1	228699	HCORE		A16-12775	<0.005	Three <1cm wide calcite veinlets with trace sct PY.
160.5	161.5	1	228700	HCORE		A16-12775	<0.005	Two <1cm wide calcite veinlets with Trace PY.
161.5	162.3	0.8	228701	HCORE		A16-12775	<0.005	One <1cm wide calcite veinlet with trace PY.
162.3	162.87	0.57	228702	HCORE		A16-12775	<0.005	Two 1cm wide calcite veinlets with trace PY.
162.87	163.45	0.58	228703	HCORE		A16-12775	0.006	Seven <1cm wide calcite veinlets with 3% Sct PY in veinlets and into host rock.
		0	228704	Blank	Blank	A16-12775	0.025	
163.45	163.89	0.44	228705	HCORE		A16-12775	<0.005	Soft brecciated fault with 1% scattered PY along veinlet margins (2cm).
163.89	164.47	0.58	228706	HCORE		A16-12775	<0.005	Trace sct PY in Pillowed Volcanic.
164.47	164.95	0.48	228707	HCORE		A16-12775	0.006	10cm of <1cm wide calcite veinlets. 3% PY in vuggy calcite and along vein margins.
164.95	165.42	0.47	228708	HCORE		A16-12775	<0.005	2cm of calcite veinlets. 1% sct PY in host and veinlets.
165.42	166.5	1.08	228709	HCORE		A16-12775	<0.005	Trace sct PY in Pillowed Volcanic.
166.5	167.5	1	228710	HCORE		A16-12858	0.007	2cm of <1cm wide calcite veinlets. Trace sct PY assc with veinlets.
167.5	168.5	1	228711	HCORE		A16-12858	<0.005	3cm of <1cm wide calcite veinlets. Trace sct PY.
168.5	169.08	0.58	228712	HCORE		A16-12858	<0.005	Trace sct PY in Pillowed Volcanic.
169.08	169.75	0.67	228713	HCORE		A16-12858	0.005	12cm of calcite veinlets (<2cm wide). 3% sct PY in calcite/vein margins/ and into volcanic.
		0	228714	STD	CDN_GS_P7J	A16-12858	0.718	
169.75	170.6	0.85	228715	HCORE		A16-12858	0.009	5cm of calcite veinlets (<3cm wide). Trace sct PY in veins and on vein margins.
170.6	171.1	0.5	228716	HCORE		A16-12858	0.013	4cm of calcite veinlets (<1cm wide). Strongly strained unit with possible fault gouge. 1% sct PY within vuggy calcite veinlets and into host.
171.1	171.9	0.8	228717	HCORE		A16-12858	0.009	9cm of calcite veinlets (<1-4cm wide). Strongly strained unit. 1% sct PY within calcite veinlets and into host.

171.9	173	1.1	228718	HCORE			A16-12858	0.01	4cm of calcite veinlets (<1cm wide). Trace sct PY in veinlets.
173	174	1	228719	HCORE			A16-12858	0.005	3cm of calcite veinlets (<1cm wide). Trace sct PY in veinlets.
174	175	1	228720	HCORE			A16-12858	0.005	4cm of calcite veinlets (<1cm wide). Trace sct PY in veinlets.
175	176	1	228721	HCORE			A16-12858	0.008	4cm of calcite veinlets (<1cm wide). Trace sct PY in veinlets.
		0	228722	DUP	228721		A16-12858	<0.005	
176	177	1	228723	HCORE			A16-12858	0.009	5cm of vuggy calcite veinlets (<2cm wide). Trace sct PY in veinlets.
177	178	1	228724	HCORE			A16-12858	0.032	10cm area at 177.7 with 5cm of calcite veinlets and 5% sct PY.
178	179	1	228725	HCORE			A16-12858	0.006	5cm of vuggy calcite veinlets (<1cm wide). Trace sct PY in veinlets.
179	180	1	228726	HCORE			A16-12858	0.006	5cm of vuggy calcite veinlets (<1cm wide). Trace sct PY in veinlets.
180	181	1	228727	HCORE			A16-12858	0.006	6cm wide vuggy calcite veinlets. Trace sct PY assoc w/ veinlet.
181	182	1	228728	HCORE			A16-12858	0.008	3cm of calcite veinlets (<1cm wide). Trace sct PY in veinlets.
182	183	1	228729	HCORE			A16-12858	0.007	4cm of qtz/calcite veinlets(1-2cm wide) Trace sct PY in veinlets.
183	184	1	228730	HCORE			A16-12858	0.005	4cm of calcite veinlets(<2cm wide). Trace sct PY in veinnlets.
		0	228731	STD		CDN_GS_P4B	A16-12858	0.403	
184	185	1	228732	HCORE			A16-12858	0.006	Barren.
185	186	1	228733	HCORE			A16-12858	0.008	2cm of calcite veinlets. Trace sct PY in veinlets.
186	187	1	228734	HCORE			A16-12858	<0.005	1cm of calcite veinlets. Trace sct PY.
187	188	1	228735	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
188	189	1	228736	HCORE			A16-12858	<0.005	5cm calcite veinlets. 1% scattered PY in veins and into host rock.
189	190	1	228737	HCORE			A16-12858	<0.005	5cm of vuggy calcite veinlets. (<1cm wide). 1% sct PY in veins and into host.
190	191	1	228738	HCORE			A16-12858	<0.005	3cm of vuggy calcite veinlets. Trace sct PY in veinlets.
191	192	1	228739	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
		0	228740	Blank		Blank	A16-12858	<0.005	
192	193	1	228741	HCORE			A16-12858	<0.005	3cm of calcite veinlets. Trace sct PY in veinlets.
193	194	1	228742	HCORE			A16-12858	0.009	2cm of calcite veinlets. Trace sct PY in veinlets.

194	195	1	228743	HCORE			A16-12858	0.005	4cm of calcite veinlets. Trace sct PY in veinlets.
195	196	1	228744	HCORE			A16-12858	0.009	2cm of calcite veinelts. Trace sct PY in veinlets.
196	197	1	228745	HCORE			A16-12858	0.012	4cm of vuggy calcite veinlets. Trace sct PY in veinlets.
197	198	1	228746	HCORE			A16-12858	<0.005	5cm of vuggy calcite veinlets. Trace sct PY in veinlets.
198	199	1	228747	HCORE			A16-12858	0.021	5cm of vuggy calcite veinlets. Trace sct PY in veinlets and into host.
		0	228748	STD		CDN_GS_P7J	A16-12858	0.69	
199	200	1	228749	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
200	201	1	228750	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
201	202	1	228751	HCORE			A16-12858	<0.005	4cm of calcite veinlets. Trace sct PY in veinlets.
202	203	1	228752	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
203	204	1	228753	HCORE			A16-12858	<0.005	3cm of calcite veinlets. Trace sct PY in veinlets.
204	205	1	228754	HCORE			A16-12858	<0.005	3cm of calcite veinlets. Trace sct PY in veinlets.
205	206	1	228755	HCORE			A16-12858	<0.005	4cm of vuggy calcite veinlets. Trace sct PY in veinlets.
206	207	1	228756	HCORE			A16-12858	<0.005	3cm of calcite veinlets. Trace sct PY in veinlets.
		0	228757	DUP	228756		A16-12858	<0.005	
207	208	1	228758	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
208	209	1	228759	HCORE			A16-12858	<0.005	1cm of calcite veinlets. Trace sct PY in veinlets
209	210	1	228760	HCORE			A16-12858	<0.005	4cm of vuggy calcite veinlets. Trace sct PY in veinlets.
210	211	1	228761	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
211	212	1	228762	HCORE			A16-12858	<0.005	1cm of calcite veinlets. Trace sct PY in veinlets
212	213	1	228763	HCORE			A16-12858	0.005	<1cm of calcite veinlets. Trace sct PY in veinlets
213	214	1	228764	HCORE			A16-12858	<0.005	1cm of calcite veinlets. Trace sct PY in veinlets
214	215	1	228765	HCORE			A16-12858	<0.005	4cm of vuggy calcite veinlets. Trace sct PY in veinlets.
		0	228766	STD		CDN_GS_P4B	A16-12858	0.414	
215	216	1	228767	HCORE			A16-12858	<0.005	4cm of qtz/calcite veinlets. Trace sct PY in veinlets.

216	217	1	228768	HCORE			A16-12858	<0.005	2cm of calcite veinlets. Trace sct PY in veinlets.
217	218	1	228769	HCORE			A16-12858	<0.005	One 4cm wide qtz/calcite vein. Vuggy. Trace CG PY along vein margin.. Hematite banding.
218	219	1	228770	HCORE			A16-12858	<0.005	2cm calcite veinlets. One 5cm qtz/calcite vein. Trace sct PY in vein and into host.
219	220	1	228771	HCORE			A16-12858	<0.005	5cm of vuggy calcite veinlets. Trace sct PY in veinlets.
220	221	1	228772	HCORE			A16-12858	<0.005	2cm of vuggy calcite veinlets. Trace sct PY in veinlets.
221	222	1	228773	HCORE			A16-12858	<0.005	8cm of vuggy calcite veinlets (<1-4cm). Trace sct PY in veinlets.
222	223	1	228774	HCORE			A16-12858	<0.005	3cm of vuggy calcite veinlets. Trace sct PY assc with veinlets.
		0	228775	Blank		Blank	A16-12858	0.006	
223	224	1	228776	HCORE			A16-12858	0.006	3cm of vuggy calcite veinlets. Trace sct PY assc with veinlets.
224	225	1	228777	HCORE			A16-12858	<0.005	3cm of qtz/calcite veinlets. Trace sct PY assc with veinlets.
225	226	1	228778	HCORE			A16-12905	<0.005	3cm of qtz/calcite veinlets. Trace sct PY assc with veinlets.
226	226.8	0.8	228779	HCORE			A16-12905	<0.005	2cm of qtz/calcite veinlets. Trace sct PY assc with veinlets.
226.8	227.45	0.65	228780	HCORE			A16-12905	<0.005	2cm of calcite veinlets. Trace PY assc with veinlets.
227.45	228	0.55	228781	HCORE			A16-12905	<0.005	1cm qtz/calcite veinlets.
228	229	1	228782	HCORE			A16-12905	<0.005	One 1cm wide qtz/calcite veinlets with trace PY.
		0	228783	STD		CDN_GS_P7J	A16-12905	0.649	
229	230	1	228784	HCORE			A16-12905	<0.005	HFZ. 1cm qtz/cal veinlets.
230	231	1	228785	HCORE			A16-12905	<0.005	HFZ. 2cm veinlets.
231	232	1	228786	HCORE			A16-12905	<0.005	HFZ. 1cm qtz/cal veinlets.
232	233	1	228787	HCORE			A16-12905	0.007	HFZ. 2cm qtz/cal veinlets.
233	234	1	228788	HCORE			A16-12905	<0.005	HFZ. 1cm calcite veinlets.
234	235	1	228789	HCORE			A16-12905	<0.005	HFZ. 1cm calcite veinlets.
235	236	1	228790	HCORE			A16-12905	<0.005	HFZ. 1cm qtz/calcite veinlets.
236	237	1	228791	HCORE			A16-12905	<0.005	HFZ. 1cm qtz/calcite veinlets.
		0	228792	DUP	228791		A16-12905	<0.005	
237	238	1	228793	HCORE			A16-12905	<0.005	HFZ. 1cm qtz/calcite veinlets.
238	239	1	228794	HCORE			A16-12905	<0.005	1cm qtz/calcite veinlet. Trace sct PY assc with veinlet.
239	240	1	228795	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlet.

240	241	1	228796	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlet.
241	242	1	228797	HCORE			A16-12905	<0.005	2cm qtz/calcite veinnlets.
242	243	1	228798	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlet.
243	244	1	228799	HCORE			A16-12905	<0.005	5cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
		0	228800	STD		CDN_GS_P4B	A16-12905	0.331	
244	245	1	228801	HCORE			A16-12905	<0.005	3cm qtz/calcite veinlets. Trace sctPY assc with veinlets.
245	246	1	228802	HCORE			A16-12905	<0.005	3cm qtz/calcite veinlets.
246	247	1	228803	HCORE			A16-12905	<0.005	2cm qtz/calcite veinlets. Trace sct PY. One MG subhedral CP in vein. Mod epidote alteration.
247	248	1	228804	HCORE			A16-12905	<0.005	3cm qtz/calcite veinlets.
248	249	1	228805	HCORE			A16-12905	<0.005	2cm qtz/calcite veinlets.
249	250	1	228806	HCORE			A16-12905	<0.005	2cm qtz/calcite veinlets.
250	251	1	228807	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlets.
251	252	1	228808	HCORE			A16-12905	<0.005	1cm qtz/calcite veinlets.
		0	228809	Blank		Blank	A16-12905	<0.005	
252	253	1	228810	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlets.
253	254	1	228811	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlets.
254	255	1	228812	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlets.
255	256	1	228813	HCORE			A16-12905	<0.005	2cm qtz/calcite veinlets.
256	257	1	228814	HCORE			A16-12905	<0.005	2cm qtz/calcite veinlets.
257	258	1	228815	HCORE			A16-12905	<0.005	3cm qtz/calcite veinlets.
258	259	1	228816	HCORE			A16-12905	<0.005	3cm qtz/calcite veinlets.
		0	228817	STD		CDN_GS_P7J	A16-12905	0.848	
259	260	1	228818	HCORE			A16-12905	<0.005	3cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
260	261	1	228819	HCORE			A16-12905	<0.005	2cm qtz/calcite veinlets.
261	262.1	1.1	228820	HCORE			A16-12905	<0.005	<1cm qtz/calcite veinlets.
262.1	263.15	1.05	228821	HCORE			A16-12905	<0.005	2cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
263.15	264	0.85	228822	HCORE			A16-12905	<0.005	Weakly silified strained zone with 15cm qtz/calcite veining. Trace sct PY assc with veining.
264	265	1	228823	HCORE			A16-12905	0.15	Weakly silicified high strain zone. 15cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
265	266	1	228824	HCORE			A16-12905	0.005	Weakly silicified high strain zone. 5cm qtz/cal veinlets. Trace sct PY assc with veinlets.
		0	228825	DUP	228824		A16-12905	<0.005	

266	267	1	228826	HCORE		A16-12905	0.008	Weakly silicified high strain zone. 3cm qtz/calcite veining. Trace sct PY assc with calcite veining.
267	268	1	228827	HCORE		A16-12905	0.005	HFZ. 1% PY sct on fractured edges.
268	269	1	228828	HCORE		A16-12905	<0.005	HFZ. Trace sct PY on fractured edges.
269	270	1	228829	HCORE		A16-12905	<0.005	HFZ. Trace sct PY on fractured edges.
270	270.75	0.75	228830	HCORE		A16-12905	<0.005	HFZ. Trace sct PY on fractured edges. One ~3cm fractured silicified qtz/carb vein with scattered PY.
270.75	271.85	1.1	228831	HCORE		A16-12905	<0.005	HFZ. Trace sct PY on fractured edges.
271.85	273	1.15	228832	HCORE		A16-12905	<0.005	HFZ. 1cm qtz/cal veinlets.
		0	228833	STD	CDN_GS_P4B	A16-12905	0.421	
273	274	1	228834	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
274	275	1	228835	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
275	276	1	228836	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
276	277	1	228837	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
277	278	1	228838	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
278	279	1	228839	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
		0	228840	Blank	Blank	A16-12905	<0.005	
279	280	1	228841	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
280	281	1	228842	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
281	282	1	228843	HCORE		A16-12905	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
282	283	1	228844	HCORE		A16-12905	<0.005	HFZ. <3cm qtz/cal veinlets. Trace sct PY assc with veinlets.
283	284	1	228845	HCORE		A16-12905	<0.005	HFZ. <2cm qtz/cal veinlets. Trace sct PY assc with veinlets.
284	285	1	228846	HCORE		A16-12954	<0.005	HFZ. <2cm qtz/cal veinlets. Trace sct PY assc with veinlets.
285	286	1	228847	HCORE		A16-12954	<0.005	HFZ. <2cm qtz/cal veinlets. Trace sct PY assc with veinlets.
		0	228848	STD	CDN_GS_P7J	A16-12954	0.731	
286	287	1	228849	HCORE		A16-12954	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
287	288	1	228850	HCORE		A16-12954	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.

288	289	1	228851	HCORE			A16-12954	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
289	290	1	228852	HCORE			A16-12954	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
290	291	1	228853	HCORE			A16-12954	0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
291	292	1	228854	HCORE			A16-12954	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
		0	228855	DUP	228854		A16-12954	<0.005	
292	293	1	228856	HCORE			A16-12954	<0.005	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
293	294	1	228857	HCORE			A16-12954	0.005	HFZ. <3cm qtz/cal veinlets. Trace sct PY assc with veinlets.
294	295	1	228858	HCORE			A16-12954	<0.005	HFZ. <2cm qtz/cal veinlets. Trace sct PY assc with veinlets.
295	296	1	228859	HCORE			A16-12954	0.005	HFZ. <2cm qtz/cal veinlets. Trace sct PY assc with veinlets.
296	297	1	228860	HCORE			A16-12954	0.006	HFZ. <1cm qtz/cal veinlets. Trace sct PY assc with veinlets.
297	298	1	228861	HCORE			A16-12954	0.005	8cm qtz/cal veinlets. Trace sct PY assc with veinlets.
298	299	1	228862	HCORE			A16-12954	0.006	4cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
		0	228863	STD		CDN_GS_P4B	A16-12954	0.446	
299	300	1	228864	HCORE			A16-12954	0.006	2cm qtz/calcite veinlets.
300	301	1	228865	HCORE			A16-12954	0.005	3cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
301	302	1	228866	HCORE			A16-12954	0.006	6cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
302	303	1	228867	HCORE			A16-12954	0.006	2cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
303	304	1	228868	HCORE			A16-12954	0.006	3cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
304	305	1	228869	HCORE			A16-12954	0.006	2cm qtz/calcite veinlets.
305	306	1	228870	HCORE			A16-12954	0.006	3cm qtz/calcite veinlets. Trace sct PY assc with veinlets.
		0	228871	Blank		Blank	A16-12954	0.005	
306	307	1	228872	HCORE			A16-12954	0.006	2cm qtz/calcite veinlets.
307	308	1	228873	HCORE			A16-12954	<0.005	Five 5cm qtz/calcite veinlets with epidote. Locally 1% sct PY along vein margins.
308	309	1	228874	HCORE			A16-12954	<0.005	Three <1-1cm qtz/calcite veinlets with epidote. Locally 1% sct PY along vein margins.
309	310	1	228875	HCORE			A16-12954	<0.005	Three 1-3cm qtz/calcite veinlets with epidote. Locally 1% sct PY along vein margins.

310	311	1	228876	HCORE			A16-12954	<0.005	Three <1cm qtz/calcite veinlets. Trace sct PY along vein margins.
311	312	1	228877	HCORE			A16-12954	<0.005	Four <1-7cm qtz/calcite veinlets with epidote. Locally 2% sct PY along vein margins.
312	313	1	228878	HCORE			A16-12954	<0.005	One 1cm qtz/cal veinlet. Trace sct PY.
		0	228879	STD		CDN_GS_P7J	A16-12954	0.592	
313	314	1	228880	HCORE			A16-12954	<0.005	Seven <1cm wide qtz/cal veinlets with epiodote. Locally 1% scattered PY on vein margins.
314	315	1	228881	HCORE			A16-12954	<0.005	Three 1cm wide qtz/cal veinlets with epidote. Locally 1% sct PY along vein margins.
315	316	1	228882	HCORE			A16-12954	<0.005	Four <1cm wide qtz/cal veinlets with epidote. Locally 1% sct PY along vein margins.
316	317	1	228883	HCORE			A16-12954	0.007	Three 1cm wide qtz/cal veinlets with epidote with locally 1% sct PY along vein margins. One 10cm qtz/crb vein with 3% sct PY throughout.
317	318	1	228884	HCORE			A16-12954	0.015	Strongly silicified. 5cm of thin qtz/crb veinlets (<0.5cm). 7% finely disseminated PY throughout.
318	319	1	228885	HCORE			A16-12954	0.006	3cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
319	320	1	228886	HCORE			A16-12954	<0.005	3cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
		0	228887	DUP	228886		A16-12954	<0.005	
320	321	1	228888	HCORE			A16-12954	<0.005	2cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
321	322	1	228889	HCORE			A16-12954	<0.005	2cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
322	323	1	228890	HCORE			A16-13025	<0.005	7cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
323	324	1	228891	HCORE			A16-13025	<0.005	5cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
324	325	1	228892	HCORE			A16-13025	<0.005	8cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
325	326	1	228893	HCORE			A16-13025	<0.005	2cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
326	327	1	228894	HCORE			A16-13025	<0.005	2cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
		0	228895	STD		CDN_GS_P4B	A16-13025	0.522	
327	328	1	228896	HCORE			A16-13025	<0.005	5cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
328	329	1	228897	HCORE			A16-13025	<0.005	4cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.

329	330	1	228898	HCORE			A16-13025	<0.005	9cm of qtz/cal veinlets(1-3cm). 1% sct PY assoc with veinlets and into host.
330	331	1	228899	HCORE			A16-13025	<0.005	8cm of qtz/cal veinlets. Trace sct PY assoc with veinlets and into host.
331	332	1	228900	HCORE			A16-13025	<0.005	3cm of qtz/cal veinlets. Trace sct PY assoc with veinlets and into host.
332	333	1	228901	HCORE			A16-13025	<0.005	2cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
		0	228902	Blank		Blank	A16-13025	<0.005	
333	334	1	228903	HCORE			A16-13025	<0.005	7cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
334	335	1	228904	HCORE			A16-13025	<0.005	4cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
335	336	1	228905	HCORE			A16-13025	<0.005	4cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
336	337	1	228906	HCORE			A16-13025	<0.005	4cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
337	338	1	228907	HCORE			A16-13025	<0.005	7cm of qtz/cal veinlets. Trace sct PY assoc with veinlets and into host.
338	339	1	228908	HCORE			A16-13025	<0.005	4cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
		0	228909	STD		CDN_GS_P7J	A16-13025	0.678	
339	340	1	228910	HCORE			A16-13025	<0.005	4cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
340	341	1	228911	HCORE			A16-13025	<0.005	4cm of qtz/cal veinlets. Trace sct PY assoc with veinlets.
341	342	1	228912	HCORE			A16-13025	<0.005	2cm of qtz/cal veinlets. Trace sct PY assoc with one <.5cm ank veinlet.
342	343	1	228913	HCORE			A16-13025	<0.005	Three <1cm qtz/cal/veinlet. One veinlet with PY on vein margins.
343	344	1	228914	HCORE			A16-13025	<0.005	<1cm qtz/cal veinlet. Rare sct PY.
344	345	1	228915	HCORE			A16-13025	<0.005	3cm qtz/ank veinlets.
345	346	1	228916	HCORE			A16-13025	<0.005	Four <1-1cm qtz/cal/ank veins with trace sct PY on vein margins. Two qtz/cal veins no minz.
		0	228917	DUP	228916		A16-13025	<0.005	
346	347	1	228918	HCORE			A16-13025	<0.005	Five <1-2cm qtz/ank/epd veins with trace sct PY on vein margins.
347	348	1	228919	HCORE			A16-13025	<0.005	<1cm qtz/ank/hem veinlets. Barren.
348	349	1	228920	HCORE			A16-13025	<0.005	Two <1-1cm wide qtz/ank veinlets with assc PY on margins.
349	350	1	228921	HCORE			A16-13025	0.005	Three <1-2cm qtz/ank/epd veining with assc trace sct PY on margins.
350	351	1	228922	HCORE			A16-13025	<0.005	Six <1cm wide qtz/ank/ veinlets with trace sct PY on veinlet margins.

351	352	1	228923	HCORE		A16-13025	<0.005	One 3cm wide qtz/cal/ank vein with localized 1% sct PY along vein margins and into host.
352	353	1	228924	HCORE		A16-13025	<0.005	Two 1-3cm wide qtz/cal/ank vein with trace sct PY along vein margins.
353	354	1	228925	HCORE		A16-13025	<0.005	Five <1-1.5cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
		0	228926	STD	CDN_GS_P4B	A16-13025	0.454	
354	355	1	228927	HCORE		A16-13025	<0.005	Four <1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
355	356	1	228928	HCORE		A16-13025	0.016	Four <2cm wide qtz/cal/ank veinnlets with trace sct PY along vein margins.
356	357	1	228929	HCORE		A16-13025	<0.005	Four <1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
357	358	1	228930	HCORE		A16-13025	<0.005	Four 1-4cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
358	359	1	228931	HCORE		A16-13025	0.005	Five <2cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
359	360	1	228932	HCORE		A16-13025	<0.005	Five irregular <1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
		0	228933	Blank	Blank	A16-13025	<0.005	
360	361	1	228934	HCORE		A16-13025	<0.005	Three <1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
361	362	1	228935	HCORE		A16-13025	<0.005	Three 1-4cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
362	363	1	228936	HCORE		A16-13025	<0.005	Two 1-2cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
363	364	1	228937	HCORE		A16-13025	<0.005	8cm of irregular qtz/cal/ank veinlets with 1% sct PY along vein margins and into host.
364	365	1	228938	HCORE		A16-13025	0.008	Two 1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
365	366	1	228939	HCORE		A16-13025	<0.005	Five <2cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
366	367	1	228940	HCORE		A16-13025	<0.005	Three <2cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
		0	228941	STD	CDN_GS_P7J	A16-13025	0.74	
367	368	1	228942	HCORE		A16-13025	<0.005	Two <1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
368	369	1	228943	HCORE		A16-13025	<0.005	Six <1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
369	370	1	228944	HCORE		A16-13025	<0.005	Two 1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.
370	371	1	228945	HCORE		A16-13025	0.005	Two <1cm wide qtz/cal/ank veinlets with trace sct PY along vein margins.

371	372	1	228946	HCORE			A16-13025	<0.005	Nine 1-3cm wide qtz/cal/ank veinlets with rare sct PY along vein margins.
372	373	1	228947	HCORE			A16-13025	<0.005	Seven 1-4cm wide qtz/cal/ank veinlets with rare sct PY along vein margins.
373	374	1	228948	HCORE			A16-13025	<0.005	Five 1-2cm wide qtz/cal/ank veinlets with rare sct PY along vein margins.
		0	228949	DUP	228948		A16-13025	<0.005	
374	375	1	228950	HCORE			A16-13025	<0.005	Five <1cm wide qtz/cal/ank veinlets with rare sct PY along vein margins.
375	376	1	228951	HCORE			A16-13025	<0.005	Ten <1cm wide qz/cal veinlets with trace sct PY and CP.
376	377	1	228952	HCORE			A16-13025	0.007	9cm of <1-2cm wide qtz/cal/ank veinlets. Up to 1% sct PY around veinlets and into host.
377	378	1	228953	HCORE			A16-13025	<0.005	10cm of <1cm wide qtz/cal/ank veinlets. Trace sct PY on vein margins.
378	379	1	228954	HCORE			A16-13025	0.007	7cm of <1cm wide qtz/cal/ank veinlets. Trace sct PY on vein margins.
379	380	1	228955	HCORE			A16-13025	<0.005	6cm of <1cm wide qtz/cal/ank veinlets. Trace sct PY on vein margins.
380	381	1	228956	HCORE			A16-13025	0.005	5cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
		0	228957	STD		CDN_GS_P4B	A16-13025	0.412	
381	382	1	228958	HCORE			A16-13025	0.008	11cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
382	383	1	228959	HCORE			A16-13025	0.006	10cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
383	384	1	228960	HCORE			A16-13025	<0.005	5cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
384	385	1	228961	HCORE			A16-13025	<0.005	8cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
385	386	1	228962	HCORE			A16-13025	<0.005	10cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
386	387	1	228963	HCORE			A16-13025	<0.005	7cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
387	388	1	228964	HCORE			A16-13025	<0.005	12cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
		0	228965	Blank		Blank	A16-13025	<0.005	
388	389	1	228966	HCORE			A16-13025	<0.005	8cm of qtz/cal/ank veinlets. 1% sct PY on vein margins and into host.
389	390	1	228967	HCORE			A16-13025	<0.005	10cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
390	391	1	228968	HCORE			A16-13025	<0.005	12 cm of qtz/cal/ank veinlets. 1% sct PY on vein margins and into host.
391	392	1	228969	HCORE			A16-13025	<0.005	8cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.

392	393	1	228970	HCORE			A16-13025	<0.005	10cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
393	394	1	228971	HCORE			A16-13025	0.08	5cm of qtz/cal/ank veinlets. One 9cm qtz/cal/ank vein with 1% sct PY along vein margins and into host.
		0	228972	STD		CDN_GS_P7J	A16-13025	0.706	
394	395	1	228973	HCORE			A16-13025	0.008	10cm of qtz/cal/ank veinlets. 1% sct PY on vein margins.
395	396	1	228974	HCORE			A16-13025	<0.005	2cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
396	397	1	228975	HCORE			A16-13025	0.005	<1cm qtz/cal veinlets.
397	398	1	228976	HCORE			A16-13025	0.005	<1cm qtz/cal veinlets.
398	399	1	228977	HCORE			A16-13025	0.006	<1cm qtz/cal veinlets.
399	400	1	228978	HCORE			A16-13025	<0.005	10cm area of multiple qtz veinlets at high angle to CA.
400	401	1	228979	HCORE			A16-13025	<0.005	2cm of qtz/cal/ank veinlets.
		0	228980	DUP	228979		A16-13025	<0.005	
401	402	1	228981	HCORE			A16-13025	<0.005	<1cm of qtz/cal veinlets.
402	403	1	228982	HCORE			A16-13070	0.011	Four <1cm wide qtz/cal/ank veinlets.
403	404	1	228983	HCORE			A16-13070	0.032	Three <1cm wide qtz/cal/ank veinlets. Trace sct PY on vein margins.
404	405	1	228984	HCORE			A16-13070	0.024	Two <1cm wide qtz/cal/ank veinlets. Trace sct PY on vein margins.
405	406	1	228985	HCORE			A16-13070	<0.005	4cm of <1cm wide irregular qtz/cal/ank veinlets. Trace sct PY on vein margins.
406	407	1	228986	HCORE			A16-13070	<0.005	Four <1cm wide qtz/cal/ank veinlets. Trace sct PY on vein margins.
		0	228987	STD		CDN_GS_P4B	A16-13070	0.372	
407	408	1	228988	HCORE			A16-13070	<0.005	Four <1cm wide qtz/cal/ank veinlets. Trace sct PY on vein margins.
408	409	1	228989	HCORE			A16-13070	<0.005	<2cm of qtz/cal/ank veinlets.
409	410	1	228990	HCORE			A16-13070	0.007	Two qtz/cal/ank veinlets (<1 and 3cm wide). Trace sct PY on vein margins.
410	411	1	228991	HCORE			A16-13070	<0.005	One 1.5cm wide qtz/cal veinlet. Trace sct PY on vein margins.
411	412	1	228992	HCORE			A16-13070	<0.005	<1cm of qtz/cal veining.
412	413	1	228993	HCORE			A16-13070	<0.005	One 2cm wide qtz/cal vein.
413	414	1	228994	HCORE			A16-13070	<0.005	<2cm of qtz/cal veinlets.
		0	228995	Blank		Blank	A16-13070	<0.005	
414	415	1	228996	HCORE			A16-13070	<0.005	2cm of qtz/cal/ank veinlets.
415	416	1	228997	HCORE			A16-13070	<0.005	3m of qtz/cal/ank veinlets.
416	417	1	228998	HCORE			A16-13070	<0.005	One <1cm wide qtz/cal/ ank veinlets with trace PY on halos.

417	418	1	228999	HCORE			A16-13070	<0.005	<1cm of qtz/cal veinlets.
418	419	1	229000	HCORE			A16-13070	<0.005	<1cm of qtz/cal/ank veinlets.
419	420	1	269001	HCORE			A16-13070	<0.005	3cm of qtz/cal veinlets.
		0	269002	STD		CDN_GS_P7J	A16-13070	0.81	
420	421	1	269003	HCORE			A16-13070	<0.005	One 4cm wide qtz/cal/ank veinlet. 2cm of <1cm wide qtz/cal/ ank veinlets. Trace sct PY on vein margins.
421	422	1	269004	HCORE			A16-13070	<0.005	3cm of qtz/cal/ank veinlets. Trace sct PY haloing veinlets.
422	423	1	269005	HCORE			A16-13070	<0.005	One 1.5cm wide qtz/cal/ank veinlet that is broadly folded along CA with 3% sct CG PY in veinlet. Also two 1.5cm wide qtz/cal/ank veinlets ~perpendicular to CA with PY haloing.
423	424	1	269006	HCORE			A16-13070	<0.005	<1cm of qtz/cal/ank veinlets. Trace sct PY in host. One 2mm wide hem veinlet.
424	425	1	269007	HCORE			A16-13070	<0.005	One 1.5cm wide qtz/cal/ank veinlet with 1% sct PY within vein. One .4cm wide qtz/hematite veinlet. Sct PY in host.
425	426	1	269008	HCORE			A16-13070	<0.005	5cm of qtz/cal/ank/hem veinlets (<1-2cm wide). Trace sct PY in veinlets.
426	427	1	269009	HCORE			A16-13070	<0.005	<1cm of qtz/cal veinlets.
		0	269010	DUP	269009		A16-13070	<0.005	
427	428	1	269011	HCORE			A16-13070	<0.005	Three 1-2cm wide qtz/cal/ank veinlets with trace sct PY haloing.
428	429	1	269012	HCORE			A16-13070	<0.005	2cm of qtz/cal veinlets. Trace sct PY in veinlets.
429	430	1	269013	HCORE			A16-13070	<0.005	Three 0.5-1.5cm wide qtz/cal ank veinlets with trace sct PY haloing.
430	431	1	269014	HCORE			A16-13070	<0.005	One 5cm wide qtz/cal/ank veinlet with trace sct PY within.
431	431.7	0.7	269015	HCORE			A16-13193	0.005	Four <1-2cm wide qtz/cal/hem veinlets with trace sct PY in veinlets.
431.7	432.55	0.85	269016	HCORE			A16-13193	0.005	8cm of <1cm wide qtz/cal veinlets wirth trace sct PY in host.
		0	269017	STD		CDN_GS_P4B	A16-13193	0.397	
432.55	433.5	0.95	269018	HCORE			A16-13193	0.006	Semi brecciated section with 2cm of mineralized qtz fe crb veins (0.5% pyrite& sericite-ankerite halos). Hematite veinlets crosscutting throughout
433.5	434.3	0.8	269019	HCORE			A16-13193	0.006	3cm of silicified qtz-fe crb veins. 0.3% pyrite and alteration halos associated with veins. 1cm Late hematite filled qtz crb veins
434.3	435.2	0.9	269020	HCORE			A16-13193	0.006	2.5cm of qtz fe crb veins. 0.5% pyrite proximal to veining in host

435.2	435.9	0.7	269021	HCORE		A16-13193	0.006	3cm qtz fe crb veins. 0.5% med grained pyrite
435.9	436.93	1.03	269022	HCORE		A16-13193	0.023	10cm silicified qtz fe crb veins with up to 1% pyrite and moderate sericite-ankerite alteration halos
436.93	438	1.07	269023	HCORE		A16-13193	0.009	2.5cm silicified qtz fe crb veins with sericite-ankerite halos. 0.5% pyrite stringers proximal to veining
		0	269024	Blank	Blank	A16-13193	0.005	
438	439	1	269025	HCORE		A16-13193	0.008	3cm qtz crb extension veins. 0.3% sct py in host proximal to veins
439	440	1	269026	HCORE		A16-13193	0.007	8cm qtz fe crb veins with minor alteration halos. 1% fine grained pyrite in host proximal to veins
440	441	1	269027	HCORE		A16-13193	0.006	2cm qtz fe crb veins that are slightly brecciated. trace FG pyrite
441	442	1	269028	HCORE		A16-13193	0.007	3cm qtz fe crb veins. 0.5% pyrite in host proximal to veins
442	442.9	0.9	269029	HCORE		A16-13193	0.01	3cm qtz fe crb veins with thin alteration halos. 0.5% pyrite proximal to veining and as replacement of magnetite rich selvages
442.9	444	1.1	269030	HCORE		A16-13193	0.043	5cm silicified qtz fe crb veins with moderate to strong sericite-ankerite alteration halos and up to 1% pyrite proximal to veining and replacing magentite rich selvages
444	445	1	269031	HCORE		A16-13193	0.006	1cm qtz crb stringers. Trace sct py
		0	269032	STD	CDN_GS_P7J	A16-13193	0.681	
445	446	1	269033	HCORE		A16-13193	0.006	3cm qtz fe crb veins with up to 1% pyrite
446	447	1	269034	HCORE		A16-13193	0.007	1cm qtz crb veining. 0.5% local stringers of pyrite replacing magnetite rich selvages
447	448	1	269035	HCORE		A16-13193	0.019	5cm weakly silicified qtz fe crb veins with minor alteration halos and up to 1% pyrite proximal to veining
448	449	1	269036	HCORE		A16-13193	0.006	2cm qtz fe crb veins trace pyrite proximal to veining in host
449	450	1	269037	HCORE		A16-13193	0.006	2cm qtz fe crb veins trace pyrite proximal to veining in host.
450	451	1	269038	HCORE		A16-13193	0.007	2cm qtz fe crb veins trace pyrite proximal to veining in host
451	452	1	269039	HCORE		A16-13193	0.006	4cm weakly silicified qt fe crb veins with up to 1% FG pyrite in weakly altered host
452	453	1	269040	HCORE		A16-13193	0.006	3.5cm barren qtz crb veinlets. trace pyrite in host
453	454	1	269041	HCORE		A16-13193	0.006	2cm weakly silicified qtz fe crb veins with up to 0.5% pyrite in weak alteration halo
454	455	1	269042	HCORE		A16-13193	0.006	5cm brecciated qtz fe crb veins with trace sct pyrite

		0	269043	DUP	269042		A16-13193	0.006	
455	456	1	269044	HCORE			A16-13193	0.007	3cm qtz fe crb veins with up to 1% fine to med grained pyrite proximal to veins in weaky altered host
456	457	1	269045	HCORE			A16-13193	0.008	2.5 cm qtz fe crb veins with trace pyrite scattered in host
457	458	1	269046	HCORE			A16-13193	0.007	2.5 cm qtz fe crb veins with trace pyrite scattered in host
458	459	1	269047	HCORE			A16-13193	0.008	2.5 cm qtz fe crb veins with trace pyrite scattered in host
459	460	1	269048	HCORE			A16-13193	0.011	8cm qt fe crb veins with up to 0.5% pyrite. increase in foliation
460	461	1	269049	HCORE			A16-13193	0.015	5cm qtz fe crb veins with up to 0.5% pyrite.
		0	269050	STD		CDN_GS_P4B	A16-13193	0.46	
461	462	1	269051	HCORE			A16-13193	0.006	5cm qtz fe crb veins. 0.5% fine grained pyrite
462	463	1	269052	HCORE			A16-13193	0.005	2cm barren qtz crb veins. trace py in host proximal to veining
463	464	1	269053	HCORE			A16-13193	0.006	5cm qtz fe crb veins with up to 05% local pyrite
464	465	1	269054	HCORE			A16-13193	0.006	2.5cm qtz crb veins. trc py in host proximal to veins
465	466	1	269055	HCORE			A16-13193	0.006	2.5cm qtz crb veins. trc py in host proximal to veins
466	467	1	269056	HCORE			A16-13193	0.007	2.5cm qtz crb veins. trc py in host proximal to veins
467	467.9	0.9	269057	HCORE			A16-13193	0.007	10cm qtz fe crb veins with epidote content. Up to 0.5% FG pyrite
467.9	468.9	1	269058	HCORE			A16-13193	0.008	10cm qtz fe crb vein ligned with epidote. up to 1% pyrite
		0	269059	Blank		Blank	A16-13193	<0.005	
468.9	469.5	0.6	269060	HCORE			A16-13193	0.206	10cm qtz fe crb vein ligned with epidote. up to 1% pyrite
469.5	470.5	1	269061	HCORE			A16-13193	0.008	1.5 cm barren qtz crb veins. No sig mineralization
470.5	471.5	1	269062	HCORE			A16-13193	0.006	1.5 cm barren qtz crb veins. No sig mineralization
471.5	472.5	1	269063	HCORE			A16-13193	0.012	8cm qtz fe crb veins with up to 1% sct py proximal to veins
472.5	473.3	0.8	269064	HCORE			A16-13193	0.008	3cm qtz fe crb veins with epidote. 0.5% lo cal med grained py
473.3	474.3	1	269065	HCORE			A16-13193	0.178	10cm low angle TCA qtz fe crb vein with epidote content. 1% pyrite
474.3	475	0.7	269066	HCORE			A16-13193	0.01	Same vein as above. 10cm qtz fe crb +/- epd with 1% pyrite

		0	269067	STD		CDN_GS_P7J	A16-13193	0.849	
475	476	1	269068	HCORE			A16-13193	0.01	2cm barren qtz crb veins. No sig mineralization
476	476.75	0.75	269069	HCORE			A16-13193	0.006	2cm barren qtz crb veins. No sig mineralization
476.75	477.3	0.55	269070	HCORE			A16-13193	0.011	2cm barren qtz crb veins. No sig mineralization
477.3	478.25	0.95	269071	HCORE			A16-13193	0.009	2cm barren qtz crb veins. No sig mineralization
478.25	479.1	0.85	269072	HCORE			A16-13193	0.007	3cm qtz fe crb extension veins. Trrace py stringers at litho contact
479.1	480	0.9	269073	HCORE			A16-13193	0.012	2cm barren qtz fe crb veins. No sig mineralization
480	481	1	269074	HCORE			A16-13193	0.008	4cm barren qtz fe crb veins. No sig mineralization
481	482	1	269075	HCORE			A16-13193	0.008	4cm barren qtz fe crb veins. No sig mineralization
		0	269076	DUP	269075		A16-13193	0.008	
482	483	1	269077	HCORE			A16-13193	0.009	2cm silicified qtz fe crb vein with 0.5% pyrite
483	484	1	269078	HCORE			A16-13193	0.01	2cm qtz fe crb veins with up to 0.5% pyrite as well as minor pyrite stringers replacing mag rich selvages
484	485	1	269079	HCORE			A16-13193	0.008	2cm qtz fe crb veins with up to 0.5% pyrite as well as minor pyrite stringers replacing mag rich selvages
485	486	1	269080	HCORE			A16-13193	0.012	2cm qtz fe crb veins with up to 0.5% pyrite as well as minor pyrite stringers replacing mag rich selvages
486	487	1	269081	HCORE			A16-13193	0.013	2cm qtz fe crb veins with up to 0.5% pyrite as well as minor pyrite stringers replacing mag rich selvages
487	488	1	269082	HCORE			A16-13193	0.009	2cm qtz fe crb veins with up to 0.5% pyrite as well as minor pyrite stringers replacing mag rich selvages
488	489	1	269083	HCORE			A16-13193	0.01	2cm qtz fe crb veins with up to 0.5% pyrite as well as minor pyrite stringers replacing mag rich selvages
489	490	1	269084	HCORE			A16-13193	0.008	3cm weakly silicified qtz fe crb vein with up to 1% pyrite.
		0	269085	STD		CDN_GS_P4B	A16-13193	0.471	
490	491	1	269086	HCORE			A16-13193	0.008	2.5cm qtz fe crb veins with 0.5% med grained py (sct/stringer)
491	491.75	0.75	269087	HCORE			A16-13193	0.008	4cm ~barren qtz fe crb veins. Trace pyrite in host proximal to veining
491.75	492.3	0.55	269088	HCORE			A16-13193	0.049	10cm silicified qtz fe crb veins with 2% pyrite

492.3	493.3	1	269089	HCORE		A16-13193	0.042	4cm weakly silicified qtz fe crb veins with 1% pyrite.
493.3	494.3	1	269090	HCORE		A16-13193	0.019	2cm silicified qtz fe crb veins with up to 0.5% pyrite. Minor replacement of mag rich selvages as loose stringers of F-MG pyrite
494.3	495.3	1	269091	HCORE		A16-13193	0.038	2cm silicified qtz fe crb veins with up to 0.5% pyrite. Minor replacement of mag rich selvages as loose stringers of F-MG pyrite
495.3	496.3	1	269092	HCORE		A16-13193	0.01	2cm silicified qtz fe crb veins with up to 0.5% pyrite. Minor replacement of mag rich selvages as loose stringers of F-MG pyrite
496.3	497.3	1	269093	HCORE		A16-13193	0.01	2cm silicified qtz fe crb veins with up to 0.5% pyrite. Minor replacement of mag rich selvages as loose stringers of F-MG pyrite
497.3	498.3	1	269094	HCORE		A16-13193	0.009	2cm silicified qtz fe crb veins with up to 0.5% pyrite. Minor replacement of mag rich selvages as loose stringers of F-MG pyrite
		0	269095	Blank	Blank	A16-13193	0.005	
498.3	499.3	1	269096	HCORE		A16-13193	0.008	2cm silicified qtz fe crb veins with up to 0.5% pyrite. Minor replacement of mag rich selvages as loose stringers of F-MG pyrite
499.3	500.16	0.86	269097	HCORE		A16-13193	0.008	2cm silicified qtz fe crb veins with up to 0.5% pyrite. Minor replacement of mag rich selvages as loose stringers of F-MG pyrite
500.16	501	0.84	269098	HCORE		A16-13193	0.008	1.5cm semi brecciated qtz fe crb veins. 0.5% F-MG eudhedral Py proximal to veining
501	501.8	0.8	269099	HCORE		A16-13193	0.011	2cm qtz fe crb veins with sct-stringer py replacing mag rich vein margins
501.8	502.6	0.8	269100	HCORE		A16-13193	0.026	2-3% pyrite (semi massive in spots where replacement of mag rich selvages creates stringers/bands) 4cm silicified/sheared qtz fe crb veins (similar to what is seen in shear zone) increase in foliation
502.6	503.6	1	269101	HCORE		A16-13193	0.009	3cm qtz fe crb veins. Trace sct py in host proximal to veining. increase in foliation
503.6	504.43	0.83	269102	HCORE		A16-13193	0.011	3cm qtz fe crb veins. Trace sct py in host proximal to veining. increase in foliation
504.43	505.45	1.02	269103	HCORE		A16-13193	22.4	8cm silicified qtz fe crb sheared stringers 1-3mm in width . 2-3% disseminated stringers of fine grained pyrite parallel to foliation

505.45	506.45	1	269104	HCORE			A16-13193	4.36	8cm silicified qtz fe crb sheared stringers 1-3mm in width . 2-3% disseminated stringers of fine grained pyrite parallel to foliation
		0	269105	STD		CDN_GS_2P	A16-13193	1.94	
506.45	507.46	1.01	269106	HCORE			A16-13193	2.58	8cm silicified qtz fe crb sheared stringers 1-3mm in width . 2-3% disseminated stringers of fine grained pyrite parallel to foliation
507.46	508.5	1.04	269107	HCORE			A16-13193	0.027	2% qtz crb veins. No significant mineralization
508.5	509.5	1	269108	HCORE			A16-13193	0.013	2% qtz crb veins. No significant mineralization
509.5	510.5	1	269109	HCORE			A16-13193	0.012	2% qtz crb veins. No significant mineralization
510.5	511.5	1	269110	HCORE			A16-13193	0.012	2% qtz crb veins. No significant mineralization
511.5	512.5	1	269111	HCORE			A16-13193	0.013	2% qtz crb veins. No significant mineralization
512.5	513.5	1	269112	HCORE			A16-13193	0.083	2% qtz crb veins. No significant mineralization
513.5	514.5	1	269113	HCORE			A16-13193	0.138	2% qtz crb veins. Trace pyrite
514.5	515.5	1	269114	HCORE			A16-13193	0.032	2% qtz crb veins. Trace pyrite
		0	269115	DUP	269114		A16-13193	0.025	
515.5	516.5	1	269116	HCORE			A16-13193	3.14	8cm silicified qtz fe crb sheared stringers 1-3mm in width . 2-3% disseminated stringers of fine grained pyrite parallel to foliation
516.5	517.5	1	269117	HCORE			A16-13193	0.05	2% qtz crb veins. Trace pyrite
517.5	518.5	1	269118	HCORE			A16-13193	0.027	2% qtz crb veins. No significant mineralization
518.5	519.5	1	269119	HCORE			A16-13193	0.073	2% qtz crb veins. No significant mineralization
519.5	520.5	1	269120	HCORE			A16-13193	0.011	2% qtz crb veins. No significant mineralization
520.5	521.5	1	269121	HCORE			A16-13193	0.016	2% qtz crb veins. No significant mineralization
521.5	522.5	1	269122	HCORE			A16-13193	0.013	2% qtz crb veins. No significant mineralization
		0	269123	STD		CDN_GS_P4B	A16-13193	0.396	
522.5	523.3	0.8	269124	HCORE			A16-13193	0.022	2% qtz crb veins. Trace pyrite
523.3	524.2	0.9	269125	HCORE			A16-13193	0.175	2% qtz crb veins. No significant mineralization
524.2	524.89	0.69	269126	HCORE			A16-13193	0.164	2% qtz crb veins. No significant mineralization

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-06 DataSet: Brookbank Program: Development

Hole Status:	COMPLETE	**Hole Length (m):**	801	**Logged By:**	D. Leduchowski
Hole Type:	Surface Drill Hole	**Dip (º):**	-57.1	**Date Log Started:**	11/28/2016
Date Drill Started:	10/30/2016	**Azimuth:**	337.7	**Date Log Completed:**	1/30/2017
Date Drill Completed:	11/17/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank	**Company:**	Greenstone Gold Mines
Grid ID:	UTM NAD 83 Zone 16N	**Drill Contractor:**	Forage G4 Drilling
UTM East (m)	439,654.6	**Hole Diameter:**	HQ
UTM North (m):	5,506,745.0	**Casing Size:**	HW
Elevation (masl):	350.228	**Casing Depth (m):**	3
Tenement ID:	TB29041	**Core Storage:**	Old Arena Road
Survey Instrument:	Trimble RTK		
Date Surveyed:	12/20/2016		
Surveyed By:	S. Ouellet		
Tenement Type:	Lease		

Purpose: To test a high grade pocket at depth and convert from inferred to indicated.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 797 **Max Sample Depth (m):** 796

Depth Logged To (m) 801 **Meters Sampled** 382.59

Total Samples 450 **# Assay** 390 **# QAQC:** 60

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-57.1	337.7	TN14	SINGLESHOT	G4	10/30/2016		Yes
7	-57.36	338.58	EZ-GYRO	SINGLESHOT	G4	11/1/2016		Yes
14	-57.6	338.27	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
41	-57.42	337.55	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
59	-57.28	338.48	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
86	-57.08	338.7	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
95	-56.99	338.84	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
104	-56.88	338.8	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
113	-56.83	338.32	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
122	-56.7	339.85	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
131	-56.63	340.93	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
140	-56.59	339.98	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
149	-56.53	339.76	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
158	-56.54	340.35	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
167	-56.42	338.1	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
175	-56.24	338.9	EZ-GYRO	SINGLESHOT	G4	11/3/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
185	-56.22	340.24	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
212	-56.36	340.54	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
221	-56.33	340.61	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
230	-56.24	341.18	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
239	-56.23	341.55	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
248	-56.15	340.88	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
253	-55.91	340.89	EZ-GYRO	SINGLESHOT	G4	11/4/2016		Yes
253.01	-55.9	340.88	EZ-GYRO	SINGLESHOT	G4	11/4/2016	retake of measurement at same depth; 0.01m added to depth	Yes
257	-56.11	340.5	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
259	-56.08	341.06	EZ-GYRO	SINGLESHOT	G4	11/4/2016		Yes
266	-56.03	340.11	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
275	-55.94	340.62	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
304	-55.81	340.73	EZ-GYRO	SINGLESHOT	G4	11/4/2016		Yes
320	-55.72	338.94	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
329	-55.64	339.57	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
338	-55.55	340.68	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
347	-55.52	340.34	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
349	-55.28	340.72	EZ-GYRO	SINGLESHOT	G4	11/5/2016	retake of measurement at same depth	Yes
349.01	-55.29	340.82	EZ-GYRO	SINGLESHOT	G4	11/5/2016	retake of measurement at same depth; 0.01m added to depth	Yes
356	-55.53	340.94	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
365	-55.5	340.91	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
373	-55.28	340.98	EZ-GYRO	SINGLESHOT	G4	11/5/2016		Yes
373.01	-55.3	341.73	EZ-GYRO	SINGLESHOT	G4	11/5/2016	retake of measurement at same depth; 0.01m added to depth	Yes
383	-55.42	341.56	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
392	-55.31	341.39	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
401	-55.27	340.88	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
419	-55.21	340.11	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
424	-55.03	341.5	EZ-GYRO	SINGLESHOT	G4	11/6/2016		Yes
424.01	-55.04	341.51	EZ-GYRO	SINGLESHOT	G4	11/6/2016	retake of measurement at same depth; 0.01m added to depth	Yes
428	-55.21	340	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
446	-55.21	342	EZ-GYRO	MULTISHOT	G4	11/17/2016		Yes
451	-54.9	341.71	EZ-GYRO	SINGLESHOT	G4	11/6/2016		Yes
451.01	-54.91	341.99	EZ-GYRO	SINGLESHOT	G4	11/6/2016	retake of measurement at same depth; 0.01m added to depth	Yes
464	-55.22	342.49	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
473	-55.2	340.66	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
478	-55.06	340.85	EZ-GYRO	SINGLESHOT	G4	11/8/2016		Yes
478.01	-55.14	341.72	EZ-GYRO	SINGLESHOT	G4	11/8/2016	retake of measurement at same depth; 0.01m added to depth	Yes
482	-55.17	340.3	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
491	-55.08	341.63	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
500	-55.09	341.18	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
509	-55.05	340.75	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
518	-55.03	340.12	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
527	-54.99	340.13	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
545	-54.95	340.41	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
547	-54.67	341.91	EZ-GYRO	SINGLESHOT	G4	11/9/2016		Yes
547.01	-54.7	340.79	EZ-GYRO	SINGLESHOT	G4	11/9/2016	retake of measurement at same depth; 0.01m added to depth	Yes
568	-54.81	340.65	EZ-GYRO	SINGLESHOT	G4	11/9/2016	Optimised	Yes
568.01	-54.78	340.64	EZ-GYRO	SINGLESHOT	G4	11/9/2016	Optimised - 2 shots done added 0.01m	Yes
572	-54.84	340.51	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
590	-54.77	340.79	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
608	-54.7	340.55	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
617	-54.63	339.96	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
635	-54.52	342.02	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
644	-54.43	341.99	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
653	-54.39	341.03	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
662	-54.28	342.25	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
671	-54.07	342.36	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
682	-53.46	343.54	EZ-GYRO	SINGLESHOT	G4	11/12/2016	Optimised	Yes
689	-53.38	343.75	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
698	-53.32	343.66	EZ-GYRO	MULTISHOT	G4	11/16/2016		Yes
707	-53.25	343.71	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
709	-53.13	343.63	EZ-GYRO	SINGLESHOT	G4	11/12/2016	Optimised	Yes
716	-53.18	343.07	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
725	-52.8	343.93	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
734	-52.25	343.76	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
743	-51.99	343.82	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
752	-51.7	344.79	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
761	-51.04	346.18	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
762	-51.04	346.51	EZ-GYRO	SINGLESHOT	G4	11/13/2016	Optimised	Yes
770	-49.94	347.25	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
784	-48.36	346.82	EZ-GYRO	SINGLESHOT	G4	11/16/2016	Optimised	Yes
788	-48.45	347.1	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes
797	-47.81	346.58	EZ-GYRO	MULTISHOT	G4	11/16/2016	Optimised	Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	3	3		OB	Overburden		
3	27	24		E1A	Basalt	Massive	Fine grained
27	34	7		E1A	Basalt		Fine grained
34	121.29	87.29		E1A	Basalt	Brecciated	Fine grained
121.29	151	29.71		E1A	Basalt	Massive	Medium grained
151	191	40		E1A	Basalt	Massive	Fine grained
191	260.82	69.82		E1A	Basalt	Pillowed	Fine grained

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
260.82	262.24	1.42	75	I3R	Quartz - Feldspar Porphyry	Porphyritic (with phenocrysts)	Medium grained
262.24	288	25.76		E1A	Basalt	Pillowed	Fine grained
288	390.2	102.2		E1A	Basalt	Massive	Medium grained
390.2	411	20.8		E1A	Basalt	Massive	Fine grained
411	421	10		E1A	Basalt	Massive	Medium grained
421	431.82	10.82		E1A	Basalt	Massive	
431.82	443	11.18		E1A	Basalt	Massive	Medium grained
443	444.2	1.2		E0	Ultramafic Volcanic		
444.2	483.72	39.52		E1A	Basalt	Massive	Medium grained
483.72	506.76	23.04		E1A	Basalt	Massive	Fine grained
506.76	586.13	79.37		E1A	Basalt	Massive	Medium grained
586.13	657	70.87		E1A	Basalt	Pillowed	Fine grained
657	678.95	21.95		E1A	Basalt		Fine grained
678.95	721	42.05		E1A	Basalt	Massive	Medium grained
721	737	16		E1A	Basalt	Massive	Fine grained
737	759.91	22.91		E1A	Basalt		Fine grained
759.91	761.8	1.89		E1A	Basalt		Fine grained
761.8	761.82	0.02		FLT	Fault Zone		Fine grained
761.82	761.87	0.05		E1A	Basalt		Fine grained
761.87	761.9	0.03		FLT	Fault Zone		Fine grained
761.9	768.7	6.8		S4	Conglomerate		Coarse grained
768.7	769.85	1.15	90	FLT	Fault Zone		Fine grained
769.85	770	0.15		S4	Conglomerate		Coarse grained
770	770.05	0.05		FLT	Fault Zone		Fine grained
770.05	778.5	8.45		S4	Conglomerate		Coarse grained
778.5	778.6	0.1		FLT	Fault Zone		Fine grained
778.6	778.9	0.3	95	S4	Conglomerate		Coarse grained
778.9	779.95	1.05	90	FLT	Fault Zone		Fine grained
779.95	780.65	0.7		S4	Conglomerate		Coarse grained
780.65	780.8	0.15		FLT	Fault Zone		Fine grained
780.8	780.95	0.15		S4	Conglomerate		Coarse grained
780.95	781.05	0.1		FLT	Fault Zone		Fine grained
781.05	784.95	3.9	97	S4	Conglomerate		Coarse grained
784.95	785.03	0.08		FLT	Fault Zone		Fine grained
785.03	801	15.97		S4	Conglomerate		Coarse grained

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**3**	3		**OB**	**Overburden**			D. Leduchowski

Overburden.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
3	**27**	24		**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Massive metavolcanic. High-Ti: spotted ilmenite up to 13.7 metres. Med grey with white spots and local green. FG. Very Weakly magnetic throughout. Weakly foliated. Pervasive mod calcite alt'n in host (in areas of low sil). Mod-str EPD bands. Patchy mod crb alt'n. Lcl trc PY sct around qz-crb veins and assoc. w/sil+ser. From 13.7 to 19.75m; 24.3 to 27m - beige-green with pinkish hue. Mod-str pervasive sil + ser. Mod crb and hem. Calcite + EPD absent.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
3	13.7	1:	Chlorite	Weak (1-25%)	Pervasive	Chl is pervasive and is locally banded. Crb assoc. w/veins. EPD assoc. w/veins (no pillows). Prv dis MAG. Spotted ilmenite.
		2:	Fe-Carbonate	Weak (1-25%)	Patches	
		3:	Epidote	Weak (1-25%)	Localized	
		4:	Magnetite	Weak (1-25%)	Pervasive	
		5:	Ilmenite	Strong (51-75%)	Spotted	
13.7	19.75	1:	Silicified	Weak (1-25%)	Pervasive	Pervasive str ser + sil. Patchy crb and hem associated together. Prv dis MAG.
		2:	Sericite	Weak (1-25%)	Pervasive	
		3:	Fe-Carbonate	Weak (1-25%)	Patches	
		4:	Hematite	Weak (1-25%)	Patches	
		5:	Magnetite	Weak (1-25%)	Pervasive	
19.75	24.3	1:	Chlorite	Weak (1-25%)	Pervasive	Chl is pervasive and is locally banded. Crb assoc. w/veins. EPD assoc. w/veins (no pillows). Prv dis MAG.
		2:	Fe-Carbonate	Weak (1-25%)	Patches	
		3:	Epidote	Weak (1-25%)	Localized	
		4:	Magnetite	Weak (1-25%)	Pervasive	
24.3	27	1:	Silicified	Moderate (26-50%)	Pervasive	Pervasive str ser + sil. Patchy crb and hem associated together. Prv dis MAG.
		2:	Sericite	Weak (1-25%)	Pervasive	
		3:	Fe-Carbonate	Weak (1-25%)	Patches	
		4:	Hematite	Weak (1-25%)	Patches	
		5:	Magnetite	Weak (1-25%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
3	6	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.8	Quartz-carb-cal extension veins
6	9	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			17.4	
9	12	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	Quartz-carb-cal extension veins; quartz-carb-epd extension veins.
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
12	15	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Vein 3 thickness of 8cm.
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			10	
15	18	1	Quartz-Fe-Carbonate	Extension Vein			7	No longer V2C in silicified zone.
18	21	1	Quartz-Fe-Carbonate	Extension Vein			5	V2C appears away from silicifed zone.
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.8	
21	24	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.9	
24	27	1	Quartz-Fe-Carbonate/Calcite	Vein > 3"			64	Large 64cm quartz-crb-cal vein.Qz-carb-cal extension veinlets.
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
27	**34**	7		**E1A**	**Basalt**		Fine grained	D. Leduchowski

Sheared metavolcanic (possible patchy actinolite). Dark green-grey with bands of light-med green-beige. FG. Nonmagnetic. Mod-str shearing. Fabric defined by banded-patchy mod EPD+CHL+ACT. Mod patchy crb associated with veins. Barren.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
27	34	1	Chlorite	Weak (1-25%)	Banding	Banded/patchy chl+epd+act define shearing. Patchy crb associated with veins. EPD+CHL+ACT associated together.
		2	Epidote	Weak (1-25%)	Patches	
		3	Actinolite	Weak (1-25%)	Patches	
		4	Fe-Carbonate	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
27	30	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
30	33	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
34	**121.29**	87.29		**E1A**	**Basalt**	Brecciated	Fine grained	D. Leduchowski

Flow breccia. Med green-grey w/pinkish to orange hue near veins and hematite. FG. Very weakly magnetic to nonmagnetic-magnetism drops completely where hematite is strong (~109-117m). Mod brecciated. Patchy chl alt'n in threads. Lcl silicified areas of ser, crb, hem (some as spc) 34m to 47.3m, 111.1 to 111.3m. Patchy fracture filling epd veins throughout. Lcl possible banded actinolite at 51.5m, 90m. Local possible pillows from 46 to 47m. Qz-carb-calcite extension veinlets, tension veins and some fracture filling veins throughout. Lcl spc hem at vein margins. Lcl trace PY sct in volcanic and in and around qz-crb veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
34	47.3	1	Silicified	Weak (1-25%)	Localized	Sil+ser+crb +/- spc hem associated together. Patchy chlorite threads throughout host. Carb localized in and around veins. Spc at vein margins.
		2	Sericite	Weak (1-25%)	Localized	
		3	Fe-Carbonate	Weak (1-25%)	Localized	
		4	Specular hematite	Weak (1-25%)	Localized	
		5	Chlorite	Weak (1-25%)	Patches	
47.3	89	1	Chlorite	Weak (1-25%)	Patches	Patchy chl threads. Local carb associated with veins. Hematite/specularite associated with veins/vein margins with carb. Patchy fracture-filling EPD. Patchy weak sil associated with carb.
		2	Fe-Carbonate	Weak (1-25%)	Patches	
		3	Hematite	Weak (1-25%)	Localized	
		4	Epidote	Weak (1-25%)	Patches	
89	90	1	Chlorite	Weak (1-25%)	Patches	Patchy chl in host. Patchy local actinolite associated with chlorite and calcite (reaction from MP139).
		2	Hematite	Weak (1-25%)	Localized	
		3	Actinolite	Weak (1-25%)	Localized	
90	109	1	Chlorite	Weak (1-25%)	Patches	Patchy chl threads. Local carb associated with veins. Hematite/specularite associated with veins/vein margins +/- carb. Local weak EPD fracture filling.
		2	Fe-Carbonate	Weak (1-25%)	Patches	
		3	Hematite	Weak (1-25%)	Patches	
		4	Epidote	Weak (1-25%)	Localized	
109	121.29	1	Hematite	Weak (1-25%)	Pervasive	Str. increase in hematite. Rock is pervasive hematite altered. Oxidized zone. Mag susc=0. Patchy sil and crb alteration. Chl patches.
		2	Silicified	Weak (1-25%)	Patches	
		3	Fe-Carbonate	Weak (1-25%)	Localized	
		4	Chlorite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
111.1	111.15	FLT2	Fault - breccia	Cohesive fault breccia in hematite rich rock.
117	117.5	FLT2	Fault - breccia	Uncohesive fault breccia in hematite rich rock.
117.5	121.29	FLT2	Fault - breccia	Various fault gouges up to 10cm in size throughout interval.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
36	39	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			10.5	
39	42	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	Quartz-carb-calcite extension (some fracture filling) veins and quartz-carb-epd fracture filling veins
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
42	45	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	Quartz-carb-calcite extension (some fracture filling) veins and quartz-carb-epd fracture filling veins
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.75	
45	48	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	Quartz-carb-calcite extension (some fracture filling) veins and quartz-carb-epd fracture filling veins
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3.2	
48	51	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7.5	Mostly grey calcite in veins. Quartz-carb-calcite extension (some fracture filling) veins and quartz-carb-epd fracture filling veins.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
51	54	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9.4	Quartz-carb extension veins, fracture filling veins. Calcite is mostly white, but some grey.
54	57	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	Quartz-carb-calcite extension veins, few are fracture filling. Quartz-carb-epd fracture filling veins.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
57	60	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	Quartz-carb-cal extension veins, some fracture filled and brecciated. Quartz-carb-epd fracture filling veins.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
60	63	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	Vein3 thickness of 3cm. Quartz-carb-calcite extension veins,fracutre filling veins. Veins are brecciated. Fracture filling qz-crb-epd veins.
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			15	
63	66	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	Vein 3 thickness of 2cm. Quartz-carb-calcite extension veins, some fracture filling. Lcl brecciated quartz-carb-calcite vein. Quartz-carb-epd fracture filling veins.
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			3	
66	69	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
69	72	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9.2	Quartz-carb-calcite (mostly grey calcite) extension veins. Quartz-carb-epd fracture filling veins.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.8	
72	75	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.75	
75	78	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
78	81	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Local brecciated quartz-calcite vein at 78m. Calcite is dark grey.
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			17	
81	84	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10.5	Quartz-carb-cal extension veins. Fracture filled quartz-carb-cal stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
84	87	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	Quartz-carb-cal (some grey calcite) extension veins. Quartz-carb-cal fracture filling stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6	
87	90	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.3	Quartz-carb-cal (some grey calcite) extension veins. Fracture filled quartz-carb-cal stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	
90	93	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Quartz-carb-cal extension veins (some grey calcite). Fracture filled quartz-carb-cal stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
93	96	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Quartz-carb-calcite extension veins (hematite in some). Fracture filling quartz-carb-cal veins.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
96	99	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.1	Quartz-carb-cal extension veins and tension gashes. Veins relatively straight and undeformed.
99	102	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	Quartz-carb-cal extension veins and pull-apart veins. Strain is slightly greater than above. Fracture filled quartz-carb-cal stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
102	105	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.5	Quartz-carb-calcite extension veins and tension gashes. Fracture filled quartz-carb-cal stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6.5	
105	108	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Vein 3 thickness = 1cm. Quartz-carb-calcite extension veins (some grey calcite). Quartz-carb-calcite fracture filled stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
108	111	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.1	Quartz-carb-calcite extension veins and tension gashes (white).
111	114	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	Quartz-carb-calcite extension veins and tension gashes (white). Fracture filling quartz-carb-cal stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
114	117	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	Quartz-carb-calcite extension veins and tension gashes.
117	120	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7.5	Some vuggy quartz-carb-calcite veins.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
121.29	**151**	29.71		**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Massive metavolcanic. Gabbroic. Light-med green with reddish hue. MG. Light to dark green equigranular phenocrysts. Slightly more magnetic than above flow breccia. Very weakly foliated. Moderate contact at 121.29m (leads one to think that this is gabbro and not massive flow). Faulted/brecciated in top 5m of unit. HFZ throughout ranging from .12m to 1.0m in size. Incompetent rock - poor RQD. Mod-str patchy hematite alt'n concentrated at fractures. Strongly oxidized. Mod-str banded-patchy EPD alt'n. Local weak carb alt'n associated with quartz-calcite veins. Barren - no signficant mineralization. Quartz-calcite stringers (pink to white in colour - may be from hematite staining, some vuggy).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
121.29	147	1:	Hematite	Weak (1-25%)	Patches	Patchy hematite alteration associated with fractures. Oxidized zone. EPD is also fracture filling but also patchy and banded. Local carb associated with veins.
		2:	Epidote	Weak (1-25%)	Patches	
		3:	Fe-Carbonate	Weak (1-25%)	Localized	

Structures

From	To	Code	Structure Type	Comments
121.29	150	HFZ	High fracture zone	HFZ in gabbro ranging .12m to 3.0m in size.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
123	126	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	Fracture filling quartz-calcite stringers.
126	129	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	Quartz-carbonate-calcite extension veins. Fracture filling quartz-calcite veins (some grey calcite).
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
129	132	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
132	135	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	Vuggy quartz-carb-calcite vein with EPD at margins 10cm in size.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
135	138	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	Quartz-carb-calcite stringers (some fracture filling).
138	141	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.75	Some vuggy quartz-carb-calcite veins.
141	144	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	Some vuggy quartz-carb-calcite veins (some grey calcite).
144	147	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	Quartz-carb-calcite extension veins and tension gashes (some grey calcite).
147	150	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			0.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
151	**191**	40		**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Massive metavolcanic. Med green-grey. FG. Mod magnetic starting at 163.9m. Patchy-banded magnetite starts at 174.6m-1cm to 5cm contorted bands of magnetite. V.weak foliation. HFZ's throughout volcanic up to 1m in size. Patchy mod EPD and ANK alt'n; fracture filling and often concentrated near veins. Mod patchy hem associated with fractures. Quartz-carb-calcite +/- epd stringers and veinlets - some veins vuggy with coarse PY minz.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
163.9	174.6	1:	Magnetite	Weak (1-25%)	Pervasive	Increase in magnetism from above. Goes from <1 mag susc to ~40. Patchy epd and ank associated with veins (some fracture filling). Patchy hem associated with fractures.
		2:	Ankerite	Weak (1-25%)	Patches	
		3:	Epidote	Weak (1-25%)	Patches	
		4:	Hematite	Weak (1-25%)	Patches	
174.6	180	1:	Magnetite	Weak (1-25%)	Banding	Patchy contorted bands of magnetite up to 5cm wide.

Structures

From	To	Code	Structure Type	Comments
156	166	HFZ	High fracture zone	HFZ in metavolcanic ranging .20m to 1m in size.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
153	156	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
156	159	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
159	162	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.9	Quartz-carb-calcite stringers +/- epd at margins; fracture filling.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		65	0.5	
162	165	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5	Quartz-carb-cal-epd stringers; some fracture filling
165	168	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	Quartz-carb-cal-epd stringers - some fracture filling. Quartz-carb-calcite stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
168	171	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	Fracture filling quartz-carb-cal +/- epd often at vein margins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
171	174	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			7	Quartz-carb-calcite +/- epd at vein margins - irregular in shape; some fracture filling. PY sct in vuggy qz-ankerite veins.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
174	177	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	Quartz-carb-calcite-epd stringers - some fracture filling - irregular shape. Quartz-ank-cal stringers - some are irregular and fracture filling - some vuggy.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			10	
177	180	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Quartz-carb-cal extension veins, some fracture filled stringers. Quartz-carb-epd extension veins and fracture filled stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein		60	2	
180	183	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			9	Quartz-carb-cal stringers, some fracture filling. Calcite is grey.. Quartz-carb-epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
183	186	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	High angle vuggy qz-carb-cal veins. Quartz-carb-cal +/- epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.5	
186	189	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Vuggy quartz-ank-cal veins. Irregular orientation.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
191	**260.82**	69.82		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed metavolcanic. Med green-grey. FG. Mod magnetic throughout. Increased magnetism in pillow selvages. V. weakly foliated. HFZ's throughout up to 4m in size and associated with vuggy qz-ank-cal. Inc PY around HFZ. Quartz-ank +/- epd amygdules up to few cm in size. Patchy ankerite and epd alt'n. Patchy hem along fracture planes - oxidized. Quartz-carb-ank veins +/- epd veins and quartz-grey calcite veins. Veins vuggy with coarse euhedral f-mg PY in and around veins. PY sct in pillow selvages.

Veins

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
192	195	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
195	198	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	Vuggy quartz-ank-cal veins. Some high angle, some irregular orientation.
198	201	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	Vuggy quartz-ank-cal stringers. Irregular orientation, many are fracture filling.
201	204	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	Vuggy quartz-ank-cal stringers. Irregular orientation, many are fracture filling.
204	207	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		80	3	Vuggy Quartz-ank-calcite stringers. Some high angle, some irregular orientation.
207	210	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			10	Vuggy quartz-ank-calcite veins associated with HFZ. Irregular orientation, some fracture filling.
210	213	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	Quartz-ank-cal stringers, most with irregular orientation.Some fracture filling.
213	216	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	Quartz-ank-cal stringers, most with irregular orientation.Some fracture filling.
216	219	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	Quartz-ank-cal stringers (grey calcite). Most are irregular. +/- EPD at vein margins.
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
219	222	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	Quartz-ank-cal stringers, most with irregular orientation.Some fracture filling.
222	225	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	Quartz-ank-cal stringers, most with irregular orientation.Some fracture filling.
225	228	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	Quartz-ank-cal stringers associated with HFZ. Most are irregular and some fracture filling. +/- EPD at vein margins.
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			0.7	
228	231	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Quartz-carb-cal extension veins (some vuggy) and tension gashes. Some fracture filling. Quartz-carb-epd fracture filling veins.
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	

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Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
231	234	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		63	4	Quartz-ank-cal extension veins often with hematite at margins; high angle; some fracture filling. Quartz-carb-epd fracture filling veins.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
234	237	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	Quartz-ank-calcite extension veins, some stringers that are fracture filling. Fracture filling quartz-carb-epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
237	240	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	vuggy quartz-ank-calcite extension veins and fracture filling veins. Fracture filling quartz-carb-epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
240	243	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	vuggy quartz-ank-calcite extension veins and fracture filling veins. Fracture filling quartz-carb-epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
243	246	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	vuggy quartz-ank-calcite extension veins and fracture filling veins. Fracture filling quartz-carb-epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
246	249	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	HFZ's associated with vuggy quartz-ank-calcite veins; mineralized, irregular orientation. Quartz-carb-epd fracture filling stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
249	252	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	Vuggy quartz-ank-cal extension veins, with hematite locally at margins. Veins vary from high angle to core axis to irregular orientation.
252	255	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	irregular shaped vuggy quartz-ank-cal veins with PY, some fracture filling.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
255	258	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.5	Vuggy quartz-ank-cal veins associated with HFZ, many mineralized with PY. Some high angle, some irregular and fracture filling.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
260.82	**262.24**	1.42	75	**I3R**	**Quartz - Feldspar Porphyry**	Porphyritic (with phenocrysts)	Medium grained	D. Leduchowski
			25	E1A	Basalt	Massive	Fine grained	

Intermediate quartz-feldspar porphyry. Sheared upper and lower contact with mafic volcanic after HFZ. Dark grey-beige. Porphyritic

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meters

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Log Length (m): 801

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

texture-quartz+feldspar porphyroblasts. Mod foliated. Nonmagnetic. Pervasive mod-str silicification throughout. Mod hematite alt'n with sil. Trc euhedral sct PY in host and replacing ank+hem. Quartz-ank-cal extension veins and fracture filling stringers. Patchy chl in vein. 25% mafic volcanic mixed with lithology.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
260.82	262.24	1:	Silicified	Weak (1-25%)	Pervasive	Pervasive mod silicification with hematite in porphyry. Patchy/banded chl alt'n associated with veins. Patchy ank alt'n.
		2:	Hematite	Weak (1-25%)	Pervasive	
		3:	Chlorite	Weak (1-25%)	Patches	
		4:	Fe-Carbonate	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
260.82	262.24	CT	Litho contact - tectonic (sheared / faulted)	Sheared upper and lower contact between quartz-feldspar porphyry and volcanic.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
262.24	**288**	25.76		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed metavolcanic. Dark grey w/greenish tint; significantly darker than metavolcanic above. Closer to ultramafic composition. Weakly foliated with mod-str foliation/shear at 267 to 272m. Mod magnetic throughout. Lcl ilmenite? sct from 267.25 to 267.35m. Weak patchy hematite alt'n-less oxidized than above. Patchy mod chl alt'n. Spotty chl replacing amphibole? at 275 to 278m. Weak-mod patchy ank near veins. Quartz-ank-cal extension veins and fracture filling stringers throughout (some vuggy). Trc PY sct to up to 1% lcl PY sct in host and in and around veins and pillow selvages, replacing magnetite and ank.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
262.24	267.25	1:	Chlorite	Weak (1-25%)	Banding	Banded-patchy chl alt'n in mafic volcanic. Patchy hem alt'n.
		2:	Hematite	Weak (1-25%)	Patches	
267.25	267.35	1:	Ilmenite	Weak (1-25%)	Spotted	Spotted ilmenite near rims of grey quartz-carb-cal veins.
267.35	288	1:	Chlorite	Weak (1-25%)	Patches	Mod patchy-banded chl alt'n, locally spotted replacing amphibole? from 274 to 278m. Patchy hem alt'n.
		2:	Hematite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
271	272	SHD	Shear / mylonitic foliation	Mod foliation/shearing in mafic volcanic

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
264	267	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			20	Increased veining in silicified mafic volcanic. Quartz-calcite +/- carb extension veins and tension gashes. Some fracture filling veins. Few with trace PY.
267	270	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			20	Quartz-calcite +/- carb extension veins and tension gashes. Some fracture filling veins. Few with trace PY.
270	273	1	Quartz-Fe-Carbonate/Calcite	Shear Vein		55	20	Quartz-carb-cal-chl shear veins-all parallel. Few smaller veins but one vein is 18cm in width. Quartz-carb-cal extension veins and tension gashes throughout.
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			9.5	
273	276	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	Quartz-calcite +/- carb extension veins and tension gashes. Some fracture filling veins. Few with trace PY.
276	279	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	Quartz-calcite +/- carb extension veins and tension gashes. Some fracture filling veins. Few with trace PY.
279	282	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Quartz-calcite +/- carb extension veins and tension gashes. Some fracture filling veins. Few with trace PY.
282	285	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Quartz-calcite +/- carb extension veins and tension gashes. Some fracture filling veins. Few with trace PY.
		2	Fe-Carbonate Vein	Stringer Zone - vein <1/4"			2	
285	288	1	Fe-Carbonate Vein	Stringer Zone - vein <1/4"			10	Carbonate-calcite fracture filling stringers. Irregular orientation.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
288	**390.2**	102.2		**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Massive metavolcanic. Gabbroic. Light-med green-grey. MG. Light to dark green equigranular phenocrysts.
Nonmagnetic to very weakly magnetic except mod mag from 335m to 344m. Very weakly foliated. Gradational contact with pillowed volcanic. Mod patchy EPD alt'n. Local weak carb alt'n associated with quartz-calcite veins. Fracture filling hematite alteration. Weak-mod silicified. Barren - no signficant mineralization up until 335m. From 335 to 340m: up to 3% lcl PY sct in and around vuggy quartz-calcite-epd veins; magnetic. Quartz-calcite extension veins and fracture filling stringers (pink to white in colour - may be from hematite staining, some vuggy). Observed other vuggy veins with PY but did not sample.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
335	344	1:	Magnetite	Weak (1-25%)	Pervasive	Pervasive dis mag throughout gabbro and associated with epidote and hematite. Patchy hematite, ankerite and epd alteration in gabbro.
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Ankerite	Weak (1-25%)	Patches	
		4:	Epidote	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
335.5	335.7	FLT	Fault	Faulting in gabbro. Quartz-calcite veining in fill.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
288	291	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Quartz-ank-cal extension veins and quartz-carb-epd stringers/fracture filling veins in gabbro.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
291	294	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	Quartz-calcite extension veins, tension gashes and some fracture filling stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
294	297	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			22	Quartz-carb-calcite +/- chl extension veins (+tension gashes), angle varies by about 10 degrees throughout. Brecciated vein with PY minz.
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			11	
297	300	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		45	1.5	Quartz-calcite extension veins and tension gashes. Fracture filling carb-epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
300	303	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	Quartz-carb-calcite (grey) veins +/- local hematite at vein margins. Fracture filling carb-epd stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
303	306	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Quartz-carb-calcite +/- hematite extension veins and tension gashes. Fracture filling quartz-calcite stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			0.5	
306	309	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.6	Quartz-carb-calcite +/- hematite extension veins.
309	312	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Vuggy calcite-quartz extension veins and some tension gashes. Carbonate +/- EPD fracture filling stringers.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
312	315	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	Quartz-calcite fracture filling stringers.

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
315	318	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.5	Quartz-calcite +/- EPD fracture filling stringers. Silicified quartz-carb extension vein.
		2:	Quartz-Fe-Carbonate / Silicified	Extension Vein		57	1	
318	321	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			0.5	
321	324	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	Vuggy quartz-calcite veins
324	327	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	Quartz-calcite +/- EPD fracture filling stringers. Silicified quartz-carb extension vein.
		2:	Quartz-Fe-Carbonate / Silicified	Extension Vein			0.4	
327	330	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	2.4	Quartz-calcite extension veins, weakly silicified. Some veins vuggy.
330	333	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	Quartz-calcite fracture filling stringers
333	336	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	Vuggy, mineralized white-pink quartz-calcite-chl vein associated with faulting at 335.45m.
		2:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			10	
336	339	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	Quartz-calcite extension veins; random orientation. Quartz-calcite +/- epd fracture filling stringers throughout
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
339	342	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
342	345	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
345	348	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Quartz-calcite extension veins, some irregular form
348	351	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			0.8	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
351	354	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			0.5	
354	357	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	Quartz-calcite extension veins. 7cm quartz-calcite-epd vein with PY at margins.
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein		58	7	
357	360	1:	Quartz / Silicified - Sulphide Replaced	Vein > 3"			10	Silicified quartz-hematite-carbonate-chl vein with sulphide replacing ankerite, hematite, chl and at margins.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1	
360	363	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
390.2	**411**	20.8		**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Mafic volcanic. From 390.2 to 391.4m: altered mafic volcanic. Dark grey. FG. Strongly magnetic - mag susc reads up to 350. Pervasive magnetite overprinted by hematite. Mod silicified. Mod shearing and foliation. Foliation varies from ~25 to 35 degrees. Up to 2% sct-ban PY replacing magnetite / hematite and aligned along shear. Vuggy fracture filling quartz-calcite stringers.
391.4 to 411m: Dark grey-green. FG. Mod-strong mag. Pervasive dis mag throughout host; patchy magnetite in host. Mag+hem +/- epd associated together around vein margins. Lcl silicification 393.7 to 393.8m, 405.3 to 407m. Fracture filling chlorite threads from 401 to 411m. Quartz-carb extension veins and fracture filling stringers + vuggy quartz-carb-calcite veins with PY. Trc PY sct in host and up to 2% PY locally sct around vuggy quartz-carb-cal veins, associated with fracture planes, and replacing magnetite/hematite.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
363	366	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
366	369	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1	
369	372	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Quartz-calcite and quartz-calcite epd extension veins
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein		55	2	
372	375	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		65	4	
375	378	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
378	381	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			3	
381	384	1:	Quartz-Fe-Carbonate / Silicified	Extension Vein			10	Silicified quartz-carbonate-chl veins. Mineralized quartz-hem-epd vein.
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	
384	387	1:	Quartz-Fe-Carbonate/Epidote	-			3	Quartz-carbonate-epd extension veins (some vuggy). PY mineralized.
387	390	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	Fracture filling quartz-carb-calcite stringers

Alteration

From	To	#	Alteration	Intesity	Style	Comments
390.2	391.4	1:	Magnetite	Strong (51-75%)	Pervasive	Pervasive magnetite overprinting hematite in alteration zone near upper contact with gabbro. Patchy silicification. Patchy chl alt'n in veins.
		2:	Hematite	Weak (1-25%)	Pervasive	
		3:	Silicified	Weak (1-25%)	Patches	
		4:	Chlorite	Weak (1-25%)	-	

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Hole Length (m): 801
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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
391.4	405.3	1:	Magnetite	Weak (1-25%)	Pervasive	Pervasive magnetite dis in host and also patchy mag in host. Patchy hem+carb+epd alt'n often near veins.
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Fe-Carbonate	Weak (1-25%)	Patches	
		4:	Epidote	Weak (1-25%)	Patches	
405.3	407	1:	Silicified	Weak (1-25%)	Patches	Patchy silicification around veins in host
407	411	1:	Magnetite	Weak (1-25%)	Pervasive	Pervasive magnetite dis in host and also patchy mag in host. Patchy hem+carb+epd alt'n often near veins.
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Fe-Carbonate	Weak (1-25%)	Patches	
		4:	Epidote	Weak (1-25%)	-	

Structures

From	To	Code	Structure Type	Comments
390.2	391.4	FOL	Foliation	Foliation/shearing in altered volcanic near upper gabbro contact

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
393	396	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Vuggy quartz-calcite and vuggy quartz-carb-epidote. PY minz associated with qz-carb-epd.
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	
396	399	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
399	402	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	Vuggy quartz-carb-cal veins with PY mineralization and fracture filling quartz-calcite veins.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
402	405	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	Vuggy quartz-calcite-epd veins with PY minz. Quartz-carb extension veins.
		2:	Quartz-Fe-Carbonate	Extension Vein			2	
405	408	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	Quartz-carb-epidote extension veins
408	411	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
411	**421**	10		**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Massive metavolcanic. MG. Medium grained plagioclase with epidote staining in fine-grained groundmass. Moderately magnetic. Weakly foliated. Gradational upper contact with mafic volcanic. Pervasive mod silicification throughout. Pervasive mod mag. Patchy hem + epd + carb alt'n. Patchy fracture filling chlorite threads. Quartz-carb-cal +/- epd extension veins and fracture filling stringers. Lcl trc PY sct in host.

DataSet: Brookbank
HoleID: B-16-06
meters

Hole Length (m): 801
Log Length (m): 801

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
411	414	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
		2	Quartz-Fe-Carbonate	Extension Vein			1.5	
414	417	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
417	420	1	Quartz-Fe-Carbonate / Silicified	Stockwork Veins			3	Silicified quartz-carb stockveins, all individually about 1mm in width.
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
421	**431.82**	10.82	**E1A**	**Basalt**	Massive		D. Leduchowski

Massive metavolcanic. Med-dark grey in upper half to green-grey in lower half. FG. Locally white-green phenocrysts of plagioclase stained by epidote. Mod to strong magnetic throughout. Weakly foliated. Pervasive mod silicification throughout. Pervasive mod-str mag, and local banded magnetite. Patchy hematite and hematite threads, often associated with epd and carb alt'n. Patchy fracture filling chlorite threads. PY sct throughout host, replacing magnetite and sct in and around quartz-carb +/- epd veins. Quartz-carb-cal +/- epd extension veins and fracture filling stringers

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
423	426	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	
426	429	1	Quartz-Fe-Carbonate	Extension Vein			5	Quartz-carb extension veins and tension gashes. Some faulted.

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
431.82	**443**	11.18	**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Massive metavolcanic. Significantly coarser-grained than above. MG. Gabbroic. Med-dark green. Dark green equigranular phenocrysts. Mod magnetic in upper portion of contact and weakly magnetic in lower portion. Very weakly foliated. Quartz-carb-calcite +/- epd extension veins and stringers. Up to 1% PY locally sct in and around veins and aligned along shear.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
432	435	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Ultramafic. Talc extension veins throughout. Quartz-carb-calcite extension veins and fracture filling stringers.
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
435	438	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

DataSet: Brookbank

HoleID: B-16-06

Hole Length (m): 801

Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
438	441	1	Quartz-Fe-Carbonate/Epidote	Extension Vein			5	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

443 444.2 1.2 **E0** **Ultramafic Volcanic** D. Leduchowski

Ultramafic volcanic. Dark grey-green with pink; strongly foliated and sheared. Moderately magnetic throughout. Significantly more altered than above. Strong pervasive hem+mag+carb alt'n. Banded chl alteration. <1cm wide talc veins. Quartz-carb-calcite +/- epidote extension veins and stringers. Up to 1% PY locally sct in and around veins and aligned along shear.

Structures

From	To	Code	Structure Type	Comments
443	444.2	SHD	Shear / mylonitic foliation	Strong shearing and foliation in ultramafic

444.2 483.72 39.52 **E1A** **Basalt** Massive Medium grained D. Leduchowski

Massive metavolcanic. Significantly coarser-grained than above. MG. Gabbroic. Med-dark green. Dark green equigranular phenocrysts. Mod magnetic in upper portion of contact and weakly magnetic in lower portion. Very weakly foliated. Quartz-carb-calcite +/- epd extension veins and stringers. Up to 1% PY locally sct in and around veins and aligned along shear.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
447	450	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	Talc veining
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
450	453	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	
453	456	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			8.5	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.5	
456	459	1	Quartz-Fe-carbonate	Extension Vein			5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
459	462	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			7	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	
462	465	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			8	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
465	468	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			6.5	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
468	471	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
471	474	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.5	
474	477	1:	Quartz-Fe-carbonate	Extension Vein			7.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	
477	480	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.8	
480	483	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
483.72	**506.76**	23.04	**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Massive metavolcanic. Hi-titanium-Mod spotted ilmenite in first 4m of lithology. Dark green-grey. No visible phenocrysts, but no pillows (massive). Mod magnetic throughout. Weakly foliated with strong local foliation/shear from 487.5 to 489m. Patchy mod hematite and epidote alteration. Local specularite at 501.5m. Patchy chlorite threads associated with veins. Local mod silicification. Quartz-carb +/- cal+epd extension veins and fracture filling veins. Up to 1% PY sct in and around veining and associated with silicification, also trc PY sct in host.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
486	489	1:	Quartz-Fe-carbonate	Extension Vein			15	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
489	492	1:	Quartz-Fe-carbonate	Extension Vein			15	Silicified quartz-carbonate vein with PY mineralization
		2:	Quartz-Fe-Carbonate /	Vein > 3"			20	
492	495	1:	Quartz-Fe-carbonate	Extension Vein			7	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
495	498	1:	Quartz-Fe-carbonate	Extension Vein			2	Quartz-carbonate extension veins and quartz-carb tension gashes/stringers.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.5	
498	501	1:	Quartz-Fe-carbonate	Extension Vein			4	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
501	504	1:	Quartz-Fe-carbonate	Extension Vein			25	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			7	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
506.76	**586.13**	79.37	**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Massive metavolcanic. Significantly coarser-grained than above. MG. Gabbroic. Med-dark green. Dark green equigranular phenocrysts. Mod magnetic throughout. Massive to very weakly foliated. Patchy mod hematite, epd and chl alt'n often associated with veining. Dis mod mag in host. Quartz-carb +/- calcite +/- epd extension veins and stringers. Local trc PY sct in and around veins and in host.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
507	510	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	
510	513	1:	Quartz-Fe-carbonate	Extension Vein			5	Quartz-carb extension veins and quartz-carb fracture filling stringers
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	
513	516	1:	Quartz-Fe-carbonate	Extension Vein			9	Quartz-carb extension veins and quartz-carb fracture filling stringers
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	
516	519	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
519	522	1:	Quartz-Fe-carbonate	Extension Vein			7	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
522	525	1:	Quartz-Fe-carbonate	Extension Vein			5.5	
525	528	1:	Quartz-Fe-carbonate	Extension Vein			4	
528	531	1:	Quartz-Fe-carbonate	Extension Vein			10	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
531	534	1:	Quartz-Fe-carbonate	Extension Vein			2.5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	
534	537	1:	Quartz-Fe-carbonate	Extension Vein			4	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.5	
537	540	1:	Quartz-Fe-carbonate	Extension Vein			5.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
540	543	1:	Quartz-Fe-carbonate	Extension Vein			6.5	Quartz-carbonate extension veins and grey quartz-calcite fracture filling stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	
543	546	1:	Quartz-Fe-carbonate	Extension Vein			3.5	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
546	549	1:	Quartz-Fe-carbonate	Extension Vein			2.5	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	

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Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
549	552	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			11 2	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
552	555	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			10 1	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
555	558	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			13 4	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
558	561	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			7 1	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
561	564	1: Quartz-Fe-Carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			5 2	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
564	567	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			7 2	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
567	570	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			9 2	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
570	573	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			7 5	Quartz-carbonate extension veins, grey quartz-calcite stringers and epidote stringers
573	576	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			2 1	
576	579	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			5 2	
579	582	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			5 1.5	
582	585	1: Quartz-Fe-carbonate 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stringer Zone - vein <1/4"			5 1.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
586.13	**657**	70.87		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed metavolcanic. Rare pillows. Light-dark green-grey. Fine-grained. Locally mod foliated and sheared. Mod magnetic throughout (inside and outside pillows). Quartz-carb +/- epidote, hematite amygdules. Patchy mod hematite, epd and chl alt'n often associated with veining but also in host. Weak to mod silicified. Dis mod mag in host. Quartz-carb +/- calcite +/- epd extension veins

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HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

and stringers. Local trc PY to up to 3% PY lcl sct in and around veins and in host.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
633	633.8	1:	Silicified	Weak (1-25%)	Pervasive	Pervasive mod silicification around veins in host. Inc. PY associated with sil.

Structures

From	To	Code	Structure Type	Comments
591	603	FOL	Foliation	Weak to moderately foliated pillowed mafic volcanic
628.5	634.5	SHD	Shear / mylonitic foliation	Local weak to moderate shearing in pillowed mafic volcanic

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
588	591	1:	Quartz-Fe-carbonate	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
591	594	1:	Quartz-Fe-carbonate	Extension Vein			4	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
594	597	1:	Quartz-Fe-carbonate	Extension Vein			5	
597	600	1:	Quartz-Fe-carbonate	Extension Vein			1.5	
600	603	1:	Quartz-Fe-carbonate	Extension Vein			6	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
603	606	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6	
		2:	Quartz-Fe-carbonate	Extension Vein			1.5	
606	609	1:	Quartz-Fe-carbonate	Extension Vein			2.5	
609	612	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1	Silicified quartz-carb extension veins
		2:	Quartz-Fe-Carbonate / Silicified	Extension Vein			4	
612	615	1:	Quartz-Fe-carbonate	Extension Vein			2	
615	618	1:	Quartz-Fe-carbonate	Extension Vein			2	
618	621	1:	Quartz-Fe-carbonate	Extension Vein			2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
621	624	1:	Quartz-Fe-carbonate	Extension Vein			3	
624	627	1:	Quartz-Fe-carbonate	Extension Vein			7	

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Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
627	630	1:	Quartz-Fe-carbonate	Extension Vein			15	
630	633	1:	Quartz-Fe-carbonate	Extension Vein			25	
633	636	1:	Quartz-Fe-carbonate	Extension Vein			20	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
636	639	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7.5	
639	642	1:	Quartz-Fe-carbonate	Vein > 3"			20	
		2:	Quartz-Fe-carbonate	Extension Vein			7	
642	645	1:	Quartz-Fe-carbonate	Extension Vein			7	
645	648	1:	Quartz-Fe-carbonate	Extension Vein			8	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	
648	651	1:	Quartz-Fe-carbonate	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	
651	654	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			5	
		2:	Quartz-Fe-carbonate	Extension Vein			3	
654	657	1:	Quartz-Fe-carbonate	Extension Vein			4	Specular hematite in veins
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
657	**678.95**	21.95	**E1A**	**Basalt**		Fine grained	D. Leduchowski

Altered metavolcanic. Light to dark green-grey-pink. FG. Locally mod foliated and sheared. Mod magnetic throughout - with decrease in quartz flooded areas. Strongly altered and silicified in top 9 metres of lithology. Patchy mod hematite, epidote, chlorite and carb alteration. Pink-white quartz-carb veining up to ~30cm in thickness and grey quartz-carb extension veining. Trc PY to up to 2% PY locally sct in and around veins,and replacing hematite and chlorite.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
657	666	1:	Silicified	Moderate (26-50%)	Pervasive	Pervasive mod silicification around veins in host associated with PY. Patchy banded chlorite. FeCrb alteration haloes associated with veins.
		2:	Chlorite	Weak (1-25%)	Patches	
		3:	Ankerite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
657	666	SHD	Shear / mylonitic foliation	Local moderate foliation and shearing in metavolcanic

Veins

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
657	660	1	Quartz-Fe-carbonate	Extension Vein			38	Wide pink-white quartz-carb veins with hematite. Well mineralized.
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			8	
660	663	1	Quartz-Fe-carbonate	Extension Vein			30	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			10	
663	666	1	Quartz-Fe-carbonate	Extension Vein			25	
666	669	1	Quartz-Fe-carbonate	Extension Vein			8	
669	672	1	Quartz-Fe-carbonate	Extension Vein			9	
672	675	1	Quartz-Fe-carbonate	Extension Vein			2.5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
675	678	1	Quartz-Fe-carbonate	Extension Vein			3	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
678.95	**721**	42.05	**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Massive metavolcanic. Significantly coarser-grained than above. MG. Gabbroic. Irregular contact with above lithology. Med-dark green. Dark green equigranular phenocrysts. Weak-mod magnetic throughout. Massive to very weakly foliated. Patchy mod hematite, epd and chl alt'n often associated with veining. Dis mod mag in host. Quartz-carb +/- calcite +/- epd extension veins and stringers. Local rare trc PY sct in and around veins and in host.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
681	684	1	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	
		2	Quartz-Fe-carbonate	Extension Vein			1	
684	687	1	Quartz-Fe-carbonate	Extension Vein			3	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.5	
687	690	1	Quartz-Fe-carbonate	Extension Vein			3	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
690	693	1	Quartz-Fe-carbonate	Extension Vein			2.1	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
693	696	1	Quartz-Fe-carbonate	Extension Vein			2	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
696	699	1	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	Quartz-carb veins +/- chlorite
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
699	702	1	Quartz-Fe-carbonate	Extension Vein			1	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	

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Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
702	705	1	Quartz-Fe-carbonate	Extension Vein			2	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
705	708	1	Quartz-Fe-carbonate	Extension Vein			4	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			0.5	
708	711	1	Quartz-Fe-carbonate	Extension Vein			7	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
711	714	1	Quartz-Fe-carbonate	Extension Vein			5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
714	717	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
717	720	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.2	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	

From	To			Lith Code	Rocktype	Texture	GrainSize	Logged By
721	**737**	16		**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Massive metavolcanic. FG. Med-dark green. Mod magnetic throughout. Weakly to moderately foliated and sheared. Patchy mod hematite, epd and chl alt'n often associated with veining. Dis mod mag in host. Quartz-carb +/- calcite +/- epd extension veins and stringers. Stronger mineralization than above gabbro - trc PY to up to 1% PY locally sct in and around quartz-carb hem stained veins and replacing chlorite and hematite in host.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
723	726	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	
726	729	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			20	
729	732	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
732	735	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	

From	To			Lith Code	Rocktype	Texture	GrainSize	Logged By
737	**759.91**	22.91		**E1A**	**Basalt**		Fine grained	D. Leduchowski

Foliated metavolcanic. Transitional shear zone-does not look as sheared as main Brookbank shear. Brookbank main shear zone was missed? FG. Med-dark green-grey. Moderately foliated and sheared. Rare pillows. Quartz-carb-epidote amygdules. Pervasive mod-strong silicification. Patchy mod hematite, epd and chl alt'n often associated with veining. dis mod mag in host. Quartz-carb hem stained extension veins, grey quartz-calcite fracture filling stringers and extension veins. Trc PY sct in and around quartz-carb veins and in host replacing chlorite.

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
737	759.91	1:	Silicified	Weak (1-25%)	Pervasive	Pervasive mod silicification in mod sheared metavolcanic

Structures

From	To	Code	Structure Type	Comments
737	759.91	SHD	Shear / mylonitic foliation	Mod shearing in mafic metavolcanic, transition to stronger shear below

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
738	741	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
741	744	1:	Quartz-Fe-carbonate	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			7	
744	747	1:	Quartz-Fe-carbonate	Extension Vein			2.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			8	
747	750	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	
750	753	1:	Quartz-Fe-carbonate	Extension Vein			16	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
753	756	1:	Quartz-Fe-carbonate	Extension Vein			40	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	
756	759	1:	Quartz-Fe-carbonate	Extension Vein			8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	

759.91 **761.8** 1.89 **E1A** **Basalt** Fine grained D. Leduchowski

Sheared Hi-Ti metavolcanic. Dark green. FG. Mod-strongly foliated and sheared. Spotty, mod ilmenite/leucoxene throughout lithology. Very weakly magnetic. Mod-strong pervasive chl alt'n. Weak pervasive silicification. Silicified quartz-carb extension veins throughout. Unmineralized.
Black flt contact with lithology-seen twice from 762.7-763m, 2.5-4.5cm, v. str silicification, dark, vfine-grained groundmass, cohesive fault cataclasite, unmineralized, nonmagnetic.

Structures

From	To	Code	Structure Type	Comments
759.91	761.8	SHD	Shear / mylonitic foliation	Strongly sheared mafic metavolcanic

761.8 **761.82** 0.02 **FLT** **Fault Zone** Fine grained D. Leduchowski

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Black fault. Planar.

Structures

From	To	Code	Structure Type	Comments
761.8	761.82	FLT4	Fault - cataclasite	Planar cohesive black fault cataclasite.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
761.82	**761.87**	0.05		**E1A**	**Basalt**		Fine grained	D. Leduchowski

Sheared metavolcanic/ultramafic-same as above.

Structures

From	To	Code	Structure Type	Comments
761.82	761.87	SHD	Shear / mylonitic foliation	Strongly sheared mafic metavolcanic

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
761.87	**761.9**	0.03		**FLT**	**Fault Zone**		Fine grained	D. Leduchowski

Black fault. Planar.

Structures

From	To	Code	Structure Type	Comments
761.87	761.9	FLT4	Fault - cataclasite	Planar cohesive black fault cataclasite.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
761.9	**768.7**	6.8		**S4**	**Conglomerate**		Coarse grained	D. Leduchowski

Sheared polymictic conglomerate. Beige-green-brown. Granitoid clasts, jasper clasts in medium-coarse grained matrix. Coarse-grained. Nonmagnetic. Mod-strong banded sericite, chlorite alt'n in moderately silicified conglomerate. Quartz-carb extension veins. Unmineralized.
Black fault seen multiple times, most prominent 768.7-769.84m, 778.7-781m. Mostly planar, but also contorted and folded, dark grey-black, v.str sil, vfg, nonmagnetic. Unmineralized.

Structures

From	To	Code	Structure Type	Comments
761.9	768.7	SHD	Shear / mylonitic foliation	Strongly sheared polymictic conglomerate

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
762	765	1	Quartz-Fe-carbonate	Extension Vein			8	
765	768	1	Quartz-Fe-carbonate	Extension Vein			6.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
768.7	**769.85**	1.15	90	**FLT**	**Fault Zone**		Fine grained	D. Leduchowski
			10	S4	Conglomerate		Coarse grained	

90% black fault with 10% conglomerate. Black fault varies from contorted to planar.

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
768.7	769.85	FLT4	Fault - cataclasite	Cohesive black fault cataclasite.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
769.85	**770**	0.15		**S4**	**Conglomerate**		Coarse grained	D. Leduchowski

Conglomerate. Same as above.

Structures

From	To	Code	Structure Type	Comments
769.85	770	SHD	Shear / mylonitic foliation	Strongly sheared polymictic conglomerate

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
770	**770.05**	0.05		**FLT**	**Fault Zone**		Fine grained	D. Leduchowski

Black fault. Planar.

Structures

From	To	Code	Structure Type	Comments
770	770.05	FLT4	Fault - cataclasite	Cohesive black fault cataclasite.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
770.05	**778.5**	8.45		**S4**	**Conglomerate**		Coarse grained	D. Leduchowski

Conglomerate. Same as above.

Structures

From	To	Code	Structure Type	Comments
770.05	778.5	SHD	Shear / mylonitic foliation	Strongly sheared polymictic conglomerate

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
771	774	1	Quartz-Fe-carbonate	Extension Vein			2	
774	777	1	Quartz-Fe-carbonate	Extension Vein			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
778.5	**778.6**	0.1		**FLT**	**Fault Zone**		Fine grained	D. Leduchowski

Black fault.

Structures

From	To	Code	Structure Type	Comments
778.5	778.6	FLT4	Fault - cataclasite	Cohesive black fault cataclasite.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
778.6	**778.9**	0.3	95	**S4**	**Conglomerate**		Coarse grained	D. Leduchowski
			5	FLT	Fault Zone		Fine grained	

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Conglomerate. Same as above. Small contorted band of black fault.

Structures

From	To	Code	Structure Type	Comments
778.6	778.9	SHD	Shear / mylonitic foliation	Strong shearing in polymictic conglomerate

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
778.9	**779.95**	1.05	90	**FLT**	**Fault Zone**		Fine grained	D. Leduchowski
			10	S4	Conglomerate		Coarse grained	

90% black fault, 10% conglomerate (same as above).

Structures

From	To	Code	Structure Type	Comments
778.9	779.95	FLT4	Fault - cataclasite	Cohesive black fault cataclasite. Strongly silicified.

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
779.95	**780.65**	0.7	**S4**	**Conglomerate**		Coarse grained	D. Leduchowski

Conglomerate. Same as above.

Structures

From	To	Code	Structure Type	Comments
779.95	780.65	SHD	Shear / mylonitic foliation	Strong shearing in polymictic conglomerate

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
780.65	**780.8**	0.15	**FLT**	**Fault Zone**		Fine grained	D. Leduchowski

Black fault. Varies from planar to contorted.

Structures

From	To	Code	Structure Type	Comments
780.65	780.8	FLT4	Fault - cataclasite	Cohesive black fault cataclasite.

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
780.8	**780.95**	0.15	**S4**	**Conglomerate**		Coarse grained	D. Leduchowski

Conglomerate.

Structures

From	To	Code	Structure Type	Comments
780.8	780.95	SHD	Shear / mylonitic foliation	Strong shearing in polymictic conglomerate

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
780.95	**781.05**	0.1	**FLT**	**Fault Zone**		Fine grained	D. Leduchowski

Black fault. Planar.

Structures

From	To	Code	Structure Type	Comments

DataSet: Brookbank
HoleID: B-16-06

Hole Length (m): 801
Log Length (m): 801

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
780.95	781.05	FLT4	Fault - cataclasite			Cohesive black fault cataclasite.		
781.05	**784.95**	3.9	97	**S4**	**Conglomerate**		Coarse grained	D. Leduchowski
			3	FLT	Fault Zone		Fine grained	
Conglomerate. Same as above. Small contorted 2cm black fault.								
784.95	**785.03**	0.08		**FLT**	**Fault Zone**		Fine grained	D. Leduchowski
Black fault. Planar.								
785.03	**801**	15.97		**S4**	**Conglomerate**		Coarse grained	D. Leduchowski
Sheared polymictic conglomerate. Beige-green-brown. Granitoid clasts, jasper clasts in medium-coarse grained matrix. Coarse-grained. Nonmagnetic. Mod-strong banded sericite, chlorite alt'n in moderately silicified conglomerate. Quartz-carb extension veins. Unmineralized.								

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
786	789	1:	Quartz-Fe-carbonate	-			1.5	
789	792	1:	Quartz-Fe-carbonate	Extension Vein			3	
792	795	1:	Quartz-Fe-carbonate	Extension Vein			3	
795	798	1:	Quartz-Fe-carbonate	Extension Vein			3	
798	801	1:	Quartz-Fe-carbonate	Extension Vein			3	

DataSet: Brookbank **Hole Length (m): 801**

HoleID: B-16-06 **Max Samp Depth (m): 796**

Total meters Sampled: 382.59

Primary Assay Samples:	390	86.67 %
Field Duplicate Samples:	15	3.33 %
Standard/Blank Samples:	45	10 %
Total Samples:	450	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
10	11	1	229001	HCORE			A16-12957	<0.005	3cm qz-calcite extension veins.
11	11.8	0.8	229002	HCORE			A16-12957	<0.005	5cm qz-calcite-epd extension veins.
11.8	12.5	0.7	229003	HCORE			A16-12957	0.008	50cm of quartz-calcite-epd veins. Trc PY sct in and around veins and inside host metavolcanic.
12.5	13	0.5	229004	HCORE			A16-12957	<0.005	3cm qz-calcite extension veins. Trc PY sct in host metavolcanic and along vein margins.
13	14	1	229005	HCORE			A16-12957	<0.005	4cm qz-calcite extension veins. Trc PY sct in host metavolcanic and in veins and along vein margins.
14	15	1	229006	HCORE			A16-12957	<0.005	3.5cm qz-carb extension veins. mod ser+sil. Very trc PY sct.
		0	229007	STD		CDN_GS_P4B	A16-12957	0.378	
15	16	1	229008	HCORE			A16-12957	0.006	3.5cm qz-carb extension veins. mod ser+sil. Very trc PY sct.
16	17	1	229009	HCORE			A16-12957	0.005	2cm qz-carb extension veins. Mod ser+sil. Trc PY sct.
17	18	1	229010	HCORE			A16-12957	<0.005	3.5cm qz-carb extension veins. Mod ser+sil. Trc PY sct and associated with silicification/sericitization in host.
18	19	1	229011	HCORE			A16-12957	<0.005	2cm qz-carb extension veins. Mod ser+sil. Trc PY sct.
19	19.75	0.75	229012	HCORE			A16-12957	<0.005	3cm qz-carb extension veins. Mod ser+sil. Trc PY sct (coarser grained than above).
19.75	20.9	1.15	229013	HCORE			A16-12957	0.019	2.5cm qz-calcite veins. No longer silicified.
		0	229014	Blank		Blank	A16-12957	<0.005	
20.9	22	1.1	229015	HCORE			A16-12957	<0.005	4cm qz-calcite veins. Spc hematite at margins.
22	23	1	229016	HCORE			A16-12957	<0.005	4cm qz-calcite veins. Spc hematite at margins.
23	23.6	0.6	229017	HCORE			A16-12957	0.05	7cm qz-calcite veins.
23.6	24.3	0.7	229018	HCORE			A16-12957	<0.005	3.5cm qz-calcite veins.
24.3	25	0.7	229019	HCORE			A16-12957	<0.005	70cm vuggy qz-calcite vein. Barren.
25	26	1	229020	HCORE			A16-12957	<0.005	3.5cm qz-crb veins. Mod sil. Barren.
		0	229021	STD		CDN_GS_P7J	A16-12957	0.654	

26	27	1	229022	HCORE			A16-12957	0.01	3.5cm qz-crb veins. Mod sil. Barren.
27	28	1	229023	HCORE			A16-12957	0.011	HFZ. 2cm qz-calcite veins.
28	29	1	229024	HCORE			A16-12957	0.009	HFZ. 4cm qz-calcite veins. Actinolite(?) banded with epd and chlorite. Mod shearing.
29	30	1	229025	HCORE			A16-12957	0.008	3cm qz-calcite veins. Mod shearing in basalt. Fabric defined by EPD and chl.
30	31	1	229026	HCORE			A16-12957	0.062	3cm qz-calcite veins. Mod shearing in basalt. Fabric defined by EPD and chl.
31	32	1	229027	HCORE			A16-12957	0.006	2.5cm qz-calcite veins. Mod shearing in basalt. Actinolite(?) + epd + chl.
35	36	1	229028	HCORE			A16-12957	0.26	5cm qz-calcite veins. Mod silicification. Trc PY sct in veins and along vein margins in host.
		0	229029	DUP	229028		A16-12957	0.268	
36	37	1	229030	HCORE			A16-12957	0.009	3.5cm qz-calcite veins. Weaker silicification than above. Very rare trc PY.
37	38	1	229031	HCORE			A16-12957	0.021	3.5 cm qz-calcite veins. Weakly silicified. Trc mg PY sct along vein contacts.
38	39	1	229032	HCORE			A16-12957	0.014	5cm qz-calcite veins. Lcl actinolite (?). One qz-calcite vein 1.5cm in width-looks barren.
39	40	1	229033	HCORE			A16-12957	0.006	5cm qz-calcite veins. Mod silicification and brecciation. Trc PY sct along margins of several veins.
40	41	1	229034	HCORE			A16-12957	0.009	4cm qz-calcite veins. Weak silicification and brecciation. Trc fg PY sct in and around veins and associated with brecciation.
41	42	1	229035	HCORE			A16-12957	<0.005	3cm qz-calcite veins.
		0	229036	STD		CDN_GS_P4B	A16-12957	0.391	
42	43	1	229037	HCORE			A16-12957	<0.005	3cm qz-calcite veins.
43	44	1	229038	HCORE			A16-12957	0.005	3.5cm qz-calcite veins (grey).
44	45	1	229039	HCORE			A16-12957	<0.005	3.5cm qz-calcite veins (grey).
45	46	1	229040	HCORE			A16-12957	0.005	3.5cm qz-calcite veins.
46	47	1	229041	HCORE			A16-12957	0.005	5.5cm qz-calcite veins. Quartz-calcite vein up to 3cm in size and weakly brecciated. Weakly silicified. Trc PY sct at vein margins.
47	48	1	229042	HCORE			A16-12957	0.005	2.5cm qz-calcite veins.
		0	229043	Blank		Blank	A16-12957	<0.005	
48	49	1	229044	HCORE			A16-12957	<0.005	3.5cm qz-calcite veins. Rare trc PY sct in host.
49	50	1	229045	HCORE			A16-12957	<0.005	3.5cm qz-calcite veins. Rare trc PY sct in host.

56	57	1	229046	HCORE			A16-13189	<0.005	4cm qz-calcite veins. Trc PY sct in and along veins and in host.
57	58	1	229047	HCORE			A16-13189	<0.005	4cm qz-calcite veins (lots grey calcite). Trc PY sct along margin of vein but not inside.
58	59	1	229048	HCORE			A16-13189	<0.005	6cm qz-calcite veins (lots grey calcite).
59	60	1	229049	HCORE			A16-13189	0.006	4cm qz-calcite veins (lots grey calcite). Trc PY sct inand around veins.
		0	229050	STD		CDN_GS_P7J	A16-13189	0.772	
60	61	1	229051	HCORE			A16-13189	0.006	4cm qz-calcite veins (lots grey calcite). Trc PY sct inand around veins and replacing chlorite.
61	62	1	229052	HCORE			A16-13189	0.005	3cm qz-calcite veins (lots grey calcite). Trc PY sct in and around veins. PY is CG.
62	63	1	229053	HCORE			A16-13189	0.011	7cm qz-calcite veins (lots grey calcite). Trc PY sct along margins of qz-epd stringers and in and around veins.
63	64	1	229054	HCORE			A16-13189	<0.005	3cm qz-calcite veins.
64	65	1	229055	HCORE			A16-13189	<0.005	3cm qz-calcite veins.
82	83	1	229056	HCORE			A16-13189	<0.005	5cm qz-calcite veins. Rare trc PY sct in host.
83	84	1	229057	HCORE			A16-13189	0.005	6cm qz-calcite veins. Trc PY sct along margins of qz-calcite veins and inside vein.
		0	229058	DUP	229057		A16-13189	0.005	
84	85	1	229059	HCORE			A16-13189	<0.005	2% PY locally sct around 2.2cm wide qz-calcite and inside vein. PY is mostly fine-grained around vein margins with some mg PY sct in host. 4cm qz-calcite veins.
85	86	1	229060	HCORE			A16-13189	0.01	4cm quartz-calcite veins. Trc local PY sct in host and in and around veins.
86	87	1	229061	HCORE			A16-13189	0.006	Moderately silicified from 86.05 to 86.15cm. Local 1% PY sct in and around grey quartz-calcite vein and associated with sil.
87	88	1	229062	HCORE			A16-13189	0.005	2cm qz-calcite veins. Trc PY sct in host and in and around margins of grey quartz-calcite vein.
95.44	96.5	1.06	229063	HCORE			A16-13189	0.012	2cm qz-calcite veins. Trc mg-cg PY sct in and around veins (locally up to 1% PY over 10cm).
96.5	97.54	1.04	229064	HCORE			A16-13189	0.006	2cm qz-calcite veins. Trc mg PY sct throughout host.
		0	229065	STD		CDN_GS_P4B	A16-13189	0.396	
97.54	98.5	0.96	229066	HCORE			A16-13189	0.005	2cm qz-calcite veins. Trc mg PY sct throughout host.
98.5	99.5	1	229067	HCORE			A16-13189	0.022	7cm deformed qz-calcite veins. Locally up to 1% PY sct in and around quartz-carb veins in last 20cm.

110	111	1	229068	HCORE			A16-13189	0.005	3cm qz-calcite veins in str hematite altered rock
111	112	1	229069	HCORE			A16-13189	0.013	3cm qz-calcite veins in str hematite altered rock
112	113	1	229070	HCORE			A16-13189	<0.005	3cm qz-calcite veins in str hematite altered rock
118	119	1	229071	HCORE			A16-13189	0.005	3cm qz-calcite veins. Strongly oxidized with presence of hematite. Faulted. Barren.
		0	229072	Blank		Blank	A16-13189	<0.005	
119	120.12	1.12	229073	HCORE			A16-13189	0.005	4cm qz-calcite veins (some vuggy and 1.5cm width). Faulted.
120.12	121.21	1.09	229074	HCORE			A16-13189	0.005	4.5cm qz-calcite veins.
121.21	122	0.79	229075	HCORE			A16-13189	0.006	4cm qz-calcite veins with EPD. Hem bands concentrated along fractures.
122	123	1	229076	HCORE			A16-13189	0.005	3cm qz-calcite veins +/- epd
123	124	1	229077	HCORE			A16-13189	0.005	2cm qz-calcite veins +/- epd. Hem bands at fractures.
124	125	1	229078	HCORE			A16-13189	0.008	2.5cm qz-calcite veins +/- epd. Hem bands at fractures.
		0	229079	STD		CDN_GS_P7J	A16-13189	0.705	
125	126	1	229080	HCORE			A16-13189	0.049	3cm qz-calcite veins. Strongly oxidized with str hem.
126	127	1	229081	HCORE			A16-13189	0.006	2cm quartz-calcite veins. Strongly oxidized. Str hem bands.
127	128	1	229082	HCORE			A16-13189	0.009	2cm quartz-calcite veins.
128	129	1	229083	HCORE			A16-13189	0.006	4cm quartz-calcite veins.
129	130	1	229084	HCORE			A16-13189	0.015	4cm quartz-calcite veins.
130	131	1	229085	HCORE			A16-13189	0.006	3cm quartz-calcite veins.
		0	229086	DUP	229085		A16-13189	0.006	
131	132	1	229087	HCORE			A16-13189	0.005	3cm quartz-calcite veins.
132	133	1	229088	HCORE			A16-13189	0.005	3cm quartz-calcite veins.
133	134	1	229089	HCORE			A16-13189	0.005	3cm quartz-calcite veins.
134	135	1	229090	HCORE			A16-13189	0.006	10cm wide vuggy quartz-calcite vein with chlorite. EPD at vein margins. Barren.
166	167	1	229091	HCORE			A16-13196	0.03	1.4cm quartz-ank-calcite veins. Lcl rare trc PY sct at margins of vein.
167	168	1	229092	HCORE			A16-13196	<0.005	5cm quartz-ank-calcite +/- epd veins. Lcl trc PY sct at vein margins.
168	169	1	229093	HCORE			A16-13196	<0.005	2cm quartz-ank-calcite veins. Coarse euhedral PY sct in host.
169	170	1	229094	HCORE			A16-13196	<0.005	4cm quartz-ank-calcite veins. Coarse Py sct in host.
		0	229095	STD		CDN_GS_P4B	A16-13196	0.434	

170	171	1	229096	HCORE			A16-13196	<0.005	Trc PY sct in host and in and along vein margins of quartz-calcite (grey) veins.
171	172	1	229097	HCORE			A16-13196	<0.005	Increase in quartz-ank-cal-epd veins. Trc PY sct in host and along margins of veins. Coarse euhedral PY sct in vuggy qz-ank-cal vein.
172	173	1	229098	HCORE			A16-13196	<0.005	Increase in quartz-ank-cal-epd veins. Trc PY sct in host and along margins of veins.
173	174	1	229099	HCORE			A16-13196	<0.005	Vuggy quartz-ank-cal veins. Medium grained PY sct in veins, at vein margins and in host.
174	175	1	229100	HCORE			A16-13196	<0.005	Patchy banded magnetite. Rare trc PY sct in host.
175	176	1	229101	HCORE			A16-13547	<0.005	Patchy banded magnetite. Rare trc PY sct in host.
176	177	1	229102	HCORE			A16-13547	<0.005	Patchy banded magnetite. Rare trc PY sct around qz-ank-cal veins.
		0	229103	Blank		Blank	A16-13547	<0.005	
177	178	1	229104	HCORE			A16-13547	<0.005	1% fine to medium grained euhedral PY sct throughout host and associated with magnetite. Quartz-ank-cal stringers.
178	179	1	229105	HCORE			A16-13547	<0.005	Trace mg PY sct in host metavolcanic and associated with margins of vuggy quartz-ank-calcite veins.
179	180	1	229106	HCORE			A16-13547	<0.005	Trace mg PY sct in host metavolcanic and associated with margins of vuggy quartz-ank-calcite veins.
180	181	1	229107	HCORE			A16-13547	<0.005	High fracture zone. Hematite along fracture planes. Trace mg PY sct in host.
181	182	1	229108	HCORE			A16-13547	<0.005	Trace PY sct along margins of vuggy qz-ank-calcite (grey) veins.
182	183	1	229109	HCORE			A16-13547	<0.005	Trace PY sct in host and in veins.
		0	229110	STD		CDN_GS_P7J	A16-13547	0.763	
183	184	1	229111	HCORE			A16-13547	<0.005	Trace PY sct in and along margins of grey vuggy qz-ank-calcite vein.
184	185	1	229112	HCORE			A16-13547	<0.005	Trace PY sct in host and in and along margins of vuggy qz-ank-cal veins.
185	186	1	229113	HCORE			A16-13547	<0.005	HFZ. Rare trc PY sct in host.
186	187	1	229114	HCORE			A16-13547	0.005	HFZ. 1% fine-grained PY sct in and around vuggy qz-ank-cal veins and along fractures.
187	188	1	229115	HCORE			A16-13547	0.046	HFZ. 1% fine-grained PY sct in and around vuggy qz-ank-cal veins and along fractures.
188	189	1	229116	HCORE			A16-13547	<0.005	Trc PY sct in and along margins of vuggy qz-ank-cal veins.
189	190	1	229117	HCORE			A16-13547	<0.005	HFZ. Rare trc PY sct sct in and along margins of vuggy qz-ank-cal veins.
		0	229118	DUP	229117		A16-13547	<0.005	

190	191	1	229119	HCORE		A16-13547	<0.005	HFZ. 1% PY sct in and along margins of vuggy qz-ank-cal veins and along fracture planes.
191	192	1	229120	HCORE		A16-13583	<0.005	HFZ. Trc PY sct in and along margins of vuggy qz-ank-cal veins.
192	193	1	229121	HCORE		A16-13583	<0.005	HFZ. Trc PY sct in pillow selvage.
193	194	1	229122	HCORE		A16-13583	<0.005	HFZ. Up to 1% PY locally sct in pillow selvage and in and around vuggy qz-ank-cal veins.
194	195	1	229123	HCORE		A16-13583	<0.005	HFZ. Local trc PY sct in host.
195	196	1	229124	HCORE		A16-13583	<0.005	HFZ. 1% PY sct in and around vuggy qz-ank-cal veins and along fractures.
196	197	1	229125	HCORE		A16-13583	<0.005	Vuggy qz-ank-cal veins with rare trc sct PY.
		0	229126	STD	CDN_GS_P4B	A16-13583	0.367	
197	198	1	229127	HCORE		A16-13583	<0.005	Vuggy qz-ank-cal veins with rare trc sct PY.
198	199	1	229128	HCORE		A16-13583	<0.005	Vuggy qz-ank-cal veins with rare trc sct PY.
199	200	1	229129	HCORE		A16-13583	<0.005	Vuggy qz-ank-cal veins with rare trc sct PY.
200	201	1	229130	HCORE		A16-13583	<0.005	Trc PY sct in and around vuggy qz-ank-cal veins
201	202	1	229131	HCORE		A16-13583	<0.005	No visible mineralization. Vuggy qz-ank-cal veins with hematite
202	203	1	229132	HCORE		A16-13583	<0.005	1% PY sct locally in pillow selvages
203	204	1	229133	HCORE		A16-13583	0.039	1% PY sct locally in pillow selvages
		0	229134	Blank	Blank	A16-13583	<0.005	
204	205	1	229135	HCORE		A16-13583	0.02	Trc PY sct in and around veins and replacing hematite locally
205	206	1	229136	HCORE		A16-13583	<0.005	Trc PY sct at margins of vuggy qz-ank-cal veins and replacing ankerite
206	207	1	229137	HCORE		A16-13583	<0.005	Small-scale conjugate fault. Vuggy qz-cal-ank veins. Trc PY sct in pillow.
207	208	1	229138	HCORE		A16-13583	<0.005	2% sct PY associated with vuggy qz-ank-cal veins and replacing hematite. PY sct along fracture planes in HFZ. HFZ is approx. 70% of interval.
208	209	1	229139	HCORE		A16-13583	<0.005	2% sct PY associated with vuggy qz-ank-cal veins and replacing hematite. PY sct along fracture planes in HFZ. HFZ is approx. 80% of interval.
209	210	1	229140	HCORE		A16-13583	<0.005	Trc sct PY associated with vuggy qz-ank-cal veins and replacing hematite. PY sct along fracture planes in HFZ. HFZ is 50% of interval. Locally brecciated.
		0	229141	STD	CDN_GS_P7J	A16-13583	0.801	

210	211	1	229142	HCORE			A16-13636	0.007	Trc sct PY associated with vuggy qz-ank-cal veins and replacing hematite. PY sct along fracture planes in HFZ. HFZ is 50% of interval. Locally brecciated.
211	212	1	229143	HCORE			A16-13636	<0.005	Trc sct PY associated with vuggy qz-ank-cal veins and replacing hematite. PY sct along fracture planes in HFZ. HFZ is 50% of interval. Locally brecciated.
225	226	1	229144	HCORE			A16-13636	<0.005	60% HFZ. PY sct along fracture planes.
226	227	1	229145	HCORE			A16-13636	<0.005	50% HFZ. Vuggy qz-ank-cal veins with hematite. Trc PY sct in viens, along fracture planes and replacing hematitelocally.
227	228	1	229146	HCORE			A16-13636	<0.005	60% HFZ. 2% PY sct along fracture planes and in vuggy qz-carb-cal veins.
228	229	1	229147	HCORE			A16-13636	<0.005	Rare trc PY sct in host
229	230	1	229148	HCORE			A16-13636	<0.005	50% HFZ. Trc PY sct replacing magnetite in pillow selvage.
		0	229149	DUP	229148		A16-13636	<0.005	
230	231	1	229150	HCORE			A16-13636	<0.005	1% PY sct in and around vuggy quartz-ank-calcite veins and throughout host.
231	232	1	229151	HCORE			A16-13636	<0.005	Trc euhedral PY sct in host and replacing hematite.
232	233	1	229152	HCORE			A16-13636	<0.005	HFZ. Trc PY sct in and around vuggy quartz-carb-cal veins and along fracture planes associated with HFZ.
233	234	1	229153	HCORE			A16-13636	<0.005	HFZ. Trc PY sct in and around vuggy quartz-carb-cal veins and along fracture planes associated with HFZ.
234	235	1	229154	HCORE			A16-13636	<0.005	HFZ. Trc PY sct in and around vuggy quartz-carb-cal veins and along fracture planes associated with HFZ.
235	236	1	229155	HCORE			A16-13636	0.106	Rare trc CG PY sct in host mafic volcanic
		0	229156	STD		CDN_GS_P4B	A16-13636	0.386	
236	237	1	229157	HCORE			A16-13636	<0.005	Rare trc CG PY sct in host mafic volcanic
237	238	1	229158	HCORE			A16-13636	<0.005	Rare trc CG PY sct in host mafic volcanic
238	239	1	229159	HCORE			A16-13636	<0.005	Trc CG PY sct in vuggy quartz-carb-ank veins and at margins.
239	240	1	229160	HCORE			A16-13636	<0.005	Rare trc CG PY sct in host mafic volcanic; likely primary pyrite.
240	241	1	229161	HCORE			A16-13636	<0.005	Trc euhedral CG PY sct in host, likely primary, as above.
241	242	1	229162	HCORE			A16-13636	<0.005	Few rare trc PY grains sct in .75cm wide vuggy quartz-ank-cal vein.
242	243	1	229163	HCORE			A16-13636	<0.005	HFZ. 2% PY sct in and around vuggy quartz-ank-cal veins, semi-aligned along foliation/shearing and sct along oxidized fracture surfaces of HFZ.

		0	229164	Blank		Blank	A16-13636	<0.005	
243	244	1	229165	HCORE			A16-13636	<0.005	HFZ. 2% PY sct in and around vuggy quartz-ank-cal veins, semi-aligned along foliation/shearing and sct along oxidized fracture surfaces of HFZ.
244	245	1	229166	HCORE			A16-13636	<0.005	HFZ. 1% PY sct along oxidized fracture surfaces.
245	246	1	229167	HCORE			A16-13636	<0.005	HFZ. 1% PY sct along oxidized fracture surfaces.
246	247	1	229168	HCORE			A16-13636	<0.005	5% fine to medium-grained PY sct along oxidized fracture surfaces and in and around vuggy quartz-ank-cal veins
247	248	1	229169	HCORE			A16-13636	<0.005	5% fine to medium-grained PY sct along oxidized fracture surfaces and in and around vuggy quartz-ank-cal veins. Magnetite rich.
248	249	1	229170	HCORE			A16-13636	<0.005	HFZ. Oxidized hematite fracture planes. Vuggy quartz-carb-cal veins. No significant mineralization.
		0	229171	STD		CDN_GS_P7J	A16-13636	0.706	
249	250	1	229172	HCORE			A16-13636	<0.005	HFZ. Oxidized hematite fracture planes. Vuggy quartz-carb-cal veins. No significant mineralization.
250	251	1	229173	HCORE			A16-13636	<0.005	Trc m-cg PY sct locally in host mafic volcanic. Few vuggy quartz-ank-cal veins.
251	252	1	229174	HCORE			A16-13636	<0.005	Trc m-cg PY sct locally in host mafic volcanic. Few vuggy quartz-ank-cal veins.
252	253	1	229175	HCORE			A16-13636	<0.005	2% PY sct in and around vuggy quartz-ank-cal veins, and in and around fracture filled carb-epd.
253	254	1	229176	HCORE			A16-13636	<0.005	Trc PY sct locally along fracture planes - significantly less mineralized than other fracture planes above.
254	255	1	229177	HCORE			A16-13636	<0.005	30% HFZ. Up to 4% PY locally sct along oxidized fracture planes and associated with vuggy veins.
255	256	1	229178	HCORE			A16-13636	<0.005	Rare trc PY sct in and around quartz-ank-cal veins.
		0	229179	DUP	229178		A16-13636	<0.005	
256	257	1	229180	HCORE			A16-13636	<0.005	1% PY sct along fracture surfaces in mafic volcanic and in and around vuggy qz-ank-cal veins.
257	258	1	229181	HCORE			A16-13636	<0.005	HFZ. Locally up to 4% PY sct along fracture surfaces and in and around vuggy qz-ank-cal veins. Trc PY sct in host.
258	259	1	229182	HCORE			A16-13636	0.006	HFZ. Locally up to 4% PY sct along fracture surfaces and in and around vuggy qz-ank-cal veins. Trc PY sct in host.

259	260	1	229183	HCORE		A16-13636	0.027	HFZ. Locally up to 2% PY sct along fracture surfaces and in and around vuggy qz-ank-cal veins. Trc PY sct in host.
260	260.82	0.82	229184	HCORE		A16-13636	<0.005	HFZ. Locally up to 4% PY sct along fracture surfaces and in and around vuggy qz-ank-cal veins. Trc PY sct in host.
260.82	261.65	0.83	229185	HCORE		A16-13636	<0.005	Mixed QFP and mafic volcanic. Medium grained anhedral PY sct in QFP and in and around silicified quartz-carb veins. Coarser trace euhedral PY sct in mafic volcanic.
		0	229186	STD	CDN_GS_P4B	A16-13636	0.467	
261.65	262.24	0.59	229187	HCORE		A16-13636	<0.005	Medium grained anhedral PY sct in QFP and in and around silicified quartz-carb veins.
262.24	263	0.76	229188	HCORE		A16-13636	0.027	1% PY sct and aligned along foliation in mafic volcanic and associated with inc sil. PY mostly sct in host, but some sct in quartz-ank-cal veins.
263	264	1	229189	HCORE		A16-13636	<0.005	1% PY sct and aligned along foliation in mafic volcanic and associated with inc sil. PY mostly sct in host, but some sct in quartz-ank-cal veins.
264	265	1	229190	HCORE		A16-13636	<0.005	1% PY sct and aligned along foliation in mafic volcanic and associated with inc sil. PY mostly sct in host, but some sct in quartz-ank-cal veins.
265	265.8	0.8	229191	HCORE		A16-13636	<0.005	Trc PY sct-ban. Rare trc PY sct throughout host. PY is banded and aligned along vein margins of quartz-ank-cal veins. Some PY sct inside vein.
265.8	266.9	1.1	229192	HCORE		A16-13636	<0.005	Trc PY sct in and around quartz-ank-cal veins. Locally up to 2% PY sct in last 20cm of sample.
266.9	268	1.1	229193	HCORE		A16-13636	<0.005	Increased foliation and shearing in mafic volcanic. 1% sct-blb PY throughout host and in and around quartz-ank-cal veins. Lcl leucoxene? alt'n.
		0	229194	Blank	Blank	A16-13636	<0.005	
268	269	1	229195	HCORE		A16-13636	<0.005	Trc PY sct in host. Veins unmineralized. PY locally replacing chlorite.
269	270	1	229196	HCORE		A16-13636	<0.005	Trc PY sct in host. Veins unmineralized. PY locally replacing chlorite.
270	271	1	229197	HCORE		A16-13636	<0.005	Trc PY sct in host. Veins unmineralized. PY locally replacing chlorite.
271	272	1	229198	HCORE		A16-13716	0.006	Mod-str foliation and shearing. 1% PY ban-sct parallel to shear in host. Coarse euhedral PY sct in vuggy qz-carb-cal veins.
272	273.1	1.1	229199	HCORE		A16-13716	<0.005	2% medium to coarse-grained PY sct in host replacing chlorite and in and around quartz-carb-cal veins.

273.1	274	0.9	229200	HCORE			A16-13716	0.005	Rare trc PY sct in host replacing chlorite and in and around quartz-carb-cal veins.
274	275	1	229201	HCORE			A16-13716	<0.005	Rare trc PY sct in host replacing chlorite and in and around quartz-carb-cal veins.
		0	229202	STD		CDN_GS_P7J	A16-13716	0.743	
275	276	1	229203	HCORE			A16-13716	<0.005	Rare trc PY sct in host replacing chlorite and in and around quartz-carb-cal veins.
276	277	1	229204	HCORE			A16-13716	<0.005	Rare trc PY sct in host replacing chlorite and in and around quartz-carb-cal veins.
277	278	1	229205	HCORE			A16-13716	0.005	Rare trc PY sct in host replacing chlorite and in and around quartz-carb-cal veins.
278	279	1	229206	HCORE			A16-13716	0.006	Rare trc PY sct in host replacing chlorite and in and around quartz-carb-cal veins.
279	280	1	229207	HCORE			A16-13716	0.006	Trc PY sct in pillow selvage in mafic volcanic.
280	281	1	229208	HCORE			A16-13716	0.006	Trc PY sct in pillow selvage in mafic volcanic.
		0	229209	DUP	229208		A16-13716	0.005	
281	282	1	229210	HCORE			A16-13716	0.012	Trc PY sct in pillow selvage in mafic volcanic.
282	283	1	229211	HCORE			A16-13771	<0.005	Locally up to 3% PY sct in and around vuggy quartz-ank-calcite vein.
283	284	1	229212	HCORE			A16-13771	<0.005	Trc PY sct in host and locally in and around vuggy quartz-ank-calcite veins.
284	285	1	229213	HCORE			A16-13771	0.005	Trc PY sct in host and locally in and around vuggy quartz-ank-calcite veins.
285	286	1	229214	HCORE			A16-13771	0.009	Trc PY sct in host and locally in and around vuggy quartz-ank-calcite veins.
286	287	1	229215	HCORE			A16-13771	0.005	Rare trc PY sct in host. Unmineralized carb-calcite stringers.
287	288	1	229216	HCORE			A16-13771	0.017	Trc PY sct in host and locally in and around vuggy quartz-ank-calcite veins.
		0	229217	STD		CDN_GS_P4B	A16-13771	0.531	
293	294	1	229218	HCORE			A16-13771	0.005	Rare trc PY sct in gabbro. Quartz-calcite extension veins unmineralized.
294	295.1	1.1	229219	HCORE			A16-13771	0.014	Locally up to 3% PY sct mostly in host but also in and around quartz-carb veins.
295.1	296	0.9	229220	HCORE			A16-13771	0.046	Approximately 20cm of silicified, brecciated quartz-carb +/- chl veining. 1% PY sct at vein margins and in vein, locally replacing chlorite.
296	297	1	229221	HCORE			A16-13771	0.027	Trc PY sct in and around vuggy quartz-calcite vein and in host
297	298	1	229222	HCORE			A16-13771	<0.005	End of 2m bracket. No significant mineralization.

335	335.9	0.9	229223	HCORE			A16-13771	0.005	20cm fault infilled with vuggy quartz-calcite-chl vein. Up to 2% local euhedral PY sct in vein. Trc sct PY in host.
		0	229224	Blank		Blank	A16-13771	<0.005	
335.9	337.1	1.2	229225	HCORE			A16-13771	0.005	3% lcl sct PY around vuggy cal-mag-epd-ank-hem alt'n and in and around grey quartz-calcite veins.
337.1	338.1	1	229226	HCORE			A16-13771	<0.005	5% lcl sct PY around vuggy cal-mag-epd-ank-hem alt'n and in and around grey quartz-calcite veins.
338.1	339	0.9	229227	HCORE			A16-13771	0.005	Grey calcite-quartz stringers and veins. PY sct in host.
339	340	1	229228	HCORE			A16-13771	<0.005	1% PY associated with vuggy cal-mag-epd-ank-hem alt'n and sct throughout host. Grey calcite-quartz stringers.
340	341	1	229229	HCORE			A16-13771	0.008	No significant mineralization.
341	342	1	229230	HCORE			A16-13771	0.005	Rare trc PY sct in vuggy quartz-calcite vein.
		0	229231	STD		CDN_GS_P7J	A16-13771	0.779	
342	343	1	229232	HCORE			A16-13771	0.005	3% fine-medium grained PY sct in host and associated with vuggy veins.
343	344	1	229233	HCORE			A16-13771	0.005	1% PY associated with vuggy cal-mag-epd-ank-hem alt'n and sct throughout host.
356.4	357.3	0.9	229234	HCORE			A16-13771	<0.005	Trc PY sct at margins of quartz-carb-calcite-epd veins
357.3	358.3	1	229235	HCORE			A16-13771	<0.005	Rare trc PY sct in host gabbro
358.3	358.8	0.5	229236	HCORE			A16-13771	<0.005	2% fine to coarse-grained PY sct along fracture planes and in and around silicified quartz-hematite-ank-chl vein in gabbro.
358.8	359.5	0.7	229237	HCORE			A16-13771	<0.005	No significant mineralization in gabbro.
359.5	360.5	1	229238	HCORE			A16-13771	<0.005	No significant mineralization in gabbro.
		0	229239	DUP	229238		A16-13771	<0.005	
366.5	367.5	1	229240	HCORE			A16-13771	<0.005	No significant mineralization/veining in gabbro.
367.5	368.35	0.85	229241	HCORE			A16-13771	<0.005	No significant mineralization/veining in gabbro.
368.35	368.9	0.55	229242	HCORE			A16-13771	<0.005	1% PY sct throughout host replacing chlorite and in and around quartz-carb-calcite-epd vein.
368.9	369.8	0.9	229243	HCORE			A16-13771	<0.005	Lcl rare trc PY sct in quartz-ank-hem vein.
369.8	370.9	1.1	229244	HCORE			A16-13771	<0.005	Rare trc PY sct in host locally, and in and around quartz-calcite extension vein.
384.9	386.05	1.15	229245	HCORE			A16-13771	<0.005	Vuggy quartz-calcite-epidote veins with 1% PY locally sct-ban in and around veins and replacing ankerite/hematite.

386.05	387	0.95	229246	HCORE		A16-13771	<0.005	Trc PY sct throughout host gabbro. No significant mineralized veins.
		0	229247	STD	CDN_GS_P4B	A16-13771	0.438	
387	388	1	229248	HCORE		A16-13771	<0.005	Quartz-ankerite-hematite fracture filling stringers with up to 1% PY sct in and around veins locally
388	389.1	1.1	229249	HCORE		A16-13771	0.014	No significant mineralization/veining in gabbro
389.1	390.2	1.1	229250	HCORE		A16-13771	0.009	No significant mineralization/veining in gabbro
390.2	391	0.8	229251	HCORE		A16-13771	0.022	Magnetite-rich, silicified and sheared zone at upper contact with gabbro. 2% PY sct in and around vuggy quartz-calcite stringers and aligned along fol/shear planes, replacing magnetite/hem.
391	392	1	229252	HCORE		A16-13771	0.005	Magnetite-rich, silicified and sheared zone at upper contact with gabbro. 1% PY sct in and around vuggy quartz-calcite stringers and aligned along fol/shear planes, replacing magnetite/hem.
392	393	1	229253	HCORE		A16-13771	<0.005	No significant mineralization/veining in mafic volcanic
		0	229254	Blank	Blank	A16-13771	<0.005	
393	394	1	229255	HCORE		A16-13771	<0.005	Moderately silicified vuggy quartz-calcite veins +/- epd and hem at margins. 1% locally sct PY in and around veins and sct locally in host.
394	395	1	229256	HCORE		A16-13771	<0.005	Trace PY sct in host and locally in and around quartz-carbonate veins
395	396	1	229257	HCORE		A16-13771	0.005	1% PY sct in host replacing chlorite and finer-grained PY sct in and around quartz-carb-hem +/- epd veins and fracture filling stringers.
396	397	1	229258	HCORE		A16-13822	<0.005	Trace PY sct locally in and around quartz-carb veins
397	398	1	229259	HCORE		A16-13822	<0.005	Trace PY replacing chlorite bands and sct in and around quartz-carb-epd veins.
398	399	1	229260	HCORE		A16-13822	<0.005	Trace PY sct throughout host and associated with silicification. PY replacing chlorite and sct in and around quartz-carb veins.
		0	229261	STD	CDN_GS_P7J	A16-13822	0.803	
399	399.7	0.7	229262	HCORE		A16-13822	0.005	2% PY sct throughout host and associated with silicification. PY replacing chlorite and sct in and around quartz-carb veins.
399.7	400.7	1	229263	HCORE		A16-13822	<0.005	3% PY sct throughout host and associated with silicification. PY replacing chlorite and sct in and around quartz-carb veins.
400.7	401.8	1.1	229264	HCORE		A16-13822	0.009	Trace PY sct in host replacing chlorite patches.

401.8	403	1.2	229265	HCORE			A16-13822	<0.005	Trace PY sct around vuggy quartz-cal-carb-epd vein and in host replacing chlorite
403	404	1	229266	HCORE			A16-13822	<0.005	Trace PY sct in host replacing chlorite
404	405	1	229267	HCORE			A16-13822	<0.005	Trace PY sct in host replacing chlorite
		0	229268	DUP	229267		A16-13822	<0.005	
405	406	1	229269	HCORE			A16-13822	<0.005	3% fine to coarse-grained PY sct. PY associated with silicification, replacing chlorite and magnetite and sct throughout host.
406	407	1	229270	HCORE			A16-13822	<0.005	Trace PY sct in and around quartz-carb veining and associated with silicification. PY replacing chl in host.
407	408	1	229271	HCORE			A16-13822	<0.005	Trace PY sct in host replacing chlorite
408	409	1	229272	HCORE			A16-13822	0.005	Trace PY sct in host replacing chlorite and sct in and around quartz-carb-epd veins
409	410	1	229273	HCORE			A16-13822	<0.005	Locally 3% PY sct around silicified volcanic, and sct in and around quartz-carb-epd veining/stringers.
410	411	1	229274	HCORE			A16-13822	<0.005	Locally 1% PY sct in and around quartz-carb-epd vein and in host proximal to vein
421	422	1	229275	HCORE			A16-13822	0.005	2% PY sct throughout host mafic volcanic,along fracture surfaces and in and around quartz-carb-calcite veins, replacing ankerite and hematite.
		0	229276	STD		CDN_GS_P4B	A16-13822	0.407	
422	423	1	229277	HCORE			A16-13822	<0.005	Trc PY sct in and around vuggy quartz-calcite veins
423	424	1	229278	HCORE			A16-13822	<0.005	Trc PY sct in and around vuggy quartz-calcite veins
424	425	1	229279	HCORE			A16-13822	<0.005	1% PY sct in and around ankerite-hem-epidote alteration and coarse-grained PY sct in host.
425	426	1	229280	HCORE			A16-13822	<0.005	Trc PY sct in and around quartz-carb veins and at margins. Locally banded in host.
426	427.05	1.05	229281	HCORE			A16-13822	<0.005	Up to 1% Py locally sct in and around quartz-carb veining and associated with hematite alt
427.05	428	0.95	229282	HCORE			A16-13822	<0.005	Up to 1% Py locally sct in and around quartz-carb veining and associated with hematite alt
428	429	1	229283	HCORE			A16-13822	<0.005	Trc PY sct in host replacing chlorite
		0	229284	Blank		Blank	A16-13822	<0.005	
429	430	1	229285	HCORE			A16-13822	<0.005	Trc PY sct in host replacing chlorite
430	431	1	229286	HCORE			A16-13822	<0.005	Trc PY sct in host replacing chlorite
431	431.82	0.82	229287	HCORE			A16-13822	<0.005	Trc PY sct in host replacing chlorite

431.82	433	1.18	229288	HCORE			A16-13822	<0.005	Contact with mafic volcanic and gabbroic massive flow.
433	434	1	229289	HCORE			A16-13822	<0.005	Trc PY sct in gabbro
441.5	442.5	1	229290	HCORE			A16-13822	<0.005	Trc PY sct in host replacing chlorite and in and around quartz-carb stringers and veins
		0	229291	STD		CDN_GS_P7J	A16-13822	0.664	
442.5	443.5	1	229292	HCORE			A16-13822	0.006	Trc PY sct in ultramafic replacing chlorite, magnetite and in and around quartz-carb stringers and veins
443.5	444.5	1	229293	HCORE			A16-13822	0.005	Trc PY sct in host replacing chlorite, magnetite and in and around quartz-carb stringers and veins
486	487	1	229294	HCORE			A17-00099	<0.005	Rare trc PY sct in quartz-carb vein
487	488	1	229295	HCORE			A17-00099	0.039	Up to 1% PY sct along shear, in and along quartz-carb vein margins and replacing chlorite in host
488	489	1	229296	HCORE			A17-00099	0.031	0.5% PY sct along shear, in and along quartz-carb vein margins and replacing chlorite in host
489	490	1	229297	HCORE			A17-00099	0.305	3% fine to coarse-grained euhedral PY sct in and around quartz-carb veins and replacing chlorite in host.
490	491	1	229298	HCORE			A17-00099	0.005	0.5% PY sct in and around quartz-carb veins and replacing chlorite in host
		0	229299	DUP	229298		A17-00099	0.005	
501	502	1	229300	HCORE			A17-00099	<0.005	0.5% PY sct in and around quartz-carb veins and replacing chlorite in host
502	503	1	229301	HCORE			A17-00099	<0.005	Trc PY sct in and around quartz-carb veins
503	504	1	229302	HCORE			A17-00099	<0.005	0.5% PY sct in and around quartz-carb veins and replacing chlorite in host
504	505	1	229303	HCORE			A17-00099	<0.005	Trc PY sct in and around quartz-carb veins
505	506	1	229304	HCORE			A17-00099	<0.005	Rare trc PY sct in quartz-carb-epd vein
506	507	1	229305	HCORE			A17-00099	0.011	1% PY fine to coarse-grained PY sct in 41cm wide white quartz-carb vein
		0	229306	STD		CDN_GS_P4B	A17-00099	0.394	
541	542	1	229307	HCORE			A17-00099	<0.005	Insignificant-Took 1 sample every 20m
560	561	1	229308	HCORE			A17-00099	<0.005	Insignificant-Took 1 sample every 20m
581	582	1	229309	HCORE			A17-00159	<0.005	Trace PY sct in and around quartz-carb +/- chl veins and associated with hem alt'n
590	591	1	229310	HCORE			A17-00159	<0.005	Trace PY sct in and around quartz-carb +/- chl veins and associated with hem alt'n
591	592	1	229311	HCORE			A17-00159	0.006	Trace PY sct in and around quartz-carb +/- chl veins and associated with hem alt'n
592	593	1	229312	HCORE			A17-00159	0.005	Weakly silicified. Fine to coarse trc PY sct in and around veins and replacing chlorite.

593	594	1	229313	HCORE			A17-00159	0.006	Trc fine-grained PY sct in and around veins and associated with hem alt'n
		0	229314	Blank		Blank	A17-00159	0.005	
594	595	1	229315	HCORE			A17-00159	<0.005	Trc fine-grained PY sct in and around veins and associated with hem alt'n
595	596	1	229316	HCORE			A17-00159	0.007	Trc CG PY sct in pillow selvage and associated with hem alt'n around quartz-carb veins
600	601	1	229317	HCORE			A17-00159	0.006	Trc fine-grained PY sct in and around veins and associated with hem alt'n
601	602	1	229318	HCORE			A17-00159	<0.005	Trc fine-grained PY sct in and around veins and associated with hem alt'n
602	603	1	229319	HCORE			A17-00159	0.01	Trc fine-grained PY sct in and around veins and associated with hem alt'n
603	604	1	229320	HCORE			A17-00159	0.006	Trc fine-grained PY sct in and around veins and associated with hem alt'n
		0	229321	STD		CDN_GS_P7J	A17-00159	0.801	
625	626	1	229322	HCORE			A17-00159	0.007	Shoulder sample. Lcl rare trc PY sct around quart-carb extension veins.
626	626.65	0.65	229323	HCORE			A17-00159	<0.005	Shoulder sample. Lcl rare trc PY sct around quart-carb extension veins.
626.65	627.5	0.85	229324	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb vein and replacing hematite.
627.5	628.5	1	229325	HCORE			A17-00159	0.005	Trc PY sct in and around quartz-carb vein and replacing hematite.
628.5	629.2	0.7	229326	HCORE			A17-00159	0.067	Trc PY sct in and around quartz-carb vein, replacing chlorite and hematite and aligned along shear
629.2	630	0.8	229327	HCORE			A17-00159	0.015	Trc PY sct in and around quartz-carb vein, replacing chlorite and hematite and aligned along shear
630	631	1	229328	HCORE			A17-00159	0.01	1% fine to coarse-grained euhedral PY sct in and around quartz-carb veins and replacing hematite.
		0	229329	DUP	229328		A17-00159	0.011	
631	632	1	229330	HCORE			A17-00159	0.006	Trc PY sct in and around quartz-carb vein and replacing chlorite.
632	633	1	229331	HCORE			A17-00159	0.025	1% fine to medium-grained euhedral PY sct in and around quartz-carb veins w/hem and along vein margins in host
633	634	1	229332	HCORE			A17-00159	0.038	3% mostly coarse-grained euhedral PY sct in and around 16cm silicified quartz-carb vein
634	635	1	229333	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb vein margins
635	636	1	229334	HCORE			A17-00159	0.005	Trc PY sct in and around quartz-carb vein margins

636	637	1	229335	HCORE		A17-00159	0.006	Trc coarse-grained euhedral PY sct in quartz-carb vein replacing hematite
		0	229336	STD	CDN_GS_P4B	A17-00159	0.364	
637	638	1	229337	HCORE		A17-00159	0.005	Rare trc PY sct in mafic volcanic
638	639	1	229338	HCORE		A17-00159	0.008	Rare trc PY sct in mafic volcanic
639	639.8	0.8	229339	HCORE		A17-00159	<0.005	Trc PY sct in and around quartz-carb vein margins
639.8	640.9	1.1	229340	HCORE		A17-00159	0.021	1% fine to medium grained Py sct in and around 25cm quartz-carb vein and in host
644	645	1	229341	HCORE		A17-00159	0.005	Trace PY sct in and around quartz-carb vein margins and in host replacing chlorite and hematite
645	646	1	229342	HCORE		A17-00159	0.007	Coarse trc PY sct in pillow selvage and in and along quartz-carb vein margins, replacing hem
646	646.7	0.7	229343	HCORE		A17-00159	0.006	Trc PY sct in host metavolcanic
		0	229344	Blank	Blank	A17-00159	<0.005	
646.7	647.3	0.6	229345	HCORE		A17-00159	<0.005	Weakly silicified. Up to 1% PY locally sct around epidote and chlorite and along vein margins
648	649	1	229346	HCORE		A17-00159	<0.005	Rare trc PY sct in host and in and around quartz-carb hem veins.
649	650	1	229347	HCORE		A17-00159	<0.005	Trc PY sct along vein margin of quartz-carb vein with hem alt
650	650.73	0.73	229348	HCORE		A17-00159	<0.005	Trc PY sct in pillow selvage
651	652	1	229349	HCORE		A17-00159	<0.005	Trc euhedral CG PY sct in and around quartz-carb veins
652	653	1	229350	HCORE		A17-00159	<0.005	Trc PY sct in host metavolcanic and in and around quartz-carb veins
653	654	1	229351	HCORE		A17-00159	<0.005	Trc PY sct in host metavolcanic and in and around quartz-carb veins
		0	229352	STD	CDN_GS_P7J	A17-00159	0.627	
654	655	1	229353	HCORE		A17-00159	<0.005	Trc PY sct in host metavolcanic and in and around quartz-carb veins
655	656	1	229354	HCORE		A17-00159	<0.005	Trc PY sct in host metavolcanic and in and around quartz-carb veins
656	657	1	229355	HCORE		A17-00159	0.009	Trc PY sct in host metavolcanic and in and around quartz-carb veins
657	658.05	1.05	229356	HCORE		A17-00159	0.007	80% quartz-carb-chl vein with hematite alteration. 1% PY sct in and around vein and replacing chlorite and hematite.
658.05	659.1	1.05	229357	HCORE		A17-00159	<0.005	Trc PY sct in and around quartz-carb veins and in host
659.1	660	0.9	229358	HCORE		A17-00159	<0.005	50% quartz-carb veining. Trc PY sct around veins and in host.

660	661	1	229359	HCORE			A17-00159	<0.005	Mod foliated metavolcanic with chlorite banding. Trc PY sct along chlorite bands and in and around quartz-carb veins.
		0	229360	DUP	229359		A17-00159	<0.005	
661	662	1	229361	HCORE			A17-00159	0.006	Trc PY sct in host metavolcanic and in and around quartz-carb veins.
662	663	1	229362	HCORE			A17-00159	0.007	50% quartz-carb-chl veining. Trc PY sct in and around large 25cm wide vein and replacing chlorite in host.
663	664	1	229363	HCORE			A17-00159	0.01	50% grey quartz-carb vein. 3% fine to medium grained PY sct in and around vein and in host replacing chlorite
664	664.88	0.88	229364	HCORE			A17-00159	0.008	2% fine to medium grained PY sct throughout host
664.88	666	1.12	229365	HCORE			A17-00159	0.006	2% fine to medium grained PY sct throughout host
666	667	1	229366	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
		0	229367	STD		CDN_GS_P4B	A17-00159	0.425	
667	668	1	229368	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
668	669	1	229369	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
669	670	1	229370	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
670	671	1	229371	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
671	672	1	229372	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
672	673	1	229373	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
		0	229374	Blank		Blank	A17-00159	<0.005	
673	674	1	229375	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
674	675	1	229376	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb veins
675	676	1	229377	HCORE			A17-00159	0.006	Trc PY sct in and around quartz-carb veins
676	677	1	229378	HCORE			A17-00159	0.005	1% PY sct in and around pillow selvage, in host and around quartz-carb veins
700	701	1	229379	HCORE			A17-00159	<0.005	20m gap sample in barren gabbro.
720	721	1	229380	HCORE			A17-00159	0.005	20m gap sample in barren gabbro.
		0	229381	STD		CDN_GS_P7J	A17-00159	0.803	
726	727	1	229382	HCORE			A17-00159	<0.005	Up to 1% PY locally sct in and around hem stained quartz-calcite-chl veins.
727	728	1	229383	HCORE			A17-00159	<0.005	5cm low angle quartz-calcite vein with specular hematite. Trc PY sct around vein and in host.
728	729	1	229384	HCORE			A17-00159	<0.005	Trc PY sct in and around grey quartz-calcite-chl veins
729	730.2	1.2	229385	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb hem stained veins
730.2	731	0.8	229386	HCORE			A17-00159	<0.005	Trc PY sct in and around quartz-carb hem stained veins

734	735	1	229387	HCORE			A17-00159	<0.005	1% coarse-grained PY sct in and around grey quartz-calcite veins and in host
735	736	1	229388	HCORE			A17-00159	<0.005	Trc coarse-grained PY sct in and around grey quartz-calcite veins and in host
		0	229389	DUP	229388		A17-00159	<0.005	
736	737	1	229390	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
737	738	1	229391	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
738	739	1	229392	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
739	740	1	229393	HCORE			A17-00209	<0.005	1% PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
740	741	1	229394	HCORE			A17-00209	<0.005	Trc PY sct in and around hem stained quartz-carb veins
741	742	1	229395	HCORE			A17-00209	<0.005	1% PY sct throughout host, replacing chlorite and in and around hem stained quartz-carb veins
		0	229396	STD		CDN_GS_P4B	A17-00209	0.425	
742	743	1	229397	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
743	744	1	229398	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
744	745	1	229399	HCORE			A17-00209	<0.005	Trc PY sct in host and in and around hem stained quartz-carb veins
745	746	1	229400	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
746	747	1	229401	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Grey quartz-calcite veins and hem stained quartz-carb.
747	748	1	229402	HCORE			A17-00209	<0.005	Trc PY sct in host and in and around hem stained quartz-carb veins
		0	229403	Blank		Blank	A17-00209	<0.005	
748	749	1	229404	HCORE			A17-00209	<0.005	Trc PY sct in host and in and around hem stained quartz-carb veins
749	750	1	229405	HCORE			A17-00209	<0.005	Trc PY sct in host and in and around hem stained quartz-carb veins. Mod silicified.
750	751	1	229406	HCORE			A17-00209	0.005	1% fine-grained PY locally sct in and around hem stained quartz-carb vein and replacing chlorite in host

751	752	1	229407	HCORE			A17-00209	<0.005	Trc fine-grained PY sct throughout host and sct in and around quartz-carb-hem stained vein. Mod silicified.
752	753	1	229408	HCORE			A17-00209	<0.005	Lcl rare trc PY replacing chlorite in host
753	754	1	229409	HCORE			A17-00209	<0.005	Trc PY replacing chlorite in host
		0	229410	STD		CDN_GS_P7J	A17-00209	0.793	
754	755	1	229411	HCORE			A17-00209	0.005	Trc PY sct in and around hem stained quartz-carb veins and in mod silicified host
755	756	1	229412	HCORE			A17-00209	0.005	25cm milky white quartz-carb vein with 1% PY sct at margins of vein, with barren interior. PY also sct in and around hem stained quartz-carb veins and associated with silicification.
756	757	1	229413	HCORE			A17-00209	<0.005	Trc PY sct throughout host, replacing chlorite. Mod silicified.
757	758	1	229414	HCORE			A17-00209	<0.005	Banded PY replacing chlorite band in metavolcanic.
758	759	1	229415	HCORE			A17-00209	<0.005	No significant mineralization or veining. Moderately sheared metavolcanic.
759	759.91	0.91	229416	HCORE			A17-00209	<0.005	No significant mineralization or veining. Moderately sheared metavolcanic.
759.91	761	1.09	229417	HCORE			A17-00209	<0.005	Strongly sheared mafic metavolcanic or ultramafic. Does not look like part of main shear zone. 60% quartz-carb extension veins. Spotted leucoxene throughout.
		0	229418	DUP	229417		A17-00209	<0.005	
761	761.9	0.9	229419	HCORE			A17-00209	0.512	Same as above with 4.5cm of dark grey-black silicified black flt. Contact with sheared unit is planar and undeformed. Unmineralized.
761.9	763	1.1	229420	HCORE			A17-00209	0.026	Barren sheared silicified conglomerate with sericite bands
763	764	1	229421	HCORE			A17-00209	0.01	Barren sheared conglomerate
764	765	1	229422	HCORE			A17-00209	0.012	Barren sheared conglomerate
765	766	1	229423	HCORE			A17-00209	0.005	Barren sheared conglomerate
766	767	1	229424	HCORE			A17-00209	0.044	Barren sheared conglomerate
		0	229425	STD		CDN_GS_P4B	A17-00209	0.553	
767	768	1	229426	HCORE			A17-00209	<0.005	Barren sheared conglomerate
768	769	1	229427	HCORE			A17-00209	<0.005	Barren sheared conglomerate
769	770.1	1.1	229428	HCORE			A17-00209	0.019	Barren sheared conglomerate, contorted black fault
770.1	771	0.9	229429	HCORE			A17-00209	<0.005	Black fault with conglomerate. Lcl rare trc PY sct in vein.
771	772	1	229430	HCORE			A17-00209	0.009	Barren sheared conglomerate

772	773	1	229431	HCORE			A17-00252	<0.005	Barren sheared conglomerate
		0	229432	Blank		Blank	A17-00252	<0.005	
773	774	1	229433	HCORE			A17-00252	<0.005	Barren sheared conglomerate
774	775	1	229434	HCORE			A17-00252	<0.005	Barren sheared conglomerate
775	776	1	229435	HCORE			A17-00252	0.05	Barren sheared conglomerate
776	777	1	229436	HCORE			A17-00252	0.02	Barren sheared conglomerate
777	778	1	229437	HCORE			A17-00252	0.023	Barren sheared conglomerate
778	778.7	0.7	229438	HCORE			A17-00252	0.076	Barren sheared conglomerate
		0	229439	STD		CDN_GS_P7J	A17-00252	0.725	
778.7	779.18	0.48	229440	HCORE			A17-00252	0.209	Contorted black fault with conglomerate. Very strongly silicified. Unmineralized.
779.18	779.95	0.77	229441	HCORE			A17-00252	0.113	Silicified unmineralized black fault
779.95	781	1.05	229442	HCORE			A17-00252	0.451	Contorted black fault with conglomerate. Very strongly silicified. Unmineralized.
781	782	1	229443	HCORE			A17-00252	0.042	Contorted black fault with conglomerate. Very strongly silicified. Unmineralized.
782	783	1	229444	HCORE			A17-00252	0.016	Barren sheared conglomerate
783	784	1	229445	HCORE			A17-00252	0.042	Barren sheared conglomerate
784	785.03	1.03	229446	HCORE			A17-00252	0.088	Barren sheared conglomerate
785.03	786	0.97	229447	HCORE			A17-00252	0.079	Barren sheared conglomerate
		0	229448	DUP	229447		A17-00252	0.12	
786	787	1	229449	HCORE			A17-00252	0.05	Barren sheared conglomerate
795	796	1	229450	HCORE			A17-00252	0.011	Barren sheared conglomerate

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-07 DataSet: Brookbank Program: Development

Hole Status:	INREVIEW	**Hole Length (m):**	822	**Logged By:**	J. Solomon
Hole Type:	Surface Drill Hole	**Dip (º):**	-57.3	**Date Log Started:**	12/7/2016
Date Drill Started:	11/17/2016	**Azimuth:**	343.8	**Date Log Completed:**	12/20/2016
Date Drill Completed:	12/4/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	439,686.8	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,506,729.0	**Date Surveyed:**	12/20/2016
Elevation (masl):	349.373	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29041	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3
Core Storage:	Old Arena Road

Purpose: To test a high grade pocket at depth and convert from inferred to indicated.

Comments: Setup moved to flatter spot. RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 804 **Max Sample Depth (m):** 822

Depth Logged To (m) 822 **Meters Sampled** 343.49

Total Samples 389 **# Assay** 340 **# QAQC:** 49

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-57.3	343.8	TN14	SINGLESHOT	G4	11/18/2016		Yes
156	-56.42	346.01	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
183	-56.45	345.82	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
192	-56.24	346.56	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
219	-56.17	346.29	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
228	-56.18	346.44	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
246	-55.93	345.83	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
255	-55.85	346.61	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
280	-55.62	347.39	EZ-GYRO	SINGLESHOT	G4	11/24/2016	Optimised	Yes
282	-55.82	347.12	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
300	-55.76	347.5	EZ-GYRO	SINGLESHOT	G4	12/4/2016		Yes
304	-55.43	347.85	EZ-GYRO	SINGLESHOT	G4	11/24/2016	retake of measurement at same depth	Yes
309	-55.7	347.98	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
318	-55.64	347.04	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
327	-55.49	347.04	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
345	-55.21	348.12	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
354	-55.13	348.71	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
363	-54.91	347.79	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
372	-54.77	348.89	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
381	-54.53	347.43	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
408	-54.52	347.87	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
417	-54.45	347.51	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
453	-54.25	347.42	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
462	-54.16	348.87	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
463	-54.08	348.64	EZ-GYRO	SINGLESHOT	G4	11/27/2016	Optimised	Yes
471	-54.12	347.19	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
489	-54.08	347.72	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
498	-54.04	348.15	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
507	-54.02	347.29	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
516	-53.96	348.82	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
518	-53.71	349.24	EZ-GYRO	SINGLESHOT	G4	11/29/2016	Optimised	Yes
525	-53.89	349.42	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
543	-53.85	348.73	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
561	-53.78	348.99	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
570	-53.77	349.69	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
579	-53.71	348.91	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
581	-53.55	348.49	EZ-GYRO	SINGLESHOT	G4	11/30/2016	Optimised	Yes
588	-53.68	348.22	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
597	-53.63	349.17	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
598	-53.45	349.78	EZ-GYRO	SINGLESHOT	G4	11/30/2016	Optimised	Yes
606	-53.57	348.07	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
633	-53.39	348.1	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
635	-53.21	348.15	EZ-GYRO	SINGLESHOT	G4	12/1/2016	Optimised	Yes
642	-53.34	348.95	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
651	-53.3	348.37	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
659	-53.2	347.26	EZ-GYRO	SINGLESHOT	G4	12/1/2016	Optimised	Yes
660	-53.28	347.44	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
669	-53.26	347.98	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
678	-53.22	349.13	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
687	-53.2	349.85	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
696	-53.15	348.09	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
705	-53.07	348.15	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
714	-53.05	350.48	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
723	-53.06	350.08	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
732	-53.06	350.14	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
737	-52.94	350.41	EZ-GYRO	SINGLESHOT	G4	12/3/2016	Optimised	Yes
750	-52.94	350.13	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
768	-52.93	348.78	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
777	-52.88	349.48	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
786	-52.77	349.34	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
790	-52.27	349.14	EZ-GYRO	SINGLESHOT	G4	12/4/2016	Optimised	Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
795	-52.3	349.57	EZ-GYRO	MULTISHOT	G4	12/4/2016		Yes
804	-52.02	350.38	EZ-GYRO	MULTISHOT	G4	12/4/2016	Optimised	Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	5.2	5.2	100	E1	Mafic Volcanic	Massive	Medium grained
5.2	53.92	48.72	100	I1A	Gabbro	Massive	Coarse grained
53.92	93.77	39.85	100	E1A	Basalt	Massive	Fine grained
93.77	100.13	6.36	100	E1A	Basalt	Massive	Fine grained
100.13	104.05	3.92	100	E2	Intermediate Volcanic	Porphyritic (with phenocrysts)	Medium grained
104.05	107.35	3.3	100	E1A	Basalt	Massive	Fine grained
107.35	107.5	0.15		LC	Lost Core		
107.5	115.34	7.84	85	E1A	Basalt	Massive	Fine grained
115.34	121.25	5.91	100	E1A	Basalt	Massive	Fine grained
121.25	121.7	0.45	100	FLT	Fault Zone		
121.7	132.77	11.07	100	E1A	Basalt	Massive	Fine grained
132.77	143.04	10.27	100	E1A	Basalt		Fine grained
143.04	190.03	46.99	100	I1A	Gabbro	Massive	Coarse grained
190.03	211.4	21.37	100	E1A	Basalt	Massive	Fine grained
211.4	216.5	5.1	100	E1A	Basalt		Fine grained
216.5	219	2.5		LC	Lost Core		
219	274.5	55.5		E1A	Basalt	Massive	Fine grained
274.5	275.5	1		LC	Lost Core		
275.5	281.23	5.73		E1A	Basalt		
281.23	297.45	16.22	100	E1A	Basalt		Fine grained
297.45	303.05	5.6	100	E1	Mafic Volcanic		Fine grained
303.05	313.12	10.07	100	E1A	Basalt		Fine grained
313.12	347.57	34.45		E1	Mafic Volcanic		Medium grained
347.57	359.4	11.83		E1	Mafic Volcanic		Fine grained
359.4	360.5	1.1		FLT	Fault Zone		Fine grained
360.5	364	3.5		E1	Mafic Volcanic		Fine grained
364	371.5	7.5		E1	Mafic Volcanic		Fine grained
371.5	375.8	4.3		FLT	Fault Zone		
375.8	428.9	53.1		E1	Mafic Volcanic		Fine grained
428.9	436.1	7.2		E1	Mafic Volcanic		Fine grained
436.1	446.45	10.35		E1	Mafic Volcanic	Massive	Fine grained
446.45	455	8.55		E1A	Basalt	Massive	Fine grained
455	460.88	5.88		E1A	Basalt	Massive	Fine grained
460.88	464.27	3.39		E1	Mafic Volcanic		Fine grained

Geology Summary

meters							
From	**To**	**Width**	**%**	**Lith Code**	**Rocktype**	**Texture**	**GrainSize**
464.27	489	24.73		I1A	Gabbro		Medium grained
489	500.08	11.08		E1	Mafic Volcanic	Massive	Fine grained
500.08	511.6	11.52		E1	Mafic Volcanic	Massive	Fine grained
511.6	514.5	2.9		E1	Mafic Volcanic	Massive	Fine grained
514.5	519.25	4.75		E1	Mafic Volcanic		Fine grained
519.25	527.9	8.65		E1	Mafic Volcanic	Massive	Fine grained
527.9	541	13.1		I1A	Gabbro		
541	589	48		E1	Mafic Volcanic	Massive	Fine grained
589	601.34	12.34		I1A	Gabbro		Medium grained
601.34	656.35	55.01		E1	Mafic Volcanic		
656.35	691.65	35.3		I1A	Gabbro		Medium grained
691.65	699.3	7.65		E1	Mafic Volcanic	Massive	
699.3	712.8	13.5		I1A	Gabbro	Massive	Medium grained
712.8	726.26	13.46		E1	Mafic Volcanic	Massive	Fine grained
726.26	749.9	23.64		I1A	Gabbro	Massive	Fine grained
749.9	753.1	3.2		I1A	Gabbro	Massive	
753.1	779.1	26		I1A	Gabbro	Massive	Fine grained
779.1	790.5	11.4		E1	Mafic Volcanic		
790.5	804.34	13.84		E1	Mafic Volcanic		
804.34	806.52	2.18		E1	Mafic Volcanic		
806.52	806.7	0.18		FLT	Fault Zone		
806.7	822	15.3		S4B	Polymictic Conglomerate		

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	5.2	5.2	100	E1	Mafic Volcanic	Massive	Medium grained	J. Solomon

Mafic Volcanics: Unit is fine grain to aphinitic, weakly foliated. Upto 1% calcite stringers present, mostly overprinted by hematite. Unit is bleached from strong calcite alteration. 9.0cm wide vuggy qtz vn seen at 3.67m. Upto 0.3% disseminated fine grain pyite present.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
3	5.2	1:	Calcite	Strong (51-75%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
3	5.2	1:	Pyrite	Fine grained	Disseminated	0.2	Pyrite mineralization preferentially associates with intense calcite altered section
VG: No							

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
5.2	53.92	48.72	100	I1A	Gabbro	Massive	Coarse grained	J. Solomon

Gabbro: Unit is massive and coarse grain with significant amount of leucoxene in places, mostly around the upper contact. sparsely distributed, irregularly oriented calcite and epidote stringer upto to 0.5%. Unit is moderately fractured with most fracture surfaces covered by hematite. Few fine grain, sporadically distributed pyrite mineralization present, trace overall.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
5.2	36.65	1:	Hematite	Weak (1-25%)	Fracture Filled	
36.65	43	1:	Epidote	Moderate (26-50%)	Patches	
		2:	Hematite	Weak (1-25%)	Fracture Filled	
43	53.92	1:	Hematite	Weak (1-25%)	Fracture Filled	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
5.2	53.92	1:	Pyrite	Fine grained	Disseminated	0.1	
VG: No							

Structures

From	To	Code	Structure Type	Comments
40.75	49	HFZ	High fracture zone	Moderate to strongly fractured zone. Fracture orientation is irregular but significantly sub-parallel TCA. All fracture plane covered with hematite.

Veins

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
53.92	**93.77**	39.85	100	**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Basalt: Sharp upper contact marked by 30.60cm wide strong k-spar altered with hematite overprint vein/felsic intrusive?? Unit is massive and aphinitic and dark in colour. Irregularly oriented qtz +/- calcite +/- epidote veins up to 0.5%. Some of the veins selvaged by hematite. Unit is moderately fractured, some fractured surface covered with weak hematite alteration. Weak to moderate calcite alteration all through. Few fine grain pyrite spotted in places but insignificant overall.

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
6	9	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.5	
9	12	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		75	1.8	
12	15	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		80	0.6	
15	18	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		80	0.8	
18	21	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	0.7	
21	24	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		75	0.6	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	0.9	
24	27	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.3	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	0.8	
27	30	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		73	0.6	
30	33	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		73	0.4	
33	36	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		75	0.8	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		55	1.3	
36	39	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	0.4	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	1.4	
39	42	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		75	1.4	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.6	
42	45	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	0.6	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		55	1.8	
45	48	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	0.9	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		50	1.4	
48	51	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	0.8	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		55	1.4	

Alteration

From	To	#	Alteration	Intesity	Style	Comments
53.92	54.3	1:	K-feldspar	Moderate (26-50%)	Pervasive	
		2:	Hematite	-	Pervasive	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
54.3	93.77	1:	Calcite	Weak (1-25%)	Pervasive	
		2:	Hematite	Weak (1-25%)	Fracture Filled	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
53.92	54.3	1:	Pyrite	Fine grained	Disseminated	0.3	
VG: No							
54.3	93.77	1:	Pyrite	Fine grained	Disseminated	0.1	Disseminated fine grain pyrite upto 0.5% locally but less than 1% overall.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
54	57	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.9	
57	60	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	2.6	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		55	1.4	
60	63	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.8	
63	66	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	0.7	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		55	1.1	
66	69	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	1.2	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	1	
69	72	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	0.9	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		75	0.8	
72	75	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		50	1	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1	
75	78	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		55	1	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	0.8	
78	81	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	0.8	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	1	
81	84	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	0.8	
84	87	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.1	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
87	90	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.3	
90	93	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	1.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
93.77	**100.13**	6.36	100	**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Basalt: Upper contact marked by the onset of kspar alteration. Unit is fine grain, aphinitic and dark in colour, brown in kspar altered section. Kspar alteration is locally strong, calcite is moderate where there is no kspar. Few irregularly oriented calcite stringers present. No visible mineralization seen

Alteration

From	To	#	Alteration	Intesity	Style	Comments
93.77	100.13	1:	K-feldspar	Moderate (26-50%)	Pervasive	
		2:	Silicified	Weak (1-25%)	Localized	
		3:	Calcite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
93.77	100.13	1:	Pyrite	Fine grained	Disseminated	0.1	
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
96	99	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
100.13	**104.05**	3.92	100	**E2**	**Intermediate Volcanic**	Porphyritic (with phenocrysts)	Medium grained	J. Solomon

Intermediate volcanics: Upper contact marked by the onset of albite phenocryst. Unit is porphyritic with about 3-5% albite phenocrysts set in mafic matrix. Unit is green in colour. Very few calcite stringer present. No visible mineralization seen

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
100.13	104.05	1:	Pyrite	Fine grained	Disseminated	0.1	
VG: No							

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
104.05	**107.35**	3.3	100	**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Basalt: Dark green/Gray aphinitic unit. Unit is massive with few 0.5 cm scale grey feldspar veins cross-cut and offset by later stage

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

mm scale stringer of calcite and grey feldspar. Few healed fracture seen. Fine grain pyrite seen preferentially rimming the edges of the late stage stringers, they also occur as fracture-filled in places. Pyrite is upto 0.3% overall but locally higher.

Structures

From	To	Code	Structure Type	Comments
105	107	JNT1	Joint - calcite infilled	Significant amount of healed fractures seen cross-cutting and offsetting each other

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
107.35	**107.5**	0.15		**LC**	**Lost Core**			J. Solomon

No core

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
107.5	**115.34**	7.84	85	**E1A**	**Basalt**	Massive	Fine grained	J. Solomon
			15	E2	Intermediate Volcanic	Porphyritic (with phenocrysts)		

Basalt: Dark green/Gray aphinitic unit with local porphyritic section. Unit is massive, few mm scale calcite stringers present. Unit is moderately silicified in places. Fine grain pyrite seen preferentially rimming the edges of the stringers, they also occur as fracture-filled in places. Pyrite is upto 0.3% overall but locally higher.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
108	111	1	Sulphides Vein	Veinlet Zone - vein 1/4" to 3"		60	0.6	
111	114	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	0.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
115.34	**121.25**	5.91	100	**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Same as above but weakly foliated. The last 25 cm is weakly brecciated felsic intrusive. Hematite moderately overprint smaller calcite sringers and selvage the bigger ones. Unit is weakly foliated at about 65 deg TCA. Unit is weakly silicified. About 0.2% fine grain pyrite present and associates

Alteration

From	To	#	Alteration	Intesity	Style	Comments
115.34	119.05	1	Hematite	Weak (1-25%)	Fracture Filled	
		2	Silicified	Weak (1-25%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
117	120	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		45	3	Most of the veins are calite+hematite

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
121.25	**121.7**	0.45	100	**FLT**	**Fault Zone**			J. Solomon

45.0 cm fault gouge. It is bordered by 25 cm weakly brecciated felsic dyke

Structures

From	To	Code	Structure Type	Comments
121.25	121.7	FLT5	Fault - gouge	Fault gouge. Gouge preceeded by 25 cm felsic intrusive. Upper contact at 30 deg TCA

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
121.7	**132.77**	11.07	100	**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Basalt: Fine grain, dark green unit, weakly foliated at about 70 deg TCA. Upto 1% calcite stringers present and oriented parallel to foliation. Chlorite alteration is moderate. No mineralization seen

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
121.7	132.77	1:	Pyrite	Fine grained	Disseminated	0.1	
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
123	126	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		55	1.4	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.4	
126	129	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	1.8	
129	132	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
132.77	**143.04**	10.27	100	**E1A**	**Basalt**		Fine grained	J. Solomon

Basalt: Dark green, fine grain, weakly foliated unit. Upto 1% calcite stringers present, oriented at 70 deg TCA and mostly overprinted by hematite. minor amount of grey calcite seen also overprinted by hematite in places. Irregularly oriented epidote stringer upto 0.5%. No significanrt mineralization seen.

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
132.77	143.04	1:	Pyrite	-	Disseminated	0.1	
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
135	138	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.8	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		45	2.4	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
138	141	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	2.6	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		45	0.6	

143.04	**190.03**	46.99	100	**I1A**	**Gabbro**	Massive	Coarse grained	J. Solomon

Gabbro: Upper contact is gradational, unit is coarse grain, green in colour and massive in texture. Close to 1% epidote stringers present, calcite stringers is minor, seen in places overprinted by epidote and rimmed by hematite. epidote alteration is weak to moderate and structural controlled. Unit is moderately fractured, 80% of the fractures are red from hematite alteration. Pyrite mineralization is only trace.

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
143.04	161	1:	Pyrite	Fine grained	Disseminated	0.1	
VG: No							

Structures

From	To	Code	Structure Type	Comments
148.25	149	HFZ	High fracture zone	Rock mostly broken
154	177	HFZ	High fracture zone	Rock mostly broken
177	186	HFZ	High fracture zone	Strongly broken core
186	190	HFZ	High fracture zone	Unit is extremely broken, rubble.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
144	147	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.6	
147	150	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	4.5	
150	153	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	4	
153	156	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	3	
156	159	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	2.4	
159	162	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	2	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	1.2	
162	165	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.4	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65		
165	168	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	0.6	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		55	0.8	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
168	171	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	3	
171	174	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	2.4	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.4	
174	177	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.6	
177	180	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	2.6	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.2	
180	183	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	1.8	
183	186	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	2.4	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.6	
186	189	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	2.2	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	1.3	

From	To					Texture	GrainSize	Logged By
190.03	**211.4**	21.37	100	**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Basalt: Upper contact is gradational. Unit is green and aphinitic. Massive except for few irregularly oriented epidote stringers. stringers vuggy in places and frees up associated pyrite. Unit is heavily fractured (broken core). Calcite alteration is very weak, moderate hemate alteration on fracture surfaces, sometimes rimming the edges of the veins into the host rock. Trace amount of disseminated fine grain py present.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
190.04	211.4	1:	Hematite	Weak (1-25%)	Fracture Filled	
		2:	Epidote	Weak (1-25%)	Halo-Vein Related	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
192	195	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	2.4	
195	198	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	3.2	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.3	
198	201	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	2.8	
201	204	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.6	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.4	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
204	207	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.8	
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.2	
207	210	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	2.4	Most of the calcite veins overprinted by hematite
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.4	

211.4	**216.5**	5.1	100	**E1A**	**Basalt**		Fine grained	J. Solomon

Same as the previous but with weak chlorite alteration. Unit is strongly broken and rubbly, friable in places. Hematite alteration is intense on calc+/-epd stringers

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
213	216	1	Quartz-Fe-Carbonate/Epidote	-		55	2.8	No veins, all rubble

216.5	**219**	2.5		**LC**	**Lost Core**			J. Solomon

Note: Previous unit strongly broken and rubbly, drillers block shows section is grinded up.

219	**274.5**	55.5		**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Unit is rubbly, same as interval 211.4 to 219. Intense ankerite alteration results in vuggy section in places, leached out veins liberate pyrite. Fine grain pyrite up to 1%, and locally higher, present mostly in association with calc+/-epidote vein

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
219	222	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		45	3	Hematite overprint calcite vein
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		45	3	

274.5	**275.5**	1		**LC**	**Lost Core**			J. Solomon

275.5	**281.23**	5.73		**E1A**	**Basalt**			J. Solomon

same as the interval 219 to 274.5

281.23	**297.45**	16.22	100	**E1A**	**Basalt**		Fine grained	J. Solomon

Basalt: Massive, green aphinitic unit. Upper contact marked by end of high fracture, the first 1.0m is weakly foliated at 50 deg TCA. Few sparsely distributed calcite veins present and irregularly oriented TCA. Calcite veins seen overprinted by hematite in places, minor parchy ankerite also on calcite veins. Significant epidote patches in present. Pyrite mineralization is minor and mostly primary.

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
281.23	297.45	1:	Epidote	Weak (1-25%)	Patches	
		2:	Ankerite	Weak (1-25%)	Pervasive	
		3:	Hematite	Weak (1-25%)	Fracture Filled	
		4:	Calcite	Weak (1-25%)	Fracture Filled	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
282	285	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	5	
285	288	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	4	
288	291	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	2	
291	294	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	5.5	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		75	2.3	
294	297	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	6.7	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		55	3.5	

From	To						
297.45	**303.05**	5.6	100	**E1**	**Mafic Volcanic**	Fine grained	J. Solomon

Strongly altered mafic volcanics. Upper contact is gradational. Unit is aphinitic and black in colour from intense magnetite alteration. Magnetic susceptibility range from 26 to 96. Unit is rubbly in places. Relics of calcite stringers are vuggy and oriented at 70 deg TCA, most veins overprinted by hematite and sub-ordinate ankerite. Localize patchy epidote present, Irregularly oriented calcite stringers upto 2% of the unit. disseminated fine grain pyrite upto 0.5% with local higher concentration.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
300	303	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	2.2	

From	To						
303.05	**313.12**	10.07	100	**E1A**	**Basalt**	Fine grained	J. Solomon

Basalt: Distinct upper contact marked by the end of magnetite alteration. Unit is green, aphinitic and weakly foliated at about 50 deg TCA. Few sparsely distributed calcite stringers present, epidote patches significant, most vein/stringer overprinted by hematite. Ankerite preferentially overprint calcite stringer. Patchy magnetite in places. Disseminated fine grain pyrite upto 0.2%

Alteration

From	To	#	Alteration	Intesity	Style	Comments
305.05	312.12	1:	Hematite	Weak (1-25%)	Fracture Filled	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
313.12	**347.57**	34.45		**E1**	**Mafic Volcanic**		Medium grained	J. Solomon

Same as the interval 297.45 - 303.05. 30 cm bull qtz at 317.7m. Pyrite mineralization upto 1% but upto 5% locally

Alteration

From	To	#	Alteration	Intesity	Style	Comments
323.95	329.72	1:	Silicified	Moderate (26-50%)	Pervasive	
329.72	332.5	1:	Magnetite	Strong (51-75%)	Pervasive	
		2:	Hematite	Weak (1-25%)	Patches	
332.5	336.13	1:	Chlorite	Weak (1-25%)	Pervasive	
		2:	Ankerite	Weak (1-25%)	Fracture Filled	
336.13	347.57	1:	Calcite	Moderate (26-50%)	Pervasive	

Structures

From	To	Code	Structure Type	Comments
324	330	FOL	Foliation	Strong foliation at 45-50 deg TCA

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
315	318	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"		70	48	
318	321	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	2.1	
324	327	1:	Quartz vein	Vein > 3"		65	15	
327	330	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	1.5	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.8	
330	333	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.6	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	1.5	
333	336	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.2	
336	339	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
347.57	**359.4**	11.83		**E1**	**Mafic Volcanic**		Fine grained	J. Solomon

Mafic Vocanics: gradational upper contact. Unit is green, aphinitic and weakly foliated at about 65 deg TCA. Few calcite stringers present and irregularly oriented TCA. Most veins are overprinted by hematite +/- ankerite. Unit is weakly magnetic. Sulphide mineralization is insignificant.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
347.57	359.4	1:	Calcite	Weak (1-25%)	Pervasive	
		2:	Hematite	Weak (1-25%)	Fracture Filled	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		3	Ankerite	Weak (1-25%)	-	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
359.4	360.5	1.1	FLT	Fault Zone		Fine grained	J. Solomon

Mafic volcanics: Unit is all rubble

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
360.5	364	3.5	E1	Mafic Volcanic		Fine grained	J. Solomon

Mafic volcanics. Unit is green, aphinitic and weakly foliated at about 50 deg TCA. Few irregularly oriented calcite stringers present. Stringers overprinted by hematite +/- ankerite, vuggy in places. weak to mod patchy epidote alteration. Unit is moderately magnetic. No significant mineralization present.

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
364	371.5	7.5	E1	Mafic Volcanic		Fine grained	J. Solomon

Mafic volcanic. Upper contact is gradational, Unit is grey, aphinitic and wk-mod foliated at about 40 deg TCA. few calcite stringers present, mostly oriented at 45 deg TCA and mostly vuggy. Ankerite alteration is mod to locally strong, pervasive calcite in places. Unit is not magnetic, No significant mineralization seen.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
364	371.5	1	Ankerite	Moderate (26-50%)	Pervasive	
		2	Chlorite	Weak (1-25%)	Pervasive	
		3	Calcite	Weak (1-25%)	-	

Structures

From	To	Code	Structure Type	Comments
366	371	FOL	Foliation	Moderately foliated at about 55 deg TCA

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
366	369	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		45	1.8	
369	370	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	1.4	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
371.5	375.8	4.3	FLT	Fault Zone			J. Solomon

Fault Gouge: Unit is 70% mud, few cm scale competent rock show strong ankerite altered mafic volcanics. No significant mineralization seen

Alteration

From	To	#	Alteration	Intesity	Style	Comments

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Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
371.5	374.8	1: Chlorite		Moderate (26-50%)	Pervasive			
		2: Ankerite		-	Pervasive			

375.8 428.9 53.1 **E1** **Mafic Volcanic** Fine grained J. Solomon

Mafic vocanics: Sharp upper contact (fault contact). Unit is green, aphinitic, massive and unaltered. Few irregularly oriented calcite stringers present, overprinted by hematite. Hematite is mod on fracture surfaces, chl alteration is weak to locally moderate. Unit is non-magnetic, no significant mineralization seen.

Structures

From	To	Code	Structure Type	Comments
417	421	FRA	Fracture	Moderately fractured zone

428.9 436.1 7.2 **E1** **Mafic Volcanic** Fine grained J. Solomon

Mafic vocanics: Sharp upper contact (fault contact) at about 75 deg TCA. Unit is green, aphinitic, massive Unit is strongly broken and rubbly. Few irregularly oriented calcite stringers present, overprinted by hematite. Hematite is mod on fracture surfaces, chl alteration is weak to locally moderate. Unit is non-magnetic. Minor amount of disseminated fine grain pyrite present, upto 0.5% locally

Structures

From	To	Code	Structure Type	Comments
428.9	436.1	HFZ	High fracture zone	Strongly fractured zone, mostly rubble

436.1 446.45 10.35 **E1** **Mafic Volcanic** Massive Fine grained J. Solomon

Mafic volcanics: Upper contact is gradational. Unit is grey, black, aphinitic and massive. Upto 5% irregularly oriented Fe-/+Ca+/-Ank present, few epidote stringers also presnt. Most veins an stringers are overprinted and selvage by hematite. Unit is wk to mod silicified. Localized disseminated fine grain pyrite upto 0.5% but insignificant overall.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
438	441	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	2.1	
441	444	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	6.3	

446.45 455 8.55 **E1A** **Basalt** Massive Fine grained J. Solomon

Mafic volcanics: Upper contact is gradational. Unit is grey, aphinitic, massive and strongly silicified. Local patches of strong hematite alteration. Few chlorite stringers present and oriented at 50 deg TCA. Disseminated fine grain pyrite upto 0.1%

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
447	450	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	2.1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
455	**460.88**	5.88		**E1A**	**Basalt**	Massive	Fine grained	J. Solomon

Gradational upper contact. Unit is black, aphinitic, grey and massive, same as previous but with intense silicification. Few irregularly oriented calcite stringers over the lower 2.0m. Disseminate fine grain pyrite upto 1% locally

Alteration

From	To	#	Alteration	Intesity	Style	Comments
455	460.88	1	Silicified	Strong (51-75%)	Pervasive	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
460.88	**464.27**	3.39		**E1**	**Mafic Volcanic**		Fine grained	J. Solomon

Altered mafic volcanics, unit aphinitic, moderately banded at about 45 deg TCA, brown in colour from strong magnetite and surbordinate hematite alteration. Relics of calcite veins overprinted by hematite. Disseminated fine grain pyrite upto 1% with local higher concentration around the veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
460.88	463	1	Magnetite	Strong (51-75%)	Banding	
		2	Hematite	Weak (1-25%)	Fracture Filled	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
464.27	**489**	24.73		**I1A**	**Gabbro**		Medium grained	J. Solomon

Gabbro: Upper contact is gradational. Unit is green, coarse grain and massive. Few irregularly oriented and sparsely distributed calcite stringers upto 1%, mostly overprinted by hematite. Unit is unaltered, no significant mineralization seen.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
464.27	489	1	Chlorite	Weak (1-25%)	Pervasive	
		2	Hematite	Weak (1-25%)	Fracture Filled	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
465	468	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	6	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		68	4	
468	471	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	3.4	

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Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
480	483	1:	Quartz vein	Veinlet Zone - vein 1/4" to 3"		65	14	
483	486	1:	Quartz vein	Veinlet Zone - vein 1/4" to 3"		65	4.5	
486	489	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	2.6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
489	**500.08**	11.08		**E1**	**Mafic Volcanic**	Massive	Fine grained	J. Solomon

Mafic volcanics: Sharp upper contact marked by hematite altered calcite vein. Unit is black, aphinitic and massive, about 5% irregularly oriented calcite stringers present, mostly overprinted and selvage by hematite. Magnetite alteration is very strong, few epidote stringers present. No significant mineralization seen.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
489	500	1:	Epidote	Weak (1-25%)	Pervasive	
		2:	Magnetite	Weak (1-25%)	Banding	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
489	492	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	2.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
500.08	**511.6**	11.52		**E1**	**Mafic Volcanic**	Massive	Fine grained	J. Solomon

Mafic volcanics; Green, aphinitic, massive mafic flow. Few calcite-filled vessicles, significant amount of irregularly oriented epidote stringers, few mm scale calcite stringers. Unit is weakly magnetic. No significant mineralization seen

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
501	504	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
511.6	**514.5**	2.9		**E1**	**Mafic Volcanic**	Massive	Fine grained	J. Solomon

Mafic volcanics; Green, aphinitic, massive mafic flow. Few calcite-filled vessicles, significant amount of irregularly oriented epidote stringers, few mm scale calcite stringers. Mod to strong hematite alteration preferentially attacking calc+/-epd veins. Unit is weakly magnetic. No significant mineralization seen

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
514.5	**519.25**	4.75		**E1**	**Mafic Volcanic**		Fine grained	J. Solomon

Mafic volcanics: Gradational upper contact. Unit is grey, aphinitic and moderately foliated at 55 deg TCA. Few calcite stringers mostly overprinted by hematite, few qtz-vn present, mostly stretched and boudinaged. An 80 cm wide qtz vn at 517.4m and associated with

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

about 5% pyrite. Magnetite alteration is strong. Disseminated fine grain pyrite mineralization upto 3%.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
514.5	519.25	1:	Magnetite	Moderate (26-50%)	Banding	
		2:	Hematite	Weak (1-25%)	Banding	

Structures

From	To	Code	Structure Type	Comments
514.5	517	FOL	Foliation	Unit is moderately foliated at 55 deg TCA
517.4	518.1	CV	Vein contact	Significant qtz vn with 3% strongly sheared wall rock. 3-5% pyrite present

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
516	519	1:	Quartz / Magnetite	Vein > 3"		70	1.04	

From	To						
519.25	**527.9**	8.65	**E1**	**Mafic Volcanic**	Massive	Fine grained	J. Solomon

Mafic VolcanicsSharp upper contact at 45 deg TCA, Unit is aphinitic, green with black magnetite bands, significant patchy epidote, sometimes occur as vein. About 2-3% calcite stringers overprinted by ankerite, they are consistently oriented at 70 deg TCA. Unit is weak to moderately magnetic. Mineralization is insignificant.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
522	525	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	4	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	3	

From	To						
527.9	**541**	13.1	**I1A**	**Gabbro**			J. Solomon

Gabbro: Unit is green, massive and coarse grain. About 2-3% calcite stringers selvaged or overprinted by ankerite, they are consistently oriented at 70 deg TCA. . Unit is moderately fractured with most fracture surfaces covered by hematite. Few fine grain, sporadically distributed pyrite mineralization present, trace overall.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
528	531	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	3.4	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	2.4	

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Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
531	534	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	4	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		55	4.5	
534	537	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	4	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	3.8	
537	540	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	2.4	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	3.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
541	**589**	48		**E1**	**Mafic Volcanic**	Massive	Fine grained	J. Solomon

Mafic volcanics: Upper contact is gradational, Unit is aphinitic, green with black magnetite bands, significant patchy epidote, sometimes occur as vein. About 2-3% calcite stringers overprinted by ankerite, they are consistently oriented at 70 deg TCA. Unit is weak to moderately magnetic. Mineralization is insignificant.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
543	546	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	4	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		65	4.2	
546	549	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	3.8	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	3.6	
549	552	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	3	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	3	
552	555	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	3.2	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	4	
555	558	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	3.4	
		2	Quartz-Fe-Carbonate/Epidote	-		65	2.8	
558	561	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	4.1	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		70	3.2	
561	564	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		55	3.4	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60		
564	567	1	Quartz-Fe-Carbonate/Calcite	-		60	2.8	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		55	3.1	
567	570	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	3.2	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		55	3.2	

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Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
570	573	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	3.2	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		60	2.8	
573	576	1	Quartz-Fe-Carbonate/Calcite	-		65	3.5	
		2	Quartz-Fe-Carbonate/Epidote	-		55	4.2	
576	579	1	Quartz-Fe-Carbonate/Calcite	-		60	1.9	
		2	Quartz-Fe-Carbonate/Epidote	-		50	3.2	
579	582	1	Quartz-Fe-Carbonate/Calcite	-		60	2.8	
		2	Quartz-Fe-Carbonate/Epidote	-		55	3.6	
582	585	1	Quartz-Fe-Carbonate/Calcite	-		65	2.4	
		2	Quartz-Fe-Carbonate/Epidote	-		55	3.2	
585	588	1	Quartz-Fe-Carbonate/Calcite	-		65	4.8	
		2	Quartz-Fe-Carbonate/Epidote	-		55	4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
589	**601.34**	12.34		**I1A**	**Gabbro**		Medium grained	J. Solomon

Gabbro: Unit is massive and med-coarse grain with some leucoxene in places. sparsely distributed, irregularly oriented calcite and epidote stringer upto to 0.5%, most of the calcite veins are moderately overprinted by hematite. Unit is moderately fractured. Few fine grain, sporadically distributed pyrite mineralization present mostly in associatio with the veins, trace overall.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
591	594	1	Quartz-Fe-Carbonate/Epidote	-		65	5	
		2	Quartz-Fe-Carbonate/Calcite	-		60	4	
594	597	1	Quartz-Fe-Carbonate/Epidote	-		60	4.8	
		2	Quartz-Fe-Carbonate/Calcite	-		55	6.4	
597	600	1	Quartz-Fe-Carbonate/Epidote	-		65	5.8	
		2	Quartz-Fe-Carbonate/Calcite	-		65	2.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
601.34	**656.35**	55.01		**E1**	**Mafic Volcanic**			J. Solomon

Mafic volcanics: Upper contact is gradational, Unit is aphinitic, green and massive. Significant patchy epidote, sometimes occur as vein. About 2-3% calcite stringers all overprinted by ankerite. The veins are consistently oriented at 70 deg TCA. Weak hematite alteration on fracture surfaces. Unit is weak to moderately magnetic. Mineralization is insignificant.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
601.37	622.57	1	Epidote	Weak (1-25%)	Patches	

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Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		2:	Hematite	Weak (1-25%)	Fracture Filled	
		3:	Calcite	Weak (1-25%)	Fracture Filled	
622.57	656.34	1:	Epidote	Weak (1-25%)	Patches	
		2:	Ankerite	Weak (1-25%)	Fracture Filled	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
603	606	1:	Quartz-Fe-Carbonate/Epidote	-		70	8.4	
		2:	Quartz-Fe-Carbonate/Calcite	-		65	3.2	
606	609	1:	Quartz-Fe-Carbonate/Epidote	-		70	3.6	
		2:	Quartz-Fe-Carbonate/Calcite	-		60	2.8	
609	612	1:	Quartz-Fe-Carbonate/Epidote	-		65	6.4	
		2:	Quartz-Fe-Carbonate/Calcite	-		62	2	
612	615	1:	Quartz-Fe-Carbonate/Epidote	-		70	5.8	
		2:	Quartz-Fe-Carbonate/Calcite	-		55	2.8	
615	618	1:	Quartz-Fe-Carbonate/Epidote	-		65	8	
		2:	Quartz-Fe-Carbonate/Calcite	-		60	3.2	
618	621	1:	Quartz-Fe-Carbonate/Epidote	-		70	7.6	
		2:	Quartz-Fe-Carbonate/Calcite	-		60	4.1	
621	624	1:	Quartz-Fe-Carbonate/Epidote	-		70	6.4	
		2:	Quartz-Fe-Carbonate/Calcite	-		55	4.2	
624	627	1:	Quartz-Fe-Carbonate/Epidote	-		70	6.6	
		2:	Quartz-Fe-Carbonate/Calcite	-		55	6.5	
627	630	1:	Quartz-Fe-Carbonate/Epidote	-		45	12	
		2:	Quartz / Magnetite	-		45	6	
630	633	1:	Quartz-Fe-Carbonate/Epidote	-		50	8	
633	636	1:	Quartz-Fe-Carbonate/Epidote	-		55	4.6	
		2:	Quartz-Fe-Carbonate/Calcite	-		60	3.6	
636	639	1:	Quartz-Fe-Carbonate/Epidote	-		55	8.8	
		2:	Quartz-Fe-Carbonate/Calcite	-		60	4.2	
639	642	1:	Quartz-Fe-Carbonate/Epidote	-		70	12	
		2:	Quartz-Fe-Carbonate/Calcite	-		55	4.4	

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Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
642	645	1	Quartz-Fe-Carbonate/Epidote	-		70	12	
		2	Quartz vein	-		60	9.6	
645	648	1	Quartz-Fe-Carbonate/Epidote	-		70	10	
		2	Quartz vein	-		45	6.8	
648	651	1	Quartz-Fe-Carbonate/Epidote	-		70	14	
		2	Quartz-Fe-Carbonate/Calcite	-		55	3.8	
651	654	1	Quartz-Fe-Carbonate/Epidote	-		65	8.8	
		2	Quartz-Fe-Carbonate/Calcite	-		50	3.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
656.35	**691.65**	35.3		**I1A**	**Gabbro**		Medium grained	J. Solomon

Gabbro: Unit is green, massive and med-coarse. sparsely distributed, irregularly oriented calcite and epidote stringer upto to 0.3%. Unit is weakly magnetic. Few fine grain pyrite are sporadically distributed mostly in associatio with the veins but insignificant overall.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
661	691.65	1	Epidote	Weak (1-25%)	Fracture Filled	
		2	Hematite	Weak (1-25%)	Fracture Filled	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
657	660	1	Quartz-Fe-Carbonate/Epidote	-		70	5.8	
		2	Quartz vein	-		65	6.4	
660	663	1	Quartz-Fe-Carbonate/Calcite	-		60	4.8	
663	666	1	Quartz-Fe-Carbonate/Calcite	-		65	4.6	
		2	Quartz-Fe-Carbonate/Epidote	-		65	8.4	
666	669	1	Quartz vein	-		60	5.1	
		2	Quartz-Fe-Carbonate/Epidote	-		55	12	
669	672	1	Quartz-Fe-Carbonate/Calcite	-		65	5.4	
		2	Quartz-Fe-Carbonate/Epidote	-		70	4.2	
672	675	1	Quartz-Fe-Carbonate/Calcite	-		65	4.2	
675	678	1	Quartz-Fe-Carbonate/Calcite	-		65	2.8	
678	681	1	Quartz-Fe-Carbonate/Calcite	-		65	3.1	

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Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
681	684	1:	Quartz-Fe-Carbonate/Calcite	-		65	3.2	
684	687	1:	Quartz-Fe-Carbonate/Calcite	-		65	4.2	
687	690	1:	Quartz-Fe-Carbonate/Calcite	-		70	12	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
691.65	**699.3**	7.65		**E1**	**Mafic Volcanic**	Massive		J. Solomon

Mafic volcanics: Upper contact is gradational, Unit is aphinitic, green and massive. Unit is blocky. Significant patchy epidote. Few calcite stringers irregularly oriented TCA and mostly overprinted by hematite. Unit is weak to moderately magnetic. Mineralization is insignificant.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
693	696	1:	Quartz-Fe-Carbonate/Epidote	-		70	4.6	
		2:	Quartz-Fe-Carbonate/Calcite	-		55	2.8	
696	699	1:	Quartz-Fe-Carbonate/Epidote	-		70	7.2	
		2:	Quartz-Fe-Carbonate/Calcite	-		60	12.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
699.3	**712.8**	13.5		**I1A**	**Gabbro**	Massive	Medium grained	J. Solomon

Gabbro: Unit is green, massive and med-coarse grain. Sparsely distributed, irregularly oriented calcite stringers upto 2% of the unit. Unit is patchy magnetic (weak). Few fine grain pyrite are sporadically distributed mostly in associatio with the veins but insignificant overall.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
702	705	1:	Quartz-Fe-Carbonate/Epidote	-		55	6.2	
		2:	Quartz-Fe-Carbonate/Calcite	-		50	2.8	
705	708	1:	Quartz-Fe-Carbonate/Calcite	-		55	3.2	
		2:	Quartz vein	-		45	8.5	
708	711	1:	Quartz-Fe-Carbonate/Calcite	-		55	3.2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
712.8	**726.26**	13.46		**E1**	**Mafic Volcanic**	Massive	Fine grained	J. Solomon

Mafic volcanics. Upper contact is gradational, unit is green to grey, massive and fine grain and unaltered. Multiple generations of calcite stringers oriented predominantly at 70 and 45 deg TCA, the earlier generation are preferentially attacked by hematite. Unit magnetic locally but vey weak overall. Upto 2% disseminated fine grain pyrite associates with hematite altered calcite veins

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
714	717	1:	Quartz-Fe-Carbonate/Calcite	-		65	4.8	
717	720	1:	Quartz-Fe-Carbonate/Calcite	-		50	21	
720	723	1:	Quartz-Fe-Carbonate/Calcite	-		45	3.4	
		2:	Quartz-Fe-Carbonate/Calcite	-		30	6.2	
723	726	1:	Quartz-Fe-Carbonate/Calcite	-		60	7.6	

726.26	**749.9**	23.64	**I1A**	**Gabbro**	Massive	Fine grained	J. Solomon

Gabbro: Unit is green, massive and fine to med grain. Sparsely distributed, irregularly oriented calcite stringers upto 2% of the unit, Some of the stringers are weakly overprinted by hematite. Unit is magnetic in places but weak overall. Few fine grain pyrite are sporadically distributed mostly in associatio with the veins but insignificant overall.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
729	732	1:	Quartz-Fe-Carbonate/Calcite	-		55	3.2	
732	735	1:	Quartz-Fe-Carbonate/Calcite	-		70	2.2	
735	738	1:	Quartz-Fe-Carbonate/Calcite	-		45	3.2	
738	741	1:	Quartz-Fe-Carbonate/Calcite	-		45	2.4	
741	744	1:	Quartz-Fe-Carbonate/Calcite	-		70	2.4	
		2:	Quartz-Fe-Carbonate/Epidote	-		65	2	
744	747	1:	Quartz-Fe-Carbonate/Calcite	-		55	2.6	
		2:	Quartz-Fe-Carbonate/Epidote	-		60	3.2	

749.9	**753.1**	3.2	**I1A**	**Gabbro**	Massive		J. Solomon

Gabbro: Gradational upper contact, moderate silicification overprints primary structural fabrics. A 50 cm wide qtz vn mixed with 5% wall rock at 750.1m depth. No significant mineralization associate with the vein but upto 0.5% disseminated fine grain py is sporadically distributed within the wall rock.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
749.9	753.1	1:	Silicified	Moderate (26-50%)	Pervasive	

Structures

From	To	Code	Structure Type	Comments

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
750.6	751.1	CV	Vein contact	Qtz vn with about 2% wall rock, the wall rock within the vein is strongly sheared and approach qtz bx, upto 1% pyrite mineralization at both contacts of the vein

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
750	753	1:	Quartz vein	-		60	50.46	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
753.1	**779.1**	26	**I1A**	**Gabbro**	Massive	Fine grained	J. Solomon

Gabbro: Upper contact is gradational, marked by end of strong silicification. The upper 2.5m is moderate epidote altered. Unit is green, massive and fine to med grain. Unit is magnetic in places but weak overall. Sparsely distributed fine thread like epidote stringers oriented at 70 deg TCA. Unit is weakly silicified, no mineralization seen

Alteration

From	To	#	Alteration	Intesity	Style	Comments
753.1	756	1:	Epidote	Moderate (26-50%)	Patches	
756	779.1	1:	Chlorite	Weak (1-25%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
762	765	1:	Quartz-Fe-Carbonate/Calcite	-		25	1.6	
765	768	1:	Quartz-Fe-Carbonate/Calcite	-		70	2.8	
		2:	Quartz-Fe-Carbonate/Epidote	-		65	3.6	
771	774	1:	Quartz-Fe-Carbonate/Epidote	-		70	6.5	
		2:	Quartz-Fe-Carbonate/Calcite	-		55	2.2	
774	777	1:	Quartz-Fe-Carbonate/Calcite	-		65	1.2	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
779.1	**790.5**	11.4	**E1**	**Mafic Volcanic**			J. Solomon

Mafic Volcanics: Upper contact is gradational, marked by preponderance of calcite stringers. Unit is green, aphinitic and wk-mod foliated at about 80 deg TCA. About 5% calcite stringers, mostly oriented parallel to foliation. Chlorite altertion is moderate, ankerite is patchy but mod, localized mod silicification. Unit is locally magnetic. Pyrite mineralization is upto 1% with local higher concentration.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
779.1	790.5	1:	Chlorite	Weak (1-25%)	Pervasive	

DataSet: Brookbank
HoleID: B-16-07

Hole Length (m): 822
Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		2	Calcite	Weak (1-25%)	Fracture Filled	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
780	783	1	Quartz-Fe-Carbonate/Calcite	-		75	35	
783	786	1	Quartz-Fe-Carbonate/Calcite	-		15		
786	789	1	Quartz-Fe-Carbonate/Calcite	-		55	6.8	

From	To	Width		Rocktype	Logged By
790.5	**804.34**	13.84	**E1**	**Mafic Volcanic**	J. Solomon

Mafic Volcanics: Distinct upper contact marked by onset of strong foliation. Unit is green, aphinitic and strongly foliated at 35 deg TCA. qtz+cal veins constitute about 30% of the unit. Chlorite alteration is moderate, ankerite is patchy, localize sericite alteration, 45 cm section of strong silicification at 799.7. Unit is non-magnetic. Pyrite mineralization upto 0.2% overall

Alteration

From	To	#	Alteration	Intesity	Style	Comments
790.5	804.34	1	Chlorite	Weak (1-25%)	Pervasive	
		2	Calcite	Weak (1-25%)	Fracture Filled	
		3	Sericite	Weak (1-25%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
792	795	1	Quartz-Fe-Carbonate/Calcite	-		30	28	
795	798	1	Quartz-Fe-Carbonate/Calcite	-		30	36	
		2	Quartz vein	-		35	5	
798	801	1	Quartz-Fe-Carbonate/Calcite	-		35	14	
801	804	1	Quartz-Fe-Carbonate/Calcite	-		40	18	

From	To	Width		Rocktype	Logged By
804.34	**806.52**	2.18	**E1**	**Mafic Volcanic**	J. Solomon

Brown, fine grain mafic volcanics. Strongly foliated at 60 deg TCA. Few qtz-cal veins present but mostly stretched and boudinaged. Unit is pale brown and bleached from strong sericite alteration overprinted by mod silicification. Local concentration of upto 1% pyrite mineralization associates with qtz vn in the upper 60cm and traces of disseminated fine grain pyrite in the rest of the interval

Alteration

From	To	#	Alteration	Intesity	Style	Comments

DataSet: Brookbank

HoleID: B-16-07

Hole Length (m): 822

Log Length (m): 822

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
804.34	806.52	1:	Sericite	Moderate (26-50%)	Pervasive	
		2:	Silicified	Weak (1-25%)	Pervasive	

806.52 **806.7** 0.18 **FLT** **Fault Zone** J. Solomon

Cataclasite: Historically refered to as "Black Fault". Sharp upper and lower contact at 25 deg TCA. Unit approach cataclasite with 90% black matrix. Significant qtz-carb veins truncated and displaced along the fault plane. The lower contact of the fault is followed by 25 cm of very strong sericite alteration. Few disseminated fine grain pyrite present but insignificant overall.

Structures

From	To	Code	Structure Type	Comments
806.52	806.7	FLT	Fault	Black fault

806.7 **822** 15.3 **S4B** **Polymictic Conglomerate** J. Solomon

Matrix supported Polymictic metaconglomerate: Few megaclasts of felsic rocks sets in argillite matrix. Unit is strongly foliated at 50-60 deg TCA, generally fissile along foliation and bedding planes. Few widely spaced mm scale qtz vn present. Few cm scale jasper clast present.The qtz vn are streched and boudinaged along foliation plane while the fragments and all clasts are streched parallel to foliation. Unit is weak to moderate sericite altered. No significant mineralization seen

Structures

From	To	Code	Structure Type	Comments
806.7	822	FOL	Foliation	Strong foliation at 40-55 deg TCA

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
807	810	1:	Quartz vein	-		2.4		
813	816	1:	Quartz vein	-		50	6.5	
816	819	1:	Quartz vein	-		50	24	
819	822	1:	Quartz vein	-		50	12	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 822**

HoleID: B-16-07 **Max Samp Depth (m): 822**

Total meters Sampled: 343.49

Primary Assay Samples:	340	87.4 %
Field Duplicate Samples:	16	4.11 %
Standard/Blank Samples:	33	8.48 %
Total Samples:	389	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
3	4	1	265001	HCORE			A16-13229	0.02	Weakly sheared, hematite altered unit with calcite overprint.
4	4.6	0.6	265002	HCORE			A16-13229	0.232	Same as above, the contact of strong calcite altered section
4.6	5.2	0.6	265003	HCORE			A16-13229	0.119	Strong calcite altered unit, marks the beginning of the gabbro unit. Upto 0.5% disseminated fine grain pyrite present
5.2	6	0.8	265004	HCORE			A16-13229	0.037	Upper contact of the gabbro unit. Massive with about 5% leucoxene, 15cm wide bull qtz-vn at 5.6m depth. Pyrite mineralization is insignificant
6	7	1	265005	HCORE			A16-13229	0.005	Massive gabbro
40	41	1	265006	HCORE			A16-13229	<0.005	Massive gabbro: Random sample within the highly fractured zone
41	42	1	265007	HCORE			A16-13229	<0.005	Massive Gabbro: Random sample within the highly fractured zone
53	53.92	0.92	265008	HCORE			A16-13229	0.005	Gabbro, lower contact of the unit borders intense k-spar altered felsic dyke??
53.92	54.3	0.38	265009	HCORE			A16-13229	0.016	Felsic dyke: Intense hematite alteration overprinting k-spar. Unit is brecciated
54.3	55	0.7	265010	HCORE			A16-13229	<0.005	Upper contact of a massive flow. about 0.5% disseminated fine grain pyrite associate with a vuggy qtz vein at the upper contact
		0	265011	STD		CDN_GS_P7J	A16-13229	0.746	
55	56	1	265012	HCORE			A16-13229	<0.005	Random sample of mafic flow. Sulphide mineralization is only trace
56	57	1	265013	HCORE			A16-13229	<0.005	Random sample of mafic flow. Sulphide mineralization is only trace
57	58	1	265014	HCORE			A16-13229	0.01	Random sample of mafic flow. Sulphide mineralization is only trace
58	59	1	265015	HCORE			A16-13229	0.039	Random sample of mafic flow. Sulphide mineralization is only trace. Some of the veins weakly overprinted by hematite, some veins are vuggy
59	60	1	265016	HCORE			A16-13229	0.005	Random sample of mafic flow. Sulphide mineralization is only trace

60	61	1	265017	HCORE			A16-13229	0.444	Random sample of mafic flow. Localized disseminated pyrite mineralization locally upto 0.5% at 60.8m
61	62	1	265018	HCORE			A16-13229	0.014	Mafic flow: Random sample. Disseminated fine grain pyrite upto 0.5 locally but less than 0.2% overall
		0	265019	Blank		Blank	A16-13229	<0.005	
86	87	1	265020	HCORE			A16-13402	<0.005	Mafic flow: Random sample. Trace of disseminated fine grain pyrite
87	88	1	265021	HCORE			A16-13402	<0.005	Mafic flow: Random sample. Trace of disseminated fine grain pyrite upto 0.5 locally but less than 0.2% overall
98	99	1	265022	HCORE			A16-13402	<0.005	Strong k-spar altered volcanics
99	100.13	1.13	265023	HCORE			A16-13402	<0.005	Strong k-spar altered volcanics. Sulphide mineralization insignificant
100.13	101	0.87	265024	HCORE			A16-13402	<0.005	Porphyritic intermediate volcanics, sulphide mineralization insignificant
		0	265025	DUP	265024		A16-13402	<0.005	
101	102	1	265026	HCORE			A16-13402	<0.005	Porphyritic intermediate volcanics, sulphide mineralization insignificant
102	103	1	265027	HCORE			A16-13402	<0.005	Porphyritic intermediate volcanics, sulphide mineralization insignificant
103	104.05	1.05	265028	HCORE			A16-13402	<0.005	Porphyritic intermediate volcanics, sulphide mineralization insignificant
104.05	105	0.95	265029	HCORE			A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
105	106	1	265030	HCORE			A16-13402	0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
106	107	1	265031	HCORE			A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
		0	265032	STD		CDN_GS_P4B	A16-13402	0.474	
107	107.35	0.35	265033	HCORE			A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
107.5	108	0.5	265034	HCORE			A16-13402	0.006	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
108	109	1	265035	HCORE			A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
109	110	1	265036	HCORE			A16-13402	0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
110	111	1	265037	HCORE			A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled

111	112	1	265038	HCORE		A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
112	113	1	265039	HCORE		A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
		0	265040	Blank	Blank	A16-13402	<0.005	
113	114	1	265041	HCORE		A16-13402	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
114	115	1	265042	HCORE		A17-00132	0.008	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
115	115.34	0.34	265043	HCORE		A17-00132	<0.005	Silicified mafic volcanics, upto 0.3% fine grain py rimmed calcite stringers, also present as fracture filled
121.7	122.4	0.7	265044	HCORE		A17-00132	0.005	Weakly foliated basalt, minor hematite on calcite vein. Insignificant sulphide. Random sample.
122.4	123	0.6	265045	HCORE		A17-00132	<0.005	Weakly foliated basalt, minor hematite on calcite vein. Insignificant sulphide. Random sample.
123	124	1	265046	HCORE		A17-00132	<0.005	Weakly foliated basalt, minor hematite on calcite vein. Insignificant sulphide. Random sample.
		0	265047	STD	CDN_GS_P7J	A17-00132	0.787	
132	132.77	0.77	265048	HCORE		A17-00132	<0.005	Weakly foliated basalt, significant amount of sulphide preferentially attacking calcite veins. hematite on calcite vein. Insignificant sulphide.
132.77	133.4	0.63	265049	HCORE		A17-00132	0.006	Weakly foliated basalt, significant amount of sulphide preferentially attacking calcite veins. hematite on calcite vein. Insignificant sulphide.
133.4	134	0.6	265050	HCORE		A17-00132	0.005	Weakly foliated basalt, significant amount of sulphide preferentially attacking calcite veins. hematite on calcite vein. Insignificant sulphide.
142	143.04	1.04	265051	HCORE		A17-00132	0.018	Massive gabbro, no significant sulphide seen
143.04	144	0.96	265052	HCORE		A17-00132	0.02	Massive gabbro, no significant sulphide seen
144	145	1	265053	HCORE		A17-00132	0.006	Massive gabbro, no significant sulphide seen
145	146	1	265054	HCORE		A17-00132	0.005	Massive gabbro, no significant sulphide seen
146	147	1	265055	HCORE		A17-00132	0.006	Massive gabbro, no significant sulphide seen
		0	265056	Blank	Blank	A17-00132	<0.005	

147	148	1	265057	HCORE			A17-00132	0.006	Massive gabbro, no significant sulphide seen
173	174	1	265058	HCORE			A17-00132	<0.005	Section has few calcite stringers that are overprinted by hematite with which few disseminated fine grain pyrite associates
174	175	1	265059	HCORE			A17-00132	0.005	Gabbro, random sample
181	182	1	265060	HCORE			A17-00132	<0.005	Section has few calcite stringers that are overprinted by hematite with which few disseminated fine grain pyrite associates
182	183	1	265061	HCORE			A17-00132	0.005	Section has few calcite stringers that are overprinted by hematite with which few disseminated fine grain pyrite associates
183	184	1	265062	HCORE			A17-00132	0.005	Gabbro, few calcite stringers, minor hematite alteration, fw disseminated fine grain py
184	185	1	265063	HCORE			A17-00132	<0.005	Gabbro, few calcite stringers, minor hematite alteration, few disseminated fine grain py present
		0	265064	DUP	265063		A17-00132	<0.005	
185	186	1	265065	HCORE			A17-00132	0.006	Gabbro, few calcite stringers, minor hematite alteration, significant amount of euhedral py present over 10 cm at 185.7m depth
197	198	1	265066	HCORE			A17-00132	0.005	Gabbro, few calcite stringers, minor hematite alteration mostly attacking calcite +/- hematite stringers, significant amount of euhedral py present over 10 cm at 185.7m depth
198	199	1	265067	HCORE			A17-00132	0.046	Gabbro, few calcite stringers, minor hematite alteration mostly attacking calcite +/- hematite stringers, significant amount of euhedral py present over 10 cm at 185.7m depth
199	200	1	265068	HCORE			A17-00132	0.01	Gabbro, few calcite stringers, minor hematite alteration mostly attacking calcite +/- epidote stringers, significant amount of euhedral py present over 10 cm at 185.7m depth
205	206	1	265069	HCORE			A17-00158	<0.005	Gabbro, few calcite stringers, significant amount of euhedral py present over 10 cm at 185.7m depth
206	207	1	265070	HCORE			A17-00158	<0.005	Massive basalt, few calcite and epidote stringers, sulphide mineralization is insignificant
221	221.6	0.6	265071	HCORE			A17-00158	<0.005	Massive basalt, few calcite and epidote stringers, sulphide mineralization is insignificant
221.6	222.4	0.8	265072	HCORE			A17-00158	<0.005	Massive basalt, few calcite and epidote stringers, sulphide mineralization is insignificant
		0	265073	STD		CDN_GS_P7J	A17-00158	0.892	

222.4	223	0.6	265074	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, minor amount of fine grain py present
223	224	1	265075	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
224	225	1	265076	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
225	226	1	265077	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
226	227	1	265078	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
227	228	1	265079	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
228	229	1	265080	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
229	230	1	265081	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
		0	265082	Blank	Blank	A17-00158	<0.005	
230	231	1	265083	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins

231	232	1	265084	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
232	233	1	265085	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
233	234	1	265086	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
234	235	1	265087	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
235	236	1	265088	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
236	237	1	265089	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
		0	265090	STD	CDN_GS_P4B	A17-00158	0.429	
237	238	1	265091	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
238	239	1	265092	HCORE		A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
239	240	1	265093	HCORE		A17-00158	0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins

240	241	1	265094	HCORE			A17-00158	<0.005	Massive basalt, few calcite stringers, strong hematite on fracture surfaces and around vein edges, Intense ankerite alteration results in vugs in places,pyrite mineralization upto 0.5% mostly loose from leached out veins
245	246	1	265095	HCORE			A17-00158	0.005	Basalt, high fracture zone with upto 1% pyrite
246	247	1	265096	HCORE			A17-00158	0.005	Basalt, high fracture zone with upto 1% pyrite
247	248	1	265097	HCORE			A17-00158	0.005	Basalt, high fracture zone with upto 1% pyrite
		0	265098	DUP	265097		A17-00158	<0.005	
273	274	1	265099	HCORE			A17-00158	0.005	Basalt, high fracture zone with upto 1% pyrite
274	274.5	0.5	265100	HCORE			A17-00158	0.005	Basalt, high fracture zone with upto 1% pyrite
275.5	276	0.5	265101	HCORE			A17-00158	0.005	Basalt, high fracture zone with upto 1% pyrite
276	277	1	265102	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
277	278	1	265103	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
278	279	1	265104	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
279	280	1	265105	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
280	280.5	0.5	265106	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
280.5	281.23	0.73	265107	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
281.23	282	0.77	265108	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
282	283	1	265109	HCORE			A17-00158	<0.005	Basalt, high fracture zone with upto 1% pyrite
		0	265110	Blank		Blank	A17-00158	<0.005	
296	296.6	0.6	265111	HCORE			A17-00158	<0.005	Massive mafic volcanic, insignificant sulphide mineralization
296.6	297.45	0.85	265112	HCORE			A17-00158	<0.005	Same as previous, lithologic contact. Few vuggy calcite veins, mineralization insignificant
297.45	298	0.55	265113	HCORE			A17-00158	<0.005	Magnetite altered volcanics. Few calcite stringers irregularly oriented TCA. Up to 0.5% pyrite mineralization present
298	299	1	265114	HCORE			A17-00158	<0.005	Magnetite altered volcanics. Few calcite stringers irregularly oriented TCA. Up to 0.5% pyrite mineralization present

299	300	1	265115	HCORE			A17-00158	<0.005	Magnetite altered volcanics. Few calcite stringers irregularly oriented TCA. Up to 0.5% pyrite mineralization present
300	301	1	265116	HCORE			A17-00158	<0.005	Magnetite altered volcanics. Few calcite stringers irregularly oriented TCA. Up to 0.5% pyrite mineralization present
		0	265117	STD		CDN_GS_P7J	A17-00158	0.859	
301	302	1	265118	HCORE			A17-00158	0.006	Magnetite altered volcanics. Few calcite stringers irregularly oriented TCA. Up to 0.5% pyrite mineralization present
302	303	1	265119	HCORE			A17-00158	<0.005	Magnetite altered volcanics. Few calcite stringers irregularly oriented TCA. Up to 0.5% pyrite mineralization present
303	304	1	265120	HCORE			A17-00158	0.083	Magnetite altered volcanics. Unit is strongly fractured. Few calcite stringers irregularly oriented TCA. Up to 1% pyrite mineralization present
304	305.05	1.05	265121	HCORE			A17-00158	0.022	Magnetite altered volcanics. Unit is strongly fractured. Few calcite stringers irregularly oriented TCA. Up to 1% pyrite mineralization present
305.05	306	0.95	265122	HCORE			A17-00158	<0.005	Magnetite altered volcanics. Unit is strongly fractured. Few calcite stringers irregularly oriented TCA. Up to 1% pyrite mineralization present
306	307	1	265123	HCORE			A17-00158	<0.005	Massive basalt, few calcite vn, no significant mineralization
307	308	1	265124	HCORE			A17-00158	<0.005	Weakly sheared, hematite altered unit with calcite overprint.
		0	265125	DUP	265124		A17-00158	<0.005	
308	309	1	265126	HCORE			A17-00158	<0.005	Weakly sheared, hematite altered unit with calcite overprint.
309	310	1	265127	HCORE			A17-00158	<0.005	Weakly sheared, hematite altered unit with calcite overprint.
310	311	1	265128	HCORE			A17-00158	<0.005	Massive basalt with few calcite veins. No significant mineralization
311	312	1	265129	HCORE			A17-00158	<0.005	Massive basalt with few calcite veins. No significant mineralization
312	313.12	1.12	265130	HCORE			A17-00158	<0.005	Massive basalt with few calcite veins. No significant mineralization
313.12	314	0.88	265131	HCORE			A17-00158	<0.005	Strong magnetite altered volcanics, few calcite veins, mostly overprinted by hematite
314	315	1	265132	HCORE			A17-00158	<0.005	Strong magnetite altered volcanics, few calcite veins, mostly overprinted by hematite
315	316	1	265133	HCORE			A17-00158	<0.005	Strong magnetite altered volcanics, few calcite veins, mostly overprinted by hematite

		0	265134	Blank		Blank	A17-00158	<0.005	
316	317	1	265135	HCORE			A17-00158	<0.005	Strong magnetite altered volcanics, few calcite veins, mostly overprinted by hematite
317	318	1	265136	HCORE			A17-00158	<0.005	Strong magnetite altered volcanics, few calcite veins, mostly overprinted by hematite
318	319	1	265137	HCORE			A17-00158	<0.005	
319	320	1	265138	HCORE			A17-00158	0.005	
320	321	1	265139	HCORE			A17-00158	0.006	
321	322	1	265140	HCORE			A17-00158	0.006	
		0	265141	STD		CDN_GS_P4B	A17-00158	0.442	
322	323	1	265142	HCORE			A17-00158	0.005	
323	323.95	0.95	265143	HCORE			A17-00158	<0.005	
323.95	325	1.05	265144	HCORE			A17-00158	0.088	
325	326	1	265145	HCORE			A17-00158	0.008	
326	327	1	265146	HCORE			A17-00158	0.009	
		0	265147	DUP	265146		A17-00158	0.006	
327	328	1	265148	HCORE			A17-00158	0.008	
328	329	1	265149	HCORE			A17-00158	<0.005	
329	329.72	0.72	265150	HCORE			A17-00158	0.012	
329.72	330.5	0.78	265151	HCORE			A17-00158	<0.005	
330.5	331	0.5	265152	HCORE			A17-00158	<0.005	
331	332	1	265153	HCORE			A17-00158	<0.005	
		0	265154	Blank		Blank	A17-00158	<0.005	
332	332.5	0.5	265155	HCORE			A17-00158	<0.005	
332.5	333	0.5	265156	HCORE			A17-00158	<0.005	
333	334	1	265157	HCORE			A17-00158	<0.005	
334	335	1	265158	HCORE			A17-00158	<0.005	
335	336.13	1.13	265159	HCORE			A17-00158	<0.005	
336.13	337	0.87	265160	HCORE			A17-00158	0.021	
337	338	1	265161	HCORE			A17-00158	<0.005	
		0	265162	STD		CDN_GS_P4B	A17-00158	0.4	
338	339	1	265163	HCORE			A17-00158	0.009	
339	340	1	265164	HCORE			A17-00158	0.007	
340	341	1	265165	HCORE			A17-00158	<0.005	
341	342	1	265166	HCORE			A17-00158	0.006	
342	343	1	265167	HCORE			A17-00158	<0.005	

343	344	1	265168	HCORE			A17-00158	0.008	
344	345	1	265169	HCORE			A17-00158	0.005	
345	346	1	265170	HCORE			A17-00158	<0.005	
346	347	1	265171	HCORE			A17-00158	<0.005	
347	347.57	0.57	265172	HCORE			A17-00158	0.059	
347.57	348	0.43	265173	HCORE			A17-00158	0.008	
358	359	1	265174	HCORE			A17-00158	0.006	
		0	265175	DUP	265174		A17-00158	0.006	
364	365	1	265187	HCORE			A17-00210	<0.005	Strong ankerite altered mafic volcanics
		0	265188	DUP	265187		A17-00210	<0.005	
365	366	1	265189	HCORE			A17-00210	<0.005	Strong ankerite altered mafic volcanics, no significant mineralization seen
366	367	1	265190	HCORE			A17-00210	<0.005	Strong ankerite altered mafic volcanics, no significant mineralization seen
367	368	1	265191	HCORE			A17-00210	<0.005	Strong ankerite altered mafic volcanics, no significant mineralization seen
368	369	1	265192	HCORE			A17-00210	<0.005	Strong ankerite altered mafic volcanics, no significant mineralization seen
369	370	1	265193	HCORE			A17-00210	<0.005	Strong ankerite altered mafic volcanics, no significant mineralization seen
370	371	1	265194	HCORE			A17-00210	0.113	Strong ankerite altered mafic volcanics, no significant mineralization seen
		0	265195	Blank		Blank	A17-00210	0.075	According to the sample tag and database, sample 265195 was supposed to be a blank inserted at 371m. The result returned was from Actlabs was 0.0750 g/t and showed that the sample was not a blank. The pulp was checked and it was consistent with a core sample pulp. The result was confirmed by the umpire lab repeat. The discrepancy can not be resolved through the photos of the core or sample tags. There may be an inconsistency in the intervals in the continuous sampling from 364-373m.
371	371.5	0.5	265196	HCORE			A17-00210	0.436	Strong ankerite altered mafic volcanics, no significant mineralization seen
371.5	372	0.5	265197	HCORE			A17-00210	0.022	Mafic volcanics, few calcite stringers with ankerite and hematite alteration. No significant mineralization seen
372	373	1	265198	HCORE			A17-00210	<0.005	Mafic volcanics, few calcite stringers with ankerite and hematite alteration. No significant mineralization seen
390	391	1	265199	HCORE			A17-00210	<0.005	Massive mafic volcanics with few calcite stringers, stringers are vuggy, minor amount of disseminated fine grain pyrite present

391	392	1	265200	HCORE			A17-00210	0.005	Massive mafic volcanics with few calcite stringers, stringers are vuggy, minor amount of disseminated fine grain pyrite present
392	393	1	265201	HCORE			A17-00210	<0.005	Massive mafic volcanics with few calcite stringers, stringers are vuggy, minor amount of disseminated fine grain pyrite present
410	411	1	265202	HCORE			A17-00210	<0.005	Massive mafic volcanics with few calcite stringers, stringers are vuggy, minor amount of disseminated fine grain pyrite present
411	412	1	265203	HCORE			A17-00210	<0.005	Massive mafic volcanics with few calcite stringers, stringers are vuggy, minor amount of disseminated fine grain pyrite present
		0	265204	STD		CDN_GS_P7J	A17-00210	0.666	
436.1	437	0.9	265205	HCORE			A17-00210	0.009	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
437	438	1	265206	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
438	439	1	265207	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
439	440	1	265208	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
440	441	1	265209	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
441	442	1	265210	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
442	443	1	265211	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
		0	265212	DUP	265211		A17-00210	<0.005	
443	444	1	265213	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
444	445	1	265214	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
445	445.8	0.8	265215	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
445.8	446.45	0.65	265216	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
446.45	447	0.55	265217	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
447	448	1	265218	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
448	449	1	265219	HCORE			A17-00210	<0.005	mafic volcanics with few calcite stringers, sulphide mineralization is insignificant
		0	265220	Blank		Blank	A17-00210	<0.005	

458	459	1	265221	HCORE			A17-00210	<0.005	Strongly silicified mafic volcanics, few calcite stringers with hem selvage. Disseminated fine grain pyrite upto 0.5%
459	460	1	265222	HCORE			A17-00210	<0.005	Strongly silicified mafic volcanics, few calcite stringers with hem selvage. Disseminated fine grain pyrite upto 0.5%
460	460.88	0.88	265223	HCORE			A17-00210	0.017	Strongly silicified mafic volcanics, few calcite stringers with hem selvage. Disseminated fine grain pyrite upto 0.5%
460.88	462	1.12	265224	HCORE			A17-00210	0.005	Strong magnetite altered mafic volcanics with mod hem on calcite. Disseminated fine grain pyrite upto 1%
462	463	1	265225	HCORE			A17-00210	0.005	Strong magnetite altered mafic volcanics with mod hem on calcite. Disseminated fine grain pyrite upto 1%
463	464.27	1.27	265226	HCORE			A17-00210	0.005	Strong magnetite altered mafic volcanics with mod hem on calcite. Disseminated fine grain pyrite upto 1%
		0	265227	STD		CDN_GS_P4B	A17-00210	0.488	
464.27	465	0.73	265228	HCORE			A17-00210	<0.005	Strong magnetite altered mafic volcanics with mod hem on calcite. Disseminated fine grain pyrite upto 1%
465	466	1	265229	HCORE			A17-00210	<0.005	mafic volcanics with few calcite veins. 0.2% disseminated fine grain pyrite present.
466	467	1	265230	HCORE			A17-00210	<0.005	mafic volcanics with few calcite veins. 0.2% disseminated fine grain pyrite present.
467	468	1	265231	HCORE			A17-00210	<0.005	mafic volcanics with few calcite veins. 0.2% disseminated fine grain pyrite present.
468	469	1	265232	HCORE			A17-00210	<0.005	mafic volcanics with few calcite veins. 0.2% disseminated fine grain pyrite present.
469	470.2	1.2	265233	HCORE			A17-00210	<0.005	mafic volcanics with few calcite veins. 0.2% disseminated fine grain pyrite present.
470.2	471	0.8	265234	HCORE			A17-00210	<0.005	mafic volcanics with few calcite veins. Mineralization is insignificant.
		0	265235	DUP	265234		A17-00210	<0.005	
480	481	1	265236	HCORE			A17-00210	<0.005	Massive gabbro, few cm scale qtz-cal vn and stringers present, sulphide mineralization is insignificant.
481	482	1	265237	HCORE			A17-00210	<0.005	Massive gabbro, about 5 cm wide qtz-cal vn present, sulphide mineralization is insignificant.
482	483	1	265238	HCORE			A17-00210	<0.005	Massive gabbro, about 11 cm wide qtz-cal vn present, sulphide mineralization is insignificant.

489	490	1	265239	HCORE			A17-00210	<0.005	massive mafic flow, no significant mineralization
490	491	1	265240	HCORE			A17-00210	<0.005	massive mafic flow, no significant mineralization
		0	265241	Blank		Blank	A17-00210	<0.005	
512	513	1	265242	HCORE			A17-00210	<0.005	massive mafic flow, no significant mineralization
513	514	1	265243	HCORE			A17-00210	<0.005	massive mafic flow, no significant mineralization
514	514.5	0.5	265244	HCORE			A17-00210	<0.005	massive mafic flow, no significant mineralization
514.5	515	0.5	265245	HCORE			A17-00210	<0.005	Strongly foliated mafic volcanics, significant calc+/-ank veins. pyrite mineralization is upto 0.2%
515	516	1	265246	HCORE			A17-00210	0.039	Strongly foliated mafic volcanics, significant calc+/-ank veins. pyrite mineralization is upto 0.2%
516	517	1	265247	HCORE			A17-00210	<0.005	Strongly foliated mafic volcanics, significant calc+/-ank veins. pyrite mineralization is upto 0.2%
		0	265248	STD		CDN_GS_P7J	A17-00210	0.739	
517	517.6	0.6	265249	HCORE			A17-00210	<0.005	Strongly foliated mafic volcanics, significant calc+/-ank veins. pyrite mineralization is upto 0.2%
517.6	518.5	0.9	265250	HCORE			A17-00210	0.112	Qtz vn with about 4% wall rock. 1% qtz vn present
518.5	519.25	0.75	265251	HCORE			A17-00210	<0.005	Strongly foliated mafic volcanics, significant calc+/-ank veins. pyrite mineralization is upto 0.2%
538	539	1	265252	HCORE			A17-00210	<0.005	Unaltered mafic volcanics. No significant mineralization
539	540	1	265253	HCORE			A17-00210	0.008	Unaltered mafic volcanics. No significant mineralization
540	541	1	265254	HCORE			A17-00251	<0.005	Unaltered mafic volcanics. No significant mineralization
541	542	1	265255	HCORE			A17-00251	0.005	Unaltered mafic volcanics. No significant mineralization
		0	265256	DUP	265255		A17-00251	0.005	
542	543	1	265257	HCORE			A17-00251	<0.005	Unaltered mafic volcanics. No significant mineralization
554	555	1	265258	HCORE			A17-00251	0.005	Unaltered mafic volcanics. No significant mineralization
555	556	1	265259	HCORE			A17-00251	<0.005	Unaltered mafic volcanics. No significant mineralization
556	557	1	265260	HCORE			A17-00251	0.005	Unaltered mafic volcanics. No significant mineralization
557	558	1	265261	HCORE			A17-00251	<0.005	Unaltered mafic volcanics. No significant mineralization

558	589	31	265262	HCORE		A17-00251	0.005	Unaltered mafic volcanics. No significant mineralization
589	590	1	265263	HCORE		A17-00251	<0.005	Unaltered mafic volcanics. No significant mineralization
599	600	1	265264	HCORE		A17-00251	<0.005	Unaltered mafic volcanics. About 0.2% pyrite associates with hematite altered calcite veins
600	600.7	0.7	265265	HCORE		A17-00251	<0.005	Unaltered mafic volcanics. About 0.2% pyrite associates with hematite altered calcite veins
		0	265266	Blank	Blank	A17-00251	<0.005	
600.7	601.37	0.67	265267	HCORE		A17-00251	<0.005	Unaltered mafic volcanics. About 0.1% pyrite associates with hematite altered calcite veins
601.37	602	0.63	265268	HCORE		A17-00251	<0.005	Weak to mod silicified mafic volcanics with irregularly oriented calcite stringer. No significant mineralization
612	613	1	265269	HCORE		A17-00251	<0.005	Weak to mod silicified mafic volcanics with irregularly oriented calcite stringer. No significant mineralization
613	614	1	265270	HCORE		A17-00251	<0.005	Weak to mod silicified mafic volcanics with irregularly oriented calcite stringer. No significant mineralization
614	615	1	265271	HCORE		A17-00251	<0.005	Weak to mod silicified mafic volcanics with irregularly oriented calcite stringer. No significant mineralization
622	622.57	0.57	265272	HCORE		A17-00251	<0.005	Weak to mod silicified mafic volcanics with irregularly oriented calcite stringer. No significant mineralization
622.57	623	0.43	265273	HCORE		A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
623	624	1	265274	HCORE		A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
624	625	1	265275	HCORE		A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
		0	265276	STD	CDN_GS_P4B	A17-00251	0.393	
625	626	1	265277	HCORE		A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
626	627	1	265278	HCORE		A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins

627	628	1	265279	HCORE			A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
628	629	1	265280	HCORE			A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
629	630	1	265281	HCORE			A17-00251	0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
630	631	1	265282	HCORE			A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
631	632	1	265283	HCORE			A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
632	633	1	265284	HCORE			A17-00251	0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
		0	265285	DUP	265284		A17-00251	0.005	
633	634	1	265286	HCORE			A17-00251	<0.005	Moderately foliated mafic volcanics, about 1% calcite stringers present, upto 0.2% disseminated fine grain pyrite associate with the veins
645	646	1	265287	HCORE			A17-00251	0.005	Mafic volcanics with few calcite stringers, traces of disseminated fine grain pyrite
646	647	1	265288	HCORE			A17-00251	0.005	Mafic volcanics with few calcite stringers, traces of disseminated fine grain pyrite
647	648	1	265289	HCORE			A17-00251	<0.005	Mafic volcanics with few calcite stringers, traces of disseminated fine grain pyrite
648	649	1	265290	HCORE			A17-00251	<0.005	Mafic volcanics with few calcite stringers, traces of disseminated fine grain pyrite
649	650	1	265291	HCORE			A17-00251	<0.005	Mafic volcanics with few calcite stringers, traces of disseminated fine grain pyrite
669	670	1	265292	HCORE			A17-00251	0.005	Massive gabbro with very few hematite altered calcite veins, minor fine grain pyrite rim the edges of the veins
670	671	1	265293	HCORE			A17-00251	0.045	Massive gabbro with very few hematite altered calcite veins, minor fine grain pyrite rim the edges of the veins
671	672	1	265294	HCORE			A17-00251	0.005	Massive gabbro with very few hematite altered calcite veins, minor fine grain pyrite rim the edges of the veins
		0	265295	Blank		Blank	A17-00251	<0.005	

686	687	1	265296	HCORE			A17-00251	<0.005	Massive and unaltered mafic volcanics, few calcite stringers irregularly oriented TCA, no significant mineralization
687	688	1	265297	HCORE			A17-00283	<0.005	Massive and unaltered mafic volcanics, few calcite stringers irregularly oriented TCA, no significant mineralization
688	689	1	265298	HCORE			A17-00283	<0.005	Massive and unaltered mafic volcanics, few calcite stringers irregularly oriented TCA, no significant mineralization
689	690	1	265299	HCORE			A17-00283	<0.005	Massive and unaltered mafic volcanics, few calcite stringers irregularly oriented TCA, no significant mineralization
690	691	1	265300	HCORE			A17-00283	<0.005	Massive and unaltered mafic volcanics, few calcite stringers irregularly oriented TCA, no significant mineralization
691	691.65	0.65	265301	HCORE			A17-00283	<0.005	Massive and unaltered mafic volcanics, few calcite stringers irregularly oriented TCA, no significant mineralization
714	715	1	265302	HCORE			A17-00283	0.006	Unaltered mafic volcanics with 2% calcite stringers, disseminated fine grain pyrite around the stringer upto 0.2%
		0	265303	STD		CDN_GS_P7J	A17-00283	0.723	
715	716	1	265304	HCORE			A17-00283	<0.005	Unaltered mafic volcanics with 2% calcite stringers, disseminated fine grain pyrite around the stringer upto 0.2%
716	717	1	265305	HCORE			A17-00283	<0.005	Unaltered mafic volcanics with 2% calcite stringers, disseminated fine grain pyrite around the stringer upto 0.2%
717	718	1	265306	HCORE			A17-00283	<0.005	Unaltered mafic volcanics with 2% calcite stringers, disseminated fine grain pyrite around the stringer upto 0.2%
718	719	1	265307	HCORE			A17-00283	0.006	Unaltered mafic volcanics with 2% calcite stringers, disseminated fine grain pyrite around the stringer upto 0.2%
719	720	1	265308	HCORE			A17-00283	0.052	Unaltered mafic volcanics with 2% calcite stringers, about 15 cm wide qtz vein with minor amount of disseminated fine grain. Pyrite mineralization around the stringers upto 0.2%
720	721	1	265309	HCORE			A17-00283	<0.005	Unaltered mafic volcanics with 2% calcite stringers, disseminated fine grain pyrite around the stringer upto 0.2%
721	722	1	265310	HCORE			A17-00283	<0.005	Unaltered mafic volcanics with 2% calcite stringers, disseminated fine grain pyrite around the stringer upto 0.2%
		0	265311	DUP	265310		A17-00283	<0.005	
691.65	692.65	1	265312	HCORE			A17-00283	<0.005	Massive mafic flow, no significant mineralization

722	723	1	265313	HCORE			A17-00283	<0.005	Mafic volcanics with 2% irregularly oriented calcite stringers. No significant mineralization seen
723	724	1	265314	HCORE			A17-00283	<0.005	Mafic volcanics with 2% irregularly oriented calcite stringers. No significant mineralization seen
724	725	1	265315	HCORE			A17-00283	<0.005	Mafic volcanics with 2% irregularly oriented calcite stringers. No significant mineralization seen
725	725.6	0.6	265316	HCORE			A17-00283	<0.005	Mafic volcanics with 2% irregularly oriented calcite stringers. No significant mineralization seen
725.6	726.26	0.66	265317	HCORE			A17-00283	<0.005	Mafic volcanics with 2% irregularly oriented calcite stringers. No significant mineralization seen
726.26	727	0.74	265318	HCORE			A17-00283	<0.005	Mafic volcanics with 2% irregularly oriented calcite stringers. No significant mineralization seen
		0	265319	STD		CDN_GS_P4B	A17-00283	0.385	
750	750.6	0.6	265320	HCORE			A17-00283	<0.005	Mafic volcanics with few irregularly oriented calcite stringers. Upto 1% pyrite mineralization at the lower contact
750.6	751.1	0.5	265321	HCORE			A17-00283	<0.005	Qtz vn with about 2% wall rock smeared within the unit. Upto 1% py min at both end of the vein
751.1	752	0.9	265322	HCORE			A17-00283	<0.005	Mafic volcanics with few irregularly oriented calcite stringers. Upto 1% pyrite mineralization at the lower contact
752	753.1	1.1	265323	HCORE			A17-00283	<0.005	Mafic volcanics with few irregularly oriented calcite stringers. Upto 1% pyrite mineralization at the lower contact
737	738	1	265324	HCORE			A17-00283	<0.005	Strongly silicified gabbro. No significant mineralization
738	739	1	265325	HCORE			A17-00283	<0.005	Strongly silicified gabbro. No significant mineralization
739	740	1	265326	HCORE			A17-00283	<0.005	Strongly silicified gabbro. No significant mineralization
764.9	765.4	0.5	265327	HCORE			A17-00283	<0.005	Gabbro with minor hematite altered calcite vein
765.4	766	0.6	265328	HCORE			A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
		0	265329	DUP	265328		A17-00283	<0.005	
766	767	1	265330	HCORE			A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
767	768	1	265331	HCORE			A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization

768	769	1	265332	HCORE		A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
769	770	1	265333	HCORE		A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
770	771	1	265334	HCORE		A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
771	772	1	265335	HCORE		A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
772	773	1	265336	HCORE		A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
		0	265337	Blank	Blank	A17-00283	<0.005	
773	774	1	265338	HCORE		A17-00283	<0.005	Massive gabbro with few calcite and epidote stringers, 8 cm wide hematite altered calcite vein associates with 0.5% fine grain pyrite at 773.1m depth
774	775	1	265339	HCORE		A17-00328	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
775	776	1	265340	HCORE		A17-00328	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
776	777	1	265341	HCORE		A17-00328	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
777	778	1	265342	HCORE		A17-00328	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
778	779	1	265343	HCORE		A17-00328	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
779	779.9	0.9	265344	HCORE		A17-00328	<0.005	Massive gabbro with few calcite and epidote stringers. No significant mineralization
		0	265345	STD	CDN_GS_P7J	A17-00328	0.662	
779.9	780.5	0.6	265346	HCORE		A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
780.5	781	0.5	265347	HCORE		A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
781	782	1	265348	HCORE		A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present

782	783	1	265349	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
783	784	1	265350	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
784	785	1	265351	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
785	786	1	265352	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
		0	265353	DUP	265352		A17-00328	<0.005	
786	787	1	265354	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
787	788	1	265355	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
788	789	1	265356	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
789	790	1	265357	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
790	790.5	0.5	265358	HCORE			A17-00328	<0.005	Weak to mod silicified mafic volcanics with significant calcite stringers. Upto 0.5% disseminated fine grain pyrite present
790.5	791	0.5	265359	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
791	792	1	265360	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
		0	265361	Blank		Blank	A17-00328	<0.005	
792	793	1	265362	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
793	794	1	265363	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite

794	795	1	265364	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
795	796	1	265365	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
796	797	1	265366	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
797	798	1	265367	HCORE			A17-00328	0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
798	799	1	265368	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
		0	265369	STD		CDN_GS_P4B	A17-00328	0.463	
799	800	1	265370	HCORE			A17-00328	0.01	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
800	801	1	265371	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
801	802	1	265372	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
802	803	1	265373	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
803	803.7	0.7	265374	HCORE			A17-00328	0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
803.7	804.34	0.64	265375	HCORE			A17-00328	<0.005	Mod chl altered mafic volcanics, significant qtz-carb veins, traces of disseminated fine grain pyrite
804.34	805	0.66	265376	HCORE			A17-00328	0.757	Mafic volcanics with strong sericite alteration overprinted by silicification, bleached, sheared and strongly foliated, few qtz vn with close to 1% py mineralization
		0	265377	DUP	265376		A17-00328	0.738	
805	806	1	265378	HCORE			A17-00328	4.78	Mafic volcanics with strong sericite alteration overprinted by silicification, bleached, sheared and strongly foliated, few qtz vn, traces of py mineralization but insignificant overall
806	806.52	0.52	265379	HCORE			A17-00328	3.59	Mafic volcanics with strong sericite alteration overprinted by silicification, bleached, sheared and strongly foliated, few qtz vn, traces of py mineralization but insignificant overall

806.52	807	0.48	265380	HCORE		A17-00328	0.044	Metasediment with black fault upper contact , significant qtz vn associates with the fault. No significant mineralization
807	808	1	265381	HCORE		A17-00328	0.018	Strongly foliated metasediment. No significant mineralization
808	809	1	265382	HCORE		A17-00328	0.008	Strongly foliated metasediment. No significant mineralization
809	810	1	265383	HCORE		A17-00328	0.012	Strongly foliated metasediment. No significant mineralization
		0	265384	Blank	Blank	A17-00328	<0.005	
810	811	1	265385	HCORE		A17-00328	0.009	Strongly foliated metasediment. No significant mineralization
811	812	1	265386	HCORE		A17-00328	0.012	Strongly foliated metasediment. No significant mineralization
812	813	1	265387	HCORE		A17-00328	0.104	Strongly foliated metasediment. No significant mineralization
813	814	1	265388	HCORE		A17-00328	0.032	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
814	815	1	265389	HCORE		A17-00328	0.005	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
815	816	1	265390	HCORE		A17-00328	0.01	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
		0	265391	STD	CDN_GS_P4B	A17-00328	0.376	
816	817	1	265392	HCORE		A17-00328	0.017	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
817	818	1	265393	HCORE		A17-00328	0.022	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
818	819	1	265394	HCORE		A17-00328	0.015	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
		0	265395	STD	CDN_GS_P7J	A17-00328	0.625	

819	820	1	265396	HCORE		A17-00328	0.009	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
820	820.5	0.5	265397	HCORE		A17-00328	0.005	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
		0	265398	DUP	265397	A17-00328	0.005	
820.5	821	0.5	265399	HCORE		A17-00328	0.01	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall
821	822	1	265400	HCORE		A17-00328	<0.005	Strongly foliated metasediment with few qtz-carb veins and felsic clasts. few sedimentary pyrite associate with foliation and bedding planes but insignificant overall

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

Hole ID: B-16-08 DataSet: Brookbank Program: Exploration

Hole Status:	INREVIEW	**Hole Length (m):**	466.7	**Logged By:**	C. Sica
Hole Type:	Surface Drill Hole	**Dip (º):**	-50	**Date Log Started:**	11/15/2016
Date Drill Started:	11/8/2016	**Azimuth:**	300	**Date Log Completed:**	11/30/2016
Date Drill Completed:	11/15/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank East		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	440,824.4	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,480.9	**Date Surveyed:**	12/20/2016
Elevation (masl):	350.543	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29030	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3
Core Storage:	Old Arena Road

Purpose: Test the intersection of the main mineralized iron-carbonate shear zone and a number of oblique structures observed at outcrop and interpreted from the detailed magnetics. Primary target: Intersection of main Fe-Carb shear zone and NE cross fault.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 461 **Max Sample Depth (m):** 466.7

Depth Logged To (m) 466.7 **Meters Sampled** 461.86

Total Samples 555 **# Assay** 485 **# QAQC:** 70

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-50	300	TN14	SINGLESHOT	G4			Yes
11	-50.33	300.48	EZ-GYRO	MULTISHOT	G4	11/14/2016	Optimised	Yes
20	-50.42	300.35	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
38	-50.53	299.52	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
56	-50.56	300.88	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
65	-50.5	300.57	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
74	-50.5	301.16	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
83	-50.48	301.7	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
92	-50.45	301	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
101	-50.44	301.15	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
119	-50.48	301.58	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
137	-50.49	302.45	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
146	-50.48	302.41	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
164	-50.48	302.8	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
182	-50.64	304.08	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
191	-50.66	304.8	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
200	-50.55	305.3	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
209	-50.6	304.46	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
227	-50.61	304.79	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
236	-50.61	305.89	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
245	-50.39	306.31	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
263	-50.01	306.99	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
272	-49.97	306.73	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
281	-49.95	307.86	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
290	-49.91	307.81	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
299	-49.87	307.68	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
314	-49.79	307.8	EZ-GYRO	SINGLESHOT	G4	11/11/2016	Optimised	Yes
317	-49.87	307.28	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
326	-49.8	308.5	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
359	-49.67	307.99	EZ-GYRO	SINGLESHOT	G4	11/11/2016	Optimised	Yes
362	-49.83	308.74	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
371	-49.82	308.22	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
383	-49.72	308.54	EZ-GYRO	SINGLESHOT	G4	11/12/2016	Optimised	Yes
389	-49.83	310.64	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
398	-49.95	310.39	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
416	-50.12	310.46	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
434	-50.12	310.04	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
452	-50.17	310.21	EZ-GYRO	MULTISHOT	G4	11/14/2016		Yes
461	-50.02	310.55	EZ-GYRO	SINGLESHOT	G4	11/13/2016	Optimised	Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	4.5	4.5		OB	Overburden		
4.5	103.3	98.8		E1A	Basalt	Pillowed	Fine grained
103.3	141.05	37.75		E1A	Basalt	Pillowed	Fine grained
141.05	144.25	3.2		E1	Mafic Volcanic	Brecciated	Fine grained
144.25	165.8	21.55		E1A	Basalt	Pillowed	Fine grained
165.8	167.8	2		BRC	Breccia	Ribboned	Fine grained
167.8	174.7	6.9		E0B	Basaltic Komatiite	Massive	Medium grained
174.7	176.37	1.67		BRC	Breccia	Brecciated	Fine grained
176.37	178.7	2.33		E0B	Basaltic Komatiite	Schistose	Fine grained
178.7	216.13	37.43		E1A	Basalt	Pillowed	
216.13	238.75	22.62		E1A	Basalt	Massive	Medium grained
238.75	238.95	0.2		V2S	Quartz -Fe-Carbonate Vein / Sulphides		
238.95	321.56	82.61		E1A	Basalt	Porphyritic (with phenocrysts)	Coarse grained

Geology Summary

meters							
From	**To**	**Width**	**%**	**Lith Code**	**Rocktype**	**Texture**	**GrainSize**
321.56	335.2	13.64		E1A	Basalt	Banded	Fine grained
335.2	345.42	10.22		E1A	Basalt	Massive	Medium grained
345.42	408.9	63.48		E1A	Basalt	Banded	Fine grained
408.9	416.45	7.55		E1	Mafic Volcanic	Schistose	Fine grained
416.45	417.25	0.8		BRC	Breccia	Brecciated	Fine grained
417.25	420.83	3.58		E1	Mafic Volcanic	Schistose	Fine grained
420.83	466.7	45.87		S4B	Polymictic Conglomerate	Schistose	Fine grained

DataSet: Brookbank
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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**4.5**	4.5		**OB**	**Overburden**			S. Molloy
Overburden								
4.5	**103.3**	98.8		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; FG; medium to light-med green/grey; non foliated; mostly non magnetic but some magnetic patches (refer to mag sus); epidote +/- quartz pillow selvages present throughout unit; qtz-crb (+/-kspar&epd) amygdules near pillow selvages; hematite on fracture surfaces (oxidation); hem stringers follow veining or crosscut everything (@34.4m); 0.5-1% PY mostly assoc w/ qtz-crb veining and pillow selvages; extension and stockwork veins present. Few low angle veins present @ 6.5m (trc PY), 38.5m (weakly mineralized), 58.9m (vuggy, no vis minz)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
4.5	53.93	1:	Hematite	Moderate (26-50%)	Patches	Hematite occurs as stringers/threads or along fracture faces. Minor Fe-crb in select veining throughout; Epd occurs mostly as selvages but also as veinlets/stringers; KSP is found w/ epd or in qtz-crb veining; chl occurs as stringers and blebs
		2:	Ankerite	Weak (1-25%)	Localized	
		3:	Epidote	Moderate (26-50%)	Patches	
		4:	K-feldspar	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
4.5	5.6	HFZ	High fracture zone	fractured and broken rock <20cm wide at 4.2m, 5m and 5.5m
67.2	67.5	FLT2	Fault - breccia	Possible flow breccia in pillowed basalt; between pillow selvages; bleaching around some qtz veining; some clasts visible
77.35	77.75	FLT2	Fault - breccia	Possible breccia; 'chaotic' looking; visible host rock clasts present

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
4.5	6	1:	Quartz-Fe-carbonate	Stockwork Veins			3.6	vein3 thickness: 1.5cm; some of stockwork veins are vuggy
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			1	
6	9	1:	Quartz-Fe-carbonate	Extension Vein			5.5	vein3 thickness: 5.2cm; mineralized low angle vein (0.5cm wide @ 6.5m)
		2:	Quartz-Fe-Carbonate / K-	Stringer Zone - vein <1/4"			3.1	
9	12	1:	Quartz-Fe-carbonate	Extension Vein			7	vein3 thickness: 2.9cm; moderate amount of low angle qtz-crb veining (some mineralized)
		2:	Quartz-Fe-carbonate	Stockwork Veins			7	
12	15	1:	Quartz-Fe-carbonate	Extension Vein			5.8	vein3 thickness: 2.9 (low angle veins)
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			2.5	

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
15	18	1:	Quartz-Fe-carbonate	Extension Vein			4.3	vein3 thickness: 2.8m; vein2 are low angle veins (non mineralized)
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2.6	
18	21	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			6.6	vein3 thickness: 1.8cm (vuggy); qtz-crb/kspar veining: 1.5
		2:	Quartz-Fe-carbonate	Extension Vein			3	
21	24	1:	Quartz-Fe-carbonate	Extension Vein			4	vein3 thickness: 3cm (vuggy); some qtz-crb-kspar/epd veins present: 2cm
		2:	Quartz-Fe-Carbonate / K-	Veinlet Zone - vein 1/4" to 3"			5.5	
24	27	1:	Quartz-Fe-carbonate	Extension Vein			4.3	vein3 thickness: 3.5cm
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			1.9	
27	30	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			4	vein3 thickness: 2.6 (qtz-crb and some are qtz-crb-epd)
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3	
30	33	1:	Quartz-Fe-carbonate	Extension Vein			9	vein3 thickness: 0.7cm (vein at 30m); vein1 includes qtz-crb and qtz-crb-kspar/epd veining
		2:	Quartz-Fe-carbonate	Stockwork Veins			2.5	
33	36	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6	vein1 includes extension and stockwork veining
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.8	
36	39	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			4	vein3 thickness: 2.4cm (one of vein3 veins is vuggy (38.4m)); some vein1 veins are low angle and vuggy (38.5m).
		2:	Quartz-Fe-carbonate	Extension Vein			2.3	
39	42	1:	Quartz-Fe-carbonate	Extension Vein			2.4	vein3 thickness: 2.2cm; some EV (vein1) are vuggy
		2:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3	
42	45	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	some of Vein1 EV are vuggy
		2:	Quartz-Fe-carbonate	Stockwork Veins			1.4	
45	48	1:	Quartz-Fe-carbonate	Extension Vein			3.6	some of vein1 are vuggy
		2:	Quartz-Fe-carbonate	Stockwork Veins			2.9	
48	51	1:	Quartz-Fe-carbonate	Extension Vein			6	
		2:	Quartz-Fe-carbonate	Stockwork Veins			3.9	
51	54	1:	Quartz-Fe-carbonate	Extension Vein			2.7	some of the stockwork veins are slightly vuggy
		2:	Quartz-Fe-carbonate	Stockwork Veins			4.4	
54	57	1:	Quartz-Fe-carbonate	Extension Vein			4.5	vein3 thickness: 3.2cm; some of vein3 are vuggy
		2:	Quartz-Fe-carbonate	Stockwork Veins			2.3	
57	60	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			8.5	vein3 thickness: 1.3cm ; Vein2 are vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.2	

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Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
60	63	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.8	vein3 thickness: 4cm; vein1 are vuggy
		2	Quartz-Fe-carbonate	Extension Vein			4.3	
63	66	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6.8	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.2	
66	69	1	Quartz-Fe-Carbonate/K-Feldspar	Breccia Veins			6.1	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.9	
69	72	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6.8	sparse vugginess
72	75	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			5	V2k; weakly vuggy
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.9	
75	78	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.2	Vein1 are vuggy and have minor chl mixed in
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1.6	
78	81	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			19	vein3 thickness: 3cm; vein1 are vuggy with mineralization, and crosscutting the V2K veins
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			15	
81	84	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			8.5	Large qtz-crb vein at 83.3m has kspar-epd at the vein margins. Veinlets are vuggy, but stirngers are not
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	
84	87	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.9	at 84.2m one veinlets is vuggy
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1.9	
87	90	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.9	vein3 thickness: 2.2cm. weak vugginess on stringers
		2	Quartz-Fe-Carbonate / K-	Stringer Zone - vein <1/4"			0.5	
90	93	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.8	vein3 thickness: 1.2cm
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			1.6	
93	96	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	no vuggy veins
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1.8	
96	99	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1.4	vein3 thickness: 1.7cm; vein2 is qtz-crb-chlorite stringers
		2	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2.4	
99	102	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			2.5	vein3 thickness: 2.6cm; Vein1 veinlets are qtz-crb-chl; some diss PY assoc w/ qtz-crb-kspar-epd veinlets
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			3.5	

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
103.3	**141.05**	37.75		**E1A**	**Basalt**	Pillowed	Fine grained	C. Sica

Pillowed basalt; FG; medium green-grey in colour; massive & aphanitic; patches of up to 5% amygdules filled with epd+crb; patchy weakly magnetic throughout with mod mag concentrated at epd + qtz pillow selvage margins; up to 3% epd-kspar stringers and qtz-crb stringers and veinlets; low angle right lateral strike-slip faulting from 128m to 129m; high angle extensional faults at 119m and 135.5m; Sections of dark grey mod-strongly magnetic mafic volcanics (volcanic sediments to flow top breccia?); (at 121m ,125.8m, 137.8m). These intervals are weakly brecciated and weak-mod sheared in patches w/ wk pervasive hem & chl and strong silicification, 15-35% qtz-crb veining (121m & 125.7m) as stockwork extensional veins, veins host spec hem and semi-massive py seams (up to 5% at 126m)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
120.8	121.18	1:	Silicified	Weak (1-25%)	Pervasive	calcite alteration is fracture controlled
		2:	Chlorite	Weak (1-25%)	Pervasive	
		3:	Calcite	Weak (1-25%)	Banding	
121.18	125.64	1:	Epidote	Moderate (26-50%)	Patches	kspar is fracture-controlled; crb is fracture-controlled; epd + mag is concentrated at pillow selvages; up to 5% grey calcite as vesicle fill and along pillow selvages
		2:	K-feldspar	Weak (1-25%)	Banding	
		3:	Calcite	Weak (1-25%)	Banding	
125.64	125.95	1:	Fe-Carbonate	Strong (51-75%)	Banding	specular hem = 2% as dissems within calcite; carb is fracture controlled
		2:	Chlorite	Moderate (26-50%)	Pervasive	
		3:	Hematite	Weak (1-25%)	Pervasive	
		4:	Specular hematite	Weak (1-25%)	Spotted	
125.95	141.05	1:	Epidote	Moderate (26-50%)	Patches	epd patchy throughout with strong epd at pillow selvages; carb and kspar are fracture controlled; up to 5% grey calcite as vesicle fill and along pillow selvages
		2:	Magnetite	Weak (1-25%)	Patches	
		3:	Calcite	Weak (1-25%)	Banding	
		4:	K-feldspar	Weak (1-25%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
125.56	125.7	1:	Pyrite	Medium grained	Blebs	1	cpy and py are intergrown and crystallized in pore space within vuggy calcite-Fecarb-qtz vein
VG: No		2:	Chalcopyrite	Medium grained	Blebs	0.5	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
105	108	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	V2K veins are vuggy
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			4.5	

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Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
108	111	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			0.5	
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			2.1	
111	114	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		65	2	kspar-epd veinlets are cross-cut by a strike slip fault filled with calcite at 113.95m; Vein1 generation has chl inclusions (3% modal) and
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Vein > 3"			15.3	
114	117	1	Quartz-Fe-carbonate	Vein > 3"			1	vein 1 and vein 2 generations are vuggy
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			0.5	
117	120	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			2	V1 generation is vuggy and cross-cut by 2 faults at 53 deg and 65 deg TCA
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"		9	1	
120	123	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			1.5	v3 generation 4 cm thickness in mod mag unit from 120.8 to 121.18m ; chl within v3 (<2% with patchy vugginess)
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1	
123	126	1	Quartz-Fe-carbonate	Vein > 3"			21.5	qtz-carb vein at 125.61m to 125.79m and 125.92m to 125.98m; v1 has 1% spec hem and local vugginess; v3 thickness is 2cm and v3 generation cross-cuts v2 generation (left lateral strike slip)
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			2	
126	129	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Vein > 3"			3	v3 generation is 1cm thick; v2 generation is vuggy with shearing in the hostrock and sheared veinlets at 128.3
		2	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		45	0.7	
129	131	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			6	v1 concentrated between 129-130;
		2	Quartz-Fe-Carbonate/K-Feldspar	-				
131	134	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.3	v3 generation is 2cm thick & cross-cuts v1 and v2 and is wkly vuggy
		2	Quartz-Fe-Carbonate/K-	Stringer Zone - vein <1/4"			1	
134	137	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Vein > 3"			12	v3 = 2cm; v3 is wkly vuggy +/- hem staining; v1 vein from 136.07 to 136.2cm
		2	Quartz-Fe-Carbonate / K-	Veinlet Zone - vein 1/4" to 3"			2.5	
137	141	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			4	v3 = 0.5cm ; v2 is vuggy with hem staining
		2	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.5	

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
141.05	**144.25**	3.2		**E1**	**Mafic Volcanic**	Brecciated	Fine grained	C. Sica

Basalt; aphanitic; dark grey colour; weakly brecciated with weak-mod shearing at 55 deg to core axis; groundmass is strongly sil w/ wk pervasive hem & chl; brecciated texture is defined by 20-30% qtz-crb stockwork throughout and 2% kspar-sil clastes at 141.4m; low angle strike slip fault at 141.5; mafic pillow basalt inclusion from 143.4 to 144.15; 3-4% fg py dissem from 141.05 to 141.41 w/ 1% fg py dissems scattered throughout

Alteration

From	To	#	Alteration	Intesity	Style	Comments
141.05	143.4	1:	Magnetite	Moderate (26-50%)	Patches	
		2:	Chlorite	Weak (1-25%)	Pervasive	
		3:	Calcite	Weak (1-25%)	Banding	
		4:	Silicified	Weak (1-25%)	Pervasive	
		5:	Hematite	Weak (1-25%)	Pervasive	
143.4	144.15	1:	Epidote	Weak (1-25%)	Patches	
144.15	144.25	1:	Silicified	Weak (1-25%)	Pervasive	calcite is fracture controlled
		2:	Hematite	Weak (1-25%)	Pervasive	
		3:	Chlorite	Weak (1-25%)	Pervasive	
		4:	Calcite	Weak (1-25%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
141.2	141.9	1:	Pyrite	Medium grained	Blebs	10	py is bleby and cubic

VG: No

144.25	**165.8**	21.55		**E1A**	**Basalt**	Pillowed	Fine grained	C. Sica

Pillowed basalt; FG; medium green-grey in colour; massive & aphanitic; magnetic (mag sus from 5 - 32) from 145m-165m; patches of up to 5% amygdules filled with epd+crb, typically grey calcite; patchy weakly magnetic throughout but mostly concentrated in cm-wide bands at epd + qtz pillow selvage margins; up to 3% epd-kspar stringers and vuggy qtz-crb veinlets; low angle hem slip plane at 10 deg TCA (157.5m); trace py assoc w/ vuggy qtz-crb stringers

Alteration

From	To	#	Alteration	Intesity	Style	Comments
144.25	165.8	1:	Epidote	Weak (1-25%)	Patches	hem is very weak (~2%) and restricted to fracture planes; white calcite is (~5%) along fractures and within amygdules; epd is patches of pervasive alteration or along pillow selvages; up to 5% grey calcite as vesicle fill and along pillow selvages
		2:	Hematite	Weak (1-25%)	Banding	
		3:	Magnetite	Weak (1-25%)	Patches	
		4:	Calcite	Weak (1-25%)	Banding	

Veins

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
165.8	**167.8**	2		**BRC**	**Breccia**	Ribboned	Fine grained	C. Sica
				E0B	Basaltic Komatiite	Banded		

Strong Altered SIL Mineralized Zone; dark grey/pink to white color; strongly silicifed (~85%) weakly brecciated throughout w/ 2-3cm wide patches of strong brecciation (5%) and 5% foliated wallrock inclusions; locally up to 5% patchy spec hem; with very trace magnetite grains; vuggy pervasive calcite alteration from 165.8m-166m; trace to 1% calcite stringers cross-cutting SIL; strongly brecciated patches are defined by dark grey-black sil with calcite and up to 4% angular Fe-carbonate inclusions; foilated wallrock inclusions are defined by a 7cm interval of ser-chl-spec hem schist, w/ accessory actinolite (trace tremolite and trace talc? white-beige color with soapy feel on fracture planes); up to 7% py throughout, bleby to sma w/ two 2cm-wide py veinlets

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
147	150	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			2.4	v1 and v2 are vuggy ; v3 thickness = 2.4cm
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			5.5	
150	153	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		83	11.5	v1 is vuggy w/ hem staining
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.3	
153	156	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		85	5	v1 is vuggy w/ hem staining
		2	Fe-Carbonate Vein	Stringer Zone - vein <1/4"			2	
156	159	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		87	5	v3 = calcite stringers cross cutting v2 generation, thickness = 1cm; v1 and v2 are vuggy with hem staining
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.1	
159	162	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			0.2	v2 generation is calcite-qtz-spec hem
		2	Specular Hematite	Stringer Zone - vein <1/4"		47	0.2	
162	165	1	Specular Hematite	Stringer Zone - vein <1/4"		50	2.5	v1 generation is calcite-qtz-spec hem ; v2 generation is vuggy
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		81	11.5	

Alteration

From	To	#	Alteration	Intesity	Style	Comments
165.8	167.8	1	Silicified	Very strong (76-99%)	Pervasive	
		2	Specular hematite	Weak (1-25%)	Patches	
		3	Sericite	Weak (1-25%)	Banding	
		4	Ankerite	Weak (1-25%)	Fracture Filled	
		5	Actinolite	Weak (1-25%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
165.8	167.2	1	Pyrite	Fine grained	Disseminated	7	
VG: No							

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
167.8	**174.7**	6.9		**E0B**	**Basaltic Komatiite**	Massive	Medium grained	C. Sica

Komatiitic Basalt; dark green, easily scratched, porphyritic texture defined by up to 15% leucoxine +/- ilmenite crystals (subhedral to euhedral crystal habit); aphanitic groundmass chl-actinolite-amphibole; very wk patchy cb alteration; moderately sheared at upper contact w/ sil mineralized zone (from 167.2m-169.25m); 10% fracture-fill calcite + calcite stringers in sheared portion, the rest of the unit has 5% fracture-fill calcite + stringers; light pink color to calcite (small portion of Fe-carb or hem staining); up to 10% vuggy calcite from 173.22m to 174m; separated from lower unit by cataclastite fault (174.7m-174.72m)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
167.8	174.7	1:	Actinolite	Weak (1-25%)	Pervasive	
		2:	Calcite	Weak (1-25%)	Fracture Filled	
		3:	Leucoxene	Weak (1-25%)	Spotted	

Structures

From	To	Code	Structure Type	Comments
167.8	169.3	FOL	Foliation	wk-mod foliation defined by chl-actinolite banding

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
168	171	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	14	
171	174	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	~half of the veinlets are vuggy

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
174.7	**176.37**	1.67		**BRC**	**Breccia**	Brecciated	Fine grained	C. Sica
				FLT	Fault Zone			

Strong Altered SIL Mineralized Zone; dark grey/pink to white color; mod-strongly silicifed (~65%); moderately brecciated throughout w/ 2-3cm wide patches of strong brecciation (5%); locally up to 7% patchy spec hem w/ 2% spec hem stringers throughout; patchy ser (~3%) and patchy Fe-cb (up to 10%); with very trace magnetite grains; vuggy pervasive calcite alteration from 174.72m-175m; 1-2% calcite stringers cross-cutting SIL; strongly brecciated patches are defined by dark grey-black sil with calcite and up to 4% angular Fe-carbonate inclusions; up to 3% fg dissem py throughout, locally up to 5% py assoc w/ Fe carb alteration; upper contact is cataclastite fault, with a sharp lower contact w/ sheared E0B

Structures

From	To	Code	Structure Type	Comments
174.7	174.72	FLT4	Fault - cataclasite	cataclastic fault at contact between upper E0B and lower sil-bx mineralized zone

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
176.37	**178.7**	2.33		**E0B**	**Basaltic Komatiite**	Schistose	Fine grained	C. Sica

Sheared Komatiitic Basalt; beige to green/pink color; strongly sheared with qtz augens; 3% brecciated seams (spec hem-carbonate) parallel to shear; shear composed of sericite (7%) + chl (30%) + actinolite (5%) + Fe-cb (5%); 3 quartz-carb veins rimmed with beige

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

calcite from 177.6m-177.67m, 178.65-178.12m, 177.8m-177.9m; 2-4% leucoxine throughout; 1% very fg py dissems throughout

Structures

From	To	Code	Structure Type	Comments
176.37	178.7	FOL	Foliation	strongly deformed E0B - ser + chl +/- actinolite banding

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
178.7	**216.13**	37.43		**E1A**	**Basalt**	Pillowed		C. Sica

Pillowed Basalt; FG; green-grey color; massive & aphanitic; epd-grey calcite pillow selvages throughout; locally up to 10% grey calcite filled vesicles; spotty mag signature with mag sus highs from 179-181m; epidotized flow breccia from 194.5m-194.8m; marbled texture throughout defined by epidote stringers (up to 7% locally); 2-3% calcite (+/-) qtz stringers to veinlets throughout ; 209-214m = wk foliation defined by alternating chl-actinolite (light green) bands w/ strong mag banding at 212m; foliated at lower contact with MG massive basalt unit

Alteration

From	To	#	Alteration	Intesity	Style	Comments
209	216.13	1:	Chlorite	Weak (1-25%)	Banding	grey calcite as fracture-fill ; sometimes parallel to foliation
		2:	Actinolite	Weak (1-25%)	Banding	
		3:	Calcite	Weak (1-25%)	Fracture Filled	
		4:	Fe-Carbonate	Weak (1-25%)	Patches	
		5:	Magnetite	Weak (1-25%)	Spotted	

Structures

From	To	Code	Structure Type	Comments
209	214	FOL	Foliation	weakly to moderately foliated mafic volcanics defined by chl-actinolite banding

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
180	183	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		55	5.4	v1= trace grey calcite
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		40	5.5	
183	186	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.8	grey calcite in v1 generation ; v3 = 1cm thickness
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2.5	
186	189	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.2	v1 generation has grey calcite
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4.8	
189	192	1:	Specular Hematite	Stringer Zone - vein <1/4"		30	0.5	v2= grey calcite
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		82	8	
192	195	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	v2 = grey calcite; v2 is cross-cutting v1
		2:	Quartz-Fe-Carbonate/Calcite	-			3.3	

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
195	198	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		75	6.5	v1 = grey calcite; fe-carb often seem as rimming stringer
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.6	
198	201	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		60	2.5	v1 generation sometimes rimmed with trace spec hem, v1 sometimes contains grey calcite; v3 vein thickness = 8cm, v3 = vuggy
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			4.5	
201	204	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		60	2.3	v1 generation sometimes rimmed with trace spec hem, v1 sometimes contains grey calcite; irreguar pattern to v2 (stockwork like texture)
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		3		
204	207	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	v1=grey calcite, v2 some veinlets fe-carb occurs rimming
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4.2	
207	210	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"	0.5	70	4	v3 thickness = 1.3cm
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
210	213	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein	2.8		6	veinlets and stringers, grey calcite throughout
213	216	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		80	14.5	v1= pink color w/ grey calcite; scattered vuggy texture ; small veinlets to stringers are rimmed with spec hem

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
216.13	**238.75**	22.62		**E1A**	**Basalt**	Massive	Medium grained	C. Sica

Massive Basalt; FG to MG; light to dark green; massive; local very wk porphoritic texture defined by visible plag crystals; small moderately folaited patches (~7cm) between 229-231m, foliated patches contain fracture-filling grey calcite alteration; scattered micro-scale dextral strike slip flts offsetting calcite-qtz-fe carb veinlets; E0B inclusion? from 222-224- 5% lcx evident, very soft (low silica for basalt), chl + amph; up to 5% fe-carb-grey calcite-qtz veinlets which host up to 2% py dissems; up to 1% py dissems sct throughout E1A; increased py assoc w/ foliated intervals; mineralized vuggy fe carb-calcite-qtz vein from 231.14-231.26m

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
219	222	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.3	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		40	0.8	
222	225	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.8	v1= grey calcite and spec hem
225	228	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		30	7	v2 has up to 5% chl inclusions
		2:	Quartz-Fe-Carbonate/Calcite	-		80	4	

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Hole Length (m): 466.7

Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
228	231	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		40	1.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5.5	
231	234	1:	Quartz-Fe-Carbonate /Sulphides	Vein > 3"		62	9	vein 3 thickness = 2cm ;v3 later than v2
		2:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		28	8	
234	237	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			6	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		30	8.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
238.75	**238.95**	0.2		**V2S**	**Quartz -Fe-Carbonate Vein / Sulphides**			C. Sica

Mineralized Fe-Carb + Calcite + Qtz Shear Vein; 21cm wide; 3-4% spec hem stringers within vein parallel to contact; 2% calcite stringers within vein parallel to contact; 238.9-238.95m = grey calcite + fe-carb w/ fe-carb alteration aligned parallel to contact; 10% py in vein total (3cm-wide very cg euhedral py crystals concentrated in seam from 237.75-238.05, w/ scattered cg crystals, fg py in fe-carb/grey calcite); 2cm-wide sil + hem altered halo at upper contact w/ 3% very fg py dissems

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
238.75	238.95	1:	Pyrite	Coarse grained	Scattered grains	10	V2S vein
VG: No							

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
238.95	**321.56**	82.61		**E1A**	**Basalt**	Porphyritic (with phenocrysts)	Coarse grained	C. Sica

Massive Basalt; FG to CG; light to dark green; massive to porphoritic texture; from 238.75m to 252.7m flow is massive and fg-mg; from 253.5m-300m flow is cg with strong porphoritic texture defined by 10% plagiclase phenocrysts; sparse (<1%) grey calcite filled vesicles; mineralized shear zone from 252.7m - 253.5m, this interval is chl + hem altered and contains four 3cm wide vuggy qtz-fe carb-calcite veinlets w/ up to 4% fg py dissems locally; up to 20% irregular epd-fe carb stringers (random orientation) from 246m to 252.7m; epd-fe carb stringers are cross-cut by 3-4% grey calcite-fe carb-qtz stringers to veinlets (+/-) spec hem; 1% py hosted by grey calcite-fe carb-qtz stringers to veinlets; possible pillow selvages from 290-294m; wk foliation from 306.59-307.48m; weakly fractured at lower contact with deformed and brecciated mafic volcanics (316-321.56m), calcite infilling fractures

Alteration

From	To	#	Alteration	Intesity	Style	Comments
252.7	253.5	1:	Hematite	Weak (1-25%)	Pervasive	
		2:	Calcite	Weak (1-25%)	Fracture Filled	
		3:	Chlorite	Weak (1-25%)	Banding	

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		4	Magnetite	Weak (1-25%)	Spotted	
253.5	321.56	1	Magnetite	Weak (1-25%)	Spotted	
		2	Hematite	Weak (1-25%)	Fracture Filled	
		3	Calcite	Weak (1-25%)	Fracture Filled	
		4	Fe-Carbonate	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
252.7	253.5	1	Pyrite	Coarse grained	-	5	wk-mod foliation and grey color (very wk pervasive fe-cb-hem-chl alteration) with four 3cm wide vuggy mineralized qtz-fecarb-calcite veinlets parallel to fol
VG: No							

Structures

From	To	Code	Structure Type	Comments
252.7	253.5	FOL	Foliation	wk-mod foliation with four 3cm wide vuggy mineralized qtz-fecarb-calcite veinlets parallel to fol
306.59	307.58	FOL	Foliation	very wk-wk foliation in mafic basalt
316	321.56	FRA	Fracture	wkly fractured zone w/ calcite infilling fractures

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
240	243	1	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		60	11.5	v2 cross-cuts mineralized v1
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		50	4.4	
243	246	1	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		60	7	
		2	Quartz-Fe-Carbonate/Epidote	-			1	
246	249	1	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			5.4	v1, grey calcite; v1 cross-cuts v2
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		40	11	
249	252	1	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		70	6.5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			36	
252	255	1	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		55	18.5	v1 vuggy, w/ py occursing as large euhedral crystals, crystallized within vug space (v1 = vuggy)
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5.5	

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
255	258	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		35	5	v1 = vuggy w/ coarse grained euhedral py crystallized within vugs
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		75	10	
258	261	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	7	spec hem assoc w/ v2
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			1	
261	264	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		44	6	v1 = vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		75	4.1	
264	267	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		30	8.5	
267	270	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	v2= grey calcite w/ some spec hem, v3 thickness = 3cm
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"			2.8	
270	273	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			3.5	
273	276	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		77	6	v3 = 7cm ; v2 = grey w/ some spec hem
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		60	6	
276	279	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			6	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			6.2	
279	282	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			2.5	v1 cross cutting v2; spec hem assoc w/ mineralized veins, sometimes vuggy
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5	
282	285	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5.2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
285	288	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		25	3.2	v3 thickness = 4cm
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	3.2	
288	291	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		42	2.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
291	294	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		57	6	v3 thickness = 2cm;
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	

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Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
294	297	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		38	2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3.7	
297	300	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			1.5	v3 thickness = 1cm
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
300	303	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	v3 thickness = 1cm
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			2	
303	306	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			2.2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
306	309	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
		2:	Sulphide / Carbonate	Stringer Zone - vein <1/4"			1	
309	312	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		75	3	v3 thickness = 3cm
		2:	Sulphide / Carbonate	-		5	1	
312	315	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	v3 thickness = 1.8cm
		2:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		15	1	
315	318	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		35	3	
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			6	
318	321	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		30	3	v1= pink, vuggy up to 1% fg py ; stockwork (dominately calcite) = 6cm thick
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2.5	

From	To			Rocktype	Texture	GrainSize	Logged By
321.56	**335.2**	13.64	**E1A**	**Basalt**	Banded	Fine grained	C. Sica
			E1	Mafic Volcanic	Brecciated		

Weakly Deformed Mafic Basalt; FG; foliated to brecciated texture; wk foliation at top of unit increasing to strong foliation at 333m; foliation orientation (beta angle) changes angle by 180 degrees from the upper to lower contact; banding defined by alternating light green (actinolite) and dark green (chlorite) bands; dark grey sil banding from 333.63-334.2m; brecciated texture defined by fracture-filling grey calcite-spec hem-carb-qtz stringers (up to 5%); patchy ser alteration, sometimes observed as halos around vuggy mineralized veinlets; spotty pervasive grey calcite alteration, sometimes observed as fracture-fill; up to 2% vuggy v2s veinlets throughout w/ up to 2% very fg py dissems, v2s vein from 328.74-328.82m; up to 1% very fg py hosted by spec hem-grey calcite-carb-qtz stringers and up to 1% very fg py throughout altered foliated volcanics

Alteration

From	To	#	Alteration	Intesity	Style	Comments
321.56	335.2	1:	Actinolite	Moderate (26-50%)	Pervasive	

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		2	Chlorite	Weak (1-25%)	Banding	
		3	Silicified	Weak (1-25%)	Banding	
		4	Magnetite	Weak (1-25%)	Spotted	

Structures

From	To	Code	Structure Type	Comments
321.56	335.2	FOL	Foliation	wk to moderate fol w/ very wk brecciation throughout same interval

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
324	327	1	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		60	4	v2 = grey calcite stringers w/ spec hem
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		65	4	
327	330	1	Quartz-Fe-Carbonate/Calcite	Vein > 3"		45	8	v3 thickness = 2cm , grey calcite w/ spec hem
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
330	333	1	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			3	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		37	2	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
335.2	**345.42**	10.22	**E1A**	**Basalt**	Massive	Medium grained	C. Sica

Massive Basalt; MG; dark green; wk pervasive act alteration; spotty dark chl alteration (5%); cross-cut by conjugate calcite stringers set (50 deg and 60 deg TCA); 2% grey calcite vesicle fill; very trace fol defined by mm-scale act banding; trace bleby py throughout assoc w/ grey calcite alteration

Alteration

From	To	#	Alteration	Intesity	Style	Comments
335.2	345.42	1	Calcite	Weak (1-25%)	Spotted	grey calcite alteration occurs as vesicle fill, dark almost blk hydrothermal chl alteration, euhedral crystals scattered throughout
		2	Chlorite	Weak (1-25%)	Spotted	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
336	339	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			7	v3 thickness; 8.1cm
		2	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			3.4	

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
345.42	**408.9**	63.48		**E1A** E1	**Basalt** Mafic Volcanic	Banded Brecciated	Fine grained	C. Sica

Weakly Deformed Mafic Basalt; FG; foliated to brecciated texture; banding defined by alternating light green (actinolite) and dark green (chlorite) bands; patchy wk epd alteration; pervasive act alteration throughout giving unit a light green color and soft to scratch; 351-355m more massive texture w/ increased chl alteration; up to 3% vesicles filled w/ grey calcite, py is sometimes seen overgrowing cal vesicle fill; high vein density from top of unit to 363m w/ up to 30% light green/orange carb-epd-qtz stringers (parallel, 30 deg TCA), up to 7% grey calcite-carb-qtz stringers (+/-) spec hem; trace-1% py assoc w/ grey calcite-carb-qtz stringers (+/-) spec hem and <1% pink vuggy qtz-cal-carb veinlets; three high fracture zones w/ vuggy calcite alteration and up to 3% cubic py mineralization from (373-373.4m, 374.37-374.8m, and 380.8-390.65m); up to 35% calcite stockwork and moderate chl alteration from 384-408.9 (lower contact w/ strongly deformed mafics)

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
339	342	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	v2 = conjugate set of stringers (alpha = 50 deg and 60 deg); vein spacing = 7cm
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
342	345	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	4.5	v1 = stringers to veinlets, spacing = 12cm

Alteration

From	To	#	Alteration	Intesity	Style	Comments
345.42	369	1:	Actinolite	Moderate (26-50%)	Pervasive	chl = dark almost black hydrothermal chl ; fractue-fill creating breccia texture; also chl banding in foliated patches and patchy perv chl; spec hem is hosted by v2c stringers, rimming the vein;
		2:	Chlorite	Weak (1-25%)	Fracture Filled	
		3:	Calcite	Weak (1-25%)	Fracture Filled	
		4:	Specular hematite	Weak (1-25%)	Halo-Vein Related	
369	372	1:	Ankerite	Weak (1-25%)	Patches	
		2:	Chlorite	Weak (1-25%)	Pervasive	
372	408.9	1:	Chlorite	Moderate (26-50%)	Pervasive	1-2% grey calcite alteration as vesicle fill
		2:	Actinolite	Weak (1-25%)	Patches	
		3:	Epidote	Weak (1-25%)	Patches	
		4:	Calcite	Weak (1-25%)	Fracture Filled	

Structures

From	To	Code	Structure Type	Comments
345.42	351	FOL	Foliation	very weak foliation defined by act + chl bands; v2e parallel to fol
357	365	FOL	Foliation	very weak foliation defined by act + chl bands; v2e parallel to fol; very wk brecciation throughout this interval
373	373.4	HFZ	High fracture zone	fractured and broken rock, w/ vuggy calcite alteration throughout

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
374.37	374.8	HFZ	High fracture zone	fractured and broken rock, w/ vuggy calcite alteration throughout
403.66	404	FLT5	Fault - gouge	possible fault; clay gauge seams and strongly fractured rock

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
348	351	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		30	18	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
351	354	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		33	18.5	v2 = grey calcite +/- spec hem ; v2 opposite beta angle of v1, v2 cross-cutting v1
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			7.5	
354	357	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		35	13.5	v2 = grey calcite +/- spec hem
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		70	5.5	
357	360	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		35	13	v2 = trace spec hem rimming
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
360	363	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		35	10.5	v3 thickness = 5.4cm ; v3 trace spec hem, grey calcite
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	5	
363	366	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		30	2	v2 spacing = 2cm, stringer size, grey calcite, rimmed w/ spec hem
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9.1	
366	369	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		40	1.5	v2= stringer size, random orientation, micro-scale tension gashes
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.6	
369	372	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8.6	v1 - chaotic, random orientation, stringer to veinlet size
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
372	375	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	v3 thickness = <1cm; mineralized v2s (v2) are vuggy; v1 = grey calcite, irregular morphology
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			21.5	
375	378	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			9	v3 thickness = 6cm
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
378	381	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8.5	v1 = irregular morphology; grey calcite
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		45	0.5	
381	384	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			7	v2 = shear vein; bands of epd/fe carb/cal/qtz; very trace fg py thoughout
		2:	Quartz-Fe-Carbonate/Epidote	Shear Vein			18	

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
408.9	**416.45**	7.55		**E1**	**Mafic Volcanic**	Schistose	Fine grained	C. Sica

Strongly Deformed Mafic Volcanics; dark green color with mod-strong pervasive chl alteration and up to 30% pink carb-grey calcite stockwork; Mineralized & Silicified Zone from 408.9-409.4m -- large vein? or silicia alteration, this interval is ~75% grey-wht quartz, strongly deformed w/ brecciated texture; ser (~10%) + fe-carb (~10%) alteration occur as ribboning and fracture-fill throughout up to 4% very fg py throughout as veinlets and dissems; Deformed and altered w/ mineralized V2S veinlets from 409.4-413m; mod fol w/ dark purple to pink color; ~60% dark purple stongly hem altered basalt w/ very wk perv sil and ser banding, w/ up to 1% very fg sct py dissems; ~40% mineralized quartz-carb veinlets parallel to fol, veins are pink and brecciated, w/ up to 10% ser banding, 1% py in veinlets hosted by fe-carb alteration, additional 1% mg py concentrated at wallrock/veinlet contacts

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
384	387	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			4.5	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	2	
387	390	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			17	
390	393	1:	Quartz-Fe-Carbonate /Sulphides	Vein > 3"		0	7	v1 = difficult to assess thickness because vein is parallel TCA; vuggy w/ 3% cubic py mineralization 2% fracture-fill spec hem
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			7	
393	396	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			16.5	v1= irregular random orientation, pink staining; scattered vugginesss
396	399	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			16	v2= pink w/ dissem py , parallel to wk fol; observed both cross-cutting stockwork and being cross-cut by stockwork ; patchy vugginess in stockwork
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		35	5.7	
399	402	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			25	
402	405	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins	35		20	high density calcite stockwork up to 35% modal
405	408	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			25	high density calcite stockwork up to 35% modal

Alteration

From	To	#	Alteration	Intesity	Style	Comments
408.9	416.45	1:	Chlorite	Strong (51-75%)	Pervasive	
		2:	Calcite	Weak (1-25%)	Fracture Filled	
		3:	Hematite	Weak (1-25%)	Banding	
		4:	Fe-Carbonate	Weak (1-25%)	Banding	
		5:	Sericite	Weak (1-25%)	Banding	

Veins

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
411	414	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		35	10	v1 = pink color, parallel to fol, irregular contacts and shape (deformed) ; v2 = calcite stockwork in mafics; v3 = mineralized veinlets parallel to fol, w/ brecciation and ser banding
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
416.45	**417.25**	0.8		**BRC**	**Breccia**	Brecciated	Fine grained	C. Sica

Silicifed Mineralized Breccia Zone, Protolith Unknown; sharp upper and lower contacts (30 deg TCA); ~70% dark purple color (hem + sil alteration), strongly brecciated with ~15% fracture-filling calcite; chaotic structure; seams of deformed and sheared ser + fe-carb alteration (5-10%); 3% very fg py throughout assoc w/ fe-carb + ser bands and fracture-filling calcite; spec of cpy(?)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
416.45	417.25	1:	Silicified	Weak (1-25%)	Pervasive	
		2:	Hematite	Weak (1-25%)	Pervasive	
		3:	Calcite	Weak (1-25%)	Fracture Filled	
		4:	Sericite	Weak (1-25%)	Banding	
		5:	Fe-Carbonate	Weak (1-25%)	Banding	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
417.25	**420.83**	3.58		**E1**	**Mafic Volcanic**	Schistose	Fine grained	C. Sica

Strongly Deformed Mafic Volcanics; mod - strong foliation w/ dark grey color, soft, chl + ser alteration (wk-mod); trace illmenite? very fg, difficult to distinguish; up to 10% beige colored qtz-carb veinlets parallel to fol, or folded, drag folds; 1-2% very fg py throughout concentrated in fol planes

Alteration

From	To	#	Alteration	Intesity	Style	Comments
417.25	420.83	1:	Chlorite	Moderate (26-50%)	Pervasive	
		2:	Sericite	Weak (1-25%)	Banding	
		3:	Hematite	Weak (1-25%)	Banding	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
420.83	**466.7**	45.87		**S4B**	**Polymictic Conglomerate**	Schistose	Fine grained	C. Sica

Strongly Deformed Conglomerate; yellow to green color from strong sericite and chlorite alteration; strong shear fabric w/ drag folds and boudinaged veinlets; sinistral fault subparallel TCA; at upper contact with silicifed and mineralized breccia zone (~420.83m) ~50% purple bands of hem alteration with ~30% beige-green ser banding; undeformed interval from 437m-438.5m; mustard yellow ser and orange ankerite banding throughout (up to 30%); 5-7% deformed and irregular beige qtz-carb stringers, veinlets and veins throughout; up to 3% very fg py dissems concentrated at contacts between deformed veinlets and sheared wallrock; veinlets are boudinaged and distorted, sometimes with chlorite ribboning within and chaotic internal structure; py is evident concentrated in fold hinges in veinlets from 441-442m; deformation lessens (to moderate) and clastes become easily recognizable from 454m to EOH

Alteration

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Alteration	Intesity	Style	Comments
420.83	466.7	1	Sericite	Strong (51-75%)	Pervasive	
		2	Ankerite	Weak (1-25%)	Banding	
		3	Chlorite	Weak (1-25%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
423	426	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			17	v1 = beige colored, deformed and boudinaged; v2 = strongly deformed vein stained w/ ankerite
		2	Quartz-Fe-Carbonate/Calcite	Vein > 3"			9	
426	429	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			24	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets; v2= red colored stringers typically parallel to fol
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		50	2.5	
429	432	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			33	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets;
432	435	1	Quartz-Fe-carbonate	-			43	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets;
435	438	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			23	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets;
438	441	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			16	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets;
441	444	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			31	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets;
444	447	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			22	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets;
447	450	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6	v1= strongly deformed, boudinaged and sheared beige colored quartz-carb(?) veinlets; v2 = parallel to fol w/ ribbons of ser within
		2	Quartz-Fe-carbonate	Vein > 3"		52	11	

DataSet: Brookbank
HoleID: B-16-08

Hole Length (m): 466.7
Log Length (m): 466.7

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
450	453	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			12	v1= deformed and folded or boudinaged and parallel to fol (~50 deg TCA); beige colored quartz-carb(?) veinlets
453	456	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			12	strongly deformed, folded and internally brecciated w/ chl; beige color qtz rimmed w/ carb?
456	459	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3	strongly deformed, folded and internally brecciated w/ chl; beige color qtz rimmed w/ carb?
459	462	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1.5	strongly deformed, folded and internally brecciated w/ chl; beige color qtz rimmed w/ carb?
462	465	1	Quartz-Fe-carbonate	Vein > 3"			18	vein is white qtz rimmed w/ beige carb, parallel to fol w/ ribbons of ser within (~3%)
465	466.7	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			19	strongly deformed, folded and internally brecciated w/ chl; beige color qtz rimmed w/ carb?

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 466.7**

HoleID: B-16-08 **Max Samp Depth (m): 466.7**

Total meters Sampled: 461.86

Primary Assay Samples:	485	87.39 %
Field Duplicate Samples:	16	2.88 %
Standard/Blank Samples:	54	9.73 %
Total Samples:	555	

meters

From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
4.5	5	0.5	246407	HCORE			A16-12539	0.005	no visible mineralization in pillowed basalt
		0	246408	STD		CDN_GS_P4B	A16-12539	0.401	
5	6	1	246409	HCORE			A16-12539	0.005	0.1% sct PY in groundmass
6	7	1	246410	HCORE			A16-12539	0.006	0.3% sct PY assoc w/ qtz-crb-kspar veining (one of veins is low angle)
7	8	1	246411	HCORE			A16-12539	0.005	0.3% sct PY assoc w/ pillow selvages
8	9	1	246412	HCORE			A16-12539	0.005	1-2% sct PY mostly assoc w/ pillow selvages
9	10	1	246413	HCORE			A16-12539	0.013	1% sct PY mostly assoc w/ pillow selvages; some assoc w/ qtz-crb-kspar veining
10	11	1	246414	HCORE			A16-12539	0.005	0.3% sct PY assoc w/ qtz-crb veining
11	12	1	246415	HCORE			A16-12539	0.009	0.3% sct PY assoc w/ thin qtz-crb stringers
		0	246416	DUP	246415		A16-12539	0.006	
12	13	1	246417	HCORE			A16-12539	0.008	1% sct PY assoc w/ mostly veining, and in groundmass
13	14	1	246418	HCORE			A16-12539	0.008	0.8% sct PY assoc w/ selvages; and some w/ qtz-fe-crb-kspar veining
14	15	1	246419	HCORE			A16-12539	0.005	0.5% sct PY equally assoc w/ qtz-crb veining and groundmass
15	16	1	246420	HCORE			A16-12539	<0.005	0.1% sct PY in selvages
16	17	1	246421	HCORE			A16-12539	0.006	0.2% sct PY assoc w/ qtz-crb stringers
17	18	1	246422	HCORE			A16-12539	0.006	no visible mineralization
18	19	1	246423	HCORE			A16-12539	<0.005	0.3% str-sct PY assoc w/ epd stringers and groundmass
		0	246424	STD		CDN_GS_P7J	A16-12539	0.743	
19	20	1	246425	HCORE			A16-12539	<0.005	0.1% sct PY assoc w/ qtz-crb stringers
20	21	1	246426	HCORE			A16-12539	0.013	1.5% sct PY assoc w/ qtz-fe-crb veining and in groundmass
21	22.06	1.06	246427	HCORE			A16-12539	<0.005	1-2% sct PY assoc w/ qtz-fe-crb veining (vuggy) and selvages
22.06	22.95	0.89	246428	HCORE			A16-12539	<0.005	0.1% sct PY assoc w/ epd stringers
22.95	23.51	0.56	246429	HCORE			A16-12539	<0.005	2-3% sct PY assoc w/ qtz-fe-crb-kspar veining; some veining vuggy

23.51	24	0.49	246430	HCORE			A16-12539	<0.005	1% sct PY assoc w/ qtz-crb-kspar/epd veining
24	25	1	246431	HCORE			A16-12539	0.005	1-2% sct PY assoc w/ qtz-crb and qtz-fe-crb-kspar/epd veining
		0	246432	Blank		Blank	A16-12539	<0.005	
25	26	1	246433	HCORE			A16-12539	<0.005	0.3% sct PY in groundmass of pillowed basalt
26	27	1	246434	HCORE			A16-12539	0.005	0.4% blb PY in epd stringer off of qtz-crb stringer
27	28	1	246435	HCORE			A16-12539	0.005	1% sct assoc w/ qtz-crb-kspar veining
28	29	1	246436	HCORE			A16-12539	0.005	0.1% sct PY in groundmass
29	30	1	246437	HCORE			A16-12539	0.005	0.8% sct-blb PY assoc w/ qtz-crb veining and epd/kspar veins
30	31	1	246438	HCORE			A16-12539	0.005	0.3% blb-sct PY mostly assoc w/ qtz-crb veining
31	31.96	0.96	246439	HCORE			A16-12539	0.006	1% blb-sct PY assoc w/ qtz-crb veining; qtz-crb-kspar/epd veining and in groundmass
		0	246440	STD		CDN_GS_P4B	A16-12539	0.422	
31.96	33	1.04	246441	HCORE			A16-12539	0.006	2% blb-sct PY assoc w/ qtz-crb-kspar veining and epd stringers
33	34	1	246442	HCORE			A16-12539	0.014	0.1% sct PY assoc w/ qtz-crb veining
34	35	1	246443	HCORE			A16-12539	0.01	no visible mineralization
35	36	1	246444	HCORE			A16-12539	0.01	0.4% blb-sct PY assoc w/ epd stringers
36	37	1	246445	HCORE			A16-12539	0.008	4-5% sct-blb PY assoc w/ qtz-crb-kspar/epd veining, pillow selvages, and groundmass
37	38	1	246446	HCORE			A16-12539	0.007	0.8% sct PY assoc w/ qtz-fe-crb veining and in groundmass
38	39	1	246447	HCORE			A16-12539	0.007	0.9% sct PY assoc w/ qtz-fe-crb/kspar veining (vuggy and low angle), epd stringers and epd-qtz-crb veining (vuggy)
		0	246448	DUP	246447		A16-12539	0.006	
39	40	1	246449	HCORE			A16-12539	0.005	0.5% sct PY assoc w/ qtz-fe-crb-epd veining (vuggy) and in selvages
40	41	1	246450	HCORE			A16-12539	0.006	1% dissem to bleby py with 1mm py seam; py is associated with epidote+qtz-crb veining
41	42	1	246451	HCORE			A16-12539	0.015	0.5% dissem py associated with vuggy qtz-crb veins and epidotized pillow selvage
42	43	1	246452	HCORE			A16-12539	0.005	0.7% bleby py hosted by epidotized pillow margin; with trace fg py dissems along contacts of vuggy qtz-carb veins +/- epd + kspar
43	44	1	246453	HCORE			A16-12539	0.007	0.2% fg py dissems hosted by qtz-carb veins; 0.5% assoc with epidotized pillow margins

44	45	1	246454	HCORE		A16-12539	0.019	trace fg py dissems; up to 0.4% py assoc with vuggy qtz-crb-kspar-epd veinlets
45	46	1	246455	HCORE		A16-12539	0.009	0.5% bleby py dissems scattered throughout
		0	246456	STD	CDN_GS_P7J	A16-12539	0.656	
46	47	1	246457	HCORE		A16-12539	0.02	up to 0.5% py assoc with qtz-crb-kspar-epd veinlets
47	48	1	246458	HCORE		A16-12539	0.019	0.2% fg-mg py assoc with kspar-epd stringers
48	49	1	246459	HCORE		A16-12539	0.006	1% bleby py within epidote + qtz + carb pillow selvages; 0.3% fg py dissems scattered in hostrock
49	50	1	246460	HCORE		A16-12539	0.005	no visible mineralization
50	51	1	246461	HCORE		A16-12539	0.008	0.1% py in epd pillow selvages
51	52	1	246462	HCORE		A16-12539	0.008	1% scattered to SMA py; assoc with quartz- Fecarb - kspar - epd veinlets
52	53	1	246463	HCORE		A16-12539	0.006	0.1% py sct in hostrock
		0	246464	Blank	Blank	A16-12539	0.005	
53	54	1	246465	HCORE		A16-12539	0.006	0.3 to 0.5% py ; scattered throughout hostrock and within vuggy qtz-cb veinlets and pillow selvages
54	55	1	246466	HCORE		A16-12539	0.006	0.7% py assoc w/ qtz-Fe carb stringers
55	56	1	246467	HCORE		A16-12539	0.009	0.2% sct py assoc w/ qtz-cb filled vesicles ; trace py assoc w/ qtz-ankerite stringers
56	57	1	246468	HCORE		A16-12539	0.012	0.4% blb py assoc w/ epd pillow selvages ; 0.1% fg py assoc with qtz-cb veinlets
57	58	1	246469	HCORE		A16-12539	0.005	0.5% sct to dissem py throughout pillow basalt
58	59	1	246470	HCORE		A16-12539	0.005	1% blb to sma PY assoc w/ qtz-carb stringers
59	60	1	246471	HCORE		A16-12632	<0.005	1-2% dissem to sma PY; assoc w/ qtz-carb (+/-) ksp-Fecarb veinlets, 2 veinlets are vuggy
		0	246472	STD	CDN_GS_P4B	A16-12632	0.396	
60	61	1	246473	HCORE		A16-12632	0.005	1-2% blb to sct PY; assoc w/ qtz-carb stringers and pillow selvages
61	62	1	246474	HCORE		A16-12632	<0.005	0.8% blb to sct PY assoc w/ vuggy qtz-carb vein 3cm wide
62	63	1	246475	HCORE		A16-12632	<0.005	no visible mineralization
63	64	1	246476	HCORE		A16-12632	0.005	0.1% speck PY in qtz-crb veinlet
64	65	1	246477	HCORE		A16-12632	<0.005	0.5% blb PY assoc w/ pillow margins and qtz-crb veinlets. Trc diss PY in host rock
65	66	1	246478	HCORE		A16-12632	<0.005	0.1-0.2% blb PY scattered throughout pillowed basalt
66	67	1	246479	HCORE		A16-12632	0.015	0.1-0.2% sma stringers within qtz stringers

		0	246480	DUP	246479		A16-12632	0.024	
67	68	1	246481	HCORE			A16-12632	0.024	0.1% diss-blb PY at margin of flow breccia.
68	69	1	246482	HCORE			A16-12632	0.007	no visible mineralization
69	70	1	246483	HCORE			A16-12632	0.011	<0.1% PY (one grain)
70	71	1	246484	HCORE			A16-12632	<0.005	no visible mineralization
71	72	1	246485	HCORE			A16-12632	0.006	0.7% blb PY assoc w/ epd-kspar-qtz-crb veinlets; 0.2% diss-sct PY in host rock
72	73	1	246486	HCORE			A16-12632	0.013	1% blb-sct PY assoc w/ qtz-crb stringers and epd-kspar veinlets.
73	74	1	246487	HCORE			A16-12632	0.008	0.5% PY assoc w/ epd pillow selvages.
		0	246488	STD		CDN_GS_P7J	A16-12632	0.746	
74	75	1	246489	HCORE			A16-12632	0.022	1-2% blb PY assoc w/ epd pillow selvages and qtz
75	76	1	246490	HCORE			A16-12632	0.013	<0.1% diss PY thorughout host rock and 0.1% PY seams assoc qtz-kspar vein
76	77	1	246491	HCORE			A16-12632	0.009	0.1% blb PY assoc w/ pillow selvages and 0.3% PY hosted in qtz-crb stringers
77	78	1	246492	HCORE			A16-12632	0.039	1-2% fine grained diss PY assoc w/ brecciated zone and vuggy qtz-crb stringers
78	79	1	246493	HCORE			A16-12632	0.056	1% blb PY throughout host rock with additional 0.5% blb and tarnished PY assoc w/ qtz-crb vein
79	80	1	246494	HCORE			A16-12632	0.008	<0.1% diss PY throughout with additional 0.5% diss PY assoc w/ qtz-crb stirngers +/- kspar
80	81	1	246495	HCORE			A16-12632	0.006	1% diss-cubic PY scattered throughout core with additional 1% fine grained diss PY assoc w/ kspar-epd-qtz-crb veinlets.
		0	246496	Blank		Blank	A16-12632	0.007	
81	82	1	246497	HCORE			A16-12632	0.013	0.5-1% fine grained diss PY scattered throughout host rock; 0.1% blb PY assoc w/ kspar-epd stringers
82	83	1	246498	HCORE			A16-12632	0.01	0.5% diss-blb PY assoc w/ kspar-epd stringers
83	84	1	246499	HCORE			A16-12632	0.006	0.5% blb PY assoc w/ epd-qtz-crb pillow selvage; 0.2% very FG diss PY assoc w/ qtz-crb stringers
84	85	1	246500	HCORE			A16-12632	0.01	<0.1% blb PY assoc w/ qtz-crb stringer
85	86	1	246501	HCORE			A16-12632	0.005	0.1-0.2% very FG diss PY assoc w/ qtz-crb-kspar stringers
86	87	1	246502	HCORE			A16-12632	0.005	very trc (<0.1%) PY seam-sma
87	88	1	246503	HCORE			A16-12632	0.005	0.1% fine grained diss PY
		0	246504	STD		CDN_GS_P4B	A16-12632	0.508	
88	89	1	246505	HCORE			A16-12632	0.006	No visible mineralization

89	90	1	246506	HCORE			A16-12632	0.01	0.2% diss-cubic PY scattered throughout; 0.1% FG diss PY assoc w/ kspar-qtz-crb veins
90	91	1	246507	HCORE			A16-12632	0.005	0.5% blb PY assoc w/ epd pillow selvage
91	92	1	246508	HCORE			A16-12632	0.005	0.5% blb PY assoc w/ epd pillow selvage and specular hem
92	93	1	246509	HCORE			A16-12632	0.006	0.2% diss-cubic PY scattered throughout and 1% very FG diss PY assoc within epd pillow selvages
93	94	1	246510	HCORE			A16-12632	0.019	0.3% diss-blb PY scattered throughout
94	95	1	246511	HCORE			A16-12632	0.007	no visible mineralization
		0	246512	DUP	246511		A16-12632	0.005	
95	96	1	246513	HCORE			A16-12632	0.01	no visible mineralization
96	97	1	246514	HCORE			A16-12632	0.008	0.2% blb PY concentrated in qtz+kspar stringers
97	98	1	246515	HCORE			A16-12632	0.01	0.5% SMA PY concentrated in epd pillow selvage
98	99	1	246516	HCORE			A16-12632	0.015	no visible mineralization
99	100	1	246517	HCORE			A16-12632	0.011	<0.1% fg PY at pillow epd selvage
100	101	1	246518	HCORE			A16-12632	0.006	1-2% blb PY assoc w/ vuggy qtz-crb veins and amygdules.
101	102	1	246519	HCORE			A16-12632	0.005	<0.1% diss PY assoc w/ qtz-crb stringers
		0	246520	STD		CDN_GS_P7J	A16-12632	0.88	
102	103	1	246521	HCORE			A16-12632	0.005	<0.1% diss PY scattered throughout
103	103.3	0.3	246522	HCORE			A16-12632	0.005	<0.1% PY assoc w/ vuggy qtz-crb stringers
103.3	103.75	0.45	246523	HCORE			A16-12632	0.006	60% qtz 35% crb 5% epd in vein; trc chlorite and kspar. vein is vuggy and trc spec hem within vugs. 1% very FG diss PY.
103.75	104.5	0.75	246524	HCORE			A16-12632	0.006	0.5% very FG PY assoc w/ vuggy qtz-crb-kspar veinlets
104.5	105.5	1	246525	HCORE			A16-12632	0.007	1-2% qtz-calcite stringers w/ trace py
105.5	106	0.5	246526	HCORE			A16-12632	0.007	3% parallel vuggy calcite stringers offsetting (dextral) early kspar-epd-crb veinlets (1%); trace dissem py in wallrock
106	107	1	246527	HCORE			A16-12632	0.014	3% parallel vuggy calcite stringers cross-cutting kspar-epd-crb-qtz veinlets (trace); 1% very fg py assoc w/ epd pillow selvage
		0	246528	Blank		Blank	A16-12632	0.007	
107	108	1	246529	HCORE			A16-12632	0.006	2 parallel faults (sinistral and dextral, 45 deg TCA) offsetting pillow selvages and calcite veinlets; trace py dissems assoc w/ 1% kspar-epd-crb-epd veinlets
108	109	1	246530	HCORE			A16-12632	0.02	1% very fg py assoc w/ vuggy kspar-epd-calcite-qtz veinlets

109	110	1	246531	HCORE			A16-12777	<0.005	1-2% bleby py assoc w/ epd + grey carbonate pillow selvages;
110	111	1	246532	HCORE			A16-12777	<0.005	1-2% bleby py assoc w/ epd + grey carbonate pillow selvages
111	112	1	246533	HCORE			A16-12777	<0.005	2% qtz-calcite stringers parallel vein array (11-111.2m); parallel fault set (45 deg TCA); trace py throughout
112	113	1	246534	HCORE			A16-12777	<0.005	trace py dissems assoc w/ high angle kspar-epd-carb-qtz veinlets (<1%) and high angle qtz-calcite stringers (<1%)
113	114	1	246535	HCORE			A16-12777	<0.005	1% ser + hem alteration surrounding epd pillow selvage; alteration hosts 1-2% bleby to cubic py dissems; 10cm wide vein? or highly altered selvage? this 10cm patch has 10% ser + hem alteration and 2% very fg py dissems
		0	246536	STD		CDN_GS_P4B	A16-12777	0.402	
114	115	1	246537	HCORE			A16-12777	<0.005	no visible mineralization; ladder step extension vein set
115	116	1	246538	HCORE			A16-12777	<0.005	<1% ksp-epd-qtz (+/- calcite) stringers with trace py dissems
116	117	1	246539	HCORE			A16-12777	<0.005	trace fg py dissems throughout
117	118	1	246540	HCORE			A16-12777	<0.005	trace py throughout concentrated at wallrock/veinlet contacts; vuggy calcite stringers offsetting (sinistral) kspar-epd veinlets
118	119	1	246541	HCORE			A16-12777	<0.005	trace py concentrated at wallrock/veinlet contacts (veinlets are vuggy calcite +/- qtz tension gashes;
119	120	1	246542	HCORE			A16-12777	<0.005	trace py hosted by calcite-qtz-epd veinlet subparallel TCA; vein is offset by 2 parallel high angle faults
120	120.7	0.7	246543	HCORE			A16-12777	<0.005	trace py hosted by calcite-qtz-epd veinlets (<1%) ; offset by sinistral faults 40 deg TCA filled with calcite
		0	246544	DUP	246543		A16-12777	<0.005	
120.7	121.17	0.47	246545	HCORE			A16-12777	<0.005	altered mafics; mod perv chl alteration; 35% very vuggy calcite as fracture-fill; weak perv hem; very wk brecciated texture defined by 2% light 0.5 to 1 cm wide rounded pink clastes (hardness = ~7, kspar (?) or hem stained silica?); 1-2% cubic to dissem py scattered throughout alteration zone
121.17	122	0.83	246546	HCORE			A16-12777	<0.005	no visible mineralization; trace parallel qtz-calcite veinlets (45%)
122	123	1	246547	HCORE			A16-12777	<0.005	no visible mineralization
123	124	1	246548	HCORE			A16-12777	<0.005	no visible mineralization; shallow angle sinistral faullt

124	125	1	246549	HCORE			A16-12777	0.008	very trace py assoc w/ kspar-epd-calcite-qtz; this mineralized vein generation is cross-cut by barren calcite stringers
125	125.56	0.56	246550	HCORE			A16-12837	0.014	no visible mineralization
125.56	126	0.44	246551	HCORE			A16-12837	0.028	Mineralized Zone: Qtz-carb Vein (125.56m to 125.7m); dark grey/light grey silica ribboning in qtz vein parallel to vein contact at 80 deg TCA; 2% chl inclusions; 1% calcite stringers cross-cutting QV, 7% spec hem, 2% bleby py overgrowing spec hem (spec hem iron source for py precipitation?); altered mafics 125.7 to 125.85m - wk hem + ser alteration with mod chl alteration, 5% calcite veinlets; Qtz- carb Vein (125.85m to 125.93m) shear vein? 30% calcite with 5% hem staining, 5% spec hem w/ 10% very fg to cg py dissems
126	126.8	0.8	246552	HCORE			A16-12837	0.005	trace py assoc w/ epd-qtz stringers; offset by dextral flt filled w/ calcite
		0	246553	STD		CDN_GS_P7J	A16-12777	0.695	
126.8	127.8	1	246554	HCORE			A16-12777	<0.005	trace py assoc w/ epd-qtz stringers; cross-cut by vuggy calcite stringers
127.8	128.8	1	246555	HCORE			A16-12777	0.005	7% kspar-epd-calcite-qtz veinlets with trace to 1% cubic py; cross-cut by dextral fault subparallel TCA
128.8	129.8	1	246556	HCORE			A16-12777	<0.005	2% kspar-epd-calcite-qtz veinlets with locally 2% very fg py
129.8	130.5	0.7	246557	HCORE			A16-12777	<0.005	no visible mineralization
130.5	131.4	0.9	246558	HCORE			A16-12777	<0.005	trace py (locally up to 1%); hosted in early epd-calcite-qtz stringers cross-cut by vuggy calcite stringers
131.4	132.3	0.9	246559	HCORE			A16-12777	<0.005	131.4-131.7; altered mafic basalt, wk chl + hem w/ very wk ser, 4% fracture-fill grey cb, 1% bleby py throughout... 131.7-132.3 mod pervasive epd with 5% hem, 2% bleby py throughout
132.3	133.2	0.9	246560	HCORE			A16-12777	<0.005	mod perv epd; 1% bleby py
133.2	134.2	1	246561	HCORE			A16-12777	<0.005	no visible mineralization
		0	246562	Blank		Blank	A16-12777	<0.005	
134.2	135.2	1	246563	HCORE			A16-12777	<0.005	3cm wide vuggy calcite-qtz veinlet w/ hem staining; cpy + py intergrown (~1% py, trace cpy), late stage mineralization occuring within vugs; contact = 58 deg TCA
135.2	136.2	1	246564	HCORE			A16-12777	<0.005	locally 3% very fg py surrounding grey calcite-qtz veinlet (2cm wide); halo ser+hem+chl alteration
136.2	137.2	1	246565	HCORE			A16-12777	<0.005	trace py assoc w/ qtz-epd-grey calcite pillow selvage

137.2	138.2	1	246566	HCORE		A16-12777	<0.005	30cm patch of wk perv hem + chl alteration with very wk brecciated texture and 7% very vuggy calcite stringers, locally 2% cubic py within vugs
138.2	139.2	1	246567	HCORE		A16-12777	<0.005	trace py assoc w/ 1% vuggy kspar-epd-qtz-calcite stringers; stringers subvertical TCA
139.2	140.2	1	246568	HCORE		A16-12777	<0.005	trace py assoc w/ 1% vuggy kspar-epd-qtz-calcite stringers; stringers subvertical TCA
140.2	141.2	1	246569	HCORE		A16-12837	0.014	up to 1% py assoc w/ 2% vuggy kspar-epd-qtz-calcite stringers; stringers subvertical TCA
141.2	141.9	0.7	246570	HCORE		A16-12837	0.008	Mineralized Zone; very wkly brecciated, dark green to light pink color; dark green patches (~60% of sample) are chl altered basalt, pink areas (~35%) are ser + hem + kspar altered w/ grey cb in vesicles; 4% white calcite-qtz stringers +/- vuggy; up to 10% dark grey spec hem + grey calcite + qtz veinlets; dextral flt at 22 deg TCA; 141.2-141.6 = 10% very fg to cubic py in altered mafics and grey calcite veinlets
		0	246571	STD	CDN_GS_P4B	A16-12837	0.393	
141.9	142.9	1	246572	HCORE		A16-12837	0.006	dark grey w/ 20% ser bleaching; 5% qtz-carb veinlets subparallel TCA; 2% qtz-grey calcite veinlets with trace spec hem, spec hem-grey calcite also as vesicle fill; two 2cm veinlets at bottom of sample (142.8m), that are qtz-carb rimmed with grey calcite; this rimmed vein generation is offset by a sinistral flt filled with calcite; 1% py throughout
142.9	143.7	0.8	246573	HCORE		A16-12777	<0.005	dark grey w/ pervasive chl + hem (wk) with 2% hem banding; very weak foliation at 40 deg TCA; 5% patchy ser bleaching; up to 15% qtz-carb veinlets parallel to fol; 1% py concentrated in chl bands within qtz-cb veinlets
143.7	144.3	0.6	246574	HCORE		A16-12777	<0.005	trace py assoc w/ 15cm patch of wkly sheared altered volcanics (same as 246573)
144.3	145.3	1	246575	HCORE		A16-12777	<0.005	3cm wide vuggy epd-qtz-calcite vein with hem staining (too soft to be kspar) subvertical TCA; locally 3% very fg py in 3cm vein
145.3	146	0.7	246576	HCORE		A16-12777	<0.005	trace py assoc with kspar-epd-carb-qtz stringers (<1%); ser alteration halo around 1% grey calcite-qtz-spec hem stringers w/ trace fg py dissems
146	147	1	246577	HCORE		A16-12777	<0.005	1-2% fg to bleby py assoc w/ 3-4% vuggy epd-qtz-calcite stringers to veinlets with hem staining (too soft to be kspar) ; parallel set with 75-80 deg TCA

147	148	1	246578	HCORE			A16-12777	<0.005	trace to 1% fg to bleby py assoc w/ 2% vuggy epd-qtz-calcite stringers to veinlets with hem staining (too soft to be kspar) ; 75-80 deg TCA
148	149	1	246579	HCORE			A16-12777	<0.005	trace py assoc w/ epd pillow selvage
		0	246580	DUP	246579		A16-12777	<0.005	
149	150	1	246581	HCORE			A16-12777	<0.005	1% bleby py assoc w/ epd pillow selvage; 3-4% vuggy epd-qtz-kspar-calcite veinlets; subvertical TCA; locally 2% very fg py in veinlets
150	151	1	246582	HCORE			A16-12777	<0.005	trace py scattered throughout
151	152	1	246583	HCORE			A16-12777	<0.005	trace very fg py assoc w/ vuggy qtz-calcite-epd-hem stringers and epd pillow selvages
152	153	1	246584	HCORE			A16-12777	<0.005	no visible mineralization
153	154	1	246585	HCORE			A16-12777	<0.005	trace to 1% fg to bleby py assoc w/ 3% vuggy kspar-epd-qtz-calcite stringers to veinlets ; parallel set 75-80 deg TCA
154	155	1	246586	HCORE			A16-12777	<0.005	trace py assoc w/ qtz-carb-spec hem stringer
155	156	1	246587	HCORE			A16-12777	<0.005	trace py assoc w/ ~1% very vuggy calcite stringers
156	157	1	246588	HCORE			A16-12777	<0.005	up to 1% mg py assoc with epd pillow selvage
		0	246589	STD		CDN_GS_P7J	A16-12777	0.839	
157	158	1	246590	HCORE			A16-12777	<0.005	trace py assoc w/ ~1% very vuggy calcite stringers
158	159	1	246591	HCORE			A16-12777	<0.005	trace py assoc w/ epd pillow selvage; extension vein array (50 deg TCA) vuggy calcite with trace to 1% very fg py dissems
159	160	1	246592	HCORE			A16-12777	<0.005	trace py concentrated at wallrock/veinlet contact; 1-2% veinlets, the grey cb-spec hem-qtz generation, 50 deg TCA cross-cutting pillow selvages
160	161	1	246593	HCORE			A16-12777	<0.005	no visible mineralization
161	162	1	246594	HCORE			A16-12777	<0.005	trace py assoc w/ 1% grey calcite-spec hem-qtz stringers
162	163	1	246595	HCORE			A16-12777	<0.005	no visible mineralization
163	164	1	246596	HCORE			A16-12777	<0.005	trace py assoc with one 1cm wide vuggy qtz-calcite-hem veinlet
164	165	1	246597	HCORE			A16-12777	<0.005	trace py assoc with 2% vuggy qtz-calcite-hem veinlets subparallel TCA
		0	246598	Blank		Blank	A16-12777	<0.005	
165	165.8	0.8	246599	HCORE			A16-12777	0.007	15-20% vuggy calcite-fe carb- calcite veinlets (+/-) epd; up to 1% py assoc w/ vuggy veinlets
		0	246600	Blank		Blank	A16-12837	<0.005	

165.8	166.2	0.4	246601	HCORE		A16-12837	0.281	strongly silicified breccia zone; 2% chl stringers; vuggy perv calcite alteration(165.8-166m); 3% fg dissem & bleby py assoc w/ patchy fe-carb alteration (30% patchy fe-carb)
166.2	166.7	0.5	246602	HCORE		A16-12837	0.378	strongly silicified breccia zone; ~30-40% of this interval is wht qtz; 60% is dark grey sil w/ iron carb; 7cm wide patch of sericite banding, grey calcite alteration interstitial to sericite bands; cross-cut by 2% calcite-qtz-fe-carb veinlets rimmed with chl; up to 7% fg-mg py dissems hosted in dark grey sil + Fe-carb zones
166.7	167	0.3	246603	HCORE		A16-12837	0.291	sil breccia zone; mottled texture; 2% calcite stringers; dominately dark sil alteration with 5-10% fe-carb + spec hem inclusions; 4% fg to bleby py throughout
167	167.3	0.3	246604	HCORE		A16-12837	0.64	167-167.1 = dark grey sil with fracture-fill calcite stringers creating breccia texture; 161.1-161.3m is grey qtz (80%) with 5% chl + ser inclusions; 2% scattered fe-carb inclusions; up to 15% py (3% as fg dissems throughout, ~12% as cm-wide py bands made up of fg-bleby py)
167.3	167.8	0.5	246605	HCORE		A16-12837	0.153	brecciated mineralized zone; mottled texture; 15% dark grey sil w/ fracture-fill calcite; 5% grey calcite bands parallel to 30% ser + chl +/- actinolite bands; up to 50% fe-carb inclusions; 5% spec hem stringers scattered throughout; up to 5% fg-mg py dissems, py is concentrated in fe-carb alteration, lesser py assoc w/ ser+chl+actinolite bands
		0	246606	Blank	Blank	A16-12837	<0.005	
		0	246607	STD	CDN_GS_2P	A16-12837	2.06	
167.8	168.6	0.8	246608	HCORE		A16-12777	<0.005	wk-mod fol texture defined by alterating dark green (chl) and light green-grey (act) bands; 2% grey calcite as fracture-fill parallel to fol; 1-2% lcx; 10% calcite-fe carb-qtz stringers; up to 1% fg py dissems assoc w/ stringers
168.6	169.3	0.7	246609	HCORE		A16-12777	<0.005	wk-mod fol texture defined by alterating dark green (chl) and light green-grey (act) bands; 2% lcx; 10-15% calcite-fe carb-qtz stringers; up to 1% irregular spec hem stringers assoc w/ veinlets; trace fg py dissems assoc w/ stringers
169.3	170	0.7	246610	HCORE		A16-12777	<0.005	E0B; ~10% beige lcx throughout; 15% pink qtz-calcite-iron carb veinlets; trace py assoc w/ veinlets
170	171	1	246611	HCORE		A16-12777	<0.005	E0B; ~10% beige lcx throughout; 15% pink qtz-calcite-iron carb veinlets; trace py assoc w/ veinlets

171	172	1	246612	HCORE			A16-12777	<0.005	E0B; ~10% beige lcx throughout; ~5% pink qtz-calcite-iron carb veinlets, some rimmed with grey calcite; very trace py assoc w/ veinlets
172	173	1	246613	HCORE			A16-12777	<0.005	E0B; 15% beige lcx throughout; 7% pink qtz-calcite-iron carb veinlets, some rimmed with grey calcite; very trace py assoc w/ veinlets
173	174	1	246614	HCORE			A16-12777	0.006	E0B; 5% beige lcx throughout; 7% pink qtz-calcite-iron carb vuggy veinlets; very trace py assoc w/ veinlets
174	174.7	0.7	246615	HCORE			A16-12777	0.006	E0B; 1-2% beige lcx; up to 5% pink qtz-calcite-iron carb vuggy veinlets; very trace py assoc w/ veinlets
		0	246616	DUP	246615		A16-12777	0.008	
		0	246617	Blank		Blank	A16-12837	<0.005	
174.7	175.1	0.4	246618	HCORE			A16-12837	0.062	altered brecciated zone; local vuggy texture; spec hem + sil w/ 2% chl stringers and 2% calcite stringers; 1% very fg py throughout with 1% vg py concentrated in seams
175.1	175.6	0.5	246619	HCORE			A16-12837	0.095	altered brecciated zone; spec hem + sil w/ 2% chl stringers and 2% calcite stringers; up to 30% patches of fe-carb alteration; 5% very fg as dissems and seams hosted by fe-carb alteration
175.6	176.37	0.77	246620	HCORE			A16-12837	0.077	altered brecciated zone; spec hem + sil w/ 2% chl stringers and 2% calcite stringers; up to 30% patches of fe-carb alteration; 5% very fg as dissems and seams hosted by fe-carb alteration
176.37	176.77	0.4	246621	HCORE			A16-12837	0.202	strongly deformed E0B; ser + chl + spec hem + brecciated seams of dark grey sil; 5%, up to 7% very fg py dissems concentrated in seams parallel to foliation
176.77	177.7	0.93	246622	HCORE			A16-12837	0.017	strongly deformed E0B; strongly foliated bands of ser + chl + spec hem; 2% lcx; 2% very fg py dissems concentrated in seams parallel to foliation
177.7	178.7	1	246623	HCORE			A16-12837	0.009	deformed E0B; strong-mod foliated bands of ser + chl + actinolite; 2-3% lcx; two qtz-carb veins rimmed with beige calcite; 2% very fg py dissems throughout hosted by deformed E0B
		0	246624	Blank		Blank	A16-12837	<0.005	
		0	246625	STD		CDN_GS_P7J	A16-12777	0.677	
178.7	179.6	0.9	246626	HCORE			A16-12777	<0.005	7% qtz-iron carb-calcite veinlets; up to 2% locally very fg py dissems hosted by veinlets

179.6	180	0.4	246627	HCORE			A16-12777	<0.005	2-3% qtz-iron carb-calcite veinlets; up to 1% locally very fg py dissems hosted by veinlets
180	181	1	246628	HCORE			A16-12777	<0.005	~1% qtz-iron carb-calcite veinlets hosting trace fg py dissems
181	182	1	246629	HCORE			A16-12777	<0.005	2-3% qtz-iron carb-calcite stringers to veinlets hosting trace fg py dissems
182	183	1	246630	HCORE			A16-12777	<0.005	barren
183	184	1	246631	HCORE			A16-12777	<0.005	very trace fg py seams assoc w/ 1% irregular epd-qtz-iron carb-calcite stringers
184	185	1	246632	HCORE			A16-12777	0.006	very trace fg py seams assoc w/ 3% irregular epd-qtz-iron carb-calcite stringers
185	186	1	246633	HCORE			A16-12777	0.005	very trace fg py assoc w/ <1% vuggy fe-carb-qtz veinlet
		0	246634	Blank		Blank	A16-12777	<0.005	
186	187	1	246635	HCORE			A16-12777	<0.005	barren
187	188	1	246636	HCORE			A16-12777	<0.005	barren
188	189	1	246637	HCORE			A16-12777	<0.005	barren
189	190	1	246638	HCORE			A16-12777	<0.005	trace bleby py assoc w/ 1% calcite stringers
190	191	1	246639	HCORE			A16-12777	<0.005	trace fg py assoc w/ 1-2% qtz-calcite-fe-carb veinlets rimmed with spec hem
191	192	1	246640	HCORE			A16-12777	<0.005	trace fg py assoc w/ 1-2% qtz-calcite-fe-carb veinlets rimmed with spec hem
192	193	1	246641	HCORE			A16-12777	<0.005	1-2% very fg py assoc w/ 2% vuggy qtz-calcite-iron carb +/- epd veinlets
193	194	1	246642	HCORE			A16-12777	<0.005	trace to 1% fg py assoc w/ 2% vuggy calcite-qtz-iron carb stringers
		0	246643	STD		CDN_GS_P4B	A16-12777	0.374	
194	195	1	246644	HCORE			A16-12777	0.025	trace fg py assoc w/ 1% vuggy calcite-qtz-iron carb stringers
195	196	1	246645	HCORE			A16-12777	0.005	very trace fg py assoc w/ ~1% grey calcite stringers
196	197	1	246646	HCORE			A16-12777	0.026	trace to 1% very fg assoc w/ 2cm high angle vuggy qtz-fe carb-calcite veinlet
197	198	1	246647	HCORE			A16-12777	0.005	trace py sca throughout ; ~1% very fg py assoc w/ vuggy calcite-iron carb-qtz veinlets (high angle TCA)
198	199	1	246648	HCORE			A16-12777	0.005	barren
199	200	1	246649	HCORE			A16-12777	0.009	trace bleby py assoc w/ grey calcite alteration; calcite alteration occurs as fracture-fill in small patch of weakly foliated volcanics

200	201	1	246650	HCORE			A16-12777	0.01	vuggy calcite-fe carb-qtz vein (200-208.08m) w/ locally 2-3% fg to bleby py; trace py in wallrock at vein contact additional trace py assoc w/ patchy grey calcite alteration in wallrock
201	202	1	246651	HCORE			A16-12777	0.005	spotty ser alteration along pillow selvage w/ local alteration (~10cm wide); this altered portion hosts up to 1% scattered py dissems
		0	246652	DUP	246651		A16-12777	0.006	
202	203	1	246653	HCORE			A16-12777	0.005	trace py assoc w/ grey calcite-fe carb - qtz stringers (<1%)
203	204	1	246654	HCORE			A16-12777	0.006	trace py at wallrock/veinlet contact of qtz-calcite-fe carb veinlet with brecciated chl inclusions
204	205	1	246655	HCORE			A16-12777	0.005	trace py along wallrock/veinlet contact of qtz-epd-calcite veinlet rimmed w/ iron carb
205	206	1	246656	HCORE			A16-12777	0.005	very trace bleby to fg dissem py scattered throughout
206	207	1	246657	HCORE			A16-12777	<0.005	14cm patch of strongly grey calcite altered volcanics; patchy ser + iron carb alteration in this interval; very fg py (1%) assoc w/ iron carb and 1% cubic py assoc w/ ser alteration
207	208	1	246658	HCORE			A16-12777	<0.005	very wk fol; trace very fg py dissems sct
208	209	1	246659	HCORE			A16-12777	<0.005	barren
209	210	1	246660	HCORE			A16-12777	<0.005	trace fg py assoc w/ grey calcite- fe carb-qtz veinlet, high angle TCA
		0	246661	STD		CDN_GS_P4B	A16-12777	0.432	
210	211	1	246662	HCORE			A16-12902	<0.005	weak-mod fol; 1% very fg py sct
211	212	1	246663	HCORE			A16-12902	<0.005	weak-mod fol; 1% very fg py sct
212	213	1	246664	HCORE			A16-12902	<0.005	magnetic, wk-mod fol; 1% very fg py sct
213	214	1	246665	HCORE			A16-12902	<0.005	trace fg py dissems sct throughout wk-mod fol volcanics; 1% fg-mg py dissems assoc w/ 5-7% grey calcite-qtz-fe carb veinlets
214	215	1	246666	HCORE			A16-12902	0.008	magnetic; strong alteration from 214.14-214.31m; this interval is silicified with wk hem + fe-carb + ser; wk brecciated texture; ~30% fracture-fill grey calcite alteration; 2% very fg-mg py in altered zone , with trace bleby py sct throughout sample
215	216	1	246667	HCORE			A16-12902	0.005	24cm strongly epidotized patch w/ 1% fe carb-grey calcite-qtz veinlets; up to 1% very fg py assoc w/ veinlets
216	217	1	246668	HCORE			A16-12902	<0.005	barren
217	218	1	246669	HCORE			A16-12902	<0.005	barren

		0	246670	Blank		Blank	A16-12902	<0.005	
218	219	1	246671	HCORE			A16-12902	<0.005	barren
219	220	1	246672	HCORE			A16-12902	<0.005	trace py sct
220	221	1	246673	HCORE			A16-12902	<0.005	trace py sct
221	222	1	246674	HCORE			A16-12902	0.005	barren
222	223	1	246675	HCORE			A16-12902	0.006	trace py hosted by grey calcite seam
223	224	1	246676	HCORE			A16-12902	<0.005	2% lcx?; trace py sct throughout
224	225	1	246677	HCORE			A16-12902	<0.005	trace py sct throughout
225	226	1	246678	HCORE			A16-12902	<0.005	trace py sct throughout
		0	246679	STD		CDN_GS_P7J	A16-12902	0.656	
226	227	1	246680	HCORE			A16-12902	<0.005	very trace py sct throughout
227	228	1	246681	HCORE			A16-12902	<0.005	very trace py sct throughout
228	229	1	246682	HCORE			A16-12902	<0.005	very trace py sct throughout and assoc w/ grey calcite-iron carb-qtz stringers (<1%)
229	230	1	246683	HCORE			A16-12902	<0.005	very trace py sct throughout; locally 1-2% bleby py assoc w/ 5cm wide patch of epd-grey calcite alteration; trace py in grey calcite-fe carb-qtz veinlets at upper and lower contact of alteration w/ volcanics
230	231	1	246684	HCORE			A16-12902	<0.005	9cm wide patch of grey calcite alteration hosting trace fg to cubic py dissems
231	231.6	0.6	246685	HCORE			A16-12902	0.014	9cm mineralized vuggy pink carb-calcite-qtz vein; two 3cm wide mineralized vuggy pink carb-calcite-qtz veinlets; euhderal cg py crystallized in vugs (2-3%); wallrock is pervasively hem+carb altered and hosts an additional 1-2% mg dissem to cubic py
231.6	232.6	1	246686	HCORE			A16-12902	<0.005	spotty mag; 3-4% carb-cal-qtz veinlets to stringers; 1-2% bleby py concentrated at veinlet/wallrock contacts
232.6	233.6	1	246687	HCORE			A16-12902	0.005	trace py sct throughout
		0	246688	DUP	246687		A16-12902	0.007	
233.6	234.6	1	246689	HCORE			A16-12902	<0.005	very wk foliation; 3cm wide cb-calcite-qtz veinlet w/ halo alteration (fe-carb+ser); 1% fg to cubic py dissems assoc w/ veinlet
234.6	235.6	1	246690	HCORE			A16-12902	0.066	locally up to 2% very cg py (from 234.6-235m); py hosted by grey calcite alteration
235.6	236.6	1	246691	HCORE			A16-12902	0.005	barren
236.6	237.6	1	246692	HCORE			A16-12902	<0.005	very trace py assoc w/ grey calcite-carb-qtz stringers (1%)
237.6	238.65	1.05	246693	HCORE			A16-12881	<0.005	very trace py sct throughout hostrock; up to 15% parallel extensional vein array (2-5cm spacing)

238.65	238.95	0.3	246694	HCORE		A16-12881	0.017	Mineralized Fe-Carb + Calcite + Qtz Shear Vein; 21cm wide; 3-4% spec hem stringers within vein parallel to contact; 2% calcite stringers within vein parallel to contact; 238.9-238.95m = grey calcite + fe-carb w/ fe-carb alteration aligned parallel to contact; 10% py in vein total (3cm-wide very cg euhedral py crystals concentrated in seam from 237.75-238.05, w/ scattered cg crystals, fg py in fe-carb/grey calcite); 2cm-wide sil + hem altered halo at upper contact w/ 3% very fg py dissems
		0	246695	Blank	Blank	A16-12881	<0.005	
238.95	240	1.05	246696	HCORE		A16-12881	<0.005	trace py sct throughout
		0	246697	STD	CDN_GS_P7J	A16-12881	0.658	
240	241	1	246698	HCORE		A16-12902	<0.005	trace py assoc w/ qtz-cal-carb veinlet
241	242	1	246699	HCORE		A16-12902	0.015	trace py hosted by grey calcite-qtz-carb stringers (10%) w/ ser alteration halos; 6cm wide pink carb-cal-qtz veinlet w/ spec hem and locally 3% very fg py; 9cm wide patch of grey calcite alteration in hostrock, grey calcite hosts 1% py veinlets and dissems; additional 1% fg-mg dissem py throughout hostrock ; trace cpy in 1cm wide qtz-carb-cal veinlet
242	243	1	246700	HCORE		A16-12902	<0.005	up to 15% grey calcite-qtz-carb stringers w/ 1% fg py dissems
243	244	1	246701	HCORE		A16-12902	0.006	very wk hem + sil + mag alteration in hostrock w/ 1% py sct; 7% grey calcite-carb-qtz stringers w/ 1% fg py
244	245	1	246702	HCORE		A16-12902	0.006	trace py sct throughout
245	246	1	246703	HCORE		A16-12902	0.006	very wk chl + fe-cb alteration of hostrock w/ trace sct py dissems; up to 1-2% fg py assoc w/ carb-grey calcite-qtz veinlets (up to 5%)
246	247	1	246704	HCORE		A16-12902	<0.005	very wk chl + fe-cb alteration of hostrock w/ trace sct py dissems; up to 1% fg py assoc w/ carb-grey calcite-qtz stringers (3%)
247	248	1	246705	HCORE		A16-12902	<0.005	trace very fg py sct throughout
		0	246706	Blank	Blank	A16-12902	<0.005	
248	249	1	246707	HCORE		A16-12902	0.007	very trace bleby py sct throughout
249	250	1	246708	HCORE		A16-12902	<0.005	trace very fg py sct throughout; up to 1% very fg py hosted by <1% grey calcite-spec hem-carb-qtz stringers cross-cutting epd-qtz-carb stringers
250	251	1	246709	HCORE		A16-12902	<0.005	trace very fg py sct throughout; up to 1% very fg py hosted by <1% grey calcite-spec hem-carb-qtz stringers cross-cutting epd-qtz-carb stringers

251	252	1	246710	HCORE			A16-12902	<0.005	trace very fg py hosted by <1% grey calcite-spec hem-carb-qtz stringers cross-cutting epd-qtz-carb stringers
252	252.7	0.7	246711	HCORE			A16-12902	<0.005	trace very fg py hosted by <1% grey calcite-spec hem-carb-qtz stringers cross-cutting epd-qtz-carb stringers
252.7	253.5	0.8	246712	HCORE			A16-12881	1.66	wk-mod foliation and grey color (very wk pervasive fe-cb-hem-chl alteration) w/ 3% fracture-fill grey cal; four 3cm wide vuggy mineralized qtz-fecarb-calcite veinlets parallel to fol (veinlets = ~60% of sample); 5% very fg py in veinlets with some cg euhedral py in vugs
253.5	254	0.5	246713	HCORE			A16-12902	<0.005	trace py assoc w/ grey calcite-carb-qtz stringers (2%)
254	255	1	246714	HCORE			A16-12902	<0.005	2cm wide vuggy carb-calcite-qtz veinlet w/ locally 1% cg euhedral py crystallized in vugs
		0	246715	STD		CDN_GS_P4B	A16-12902	0.516	
255	256	1	246716	HCORE			A16-12902	0.008	1cm and 2cm wide vuggy carb-calcite-qtz veinlets w/ locally 2% cg euhedral py crystallized in vugs (from 255-255.2m); rest of the sample is barren
256	257	1	246717	HCORE			A16-12902	<0.005	trace py assoc w/ grey calcite-carb-qtz veinlets (2%)
257	258	1	246718	HCORE			A16-12902	<0.005	trace py assoc w/ <1% grey calcite-carb-qtz stringers
258	259	1	246719	HCORE			A16-12902	<0.005	trace py assoc w/ 1-2% grey calcite-carb-qtz stringers (+/-) spec hem
259	260	1	246720	HCORE			A16-12902	<0.005	trace py assoc w/ <1% grey calcite-carb-qtz stringers
260	261	1	246721	HCORE			A16-12902	<0.005	no visible mineralization
261	262	1	246722	HCORE			A16-12902	<0.005	locally 1% py assoc w/ <1% grey calcite-carb-qtz veinlet
262	263	1	246723	HCORE			A16-12902	<0.005	trace to 1% py assoc w/ 3% grey calcite-carb-qtz veinlets and stringers
		0	246724	DUP	246723		A16-12902	<0.005	
263	264	1	246725	HCORE			A16-12902	<0.005	wk fe-carb + ser alteration from 263.25-265.25; vuggy texture; locally 1% fg py
264	265	1	246726	HCORE			A16-12902	<0.005	no visible mineralization
265	266	1	246727	HCORE			A16-12902	<0.005	trace py assoc w/ <1% grey calcite-carb-qtz veinlets
266	267	1	246728	HCORE			A16-12902	<0.005	very wk silica flooding; up to 1% bleby py sct throughout
267	267.93	0.93	246729	HCORE			A16-12902	<0.005	trace py sct
268.27	269	0.73	246730	HCORE			A16-12902	0.011	trace py assoc w/ spec hem-grey calcite-carb-qtz stringers (1%)

269	270	1	246731	HCORE		A16-12902	<0.005	trace py assoc w/ spec hem-grey calcite-carb-qtz stringers (1%)
270	271	1	246732	HCORE		A16-12902	0.005	no visible mineralization
		0	246733	STD	CDN_GS_P7J	A16-12902	0.708	
271	272	1	246734	HCORE		A16-12902	<0.005	no visible mineralization
272	273	1	246735	HCORE		A16-12902	<0.005	trace -1% fg py dissems hosted by spec hem-grey calcite-carb-qtz stringers (1%)
273	274	1	246736	HCORE		A16-12902	0.406	1% fg py dissems hosted by spec hem-grey calcite-carb-qtz veinlets (4%)
274	275	1	246737	HCORE		A16-12902	0.006	trace py assoc w/ spec hem-grey calcite-carb-qtz stringers (1%)
275	276	1	246738	HCORE		A16-12902	<0.005	up to 1% fg py dissems hosted by spec hem-grey calcite-carb-qtz veinlets (4%)
276	277	1	246739	HCORE		A16-12902	<0.005	trace py assoc w/ spec hem-grey calcite-carb-qtz stringers (1%)
277	278	1	246740	HCORE		A16-12902	<0.005	up to 1% fg py dissems hosted by vuggy spec hem-grey calcite-carb-qtz veinlets (4%)
278	279	1	246741	HCORE		A16-12902	<0.005	wk mag; trace py assoc w/ qtz-carb-calcite veinlet
		0	246742	Blank	Blank	A16-12902	<0.005	
279	280	1	246743	HCORE		A16-12902	<0.005	trace py assoc w/ spec hem-grey calcite-carb-qtz stringers (1%)
280	281	1	246744	HCORE		A16-12902	<0.005	no visible mineralization
281	282	1	246745	HCORE		A16-12902	<0.005	trace 0.5cm wide cubic py grains in basalt; trace (locally 2%) very fg py assoc w/ vuggy qtz-calcite-carb veinlet
282	283	1	246746	HCORE		A16-12902	0.017	wk mag; trace cg cubic to bleby py sct in basalt
283	284	1	246747	HCORE		A16-12902	<0.005	wk mag; trace cg cubic to bleby py sct in basalt
284	285	1	246748	HCORE		A16-12902	<0.005	trace cg bleby py sct in basalt
285	286	1	246749	HCORE		A16-12902	<0.005	trace cg bleby py sct in basalt
286	287	1	246750	HCORE		A16-12902	<0.005	no visible mineralization
		0	246751	STD	CDN_GS_P4B	A16-12902	0.395	
287	288	1	246752	HCORE		A16-12902	<0.005	2 parallel 1-2cm wide v2s veinlets; (27 deg TCA); locally 1% fg py within veins and concentrated at wallrock/vein contacts
288	289	1	246753	HCORE		A16-12902	<0.005	trace bleby py sct in basalt; trace fg py assoc w/ v2s stringers
289	290	1	246754	HCORE		A16-12902	0.005	trace bleby py sct in basalt
290	291	1	246755	HCORE		A16-12902	<0.005	trace bleby py sct in basalt
291	292	1	246756	HCORE		A16-12902	<0.005	4cm wide v2s veinlet w/ locally 1% very fg py
292	293	1	246757	HCORE		A16-12902	<0.005	very trace bleby py sct in basalt

293	294	1	246758	HCORE			A16-12902	<0.005	one 2cm wide v2s veinlets (35 deg TCA); locally 1% fg py within veinlet and concentrated at wallrock contacts
294	295	1	246759	HCORE			A16-12902	<0.005	2-3% v2s stringers (38 deg TCA); locally 1% fg py within stringers and concentrated at wallrock contacts; sericite alteration halos
		0	246760	DUP	246759		A16-12902	<0.005	
295	296	1	246761	HCORE			A16-12902	<0.005	trace to 1% sct py
296	297	1	246762	HCORE			A16-12902	<0.005	one v2s veinlet; locally 1% fg py within veinlet and concentrated at wallrock contacts
297	298	1	246763	HCORE			A16-12902	<0.005	trace sct py
298	299	1	246764	HCORE			A16-12902	<0.005	trace sct py
299	300	1	246765	HCORE			A16-12902	<0.005	trace sct py
300	301	1	246766	HCORE			A16-12902	<0.005	trace sct py
301	302	1	246767	HCORE			A16-12902	<0.005	very wk mag + sil alteration, trace sct py in basalt; 4-5% v2s veinlets w/ up to 2% very fg py dissems concentrated in veins and at wallrock contacts
302	303	1	246768	HCORE			A16-12902	<0.005	trace sct py
		0	246769	STD		CDN_GS_P7J	A16-12902	0.653	
303	304	1	246770	HCORE			A16-12902	<0.005	barren
304	305	1	246771	HCORE			A16-12902	<0.005	trace fg py dissem assoc w/ v2s veinlet
305	306	1	246772	HCORE			A16-12902	<0.005	very trace sct py
306	307	1	246773	HCORE			A16-12902	<0.005	very trace sct py
307	308	1	246774	HCORE			A16-12902	<0.005	2% py veinlets (irregular contacts and morphology); very wk fol w/ weak chl + act alteration; py cross-cut by grey calcite v2c stringers
308	309	1	246775	HCORE			A16-12902	<0.005	1-2% py veinlets, irregular contacts and morphology; py assoc w/ grey calcite alteration
309	310	1	246776	HCORE			A16-12902	<0.005	very trace sct bleby py ; up to 1% py stringers assoc w/ grey calcite alteration
310	311	1	246777	HCORE			A16-12902	<0.005	trace bleby py assoc w/ grey calcite stringers
		0	246778	Blank		Blank	A16-12902	<0.005	
311	312	1	246779	HCORE			A16-12902	<0.005	2% py veinlets (irregular contacts and morphology), subparallel TCA; grey calcite at py veinlet/wallrock contacts
312	313	1	246780	HCORE			A16-12902	<0.005	very trace sct py
313	314	1	246781	HCORE			A16-12902	<0.005	one 2cm v2s veinlet w/ locally 2% very fg py dissems in veinlet and at wallrock contacts (15 deg TCA)
314	315	1	246782	HCORE			A16-12902	<0.005	trace sct bleby py

315	316	1	246783	HCORE			A16-12902	<0.005	very trace py assoc w/ mm-scale calcite stockwork
316	317	1	246784	HCORE			A16-12902	<0.005	barren
317	318	1	246785	HCORE			A16-12902	<0.005	trace bleby py assoc w/ grey calcite stringers
318	319	1	246786	HCORE			A16-12902	<0.005	very trace py assoc w/ grey calcite stringers (up to 5%)
		0	246787	STD		CDN_GS_P4B	A16-12902	0.438	
319	320	1	246788	HCORE			A16-12902	<0.005	very trace py assoc w/ grey calcite stringers (up to 3%)
320	321	1	246789	HCORE			A16-12902	<0.005	one 1cm v2s veinlet w/ locally 2% very fg py dissems in veinlet and at wallrock contacts (30 deg TCA); trace py throughout weakly fractured hostrock as fracture-fill mineralization
321	321.56	0.56	246790	HCORE			A16-12902	<0.005	very trace sct py
321.56	322.6	1.04	246791	HCORE			A16-12902	<0.005	actionlite wkly brecciated & foliated zone; up to 4% spec hem-grey calcite-qtz-carb stringers; trace sct py throughout
322.6	323.6	1	246792	HCORE			A16-12902	<0.005	actionlite wkly brecciated & foliated zone; up to 7% spec hem-grey calcite-qtz-carb stringers; trace very fg py hosted by stringers
323.6	324.6	1	246793	HCORE			A16-12902	<0.005	actionlite wkly brecciated & foliated zone; up to 3% spec hem-grey calcite-qtz-carb stringers; trace very fg py hosted by stringers
324.6	325.6	1	246794	HCORE			A16-12902	<0.005	act + chl wkly brecciated & foliated zone; 2% spec hem-grey calcite-qtz-carb stringers; trace sct py throughout
325.6	326.6	1	246795	HCORE			A16-12902	<0.005	act + chl wkly brecciated & foliated zone; 2% spec hem-grey calcite-qtz-carb stringers hosting trace fg py dissems
		0	246796	DUP	246795		A16-12902	<0.005	
326.6	327.6	1	246797	HCORE			A16-12902	<0.005	act + chl wkly brecciation & mod fol; 2% spec hem-grey calcite-qtz-carb stringers hosting trace fg py dissems; up to 1% very fg py throughout hostrock assoc w/ patchy grey calcite alteration
327.6	328.6	1	246798	HCORE			A16-12902	0.007	1 2cm wide v2s veinlet w/ 1% py; ser halo around <1% v2s stringers w/ trace fg py dissems; trace sct py throughout hostrock
328.6	328.9	0.3	246799	HCORE			A16-12881	1.29	8cm wide v2s vein; vein is vuggy w/ 1% spec hem ribboning & 1% fg py dissems; fe-carb + ser alteration halos w/ an additional 1% fg to cubic py dissems
328.9	329.9	1	246800	HCORE			A16-12881	0.017	1% fg py throughout mod fol & wk brecciated hostrock; chl + act alteration

329.9	330.9	1	246801	HCORE		A16-12881	<0.005	1cm wide v2s vuggy veinlet w/ locally 1% very fg py dissems; trace mg py dissems hosted by 2% v2c veinlets parallel to fol; trace fg py throughout hostrock assoc w/ patchy grey cal alteration
330.9	331.9	1	246802	HCORE		A16-12881	0.038	3% vuggy v2s veinlets w/ locally up to 2% very fg py dissems, spec hem rimming veinlets; up to 1% mg to cubic py dissems in hostrock assoc w/ spotty grey calcite alteration and contacts w/ mineralized veinlets
331.9	332.9	1	246803	HCORE		A16-12904	0.04	8cm wide patch of vuggy v2s veinlets hosting locally 1% cubic py; basalt is mod foliated and chl + act altered w/ fracture-filling grey calcite and patchy ser alteration, hosting 1-2% dissem to cubic py throughout
332.9	333.63	0.73	246804	HCORE		A16-12904	0.01	trace fg py sct
		0	246805	STD	CDN_GS_P7J	A16-12904	0.732	
333.63	334.2	0.57	246806	HCORE		A16-12904	0.007	strongly foliated; alternating bands of dark grey sil + light green act + carb w/ grey calcite; trace fg py throughout assoc w/ actinolite bands
334.2	335.2	1	246807	HCORE		A16-12904	0.017	3-5cm wide vuggy carb-calcite-qtz veinlet; running parallel TCA throughout sample interval; 2% very fg py in veinlet
335.2	336	0.8	246808	HCORE		A16-12904	<0.005	no visible mineralization
336	337	1	246809	HCORE		A16-12904	<0.005	trace fg py assoc w/ 1-2% grey calcite-carb-qtz-spec hem stringers; locally 1% fg py hosted by vuggy qtz-carb-cal veinlet
337	338	1	246810	HCORE		A16-12904	<0.005	very trace sct py
338	339	1	246811	HCORE		A16-12904	<0.005	trace py (as veinlet) hosted by grey calcite stringer
339	340	1	246812	HCORE		A16-12904	0.005	no visible mineralization
340	341	1	246813	HCORE		A16-12904	<0.005	trace sct py throughout; trace fg py assoc w/ grey calcite-qtz-carb stringers (up to 3%)
		0	246814	Blank	Blank	A16-12904	<0.005	
341	342	1	246815	HCORE		A16-12904	<0.005	up to 1% py overgrowing grey calcite in vesicles ; not all vesicles are mineralized (~50%)
342	343	1	246816	HCORE		A16-12904	<0.005	up to 1% py overgrowing grey calcite in vesicles ; not all vesicles are mineralized (~50%)
343	344	1	246817	HCORE		A16-12904	0.008	trace py overgrowing grey calcite as vesicle fill; one 1cm vuggy qtz-carb-cal veinlet; grey calcite is rimming veinlet; grey cal hosts locally 1% bleby py

344	345	1	246818	HCORE			A16-12904	0.006	trace to 1% py overgrowing grey calcite vesicle fill; trace py assoc w/ 2% cal-carb-qtz stringers
345	345.42	0.42	246819	HCORE			A16-12904	0.006	trace to 1% py overgrowing grey calcite vesicle fill
345.42	346	0.58	246820	HCORE			A16-12904	0.005	trace to 1% py overgrowing grey calcite vesicle fill
346	347	1	246821	HCORE			A16-12904	0.027	trace sct py
347	348	1	246822	HCORE			A16-12904	0.031	trace to 1% fg py assoc w/ grey calcite-qtz-carb stringers (3%; wk-mod fol
		0	246823	STD		CDN_GS_P4B	A16-12956	0.371	
348	349	1	246824	HCORE			A16-12956	<0.005	trace to 1% mg py assoc w/ 2-3% grey calcite alteration (fracture-fill)
349	350	1	246825	HCORE			A16-12956	0.007	trace sct py; up to 1% mg py assoc w/ fracture-fill grey calcite alteration (~3%)
350	351	1	246826	HCORE			A16-12956	0.01	trace sct py
351	352	1	246827	HCORE			A16-12956	<0.005	trace to 1% sct py; trace py assoc w/ grey calcite stringers (4%)
352	353	1	246828	HCORE			A16-12956	<0.005	trace py assoc w/ ~3% grey calcite-carb-qtz-spec hem stringers
353	354	1	246829	HCORE			A16-12956	<0.005	trace sct py; up to 1% py overgrowing grey calcite vesicle fill
354	355	1	246830	HCORE			A16-12956	<0.005	trace to 1% py assoc w/ grey calcite alteration (spotty) and grey calcite-carb-qtz stringers
355	356	1	246831	HCORE			A16-12956	0.006	trace sct py
		0	246832	DUP	246831		A16-12956	0.005	
356	357	1	246833	HCORE			A16-12956	<0.005	trace py assoc w/ up to 3% spec hem-grey calcite-qtz-carb stringers
357	358	1	246834	HCORE			A16-12956	<0.005	very trace py assoc w/ 1% spec hem-grey calcite-qtz-carb stringers
358	359	1	246835	HCORE			A16-12956	<0.005	trace sct py
359	360	1	246836	HCORE			A16-12956	0.005	very trace py assoc w/ 1% spec hem-grey calcite-qtz-carb stringers
360	361	1	246837	HCORE			A16-12956	<0.005	no visible mineralization
361	362	1	246838	HCORE			A16-12956	<0.005	trace py veinlets overgrowing spec hem-grey calcite-qtz-carb stringers (stringers have random orientation); one 2cm wide v2c veinlet w/ locally 1% very fg py, very wk vuggy texture to veinlet; veinlet is opposite beta angle to fol and v2e veinlets (later generation)
362	363	1	246839	HCORE			A16-12956	<0.005	trace sct py
363	364	1	246840	HCORE			A16-12956	<0.005	trace cubic py assoc w/ fracture-filling grey calcite alteration & grey calcite-carb-qtz stringers (<1%)

		0	246841	STD	CDN_GS_P7J	A16-12956	0.643	
364	365	1	246842	HCORE		A16-12956	0.005	1-2% very fg py sct throughout, assoc w/ patches of increased act + chl alteration
365	366	1	246843	HCORE		A16-13024	0.009	5cm vuggy calcite veinlet w/ 2% very fg py dissems and grey calcite > dark chl > ser halo alteration moving outwards from veinlet; additional trace sct py throughout samples and additional 1% cubic py throughout hosted by grey cal-qtz-carb stringers, irregular pattern (4%)
366	367	1	246844	HCORE		A16-13024	0.006	mod fol & brecciation in this sample, up to 3% calcite stockwork; 1% sct py dissems throughout
367	368	1	246845	HCORE		A16-13024	0.005	very trace py assoc w/ <1% vuggy cal-qtz-carb stringers
368	369	1	246846	HCORE		A16-13024	0.006	very trace py assoc w/ <1% grey cal-qtz-carb stringers
369	370	1	246847	HCORE		A16-13024	0.005	1% cubic py dissems assoc w/ 2% grey cal-carb-qtz stringers
370	371	1	246848	HCORE		A16-13024	0.005	2% spotty vuggy cal alteration hosting fg py dissems (locally up to 1%); trace sct py dissems throughout assoc w/ chl alteration; up to 1% mg cubic py hosted by 3-4% grey cal-carb-qtz stringers
371	372	1	246849	HCORE		A16-13024	0.018	no visible mineralization
		0	246850	Blank	Blank	A16-13024	0.005	
372	373	1	246851	HCORE		A16-13024	0.006	up to 1% very fg py hosted by vuggy cal-qtz-crb-spec hem stringers (up to 15% stringers)
373	374	1	246852	HCORE		A16-13024	0.006	high fracture zone from 373-373.4m w/ vuggy cal alteration; 1-2% fg py in fracture/cal altered zone
374	375	1	246853	HCORE		A16-13024	0.008	high fracture zone from 374.37-374.8m w/ vuggy cal alteration; 1% spec hem crystallized in vugs; 1-2% fg py in fracture/cal altered zone
375	376	1	246854	HCORE		A16-13024	0.007	trace py hosted by 2% grey cal-qtz-crb stringers
376	377	1	246855	HCORE		A16-13024	0.006	15% irregular extensional veining to stockwork throughout sample (main veinlet subparallel TCA w/ splays at various angles TCA); cross-cutting wk fol of 40 deg TCA (act-chl banding); pink-purple color of stockwork from spec hem and fe carb; 1% very fg py in veinlet system with 1% cubic py in wallrock (chl+act) at veinlet contacts
377	378	1	246856	HCORE		A16-13024	<0.005	~8cm patch of vuggy calcite alteration (377.67-377.72m) w/ locally 1% cubic py dissems
378	379	1	246857	HCORE		A16-13024	<0.005	no visible mineralization

379	380	1	246858	HCORE			A16-13024	<0.005	very trace py assoc w/ 3% grey calcite-spec hem-qtz-carb stringers
		0	246859	STD		CDN_GS_P4B	A16-13024	0.386	
402	403	1	246860	HCORE			A16-12927	<0.005	mod chl altered basalt w/ 15% calcite stockwork; verk wk fol; very trace sct py
403	404	1	246861	HCORE			A16-12927	0.005	mod chl altered basalt w/ 25% calcite stockwork; verk wk fol; very trace sct py in basalt; one boudinaged qtz-carb-cal veinlet w/ py dissems (up to 1% locally) concentrated at wallrock/veinlet contacts; fault zone w/ clay gauge from 403.66-404m
404	405	1	246862	HCORE			A16-12927	0.026	mod chl altered basalt w/ 15% calcite stockwork; verk wk fol; very trace sct py
405	406	1	246863	HCORE			A16-12927	0.023	weakly fractured, gauge on fractures; w/ 20% calcite stockwork; verk wk fol; very trace sct py
406	407	1	246864	HCORE			A16-12927	0.061	very weakly fractured; w/ 20% calcite stockwork; verk wk fol; very trace sct py in hostrock and in stockwork
407	408	1	246865	HCORE			A16-12927	<0.005	weak fol; up to 20% calcite stockwork; trace py assoc w/ qtz-carb-cal veinlet parallel to fol
408	408.9	0.9	246866	HCORE			A16-12927	<0.005	mod fol w/ banding of grey calcite (1%) + ser (~3%) + ankerite (~2%) + chl (~40%) + act (~15%); up to 1% fg py concentrated in fol planes, where ser + ank alteration occur
408.9	409.4	0.5	246867	HCORE			A16-12927	2.82	Mineralized & Silicified Zone; large vein? or silicia alteration; sample is ~75% grey-wht quartz, strongly deformed w/ brecciated texture; ser (~10%) + fe-carb (~10%) alteration occur as ribboning and fracture-fill throughout, sometimes creating augens around qtz inclusions; (~1%) spec hem ribboning; late stage calcite veins cross-cut alteration and fill micro-scale fractures in qtz augens; up to 4% very fg py throughout as veinlets and dissems; 3% of this py is hosted by ser + ankerite alteration w/ ~1% dissems in qtz;
		0	246868	DUP	246867		A16-12927	2.95	

409.4	410.35	0.95	246869	HCORE		A16-12927	0.471	Deformed mafic basalt w/ mineralized V2S veinlets; mod foliation w/ dark purple to pink color; sample is ~40% dark purple stongly hem altered basalt w/ very wk pervasive sil and ser banding, w/ up to 1% very fg sct py dissems; ~60% of the sample is mineralized quartz-carb veinlets parallel to fol, veins are pink and brecciated, w/ up to 10% ser banding, 1% py in veinlets hosted by fe-carb alteration, additional 1% mg py concentrated at wallrock/veinlet contacts
410.35	411	0.65	246870	HCORE		A16-12927	0.985	Deformed mafic basalt w/ mineralized V2S veinlets; mod foliation w/ dark purple to pink color; sample is ~50% dark purple to dark grey mod-strongly hem altered basalt w/ very wk pervasive sil and ser banding, w/ up to 1% very fg sct py dissems; ~50% of the sample is mineralized quartz-carb veinlets parallel to fol (largest veinlets are 6cm and 4cm wide), veins are pink and brecciated (chaoitic internal structure), w/ up to 10% ser banding, 3% fg py in veinlets assoc w/ fe-carb + ser alteration
411	412	1	246871	HCORE		A16-12927	0.159	Deformed mafic basalt w/ mineralized V2S veinlets; mod foliation w/ dark purple to pink color; sample is ~70% dark purple to dark grey basalt w/ hem + chl + ser banding, and up to 1% very fg sct py dissems; ~30% of the sample is mineralized quartz-carb stringers to veinlets parallel to fol, veinlets are pink and brecciated (chaoitic internal structure), w/ up to 10% ser banding, 3% fg py in veinlets assoc w/ fe-carb + ser alteration; pytogmatic folding of stringers with quartz augens at vein/wallrock contacts
412	413	1	246872	HCORE		A16-12927	0.246	Deformed mafic basalt w/ mineralized V2S veinlets; mod foliation w/ dark purple to pink color; sample is ~70% dark purple to dark grey basalt w/ hem + chl + ser banding, and up to 1% very fg sct py dissems; ~30% of the sample is mineralized quartz-carb stringers to veinlets parallel to fol, veinlets are pink and brecciated (chaoitic internal structure), quartz augens at vein/wallrock contacts, w/ up to 10% ser banding, 3% fg py in veinlets assoc w/ fe-carb + ser alteration
413	414	1	246873	HCORE		A16-12927	0.474	wk fol w/ 15% pink fe-carb+calcite stockwork; 4% v2s veinlets parallel to fol; veinlets have ser + grey calcite alteration halos; 1-2% py dissems assoc w/ veinlets

414	415	1	246874	HCORE		A16-12927	<0.005	very wk fol w/ 15% pink fe-carb+grey calcite stockwork; trace py assoc w/ stockwork
415	416	1	246875	HCORE		A16-12927	<0.005	very wk fol w/ 15% pink fe-carb+grey calcite stockwork; trace py assoc w/ stockwork
416	416.45	0.45	246876	HCORE		A16-12927	0.264	wk fol w/ 15% pink fe-carb+grey calcite stockwork; trace py assoc w/ stockwork; ~3% v2s veinlets parallel to fol w/ up to 1% py dissems; sharp contact w/ underlying silicified breccia zone
		0	246877	STD	CDN_GS_2P	A16-12927	1.93	
416.45	417.25	0.8	246878	HCORE		A16-12927	0.086	Silicifed Mineralized Breccia Zone; sharp upper and lower contacts (30 deg TCA); ~70% dark purple color (hem + sil alteration), strongly brecciated with ~15% fracture-filling calcite; chaotic structure; seams of deformed and sheared ser + fe-carb alteration (5-10%); 3% very fg py throughout assoc w/ fe-carb + ser bands and fracture-filling calcite; spec of cpy(?)
		0	246879	Blank	Blank	A16-12927	<0.005	
417.25	418	0.75	246880	HCORE		A16-12927	0.01	mod - strong foliation w/ dark grey color, soft, chl + ser alteration (wk); up to 10% beige colored qtz-carb veinlets parallel to fol, or folded; trace py throughout concentrated in fol planes; 8cm patch of silicifed breccia zone as described in sample 246878 (locally 2% fg py)
418	419	1	246881	HCORE		A16-12927	0.005	mod - strong foliation w/ dark grey color, soft, chl + ser alteration (wk-mod); trace illmenite? very fg, difficult to distinguish; up to 10% beige colored qtz-carb veinlets parallel to fol, or folded; 1-2% very fg py throughout concentrated in fol planes
419	420	1	246882	HCORE		A16-12927	<0.005	mod - strong foliation w/ green/grey color, soft, chl + ser alteration (wk-mod); trace illmenite? very fg, difficult to distinguish; ~7% beige colored qtz-carb veinlets parallel to fol, or folded; trace very fg py throughout concentrated in fol planes
420	420.8	0.8	246883	HCORE		A16-12927	<0.005	mod - strong foliation w/ green/grey color, soft, chl + ser alteration (wk-mod); trace illmenite? very fg, difficult to distinguish; ~7% beige colored qtz-carb veinlets parallel to fol, or folded; trace very fg py throughout concentrated in fol planes and 1% py concentrated at contacts between folded deformed veinlets and hostrock; one 2cm wide v2s veinlet, 2 3% spec hem and sericite alteration halo, locally 2% very fg py in veinlet and sericite halo

420.8	421.8	1	246884	HCORE		A16-12927	<0.005	strongly deformed conglomerate; sinistral fault subparallel TCA; ~50% purple bands of hem alteration with ~30% beige-green ser banding; 5-7% deformed and irregular beige qtz-carb stringers and veinlets; 3% very fg py dissems concentrated at contacts between deformed veinlets and sheared wallrock
421.8	422.8	1	246885	HCORE		A16-12927	<0.005	strongly deformed conglomerate; ~40% purple bands of hem alteration with ~50% beige-green ser banding; strong foliation and folding; 3-4% deformed and irregular beige qtz-carb stringers and veinlets; 2-3% very fg py dissems assoc w/ ser alteration
		0	246886	Blank	Blank	A16-12927	<0.005	
422.8	423.8	1	246887	HCORE		A16-12927	<0.005	strongly deformed conglomerate; strong foliation w/ ~60% ser + ~20% chl alteration; up to 10% seams of spec hem + grey calcite filling space between foliation planes; up to 2% mg py dissems assoc w/ fracture-fill spec hem + grey calcite
423.8	424.8	1	246888	HCORE		A16-12927	<0.005	strongly deformed conglomerate; strong foliation w/ ~60% ser + ~20% chl alteration; up to 10% seams of spec hem + grey calcite filling space between foliation planes; up to 2% mg py dissems assoc w/ fracture-fill spec hem + grey calcite
380	381	1	246889	HCORE		A16-13024	<0.005	mod chl + act alteration, very trace fg py sct
381	382	1	246890	HCORE		A16-13024	<0.005	no visible mineralization
382	383	1	246891	HCORE		A16-13024	0.012	qtz-carb-cal-epd shear vein (382.75-382.93m) w/ 1% very fg py throughout
383	384	1	246892	HCORE		A16-13024	<0.005	no visible mineralization
384	385	1	246893	HCORE		A16-13024	<0.005	no visible mineralization
385	386	1	246894	HCORE		A16-13024	<0.005	trace fg py assoc w/ 5% v2c stockwork
		0	246895	STD	CDN_GS_P4B	A16-13024	0.437	
386	387	1	246896	HCORE		A16-13024	<0.005	trace fg py assoc w/ 5% v2c stockwork
387	388	1	246897	HCORE		A16-13024	<0.005	no visible mineralization
388	389	1	246898	HCORE		A16-13024	<0.005	trace fg py assoc w/ ~25% v2c stockwork
389	390	1	246899	HCORE		A16-13024	<0.005	trace cubic py sct throughout hostrock (chl altered); up to 1% py assoc w/ 10% v2c stockwork
390	391	1	246900	HCORE		A16-13024	0.022	vuggy v2s vein parallel TCA from 390-390.65; vuggy vein hosts 2-3% cubic py within vugs; 2-3% fracture-fill spec hem ; additional 1% fg py assoc w/ patchy vuggy calcite alteration from 390.65-391
391	392	1	246901	HCORE		A16-13024	<0.005	up to 1% fg py sct thoughout; wk fol w/ chl alteration

392	393	1	246902	HCORE			A16-13024	<0.005	trace to 1% fg py assoc w/ 5% v2c + spec hem stringers
393	394	1	246903	HCORE			A16-13024	<0.005	trace to 1% fg py assoc w/ 25% v2c stockwork
		0	246904	DUP	246903		A16-13024	<0.005	
394	395	1	246905	HCORE			A16-13024	<0.005	trace to 1% fg py assoc w/ 25% v2c stockwork
395	396	1	246906	HCORE			A16-13024	<0.005	trace to 1% very fg py assoc w/ patch of pervasive cal alteration (395.4-396)
396	397	1	246907	HCORE			A16-13024	0.045	trace fg py assoc w patch of cal alteration (396-396.2); 1% cubic py scattered throughout chl altered mafic volcanics; trace fg py hosted by one vuggy v2c veinlet w/ ser halo
397	398	1	246908	HCORE			A16-13024	<0.005	trace to 1% fg py scattered throughout chl altered mafic volcanics; 1-2% fg py hosted by 2% v2c veinlets w/ ser halos
398	399	1	246909	HCORE			A16-13024	<0.005	very trace fg py dissems assoc w/ ~15% pink v2c stockwork
399	400	1	246910	HCORE			A16-13024	<0.005	1-2% fg py hosted by 2% v2c veinlets w/ ser halos
400	401	1	246911	HCORE			A16-13024	<0.005	very trace fg py dissems assoc w/ ~7% v2c stockwork ; wk fol + chl in mafic volcanics
401	402	1	246912	HCORE			A16-13024	<0.005	very trace fg py dissems assoc w/ ~7% v2c stockwork
		0	246913	STD		CDN_GS_P7J	A16-13024	0.646	
424.8	425.4	0.6	246914	HCORE			A16-13028	0.008	no visible mineralization
425.4	426	0.6	246915	HCORE			A16-13028	<0.005	no visible mineralization
426	427	1	246916	HCORE			A16-13028	0.02	no visible mineralization; strong deformation, conjugate fault set (extension)
427	428	1	246917	HCORE			A16-13028	0.023	no visible mineralization; strong deformation
428	429	1	246918	HCORE			A16-13028	0.011	no visible mineralization; strong deformation
429	430	1	246919	HCORE			A16-13028	0.052	no visible mineralization; strong deformation
430	431	1	246920	HCORE			A16-13028	0.011	no visible mineralization; strong deformation
431	432	1	246921	HCORE			A16-13028	0.083	no visible mineralization; strong deformation
		0	246922	Blank		Blank	A16-13028	<0.005	
432	433	1	246923	HCORE			A16-13028	0.013	strong deformation; trace very fg py concentrated at contacts between distorted drag folds and sheared wallrock w/ strong ser alteration + ankerite bands

433	434	1	246924	HCORE		A16-13028	0.018	strong deformation; trace very fg py concentrated at contacts between boudinaged beige qtz-carb veinlets and sheared wallrock w/ strong ser alteration + ankerite bands
434	435	1	246925	HCORE		A16-13028	0.015	strong deformation; trace very fg py concentrated at contacts between boudinaged/distorted beige qtz-carb veinlets and sheared wallrock w/ strong ser alteration + ankerite bands
435	436	1	246926	HCORE		A16-13028	0.008	strong deformation; smokey grey qtz augen (max width = 2cm) w/ locally 3% semi massive py mineralization
436	437	1	246927	HCORE		A16-13028	0.006	no visible mineralization; strong deformation
437	438	1	246928	HCORE		A16-13028	0.009	no visible mineralization; strong deformation
438	439	1	246929	HCORE		A16-13028	0.006	strong deformation; trace very fg py concentrated at contacts between boudinaged/distorted beige qtz-carb veinlets and sheared wallrock w/ mustard colored ser + ankerite bands
439	440	1	246930	HCORE		A16-13028	<0.005	strong deformation; trace very fg py concentrated at contacts between distorted (kink banding? or drag folds?) beige qtz-carb veinlets and sheared wallrock w/ mustard colored ser + ankerite bands
		0	246931	STD	CDN_GS_P4B	A16-13028	0.411	
440	441	1	246932	HCORE		A16-13028	0.006	strong deformation; trace very fg py concentrated at contacts between <1% sheared smokey grey qtz veinlets and sheared wallrock w/ mustard colored ser bands
441	442	1	246933	HCORE		A16-13028	0.014	strong deformation; 1% fg py concentrated in fold hinges of folded beige qtz-carb stringers (up to 3%); parallel folding in ser + chl banding at contacts with stringers
442	443	1	246934	HCORE		A16-13028	0.007	strong deformation; trace very fg py concentrated at contacts between boudinaged/distorted beige qtz-carb veinlets (3-4%) and sheared wallrock w/ mustard colored ser + chl bands
443	444	1	246935	HCORE		A16-13028	0.006	no visible mineralization; strong deformation
444	445	1	246936	HCORE		A16-13028	0.005	no visible mineralization; strong deformation
445	446	1	246937	HCORE		A16-13028	0.005	trace py veinlets parallel to foliation; concentrated at contact between mustard yellow ser bands and grey qtz-beige carb stringers (<1%, stringers are irregular and sheared)

446	447	1	246938	HCORE			A16-13028	0.011	strong deformation; trace very fg py concentrated at contacts between <1% sheared smokey grey qtz veinlets and sheared wallrock w/ mustard colored ser bands
447	448	1	246939	HCORE			A16-13028	0.04	no visible mineralization; strong deformation
		0	246940	DUP	246939		A16-13028	0.051	
448	449	1	246941	HCORE			A16-13028	0.055	no visible mineralization; strong deformation
449	450	1	246942	HCORE			A16-13028	0.01	no visible mineralization; strong deformation
450	451	1	246943	HCORE			A16-13028	0.007	very trace py concentrated at veinlet/wallrock contacts; veinlets are parallel to strong foliation (38 deg TCA); veinlets are smokey grey qtz-beige carb-calcite with internal distortion
451	452	1	246944	HCORE			A16-13028	0.031	very trace py concentrated at veinlet/wallrock contacts; veinlets are parallel to strong foliation (38 deg TCA); veinlets are smokey grey qtz-beige carb-calcite with internal distortion
452	453	1	246945	HCORE			A16-13028	0.026	no visible mineralization; strong deformation
453	454	1	246946	HCORE			A16-13028	0.012	no visible mineralization; strong deformation
454	455	1	246947	HCORE			A16-13028	0.018	no visible mineralization; moderate deformation, easily recognizable clastes
455	456	1	246948	HCORE			A16-13028	0.024	no visible mineralization; moderate deformation, easily recognizable clastes
		0	246949	STD		CDN_GS_P7J	A16-13028	0.63	
456	457	1	246950	HCORE			A16-13029	0.009	no visible mineralization; moderate deformation, easily recognizable clastes
457	458	1	246951	HCORE			A16-13029	0.006	no visible mineralization; moderate deformation, easily recognizable clastes
458	459	1	246952	HCORE			A16-13029	0.06	no visible mineralization; moderate deformation, easily recognizable clastes
459	460	1	246953	HCORE			A16-13029	0.009	no visible mineralization
460	461	1	246954	HCORE			A16-13029	0.005	very trace py concentrated at veinlet/wallrock contacts; veinlets are parallel to strong foliation (30 deg TCA); veinlets are smokey grey qtz-beige carb-calcite (~2-3%) with internal distortion
461	462	1	246955	HCORE			A16-13029	0.019	no visible mineralization; moderate deformation, easily recognizable clastes
462	463	1	246956	HCORE			A16-13029	<0.005	very trace py concentrated at veinlet/wallrock contacts; veinlets are parallel to strong foliation (30 deg TCA); veinlets are smokey grey qtz-beige carb-calcite (~1-2%) with internal distortion

463	464	1	246957	HCORE			A16-13029	0.013	no visible mineralization; moderate deformation,fol @ 30 deg TCA
		0	246958	Blank		Blank	A16-13029	<0.005	
464	465	1	246959	HCORE			A16-13029	0.007	no visible mineralization
465	466	1	246960	HCORE			A16-13029	0.021	no visible mineralization
466	466.7	0.7	246961	HCORE			A16-13029	0.009	very trace py concentrated at veinlet/wallrock contacts; veinlets are parallel to strong foliation (43 deg TCA); veinlets are smokey grey qtz-beige carb-calcite (~1-2%) with internal distortion

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-09 DataSet: Brookbank Program: Exploration

Hole Status:	INREVIEW	**Hole Length (m):**	561	**Logged By:**	S. Molloy
Hole Type:	Surface Drill Hole	**Dip (º):**	-55	**Date Log Started:**	11/29/2016
Date Drill Started:	11/15/2016	**Azimuth:**	305.2	**Date Log Completed:**	1/4/2017
Date Drill Completed:	11/25/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank East		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	440,872.5	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,474.9	**Date Surveyed:**	12/20/2016
Elevation (masl):	354.728	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29029	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	4.5
Core Storage:	Brookbank

Purpose: Test the intersection of the main mineralized iron-carbonate shear zone and a number of oblique structures observed at outcrop and interpreted from the detailed magnetics. Primary target: Intersection of main Fe-Carb shear zone and Sinistral Shear.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 558 **Max Sample Depth (m):** 554

Depth Logged To (m) 561 **Meters Sampled** 420.5

Total Samples 521 **# Assay** 451 **# QAQC:** 70

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-55	305.2	TN14	SINGLESHOT	G4	11/16/2016		Yes
5	-17.89	328.49	EZ-GYRO	SINGLESHOT	G4	11/24/2016		No
8	-17.89	324.68	EZ-GYRO	SINGLESHOT	G4	11/24/2016		No
9	-55.03	305.77	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
11	-55.12	305.07	EZ-GYRO	SINGLESHOT	G4	11/24/2016		Yes
18	-55.05	305.3	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
20	-55.21	305.98	EZ-GYRO	MULTISHOT	G4	11/25/2016	Optimised	No
27	-55.07	305.31	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
36	-55.03	306.63	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
45	-55.07	306.48	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
54	-55.1	306.93	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
63	-55.04	306.26	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
72	-55.07	305.06	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
80	-55.14	305.26	EZ-GYRO	MULTISHOT	G4	11/25/2016	Optimised	Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
81	-55.11	305.95	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
90	-55.2	307.11	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
99	-55.23	310.07	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
108	-55.24	306.73	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
117	-55.24	308.11	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
126	-55.24	307.9	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
135	-55.28	307.66	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
144	-55.36	309.11	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
153	-55.56	308.48	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
162	-55.53	306.52	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
171	-55.57	307.23	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
180	-55.6	307.64	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
185	-55.66	309.38	EZ-GYRO	MULTISHOT	G4	11/25/2016	Optimised	Yes
189	-55.64	311.24	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
198	-55.68	310.47	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
207	-55.67	311.24	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
216	-55.71	311.42	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
225	-55.74	310.7	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
234	-55.82	310.89	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
243	-55.89	310.53	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
252	-55.93	310.52	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
261	-55.95	311.68	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
270	-56	312.43	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
279	-56.13	312.28	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
288	-56.17	313.1	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
297	-56.19	312.38	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
306	-56.17	312.35	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
315	-56.21	313.37	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
324	-56.2	312.67	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
333	-56.25	313.51	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
342	-56.3	314.11	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
351	-56.32	314.99	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
360	-56.32	313.54	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
369	-56.39	314.29	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
378	-56.46	314.57	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
387	-56.49	315.4	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
396	-56.5	314.73	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
405	-56.53	313.93	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
414	-56.6	315.22	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
423	-56.63	313.73	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
432	-56.62	313.5	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
441	-56.6	314.17	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
450	-56.63	315.81	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
459	-56.62	314.77	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
468	-56.6	314.8	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
477	-56.62	314.34	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
486	-56.62	314.31	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
495	-56.59	316.66	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
504	-56.61	316.08	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
513	-56.66	316.51	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
522	-56.58	317	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
531	-56.6	317.45	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
533	-56.52	315.53	EZ-GYRO	SINGLESHOT	G4	11/24/2016	Optimised	Yes
540	-56.55	316.57	EZ-GYRO	MULTISHOT	G4	11/25/2016		No
549	-56.3	315.01	EZ-GYRO	MULTISHOT	G4	11/25/2016		Yes
558	-56.22	315.57	EZ-GYRO	MULTISHOT	G4	11/25/2016	Optimised	Yes

Geology Summary

meters							
From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	4.5	4.5		OB	Overburden		
4.5	13.29	8.79		E1A	Basalt	Pillowed	Fine grained
13.29	37.37	24.08		E1A	Basalt	Massive	Fine grained
37.37	72.05	34.68		E1A	Basalt	Pillowed	Fine grained
72.05	89.8	17.75		E1A	Basalt	Pillowed	Fine grained
89.8	95.9	6.1		E1A	Basalt	Pillowed	Fine grained
95.9	124.25	28.35		E1A	Basalt	Pillowed	Fine grained
124.25	149	24.75		E1A	Basalt	Massive	Fine grained
149	158.68	9.68		E1A	Basalt	Pillowed	Fine grained
158.68	162	3.32		E1A	Basalt	Massive	Fine grained
162	170	8		E1A	Basalt	Pillowed	Fine grained
170	181.57	11.57		E1A	Basalt	Massive	Fine grained
181.57	207.86	26.29		E1A	Basalt	Pillowed	Fine grained
207.86	214.15	6.29		E1A	Basalt	Brecciated	Fine grained
214.15	216.9	2.75		E0B	Basaltic Komatiite	Porphyritic (with phenocrysts)	Fine grained
216.9	218.15	1.25		E1	Mafic Volcanic	Brecciated	Fine grained
218.15	220	1.85		E1A	Basalt	Schistose	Fine grained
220	223.48	3.48		I1A	Gabbro	Phenocrystic	Medium grained
223.48	261.4	37.92		E1A	Basalt	Pillowed	Fine grained
261.4	274.3	12.9		E1A	Basalt	Massive	Fine grained
274.3	293.25	18.95		E1A	Basalt	Pillowed	Medium grained
293.25	294.41	1.16		E1A	Basalt	Schistose	Fine grained
294.41	296.72	2.31		E1	Mafic Volcanic	Massive	Fine grained
296.72	304.68	7.96	90	E1A	Basalt	Schistose	Fine grained
304.68	318.74	14.06		E1A	Basalt	Massive	Medium grained
318.74	324.35	5.61		E1A	Basalt	Schistose	Fine grained

Geology Summary

meters							
From	**To**	**Width**	**%**	**Lith Code**	**Rocktype**	**Texture**	**GrainSize**
324.35	364.51	40.16		E1A	Basalt	Massive	Medium grained
364.51	367	2.49		E1A	Basalt	Schistose	Fine grained
367	396	29		E1A	Basalt	Massive	Medium grained
396	405.3	9.3		E1	Mafic Volcanic	Massive	Fine grained
405.3	415.38	10.08		E1A	Basalt	Massive	Fine grained
415.38	458	42.62		E1A	Basalt	Massive	Fine grained
458	470	12		E1A	Basalt	Pillowed	Fine grained
470	475.87	5.87		E1	Mafic Volcanic	Schistose	Fine grained
475.87	481	5.13		E1	Mafic Volcanic	Schistose	Fine grained
481	486.17	5.17		S4B	Polymictic Conglomerate	Schistose	Fine grained
486.17	512.66	26.49		S4B	Polymictic Conglomerate	Schistose	Medium grained
512.66	527	14.34		S4B	Polymictic Conglomerate	Schistose	Coarse grained
527	548	21		S4B	Polymictic Conglomerate	Schistose	Coarse grained
548	561	13		S4B	Polymictic Conglomerate	Schistose	Medium grained

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**4.5**	4.5		**OB**	**Overburden**			S. Molloy

overburden. Very blocky, mafic volcanic.

4.5	**13.29**	8.79		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Basalt; possible pillow selvages @ 5.5m and 9m with epd & qtz-crb filled amygdules (amygdules disappear after 13.29m). Medium grey-green in colour with bright green epd veinlets (poss fracture fills); mod patchy magnetic; non silicified; non foliated; 3-5% qtz-crb veining +/- kspar & Fe-crb. High fracture zone from 5-9.6m. trc PY mostly assoc w/ veining; hem on fracture surfaces. some qtz-crb veins are vuggy.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
4.5	13.29	1:	Hematite	Weak (1-25%)	Localized	Hem is mostly on fracture surfaces. Epd is present as selvages and as stringers.
		2:	Magnetite	Weak (1-25%)	Patches	
		3:	Epidote	Weak (1-25%)	Patches	
		4:	K-feldspar	Weak (1-25%)	Patches	
		5:	Ankerite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
5	9.6	HFZ	High fracture zone	High fracture zone within pillowed basalt; hematite on planes of fractures. Very block core with sections of more competent core roughly at 5.5-6.3m and 8.6-9.1m.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
4.5	9	1:	Quartz-Fe-carbonate	Extension Vein			2.3	veinlet (vein1) @ 7.8m is vuggy
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			3	
9	12	1:	Quartz-Fe-carbonate	Extension Vein			7.8	some of the qtz-crb veins are vuggy.
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			1.5	

13.29	**37.37**	24.08		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Massive basalt; no visible contact, but lack of pillow selvages. FG with sections that appear coarser grained (13.29-16m; texture change); medium grey-green in colour; non foliated (except at 20.8m: 5cm of fol epd stringers); moderate amount of epd stringers; 2-4% qtz-crb veining +/- kspar & ank; weak local mag (refer to mag sus); local hem stringers; 3-4cm qtz-crb vein + kspar/epd/ank w/ PY stringer through it. trace PY throughout. Hem on fracture surfaces

Veins

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
15	18	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Extension Vein			3.8	no vuggy veins.
		2	Quartz-Fe-carbonate	Extension Vein			1.9	
18	21	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	V2C veinlet (EV) is offset by 3cm by fracture @ 19.7m. Vein1 has some very weakly vuggy veins
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			1.7	
21	24	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.8	vein3 thickness: 1.9cm. Vein3_CA should not have a value. Some of the Vein1 extension veins are weakly vuggy
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Stringer Zone - vein <1/4"			2.5	
24	27	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.2	some of the extension veins have hematite along its boundaries @ 26m
		2	Quartz-Fe-Carbonate / K-	Stringer Zone - vein <1/4"			2	
27	30	1	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			2.8	vein3 thickness: 1.2cm. no vuggy veins present.
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.7	
30	33	1	Quartz-Fe-Carbonate/K-Feldspar	Vein > 3"			5	vein3 thickness: 3.4cm - some of these veins are qtz-crb-epd
		2	Quartz-Fe-Carbonate / K-Feldspar-epidote	Veinlet Zone - vein 1/4" to 3"			4.4	
33	36	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	vein3 thickness: 0.6cm. Vein1 Extension vein @ 34.4m has wall rock fragments in it
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
37.37	**72.05**	34.68	**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; pillow selvages present. Fine grained; medium green-grey in colour with darker green in places. non foliated; qtz-crb stockwork stringers present throughout, along with qtz-crb-epd/fe-crb veinlets and extension veinlets. Thin calcite fracture fills throughout (appears to be high fracture zone but not broken up, until roughly 49m). Scattered PY throughout unit. Increase in chlorite stringers and blebs compared to previous units (chl mostly concentrated around selvages). Amygdules present near selvages, filled with chl or qtz or qtz-fe-crb. Offset of selvages present at 54.8m. Qtz-crb present within some selvages. Weak patchy mag. Hem on some fracture planes. Grey calcite assoc w/ pillow selvages. White calcite assoc w/ fracture fills. Flow breccia in low angle pillow selvage from 55.55-57.37m.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
39	55	1	Hematite	Weak (1-25%)	Fracture Filled	Hem present on fracture surfaces and on calcite fracture fill boundaries or as stringers; weak mag concentrated near pillow selvages; chl concentrated in selvages and amygdules. Grey calcite assoc w/ selvages. white calcite as fracture fills.
		2	Magnetite	Weak (1-25%)	Patches	
		3	Epidote	Weak (1-25%)	Patches	
		4	Ankerite	Weak (1-25%)	Patches	

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
55	58	1:	Calcite	Moderate (26-50%)	Patches	Mag found in pillow selvages; grey calcite assoc w/ selvages; white calcite assoc w/ fracture fills; Fe-crb assoc w/ qtz-crb/calcite. Increase in epidote and calcite. This is the flow breccia section.
		2:	Epidote	-	Patches	
		3:	Ankerite	Weak (1-25%)	Patches	
		4:	Magnetite	Weak (1-25%)	Localized	
58	66.5	1:	Calcite	Weak (1-25%)	Fracture Filled	Hem is on fracture planes. Grey calcite is assoc w/ selvages and white calcite assoc w/ fracture fills. Fe-crb found in qtz-crb veining and as halos.
		2:	Epidote	Weak (1-25%)	Patches	
		3:	Ankerite	Weak (1-25%)	Patches	
		4:	Magnetite	Weak (1-25%)	Localized	
		5:	Hematite	Weak (1-25%)	Fracture Filled	
66.5	68.7	1:	Hematite	Weak (1-25%)	Fracture Filled	Hem found on fracture planes, and as fracture fills (stringers). Increased amount of hematite compared to previous unit. Mag concentrated in selvages. Fe-crb occurs in qtz-crb veining (and qtz-crb in selvages)
		2:	Epidote	Weak (1-25%)	Patches	
		3:	Ankerite	Weak (1-25%)	Patches	
		4:	Magnetite	Weak (1-25%)	Localized	
68.7	72.05	1:	Magnetite	Weak (1-25%)	Localized	Hem seen on fracture planes; Mag concentrated in selvages. Fe-crb assoc w/ qtz-crb/calcite
		2:	Epidote	Weak (1-25%)	Patches	
		3:	Hematite	Weak (1-25%)	Fracture Filled	
		4:	Ankerite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
49.67	49.75	FLT5	Fault - gouge	Possible fault gouge (cohesive) - soft, pervasive calcite. qtz-calcite/fe-crb veins on either side. 1-3% PY dissem throughout.
55.55	57.37	FLT2	Fault - breccia	Not a fault breccia (no breccia code) but a flow breccia within a low angle pillow selvage.
66.45	71.45	HFZ	High fracture zone	Cohesive high fracture zone (calcite-epd infill) with blocky core @ 67.2m and 68.55m. Core is somewhat blocky in between these two intervals and around 70.6-71.45m.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
39	42	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	v3 thickness: 2cm; Vein1 are different vein sets
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.6	
42	45	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.4	v3 thickness: 2.5cm (may not be true veins but just qtz-crb concentrations in selvages because vein3 is grey calcite
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			4	
45	48	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.8	v3 thickness: 2.5cm (not true veins - in selvages; grey calcite).
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3.6	

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Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
48	51	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.4	v3 thickness: 3.1cm; extension veins are in different directions; vuggy veinlet @ 50.8m
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3.1	
51	54	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.6	v3 thickness: 5cm.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.4	
54	57	1:	Quartz-Fe-Carbonate/Epidote	Stockwork Veins			2.9	v3 thickness: 4.2cm; vuggy extension vein at 55.3m.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.2	
57	60	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.2	3cm of grey calcite, in pillow selvage, not a true vein?; Vuggy extension vein @60m.
		2:	Quartz-Fe-Carbonate/Epidote	Stockwork Veins			5	
60	63	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		45	3.8	v3 thickness: 3.2cm. continuation of vuggy vein at 60m. Grey calcite veinlet at 62.03m; v1 extension veins are spaced apart at varying lengths. v2 is several different directions
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.8	
63	66	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	1.9	v3 thickness: 2.7cm. v1 vein set spaced 20-50cm apart @ 60.3-64.1m. V2 set is spaced 4-50cm apart from 65-66m.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	1.2	
66	69	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	1.4	v3: 1cm.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		73	2.9	
69	72	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		73	2.5	v3 thickness: 3cm. Vuggy veinlets (v2) @ 71.3m.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
72.05	**89.8**	17.75		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt w/ (poss) pillow brecciated zones @76.44-78m and 81.53-82.53m (Fe-crb altered qtz-calc vein w/ silicified ser on the margins (76.44-78m), chl and hem fracture fills; pervas calcite, Fe-crb +/-ser altered host rock fragments). A brecciated zone at 83.73-84.85m: Breccia with qtz-crb fragments w/ host rock and grey calcite matrix; altered host rock fragments (Fe-crb) and hem stringers, could be weakly silicifed. Decreased amount of epd compared to previous pillowed unit. Increase in qtz-calc stockwork veins. Weak local mag; non foliated; FG; amygdules assoc w/ pillows contain qtz-calc +/- chl or just chl. trc-1% PY throughout. Majority of PY assoc with brecciated zones. Low angle hem and calcite veins @86.77m, possible conjugate set (intesection present in core) with sil Fe-crb +/- ser halos (mineralized w/ 1-3% fg-cg PY in halos and vein margins). Medium grey in colour

Alteration

From	To	#	Alteration	Intesity	Style	Comments
72.05	76.44	1:	Calcite	Weak (1-25%)	Fracture Filled	Local mag concentrated in selvages; qtz-calc stockwork vein zone; Fe-crb assoc w/ veining
		2:	Epidote	Weak (1-25%)	Patches	
		3:	Ankerite	Weak (1-25%)	Patches	
		4:	Magnetite	Weak (1-25%)	Localized	

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
76.44	82.53	1:	Hematite	Weak (1-25%)	Fracture Filled	local weak mag present. Hem present as fracture fills & on fracture planes. chl occurs as stringers. Fe-crb assoc w/ veining. Weak silicified ser present assoc w/ veining.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Chlorite	Weak (1-25%)	Fracture Filled	
		4:	Sericite	Weak (1-25%)	Halo-Vein Related	
		5:	Silicified	Weak (1-25%)	Pervasive	
82.53	84.85	1:	Calcite	Moderate (26-50%)	Pervasive	possible silicified ser fragments in breccia zone. chl and hem occur as stringers. Fe-crb assoc w/ veining and qtz-crb fragments in breccia zone
		2:	Ankerite	Weak (1-25%)	Patches	
		3:	Hematite	Weak (1-25%)	Fracture Filled	
		4:	Chlorite	Weak (1-25%)	Fracture Filled	
		5:	Sericite	Weak (1-25%)	Patches	
84.85	89.8	1:	Hematite	Weak (1-25%)	Fracture Filled	weak sil along hem-calc vein boundary (silicifed fe-crb). Hem-calc conjugate vein set at 86.77m. Fe-crb assoc w/ veining
		2:	Magnetite	Weak (1-25%)	Localized	
		3:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		4:	Calcite	Weak (1-25%)	Fracture Filled	
		5:	Silicified	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
76.44	78	FLT2	Fault - breccia	Pillow flow breccia w/ large low angle qtz-fe-crb vein and 1% PY
81.53	82.5	FLT2	Fault - breccia	Pillow top breccia w/ hem-calcite matrix
83.73	84.85	FLT2	Fault - breccia	Breccia with qtz-fe-crb and mafic fragments in a grey calcite matrix. 2-3% PY

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
75	78	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.5	v3 thickness: 2cm; v1 includes large low ange mineralized vein w/in poss pillow top breccia zone
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.2	
78	81	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	v3 thickness: 4cm. V1 are qtz-fe-crb-cal + hem veining.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
81	84	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	v1 includes qtz-fe-crb vein within pillow breccia
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3.2	
84	87	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7.4	v3 thickness: 2.5cm; v2 are hem-grey calcite veins.
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
89.8	**95.9**	6.1		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Pillowed basalt; medium green-grey in colour; FG: mod local mag; non foliated; Epd pillow selvages present. Increased amount of epd from previous unit. Vuggy qtz-calcite extension veins scattered throughout. Hem and chl fracture fills. Possible breccia/flow breccia at 93.32-94.18m. fragments of host rock with hem+calcite matrix. Fe-crb assoc w/ qtz-calc veining as halos or included in vein. Another flow breccia within pillow selvages at 94.95-95.35m with fragments of host rock in a hem/calcite matrix. Trc PY. non foliated

Alteration

From	To	#	Alteration	Intesity	Style	Comments
89.8	95.9	1:	Magnetite	Moderate (26-50%)	Patches	Chl and hem frac fills present. Fe-crb assoc w/ veining.
		2:	Epidote	-	Patches	
		3:	Hematite	Weak (1-25%)	Fracture Filled	
		4:	Chlorite	Weak (1-25%)	Fracture Filled	
		5:	Ankerite	Weak (1-25%)	Halo-Vein Related	

Structures

From	To	Code	Structure Type	Comments
93.3	94.18	FLT2	Fault - breccia	Pillow top breccia w/ selvage fragments
94.95	95.35	FLT2	Fault - breccia	Pillow top breccia with selvage fragments

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
90	93	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.7	v1 includes vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
95.9	**124.25**	28.35		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; medium grey-green/pink possible flow breccia at 100.35-100.84 (or just fracture filled); amygdules filled w/ qtz-calcite and magnetic near selvage boundaries; weakly silicified; Fe-crb assoc w/ veining. Mostly extension veins and fracture fills (mostly hem +/- calc) with some stockwork veining present. Some vuggy qtz-calc veins present. Trc PY throughout. Locally magnetic. Hem-calc at selvage boundary at 101.3m. Multiple flow breccias at 110.46-111m, 112.37-114.31m, 122.65-124.25m. 5-7% qtz-crb-calcite veining. Hem halos around pillow selvages (replacing magnetite) and becoming more pervasive around 105m. Fine grained; non foliated.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
95.9	105	1:	Ankerite	Weak (1-25%)	Halo-Vein Related	Fe-crb assoc w/ veining; hem and chl as fracture fills. hem/calc near boundary of possible pillow selvages.
		2:	Chlorite	Weak (1-25%)	Fracture Filled	
		3:	Hematite	Weak (1-25%)	Patches	
		4:	Magnetite	Weak (1-25%)	Patches	
		5:	Calcite	Weak (1-25%)	Patches	

DataSet: Brookbank
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Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
105	124.25	1:	Ankerite	Moderate (26-50%)	Patches	calcite occurs as matrix in flow breccias; hem is present as fracture fills as well as more pervasive (replacing magnetite). Fe-crb present in veining and in halos. weak local mag in pillow selvages.
		2:	Chlorite	Weak (1-25%)	Fracture Filled	
		3:	Hematite	Weak (1-25%)	Patches	
		4:	Specular hematite	Weak (1-25%)	Fracture Filled	

Structures

From	To	Code	Structure Type	Comments
100.35	100.84	FLT2	Fault - breccia	Possible pillow top breccia or hem-calcite fracture fills throughout
109.83	111	FLT2	Fault - breccia	flow breccia in pillowed basalt. up to 1% PY; fe-crb altered host fragments in a chl dominated matrix. bounded by pillow selvages on either side.
112.37	114.31	FLT2	Fault - breccia	flow breccia with grey calcite veins with host rock fragments included in them. silicifed ser altered fragments w/ chl dominant matrix. up to 1-2% PY present
122.65	124.25	FLT2	Fault - breccia	possible flow breccia with fe-crb (pink stained) and light green (sil ser) fragments . qtz-crb-calcite veins at each contact. Up to 1% PY present. 2-5% qtz-fe-crb veining present

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
96	99	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	no vuggy veins; some of v1 have grey calcite in them
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			2.5	
99	102	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7.5	some of v1 veins are vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3	
102	105	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		25	4	v1 includes vuggy vein. v1 also includes different vein set but most prominent set has a CA of 25-27deg
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3	
105	108	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	V2 includes a mineralized vuggy vein at 106.3m. V1 is a qtz-fe-crb pink-white vein w/ chl and ser at the margins, trc PY included in vein but up to 1% PY in chl-ser halo. V3 vein set spaced 20-30cm apart
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			1.3	
108	111	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	v1 includes thick vuggy vein @ 110.46m w/ PY assoc w/ its margins (possible breccia vein with qtz-crb fragments in chl-calc&hem matrix.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4.2	

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Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
111	114	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		22	7	v1 are extension veins that are low angle and have minor displacement of the host rock (up to 1cm). V3 is a breccia vein w/ host rock fragments in a calcite-hem matrix.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	3	
114	117	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		65	3.5	V2 includes the other extension vein sets. V1 is the dominant vein set spaced at 20-40cm.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	
117	120	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		30	3.5	v1 includes mineralized vuggy vein at 117.15. v2 extension veins are spaced sporadically; vein3 set has some vuggy veins and is spaced 25-60cm apart.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		35	2.5	
120	123	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		37	2	v1 is vuggy pink vein with trc PY on margins. v2 are stringers, some of which are vuggy and mineralized
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
124.25	**149**	24.75		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Massive Basalt with local flow breccias. FG to locally MG; medium grey-green/pink in colour. non foliated; locally weakly magnetic; flow breccias at 130.65-130.76m, 131.28-131.5m, 132.96-132.45m, 136-137.85m. 15-20% veining-stringers w/ ser-fe-crb halos (alteration appears to be 'bleeding' out of veining; this gives the rock a brecciated look). chl and spc stringer-bands present throughout. Hem appears more pervasive (replacement of magnetite). Fragments in flow breccias are predominantly qtz-fe-crb w/ minor host rock fragments in a matrix of calcite-hem-chl. Up to 1% PY predominantly assoc w/ qtz-crb veining and alteration halos, but some PY present dissem in host rock. low angle vuggy veins @ 144m and 147.6m both with fe-crb and trc PY. Vein at 147.6m has grey calcite in it.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
124.25	133	1:	Ankerite	Moderate (26-50%)	Halo-Vein Related	Fe-crb occurs in veinlets and as halos. ser is also in halos. Hem is replacing magnetite
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Sericite	Weak (1-25%)	Halo-Vein Related	
		4:	Calcite	Weak (1-25%)	Fracture Filled	
133	149	1:	Ankerite	Weak (1-25%)	Halo-Vein Related	calcite-hem occur as matrix in flow breccias. fe-crb and ser occurs as halos. fe-crb is also in veining. hem occurs with calcite in matrix.
		2:	Hematite	Weak (1-25%)	Patches	
		3:	Sericite	Weak (1-25%)	Halo-Vein Related	
		4:	Calcite	Weak (1-25%)	Fracture Filled	
		5:	Chlorite	Weak (1-25%)	Fracture Filled	

Structures

From	To	Code	Structure Type	Comments

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
130.65	130.76	FLT2		Fault - breccia		flow breccia w/ qtz-fe-crb-ser fragments; trc PY		
136	137.85	FLT2		Fault - breccia		possible vein breccia. 2cm thick low angle qtz-fe-crb vein w/ vein fragments on edges. trc PY. vein is a mix of pink fe-crb and calcite-hem.		
142.8	144.62	CV		Vein contact		low angle vuggy qtz-crb vein w/ trc PY assoc w/ it. slight sinistral displacement on the pillow selvage assoc w/ this vein (1cm)		
147.37	147.62	CV		Vein contact		low angle vuggy qtz-crb vein w/ trc PY		

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
126	129	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		30	3.5	veins have fe-crb halos. no vuggy veins present. v2 includes extension veins at different core angles (they werent the dominant set); v1 is spaced every 20-40cm
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	
129	132	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	v1 include some vuggy veinlets at different angles. v2 include veins with qtz-crb fragments in a chl-calcite matrix or host rock fragments in them w/ a calcite-hem matrix
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			4.5	
132	135	1:	Quartz-Fe-Carbonate/Calcite	Breccia Veins		19	3.5	v1 is a breccia vein w/ qtz-crb fragments in a calcite w/ minor hem matrix adjacent to a qtz-fe-crb vuggy vein (both included in v1 measurement); v2 includes dominant extension vein set spaced every 10-30cm from 133.4-135m. v3 are the rest of the extension veins at different core angles
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		65	2.1	
135	138	1:	Quartz-Fe-Carbonate/Calcite	Breccia Veins		10	4.2	large low angle breccia vein with qtz-crb fragments in a chl-calcite matrix. no vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		65	1.9	
138	141	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	1.5	v1 is a mineralized vuggy vein. v2 is a (trc) mineralized qtz-calcite vein and v3 includes all other extension veins and stockwork veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		42	1.5	
141	144	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	4.5	v2 is a low angle vuggy vein w/ host rock fragments in it. v1 is the dominant vein set and some are vuggy. v3 are remaining veins
		2:	Quartz-Fe-Carbonate/Calcite	Vein with wall rock fragments		10	2	

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
144	147	1:	Quartz-Fe-Carbonate/Calcite	Vein with wall rock fragments		10	1.5	v1 is the same low angle qtz-calcite vein with host rock fragments as the previous section (vuggy)
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
149	**158.68**	9.68		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; light-medium grey in colour; pillow selvages present sporadically through unit. Mod patchy mag; non foliated; 10-15% qtc-crb veining with a dominant vuggy set. calcite-fe-crb filled amygdules near pillow selvages. selvages have higher chl content and very low to no epidote. trc PY throughout unit but mostly assoc w/ veining. stringers of chl+hem/spec+calc give the rock a weak brecciated look (psuedobreccia).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
149	158.68	1:	Ankerite	Weak (1-25%)	Fracture Filled	hem+chl+calcite fracture fills give rock a brecciated appearance. Fe-crb is present predominantly in veining but also as halos with ser. Magnetite is present in patches (mostly in epidote selvages).
		2:	Hematite	Weak (1-25%)	Fracture Filled	
		3:	Magnetite	Moderate (26-50%)	Patches	
		4:	Chlorite	Weak (1-25%)	Banding	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
150	153	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		20	1.8	v1 is a low angle qtz-calcite vein w/ trc mineralization. v2 includes vuggy extension veins and v3 includes other extension veins and stockwork veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	2.5	
153	156	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		50	5.7	v1 is the dominant vein set (vuggy and mineralized); v2 is the remaining extension veins at different angles and v3 are the stockwork veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
158.68	**162**	3.32		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Altered basalt. Possible Fe-crb target. Massive but has some pillows present. Medium grey-beige-green in colour. 20-30% sma-sct PY (ranging from fg-cg) mostly assoc w/ qtz-crb veining. 50% qtz-crb veining ranging from pink to white to slightly smokey at 160.2m. non foliated. specularite-calcite and chl stringers give rock a brecciated appearance. Fe-crb is found in qtz-crb veins and as halos around smaller stringers. vuggy qtz-calcite+crb veins are present throughout unit (with PY assoc). very localized magnetite @ 159.4m. PY is mostly semi-massive from 159-161.2m, then PY becomes less frequent.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
158.68	162	1:	Ankerite	Strong (51-75%)	Halo-Vein Related	Very localized magnetite around 159.2m. Fe-crb is the dominant form of alteration present in qtz-crb veining and as vein halos (+ser). Hem present as fracture fills within qtz-crb veining at 159.5m. chl occurs as fracture fills. Silicified veins and most of host rock except for chl.
		2:	Sericite	Weak (1-25%)	Halo-Vein Related	
		3:	Hematite	Weak (1-25%)	Fracture Filled	
		4:	Chlorite	Weak (1-25%)	Fracture Filled	
		5:	Silicified	Moderate (26-50%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
158.68	162	1:	Pyrite	Medium grained	Semi-massive	25	20-30% SMA-sct PY assoc w/ qtz-crb veining and stringers. PY grainsize ranges from fine grained to coarse grained.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
159	162	1:	Quartz-Fe-Carbonate / Silicified - Sulphide Replaced	Veinlet Zone - vein 1/4" to 3"			10	v1 veins are silicified. v2 includes vuggy veins and silicified veins. v3 veins w/ massive PY range in angles from 30-65degrees. v2 veins are white to pink in colour and range in angle from 60-77 degrees. only stringers and stockwork veins were not included (4cm)
		2:	Quartz-Fe-carbonate	Vein > 3"			111	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
162	**170**	8		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; FG; ranges from medium grey to medium green-grey. Moderately magnetic throughout. non foliated. 10% qtz-crb veining predominantly vuggy qtz-fe-crb. calcite filled amygdules present near selvages. Increased epidote concentration compared to previous pillow unit (149-158.68m). qtz-calcite found in selvages. trc PY, mostly assoc w/ veining. Spec/hem+calc or chl stringers give rock a slight brecciated appearance.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
162	170	1:	Epidote	Moderate (26-50%)	Patches	Magnetite is pervasive throughout the hole but stronger in the selvages. Epd is mainly concentrated in the selvages but occurs as fracture fills as well. Fe-crb/ank is in veining as well as minor halos. spec occurs as fracture fills +/- calcite.
		2:	Magnetite	-	Pervasive	
		3:	Specular hematite	Weak (1-25%)	Fracture Filled	
		4:	Ankerite	Weak (1-25%)	Halo-Vein Related	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
162	165	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	8.4	v1 and v2 are both mineralized vuggy veins with the same core angle but in opposite directions. v3 are stringers and stockwork veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		60	4.5	
165	168	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.5	v2 are mostly vuggy veins (white-pink); v1 are pink-white-green veins, not vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
170	**181.57**	11.57		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Massive basalt. Medium grey-green in colour; FG; non foliated; weakly patchy-pervasive magnetic. calcite fracture fills give rock a brecciated appearance from 174.3-176.2. 4-7% qtz-crb +/- calcite veining. Trc PY througout assoc w/ veining. Unaltered basalt. Breccia vein from 173.5-174.1m (qtz-calcite fragments in a chl matrix - cannot get structural measurements; runs horizontal along core).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
170	178	1:	Magnetite	Weak (1-25%)	Pervasive	Spec and most calcite in fracture fills. Chl in bands and fracture fills. Fe-crb assoc w/ veining. Patchy-pervasive mag. Fairly massive unaltered basalt.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Chlorite	Moderate (26-50%)	Fracture Filled	
		4:	Specular hematite	Weak (1-25%)	Fracture Filled	
178	181.57	1:	Magnetite	Weak (1-25%)	Localized	Decrease in magnetite. Fe-crb assoc w/ veining; calcite and hem dominantly occur as fracture fills. weak chl stringers present
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Calcite	Weak (1-25%)	Fracture Filled	
		4:	Hematite	Weak (1-25%)	Fracture Filled	
		5:	Chlorite	Weak (1-25%)	Fracture Filled	

Structures

From	To	Code	Structure Type	Comments
173.5	174.1	CV	Vein contact	Breccia vein. qtz-calcite fragments in a chl-calcite matrix - cannot get structural measurements; runs horizontal along core.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
171	174	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			4	v1 is part of a larger qtz-crb vein w/ calcite-fe-crb halos, this vein is also assoc w/ the breccia vein (v3. qtz-crb and calcite fragments in a chl-host rock
		2:	Quartz-Fe-Carbonate/Calcite	-			3.5	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
								matrix. low angle). v2 includes extension veins of all different angles (not specific set stands out; some are vuggy).
174	177	1:	Quartz-Fe-carbonate	Vein > 3"			5	v1 includes second part of large qtz-crb vein. v2 is a specific set of extensin veins (some are vuggy); v3 includes rest of extension veins (some vuggy)
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	3.7	
177	180	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		35	4	v1 is a set of lower angle extension veins (some of them slightly vuggy); v2 includes all other extension veins (some are slightly vuggy) and v3 includes stockwork veins.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
181.57	**207.86**	26.29		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

PIllowed basalt; medium green-grey in colour; FG: pillow selvages go from chl dominant to epd dominant at 189.4m. Flow breccias at 183.28-184.1m and 185.96-186.92m. Non foliated except after pillow flow breccia at 184-184.3 (gradually disappears at this point); 3-5% qtz-crb +/- calcite veining; some are slightly vuggy. Most are white-pink/purple (hem staining). chl or calcite filled amygdules assoc w/ pillows. trc PY assoc w/ veining and pillow selvages. Weak-mod mag throughout. qtz-crb vein and fe-crb-ser halo w/ silicified/bleached fragments (poss qtz-crb? or felds) at 191.89-192.04m (breccia vein)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
181.57	194	1:	Magnetite	Weak (1-25%)	Patches	Chl dominant pillow selvages change to epd dominant selvages at 189.4m. fe-crb assoc w/ veins and halos. calcite occurs in fracture fills. hem occurs as fracture fills; poss weak-mod ser in flow breccia at 185.96-186.82m.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Chlorite	Moderate (26-50%)	Localized	
		4:	Calcite	Weak (1-25%)	Fracture Filled	
194	207.86	1:	Magnetite	Weak (1-25%)	Patches	Unaltered pillowed basalt; patchy-pervasive magnetite. Calcite assoc w/ veining and fracture fills. Fe-crb assoc w/ veining.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Calcite	Weak (1-25%)	Fracture Filled	

Structures

From	To	Code	Structure Type	Comments
183.28	184.09	FLT2	Fault - breccia	Flow breccia; becomes slightly foliated at lower contact
184.09	184.3	FOL	Foliation	Foliation after flow breccia; weak and gradually disappears.
185.96	186.82	FLT2	Fault - breccia	Flow breccia w/ up to 1% PY throughout; non silcified; green-biege in colour

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
191.84	192.04	CV	Vein contact	Breccia vein w/ fe-crb halo. Qtz-crb-calcite. yellowy-orangish fragments in a qtz-calcite+/-crb and chl matrix. strongly magnetic. silicified; weakly vuggy
194	201.7	HFZ	High fracture zone	Fracture Zone w/ larger sections of core. avg length of core is ~20cm.
201.7	202.12	FLT2	Fault - breccia	Breccia Vein in pillow sevlage. qtz-crb-calcite fragments in chl-epd selvage matrix.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
183	186	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	v1 are deformed veinlets (wavy or wispy) and v2 are all extension veins (no dominant set)
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	
186	189	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	v1 are deformed veinlets (wavy or wispy); v2 are first dominant set of extension veins (thicker: ~2mm); v3 is second dominant set of extension veins 1mm). v3 are concentrated from 185.6-186.82m.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	3.5	
189	192	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"		46	7	v1 is slightly vuggy qtz-crb-calcite breccia vein; v2 is vuggy extension vein; v3 is rest of extension veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		61	2	
192	195	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	v1 includes dominant set of extension veins mostly concentrated aroun 193.2-193.5m; vuggy; v2 includes rest of extension veins (no sets; all different angles; some vuggy)
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.8	
195	198	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	Thin stringers of qtz-crb-calcite (vuggy) and qtz-crb-epd.
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.5	
198	201	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	thin veinlets and stringers; some are vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
201	204	1:	Quartz-Fe-Carbonate/Calcite	Vein with wall rock fragments		4	3	v1 is qtz-calcite+/-crb vein w/ host rock fragments in it. v2 is a extension vein set (high angle) and v3 includes extension veins of all angles; most veins are vuggy.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		80	4	
204	207	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	3.5	v1 is dominant set of vuggy extension veins; v2 are rest of extension veins and v3 are stockwork veins/
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
207.86	**214.15**	6.29		**E1A**	**Basalt**	Brecciated	Fine grained	S. Molloy

Basalt; brecciated from 210-213m. weakly sheared. weak dissem magnetite; foliated; 10-15% qtz-crb+/-calcite veining (mostly vuggy). Large qtz-crb+/-calcite vein (silicified) at 209.8-210m with hem staining and up to 2-3% PY. Core is very blocky (highly fractured) w/ sections of less blocky core @ 209.3-209.8m and 211.5-211.9m. fault gouge <1cm at 213.2m (very soft and core just falls apart when touched). Medium-dark grey-green

Alteration

From	To	#	Alteration	Intesity	Style	Comments
207.86	214.15	1:	Magnetite	Weak (1-25%)	Pervasive	Dissem magnetite throughout unit; calcite is present in veining and in fracture fills & in breccia. Fe-crb occurs with veining. hem occurs as fracture fills in breccia and in large qtz-crb vein at 209.8m.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Hematite	Weak (1-25%)	Fracture Filled	
		4:	Calcite	Weak (1-25%)	Fracture Filled	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
209.35	210	1:	Pyrite	Medium grained	Scattered grains	5	up to 5% sct PY assoc w/ qtz-crb veining +/-calcite; weakly silicified on second vein at 209.8-209.95m (hem in fractures within vein). In host rock of massive basalt.
VG: No							

Structures

From	To	Code	Structure Type	Comments
208	210	HFZ	High fracture zone	High fracture zone; core is blocky w/ more competent sections from 209.25-209.9
210	213	FLT2	Fault - breccia	Flow breccia in massive basalt. host rock fragments in chl matrix.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
210	213	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	qtz-crb+/-calcite stringers. minor fracture fills also present but not included (thin and minor)

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
214.15	**216.9**	2.75	**E0B**	**Basaltic Komatiite**	Porphyritic (with phenocrysts)	Fine grained	S. Molloy

Utramafic-mafic basalt. titanium clasts (leucoxsene or ilmenite) dissem throughout unit (f-mg; tabular-cubic; white; 15-20% ti); weakly sheared; very soft; weak localized magnetite (214.5m); very dark green-blue in colour; talc present (can feel on broken surfaces). trc PY assoc w/ qtz-crb-calcite veins. blocky core; 10-15% veining.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
214.15	216.9	1:	Chlorite	Strong (51-75%)	Pervasive	ultramafic-mafic basalt. 15-20% titanium. talc is patchy and can be felt on broken surfaces. calcite occurs as fracture fills and in veining. fe-crb is present in veining. patchy magnetite.
		2:	Ilmenite	Weak (1-25%)	Spotted	
		3:	Talc	Weak (1-25%)	Patches	
		4:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		5:	Magnetite	Weak (1-25%)	Patches	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
216.9	**218.15**	1.25		**E1**	**Mafic Volcanic**	Brecciated	Fine grained	S. Molloy

Altered mafic volcanic; mod-strong magnetite being overprinted by hematite. Medium-dark purple in colour; mottled; appears weakly brecciated, chl stringers throughout. 10% PY dissem throughout (replacing hem or magnetite) w/ up to 10% local sma PY; PY is f-mg. SMA PY is concentrated by qtz-crb and chl stringers. non foliated; 2-3% vuggy qtz-crb-calcite veins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
216.9	218.15	1:	Hematite	Strong (51-75%)	Pervasive	Altered mafic volcanic. wk-mod magnetite being replaced by hem. core has medium-dark purple colour. pervasive calcite throughout. Unit also appears weakly brecciated
		2:	Magnetite	Weak (1-25%)	Pervasive	
		3:	Calcite	Weak (1-25%)	Pervasive	
		4:	Andalusite	Weak (1-25%)	Halo-Vein Related	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
218.15	**220**	1.85		**E1A**	**Basalt**	Schistose	Fine grained	S. Molloy

Medium green-grey-purple basalt. FG; weakly-moderately sheared. magnetic (dissem); purple hem bands, wispy calcite 'veins'. 20% qtz-crb+/-calcite veining (mostly vuggy; ranges from pink to white to smokey); up to 1% argentite locally (@219.9m, within smokey-white qtz-crb). up to 3-4% PY. blocky core.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
218.15	220	1:	Magnetite	Weak (1-25%)	Patches	Calcite occurs in veining and as fracture fills. Ank assoc w/ veining. Patchy to dissem mag. pervasive chl throughout.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Calcite	Weak (1-25%)	Fracture Filled	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
219.7	220	1:	Pyrite	Fine grained	Scattered grains	5	5-7% fg-mg PY assoc w/ qtz-crb veining. Argentite assoc w/ qtz-crb veining.
VG: No		2:	Argentite	Medium grained	Blebs	1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
220	**223.48**	3.48		**I1A**	**Gabbro**	Phenocrystic	Medium grained	S. Molloy

Gabbro; medium green; same age as volcanic flows, homogeneous texture of medium grained phenos, 2-3% qtz-crb-calcite stringers

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

and pink-red fe-crb-epd-qtz veinlets. contacts at either end of unit are veins. patchy-dissem magnetite. non foliated; trc PY assoc w/ veining. chl replaced phenos (pyroxene).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
220	223.48	1:	Ankerite	Weak (1-25%)	Halo-Vein Related	calcite present as fracture fills and veining; Fe-crb present in qtz-crb-epd veinlets. fairly unaltered gabbro (except for pervasive chl)
		2:	Calcite	Weak (1-25%)	Fracture Filled	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
223.48	**261.4**	37.92		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; weakly sheared. Med green-grey in colour; FG; dissem magnetite from 225.62-229.74m, rest of unit is patchy magnetite (mostly concentrated around pillow selvages. increased amount of stockwork stringers. 2-3% qtz-crb+/-calcite veins present; trc PY throughout, but mostly concentrated in veining. 241.45-242.6m is possible flow breccia or just appears brecciated due to high amount of fracture fills (calcite). Another possible flow breccia at 259.5-260.3m; fragments of host rocl and qtz-crb-calc.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
223.48	225.62	1:	Magnetite	Weak (1-25%)	Patches	Patchy magnetite (very weak) and fe-crb assoc w/ veining. Unaltered pillowed basalt
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
225.62	229.74	1:	Magnetite	Weak (1-25%)	Pervasive	Fairly unaltered pillowed basalt; increase in magnetite content (dissem throughout); fe-crb assoc w/ veining.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
229.74	261.4	1:	Magnetite	Weak (1-25%)	Patches	Decrease in magnetite content. Magnetite mostly concentrated around pillow selvages. Local hem assoc w/ fractures or with calcite in stringers/veinlets.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Hematite	Weak (1-25%)	Localized	

Structures

From	To	Code	Structure Type	Comments
241.45	242.6	FLT2	Fault - breccia	possible flow breccia or just highly fracture filled giving it the appearance of flow breccia
259.5	260.3	FLT2	Fault - breccia	Possible flow breccia. fragments of host rock and qtz-crb-calcite/hem.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
225	228	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	Veinlets (v1) are wavy qtz-crb-calcite veins; v1 are stringers and extension
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.8	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
								veins; v3 are thin stockwork veins
228	231	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Veinlet Zone - vein 1/4" to 3"		48	2.5 3.5	v1 are pink vuggy qtz-crb-calc veins with up to 1% PY; v2 are wispy and wavy veinlets predominantly composed of calcite. v3 includes thin extension veins and predominantly stockwork veins
231	234	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Veinlet Zone - vein 1/4" to 3" Veinlet Zone - vein 1/4" to 3"			3.5 1	v1 are the wispy and wavy veinlets that are predominantly composed of calcite. v2 is a mineralized veinlet (pink in colour) and v3 are stringers and stockwork veins.
234	237	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stockwork Veins			3.6 3.5	v1 are pink-white, mineralized vuggy extension veins; v2 are stockwork veins and v3 are remaining stringers
237	240	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Stringer Zone - vein <1/4" Stockwork Veins			4 4	v1 are stringers/extension veins and v3 are stockwork veins
240	243	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Veinlet Zone - vein 1/4" to 3" Stringer Zone - vein <1/4"			1.5 3	v1 and v2 are veinlets/stringers (wavy) and v3 are stockwork veins predominantly calcite.
243	246	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Veinlet Zone - vein 1/4" to 3" Stockwork Veins			5 4	predominantly calcite veinlets and stockwork veins
246	249	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Veinlet Zone - vein 1/4" to 3" Extension Vein			6 1.5	v1 are wavy calcite dominant veinlets; v2 are calcite+/-qtz-crb fracture fills (thin) and v3 are stockwork veins
249	252	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Veinlet Zone - vein 1/4" to 3" Extension Vein		10	1 4	v1 is a low angle qtz-calcite vein. v2 are extension veins and v3 are stockwork veins
252	255	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Stockwork Veins		70	3 5	v2 includes low angle veinlet. v1 are all extension veins of similar angles.
255	258	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Veinlet Zone - vein 1/4" to 3" Extension Vein			4 4	v1 are wavy calcite dominant veinlets. v2 are mostly vuggy and mineralized extension veins. v3 includes thin stringers and stockworkveins
258	261	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite		Extension Vein Extension Vein		30	2.5 3	v1 are slightly vuggy and calcite dominant. v2 are all other extension veins.

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
261.4	**274.3**	12.9		**E1A**	**Basalt**	Massive	Fine grained	S. Molloy

Massive basalt; unaltered; FG; medium grey-green; 2-3% qtz-crb+/-calcite veins; trc PY. weak-moderate patchy magnetite. ni pillow selvages present.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
261.4	270	1:	Magnetite	Weak (1-25%)	Patches	Unaltered massive basalt. minor hem stringers present.
		2:	Hematite	Weak (1-25%)	Fracture Filled	
		3:	Ankerite	Weak (1-25%)	Halo-Vein Related	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
264	267	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		65	2.7	v1 and v2 are dominant vein sets; both sets are mineralized. v3 are remaining stringers of different angles.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		53	2	
267	270	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		76	6	v1 and v2 are dominant vein sets; some are vuggy and mineralized. v3 is remaining veins.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		45	2	
270	273	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	Most of v1 are mineralized and some are vuggy. v2 are all extension veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
274.3	**293.25**	18.95		**E1A**	**Basalt**	Pillowed	Medium grained	S. Molloy

Pillowed basalt; fairly unaltered; weak-mod patchy mag; medium green-grey to medium grey (and FG, at 282-285.7m). MG. hem stringers and hem at stringer margins present. hem on fracture planes. pillow selvages present w/ actinolite and epd. More magnetic (dissem) from 282-285.7m (finer grained darker unit). 3-5% qtz-crb-calcite veining; trc PY throughout. non foliated.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
282	285.7	1:	Magnetite	Weak (1-25%)	Pervasive	Increase in magnetite content; core is darker grey than previous unit. ank is assoc w/ veining and hem occurs at margins of some stringers.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Hematite	Weak (1-25%)	Halo-Vein Related	
285.7	293.25	1:	Magnetite	Weak (1-25%)	Patches	Hem seen on fracture surfaces and at margins of qtz-crb-calcite stringers. patch-prv magnetite.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Hematite	Weak (1-25%)	Halo-Vein Related	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
276	279	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			9	barren qtz-crb-calc vein and stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.2	
279	282	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
282	285	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	some of v1 are mineralized and vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
285	288	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			7	v1 has trc PY; no vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.5	
288	291	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	v2 are lower angle veinlets that are wavy.
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
293.25	**294.41**	1.16		**E1A**	**Basalt**	Schistose	Fine grained	S. Molloy

Weakly sheared mafic volcanic. frequent qtz-crb-calc stringers (wispy); FG; dark grey-green in in colour. 5-10% qtz-crb-veining/stringers; trc PY throughout unit. moderately magnetic.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
293.25	294.41	1:	Chlorite	Moderate (26-50%)	Pervasive	Strong pervasive chl; core is dark green-grey in colour; weakl fe-crb in veining. pervasive magnetite
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Magnetite	Weak (1-25%)	-	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
294.41	**296.72**	2.31		**E1**	**Mafic Volcanic**	Massive	Fine grained	S. Molloy

Dark grey, very magnetic, mafic volcanic. high fracture zone; large qtz-crb vein at upper contact (26cm wide vein, white-pink, weakly vuggy). Another large qtz-crb vein at 295.25-295.6m (white-pink, slightly vuggy); large veins are mineralized w/ up to 6-8% PY (f-mg); 20% qtz-crb+/-calcite veining; sct PY throughout. very weakly foliated.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
294.41	296.72	1:	Magnetite	Strong (51-75%)	Pervasive	Strong pervasive magnetite. core is dark grey-black in colour.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
296.72	**304.68**	7.96	90	**E1A**	**Basalt**	Schistose	Fine grained	S. Molloy
			10	E0B	Basaltic Komatiite	Porphyritic (with phenocrysts)	Medium grained	

Weakly sheared mafic volcanic; FG; magnetic; ultramafic unit from 217.92-298.23m w/ a contact at 38 CA; ultramafic unit has mg

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

phenos of leucoxsene and is very soft, and dark green/grey in colour; 7-10% qtz-crb-calc veinlets throughout unit (wispy); trc PY throughout. mafic volc unit is less magnetic.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
296.72	304.68	1:	Magnetite	Moderate (26-50%)	Pervasive	ilmenite/leucoxsene phenos in small ultramafic basalt at 297.92-298.23m. fe-crb assoc w/ veining. large qtz-crb-calcite vuggy vein silicified @ 303.6-304.4m
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Ilmenite	Weak (1-25%)	Localized	
		4:	Silicified	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
303.6	304.4	1:	Pyrite	Medium grained	Scattered grains	5	5-7% f-mg sct PY assoc w/ large vuggy qtz-crb silicified vein.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
297	300	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	no vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
300	303	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			8	v1 is large vuggy vein. v2 are slightly vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6.5	

304.68	**318.74**	14.06	**E1A**	**Basalt**	Massive	Medium grained	S. Molloy

Massive basalt; unaltered; alternating grainsize from fg to mg; non foliated; weak patchy magnetite; 3-4% qtz-crb-calcite veining (vuggy); phenocrysts of plagioclase (anhedral; mg) scattered in sections throughout rock (not homogeneous grainsize). medium grey-green in colour. trc PY

Alteration

From	To	#	Alteration	Intesity	Style	Comments
304.68	318.74	1:	Chlorite	Weak (1-25%)	Spotted	chl replacing mg phenos; patchy magnetite
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Magnetite	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
306	309	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
309	312	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			10	v1 and v2 are vuggy and mineralized
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
312	315	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	v2 are lower angle veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			1.5	
315	318	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	extension veins off all different angles

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
318.74	**324.35**	5.61		**E1A**	**Basalt**	Schistose	Fine grained	S. Molloy

Weakly sheared basalt; fg; medium-dark grey-green; weakly magnetic; unaltered; 5-7% qtz-crb-calcite veining (some are vuggy and most are wispy and wavy); trc PY throughout, mostly assoc w/ veining.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
318.74	324.35	1:	Magnetite	Weak (1-25%)	Patches	
		2:	Andalusite	Weak (1-25%)	Halo-Vein Related	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
321	324	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
324.35	**364.51**	40.16		**E1A**	**Basalt**	Massive	Medium grained	S. Molloy

Massive basalt; fairly unaltered; weak epd halos around qtz-crb-epd veinlets; chl replaced phenos in some places (330.4m); medium-dark grey-green in colour; weakly magnetic throughout. 7-10% qtz-crb-calcite veins, mostly extension veins and some vuggy veins. trc PY throughout. non foliated. Fault gouge (around 1cm) at 358.3m; gradational changes in grainsize alternating from fg to mg

Alteration

From	To	#	Alteration	Intesity	Style	Comments
324.35	335	1:	Magnetite	Weak (1-25%)	Patches	patchy-prv magnetite
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
335	364.51	1:	Magnetite	Weak (1-25%)	Pervasive	increase in epd, mostly as 'alteration' halos around qtz-crb-epd veins
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Epidote	Weak (1-25%)	Halo-Vein Related	

Structures

From	To	Code	Structure Type	Comments

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
338.17	349	HFZ	High fracture zone	Area of high fracture zones within competent rock; HFZ are 10-25cm wide and spaced around every 1m to 1.5m.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
327	330	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			11	v1 is mineralized and vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
330	333	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	v1 are vuggy mineralized veins; some are low angle.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
333	336	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	v1 includes some vuggy veinlets and some wispy.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
336	339	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	v1 includes some vuggy veinlets and some wispy.
		2:	Quartz-Fe-Carbonate/Calcite	-			3	
339	342	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	v1 includes vuggy mineralized veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
342	345	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	v1 and v2 include mineralized vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
345	348	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4.5	v1 includes vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
348	351	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	v2 includes slightly vuggy and mineralized veinlets
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
351	354	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	some of v1 veinlets are slightly vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
354	357	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	some veinlets/stringers are vuggy. stringers include stockwork veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
357	360	1:	Quartz-Fe-Carbonate / Silicified	Vein > 3"			10	also 2cm of stringers and stockwork veins.
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
360	363	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	some weakly vuggy veinlets present.
		2:	Quartz-Fe-Carbonate/Calcite	Vein with wall rock fragments		30	3	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
364.51	**367**	2.49		**E1A**	**Basalt**	Schistose	Fine grained	S. Molloy

Weakly sheared basalt; Medium-dark green-grey; fg; no selvages present but possible calcite-qtz filled amygdules; purple-grey calcite-hem/spec dominated vein at 365.95m (~12cm; slightly vuggy; mineralized); moderately magnetic.

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
364.51	367	1:	Magnetite	Weak (1-25%)	Pervasive	Calcite and spec/hem qtz-crb vein: purple/grey in colour; only very slightly vuggy.
		2:	Specular hematite	Weak (1-25%)	Patches	
		3:	Calcite	Weak (1-25%)	Halo-Vein Related	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
367	**396**	29		**E1A**	**Basalt**	Massive	Medium grained	S. Molloy

Massive basalt; F-MG; Dark green-grey in colour; non foliated; weak-moderate pervasive magnetite; fairly unaltered; 7% qtz-crb-calcite veins; trc PY throughout. some veins are vuggy. veins are predominantly white in colour with few being pink.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
367	396	1:	Magnetite	Weak (1-25%)	Pervasive	Localized fe-crb-qtz veinlets. Rest of veining is white.
		2:	Ankerite	Weak (1-25%)	Localized	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
369	372	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	some veins are weakly vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
372	375	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	v1 includes vuggy low angle veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
375	378	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	White qtz/cal veinlets.
378	381	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	White qtz/cal veinlets.
381	384	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	White qtz/cal veinlets.
384	387	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	White qtz/cal veinlets.
387	390	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	White qtz/cal veinlets.
390	393	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	White qtz/cal veinlets.
393	396	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	White qtz/cal veinlets.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
396	**405.3**	9.3		**E1**	**Mafic Volcanic**	Massive	Fine grained	D. Grabiec

Silicified Mafic Volcanic. Weakly to Moderately silicified Mafic volcanic (Increasing downhole). Massive textured. Non magnetic. Very Fine Grained. Light green to gradationallylight pink towards bottom contact. Millimeter scale brecciation cracks throughout. 2-3%

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

qtz/cal/ank veinlets throughout with Rare PY. One silicious 2cm qtz/cal/ank veinlet at 398.4m with 1% sct PY haloing.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
396	405.3	1:	Silicified	Weak (1-25%)	Pervasive	Weak-moderately Silicified mafic volcanic. Ank in veinlets.
		2:	Ankerite	Weak (1-25%)	Localized	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
396	399	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
399	402	1:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			14	Brecciation infill veining in silicified area.
402	405	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	Brecciation infill veining in silicified area.

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
405.3	**415.38**	10.08	**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive Foliated Basalt. Weakly foliated chlorite alteration at low angle to CA. Non Magnetic. Localized <10cm patches of silicification (same as above; weakly brecciated; pinkish).10% qtz/cal veinlets at many Various Angles to CA. Rare PY on vein halos.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
405.3	415.38	1:	Chlorite	Moderate (26-50%)	Pervasive	Moderate chlorite alteration creating weak foliation.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
408	411	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			22	Weakly foliated mafic volcanic. Various angles for veinnlets.
411	414	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			20	Weakly foliated mafic volcanic. Various angles for veinnlets.

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
415.38	**458**	42.62	**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive basalt. Fine grained. Pervasive moderate magnetic; locally faint foliation. 5% quartz/calcite veinlets at various angles to CA. <1% thin (<.5cm wide hematite stringers). Rare PY along veinlet margins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
415.38	458	1:	Magnetite	Weak (1-25%)	Pervasive	Increase in magnetic rock. <1% hematite stringers.

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		2	Hematite	Weak (1-25%)	Localized	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
417	420	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			17	
420	423	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			12	
423	426	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			9	
426	429	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			15	
		2	Specular Hematite	Extension Vein			2	
429	432	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			18	
432	435	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			18	
435	438	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			12	
		2	Specular Hematite	Extension Vein			2	
438	441	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			9	
441	444	1	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			12	
		2	Specular Hematite	Extension Vein			1	
444	447	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4.5	hem along boundary of some veinlets
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
447	450	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
450	453	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
		2	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			2	
453	456	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
458	**470**	12		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; only few selvages. Pillow breccia @458.5m. Medium green in colour; FG; weak-mod pervasive-patchy magnetite. hem filled fractures from 465-466.2m give rock brecciated appearance. basalt is also weakly sheared from 465-470m (core is also locally blocky in this interval). 3-4% qtz-crb/calcite veining; trc PY assoc w/ selvages and veining.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
458	470	1:	Magnetite	Weak (1-25%)	Pervasive	weak-mod prv-patchy magnetite. Hem stringers from 465-467m. Hem also occurs on fracture planes.
		2:	Hematite	Weak (1-25%)	Fracture Filled	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
459	462	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3	
462	465	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3	
465	468	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	v2 includes stringers and some stockwork veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
470	**475.87**	5.87	**E1**	**Mafic Volcanic**	Schistose	Fine grained	S. Molloy

Hem altered mafic volcanic; sheared with minor folding. foliation changes throughout unit; purple-green-beige in colour; appears banded; core is broken along shear/fol planes. weak local magnetite; 1-2% qtz-crb stringers; 1-2% fine grained PY following banding and assoc w/ veining. fine grained. cohesive breccia from 475.70-475.87m

Alteration

From	To	#	Alteration	Intesity	Style	Comments
470	475.87	1:	Hematite	Moderate (26-50%)	Pervasive	Increased percentage of hem. core is purple in colour and appears banded (from shearing)
		2:	Sericite	Weak (1-25%)	Localized	
		3:	Magnetite	Weak (1-25%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
470	475.87	1:	Pyrite	Fine grained	Scattered grains	2	up to 1% PY scattered throughout. assoc w/ veining and along 'banding'
VG: No							

Structures

From	To	Code	Structure Type	Comments
475.7	475.87	FLT2	Fault - breccia	cohesive breccia in sheared, hem altered mafic volc.

Veins

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
471	474	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			18	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
475.87	**481**	5.13		**E1**	**Mafic Volcanic**	Schistose	Fine grained	S. Molloy

Shearedmafic volc. fine-med grained; moderately sheared; weakly folded. weak-mod pervasive magnetite. green in colour. 7-10% qtz-crb veining; very trc PY

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
477	480	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9.8	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
481	**486.17**	5.17		**S4B**	**Polymictic Conglomerate**	Schistose	Fine grained	S. Molloy

poss sheared conglomerate. <5% clasts (small fragments of jasper @ 482m and 483.75m (2mm-<1cm big) and possible granitic clasts at 483.7m and 484.7m). fine-med grained; moderately sheared; weakly folded. weak-mod pervasive magnetite. green in colour. 7-10% qtz-crb veining; very trc PY

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
483	486	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
486.17	**512.66**	26.49		**S4B**	**Polymictic Conglomerate**	Schistose	Medium grained	S. Molloy

sheared conglomerate; very sheared; medium grained; green-yellow-beige in colour; weak local mag; weak folding; foliation changes within unit; jasper clasts present @ 490.2m, 494.2m and 495.3m (5mm-1cm); increased amount of sericite. 10% clasts; 10-15% qtz-crb veining; very trc PY. fault gouge present at 509.6m, 510.6 and 511.7m.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
486.17	512.66	1:	Sericite	Moderate (26-50%)	Banding	Ank is more yellow-orange; increased amount in ser compared to previous unit. weak local mag.
		2:	Magnetite	Weak (1-25%)	Localized	
		3:	Ankerite	Weak (1-25%)	Halo-Vein Related	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
489	492	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			11	

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
492	495	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
495	498	1	Quartz-Fe-Carbonate/Calcite	Vein > 3"			41	large vein at 496.3-497m.
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8.5	
498	501	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
501	504	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			17	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
504	507	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	
507	510	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13.5	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
512.66	**527**	14.34		**S4B**	**Polymictic Conglomerate**	Schistose	Coarse grained	S. Molloy

Medium-coarse grained conglomerate; sheared with folded sections. 5-10% clasts; jasper clasts present. very weakly magnetic in patches; yellow-beige in colour (pervasive ser?); ser is also in bands. 3-5% qtz-crb veining with trc PY assoc w/ it.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
512.66	527	1	Sericite	Moderate (26-50%)	Pervasive	Sericite is pervasive and in bands.
		2	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3	Magnetite	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
513	516	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	v1 includes minor stringers
516	519	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.5	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
519	522	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
522	525	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
527	**548**	21		**S4B**	**Polymictic Conglomerate**	Schistose	Coarse grained	S. Molloy

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Medium-coarse grained conglomerate w/ 10-20% clasts; Jasper clasts present. moderately sheared w/ minor folded. brown-grey-beige in colour; lesser amount of ser compared to previous conglomerate unit. 5-10% qtz-crb veining; trc PY; very weakly magnetic in places.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
527	548	1:	Sericite	Weak (1-25%)	Banding	ser occurs as banding
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Magnetite	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
528	531	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	v1 includes few stringers
531	534	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			11	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	
534	537	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
537	540	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
540	543	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
543	546	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
548	**561**	13		**S4B**	**Polymictic Conglomerate**	Schistose	Medium grained	S. Molloy

Fine-medium grained conglomerate; 30-40% clasts; jasper fragments present. moderately sheared w/ some folding; 7-10% qtz-crb veining; trc PY; very weakly magnetic in patches. grey-biege-green in colour. EOH

Alteration

From	To	#	Alteration	Intesity	Style	Comments
548	561	1:	Sericite	Weak (1-25%)	Banding	decrease in ser alteration.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Magnetite	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
549	552	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			24	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	

DataSet: Brookbank
HoleID: B-16-09

Hole Length (m): 561
Log Length (m): 561

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
552	555	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			22	v1 includes a low angle vein
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
555	558	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			20.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
558	561	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			16	EOH
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10.5	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 561**

HoleID: B-16-09 **Max Samp Depth (m): 554**

Total meters Sampled: 420.5

Primary Assay Samples:	451	86.56 %
Field Duplicate Samples:	15	2.88 %
Standard/Blank Samples:	55	10.56 %
Total Samples:	521	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
4.5	5	0.5	263751	HCORE			A16-13027	<0.005	Trc PY concentrated near qtz-crb-epd veinlets, in pillowed basalt.
5	6	1	263752	HCORE			A16-13027	<0.005	1% PY assoc w/ qtz-crb-epd-fe-crb veinlet and epd-qt-crb filled amygdules. High fracture zone
6	7	1	263753	HCORE			A16-13027	<0.005	Trc PY scattered in host rock, pillowed basalt. High fracture zone.
7	8	1	263754	HCORE			A16-13027	<0.005	No visible mineralization in pillowed basalt; High fracture zone.
8	9	1	263755	HCORE			A16-13027	<0.005	Trc PY blebs scattered in host rock, pillowed basalt.
9	10	1	263756	HCORE			A16-13027	<0.005	Trc PY (fine grained) assoc w/ qtz-crb veinlet, in pillowed basalt.
10	11	1	263757	HCORE			A16-13027	<0.005	1% fine grained PY assoc w/ qtz-crb/calcite veinlets (mostly on vein boundaries, but some PY inclusions visible)
		0	263758	STD		CDN_GS_P4B	A16-13027	0.391	
11	12	1	263759	HCORE			A16-13027	<0.005	1-1.5% PY, mostly assoc with qtz-crb veining (mostly along vein boundaries) and Fe-crb halos around veins. Some PY is scattered in the host rock, pillowed basalt.
12	12.7	0.7	263760	HCORE			A16-13027	<0.005	1% PY assoc w/ qtz-crb vein boundaries and scattered in host rock, pillowed basalt.
12.7	13.29	0.59	263761	HCORE			A16-13027	<0.005	Trc PY specks assoc with qtz-crb stringers, in pillowed basalt.
13.29	14	0.71	263762	HCORE			A16-13027	<0.005	Trc PY blebs scattered in host rock, massive basalt.
14	15	1	263763	HCORE			A16-13027	<0.005	Trc PY blebs scattered in host rock, massive basalt.
15	16	1	263764	HCORE			A16-13027	<0.005	trc sct PY assoc w/ qtz-crb veining and Fe-crb & epd halos in massive basalt.
16	17	1	263765	HCORE			A16-13027	<0.005	trc PY blebs disseminated in massive basalt. Qtz-crb stringers present but non mineralized. Hem present in thin qtz-crb-epd stringers
		0	263766	Blank		Blank	A16-13027	<0.005	
17	18	1	263767	HCORE			A16-13027	<0.005	Trc PY blebs in epd stringers, in massive basalt

18	19	1	263768	HCORE			A16-13027	<0.005	trc PY blebs disseminated in host massive basalt. Chlorite stringer present at 18.35m. Veining is not mineralized
19	20	1	263769	HCORE			A16-13027	<0.005	1% PY blebs disseminated in host massive basalt. Some PY blebs are assoc with qtz-crb vein boundaries.
20	21	1	263770	HCORE			A16-13027	0.006	2% sct-blb PY assoc w/ qtz-crb veining and Fe-crb halos within massive basalt. PY blbs also disseminated throughout host rock.
21	22	1	263771	HCORE			A16-13027	<0.005	Trc stringer PY assoc w/ epd stringers in massive basalt
22	23	1	263772	HCORE			A16-13027	<0.005	Trc sct PY near and along qtz-crb vein boundaries.
23	24	1	263773	HCORE			A16-13027	<0.005	no visible mineralization in massive basalt
		0	263774	STD		CDN_GS_P7J	A16-13027	0.666	
24	25	1	263775	HCORE			A16-13027	<0.005	Trc blebby PY assoc w/ epd stringers in massive basalt
25	26	1	263776	HCORE			A16-13027	<0.005	Trc PY assoc w/ hem and qtz-crb stringers, in massive basalt
26	27	1	263777	HCORE			A16-13027	<0.005	Trc blebby PY in host rock, Massive basalt.
27	28	1	263778	HCORE			A16-13027	<0.005	No visible mineralization in massive basalt.
28	29	1	263779	HCORE			A16-13027	<0.005	No visible mineralization
29	30	1	263780	HCORE			A16-13027	0.008	1% PY assoc w/ qtz-crb veining and Fe-crb halo in massive basalt. The mineralized vein is offset by 1cm dextrally. Veinlet is 7mm thick
30	31	1	263781	HCORE			A16-13027	0.007	1-2% PY assoc w/ qtz-crb veining and Fe-crb halos, in massive basalt. Py also assoc w/ qtz-crb-epd/kspar vein.
31	32	1	263782	HCORE			A16-13027	<0.005	No visible mineralization in massive basalt.
		0	263783	DUP	263782		A16-13027	<0.005	
32	33	1	263784	HCORE			A16-13027	<0.005	Trc sct PY in host rock, massive basalt
33	34	1	263785	HCORE			A16-13027	<0.005	Trc PY in host rock, massive basalt
34	35	1	263786	HCORE			A16-13027	0.006	Trc PY disseminated in host rock, massive basalt.
35	36	1	263787	HCORE			A16-13027	0.005	Trc blebby PY disseminated in host rock and assoc w/ qtz-crb veining
36	37	1	263788	HCORE			A16-13027	0.005	Trc PY assoc w/ qtz-crb veining in massive basalt.
37	37.7	0.7	263789	HCORE			A16-13027	<0.005	no vis minz.
		0	263790	STD		CDN_GS_P4B	A16-13027	0.415	
37.7	38	0.3	263791	HCORE			A16-13027	0.005	trc blb PY assoc w/ pillow selvage
38	39	1	263792	HCORE			A16-13027	0.007	1% PY assoc w/ pillow selvage
39	40	1	263793	HCORE			A16-13027	<0.005	no vis minz

40	41	1	263794	HCORE			A16-13027	<0.005	trc sct PY in host rock, pillowed basalt
41	42	1	263795	HCORE			A16-13027	0.005	trc PY assoc w/ epd stringer and trc PY replacing hem in a hem-calcite amygdule.
42	43	1	263796	HCORE			A16-13027	0.006	1.5% sct PY assoc w/ qtz-calcite (grey) in selvages and qtz-fe-crb veining.
43	44	1	263797	HCORE			A16-13027	0.005	trc PY assoc w/ grey calcite in pillow selvages
		0	263798	Blank		Blank	A16-13027	<0.005	
44	45	1	263799	HCORE			A16-13027	<0.005	trc PY assoc w/ qtz-fe-crb-epd selvages
45	46	1	263800	HCORE			A16-13075	<0.005	1% PY assoc w/ qtz-calcite veinlets and pillow selvages
46	47	1	263801	HCORE			A16-13075	<0.005	trc blb PY assoc w/ qtz-calcite-fe-crb in selvages
47	48	1	263802	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-calcite-fe-crb in selvages
48	49	1	263803	HCORE			A16-13075	<0.005	3-5% blb-sma PY (med-coarse grained) assoc w/ pillow selvages
49	50	1	263804	HCORE			A16-13075	<0.005	2% PY sct-SMA, assoc w/ qtz-fe-crb veining and possible fault gouge & qtz-fe-crb vein @ 49.67m.
50	51	1	263805	HCORE			A16-13075	<0.005	2% sct-blb PY assoc w/ qtz-fe-crb-epd veinlets
		0	263806	STD		CDN_GS_P7J	A16-13075	0.753	
51	52	1	263807	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-calcite stringers
52	53	1	263808	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-calcite extension veinlet. PY along boundaries and included in vein
53	54	1	263809	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-calcite-epd veinlets
54	55	1	263810	HCORE			A16-13075	<0.005	no vis minz
55	56	1	263811	HCORE			A16-13075	<0.005	2% PY assoc w/ pillow selvages. grey calcite assoc w/ pillow selvages
56	57	1	263812	HCORE			A16-13075	0.007	1% PY assoc w/ qtz-calcite in pillow selvages
57	58	1	263813	HCORE			A16-13075	<0.005	3% CG PY assoc w/ Fe-crb halos near qtz-calcite stringers and qtz-calcite (grey) in pillow selvages.
		0	263814	DUP	263813		A16-13075	<0.005	
58	59	1	263815	HCORE			A16-13075	<0.005	1% CG PY assoc w/ epd & calcite selvages
59	59.92	0.92	263816	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-crb-epd stringers
59.92	60.5	0.58	263817	HCORE			A16-13075	<0.005	1% diss PY in host rock
60.5	61	0.5	263818	HCORE			A16-13075	<0.005	trc PY assoc w/ epd stringers
61	62	1	263819	HCORE			A16-13075	<0.005	1% PY mostly assoc w/ calcite and qtz-fe-crb stringers
62	63	1	263820	HCORE			A16-13075	<0.005	2% blb med-coarse grained PY assoc w/ qtz-calcite veins and pillow selvages

63	64	1	263821	HCORE			A16-13075	<0.005	1% PY assoc w/ selvages and qtz-calcite stringers
		0	263822	STD		CDN_GS_P4B	A16-13075	0.426	
64	65	1	263823	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-calcite str
65	66	1	263824	HCORE			A16-13075	<0.005	1% blb PY assoc qtz-fe-crb and selvages. most PY is coarse grained
66	67	1	263825	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-fe-crb veinlets
67	68	1	263826	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-crb stringers
68	69	1	263827	HCORE			A16-13075	<0.005	1-2% blb cg PY assoc w/ qtz-calcite vuggy vein and pillow selvage
69	70	1	263828	HCORE			A16-13075	<0.005	1% PY assoc w/ qtz-fe-crb +/- epd veinlets, some are vuggy
70	70.65	0.65	263829	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-calcite stringers
		0	263830	Blank		Blank	A16-13075	<0.005	
70.65	71.4	0.75	263831	HCORE			A16-13075	<0.005	2-3% sct PY assoc w/ qtz-fe-crb/calcite veins and pillow selvages.
71.4	72.05	0.65	263832	HCORE			A16-13075	<0.005	trc PY in host rock
72.05	73	0.95	263833	HCORE			A16-13075	<0.005	trc-1% PY in stockwork veins
73	74	1	263834	HCORE			A16-13075	<0.005	trc PY assoc w/ stockwork veins and qtz-fe-crb veins
74	75	1	263835	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-fe-crb stringers and stockwork veins
75	76	1	263836	HCORE			A16-13075	<0.005	1% PY assoc w/ qtz-fe-crb veinlet margins
76	76.44	0.44	263837	HCORE			A16-13075	<0.005	trc-1% PY assoc w/ qtz-fe-crb veining margins
		0	263838	STD		CDN_GS_P7J	A16-13075	0.731	
76.44	77.4	0.96	263839	HCORE			A16-13075	<0.005	4-6% blb PY in breccia zone; assoc w/ qtz-fe-crb vein and fe-crb halos
77.4	78	0.6	263840	HCORE			A16-13075	0.008	1-2% sct PY assoc w/ Fe-crb-qtz veinlets
78	79	1	263841	HCORE			A16-13075	0.011	1% PY assoc mostly with hem-qtz-crb vein and fe-crb-qtz stringers
79	80	1	263842	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-crb veining
80	81	1	263843	HCORE			A16-13075	<0.005	trc PY assoc w/ qtz-crb stockwork veins
81	81.92	0.92	263844	HCORE			A16-13075	<0.005	trc-1% PY assoc mostly with grey-calcite in poss flow breccia
81.92	82.9	0.98	263845	HCORE			A16-13075	<0.005	1% PY assoc w/ fe-crb halos and qtz-crb veining
		0	263846	DUP	263845		A16-13075	<0.005	
82.9	83.73	0.83	263847	HCORE			A16-13075	<0.005	trc-1% fg PY assoc w/ qtz-crb stringers and fe-crb halos
83.73	84.25	0.52	263848	HCORE			A16-13075	0.02	trc PY dissem in breccia zone.
84.25	84.92	0.67	263849	HCORE			A16-13075	0.021	1% PY dissem in breccia zone. 0.5% fg PY replacing hem

84.92	85.5	0.58	263850	HCORE		A16-13075	0.006	trc-1% PY assoc w/ fe-crb halos and qtz-crb veining. trc PY assoc w/ hem-grey calcite veining
85.5	86.47	0.97	263851	HCORE		A16-13075	0.005	trc-1% PY assoc w/ qtz-fe-crb stockwork veining
86.47	87.1	0.63	263852	HCORE		A16-13075	0.012	1% PY; half assoc w/ hem-grey calcite veining and rest assoc w. qtz-fe-crb stringers
87.1	88	0.9	263853	HCORE		A16-13075	<0.005	1% PY dissem in host rock; trc PY assoc w/ qtz-crb stringers
		0	263854	STD	CDN_GS_P4B	A16-13075	0.422	
88	89	1	263855	HCORE		A16-13075	<0.005	1-2% sct PY assoc w/ qtz-fe-crb veinlets/stringers along margins and as inclusions
89	89.8	0.8	263856	HCORE		A16-13075	<0.005	2-3% sct-dissem PY; mostly assoc w/ qtz-fe-crb stringers and some in host rock
89.8	90.8	1	263857	HCORE		A16-13075	<0.005	trc PY assoc w/ qtz-fe-crb veinlet margins
90.8	91.6	0.8	263858	HCORE		A16-13075	<0.005	trc PY assoc w/ qtz-fe-crb stringer margins. Vuggy veins in this sample had no visible minz
91.6	92.5	0.9	263859	HCORE		A16-13075	0.006	trc fg PY assoc w/ qtz-fe-crb/calcite veining. Vuggy veins had no vis minz
92.5	93	0.5	263860	HCORE		A16-13075	0.026	trc PY assoc w/ qtz-fe-crb veining
93	94	1	263861	HCORE		A16-13075	<0.005	trc-1% PY assoc with qtz-fe-crb/calcite veining; mostly vuggy veins
		0	263862	Blank	Blank	A16-13075	<0.005	
94	95	1	263863	HCORE		A16-13075	<0.005	trc-1% PY assoc w/ qtz-fe-crb/calcite veining; half of veins are vuggy
95	95.9	0.9	263864	HCORE		A16-13075	<0.005	1% sct-blb PY assoc w/ qtz-fe-crb veining and hem stringers
95.9	96.9	1	263865	HCORE		A16-13075	<0.005	1-1.5% blb PY mostly assoc w/ fe-crb halos around grey calcite veins. rest of PY is assoc w/ qtz-fe-crb veining or is dissem in host rock
96.9	97.5	0.6	263866	HCORE		A16-13075	<0.005	trc PY assoc w/ qtz-calcite vein margins
97.5	98	0.5	263867	HCORE		A16-13075	<0.005	trc PY assoc w/ vuggy qtz-calcite veinlets
98	99	1	263868	HCORE		A16-13075	<0.005	trc PY assoc w/ qtz-crb/calcite veinlet, as inclusion
99	100	1	263869	HCORE		A16-13075	0.007	trc PY assoc w/ vuggy qtz-fe-crb/calcite veins
		0	263870	STD	CDN_GS_P7J	A16-13075	0.75	
100	101	1	263871	HCORE		A16-13075	<0.005	trc-1% PY assoc w/ vuggy qtz-fe-crb/calcite veins as inclusions and in fe-crb halos
101	102	1	263872	HCORE		A16-13075	<0.005	1% str-sct PY mostly replacing hem in hem-calcite stringers/veinlets. Also assoc w/ qtz-crb veining and dissem in host rock

102	102.85	0.85	263873	HCORE			A16-13075	0.006	1-1.5% sct-blb PY dissem in host rock and assoc w/ qtz-fe-crb/calcite stringers
102.85	103.6	0.75	263874	HCORE			A16-13075	<0.005	1-3% sct PY. Mostly assoc w/ qtz-fe-crb/calcite veinlets (some of which are vuggy) and fe-crb halos. Also dissem throughout host rock
103.6	104.5	0.9	263875	HCORE			A16-13075	0.006	1-1.5% blb-sct PY mostly assoc w/ qtz-fe-crb/calcite veining. Trc dissem in host and trc replacing hem.
104.5	105.5	1	263876	HCORE			A16-13075	<0.005	trc PY sct in host rock
105.5	106.4	0.9	263877	HCORE			A16-13075	<0.005	1% PY (fg-mg) assoc w/ qtz-fe-crb vein halo (chl&fe-crb); trc PY in vuggy qtz-fe-crb vein
		0	263878	DUP	263877		A16-13075	<0.005	
106.4	107	0.6	263879	HCORE			A16-13075	<0.005	1-2% PY assoc w/ hem halo of a pillow selvage; up to 1% PY assoc w/ qtz-crb stringers and host rock
107	108	1	263880	HCORE			A16-13075	<0.005	1% PY assoc w/ pillow selvages and dissem in host rock. trc PY assoc w/ qtz-crb stringers
108	108.9	0.9	263881	HCORE			A16-13075	<0.005	up to 1% sct PY (mg) assoc w/ pillow selvages and trc PY assoc w/ qtz-crb stringers and dissem in host rock.
108.9	109.9	1	263882	HCORE			A16-13075	<0.005	2-3% PY (mg) assoc w/ pillow selvages (hem and chl) adjacent to qtz-crb (within selvage; not a true vein). trc PY assoc w/ qtz-crb stringers
109.9	110.9	1	263883	HCORE			A16-13075	<0.005	1% PY in vuggy qtz-crb+/-calcite breccia vein (fragments of qtz-crb w/ chl-calc matrix); up to 1% PY dissem in brecciated host rock (flow breccia)
110.9	111.5	0.6	263884	HCORE			A16-13075	<0.005	up to 1% PY mostly assoc w/ flow breccia. trc PY on qtz-crb stringer margins
		0	263885	STD		CDN_GS_P4B	A16-13075	0.412	
111.5	112.37	0.87	263886	HCORE			A16-13075	<0.005	1-2% PY (f-mg) w/ up to 1% PY assoc w/ qtz-fe-crb veining (on margins and replacing hem in some); rest of PY assoc w/ pillow selvages or dissem in host rock
112.37	113	0.63	263887	HCORE			A16-13075	0.007	up to 1% PY (f-mg) assoc w/ qtz-fe-crb veining (on margins) and dissem in host rock (flow breccia)
113	114	1	263888	HCORE			A16-13075	<0.005	3-4% PY (f-mg). mostly assocw/ flow breccia and qtz-crb stringers; up to 1-2% assoc w/ vein w/ host rock fragments in it (qtz-crb-clacite +/-hem matrix); vein is slightly vuggy.
114	115	1	263889	HCORE			A16-13075	<0.005	1-2% PY; most of PY is concentrated in or around vein margins. Trc PY replacing hem in hem-calcite stringers/fragments. Trc PY dissem in host rock

115	116	1	263890	HCORE			A16-13075	<0.005	2-3% mg PY dissem in host rock. 1% assoc w/ qtz-crb veining. hem is replacing magnetite in host rock.
116	117	1	263891	HCORE			A16-13075	0.006	locally 2-3% PY assoc w/ pillow selvage (hem has replaced magnetite and now PY is replacing hem). up to 1% PY (f-mg) assoc w/ qtz-crb stringers and trc PY dissem in host rock.
117	118	1	263892	HCORE			A16-13075	<0.005	up to 1% f-mg PY assoc w/ qtz-crb veinlets (some are weakly vuggy).
		0	263893	Blank		Blank	A16-13075	<0.005	
118	119	1	263894	HCORE			A16-13075	<0.005	up to 2% PY locally in qtz-crb+/-chl stringer. up to 1% PY dissem in host rock and in qtz-fe-crb+/-hem stringer.
119	120	1	263895	HCORE			A16-13075	<0.005	trc local PY assoc w/ qtz-crb +hem stringer.
120	121	1	263896	HCORE			A16-13075	<0.005	1% PY locally in fe-crb-ser halo of qtz-crb veinlet. trc PY found in qtz-crb stringers/veinlets (veinlet is vuggy) and dissem in host rock.
121	122	1	263897	HCORE			A16-13075	<0.005	1-3% cg PY assoc w/ pillow selvages or dissem in host rock. trc fg-mg PY assoc w/ qtz-crb stringers
122	123	1	263898	HCORE			A16-13075	<0.005	locally 3-4% PY assoc w/ fe-crb-ser +spec halo around a qtz-crb veinlet (slightly vuggy, pink). trc PY assoc w/ qtz-crb+/-hem stringers
123	124	1	263899	HCORE			A16-13075	0.084	trc PY assoc w/ qtz-crb stringers and hem stringers
		0	263900	STD		CDN_GS_P7J	A16-13075	0.729	
124	125	1	263901	HCORE			A16-13075	0.005	up to 1% PY (mg-cg) locally in qtz-fe-crb (pink) vein.
125	126	1	263902	HCORE			A16-13075	0.045	up to 1% PY (m-cg) mostly assoc w/ qtz-crb +/- hem stringers. some PY grains in host rock. PY is replacing hem in some stringers.
126	127	1	263903	HCORE			A16-13075	<0.005	1% PY (f-mg) mostly assoc w/ qtz-crb veining; trc PY replacing hem in hem stringers.
127	128	1	263904	HCORE			A16-13075	<0.005	1-2% PY mostly concentrated around qtz-crb veinlet (pink) in fe-crb-ser-hem halo. trc PY assoc w/ qtz-fe-crb stringers (pink)
128	129	1	263905	HCORE			A16-13075	<0.005	up to 1% blb PY (fg-very cg) assoc w/ qtz-fe-crb (pink) stringers
129	130	1	263906	HCORE			A16-13075	<0.005	1-2% f-mg PY assoc w/ qtz-crb (pink-white) veinlets/stringers; slightly vuggy; trc PY sct in host rock.
130	131	1	263907	HCORE			A16-13075	<0.005	2% PY (f-mg) mostly assoc w/ qtz-fe-crb veining and fe-crb +/- ser halo. trc PY in host rock

		0	263908	DUP	263907		A16-13075	<0.005	
131	132	1	263909	HCORE			A16-13194	<0.005	1-2% PY assoc w/ qtz-crb veining and chl stringers in flow breccia
132	132.96	0.96	263910	HCORE			A16-13194	<0.005	1-2% PY (f-mg) assoc w. qtz-crb veining and fe-crb-ser halos. trc PY assoc w/ host rock.
132.96	133.97	1.01	263911	HCORE			A16-13194	<0.005	up to 1% (mg) assoc w/ vein breccia @ 133m (along vein margins or in small stringers coming off large breccia vein). Breccia vein has qtz-crb fragments in a calcite +/- hem matrix. trc PY assoc w/ qtz-crb stringers after the breccia vein
133.97	135	1.03	263912	HCORE			A16-13194	<0.005	2-3% (fg) PY assoc w. qtz-crb veining and ser-fe-crb halos. slightly vuggy. trc PY assoc w/ host rock
135	136	1	263913	HCORE			A16-13194	<0.005	1-3% (f-mg) PY assoc w/ qtz-crb veining and breccia vein (qtz-crb fragments w/ dark green matrix (chl)).
136	137	1	263914	HCORE			A16-13194	<0.005	trc PY in low angle breccia vein (qtz-calcite w/ dark green matrix (chl); trc PY assoc w/ qtz-crb (pinky-white) veinlets (some look 'ripped' up or broken).
137	138	1	263915	HCORE			A16-13194	<0.005	up to 1% PY assoc w/ large low angle qtz-crb-calcite vein w/ vein fragments at margins. 1% fg PY assoc w/ qtz-crb (pink-white) veins (vuggy) and halos (ser-fe-crb)
		0	263916	STD		CDN_GS_P4B	A16-13194	0.484	
138	139	1	263917	HCORE			A16-13194	<0.005	2% PY assoc w/ qtz-fe-crb stringer halos.
139	140	1	263918	HCORE			A16-13194	<0.005	up to 1% PY assoc w/ qtz-crb veining; one vuggy extension vein (pink-white) has trc PY. trc PY replacing hem in hem-calcite veinlet.
140	141	1	263919	HCORE			A16-13194	<0.005	up to 1% very coarse grained blebby PY assoc w/ qtz-fe-crb veinlets and halos
141	142	1	263920	HCORE			A16-13194	<0.005	1% cg blebby PY assoc w/ qtz-crb and ffe-crb halos. trc PY sct in host rock. trc PY assoc w/ light pink vuggy vein
142	143	1	263921	HCORE			A16-13194	<0.005	3-5% mg PY, mostly assoc w/ qtz-crb veining and fe-crb-ser altn halos. some veins are vuggy. core looks like a flow breccia (could be from multiple fracture fills giving it that appearance). trc PY replacing hem.
143	144	1	263922	HCORE			A16-13194	0.006	3-5% mg PY mostly concentrated around qtz-crb veins and fe-crb halos (pink and vuggy); trc-1% PY assoc w/ the low angle vuggy vein with host rock fragments in it.
		0	263923	Blank		Blank	A16-13194	<0.005	
144	145	1	263924	HCORE			A16-13194	<0.005	2-3% mg PY. Assoc w/ pillow selvages, qtz-fe-crb stringers and up to 1% PY found in the vuggy low angle vein.

145	146	1	263925	HCORE		A16-13194	<0.005	trc PY assoc w/ qtz-crb-calcite veins (some are vuggy) and fe-crb-calc-ser altn halos
146	147	1	263926	HCORE		A16-13194	0.005	1% mg blebby PY mostly assoc w/ qtz-crb veining/stringers. trc PY in host rock.
147	148	1	263927	HCORE		A16-13194	<0.005	1-2% PY assoc w/ qtz-crb-calcite veins, most of which are vuggy.
148	149	1	263928	HCORE		A16-13194	<0.005	1-2% PY assoc w/ qtz-crb-calcite veining (vuggy and pink); PY also found in fe-crb-ser halos.
149	150	1	263929	HCORE		A16-13194	<0.005	3-4% cg blebby PY mostly assoc w/ pillow selvage. up to 1-2% assoc w/ qtz-crb-calcite veining (no vuggy veins)
150	151	1	263930	HCORE		A16-13194	<0.005	1-2% PY assoc w/ qtz-crb-calcite veins (not vuggy) and fe-rb halos. trc PY assoc w/ chl bands
		0	263931	STD	CDN_GS_P7J	A16-13194	0.647	
151	152	1	263932	HCORE		A16-13194	<0.005	3-5% f-mg PY. Most assoc w/ qtz-crb+/-calcite veins and stringers (some are vuggy) and their fe-crb-ser altn halos.
152	153	1	263933	HCORE		A16-13194	<0.005	1-2% f-mg PY assoc w/ qtz-crb+/-calcite veins/stringers and their fe-crb-ser halos. Some PY assoc w/ pillow selvage.
153	154	1	263934	HCORE		A16-13194	<0.005	1-3% f-mg PY assoc w/ qtz-crb+/-calcite veins (some are vuggy) and their fe-crb+/-ser halos. Trc PY in host rock.
154	155	1	263935	HCORE		A16-13194	<0.005	1% PY assoc w/ qtz-crb+/-calcite (veins of same set are vuggy) and altn halos (fe-crb); trc PY assoc w/ pillow selvages
155	156	1	263936	HCORE		A16-13194	<0.005	1% PY assoc w/ vuggy pink-white qtz-crb-calcite veins.
156	157	1	263937	HCORE		A16-13194	<0.005	1-2% mg PY assoc w/ vuggy qtz-crb-calcite veins.
157	158	1	263938	HCORE		A16-13194	<0.005	locally 1% PY in pink-white vuggy qtz-crb-calcite vein. trc PY throughout rest of sample assoc w/ qtz-crb+/-calcite veining (mostly vuggy). Increased amount of specularite as stringers and in vuggy veins.
158	158.68	0.68	263939	HCORE		A16-13194	0.005	2-3% PY assoc w/ qtz-crb+/-calcite veins (mostly vuggy). trc PY assoc w/ pillow selvages.
		0	263940	Blank	Blank	A16-13194	<0.005	
158.68	159.5	0.82	263941	HCORE		A16-13238	0.022	10% sma-sct PY (f-cg) mostly assoc w/ qtz-crb +/- calcite veining (some are very vuggy but most are silicified). up to 2% PY is assoc w/ pillow selvage at 158.9m. 15% qtz-crb veining mostly silicified. 1 very vuggy vein 1.5-2cm wide at 159m.

159.5	160.52	1.02	263942	HCORE			A16-13238	0.021	7-8% sct-sma PY (f-cg); assoc w/ qtz-crb vein. Fe-crb zone; possible ser/chl halos. silicified; hem in fractures of qtz-crb vein from 159.5-159.8m. PY included in vein, but mostly along margins. 90% qtz-crb+/- calcite veining.
		0	263943	STD		CDN_GS_2P	A16-13238	2.05	
160.52	161.3	0.78	263944	HCORE			A16-13238	0.014	10-11% SMA-sct PY (f-cg); PY replacing vuggy qtz-crb+trc calcite vein @ 160.77m (6cm wide); silicified unit. PY assoc w/ qtz-crb veining and alteration halos (ser). 30% qtz-crb+/-calcite veining
161.3	162	0.7	263945	HCORE			A16-13238	0.012	5-6% sct-SMA PY; assoc w/ qtz-fe-crb veining, included in vein and along margins. veins are vuggy. Py also following small stringers of chl (crosscutting other veins: 3 degree core angle). silicified unit. Fe-crb zone. 30-40% qtz-crb +/- calcite veining
		0	263946	Blank		Blank	A16-13238	0.007	
162	163	1	263947	HCORE			A16-13238	0.009	3-4% f-mg PY assoc w/ vuggy qtz-crb-calcite veins; included in vugs and along margins and in alteration halos (fe-crb); 5-10% qtz-crb-calcite veining, mostly vuggy
163	164	1	263948	HCORE			A16-13238	0.008	2% PY (f-mg) mostly assoc w/ qtz-crb-calcite veining and some assoc w/ pillow selvages. 5-7% qtz-crb-calcite veiningl all vuggy.
164	165	1	263949	HCORE			A16-13238	0.008	2-3% sct PY (f-mg) assoc w/ vuggy qtz-crb-calcite veining/stringers; included in veins and along margins. Trc PY assoc w/ qtz-crb in pillow selvage at end of sample. 5-7% qtz-crb-calcite veining.
165	166	1	263950	HCORE			A16-13238	0.008	1-2% PY all assoc w/ vuggy qtz-crb-calcite veins at beginning of sample (up to 165.5m); PY in vugs and along vein margins. 3-4% veining.
166	167	1	263951	HCORE			A16-13238	0.008	no visible minz
167	168	1	263952	HCORE			A16-13238	0.008	no visible minz
168	169	1	263953	HCORE			A16-13238	0.008	no visible minz
169	170	1	263954	HCORE			A16-13238	0.008	no visible minz
		0	263955	DUP	263954		A16-13238	0.007	
170	171	1	263956	HCORE			A16-13238	0.008	trc PY assoc w/ vuggy qtz-calcite+/-fe-crb veining. included in vein and along margins. 3% qtz-crb veining.
171	172	1	263957	HCORE			A16-13238	0.008	up to 1% PY assoc w/ qtz-calcite+/-fe-crb veins. 2-3% veining. trc PY sct in host rock.
172	173	1	263958	HCORE			A16-13238	0.007	no visible minz
173	173.57	0.57	263959	HCORE			A16-13238	0.007	no visible minz

173.57	174.26	0.69	263960	HCORE		A16-13238	0.007	3-4% m-cg PY assoc w/ large qtz-fe-crb vein and breccia vein with qtz-crb fragments in chl-calcite matrix. Most PY in breccia matrix, rest of PY along large qtz-crb vein margins. 30% veining.
174.26	175	0.74	263961	HCORE		A16-13238	0.008	up to 1% PY assoc w/ qtz-crb stringers (some vuggy) and trc found in host rock; 1-2% veining.
175	176	1	263962	HCORE		A16-13238	0.008	1-2% sct PY assoc w/ qtz-crb+/-calcite veining (PY in vugs and along margins); trc PY also sct in host rock.5-6% veining
		0	263963	STD	CDN_GS_P4B	A16-13238	0.369	
176	177	1	263964	HCORE		A16-13238	0.008	2% f-mg PY; 1% locally assoc w/ qtz-crb+/-calc (pink) vein at beginning of sample in flow breccia. Rest of PY assoc w/ qtz-crb+/-calcite veining (only few slightly vuggy), along margins. trc PY sct in host rock. 3-5% veining
177	178	1	263965	HCORE		A16-13238	0.008	1% PY found in qtz-crb+/-calcite veinlets (some are vuggy); 1-2% veining.
178	179	1	263966	HCORE		A16-13238	0.008	trc PY assoc w/ thin qtz-calcite stringers; 4-5% veining.
179	180	1	263967	HCORE		A16-13238	0.008	no visible minz
180	181	1	263968	HCORE		A16-13238	0.008	trc PY assoc w/ qtz-calcite stringers, along margins and included in vein. 1-2% PY.
181	181.57	0.57	263969	HCORE		A16-13238	0.008	trc PY assoc w/ thin qtz-calcite stringers or sct in host rock. 5% veining.
181.57	182.2	0.63	263970	HCORE		A16-13238	0.008	1-2% PY locally assoc w/ chl dominant pillow selvage (and minor qtz-calcite assoc w/ selvage). 5-7% veining
		0	263971	Blank	Blank	A16-13238	0.008	
182.2	183	0.8	263972	HCORE		A16-13238	0.008	trc PY in host rock.
183	184	1	263973	HCORE		A16-13238	0.008	2% PY mostly assoc w/ pillow selvage and halo area near qtz-crb+/-calcite vein (chl-ser?); trc PY assoc w/ qtz-calcite stringer. In flow breccia. 10% veining - wavy and wispy
184	185	1	263974	HCORE		A16-13238	0.008	2-3% mg PY assoc ser-chl halo area of qtz-crb+/-calcite vein within flow breccia area. trc PY sct in host rock. 2-3% veining
185	186	1	263975	HCORE		A16-13238	0.008	locally 1% PY assoc w/ pink-white qtz-crb+/-calcite veinlet. trc PY sct in host rock. 2-3% veining
186	187	1	263976	HCORE		A16-13238	0.01	3-5% mg-cg sct PY assoc w/ flow breccia and qtz-calcite+/-crb and chl stringers. 5% veining
187	188	1	263977	HCORE		A16-13238	0.009	Trc PY sct in host rock; 5-10% wispy-wavy qtz-calcite veining
188	189	1	263978	HCORE		A16-13238	0.009	very trc PY assoc w/ qtz-crb-epd stringers. 5% qtz-calcite and qtz-crb-epd stringers.

		0	263979	STD		CDN_GS_P7J	A16-13238	0.7	
189	190	1	263980	HCORE			A16-13238	0.009	1% PY assoc w/ qtz-crb+/-calcite veining (some vuggy); trc PY assoc w/ pillow selvage. 4% veining.
190	191	1	263981	HCORE			A16-13238	0.008	trc PY assoc epd amygdule. 1-2% vuggy qtz-crb-calcite veining
191	191.89	0.89	263982	HCORE			A16-13238	0.009	up to 1%PY assoc w/ pillow selvage. trc PY in qtz-crb+/-calcite stringer (thin and wavy)
191.89	192.5	0.61	263983	HCORE			A16-13238	0.01	1-2% PY assoc w/ qtz-crb + grey calcite vein w/ fe-crb& ser halo. PY included in vein and in halo. trc PY in fe-crb-qtz amygdules.
192.5	193	0.5	263984	HCORE			A16-13238	0.009	very trc PY assoc w/ qtz-crb-epd stringer. Trc PY assoc w/ qtz-crb+/-calcite stringer (vuggy; fractured)
193	194	1	263985	HCORE			A16-13823	<0.005	trc PY assoc w/ qtz-crb+/-calcite and qtz-crb-epd stringers (vuggy); 2-3% veining.
194	195	1	263986	HCORE			A16-13823	<0.005	trc PY in qtz-crb+/-calcite stringers in pillowed basalt. 1-2% veining
		0	263987	DUP	263986		A16-13823	<0.005	
195	196	1	263988	HCORE			A16-13823	<0.005	1-1.5% mg cubic PY assoc w/ pillow selvages and thin qtz-crb-calcite extension veins. 1% veining
196	197	1	263989	HCORE			A16-13823	<0.005	1% local PY in vuggy qtz-crb-calcite (pink) extension vein (thin); trc PY assoc w/ thin qtz-crb-calcite stringers. 2-3% veining in pillowed basalt
197	198	1	263990	HCORE			A16-13823	<0.005	1% PY mostly assoc w/ qtz-crb-calcite veining (vuggy) and rest of PY found in calcite filled amygdules or in thin stringers. 2-3% veining
198	199	1	263991	HCORE			A16-13823	<0.005	2% PY assoc w/ qtz-crb-calcite veining (vuggy extension veins). 2-4% veining
199	200	1	263992	HCORE			A16-13823	<0.005	up to 1% PY assoc w/ qtz-crb-calcite extension veins (vuggy) and trc PY assoc w/ calcite filled amygdules
200	201	1	263993	HCORE			A16-13823	<0.005	trc PY assoc w/ qtz-crb-calcite stringers.
201	202	1	263994	HCORE			A16-13823	<0.005	trc PY assoc w/ thin qtz-crb-calcite stringers and breccia vein in pillow selvage
		0	263995	STD		CDN_GS_P4B	A16-13823	0.429	
202	203	1	263996	HCORE			A16-13823	<0.005	1-2% PY assoc w/ breccia vein in pillow selvage, and qtz-crb-calcite veins.
203	204	1	263997	HCORE			A16-13823	<0.005	trc PY assoc w/ thin stringers of qtz-crb-calcite+/-epd; vuggy
204	205	1	263998	HCORE			A16-13823	<0.005	trc PY assoc w/ vuggy qtz-crb-calcite veining

205	206	1	263999	HCORE		A16-13823	<0.005	up to 1% PY mostly assoc w/ pillow selvage. Rest of PY found in thin stringers of qtz-crb-calcite
206	207	1	264000	HCORE		A16-13823	0.005	1% PY assoc w/ vuggy qtz-crb-calcite extension veins and hem+calcite alteration halo
207	207.86	0.86	264001	HCORE		A16-13823	0.005	trc PY assoc w/ qtz-crb+/-calcite veinlets.
		0	264002	Blank	Blank	A16-13823	<0.005	
207.86	208.8	0.94	264003	HCORE		A16-13823	<0.005	1-2% PY mostly assoc w/ vuggy qtz-crb-calcite veinlets. weakly sheared; chl+hem altn halo.
208.8	209.76	0.96	264004	HCORE		A16-13823	<0.005	2% PY assoc w/ qtz-crb-calcite vuggy veins; trc PY assoc w/ hem stained qtz-crb veinlet. weakly sheared massive basalt
209.76	210.5	0.74	264005	HCORE		A16-13823	0.062	2-3% f-mg PY assoc w/ large qtz-crb-calcite vein (slightly vuggy); hem fills fractures within large vein. trc PY assoc w/ qtz-crb-calcite veinlets/stringers. Weakly sheared massive basalt.
210.5	211.5	1	264006	HCORE		A16-13823	0.005	up to 1% PY assoc w/ qtz-crb-calcite stringers/veinlets (some vuggy), in weakly sheared massive basalt.
211.5	212.5	1	264007	HCORE		A16-13823	<0.005	trc PY assoc w/ vuggy qtz-crb-calcite veinlets.
212.5	213.25	0.75	264008	HCORE		A16-13823	0.006	trc blb PY assoc w/ vuggy qtz-crb-calcite vein in weakly sheared massive basalt.
213.25	214.15	0.9	264009	HCORE		A16-13823	0.016	2% PY assoc w/ vuggy qtz-crb-calcite veins in weakly sheared basalt.
		0	264010	STD	CDN_GS_P7J	A16-13823	0.825	
214.15	215	0.85	264011	HCORE		A16-13823	0.011	1% PY assoc w/ qtz-crb-calcite veinlets (vuggy, white-pink); 2-3% veining in ultramafic basalt.
215	216	1	264012	HCORE		A16-13823	<0.005	trc PY assoc w/ vuggy qtz-crb-calcite veinlets (pink-white). 5-7% calcite+/-qtz-crb wispy veinlets in ultramafic basalt. 5-20% ilmenite/leucoxsene phenos (white and rectangular (subhedral).
216	216.9	0.9	264013	HCORE		A16-13823	<0.005	2-3% f-mg PY assoc w/ qtz-crb-calcite veining (white-pink and vuggy) and in host rock (near veining). 4-6% qtz-crb-calcite and calcite+/-qtz-crb veinlets (wispy) in ultramafic basalt. 10-15% ilmenite/leucoxsene phenos (subhedral, medium grained; rectangular).
216.9	217.5	0.6	264014	HCORE		A17-00015	0.034	3-5% f-mg PY assoc w/ qtz-crb-calcite veining (weakly vuggy) and dissem in host rock. Altered mafic volcanic; mod-strong hematite overprinting magnetite (med-dark purple colour and mottled). 7-10% qtz-crb+/-calcite veining.

217.5	218.15	0.65	264015	HCORE			A17-00015	0.276	7-10% sct-SMA PY (f-mg) in highly altered mafic volcanic (hem overprinting magnetite); weakly brecciated. PY ranges from weakly semi-massive to dissem, mostly concentrated in brecciated section (217.5-217.8m. 1-2% veining.
		0	264016	STD		CDN_GS_2P	A17-00015	2.07	
218.15	219	0.85	264017	HCORE			A17-00015	0.024	3-4% f-mg PY assoc w/ qtz-crb+/-calcite veins (weakly vuggy); weakly-mod sheared mafic volcanic; 5-10% qtz-crb-calcite veining.
219	220	1	264018	HCORE			A17-00015	0.078	5-7% f-mg PY (mg PY is cubic); mostly assoc w/ qtz-crb+/-calcite veining. Large silicified qtz-crb+/-calc vein is white-pinky-smokey. large vein is 30cm wide. 35% qtz-crb+/-calcite veining in sheared basalt. large vein is at contact between sheared basalt and gabbro unit. up to 1% blebby argentite present in large 30cm silicified vein.
220	221	1	264019	HCORE			A17-00015	0.008	up to 1% fg PY mostly assoc w/ qtz-crb+/-calcite veining; trc stringer PY present in very thin fracture that offset a qtz-crb-epd veinlet. Most PY concentrated near beginnin of gabbro unit (near contact w/ large vein). 2-4% veining in gabbro.
221	222	1	264020	HCORE			A17-00015	0.005	up to 1% fg PY assoc w/ thin qtz-crb+/-calcite veinlets and fe-crb altn halos.2-3% thin veinlets in gabbro unit.
222	223	1	264021	HCORE			A17-00015	0.005	no visible minz in gabbro.
223	223.48	0.48	264022	HCORE			A17-00015	<0.005	no visible minz in gabbro.
223.48	224	0.52	264023	HCORE			A17-00015	0.006	up to 1% PY assoc w/ qtz-crb+/-calcite vein (vuggy, pink) at contact between gabbro and pillowed basalt.
		0	264024	DUP	264023		A17-00015	0.005	
224	225	1	264025	HCORE			A17-00015	0.008	no vis minz
225	226	1	264026	HCORE			A17-00015	0.005	trc PY SMA assoc w/ thin qtz-crb-calcite stringer/stockwork
226	227	1	264027	HCORE			A17-00015	0.006	trc PY assoc w/ qtz-calcite stockwork stringers
227	228	1	264028	HCORE			A17-00015	0.005	trc PY assoc w/ qtz-calcite stockwork stringers
228	229	1	264029	HCORE			A17-00015	0.006	3-4% fg PY assoc w/ qtz-crb+/-calcite veining; some are vuggy. most are part of similar vein set (near top of sample @ 228.1m)
229	230	1	264030	HCORE			A17-00015	<0.005	trc PY mostly assoc w/ pillow selvage.
		0	264031	STD		CDN_GS_P4B	A17-00015	0.543	

230	231	1	264032	HCORE			A17-00015	0.007	up to 1% PY mostly assoc w/ pillow selvages (and qtz-crb-calcite within selvages).
231	232	1	264033	HCORE			A17-00015	0.008	1% f-mg PY mostly assoc w/ qtz-crb+/-calc veining. Trc PY assoc w/ pillow selvages.
232	233	1	264034	HCORE			A17-00015	<0.005	trc PY assoc w/ pillow selvages
233	234	1	264035	HCORE			A17-00015	<0.005	no vis minz
234	235	1	264036	HCORE			A17-00015	0.008	trc PY in qtz-crb filled amygdules.
235	236	1	264037	HCORE			A17-00015	<0.005	1% PY assoc w/ qtz-crb veining and thin stringers.
		0	264038	Blank		Blank	A17-00015	<0.005	
236	237	1	264039	HCORE			A17-00015	0.01	2% PY assoc w/ vuggy, pink qtz-crb-calcite extension veins of similar angles (42 and 30 respectfully). trc PY assoc w/ thin calcite-epd stringers.
237	238	1	264040	HCORE			A17-00015	<0.005	no vis minz
238	239	1	264041	HCORE			A17-00015	<0.005	trc PY assoc w/ qtz-crb stringers and trc PY in host rock.
239	240	1	264042	HCORE			A17-00015	<0.005	Trc PY assoc w/ qtz-crb-epd stringers. Trc PY assoc w/ calcite filled amygdules.
240	241	1	264043	HCORE			A17-00015	0.006	trc PY assoc w/ pillow selvages; trc PY assoc w/ thin qtz-crb-calc stringers
241	242	1	264044	HCORE			A17-00015	0.008	up to 1% PY (locally) in qtz-crb-calcite veinlet.
		0	264045	STD		CDN_GS_P7J	A17-00015	0.716	
242	243	1	264046	HCORE			A17-00015	0.63	trc PY in qtz-crb stringers. trc PY sct in host rock.
243	244	1	264047	HCORE			A17-00015	0.007	1% PY mostly assoc w/ qtz-crb-calcite veinlets. trc PY sct in host rock. PY is f-mg (mg PY is cubic)
244	245	1	264048	HCORE			A17-00015	0.007	trc PY assoc w/ wispy qtz-crb-calc stringers. trc PY in pillow selvages.
245	246	1	264049	HCORE			A17-00015	0.005	trc PY mostly assoc w/ pillow selvages. trc PY sct in host rock.
246	247	1	264050	HCORE			A17-00015	0.005	trc PY assoc w/ calcite-hem 'veins'.
247	248	1	264051	HCORE			A17-00015	<0.005	up to 1% PY mostly scattered in hostrock (trc assoc w/ qtz-crb stringers)
248	249	1	264052	HCORE			A17-00015	<0.005	trc PY mostly scattered in host rock. trc PY assoc w/ qtz-crb-calcite veinlets/stringers.
249	250	1	264053	HCORE			A17-00015	<0.005	trc PY assoc w/ qtz-crb-calc veinlets and scattered in host rock.
		0	264054	DUP	264053		A17-00015	<0.005	
250	251	1	264055	HCORE			A17-00015	<0.005	trc PY scattered in host rock.
251	252	1	264056	HCORE			A17-00015	<0.005	trc blebby PY in pillow selvages.

252	253	1	264057	HCORE			A17-00015	<0.005	1% PY in pillow selvages; trc PY in qtz-crb-calc veinlets.
253	254	1	264058	HCORE			A17-00015	0.005	1-2% PY in qtz-crb-calc veinlets (and in fe-crb altn halos). trc PY in pillow selvages.
254	255	1	264059	HCORE			A17-00015	<0.005	1% blb PY in area w/ frequent qtz-crb-epd stringers (stockwork).
255	256	1	264060	HCORE			A17-00015	<0.005	trc PY in calcite dominant stringer. few specks of PY scattered in host rock.
256	257	1	264061	HCORE			A17-00015	0.009	1% PY assoc w/ qtz-crb-calcite veinlets (slightly vuggy) w/ minor hem fragments at margin.
		0	264062	STD		CDN_GS_P4B	A17-00015	0.449	
257	258	1	264063	HCORE			A17-00015	0.028	2% local PY in qtz-crb vein w/ fe-crb/hem altn halo
258	259	1	264064	HCORE			A17-00015	0.005	1% PY assoc w/ qtz-crb-calcite extension veins and fe-crb
259	260	1	264065	HCORE			A17-00015	0.005	no visible minz
260	260.5	0.5	264066	HCORE			A17-00015	<0.005	trc PY stringers scattered in host rock.
260.5	261.4	0.9	264067	HCORE			A17-00015	0.005	1% SMA PY mostly assoc w/ thin fracture fills.
261.4	262	0.6	264068	HCORE			A17-00015	<0.005	trc PY dissem in host rock
262	263	1	264069	HCORE			A17-00015	<0.005	trc PY scattered in host rock
		0	264070	Blank		Blank	A17-00015	<0.005	
263	264	1	264071	HCORE			A17-00015	<0.005	trc PY scattered in host rock
264	265	1	264072	HCORE			A17-00015	0.008	trc PY assoc w/ qtz-crb-calc stringers.
265	266	1	264073	HCORE			A17-00015	0.005	up to 1% PY (mg) in qtz-crb-calc extension vein.
266	267.03	1.03	264074	HCORE			A17-00015	<0.005	3-4% PY (f-mg) assoc w/ qtz-crb-calc veining (some slightly vuggy; pink and white in colour).
267.03	268	0.97	264075	HCORE			A17-00015	<0.005	1-2% PY (f-mg) assoc w/ qtz-crb-calc veining and fe-crb halos, belonging to similar vein set.
268	269	1	264076	HCORE			A17-00015	0.005	1-2% PY (f-mg) assoc w/ qtz-crb-calc veining and fe-crb altn halos.
269	270	1	264077	HCORE			A17-00015	0.011	1% PY assoc w/ qtz-crb veining (mostly concentrated around margins); trc PY in host rock
270	271	1	264078	HCORE			A17-00015	0.005	up to 1% PY assoc w/ qtz-crb+/-calcite veining and trc PY in host rock
		0	264079	STD		CDN_GS_P7J	A17-00015	0.746	
271	272	1	264080	HCORE			A17-00015	0.008	5-7% mg PY assoc w/ vuggy, qtz-crb-calc veining and fe-crb altn halos. trc PY sct in host rock.
272	273	1	264081	HCORE			A17-00015	0.005	2-3% PY assoc w/ qtz-crb-calc veining; 1% blebby PY scattered in host rock

273	273.7	0.7	264082	HCORE			A17-00015	0.007	trc PY in host rock and near qtz-fe-crb veining
273.7	274.3	0.6	264083	HCORE			A17-00015	0.012	trc blebby PY near thin stringer.
274.3	275	0.7	264084	HCORE			A17-00015	0.011	trc blebby PY scattered in host rock
275	276	1	264085	HCORE			A17-00015	<0.005	trc blebby PY scattered in host rock
		0	264086	DUP	264085		A17-00015	<0.005	
276	277	1	264087	HCORE			A17-00052	0.005	trc blebby PY scattered in host rock
277	278	1	264088	HCORE			A17-00052	0.006	up to 1% PY; mostly scattered in host rock, but some assoc w/ pink qtz-crb veinlets.
278	279.02	1.02	264089	HCORE			A17-00052	0.005	trc PY in host rock
279.02	280	0.98	264090	HCORE			A17-00052	<0.005	no vis minz
280	281	1	264091	HCORE			A17-00052	<0.005	no vis minz
281	282	1	264092	HCORE			A17-00052	0.008	no vis minz
		0	264093	STD		CDN_GS_P4B	A17-00052	0.386	
282	283	1	264094	HCORE			A17-00052	0.008	trc PY mostly assoc w/ qtz-crb+/-calc stringers and rest scattered in host rock.
283	284	1	264095	HCORE			A17-00052	0.005	up to 1% blebby PY scattered in host rock
284	285	1	264096	HCORE			A17-00052	0.008	2% PY (f-mg) assoc w/ vuggy qtz-crb-calc vein. 1% PY dissem in groundmass
285	286	1	264097	HCORE			A17-00052	0.037	1% PY assoc w/ qtz-crb/calcite vein; trc PY dissem in groundmass
286	287	1	264098	HCORE			A17-00052	<0.005	up to 1% PY mostly assoc w/ qtz-crb stringers.
287	288	1	264099	HCORE			A17-00052	<0.005	1% blebby PY dissem in groundmass; trc PY assoc w/ veining.
		0	264100	Blank		Blank	A17-00052	<0.005	
288	289	1	264101	HCORE			A17-00052	0.013	trc PY assoc w/ qtz-crb/calcite stringers
289	290	1	264102	HCORE			A17-00052	0.006	trc PY assoc w/ qtz-crb stringers and groundmass
290	291	1	264103	HCORE			A17-00052	0.005	trc PY in groundmass
291	292	1	264104	HCORE			A17-00052	0.006	trc PY in groundmass
292	292.6	0.6	264105	HCORE			A17-00052	0.006	trc PY assoc w/ qtz-crb veinlets
292.6	293.25	0.65	264106	HCORE			A17-00052	0.009	2% PY assoc w/ qtz-crb-calcite vein (low angle) and trc PY scattered in groundmass
293.25	293.6	0.35	264107	HCORE			A17-00052	0.005	1% blebby PY scattered in host rock
293.6	294.41	0.81	264108	HCORE			A17-00052	0.006	2% PY assoc w/ area near large silicified qtz-crb+/-calc vein (at contact)
294.41	295	0.59	264109	HCORE			A17-00052	0.029	5% PY (f-mg) assoc w/ large silicified qtz-crb+/-calc vein (vuggy); 1-2% PY assoc w/ qtz-crb stringers and groundmass; in strong mag altered mafic volc.

295	295.88	0.88	264110	HCORE			A17-00052	0.019	5-6% PY (f-mg) assoc w/ large silcified qtz-crb+/-calcite vein (vuggy). 2% PY assoc w/ qtz-crb stringers and groundmass. in strong mag altered mafic volc.
		0	264111	STD		CDN_GS_2P	A17-00052	1.86	
295.88	296.72	0.84	264112	HCORE			A17-00052	0.024	5-6% PY; mostly assoc w/ vuggy qtz-crb-calcite veins and also dissem in groundmass; PY is f-mg.
		0	264113	Blank		Blank	A17-00052	<0.005	
296.72	297.25	0.53	264114	HCORE			A17-00052	0.008	3% PY assoc w/ qtz-crb-calc vein and fe-crb altn halo
297.25	297.92	0.67	264115	HCORE			A17-00052	0.006	trc PY in groundmass
297.92	298.27	0.35	264116	HCORE			A17-00052	<0.005	trc PY in groundmass
298.27	299	0.73	264117	HCORE			A17-00052	<0.005	trc blb PY in groundmass
299	300	1	264118	HCORE			A17-00052	<0.005	trc PY in groundmass
300	301	1	264119	HCORE			A17-00052	0.006	2-3% f-mg PY mostly assoc w/ qtz-crb-calc (vuggy) vein and fe-crb alt'n halos. trc PY in groundmass
301	302	1	264120	HCORE			A17-00052	0.026	1% PY in and around qtz-crb veins; trc PY in host rock
302	303	1	264121	HCORE			A17-00052	0.005	trc PY assoc w/ qtz-crb-calc veining (some vuggy) and scattered in host rock.
303	303.6	0.6	264122	HCORE			A17-00052	<0.005	trc PY assoc w/ wispy predominantly calcite+qtz-crb veinlets and in host rock
		0	264123	STD		CDN_GS_P7J	A17-00052	0.786	
303.6	304.68	1.08	264124	HCORE			A17-00052	0.084	7-10% PY (f-mg) assoc w/ large silicified qtz-crb-calcite vein (vuggy)
304.68	305.5	0.82	264125	HCORE			A17-00052	0.005	1-2% PY assoc w/ qtz-crb-calc veins and scattered in host rock
305.5	306	0.5	264126	HCORE			A17-00052	0.01	1% blebby PY dissem in host rock.
306	307	1	264127	HCORE			A17-00052	<0.005	trc PY mostly assoc w/ qtz-crb-calcite veining (vuggy); also sct in host rock
307	308	1	264128	HCORE			A17-00052	0.006	trc PY sct in host rock
308	308.96	0.96	264129	HCORE			A17-00052	0.008	trc PY mostly assoc w/ qtz-crb-calcite (weak vuggyness) veins
308.96	309.98	1.02	264130	HCORE			A17-00052	0.012	3-5% mg PY mostly assoc w/ vuggy qtz-crb-calcite veining.
		0	264131	DUP	264130		A17-00052	0.013	
309.98	311	1.02	264132	HCORE			A17-00052	0.008	trc pY sct in host rock
311	312	1	264133	HCORE			A17-00052	0.007	up to 1% locally in pink-white qtz-crb-calcite vein
312	313	1	264134	HCORE			A17-00052	0.005	very trc PY sct in host rock
313	314	1	264135	HCORE			A17-00052	0.007	trc blebby PY scattered in mg host rock
314	315	1	264136	HCORE			A17-00052	0.011	up to 1% blebby PY scattered in host rock

315	316	1	264137	HCORE			A17-00052	0.006	trc PY scattered in host rock
		0	264138	STD		CDN_GS_P4B	A17-00052	0.437	
316	317	1	264139	HCORE			A17-00052	0.006	up to 1% PY mostly assoc w/ qtz-crb-calcite veining (weakly vuggy)
317	318	1	264140	HCORE			A17-00052	0.01	locally 1-2% PY assoc w/ qtz-crb-calcite veining and near vein (white-pink, vuggy)
318	318.74	0.74	264141	HCORE			A17-00052	0.006	1-2% PY assoc w/ qtz-crb-calcite veining and trc blebby PY in host rock. vuggy pink-white vein
318.74	319.75	1.01	264142	HCORE			A17-00052	0.006	2% f-mg PY assoc w/ qtz-crb-calcite veining.
319.75	320.5	0.75	264143	HCORE			A17-00052	0.019	3% f-mg PY assoc w/ qtz-crb-calc veining and slight altn halo; vein is white-pink and slightly vuggy
320.5	321	0.5	264144	HCORE			A17-00052	0.005	up to 1% PY sct in host rock
321	322	1	264145	HCORE			A17-00052	0.01	1-2% PY mostly assoc w/ qtz-crb+/-calc veins.
		0	264146	Blank		Blank	A17-00052	<0.005	
322	323	1	264147	HCORE			A17-00052	<0.005	trc PY sct in host rock
323	323.8	0.8	264148	HCORE			A17-00052	<0.005	trc PY sct in host rock and assoc w/ qtz-crb
323.8	324.35	0.55	264149	HCORE			A17-00052	<0.005	trc PY sct in host rock
324.35	325	0.65	264150	HCORE			A17-00052	<0.005	trc PY sct in host rock and assoc w/ qtz-crb blebs/amygdules?
325	326	1	264151	HCORE			A17-00052	0.005	1% PY dissem in host rock
326	327	1	264152	HCORE			A17-00052	0.07	2-3% mg PY blebs; mostly assoc w/ qtz-crb-calcite (grey calcite) veining.
		0	264153	STD		CDN_GS_P7J	A17-00052	0.629	
327	328	1	264154	HCORE			A17-00052	0.005	3% PY predominantly assoc w/ qtz-crb-calcite veining (some vuggy). Also dissem through host rock
328	329	1	264155	HCORE			A17-00052	0.009	1% PY assoc w/ qtz-crb-calcite vein (vuggy) and its fe-crb-calcite alteration halo. trc PY dissem in host rock
329	330	1	264156	HCORE			A17-00052	0.01	1-2% PY assoc w/ qtz-crb-calcite veining (vuggy) and trc-1% PY dissem in host rock
330	331	1	264157	HCORE			A17-00052	0.008	up to 1% PY assoc w/ slightly vuggy qtz-crb-calc veining and dissem in host rock
331	332	1	264158	HCORE			A17-00052	0.005	1% PY assoc w/ vuggy qtz-crb-calcite veining; only trc PY assoc w/ low angle vuggy qtz-crb-calc vein
332	333	1	264159	HCORE			A17-00052	<0.005	1% PY mostly assoc w/ vuggy qtz-crb-calc veining
333	334	1	264160	HCORE			A17-00052	0.008	1% PY mostly assoc w/ vuggy qtz-crb-calc veining
		0	264161	DUP	264160		A17-00052	<0.005	

334	335	1	264162	HCORE		A17-00052	<0.005	trc PY sct in host rock
335	336	1	264163	HCORE		A17-00052	0.005	trc PY sct in host rock
336	337	1	264164	HCORE		A17-00052	0.011	1% blebby mg PY assoc w/ qtz-crb-calcite veinlet.
337	338	1	264165	HCORE		A17-00052	<0.005	trc PY assoc w/ qtz-crb-calc stringers and scattered in host rock
338	339	1	264166	HCORE		A17-00052	0.016	2-3% f-mg PY assoc w/ vuggy qtz-crb-calcite vein.
339	340	1	264167	HCORE		A17-00052	0.005	no vis minz
340	341	1	264168	HCORE		A17-00052	0.039	up to 1% PY mostly assoc w/ qtz-crb-calc veining (some slightly vuggy) and trc PY scattered in groundmass
		0	264169	STD	CDN_GS_P4B	A17-00052	0.38	
341	342	1	264170	HCORE		A17-00052	0.02	2-3% f-mg PY mostly assoc w/ vuggy qtz-crb-calc veins; trc PY scattered in host rock
342	343	1	264171	HCORE		A17-00052	0.034	1-2% fg PY assoc w/ qtz-crb-calcite veining (some vuggy)
343	344	1	264172	HCORE		A17-00052	0.006	1% fg PY assoc w/ qtz-crb veining; vuggy
344	345	1	264173	HCORE		A17-00052	0.012	2-3% f-mg PY mostly assoc w/ low angle vuggy qtz-crb-calc vein; trc PY scattered in host rock
345	346	1	264174	HCORE		A17-00052	0.006	trc PY scattered in host rock and assoc w/ qtz-crb+/-calcite stringers.
346	347	1	264175	HCORE		A17-00052	0.005	1-2% f-mg PY assoc w/ vuggy qtz-crb-calc veining.
		0	264176	Blank	Blank	A17-00052	<0.005	
347	348	1	264177	HCORE		A17-00052	0.005	1-2% f-mg PY assoc w/ vuggy qtz-crb-calc veining; trc PY sct in host rock
348	349	1	264178	HCORE		A17-00052	0.005	up to 1% PY assoc w/ vuggy qtz-crb-calc veining; trc PY scattered in host rock.
349	350	1	264179	HCORE		A17-00052	0.005	trc PY assoc w/ slightly vuggy qtz-crb-calc veining; trc PY in host
350	351	1	264180	HCORE		A17-00052	0.005	trc fg PY assoc w/ qtz-crb-calc stringers
351	352	1	264181	HCORE		A17-00052	0.008	trc PY assoc w/ qtz-crb+/-calc veins.
352	353	1	264182	HCORE		A17-00052	0.005	trc PY scattered in host rock
353	354	1	264183	HCORE		A17-00052	0.006	up to 1% PY assoc w/ qtz-crb+/-calc veining
		0	264184	STD	CDN_GS_P7J	A17-00052	0.682	
354	355	1	264185	HCORE		A17-00052	0.006	up to 1% PY assoc w/ qtz-crb-calc+/-hem veinlets/stringers
355	356	1	264186	HCORE		A17-00052	0.007	trc sct PY assoc w/ qtz-crb+/-epd stringers
356	357	1	264187	HCORE		A17-00052	0.009	trc fg PY assoc w/ qtz-crb veinlets w/ epd stringer/halo
357	358	1	264188	HCORE		A17-00052	0.006	trc PY scattered in groundmass

358	359	1	264189	HCORE			A17-00052	0.012	1-2% fg PY assoc w/ qtz-crb-calc veining
359	360	1	264190	HCORE			A17-00052	0.005	trc PY scattered in host rock
		0	264191	DUP	264190		A17-00052	<0.005	
360	361	1	264192	HCORE			A17-00052	<0.005	trc f-mg PY assoc w/ qtz-crb veining
361	362	1	264193	HCORE			A17-00052	<0.005	no vis minz
362	363	1	264194	HCORE			A17-00052	<0.005	trc PY (fg) assoc w/ qtz-crb veining
363	364	1	264195	HCORE			A17-00052	<0.005	no vis minz
364	364.51	0.51	264196	HCORE			A17-00052	<0.005	up to 1% fg PY localized in vuggy qtz-crb-calcite vein
364.51	365.51	1	264197	HCORE			A17-00052	<0.005	up to 1% fg PY assoc w/ qtz-crb-calc veining; trc mg blebby PY scattered in host rock
365.51	366.19	0.68	264198	HCORE			A17-00052	0.008	4% PY assoc w/ large qtz-crb-calcite-hem/spc vein (f-mg PY; weakly vuggy); trc PY assoc w/ qtz-crb veinlets.
366.19	367	0.81	264199	HCORE			A17-00052	<0.005	trc blebby PY mostly assoc w/ qtz-crb-calcite.
		0	264200	STD		CDN_GS_P4B	A17-00052	0.379	
367	368	1	264201	HCORE			A17-00052	0.006	vuggy low angle veinlets.
368	369	1	264202	HCORE			A17-00052	<0.005	vuggy low angle veinlets.
387	388	1	264203	HCORE			A17-00052	<0.005	3cm vuggy qtz/cal veinlets.
388	389	1	264204	HCORE			A17-00052	<0.005	9cm qtz/cal veinlets. Weakly silicified. 1% haloing sct PY.
389	390	1	264205	HCORE			A17-00097	0.011	3cm vuggy qtz/cal veinlets. Trace sct PY on vein margins.
390	391	1	264206	HCORE			A17-00097	0.008	2cm white qtz/cal veinlets. Rare PY.
391	392	1	264207	HCORE			A17-00097	0.006	4cm white qtz/cal veinlets.
		0	264208	Blank		Blank	A17-00097	0.007	
392	393	1	264209	HCORE			A17-00097	0.01	11cm white qtz/cal veinlets.
393	394	1	264210	HCORE			A17-00097	0.005	5cm qtz/cal/ank veinlets.
394	395	1	264211	HCORE			A17-00097	0.005	2cm qtz/cal/ank veinlets.
395	396	1	264212	HCORE			A17-00097	0.006	6cm qtz/cal/ank veinlets.
396	397	1	264213	HCORE			A17-00097	0.01	Weakly silicified. 3cm qtz/cal/ank veinlets. Trace sct PY haloing veinlets.
397	398	1	264214	HCORE			A17-00097	0.005	Weakly silicified. 2cm qtz/cal/ank veinlets. Rare PY.
398	399	1	264215	HCORE			A17-00097	0.023	Moderately silicified. 3cm of qtz/cal/ank veinlets with 1% haloing PY.
399	400	1	264216	HCORE			A17-00097	0.005	Moderately silicified. 5cm qtz/cal/ank veinlets. Rare PY.
		0	264217	STD		CDN_GS_P7J	A17-00097	0.647	

400	401	1	264218	HCORE			A17-00097	0.009	Moderately silicified. 3cm of qtz/cal/ank veinlets. Trace PY around vein margins..
401	402	1	264219	HCORE			A17-00097	<0.005	Moderately silicified. 3cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
402	403.1	1.1	264220	HCORE			A17-00097	0.008	Moderately silicified. 6cm of qtz/cal/ank veinlets. Trace sct PY on vein margins.
403.1	404.2	1.1	264221	HCORE			A17-00097	0.008	Moderately silicified. 10cm qtz/cal/ank veinlets. Rare PY.
404.2	405.3	1.1	264222	HCORE			A17-00097	0.01	Weakly silicified. 12cm qtz/cal/ank veinlets. Rare PY.
405.3	406	0.7	264223	HCORE			A17-00097	0.018	4cm qtz/cal veinlets. Trace sct PY haloing veinlets.
		0	264224	DUP	264223		A17-00097	0.014	
406	407	1	264225	HCORE			A17-00097	0.012	5cm qtz/cal veinlets. Trace sct PY haloing veinlets.
407	408	1	264226	HCORE			A17-00097	0.007	8cm qtz/cal veinlets. Rare sct PY.
408	409	1	264227	HCORE			A17-00097	0.009	5cm qtz/cal veinlets. Rare sct PY.
409	410	1	264228	HCORE			A17-00097	0.008	5cm qtz/cal veinlets. Rare sct PY.
410	411	1	264229	HCORE			A17-00097	0.009	7cm qtz/cal veinlets. Rare sct PY.
411	412	1	264230	HCORE			A17-00097	0.011	5cm qtz/cal veinlets. Rare sct PY.
		0	264231	STD		CDN_GS_P4B	A17-00097	0.481	
412	413	1	264232	HCORE			A17-00097	0.008	5cm qtz/cal veinlets. Rare sct PY.
413	414	1	264233	HCORE			A17-00097	0.008	8cm qtz/cal veinlets. Weakly silicified. Rare sct PY.
414	414.8	0.8	264234	HCORE			A17-00097	0.008	3cm qtz/cal veinlets. Rare sct PY.
414.8	415.38	0.58	264235	HCORE			A17-00097	0.016	7cm qtz/cal veinlets. Rare sct PY.
415.38	416	0.62	264236	HCORE			A17-00097	0.007	2cm qtz/cal veinlets. Rare sct PY.
429	430	1	264237	HCORE			A17-00097	0.007	3cm qtz/cal veinlets.
430	431	1	264238	HCORE			A17-00097	0.008	1cm vuggy qtz/cal veinlet with 1% sct PY in veinlet and haloing.
431	432	1	264239	HCORE			A17-00097	0.008	4cm qtz/cal veinlets.
		0	264240	Blank		Blank	A17-00097	0.007	
452	453	1	264241	HCORE			A17-00097	0.008	2-3% blebby PY scattered in host rock; up to 1% fg PY assoc w/ qtz-crb-calcite veining.
453	454	1	264242	HCORE			A17-00097	0.009	2% blebby PY scattered in host rock and assoc w/ pillow selvage.
463	464	1	264243	HCORE			A17-00097	0.008	trc-1% PY mostly scattered in host rock.
464	465	1	264244	HCORE			A17-00097	0.008	trc PY assoc w/ qtz-crb-calc veining (+/-hem)
465	466	1	264245	HCORE			A17-00097	0.01	3-4% fg-mg PY mostly assoc w/ qtz-crb-calc veining (+/-hem) in weakly sheared mafic volc

466	467	1	264246	HCORE			A17-00097	0.011	1% PY mostly assoc w/ hem stringers in sheared mafic volc. 1% PY assoc w/ qtz-crb-calc veining
		0	264247	STD		CDN_GS_P7J	A17-00097	0.706	
467	468	1	264248	HCORE			A17-00097	0.01	2% blebby mg PY scattered in sheared mafic volc; 1% m-cg blebby PY assoc w/ qt-crb+/-calcite veining
468	469	1	264249	HCORE			A17-00097	0.036	3% PY assoc w/ qtz-crb+/-calc veining; up to 1% PY scattered in sheared mafic volc.
469	470	1	264250	HCORE			A17-00097	0.017	3-4% mg PY (blebby to semimassive) assoc w/ qtz-crb+/-calc veining; trc PY scattered in sheared mafic volc
470	471	1	264251	HCORE			A17-00097	0.019	2% fg PY assoc w/ qtz-crb+/-calc veining; in sheared, hem-altered mafic volc (appears banded, weakly magnetic); weakly folded
471	472	1	264252	HCORE			A17-00097	0.384	1-2% fg PY assoc w/ qtz-crb+/-calc veining in sheared, hem-altered mafic volcanic. trc PY scattered in groundmass. weakly folded/wavy
472	473	1	264253	HCORE			A17-00097	1.14	3-4% fg PY assoc w/ qtz-crb+/-calc veining; trc PY scattered in groundmass; host rock is sheared, hem-altered mafic volc. weakly folded-wavy
473	474	1	264254	HCORE			A17-00097	0.726	4% fg PY mostly assoc w/ qtz-crb+/-calcite veining; trc PY scattered in groundmass of sheared, hem-altered mafic volcanic. unit is wavy-weakly folded
		0	264255	STD		CDN_GS_2P	A17-00097	2.11	
474	475	1	264256	HCORE			A17-00097	2.4	4% fg PY mostly assoc w/ qtz-crb+/-calc veining; trc PY scattered in groundmass of sheared, hem-altered mafic volc. unit is weakly folded in parts.
475	475.87	0.87	264257	HCORE			A17-00097	0.12	2% fg-mg PY assoc w/ qtz-crb+/-calc veining; end of sample looks weakly brecciated.
475.87	476.5	0.63	264258	HCORE			A17-00097	0.015	trc PY assoc w/ qtz-crb+/-calc veining in sheared mafic volc/conglomerate
476.5	477	0.5	264259	HCORE			A17-00097	0.012	1-2% fg PY assoc w/ large qtz-crb+/-calc vein (weakly silicified), in sheared mafic-volc/conglom.
477	478	1	264260	HCORE			A17-00133	0.009	trc PY assoc w/ qtz-crb+/-calc veining in sheared mafic volc/conglom
496	497	1	264261	HCORE			A17-00133	0.027	very trc PY assoc w/ qtz-crb+/-calc veining in conglomerate. Sampled because
		0	264262	DUP	264261		A17-00133	0.045	
519	520	1	264263	HCORE			A17-00133	0.01	up to 1% PY scattered in groundmass of sheared conglomerate (f-mg); trc PY assoc w/ clasts

526	527	1	264264	HCORE		A17-00133	0.008	trc PY assoc w/ large qtz-crb breccia vein at 526.4-526.8m
527	528	1	264265	HCORE		A17-00133	0.014	no vis sulphides in sheared conglomerate
528	529	1	264266	HCORE		A17-00133	0.02	1-2% f-mg PY mostly assoc w/ altered qtz-crb veining (black chlorite? soft)
529	530	1	264267	HCORE		A17-00133	0.007	no visible sulphides in sheared conglomerate
553	554	1	264268	HCORE		A17-00133	0.007	trc mg PY assoc w/ qtz-crb veining in sheared conglomerate. (end of sampling; EOH @ 561m)
		0	269327	STD	CDN_GS_P7J	A17-00157	0.823	
		0	269334	Blank	Blank	A17-00157	<0.005	
		0	269342	STD	CDN_GS_P4B	A17-00157	0.465	

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-10 DataSet: Brookbank Program: Exploration

Hole Status:	INREVIEW	**Hole Length (m):**	303	**Logged By:**	C. Sica
Hole Type:	Surface Drill Hole	**Dip (º):**	-50.3	**Date Log Started:**	12/2/2016
Date Drill Started:	11/25/2016	**Azimuth:**	304.7	**Date Log Completed:**	12/7/2016
Date Drill Completed:	12/1/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank East		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	440,880.7	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,505.9	**Date Surveyed:**	12/20/2016
Elevation (masl):	354.696	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29029	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3.5
Core Storage:	Brookbank

Purpose: Test the intersection of the main mineralized iron-carbonate shear zone and a number of oblique structures observed at outcrop and interpreted from the detailed magnetics. Primary target: Intersection of main Fe Carb low and N Mag Low.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 299 **Max Sample Depth (m):** 303

Depth Logged To (m) 303 **Meters Sampled** 300

Total Samples 344 **# Assay** 305 **# QAQC:** 39

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-50.3	304.7	TN14	SINGLESHOT	G4	11/26/2016		Yes
11	-50.45	303.87	EZ-GYRO	MULTISHOT	G4	12/1/2016	Optimised	No
20	-50.52	304.57	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
29	-50.37	304.39	EZ-GYRO	SINGLESHOT	G4	11/26/2016	Optimised	Yes
56	-50.9	305.35	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
59	-50.86	305.01	EZ-GYRO	SINGLESHOT	G4	11/28/2016	Optimised	Yes
65	-50.96	305.39	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
110	-50.47	305.96	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
119	-50.19	307.52	EZ-GYRO	MULTISHOT	G4	12/1/2016		No
128	-49.93	306.39	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
137	-49.9	307.97	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
146	-49.79	307.81	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
155	-49.51	308.86	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
164	-48.98	309.21	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
173	-48.53	310.41	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
200	-46.69	310.38	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
209	-46.12	310.62	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
227	-45.75	311.53	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
236	-45.68	311.07	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
245	-45.65	311	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
263	-45.14	311.48	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
272	-44.59	311.81	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
281	-43.84	312.37	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
290	-43.14	313.82	EZ-GYRO	MULTISHOT	G4	12/1/2016		Yes
299	-42.77	314.11	EZ-GYRO	MULTISHOT	G4	12/1/2016	Optimised	Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	2.8	2.8		OB	Overburden		
2.8	108.12	105.32		E1A	Basalt	Pillowed	Fine grained
108.12	115.03	6.91		E1	Mafic Volcanic	Banded	Fine grained
115.03	120.64	5.61		E1	Mafic Volcanic	Schistose	Fine grained
120.64	134	13.36		E1A	Basalt	Porphyritic (with phenocrysts)	Medium grained
134	238.47	104.47		E1A	Basalt	Pillowed	
238.47	252.27	13.8		E1A	Basalt	Banded	Fine grained
252.27	265.34	13.07	90	S4	Conglomerate	Schistose	Fine grained
265.34	303	37.66		S4B	Polymictic Conglomerate	Schistose	Medium grained

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	2.8	2.8		OB	Overburden			C. Sica
2.8	108.12	105.32		E1A	Basalt	Pillowed	Fine grained	C. Sica

Pillow Mafic Basalt; massive and aphanitic; epd pillow selvages evident throughout (~5% of selvages are also rimmed w/ magnetite); scattered patches of calcite filled vesicles (1-2%); 2-3% vuggy calcite-carb-qtz (+/-) epd veinlets subvertical TCA; micro dextral and sinistral strike slip faults offsetting epd-carb-cal-qtz stringers, filled w/ grey calcite; very wk fol and brecciation from 54.4m-58.56m (small pillow/flow breccia); this interval has wk perv hem + chl+ ser + cal alteration and up to 7% grey fracture fill calcite and locally 2% py dissems; mineralization in unit is <1% and concentrated in vuggy cal-qtz-carb stringers to veinlets; massive py vein at lower contact with strongly altered and mineralized unit (106.16-106.26m) ; increased v2c stringers (up to ~15%) w/ increased chl alteration + 2% ilmenite at lower contact area (107.1-108.12m)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
2.8	54.4	1:	Epidote	Weak (1-25%)	Patches	epd occurs at pillow selvage; calcite is grey and fills vesicles; patchy act
		2:	Calcite	Weak (1-25%)	Fracture Filled	
		3:	Actinolite	Weak (1-25%)	Patches	
		4:	Magnetite	Weak (1-25%)	Spotted	
		5:	Sericite	Weak (1-25%)	Halo-Vein Related	
54.4	58.56	1:	Sericite	Weak (1-25%)	Pervasive	wk fol in pillow breccia
		2:	Hematite	Weak (1-25%)	Pervasive	
		3:	Chlorite	Weak (1-25%)	Pervasive	
		4:	Silicified	Weak (1-25%)	Patches	
		5:	Calcite	Weak (1-25%)	Pervasive	
58.56	108.12	1:	Epidote	Weak (1-25%)	Patches	
		2:	Calcite	Weak (1-25%)	Spotted	
		3:	Magnetite	Weak (1-25%)	Spotted	
		4:	Hematite	Weak (1-25%)	Fracture Filled	
		5:	Sericite	Weak (1-25%)	Halo-Vein Related	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
106.16	106.26	1:	Pyrite	Coarse grained	Massive	80	
VG: No							

Structures

From	To	Code	Structure Type	Comments
36.2	37.5	HFZ	High fracture zone	moderately fractured w/ broken rock
44.56	44.57	FLT	Fault	dextral strike slip offsetting epd-carb-qtz stringers; flt filled w/ cal

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
47.2	47.58	HFZ	High fracture zone	moderately fractured w/ broken rock; yellow/orange oxidation on fracture planes
54.4	58.56	FOL	Foliation	very wk foliation in small pillow breccia unit
73	74	FLT	Fault	parallel TCA, dextral
83.26	83.27	FLT	Fault	dextral 25 deg TCA
89.44	89.45	FLT	Fault	dextral, 89 deg TCA
95.2	95.3	FLT	Fault	dextral, low angle (15 deg TCA) filled w/ grey cal

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
3	6	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
6	9	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
9	12	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	1	
12	15	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.2	
15	18	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.2	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4.5	
18	21	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
21	24	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	4	
24	27	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.3	
27	30	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
30	33	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	stringers are vuggy
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
33	36	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		57	2	
36	39	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
39	42	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	v3 = py dissems, grey calcite and ser halos
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4.5	

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
42	45	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6.7	v2 = vuggy
		2	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			4	
45	48	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			5.5	wk vuggy v2 and v3
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		80	8.5	
48	51	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6.5	v3 = vuggy
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
51	54	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.6	; cal+qtz=carb
54	57	1	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			11	v1 = vuggy, aleration halos
57	60	1	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			4	v1=vuggy, grey calcite
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			6	
60	63	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			6	v2c = grey cal
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
63	66	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			10	
		2	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		75	6	
66	69	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			7	v2= ser alteration halo, py, grey cal-qtz-carb; parallel set
		2	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"		68	5.5	
69	72	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.6	
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.5	
72	75	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.1	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.4	
75	78	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
78	81	1	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			4	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
81	84	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.6	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.6	

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
84	87	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
87	90	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	v2 = grey calcite; v2e offset by dextral flts filled w/ grey cal
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"		79	1.5	
90	93	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			7.5	v2s are vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
93	96	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	v2e offset by dextral flts filled w/ grey cal
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
96	99	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.6	
99	102	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
102	105	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5.7	
105	108	1:	Sulphide / Carbonate	Vein > 3"		60	10	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			7.1	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
108.12	**115.03**	6.91	**E1**	**Mafic Volcanic**	Banded	Fine grained	C. Sica

Strongly Altered and Mineralized Basalt; dark purple color; massive to foliated; aphanitic; magnetic with high (up to 700) mag sus anomalies; mod to strongly pervasively hem altered (hem alteration of mag?) giving unit dark purple color; foliated texture defined by light beige ser bands; up to 5% mineralized fe carb-qtz and fe carb-cal-qtz veinlets w/ ser alteration halos (~68-75 deg TCA); mineralized fe carb-qtz-cal veins w/ up to 20% py (py overgrowing fe carb) and 2% spec hem ribboning at 109.42-109.51m and 109.65m-109.8m; two sets of fe carb-qtz stringer vein arrays (one at 85 deg and one at 35 deg) up to 4% modal of unit --- folding pattern observable between this unit and underlying shear zone ; fol changes direction from 113.28-116.39m --> foliation changes again at 117.44m (limb)--> leading up to fold hinge at ~117.9m-118.53m ---> foliation change on other side of hinge (limb)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
108.12	115.03	1:	Hematite	Very strong (76-99%)	Pervasive	
		2:	Magnetite	Weak (1-25%)	Pervasive	
		3:	Sericite	Weak (1-25%)	Halo-Vein Related	

Structures

From	To	Code	Structure Type	Comments
111.44	111.48	HFZ	High fracture zone	moderately fractured w/ broken magnetic rock

Veins

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
111	114	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		79	11	v2 ; two vein arrays, one at 85 deg TCA (1-2cm spacing) and one at 35 deg TCA (3cm spacing)
		2:	Quartz-Fe-Carbonate	Stringer Zone - vein <1/4"		35	8.4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
115.03	**120.64**	5.61		**E1**	**Mafic Volcanic**	Schistose	Fine grained	C. Sica

Strongly Altered and Deformed Mafic Volcanics (I still think these might be felsic volcanics, high concentrations of feldspar (up to 8%), and there has a to be a reason the deformation is so strongly localized in this interval, a package of all mafic volcanics would behave the same when deformed?; light beige to light green /pink color; aphanitic to local very wk porph texture; mod to strongly foliated w/ localized patches of shear fabric; mod-strong pervasive ser alteration w/ banded ank alteration (~15%); quartz-carb-sulphide vein from 117.9-118.53m (2% py as fracture-fill); up to 15% beige qtz-carb veinlets and stringers rimmed w/ feldspar, either parallel to fol or folded and boudinaged; sparse qtz + feldspar augens; spec hem seams parallel to fol (~1%); glassy grey sil flooding at lower contact; 2-3% py throughout unit, concentrated in seams parallel to fol, or at contacts between veinlets/sheared wallrock; sharp upper contact and gradational lower contact

Alteration

From	To	#	Alteration	Intesity	Style	Comments
115.03	120.64	1:	Sericite	Moderate (26-50%)	Banding	
		2:	Hematite	Weak (1-25%)	Banding	
		3:	Specular hematite	Weak (1-25%)	Banding	
		4:	Chlorite	Weak (1-25%)	Banding	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
117	120	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"		46	8	
		2:	Quartz-Fe-carbonate	Breccia Veins		59	61	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
120.64	**134**	13.36		**E1A**	**Basalt**	Porphyritic (with phenocrysts)	Medium grained	C. Sica

Mafic Basalt; dark green; fg to cg; massive to porph texture defined by up to 7% plag phenocrysts; wk-mod chl altered at upper contact w/ felsics (120.64m-125m); up to 2% vuggy qtz-carb-cal veinlets and stringers hosting 1% fg py dissems vuggy veins at 60-70 deg TCA; HZF from 135.74-135.9m w/ vuggy cal

Alteration

From	To	#	Alteration	Intesity	Style	Comments
120.64	125	1:	Chlorite	Moderate (26-50%)	Pervasive	
		2:	Ilmenite	Weak (1-25%)	Spotted	

Veins

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
123	126	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4.5	v2 = vuggy
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			5	
126	129	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
		2:	Quartz-Fe-Carbonate /Sulphides	-		70	4	
129	132	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	v2 = vuggy
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			1	

134	**238.47**	104.47	**E1A**	**Basalt**	Pillowed	C. Sica

Mafic Pillow to Massive Flow Basalt; dark green; massive; aphanitic to locally porph; light green color (patchy act alteration); dominately massive flow w/ only ~3% epd pilow selvages; up to 2% grey calcite filled vesicles; wk fol w/ actinolite/chl banding from 167-170.25m and again from 242.5m-246m; marbled texture from 182.5-200m - created by up to 35% epd-qtz-fe carb stringers and veinlets; cg flow w/ porph texture defined by plag phenocrysts from 205-213m; set of dextral and sinistral faults (45 deg to each other @ 206m); HFZ with strongly broken rock w/ hem alteration from 242.5-246m; 1-2% py in unit hosted by ~3% vuggy cal-qtz-carb veinlets and stringers; trace sct py and py overgrowing grey cal filled vesicles

Alteration

From	To	#	Alteration	Intesity	Style	Comments
168	175	1:	Actinolite	Weak (1-25%)	Patches	
		2:	Chlorite	Weak (1-25%)	Banding	
175	224.8	1:	Epidote	Weak (1-25%)	Patches	epd occurs in pillow selvages; cal occurs as vesicle fill
		2:	Calcite	Weak (1-25%)	Fracture Filled	
		3:	Hematite	Weak (1-25%)	Fracture Filled	
224.8	227.24	1:	Chlorite	Moderate (26-50%)	Pervasive	
		2:	Hematite	Weak (1-25%)	Fracture Filled	
		3:	Magnetite	Weak (1-25%)	Patches	
		4:	Epidote	Weak (1-25%)	Patches	
227.24	238.47	1:	Epidote	Weak (1-25%)	-	
		2:	Hematite	Weak (1-25%)	Fracture Filled	
		3:	Calcite	Weak (1-25%)	Fracture Filled	

Structures

From	To	Code	Structure Type	Comments
135.75	135.9	HFZ	High fracture zone	fractured and broken rock w/ ~30% vuggy cal-carb-qtz stringers w/ 1% cubic py
167	170.25	FOL	Foliation	wk act + chl banding

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
135	138	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		70	2.5	v1 = vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
138	141	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
141	144	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		70	3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
144	147	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		75	1.5	
		2:	Quartz-Fe-Carbonate/Epidote	-			3	
147	150	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		65	4	v1= vuggy
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
150	153	1:	Quartz-Fe-Carbonate /Sulphides	Vein > 3"			29	v1= vuggy w/ 2% cubic
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
153	156	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			2	grey cal in stringers
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
156	159	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			2	v1 = vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
159	162	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4.6	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
162	165	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			7	v2 = vuggy
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		80	2	
165	168	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		75	2	v1 = vuggy stringers
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
168	171	1:	Quartz-Fe-Carbonate /Sulphides	-				

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
171	174	1:	Quartz-Fe-Carbonate/Calcite	-			1	
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			1	
174	177	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
177	180	1:	Quartz-Fe-Carbonate/Calcite	-			1	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	
180	183	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			6	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
183	186	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		80	9	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			6	
186	189	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			5	v1 = vuggy; v2e = irregular chaoitic
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			15	
189	192	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			15	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
192	195	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			7	
		2:	Quartz-Fe-carbonate	Vein > 3"			7	
195	198	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			25	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
198	201	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5.2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
201	204	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
204	207	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			5	
		2:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			3	
207	210	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
210	213	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5	
213	216	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			6	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
216	219	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			6	
		2:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			1	
219	222	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			6	
		2:	Quartz-Fe-Carbonate /Sulphides	-			6	
222	225	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
225	228	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			4.2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
228	231	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		50	1.7	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		0	2.3	
231	234	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		80	1.5	
234	237	1:	Quartz-Fe-Carbonate/Epidote	Vein > 3"		55	7	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		45	1	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
238.47	**252.27**	13.8		**E1A**	**Basalt**	Banded	Fine grained	C. Sica

Foliated Mafic Basalt; aphanitic with moderate foliation @ 35-40 deg TCA; dark to light green; ~40% chl alteration with up to 30% act alteration; scattered <2% dark chl + cal filled vesicles; up to 30% act-epd-qtz veinlets parallel to fol; up to 5% cal-qtz-carb veinlets (@ 80 deg TCA); trace py throughout assoc w/ cal-qtz-carb veinlets

Alteration

From	To	#	Alteration	Intesity	Style	Comments
238.47	252.27	1:	Chlorite	Weak (1-25%)	Pervasive	
		2:	Actinolite	Weak (1-25%)	Pervasive	

Structures

From	To	Code	Structure Type	Comments
238.47	250.19	FOL	Foliation	wk-mod fol mafic volcanics at upper contact w/ shear zone
250.19	251	HFZ	High fracture zone	strongly broken rock w/ hem alteration along broken planes
251	252.27	FOL	Foliation	wk-mod fol mafic volcanics at upper contact w/ shear zone

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
240	243	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		50	8	

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
252.27	**265.34**	13.07	90	**S4**	**Conglomerate**	Schistose	Fine grained	C. Sica
			10	E1	Mafic Volcanic	Schistose	Fine grained	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
243	246	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"		60	30	v2 = cal
		2	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			5	
246	249	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		40	10	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4.5	
249	252	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	

Strongly Deformed, Altered and Sheared Conglomerate with Mafic Volcanics; 90% sheared conglomerate w/ mix of sheared mafic volcanics from (252.27-255m); unit is fine to medium grained (visible subrounded sediment grains); w/ mod to strong pervasive ser + chl alteration; up to 5% ankerite bands parallel to fol; very wk hem along fol planes, very trace spec hem seams parallel to fol; strong foliation and shear fabric w/ kink banding and isoclinal folds, 2% qtz augens; tight folding, with traceable changes in foliation orientation along fold structures at 1m and 2m intervals; non-linear axial planes, refolded folds; up to 15% beige quartz-carb (+/-) cal veinlets to veins, strongly deformed and boudinaged; trace very fg py dissem concentrated in sheared wallrocks at contacts w/ deformed veinlets

Alteration

From	To	#	Alteration	Intesity	Style	Comments
252.27	265.34	1	Sericite	Moderate (26-50%)	Banding	
		2	Chlorite	-	Banding	
		3	Ankerite	Weak (1-25%)	Banding	
		4	Hematite	Weak (1-25%)	Banding	

Structures

From	To	Code	Structure Type	Comments
252.27	265.34	SHD	Shear / mylonitic foliation	strongy sheared and folded w/ kink banding and traceable antiform synform pairs (variable alpha angle of 25 to 90

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
255	258	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			43	
258	261	1	Quartz-Fe-carbonate	Vein > 3"			10	
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			31	

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
265.34	**303**	37.66		**S4B**	**Polymictic Conglomerate**	Schistose	Medium grained	C. Sica

Weakly Deformed Polymicitic Conglomerate; this unit is light green to light pink in the upper portion and dark green to grey in the lower portion; it is fine to medium grained and massive to foliated; clastes ranging in size from 2 cm to 12cm and composition (red jasper, diorite, granite, and black chert) are visible throughout; the deformation and alteration lessens in this unit moving downhole (away from contact-shear zone), a progressive change in the alpha angle is also observable from 35 deg TCA at the top of the unit to 65 deg TCA @ 291m; the upper portion of the unit (265.34-282m) is strongly foliated w/ strong ser altered with 7% ank banding and 10% chl banding; this portion contains ~3% clastes, 2-3% qtz-carb veinlets that are parallel to fol or weakly boudinaged, sinisitral strike-slip faults are observable, from 282-293m the unit is dark grey/green and very weakly foliated; mod-strong chl alteration w/ up to 30% clastes; trace fg py scattered throughout unit

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
261	264	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			20	

Alteration

From	To	#	Alteration	Intesity	Style	Comments
265.34	282	1:	Sericite	Strong (51-75%)	Pervasive	
		2:	Chlorite	Weak (1-25%)	Banding	
		3:	Hematite	Weak (1-25%)	Banding	
282	303	1:	Chlorite	Strong (51-75%)	Pervasive	
		2:	Sericite	Weak (1-25%)	Banding	
		3:	Hematite	Weak (1-25%)	Banding	

Structures

From	To	Code	Structure Type	Comments
265.34	273	FOL	Foliation	mod to strong fol in conglomerate
276	280.5	FOL	Foliation	mod fol in conglomerate (47 deg TCA)
280.5	280.7	FLT	Fault	subparallel TCA, sinistral strike slip flt offsetting veinlets parallel to fol (fol = 45 deg TCA)
280.7	293	FOL	Foliation	wk to mod fol; ser + chl +/- ank banding, conglomerate
293	303	FOL	Foliation	wk to mod fol; ser + chl +/- ank banding, conglomerate

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
267	270	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			10	
270	273	1:	Quartz-Fe-carbonate	-			6	
273	276	1:	Quartz-Fe-carbonate	-		35	3	

DataSet: Brookbank
HoleID: B-16-10

Hole Length (m): 303
Log Length (m): 303

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
276	279	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1	
279	282	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		45	7	
282	285	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		55	6	
285	288	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		40	2	
288	291	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			10	
291	294	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		65	4.8	
294	297	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		65	3.5	
297	300	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.6	
300	303	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"		55	3	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 303**

HoleID: B-16-10 **Max Samp Depth (m): 303**

Total meters Sampled: 300

Primary Assay Samples:	305	88.66 %
Field Duplicate Samples:	9	2.62 %
Standard/Blank Samples:	30	8.72 %
Total Samples:	344	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
3	4	1	246962	HCORE			A16-13072	0.006	no visible mineralization
4	5	1	246963	HCORE			A16-13072	0.005	no visible mineralization
5	6	1	246964	HCORE			A16-13072	0.005	no visible mineralization
6	7	1	246965	HCORE			A16-13072	0.005	no visible mineralization
7	8	1	246966	HCORE			A16-13072	0.006	no visible mineralization
8	9	1	246967	HCORE			A16-13072	0.006	no visible mineralization
9	10	1	246968	HCORE			A16-13072	0.006	no visible mineralization
10	11	1	246969	HCORE			A16-13072	0.006	no visible mineralization
		0	246970	STD		CDN_GS_P4B	A16-13072	0.383	
11	12	1	246971	HCORE			A16-13072	0.005	no visible mineralization
12	13	1	246972	HCORE			A16-13072	0.006	no visible mineralization
13	14	1	246973	HCORE			A16-13072	0.006	no visible mineralization
14	15	1	246974	HCORE			A16-13072	0.006	no visible mineralization
15	16	1	246975	HCORE			A16-13072	0.006	trace cubic py sct throughout
16	17	1	246976	HCORE			A16-13072	0.006	no visible mineralization
17	18	1	246977	HCORE			A16-13072	0.006	no visible mineralization
18	19	1	246978	HCORE			A16-13072	0.006	trace py assoc w/ <1% pink carb-cal-qtz stringers; trace py assoc w/ grey calcite filled vesicles ; up to 1% py assoc w/ epd pillow selvage
		0	246979	DUP	246978		A16-13072	0.006	
19	20	1	246980	HCORE			A16-13072	0.01	no visible mineralization
20	21	1	246981	HCORE			A16-13072	0.006	trace bleby py assoc w/ v2c veinlets (<1%)
21	22	1	246982	HCORE			A16-13072	0.006	no visible mineralization
22	23	1	246983	HCORE			A16-13072	0.029	trace py assoc w/ small patch (~7cm) of epd stockwork
23	24	1	246984	HCORE			A16-13072	0.04	2cm patch of ser alteration (spotty) w/ trace fg py dissems
24	25	1	246985	HCORE			A16-13072	0.009	trace fg py assoc w/ 2% epd stockwork
25	26	1	246986	HCORE			A16-13072	0.006	very trace fg py assoc w/ epd pillow selvage

26	27	1	246987	HCORE		A16-13072	0.006	trace fg py assoc w/ 2% v2c veinlets, ser halo
		0	246988	STD	CDN_GS_P7J	A16-13072	0.612	
27	28	1	246989	HCORE		A16-13072	0.006	no visible mineralization
28	29	1	246990	HCORE		A16-13072	0.008	no visible mineralization
29	30	1	246991	HCORE		A16-13072	0.007	no visible mineralization
30	31	1	246992	HCORE		A16-13072	0.007	4cm vuggy qtz-carb-cal veinlet w/ ser alteration halo; locally 1% fg py
31	32	1	246993	HCORE		A16-13072	0.007	no visible mineralization
32	33	1	246994	HCORE		A16-13072	0.008	trace fg py assoc w/ epd-qtz-carb stringers (~1%)
33	34	1	246995	HCORE		A16-13072	0.007	1% bleby py assoc w/ epd pillow selvages
34	35	1	246996	HCORE		A16-13072	<0.005	trace py assoc w/ v2e stringers (<1%)
		0	246997	Blank	Blank	A16-13072	<0.005	
35	36	1	246998	HCORE		A16-13072	<0.005	trace py assoc w/ v2e stringers (2%)
36	37	1	246999	HCORE		A16-13188	0.005	trace py assoc w/ v2e stringers (<1%)
37	38	1	247000	HCORE		A16-13188	0.006	trace py assoc w/ v2e stringers (2-3%)
38	39	1	247001	HCORE		A16-13188	0.005	no visible mineralization
39	40	1	247002	HCORE		A16-13188	0.005	2-3% vuggy cal-fe carb-qtz-spec hem stringers to veinlets hosting 1% very fg py;
40	41	1	247003	HCORE		A16-13188	0.005	trace sct cubic py; small (~2cm wide) patch of dark grey sil alteration w/ trace fg py dissems
41	42	1	247004	HCORE		A16-13188	0.006	two 2cm wide fe carb-cal-chl-qtz veinlets w/ ser alteration halos; 1-2% cg py dissems concentrated in ser alteration halos; py overgrowing fe carb
42	43	1	247005	HCORE		A16-13188	0.006	2-3% vuggy cal-fe carb-qtz stringers to veinlets hosting 1% very fg py; patchy wk hem+ sil alteration from 42-42.2m w/ trace py dissems
		0	247006	STD	CDN_GS_P4B	A16-13188	0.406	
43	44	1	247007	HCORE		A16-13188	0.006	2-3% vuggy cal-fe carb-qtz-spec hem stringers to veinlets hosting 1% very fg py;
44	45	1	247008	HCORE		A16-13188	0.006	2% vuggy cal-fe carb-qtz-spec hem stringers hosting trace to 1% very fg py
45	46	1	247009	HCORE		A16-13188	0.006	trace fg py assoc w/ trace vuggy cal-carb-qtz stringers
46	47	1	247010	HCORE		A16-13188	0.006	trace py assoc w/ <1% vuggy cal-qtz-carb veinlets w/ ser alteration halos
47	48	1	247011	HCORE		A16-13188	0.008	very trace mg-cg py dissem in ser band at ~47m
48	49	1	247012	HCORE		A16-13188	0.008	trace py assoc w/ epd pillow selvages; 2cm brecciated fe carb-qtz-cal veinlet w/ chl seams and trace py dissems

49	50	1	247013	HCORE			A16-13188	0.007	~1% brecciated fe carb-qtz-cal veinlets w/ chl seams and trace py dissems; trace py assoc w/ <1% pink fe carb-cal-qtz stringers and trace py assoc w/ epd pillow selvages
50	51	1	247014	HCORE			A16-13188	0.014	up to 1% dissem py assoc/ w epd pillow selvage; trace py assoc w/ <1% pink fe carb-cal-qtz stringers
		0	247015	DUP	247014		A16-13188	0.007	
51	52	1	247016	HCORE			A16-13188	0.007	up to 1% dissem py assoc/ w epd pillow selvage; trace py in vesicles, overgrowing grey cal
52	53	1	247017	HCORE			A16-13188	0.007	trace-1% mg py assoc w/ 2-3% vuggy pink fe cb-cal-qtz stringers
53	54	1	247018	HCORE			A16-13188	0.007	trace-1% mg py assoc w/ 1-2% vuggy pink fe cb-cal-qtz stringers
54	55	1	247019	HCORE			A16-13188	0.007	trace fg py dissems assoc w/ vuggy carb-cal-qtz-chl veinlets (<1%)
55	56	1	247020	HCORE			A16-13188	0.008	flow breccia - local foliated and brecciated texture; very wk perv hem + sil, wk-mod perv cal + ser alteration; up to 2% cubic py dissems scattered throughout
56	57	1	247021	HCORE			A16-13188	0.007	flow breccia; local foliated and brecciated texture; very wk perv sil + chl, wk-mod perv hem + cal + ser alteration; spotty epd; up to 2% cubic py dissems scattered throughout; <1% cross-cutting vuggy cal-qtz-carb stringers w/ trace cubic py dissems
57	58	1	247022	HCORE			A16-13188	0.007	flow breccia; local foliated and brecciated texture; very wk perv sil + chl, wk-mod perv hem + cal + ser alteration; 1% fg py sct throughout
58	59	1	247023	HCORE			A16-13188	0.008	no visible mineralization
		0	247024	STD		CDN_GS_P7J	A16-13188	0.73	
59	60	1	247025	HCORE			A16-13188	0.008	no visible mineralization
60	61	1	247026	HCORE			A16-13188	0.007	no visible mineralization
61	62	1	247027	HCORE			A16-13188	0.007	no visible mineralization
62	63	1	247028	HCORE			A16-13188	0.008	up to 1% cg cubic py assoc w/ epd pillow selvage
63	64	1	247029	HCORE			A16-13188	0.007	5cm wide veinlet of cal-fe carb-qtz-chl w/ ser halo and locally up to 2% cubic py dissems
64	65	1	247030	HCORE			A16-13188	0.007	very trace dissem py assoc w/ epd pillow selvage
65	66	1	247031	HCORE			A16-13188	0.007	trace py assoc w/ ~3% v2e stringers
66	67	1	247032	HCORE			A16-13188	0.007	trace py assoc w/ 2-3% grey cal-qtz-carb stringers to veinlets w/ ser alteration halos

		0	247033	Blank		Blank	A16-13188	0.008	
67	68	1	247034	HCORE			A16-13188	0.008	trace py assoc w/ 1% grey cal-qtz-carb stringers w/ ser alteration halos
68	69	1	247035	HCORE			A16-13188	0.008	4cm wide v2e veinlet w/ grey cal hosting trace py dissems
69	70	1	247036	HCORE			A16-13188	0.008	trace py assoc w/ <1% v2c veinlets
70	71	1	247037	HCORE			A16-13188	0.008	no visible mineralization
71	72	1	247038	HCORE			A16-13188	0.008	no visible mineralization
72	73	1	247039	HCORE			A16-13188	0.008	very trace bleby py sct
73	74	1	247040	HCORE			A16-13188	0.008	no visible mineralization
74	75	1	247041	HCORE			A16-13188	0.008	no visible mineralization
		0	247042	STD		CDN_GS_P4B	A16-13192	0.474	
75	76	1	247043	HCORE			A16-13192	<0.005	no visible mineralization
76	77	1	247044	HCORE			A16-13192	0.008	no visible mineralization
77	78	1	247045	HCORE			A16-13192	<0.005	no visible mineralization
78	79	1	247046	HCORE			A16-13192	0.006	4cm v2c veinlet (grey cal), rimmed w/ epd; locally 1% py in veinlet and at wallrock contacts; additional trace py assoc w/ v2e stringers (~1%)
79	80	1	247047	HCORE			A16-13192	0.005	trace py assoc w/ 2% epd stockwork
80	81	1	247048	HCORE			A16-13192	0.005	trace py assoc w/ grey cal-qtz-carb stringers (~1%)
81	82	1	247049	HCORE			A16-13192	<0.005	trace py assoc w/ grey cal-epd pillow selvages
82	83	1	247050	HCORE			A16-13192	0.005	no visible mineralization
		0	247051	DUP	247050		A16-13192	<0.005	
83	84	1	247052	HCORE			A16-13192	0.005	no visible mineralization
84	85	1	247053	HCORE			A16-13192	0.005	no visible mineralization
85	86	1	247054	HCORE			A16-13192	0.005	no visible mineralization
86	87	1	247055	HCORE			A16-13192	0.006	no visible mineralization
87	88	1	247056	HCORE			A16-13192	0.006	trace py assoc w/ grey cal-carb-qtz stringers (<1%) +/- ser halos
88	89	1	247057	HCORE			A16-13192	0.005	very trace py assoc w/ v2e stringers (3-4%)
89	90	1	247058	HCORE			A16-13192	0.006	trace py assoc w/ grey cal-carb-qtz stringers (<1%) +/- ser halos
90	91	1	247059	HCORE			A16-13192	0.006	trace to 1% fg py assoc w/ 3-4% vuggy v2c veinlets
		0	247060	STD		CDN_GS_P7J	A16-13192	0.735	
91	92	1	247061	HCORE			A16-13192	0.008	trace py assoc w/ 34% vuggy v2c veinlets
92	93	1	247062	HCORE			A16-13192	0.006	very trace py assoc w/ epd pillow selvages
93	94	1	247063	HCORE			A16-13192	0.006	no visible mineralization

94	95	1	247064	HCORE		A16-13192	0.009	no visible mineralization
95	96	1	247065	HCORE		A16-13192	0.006	very trace sct py
96	97	1	247066	HCORE		A16-13192	0.006	trace py assoc w/ grey cal + epd pillow selvages
97	98	1	247067	HCORE		A16-13192	0.007	1mm-wide py veinlet parallel to 30cm interval of wk fol (chl banding)
98	99	1	247068	HCORE		A16-13192	0.006	no visible mineralization
		0	247069	Blank	Blank	A16-13192	0.005	
99	100	1	247070	HCORE		A16-13192	0.006	no visible mineralization
100	101	1	247071	HCORE		A16-13192	0.009	trace sct py
101	102	1	247072	HCORE		A16-13192	0.006	very trace sct py
102	103	1	247073	HCORE		A16-13192	0.011	very trace sct py
103	104	1	247074	HCORE		A16-13192	0.007	very trace sct py
104	105	1	247075	HCORE		A16-13192	0.008	very trace sct py
105	106	1	247076	HCORE		A16-13192	0.006	very trace sct py
106	106.3	0.3	247077	HCORE		A16-13192	0.423	massive py seam (up to 85% modal) from 106.16-106.26m; py overgrowing fe carb + cal vein; wallrock is chl + ser altered w/ trace py
		0	247078	STD	CDN_GS_P4B	A16-13192	0.375	
106.3	107.1	0.8	247079	HCORE		A16-13192	0.013	trace fg py hosted by grey calcite seams parallel to wk fol
107.1	108.12	1.02	247080	HCORE		A16-13192	0.009	up to 1% fg py hosted by v2c stringers (stringers make up ~ 30% of unit); wallrock is chl + ser altered and wkly foliated w/ up to 3% ilmenite
108.12	108.8	0.68	247081	HCORE		A16-13192	0.02	rusty (orange oxi) and vuggy throughout; wallrock is mag and mod-strongly pervasively hem altered; trace py assoc w/ ~1% v2c stringers
108.8	109.4	0.6	247082	HCORE		A16-13192	0.013	dark grey-purple ; mag + hem altered; ~15% v2c stringers; 1% mg dissem py concentrated at wallrock/stringer contacts
109.4	109.8	0.4	247083	HCORE		A16-13192	3.06	sample is 70% mineralized veins and 30% hem+mag altered wallrock; 9cm and 15cm qtz-ankerite-cal veins, w/ 2% spec hem ribboning and weak vugs; chaoitic internal structure (shear veins?); up to 7% mg-cg py overgrowing fe-carb in veins
109.8	110.8	1	247084	HCORE		A16-13192	0.036	dark purple hem + mag altered basalt w/ ~4% mineralized fe carb-cal-qtz veinlets, parallel @ 70-75 deg TCA; bleached ser alteration halos; locally up to 3% fg-mg py dissems w/in veinlets and at wallrock contacts

110.8	111.8	1	247085	HCORE			A16-13192	0.078	high fracture zone - 111.44-111.48m; dark purple hem + mag altered basalt w/ ~2% mineralized fe carb-cal-qtz veinlets (~1% are vuggy), bleached ser alteration halos; locally up to 4% fg-mg py dissems w/in veinlets and at wallrock contacts
111.8	112.3	0.5	247086	HCORE			A16-13192	1.2	dark purple hem + mag altered basalt w/ ~20% mineralized fe carb-cal-qtz veinlets, @79 deg TCA; bleached ser alteration halos; locally up to 4% fg-mg py dissems w/in veinlets overgrowing fe carb alteration
		0	247087	DUP	247086		A16-13192	1.02	
112.3	113	0.7	247088	HCORE			A16-13192	0.332	dark purple hem + mag altered basalt w/ ~4% mineralized fe carb-cal-qtz veinlets; bleached ser halos; locally up to 2% fg py dissems w/in veinlets overgrowing fe carb alteration
113	114	1	247089	HCORE			A16-13192	0.091	dark purple hem + mag altered basalt, wk fol; 1-2% mineralized fe carb-cal-qtz veinlets w/ 2% fg py dissems w/in veinlets and at wallrock contacts overgrowing fe carb alteration
114	115	1	247090	HCORE			A16-13192	0.047	dark purple hem + mag altered basalt, wk fol; 9cm patch at lower contact w/ felsic volcanics that is strongly sheared w/ 2% glassy grey qtz stringers; up to 2% very fg py dissems and seams concentrated at sheared wallrock/qtz stringer contacts (rimming stringers)
		0	247091	Blank		Blank	A16-13192	0.01	
115	116	1	247092	HCORE			A16-13192	0.142	altered and deformed felsic volcanics; light grey/beige; ~10 cm wide qtz-carb vein w/ locally 2% massive py seams; ~10% broken and distorted qtz-carb veinlets/stringers; mod-strong fol defined by ser banding; py occurs rimming veinlets and in seams parallel to fol (~3%) throughout unit
116	117	1	247093	HCORE			A16-13228	0.102	altered and deformed felsic volcanics; light grey/beige to red; ~5% broken and distorted qtz-carb veinlets/stringers; mod-strong fol defined by ser + red hem banding; scattered (<1%) spec hem seam; py occurs rimming veinlets and in seams parallel to fol throughout unit, as well as scattered dissems (~2-3%); py is tarnished
117	117.9	0.9	247094	HCORE			A16-13228	0.031	altered and deformed felsic volcanics; light grey/beige to red; 2-3% distorted and folded qtz-carb veinlets/stringers; mod-strong fol defined by ser + red hem banding, w/ shear fabric; py occurs rimming veinlets and in seams parallel to fol throughout unit, as well as scattered dissems (~1-2%)

117.9	118.5	0.6	247095	HCORE		A16-13228	0.078	quartz-carb vein; white and grey with brecciated-distorted appearance; grey-white qtz w/ ~15% overgrowing beige carb; <1% ser+hem wallrock inclusions; 1-2% py as seams and stockwork like stringers
		0	247096	STD	CDN_GS_P7J	A16-13228	0.846	
118.5	119.3	0.8	247097	HCORE		A16-13228	1.05	strongly altered felsic volcanics; strong fol defined by ser banding w/ glassy grey sil (flooding?); ~7% beige qtz-carb veinlets (parallel to fol or distorted and boundinaged w/ qtz augens); ~3% fg py concentrated in seams parallel to fol
119.3	120	0.7	247098	HCORE		A16-13228	0.016	gradational lower contact zone? felsic/mafic; 12% qtz-carb stringers parallel to fol or folded; 3% spec hem stringers; ~2% ilmenite?; 1% fg py as seams in fol planes or at contacts w/ qtz-carb stringers
120	120.9	0.9	247099	HCORE		A16-13228	0.008	fol volcanics; ser + chl altered; 2% ilmenite?; 2-3% qtz-carb stringers parallel to fol or contorted w/ bleached ser halos; trace bleby py sct throughout; w/ locally 1% fg py hosted in contorted stringers w/ bleached alteration halos
120.9	121.9	1	247100	HCORE		A16-13228	0.019	chl altered mafics; 6cm wide vuggy cal-carb-qtz veinlet (60 deg TCA); locally 2% cubic py w/in vugs and overgrowing fe-carb in veinlets; trace py assoc w/ ~2% vuggy qtz-carb-cal stringers
121.9	122.9	1	247101	HCORE		A16-13228	0.007	chl altered baslt; very trace py assoc w/ 2-3% qtz-cal-carb stringers; 9cm wide irregular qtz-carb-cal blow out w/ locally 1% fg py
122.9	123.9	1	247102	HCORE		A16-13228	0.008	chl altered basalt; trace fg py assoc w/ 1% vuggy cal-carb-qtz stringers
123.9	124.9	1	247103	HCORE		A16-13228	0.008	chl altered basalt; trace fg py assoc w/ 1% vuggy cal-carb-qtz stringers
124.9	125.9	1	247104	HCORE		A16-13228	0.012	chl altered basalt; trace fg py assoc w/ 1% vuggy cal-carb-qtz stringers
		0	247105	Blank	Blank	A16-13228	0.006	
125.9	126.9	1	247106	HCORE		A16-13228	0.016	chl altered basalt; trace fg py assoc w/ 1% vuggy cal-carb-qtz stringers
126.9	127.9	1	247107	HCORE		A16-13228	0.011	chl altered basalt; trace fg py assoc w/ 2cm vuggy cal-carb-qtz stringer
127.9	128.9	1	247108	HCORE		A16-13228	0.037	trace bleby sct py
128.9	129.9	1	247109	HCORE		A16-13228	0.01	trace bleby sct py; very trace fg py assoc w/ <1% vuggy cal-carb-qtz stringers
129.9	130.9	1	247110	HCORE		A16-13228	0.02	trace bleby sct py; very trace fg py assoc w/ 1-2% vuggy cal-carb-qtz stringers

130.9	131.9	1	247111	HCORE			A16-13228	0.008	trace fg py assoc w/ 2cm vuggy cal-carb-qtz stringer
131.9	132.9	1	247112	HCORE			A16-13228	0.011	trace sct py
132.9	133.9	1	247113	HCORE			A16-13228	0.01	very trace sct py
		0	247114	STD		CDN_GS_P4B	A16-13228	0.411	
133.9	134.9	1	247115	HCORE			A16-13228	0.02	trace, locally 1% fg py assoc w/ 1% vuggy cal-carb-qtz stringers
134.9	135.9	1	247116	HCORE			A16-13228	0.063	1% py, locally 2% assoc w/ 2-3% vuggy cal-carb-qtz stringers
135.9	137	1.1	247117	HCORE			A16-13228	0.021	very trace sct py
137	138	1	247118	HCORE			A16-13228	0.048	trace bleby py assoc w/ 2cm grey cal-qtz-carb veinlet
138	139	1	247119	HCORE			A16-13228	0.009	10cm patch of mod epd alteration w/ locally 2% cg cubic py dissems
139	140	1	247120	HCORE			A16-13228	0.008	1cm grey cal-qtz-carb veinlet, high angle TCA, locally 1% py in veinlet and at wallrock contacts
140	141	1	247121	HCORE			A16-13228	0.014	1cm grey cal-qtz-carb veinlet, high angle TCA, locally 1% py in veinlet and at wallrock contacts
141	142	1	247122	HCORE			A16-13228	0.012	very trace sct py
		0	247123	DUP	247122		A16-13228	0.012	
142	143	1	247124	HCORE			A16-13228	0.044	2% cal-carb-qtz stingers to veinlets w/ locally 1% py concentrated at wallrock/veinlet contacts
143	144	1	247125	HCORE			A16-13228	0.01	trace py assoc w/ <1% cal-carb-qtz stingers
144	145	1	247126	HCORE			A16-13228	0.012	trace py assoc w/ 1% cal-carb-qtz stingers
145	146	1	247127	HCORE			A16-13228	0.009	trace py + cpy assoc w/ 1% cal-carb-qtz stingers
146	147	1	247128	HCORE			A16-13228	0.011	up to 1% bleby py assoc w/ v2e veinlets; very trace py assoc w/ <1% cal-carb-qtz stingers
147	148	1	247129	HCORE			A16-13228	0.009	very trace py assoc w/ <1% cal-carb-qtz stingers
148	149	1	247130	HCORE			A16-13228	0.01	1mm-wide py seam ; trace bleby py sct throughout
149	150	1	247131	HCORE			A16-13228	0.014	two 3cm wide vuggy cal-qtz-carv veinlets; 70 deg TCA w/ mm-scale bleached halos; locally up to 3% cubic py concentrated in vugs and at wallrock contacts
		0	247132	STD		CDN_GS_P7J	A16-13228	0.744	
150	151	1	247133	HCORE			A16-13228	0.008	very trace sct py
151	152	1	247134	HCORE			A16-13228	0.009	very trace py overgrowing grey calcite stringers (~1%)

152	153	1	247135	HCORE			A16-13228	0.078	vuggy cal-qtz-carb-spec hem vein from 152.3-152.59m; 2% spec hem ribboning; 1% fg cubic py hosted in vugs; additional 1-2% cubic py concentrated in 2cm wide band of fe-carb alteration at vein/wallrock contact; ~1% grey cal-qtz-carb stringers w/ locally trace-1% py dissems within and at wallrock contacts
153	154	1	247136	HCORE			A16-13228	0.009	trace sct py
154	155	1	247137	HCORE			A16-13228	0.009	two 2cm grey cal-qtz-carb veinlets w/ locally 1-2% py dissems
155	156	1	247138	HCORE			A16-13228	0.01	trace sct py
156	157	1	247139	HCORE			A16-13228	0.03	2cm wide vuggy qtz-carb-cal veinlet w/ locally 1% cubic py concentrated in vugs and at wallrock contacts
157	158	1	247140	HCORE			A16-13228	0.009	trace mm-wide py seams overgrowing grey calcite stringers
		0	247141	Blank		Blank	A16-13228	0.008	
158	159	1	247142	HCORE			A16-13228	0.01	trace py overgrowing grey calcite stringers
159	160	1	247143	HCORE			A16-13228	0.032	trace fg py dissems overgrowing grey cal filled vesicles
160	161	1	247144	HCORE			A16-13228	0.122	up to 20% pink vuggy qtz-carb-cal veinlets from 160-160.64m; 5% grey fracture filling cal overgrowing veinlets; wk-mod fe carb alteration in this interval
161	162	1	247145	HCORE			A16-13228	0.01	no visible mineralization
162	163	1	247146	HCORE			A16-13228	0.011	no visible mineralization
163	164	1	247147	HCORE			A16-13228	0.023	1cm wide vuggy qtz-cal-carb veinlet subparallel TCA; 1% fg py concentrated at contacts
164	165	1	247148	HCORE			A16-13228	0.014	set of parallel (80 deg TCA); vuggy qtz-cal-carb stringers; locally 2% very fg py in basalt in stringer zone
165	166	1	247149	HCORE			A16-13228	0.01	trace very fg py assoc w/ grey cal vesicle fill and patchy grey cal alteration (<2%)
		0	247150	STD		CDN_GS_P4B	A16-13228	0.384	
166	167	1	247151	HCORE			A16-13228	0.016	19cm patch of vuggy qtz-cal-carb veinlet subparallel TCA; 1% cubic fg py concentrated at in vugs and at wallrock contacts
167	168	1	247152	HCORE			A16-13228	0.01	6cm wide vuggy qtz-carb-cal veinlet w/ 1% py concentrated at contacts
168	169	1	247153	HCORE			A16-13228	0.012	wk fol w/ actinolite and chl alteration; two 2cm wide vuggy qtz-carb-cal veinlet w. chl alteration at contacts w/ wallrock; locally 2% fg py w/in vugs and at contacts w/ wallrock

169	170	1	247154	HCORE			A16-13228	0.009	wk fol w/ actinolite and chl alteration; trace fg py throughout; trace py assoc w/ grey cal-qtz-carb veinlets (<1%)
170	171	1	247155	HCORE			A16-13228	0.009	no visible mineralization
171	172	1	247156	HCORE			A16-13228	0.01	trace fg py assoc w/ <1% vuggy cal-qtz-carb stringers
172	173	1	247157	HCORE			A16-13228	0.009	trace fg py assoc w/ <1% vuggy cal-qtz-carb stringers
173	174	1	247158	HCORE			A16-13228	0.01	trace fg py assoc w/ <1% vuggy cal-qtz-carb stringers
174	175	1	247159	HCORE			A16-13228	0.009	trace fg py assoc w/ <1% vuggy cal-qtz-carb stringers
		0	247160	DUP	247159		A16-13228	0.009	
175	176	1	247161	HCORE			A16-13228	0.009	no visible mineralization
176	177	1	247162	HCORE			A16-13228	0.009	trace sct bleby py
177	178	1	247163	HCORE			A16-13228	0.01	trace sct bleby py
178	179	1	247164	HCORE			A16-13228	0.009	trace sct bleby py
179	180	1	247165	HCORE			A16-13228	0.01	trace sct bleby py
180	181	1	247166	HCORE			A16-13228	0.009	no visible mineralization
181	182	1	247167	HCORE			A16-13228	0.009	no visible mineralization
182	183	1	247168	HCORE			A16-13228	0.008	no visible mineralization
183	184	1	247169	HCORE			A16-13228	0.012	trace py assoc w/ two 1cm wide grey cal-qtz-carb veinlets (80 deg TCA)
		0	247170	STD		CDN_GS_P7J	A16-13228	0.743	
184	185	1	247171	HCORE			A16-13228	0.013	2mm wide py seam parallel to wk fol (act + chl banding) w/ trace bleby py concentrated in fol planes
185	186	1	247172	HCORE			A16-13228	0.021	4cm wide vuggy cal-carb-qtz veinlet subparallel TCA throughout entire sample length; veinlet is rimmed w/ fe-carb +/- spec hem ribboning; 3% fg cubic py
186	187	1	247173	HCORE			A16-13228	0.019	continuation of same veinlet from sample 247172; 4cm wide vuggy cal-carb-qtz veinlet subparallel TCA from 186-186.73 w/ tension gashes; veinlet is rimmed w/ fe-carb +/- spec hem ribboning; 3% fg cubic py concentrated in veinlet vugs and at wallrock contacts
187	188	1	247174	HCORE			A16-13228	0.009	0.5cm wide and 3cm wide vuggy cal-qtz-carb veinlets w/ up to 2% py locally; 2% cal-qtz-carb stringers (irregular morphology) w/ 1% fg to bleby py
188	189	1	247175	HCORE			A16-13228	0.012	1% cal-qtz-carb stringers (irregular morphology) w/ trace fg to bleby py
189	190	1	247176	HCORE			A16-13398	<0.005	no visible mineralization
190	191	1	247177	HCORE			A16-13398	<0.005	no visible mineralization

191	192	1	247178	HCORE			A16-13398	<0.005	no visible mineralization
		0	247179	Blank		Blank	A16-13398	<0.005	
192	193	1	247180	HCORE			A16-13398	<0.005	no visible mineralization
193	194	1	247181	HCORE			A16-13398	<0.005	no visible mineralization
194	195	1	247182	HCORE			A16-13398	<0.005	no visible mineralization
195	196	1	247183	HCORE			A16-13398	<0.005	no visible mineralization
196	197	1	247184	HCORE			A16-13398	<0.005	no visible mineralization
197	198	1	247185	HCORE			A16-13398	<0.005	no visible mineralization
198	199	1	247186	HCORE			A16-13398	<0.005	no visible mineralization
199	200	1	247187	HCORE			A16-13398	<0.005	no visible mineralization
		0	247188	STD		CDN_GS_P4B	A16-13398	0.468	
200	201	1	247189	HCORE			A16-13398	<0.005	no visible mineralization
201	202	1	247190	HCORE			A16-13398	0.008	5cm wide patch of cal + clay + fe carb alteration (soft, fissile, clay... fault gauge...?); 2% fg cubic py dissems w/in altered patch
202	203	1	247191	HCORE			A16-13398	<0.005	locally 1-2% cubic to bleby py assoc from 202-202.1m (patch of very wk to wk perv cal + hem alteration
203	204	1	247192	HCORE			A16-13398	<0.005	very trace sct py
204	205	1	247193	HCORE			A16-13398	<0.005	trace py assoc w/ <1% qtz-cal-carb veinlet
205	206	1	247194	HCORE			A16-13398	<0.005	no visible mineralization
206	207	1	247195	HCORE			A16-13398	<0.005	trace py assoc w/ <1% qtz-cal-carb veinlet
207	208	1	247196	HCORE			A16-13398	<0.005	no visible mineralization
		0	247197	DUP	247196		A16-13398	<0.005	
208	209	1	247198	HCORE			A16-13398	<0.005	no visible mineralization
209	210	1	247199	HCORE			A16-13398	<0.005	no visible mineralization
210	211	1	247200	HCORE			A16-13398	<0.005	trace sct py
211	212	1	247201	HCORE			A16-13398	<0.005	trace py assoc w/ <1% qtz-carb-cal veinlets
212	213	1	247202	HCORE			A16-13398	<0.005	no visible mineralization
213	214	1	247203	HCORE			A16-13398	<0.005	trace sct py
214	215	1	247204	HCORE			A16-13398	<0.005	no visible mineralization
215	216	1	247205	HCORE			A16-13398	<0.005	trace sct py
		0	247206	STD		CDN_GS_P7J	A16-13398	0.62	
216	217	1	247207	HCORE			A16-13398	<0.005	no visible mineralization
217	218	1	247208	HCORE			A16-13398	<0.005	no visible mineralization
218	219	1	247209	HCORE			A16-13398	<0.005	trace py assoc w/ <1% qtz-carb-cal veinlets

219	220	1	247210	HCORE		A16-13398	<0.005	very trace py assoc w/ grey cal stringer
220	221	1	247211	HCORE		A16-13398	0.006	4cm wide qtz-cal-carb veinlet rimmed w/ actinolite, 2% bleby py
221	222	1	247212	HCORE		A16-13398	<0.005	trace sct py
222	223	1	247213	HCORE		A16-13398	<0.005	trace sct py
223	224	1	247214	HCORE		A16-13398	<0.005	trace sct py ; trace py assoc w/ patchy grey cal alteration
224	224.8	0.8	247215	HCORE		A16-13398	<0.005	1mm wide py seam assoc w/ act alteration
		0	247216	Blank	Blank	A16-13398	<0.005	
224.8	225.6	0.8	247217	HCORE		A16-13398	0.005	mod chl altered w/ up to 15% calcite-qtz-carb irreguar morphology stingers to veinlets hosting up to 2% fg to bleby py hosted within veins and at contacts with wallrock
225.6	226.4	0.8	247218	HCORE		A16-13398	0.005	mod chl altered w/ weak mag alteration, very wk act; localized wkly brecciated texture ~30% dark purple bands w/ up to 7% fracture-fill cal; 1-2% very fg py assoc w/ vuggy grey fracture-fill cal alteration
226.4	227.24	0.84	247219	HCORE		A16-13398	0.005	mod chl altered w/ weak mag alteration, very wk act; localized wkly brecciated texture w/ ~5% brecciated dark purple (hem overprint of magnetite?) bands; up to 7% fracture-fill cal; 1-2% very fg py assoc w/ up to 7% vuggy pink cal-carb-qtz irregular veinlets
227.24	228	0.76	247220	HCORE		A16-13398	<0.005	trace very fg py sct
228	229	1	247221	HCORE		A16-13398	<0.005	trace very fg py sct
229	230	1	247222	HCORE		A16-13398	<0.005	2cm wide qtz-cal-carb veinlet subparallel TCA; rimmed w/ up to 1% fg to cubic py concentrated at contacts w/ wallrock
230	231	1	247223	HCORE		A16-13398	<0.005	no visible mineralization
231	232	1	247224	HCORE		A16-13398	<0.005	no visible mineralization
		0	247225	STD	CDN_GS_P4B	A16-13398	0.468	
232	233	1	247226	HCORE		A16-13398	<0.005	trace sct py
233	234	1	247227	HCORE		A16-13398	0.11	5cm patch of epd + sil flooding, locally 1-2% dissem py; trace sct bleby py throughout
234	235	1	247228	HCORE		A16-13398	<0.005	trace sct bleby py
235	236	1	247229	HCORE		A16-13398	0.097	very trace py assoc w <1% cal-qtz-carb stringers
236	237	1	247230	HCORE		A16-13398	0.06	very trace py assoc w <1% cal-qtz-carb stringers
237	238	1	247231	HCORE		A16-13398	<0.005	trace sct py assoc w/ mod patchy act alteration
238	239	1	247232	HCORE		A16-13398	<0.005	very trace sct py

239	240	1	247233	HCORE			A16-13398	<0.005	very trace py assoc w/ <1% grey calcite stringers
		0	247234	DUP	247233		A16-13398	<0.005	
240	241	1	247235	HCORE			A16-13398	<0.005	trace dissem py assoc w/ bands of chl alteration
241	242	1	247236	HCORE			A16-13398	<0.005	1cm wide glassy qtz-carb-cal veinlet (30 deg TCA); w/ mm-wide py seam at contacts w/ wallrock
242	243	1	247237	HCORE			A16-13398	<0.005	no visible mineralization
243	244	1	247238	HCORE			A16-13398	0.013	trace py assoc w/ 1-2% cal-qtz-carb stringers (60 deg TCA); py occurs as seams at wallrock contacts
244	245	1	247239	HCORE			A16-13398	<0.005	trace py assoc w/ 3% cal-qtz-carb veinlets up to 3cm wide, (60 deg TCA); py occurs as seams at wallrock contacts
245	246	1	247240	HCORE			A16-13398	<0.005	trace py assoc w/ 3% cal-qtz-carb veinlets up to 3cm wide, (60 deg TCA); py occurs as seams at wallrock contacts
246	247	1	247241	HCORE			A16-13398	<0.005	no visible mineralization
247	248	1	247242	HCORE			A16-13398	0.006	trace py assoc w/ 1-2% cal-qtz-carb veinlets (45 deg TCA)
		0	247243	STD		CDN_GS_P7J	A16-13398	0.797	
248	249	1	247244	HCORE			A16-13398	<0.005	trace sct py
249	250	1	247245	HCORE			A16-13398	0.114	no visible mineralization
250	251	1	247246	HCORE			A16-13398	0.012	HFZ w/ hem on fractures; 250.19-251
251	252.27	1.27	247247	HCORE			A16-13398	0.257	no visible mineralization
252.27	253	0.73	247248	HCORE			A16-13398	0.018	sheared mafic volcanics/conglomerate; chl altered; trace py in fol planes and trace py assoc w/ pink qtz-carb veinlets parallel to fol (25 deg TCA)
253	254	1	247249	HCORE			A16-13398	0.013	sheared metasediments; ser + chl altered; very trace fg py on fol planes
254	255	1	247250	HCORE			A16-13398	0.008	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~10%)
255	256	1	247251	HCORE			A16-13398	0.007	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~10%)
		0	247252	Blank		Blank	A16-13398	<0.005	
256	257	1	247253	HCORE			A16-13398	0.049	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~10%)

257	258	1	247254	HCORE		A16-13398	0.011	sheared metasediments; ser + chl altered w/ 3% ank banding; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~20%)
258	259	1	247255	HCORE		A16-13398	0.093	sheared metasediments; ser + chl altered, ~3% ank banding; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~5%)
259	260	1	247256	HCORE		A16-13398	0.02	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~10%)
260	261	1	247257	HCORE		A16-13398	0.075	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~5%)
261	262	1	247258	HCORE		A16-13398	0.026	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged/folded qtz-carb veinlets (~7%)
262	263	1	247259	HCORE		A16-13398	0.037	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged qtz-carb veinlets (~10%)
263	264	1	247260	HCORE		A16-13398	0.034	sheared metasediments; ser + chl altered; very trace fg py concentrated at contacts w/ deformed/boudinaged qtz-carb veinlets (~5%)
		0	247261	STD	CDN_GS_P4B	A16-13398	0.478	
264	265	1	247262	HCORE		A16-13398	0.014	no visible mineralization
265	266	1	247263	HCORE		A16-13398	0.02	no visible mineralization
266	267	1	247264	HCORE		A16-13398	0.022	no visible mineralization
267	268	1	247265	HCORE		A16-13398	0.007	no visible mineralization
268	269	1	247266	HCORE		A16-13398	0.006	weak to moderately deformed conglomerate very trace sct py; chl + ser altered
269	270	1	247267	HCORE		A16-13398	0.006	weak to moderately deformed conglomerate; strong ser alteration; very trace py concentrated at contacts w/ augen clastes
270	271	1	247268	HCORE		A16-13398	0.009	weak to moderately deformed conglomerate; strong ser alteration; very trace py concentrated at contacts w/ augen clastes
271	272	1	247269	HCORE		A16-13398	0.005	weak to moderately deformed conglomerate; strong ser alteration; very trace py concentrated at contacts w/ augen clastes

		0	247270	DUP	247269		A16-13398	0.005	
272	273	1	247271	HCORE			A16-13398	<0.005	no visible mineralization
273	274	1	247272	HCORE			A16-13398	0.006	no visible mineralization
274	275	1	247273	HCORE			A16-13398	0.008	no visible mineralization
275	276	1	247274	HCORE			A16-13398	0.006	no visible mineralization
276	277	1	247275	HCORE			A16-13398	0.037	mod fol w/ mod ser; very trace sct py
277	278	1	247276	HCORE			A16-13398	0.008	very trace py hosted by granitic claste
278	279	1	247277	HCORE			A16-13398	0.008	mod fol; mod ser + up to 7% ank banding; very trace sct py
279	280	1	247278	HCORE			A16-13398	0.011	mod fol; mod ser + up to 7% ank banding; very trace sct py
		0	247279	STD		CDN_GS_P7J	A16-13398	0.684	
280	281	1	247280	HCORE			A16-13398	0.006	mod fol, kink banding; mod ser + chl + up to 7% ank banding; very trace sct py
281	282	1	247281	HCORE			A16-13398	0.039	mod fol, kink banding; mod ser + chl + up to 7% ank banding; very trace sct py
282	283	1	247282	HCORE			A16-13398	0.023	wk fol w/ undeformed sediment patches; no visible mineralization
283	284	1	247283	HCORE			A16-13398	0.043	wk fol w/ undeformed sediment patches; no visible mineralization
284	285	1	247284	HCORE			A16-13398	0.005	wk fol w/ undeformed sediment patches; no visible mineralization
285	286	1	247285	HCORE			A16-13400	0.009	wk fol w/ undeformed sediment patches; no visible mineralization
286	287	1	247286	HCORE			A16-13400	0.052	~20% ser banding, dominately chl, wk fol @ 38 deg TCA; very trace fg py throughout
287	288	1	247287	HCORE			A16-13400	0.04	~20% ser banding, dominately chl, wk fol @ 38 deg TCA; very trace fg py throughout
		0	247288	Blank		Blank	A16-13400	<0.005	
288	289	1	247289	HCORE			A16-13400	0.098	~20% ser banding, dominately chl, up to 10% clastes aligned w/ fol; wk fol @ 42 deg TCA; very trace fg py throughout
289	290	1	247290	HCORE			A16-13400	0.024	chl altered; very wk fol; 3% milky qtz veinlets; patchy ilmenite? (<1%); up to 5% clastes; very trace fg py sct
290	291	1	247291	HCORE			A16-13400	0.011	chl altered; very wk fol @ 65 deg TCA; up to 30% clastes; very trace fg py sct
291	292	1	247292	HCORE			A16-13400	0.006	chl altered; 3% ser banding; very wk fol @ 65 deg TCA; up to 30% clastes; very trace fg py sct
292	293	1	247293	HCORE			A16-13400	0.006	chl altered; 3% ser banding; very wk fol @ 60 deg TCA; up to 20% clastes; very trace fg py sct
		0	247301	STD		CDN_GS_P4B	A16-13396	0.416	

293	294	1	265176	HCORE			A16-13546	0.016	wk to mod fol; ser + chl +/- ank banding, conglomerate
294	295	1	265177	HCORE			A16-13546	0.005	wk to mod fol; ser + chl +/- ank banding, conglomerate
295	296	1	265178	HCORE			A16-13546	0.011	wk to mod fol; ser + chl +/- ank banding, conglomerate
296	297	1	265179	HCORE			A16-13546	0.172	wk to mod fol; ser + chl +/- ank banding, conglomerate
297	298	1	265180	HCORE			A16-13546	0.01	wk to mod fol; ser + chl +/- ank banding, conglomerate
298	299	1	265181	HCORE			A16-13546	0.033	wk to mod fol; ser + chl +/- ank banding, conglomerate
		0	265182	STD		CDN_GS_P7J	A16-13546	0.666	
299	300	1	265183	HCORE			A16-13546	<0.005	wk to mod fol; ser + chl +/- ank banding, conglomerate
300	301	1	265184	HCORE			A16-13546	0.01	wk to mod fol; ser + chl +/- ank banding, conglomerate
301	302	1	265185	HCORE			A16-13546	<0.005	wk to mod fol; ser + chl +/- ank banding, conglomerate
302	303	1	265186	HCORE			A16-13546	0.005	wk to mod fol; ser + chl +/- ank banding, conglomerate

Au Assay result colour coding Au >1 g/t Au <1 and >0.5 g/t Au <0.5 and >0.1 g/t

Drill Hole Log

Hole ID: B-16-11 DataSet: Brookbank Program: Exploration

Hole Status:	INREVIEW	**Hole Length (m):**	597	**Logged By:**	K. Leupen
Hole Type:	Surface Drill Hole	**Dip (º):**	-55.3	**Date Log Started:**	12/5/2016
Date Drill Started:	12/1/2016	**Azimuth:**	299.8	**Date Log Completed:**	12/21/2016
Date Drill Completed:	12/9/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank East	**Company:**	Greenstone Gold Mines
Grid ID:	UTM NAD 83 Zone 16N	**Drill Contractor:**	Forage G4 Drilling
UTM East (m)	440,911.1	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,425.1	**Date Surveyed:**	12/20/2016
Elevation (masl):	352.371	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29029	**Tenement Type:**	Lease
Hole Diameter:	HQ		
Casing Size:	HW		
Casing Depth (m):	3		
Core Storage:	Brookbank		

Purpose: Test intersection of main mineralized iron-carbonate shear zone and oblique structures observed at outcrop and interpreted from the detailed magnetics. Primary target: intersection of main Fe-Carb shear zone and sinistral shear deeper than B-16-09.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 590 **Max Sample Depth (m):** 597

Depth Logged To (m) 597 **Meters Sampled** 592.66

Total Samples 686 **# Assay** 612 **# QAQC:** 74

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-55.3	299.8	TN14	SINGLESHOT	G4	12/2/2016		Yes
14	-54.56	300.96	EZ-GYRO	MULTISHOT	G4	12/9/2016	Optimised	Yes
23	-54.49	301.73	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
86	-54.13	301.96	EZ-GYRO	SINGLESHOT	G4	12/2/2016	Optimised	Yes
95	-54.07	302.81	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
113	-53.43	303.25	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
122	-53.13	303.8	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
131	-52.77	305.31	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
140	-52.38	304.83	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
158	-52.42	305.18	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
164	-52.38	305.83	EZ-GYRO	SINGLESHOT	G4	12/3/2016	Optimised	Yes
185	-52.42	305.49	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
194	-52.5	306.49	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
203	-52.55	306.91	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
239	-52.87	306.97	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
257	-52.99	308.27	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
266	-52.99	308.69	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
275	-52.98	308.8	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
284	-53.09	308.93	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
293	-53.08	309.19	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
311	-53.15	309.01	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
320	-53.21	309.72	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
329	-53.22	310.7	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
347	-53.14	310.7	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
356	-53.11	310.72	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
365	-53.13	310.81	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
392	-53.17	311	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
410	-53.2	312.14	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
419	-53.23	312.53	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
428	-53.31	312.49	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
446	-53.29	312.15	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
455	-53.3	312.89	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
464	-53.34	312.86	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
473	-53.37	313.02	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
482	-53.42	314.01	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
491	-53.44	314.45	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
518	-53.43	314.98	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
527	-53.39	314.84	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
536	-53.36	314.32	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
545	-53.32	314.83	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
554	-53.22	314.87	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
572	-52.96	314.94	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
581	-52.94	315.71	EZ-GYRO	MULTISHOT	G4	12/9/2016		Yes
590	-52.98	315.53	EZ-GYRO	MULTISHOT	G4	12/9/2016	Optimised	Yes

Geology Summary

meters							
From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	3	3		OB	Overburden		
3	27.6	24.6		E1	Mafic Volcanic	Massive	Medium grained
27.6	110	82.4		E1	Mafic Volcanic	Pillowed	
110	110.65	0.65		FLT	Fault Zone		
110.65	286	175.35		E1A	Basalt	Pillowed	Fine grained
286	308	22		E1	Mafic Volcanic	Schistose	Fine grained
308	319.1	11.1		E1	Mafic Volcanic	Massive	Medium grained
319.1	350.38	31.28		E1	Mafic Volcanic	Pillowed	Fine grained
350.38	406.18	55.8		E1	Mafic Volcanic	Pillowed	Fine grained
406.18	434.45	28.27		E1	Mafic Volcanic	Massive	Fine grained

Geology Summary

meters							
From	**To**	**Width**	**%**	**Lith Code**	**Rocktype**	**Texture**	**GrainSize**
434.45	447.65	13.2		E1	Mafic Volcanic	Pillowed	Fine grained
447.65	471.75	24.1		E1	Mafic Volcanic	Massive	Fine grained
471.75	488.54	16.79		E1	Mafic Volcanic	Massive	Fine grained
488.54	512.5	23.96		E1	Mafic Volcanic	Massive	Fine grained
512.5	520.57	8.07		E1	Mafic Volcanic	Massive	Fine grained
520.57	536.1	15.53		E1	Mafic Volcanic	Pillowed	Fine grained
536.1	546.8	10.7		E1	Mafic Volcanic	Schistose	Fine grained
546.8	551.5	4.7		E1	Mafic Volcanic	Schistose	Fine grained
551.5	556.3	4.8		E1	Mafic Volcanic	Schistose	Fine grained
556.3	568	11.7		S4B	Polymictic Conglomerate	Supported - matrix	Fine grained
568	597	29		S4B	Polymictic Conglomerate	Schistose	Fine grained

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Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	3	3		OB	Overburden			K. Leupen
3	27.6	24.6		E1	Mafic Volcanic	Massive	Medium grained	K. Leupen

Massive metavolcanic flow, resembles gabbro. Few and far between bands of epidote w/kspar that look selvage related. Med green colour, med grained, non magnetic,local spots of weak foliation. 1% qtz fe crb veins +/- epidote that are vuggy and exhibit minor alteration halos, mineralized with up to 1% pyrite. 1-2% barren qtz crb +/-epidote and kspar veins

Structures

From	To	Code	Structure Type	Comments
16.5	18	HFZ	High fracture zone	Highly fractured core with oxidized fracture surfaces

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
3	6	1:	Quartz-Fe-carbonate	Extension Vein		35	5.5	
6	9	1:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Shear Vein			3.5	
		2:	Quartz-Fe-carbonate	Extension Vein			1.5	
9	12	1:	Quartz-Fe-carbonate	Extension Vein		60	2	
12	15	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Shear Vein			2.5	
15	18	1:	Quartz-Fe-carbonate	Extension Vein			3.5	
18	21	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein		60	3	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Shear Vein			1	
21	24	1:	Quartz-Fe-carbonate	Extension Vein			3	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Shear Vein			2.5	
24	27	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Shear Vein			1.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
27.6	110	82.4		E1	Mafic Volcanic	Pillowed		C. Sica

Pillowed metavolcanic; dark green colour; massive; aphanitic to fine-graine; weak foliation and spotty weak magnetic signature throughout with slight increase where selvages are high in magnetite. Local clusters of carb filled vesicles proximal to well preserved epd altered selvages. Pillow selvages are often rimmed w/ dark chl alteration or contain glassy sil flooding or very weak cal + fe carb alteration; HFZ from 41.39-42.8m and 50-53.65m w/ epd + hem +/- cal on fracture planes; small patches (~5cm wide) of coarse grained basalt w/ visible plag phenocrysts; Regular loosely spaced stringers of fine to med grained pyrite replacing magnetite rich

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

selvages (from top of hole to ~40m) {observed by Kris Leupen}; 1-2% qtz fe crb +/-epidote veins, mineralized with trace pyrite in the weak alteration halos; 1-2% barren qtz +/-fe crb epd extension veinlets throughout at 70-80 deg TCA; trace to 1% py also occurs in pillow selvages assoc w/ fe-carb and sil alteration

Structures

From	To	Code	Structure Type	Comments
41.39	43.5	HFZ	High fracture zone	Highly fractured pillowed metavolcanics
50	50.25	HFZ	High fracture zone	Strongly fractured pillowed metavolcanics w/ hem + epd on fracture planes
52.7	52.8	FLT	Fault	sinistral flt offsetting epd stringers
53.47	53.65	HFZ	High fracture zone	Strongly fractured pillowed metavolcanics w/ hem + epd on fracture planes
73.2	73.3	FLT	Fault	dextral flt offsetting high angle qtz-cal stringers; flt filled w/ cal

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
30	33	1:	Quartz-Fe-carbonate	Extension Vein			5.5	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Shear Vein			1.5	
33	36	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.5	
36	39	1:	Quartz-Fe-carbonate	Extension Vein			4.5	
		2:	Quartz-Fe-Carbonate/Epidote	-			1.5	
39	42	1:	Quartz-Fe-carbonate	Extension Vein			4	
		2:	Quartz-Fe-Carbonate / K-Feldspar-epidote	Shear Vein			1	
42	45	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			0.6	
45	48	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		73	4	
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			2	
48	51	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		73	3	
		2:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			0.5	
51	54	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		85	2	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	2.5	

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Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
54	57	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		70	2.5	
		2	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		35	0.5	
57	60	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			0.5	
60	63	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
63	66	1	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	4	
66	69	1	Quartz-Fe-Carbonate/Calcite	Extension Vein		70	1	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
69	72	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		40	3	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	2	
72	75	1	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		65	2	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
75	78	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		75	2	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
78	81	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		75	2	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
81	84	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
84	87	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
87	90	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			1.5	
90	93	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
93	96	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		65	1.3	
96	99	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		75	1.7	
99	102	1	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	7	v1 = vuggy
102	105	1	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	4	
		2	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		60	1	
105	108	1	Quartz-Fe-Carbonate/Calcite	Extension Vein		50	8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
110	**110.65**	0.65		**FLT**	**Fault Zone**			C. Sica

Fault; clay fault gauge from 110 to 110.32m surrounded by strongly broken mafic basalt 1% very fg py dissems in gauge w/ up to 1%

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From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

bleby py on fracture planes of broken basalt; calcite on fracture planes

Structures

From	To	Code	Structure Type	Comments
110	110.32	FLT5	Fault - gouge	grey-green clay gauge w/ up to 1% very fg py

110.65	**286**	175.35	**E1A**	**Basalt**	Pillowed	Fine grained	C. Sica

Pillowed metavolcanic; dark green colour; massive; aphanitic to fine-grained; spotty weak magnetic signature throughout; Local clusters of grey cal filled vesicles proximal to well preserved epd altered selvages. Pillow selvages are often rimmed w/ dark chl alteration or contain glassy sil flooding or very weak cal + fe carb alteration; 6 HFZ throughout w/ cal + hem on fracture planes; small flow-pillow breccia unit from 114-116.32m w/ mod chl alteration & up to 2% very fg py sct dissems; mm-scale strike slip faults throughout (sinistral & dextral); three 2cm wide brecciated fault seams from 122.84m-154.97m; 1-2% qtz fe crb +/-epidote veinlets to stringers, mineralized with trace pyrite in the weak alteration halos; mineralized pink vuggy cal-qtz-carb-epd stringers and veinlets are cross-cut and offset by grey cal-hem stringers; 1-2% barren qtz +/-fe crb +/- chl extension veinlets throughout; trace to 1% py also occurs in pillow selvages assoc w/ fe-carb and sil alteration

Alteration

From	To	#	Alteration	Intesity	Style	Comments
220	221	1:	Silicified	Weak (1-25%)	Pervasive	
		2:	Chlorite	Weak (1-25%)	Pervasive	
		3:	Sericite	Weak (1-25%)	Patches	
		4:	Fe-Carbonate	Weak (1-25%)	Patches	
		5:	Hematite	Weak (1-25%)	Pervasive	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
220	221	1:	Pyrite	Fine grained	Disseminated	3	fg py assoc w/ brecciated altered zones and iron carb clastes
VG: No							
221	238	1:	Pyrite	Fine grained	Scattered grains	1	
VG: No							
251.37	251.39	1:	Argentite	Medium grained	Acicular (needles)	0.5	hosted in vuggy veinlet v2c - electrum not argentite?
VG: No		2:	Pyrite	Medium grained	Disseminated	1	

Structures

From	To	Code	Structure Type	Comments
112.53	112.73	HFZ	High fracture zone	moderately fractured zone w/ cal on fracture planes
118.19	118.43	HFZ	High fracture zone	moderately fractured zone w/ cal on fracture planes, locally up to 1% very fg py
122.84	122.86	FLT2	Fault - breccia	cataclastite? or breccia seam, sharp contacts ; basalt groundmass w/ anglular epd (+/-) fe carb clastes

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Structures

From	To	Code	Structure Type	Comments
142.48	142.5	FLT2	Fault - breccia	cataclastite? or breccia seam, sharp contacts ; basalt groundmass w/ anglular epd (+/-) fe carb clastes
154.93	154.97	FLT2	Fault - breccia	cataclastite? or breccia seam, sharp contacts ; basalt groundmass w/ anglular epd clastes
189.41	189.56	HFZ	High fracture zone	moderately broken mafic pillows wk hem on fracture planes
190.09	190.24	HFZ	High fracture zone	strongly fractured mafic pillows w/ pink vuggy cal on fracture planes

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
111	114	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
114	117	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		40	5	v1 - vuggy
117	120	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		40	1	
120	123	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		65	1	
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			1	
123	126	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
126	129	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
129	132	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
138	141	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		47	1	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
141	144	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		43	1	
144	147	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
147	150	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
150	153	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"		63	2	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			1	

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Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
153	156	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
156	159	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
159	162	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	
162	165	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		30	8	v1- vuggy
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4	
165	168	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
168	171	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			10	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
171	174	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		33	11	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
174	177	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
177	180	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"		77	5	
		2:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"		65	2	
180	183	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
183	186	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
186	189	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
189	192	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		66	4	
192	195	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		66	12	v2= rimmed w/ hem + grey cal +/- fg py
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
195	198	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		67	3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
198	201	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
201	204	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1.5	
204	207	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
207	210	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		35	3	
210	213	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.5	grey cal + hem
213	216	1:	Quartz-Fe-Carbonate /Sulphides	Veinlet Zone - vein 1/4" to 3"			1	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	
216	219	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
219	222	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	
222	225	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		55	9	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	
225	228	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	
228	231	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
231	234	1:	Quartz-Fe-Carbonate /Sulphides	Stringer Zone - vein <1/4"			1.5	
234	237	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
237	240	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	v1 = vuggy
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
240	243	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
243	246	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			10	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		65	5	
246	249	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"		35	9	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
249	252	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		70	5	
		2:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4	

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meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
252	255	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
		2	Quartz-Fe-Carbonate/Epidote	-			3	
255	258	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			2	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
258	261	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			10	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
261	264	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4	
264	267	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			5	
267	270	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5.5	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			4	
270	273	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			3	
273	276	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			16	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
276	279	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5.5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	
279	282	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
		2	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			3	
282	285	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
286	**308**	22		**E1**	**Mafic Volcanic**	Schistose	Fine grained	K. Leupen

Brecciated/ sheared, magnetite altered pillowed metavlocanic. med green with shades of grey,fine grained, semi-brecciated upper and lower contacts with strong shear in between. 2% qtz fe crb veins that are mineralized locally with up to 2% pyrite(Veins exhibit moderate ankerite-sericite alteration halos, local weakly silicified veins). 2% fracture filling qtz fe crb veins throughout. Minor replacement of magnetite rich selvages as loose stringers of fine grained pyrite (locally up to 1%)

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
288	291	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6	
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2.5	

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
291	294	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			12	
294	297	1	Quartz-Fe-Carbonate/Calcite	Shear Vein			5.5	
		2	Quartz-Fe-Carbonate	Extension Vein			8	
297	300	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			10	
		2	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2.5	
300	303	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			10	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
303	306	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
308	**319.1**	11.1		**E1**	**Mafic Volcanic**	Massive	Medium grained	K. Leupen

Massive flow metavolcanic (gabbro). Med green, fine to med grained, massive texture. weakly magnetic, sparse epidote altered veinlets. 1% qtz fe crb veins that are locally vuggy, exhibiting weak sericite-ankerite alteration halos, and mineralized with up to 1% pyrite. 1% barren qtz fe crb stringers+/- epidote throughout. transitional sheared contact at 30 deg TCA

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
309	312	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			7	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	
312	315	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	
315	318	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
319.1	**350.38**	31.28		**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Magnetite altered pillowed metavolcanics (sparse evidence of selvages) Dark grey green colour, fine grained- aphanitic texture, weak foliation, moderately magnetic throughout. 1% qtz fe crb veins that are weakly silicified and mineralized with up to 1% locally. rare alteration halos. up to 1-2% pyrite locally as loose stringers replacing magnetite rich selvages. 1% thin qtz fe crb stringers throughout.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
321	324	1	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5.5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2	

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
350.38	406.18	55.8		E1	Mafic Volcanic	Pillowed	Fine grained	K. Leupen

Pillowed metavolcanics. med green colour, fine grained, frequent epidote alteration related to slevages. weak-moderate silicified. Local high strain defined by 10-20cm intervals of semi brecciated/sheared host. locally magnetic throughout interval, with spikes in magnetics where magnetite rich selvages and mineralized veins occur . 2% qtz fe crb veins that are weakly silcified, with vuggy cores, up to 20cm width, and mineralized with up to 5% pyrite and locally1% silver mineral (argentite, electrum?) and trace chalco,exhibiting weak ankerite-sericite alteration halos. 2% barren qtz fe crb stringers and veins throughout.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
324	327	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
327	330	1:	Quartz-Fe-carbonate	Extension Vein			5.2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			1	
330	333	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			0.8	
333	336	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6.5	
336	339	1:	Quartz-Fe-carbonate	Breccia Veins			4.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	
339	342	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.5	
342	345	1:	Quartz-Fe-Carbonate/Epidote	Extension Vein			4.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1.2	
345	348	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3.8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			1	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
370.4	370.9	1:	Pyrite	Medium grained	Scattered grains	5	Up to 5% pyrite and 1% argentite? in 25cm qtz fe crb veining
VG: No		2:	Argentite	Fine grained	Blebs	1	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
351	354	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.5	
354	357	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
357	360	1	Quartz-Fe-carbonate	Extension Vein			4.5	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
360	363	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			14.5	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.5	
363	366	1	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			6.5	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
366	369	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.5	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.6	
369	372	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			18	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.5	
372	375	1	Quartz-Fe-Carbonate/Calcite	Extension Vein		65	4.5	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.5	
375	378	1	Quartz-Fe-carbonate	Extension Vein			4.5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
378	381	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			6	
		2	Quartz-Fe-carbonate	Extension Vein			4	
381	384	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
384	387	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
387	390	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			10	
		2	Quartz-Fe-carbonate	Breccia Veins			2.5	
390	393	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			14.5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.5	
393	396	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.5	
396	399	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			22.5	
		2	Quartz-Fe-carbonate	Extension Vein			7	
399	402	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			7.5	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	
402	405	1	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
		2	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.5	

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
406.18	**434.45**	28.27		**E1**	**Mafic Volcanic**	Massive	Fine grained	K. Leupen

Massive fine grained,magnetite altered mafic volcanic. brecciated/sheared upper contact at 20 deg TCA. Dark grey green colour, fine to very fine grained massive texture, moderately magnetic throughout. 2% vuggy qtz fe crb veins, up to 6cm in width, exhibiting weak to moderate ankerite-sericite alteration halos and mineralized with up to 3-4% pyrite mainly in the alteration halos. 1-2% qtz fe crb +/- epidote veinlets throughout

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
408	411	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
411	414	1:	Quartz-Fe-carbonate	Extension Vein			8	
414	417	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8.2	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6	
417	420	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.8	
420	423	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.5	
423	426	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3.6	
426	429	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	17	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2.8	
429	432	1:	Quartz-Fe-carbonate	Breccia Veins			14	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.8	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
434.45	**447.65**	13.2		**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Pillowed mafic volcanic. med green fine grained, weakly foliated. weakly magnetic throughout. frequent epidotr alteration associated with pillow selvages. 1% qtz fe crb veins that are locally vuggy, exhibiting weak alteration halos and mineralized with up to 1% pyrite locally. 1-2% qtz fe crb +/- epidote veins throughout

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
435	438	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8.2	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
438	441	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			10	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.8	

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
441	444	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
444	447	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	

447.65	**471.75**	24.1	**E1**	**Mafic Volcanic**	Massive	Fine grained	K. Leupen

Massive mafic volcanic. med green, fine grained massive texture, weakly magnetic throughout, sparse epidoter alteration associated with possible pillow selvages. 2% vuggy qtz fe crb veins with up to 1% pyrite locally, mainly in weak alteration halos, veins are up to 12cm wide. 1-2% barren qtz fe crb +/- epidote stringers.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
450	453	1:	Quartz-Fe-Carbonate/Epidote	Veinlet Zone - vein 1/4" to 3"			14	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	
453	456	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3.5	
456	459	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
459	462	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			5.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			3	
462	465	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6	
465	468	1:	Quartz-Fe-carbonate	Extension Vein			12	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			2.5	
468	471	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	

471.75	**488.54**	16.79	**E1**	**Mafic Volcanic**	Massive	Fine grained	K. Leupen

Locally sheared massive mafic volcanic defined by spikes in foliation intensity and "whispy" textures. med dark green-grey; fine grained, weak-moderate magnetic throughout.1-2% mineralized qtz fe crb veins with moderate alteration halos and up to 2% pyrite. 1-2% qtz fe crb veins at low angles to CA, containing spec hematite and minor pyrite along the vein margins.1-2% qtz fe crb stringers throughout

Structures

From	To	Code	Structure Type	Comments

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
471.75	475.6	FOL		Foliation		Slightly sheared mafic volcanic defined by moderate to strong foliation		
480.5	488.54	FOL		Foliation		Slightly sheared mafic volcanic defined by moderate to strong foliation		

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
474	477	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3.5	
477	480	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			6	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	
480	483	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			14	
483	486	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			9.5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	

488.54	**512.5**	23.96	**E1**	**Mafic Volcanic**	Massive	Fine grained	K. Leupen

Massive mafic volcanic. med to dark green colour, fine grained, massive to locally aphanitic texture, weak-moderate magnetic throughout, sparse epidote alteration associated with possible pillow selvages. 1-2% qtz fe crb veins up to 12cm in width, mineralized with up to 2% locally, concentrated in weak-moderate alteration halos. 1-2% qtz fe crb veinlets throughout (local brecciated textures).

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
489	492	1:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			9	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
492	495	1:	Quartz-Fe-carbonate	Extension Vein			15	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.5	
495	498	1:	Quartz-Fe-carbonate	Extension Vein			12	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
498	501	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5.5	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
501	504	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			6	
		2:	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
504	507	1:	Quartz-Fe-carbonate	Extension Vein			10	
		2:	Quartz-Fe-carbonate	Breccia Veins			8	

DataSet: Brookbank

HoleID: B-16-11

Hole Length (m): 597

Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
507	510	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
512.5	**520.57**	8.07		**E1**	**Mafic Volcanic**	Massive	Fine grained	K. Leupen

Massive mafic volcanic with weak to moderate foliation and speckled appearance caused by leucoxene alt'n. Dark green colour, very weakly magnetic. 2-3% sheared qtz fe crb veins, up to 12cm wide and mineralized with up to 25 pyrite mainly along the vein margins. 2% fracture filling qtz fe crb veinlets.

Structures

From	To	Code	Structure Type	Comments
512.5	520.57	FOL	Foliation	Moderate foliation in leucoxene altered unit. Could not measure due to no orientation

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
513	516	1:	Quartz-Fe-carbonate	Shear Vein		45	22	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	
516	519	1:	Quartz-Fe-carbonate	Shear Vein			6	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
520.57	**536.1**	15.53		**E1**	**Mafic Volcanic**	Pillowed	Fine grained	K. Leupen

Pillowed mafic volcanic. med green colour, fine grained, weak foliation, moderately magnetic with local sections of higher magnetite content, sparse epidote alteration associated with well spaced (up to 1m) selvages. 1-2% qtz fe crb veins with local vuggy textures and mineralized with up to 2% pyrite. 2% fracture filling qtz fe crb veinlets

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
522	525	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
525	528	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	
528	531	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			8.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
531	534	1:	Quartz-Fe-carbonate	Breccia Veins			5.2	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4.5	

536.1	**546.8**	10.7	**E1**	**Mafic Volcanic**	Schistose	Fine grained	K. Leupen

Sheared mafic volcanic. Med dark green colour, striped appearance,fine grained, variable foliation and magnetics, local epidote alteration associated with broken up/sheared selvages. 1-2% qtz fe crb veins that are mineralized with up to 2% pyrite and locally brecciated. 3-4% qtz fe crb stringers that give a striped appearance.

Structures

From	To	Code	Structure Type	Comments
536.11	546.8	SHD	Shear / mylonitic foliation	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
537	540	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6	
		2:	Quartz-Fe-carbonate	Breccia Veins			4.5	
540	543	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			18	
		2:	Quartz-Fe-carbonate	Breccia Veins			3.8	
543	546	1:	Quartz-Fe-carbonate	Breccia Veins			7.5	
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6	

546.8	**551.5**	4.7	**E1**	**Mafic Volcanic**	Schistose	Fine grained	K. Leupen

Sheared, hematite altered mafic volcanic. med to light grey purple colour, tightly banded foliation, striped appearance, variable magnetics (down to insignificant). Local moderater serictie-ankerite alteration halos associated with mineralized veins. weakly silicified. 2-3% qtz fe crb veins, mineralized with up to 2% pyrite and 1% hematite veinlets. local semi massive bands of pyrite as replacement of magnetite close to upper contact

Structures

From	To	Code	Structure Type	Comments
546.8	551.5	SHD	Shear / mylonitic foliation	

551.5	**556.3**	4.8	**E1**	**Mafic Volcanic**	Schistose	Fine grained	K. Leupen

Sheared mafic volcanic. med green colour, tightly banded,striped appearance, local very weak magnetic. 5%, 5-20cm wide qtz crb extensions veins with strongly sheared and sericite-chlorite altered margins (local towards end of hole). trace fine grained disseminated pyrite along the vein margins.. 2-3% thin qtz crb veinlets throughout

Structures

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	Code	Structure Type	Comments
551.5	556.3	SHD	Shear / mylonitic foliation	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
552	555	1:	Quartz-Fe-carbonate	Extension Vein			18	
		2:	Quartz-Fe-carbonate	Shear Vein			8.5	

From	To	Width		Lith Code	Rocktype	Texture	GrainSize	Logged By
556.3	**568**	11.7		**S4B**	**Polymictic Conglomerate**	Supported - matrix	Fine grained	K. Leupen

Sheared, chlorite altered conglomerate. med green colour, strongly foliated/ tightly banded matrix with 10% semi round/flattened various litho clasts up to 6cm in width. 11cm wide silicified qtz fe crb vein that is mineralized with up to 2% pyrite at 558.57m. Very trace pyrite associated with some veins. 2% barren qtz crb veins/ stringers throughout.

Structures

From	To	Code	Structure Type	Comments
556.3	568	SHD	Shear / mylonitic foliation	Strong shear in conglomerate

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
558	561	1:	Fe-Carbonate / Silicified-Sulphide Replaced	Extension Vein			10	
561	564	1:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			6.5	
564	567	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			3.5	

From	To	Width		Lith Code	Rocktype	Texture	GrainSize	Logged By
568	**597**	29		**S4B**	**Polymictic Conglomerate**	Schistose	Fine grained	K. Leupen

Very strongly sheared, sericite altered conglomerate.med green-beige gradually becoming solid beige. fine grained matrix. strong to very strong foliation that becoms mylonitic with depth. 2 healed faults composed of semi consolidated variable size material (@569.75&588.75m) 5% round to flattened various litho clasts up to 8cm. 2-3% barren qtz crb veins/stringers with local very trace pyrite along the vein margins. very trace pyrite disseminated locally in matrix.

Structures

From	To	Code	Structure Type	Comments
568	597	SHD	Shear / mylonitic foliation	Very strong shear with gradual intensity increase with depth

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
570	573	1:	Quartz-Fe-carbonate	Veinlet Zone - vein 1/4" to 3"			22	

DataSet: Brookbank
HoleID: B-16-11

Hole Length (m): 597
Log Length (m): 597

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
573	576	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			25	
576	579	1	Quartz-Fe-carbonate	Extension Vein			30	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	
579	582	1	Quartz-Fe-carbonate	Extension Vein			30	
582	585	1	Quartz-Fe-carbonate	Extension Vein			55	
585	588	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			20	
588	591	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			26	
591	594	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			9	
594	597	1	Quartz-Fe-carbonate	Extension Vein			24	
		2	Quartz-Fe-Carbonate / Silicified	Extension Vein		42	13.5	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 597**

HoleID: B-16-11 **Max Samp Depth (m): 597**

Total meters Sampled: 592.66

Primary Assay Samples:	612	89.21 %
Field Duplicate Samples:	19	2.77 %
Standard/Blank Samples:	55	8.02 %
Total Samples:	686	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
41.39	42	0.61	247294	HCORE			A16-13396	<0.005	HFZ; strongly fractured pillow basalt; very trace fg py sct
42	43	1	247295	HCORE			A16-13396	<0.005	HFZ (42.4-42.8m); epd on fracture planes very trace fg py
43	44	1	247296	HCORE			A16-13396	<0.005	very trace sct py concentrated at contacts w/ 3% grey calcite stringers subvertical TCA
		0	247297	STD		CDN_GS_P4B	A16-13396	0.367	
44	45	1	247298	HCORE			A16-13396	<0.005	very trace sct py concentrated at contacts w/ 3% grey calcite w/ specs of specular hematite; stringers are 70 deg TCA
45	46	1	247299	HCORE			A16-13396	<0.005	no visible mineralization
46	47	1	247300	HCORE			A16-13396	<0.005	patchy act + epd alteration; trace py dissems concentrated in basalt in between patchy alteration; 2cm wide pink epd-qtz(+/-)-carb veinlet w/ locally 1% very fg py dissems
47	48	1	247302	HCORE			A16-13396	<0.005	trace to 1% mg py concentrated at epd pillow selvage/wallrock contacts; three 1cm wide extension cal-qtz veinlets (73 deg TCA) w/ trace fg py
48	49	1	247303	HCORE			A16-13396	<0.005	locally 1% bleby py overgrowing fe-carb alteration at epd-qtz pillow selvage; trace py assoc w/ glassy qtz-carb veinlets (<1%) @ 40 deg TCA
49	50	1	247304	HCORE			A16-13396	<0.005	trace py assoc w/ glassy qtz-carb veinlets (<1%) @ 40 deg TCA
50	51	1	247305	HCORE			A16-13396	<0.005	HFZ from 50-50.25m (4% pink qtz-carb-cal-spec hem veinlets in HFZ w/ 1% fg to bleby py dissems); wk spotty mag throughout rest of sample w/ 2% vuggy cal stringers paralell TCA w/ very trace py
51	52	1	247306	HCORE			A16-13396	<0.005	trace py assoc w/ chl-qtz-carb-cal veinlet @ 50 deg TCA; trace bleby py assoc w/ epd-qtz-carb stringers (3%)
52	53	1	247307	HCORE			A16-13396	<0.005	very trace fg py assoc w/ irregular network of epd-qtz-carb stringers (~5% modal)

53	54	1	247308	HCORE			A16-13396	<0.005	HFZ from 53.47-53.65m w/ hem on fracture planes; trace fg py assoc w/ epd pillow selvage; trace py overgrowing cal-carb stringers (stringers = 3% of unit)
54	55	1	247309	HCORE			A16-13396	<0.005	one cm veinlet @ 35 deg TCA, quartz rimmed w/ iron carb; trace py over-growing fe-carb
		0	247310	DUP	247309		A16-13396	<0.005	
55	56	1	247311	HCORE			A16-13396	<0.005	trace bleby py assoc w/ epd pillow selvage; trace fg py assoc w/ 2% irregular qtz-carb stringers concentrated at stringer/wallrock contacts
56	57	1	247312	HCORE			A16-13396	<0.005	trace sct fg py dissems; up to 25% irregular epd stringers cross-cut by vuggy cal stringers at 70 deg TCA
57	58	1	247313	HCORE			A16-13396	<0.005	trace py concentrated in basalt at contacts w/ epd pillow selvages
58	59	1	247314	HCORE			A16-13396	<0.005	trace fg py assoc w/ network of v2e + cal stringers (irregular morphology); cross-cutting epd alteration of pillow mafics
59	60	1	247315	HCORE			A16-13396	<0.005	wk pervasive mag signature; wkly fractured w/ hem on fracture planes; no visible mineralization
60	61	1	247316	HCORE			A16-13396	<0.005	trace fg py dissem assoc w/ epd pillow selvage w/ glassy grey sil flooding
61	62	1	247317	HCORE			A16-13396	<0.005	wkly fractured ; trace fg py dissem assoc w/ epd pillow selvage w/ glassy grey sil flooding
62	63	1	247318	HCORE			A16-13396	<0.005	trace fg py assoc w/ 3% irregular qtz-carb stringers w/ ser alteration halos;
63	64	1	247319	HCORE			A16-13396	<0.005	trace fg py assoc w/ 2% irregular epd-qtz-carb stringers
		0	247320	STD		CDN_GS_P7J	A16-13396	0.747	
64	65	1	247321	HCORE			A16-13396	<0.005	up to 1% bleby py at contact between basalt and epd pillow selvage; fe-carb stringer overgrowing epd selvage
65	66	1	247322	HCORE			A16-13396	<0.005	trace py assoc w/ ~30% epd pillow selvages rimmed w/ dark green chl
66	67	1	247323	HCORE			A16-13396	0.005	trace py assoc w/ epd-qtz- (+/-) cal stringers (irregular morphology) ~3-4% modal
67	68	1	247324	HCORE			A16-13396	<0.005	trace py assoc w/ epd pillow selvage
68	69	1	247325	HCORE			A16-13396	<0.005	trace bleby py assoc w/ epd pillow selvage
69	70	1	247326	HCORE			A16-13396	<0.005	trace fg dissem py hosted by stringer network of epd-carb-qtz stringers w/ irregular morphology (3%)

70	71	1	247327	HCORE			A16-13396	<0.005	trace fg dissem py hosted by stringer network of epd-carb-qtz stringers w/ irregular morphology (3%) w/ bleached alteration halos
71	72	1	247328	HCORE			A16-13396	<0.005	trace fg dissem py assoc w/ epd-carb-qtz stringer network w/ irregular morphology (3%), py hosted in veins or at contacts w/ wallrock
		0	247329	Blank		Blank	A16-13396	<0.005	
72	73	1	247330	HCORE			A16-13396	<0.005	no visible mineralization
73	74	1	247331	HCORE			A16-13396	<0.005	three 2cm wide veinlets @ 65 deg TCA; epd-qtz-carb-cal; very wk vuggy texture; locally 1% py concentrated at wallrock contacts
74	75	1	247332	HCORE			A16-13396	<0.005	trace bleby py assoc w epd + cal pillow selvage w/ very wk mag
75	76	1	247333	HCORE			A16-13399	<0.005	trace fg dissem py hosted by epd-carb-qtz stringers (3%) w/ bleached alteration halos; py is concentrated at wallrock contacts
76	77	1	247334	HCORE			A16-13399	<0.005	trace py stringers to dissems assoc w/ epd + cal pillow selvage w/ very wk mag
77	78	1	247335	HCORE			A16-13399	<0.005	trace fg dissem py hosted by 1% epd-carb-qtz stringers @ 57 deg TCA
78	79	1	247336	HCORE			A16-13399	<0.005	trace fg dissem py hosted by 1% epd-carb-qtz stringers @ 57 deg TCA
79	80	1	247337	HCORE			A16-13399	<0.005	trace fg dissem py hosted by 1% epd-carb-qtz stringers @ 57 deg TCA
		0	247338	STD		CDN_GS_P4B	A16-13399	0.373	
80	81	1	247339	HCORE			A16-13399	<0.005	no visible mineralization
81	82	1	247340	HCORE			A16-13399	<0.005	very trace sct py
82	83	1	247341	HCORE			A16-13399	<0.005	40cm wide epd pillow selvage subparallel TCA w/ glassy sil flooding; trace py rimming sil flooding
83	84	1	247342	HCORE			A16-13399	<0.005	no visible mineralization
84	85	1	247343	HCORE			A16-13399	<0.005	2cm wide epd pillow selvage w/ seams of sil alteration hosting trace dissem py
85	86	1	247344	HCORE			A16-13399	<0.005	up to 10% epd pillow + cal selvages w/ trace dissem to bleby py overgrowing cal alteration
86	87	1	247345	HCORE			A16-13399	<0.005	<5% epd pillow + cal + fe carb selvages w/ 1% dissem to bleby py assoc w/ fe carb alteration
87	88	1	247346	HCORE			A16-13399	<0.005	3% epd pillow + cal + fe carb selvages w/ trace bleby py assoc w/ cal alteration
		0	247347	DUP	247346		A16-13399	<0.005	

88	89	1	247348	HCORE		A16-13399	<0.005	epd pillow selvage rimmed w/ dark chl alteration; very wk fe carb + cal alteration; w/ locally 1% py assoc w/ cal-carb alteration and concentrated in wallrock/selvage contacts
89	90	1	247349	HCORE		A16-13399	<0.005	epd pillow selvage rimmed w/ dark chl alteration and weakly flooded w/ glassy sil; very wk fe carb + cal alteration, very wk mag; w/ locally 1% py assoc w/ cal alteration
90	91	1	247350	HCORE		A16-13399	<0.005	epd pillow selvage rimmed w/ dark chl alteration and wk cal alteration; very wk mag; w/ locally 1-2% bleby py
91	92	1	247351	HCORE		A16-13399	<0.005	epd pillow selvage rimmed w/ dark chl alteration and wk cal alteration; very wk mag; w/ locally trace dissem py
92	93	1	247352	HCORE		A16-13399	<0.005	no visible mineralization
93	94	1	247353	HCORE		A16-13399	<0.005	very trace py assoc w/ 2cm wide epd-qtz-carb veinlet
94	95	1	247354	HCORE		A16-13399	<0.005	no visible mineralization
95	96	1	247355	HCORE		A16-13399	<0.005	epd pillow selvage rimmed w/ very wk cal alteration; very wk mag; w/ locally trace dissem py
		0	247356	STD	CDN_GS_P7J	A16-13399	0.675	
96	97	1	247357	HCORE		A16-13399	<0.005	no visible mineralization
97	98	1	247358	HCORE		A16-13399	<0.005	very trace sct py
98	99	1	247359	HCORE		A16-13399	<0.005	epd pillow selvage rimmed w/ dark chl alteration; very wk fe carb + cal alteration; w/ locally trace to 1% py assoc w/ cal-carb alteration
99	100	1	247360	HCORE		A16-13399	<0.005	no visible mineralization
100	101	1	247361	HCORE		A16-13399	<0.005	no visible mineralization
101	102	1	247362	HCORE		A16-13399	<0.005	no visible mineralization
102	103	1	247363	HCORE		A16-13399	<0.005	very trace fg assoc w/ <1% qtz-carb-epd stringers w/ bleached alteration halos
103	104	1	247364	HCORE		A16-13399	<0.005	very trace fg assoc w/ <1% qtz-carb-epd stringers w/ bleached alteration halos
		0	247365	Blank	Blank	A16-13399	<0.005	
104	105	1	247366	HCORE		A16-13399	<0.005	trace fg py dissems assoc w/ 1-2% qtz-carb-epd stringers @ 60 deg TCA w/ bleached alteration halos; 1% bleby py assoc w/ grey cal fracture-controlled alteration within epd pillow selvage
105	106	1	247367	HCORE		A16-13399	<0.005	trace sct py
106	107	1	247368	HCORE		A16-13399	<0.005	very trace fg assoc w/ <1% qtz-carb-epd stringers
107	108	1	247369	HCORE		A16-13399	<0.005	very trace fg py assoc w/ epd + chl selvage

108	109	1	247370	HCORE			A16-13399	<0.005	trace to 1% fg assoc w/ 2cm wide qtz-carb-epd veinlet; locally 1% bleby py assoc w/ epd + chl selvage
109	110	1	247371	HCORE			A16-13399	<0.005	no visible mineralization
110	111	1	247372	HCORE			A16-13399	<0.005	HFZ; clay gauge from 110-110.25m; moderately to strongly fractured w/ calcite on fracture planes; 1% py throughout
111	112	1	247373	HCORE			A16-13399	<0.005	HFZ; moderately to strongly fractured w/ calcite on fracture planes; 1% py throughout
		0	247374	STD		CDN_GS_P4B	A16-13399	0.389	
112	113	1	247375	HCORE			A16-13399	<0.005	HFZ from 112.53-112.73m; this interval is moderately to strongly fractured w/ calcite on fracture planes; 1% py throughout
113	114	1	247376	HCORE			A16-13399	<0.005	very trace py assoc w/ <1% vuggy v2c stringers
114	114.6	0.6	247377	HCORE			A16-13399	<0.005	flow breccia; wk fol; mod chl alteration; deformed pillow selvages and folded fe-carb-epd veinlets; patchy fracture-filling grey cal alteration (~5%); late vuggy v2c generation @ 40 deg TCA; up to 2% very fg py scattered throughout deformed pillow selvage
114.6	115.4	0.8	247378	HCORE			A16-13399	<0.005	flow breccia; wk fol; mod chl alteration; deformed pillow selvages and folded fe-carb-epd veinlets; patchy fracture-filling grey cal alteration (~5%); late vuggy v2c generation @ 40 deg TCA; up to 2% very fg py scattered throughout deformed pillow selvage
115.4	116.32	0.92	247379	HCORE			A16-13399	<0.005	flow breccia; wk to mod fol; mod chl alteration; 5% late vuggy v2c veinlet generation @ 40 deg TCA w/ bleached (ser?) alteration halos; up to 2% very fg py assoc w/ veinlets and at veinlet/wallrock contacts
116.32	117	0.68	247380	HCORE			A16-13399	<0.005	flow breccia; wk fol; mod chl alteration; 2% pink vuggy v2c stringers; up to 1% very fg py assoc w/ stringers
117	118	1	247381	HCORE			A16-13399	<0.005	trace fg py sct throughout; 2 epd pillow selvages very weakly magnetic; w/ locally 1% bleby py concentrated at wallrock/selvage contacts
118	119	1	247382	HCORE			A16-13399	<0.005	HFZ from 118.19-118.43m; 1-2% pink vuggy v2c stringers to veinlets w/ locally 1% fg cubic py w/in vugs
		0	247383	DUP	247382		A16-13399	<0.005	
119	120	1	247384	HCORE			A16-13399	<0.005	no visible mineralization

120	121	1	247385	HCORE			A16-13483	<0.005	1% pink vuggy v2c stringers w/ trace fg cubic py w/in vugs
121	122	1	247386	HCORE			A16-13483	<0.005	1% pink vuggy v2c stringers @ 53 deg TCA; w/ trace fg cubic py w/in vugs
122	123	1	247387	HCORE			A16-13483	<0.005	no visible mineralization; small cataclastite flt from 122.84-122.86m
123	124	1	247388	HCORE			A16-13483	<0.005	very trace py assoc w/ <1% vuggy pink cal-carb-qtz stringers (irregular morphology)
124	125	1	247389	HCORE			A16-13483	<0.005	no visible mineralization
125	126	1	247390	HCORE			A16-13483	<0.005	trace bleby py assoc w/ 1cm wide epd-qtz-carb veinlet, irregular morphology
126	127	1	247391	HCORE			A16-13483	<0.005	irregular pervasive epd alteration; trace bleby py hosted in wallrock proximal to epd alteration
		0	247392	STD		CDN_GS_P7J	A16-13483	0.798	
127	128	1	247393	HCORE			A16-13483	<0.005	trace fg py assoc w/ epd pillow selvage/wallrock contacts
128	129	1	247394	HCORE			A16-13483	<0.005	very trace py assoc w/ <1% vuggy pink cal-carb-qtz stringers (irregular morphology)
129	130	1	247395	HCORE			A16-13483	<0.005	no visible mineralization
130	131	1	247396	HCORE			A16-13483	<0.005	no visible mineralization
131	132	1	247397	HCORE			A16-13483	<0.005	no visible mineralization
132	133	1	247398	HCORE			A16-13483	<0.005	1-2% qtz-cal-carb stringers aligned @ 60 deg TCA hosting trace fg py
133	134	1	247399	HCORE			A16-13483	<0.005	no visible mineralization
137	138	1	247400	HCORE			A16-13483	<0.005	trace bleby py assoc w/ magnetic epd pillow selvage
		0	247401	Blank		Blank	A16-13483	<0.005	
138	139	1	247402	HCORE			A16-13483	<0.005	trace bleby py assoc w/ magnetic epd pillow selvage
139	140	1	247403	HCORE			A16-13483	<0.005	trace fg py assoc with two 1cm wide pink vuggy qtz-cal-carb veinlets; trace fg py assoc w/ magnetic epd pillow selvage
140	141	1	247404	HCORE			A16-13483	<0.005	trace fg py assoc w/ poorly defined epd-cal pillow selvage
141	142	1	247405	HCORE			A16-13483	<0.005	trace fg py assoc w/ <1% pink qtz-carb-cal stringers
142	143	1	247406	HCORE			A16-13483	<0.005	small flt seam 142.48-142.5; no visible mineralization
143	144	1	247407	HCORE			A16-13483	<0.005	very trace py assoc w/ <1% qtz-cal-carb-hem stringer
144	145	1	247408	HCORE			A16-13483	<0.005	one 5cm and one 25cm patch of wk ser+hem + cal + mod chl alteration w/ 7% grey fracture-filling cal; trace cubic py assoc w/ vugs in alteration patches

145	146.1	1.1	247409	HCORE			A16-13483	<0.005	lost core from 145.7-146.15; very trace py assoc w/ <1% vuggy pink qtz-cal-carb-hem stringers
		0	247410	STD		CDN_GS_P4B	A16-13483	0.386	
146.1	147	0.9	247411	HCORE			A16-13483	<0.005	very trace py assoc w/ <1% vuggy pink qtz-cal-carb-hem stringers
147	148	1	247412	HCORE			A16-13483	<0.005	2cm wide pink vuggy qtz-cal-carb veinlet w/ trace cubic py
148	149	1	247413	HCORE			A16-13483	<0.005	trace py assoc w/ epd-cal-qtz veinlets (2%)
149	150	1	247414	HCORE			A16-13483	<0.005	no visible mineralization
150	151	1	247415	HCORE			A16-13483	<0.005	very trace sct py
151	152	1	247416	HCORE			A16-13483	<0.005	parallel set of stringers @ 63 deg TCA; qtz-carb-cal; trace very fg py dissems
152	153	1	247417	HCORE			A16-13483	<0.005	trace py assoc w/ pink hem stained qtz-cal veinlets <1%; offset by late strike slip flt
153	154	1	247418	HCORE			A16-13483	<0.005	1cm wide qtz-cal vein stained w/ hem on rim; vuggy w/ euhedral py crystals in vugs (<1% py)
		0	247419	DUP	247418		A16-13483	<0.005	
154	155	1	247420	HCORE			A16-13483	<0.005	flt 154.93-154.97; trace py assoc w/ 2-3% pink cal-qtz stringers ; 60 deg TCA
155	156	1	247421	HCORE			A16-13483	<0.005	trace py overgrowing cal filled vesicles; trace mg py in epd + sil flooded pillow selvages
156	157	1	247422	HCORE			A16-13483	<0.005	156.8-157m; patchy epd alteration (deformed pillows?); w/ hem + ser alteration (very wk) as halo alteration around 2cm wide white v2v veinlet; locally 2% mg py dissems assoc w/ halo
157	158	1	247423	HCORE			A16-13546	<0.005	mm wide py veinlet; overgrowing mag??
158	159	1	247424	HCORE			A16-13546	<0.005	trace py assoc w/ epd pillow selvages subparallel TCA
159	160	1	247425	HCORE			A16-13546	<0.005	trace to 1% py assoc w/ epd pillow selvages subparallel TCA
160	161	1	247426	HCORE			A16-13546	<0.005	trace to 1% py assoc w/ epd pillow selvages subparallel TCA
161	162	1	247427	HCORE			A16-13546	<0.005	trace sct py
		0	247428	STD		CDN_GS_P7J	A16-13546	0.732	
162	163	1	247429	HCORE			A16-13546	<0.005	epd pillow selvage w/ fe carb + cal + sil flooding; up to 1% py in selvage, rimming sil alteration and sct throughout
163	164	1	247430	HCORE			A16-13546	<0.005	no visible mineralization
164	165	1	247431	HCORE			A16-13546	<0.005	trace sct py assoc w/ 5cm patch of chl alteration

165	166	1	247432	HCORE		A16-13546	<0.005	trace sct py assoc w/ 5cm patch of chl alteration and very trace assoc w/ calcite-qtz stringer
166	167	1	247433	HCORE		A16-13546	<0.005	trace sct py assoc w/ 5cm patch of chl alteration, patchy bleaching (ser? w/ very anhedral mag crystals??) and very trace py assoc w/ calcite-qtz stringer
167	168	1	247434	HCORE		A16-13546	<0.005	very trace sct py seams overgrowing cal stringers --> light green halos (ser?)
168	169	1	247435	HCORE		A16-13546	<0.005	very trace py assoc w/ irregular morphology 2% pink hem stained qtz-cal stringers
169	170	1	247436	HCORE		A16-13546	<0.005	no visible mineralization
		0	247437	Blank	Blank	A16-13546	<0.005	
170	171	1	247438	HCORE		A16-13546	<0.005	very trace py hosted by <1% qtz-cal stringers rimmed w/ hem alteration
171	172	1	247439	HCORE		A16-13546	<0.005	very trace py hosted by 4cm wide qtz-cal veinlet rimmed w/ hem alteration @ 33 deg TCA
172	173	1	247440	HCORE		A16-13546	<0.005	trace fg py assoc w/ cal-qtz tension gashes (1-2%)
173	174	1	247441	HCORE		A16-13546	<0.005	trace py assoc w/ epd pillow selvages, w/ chl inclusions (very weak mag, maybe magnetite?); late grey cal tension gashes cross-cutting and offsetting epd-qtz-carb stringers; very trace sct py in basalt assoc w/ contacts w/ v2e stringers
174	175	1	247442	HCORE		A16-13546	<0.005	very trace dissem py assoc w/ v2e stringers; 30 cm wide patch of sil + epd flooding hosting 1% spotty py dissems and trace py veinlets at contacts w/ basalt
175	176	1	247443	HCORE		A16-13546	<0.005	10 cm patch of breccia w/ angular epd clastes - brecciated pillow selvage? - hosting very trace py
176	177	1	247444	HCORE		A16-13546	<0.005	trace cubic py assoc w/ epd pillow selvage
177	178	1	247445	HCORE		A16-13546	<0.005	10cm patch of wk perv ser + hem + chl alteration at contact w/ 3cm wide pink qtz-cal veinlet; alteration patch hosts trace to 1% fg-bleby py
		0	247446	STD	CDN_GS_P4B	A16-13546	0.396	
178	179	1	247447	HCORE		A16-13546	<0.005	1cm wide py veinlet overgrowing fe-carb-hem-cal-qtz veinlet
179	180	1	247448	HCORE		A16-13546	<0.005	trace fg py assoc w/ 2% pink hem-cal-qtz stringers @ 65 deg TCA ; additional trace-1% py assoc w/ epd pillow selvages
180	181	1	247449	HCORE		A16-13546	<0.005	trace fg py assoc w/ 2% pink hem-cal-qtz stringers @ 65 deg TCA ; additional trace-1% py assoc w/ epd pillow selvages

181	182	1	247450	HCORE			A16-13546	<0.005	trace fg py assoc w/ 1% pink hem-cal-qtz stringers; 2% glassy qtz inclusions w/ spec hem and trace fg py overgrowing spec hem
182	183	1	247451	HCORE			A16-13546	<0.005	wkly brecciated w/ wk pervasive cal alteration creating vuggy texture; epd + chl altered selvages (?) ; 4% pink vuggy cal-hem-(+/-)-qtz stringers w/ up to 2% very fg py in stringers and wallrock
183	184	1	247452	HCORE			A16-13546	<0.005	3cm wide seam of very fg py dissems; up to 15% of the sample is altered selvages? epd+fe carb+ cal+ sil flooding + chl w/ 1% bleby py throughout
184	185	1	247453	HCORE			A16-13546	<0.005	trace bleby py overgrowing grey cal filled vesicles; trace py assoc w/ 3% pink carb-qtz-cal-epd stringers (irregular morphology)
185	186	1	247454	HCORE			A16-13546	<0.005	wk perv cal alteration giving interval a vuggy texture; 3% grey cal-hem stringers w/ very trace fg py dissems; trace py assoc w/ 3% pink carb-qtz-cal-epd stringers (irregular morphology)
		0	247455	DUP	247454		A16-13546	<0.005	
186	187	1	247456	HCORE			A16-13546	<0.005	trace py concentrated at epd+chl altered selvage; trace py assoc w/ 1% pink carb-qtz-cal-epd stringers (irregular morphology)
187	188	1	247457	HCORE			A16-13546	<0.005	trace py assoc w/ 2% pink vuggy carb-qtz-cal-epd stringers (irregular morphology)
188	189	1	247458	HCORE			A16-13546	<0.005	trace py assoc w/ <1% pink carb-qtz-cal stringers (irregular morphology) ; offset by grey cal-hem stringers
189	190	1	247459	HCORE			A16-13546	<0.005	HFZ 189.41-189.56m, wk hem on fracture planes; trace py assoc w/ <1% pink carb-qtz-cal stringers (irregular morphology)
190	191	1	247460	HCORE			A16-13546	<0.005	HFZ 190.09-190.24m, wk hem + cal on fracture planes; trace py assoc w/ 2% pink carb-qtz-cal stringers (irregular morphology)
134	135	1	247461	HCORE			A16-13483	<0.005	trace sct py
135	136	1	247462	HCORE			A16-13483	<0.005	trace sct py
136	137	1	247463	HCORE			A16-13483	<0.005	trace fg py assoc w/ high angle vuggy cal-qtz veinlet (2cm)
		0	247464	STD		CDN_GS_P7J	A16-13483	0.635	
191	192	1	247465	HCORE			A16-13546	<0.005	3-4% vuggy cal-qtz-carb extension veinlets; 1% grey cal-hem stringers w/ 1% py concentrated at stringer/wallrock contacts

192	193	1	247466	HCORE		A16-13546	<0.005	trace bleby py assoc w/ epd + chl + very wk mag pillow selvage; 1% grey cal-hem stringers w/ alteration halos and trace fg py dissems; grey cal-hem stringers offset epd-cal-qtz veinlets
193	194	1	247467	HCORE		A16-13546	<0.005	no visible mineralization
194	195	1	247468	HCORE		A16-13546	<0.005	very trace fg py at veinlet/wallrock contacts; 3% grey cal-hem-qtz veinlets @ 65 deg tca
195	196	1	247469	HCORE		A16-13546	<0.005	195.4-196m - wkly brecciated ~70% epd + 10% sil + 5% ser + 5% act (?); wk pervasive hem; trace to 1% fg py concentrated at mafic basalt/breccia unit
196	197	1	247470	HCORE		A16-13546	<0.005	196-196.2m- chl altered w/ 30% vuggy cal veinlets; locally 1-2% fg py dissems w/in vugs and w/in chl altered wallrock
197	198	1	247471	HCORE		A16-13546	<0.005	197.95-198m = sil altered (~80%) w/ chl ribboning; trace fg py
198	199	1	247472	HCORE		A16-13546	<0.005	mag + epd pillow selvage subparallel TCA; 1% mg to bleby py; additional trace to 1% very fg py hosted by <1% pink vuggy hem-cal-qtz stringers
		0	247473	Blank	Blank	A16-13546	<0.005	
199	200	1	247474	HCORE		A16-13546	<0.005	3cm seam of grey cal + hem alteration w/ trace fg py
200	201	1	247475	HCORE		A16-13546	<0.005	1% cubic py assoc w/ magnetic epd + sil + hem staining pillow selvages (selvages = ~15% of sample); up to 4% irregular pink qtz-carb-epd stringers w/ bleached alteration halos and trace to 1% very fg py
201	202	1	247476	HCORE		A16-13546	<0.005	locally 1% cubic py assoc w/ magnetic epd + sil pillow selvages (selvages = ~5% of sample);
202	203	1	247477	HCORE		A16-13546	0.005	no visible mineralization
203	204	1	247478	HCORE		A16-13546	<0.005	no visible mineralization
204	205	1	247479	HCORE		A16-13582	<0.005	trace cubic py assoc w/ weakly magnetic epd + chl pillow selvages (selvages = ~5% of sample);
205	206	1	247480	HCORE		A16-13582	0.007	trace bleby py assoc w/ weakly magnetic epd + chl pillow selvages ; trace sct py
206	207	1	247481	HCORE		A16-13582	<0.005	no visible mineralization
		0	247482	STD	CDN_GS_P4B	A16-13582	0.471	
207	208	1	247483	HCORE		A16-13582	<0.005	no visible mineralization
208	209	1	247484	HCORE		A16-13582	<0.005	no visible mineralization
209	210	1	247485	HCORE		A16-13582	<0.005	no visible mineralization
210	211	1	247486	HCORE		A16-13582	<0.005	very trace py assoc w/ epd pillow selvage

211	212	1	247487	HCORE			A16-13582	<0.005	very trace py hosted by 2cm wide grey cal-hem-qtz veinlet @ 65 deg TCA
212	213	1	247488	HCORE			A16-13582	<0.005	6.5cm - brecciated vein? or altered pillow selvage? epd filled w/ sil + dark purple hem + dark chl clastes; locally up to 1% bleby py concentrated in sil
213	214	1	247489	HCORE			A16-13582	<0.005	~15% of sample is epd+sil selvage w/ trace bleby py
214	215	1	247490	HCORE			A16-13582	<0.005	no visible mineralization
		0	247491	DUP	247490		A16-13582	<0.005	
215	216	1	247492	HCORE			A16-13582	0.008	<<1% pink vuggy qtz-cal veinlets w/ trace cubic py
216	217	1	247493	HCORE			A16-13582	<0.005	4cm wide vuggy cal-qtz-carb veinlet bleached alteration halo, w/ 1% very fg py
217	218	1	247494	HCORE			A16-13582	<0.005	<<1% pink vuggy qtz-cal stringers w/ trace fg py dissems
218	219	1	247495	HCORE			A16-13582	<0.005	<<1% pink vuggy qtz-cal stringers w/ trace fg py dissems, trace py assoc w/ epd + sil pillow selvage
219	220	1	247496	HCORE			A16-13582	<0.005	4% pink vuggy qtz-cal stringers w/ trace fg py dissems
220	221	1	247497	HCORE			A16-13582	0.011	altered and mineralized mafic basalt; wkly brecciated; wkly pervasively silicified; weak chl + ser with fe-carb clastes and very wk pervasive hem; 5% grey fracture filling calcite w/ hem staining; 2-3% very fg py
221	222	1	247498	HCORE			A16-13582	<0.005	very trace py overgrowing cal-filled vesicles
222	223	1	247499	HCORE			A16-13582	<0.005	5cm patch of mod chl + wk ser alteration w/ locally 1% cubic py ; cross-cut by hem-cal stringers
		0	247500	STD		CDN_GS_P7J	A16-13582	0.711	
223	224	1	247501	HCORE			A16-13582	<0.005	mod chl altered basalt; 4% grey cal-qtz-carb stringers w/ ser alteration halos; locally 2% fg py concentrated at stringer/wallrock contacts
224	225	1	247502	HCORE			A16-13582	<0.005	2cm wide vuggy pink cal-qtz-carb veinlet; trace fg py
225	226	1	247503	HCORE			A16-13582	<0.005	trace fg py assoc w/ <1% pink vuggy cal-qtz stringers
226	227	1	247504	HCORE			A16-13582	<0.005	trace bleby py assoc w/ very weakly magnetic epd + chl pillow selvage
227	228	1	247505	HCORE			A16-13582	<0.005	trace very fg py mm-wide seams overgrowing <1% calcite + hem stringers
228	229	1	247506	HCORE			A16-13582	<0.005	trace very fg py mm-wide seams overgrowing <1% calcite + hem stringers

229	230	1	247507	HCORE			A16-13582	0.005	~10% of sample is epd + chl selvages w/ very wk magnetic signature; w/ locally up to 1% cubic py
230	231	1	247508	HCORE			A16-13582	<0.005	very trace py assoc w/ <1% pink vuggy cal-qtz-carb stringers
		0	247509	Blank		Blank	A16-13582	<0.005	
231	232	1	247510	HCORE			A16-13582	<0.005	no mineralization
232	233	1	247511	HCORE			A16-13582	<0.005	trace blebs of py assoc w/ vesicles (<1%)
233	234	1	247512	HCORE			A16-13582	<0.005	very trace py assoc w/ <1% pink vuggy cal-qtz-carb stringers
234	235	1	247513	HCORE			A16-13582	<0.005	~5% of sample is epd + chl selvages w/ very wk magnetic signature; w/ locally up to 1% cubic py
235	236	1	247514	HCORE			A16-13582	<0.005	trace very fg py dissems overgrowing <1% calcite stringers
236	237	1	247515	HCORE			A16-13582	<0.005	trace py assoc w/ 2% pink vuggy cal-qtz-carb stringers
237	238	1	247516	HCORE			A16-13582	<0.005	very trace py assoc w/ <1% pink vuggy cal-qtz-carb stringers
238	239	1	247517	HCORE			A16-13582	<0.005	~2% of sample is epd + chl selvages w/ very wk magnetic signature; w/ trace cubic py
		0	247518	STD		CDN_GS_P4B	A16-13582	0.426	
239	240	1	247519	HCORE			A16-13582	<0.005	2% parallel vuggy pink cal-carb-qtz stringers @ 75 deg TCA w/ trace fg py dissems
240	241	1	247520	HCORE			A16-13582	<0.005	1% parallel vuggy pink cal-carb-qtz stringers @ 75 deg TCA w/ trace fg py dissems
241	242	1	247521	HCORE			A16-13582	<0.005	very trace mm-scale fg py dissems overgrowing trace calcite stockwork
242	243	1	247522	HCORE			A16-13582	<0.005	1cm wide pink vuggy qtz-carb-cal veinlet w/ trace fg py dissems concentrated at wallrock/veinlet contacts
243	244	1	247523	HCORE			A16-13582	<0.005	3cm wide vuggy cal-qtz-carb veinlet w/ up to 1% fg py crystallized in vugs
244	245	1	247524	HCORE			A16-13582	<0.005	2 parallel 1 cm pink grey cal-carb-qtz veinlets rimmed w/ hem alteration; 65 deg TCA; trace py concentrated @ veinlet/wallrock contacts
245	246	1	247525	HCORE			A16-13582	<0.005	1 cm pink grey cal-carb-qtz veinlets rimmed w/ hem alteration; 65 deg TCA; trace py concentrated @ veinlet/wallrock contacts
246	247	1	247526	HCORE			A16-13582	<0.005	2% parallel vuggy pink cal-carb-qtz veinlets @ 75 deg TCA w/ trace fg py dissems ; mineralized veinlets cross-cut early generation qtz-epd-carb

		0	247527	DUP	247526		A16-13582	<0.005	
247	248	1	247528	HCORE			A16-13582	<0.005	trace calcite tension gashes hem stained w/ very trace fg py
248	249	1	247529	HCORE			A16-13582	<0.005	no visible mineralization; weak fracturing w/ hem on the fracture planes
249	250	1	247530	HCORE			A16-13582	<0.005	10cm patch of mod hem + chl alteration w/ locally 15% cal +/- qtz stringers irregular morphology, 5% grey calcite as fracture-fill; 2%py as fg dissems and seams assoc w/ grey calcite
250	251	1	247531	HCORE			A16-13582	<0.005	trace cubic py assoc w/ epd pillow selvage
251	252	1	247532	HCORE			A16-13582	<0.005	1cm wide vuggy qtz veinlet-cal veinlet w/ trace fg py and argentite or electrum ? crystallized in vugs;
252	253	1	247533	HCORE			A16-13582	<0.005	trace py assoc w/ epd selvage
253	254	1	247534	HCORE			A16-13582	<0.005	trace py assoc w/ epd selvage subparallel TCA; very trace py assoc w/ <1% pink vuggy cal-qtz-carb stringers
254	255	1	247535	HCORE			A16-13582	<0.005	very trace py assoc w/ <1% pink vuggy cal-qtz-carb stringers
		0	247536	STD		CDN_GS_P7J	A16-13582	0.776	
255	256	1	247537	HCORE			A16-13582	<0.005	very trace py assoc w/ <1% pink vuggy cal-qtz-carb stringers
256	257	1	247538	HCORE			A16-13582	<0.005	trace cubic py assoc w/ epd pillow selvage
257	258	1	247539	HCORE			A16-13582	<0.005	very trace py assoc w/ <1% pink vuggy cal-qtz-carb stringers
258	259	1	247540	HCORE			A16-13582	<0.005	1% pyrite as replacement of mag rich selvages and associated with qtz fe crb+epd veins
259	260	1	247541	HCORE			A16-13582	<0.005	trace pyrite as replacement of mag rich selvage
260	261	1	247542	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb vein
261	262	1	247543	HCORE			A16-13582	<0.005	trace pyrite in vuggy qtz fe crb vein
262	263	1	247544	HCORE			A16-13582	<0.005	trace pyrite assoc with qtz fe crb veins. locally vuggy
		0	247545	Blank		Blank	A16-13582	<0.005	
263	264	1	247546	HCORE			A16-13582	<0.005	close to 1% pyrite as replacement of mag rich selvages and assoc with qtz fe crb veins
264	265	1	247547	HCORE			A16-13582	<0.005	1% locally as replacement of mag rich selvages and in weakly silicifed qtz fe crb vein
265	266	1	247548	HCORE			A16-13582	0.012	trace pyrite replacing mag rich selvages
266	267	1	247549	HCORE			A16-13582	<0.005	1% pyrite locally in qtz fe crb vein with magnetite alteration halo. trace pyrite replacing mag rich selvages

267	268	1	247550	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins and replacing mag rich selvages
268	269	1	247551	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins and replacing mag rich selvages
269	270	1	247552	HCORE			A16-13582	<0.005	trace pyrite stringers assoc with mag rich selvages
270	271	1	247553	HCORE			A16-13582	<0.005	1% pyrite locally in and around vuggy qtz fe crb vein that is sheared and has magnetite alteration halo
		0	247554	STD		CDN_GS_P4B	A16-13582	0.405	
271	272	1	247555	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins and replacing mag rich selvages
272	273	1	247556	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins and replacing mag rich selvages
273	274	1	247557	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins and replacing mag rich selvages
274	275	1	247558	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins and replacing mag rich selvages
275	276	1	247559	HCORE			A16-13582	<0.005	1% pyrite locally in vuggy qtz fe crb veins and as loose stringers replacing mag rich selvages
276	277	1	247560	HCORE			A16-13582	<0.005	1% pyrite locally as med grained loose stringers replacing mag rich selvages. trace pyrite assoc with vuggy qtz fe crb veins
277	278	1	247561	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins that are lined with stringers of purple hematite. trace pyrite replacing mag rich selvages
278	279	1	247562	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins that are lined with stringers of purple hematite. trace pyrite replacing mag rich selvages
		0	247563	DUP	247562		A16-13582	<0.005	
279	280	1	247564	HCORE			A16-13582	<0.005	trace pyrite assoc with vuggy qtz fe crb veins that are lined with stringers of purple hematite. trace pyrite replacing mag rich selvages
280	281	1	247565	HCORE			A16-13582	<0.005	trace pyrite associated with qtz fe crb veins and minor replacement of mag rich selvages
281	282	1	247566	HCORE			A16-13582	<0.005	trace pyrite associated with qtz fe crb veins and minor replacement of mag rich selvages
282	283	1	247567	HCORE			A16-13582	<0.005	trace pyrite associated with qtz fe crb veins and minor replacement of mag rich selvages
283	284	1	247568	HCORE			A16-13582	<0.005	trace pyrite associated with qtz fe crb veins and minor replacement of mag rich selvages

284	285	1	247569	HCORE		A16-13582	<0.005	trace pyrite associated with qtz fe crb veins and minor replacement of mag rich selvages
285	285.55	0.55	247570	HCORE		A16-13582	<0.005	semi brecciated texture. trace pyrite assoc with mag highs in groundmass
285.55	285.96	0.41	247571	HCORE		A16-13582	<0.005	semi brecciated texture. trace pyrite assoc with mag highs in groundmass
		0	247572	STD	CDN_GS_P7J	A16-13582	0.71	
285.96	287	1.04	247573	HCORE		A16-13582	<0.005	up to 1% pyrite locally assoc with qtz fe crb veins
287	288	1	247574	HCORE		A16-13582	<0.005	very trace pyrite along qtz fe crb vein margins in sheared host
288	289	1	247575	HCORE		A16-13582	<0.005	up to 1% pyrite locally mainly along the vein margins in sheared host
289	290	1	247576	HCORE		A16-13582	<0.005	up to 1% pyrite locally in magnetite alteration halos assoc with qtz fe crb veins
290	291	1	247577	HCORE		A16-13582	<0.005	trace pyrite assoc with qtz fe crb veins
291	292	1	247578	HCORE		A16-13582	0.005	trace pyrite assoc with qtz fe crb veins in sheared host
292	293	1	247579	HCORE		A16-13582	<0.005	trace pyrite in sheared host assoc with weakly silicified qtz fe crb veins
293	294	1	247580	HCORE		A16-13582	<0.005	trace pyrite along weakly silicified qtz fe crb vein margins
		0	247581	Blank	Blank	A16-13582	<0.005	
294	295	1	247582	HCORE		A16-13582	0.041	up to 3% pyrite locally in alteration halos around qtz fe crb veins (locally silicified)
295	296	1	247583	HCORE		A16-13582	0.014	trace pyrite assoc with qtz fe crb veins
296	297	1	247584	HCORE		A16-13582	0.017	trace pyrite assoc with qtz fe crb veins
297	298	1	247585	HCORE		A16-13582	<0.005	trace pyrite assoc with qtz fe crb veins
298	299	1	247586	HCORE		A16-13582	0.013	trace pyrite assoc with qtz fe crb veins
299	300	1	247587	HCORE		A16-13582	0.01	up to 2% pyrite locally as semi massive ~1cm stringers and scattered grains of pyrite along qtz fe crb vein margins
300	300.7	0.7	247588	HCORE		A16-13582	<0.005	Trace pyrite in sheared host assoc with qtz fe crb veins
300.7	301.7	1	247589	HCORE		A16-13582	0.05	up to 3-4% pyrite locally, concentrated in alteration halos around qtz fe crb veins. brecciated, altered and silicified host
		0	247590	STD	CDN_GS_P4B	A16-13582	0.392	
301.7	302.7	1	247591	HCORE		A16-13582	0.016	up to 1% pyrite as loose stringers and scattered grains along qtz fe crb vein margins
302.7	303.7	1	247592	HCORE		A16-13582	<0.005	up to 1% pyrite locally as scattered grains in and around qtz fe crb veins
303.7	304.7	1	247593	HCORE		A16-13582	<0.005	up to 1% pyrite locally associated with qtz fe crb veins

304.7	305.7	1	247594	HCORE			A16-13582	0.005	up to 1% pyrite locally associated with qtz fe crb veins
305.7	306.5	0.8	247595	HCORE			A16-13582	<0.005	trace pyrite as loose stringers and scattered grains assoc with thin qtz fe crb veins in sheared host
306.5	307.2	0.7	247596	HCORE			A16-13582	<0.005	trace pyrite as loose stringers and scattered grains assoc with thin qtz fe crb veins in sheared host
307.2	308	0.8	247597	HCORE			A16-13582	0.025	up to 2% pyrite along foliation mainly as stringers replacing magnetite rich selvages.
308	309	1	247598	HCORE			A16-13582	0.005	1cm qtz fe crb veining with trace pyrite in alteration halo
		0	247599	DUP	247598		A16-13582	<0.005	
309	309.9	0.9	247600	HCORE			A16-13582	<0.005	2cm qtz fe crb veining. trace py in host assoc with veining
309.9	310.9	1	247601	HCORE			A16-13582	<0.005	10cm vuggy qtz fe crb veining with up to 1% pyrite locally
310.9	311.9	1	247602	HCORE			A16-13582	<0.005	2cm qtz fe crb stringers. trace pyrite along vein margins
311.9	313	1.1	247603	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. trace pyrite along vein margins
313	314	1	247604	HCORE			A16-13637	<0.005	4cm vuggy qtz fe crb veins. up to 1% pyrite locally, mainly in alteration halos
314	315	1	247605	HCORE			A16-13637	<0.005	3cm vuggy qtz fe crb veins. trace pyrite assoc with veining
315	316	1	247606	HCORE			A16-13637	0.005	3cm qtz fe crb veining with up to 1% pyrite locally as scattered grains along the vein margins
316	317	1	247607	HCORE			A16-13637	<0.005	2cm qtz fe crb veining at low angle TCA. 1% pyrite locally assoc with veining
		0	247608	STD		CDN_GS_P7J	A16-13637	0.753	
317	317.7	0.7	247609	HCORE			A16-13637	<0.005	2cm qtz crb veining. trace pyrite assoc with veining
317.7	318.4	0.7	247610	HCORE			A16-13637	<0.005	2cm qtz fe crb veining. no significant mineralization
318.4	319.1	0.7	247611	HCORE			A16-13637	<0.005	2cm qtz fe crb veining. no significant mineralization
319.1	320	0.9	247612	HCORE			A16-13637	<0.005	2cm sheared qtz crb veins. trace pyrite replacing mag highs in sheared transitional contact
320	321	1	247613	HCORE			A16-13637	0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
321	322	1	247614	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
322	323	1	247615	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining

323	324	1	247616	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
		0	247617	Blank		Blank	A16-13637	<0.005	
324	325	1	247618	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
325	326	1	247619	HCORE			A16-13637	0.008	2cm qtz fe crb stringers. very trace pyrite assoc with veining
326	327	1	247620	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
327	328	1	247621	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
328	329	1	247622	HCORE			A16-13637	<0.005	3.5cm qtz fe crb stringers. very trace pyrite assoc with veining
329	330	1	247623	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
330	331	1	247624	HCORE			A16-13637	0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
331	332	1	247625	HCORE			A16-13637	0.009	2cm qtz fe crb stringers. very trace pyrite assoc with veining
332	333	1	247626	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
333	334	1	247627	HCORE			A16-13637	0.009	5cm semi brecciated and silicified qtz fe crb veining with mild alteration halos. up to 1% pyrite concentrated along vein margins
		0	247628	STD		CDN_GS_P4B	A16-13637	0.433	
334	335	1	247629	HCORE			A16-13637	0.008	2cm qtz fe crb veining. trace pyrite accoc with veining
335	336	1	247630	HCORE			A16-13637	<0.005	2cm qtz fe crb veining. trace pyrite accoc with veining
336	337	1	247631	HCORE			A16-13637	0.013	2cm qtz fe crb veining. trace pyrite accoc with veining
337	338	1	247632	HCORE			A16-13637	<0.005	5cm semi brecciated qtz fe crb veins with trace pyrite locally
338	339	1	247633	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
339	340	1	247634	HCORE			A16-13637	<0.005	2cm qtz fe crb stringers. very trace pyrite assoc with veining
340	341	1	247635	HCORE			A16-13637	0.008	1cm qtz fe crb stringers. trace pyrite as clusters replacing magnetite in groundmass
341	342	1	247636	HCORE			A16-13637	0.007	3cm brecciated/silicified qtz crb veins with magnetite bands along vein margins. 1% pyrite locally as loose stringers replacing magnetite
		0	247637	DUP	247636		A16-13637	0.005	

342	343	1	247638	HCORE		A16-13637	0.037	no significant veining. trace pyrite locally as loose stringers/clusters replacing magnetite rich selvage
343	344	1	247639	HCORE		A16-13637	<0.005	1% pyrite locally as loose stringers/clusters replacing magnetite rich selvages
344	345	1	247640	HCORE		A16-13637	<0.005	trace pyrite throughout groundmass as replacement of magnetite/chlorite tension/fracture filling veinlets
345	346	1	247641	HCORE		A16-13637	<0.005	trace pyrite throughout groundmass as replacement of magnetite/chlorite tension/fracture filling veinlets
346	347	1	247642	HCORE		A16-13637	<0.005	trace pyrite throughout groundmass as replacement of magnetite/chlorite tension/fracture filling veinlets
347	348	1	247643	HCORE		A16-13637	<0.005	trace pyrite throughout groundmass as replacement of magnetite/chlorite tension/fracture filling veinlets
348	348.8	0.8	247644	HCORE		A16-13637	<0.005	trace pyrite throughout groundmass as replacement of magnetite/chlorite tension/fracture filling veinlets
348.8	349.6	0.8	247645	HCORE		A16-13637	<0.005	trace pyrite throughout groundmass as replacement of magnetite/chlorite tension/fracture filling veinlets
349.6	350.38	0.78	247646	HCORE		A16-13637	<0.005	3cm qtz fe crb veining. one space filling vein with well formed qtz crystals, partially filled with spec hematite. trace pyrite in groundmass
		0	247647	STD	CDN_GS_P7J	A16-13718	0.91	
350.38	351.4	1.02	247648	HCORE		A16-13718	0.019	2-3cm qtz fe crb veining. trace pyrite in groundmass
351.4	352.4	1	247649	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass
352.4	353.4	1	247650	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass
353.4	354.4	1	247651	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass
354.4	355.4	1	247652	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass
355.4	356.4	1	247653	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass
356.4	357.4	1	247654	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass
357.4	358.4	1	247655	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass
358.4	359.2	0.8	247656	HCORE		A16-13718	<0.005	2-3cm qtz fe crb veining. trace pyrite in groundmass

359.2	359.8	0.6	247657	HCORE		A16-13718	<0.005	4cm qtz fe crb calcite veining. up to 1% pyrite locally, concentrated in alteration halo around one vein
		0	247658	Blank	Blank	A16-13718	<0.005	
359.8	360.6	0.8	247659	HCORE		A16-13718	<0.005	3cm qtz fe crb calcite veins, with hematite veinlets along the vein margins. trace pyrite in groundmass
360.6	361.5	0.9	247660	HCORE		A16-13718	0.011	20cm weakly silicified qtz fe crb veins with vuggy cores. 2-3% pyrite locally, concentrated in alteration halos
361.5	362.5	1	247661	HCORE		A16-13718	<0.005	3-4cm qtz fe crb +/-epidote veining. trace pyrite assoc with veining
362.5	363.5	1	247662	HCORE		A16-13718	<0.005	3-4cm qtz fe crb +/-epidote veining. trace pyrite assoc with veining
363.5	364.5	1	247663	HCORE		A16-13718	<0.005	3-4cm qtz fe crb +/-epidote veining. trace pyrite assoc with veining
364.5	365.5	1	247664	HCORE		A16-13718	0.008	3-4cm qtz fe crb +/-epidote veining. trace pyrite assoc with veining
365.5	366.5	1	247665	HCORE		A16-13718	<0.005	3-4cm qtz fe crb +/-epidote veining. trace pyrite assoc with veining
366.5	367.5	1	247666	HCORE		A16-13718	<0.005	5cm qtz fe crb veins (locally vuggy). trace pyrite associated with veining as well as replacing mag rich selvages
367.5	368.5	1	247667	HCORE		A16-13718	0.007	3.5cm qtz fe crb +epidote veins. very trace pyrite in groundmass
368.5	369.5	1	247668	HCORE		A16-13718	0.005	3cm qtz fe crb veining with thin hematite stringers along the vein margins. 1% pyrite locally, concentrated in and around vein with alteration halo
369.5	370.3	0.8	247669	HCORE		A16-13718	<0.005	4cm weakly silicified qtz fe crb vein with vuggy cores and moderate alteration halos. up to 2% pyrite locally, concentrated in alt'n halos.
		0	247670	STD	CDN_GS_P4B	A16-13718	0.542	
370.3	370.9	0.6	247671	HCORE		A16-13718	0.07	20cm weakly silicified qtz fe crb veins with vuggy cores. up to 5% pyrite locally in and around veins. 1% clusters of silver mineral (argentite, electrum?) in vein
370.9	371.9	1	247672	HCORE		A16-13718	<0.005	2.5cm qtz fe crb veins .trace pyrite in groundmass as replacement of mag rich selvage proximal to veining
371.9	372.9	1	247673	HCORE		A16-13718	<0.005	2cm qtz fe crb +epidote veining. trace pyrite replacing mag rich selvage in groundmass
372.9	373.9	1	247674	HCORE		A16-13718	<0.005	one 3cm qtz fe crfb vein with moderate ser-ank alteration halo. 1% pyrite locally
373.9	374.9	1	247675	HCORE		A16-13718	<0.005	No significant mineralization
374.9	375.9	1	247676	HCORE		A16-13718	<0.005	No significant mineralization

375.9	376.9	1	247677	HCORE			A16-13718	<0.005	No significant mineralization
376.9	377.9	1	247678	HCORE			A16-13718	<0.005	No significant mineralization
377.9	378.9	1	247679	HCORE			A16-13718	<0.005	5cm qtz fe crb veining. 1% pyrite locally
		0	247680	DUP	247679		A16-13718	<0.005	
378.9	379.9	1	247681	HCORE			A16-13718	<0.005	very trace pyrite replacing mag rich selvage
379.9	380.9	1	247682	HCORE			A16-13718	<0.005	1cm vuggy qtz fe crb vein. trace pyrite
380.9	381.9	1	247683	HCORE			A16-13718	<0.005	3cm qtz fe crb veins with mild alteration halos and 1% pyrite locally
381.9	382.9	1	247684	HCORE			A16-13718	<0.005	no significant mineralization
382.9	383.9	1	247685	HCORE			A16-13718	<0.005	2cm qtz fe crb vein with up to 1% pyrite locally
383.9	384.9	1	247686	HCORE			A16-13718	<0.005	9cm locally vuggy qtz fe crb veins with 1% pyrite locally
384.9	385.9	1	247687	HCORE			A16-13770	<0.005	3cm qtz fe crb veins with mild alteration halos and 1% pyrite locally
385.9	386.9	1	247688	HCORE			A16-13770	<0.005	5cm qtz fe crb veins with trace pyrite locally. minor replacement of magnetite in groundmass as scattred grains of pyrite
386.9	387.9	1	247689	HCORE			A16-13770	<0.005	trace scattered fine grained pyrite in groundmass
387.9	388.9	1	247690	HCORE			A16-13770	<0.005	trace scattered-disseminated pyrite associated with breciated/sheared section that exhibits weak sericite-ankerite alteration to host
388.9	389.75	0.85	247691	HCORE			A16-13770	<0.005	2.5cm qtz fe crb veins with trace pyrite
389.75	390.55	0.8	247692	HCORE			A16-13770	<0.005	very trace pyrite in groundmass replacing magnetite
390.55	391.5	0.95	247693	HCORE			A16-13770	0.005	14.5cm vuggy qtz fe crb veins with brecciated margins. moderate ser-ank alteration and mineralized with up to 4-5% pyrite locally
		0	247694	STD		CDN_GS_P7J	A16-13770	0.659	
391.5	392.5	1	247695	HCORE			A16-13770	0.005	2cm qtz fe crb veins with trace pyrite along the vein margins
392.5	393.5	1	247696	HCORE			A16-13770	0.005	2cm qtz fe crb veins with trace pyrite along the vein margins
393.5	394.5	1	247697	HCORE			A16-13770	<0.005	no significant mineralization
394.5	395.5	1	247698	HCORE			A16-13770	<0.005	trace pyrite replacing magnetite in sheared section of host
395.5	396.5	1	247699	HCORE			A16-13770	0.011	8cm silcified qtz fe crb veins with moderate ankerite-sericite alteration. up to 5% pyrite locally
396.5	397.3	0.8	247700	HCORE			A16-13770	0.006	5cm vuggy qtz fe crb veining. up to 1% pyrite locally

397.3	397.9	0.6	247701	HCORE			A16-13770	<0.005	one mm scale qtz fe crb veinlet with trace pyrite. trace pyrite replacing magnetite in groundmass
397.9	398.4	0.5	247702	HCORE			A16-13770	0.049	22cm vuggy qtz fe crb veining. up to 3% pyrite and 1% chalco and argentite locally in vein
		0	247703	Blank		Blank	A16-13770	<0.005	
398.4	399.4	1	247704	HCORE			A16-13770	<0.005	1cm qtz fe crb veining. trace pyrite
399.4	400.4	1	247705	HCORE			A16-13770	<0.005	1.5cm qtz fe crb veining with moderate alteration halo. trace pyrite locally
400.4	401.4	1	247706	HCORE			A16-13770	<0.005	no significant mineralization
401.4	402.4	1	247707	HCORE			A16-13770	<0.005	1cm vuggy qtz fe crb vein with trace pyrite along the vein margins
402.4	403.4	1	247708	HCORE			A16-13770	<0.005	no significant mineralization
403.4	404.4	1	247709	HCORE			A16-13770	<0.005	3cm vuggy qtz fe crb viening. 1% pyrite locally.
404.4	405.3	0.9	247710	HCORE			A16-13770	<0.005	no significant mineralization
405.3	406.18	0.88	247711	HCORE			A16-13770	0.009	no significant mineralization
406.18	407.2	1.02	247712	HCORE			A16-13770	0.006	very trace pyrite associated with veins in sheared section at contact
		0	247713	STD		CDN_GS_P4B	A16-13770	0.491	
407.2	408.2	1	247714	HCORE			A16-13821	<0.005	3cm vuggy qtz fe crb vein. up to 1% pyrite along vein margin in alteration halo
408.2	409.2	1	247715	HCORE			A16-13821	<0.005	3cm vuggy qtz fe crb veining with 1% pyrite locally. trace coarse pyrite replacing magnetite in groundmass
409.2	410	0.8	247716	HCORE			A16-13821	<0.005	5cm qtz fe crb veining. 1% pyrite locally along vein margins
410	411	1	247717	HCORE			A16-13821	<0.005	2cm qtz fe crb veining. trace pyrite
411	412	1	247718	HCORE			A16-13821	<0.005	3cm qtz fe crb veining with up to 1% pyrite locally along the vein margins
412	413	1	247719	HCORE			A16-13821	<0.005	trace med grained pyrite replacing magnetite in groundmass
413	414	1	247720	HCORE			A16-13821	<0.005	3cm qtz fe crb veining with up to 1% pyrite locally
414	415	1	247721	HCORE			A16-13821	<0.005	4cm vuggy qtz fe crb veining with up to 1% pyrite locally
		0	247722	DUP	247721		A16-13821	<0.005	
415	416	1	247723	HCORE			A16-13821	<0.005	5cm vuggy qtz fe crb with up to 1% fine to med grained pyrite in the alteration halo
416	417	1	247724	HCORE			A16-13821	<0.005	2.5cm qtz fe crb veinlets. trace pyrite
417	418	1	247725	HCORE			A16-13821	<0.005	one 3cm vuggy qtz fe crb vein with up to 1% pyrite
418	419	1	247726	HCORE			A16-13821	<0.005	7cm vuggy qtz fe crb veining with up to 1% pyrite locally

419	420	1	247727	HCORE		A16-13821	<0.005	2.5cm vuggy qtz fe crb veins with up to 1% pyrite locally
420	420.85	0.85	247728	HCORE		A16-13821	<0.005	2cm vuggy qtz fe crb veining in highly fractured interval. up to 1% pyrite locally
420.85	421.9	1.05	247729	HCORE		A16-13821	<0.005	6cm qtz fe crb veining, locally vuggy. 1% pyrite assoc with veining
		0	247730	STD	CDN_GS_P7J	A16-13821	0.622	
421.9	422.9	1	247731	HCORE		A16-13821	<0.005	2cm qtz fe crb veining with up to 1% pyrite locally in alteration halo
422.9	423.9	1	247732	HCORE		A16-13821	<0.005	2cm qtz fe crb veining with up to 1% pyrite locally in alteration halo
423.9	424.9	1	247733	HCORE		A16-13821	<0.005	2cm qtz fe crb veining with trace pyrite along the vein margins
424.9	425.9	1	247734	HCORE		A16-13821	<0.005	2cm qtz fe crb veining with trace pyrite along the vein margins
425.9	426.6	0.7	247735	HCORE		A16-13821	<0.005	3cm qtz fe crb veining with 1% pyrite locally
426.6	427.45	0.85	247736	HCORE		A16-13821	<0.005	3.5cm qtz fe crb veining with up to 1% pyrite locally
427.45	428.4	0.95	247737	HCORE		A16-13821	0.005	12cm partially vuggy qtz fe crb veins. up to 5% pyrite proximal to veining in host
		0	247738	Blank	Blank	A16-13821	<0.005	
428.4	429.4	1	247739	HCORE		A16-13821	<0.005	6.5cm vuggy qtz fe crb veining with 1% pyrite locally
429.4	430.4	1	247740	HCORE		A16-13821	<0.005	trace pyrite in groundmass replacing magnetite
430.4	431.4	1	247741	HCORE		A16-13821	<0.005	7cm slightly brecciated qtz fe crb veining. up to 1% pyrite locally, some as replacement of magnetite
431.4	432.4	1	247742	HCORE		A16-13821	<0.005	trace pyrite in replacing magnetite in groundmass
432.4	433.4	1	247743	HCORE		A16-13821	<0.005	trace pyrite in replacing magnetite in groundmass
433.4	434.45	1.05	247744	HCORE		A16-13821	0.012	4cm vuggy qtz fe crb veining. 1% pyrite locally
434.45	435.4	0.95	247745	HCORE		A16-13821	<0.005	trace pyrite replacing magnetite in groundmass
435.4	436.4	1	247746	HCORE		A16-13821	<0.005	2.5cm qtz fe crb veining. up to 1% pyrite in alteration halos
436.4	437.4	1	247747	HCORE		A16-13821	<0.005	4cm vuggy qtz fe crb veins. up to 1% fine to med grained pyrite proximal to veining
		0	247748	STD	CDN_GS_P4B	A16-13821	0.399	
437.4	438.4	1	247749	HCORE		A16-13821	<0.005	5cm vuggy qtz fe crb veins. up to 1% pyrite in alteration halos
438.4	439.4	1	247750	HCORE		A16-13821	<0.005	no significant mineralization

439.4	440.4	1	247751	HCORE			A16-13821	<0.005	3cm qtz fe crb veining with up to 1% pyrite in alteration halos
440.4	441.4	1	247752	HCORE			A16-13821	<0.005	very trace pyrite replacing magnetite in groundmass
441.4	442.4	1	247753	HCORE			A16-13821	<0.005	very trace pyrite replacing magnetite in groundmass
442.4	443.4	1	247754	HCORE			A16-13821	<0.005	very trace pyrite replacing magnetite in groundmass
443.4	444.4	1	247755	HCORE			A16-13821	<0.005	1.5% vuggy qtz fe crb vein. 1% pyrite locally
444.4	445.2	0.8	247756	HCORE			A16-13821	<0.005	trace pyrite assoc with qtz fe crb veinlets
445.2	446	0.8	247757	HCORE			A16-13821	<0.005	2cm vuggy qtz fe crb veining with 1% pyrite locally in alteration halo
		0	247758	DUP	247757		A16-13821	<0.005	
446	446.8	0.8	247759	HCORE			A16-13821	<0.005	trace scattered pyrite in groundmass
446.8	447.65	0.85	247760	HCORE			A16-13821	<0.005	2.5cm vuggy qtz fe crb vein with 1% pyrite locally
447.65	448.6	0.95	247761	HCORE			A16-13821	<0.005	trace pyrite in groundmass
448.6	449.6	1	247762	HCORE			A16-13821	<0.005	Trace fine to med grained euhedral pyrite in groundmass
449.6	450.6	1	247763	HCORE			A16-13821	<0.005	Trace fine to med grained euhedral pyrite in groundmass
450.6	451.6	1	247764	HCORE			A16-13821	<0.005	Trace fine to med grained euhedral pyrite in groundmass
451.6	452.5	0.9	247765	HCORE			A16-13821	<0.005	Trace fine to med grained euhedral pyrite in groundmass
452.5	453.5	1	247766	HCORE			A16-13821	<0.005	~10cm qtz fe crb veins with up to 1% pyrite locally in alteration halos
		0	247767	STD		CDN_GS_P7J	A16-13821	0.669	
453.5	454.5	1	247768	HCORE			A16-13821	<0.005	trace pyrite scattered in groundmass
454.5	455.5	1	247769	HCORE			A16-13821	<0.005	trace pyrite scattered in groundmass
455.5	456.5	1	247770	HCORE			A16-13821	<0.005	20cm qtz fe crb veins with local vuggy textures (0ne vein 13cm wide) 1% pyrite assoc with veining
456.5	457.5	1	247771	HCORE			A16-13821	<0.005	3.5 cm qtz fe crb veining. up to 1% pyrite along the vein margins
457.5	458.5	1	247772	HCORE			A16-13821	<0.005	5cm qtz fe crb veining. trace pyrite along vein margins
458.5	459.5	1	247773	HCORE			A16-13821	<0.005	trace fine grained pyrite in groundmass
459.5	460.5	1	247774	HCORE			A16-13821	<0.005	trace fine grained pyrite in groundmass
460.5	461.5	1	247775	HCORE			A16-13821	<0.005	1cm qtz fe crb vein. trace pyrite along the vein margins
461.5	462.5	1	247776	HCORE			A16-13821	<0.005	6cm wide vuggy qtz fe crb vein. trace pyrite along the vein margins
		0	247777	Blank		Blank	A16-13821	<0.005	

462.5	463.5	1	247778	HCORE			A16-13821	<0.005	5cm qtz fe crb veining. trace pyrite in groundmass proximal veining
463.5	464.5	1	247779	HCORE			A16-13821	<0.005	3cm qtz fe crb veining. up to 1% pyrite along the vein margins
464.5	465.5	1	247780	HCORE			A16-13821	<0.005	4cm qtz fe crb veining. trace pyrite along the vein margins
465.5	466.5	1	247781	HCORE			A16-13821	<0.005	3cm vuggy qtz fe crb +epidote veining with 1% pyrite locally
466.5	467.5	1	247782	HCORE			A16-13821	<0.005	very trace pyrite in groundmass
467.5	468.5	1	247783	HCORE			A16-13821	<0.005	10cm qtz fe crb veining, mostly vuggy. up to 1% pyrite assoc with veining
468.5	469.3	0.8	247784	HCORE			A16-13821	<0.005	4cm vuggy qtz fe crb veining. 1% pyrite locally
469.3	470.2	0.9	247785	HCORE			A16-13821	<0.005	3cm vuggy qtz fe crb veining. 1% pyrite locally
		0	247786	STD		CDN_GS_P4B	A16-13821	0.416	
470.2	470.85	0.65	247787	HCORE			A16-13821	<0.005	trace pyrite in groundmass
470.85	471.75	0.9	247788	HCORE			A17-00016	<0.005	4cm vuggy qtz fe crb veining. 1% pyrite locally
471.75	472.75	1	247789	HCORE			A17-00016	<0.005	5cm qtz fe crb veining (locally sheared) trace pyrite assoc with veining
472.75	473.75	1	247790	HCORE			A17-00016	<0.005	2cm vuggy qtz fe crb vein. trace pyrite
473.75	474.75	1	247791	HCORE			A17-00016	<0.005	2.5cm qtz fe crb veining. trace pyrite along the vein margins
474.75	475.75	1	247792	HCORE			A17-00016	<0.005	2.5cm qtz fe crb veining. trace pyrite along the vein margins
475.75	476.75	1	247793	HCORE			A17-00016	<0.005	trace pyrite in groundmass
476.75	477.75	1	247794	HCORE			A17-00016	<0.005	trace pyrite in groundmass
477.75	478.75	1	247795	HCORE			A17-00016	<0.005	2cm qtz fe crb vein. trace pyrite along the vein margins
478.75	479.75	1	247796	HCORE			A17-00016	<0.005	trace pyrite in groundmass
		0	247797	DUP	247796		A17-00016	<0.005	
479.75	480.75	1	247798	HCORE			A17-00016	<0.005	trace pyrite in groundmass
480.75	481.75	1	247799	HCORE			A17-00016	<0.005	3cm qtz fe crb veinlets. trace pyrite along the vein margins
481.75	482.7	0.95	247800	HCORE			A17-00016	<0.005	7cm qtz fe crb veining. up to 3% pyrite locally, concentrated in alteration halos
482.7	483.7	1	247801	HCORE			A17-00016	<0.005	3cm qtz fe crb veining. trace pyrite assoc with veining
483.7	484.7	1	247802	HCORE			A17-00016	<0.005	3cm qtz fe crb veining. trace pyrite assoc with veining
484.7	485.7	1	247803	HCORE			A17-00016	<0.005	5cm qtz fe crb veining. up to 1% pyrite assoc with veining

485.7	486.7	1	247804	HCORE		A17-00016	<0.005	10cm qtz fe crb veining with minor hematite in veins. trace pyrite along vein margins
486.7	487.7	1	247805	HCORE		A17-00016	<0.005	10cm qtz fe crb veining. up to 2% pyrite locally in alteration halos
487.7	488.54	0.84	247806	HCORE		A17-00016	<0.005	14cm qtz fe crb veining with 1% spec hematite in veins. up to 1% pyrite along the vein margins
		0	247807	STD	CDN_GS_P7J	A17-00016	0.809	
488.54	489.5	0.96	247808	HCORE		A17-00016	<0.005	10cm qtz fe crb veins. trace pyrite assoc with veining
489.5	490.5	1	247809	HCORE		A17-00016	<0.005	trace pyrite scattered in groundmass
490.5	491.5	1	247810	HCORE		A17-00016	<0.005	trace pyrite scattered in groundmass
491.5	492.5	1	247811	HCORE		A17-00016	<0.005	trace pyrite scattered in groundmass
492.5	493.4	0.9	247812	HCORE		A17-00016	<0.005	trace pyrite scattered in groundmass
493.4	494.5	1.1	247813	HCORE		A17-00016	<0.005	6cm qtz fe crb veins. 1% pyrite assoc with veining
494.5	495.5	1	247814	HCORE		A17-00016	<0.005	12cm qtz fe crb veining. up to 1% fine to med grained pyrite along the vein margins
495.5	496.2	0.7	247815	HCORE		A17-00016	<0.005	10cm qtz fe crb veining with 2-3% pyrite locally concentrated in the alteration halos
		0	247816	Blank	Blank	A17-00016	<0.005	
496.2	497	0.8	247817	HCORE		A17-00016	<0.005	2cm qtz fe crb veinlets. trace pyrite assoc with veins
497	498	1	247818	HCORE		A17-00016	<0.005	2cm qtz fe crb veinlets. trace pyrite assoc with veins
498	499	1	247819	HCORE		A17-00016	<0.005	1cm qtz fe crb veinlet. trace pyrite assoc with vein
499	500	1	247820	HCORE		A17-00016	<0.005	3cm qtz fe crb veinlets. up to 1% pyrite locally along the vein margins
500	501	1	247821	HCORE		A17-00016	<0.005	3cm qtz fe crb veinlets. up to 1% pyrite locally along the vein margins
501	502	1	247822	HCORE		A17-00016	<0.005	4.5cm qtz fe crb veins with up to 1% pyrite in alteration halos
502	503	1	247823	HCORE		A17-00016	<0.005	1.5cm qtz fe crb stringers with local 1% pyrite along the vein margins
503	503.7	0.7	247824	HCORE		A17-00016	<0.005	trace pyrite assoc with 1.5cm qtz fe crb vein and scattered in groundmass
503.7	504.6	0.9	247825	HCORE		A17-00016	<0.005	6cm qtz fe crb veining. trace pyrite assoc with veining
504.6	505.6	1	247826	HCORE		A17-00016	<0.005	15cm qtz fe crb veining. trace pyrite assoc with veining
		0	247827	STD	CDN_GS_P4B	A17-00016	0.396	
505.6	506.6	1	247828	HCORE		A17-00016	0.007	8.5cm silicified and brecciated qtz fe crb veining. 2-3% oxidized hematite and minor pyrite assoc with veining

506.6	507.6	1	247829	HCORE			A17-00016	<0.005	3cm qtz fe crb veining. trace fine to med grained pyrite assoc with veining
507.6	508.5	0.9	247830	HCORE			A17-00016	0.009	6cm vuggy qtz fe crb veining with up to 2% pyrite locally
508.5	509.5	1	247831	HCORE			A17-00016	0.006	3-4cm qtz fe crb veining. trace pyrite scattered in groundmass
509.5	510.5	1	247832	HCORE			A17-00016	<0.005	3-4cm qtz fe crb veining. trace pyrite scattered in groundmass
510.5	511.5	1	247833	HCORE			A17-00016	<0.005	3-4cm qtz fe crb veining. trace pyrite scattered in groundmass
511.5	512.5	1	247834	HCORE			A17-00016	<0.005	3-4cm qtz fe crb veining. trace pyrite scattered in groundmass
512.5	513.5	1	247835	HCORE			A17-00016	<0.005	3-4cm qtz fe crb veining. trace pyrite scattered in groundmass
		0	247836	DUP	247835		A17-00016	<0.005	
513.5	514.5	1	247837	HCORE			A17-00016	<0.005	2cm qtz fe crb veinlets. trace pyrite scattered in groundmass
514.5	515.5	1	247838	HCORE			A17-00016	0.007	15cm sheared and weakly silicified qtz fe crb veining. up to 1% pyrite mainly along the vein margins
515.5	516.5	1	247839	HCORE			A17-00016	0.006	15cm sheared and weakly silicified qtz fe crb veining. up to 1% pyrite mainly along the vein margins
516.5	517.5	1	247840	HCORE			A17-00016	<0.005	3cm qtz fe crb veining. trace pyrite assoc with veining
517.5	518.5	1	247841	HCORE			A17-00016	<0.005	3cm qtz fe crb veining. trace pyrite assoc with veining
518.5	519.5	1	247842	HCORE			A17-00016	<0.005	15cm sheared qtz fe crb veining with up to 3% pyrite locally
519.5	520.57	1.07	247843	HCORE			A17-00016	0.039	5cm weakly silicified qtz fe crb veining with up to 1% pyrite along the vein margins as loose stringers
520.57	521.5	0.93	247844	HCORE			A17-00016	<0.005	2 cm qtz fe crb veining. trace pyrite in groundmass
521.5	522.5	1	247845	HCORE			A17-00016	0.01	5cm qtz fe crb veining. trace pyrite in groundmass
522.5	523.3	0.8	247846	HCORE			A17-00016	0.008	3.5cm qtz fe crb veining. trace pyrite in groundmass
523.3	524.05	0.75	247847	HCORE			A17-00016	<0.005	2cm qtz fe crb veining. trace pyrite assoc with veining
524.5	525.2	0.7	247848	HCORE			A17-00016	0.347	8cm vuggy qtz fe crb vein with up to 2% fine grained pyrite
		0	247849	STD		CDN_GS_P7J	A17-00016	0.77	
525.2	526.2	1	247850	HCORE			A17-00016	<0.005	3.5 qtz fe crb veining. trace pyrite
526.2	527.1	0.9	247851	HCORE			A17-00016	<0.005	4cm qtz fe crb veining. up to 1% pyrite along the vein margins

527.1	528	0.9	247852	HCORE			A17-00016	<0.005	6cm vuggy qtz fe crb veining. trace pyrite in groundmass
528	529	1	247853	HCORE			A17-00016	<0.005	3.5cm qtz fe crb veining, trace pyrite in groundmass
529	530	1	247854	HCORE			A17-00016	<0.005	4.5cm wide qtz fe crb vein that is weakly silicified and mineralized with 2% pyrite locally
530	531	1	247855	HCORE			A17-00016	<0.005	trace pyrite scattered in groundmass
531	532	1	247856	HCORE			A17-00051	<0.005	2.5cm qtz fe crb veining. trace pyrite in groundmass
532	533	1	247857	HCORE			A17-00051	<0.005	2-3cm qtz fe crb veining. trace pyrite along vein margins
533	534	1	247858	HCORE			A17-00051	<0.005	2-3cm qtz fe crb veining. trace pyrite along vein margins
		0	247859	Blank		Blank	A17-00051	<0.005	
534	535.05	1.05	247860	HCORE			A17-00051	<0.005	2-3cm qtz fe crb veining. trace pyrite along vein margins
535.05	536.11	1.06	247861	HCORE			A17-00051	0.008	2-3cm qtz fe crb veining. trace pyrite along vein margins
536.11	537	0.89	247862	HCORE			A17-00051	0.006	3cm sheared qtz fe crb veins. trace pyrite along the vein margins
537	538	1	247863	HCORE			A17-00051	0.006	4cm qtz fe crb veining. trace pyrite along vein margins and locally in vein
538	539	1	247864	HCORE			A17-00051	0.005	2cm qtz fe crb veining. trace pyrite as loose stringers replacing magnetite in groundmass
539	540	1	247865	HCORE			A17-00051	0.011	2cm silicified qtzb fe crfb vein with 2% pyrite locally. 4cm qtz fe crb veining. trace pyrite replacing magnetite in groundmass
540	541	1	247866	HCORE			A17-00051	0.012	5cm qtz fe crb stringers . trace pyrite in replacing magnetite in groundmas
541	542	1	247867	HCORE			A17-00051	0.023	5cm qtz fe crb stringers . trace pyrite in replacing magnetite in groundmas
542	543	1	247868	HCORE			A17-00051	0.005	5cm qtz fe crb stringers . trace pyrite in replacing magnetite in groundmas
543	544	1	247869	HCORE			A17-00051	0.06	8cm silicified qtz fe crb veining with up to 1% pyrite locally.
		0	247870	STD		CDN_GS_P4B	A17-00051	0.411	
544	545	1	247871	HCORE			A17-00051	0.015	5cm qtz fe crb stringers. trace pyrite in groundmass
545	545.9	0.9	247872	HCORE			A17-00051	0.017	5cm qtz fe crb stringers. up to 1% pyrite locally as stringers replacing magnetite
545.9	546.8	0.9	247873	HCORE			A17-00051	0.048	5cm qtz fe crb stringers. up to 2% pyrite locally as stringers replacing magnetite
546.8	547.34	0.54	247874	HCORE			A17-00051	0.901	2cm qtz fe crb veining. up to 3% pyrite locally as semi massive stringers replacing magnetite, as well as associated with veining

547.66	548.5	0.84	247875	HCORE			A17-00051	0.461	14 cm mineralized and silicified qtz fe crfb veins with up to 2% pyrite locally
548.5	549.3	0.8	247876	HCORE			A17-00051	0.062	5cm qtz fe cb veining with hematite content. up to 1% pyrite concentrated along the vein margins
549.3	550.1	0.8	247877	HCORE			A17-00051	0.018	3.5cm qtz fe crb veining with trace pyrite along the vein margins
550.1	550.75	0.65	247878	HCORE			A17-00051	0.944	5cm silicified qtz fe crb veining with hematite content and up to 3-4% pyrite
		0	247879	DUP	247878		A17-00051	1.02	
550.75	551.5	0.75	247880	HCORE			A17-00051	0.433	3.5cm qtz fe crb stringers with up to 1% locally along the vein margins
551.5	552.5	1	247881	HCORE			A17-00051	0.022	3cm qtz fe crb stringers. trace pyrite in groundmass
552.5	553.5	1	247882	HCORE			A17-00051	0.009	3cm qtz fe crb stringers. trace pyrite in groundmass
553.5	554.5	1	247883	HCORE			A17-00051	0.009	20cm barren qtz fe crb veins.very trace pyrite assoc with veining
554.5	555.4	0.9	247884	HCORE			A17-00051	0.015	no significant mineralization
555.4	556.3	0.9	247885	HCORE			A17-00051	0.016	25cm qtz crb veins with brecciated/sheared contacts. very trace pyrite
556.3	557.3	1	247886	HCORE			A17-00051	0.073	very trace pyrite in sheared matrix
557.3	558.3	1	247887	HCORE			A17-00051	0.014	10cm silicified qtz fe crb vein with 2-3% pyrite in vein.
558.3	559	0.7	247888	HCORE			A17-00051	0.148	no significant mineralization
		0	247889	STD		CDN_GS_P7J	A17-00051	0.746	
559	560	1	247890	HCORE			A17-00051	0.015	no significant mineralization
560	561	1	247891	HCORE			A17-00051	0.01	no significant mineralization
561	562	1	247892	HCORE			A17-00051	0.013	3mm wide stringer of pyrite in matrix parallel to foliation
562	563	1	247893	HCORE			A17-00051	0.035	No significant mineralization
563	564	1	247894	HCORE			A17-00051	0.02	No significant mineralization
564	565	1	247895	HCORE			A17-00051	0.014	No significant mineralization
565	566	1	247896	HCORE			A17-00051	0.017	No significant mineralization
566	567	1	247897	HCORE			A17-00051	0.008	No significant mineralization
567	568	1	247898	HCORE			A17-00051	0.011	7cm qtz crb veining. very trace pyrite along some vein margins
568	568.7	0.7	247899	HCORE			A17-00051	0.011	12cm qtz crb veining. very trace pyrite along some vein margins
		0	247900	Blank		Blank	A17-00051	<0.005	
568.7	569.7	1	247901	HCORE			A17-00051	0.005	8cm qtz crb veining. no significant mineralization

569.7	570.4	0.7	247902	HCORE			A17-00051	0.1	10cm qtz crb veining. 10cm wide fault cut by one vein. no significant mineralization
570.4	571.2	0.8	247903	HCORE			A17-00051	0.005	5cm qtz crb veining. no significant mineralization
571.2	572	0.8	247904	HCORE			A17-00051	0.014	13cm qtz crb veining. No significant mineralization
572	573	1	247905	HCORE			A17-00051	0.012	3cm sheared qtz crb stringers. No significant mineralization
573	574	1	247906	HCORE			A17-00051	0.216	12cm sheared qtz crb veining. No significant mineralization
574	575	1	247907	HCORE			A17-00051	0.033	15cm sheared qtz crb veining. No significant mineralization
575	576	1	247908	HCORE			A17-00051	0.053	6cm sheared qtz crb stringers. No significant mineralization
576	577	1	247909	HCORE			A17-00051	0.055	10cm sheared qtz crb veins. very trace fine grained pyrite assoc with veining
577	577.8	0.8	247910	HCORE			A17-00051	0.01	15cm qtz crb veining. No significant mineralization
577.8	578.6	0.8	247911	HCORE			A17-00051	0.007	20cm faulted vuggy qtz fe crb vein. No significant mineralization
		0	247912	STD		CDN_GS_P4B	A17-00051	0.378	
578.6	579.4	0.8	247913	HCORE			A17-00051	0.014	3cm qtz crb veinlets. No significant mineralization
579.4	580.15	0.75	247914	HCORE			A17-00051	0.008	3cm qtz crb veinlets. No significant mineralization
580.15	581	0.85	247915	HCORE			A17-00051	0.008	15cm qtz crb veining. No significant mineralization
581	581.9	0.9	247916	HCORE			A17-00051	0.007	10cm qtz crb veining. trace pyrite assoc with veining
581.9	582.8	0.9	247917	HCORE			A17-00051	0.007	15cm qtz crb veining. very trace pyrite assoc with veining
582.8	583.75	0.95	247918	HCORE			A17-00051	0.022	15cm qtz crb veining. very trace pyrite assoc with veining
583.75	584.5	0.75	247919	HCORE			A17-00051	0.01	20cm qtz crb veining. very trace pyrite assoc with veining
		0	247920	DUP	247919		A17-00051	0.007	
584.5	585.5	1	247921	HCORE			A17-00051	0.008	4cm qtz crb stringers. No significant mineralization
585.5	586.5	1	247922	HCORE			A17-00051	0.01	3cm qtz crb stringers. very trace pyrite in matrix
586.5	587.3	0.8	247923	HCORE			A17-00051	0.01	2.5cm qtz crb stringers. No significant mineralization
587.3	588.3	1	247924	HCORE			A17-00051	0.02	18cm sheared qtz crb veins. No significant mineralization
588.3	589.3	1	247925	HCORE			A17-00051	0.014	10cm sheared qtz crb veins. No significant mineralization. 4cm wide fault at 588.75

589.3	590.1	0.8	247926	HCORE			A17-00051	0.028	3.5cm qtz crb veinlets. No significant mineralization
590.1	591	0.9	247927	HCORE			A17-00051	0.038	3.5cm qtz crb veinlets. No significant mineralization
591	592	1	247928	HCORE			A17-00051	0.009	3.5cm qtz crb veinlets. No significant mineralization
		0	247929	STD		CDN_GS_P7J	A17-00051	0.685	
592	593	1	247930	HCORE			A17-00051	0.009	1.5cm qtz crb stringers. very trace pyrite disseminated in matrix
593	594	1	247931	HCORE			A17-00051	0.008	1.5cm qtz crb stringers. very trace pyrite disseminated in matrix
594	594.75	0.75	247932	HCORE			A17-00051	0.11	15cm wide silicified qtz crb vein. 10cm qtz crb veins. no significant mineralization
		0	247933	Blank		Blank	A17-00051	<0.005	
594.75	595.4	0.65	247934	HCORE			A17-00051	0.029	8cm folded qtz crb veins. no significant mineralization
595.4	596.2	0.8	247935	HCORE			A17-00051	0.006	1.5cm qtz crb stringers. very trace pyrite disseminated in matrix
596.2	597	0.8	247936	HCORE			A17-00051	0.007	1.5cm qtz crb stringers. very trace pyrite disseminated in matrix
3	4	1	269127	HCORE			A16-13190	<0.005	2cm qtz fe crb extension veins. Trace pyrite proximal to veins
4	5.15	1.15	269128	HCORE			A16-13190	<0.005	6cm qtz fe crb veins. trace pyrite along vein margins
5.72	6.7	0.98	269129	HCORE			A16-13190	<0.005	No significant mineralization or veining
6.7	7.7	1	269130	HCORE			A16-13190	<0.005	No significant mineralization or veining
		0	269131	DUP	269130		A16-13190	<0.005	
7.7	8.7	1	269132	HCORE			A16-13190	<0.005	No significant mineralization or veining
8.7	9.7	1	269133	HCORE			A16-13190	0.005	No significant mineralization or veining
9.7	10.75	1.05	269134	HCORE			A16-13190	0.005	No significant mineralization or veining
10.75	11.6	0.85	269135	HCORE			A16-13190	<0.005	No significant mineralization or veining
11.6	12.6	1	269136	HCORE			A16-13190	<0.005	One 1cm wide qtz fe crb vein with trace local pyrite
12.6	13.6	1	269137	HCORE			A16-13190	<0.005	2cm barren qtz crb veins. No sig mineralization
13.6	14.5	0.9	269138	HCORE			A16-13190	0.005	2cm vuggy qtz fe crb vein with trace pyrite
		0	269139	STD		CDN_GS_P7J	A16-13190	0.667	
14.5	15.5	1	269140	HCORE			A16-13190	0.01	5cm qtz fe crb + epidote vein with trace pyrite proximal to veins
15.5	16.5	1	269141	HCORE			A16-13190	0.005	2cm barren veining. No significant mineralization
16.5	17.5	1	269142	HCORE			A16-13190	0.005	3cm qtz fe crb +epidote veins with trace pyrite along vein margins

17.5	18.5	1	269143	HCORE		A16-13190	0.005	3cm qtz fe crb +epidote veins with trace pyrite along vein margins
18.5	19.5	1	269144	HCORE		A16-13190	0.005	2cm barren qtz fe crb veins. No significant mineralization
19.5	20.5	1	269145	HCORE		A16-13190	0.005	2cm barren qtz fe crb veins. Trace pyrite stringer in groundmass
		0	269146	Blank	Blank	A16-13190	<0.005	
20.5	21.5	1	269147	HCORE		A16-13190	0.005	1cm barren qtz fe crb veins. Minor local pyrite stringer in groundmass
21.5	22.5	1	269148	HCORE		A16-13190	0.005	2cm qtz fe crb veins with trace pyrite along the margins and minor loose stringers of pyrite in groundmass.
22.5	23.5	1	269149	HCORE		A16-13190	0.011	2cm qtz fe crb veins with trace pyrite along the margins and minor loose stringers of pyrite in groundmass.
23.5	24.5	1	269150	HCORE		A16-13190	0.005	2cm qtz fe crb veins with trace pyrite along the margins and minor loose stringers of pyrite in groundmass.
24.5	25.5	1	269151	HCORE		A16-13190	0.006	2cm qtz fe crb veins with trace pyrite along the margins and minor loose stringers of pyrite in groundmass.
25.5	26.55	1.05	269152	HCORE		A16-13190	0.006	2cm qtz fe crb +epidote veins with trace scattered pyrite in the veins
26.55	27.6	1.05	269153	HCORE		A16-13190	0.006	1.5cm qtz fe crb veins with trace pyrite.
27.6	28.5	0.9	269154	HCORE		A16-13190	0.025	~35cm vuggy qtz fe crb veins with minor alteration halos. 1% pyrite along the vein margins.
		0	269155	STD	CDN_GS_P4B	A16-13190	0.43	
28.5	29.5	1	269156	HCORE		A16-13190	0.007	2cm qtz fe crb veins +/- epidote with trace local pyrite and local pyrite stringers in groundmass replacing epidote/mag rich selvages
29.5	30.5	1	269157	HCORE		A16-13190	0.007	2cm qtz fe crb veins +/- epidote with trace local pyrite and local pyrite stringers in groundmass replacing epidote/mag rich selvages
30.5	31.5	1	269158	HCORE		A16-13190	0.007	2cm qtz fe crb veins +/- epidote with trace local pyrite and local pyrite stringers in groundmass replacing epidote/mag rich selvages
31.5	32.5	1	269159	HCORE		A16-13190	0.006	2cm qtz fe crb veins +/- epidote with trace local pyrite and local pyrite stringers in groundmass replacing epidote/mag rich selvages
32.5	33.5	1	269160	HCORE		A16-13190	0.007	3cm qtz fe crb +/- epidote veins with local 1% pyrite mainly in the alteration halo. Loose stringers of pyrite replacing mag rich selvages

33.5	34.4	0.9	269161	HCORE			A16-13190	0.006	3cm qtz fe crb +/- epidote veins with local 1% pyrite mainly in the alteration halo. Loose stringers of pyrite replacing mag rich selvages
34.4	35.4	1	269162	HCORE			A16-13190	0.007	3cm qtz fe crb +/- epidote veins with local 1% pyrite mainly in the alteration halo. Loose stringers of pyrite replacing mag rich selvages
		0	269163	DUP	269162		A16-13190	0.007	
35.4	36.4	1	269164	HCORE			A16-13396	<0.005	3cm qtz fe crb +/- epidote veins with local 1% pyrite mainly in the alteration halo. Loose stringers of pyrite replacing mag rich selvages
36.4	37.4	1	269165	HCORE			A16-13396	<0.005	2.5cm qtz fe crb veins with trace pyrite. Local loose stringers of pyrite replacing mag rich selvages
37.4	38.4	1	269166	HCORE			A16-13396	<0.005	2.5cm qtz fe crb veins with trace pyrite. Local loose stringers of pyrite replacing mag rich selvages
38.4	39.4	1	269167	HCORE			A16-13396	<0.005	2.5cm qtz fe crb veins with trace pyrite. Local loose stringers of pyrite replacing mag rich selvages
39.4	40.4	1	269168	HCORE			A16-13396	<0.005	2.5cm qtz fe crb veins with trace pyrite. Local loose stringers of pyrite replacing mag rich selvages
		0	269169	STD		CDN_GS_P7J	A16-13396	0.691	
40.4	41.39	0.99	269170	HCORE			A16-13396	<0.005	1cm barren qtz fe crb veins. Trace pyrite in groundmass, replacing magnetite?

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-12 DataSet: Brookbank Program: Exploration

Hole Status:	ABANDONED	**Hole Length (m):**	36	**Logged By:**	K. Leupen
Hole Type:	Surface Drill Hole	**Dip (º):**	N/A	**Date Log Started:**	12/23/2016
Date Drill Started:	12/5/2016	**Azimuth:**	N/A	**Date Log Completed:**	12/23/2016
Date Drill Completed:	12/6/2016	**Survey Instrument**	N/A		

Prospect:	Brookbank East	**Company:**	Greenstone Gold Mines
Grid ID:	UTM NAD 83 Zone 16N	**Drill Contractor:**	Forage G4 Drilling
UTM East (m)	441,030.1	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,372.3	**Date Surveyed:**	12/21/2016
Elevation (masl):	340.749	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29029	**Tenement Type:**	Lease
Hole Diameter:	HQ		
Casing Size:	HW		
Casing Depth (m):	3		
Core Storage:	Brookbank		

Purpose: Test the intersection of the main mineralized iron-carbonate shear zone and a number of oblique structures observed at outcrop and interpreted from the detailed magnetics.

Comments: Hole misaligned abandoned

Downhole Data Available:

Max Survey Depth (m): No Surveys in Database **Max Sample Depth (m):** 35.53

Depth Logged To (m) 35.53 **Meters Sampled** 32.88

Total Samples 38 **# Assay** 34 **# QAQC:** 4

Geology Summary

meters							
From	**To**	**Width**	**%**	**Lith Code**	**Rocktype**	**Texture**	**GrainSize**
0	2.65	2.65		OB	Overburden		
2.65	22.12	19.47		E1	Mafic Volcanic	Massive	Medium grained
22.12	28.1	5.98		E1	Mafic Volcanic	Schistose	Fine grained
28.1	35.53	7.43		E1	Mafic Volcanic	Massive	Fine grained

DataSet: Brookbank
HoleID: B-16-12
meters

Hole Length (m): 36
Log Length (m): 35.53

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	2.65	2.65		OB	Overburden			K. Leupen
2.65	22.12	19.47		E1	Mafic Volcanic	Massive	Medium grained	K. Leupen

Massive flow mafic volcanic. Med-dark green grey colour. fine to med grained massive texture with sparse epidote alteration affecting possible selvages. very weak magnetic. minor vuggy qtz fe crb veins with trace pyrite locally. very trace scattered grains of pyrite throughout groundmass. 1% qtz fe crb+/-epidote veinlets throughout. weak silica overprint throughout

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
2.65	3	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
3	6	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3.5	
6	9	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.5	
9	12	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			7	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	
12	15	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			1	
15	18	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			4.5	
		2	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
18	21	1	Quartz-Fe-Carbonate/Epidote	Stringer Zone - vein <1/4"			3	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
22.12	28.1	5.98		E1	Mafic Volcanic	Schistose	Fine grained	K. Leupen

Sheared mafic volcanic. Med-dark grey with shades of pink, weakly magnetic. transitional contact with above unit, starting with semi brecciated texture to intense shear with depth. mod-strong ankerite& weak sericite alteration proximal to qtz fe crb veining. 15% qtz fe crb veining,locally vuggy, mineralized with up to 3% pyrite . weak silicification throughout.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
24	27	1	Quartz-Fe-carbonate	Shear Vein			12	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
28.1	35.53	7.43		E1	Mafic Volcanic	Massive	Fine grained	K. Leupen

Massive mafic volcanic. dark grey-green colour, fine grained, weak foliation throughout, weak-moderate magnetic. one 3.5 cm wide greyish qtz fe crb vein that is weakly silicified with vuggy core, mineralized with 2% pyrite locally. 1% qtz crb stringers. trace pyrite scattered in groundmass with slight concentration assoc with qtz crb stringers. weak silicification throughout.

DataSet: Brookbank
HoleID: B-16-12

Hole Length (m): 36
Log Length (m): 35.53

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
30	33	1	Fe-Carbonate / Silicified-Sulphide Replaced	Extension Vein			3.5	
		2	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			2	
33	35.53	1	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			4	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 36**

HoleID: B-16-12 **Max Samp Depth (m): 35.53**

Total meters Sampled: 32.88

Primary Assay Samples:	34	89.47 %
Field Duplicate Samples:	1	2.63 %
Standard/Blank Samples:	3	7.89 %
Total Samples:	38	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
2.65	3.65	1	247937	HCORE			A17-00098	0.008	trace pyrite assoc with qtz fe crb -epidote stringers
3.65	4.5	0.85	247938	HCORE			A17-00098	0.005	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
4.5	5.5	1	247939	HCORE			A17-00098	<0.005	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
5.5	6.5	1	247940	HCORE			A17-00098	0.005	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
6.5	7.5	1	247941	HCORE			A17-00098	0.006	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
7.5	8.5	1	247942	HCORE			A17-00098	0.005	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
8.5	9.5	1	247943	HCORE			A17-00098	<0.005	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
9.5	10.5	1	247944	HCORE			A17-00098	0.007	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
10.5	11.5	1	247945	HCORE			A17-00098	0.005	2-3cm qtz fe crb+/- epd stringers. trace pyrite scattered in groundmass
11.5	12.5	1	247946	HCORE			A17-00098	<0.005	5cm vuggy qtz fe crb+epd vein. trace pyrite
		0	247947	STD		CDN_GS_P4B	A17-00098	0.439	
12.5	13.5	1	247948	HCORE			A17-00098	0.005	2cm qtz fe crb+epd veins. trace pyrite scattered in groundmass
13.5	14.5	1	247949	HCORE			A17-00098	0.005	2cm qtz fe crb+epd veins. trace pyrite scattered in groundmass
14.5	15.5	1	247950	HCORE			A17-00098	0.008	2cm qtz fe crb+epd veins. trace pyrite scattered in groundmass
15.5	16.5	1	247951	HCORE			A17-00098	0.006	2cm qtz fe crb+epd veins. trace pyrite scattered in groundmass
16.5	17.5	1	247952	HCORE			A17-00098	0.005	2cm qtz fe crb+epd veins. trace pyrite scattered in groundmass
17.5	18.5	1	247953	HCORE			A17-00098	<0.005	2cm qtz fe crb+epd veins. trace pyrite scattered in groundmass
18.5	19.5	1	247954	HCORE			A17-00098	0.006	2cm qtz fe crb+epd veins. trace pyrite scattered in groundmass
19.5	20.3	0.8	247955	HCORE			A17-00098	0.009	2cm qtz fe crb vein with trace pyrite. trace pyrite scattered in groundmass

20.3	21.2	0.9	247956	HCORE			A17-00098	0.005	1.5cm qtz fe crb veins. trace pyrite scattered in groundmass
		0	247957	DUP	247956		A17-00098	<0.005	
21.2	22.12	0.92	247958	HCORE			A17-00098	0.007	2.5cm qtz fe crb veins. trace pyrite scattered in groundmass
22.12	23.1	0.98	247959	HCORE			A17-00098	0.005	7cm sheared qtz fe crb veining. up to 2% pyrite concetrated proximal to veins
23.1	24	0.9	247960	HCORE			A17-00098	0.036	12cm vuggy qtz fe crb veins. up to 1% pyrite locally
24	25	1	247961	HCORE			A17-00098	0.05	10cm sheared and vuggy qtz fe crb veins with trace pyrite along the vein margins
25	26	1	247962	HCORE			A17-00098	0.042	15cm silicified and sheared qtz fe crb veins with up to 3-4% pyrite locally
		0	247963	STD		CDN_GS_P7J	A17-00098	0.732	
26	27.05	1.05	247964	HCORE			A17-00098	0.073	8cm sheared qtz fe crb veins with up to 4% fine grained pyrite locally .
27.05	28.1	1.05	247965	HCORE			A17-00098	0.008	2cm qtz fe crb stringers. very trace pyrite scattered in groundmass with concetration proximal to veining.
28.1	29	0.9	247966	HCORE			A17-00098	0.011	2cm qtz fe crb stringers. very trace pyrite scattered in groundmass with concetration proximal to veining.
29	30	1	247967	HCORE			A17-00098	0.006	2cm qtz fe crb stringers. very trace pyrite scattered in groundmass with concetration proximal to veining.
30	31	1	247968	HCORE			A17-00098	0.011	2cm qtz fe crb stringers. very trace pyrite scattered in groundmass with concetration proximal to veining.
31	32	1	247969	HCORE			A17-00098	0.009	2cm qtz fe crb stringers. very trace pyrite scattered in groundmass with concetration proximal to veining.
32	33	1	247970	HCORE			A17-00098	0.012	3.5cm silicified qtz fe crb vein with vuggy core. up to 3% pyrite locally. trace pyrite scattered in groundmass
		0	247971	Blank		Blank	A17-00098	0.008	
33	34	1	247972	HCORE			A17-00098	0.006	trace pyrite scattered in groundmass with concentration proximal to veining
34	34.8	0.8	247973	HCORE			A17-00098	0.005	trace pyrite scattered in groundmass with concentration proximal to veining
34.8	35.53	0.73	247974	HCORE			A17-00098	0.006	trace pyrite scattered in groundmass with concentration proximal to veining

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

GREENSTONE GOLD MINES

Hole ID: B-16-12A DataSet: Brookbank Program: Exploration

Hole Status:	INREVIEW	**Hole Length (m):**	784	**Logged By:**	D. Grabiec
Hole Type:	Surface Drill Hole	**Dip (º):**	-57	**Date Log Started:**	12/11/2016
Date Drill Started:	12/6/2016	**Azimuth:**	303	**Date Log Completed:**	1/16/2017
Date Drill Completed:	12/16/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank East		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	441,030.1	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,372.3	**Date Surveyed:**	12/21/2016
Elevation (masl):	340.749	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29029	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	3
Core Storage:	Brookbank

Purpose: Test intersection of main mineralized iron-carbonate shear zone and oblique structures observed at outcrop and interpreted from the detailed magnetics. Primary target: intersection of main Fe-Carb shear zone and second northeast cross fault.

Comments: B-16-12 moved and realigned and restarted as B-16-12A. RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 780 **Max Sample Depth (m):** 784

Depth Logged To (m) 784 **Meters Sampled** 586.6

Total Samples 709 **# Assay** 618 **# QAQC:** 91

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-57	303	TN14	SINGLESHOT	G4	12/6/2016		Yes
24	-57.05	303.33	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
51	-57.01	303.54	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
60	-57	303.29	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
78	-56.88	304.22	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
114	-56.75	304.79	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
123	-56.76	304.96	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
132	-56.78	304.92	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
141	-56.9	305.04	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
161	-56.82	305.57	EZ-GYRO	SINGLESHOT	G4	12/8/2016	Optimised	Yes
168	-56.76	305.17	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
186	-56.64	305.16	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
191	-56.66	305.73	EZ-GYRO	SINGLESHOT	G4	12/8/2016	Optimised	Yes
195	-56.63	305.37	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
204	-56.62	305.53	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
230	-56.82	306.8	EZ-GYRO	SINGLESHOT	G4	12/9/2016	Optimised	Yes
231	-56.68	306.39	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
249	-56.64	306.21	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
267	-56.66	306.5	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
303	-56.8	306.67	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
312	-56.73	306.25	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
321	-56.7	306.78	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
339	-56.74	306.08	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
357	-56.77	306.7	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
366	-56.88	307.01	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
384	-57.07	307.76	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
393	-57.19	308.55	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
398	-57.33	308.52	EZ-GYRO	SINGLESHOT	G4	12/11/2016	Optimised	Yes
411	-57.48	309.53	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
420	-57.6	309.27	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
429	-57.59	309.1	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
438	-57.57	309.43	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
456	-57.55	309.07	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
474	-57.48	309.37	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
483	-57.5	309.95	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
492	-57.52	309.73	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
501	-57.37	310.73	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
519	-57.27	311.38	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
528	-57.29	311.49	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
537	-57.31	311.28	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
555	-57.46	311.81	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
573	-57.42	312.15	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
582	-57.36	313.22	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
600	-57.28	312.63	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
609	-57.04	313.79	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
618	-56.92	313.51	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
627	-56.86	314.46	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
636	-56.76	315.61	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
645	-56.47	315.15	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
654	-56.2	315.08	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
663	-56.07	316.01	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
672	-55.67	316.14	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
681	-55.75	317.12	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
690	-55.65	317.74	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
699	-55.53	318.33	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
735	-54.62	318.97	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
744	-54.35	318.53	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
753	-54.08	319.37	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
762	-53.54	319.97	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
771	-53.29	320.99	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes
780	-52.99	320.42	EZ-GYRO	MULTISHOT	G4	12/16/2016		Yes

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	3	3		OB	Overburden		
3	22.7	19.7		E1	Mafic Volcanic	Pillowed	
22.7	28	5.3		E1	Mafic Volcanic	Schistose	
28	62.55	34.55		E1	Mafic Volcanic	Massive	
62.55	67.21	4.66		E0B	Basaltic Komatiite		

Geology Summary

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
67.21	146.55	79.34		E1A	Basalt	Massive	
146.55	147.42	0.87		E1	Mafic Volcanic		
147.42	210	62.58		E1A	Basalt	Massive	
210	267	57		E1A	Basalt	Massive	
267	291	24		E1A	Basalt	Massive	
291	312.75	21.75		E1A	Basalt	Massive	
312.75	340.6	27.85		E1A	Basalt	Pillowed	Fine grained
340.6	358.87	18.27		E1A	Basalt	Massive	Coarse grained
358.87	400	41.13		E1A	Basalt	Pillowed	Fine grained
400	418.31	18.31		E1A	Basalt	Massive	Medium grained
418.31	453	34.69		E1A	Basalt	Pillowed	Fine grained
453	454.5	1.5		E0	Ultramafic Volcanic	Schistose	Fine grained
454.5	455.71	1.21		E1A	Basalt	Schistose	Fine grained
455.71	460.1	4.39		E1	Mafic Volcanic	Schistose	Fine grained
460.1	479.34	19.24		E1A	Basalt	Brecciated	Fine grained
479.34	485.08	5.74		E1A	Basalt	Pillowed	Fine grained
485.08	529.7	44.62		E1A	Basalt	Pillowed	Fine grained
529.7	541.65	11.95		E1A	Basalt	Massive	
541.65	564	22.35		E1	Mafic Volcanic	Massive	
564	570.53	6.53		E1	Mafic Volcanic	Massive	
570.53	597.3	26.77		E1	Mafic Volcanic	Massive	
597.3	598.15	0.85		MC	Missing Core		
598.15	609.3	11.15		E1A	Basalt		
609.3	625	15.7		E1A	Basalt		
625	697.67	72.67		E1A	Basalt	Massive	Fine grained
697.67	708.35	10.68		E1A	Basalt	Massive	Medium grained
708.35	711.51	3.16		E1A	Basalt	Massive	Fine grained
711.51	715.19	3.68		E1A	Basalt	Massive	Medium grained
715.19	730.6	15.41		E1A	Basalt	Massive	Fine grained
730.6	737.25	6.65		E1A	Basalt	Laminated	Fine grained
737.25	750	12.75		E1A	Basalt	Massive	Fine grained
750	755	5		S4B	Polymictic Conglomerate		
755	772	17		S4B	Polymictic Conglomerate		
772	784	12		S4B	Polymictic Conglomerate		

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	3	3		OB	Overburden			K. Leupen
3	22.7	19.7		E1	Mafic Volcanic	Pillowed		K. Leupen

Pillowed metavolocanics. Med green; fine grained; weak foliation; weakly magnetic throughout. Regular ~1m spaced pillow selvages that are slightly more magnetic. Clusters of carb filled vesicles proximal to selvages. One 14cm vuggy qtz fe cfb vein that is mineralized with trace pyrite mainly along the vein argins@ 11.75m. 1% qtz fe crb veins proximal to pillow selvges that are mineralzied with trace pyrite as replacement of higher magnetite content. 1% barren qtz fe +/- epidote etxension veins throughout.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
3	6	1:	Quartz-Fe-carbonate	Extension Vein			2.8	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			2	
6	9	1:	Quartz-Fe-carbonate	Extension Vein			3.5	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3	
9	12	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			14.5	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			3.8	
12	15	1:	Quartz-Fe-carbonate	Extension Vein			4.2	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.2	
15	18	1:	Quartz-Fe-carbonate	Extension Vein			4.2	
		2:	Quartz-Fe-carbonate	Breccia Veins			2.5	
18	21	1:	Quartz-Fe-carbonate	Extension Vein			3.8	
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			0.5	

From	To							
22.7	28	5.3		E1	Mafic Volcanic	Schistose		K. Leupen

Sheared metavolcanics. Upper contact is brecciated and transitions into highly sheared at 23.7m. General trend of shear is ~20 deg TCA and slightly steepens in core with depth. Sheared qtz fe crb veining accounts for 20% of interval with related pyrite along the vein margins. Three silicified qtz fe crb veins with moderate alteration halos and mineralized with up to 2% pyrite locally. lower contact is gradational, defined by gradual less intense fabric leading to "fresh" metavolcanics. 1% hematite as bands throughout sheared host (more concentrated proximal to sheared veins)

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
22.7	28	1:	Pyrite	Fine grained	Scattered grains	2	Sheared/altered interval with up to 2% pyrite locally as stringers and scattered grains proximal to qtz fe crb veining. 1% hematite bands in sheared host
VG: No		2:	Hematite	Fine grained	Banded	1	

Structures

From	To	Code	Structure Type	Comments
22.7	23.7	FLT2	Fault - breccia	Brecciated interval at upper contact as unit becomes strongly sheared
23.7	28	SHD	Shear / mylonitic foliation	Strongly sheared interval

Veins

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
24	27	1	Quartz-Fe-carbonate	Shear Vein			18	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.4	

From	To	Width	Lith Code	Rocktype	Texture	Logged By
28	**62.55**	34.55	**E1**	**Mafic Volcanic**	Massive	K. Leupen

Massive flow metavolcanics. Med-drark green; fine to medium grained, massive texture. Weakly magnetic, gradually becoming less magnetic and dropping completely at lower contact. 1% qtz fe crb veins that are lightly mineralized with trace pyrite mainly along the vein margins. Trace scattered pyrite occurring in groundmass as replacement of magnetite. Rare thin qtz fe crb extension veins that are filled completely with hematite.1% barren qtz fe crb +/- epidote throughout.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
30	33	1	Quartz-Fe-carbonate	Extension Vein			6.5	
33	36	1	Quartz-Fe-carbonate	Extension Vein			7	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.4	
36	39	1	Quartz-Fe-carbonate	Extension Vein			5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1	
39	42	1	Quartz-Fe-carbonate	Extension Vein			3.8	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.5	
42	45	1	Quartz-Fe-Carbonate/Epidote	Extension Vein			2.5	
		2	Quartz-Fe-carbonate	Extension Vein			2	
45	48	1	Quartz-Fe-carbonate	Extension Vein			3.8	
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
48	51	1	Quartz-Fe-carbonate	Extension Vein			8	
51	54	1	Quartz-Fe-carbonate	Extension Vein			5.5	
		2	Quartz-Fe-Carbonate/Epidote	Extension Vein			1.5	
54	57	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
57	60	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	

From	To	Width	Lith Code	Rocktype	Texture	Logged By
62.55	**67.21**	4.66	**E0B**	**Basaltic Komatiite**		D. Grabiec

Ultramafic flow. Medium to dark green; medium grained; massive textured. Non magnetic. 5% white and cloudy calcite veinlets (<1-2cm wide; non mineralized). 1% qtz/ank veinlets with trace scatted PY in and haloing (<2cm). 10% leucoxene minerals (<2mm long). Moderate pervasive talc alteration including irregular veinlet-like concentrations of pure talc (<1cm wide).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
62.55	67.21	1	Talc	Weak (1-25%)	-	Weak-moderate talc alteration in komatiatic basalt. Pervasive and vein-like concentrations.

Veins

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
63	66	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			19	

67.21	**146.55**	79.34	**E1A**	**Basalt**	Massive	D. Grabiec

Massive flow metavolcanics. Med-drark green; fine to medium grained, massive texture. Non magnetic. 1% qtz fe crb veins that are lightly mineralized with trace pyrite mainly along the vein margins.1% barren qtz fe crb +/- epidote throughout.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
69	72	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
72	75	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
75	78	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			28	One 25cm wide qtz/cal/ank veinlets.
78	81	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
81	84	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
84	87	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
87	90	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
90	93	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
93	96	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
96	99	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
99	102	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
102	105	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
105	108	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
108	111	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
111	114	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
114	117	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
117	120	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
120	123	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
123	126	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
126	129	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
129	132	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
132	135	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
135	138	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
138	141	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
141	144	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	

DataSet: Brookbank
HoleID: B-16-12A
meters

Hole Length (m): 784
Log Length (m): 784

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
146.55	**147.42**	0.87		**E1**	**Mafic Volcanic**			D. Grabiec

Silicified/strained Mafic Volcanic. Strongly silicified and strained mafic volcanic. Brecciation cracks throughout. Strong foliation of chlorite alteration. Unit marks the begining of reintroduction of ankerite veining. 8% subhedral pyrite infilling breccia cracks. Non magnetic. 2% qtz/cal/ank veinlets are earlier than brecciation as they are offset.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
146.55	147.42	1:	Silicified	Strong (51-75%)	Pervasive	Strong Pervasive Silicification. Start of Very weak ankerite alteration.
		2:	Ankerite	Weak (1-25%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
146.55	147.42	1:	Pyrite	Fine grained	Semi-massive	8	8% SMA PY associated with strongly silicified/brecciated mafic volcanic.
VG: No							

Structures

From	To	Code	Structure Type	Comments
146.55	147.42	SHD	Shear / mylonitic foliation	Strongly sheared and silicified unit.

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
147.42	**210**	62.58		**E1A**	**Basalt**	Massive		D. Grabiec

Massive mafic volcanic. Non magnetic at top of unit and becoming increasingly magnetic downhole. Non foliated. 2-3% qtz/cal veinlets and increasing to 6% down hole (1-2% ankerite replacement of calcite veinlets). Trace sct PY associated with qtz/cal/(ank) veinlets. Localized patches of very weak epidote alteration. <1% thin (<.5cm wide) specular hematite veinlets at Various angle to C.A. Faulting and shearing from 175.5-176.5m. Shear veining at 187.35;202.22;205.35 with 2-3% SMA PY.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
147.42	188	1:	Ankerite	Weak (1-25%)	-	Weak iron-carbonate alteration in veinlets. <.5cm wide hematite veinlets (One every 3-4m).
		2:	Hematite	Weak (1-25%)	-	
188	210	1:	Ankerite	Weak (1-25%)	Localized	Increase in Iron content. Visible by increase pervasive magnetic/ ankerite alteration/ and hematite veinlets.
		2:	Hematite	Weak (1-25%)	Localized	
		3:	Magnetite	Weak (1-25%)	Patches	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
183.5	186.5	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY associated with vuggy qtz/cal veinlets.
VG: No							
186.5	187.4	1:	Pyrite	Medium grained	Scattered grains	3	3% sct PY associated with shear veining.
VG: No							

DataSet: Brookbank

HoleID: B-16-12A

Hole Length (m): 784

Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
187.4	204	1	Pyrite	Medium grained	Scattered grains	0.3	Trace sct PY associated with vuggy calcite veinlets. Bands of Localized SMA PY (<2cm wide) at 194.17; 202.22; 204.33; 205.35; 205.9m
VG: No							

Structures

From	To	Code	Structure Type	Comments
175.5	176.4	SHD	Shear / mylonitic foliation	90cm wide area with two shears at 175.65 and 176.38. Also diplacement fault at 175.83m with unknown diplacement.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
150	153	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
153	156	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
156	159	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	
159	162	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	
162	165	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
165	168	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	
168	171	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
171	174	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	
174	177	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	
177	180	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
180	183	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	
183	186	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			17	Vuggy qtz/cal veinlets with trace PY.
186	189	1	Quartz-Fe-Carbonate/Calcite	Breccia Veins			15	15cm of mineralized shear/brecciated veinlets. 4cm of qtz/cal stringers.
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
189	192	1	Quartz-Fe-Carbonate/Epidote	Extension Vein			12	12cm of unmineralized qtz/cal/epd veinlets. 11cm of mineralized qtz/cal vuggy veinlets. Vuggy veinlets are cutting epidote.
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	
192	195	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			12	12cm of mineralized vuggy qtz/cal veinlets. 11cm of qtz/cal veinlets. 5cm of qtz/cal veinlets with SMA PY.
		2	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	
195	198	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			21	21cm of qtz/cal veinlets at Various angles to CA. One <1cm veinlets filled with PY at 196.7m.

DataSet: Brookbank

HoleID: B-16-12A

Hole Length (m): 784

Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
210	**267**	57		**E1A**	**Basalt**	Massive		D. Grabiec

Massive Metavolcanic. Non magnetic. Non foliated. Light green. High fracture zone from 210 to 214.4m (Fractures appear to form along qtz/cal veinlets being dissolved. 1-2% qtz/cal veinlets at various angles (some vuggy). No significant mineralization. Very weak epidote veinlets occasionally associated with qtz/cal. No pillows.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
198	201	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			14	14cm of qtz/cal veinlets at various angles. 3cm of vuggy qtz/cal veinlets with trace PY.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
201	204	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of vuggy qtz/cal veinlets with trace PY. 9cm of qtz/cal/epidote veining.
		2:	Quartz-Fe-Carbonate/Epidote	Extension Vein			9	
204	207	1:	Fe-Carbonate / Sulphides	Extension Vein			13	13cm of SMA PY veinlets assoc with qtz/cal veinlets. 4cm of vuggy qtz/cal veinlets with trace PY. 9cm of qtz/cal/ank/epd veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
207	210	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	7cm of qtz/cal veinlets vuggy with trace PY. 2cm of fracture filling PY veinlets associated with mm scale qtz/cal. 3cm qtz/cal/ank/epd veinlets.
		2:	Fe-Carbonate / Sulphides	Extension Vein			2	

Alteration

From	To	#	Alteration	Intesity	Style	Comments
210	267	1:	Calcite	Weak (1-25%)	Patches	Decrease in Iron content. Very weak specular hematite at 224.7m
		2:	Hematite	Weak (1-25%)	-	

Structures

From	To	Code	Structure Type	Comments
210	214.4	HFZ	High fracture zone	high fracture zone with fracture pieces being <1cm in size to upwards of 20cm.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
210	213	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm qtz/cal veinlets at various angles.
213	216	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	13cm qtz/cal veinlets at various angles.
216	219	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm qtz/cal veinlets.
219	222	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm qtz/cal veinets.
222	225	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	9cm qtz/cal veinlets with 1cm of hematite.
		2:	Specular Hematite	Extension Vein			1	

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
225	228	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm qtz/cal veinlets.
228	231	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	2cm qtz/cal veinlets.
231	234	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	3cm qtz/cal veinlets. 0.5cm wide thin hematite veinlets with qtz/cal.
		2:	Specular Hematite	-			0.5	
234	237	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm qtz/cal veinlets.
237	240	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	6cm qtz/cal veinnlets.
240	243	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	6cm qtz/cal veinlets.
243	246	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	9cm qtz/cal veinlets.
246	249	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm qtz/cal veinlets.
249	252	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm qtz/cal veinlets.
252	255	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			22	22cm qtz/cal veinlets. Trace sct PY.
255	258	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	8cm qtz/cal veinlets.
258	261	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	6cm qtz/cal veinlets.
261	264	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	9cm qtz/cal veinlets.
264	267	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm qtz/cal veinlets.

From	To		Lith Code	Rocktype	Texture	Logged By
267	**291**	24	**E1A**	**Basalt**	Massive	D. Grabiec

Massive Metavolcanic. Moderately magnetic. Med green. Becomes darker and more magnetic simultaneously. Increase in ankerite alteration in veinlets. 10-15% white qtz/cal veinlets. 2% redish ankerite veinlets. Veinlets at <1-3cm wide at various angles. Weakly foliated. Rare sct on vein margins. Patches of weak foliation.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
267	291	1:	Ankerite	Weak (1-25%)	Localized	Rock becomes darker and more magnetic. Increase in veining and ankerite.
		2:	Magnetite	Weak (1-25%)	Pervasive	
		3:	Calcite	Weak (1-25%)	Localized	

Structures

From	To	Code	Structure Type	Comments
275	291	FOL	Foliation	Increased strain/foliation and veining.

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
291	**312.75**	21.75		**E1A**	**Basalt**	Massive		D. Grabiec

Massive Metavolcanic. Non magnetic. Non foliated or significant structures. Light green. 1-2% qtz/cal veinlets at various angles (some vuggy). No significant mineralization. Very weak epidote veinlets occasionally associated with qtz/cal. No pillows.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
267	270	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	15	16cm of qtz/cal veinlets.
270	273	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	15	15cm cm of 160CA veinlets. 3cm of high angle vuggy qtz/cal veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		100	3	
273	276	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	13	13cm of 160CA veinlets. 2cm of high angle qtz/cal.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		90	2	
276	279	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	48	48cm of qtz/cal veinlets. Distorted. strong foliation.
279	282	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	32	34cm of qtz/cal veinlets. Distorted. Moderate foliation.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		30	2	
282	285	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		30	10	12cm of qtz/cal veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	2	
285	288	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		160	11	20cm of qtz/cal veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		30	9	
288	291	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			31	31cm of qtz/cal veinlets.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
291	312.75	1:	Calcite	Weak (1-25%)	Localized	Localized epidote and calcite veinlets.
		2:	Epidote	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
291	294	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	10cm of qtz/cal veinlets.
294	297	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of qtz/cal veinlets.
297	300	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm of qtz/cal veinlets.
300	303	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	5cm of qtz/cal veinlets.
303	306	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm of qtz/cal veinlets.
306	309	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	4cm of qtz/cal veinlets.
309	312	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	6cm of qtz/cal veinlets.

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
312.75	**340.6**	27.85		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; weakly magnetic (patchy); medium green in colour; FG; pillow selvages visible w/ chl or epd amygdules. non foliated; 10% vuggy qtz-crb-calcite veining (pink-white) near top of unit (312.75-322m) and decreases to 3-5% qtz-crb+/-calcite veining. trc PY throughout with up to 3-5% PY concentrating around qtz-crb veins and in selvages. Grainsize change from fg-cg around 327.6m. alteration/textural change at 327m (white-green grains concentrated around selvages; feldspars?)

Alteration

From	To	#	Alteration	Intesity	Style	Comments
312.75	340.6	1:	Ankerite	Weak (1-25%)	Halo-Vein Related	chl bands/stringers throughout unit. fe-crb present with veining. very weak magnetite
		2:	Chlorite	Weak (1-25%)	Banding	
		3:	Magnetite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
334.4	336.5	HFZ	High fracture zone	small areas of highly fractures rock with more competent rock inbetween

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
315	318	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		85	5	v1 are vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
318	321	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	v1 are vuggy veins; v3 are not vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Shear Vein			4	
321	324	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	v1 are vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.7	
324	327	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			11	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
327	330	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	mostly extenstion stringers; thin
330	333	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			1.5	some of v1 are slightly vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
333	336	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	v1 includes different vein sets
336	339	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
340.6	**358.87**	18.27		**E1A**	**Basalt**	Massive	Coarse grained	S. Molloy

Massive basalt; alternates between mg and cg; medium-dark green in colour; no visible pillow selvages; 2-3% qtz-crb+/-calc; some are pink-white nd vuggy and others are thin white extension veins. up to 1% PY throughout, mostly concentrated around veining; non foliated; weak patchy magnetite.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
340.6	358.87	1:	Ankerite	Weak (1-25%)	Halo-Vein Related	very weak patchy magnetite; patchy epd in veining and in groundmass
		2:	Magnetite	Weak (1-25%)	Patches	

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
		3:	Epidote	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
342	345	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.5	v1 are pink-white vuggy mineralized veins; v2 are white extension veinlets
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
345	348	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	v1 includes both vuggy and non vuggy veins
348	351	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			12.5	v1 includes vuggy and non vuggy mineralized veins; v2 are rest of extension veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	
351	354	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7.5	v1 is vuggy and mineralized veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
354	357	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	includes all veins

From	To			Lith Code	Rocktype	Texture	GrainSize	Logged By
358.87	**400**	41.13		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; fine grained alternating with coarser grained flows. non foliated; weak patchy magnetite; 3-5% qtz-crb+/-calc veining; some are white-pink and vuggy, others are white extension veins; trc PY throughout, mostly assoc w/ veining. selvages present. 362-365.6m has increase in stockwork veining and veins with wall rock fragments in it (almost appears brecciated). 40cm of core loss from 370.25-370.65m

Alteration

From	To	#	Alteration	Intesity	Style	Comments
358.87	400	1:	Ankerite	Weak (1-25%)	Halo-Vein Related	very weak patchy magnetite.
		2:	Magnetite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
368.7	371	HFZ	High fracture zone	fractured rock intervals inbetween more competent rock. core loss at 370.25-370.65m (40cm of core loss)
377.8	385.5	HFZ	High fracture zone	highly fractured rock assoc w/ vuggy qtz-crb-calc veining. fractured rock at 385.3-385.4 is not assoc w/ veining

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
360	363	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	v1 is mineralized veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	
363	366	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			3	some of v2 are mineralized
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	

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HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
366	369	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	v1 are mineralized veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
369	372	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	v2 include low angle stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
372	375	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	v1 are mineralized veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
375	378	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			8	v1 is vuggy and mineralized
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
378	381	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	v1 are vuggy mineralized veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	
381	384	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	v1 are mineralized and mostly vuggy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
384	387	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	includes all veinlets; some are mineralized and vuggy
387	390	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	some are mineralized and weakly vuggy
390	393	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	v1 are mineralized nd weakly vuggy veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	
393	396	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5.5	v1 are mineralized and vuggy veinlets
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
396	399	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		20	2	v1 are low angle veinlets and v2 are all other extension veins
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
400	**418.31**	18.31	**E1A**	**Basalt**	Massive	Medium grained	S. Molloy

Massive basalt; ranges from FG to CG; weak patchy magnetite; medium-dark grey-green; non foliated except for small 4cm foliated band @ 402.26m (with epd and fe-crb altn within and thin qtz-crb+/-calc stringers); blocky core interval from 403-406m. Epd and ankerite alteration sporadically throughout unit. Breccia zone at 417.48-417.9m (fe-crb altered and 3-4% blebby PY). 5-7% qtz-crb+/-calc veining; trcc PY throughout

Alteration

From	To	#	Alteration	Intesity	Style	Comments
400	418.31	1:	Ankerite	Weak (1-25%)	Patches	Ankerite is present in qtz-crb veining and as alteration with epd.
		2:	Epidote	Weak (1-25%)	Patches	
		3:	Magnetite	Weak (1-25%)	Patches	

Structures

From	To	Code	Structure Type	Comments
403	406	HFZ	High fracture zone	high fracture zone within pillowed basalt.
417.48	417.9	FLT2	Fault - breccia	breccia zone; moderate ankerite alteration and 3-4% blebby PY

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
402	405	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	veins are mostly mineralized and weakly vuggy
405	408	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	some veins are mineralized, pink and vuggy
408	411	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	some are mineralized and vuggy
411	414	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	some veins are mineralized but not vuggy
414	417	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			8	large bull qtz vein, not mineralized; v2 include mineralized veins (not vuggy)
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
418.31	**453**	34.69		**E1A**	**Basalt**	Pillowed	Fine grained	S. Molloy

Pillowed basalt; fine grained; weak-mod magnetite; medium-dark green-grey; qtz-calcite filled amygdules near pillow selvages; non foliated except near end of unit @ 452.47m. altered and deformed area at 431.55-435.5m (appears weakly foliated and altered (ank, sil, increased magnetite content) with possible breccia at upper contact. broken up and altered pillow selvage? 3-5% mg PY); 10-15% qtz-crb+/-calc veining with large white bull qtz vein from 421-421.63m. trc PY throughout.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
418.31	431.55	1:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		2:	Magnetite	Weak (1-25%)	Patches	
431.55	435.5	1:	Magnetite	Weak (1-25%)	Patches	local bleaching around chl-mag-PY bleb/stringer @ 432.4m.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Silicified	Weak (1-25%)	Pervasive	
		4:	Bleaching	Weak (1-25%)	Localized	
		5:	Chlorite	Weak (1-25%)	Patches	
435.5	453	1:	Magnetite	Weak (1-25%)	Patches	weaker silicification than previous unit
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Silicified	Weak (1-25%)	Pervasive	
		4:	Hematite	Weak (1-25%)	Spotted	

Structures

From	To	Code	Structure Type	Comments
431.55	433.34	FLT2	Fault - breccia	possible breccia; highly magnetic, silicified zone with increased fe-crb and chl. pillow selvage looks ripped apart. possible fragments or just look that way due to fracture fills
444.4	444.78	FLT2	Fault - breccia	possible breccia in pillowed basalt; or just appears to be brecciated due to fracturing
452.47	452.9	HFZ	High fracture zone	high fracture zone in pillowed basalt

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
420	423	1:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			59	v1 is very large bull qtz vein w/ trc PY at its margins.
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	
423	426	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10.5	v1 are mostly mineralized
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
426	429	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			2	
429	432	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	
432	435	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	v1 are mostly mineralized and somewhat deformed or dont have sharp boundaries
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
435	438	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
438	441	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	both veins 1 and 2 have some mineralization
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.5	
441	444	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	veinlets are weakly mineralized
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3.5	
444	447	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			15	v2 is at 444.78m
		2:	Quartz-Fe-Carbonate/Calcite	Vein with wall rock fragments			3	
447	450	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	most of v2 are pink veins with trc PY
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
450	453	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	most of v1 are mineralized
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
453	**454.5**	1.5	**E0**	**Ultramafic Volcanic**	Schistose	Fine grained	S. Molloy

Ultramafic flow. Dark grey-black. moderately sheared; leucoxsene grains visible (5-10% disseminated leucoxsene); mod patchy magnetite; 15-20% pink-white qtz-crb+/-calc veining; moderate fe-crb assoc w/ veining; 1-2% PY assoc w/ veining.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
453	454.5	1:	Leucoxene	Weak (1-25%)	Pervasive	leucoxsene grains present, disseminated throughout unit.
		2:	Magnetite	Weak (1-25%)	Patches	
		3:	Ankerite	Weak (1-25%)	Halo-Vein Related	

From	To	Width	Lith Code	Rocktype	Texture	GrainSize	Logged By
454.5	**455.71**	1.21	**E1A**	**Basalt**	Schistose	Fine grained	S. Molloy

Sheared mafic volcanic; no visible leucoxsene's; 10-15% white-pink qzt-crb+/-calc veining; 1-2% PY assoc w/ veining; mod patchy magnetite; moderately sheared. dark green-grey in colour.

Alteration

DataSet: Brookbank
HoleID: B-16-12A
meters

Hole Length (m): 784
Log Length (m): 784

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Alteration	Intesity	Style	Comments
454.5	455.71	1:	Magnetite	Weak (1-25%)	Patches	in sheared mafic volcanic
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	

Structures

From	To	Code	Structure Type	Comments
454.5	455.71	SHD	Shear / mylonitic foliation	Sheared mafic volcanic

455.71	**460.1**	4.39		**E1**	**Mafic Volcanic**	Schistose	Fine grained	S. Molloy

Shear zone w/ areas that appear brecciated with qtz-crb and host rock fragments (455.71-456.8m and 458.25-2m); weak silicification; moderate ser banding; weak mag; weak hem/spec banding/stringers; mod bleaching assoc w/ qtz-crb+/-calc stringers; mod fe-crb. 5% qtz-crb+/-calc veining; 2-3% f-mg PY.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
455.71	460.1	1:	Sericite	Weak (1-25%)	Banding	bleaching assoc w/ qtz-crb+/-calc veining.
		2:	Silicified	Weak (1-25%)	Pervasive	
		3:	Magnetite	Weak (1-25%)	Patches	
		4:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		5:	Bleaching	Weak (1-25%)	Halo-Vein Related	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
455.71	460.1	1:	Pyrite	Fine grained	Scattered grains	3	F-MG PY assoc w/ qtz-crb+/-calc veining (pink-white in colour); sheared and brecciated
VG: No							

Structures

From	To	Code	Structure Type	Comments
455.71	457.25	FLT2	Fault - breccia	brecciated mafic volcanic; upper part of shear zone
457.25	460.1	SHD	Shear / mylonitic foliation	Shear zone with some minor brecciation within it @458.25-459.3

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
456	459	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	in mineralized shear/brecciated zone
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	

460.1	**479.34**	19.24		**E1A**	**Basalt**	Brecciated	Fine grained	S. Molloy

brecciated mafic volcanic; possibly pillowed basalt (possible selvages throughout unit, or just more sheared sections). Dark grey-green and pink in colour; mod-strong fe-crb; weakly sheared; host rock fragments visible throughout. 5-7% qtz-crb+/-calc veining (pink-white); mod pervasive magnetite; weakly silicified; mod ser bands; weak epd. trc PY. upper contact is 41 degrees to CA and lower contact is 15.

Alteration

DataSet: Brookbank
HoleID: B-16-12A
meters

Hole Length (m): 784
Log Length (m): 784

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Alteration	Intesity	Style	Comments
460.1	479.34	1:	Magnetite	Weak (1-25%)	Pervasive	weak bleaching assoc w/ veining.
		2:	Ankerite	Weak (1-25%)	Halo-Vein Related	
		3:	Silicified	Weak (1-25%)	Pervasive	
		4:	Bleaching	Weak (1-25%)	Halo-Vein Related	
		5:	Chlorite	Weak (1-25%)	Banding	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
460.1	479.34	1:	Pyrite	Medium grained	Scattered grains	2	PY mostly assoc w/ qtz-crb+/-calc veining in brecciated and weakly sheared pillowed basalt.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
462	465	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			6	
465	468	1:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			11	mostly stockwork veins
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
468	471	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			9	qtz-crb seen in pillow selvages were not included (not real veins)
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			6	
471	474	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			14	
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			7	
474	477	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			19	some of v1 are shear veins
		2:	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			1.5	

479.34 **485.08** 5.74 **E1A** **Basalt** Pillowed Fine grained S. Molloy

Pillowed basalt; weakly sheared and deformed; fine grained; medium-dark green-pink in colour; weak-mod pervasive magnetite; very weak silicification; weak hem/spec stringers/blebs; pillow selvages present; 5% qtz-crb+/-calc veining; trc PY

Alteration

From	To	#	Alteration	Intesity	Style	Comments
479.34	485.08	1:	Magnetite	Weak (1-25%)	Pervasive	
		2:	Silicified	Weak (1-25%)	Pervasive	
		3:	Ankerite	Weak (1-25%)	Halo-Vein Related	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
480	483	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	some are shear veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

485.08 **529.7** 44.62 **E1A** **Basalt** Pillowed Fine grained S. Molloy

Massive basalt; very sparse pillow selvages present; dark grey in colour; weak-mod epd; weaker fe-crb compared to previous unit. 3-

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

4% qtz-crb+/-calc veining; trc PY. non foliated; weak-mod pervasive magnetite; weak spec blebs. Increase qtz/crb veining from 490-496m(5-20% white qtz/cal veinlets).

Structures

From	To	Code	Structure Type	Comments
490	496	FOL	Foliation	Increase strain/foliation and veining.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
486	489	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	minor stringers present as well
		2:	Quartz-Fe-Carbonate/Calcite	Shear Vein			2	
489	492	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			23	most veinlets are wispy/wavy
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			8	
492	495	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	30	110CA crosscutting 50CA veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		110	14	
495	498	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	17	110CA crosscutting 50CA veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	-		110	5	
498	501	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		50	7	
		2:	Quartz-Fe-Carbonate/Calcite	-				
501	504	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	One 25cm qtz/crb veinlets.
		2:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			25	
504	507	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
507	510	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
510	513	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
513	516	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
516	519	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
519	522	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	
522	525	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
525	528	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	One 10cm qtz/cal veinlets. Weakly silicified.
		2:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			10	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
529.7	**541.65**	11.95		**E1A**	**Basalt**	Massive		D. Grabiec

Massive basalt; coarser grained gabbroic texture; non magnetic. med grey-green in colour; localized ankerite alt in veining; no significant structures or mineralization. 1-2% qtz/cal veinlets.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
531	534	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
534	537	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	

DataSet: Brookbank
HoleID: B-16-12A
meters

Hole Length (m): 784
Log Length (m): 784

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
537	540	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
541.65	**564**	22.35		**E1**	**Mafic Volcanic**	Massive		D. Grabiec

Massive basalt; very sparse pillow selvages; med grey in colour. non magnetic.localized ankerite alt in veining. 2-3% qtz/cal veinlets.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
543	546	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
546	549	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
549	552	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
552	555	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
555	558	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
558	561	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
561	564	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
564	**570.53**	6.53		**E1**	**Mafic Volcanic**	Massive		D. Grabiec

Massive basalt; coarser grained gabbroic texture; non magnetic. med grey-green in colour; localized ankerite alt in veining; no significant structures or mineralization. 1-2% qtz/cal veinlets.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
564	567	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
567	570	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
570.53	**597.3**	26.77		**E1**	**Mafic Volcanic**	Massive		D. Grabiec

Massive basalt; no pillow selvages; med-dark grey in colour. weakly magnetic at 571.5m. localized ankerite alt in veining. 2-3% qtz/cal veinlets with assoc trace sct PY. Slight foliation at upper contact for appx 1m. Brecciation fault at 601.25m to 601.8m with irregular contacts.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
573	576	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
576	579	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
579	582	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
582	585	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
585	588	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	
588	591	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	
591	594	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			17	
594	597	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	

From	To	Width	Lith Code	Rocktype	Logged By
597.3	**598.15**	0.85	**MC**	**Missing Core**	D. Grabiec

Missing Core.

From	To	Width	Lith Code	Rocktype	Logged By
598.15	**609.3**	11.15	**E1A**	**Basalt**	D. Grabiec

Massive basalt; no pillow selvages; med-dark grey in colour. weakly magnetic at 571.5m. localized ankerite alt in veining. 2-3% qtz/cal veinlets with assoc trace sct PY. Slight foliation at upper contact for appx 1m. Brecciation fault at 601.25m to 601.8m with irregular contacts.

Structures

From	To	Code	Structure Type	Comments
601.25	601.8	FLT2	Fault - breccia	Fault breccia with very irregular contact. Two <1cm wide hem veinlets through center. Very weak sericite. Trace sct PY. Spaces filled with qtz/cal.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
600	603	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
		2	Quartz-Fe-Carbonate/Calcite	Stockwork Veins			8	
603	606	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
606	609	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	

From	To	Width	Lith Code	Rocktype	Logged By
609.3	**625**	15.7	**E1A**	**Basalt**	D. Grabiec

Massive basalt; coarser grained gabbroic texture; non magnetic. med grey-green in colour; localized ankerite alt in veining; no significant structures or mineralization. 1-2% qtz/cal veinlets. Weak patches of epidote.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
609.3	625	1	Ankerite	Weak (1-25%)	Localized	Minor ankerite in veinlets. Localized patches of epidote.
		2	Epidote	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
612	615	1	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
625	**697.67**	72.67		**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive basalt; no pillow selvages; med-dark green-grey in colour. Weakly magnetic from 670-681m. localized ankerite alt in veining. 2-3% qtz/cal veinlets with assoc trace sct PY. Decreasing veinlets to 1% down hole. One 35cm wide white qtz/cal vein at 650.9m with 2% sct PY on vein margins.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
615	618	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
618	621	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
621	624	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	

Alteration

From	To	#	Alteration	Intesity	Style	Comments
625	697.67	1:	Ankerite	Weak (1-25%)	Localized	Minor ankerite in veinlets. Localzied area with weakly magnetic.
		2:	Magnetite	Weak (1-25%)	-	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
627	630	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
630	633	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
633	636	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
		2:	Quartz-Fe-Carbonate/Calcite	Breccia Veins			1	
636	639	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
639	642	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
642	645	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
645	648	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
648	651	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
651	654	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
		2:	Quartz-Fe-Carbonate/Calcite	Vein > 3"			34	
654	657	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
657	660	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
660	663	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	
663	666	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
666	669	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			2	
669	672	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
672	675	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	

DataSet: Brookbank
HoleID: B-16-12A
meters

Hole Length (m): 784
Log Length (m): 784

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
675	678	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			7	
678	681	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
681	684	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
684	687	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			5	
687	690	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
690	693	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			8	
693	696	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
697.67	**708.35**	10.68		**E1A**	**Basalt**	Massive	Medium grained	D. Grabiec

Massive basalt; coarser grained gabbroic texture; non magnetic. med grey-green in colour; localized ankerite alt in veining; no significant structures or mineralization. 1-2% qtz/cal veinlets. Weak patches of epidote.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
697.67	708.35	1:	Ankerite	Weak (1-25%)	Localized	
		2:	Epidote	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
699	702	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
702	705	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	
705	708	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
708.35	**711.51**	3.16		**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive basalt; no pillow salvages; med-dark grey; fine grained; strongly magnetic; weakly silicified; weakly brecciated; five 1-15cm wide qtz/cal veining; 1% sct PY along vein margins.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
708.35	711.51	1:	Ankerite	Weak (1-25%)	Localized	Pervasive strongly magnetic; weakly silicified and brecciated.
		2:	Magnetite	Weak (1-25%)	Pervasive	
		3:	Silicified	Weak (1-25%)	-	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
708.35	711.51	1:	Pyrite	Fine grained	Scattered grains	1	Py associated w/ qtz/al veining. Weakly silicified zone.
VG: No							

Structures

DataSet: Brookbank
HoleID: B-16-12A
meters

Hole Length (m): 784
Log Length (m): 784

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	Code	Structure Type	Comments
708.35	711.51	FLT2	Fault - breccia	Very weakly brecciated and weakly foliated mafic volcanic with increased magnetics.

711.51 **715.19** 3.68 **E1A** **Basalt** Massive Medium grained D. Grabiec

Massive basalt; coarser grained gabbroic texture; weakly foliated; non magnetic. med grey-green in colour; localized ankerite alt in veining; no significant structures or mineralization. 1-2% qtz/cal veinlets. Weak patches of epidote.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
711.51	715.19	1:	Ankerite	Weak (1-25%)	Localized	
		2:	Epidote	Weak (1-25%)	Patches	

715.19 **730.6** 15.41 **E1A** **Basalt** Massive Fine grained D. Grabiec

Massive basalt; no pillow salvages; med greenish grey; fine grained; moderately magnetic; Very weak local patches of epidote; weakly foliated; 2-3% qtz/cal/ank veinlets (some with associated trace sct PY.) Sharp contacts.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
715.19	730.6	1:	Ankerite	Weak (1-25%)	Localized	
		2:	Epidote	Weak (1-25%)	-	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
715.19	730.6	1:	Pyrite	Fine grained	Scattered grains	0.2	Trace sct PY assoc with qtz/cal veinlet.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
717	720	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
720	723	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
723	726	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			11	
726	729	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			36	Increasing qtz/cal veining with increase strain.

730.6 **737.25** 6.65 **E1A** **Basalt** Laminated Fine grained D. Grabiec

Sheared mafic volcanic; Varying light green/grey/bands of darker grey; strongly strained; no conglomerate clasts; non magnetic; moderate-strong ankerite; moderate sericite banding. 3-4% qtz/cal veinlets with Trace-1% sct PY on veinlet margins. Final 1.5m is weakly silicified.

Alteration

From	To	#	Alteration	Intesity	Style	Comments

DataSet: Brookbank
HoleID: B-16-12A

Hole Length (m): 784
Log Length (m): 784

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
730.6	737.25	1:	Ankerite	Weak (1-25%)	Pervasive	Highly strained mafic volcanic with sericite/ankerite alteration and localized silicification.
		2:	Sericite	Weak (1-25%)	Patches	
		3:	Silicified	Weak (1-25%)	-	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
732	735	1:	Quartz-Fe-Carbonate/Calcite	Shear Vein			36	Shear veining.

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
737.25	**750**	12.75	**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive basalt; no pillow slavages; med greyish green; non magnetic; moderately foliated; mod calcite; One .5cm wide bands of hematite at 744.81.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
737.25	750	1:	Calcite	Weak (1-25%)	Localized	
		2:	Hematite	Weak (1-25%)	Localized	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
738	741	1:	Quartz-Fe-Carbonate/Calcite	Shear Vein			14	Shear veining.
741	744	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			16	Decrease in qtz/cal veining with decrease strain.
744	747	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"		52	11	
		2:	Specular Hematite	Veinlet Zone - vein 1/4" to 3"		140	0.5	
747	750	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			32	Increase qtz/cal veinlets with increae shearing.

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
750	**755**	5	**S4B**	**Polymictic Conglomerate**			D. Grabiec

Polymictic conglomerate. Moderately sheared. Clasts are rounded and elongated (Qtz;qtz/feldspar;chert) <1-3cm wide. Very weak sericite. 1-2% qtz/cal veinining. No significant mineralization.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
750	755	1:	Calcite	Weak (1-25%)	Patches	
		2:	Sericite	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments

DataSet: Brookbank
HoleID: B-16-12A
meters

Hole Length (m): 784
Log Length (m): 784

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
750	753	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			6	

755 **772** 17 **S4B** **Polymictic Conglomerate** D. Grabiec

Polymictic conglomerate. Moderately sheared. Clasts are rounded and elongated (Qtz;qtz/feldspar;chert) <1-3cm wide. Strong sericite. 1-2% qtz/cal veinining. No significant mineralization.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
755	772	1:	Calcite	Weak (1-25%)	Patches	Strong sericite in conglomerate.
		2:	Sericite	Weak (1-25%)	Pervasive	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
756	759	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			11	
759	762	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			22	
762	765	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			13	
765	768	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			10	
768	771	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			12	

772 **784** 12 **S4B** **Polymictic Conglomerate** D. Grabiec

Polymictic conglomerate. Moderately sheared. Clasts are rounded and elongated (Qtz;qtz/feldspar;chert) <1-3cm wide. Very weak sericite. 1-2% qtz/cal veinining. No significant mineralization.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
772	784	1:	Calcite	Weak (1-25%)	Patches	
		2:	Sericite	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
774	777	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			4	
777	780	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
780	783	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			3	
783	784	1:	Quartz-Fe-Carbonate/Calcite	Veinlet Zone - vein 1/4" to 3"			1	

DataSet: Brookbank **Hole Length (m): 784**

HoleID: B-16-12A **Max Samp Depth (m): 784**

Total meters Sampled: 586.6

Primary Assay Samples:	618	87.17 %
Field Duplicate Samples:	23	3.24 %
Standard/Blank Samples:	68	9.59 %
Total Samples:	709	

meters From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
3	4	1	269171	HCORE			A17-00098	0.005	1-2cm of barren veining. No significant mineralization
4	5	1	269172	HCORE			A17-00098	0.007	1-2cm of barren veining. No significant mineralization
5	6	1	269173	HCORE			A17-00098	0.008	1-2cm of barren veining. No significant mineralization
6	7	1	269174	HCORE			A17-00098	0.006	1-2cm of barren veining. No significant mineralization
7	8	1	269175	HCORE			A17-00098	0.006	1-2cm of barren veining. No significant mineralization
8	9	1	269176	HCORE			A17-00098	0.01	1-2cm of barren veining. No significant mineralization
9	10	1	269177	HCORE			A17-00098	0.006	1-2cm of barren veining. No significant mineralization
		0	269178	Blank		Blank	A17-00098	0.005	
10	11	1	269179	HCORE			A17-00098	0.006	1-2cm of barren veining. No significant mineralization
11	11.7	0.7	269180	HCORE			A17-00098	0.008	1-2cm of barren veining. No significant mineralization
11.7	12.2	0.5	269181	HCORE			A17-00098	0.006	14cm vuggy qtz fe crb vein with trace pyrite along the vein margins. minor replacement of mag rich selvage as scattered grains of pyrite
12.2	13	0.8	269182	HCORE			A17-00098	0.005	2-3cm barren veins. No significant veining
13	14	1	269183	HCORE			A17-00098	0.005	2-3cm barren veins. No significant veining
14	15	1	269184	HCORE			A17-00098	0.006	2-3cm barren veins. No significant veining
15	16	1	269185	HCORE			A17-00098	0.008	2-3cm barren veins. No significant veining
16	17	1	269186	HCORE			A17-00098	0.005	2-3cm barren veins. No significant veining
		0	269187	STD		CDN_GS_P4B	A17-00098	0.399	
17	18	1	269188	HCORE			A17-00098	0.006	2-3cm barren veins. No significant veining
18	19	1	269189	HCORE			A17-00098	0.009	2-3cm barren veins. No significant veining
19	20	1	269190	HCORE			A17-00098	0.01	2cm veining proximal to pillow selvage. local 1% pyrite replacing magnetite rich selvage as scattered grains
20	21	1	269191	HCORE			A17-00098	0.006	2cm barren veins. No significant veining
21	22	1	269192	HCORE			A17-00098	0.006	2cm barren veins. No significant veining
22	22.7	0.7	269193	HCORE			A17-00098	0.006	2.5cm qtz fe crb calcite veins with trace pyrite along the vein margins

22.7	23.7	1	269194	HCORE			A17-00098	0.007	Brecciated and slightly more magnetite rich throughout sample. 7-8cm of qtz fe crb infill and up to 2% pyrite locally, replacing magnetite rich selvages/ ground mass
23.7	24.7	1	269195	HCORE			A17-00098	0.075	Highly sheared. trace pyrite as loose stringers along sheared veins. one 2.4cm vuggy qt fe crb vein partially filled with chlorite
		0	269196	DUP	269195		A17-00098	0.068	
24.7	25.7	1	269197	HCORE			A17-00098	0.054	Highly sheared. tarce pyrite along sheared qtz fe crb veins.
25.7	26.5	0.8	269198	HCORE			A17-00098	0.056	Highly sheared. 2 silicified qtz fe crb veins with up to 2% pyrite locally. Trace pyrite along sheared qtz fe crb vein margins
26.5	27.2	0.7	269199	HCORE			A17-00098	0.057	Highly sheared. one silicified grey qt crb vein with up to 2% pyrite locally. trace pyrite along sheared veins
27.2	28	0.8	269200	HCORE			A17-00098	0.008	Transition out of highly sheared interval. mod-strong foliation. very trace pyrite along sheared qtz fe crb veins
28	29	1	269201	HCORE			A17-00098	0.008	2-3cm qtz fe crb veins/ vein fragments with trace pyrite along the vein margins and replacing magnetite in groundmass
29	30	1	269202	HCORE			A17-00131	0.011	2-3cm qtz fe crb veins/ vein fragments with trace pyrite along the vein margins and replacing magnetite in groundmass
30	31	1	269203	HCORE			A17-00131	0.008	2-3cm qtz fe crb veins/ vein fragments with trace pyrite along the vein margins and replacing magnetite in groundmass
31	32	1	269204	HCORE			A17-00131	0.01	2-3cm qtz fe crb veins/ vein fragments with trace pyrite along the vein margins and replacing magnetite in groundmass
		0	269205	STD		CDN_GS_P7J	A17-00131	0.696	
32	33	1	269206	HCORE			A17-00131	0.007	2-3cm qtz fe crb veins/ vein fragments with trace pyrite along the vein margins and replacing magnetite in groundmass
33	34	1	269207	HCORE			A17-00131	0.006	5cm qtz fe crb veins. locally vuggy. up to 1% fine to med grained pyrite along the vein margins
34	35	1	269208	HCORE			A17-00131	0.006	2-3cm qtz fe crb extension veins. No significant mineralization
35	36	1	269209	HCORE			A17-00131	0.005	2-3cm qtz fe crb extension veins. No significant mineralization
36	37	1	269210	HCORE			A17-00131	0.007	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
37	38	1	269211	HCORE			A17-00131	0.007	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
38	39	1	269212	HCORE			A17-00131	0.005	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
39	40	1	269213	HCORE			A17-00131	0.006	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
		0	269214	Blank		Blank	A17-00131	0.005	
40	41	1	269215	HCORE			A17-00131	0.008	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization

41	42	1	269216	HCORE			A17-00131	0.008	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
42	43	1	269217	HCORE			A17-00131	0.007	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
43	44	1	269218	HCORE			A17-00131	0.005	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
44	45	1	269219	HCORE			A17-00131	0.007	2-3 cm barren qtz fe crb +/- epidote veins. No significant mineralization
45	46	1	269220	HCORE			A17-00131	0.006	3cm qtz fe crb veins. Trace scattered pyrite in groundmass a replacement of magnetite.
46	46.9	0.9	269221	HCORE			A17-00131	0.005	4cm whispy qtz fe cfb veins. trace pyrite in groundmass proximal to veining
46.9	47.85	0.95	269222	HCORE			A17-00131	0.007	4cm vuggy qtz fe crb veins. Up to 1% pyrite locally along the vein margins
		0	269223	STD		CDN_GS_P4B	A17-00131	0.439	
47.85	48.85	1	269224	HCORE			A17-00131	0.006	3 cm qtz fe crb extension veins. trace pyrite in groundmass proximal to veining.
48.85	49.85	1	269225	HCORE			A17-00131	0.007	4cm qtz fe crb veins. Trace pyrite in groundmass proximal to veining
49.85	50.8	0.95	269226	HCORE			A17-00131	0.006	4cm qtz fe cerb veins with trace pyrite proximal to veining as fine grained stringers along the vein margins and scattered in groundmass
50.8	51.8	1	269227	HCORE			A17-00131	0.005	4cm qtz fe crb veins. one 1cm wide brecciated vein containing trace pyrite
51.8	52.8	1	269228	HCORE			A17-00131	0.013	3cm qtz fe crb veins. No significant mineralization
52.8	53.8	1	269229	HCORE			A17-00131	0.005	3cm qtz fe crb veins. No significant mineralization
53.8	54.8	1	269230	HCORE			A17-00131	0.006	4 cm qtz fe crb veining. one 1.5cm wide vuggy vein with 1% pyrite locally along the vein margins
		0	269231	DUP	269230		A17-00131	0.01	
54.8	55.7	0.9	269232	HCORE			A17-00131	0.005	2cm qtz fe crb veining. trace pyrite in groundmass proximal to veining.
55.7	56.8	1.1	269233	HCORE			A17-00131	0.006	2cm qtz/fe/crb veining. No sig minz.
56.8	57.9	1.1	269234	HCORE			A17-00131	0.006	No sig minz.
57.9	59	1.1	269235	HCORE			A17-00131	0.006	3cm qtz/cal/fe veinlets with trace sct PY.
59	60	1	269236	HCORE			A17-00131	0.006	5cm qtz/cal/fe veinlets with trace sct PY. Localized 1% sct PY in one veinlet.
60	61	1	269237	HCORE			A17-00131	0.007	2cm of qtz/cal/ank veinlets. Trace sct PY.
		0	269238	STD		CDN_GS_P7J	A17-00131	0.725	
61	61.7	0.7	269239	HCORE			A17-00131	<0.005	2cm qtz/cal/ank veinlets. Trace sct PY.
61.7	62.55	0.85	269240	HCORE			A17-00131	0.009	4cm of qtz/cal/ank veinlets. Trace sct PY.
62.55	63.5	0.95	269241	HCORE			A17-00131	<0.005	4cm qtz/cal veinlets. Trace sct PY.
63.5	64.5	1	269242	HCORE			A17-00131	<0.005	8cm qtz/cal veinlets. Trace sct PY.
64.5	65.5	1	269243	HCORE			A17-00131	0.005	5cm qtz/cal veinlets.
65.5	66.5	1	269244	HCORE			A17-00131	0.005	10cm qtz/cal veinlets.

66.5	67.21	0.71	269245	HCORE			A17-00131	<0.005	6cm qtz/cal veinlets.
		0	269246	Blank		Blank	A17-00131	<0.005	
67.21	68	0.79	269247	HCORE			A17-00131	<0.005	3cm qtz/cal veinlets.
68	69	1	269248	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
69	70	1	269249	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
70	71	1	269250	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
71	72	1	269251	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
72	73	1	269252	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
		0	269253	STD		CDN_GS_P4B	A17-00131	<0.005	
73	74	1	269254	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
74	75	1	269255	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
75	76	1	269256	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
76	77	1	269257	HCORE			A17-00131	0.005	25cm of multiple 4cm wide qtz/cal/ank veinlets. Rare PY.
77	78	1	269258	HCORE			A17-00131	0.005	1cm qtz/cal veinlets.
78	79	1	269259	HCORE			A17-00131	0.006	1cm qtz/cal veinlets.
79	80	1	269260	HCORE			A17-00131	0.005	2cm qtz/cal veinlets.
		0	269261	DUP	269262		A17-00131	0.009	
80	81	1	269262	HCORE			A17-00131	0.007	1cm qtz/cal veinlets.
81	82	1	269263	HCORE			A17-00131	0.007	2cm qtz/cal veinlets.
82	83	1	269264	HCORE			A17-00131	0.007	3cm qtz/cal veinlets.
83	84	1	269265	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
84	85	1	269266	HCORE			A17-00131	0.005	2cm qtz/cal veinlets.
85	86	1	269267	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
		0	269268	STD		CDN_GS_P7J	A17-00131	0.716	
86	87	1	269269	HCORE			A17-00131	0.006	1cm qtz/cal veinlets.
87	88	1	269270	HCORE			A17-00131	0.009	1cm qtz/cal veinlets.
138	139	1	269271	HCORE			A17-00131	0.005	1cm qtz/cal veinlets.
139	140	1	269272	HCORE			A17-00131	<0.005	8cm wide qtz/cal/ank veinlet with haloeing epidote. 1% sct PY on vein margins of the veinlet.
140	141	1	269273	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
141	142	1	269274	HCORE			A17-00131	<0.005	6cm qtz/cal/ank veinlets. Trace sct PY assoc with vein margins.
142	143	1	269275	HCORE			A17-00131	<0.005	4cm qtz/cal veinlets. Trace sct PY.
		0	269276	Blank		Blank	A17-00131	<0.005	
143	143.8	0.8	269277	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
143.8	144.5	0.7	269278	HCORE			A17-00131	0.012	2cm qtz/cal veinlets.
144.5	145.5	1	269279	HCORE			A17-00131	0.005	2cm qtz/cal veinlets.
145.5	146.55	1.05	269280	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.

146.55	147.42	0.87	269281	HCORE			A17-00131	0.011	Strongly silicified/brecciated/foliated. 8% SMA pyrite infilling brecciation. Crosscuting same qtz/cal/ank veinls as above and below.
147.42	148.5	1.08	269282	HCORE			A17-00131	<0.005	12cm qtz/cal/ank veinlets.1% sct PY on veinlet margins.
		0	269283	STD		CDN_GS_P4B	A17-00131	0.406	
148.5	149.5	1	269284	HCORE			A17-00131	<0.005	3cm qtz/cal veinlets. Trace sct PY on veinlet margins.
149.5	150.5	1	269285	HCORE			A17-00131	<0.005	4cm qtz/cal veinlets. Rare PY.
150.5	151.5	1	269286	HCORE			A17-00131	<0.005	4cm qtz/cal veinlets.
151.5	152.5	1	269287	HCORE			A17-00131	<0.005	4cm qtz/cal veinlets.
152.5	153.5	1	269288	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
153.5	154.2	0.7	269289	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
154.2	155	0.8	269290	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
		0	269291	DUP	269290		A17-00131	<0.005	
155	156	1	269292	HCORE			A17-00131	<0.005	2cm qtz/cal veinlets.
156	157	1	269293	HCORE			A17-00131	<0.005	4cm qtz/cal/ank veinlets. <1cm hematite veinlet. Trace sct PY on vein margins.
157	158	1	269294	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
158	159	1	269295	HCORE			A17-00131	<0.005	1cm qtz/cal veinlets.
159	160	1	269296	HCORE			A17-00131	<0.005	5cm wide qtz/cal/ank/hem veinlet. Weak Silicification halos (~10cm). 1% sct PY on veinlet margins.
160	161	1	269297	HCORE			A17-00131	<0.005	4cm qtz/cal/ank veinlets. Trace sct PY on vein margins.
		0	269298	STD		CDN_GS_P7J	A17-00131	0.693	
161	162	1	269299	HCORE			A17-00131	<0.005	One 5cm wide qtz/cal veinlet.
174	175	1	269300	HCORE			A17-00131	<0.005	Weakly silicified and brecciated. Two 1.5cm wide brecciated faults. 2cm of hematite veinlets. 2cm qtz/cal veinlets. Rare PY.
175	176	1	269301	HCORE			A17-00131	<0.005	Weakly silicified and brecciated. 2cm of hematite veinlets. 3% qtz/cal/ank veinlets with associated 1% sct PY.
176	177	1	269302	HCORE			A17-00131	<0.005	Weakly silicified and brecciated. 1cm of hematite veinlets. 2cm of qtz/cal/ank veinlets with associated trace PY.
177	178	1	269303	HCORE			A17-00131	<0.005	1cm qtz/cal/ank veinlets.
178	179	1	269304	HCORE			A17-00157	<0.005	6cm of qtz/cal/ank/epidote veinlets. 1% sct PY haloeing veinlets.
		0	269305	Blank		Blank	A17-00157	<0.005	
179	180	1	269306	HCORE			A17-00157	<0.005	1cm hematite veinlets. 2cm qtz/cal/ank veinlets. rare PY.
180	181	1	269307	HCORE			A17-00157	<0.005	2cm qtz/cal/ank veinlets.
181	182	1	269308	HCORE			A17-00157	<0.005	25cm of qtz/cal/ank/epd veinlets. 1cm hematite veinlets. Trace sct PY haloing veinlets.
182	183	1	269309	HCORE			A17-00157	<0.005	4cm qtz/cal/ank/epd veinlets.Trace sct PY on vein margins.

183	184	1	269310	HCORE			A17-00157	0.005	12cm of qtz/cal/ank/epd veinlets. One veinlets is 5cm wide; vuggy; with localized 1% sct PY.
184	185	1	269311	HCORE			A17-00157	0.012	8cm of vuggy qtz/cal/ank veinlets. 1% sct PY in vuggy veinlets.
185	186	1	269312	HCORE			A17-00157	0.006	3cm qtz/cal/ank/hem veinlets. 1% sct PY haloeing veinlets.
		0	269313	STD		CDN_GS_P4B	A17-00157	0.435	
186	186.84	0.84	269314	HCORE			A17-00157	0.006	4cm qtz/cal veinlets. Trace sct PY haloing veinlets. 8cm wide weakly brecciated pillow salvage w/ epidote and weakly bleached.
186.84	187.4	0.56	269315	HCORE			A17-00157	0.021	One 15cm wide shear zone with locally 8% sct PY throughout. Also two <2cm wide white veinlets with 5% sct PY haloing veinlets. 1% sct PY thoughout rest of host.
187.4	188	0.6	269316	HCORE			A17-00157	0.007	4cm of qtz/cal/ank veinlets. Rare PY.
188	189	1	269317	HCORE			A17-00157	0.005	4cm qtz/cal/ank veinlets.
189	190	1	269318	HCORE			A17-00157	0.005	2cm qtz/cal/epd/ank veinlets. Trace sct PY in veinlets.
190	191	1	269319	HCORE			A17-00157	0.007	4cm of qtz/cal/ank/hem veinlets. Very weakly silicified with 1% sct PY haloing into host.
		0	269320	DUP	269319		A17-00157	0.006	
191	192	1	269321	HCORE			A17-00157	0.005	7cm of multiple generations of varying qtz/cal/ank/epd veining.1% sct PY associated with latest generation qtz/cal/ank veinlets.
192	193	1	269322	HCORE			A17-00157	0.006	6cm of multiple generations of varying qtz/cal/ank/epd/hem veinlets. Trace sct PY assoc with latest qtz/cal/ank veinlets.
193	194	1	269323	HCORE			A17-00157	0.007	3cm of vuggy qtz/cal/ank veinlets. Trace sct PY in qtz/cal veinlets.
194	194.4	0.4	269324	HCORE			A17-00157	0.01	Three 1-2cm wide qtz/cal veinlets (weakly silicified and with up to 5% SMA PY locally within the 3 veinlets. No py in host.
194.4	195.3	0.9	269325	HCORE			A17-00157	<0.005	3cm qtz/cal veinlets. One varying 1-2cm wide qtz/cal/ank veinlets with locally 5% sct PY within veinlet.
195.3	195.97	0.67	269326	HCORE			A17-00157	0.02	6cm of qtz/cal veinlets (Weakly silicified). 10cm of sample is brecciated and bleached. One 1cm wide qtz/cal veinlet with 80% sct PY within. 2% sct PY thoughout host.
195.97	196.88	0.91	269328	HCORE			A17-00157	0.008	Four 0.5cm wide qtz/cal veinlet with 80% sct PY within veinlet (no PY haloing). 5cm qtz/cal veinlets (some vuggy with trace sct PY.
196.88	197.9	1.02	269329	HCORE			A17-00157	0.005	10cm qtz/cal veinlets. Trace sct PY within veinlets.
197.9	199	1.1	269330	HCORE			A17-00157	0.005	Weakly brecciated and bleached; 6cm of qtz/cal veinlets. Trace sct PY thoughout host around brecciation. One 2mm wide qtz/cal veinlet with 60% PY Sct thoughout.

199	200	1	269331	HCORE		A17-00157	<0.005	4cm qtz/cal veinlets. Trace sct PY associated with veinlets.
200	201	1	269332	HCORE		A17-00157	0.007	2cm qtz/cal/ank/epidote veinlets. 1% sct PY associated with one qtz/cal/ank veinlet.
201	201.95	0.95	269333	HCORE		A17-00157	0.005	2cm qtz/cal/ank/epidote veinlets. Trace sct PY associated with epidote veining.
201.95	202.5	0.55	269335	HCORE		A17-00157	0.011	5cm wide shear zone with 7% sct disseminated PY within highly sheared section. One 4cm wide strong epidote/ank altered pillow salvage with 4% sct PY. 2cm of white crosscutting qtz/cal/ank veinlets.
202.5	203.4	0.9	269336	HCORE		A17-00157	0.005	5cm of vuggy qtz/cal/ank/epd veinlets. Trace sct PY haloing veinlets. One veinlet with 2cm halo of 5% sct PY.
203.4	204.07	0.67	269337	HCORE		A17-00157	0.008	6cm of vuggy qtz/cal/ank veinlets. 1% sct PY associated with veinlets on margins.
204.07	205	0.93	269338	HCORE		A17-00157	0.026	15% SMA PY in banding parralel to shear planes. 7 bands. 1% FG PY thoughout host. 3cm of parallel qtz/cal vuggy veinlets.
205	205.6	0.6	269339	HCORE		A17-00157	0.009	10cm qtz/cal/ank veinlets. One 1cm wide qtz/cal/ank veinlet with Trace sct PY haloing.
205.6	206.4	0.8	269340	HCORE		A17-00157	0.015	Five <1-2cm wide SMA PY bands parallel to a very weak foliation. 1% sct PY thoughout host. 3cm qtz/cal veinlets parallel to weak foliation.
206.4	207.26	0.86	269341	HCORE		A17-00157	0.009	Nine distorted <1-2cm wide SMA PY bands. Appear to be replacing qtz/cal/ank veinlets and less parralel to foliation as above samples. 4cm qtz/cal/ank/epd veinlets from pillow salvages. One 3cm wide vuggy qtz/cal veinlet with 5% fine disseminated PY.
207.26	208	0.74	269343	HCORE		A17-00157	0.007	One 1-2cm wide qtz/cal vuggy veinlet at shallow angle along core axis with 3% sct PY in veinlet and into host. 4cm qtz/cal/ank veinlets crosscut py qtz/cal.
208	209	1	269344	HCORE		A17-00157	0.056	One 1-2cm wide qtz/cal vuggy veinlet at shallow angle along core axis with 5% sct PY in veinlet and into host. 2cm qtz/cal/ank veinlets crosscut py qtz/cal.
209	210	1	269345	HCORE		A17-00157	0.011	6cm qtz/cal/ank veinlets. Two are vuggy with trace sct PY.
210	211	1	269346	HCORE		A17-00157	0.005	Begining of HFZ. 2cm qtz/cal/ank veinlets.
211	212	1	269347	HCORE		A17-00157	0.005	HFZ. 3cm qtz/cal/ank veinlets.
267	268	1	269348	HCORE		A17-00157	0.005	3cm qtz/cal/ank veinlets.
		0	269349	DUP	269348	A17-00157	0.005	
268	269	1	269350	HCORE		A17-00157	0.006	5cm qtz/cal/ank veinlets. Trace sct PY on vein margins.
269	270	1	269351	HCORE		A17-00157	0.005	8cm qtz/cal/ank veinlets. Trace sct PY on vein margins.
270	271	1	269352	HCORE		A17-00157	0.005	6cm qtz/cal/ank veinlets. Trace sct PY on vein margins and in host.

271	272	1	269353	HCORE			A17-00157	0.007	5cm qtz/cal/ank veinlets. 1% sct PY haloing veinlets.
272	273	1	269354	HCORE			A17-00157	0.006	5cm qtz/cal/ank veinlets. Trace sct PY on vein margins.
273	274	1	269355	HCORE			A17-00157	0.005	4cm qtz/cal/ank veinlets. Trace sct PY on vein margins.
		0	269356	STD		CDN_GS_P7J	A17-00157	0.679	
274	275	1	269357	HCORE			A17-00157	0.006	4cm qtz/cal/ank veinlets. Trace sct PY on vein margins.
275	276	1	269358	HCORE			A17-00157	0.006	10cm qtz/cal/ank veinlets. 1% sct PY haloing veinlets. Weakly foliated host.
276	277	1	269359	HCORE			A17-00157	0.006	12cm qtz/cal/ank veinlets. 1% sct PY haloing veinlets. 20cm is weakly brecciated host.
277	278	1	269360	HCORE			A17-00157	0.006	25cm qtz/cal/ank veinlets Trace sct PY in host. Moderately strained.
278	279	1	269361	HCORE			A17-00157	0.007	20cm qtz/cal/ank veinlets. Trace sct PY in host. Moderatly strained.
279	280	1	269362	HCORE			A17-00157	0.006	21cm qtz/cal/ank veinlets. Trace sct PY in host. Moderately strained.
280	281	1	269363	HCORE			A17-00157	0.006	22cm qtz/cal/ank veinlets. Trace sct PYin host. Moderately strained.
		0	269364	Blank		Blank	A17-00157	0.005	
281	282	1	269365	HCORE			A17-00157	0.007	11cm qtz/cal/ank veinlets. Trace sct PY in host. Moderately strained.
282	283	1	269366	HCORE			A17-00157	0.007	8cm qtz/cal/ank veinlets. Trace sct PY in host/veinlets. Moderately strained.
283	284	1	269367	HCORE			A17-00157	0.006	8cm qtz/cal/ank veinlets. Trace sct PY in host/veinlets.
284	285	1	269368	HCORE			A17-00157	0.006	8cm qtz/cal/ank veinlets. Trace sct PY in host/veinlets.
285	286	1	269369	HCORE			A17-00157	0.006	12cm qtz/cal/ank veinlets. Trace sct PY in host.
286	287	1	269370	HCORE			A17-00157	0.006	8cm qtz/cal/ank veinlets. 1% sct PY in host.
		0	269371	STD		CDN_GS_P4B	A17-00157	0.373	
287	288	1	269372	HCORE			A17-00157	0.006	6cm qtz/cal/ank veinlets. Trace sct PY in host.
288	289	1	269373	HCORE			A17-00157	<0.005	11cm qtz/cal/ank veinlets. Trace sct PY in host/veinlets.
289	290	1	269374	HCORE			A17-00157	<0.005	17cm qtz/cal/ank veinlets. 1% sct PY in host/veinlets.
290	291	1	269375	HCORE			A17-00157	<0.005	4cm qtz/cal/ank veinlets. Trace sct PY in veinlets.
291	292	1	269376	HCORE			A17-00157	<0.005	8cm qtz/cal/ank veinlets. Trace sct PY in veinlets. 6cm of brecciated/bleached host.
292	293	1	269377	HCORE			A17-00157	<0.005	6cm qtz/cal/ank veinlets. Trace sct PY in veinlets.
		0	269378	DUP	269377		A17-00157	<0.005	
293	294	1	269379	HCORE			A17-00157	<0.005	4cm qtz/cal/ank veinlets. Trace sct PY.
294	295	1	269380	HCORE			A17-00157	<0.005	Two 0.5-1.5 cm wide qtz/cal veinlets. No sig minz.

310	311	1	269381	HCORE			A17-00157	<0.005	1-2% sct PY concentrated around qtz-crb-calc veins (pink-white and vuggy).
311	312	1	269382	HCORE			A17-00157	<0.005	up to 2% local PY assoc w/ qtz-crb-calc veining (pink-white and vuggy)
312	312.75	0.75	269383	HCORE			A17-00157	<0.005	1% local PY assoc w/ qtz-crb-calc veining (pink and vuggy)
312.75	313.4	0.65	269384	HCORE			A17-00157	<0.005	2% PY assoc w/ pink vuggy qtz-crb-calc veining and 2% PY assoc w/ pillow selvage
		0	269385	STD		CDN_GS_P7J	A17-00157	0.69	
313.4	314	0.6	269386	HCORE			A17-00157	<0.005	1-2% PY assoc w/ qtz-crb-calc veining (pink-white and vuggy); trc PY scattered throughout groundmass
314	315	1	269387	HCORE			A17-00157	<0.005	1% PY assoc w/ pink-white qtz-crb-calc veining (vuggy)
315	316	1	269388	HCORE			A17-00157	<0.005	2% PY assoc w/ vuggy qtz-crb-calc veining; trc PY scattered in groundmass
316	317	1	269389	HCORE			A17-00157	<0.005	2-3% PY assoc w/ qtz-crb+/-calc veining; most mineralized veins are pink-white and vuggy but some are milky-smokey qtz w/ fe-crb halos. trc PY in groundmass
317	318	1	269390	HCORE			A17-00157	<0.005	2% PY concentrated around qtz-crb-calc+/-hem veining; only one vein is vuggy and it has very trc PY assoc w/ it. trc PY scattered in groundmass.
318	319	1	269391	HCORE			A17-00157	<0.005	4-5% m-cg PY mostly assoc w/ pillow selvages, some assoc with vuggy pink qtz-crb-calc veining
		0	269392	Blank		Blank	A17-00157	<0.005	
319	320	1	269393	HCORE			A17-00157	<0.005	2% PY assoc w/ qtz-crb+/-calc veining (white, non vuggy); up to 1% m-cg PY scattered in groundmass.
320	321	1	269394	HCORE			A17-00157	<0.005	2% PY assoc w/ qtz-crb+/-calc veining and fe-crb/ser halos. trc PY scattered in groundmass
321	322	1	269395	HCORE			A17-00157	<0.005	1% PY assoc w/ pink vuggy qtz-crb-calc veining; trc PY scattered in groundmass of pillowed basalt
322	323	1	269396	HCORE			A17-00157	<0.005	up to 1% PY assoc w/ pink vuggy qtz-crb-calc veining
323	324	1	269397	HCORE			A17-00157	<0.005	trc PY assoc w/ qtz-crb+/-calc veinlets/stringers
324	325	1	269398	HCORE			A17-00157	<0.005	trc PY assoc w/ pillow selvages
325	325.7	0.7	269399	HCORE			A17-00157	<0.005	trc PY assoc w/ pillow selvages
325.7	326.5	0.8	269400	HCORE			A17-00157	<0.005	2% PY assoc w/ qtz-crb+/-calc veining, non vuggy.
326.5	327.5	1	269401	HCORE			A17-00157	<0.005	up to 1% blebby PY scattered in groundmass of pillowed basalt
327.5	328.5	1	269402	HCORE			A17-00157	<0.005	trc PY filling amygdules; trc PY scattered in groundmass of pillowed basalt.
		0	269403	STD		CDN_GS_P4B	A17-00157	0.42	
341	342	1	269404	HCORE			A17-00157	<0.005	trc PY scattered in host rock and assoc w/ qtz-crb veining

342	343	1	269405	HCORE			A17-00157	<0.005	trc PY mostly assoc w/ qtz-crb-calc veining (pink and vuggy)
343	344	1	269406	HCORE			A17-00157	<0.005	up to 1% local PY assoc w/ qtz-crb-calc veining (vuggy and pink)
344	345	1	269407	HCORE			A17-00157	<0.005	1-2% local PY assoc w/ pink and vuggy qtz-crb-calc veining
345	346	1	269408	HCORE			A17-00157	<0.005	trc PY scattered in host rock
346	347	1	269409	HCORE			A17-00157	<0.005	very trc PY scattered in groundmass
347	348	1	269410	HCORE			A17-00157	<0.005	1-2% blebby PY in groundmass of massive basalt
		0	269411	DUP	269410		A17-00157	<0.005	
348	349	1	269412	HCORE			A17-00157	<0.005	1% mg PY assoc w/ qtz-crb+/-calc veining; not vuggy
349	350	1	269413	HCORE			A17-00157	<0.005	1-2% mg PY assoc w/ vuggy qtz-crb-calc veining
350	351	1	269414	HCORE			A17-00157	<0.005	2-3% mg PY assoc w/ qtz-crb-calc veining; vuggy and light pink in colour
351	352	1	269415	HCORE			A17-00157	<0.005	trc PY assoc w/ light pink qtz-cr-b+/-calc veining (some vuggy)
352	353	1	269416	HCORE			A17-00157	<0.005	3% mg PY assoc w/ vuggy and light pink qtz-crb-calc veining; trc blebby PY assoc w/ epd vein
353	354	1	269417	HCORE			A17-00157	0.005	1% PY assoc w/ qtz-crb+/-calc veining; some are vuggy
354	355	1	269418	HCORE			A17-00157	<0.005	trc PY scattered in groundmass and also concentrated near light pink qtz-crb-calc veinlets
		0	269419	STD		CDN_GS_P7J	A17-00157	0.786	
355	356	1	269420	HCORE			A17-00157	<0.005	1% local PY assoc w/ qtz-crb+/-calc veining (not vuggy) but white-pink in colour
356	357	1	269421	HCORE			A17-00157	<0.005	trc PY assoc w/ qtz-crb+/-calc vein (not vuggy, white-pink); trc PY scattered in groundmass
357	358	1	269422	HCORE			A17-00157	<0.005	2-3% blebby-semimassive PY replacing epd-qtz-crb veining. up to 1% dissem PY in groundmass and trc PY assoc w/ qtz-crb+/-calc veinlet
358	358.87	0.87	269423	HCORE			A17-00157	<0.005	trc-1% PY assoc w/ qtz-crb-calc veinlet (not vuggy)
358.87	359.5	0.63	269424	HCORE			A17-00157	<0.005	1% PY assoc w/ qtz-crb+/-calc veining; (some are vuggy)
		0	269425	Blank		Blank	A17-00157	0.005	
359.5	360	0.5	269426	HCORE			A17-00157	0.005	trc PY assoc w/ qtz-crb+/-calc+/-epd veining
360	361	1	269427	HCORE			A17-00157	0.005	2-3% dissem PY; trc PY assoc w/ qtz-crb+/-calc veining (not vuggy)
361	362	1	269428	HCORE			A17-00157	<0.005	2-3% dissem PY in groundmass; 2% PY assoc w/ epd stringers; and up to 1% PY assoc w/ qtz-crb-calc veining (vuggy)

362	363	1	269429	HCORE			A17-00157	<0.005	5% semimassive-blebby PY assoc w/ qtz-crb-calc in possible pillow selvage. trc PY assoc w/ qtz-crb-calc veining and trc PY assoc w/ vuggy epd stringers
363	364	1	269430	HCORE			A17-00157	<0.005	3-4% semimassive-blebby PY assoc w/ chaotic qtz-crb-calc "veinlets" in possible selvage. 1% PY assoc w/ qtz-crb+/-calc veining (some are vuggy)
364	365	1	269431	HCORE			A17-00157	<0.005	5-6% semimassive-blebby PY assoc w/ qtz-crb-calc+/-epd chaotic veining (with wall rock fragments.
		0	269432	STD		CDN_GS_P4B	A17-00157	0.433	
365	366	1	269433	HCORE			A17-00157	<0.005	trc PY assoc w/ qtz-crb-calc veinlets/stringers
366	367	1	269434	HCORE			A17-00157	<0.005	trc blebby PY in groundmass of pillowed basalt
367	368	1	269435	HCORE			A17-00157	<0.005	up to 1% PY assoc w/ qtz-crb-calc veining (vuggy and pink); trc PY scattered in groundmass
368	369	1	269436	HCORE			A17-00157	0.005	2-3% mg PY assoc w/ vuggy qtz-crb-calc veining (pink-white); trc PY scattered in pillow selvage
369	369.5	0.5	269437	HCORE			A17-00157	<0.005	trc PY assoc w/ qtz-crb+/-calc stringers; very trc PY scattered in groundmass
369.5	370.25	0.75	269438	HCORE			A17-00157	<0.005	very trc PY scattered in groundmass
376	377	1	269439	HCORE			A17-00157	<0.005	trc PY scattered in pillow selvages and trc PY assoc w/ thin qtz-crb+/-calc stringers
		0	269440	DUP	269439		A17-00157	<0.005	
377	378	1	269441	HCORE			A17-00157	<0.005	3-4% mg PY assoc w/ qtz-crb-calc veining; one large vein is vuggy and white-pink in colour (at end of sample, 8cm wide)
378	379	1	269442	HCORE			A17-00157	0.005	4-5% PY assoc w/ vuggy qtz-crb-calc veining.
379	380	1	269443	HCORE			A17-00157	<0.005	2% PY assoc w/ vuggy pink qtz-crb-calc veining
380	381	1	269444	HCORE			A17-00157	<0.005	3% PY assoc w/ vuggy white-pink qtz-crb-calc veining; up to 1% PY assoc w/ pillow selvage
381	382	1	269445	HCORE			A17-00157	<0.005	3% PY assoc w/ vuggy white-pink qtz-crb veining
		0	269446	STD		CDN_GS_P7J	A17-00157	0.675	
382	383	1	269447	HCORE			A17-00157	<0.005	1% assoc w/ qtz-crb-calc veining; up to 1% PY scattered in host rock
392	393	1	269448	HCORE			A17-00157	<0.005	1% m-cg PY assoc w/ qtz-crb+/-calc veining and fe-crb halos
393	394	1	269449	HCORE			A17-00157	0.005	2-3% fg PY assoc w/ qtz-crb+/-calc veining and fe-crb altn halos; trc PY scattered in groundmass
394	395	1	269450	HCORE			A17-00157	<0.005	upto 1% PY assoc w/ qtz-crb-calc vein and scattered in host rock
403	404	1	269451	HCORE			A17-00157	<0.005	2-3% mg PY assoc w/ vuggy qtz-crb-calc veining; in high fracture zone of massive basalt. weak local foliation.

404	405	1	269452	HCORE			A17-00157	0.012	3% m-cg PY assoc w/ vuggy qtz-crb-calc veining and possible breccia/alteration halo adjacent to vein.
405	406	1	269453	HCORE			A17-00207	0.005	2% semimassive PY assoc w/ qtz-crb veinign in possible breccia or alteration halo (fe-crb); 1% PY assoc w/ qtz-crb-calc veining and scattered in ground mass
		0	269454	Blank		Blank	A17-00207	<0.005	
415	416	1	269455	HCORE			A17-00207	<0.005	up to 1% PY assoc w/ qtz-crb+/-calc veinlets; trc PY along margins of larger bull qtz vein.
416	416.9	0.9	269456	HCORE			A17-00207	<0.005	1-2% sct-str PY mostly assoc w/ white-pink qtz-crb+/-calc veining and their fe-crb altn halos. trc PY scattered in groundmass
416.9	417.48	0.58	269457	HCORE			A17-00207	<0.005	1-2% PY assoc w/ qtz-crb veining and fe-crb altn halos
417.48	418.31	0.83	269458	HCORE			A17-00207	<0.005	4% mg blebby PY assoc w/ breccia zone and fe-crb-qtz within breccia zone; trc blebby PY assoc w/ qtz-crb veinlets and scattered in groundmass
418.31	419.12	0.81	269459	HCORE			A17-00207	<0.005	1% PY assoc w/ qtz-crb veining and contact with breccia zone.
419.12	420.1	0.98	269460	HCORE			A17-00207	<0.005	1-2% PY assoc w/ pink qtz-crb veining and fe-crb altn halos.
		0	269461	STD		CDN_GS_P4B	A17-00207	0.405	
420.1	420.7	0.6	269462	HCORE			A17-00207	<0.005	trc PY scattered in host rock
420.7	421.7	1	269463	HCORE			A17-00207	<0.005	1-2% PY assoc w/ qtz-crb veinlets and alteration halos. 2-3% blebby-semimassive PY assoc w/ large bull qtz vein, along its margins and included in vein (1% of this PY is assoc w/ pink fe-crb fragment in the vein)
421.7	422.4	0.7	269464	HCORE			A17-00207	<0.005	up to 1% PY assoc w/ qtz-crb-calc stringers and in groundmass
422.4	423	0.6	269465	HCORE			A17-00207	<0.005	1-2% PY assoc w/ qtz-crb-calc veining and pillow selvage
429	430	1	269466	HCORE			A17-00207	<0.005	trc PY assoc w/ qtz-crb+/-calc veining
430	431	1	269467	HCORE			A17-00207	<0.005	1% PY assoc w/ pink qtz-crb+/-calc veining and altered pillow selvage
431	431.42	0.42	269468	HCORE			A17-00207	<0.005	1% PY assoc w/ pillow selvage; trc PY assoc w/ pink qtz-crb+/-calc veining
		0	269469	DUP	269468		A17-00207	<0.005	
431.42	432.4	0.98	269470	HCORE			A17-00207	<0.005	3% PY assoc w/ magnetic and deformed pillow selvage and pink qtz-crb+/-calc veining.
432.4	433.4	1	269471	HCORE			A17-00207	<0.005	3-4% semimassive to scattered PY mostly assoc w/ qtz-crb veining in strongly magnetic portion of pillowed basalt; weakly silicified and bleached.
433.4	434.4	1	269472	HCORE			A17-00207	<0.005	1% cg blebby PY assoc w/ pillow selvage; up to 1% PY assoc w/ pink-white qtz-crb veining, in strongly magnetic pillowed basalt.

434.4	435.4	1	269473	HCORE			A17-00207	<0.005	1% PY assoc w/ pink qtz-crb veinlets, in strongly magnetic pillowed basalt.
435.4	436	0.6	269474	HCORE			A17-00207	<0.005	trc PY assoc w/ pink-white qtz-crb veinlets; trc PY assoc w/ qtz-calc filled amygdules. Magnetite decreases to moderate in this unit.
		0	269475	STD		CDN_GS_P7J	A17-00207	0.733	
443	444	1	269476	HCORE			A17-00284	0.006	1% PY assoc w/ qtz-crb+/-calc veining
444	445	1	269477	HCORE			A17-00284	0.006	4% PY assoc w/ pink-white qtz-crb veining and alteration halos
445	446	1	269478	HCORE			A17-00284	<0.005	1% PY assoc w/ pink-wite qtz-crb veining and alteration halos
446	447	1	269479	HCORE			A17-00284	<0.005	1% PY assoc w/ pink-wite qtz-crb veining and alteration halos
447	448	1	269480	HCORE			A17-00284	<0.005	Trace sct PY assoc w/ pink-white qtz-crb veining
448	449	1	269481	HCORE			A17-00284	<0.005	1% sct PY assoc w/ pink-white qtz-crb veining
449	450	1	269482	HCORE			A17-00284	<0.005	1% sct PY assoc w/ pink-white qtz-crb veining and alteration halos
		0	269483	Blank		Blank	A17-00284	<0.005	
450	451	1	269484	HCORE			A17-00284	<0.005	Trace sct PY assc w/ pink-white qtz/crb veining.
451	452	1	269485	HCORE			A17-00284	0.006	1% sct PY assoc w/ epidote-white veining and trace with pink-white qtz/crb veining
452	453	1	269486	HCORE			A17-00284	0.005	1% sct PY assoc w/ pink-white qtz/crb veining.
453	454	1	269487	HCORE			A17-00284	<0.005	Shear ultramafic flow. 1% sct/stringer PY parallel to foliation in white-pink qtz veinlets.
454	454.5	0.5	269488	HCORE			A17-00284	0.014	Shear ultramafic flow. 1% sct/stringer PY parallel to foliation in white-pink qtz veinlets.
454.5	455	0.5	269489	HCORE			A17-00284	0.006	Sheared mafic. 1% sct/stringer PY associated with pink-white qtz veinlets parralel to strain.
		0	269490	STD		CDN_GS_P4B	A17-00284	0.412	
455	455.83	0.83	269491	HCORE			A17-00284	0.007	Weakly strained mafic. 2% sct PY in white/pink qtz veinlets and haloing into host.
455.83	456.78	0.95	269492	HCORE			A17-00284	0.015	Silicified and brecciated. Trace sct PY along brecciation fractures.
456.78	457.4	0.62	269493	HCORE			A17-00284	0.005	Weakly brecciated, silicified, sheared. 1% sct PY associated with pink-white qtz/crb veinlets.
457.4	458.29	0.89	269494	HCORE			A17-00284	0.011	Mod strained. Weak bleach. Strong ser. Trace sct PY in ser alteration.
458.29	459.29	1	269495	HCORE			A17-00284	0.02	Strongly strained with <1cm wide brecciation fragments; mod silicified. Trace sct PY.
459.29	460.1	0.81	269496	HCORE			A17-00284	0.006	Weakly brecciated and silicified. Trace sct PY along hem veinlets.
		0	269497	DUP	269496		A17-00284	0.006	

460.1	461	0.9	269498	HCORE			A17-00284	0.005	Trace sct PY assoc with pink-white qtz/crb veinlets and into host rock.
461	462	1	269499	HCORE			A17-00284	0.006	1% sct PY assc with pink-white qtz/crb veinlets haloing into host.
462	463	1	269500	HCORE			A17-00284	0.006	Moderately brecciated and bleached. Weakly sheared. 2% sct PY fracture filling of brecciation.
463	464	1	269501	HCORE			A17-00284	0.006	Weakly brecciated. Trace sct PY fracture filling of brecciation.
464	465	1	269502	HCORE			A17-00284	0.008	20cm of white-pink qtz/crb veinlets with 2% sct PY in veinlets and haloing into host.
465	466	1	269503	HCORE			A17-00284	0.01	10cm of white-pink qtz/crb veinlets with 2% sct PY in veinlets and haloing into host.
		0	269504	STD		CDN_GS_P7J	A17-00284	0.662	
466	467	1	269505	HCORE			A17-00284	0.007	Weakly strained and brecciated. Trace sct PY in brecciation.
467	468	1	269506	HCORE			A17-00284	0.006	1% sct PY assoc with pink-white qtz/crb veining.
468	469	1	269507	HCORE			A17-00284	0.007	3% sct PY assoc with white-pink qtz/crb veining and haloing into host.
469	470	1	269508	HCORE			A17-00284	0.006	2% sct PY assoc with white-pink qtz/crb veining and haloing into host.
470	471	1	269509	HCORE			A17-00284	0.006	Trace sct PY assoc with white-pink qtz/crb veining.
471	472	1	269510	HCORE			A17-00284	0.006	Trace sct PY assoc with white-pink qtz/crb veining.
472	473	1	269511	HCORE			A17-00284	<0.005	15cm sct PY assoc with white-pink qtz/crb veining with 2% associated PY.
		0	269512	Blank		Blank	A17-00284	<0.005	
473	474	1	269513	HCORE			A17-00284	<0.005	1% sct PY assoc with white-pink qtz/crb veinlets.
474	475	1	269514	HCORE			A17-00284	<0.005	2% sct PY assoc with white-pink qtz/crb veinlets.
475	476	1	269515	HCORE			A17-00284	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
476	476.85	0.85	269516	HCORE			A17-00284	<0.005	2% sct PY assoc with white-pink qtz/crb veinlets.
476.85	477.88	1.03	269517	HCORE			A17-00284	0.006	15cm of cloudy white qtz/crb veinlets. 2% sct PY haloing veinlets.
477.88	478.5	0.62	269518	HCORE			A17-00284	<0.005	1% sct PY assoc with white-pink qtz/crb veinlets.
		0	269519	STD		CDN_GS_P4B	A17-00284	0.404	
478.5	479.34	0.84	269520	HCORE			A17-00284	<0.005	Trace sct PY assoc white-pink qtz/crb veinlets.
479.34	480	0.66	269521	HCORE			A17-00284	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
480	481	1	269522	HCORE			A17-00284	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
481	482	1	269523	HCORE			A17-00284	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
482	483	1	269524	HCORE			A17-00284	<0.005	1% sct PY assoc with white-pink qtz/crb veinlets.

483	484	1	269525	HCORE			A17-00284	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
		0	269526	DUP	269525		A17-00284	0.006	
484	485.08	1.08	269527	HCORE			A17-00284	0.006	Trace sct PY assoc with white-pink qtz/crb veinlets.
485.08	486	0.92	269528	HCORE			A17-00314	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
486	487	1	269529	HCORE			A17-00314	0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
487	488	1	269530	HCORE			A17-00314	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
488	489	1	269531	HCORE			A17-00314	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
489	490	1	269532	HCORE			A17-00314	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
490	491	1	269533	HCORE			A17-00314	<0.005	Trace sct PY assoc with white-pink qtz/crb veinlets.
		0	269534	STD		CDN_GS_P7J	A17-00314	0.774	
491	492	1	269535	HCORE			A17-00314	<0.005	1% sct PY assoc with white-pink qtz/crb veinlets. 20cm of veinlets.
492	493	1	269536	HCORE			A17-00314	<0.005	35cm of white-pink qtz/crb veins/veinlets. Trace sct PY on vein margins.
493	494	1	269537	HCORE			A17-00314	<0.005	8cm of white-pink qtz/crb veinlets. Trace sct PY.
494	495	1	269538	HCORE			A17-00314	<0.005	10cm qtz/cal veinlets with trace sct PY associated with veinlets.
495	496	1	269539	HCORE			A17-00314	<0.005	Trace sct PY assoc with 8cm of white cal veinlets.
496	497	1	269540	HCORE			A17-00314	<0.005	2cm qtz/cal veinlets.
		0	269541	Blank		Blank	A17-00314	<0.005	
497	498	1	269542	HCORE			A17-00314	<0.005	3cm qtz/cal veinlets.
498	499	1	269543	HCORE			A17-00314	<0.005	Barren.
499	500	1	269544	HCORE			A17-00314	<0.005	Barren.
500	501	1	269545	HCORE			A17-00314	<0.005	7cm qtz/cal veinlets. Rare PY.
501	502	1	269546	HCORE			A17-00314	<0.005	Barren.
502	502.75	0.75	269547	HCORE			A17-00314	<0.005	3cm silicfied qtz/cal veinlet. Trace sct PY on veinlet margins.
502.75	503.4	0.65	269548	HCORE			A17-00314	<0.005	5cm qtz/cal veinlets. Trace sct PY haloing into host.
		0	269549	STD		CDN_GS_P4B	A17-00314	0.432	
503.4	503.7	0.3	269550	HCORE			A17-00314	0.073	30cm wide silicified qtz vein. 3% sct PY throughout. One 2cm long stringer of CP. Brecciated texture.
503.7	504.5	0.8	269551	HCORE			A17-00314	<0.005	4cm qtz/cal veinlets. Trace sct PY.
504.5	505	0.5	269552	HCORE			A17-00314	<0.005	3cm qtz/cal veinlets.
505	506	1	269553	HCORE			A17-00314	<0.005	Barren.
506	507	1	269554	HCORE			A17-00314	<0.005	Barren.
		0	269555	DUP	269554		A17-00314	<0.005	

507	508	1	269556	HCORE			A17-00314	<0.005	Barren.
508	509	1	269557	HCORE			A17-00314	<0.005	Barren.
509	510	1	269558	HCORE			A17-00314	<0.005	Barren.
510	511	1	269559	HCORE			A17-00314	<0.005	One 2cm wide cal veinlet with trace sct PY.
511	512	1	269560	HCORE			A17-00314	<0.005	One 2cm wide cal veinlet with trace sct PY in and haloing into host.
512	513	1	269561	HCORE			A17-00314	<0.005	One 4cm wide cal veinlet with trace sct PY in and haloing into host.
513	514	1	269562	HCORE			A17-00314	<0.005	Barren.
		0	269563	STD		CDN_GS_P7J	A17-00314	0.739	
514	515	1	269564	HCORE			A17-00314	<0.005	Barren.
515	516	1	269565	HCORE			A17-00314	<0.005	Barren.
516	517	1	269566	HCORE			A17-00314	<0.005	Barren.
517	518	1	269567	HCORE			A17-00314	<0.005	Five .2-2cm wide cal veinlets with trace sct PY in host.
518	519	1	269568	HCORE			A17-00314	<0.005	Barren.
519	520	1	269569	HCORE			A17-00314	<0.005	Four 1-5cm wide qtz/cal veinlets with trace sct PY on vein margins.
		0	269570	Blank		Blank	A17-00314	<0.005	
520	521	1	269571	HCORE			A17-00314	<0.005	Barren.
521	522	1	269572	HCORE			A17-00314	<0.005	One 3cm wide qtz/cal veinlet with trace sct PY.
522	523	1	269573	HCORE			A17-00314	<0.005	One 1.5cm wide qtz/cal veinlet with locally 1% sct PY within.
523	524	1	269574	HCORE			A17-00314	<0.005	Barren.
524	525	1	269575	HCORE			A17-00314	<0.005	One 1.5cm wide qtz/cal veinlet with trace sct PY.
525	526	1	269576	HCORE			A17-00314	0.012	
526	526.6	0.6	269577	HCORE			A17-00314	0.005	4cm of silicified qtz veinlets. Trace sct PY.
		0	269578	STD		CDN_GS_P4B	A17-00314	0.424	
526.6	527.25	0.65	269579	HCORE			A17-00314	0.041	One 15cm silicfied qtz vein. 4% sct PY on vein margins and haloing into host.
527.25	528	0.75	269580	HCORE			A17-00314	<0.005	3cm of qtz/cal veinlets. Trace sct PY on vein margins.
528	529	1	269581	HCORE			A17-00314	<0.005	Barren.
529	529.7	0.7	269582	HCORE			A17-00314	<0.005	Barren.
529.7	530.7	1	269583	HCORE			A17-00314	<0.005	Barren.
535	536	1	269584	HCORE			A17-00364	<0.005	Barren.
		0	269585	DUP	269584		A17-00364	<0.005	
536	537	1	269586	HCORE			A17-00364	<0.005	Barren.
537	538	1	269587	HCORE			A17-00364	<0.005	One 1cm wide qtz/cal veinlet with trace PY.
538	539	1	269588	HCORE			A17-00364	<0.005	Two 1-2cm wide qtz/cal veinlets with trace PY.
539	540	1	269589	HCORE			A17-00364	<0.005	Barren.

540	541	1	269590	HCORE			A17-00364	<0.005	One 1cm wide qtz/cal veinlet with trace PY.
541	541.65	0.65	269591	HCORE			A17-00364	<0.005	
541.65	542.1	0.45	269592	HCORE			A17-00364	<0.005	Barren.
		0	269593	STD		CDN_GS_P7J	A17-00364	0.658	
542.1	543.1	1	269594	HCORE			A17-00364	<0.005	One 1cm wide qtz/cal veinlet with trace PY.
543.1	544.1	1	269595	HCORE			A17-00364	<0.005	5cm wide qtz/cal veinlet with trace sct PY.
544.1	545	0.9	269596	HCORE			A17-00364	<0.005	One .5cm wide qtz/cal veinlet with trace sct PY.
545	546	1	269597	HCORE			A17-00364	<0.005	Barren.
546	547	1	269598	HCORE			A17-00364	<0.005	Barren.
547	548	1	269599	HCORE			A17-00364	<0.005	Barren.
		0	269600	Blank		Blank	A17-00364	<0.005	
548	549	1	269601	HCORE			A17-00364	<0.005	Barren.
549	550	1	269602	HCORE			A17-00364	<0.005	Barren.
550	551	1	269603	HCORE			A17-00364	<0.005	Barren.
551	552	1	269604	HCORE			A17-00364	<0.005	Barren.
552	553	1	269605	HCORE			A17-00364	<0.005	Barren.
553	554	1	269606	HCORE			A17-00364	<0.005	Barren.
		0	269607	STD		CDN_GS_P4B	A17-00364	0.369	
554	555	1	269608	HCORE			A17-00364	<0.005	Barren.
555	556	1	269609	HCORE			A17-00364	<0.005	Barren.
556	557	1	269610	HCORE			A17-00364	<0.005	Barren.
557	558	1	269611	HCORE			A17-00364	<0.005	Barren.
558	559	1	269612	HCORE			A17-00364	<0.005	20cm area with area with minor epidote and 1% CG PY sct through host.
559	560	1	269613	HCORE			A17-00364	<0.005	One 1m wide white qtz/cal veinlet with trace PY.
560	561	1	269614	HCORE			A17-00364	<0.005	Two 0.5-1cm wide qtz/cal veinlets with trace PY.
		0	269615	DUP	269614		A17-00364	<0.005	
561	562	1	269616	HCORE			A17-00364	<0.005	One .2cm wide qtz/cal veinlet with trace sct PY.
562	563	1	269617	HCORE			A17-00364	<0.005	Barren.
563	564	1	269618	HCORE			A17-00364	0.006	Barren.
564	565	1	269619	HCORE			A17-00364	<0.005	Barren.
565	566	1	269620	HCORE			A17-00364	<0.005	Barren.
566	567	1	269621	HCORE			A17-00364	<0.005	Barren.
		0	269622	STD		CDN_GS_P7J	A17-00364	0.69	
567	568	1	269623	HCORE			A17-00364	<0.005	Barren.
568	569	1	269624	HCORE			A17-00364	<0.005	Two 1cm wide qtz/cal veinelets with trace PY.
569	570	1	269625	HCORE			A17-00364	<0.005	Barren.

570	570.53	0.53	269626	HCORE			A17-00364	<0.005	Barren.
570.53	571.1	0.57	269627	HCORE			A17-00364	<0.005	Barren.
571.1	572	0.9	269628	HCORE			A17-00364	<0.005	Two 1.5cm wide qtz/cal veinlets with trace PY.
572	573	1	269629	HCORE			A17-00364	<0.005	Barren.
		0	269630	Blank		Blank	A17-00364	<0.005	
573	574	1	269631	HCORE			A17-00364	<0.005	Barren.
574	575	1	269632	HCORE			A17-00364	0.006	Barren.
575	576	1	269633	HCORE			A17-00364	0.005	Three 1cm wide qtz/cal veinlets with trace PY.
576	577	1	269634	HCORE			A17-00364	<0.005	Barren.
577	578	1	269635	HCORE			A17-00364	<0.005	Barren.
578	579	1	269636	HCORE			A17-00364	0.005	Weakly foliated mafic volcanic. Trace sct PY. Very low core axis angle10cm qtz/cal veinlets.
		0	269637	STD		CDN_GS_P4B	A17-00364	0.425	
579	580	1	269638	HCORE			A17-00364	<0.005	Weakly foliated mafic volcanic. Barren.
580	581	1	269639	HCORE			A17-00364	<0.005	Barren.
581	582	1	269640	HCORE			A17-00364	<0.005	Barren.
582	583	1	269641	HCORE			A17-00364	<0.005	Barren.
583	584	1	269642	HCORE			A17-00364	<0.005	One .25cm wide qtz/cal veinlet with trace sct PY in and around veinlet.
584	585	1	269643	HCORE			A17-00364	<0.005	Barren.
		0	269644	DUP	269643		A17-00364	<0.005	
585	586	1	269645	HCORE			A17-00364	<0.005	Barren.
586	587	1	269646	HCORE			A17-00364	<0.005	Barren.
587	588	1	269647	HCORE			A17-00364	<0.005	Barren.
588	589	1	269648	HCORE			A17-00364	<0.005	Barren.
589	590	1	269649	HCORE			A17-00364	<0.005	Barren.
590	591	1	269650	HCORE			A17-00364	0.009	One 1.5cm wide qtz/cal veinlet with trace sct PY.
591	592	1	269651	HCORE			A17-00364	0.009	Weakly brecciated mafic volcanic. 1% sct PY fracture filling throughout. One 1cm wide qtz/cal veinlet with trace sct PY.
		0	269652	STD		CDN_GS_P7J	A17-00364	0.748	
592	593	1	269653	HCORE			A17-00364	0.008	One 10cm wide qtz/cal vein with 1% sct PY assoc.
593	594	1	269654	HCORE			A17-00530	<0.005	Barren.
594	595	1	269655	HCORE			A17-00530	<0.005	One .2cm wide qtz/cal veinlet with trace sct PY.
595	596	1	269656	HCORE			A17-00530	<0.005	10cm wide pillow with 1% sct PY throughout.
596	596.8	0.8	269657	HCORE			A17-00530	<0.005	One 1cm wide qtz/cal veinlet with trace sct PY.
596.8	597.3	0.5	269658	HCORE			A17-00530	<0.005	Barren.

		0	269659	Blank			Blank	A17-00530	<0.005	
598.15	599	0.85	269660	HCORE				A17-00530	<0.005	Barren.
599	600	1	269661	HCORE				A17-00530	<0.005	Two 1-1.5 cm wide qtz/cal veinlet with trace sct PY.
600	600.6	0.6	269662	HCORE				A17-00530	<0.005	One 2mm wide qtz/cal veinlet with trace sct PY.
600.6	601.25	0.65	269663	HCORE				A17-00530	<0.005	Three <.5cm wide qtz/cal veinlet with trace sct PY.
601.25	601.8	0.55	269664	HCORE				A17-00530	0.02	55cm wide area of cohesive brecciation. Moderate sericite. Brecciation filled by Qtz/cal flooding. Two .5cm wide hematite veinlets through center. Trace sct PY in qtz/cal.
601.8	602.9	1.1	269665	HCORE				A17-00530	0.007	Two 0.5cm wide qtz cal veinlets with trace sct PY in and haloing into host.
602.9	604	1.1	269666	HCORE				A17-00364	0.006	Barren.
		0	269667	STD			CDN_GS_P4B	A17-00364	0.457	
604	605	1	269668	HCORE				A17-00364	0.007	Barren.
605	606	1	269669	HCORE				A17-00364	0.006	Four <1-2cm wide qtz/cal veinlet with trace sct PY in and haloing into host.
606	607	1	269670	HCORE				A17-00364	0.006	One varying thickness vein from <1cm to 4cm wide with 1% sct PY on vein margins and into host.
607	608	1	269671	HCORE				A17-00364	0.006	One 1cm wide qtz/cal veinlet with trace sct PY.
608	608.7	0.7	269672	HCORE				A17-00364	0.007	Barren.
608.7	609.3	0.6	269673	HCORE				A17-00364	0.008	Trace sct PY in host.
609.3	610	0.7	269674	HCORE				A17-00364	0.007	Barren.
		0	269675	DUP	269674			A17-00364	0.007	
610	611	1	269676	HCORE				A17-00364	0.007	Barren.
611	612	1	269677	HCORE				A17-00364	0.007	Barren.
612	613	1	269678	HCORE				A17-00364	<0.005	Barren.
613	614	1	269679	HCORE				A17-00364	<0.005	Barren.
614	615	1	269680	HCORE				A17-00364	<0.005	Barren.
615	616	1	269681	HCORE				A17-00364	<0.005	Barren.
		0	269682	STD			CDN_GS_P7J	A17-00364	0.712	
616	617	1	269683	HCORE				A17-00364	<0.005	Barren.
617	618	1	269684	HCORE				A17-00364	<0.005	One 3cm wide qtz/cal veinlet with trace sct PY.
618	619	1	269685	HCORE				A17-00364	<0.005	One 1cm wide qtz/cal veinlet with trace sct PY.
619	620	1	269686	HCORE				A17-00364	<0.005	Two 1-2cm wide qtz/cal veinlets with trace sctPY.
620	621	1	269687	HCORE				A17-00364	<0.005	Barren.
621	622	1	269688	HCORE				A17-00364	<0.005	Trace sct PY in host.
622	623	1	269689	HCORE				A17-00364	<0.005	Trace sct PY in host.
		0	269690	Blank			Blank	A17-00364	<0.005	

623	624	1	269691	HCORE			A17-00364	<0.005	Barren.
624	625	1	269692	HCORE			A17-00364	<0.005	Barren.
625	626	1	269693	HCORE			A17-00364	<0.005	One 2cm wide qtz/cal vein with trace sct PY.
626	627	1	269694	HCORE			A17-00364	<0.005	Two 1.5cm wide qtz/cal veinlet with trace sct PY.
627	628	1	269695	HCORE			A17-00364	<0.005	Barren.
628	629	1	269696	HCORE			A17-00364	<0.005	One 2cm wide qtz/cal vein with trace sct PY.
		0	269697	STD		CDN_GS_P4B	A17-00364	0.397	
629	630	1	269698	HCORE			A17-00364	<0.005	Barren.
630	631	1	269699	HCORE			A17-00364	<0.005	One 4cm wide qtz/ca lvein with Trace sct PY.
631	632	1	269700	HCORE			A17-00364	<0.005	One 2mm wide cal veinlet with trace sct PY. Trace sct PY in host.
632	633	1	269701	HCORE			A17-00364	<0.005	One .5cm wide qtz/cal veinlet with trace sct PY.
633	634	1	269702	HCORE			A17-00364	<0.005	One 2cm wide qtz/cal veinlet with brecciation. No minz.
634	635	1	269703	HCORE			A17-00364	<0.005	Barren.
		0	269704	DUP	269703		A17-00364	<0.005	
635	636	1	269705	HCORE			A17-00364	<0.005	Barren.
636	637	1	269706	HCORE			A17-00364	<0.005	One 2mm wide qtz/cal veinlet with trace sct PY.
637	638	1	269707	HCORE			A17-00530	<0.005	Barren.
638	639	1	269708	HCORE			A17-00530	<0.005	Very weak brecciation in 20cm area with 1% sct PY fracture filling.
639	640	1	269709	HCORE			A17-00530	<0.005	One 3mm wide qtz/cal veinlet at low angle with Trace sct PY.
640	641	1	269710	HCORE			A17-00530	<0.005	Very weak brecciation with 1% sct PY fracture filling. 2cm of qtz/cal veinnlets.
641	642	1	269711	HCORE			A17-00530	<0.005	One 1cm wide qtz/cal veinlet with trace sct PY.
642	643	1	269712	HCORE			A17-00530	<0.005	One 2cm patch of qtz/cal veining with trace sct PY.
		0	269713	STD		CDN_GS_P7J	A17-00530	0.758	
643	644	1	269714	HCORE			A17-00530	<0.005	Barren.
644	645	1	269715	HCORE			A17-00530	<0.005	Very weak brecciation. Trace PY fracture filling. One 1cm wide qtz/cal veinlet with trace sct PY.
645	646	1	269716	HCORE			A17-00530	<0.005	Barren.
646	647	1	269717	HCORE			A17-00530	<0.005	Barren.
647	648	1	269718	HCORE			A17-00530	<0.005	Barren.
648	649	1	269719	HCORE			A17-00530	<0.005	Barren.
		0	269720	Blank		Blank	A17-00530	<0.005	
649	650	1	269721	HCORE			A17-00530	0.006	One 5cm wide; weakly silicified qtz/cal veinlet. 1% sct PY on vein margins haloing 4-5cm into host.

650	650.9	0.9	269722	HCORE			A17-00530	0.007	Trace sct PY in host.
650.9	651.55	0.65	269723	HCORE			A17-00530	0.016	One 35cm and one 15cm arched milky white qtz/cal veins. 5% sct PY along vein margins and 3-4cm into host rock.
651.55	652.2	0.65	269724	HCORE			A17-00530	0.005	1% sct PY in host.
652.2	653	0.8	269725	HCORE			A17-00530	<0.005	Barren.
653	654	1	269726	HCORE			A17-00530	<0.005	One .75cm wide qtz/cal veinlet with haloing 2-3cm 1% sct PY into host.
654	655	1	269727	HCORE			A17-00530	<0.005	Barren.
		0	269728	STD		CDN_GS_P4B	A17-00530	0.478	
655	656	1	269729	HCORE			A17-00530	<0.005	Barren.
656	657	1	269730	HCORE			A17-00530	0.005	Trace sct PY in host.
657	658	1	269731	HCORE			A17-00530	<0.005	Barren.
658	659	1	269732	HCORE			A17-00530	<0.005	Barren.
659	660	1	269733	HCORE			A17-00530	<0.005	Barren.
660	661	1	269734	HCORE			A17-00530	<0.005	Barren.
		0	269735	DUP	269734		A17-00530	<0.005	
661	662	1	269736	HCORE			A17-00530	<0.005	Barren.
662	663	1	269737	HCORE			A17-00530	<0.005	Barren.
663	664	1	269738	HCORE			A17-00530	<0.005	Barren.
664	665	1	269739	HCORE			A17-00530	<0.005	Barren.
665	666	1	269740	HCORE			A17-00530	<0.005	Barren.
666	667	1	269741	HCORE			A17-00530	<0.005	One 1.5cm wide qtz/cal veinlet with trace sct PY.
667	668	1	269742	HCORE			A17-00530	0.019	Barren.
		0	269743	STD		CDN_GS_2P	A17-00530	0.804	
668	669	1	269744	HCORE			A17-00530	<0.005	Barren.
669	670	1	269745	HCORE			A17-00530	<0.005	Barren.
670	671	1	269746	HCORE			A17-00530	0.008	Barren.
671	672	1	269747	HCORE			A17-00530	<0.005	Barren.
672	673	1	269748	HCORE			A17-00530	<0.005	Barren.
673	674	1	269749	HCORE			A17-00530	<0.005	Barren.
		0	269750	Blank		Blank	A17-00530	<0.005	
674	675	1	269751	HCORE			A17-00530	0.005	Barren.
675	676	1	269752	HCORE			A17-00530	<0.005	Barren.
676	677	1	269753	HCORE			A17-00530	<0.005	One 3cm wide qtz/cal veinlet with trace sct PY.
677	678	1	269754	HCORE			A17-00530	<0.005	One 1.5cm wide qtz/cal veinelt with trace sct PY.
678	679	1	269755	HCORE			A17-00530	<0.005	Barren.
679	680	1	269756	HCORE			A17-00530	<0.005	Barren.
		0	269757	STD		CDN_GS_P4B	A17-00530	0.468	
680	681	1	269758	HCORE			A17-00530	<0.005	Barren. Barren.

681	682	1	269759	HCORE			A17-00530	<0.005	Barren.
682	683	1	269760	HCORE			A17-00530	<0.005	Barren.
683	684	1	269761	HCORE			A17-00530	<0.005	Barren.
684	685	1	269762	HCORE			A17-00530	<0.005	Barren.
685	686	1	269763	HCORE			A17-00530	<0.005	Barren.
686	687	1	269764	HCORE			A17-00530	<0.005	Barren.
		0	269765	DUP	269764		A17-00530	<0.005	
687	688	1	269766	HCORE			A17-00530	<0.005	Two 2-3cm wide qtz/cal veinlets with trace sct PY.
688	689	1	269767	HCORE			A17-00530	<0.005	Barren.
689	690	1	269768	HCORE			A17-00530	<0.005	Barren.
690	691	1	269769	HCORE			A17-00530	<0.005	Barren.
691	692	1	269770	HCORE			A17-00530	0.006	Barren.
692	693	1	269771	HCORE			A17-00530	0.005	Barren.
		0	269772	STD		CDN_GS_P7J	A17-00530	0.676	
693	694	1	269773	HCORE			A17-00530	0.005	A 14 cm wide qtz/cal flooding zone with 2% sct PY.
694	695	1	269774	HCORE			A17-00530	<0.005	Barren.
695	696	1	269775	HCORE			A17-00530	<0.005	Barren.
696	697	1	269776	HCORE			A17-00562	0.01	Barren.
697	697.67	0.67	269777	HCORE			A17-00562	<0.005	Barren.
697.67	698.2	0.53	269778	HCORE			A17-00562	0.024	Barren.
698.2	699	0.8	269779	HCORE			A17-00562	0.006	Barren.
		0	269780	Blank		Blank	A17-00562	<0.005	
699	700	1	269781	HCORE			A17-00562	<0.005	Barren.
700	701	1	269782	HCORE			A17-00562	<0.005	Barren.
701	702	1	269783	HCORE			A17-00562	0.006	Barren.
702	703	1	269784	HCORE			A17-00562	0.005	Barren.
703	704	1	269785	HCORE			A17-00562	0.005	Barren.
704	705	1	269786	HCORE			A17-00562	0.01	Barren.
		0	269787	STD		CDN_GS_P4B	A17-00562	0.482	
705	706	1	269788	HCORE			A17-00562	0.005	Barren.
706	707	1	269789	HCORE			A17-00562	<0.005	Barren.
707	708	1	269790	HCORE			A17-00562	<0.005	Barren.
708	708.35	0.35	269791	HCORE			A17-00562	0.005	Barren.
708.35	709	0.65	269792	HCORE			A17-00562	0.005	Weakly silicified mafic volcanic.
709	710	1	269793	HCORE			A17-00562	0.012	Weakly silicified and brecciated mafic volcanic. Two 1-4cm wide qtz/cal veinlets with 2% sct PY on veinlet margins.
710	710.9	0.9	269794	HCORE			A17-00562	0.007	Weakly silicified mafic volcanic.
		0	269795	DUP	269794		A17-00562	0.005	

710.9	711.51	0.61	269796	HCORE			A17-00562	0.01	Weakly silicified and brecciated mafic volcanic. One 13cm wide qtz/cal vein with 2% sct PY on veinlet margins and haloing 10cm into host.
711.51	712.2	0.69	269797	HCORE			A17-00562	0.005	Barren.
712.2	713.2	1	269798	HCORE			A17-00562	<0.005	Barren.
713.2	714.2	1	269799	HCORE			A17-00562	<0.005	Barren.
714.2	715.19	0.99	269800	HCORE			A17-00562	0.008	Barren.
715.19	716	0.81	269801	HCORE			A17-00562	<0.005	Weakly foliated mafic volcanic. Trace sct PY in host.
716	717	1	269802	HCORE			A17-00562	<0.005	Four <1cm wide bands of sct PY in host parallel to foliation.
		0	269803	STD		CDN_GS_2P	A17-00562	2.03	
717	718	1	269804	HCORE			A17-00562	0.005	One 1.5cm wide qtz/cal veinlet with trace sct PY. One 3cm wide qtz/cal/epd area with trace sct blbs of py.
718	719	1	269805	HCORE			A17-00562	<0.005	Three 1cm wide qtz/cal veinlets with trace sct PY.
719	720	1	269806	HCORE			A17-00562	0.01	Four <1-1cm wide qtz/cal veinlets with 1% sct PY in veinlets and haloing into host.
720	721	1	269807	HCORE			A17-00562	0.005	Two 0.5-1.5cm wide qtz/cal veinlets with trace sct PY.
721	722	1	269808	HCORE			A17-00562	0.008	Two 1-2cm wide qtz/cal veinlet with trace sct PY.
722	723	1	269809	HCORE			A17-00562	0.005	One 0.5cm wide qtz/cal veinlet with trace sct PY.
		0	269810	Blank		Blank	A17-00562	<0.005	
723	724	1	269811	HCORE			A17-00562	0.009	Three <.5cm wide qtz/cal veinnlets with trace sct PY.
724	724.9	0.9	269812	HCORE			A17-00562	0.005	Barren.
724.9	725.8	0.9	269813	HCORE			A17-00562	<0.005	Barren.
725.8	726.4	0.6	269814	HCORE			A17-00562	0.033	24cm of silicified qtz/cal vein(lets). 2cm to 6cm wide. 2% sct PY in veins and haloing into host.
726.4	727	0.6	269815	HCORE			A17-00562	0.006	5cm of thin qtz/cal veinlets with trace sct PY along foliation with increase straining.
727	728	1	269816	HCORE			A17-00562	0.007	Trace sct PY in host.
728	729	1	269817	HCORE			A17-00562	<0.005	Trace sct PY in host.
		0	269818	STD		CDN_GS_P4B	A17-00562	0.392	
729	730	1	269819	HCORE			A17-00562	0.006	1% diss PY throughout host. Moderately strained.
730	730.6	0.6	269820	HCORE			A17-00562	0.005	1% diss PY throughout host. Moderately strained.
730.6	731.15	0.55	269821	HCORE			A17-00562	0.045	1% diss PY throughout host. Moderately strained.
731.15	732	0.85	269822	HCORE			A17-00562	0.019	Trace diss PY throughout host. Moderately strained.
732	733	1	269823	HCORE			A17-00562	0.023	2% diss PY throughout host. Moderately strained. Increase of PY in this sample related to 4cm of 1-2cm wide qtz veining parallel to fol.

733	734	1	269824	HCORE			A17-00562	0.02	Trace diss PY throughout host. Moderately strained.
		0	269825	DUP	269824		A17-00562	0.022	
734	735	1	269826	HCORE			A17-00562	0.032	Trace diss PY throughout host. Moderately strained.
735	736	1	269827	HCORE			A17-00562	0.074	1% diss PY throughout host. Moderately strained.
736	737	1	269828	HCORE			A17-00530	0.024	1% diss PY throughout host and associated with One 3cm wide qtz/cal veinlet. Moderately strained.
737	738.1	1.1	269829	HCORE			A17-00530	0.037	1% diss PY throughout host and one 5cm wide area with silicified qtz/cal veinlets. Moderately strained.
738.1	739.25	1.15	269830	HCORE			A17-00530	0.38	Trace diss PY thoughout host. Pervasively silicified. Moderately strained.
739.25	740	0.75	269831	HCORE			A17-00530	0.153	Trace diss PY thoughout host. Pervasively silicified. Moderately strained.
740	741	1	269832	HCORE			A17-00530	0.006	Barren.
		0	269833	STD		CDN_GS_2P	A17-00530	1.94	
741	742	1	269834	HCORE			A17-00530	0.021	Barren.
742	743	1	269835	HCORE			A17-00530	0.005	Barren.
743	744	1	269836	HCORE			A17-00530	0.007	Barren.
744	745	1	269837	HCORE			A17-00530	0.005	Barren. One 0.5cm wide hematite stringer.
745	746	1	269838	HCORE			A17-00530	<0.005	Barren.
746	747	1	269839	HCORE			A17-00530	0.005	Barren.
		0	269840	Blank		Blank	A17-00530	<0.005	
747	748	1	269841	HCORE			A17-00530	0.033	Barren.
748	749	1	269842	HCORE			A17-00530	0.246	Barren.
749	750	1	269843	HCORE			A17-00530	0.013	Barren.
750	751	1	269844	HCORE			A17-00530	0.008	Polymictic conglomerate. No significant mineralization.
751	752	1	269845	HCORE			A17-00530	0.01	Polymictic conglomerate. No significant mineralization. Polymictic conglomerate. No significant mineralization.
752	753	1	269846	HCORE			A17-00530	0.039	Polymictic conglomerate. No significant mineralization.
753	754	1	269847	HCORE			A17-00530	0.015	Polymictic conglomerate. No significant mineralization.
		0	269848	STD		CDN_GS_P4B	A17-00530	0.41	
754	755	1	269849	HCORE			A17-00530	0.018	Polymictic conglomerate. No significant mineralization.
755	756	1	269850	HCORE			A17-00530	0.059	Polymictic conglomerate. No significant mineralization.
756	757	1	269851	HCORE			A17-00530	0.011	Polymictic conglomerate. No significant mineralization.
757	758	1	269852	HCORE			A17-00530	<0.005	Polymictic conglomerate. No significant mineralization.

758	759	1	269853	HCORE			A17-00530	0.016	Polymictic conglomerate. No significant mineralization.
759	760	1	269854	HCORE			A17-00530	0.012	Polymictic conglomerate. No significant mineralization.
		0	269855	DUP	269854		A17-00530	0.013	
760	761	1	269856	HCORE			A17-00530	0.013	Polymictic conglomerate. No significant mineralization.
761	762	1	269857	HCORE			A17-00530	0.007	Polymictic conglomerate. No significant mineralization.
762	763	1	269858	HCORE			A17-00530	0.02	Polymictic conglomerate. No significant mineralization.
763	764	1	269859	HCORE			A17-00530	0.047	Polymictic conglomerate. No significant mineralization.
764	765	1	269860	HCORE			A17-00530	0.037	Polymictic conglomerate. No significant mineralization.
765	766	1	269861	HCORE			A17-00530	0.028	Polymictic conglomerate. No significant mineralization.
766	767	1	269862	HCORE			A17-00530	0.011	Polymictic conglomerate. No significant mineralization.
		0	269863	STD		CDN_GS_2P	A17-00530	2.06	
767	768	1	269864	HCORE			A17-00530	0.006	Polymictic conglomerate. No significant mineralization.
768	769	1	269865	HCORE			A17-00530	0.007	Polymictic conglomerate. No significant mineralization.
769	770	1	269866	HCORE			A17-00530	0.013	Polymictic conglomerate. No significant mineralization.
770	771	1	269867	HCORE			A17-00530	0.02	Polymictic conglomerate. No significant mineralization.
771	772	1	269868	HCORE			A17-00530	0.006	Polymictic conglomerate. No significant mineralization.
772	773	1	269869	HCORE			A17-00530	0.03	Polymictic conglomerate. No significant mineralization.
		0	269870	Blank		Blank	A17-00530	<0.005	
773	774	1	269871	HCORE			A17-00530	0.026	Polymictic conglomerate. No significant mineralization.
774	775	1	269872	HCORE			A17-00530	0.025	Polymictic conglomerate. No significant mineralization.
775	776	1	269873	HCORE			A17-00530	0.006	Polymictic conglomerate. No significant mineralization.
776	777	1	269874	HCORE			A17-00530	0.032	Polymictic conglomerate. No significant mineralization.
777	778	1	269875	HCORE			A17-00530	0.011	Polymictic conglomerate. No significant mineralization.
778	779	1	269876	HCORE			A17-00530	0.279	Polymictic conglomerate. No significant mineralization.
779	780	1	269877	HCORE			A17-00530	0.024	Polymictic conglomerate. No significant mineralization.
		0	269878	STD		CDN_GS_P4B	A17-00530	0.59	
780	781	1	269879	HCORE			A17-00530	0.046	Polymictic conglomerate. No significant mineralization.

781	782	1	269880	HCORE			A17-00530	0.027	Polymictic conglomerate. No significant mineralization.
782	783	1	269881	HCORE			A17-00530	0.006	Polymictic conglomerate. No significant mineralization.
783	784	1	269882	HCORE			A17-00530	0.01	Polymictic conglomerate. No significant mineralization.

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t

Drill Hole Log

Hole ID: B-16-13 DataSet: Brookbank Program: Exploration

Hole Status:	COMPLETE	**Hole Length (m):**	432	**Logged By:**	D. Grabiec
Hole Type:	Surface Drill Hole	**Dip (º):**	-50	**Date Log Started:**	1/8/2017
Date Drill Started:	12/10/2016	**Azimuth:**	300.2	**Date Log Completed:**	1/20/2017
Date Drill Completed:	12/15/2016	**Survey Instrument**	Reflex TN14 Gyrocompass		

Prospect:	Brookbank East		
Grid ID:	UTM NAD 83 Zone 16N		
UTM East (m)	441,020.3	**Survey Instrument:**	Trimble RTK
UTM North (m):	5,507,405.2	**Date Surveyed:**	12/21/2016
Elevation (masl):	345.988	**Surveyed By:**	S. Ouellet
Tenement ID:	TB29029	**Tenement Type:**	Lease

Company:	Greenstone Gold Mines
Drill Contractor:	Forage G4 Drilling
Hole Diameter:	HQ
Casing Size:	HW
Casing Depth (m):	4
Core Storage:	Brookbank

Purpose: Test intersection of main mineralized iron-carbonate shear zone and oblique structures observed at outcrop and interpreted from the detailed magnetics. Primary target:main Fe-Carb shear zone at depth and intersection of second northeast cross fault.

Comments: RTK survey after drill moved off.

Downhole Data Available:

Max Survey Depth (m): 415 **Max Sample Depth (m):** 432

Depth Logged To (m) 432 **Meters Sampled** 278

Total Samples 327 **# Assay** 283 **# QAQC:** 44

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
0	-50	300.2	TN14	SINGLESHOT	G4	12/10/2016		Yes
10	-49.94	300.95	EZ-GYRO	SINGLESHOT	G4	12/15/2016	Optimised	Yes
19	-49.82	301.27	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
37	-49.76	301.45	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
46	-49.78	302.89	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
55	-49.6	302.73	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
64	-48.88	304.92	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
73	-48.59	305.77	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
82	-48.52	307.43	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
100	-48.4	308.33	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
109	-48.64	308.27	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
118	-48.72	308.64	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
127	-48.88	308.41	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
136	-49.02	309.5	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes

Downhole Survey

Depth	Dip	Azimuth (True)	Survey Instrument	Survey Method	Survey Company	Date Surveyed	Comments	Survey Accepted
154	-49.13	309.57	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
163	-49.23	310.65	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
172	-49.1	310.84	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
190	-48.84	310.79	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
199	-48.8	310.29	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
208	-48.67	312.02	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
217	-48.63	312.36	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
244	-48.85	312.59	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
253	-48.96	312.28	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
262	-49.02	312.87	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
271	-49.05	312.66	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
298	-49.08	313.48	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
316	-49.18	314.5	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
325	-49.24	314.83	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
343	-49.37	315.01	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
352	-49.44	315.05	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
361	-49.44	315.72	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
370	-49.35	315.38	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
379	-49.34	316.33	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
406	-49.11	316.3	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes
415	-49.12	316.26	EZ-GYRO	MULTISHOT	G4	12/15/2016		Yes

Geology Summary

meters							
From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize
0	4	4		OB	Overburden		
4	63	59		E1A	Basalt	Massive	Fine grained
63	138	75		E1A	Basalt	Massive	Fine grained
138	150.22	12.22		E1A	Basalt	Pillowed	Fine grained
150.22	170.5	20.28		E1A	Basalt	Massive	Medium grained
170.5	182	11.5		E1A	Basalt	Pillowed	Fine grained
182	194.37	12.37		E1A	Basalt	Massive	Medium grained
194.37	198.67	4.3		E0	Ultramafic Volcanic	Massive	Fine grained
198.67	281.4	82.73		E1A	Basalt	Pillowed	Fine grained
281.4	301.1	19.7		E1A	Basalt	Massive	Medium grained
301.1	359.85	58.75		E1A	Basalt	Pillowed	Fine grained
359.85	363	3.15		E1A	Basalt	Massive	Fine grained
363	371	8		E0	Ultramafic Volcanic	Laminated	Fine grained
371	371.36	0.36		E1A	Basalt	Laminated	Fine grained
371.36	390.77	19.41		E1A	Basalt	Massive	Fine grained
390.77	432	41.23		E1A	Basalt	Massive	Fine grained

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
0	**4**	4		**OB**	**Overburden**			D. Leduchowski
Overburden								
4	**63**	59		**E1A**	**Basalt**	Massive	Fine grained	D. Leduchowski

Massive metavolcanic. Dark green-grey. FG. Local moderate foliation. Mod magnetic throughout - dis mag throughout host and lcl banded magnetite (<2cm). Patchy/pervasive mod epidote and chl alt'n throughout unit. Local mod hematite near veins and vein margins. Pervasive mod magnetite. Quartz-carb-calcite extension veins and quartz-calcite fracture-filling stringers throughout. Very rare local PY sct in and around veins.

Alteration

From	To	# Alteration	Intesity	Style	Comments
4	63	1: Magnetite	Weak (1-25%)	Pervasive	Pervasive mod magnetite alteration throughout, mag sus varies from ~20-100.

Structures

From	To	Code	Structure Type	Comments
41	49	SHD	Shear / mylonitic foliation	Moderate shearing and foliation in metavolcanic

Veins

From	To	# Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
4	6	1: Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
6	9	1: Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.7	
9	12	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite	Extension Vein Stringer Zone - vein <1/4"			2 1	Quartz-carb-calcite +/- chlorite and hematite at margins
12	15	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	Quartz-carb-calcite +/- chlorite and hematite at margins
15	18	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			1.8	
18	21	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite	Extension Vein Stringer Zone - vein <1/4"			4 2	Quartz-carb-calcite +/- chlorite and hematite at margins
21	24	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite	Extension Vein Stringer Zone - vein <1/4"			7 3	Quartz-carb-calcite +/- chlorite and hematite at margins
24	27	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite	Extension Vein Stringer Zone - vein <1/4"			2.5 1	
27	30	1: Quartz-Fe-Carbonate/Calcite 2: Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4" Extension Vein			5 3	

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
63	138	75		E1A	Basalt	Massive	Fine grained	D. Leduchowski

Massive metavolcanic. Dark green-grey. FG. Local moderate foliation. HFZ from 136.5-138m. Nonmagnetic to Weakly magnetic throughout, with local patchy mag. Patchy/pervasive mod epidote and chl alt'n throughout unit. Patchy mod-str hematite near veins and vein margins. Quartz-carb-calcite extension veins and quartz-calcite fracture-filling stringers throughout. Very rare local PY sct in and around veins up to 104m. After 104m-up to 1% PY sct in and around hem stained quartz-carb-calcite veins

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
30	33	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3.5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
33	36	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
36	39	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
39	42	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
42	45	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
45	48	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
48	51	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
51	54	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
54	57	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
57	60	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
60	63	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		12	1	Low angle quartz-carb-calcite vein with weakly mineralized PY at margins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	

Alteration

From	To	#	Alteration	Intesity	Style	Comments
63	69	1:	Hematite	Weak (1-25%)	Patches	No longer magnetic. Magnetite replaced by patchy hematite in and around veins and in host.

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Alteration

From	To	#	Alteration	Intesity	Style	Comments
69	126	1:	Magnetite	Weak (1-25%)	Localized	Magnetite no longer dis throughout, localized in host. Local silicification near quartz-carb flooded areas
		2:	Silicified	Weak (1-25%)	Localized	
126	138	1:	Magnetite	Weak (1-25%)	Localized	Local magnetite sct in host. Local silicification+sericitization around vein margins.
		2:	Silicified	Weak (1-25%)	Localized	
		3:	Sericite	Weak (1-25%)	Localized	

Structures

From	To	Code	Structure Type	Comments
65	90	SHD	Shear / mylonitic foliation	Weak to moderate shearing and foliation in metavolcanic
104	109	SHD	Shear / mylonitic foliation	Moderate shearing and foliation in metavolcanic
129	137.4	HFZ	High fracture zone	HFZ's in metavolcanic up to 0.60m in size
137.4	137.5	FLT5	Fault - gouge	10cm uncohesive fault gouge in metavolcanic

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
63	66	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Quartz-carb-calcite extension veins +/- chlorite and hematite
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
66	69	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	Quartz-carb-calcite extension veins +/- chlorite and hematite, quartz-calcite fracture filling stringers throughout
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
69	72	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			18	Quartz-carb-calcite extension veins, quartz-calcite fracture filling stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
72	75	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	Quartz-carb-calcite extension veins, quartz-calcite fracture filling stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.7	
75	78	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.2	Quartz-carb-calcite extension veins, quartz-calcite fracture filling stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1	
78	81	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Hem stained quartz-carb-calcite extension veins, quartz-calcite fracture filling stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
81	84	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			32	Large 30cm wide quartz-carb-calcite-chlorite vein (hem stained). Also smaller quartz-carb-calcite extension veins and quartz-calcite stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
84	87	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			24.5	Mineralized 15cm wide quartz-carb-calcite (hem stained) vein. Smaller quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	
87	90	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	Quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
90	93	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.8	Quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
93	96	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	Quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2.5	
96	99	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.5	Quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
99	102	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	Quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
102	105	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	Quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
105	108	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	10	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
108	111	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	9	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
111	114	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
114	117	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			18	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
117	120	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			17	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	
120	123	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	Some vuggy quartz-calcite veins with Pyrite. Quartz-calcite tension gashes throughout.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
123	126	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			13	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
126	129	1:	Quartz-Fe-carbonate	Extension Vein			13	Hem stained quartz-carb extension veins, fracture filling quartz-calcite stringers
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
129	132	1:	Quartz-Fe-carbonate	Extension Vein			7	15cm wide quartz-carb-chlorite vein.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	Quartz-carb extension veins, fracture filling quartz-calcite vein.
132	135	1:	Quartz-Fe-carbonate	Extension Vein			10	Quartz-carb-chlorite extension vein.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			5	Quartz-carb fracture filling stringers.
135	138	1:	Quartz-Fe-carbonate	Extension Vein			2	Quartz-carb-chlorite extension vein.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	Quartz-carb fracture filling stringers.

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
138	**150.22**	12.22	**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed metavolcanic. Light-dark green-grey. FG. Moderately foliated and sheared. HFZ's throughout ranging up to 0.6m in size. Moderately magnetic throughout. Patchy/pervasive mod epidote and chl alt'n throughout unit. Patchy mod-str hematite near veins and vein margins. Moderate pervasive siliciation throughout host and in and around veins. Quartz-carb-calcite extension veins (hem stained; most vuggy with PY) and quartz-calcite fracture filling stringers. Up to 1% vfg PY sct in and around veins.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
138	141	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		75	3	Vuggy quartz-calcite vein with PY.
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	Quartz-calcite fracture filling stringers.
141	144	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1	Vuggy quartz-calcite extension vein.
		2:	Quartz-Fe-carbonate	Extension Vein			3	Quartz-carb extension veins.
144	147	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	Mineralized vuggy quartz-calcite veins
		2:	Quartz-Fe-carbonate	Stringer Zone - vein <1/4"			5	
147	150	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
150.22	**170.5**	20.28	**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Gabbroic high-Ti metavolcanic. Light-dark green. MG. Weak to moderately foliated and sheared. HFZ up to 0.50m in size. Moderately magnetic throughout to weakly magnetic in last ~15m. Patchy/pervasive mod epidote and chl alt'n throughout unit. Patchy mod-str hematite near veins and vein margins. Oxidized fracture planes. Lcl spotted leucoxene from 159-162.5m. Mod silicified. Hem stained quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers. Rare lcl trc PY sct.

Alteration

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Alteration	Intesity	Style	Comments
158.23	159	1:	Magnetite	Weak (1-25%)	Pervasive	Pervasive mod magnetite alteration
159	162.5	1:	Leucoxene	Weak (1-25%)	Spotted	Spotted leucoxene in gabbroic metavolcanic

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
153	156	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		85	0.5	High angle quartz-calcite extension vein
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			4	
156	159	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2.5	Vuggy quartz-calcite veins
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			3	
159	162	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
162	165	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		60	6	
165	168	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
170.5	**182**	11.5		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed metavolcanic. Light-dark green-grey. FG. Weakly foliated. Nonmagnetic. 15cm wide HFZ @ 176m. Patchy/pervasive mod epidote and chl alt'n throughout. Patchy mod hematite near veins and vein margins. Pervasive mod silicification throughout. No longer oxidized fracture planes. High angle (60 to 70 degrees) vuggy quartz-calcite extension veins with rare trc PY. Hem stained quartz-carb extension veins and quartz-calcite stringers. Rare lcl trc PY.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
170.5	182	1:	Silicified	Weak (1-25%)	Pervasive	Pervasive mod silicification throughout pillowed metavolcanic

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
171	174	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
174	177	1:	Quartz-Fe-carbonate	Extension Vein			5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
177	180	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
182	**194.37**	12.37		**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Gabbroic metavolcanic. Light-dark green. MG. Weak to moderately foliated and sheared. Dark green phenocrysts. Weakly magnetic

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

throughout. Patchy/pervasive mod epidote and chl alt'n throughout unit. Patchy mod-str hematite near veins and vein margins. Mod silicified. Hem stained quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers. Rare lcl trc PY sct.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
183	186	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
186	189	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	
189	192	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			1.5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
194.37	**198.67**	4.3		**E0**	**Ultramafic Volcanic**	Massive	Fine grained	D. Leduchowski

Hi-titanium metavolcanic. Dark grey-green. MG. Weak to moderately foliated. Dark green phenocrysts. Weakly magnetic throughout. Patchy/pervasive chl alt'n throughout unit. spotted moderate leucoxene/ilmenite in host. Patchy mod hem near veins and vein margins. Hem stained quartz-carb-calcite extension veins and fracture filling stringers. Rare lcl trc PY sct.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
194.37	198.37	1:	Leucoxene	Weak (1-25%)	Spotted	High-Ti metavolcanic with spotted leuxocene throughout

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
195	198	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			12.5	Quartz-calcite extension veins (some vuggy). Fracture filling stringers throughout.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
198.67	**281.4**	82.73		**E1A**	**Basalt**	Pillowed	Fine grained	D. Leduchowski

Pillowed metavolcanic. Light-dark green-grey. F-MG. Weak to moderately foliated. Weakly magnetic up to 216m, then moderately magnetic (mag sus in ~30-70 range). Magnetite dis in host from 216m onwards, but inc magnetism in pillow selvages of metavolcanic. Patchy/pervasive chl and epd alt'n. Local silicification near areas of increased quartz-carb flooding. Patchy mod hem near veins and vein margins. Hem stained quartz-carb-calcite extension veins and high angle vuggy quartz-calcite veins. Fracture filling quartz-calcite stringers. Trc PY sct in and around vuggy quartz-calcite veins.

Structures

From	To	Code	Structure Type	Comments
216	227	HFZ	High fracture zone	HFZ's in pillowed metavolcanic with vuggy quartz-calcite veins. HFZ's range from .10m to 2.5m in size
227	259	HFZ	High fracture zone	HFZ's in pillowed metavolcanic with vuggy quartz-calcite veins. HFZ's range from .10m to 2.5m in size

Veins

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
201	204	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Hem stained quartz-carb-calcite extension veins. Fracture filling stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
204	207	1:	Quartz-Fe-carbonate	Extension Vein			2.6	Hem stained quartz-carb-calcite extension veins. Fracture filling stringers.
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
207	210	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	
210	213	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	
213	216	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			1.5	
216	219	1:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			2	Vuggy quartz-calcite veins with PY, fracture related
219	222	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Vuggy quartz-calcite veins related to HFZ's in metavolcanic
222	225	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6.5	Vuggy quartz-calcite veins related to HFZ's in metavolcanic
225	228	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	Vuggy quartz-calcite veins related to HFZ's in metavolcanic
228	231	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Grey quartz-calcite extension veins and hem stained quartz-calcite veins (some vuggy).
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.5	
231	234	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.3	
234	237	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	
237	240	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4.5	
		2:	Quartz-Fe-Carbonate/Calcite	Stringer Zone - vein <1/4"			0.7	
240	243	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3.5	
243	246	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
246	249	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
249	252	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	Vuggy quartz-calcite veins causing HFZ's in metavolcanic
252	255	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	Vuggy quartz-calcite veins causing HFZ's in metavolcanic

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
281.4	**301.1**	19.7		**E1A**	**Basalt**	Massive	Medium grained	D. Leduchowski

Gabbroic metavolcanic. Light-dark green. MG. Weak to moderately foliated and sheared. Dark green phenocrysts. Weakly magnetic throughout. Patchy/pervasive mod epidote and chl alt'n throughout unit. Patchy mod-str hematite near veins and vein margins. Mod silicified. Hem stained quartz-carb-calcite extension veins and fracture filling quartz-calcite stringers. Rare lcl trc PY sct.

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
255	258	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			10	Vuggy quartz-calcite veins causing HFZ's in metavolcanic
258	261	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	Vuggy quartz-calcite veins causing HFZ's in metavolcanic
261	264	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	Vuggy quartz-calcite veins causing HFZ's in metavolcanic
264	267	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	Vuggy quartz-calcite veins causing HFZ's in metavolcanic
267	270	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	Grey quartz-calcite extension veins in metavolcanic with vuggy quart-calcite veins
270	273	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Quartz-calcite extension veins
273	276	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Vuggy quartz-calcite veins and quartz-carb extension veins
		2:	Quartz-Fe-carbonate	Extension Vein			2.5	
276	279	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Quartz-calcite extension veins (some grey calcite).

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
282	285	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	Quartz-calcite extension veins (some grey calcite).
285	288	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			3	Quartz-calcite extension veins (some grey calcite).
288	291	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			2	Quartz-calcite extension veins (some grey calcite).
291	294	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
294	297	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
297	300	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

DataSet: Brookbank

HoleID: B-16-13

Hole Length (m): 432

Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
301.1	**359.85**	58.75		**E1A**	**Basalt**	Pillowed	Fine grained	D. Grabiec

Pillowed metavolcanic. Light-dark green-grey. F-MG. Weak to moderately foliated. Patchy/pervasive chl and epd alt'n. Local silicification at Upper contact in 25cm of qtz/cal veining Non magnetic at to of hole and weak patches of magnetics increasing down hole. Patchy mod hem near veins and vein margins. Hem stained quartz-carb-calcite extension veins and high angle vuggy quartz-calcite veins. Fracture filling quartz-calcite stringers. Trc PY sct in and around vuggy quartz-calcite veins.

Alteration

From	To	# Alteration	Intesity	Style	Comments
301.1	359.85	1: Ankerite	Weak (1-25%)	Localized	Moderate patches of Epidote throughout. Ankerite assc with veinlets. Localized 10cm patches of silicification. Localized weak patches of magnetite increasing down hole.
		2: Epidote	Weak (1-25%)	Pervasive	
		3: Silicified	Weak (1-25%)	Patches	
		4: Magnetite	Weak (1-25%)	-	

Veins

From	To	# Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
303	306	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			21	
306	309	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
309	312	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
312	315	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
315	318	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
318	321	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
321	324	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
324	327	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
327	330	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
330	333	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
333	336	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
336	339	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
339	342	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
342	345	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
345	348	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
348	351	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			4	
351	354	1: Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
354	357	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
359.85	**363**	3.15		**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Metavolcanic. Upper contact of shear zone below. Dark grey; Weakly silicified and grading to strongly silicified towards lower contact; non magnetic; weak-moderately strained; 5% qtz/cal/ank veininlets parallel to foliation. Weak sericite parallel to foliation. 1% sct PY throughout in host and along veinlets margins and haloing into host.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
359.85	363	1:	Ankerite	Weak (1-25%)	Localized	Pervasively silicified metavolcanic at contact with shear zone.
		2:	Silicified	Weak (1-25%)	Pervasive	
		3:	Calcite	Weak (1-25%)	-	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
360	363	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			20	

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By
363	**371**	8		**E0**	**Ultramafic Volcanic**	Laminated	Fine grained	D. Grabiec

Sheared Metavolcanic. Strongly strained at approx 41dca. Non magnetic. Strong pervasive sericite alt'n. Hematite alteration from 369.5 to 371 with appx 1% specular hematite stringers (unit is pervasively stained pinky-red). 5% qtz/cal/ank veinlets prodominantly parallel to foliation. Trace sct PY throughout host. Up to 1% sct PY where increase qtz/cal veinlet and silicification.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
363	369.5	1:	Sericite	Weak (1-25%)	Pervasive	Strong pervasive sericite alt'n in shear zone.
		2:	Ankerite	Weak (1-25%)	Localized	
369.5	371	1:	Hematite	Weak (1-25%)	Localized	Strong sericite alt'n with overprinting of hematite staining. Stringers of spec hem.
		2:	Sericite	Weak (1-25%)	Pervasive	
		3:	Specular hematite	Weak (1-25%)	Localized	

Structures

From	To	Code	Structure Type	Comments
363	371	SHD	Shear / mylonitic foliation	Shear Zone with strong sericite alteration and minor spec hem from 369.5 to 371.

Veins

DataSet: Brookbank

HoleID: B-16-13

Hole Length (m): 432

Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
363	366	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			11	
		2:	Specular Hematite	Extension Vein			2	
366	369	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			18	
		2:	Specular Hematite	Extension Vein			1	

371 **371.36** 0.36 **E1A** **Basalt** Laminated Fine grained D. Grabiec

Basaltic Ultramafic. At lower contact of shear zone above. Non magnetic; moderately strained. 10% 1-2mm wide leucoxene. Moderate pervasive talc alteration. 2% thin qtz/cal veinlets parallel to fol. No signficant mineralization. Sharp contact.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
371	371.36	1:	Leucoxene	Weak (1-25%)	Spotted	10% leucoxene crystals. Moderate pervasive talc alt'n.
		2:	Talc	Weak (1-25%)	Pervasive	

371.36 **390.77** 19.41 **E1A** **Basalt** Massive Fine grained D. Grabiec

Silicified metavolcanic. Pervasively silicified massive metavolcanic. No foliation. Weakly pervasively magnetic. Weak calcite in veinlets. Very weak ankerite assc with veinlets. 5% qtz/cal veinlets. Three distinct generation of veinlets (~a45;b45 (silicified with trace sct PY) ~a30;b300 ~a60; 240).

Alteration

From	To	#	Alteration	Intesity	Style	Comments
371.36	390.77	1:	Silicified	Weak (1-25%)	Pervasive	Strongly silicified pervasively. Calcite alt'n in veinlets.
		2:	Calcite	Weak (1-25%)	Localized	

Minerals

From	To	#	Mineral	GrainSize	Style	%	Comments
371.36	390.7	1:	Pyrite	Fine grained	Scattered grains	0.3	Trace sct PY assc with qtz/cal veinlets and <1cm halos into host rock.
VG: No							

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
372	375	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	10	55CA veinlets have trace PY.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		155	8	
375	378	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	3	55CA veinlets have trace PY.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		155	4	

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
378	381	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	3	55CA veinlets have trace PY.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		155	4	
381	384	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein		55	4	55CA veinlets have trace PY.
		2:	Quartz-Fe-Carbonate/Calcite	Extension Vein		155	4	
384	387	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	
387	390	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			15	
		2:	Specular Hematite	Extension Vein			2	

From	To		Lith Code	Rocktype	Texture	GrainSize	Logged By
390.77	**432**	41.23	**E1A**	**Basalt**	Massive	Fine grained	D. Grabiec

Massive metavolcanic. Med green-grey. FG. local weak foliation. Weak-mod magnetic throughout. 2-3% qtz/cal veinlets. No significant mineralization.

Alteration

From	To	#	Alteration	Intesity	Style	Comments
390.77	432	1:	Calcite	Weak (1-25%)	Localized	Weak calcite and local patches of epidote assoc with pillow margins.
		2:	Epidote	Weak (1-25%)	Patches	

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
393	396	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
396	399	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
399	402	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
402	405	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
405	408	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
408	411	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			9	
411	414	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
414	417	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			6	
417	420	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	
420	423	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
423	426	1:	Quartz-Fe-Carbonate/Calcite	Extension Vein			5	

DataSet: Brookbank
HoleID: B-16-13

Hole Length (m): 432
Log Length (m): 432

meters

From	To	Width	%	Lith Code	Rocktype	Texture	GrainSize	Logged By

Veins

From	To	#	Vein Type	Style	%	Core Angle º	Thickness (cm)	Comments
426	429	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			8	
429	432	1	Quartz-Fe-Carbonate/Calcite	Extension Vein			7	

Downhole Samples and Assay Results

GREENSTONE GOLD MINES

DataSet: Brookbank **Hole Length (m): 432**

HoleID: B-16-13 **Max Samp Depth (m): 432**

Total meters Sampled: 278

Primary Assay Samples:	283	86.54 %
Field Duplicate Samples:	11	3.36 %
Standard/Blank Samples:	33	10.09 %
Total Samples:	327	

meters

From	To	Width	SampleID	Type	Original SampleID	StandardID	Batch #	Au (g/t)	Comments
21	22	1	229451	HCORE			A17-00253	<0.005	2cm quartz-carb-calcite extension veins, no signficant mineralization
40	41	1	229452	HCORE			A17-00253	0.005	4cm quartz-carb-calcite extension veins and stringers, no significant mineralization
60	61	1	229453	HCORE			A17-00253	0.005	Trc PY sct at vein margins of low angle quartz-carb-calcite extension vein
80	81	1	229454	HCORE			A17-00253	<0.005	3cm quartz-carb-calcite extension veins in mod sheared metavolcanic
81	82	1	229455	HCORE			A17-00253	0.005	1.5cm quartz-carb-calcite extension veins in mod sheared metavolcanic
82	83	1	229456	HCORE			A17-00253	0.005	No significant veining or mineralization. Mod sheared metavolcanic.
		0	229457	STD		CDN_GS_P4B	A17-00253	0.377	
83	84	1	229458	HCORE			A17-00253	<0.005	30cm thick hem stained quartz-carb-calcite-chl vein. Rare trc PY sct in host, replacing chlorite.
84	85	1	229459	HCORE			A17-00253	<0.005	No significant veining or mineralization. Mod sheared metavolcanic.
85	86	1	229460	HCORE			A17-00253	0.032	1% PY locally sct along margins of hem stained quartz-carb-calcite vein. Quartz-carb-calcite extension veins throughout.
104	105	1	229461	HCORE			A17-00253	<0.005	1% vfg PY sct in and around hem stained quartz-carb-calcite veins
105	106	1	229462	HCORE			A17-00253	0.005	1% vfg-cg PY sct in and around hem stained quartz-carb-calcite veins
106	107	1	229463	HCORE			A17-00253	<0.005	0.5% vfg-cg PY sct in and around hem stained quartz-carb-calcite veins
		0	229464	Blank		Blank	A17-00253	0.005	
107	108	1	229465	HCORE			A17-00253	0.005	Coarse trc euhedral PY sct in and around quartz-carb-calcite veins. Some vuggy calcite veins with PY.
108	109	1	229466	HCORE			A17-00253	<0.005	Coarse trc euhedral PY sct in and around quartz-carb-calcite veins. Some vuggy calcite veins with PY.
109	110	1	229467	HCORE			A17-00253	0.005	Local rare trc PY sct along margins of vuggy calcite vein
110	111	1	229468	HCORE			A17-00253	0.005	Local rare trc PY sct along margins of vuggy calcite vein

111	112	1	229469	HCORE			A17-00253	0.02	Lcl trc PY replacing hematite in hem stained quartz-carb-calcite vein
112	113	1	229470	HCORE			A17-00253	<0.005	Vuggy calcite vein with trc PY and trc argentite (?) in vein.
113	114	1	229471	HCORE			A17-00253	<0.005	Trc PY sct in and around quartz-carb-calcite extension veins
		0	229472	STD		CDN_GS_P7J	A17-00253	0.753	
114	115	1	229473	HCORE			A17-00253	0.005	Trc PY sct in and around quartz-carb-calcite extension veins
115	116	1	229474	HCORE			A17-00253	0.005	Trc PY sct in and around quartz-carb-calcite extension veins
116	117	1	229475	HCORE			A17-00253	<0.005	Trc PY sct in and around vuggy quartz-calcite veins and in host metavolcanic
117	118	1	229476	HCORE			A17-00253	<0.005	Quartz-carb-calcite extension veins with no significant min
118	119	1	229477	HCORE			A17-00253	0.008	Moderately sheared; hem stained quartz-carb-calcite veins
119	120	1	229478	HCORE			A17-00253	<0.005	Moderately sheared; trc PY sct in quartz-carb-chlorite vein and in host
120	121	1	229479	HCORE			A17-00253	<0.005	Quartz-carb-calcite extension veins with no significant min
		0	229480	DUP	229479		A17-00253	0.005	
121	122	1	229481	HCORE			A17-00253	0.005	Vuggy calcite vein with trc PY sct in vein. Mod sericitized/silicified margins.
122	123	1	229482	HCORE			A17-00253	<0.005	Quartz-carb-calcite extension veins with no significant min
123	124	1	229483	HCORE			A17-00314	<0.005	Quartz-carb-calcite extension veins with no significant min
124	125	1	229484	HCORE			A17-00314	<0.005	Low angle hem stained quartz-carb-calcite vein, no significant min
125	126	1	229485	HCORE			A17-00314	<0.005	10cm HFZ. Vuggy calcite veins with trc PY sct in vein.
126	127	1	229486	HCORE			A17-00314	<0.005	Vuggy calcite veins with trc PY sct in vein.
		0	229487	STD		CDN_GS_P4B	A17-00314	0.437	
127	128	1	229488	HCORE			A17-00314	<0.005	Trc PY sct in and around hem stained quartz-carb veins
128	129	1	229489	HCORE			A17-00314	0.005	1% vfg PY sct in and around quartz-carb extension veins and in host
129	130	1	229490	HCORE			A17-00314	<0.005	Trc mg PY sct in host and in and around quartz-carb veins
130	131	1	229491	HCORE			A17-00314	0.005	Trc Py sct in and around silicified vein margins and in quartz-carb veins
131	131.6	0.6	229492	HCORE			A17-00314	0.005	Trc Py sct in and around silicified vein margins and in quartz-carb veins
131.6	132.3	0.7	229493	HCORE			A17-00314	<0.005	90% quartz-carb-chlorite vein. Rare trc PY sct in vein.

132.3	133	0.7	229494	HCORE			A17-00314	<0.005	Oxidized fracture surfaces. No significant mineralization or veining.
		0	229495	Blank		Blank	A17-00314	<0.005	
133	134	1	229496	HCORE			A17-00314	<0.005	Oxidized fracture surfaces. No significant mineralization or veining.
134	135	1	229497	HCORE			A17-00314	<0.005	Trc PY sct in quartz-carb-calcite veins and in host metavolcanic
135	136	1	229498	HCORE			A17-00314	<0.005	No significant veining or mineralization in metavolcanic
136	137	1	229499	HCORE			A17-00314	<0.005	No significant veining or mineralization in metavolcanic
137	138	1	229500	HCORE			A17-00314	<0.005	HFZ with 10cm fault gouge. No significant mineralization.
138	139	1	265401	HCORE			A17-00360	0.011	Trc PY associated with silicified zones in metavolcanic and in quartz-carb veins.
		0	265402	STD		CDN_GS_P7J	A17-00360	0.673	
139	140	1	265403	HCORE			A17-00360	<0.005	No significant veining or mineralization in metavolcanic
140	141	1	265404	HCORE			A17-00360	<0.005	3cm vuggy quartz-calcite vein with trc Py sct in vein.
141	142	1	265405	HCORE			A17-00360	0.012	3cm vuggy quartz-calcite vein with trc Py sct in vein.
142	143	1	265406	HCORE			A17-00360	<0.005	Grey quartz-calcite extension veins and stringers
143	144	1	265407	HCORE			A17-00360	<0.005	Grey quartz-calcite extension veins and stringers
144	145	1	265408	HCORE			A17-00360	<0.005	Grey quartz-calcite extension veins and stringers
145	146	1	265409	HCORE			A17-00360	<0.005	Vuggy quartz-calcite veins
		0	265410	DUP	265409		A17-00360	<0.005	
146	147	1	265411	HCORE			A17-00360	0.008	13cm vuggy quartz-calcite-chlorite vein with up to 1% PY sct locally around vein.
147	148	1	265412	HCORE			A17-00360	<0.005	Vuggy quartz-calcite veins with local trc PY
148	149	1	265413	HCORE			A17-00360	<0.005	Vuggy quartz-calcite veins with local trc PY
149	150	1	265414	HCORE			A17-00360	<0.005	Vuggy quartz-calcite veins with local trc PY
169	170	1	265415	HCORE			A17-00360	<0.005	Vuggy quartz-calcite veins with local trc PY
190	191	1	265416	HCORE			A17-00360	<0.005	No significant veining or mineralization in gabbroic metavolcanic
		0	265417	STD		CDN_GS_P4B	A17-00360	0.422	
196	197	1	265418	HCORE			A17-00360	<0.005	Ultramafic volcanic with trc PY sct in host and rare trc PY sct in 10cm vuggy quartz-calcite vein
197	198	1	265419	HCORE			A17-00360	<0.005	Rare lcl trc PY sct in and around vuggy quartz-calcite veins in ultramafic

198	198.67	0.67	265420	HCORE			A17-00360	<0.005	Rare lcl trc PY sct in and around vuggy quartz-calcite veins in ultramafic
198.67	199.9	1.23	265421	HCORE			A17-00360	<0.005	Subvertical quartz-calcite extension veins with rare lcl trc PY sct.
		0	265422	Blank		Blank	A17-00360	<0.005	
199.9	201	1.1	265423	HCORE			A17-00360	<0.005	Silicified vuggy quartz-calcite vein with trc PY
216	217	1	265424	HCORE			A17-00360	<0.005	Rare lcl trc PY sct in and around few vuggy quartz-calcite veins in metavolcanic
217	218	1	265425	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
218	219	1	265426	HCORE			A17-00360	<0.005	Trc PY sct in and around quartz-calcite veins in metavolcanic
219	220.1	1.1	265427	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
220.1	221.05	0.95	265428	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
		0	265429	STD		CDN_GS_P7J	A17-00360	0.744	
221.05	222	0.95	265430	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
222	223	1	265431	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
223	224	1	265432	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
224	225	1	265433	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
225	226	1	265434	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
226	227	1	265435	HCORE			A17-00360	<0.005	HFZ's in metavolcanic associated with vuggy quartz-calcite veins. Trc Py sct in veins and at vein margins.
227	228	1	265436	HCORE			A17-00360	<0.005	2cm quartz-calcite vein with trc PY sct along margins of vein
		0	265437	DUP	265436		A17-00360	<0.005	
228	229	1	265438	HCORE			A17-00360	<0.005	Grey quartz-calcite veins and hem stained quartz-carb-calcite veins with trc PY
229	230	1	265439	HCORE			A17-00360	<0.005	Vuggy quartz-carb-cal veins (with hem staining) and trc PY
230	231	1	265440	HCORE			A17-00360	<0.005	Vuggy quartz-carb-cal veins (with hem staining) and trc PY

231	232	1	265441	HCORE		A17-00360	<0.005	10cm HFZ with lcl rare trc PY sct along fracture surfaces
232	233	1	265442	HCORE		A17-00360	<0.005	2.5cm hematite stained quartz-calcite veins with trc PY
233	234	1	265443	HCORE		A17-00360	<0.005	2.5cm hematite stained quartz-calcite veins with trc PY
		0	265444	STD	CDN_GS_P4B	A17-00360	0.407	
234	235	1	265445	HCORE		A17-00360	<0.005	10cm HFZ. Vuggy quartz-calcite veins with hem staining and trc PY sct in and around veins
235	236	1	265446	HCORE		A17-00360	<0.005	10cm HFZ. Vuggy quartz-calcite veins with hem staining and trc PY sct in and around veins
236	237	1	265447	HCORE		A17-00360	<0.005	3.5cm vuggy quartz-calcite with trc PY
237	238	1	265448	HCORE		A17-00360	0.007	3.5cm vuggy quartz-calcite with trc PY
238	239	1	265449	HCORE		A17-00360	<0.005	Moderate shearing in metavolcanic with trc PY sct along margins of quartz-carb vein
239	240	1	265450	HCORE		A17-00360	<0.005	2 10 cm HFZ's in metavolcanic. 1% PY sct along fracture surfaces and associated with vuggy quartz-calcite veins.
240	241	1	265451	HCORE		A17-00360	<0.005	Trc PY sct along margins of vuggy quartz-calcite veins
		0	265452	Blank	Blank	A17-00360	<0.005	
241	242	1	265453	HCORE		A17-00360	<0.005	Trc PY sct along margins of vuggy quartz-calcite veins
242	243	1	265454	HCORE		A17-00360	<0.005	Trc PY sct along margins of vuggy quartz-calcite veins
243	244	1	265455	HCORE		A17-00360	<0.005	Quartz-calcite hem stained extension veins with lcl trc PY around veins
244	245	1	265456	HCORE		A17-00360	<0.005	Grey quartz-calcite veins and hem stained extension veins. No significant mineralization.
245	246	1	265457	HCORE		A17-00360	<0.005	30cm HFZ in metavolcanic with vuggy quartz-calcite veins. Trc PY sct in host, replacing chlorite and in and around vuggy veins.
246	247	1	265458	HCORE		A17-00360	0.01	30cm HFZ in metavolcanic with vuggy quartz-calcite veins. Trc PY sct in host, replacing chlorite and in and around vuggy veins. Grey quartz-calcite veins.
		0	265459	STD	CDN_GS_P7J	A17-00360	0.708	
247	248	1	265460	HCORE		A17-00360	<0.005	Moderately silicified and brecciated. HFZ in metavolcanic with trc PY sct around vuggy quartz-calcite veins.
248	249	1	265461	HCORE		A17-00360	<0.005	Moderately silicified and brecciated. HFZ in metavolcanic with trc PY sct around vuggy quartz-calcite veins.

249	250	1	265462	HCORE			A17-00360	<0.005	Grey quartz-calcite veins in metavolcanic with HFZ.
250	251	1	265463	HCORE			A17-00360	<0.005	Entire interval contains rubbly, fractured core (faulted). Trc PY sct along fracture surfaces and associated with vuggy quartz-calcite veins.
251	252	1	265464	HCORE			A17-00360	<0.005	Entire interval contains rubbly, fractured core (faulted). Trc PY sct along fracture surfaces and associated with vuggy quartz-calcite veins.
252	253	1	265465	HCORE			A17-00360	<0.005	Vuggy quartz-calcite veins with trc PY sct in and around veins.
253	254	1	265466	HCORE			A17-00360	<0.005	40cm HFZ. Trc PY sct in and around vuggy quartz-carb veins and associated with fracture surfaces in HFZ.
		0	265467	DUP	265466		A17-00360	<0.005	
254	255	1	265468	HCORE			A17-00360	<0.005	20cm HFZ. Trc PY sct in and around vuggy quartz-carb veins and associated with fracture surfaces in HFZ.
255	256	1	265469	HCORE			A17-00360	<0.005	Trc PY sct in and around vuggy quartz-calcite veins in metavolcanic
256	257	1	265470	HCORE			A17-00360	<0.005	HFZ. Trc PY sct in and around vuggy quartz-calcite veins in metavolcanic
257	258	1	265471	HCORE			A17-00360	0.006	HFZ. Trc PY sct in and around vuggy quartz-calcite veins in metavolcanic
258	259	1	265472	HCORE			A17-00360	<0.005	HFZ. Trc PY sct in and around vuggy quartz-calcite veins in metavolcanic
259	260	1	265473	HCORE			A17-00360	0.005	Trace sct PY in and around vuggy qtz/cal veinlets.
		0	265474	STD		CDN_GS_P4B	A17-00360	0.461	
260	261	1	265475	HCORE			A17-00360	<0.005	Barren.
261	262	1	265476	HCORE			A17-00360	<0.005	Barren.
262	263	1	265477	HCORE			A17-00360	<0.005	Two 1.5cm wide qtz/cal veinlets with assc trace sct PY.
263	264	1	265478	HCORE			A17-00360	<0.005	One <1cm wide vuggy calcite veinlet with trace sct PY.
264	265	1	265479	HCORE			A17-00360	<0.005	One 2cm wide qtz/cal veinlet.
265	266	1	265480	HCORE			A17-00360	<0.005	Barren.
		0	265481	Blank		Blank	A17-00360	<0.005	
266	267	1	265482	HCORE			A17-00360	<0.005	Barren.
267	268	1	265483	HCORE			A17-00360	0.005	Barren.
268	269	1	265484	HCORE			A17-00360	<0.005	Two 1cm wide qtz/cal veinlet with trace sct PY.
269	270	1	265485	HCORE			A17-00360	<0.005	Barren.
270	271	1	265486	HCORE			A17-00360	<0.005	Barren.

271	272	1	265487	HCORE			A17-00360	0.005	Barren.
		0	265488	STD		CDN_GS_P7J	A17-00360	0.961	
272	273	1	265489	HCORE			A17-00360	<0.005	One .5cm wide vuggy calcite veinlet with trace sct PY.
273	274	1	265490	HCORE			A17-00360	<0.005	Barren.
274	275	1	265491	HCORE			A17-00360	<0.005	One 0.5cm wide qtz/cal veinlet with trace sct PY.
275	276	1	265492	HCORE			A17-00360	<0.005	Two 0.5cm wide vuggy qtz/cal veinlet with trace sct PY.
276	277	1	265493	HCORE			A17-00360	<0.005	10cm area of weak brecciation and one stringer of PY.
277	278	1	265494	HCORE			A17-00360	0.015	Barren.
		0	265495	DUP	265494		A17-00360	<0.005	
278	279	1	265496	HCORE			A17-00360	<0.005	One .75cm wide qtz/cal veinlet with trace sct PY.
279	280	1	265497	HCORE			A17-00360	<0.005	Barren.
280	281	1	265498	HCORE			A17-00360	<0.005	Barren.
281	282	1	265499	HCORE			A17-00360	<0.005	Barren.
282	283	1	265500	HCORE			A17-00360	<0.005	Barren.
283	284	1	265501	HCORE			A17-00360	<0.005	Barren.
		0	265502	STD		CDN_GS_P4B	A17-00360	0.459	
284	285	1	265503	HCORE			A17-00360	<0.005	Barren.
285	286	1	265504	HCORE			A17-00360	<0.005	Barren.
286	287	1	265505	HCORE			A17-00360	<0.005	Barren.
287	288	1	265506	HCORE			A17-00360	<0.005	Barren.
288	289	1	265507	HCORE			A17-00360	<0.005	Barren.
289	290	1	265508	HCORE			A17-00360	<0.005	Barren.
		0	265509	Blank		Blank	A17-00360	<0.005	
290	291	1	265510	HCORE			A17-00360	0.005	Barren.
291	292	1	265511	HCORE			A17-00562	0.005	Barren.
292	293	1	265512	HCORE			A17-00562	<0.005	Barren.
293	294	1	265513	HCORE			A17-00562	0.005	Barren.
294	295	1	265514	HCORE			A17-00562	<0.005	Barren.
295	296	1	265515	HCORE			A17-00562	<0.005	Barren.
296	297	1	265516	HCORE			A17-00562	0.006	Barren.
		0	265517	STD		CDN_GS_2P	A17-00562	2.09	
297	298	1	265518	HCORE			A17-00562	0.008	Barren.
298	299	1	265519	HCORE			A17-00562	0.007	Barren.
299	300	1	265520	HCORE			A17-00562	0.005	Barren.

300	301.1	1.1	265521	HCORE			A17-00562	0.005	Barren.
301.1	301.8	0.7	265522	HCORE			A17-00562	0.033	Moderately brecciated. 35cm of strongly silicified qtz/cal veining 1% sct PY. Host is also brecciated and silicified. Competant core except Two 1-2cm wide vuggy qtz/cal veinlets.
301.8	302.5	0.7	265523	HCORE			A17-00562	0.006	Weakly brecciated. Trace sct PY in host.
		0	265524	DUP	265523		A17-00562	<0.005	
302.5	303.2	0.7	265525	HCORE			A17-00562	0.007	Weakly brecciated. Trace sct PY in host.
303.2	303.55	0.35	265526	HCORE			A17-00562	0.032	Sample is a brecciated qtz/cal vein. Silicified. 4% sct PY throughout.
303.55	304	0.45	265527	HCORE			A17-00562	0.033	Weakly brecciated. Trace sct PY in host.
304	305	1	265528	HCORE			A17-00562	<0.005	Weakly brecciated. Trace sct PY in host.
305	306	1	265529	HCORE			A17-00562	0.01	Barren.
306	307	1	265530	HCORE			A17-00562	0.006	One 5cm wide qtz/cal veinlet. Silicified. 1% sct PY.
		0	265531	STD		CDN_GS_P4B	A17-00562	0.428	
307	308	1	265532	HCORE			A17-00562	0.005	Barren.
308	309	1	265533	HCORE			A17-00562	<0.005	Barren.
309	310	1	265534	HCORE			A17-00562	<0.005	Barren.
310	311	1	265535	HCORE			A17-00627	0.012	Barren.
311	312	1	265536	HCORE			A17-00627	<0.005	Barren.
312	313	1	265537	HCORE			A17-00627	0.006	Two 1cm wide qtz/cal veinlet with trace sct PY.
		0	265538	Blank		Blank	A17-00627	<0.005	
313	314	1	265539	HCORE			A17-00627	<0.005	Barren.
314	315	1	265540	HCORE			A17-00627	0.006	1.5cm wide qtz/cal veinlet.
315	316	1	265541	HCORE			A17-00627	0.005	Barren.
316	317	1	265542	HCORE			A17-00627	0.007	One .5cm wide vuggy qtz/cal veinlet with trace sct PY.
317	318	1	265543	HCORE			A17-00627	0.006	Barren.
318	319	1	265544	HCORE			A17-00627	<0.005	Barren.
319	320	1	265545	HCORE			A17-00627	0.007	Three <1cm wide vuggy qtz/cal veinlet with trace sct PY.
		0	265546	STD		CDN_GS_2P	A17-00627	2.04	Standard initially entered incorrectly as CDN_GS_1L checked book changed to CDN_GS_2P
320	321	1	265547	HCORE			A17-00627	0.006	Barren.
321	322	1	265548	HCORE			A17-00627	<0.005	Barren.
322	323	1	265549	HCORE			A17-00627	<0.005	One 1cm wide qtz/cal veinlet with trace sct PY.
323	324	1	265550	HCORE			A17-00627	<0.005	Barren.

324	325	1	265551	HCORE			A17-00627	<0.005	One .5cm wide qtz/cal veinlet with trace sct PY.
325	326	1	265552	HCORE			A17-00627	<0.005	One vuggy .5cm wide qtz/cal veinlet with trace sct PY.
326	327	1	265553	HCORE			A17-00627	<0.005	Barren.
		0	265554	DUP	265553		A17-00627	<0.005	
327	328	1	265555	HCORE			A17-00627	<0.005	One 1cm wide qtz/cal vuggy veinlet with trace sct PY.
328	329	1	265556	HCORE			A17-00627	<0.005	Barren.
329	330	1	265557	HCORE			A17-00627	<0.005	Barren.
330	331	1	265558	HCORE			A17-00627	<0.005	Three <.5cm wide qtz/cal veinlet with trace sct PY.
331	332	1	265559	HCORE			A17-00627	<0.005	Three <.5cm wide qtz/cal vuggy veinlets with trace sct PY.
332	333	1	265560	HCORE			A17-00627	<0.005	Barren.
		0	265561	STD		CDN_GS_P4B	A17-00627	0.432	
333	334	1	265562	HCORE			A17-00627	<0.005	One .5cm wide qtz/cal veinlet with trace sct PY.
334	335	1	265563	HCORE			A17-00627	<0.005	One 1cm wide vuggy qtz/cal veinlet with trace sct PY.
335	336	1	265564	HCORE			A17-00627	0.006	Barren. 10cm is silicified next to 2-4cm of rubbly core with trace sct PY on fractures.
336	337	1	265565	HCORE			A17-00627	<0.005	Barren.
337	338	1	265566	HCORE			A17-00627	<0.005	One white 1cm wide qtz/cal veinlet with trace sct py. Vuggy.
338	339	1	265567	HCORE			A17-00627	<0.005	One 2cm wide white; weakly vuggy qtz/cal veinlet with a 15cm silicified halo in host and weakly brecciated. Trace sct PY on veinlet margins.
339	340	1	265568	HCORE			A17-00627	<0.005	Barren. 20cm of sample is weakly silicified and brecciated. No sig minz.
		0	265569	Blank		Blank	A17-00627	<0.005	
340	341	1	265570	HCORE			A17-00627	0.005	One 2cm wide qtz/cal veinlet with trace sct PY.
341	342	1	265571	HCORE			A17-00627	0.008	One 2cm wide qtz/cal veinlet with trace sct PY. 50cm of sample is weakly silicified and weakly brecciated.
342	343	1	265572	HCORE			A17-00627	<0.005	One 2cm wide silicified qtz/cal veinlet with 1% sct PY haloing into host.
343	344	1	265573	HCORE			A17-00627	<0.005	Barren.
344	345	1	265574	HCORE			A17-00627	0.006	Barren.
345	346	1	265575	HCORE			A17-00627	<0.005	Barren.
		0	265576	STD		CDN_GS_2P	A17-00627	1.74	
346	347	1	265577	HCORE			A17-00627	<0.005	One <.5cm wide qtz/cal vuggy veinlet with trace sct PY.

347	348	1	265578	HCORE			A17-00627	0.005	One .5cm wdie qtz/cal vuggy veinlet with trace sct PY.
348	349	1	265579	HCORE			A17-00627	<0.005	Barren.
349	350	1	265580	HCORE			A17-00627	<0.005	Barren.
350	351	1	265581	HCORE			A17-00627	0.006	Barren.
351	352	1	265582	HCORE			A17-00627	<0.005	Barren.
352	353	1	265583	HCORE			A17-00627	<0.005	One qtz/cal/epd veinlet (pillow) with 1% sct PY.
		0	265584	DUP	265583		A17-00627	<0.005	
353	354	1	265585	HCORE			A17-00627	0.005	Barren.
354	355	1	265586	HCORE			A17-00627	<0.005	Three 0.5-1cm wide vuggy qtz/cal veinlet with trace sct PY.
355	356	1	265587	HCORE			A17-00627	<0.005	One .5cm wide vuggy qtz/cal veinlet with trace sct PY.
356	357	1	265588	HCORE			A17-00627	0.009	20cm of white qtz/cal veinlet with no sig minz.
357	358	1	265589	HCORE			A17-00627	0.006	5cm of white qtz/cal veinlets.
358	359	1	265590	HCORE			A17-00627	<0.005	5cm of qtz/cal ank veinlet.
		0	265591	STD		CDN_GS_P4B	A17-00627	0.352	
359	359.85	0.85	265592	HCORE			A17-00627	<0.005	6cm of qtz/cal/ank veinlets. Trace sct PY in host. Weakly brecciated.
359.85	360.5	0.65	265593	HCORE			A17-00627	0.005	10cm area with strong foliation; qtz/cal flooding; and 2% sct PY. Rest is foliated mafic volcanic with 5cm qtz/cal ank veinlets. Trace sct PY throughout host.
360.5	361.5	1	265594	HCORE			A17-00627	0.009	Foliated mafic volcanic with 10cm qtz/cal veinlets. Weakly silicified.
361.5	362.42	0.92	265595	HCORE			A17-00627	<0.005	Silicified mafic volcanic. Mod foliated. 8cm qtz/cal/ank veinlets. Trace sct PY in host and along veinlet margins.
362.42	363	0.58	265596	HCORE			A17-00627	<0.005	Silicified mafic volcanic. Mod foliated. 5cm qtz/cal/ank veinlets. Trace sct PY
363	364	1	265597	HCORE			A17-00627	0.012	Shear zone. Strong sericite. 4cm qtz/cal veinlets. Trace sct PY throughout.
364	365	1	265598	HCORE			A17-00627	0.009	Shear zone. Moderate sericite. 4cm qtz/cal veinlets. Trace sct PY throughout.
		0	265599	Blank		Blank	A17-00627	<0.005	
365	366	1	265600	HCORE			A17-00627	0.014	Shear zone. Moderate sericite. 4cm qtz/cal veinlets. 1cm of spec hem veinlet. Trace sct PY throughout.
366	367	1	265601	HCORE			A17-00627	0.01	Shear zone. Strong sericite. 6cm qtz/cal veinlets. Trace sct PY throughout.
367	368	1	265602	HCORE			A17-00627	0.016	Shear zone. Strong sericite. 4cm qtz/cal veinlets. Trace sct PY throughout.

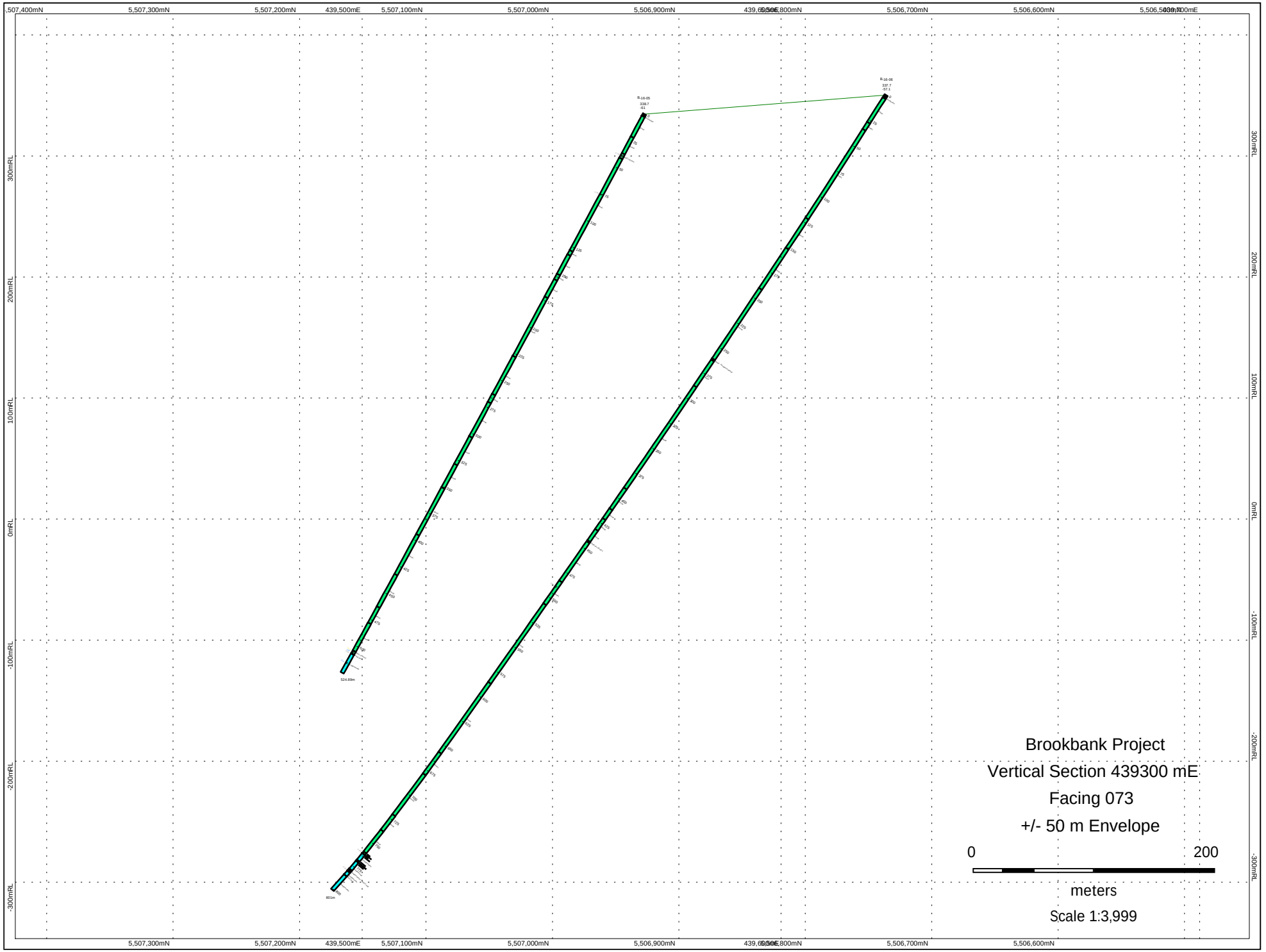
368	369	1	265603	HCORE			A17-00627	0.017	Shear zone. Very strong sericite. 8cm qtz/cal veinlets. Trace sct PY throughout.
369	370	1	265604	HCORE			A17-00627	0.015	Shear zone. Strong sericite. Mod hem staining. 2cm of qtz/cal veinlets. Trace sct PY throughout.
370	371	1	265605	HCORE			A17-00627	0.029	Shear Zone. Strong sericite. Strong hem staining. 4cm of qtz/cal veinlets. 2cm of specular hematite. 2% FG diss PY throughout.
371	371.36	0.36	265606	HCORE			A17-00627	0.016	Ultramafic. No sig minz. 2cm of qtz/cal veinlets parallel to fol.
		0	265607	STD		CDN_GS_2P	A17-00627	1.95	
371.36	372	0.64	265608	HCORE			A17-00627	0.005	Silicified mafic volcanic. 2cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
372	373	1	265609	HCORE			A17-00627	<0.005	Silicified mafic volcanic. 6cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
373	374	1	265610	HCORE			A17-00627	0.006	Silicified mafic volcanic. 7cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
374	375	1	265611	HCORE			A17-00627	0.006	Silicified mafic volcanic. 6cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
375	376	1	265612	HCORE			A17-00627	0.006	Silicified mafic volcanic. 6cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
376	377	1	265613	HCORE			A17-00627	0.011	Silicified mafic volcanic. 6cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
		0	265614	DUP	265615		A17-00627	0.008	
377	378	1	265615	HCORE			A17-00627	0.007	Silicified mafic volcanic. 7cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
378	379	1	265616	HCORE			A17-00627	0.007	Silicified mafic volcanic. 5cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
379	380	1	265617	HCORE			A17-00627	0.009	Silicified mafic volcanic. 6cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
380	381	1	265618	HCORE			A17-00627	0.007	Silicified mafic volcanic. 8cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
381	382	1	265619	HCORE			A17-00627	0.006	Silicified mafic volcanic. 4cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
382	383	1	265620	HCORE			A17-00627	0.008	Silicified mafic volcanic. 7cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets and in host.

383	384	1	265621	HCORE			A17-00627	0.008	Silicified mafic volcanic. 6cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
		0	265622	STD		CDN_GS_P4B	A17-00627	0.39	
384	385	1	265623	HCORE			A17-00627	<0.005	Silicified mafic volcanic. 5cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
385	386	1	265624	HCORE			A17-00627	0.006	Weakly silicified mafic volcanic. 4cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
386	387	1	265625	HCORE			A17-00627	0.012	Weakly silicified mafic volcanic. 4cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
387	388	1	265626	HCORE			A17-00627	0.006	Weakly silicified and brecciated mafic volcanic. 8cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
388	389	1	265627	HCORE			A17-00627	0.005	Weakly silicified and brecciated mafic volcanic. 8cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
389	390	1	265628	HCORE			A17-00627	0.006	Weakly silicified and brecciated mafic volcanic. 5cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
		0	265629	Blank		Blank	A17-00627	<0.005	
390	390.77	0.77	265630	HCORE			A17-00627	0.01	Silicified mafic volcanic. 8cm of qtz/cal veinlets. Trace sct PY in and haloing veinlets.
390.77	391.8	1.03	265631	HCORE			A17-00627	<0.005	Barren.
391.8	392.9	1.1	265632	HCORE			A17-00699	0.005	Barren.
392.9	394	1.1	265633	HCORE			A17-00699	<0.005	Barren.
394	395	1	265634	HCORE			A17-00699	<0.005	Barren.
395	396	1	265635	HCORE			A17-00699	<0.005	Barren.
396	397	1	265636	HCORE			A17-00699	<0.005	Barren.
		0	265637	STD		CDN_GS_2P	A17-00699	2.09	
397	398	1	265638	HCORE			A17-00699	<0.005	Barren.
398	399	1	265639	HCORE			A17-00699	0.008	One 1cm wide vuggy qtz/cal veinlet with trace sct PY.
399	400	1	265640	HCORE			A17-00699	0.005	Two <1cm wide vuggy qtz/cal veinlet with trace sct PY. One 1cm wide qtz/cal veinlet with 5% sct PY within.
400	401	1	265641	HCORE			A17-00699	<0.005	Three <1cm wide vuggy qtz/cal veinlet with trace sct PY.
401	402	1	265642	HCORE			A17-00699	0.01	6cm wide qtz flooding zone with 1% sct PY. Trace PY in host.
402	403	1	265643	HCORE			A17-00699	<0.005	4cm wide qtz flooding zone. 1% sct PY.
		0	265644	DUP	265643		A17-00699	0.005	

403	404	1	265645	HCORE		A17-00699	<0.005	Barren.
404	405	1	265646	HCORE		A17-00699	<0.005	Barren.
405	406	1	265647	HCORE		A17-00699	<0.005	2cm wide silicfied qtz/cal veinlet with trace sct PY in and haloing into host.
406	407	1	265648	HCORE		A17-00699	<0.005	Barren.
407	408	1	265649	HCORE		A17-00699	<0.005	One <.5cm wide vuggy qtz/cal veinlet with trace sct PY.
408	409	1	265650	HCORE		A17-00699	<0.005	Three .5cm wide vuggy qtz/cal veinlets with trace sct PY.
409	410	1	265651	HCORE		A17-00699	<0.005	One .5cm wide vuggy qtz/cal veinlets with trace sct PY.
		0	265652	STD	CDN_GS_P4B	A17-00699	0.429	
410	411	1	265653	HCORE		A17-00699	<0.005	Three .5cm wide vuggy qtz/cal veinlets with trace sct PY.
411	412	1	265654	HCORE		A17-00699	<0.005	Two .5cm wide vuggy qtz/cal veinlets with trace sct PY.
412	413	1	265655	HCORE		A17-00699	<0.005	Two <.5cm wide vuggy qtz/cal veinlets with trace sct PY.
413	414	1	265656	HCORE		A17-00699	<0.005	Barren.
414	415	1	265657	HCORE		A17-00699	<0.005	Barren.
415	416	1	265658	HCORE		A17-00699	<0.005	Barren.
		0	265659	Blank	Blank	A17-00699	<0.005	
416	417	1	265660	HCORE		A17-00699	<0.005	One .5cm wide vuggy qtz/cal veinlet with trace sct PY.
417	418	1	265661	HCORE		A17-00699	<0.005	Two 1cm wide vuggy qtz/cal veinlets with trace sct PY.
418	419	1	265662	HCORE		A17-00699	<0.005	Barren.
419	420	1	265663	HCORE		A17-00699	<0.005	Four <.5cm wide vuggy qtz/cal veinelts with trace sct PY.
420	421	1	265664	HCORE		A17-00699	<0.005	Two 1cm wide vuggy qtz/cal veinlets with trace sct PY.
421	422	1	265665	HCORE		A17-00699	<0.005	Three .5cm wide vuggy qtz/cal veinlets with trace sct PY.
422	423	1	265666	HCORE		A17-00699	0.014	25cm wide area of vuggy qtz/cal veinlets with 2% sct PY.
		0	265667	STD	CDN_GS_2P	A17-00699	1.91	
423	424	1	265668	HCORE		A17-00699	<0.005	Two .5cm wide vuggy qtz/cal veinlets with trace sct PY.
424	425	1	265669	HCORE		A17-00699	<0.005	Barren.
425	426	1	265670	HCORE		A17-00699	<0.005	Barren.
426	427	1	265671	HCORE		A17-00699	<0.005	Barren.
427	428	1	265672	HCORE		A17-00699	<0.005	Barren.
428	429	1	265673	HCORE		A17-00699	<0.005	Barren.

		0	265674	DUP	265673	A17-00699	<0.005	
429	430	1	265675	HCORE		A17-00699	<0.005	Barren.
430	431	1	265676	HCORE		A17-00699	<0.005	Barren.
431	432	1	265677	HCORE		A17-00699	<0.005	Barren.

Au Assay result colour coding | Au >1 g/t | Au <1 and >0.5 g/t | Au <0.5 and >0.1 g/t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Brookbank Project
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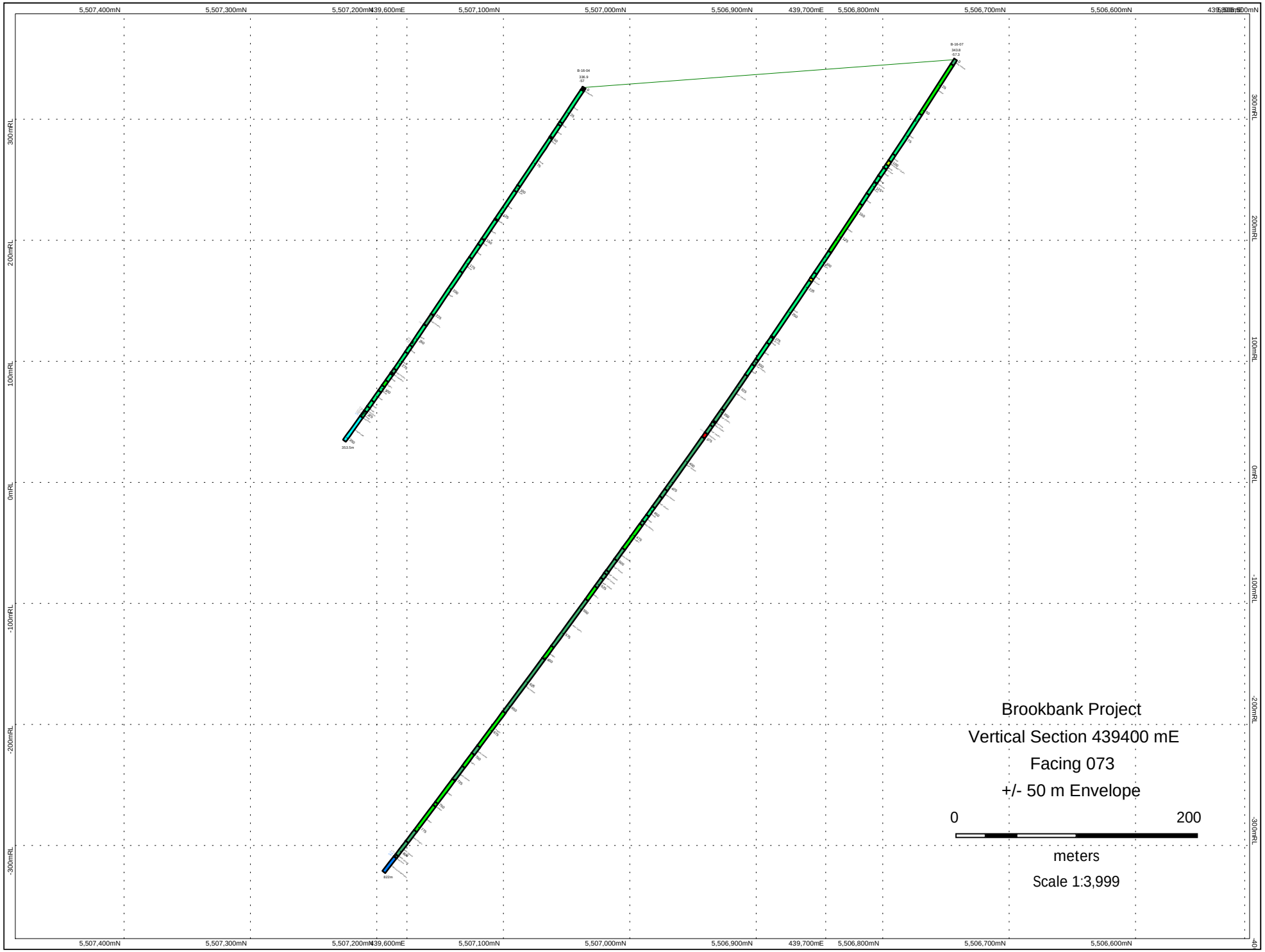
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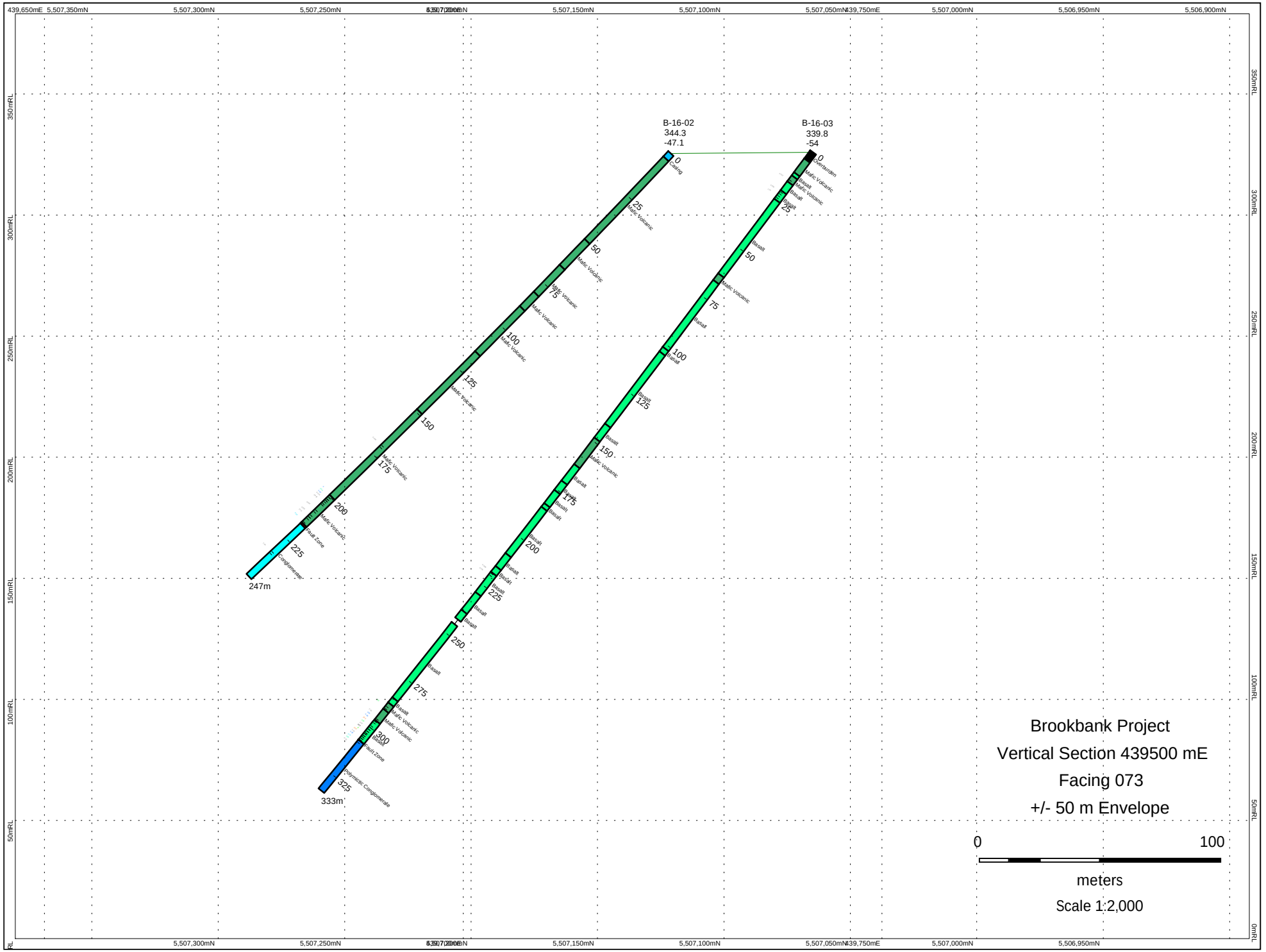
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B-16-03
339.8
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Casing
Overburden
Mafic Volcanic
Basalt
Fault Zone
Conglomerate
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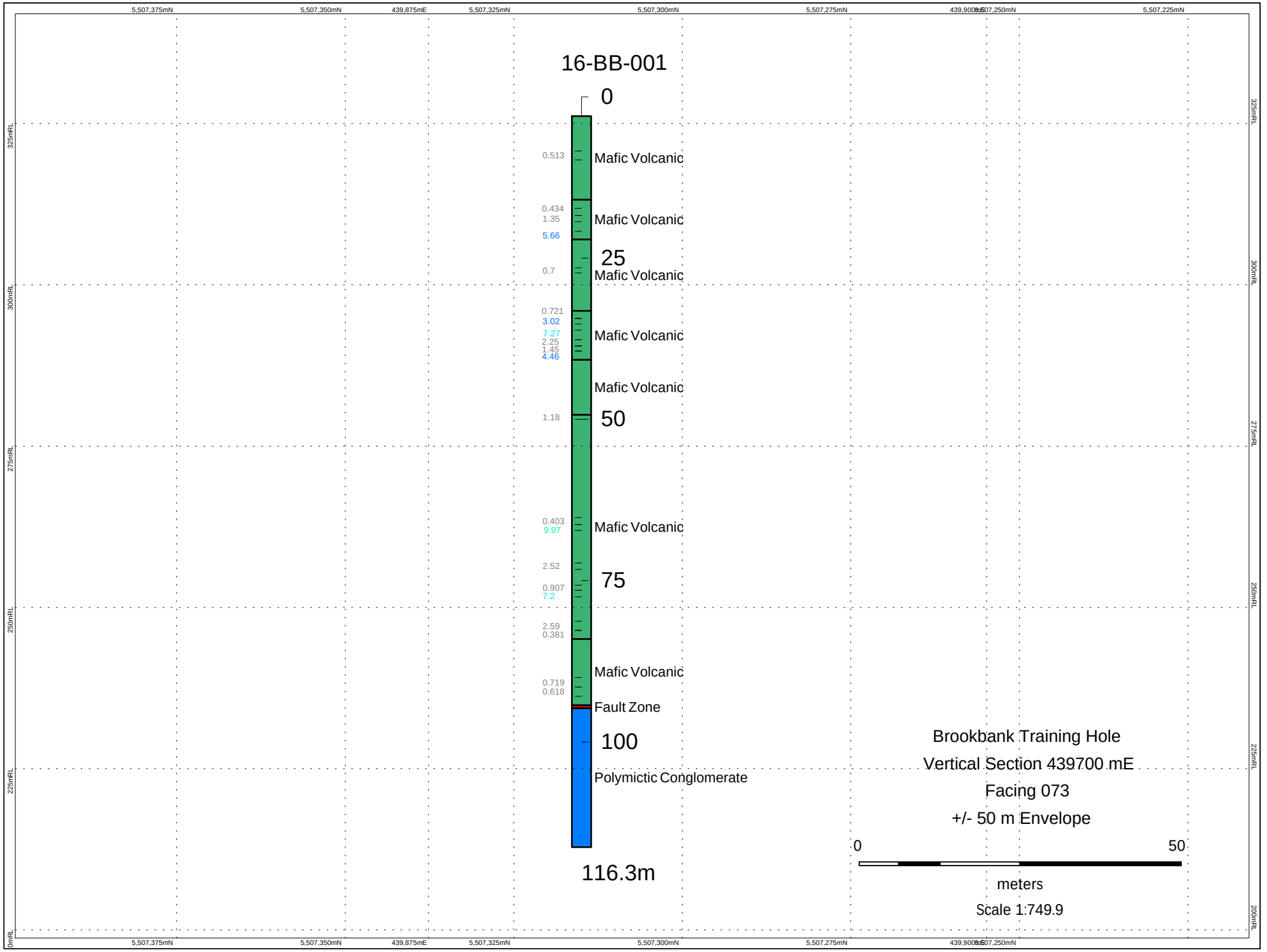
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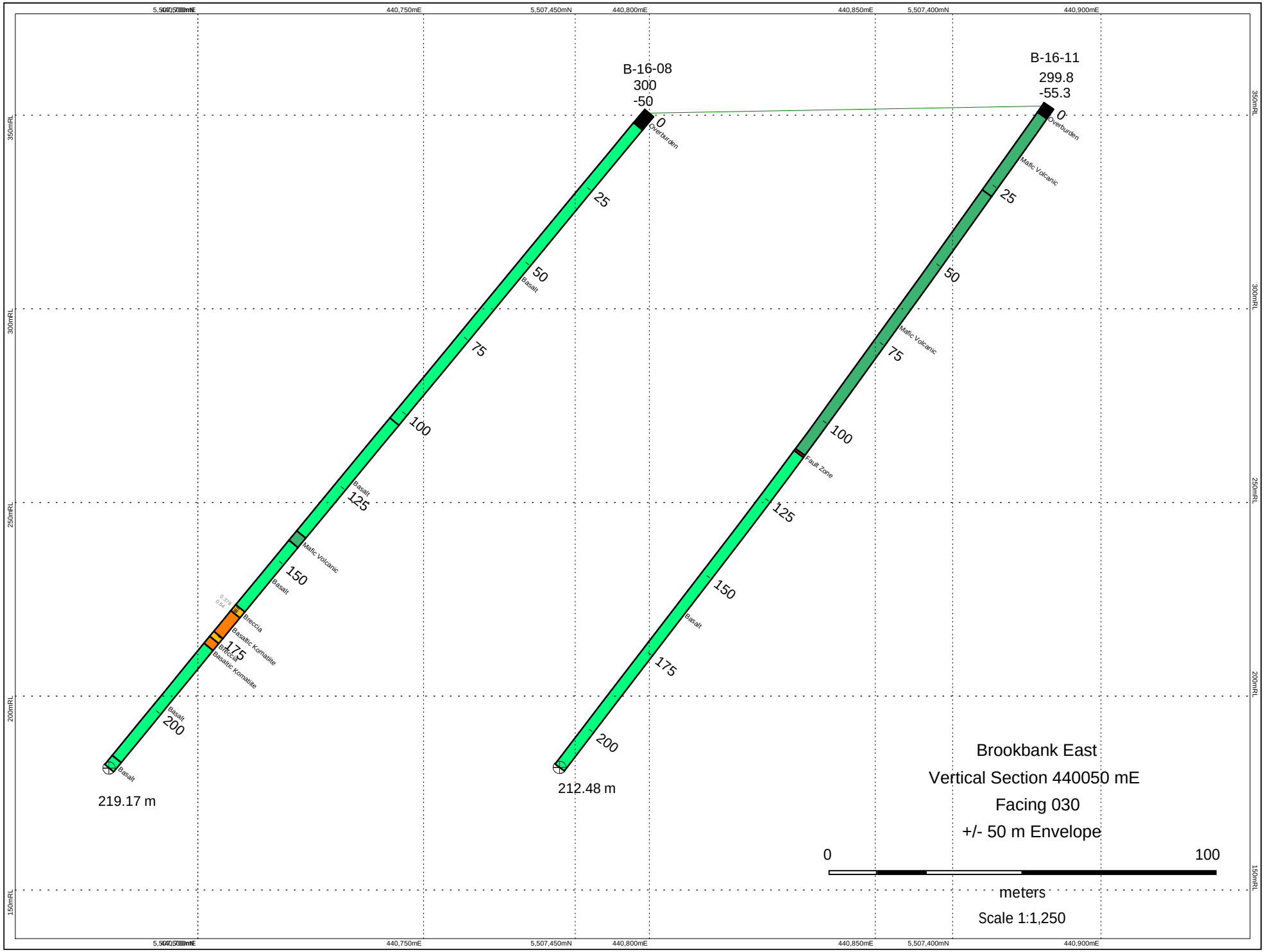
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Breccia
Basaltic Komatiite
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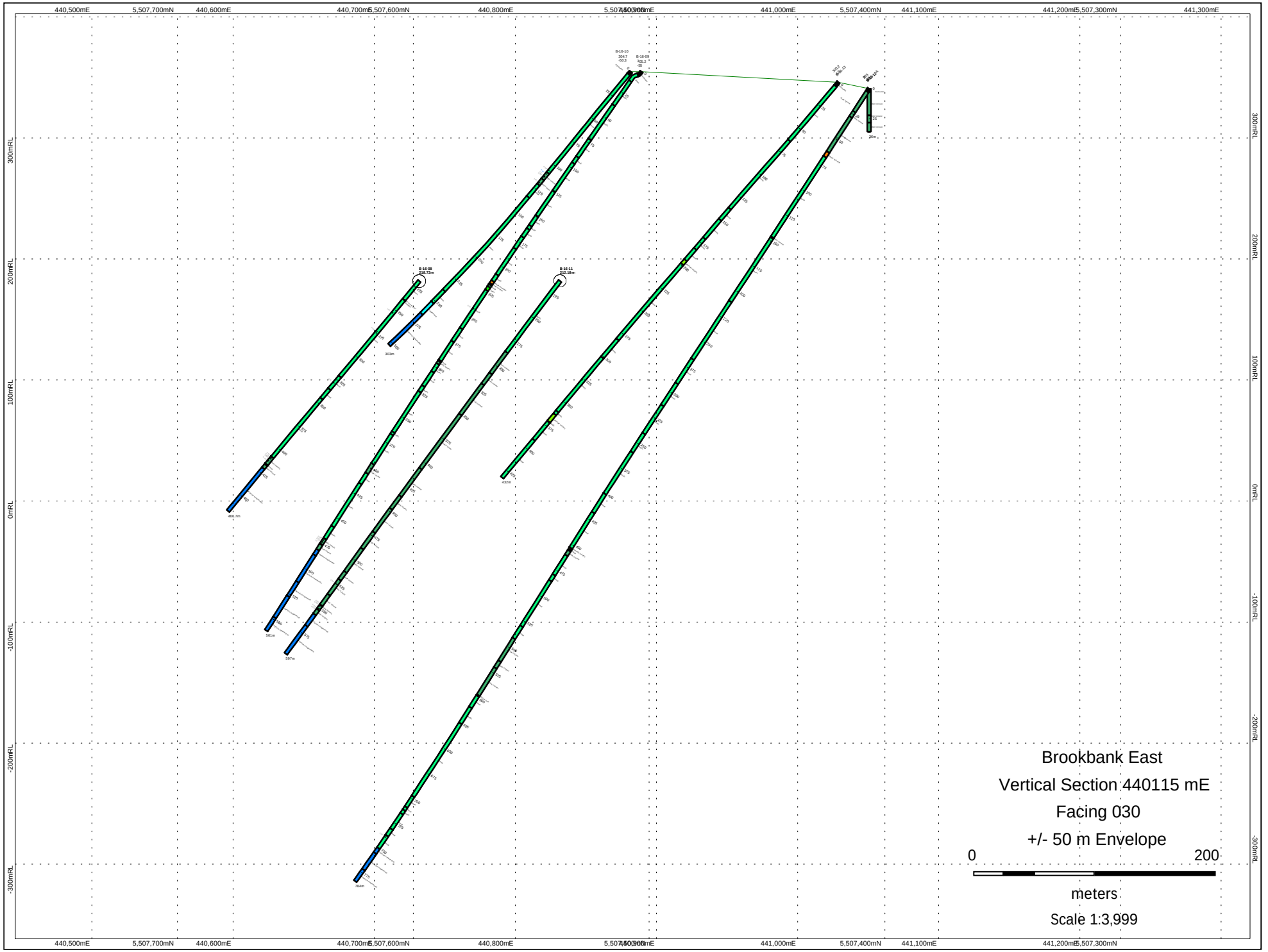
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Brookbank East
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meters
Scale 1:3,999

Test Date	Test Time	Project	Drillhole	Prospect	Depth From	Depth To	Grid	Easting	Northing	Sampler Name	Sample Id	Sample Type	Comments	Reading Number	Mode	LOD Sigma	Instrument SN	Instrument Mode	Tube Anode	QAQC Type	QAQC Name	Packaging	Preparation
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12/08/2016	14:54:13 PM	Brookbank	B-16-03		112	113		0	0	S. Oquin	246132	pXRFCup		763	Geochem	3	512403	DELTA_SDD	RH				
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Sample Id	Mg_ppm	Mg_ppm_Error	Al_ppm	Al_ppm_Error	Si_ppm	Si_ppm_Error	P_ppm	P_ppm_Error	S_ppm	S_ppm_Error	K_ppm	K_ppm_Error	Ca_ppm	Ca_ppm_Error	Ti_ppm	Ti_ppm_Error	V_ppm	V_ppm_Error	Cr_ppm	Cr_ppm_Error	Mn_ppm	Mn_ppm_Error	Fe_ppm	Fe_ppm_Error
246133	36702.77	2862.75	56723.39	845.33	193536.92	948.51	0	127.29	0	80.62	5969	52.39	73697.85	321.35	4156.21	92.33	344.28	38.07	0	50.46	1640.93	29.13	106363.18	468.91
246132	36634.63	2602.19	59740.38	820.73	210966.94	943.92	0	118.35	220.72	34.87	3705.83	43.17	79277.6	318.4	4038.23	89.31	254.69	36.12	52.21	14.59	1683.28	28.61	104284.37	426.55
246131	34644.77	2712.28	56596.37	813.8	199999.21	933.46	0	122.22	144.49	34.72	943.05	34.2	86799.81	358.07	4111.12	91.55	258.37	36.97	45.22	14.8	1742.93	29.63	104237.08	441.04
246130	26163.1	2598.6	55171.89	795.4	203455.36	926.81	0	121.04	1249.42	39.97	676.85	33.08	85598.71	345.89	3903.12	89.25	203.93	35.8	0	49.28	1594.13	28.12	93404.88	391.01
246129	33976.26	2693.71	52916.32	792.48	209833.67	962.42	0	121.69	863.3	38.43	829.01	33.79	80571.18	332.13	3734.16	88.09	200.83	35.52	63.37	14.75	1612.5	28.4	99061.97	418.61
246128	27657.55	2711.48	57265.47	828.13	197432.77	937.64	0	125.36	0	79.06	2653.44	39.88	75149.39	317.45	3899.49	89.34	276.09	36.53	74.99	15.1	1618.37	28.64	104384.08	447.62
246127	25982.56	2715.21	58831.31	840.59	201955.96	958.06	0	128.12	3407.25	51.32	2964.94	41.59	65003.6	278.65	4270.45	91.75	359.77	37.63	71.53	15.09	1619.11	28.59	105571.89	453.72
246125	31779.51	2730.35	59818.99	839.87	197765.99	941.23	0	125.57	1449.88	41.48	2107.38	38.13	68239.84	290.78	4196.49	91.03	273.94	36.59	0	49.71	1600.84	28.27	101426.91	436.71
246124	40750.98	2713.88	57923.13	820.19	202459.66	935.54	0	119.54	0	75.26	5152.11	47.37	67866.96	282.58	3701.61	85.15	208.19	34.41	0	47.97	1593.69	27.44	99606.54	418.99
246123	38140.44	2874.22	55529.51	832.45	168904.09	847.07	0	124	1070.4	37.69	7474.92	55.57	89422.01	381.83	3631.04	86.55	228	35.27	80.76	14.82	1276.97	25.54	96389.85	424.34
246122	31108.88	2719.53	56718.14	848.73	173868.36	844.43	0	118.44	0	74.5	18534.59	97.03	80461.2	336.41	3576.74	86.46	278.37	36.06	0	49.28	1243.98	25.28	95485.14	409.69
246120	26284.67	2615.8	38291.3	700.36	201898.65	906.48	0	117.22	10081.36	75.89	3695.65	41.05	91081.17	363.59	2843.39	80.66	269.88	35.35	0	47.66	1209.12	24.6	67138.79	289.53
246119	33738.18	2865.54	50191.59	795.11	170776.88	848.32	0	123.14	669.7	35.18	3841.3	41.21	94227.62	398.82	3429.34	84.38	257.85	35.1	79.09	14.63	1400.18	26.2	86312.4	381.55

Sample Id	Co_ppm	Co_ppm_Error	Ni_ppm	Ni_ppm_Error	Cu_ppm	Cu_ppm_Error	Zn_ppm	Zn_ppm_Error	As_ppm	As_ppm_Error	Se_ppm	Se_ppm_Error	Rb_ppm	Rb_ppm_Error	Sr_ppm	Sr_ppm_Error	Y_ppm	Y_ppm_Error	Zr_ppm	Zr_ppm_Error	Nb_ppm	Nb_ppm_Error	Mo_ppm	Mo_ppm_Error
246133	0	167.34	75.65	6.15	167.28	6.71	110.99	3.77	0	9.08	0	5.07	35.19	1.03	178.4	1.91	23.38	1.04	77.15	1.55	0	30.97	0	28.87
246132	0	160.74	90.65	6.06	80.96	5.41	105.38	3.5	0	8.67	0	5	24.39	0.88	142.74	1.63	21.23	0.96	71.85	1.44	0	30.09	0	27.68
246131	0	163.76	85.68	6.14	99.88	5.62	103.17	3.57	4.75	1.27	0	4.94	10.36	0.74	161.16	1.77	23.99	0.98	73.45	1.49	0	30.92	0	28.52
246130	0	157.13	83.23	5.86	31.51	4.77	94.07	3.29	0	9.04	0	5.09	8.21	0.69	178.64	1.82	25.35	0.97	70.31	1.44	0	31.71	0	29.47
246129	0	160.92	77.83	5.9	40.36	4.69	104.9	3.5	0	8.72	0	5.19	11.04	0.73	112.69	1.46	20.72	0.94	66.77	1.41	5.51	1.5	0	29
246128	0	165.12	87.28	6.2	97.99	5.85	100.58	3.54	0	8.94	0	5.18	16.3	0.81	126.2	1.58	24.18	1	69.92	1.46	0	30.87	0	28.56
246127	0	166.11	82.49	6.18	110.03	6.01	95.46	3.49	0	9.06	0	5.36	18.61	0.85	133.53	1.63	24.2	1.01	78.45	1.51	8.03	1.56	0	28.4
246125	0	162.9	80.26	6.04	105.2	5.87	92.33	3.41	0	9.18	0	5.17	15.29	0.79	122.24	1.54	22.03	0.97	77.16	1.48	0	30.82	0	28.68
246124	0	156.2	70.91	5.65	94.52	5.46	93.4	3.29	0	8.07	0	4.72	35.51	0.96	96.15	1.33	19.79	0.94	65.75	1.36	0	29.84	0	27.86
246123	0	158.35	67.85	5.63	73	5.21	89.31	3.25	0	8.5	0	5	56.18	1.16	114.83	1.47	22.16	1	64.33	1.38	0	31.03	4.69	1.26
246122	0	157.64	76	5.75	51.24	4.96	106.97	3.47	4.77	1.17	0	5.04	153.04	1.81	97.03	1.35	20.89	1.12	62.79	1.36	5.24	1.48	7.49	1.27
246120	0	138.58	50.74	4.88	53.99	4.42	74	2.84	0	11.27	0	5.8	39.81	0.94	137.79	1.51	16.47	0.88	45.64	1.22	0	34.26	0	32.06
246119	0	151.15	73.38	5.49	85.75	5.11	108.1	3.4	0	9.83	0	5.04	42.32	1	125.3	1.49	19.44	0.94	61.72	1.33	0	31.72	0	29.42

Sample Id	Ag_ppm	Ag_ppm_Error	Cd_ppm	Cd_ppm_Error	Sn_ppm	Sn_ppm_Error	Sb_ppm	Sb_ppm_Error	W_ppm	W_ppm_Error	Hg_ppm	Hg_ppm_Error	Pb_ppm	Pb_ppm_Error	Bi_ppm	Bi_ppm_Error	Th_ppm	Th_ppm_Error	U_ppm	U_ppm_Error	LE_ppm	LE_ppm_Error
246133	0	194.71	0	240.43	0	387.22	0	498.44	0	61.64	0	38.57	9.89	1.88	0	156.5	0	116.61	0	62.13	520133.67	2082.05
246132	0	190.96	0	236.27	0	384.01	0	492.06	0	57.7	0	35.87	7.43	1.75	0	150.52	0	112.01	0	58.29	498546.74	1898.21
246131	0	194.35	0	239.76	0	382.27	0	489.88	0	62.51	6.47	2.12	6.59	1.75	0	154.07	0	114.84	0	60.52	509864.84	1975.88
246130	0	200.72	0	247.78	0	395.18	0	504.22	0	60.02	0	38.57	9.99	1.71	0	158.48	0	118.79	0	62.6	528021.1	1939.8
246129	0	198.71	0	244.47	0	390.93	0	503.36	0	59.79	0	37.54	7.58	1.72	0	155.05	0	115.67	0	59.19	515854.6	1969.19
246128	0	194.71	0	241.34	0	388	0	499.6	0	60.74	0	38.4	10.91	1.85	0	153.64	0	114.7	0	58.63	528998.12	2018.04
246127	0	194.12	0	240.19	0	389.88	0	501.54	0	59.26	0	37.31	9	1.85	0	153.14	0	113.93	0	59.18	529345.53	2025.63
246125	0	195.65	0	241.66	0	389.99	0	501.6	0	61.36	8.01	2.09	10.44	1.82	0	154.66	0	115.07	0	59.06	530750.95	2027.23
246124	0	189.38	0	232.65	0	371.74	0	477.96	0	57.02	0	34.9	0	35.15	0	150.4	0	112.23	0	56.65	520209.61	1975.12
246123	0	195	0	240.65	0	388.04	0	495.73	0	60.2	0	38.01	7.07	1.69	0	154.52	0	114.76	0	61.98	537303.38	2086.11
246122	0	196.52	0	242.7	0	389.25	0	499.2	0	59.5	6.48	1.96	0	36.52	0	158.71	0	116.97	0	64.67	538081.72	2015.29
246120	0	217.49	0	268.62	0	434.47	0	558.07	0	66.32	0	40.73	23.8	1.75	0	174.28	0	130.13	0	66.98	556729.28	1947.71
246119	0	201.38	0	247.51	0	399.84	0	515.13	0	61.24	0	38.26	15.98	1.74	0	158.07	0	118.01	0	61.75	554504.97	2092.67

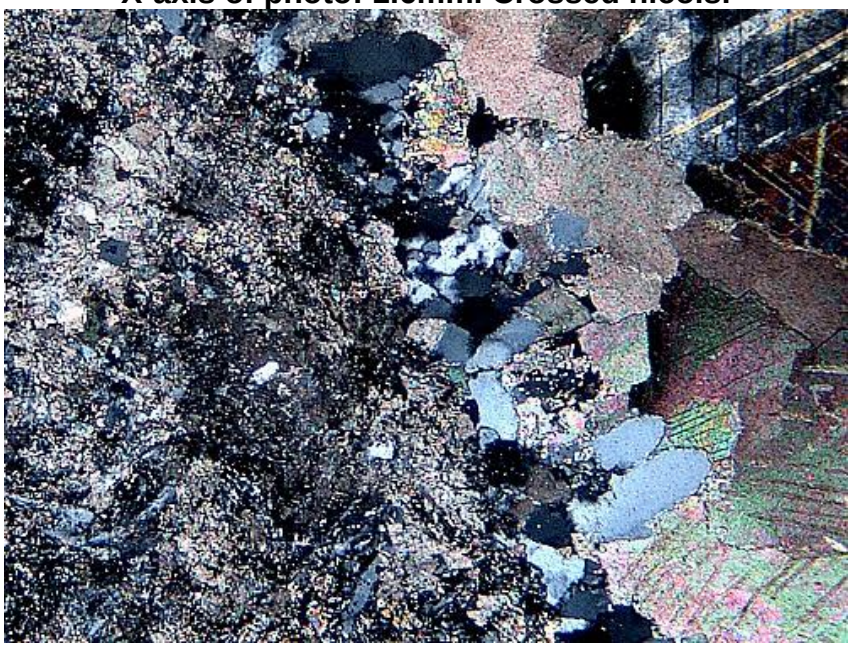
PETROGRAPHIC STUDY OF ROCKS FROM THE BROOKBANK Au DEPOSIT in the BEARDMORE-GERALDTON BELT

Prepared For:

Michele Cote MSc, P.Geo
GREENSTONE GOLD MINES

January 8, 2017

TS-002. Two carbonate generations in altered volcanic rock.
X-axis of photo: 1.6mm. Crossed nicols.



Prepared by:

Eva S. Schandl Ph.D.
GeoConsult

GeoConsult

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INTRODUCTION AND OBJECTIVES

The present report is a detailed petrographic study on a suite of ten altered volcanic rocks from the Brookbank Au deposit in the Beardmore-Geraldton Belt.

The objectives of the study are:

1) To describe the mineralogy and texture of the altered volcanic rocks
2) To identify the major alteration types, and
3) To distinguish between K-feldspar altered and carbonate-altered rocks

Analytical Techniques

The polished thin sections were examined under a petrographic microscope, using reflected and transmitted lights in order to identify the silicates, carbonates, sulfides and oxides. Several photomicrographs were obtained from the polished thin sections using a Leica cooled digital camera attached to the microscope.

SUMMARY

Lithology

The suite of ten samples represent variably altered volcanic rocks. Due to extensive alteration, their protolith could be positively identified only in the least altered rock. Sample TS-001 is an aphyric andesite. Because the rocks were subjected to various episodes of metamorphism, the primary minerals in most samples were destroyed. However, small domains in individual samples preserved the original mineralogy and texture of the protolith, suggesting a volcanic precursor.

In addition to volcanic rocks, some thin sections also contain lithic inclusions, such as a coarse-grained mafic intrusive rock (TS-010 & TS-011) and felsic fragments (TS-001 & TS-010). In fact, TS-010 may be an extensively sheared fragmental.

Mineralogy and alteration

The mineralogy of individual samples is described in the section on Petrography, and salient features are demonstrated with photomicrographs. The paragenetic sequence of alteration in the rocks is as follows: carbonate → quartz (veins) → carbonate (rim on quartz or vein) → sericite.

There is no evidence for significant K-feldspathization in the present suite of rocks. Only two samples (TS-001 # TS-002) contain minor replacement of some vein quartz by microcline.

Carbonate alteration is pervasive in most samples (as described below).

Plagioclase is ubiquitous in the relict domains of the volcanic rocks. The small grains are slender or acicular, and have single twinning. Other plagioclase include chessboard albite (metamorphic), and secondary plagioclase in some quartz veins.

K-feldspars are rare. K-feldspathization of quartz and possibly of albite was observed only in two samples; TS-001 & TS-002. In both cases, it is a relatively minor replacement.

Carbonate is the most abundant secondary mineral in the rocks. In six of the ten samples, they make up >50% of the rock. Often two carbonate generations co-exist. The first generation is more fine-grained and it replaces the matrix, whereas the second generation carbonates are coarse-grained and occur in veins. Their composition cannot be determined optically, but the absence of Fe-staining would suggest that they are probably not ankerite nor Fe-rich dolomite.

Quartz occurs mostly in veins and also as a replacement after some plagioclase. Several vein generations were identified; some contain interstitial chessboard albite and carbonate, and some vein quartz are rimmed by carbonates. In TS-009 pre and post-shearing quartz veins co-exist.

Sericite occurs mostly as anastomosing veins that flank the quartz or carbonate veins, and / or cross-cut the carbonate-altered matrix. Sericite represents the last alteration episode.

Table 1 Visually Estimated % Minerals in Rocks from the Beardmore Au Deposit

Sample Number Rock Type	TS-001 andesite	TS-002 altered volcanic	TS-003 altered volcanic	TS-004 altered volcanic	TS-005 altered volcanic
Plagioclase	65	10	10	12	x
K-feldspar	x	x			
Quartz	22	12	10	28	10
Carbonate	5	70	75	53	82
Epidote	2				
Chlorite	2	x	x	x	
Sericite	x	1	2		5
Clays					
Amphibole	x				
Rutile	x				
Apatite	x	x	x	x	
Magnetite					
Hematite		2		2	
Ilmenite					
Pyrite	4	5	3	5	3
Pyrrhotite					
Chalcopyrite			x		
Chalcocite					
Irresolvable Matrix					

x=trace amount

Table 1 Visually Estimated % Minerals in Rocks from the Beardmore Au Deposit

Sample Number Rock Type	TS-007 altered volcanic	TS-008 altered volcanic	TS-009 altered volcanic	TS-010 altered volcanic	TS-011 altered volcanic
Plagioclase	8	10		35	25
K-feldspar					
Quartz	12	12	42	x	10
Carbonate	70	67	2	x	10
Epidote				5	7
Chlorite	x	x		x	6
Sericite	9	5		2	
Clays					30
Amphibole				40	12
Rutile					
Apatite	x	x	x	x	x
Magnetite					
Hematite		3			x
Ilmenite				5	
Pyrite	1	3	<0.5		x
Pyrrhotite	x				x
Chalcopyrite				1	
Chalcocite				x	
Irresolvable Matrix			56	12	

x=trace amount

PETROGRAPHY

Ppl = Plane polarized light

XN = crossed nicols

Refl. light = Reflected light

Sample Number: TS-001 **Rock Type: Andesite + felsic intrusive contact + quartz vein**

Petrographic Description:

The rock is an aphyric andesite in contact with a granulated and sheared felsic intrusive rock fragment and a sheared quartz vein. The contact is relatively sharp, and the andesite was not significantly affected by shearing and granulation. The two different lithological units are separated by a chlorite-rich zone that contains aggregates and single grains of pyrite. The mineralogy of the andesite is relatively simple. It consists predominantly of needle-shaped plagioclase with interstitial altered and Fe-stained matrix. The original minerals in the matrix were probably plagioclase and amphibole, which were partly replaced by epidote and minor chlorite. The andesite is cross-cut by a few small epidote veinlets, and also contains aggregates and single grains of pyrite, some of which are rimmed by chlorite.

The felsic fragment in touch with the andesite consists of granulated and fragmented plagioclase, aggregates of fine-grained chessboard albite, quartz and a coarse-grained quartz vein. The felsic fragment and the vein are extensively sheared and granulated. Granulation resulted in the breakdown of the original minerals to microcrystalline domains, some of which are rimmed by chlorite.

Some of the deformed coarse-grained quartz in the vein are K-metasomatized and partly replaced by microcline with cross-hatched twinning. Another superimposed alteration on the rock is carbonate. The carbonates represent a late alteration, as some form a rim on the quartz and most are interstitial to the vein quartz.

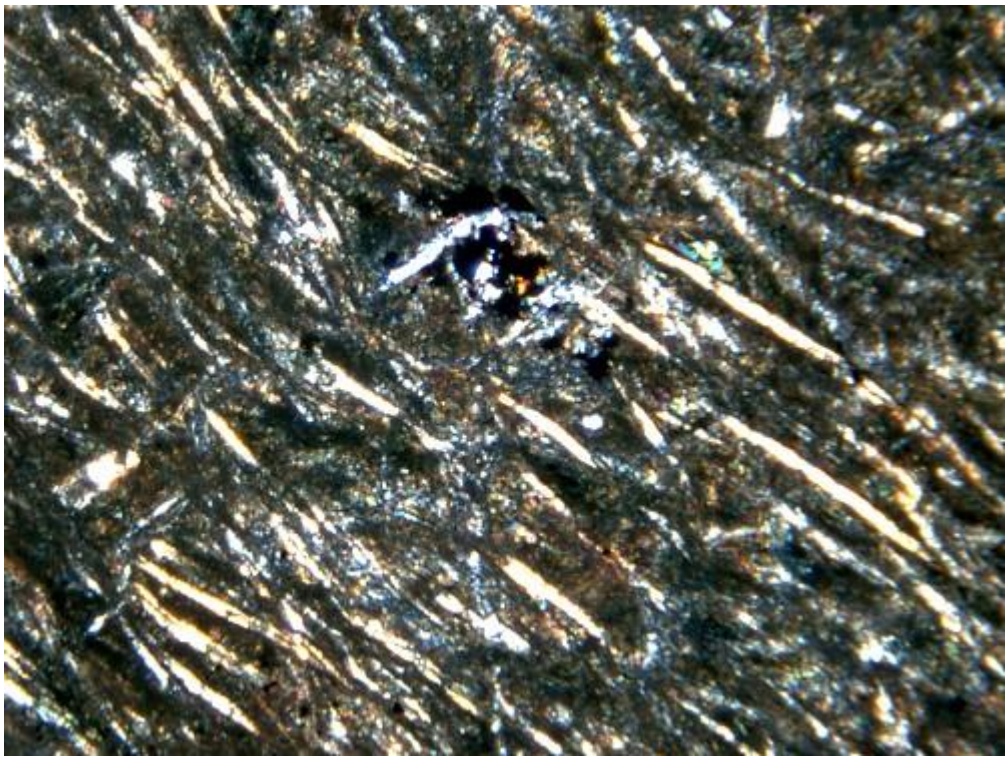
Pyrite is relatively abundant in the felsic domain, particularly in the chlorite zone in contact with the andesite.

Detailed mineralogy

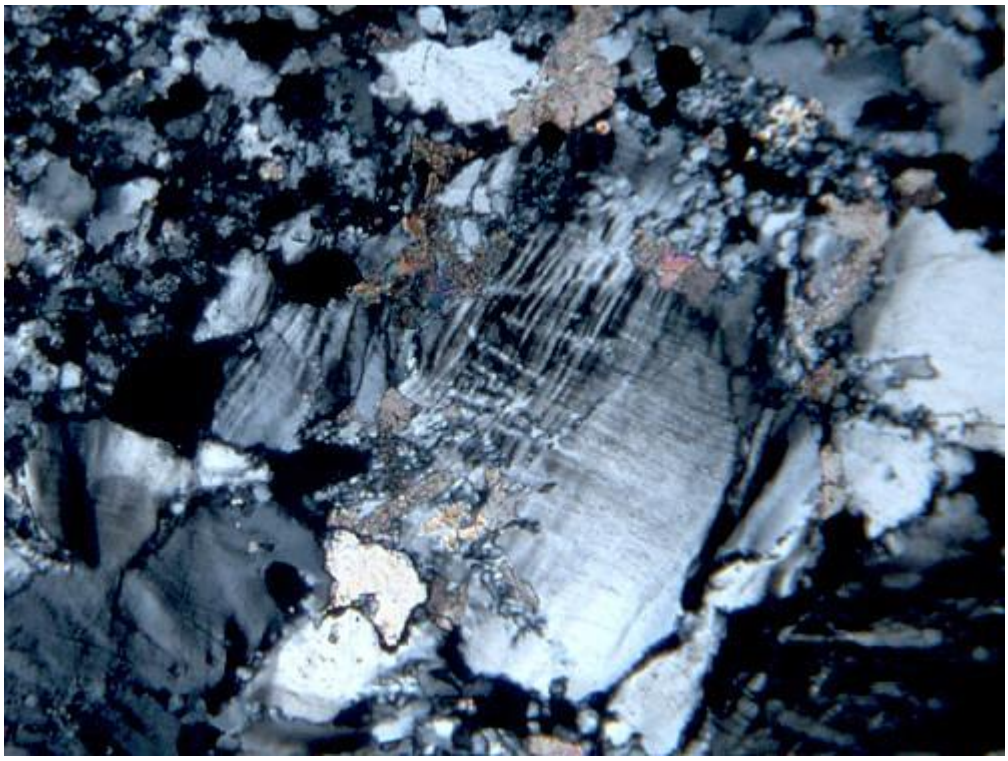
Mineral	%	Grain size(mm)	Comments
Plagioclase	65	<0.1-1.5	Acicular plagioclase makes up a significant part of the andesite. Most have preferred orientation – a result of flow orientation, or of superimposed deformation. Their composition cannot be determined as polysynthetic twinning is rare. Poorly defined anhedral plagioclase are also interstitial to the matrix, some of which were partly replaced by fine-grained epidote or carbonate. In the felsic fragment, the plagioclase are fragmented and granulated and some recrystallized to metamorphic chessboard albite.

Quartz	22	microcrystaline-2.8	Quartz occurs as part of a fragmented and deformed vein, it is interstitial to the felsic fragment, and the granulated microcrystalline quartz is part of the contact between the volcanic rock and the felsic fragment. Most quartz are extensively strained, they have undulose extinction, and some are K-feldspathized.
Carbonate	5	0.05-0.8	Minor carbonate is interstitial to the volcanic rock, whereas in the felsic fragment and quartz vein, aggregates of carbonate form a rim on quartz and occur an aggregates within some of the chlorite. The anhedral grains represent a late alteration that post-dated granulation and shearing.
Chlorite	2		Most chlorite occurs at the contact between the andesite and the felsic fragment + quartz vein. The narrow zone is well defined and the chlorite contains inclusions of granulated quartz, pyrite and carbonate. Some of the pyrite are also rimmed by chlorite.
Pyrite	4	<0.03-1.0	Pyrite in the volcanic rock occur as anhedral poikiloblasts and mostly in aggregates. In the felsic fragment, the chlorite-rich zone, and in the quartz vein, most pyrite are subhedral-anhedral single grains. Some are rimmed by chlorite.
Epidote	2	<0.03-0.4	The andesite contains a few discontinuous veinlets of fine-grained epidote. Epidote is also part of the matrix, probably replacing the original plagioclase and amphibole. It is also interstitial to some of the fine-grained carbonate aggregates.

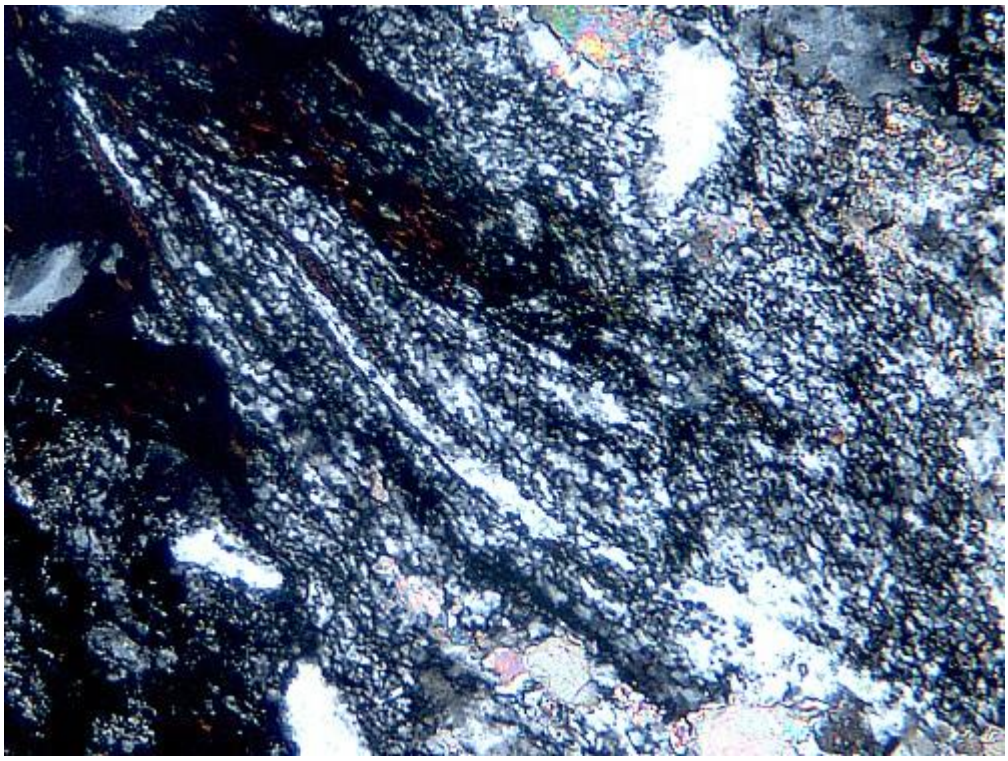
Accessory minerals: K-feldspar, amphibole, rutile, apatite, sericite



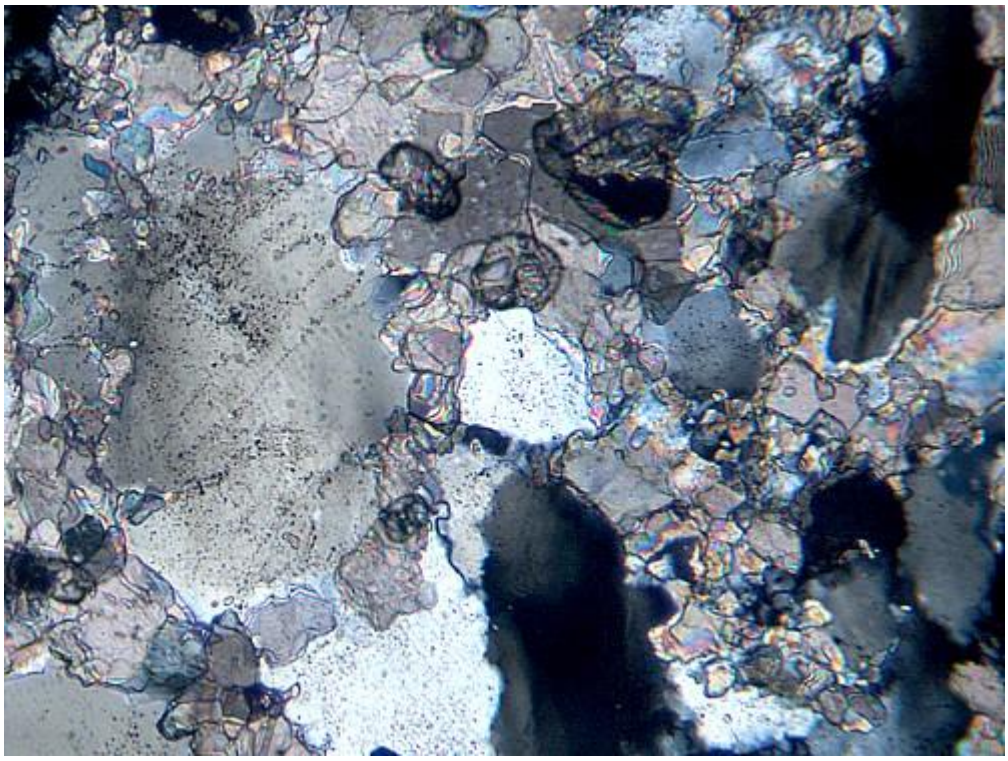
Relict andesite-rich domain. X-axis of photo: 1.6mm. XN.



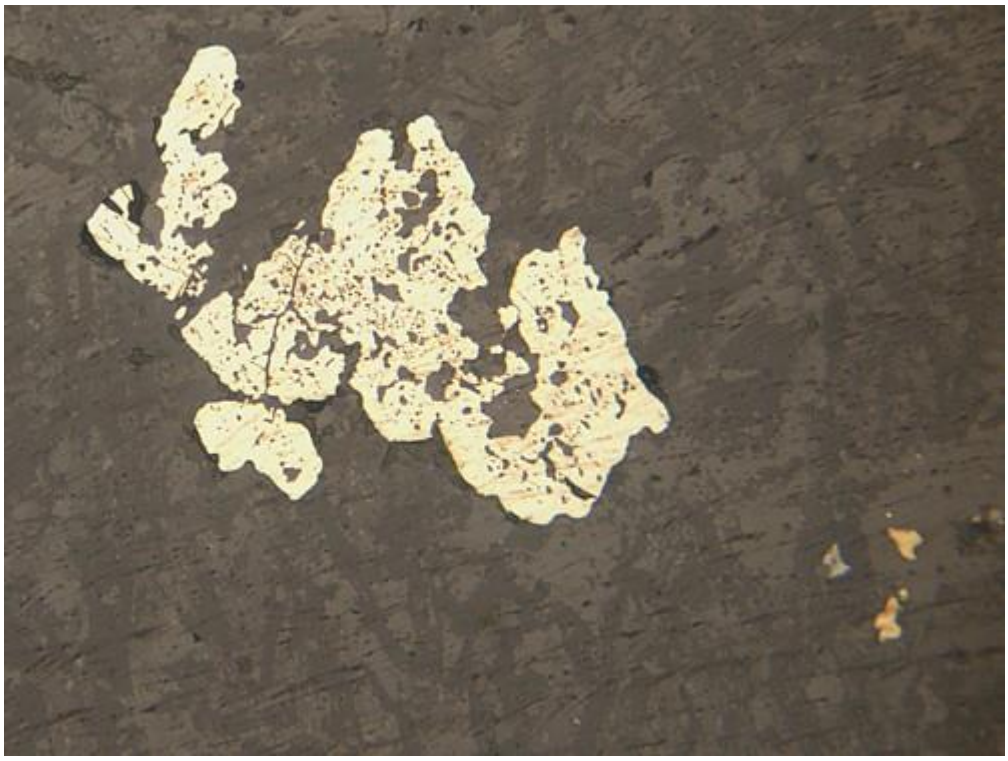
Fragmented vein quartz is partly replaced by microcline. X-axis of photo: 1.6mm. XN.



Sheared and granulated quartz. X-axis of photo: 1.6mm. XN.



Quartz grains (white) are included in carbonate aggregates.
X-axis of photo: 0.64mm. XN.



Anhedral pyrite in andesite. X-axis of photo: 0.64mm. Refl. light.

Sample Number: TS-002 **Rock Type: Altered volcanic rock**

Petrographic Description:

An extensively altered volcanic rock. In some domains the texture of the original needle-shaped plagioclase is preserved (andesite?). Presently, the rock consists predominantly of carbonate, lesser quartz, sericite, and pyrite. Two carbonate generations were identified, the early carbonate is dominant, it forms a network replacing the original mineralogy. The rock also contains small domains that consist of fine-grained aggregates of (metamorphic) chessboard albite, albite, quartz, and K-feldspars. These secondary assemblages were partly replaced by fine-grained carbonate. Small stringers of sericite is interstitial to and form a rim on all other minerals. Coarse-gained carbonate vein over-prints the early, more abundant replacement carbonates, as well as some of the secondary quartz and chessboard albite.

Specular hematite forms discontinuous veinlets which cross-cut the early matrix carbonates.

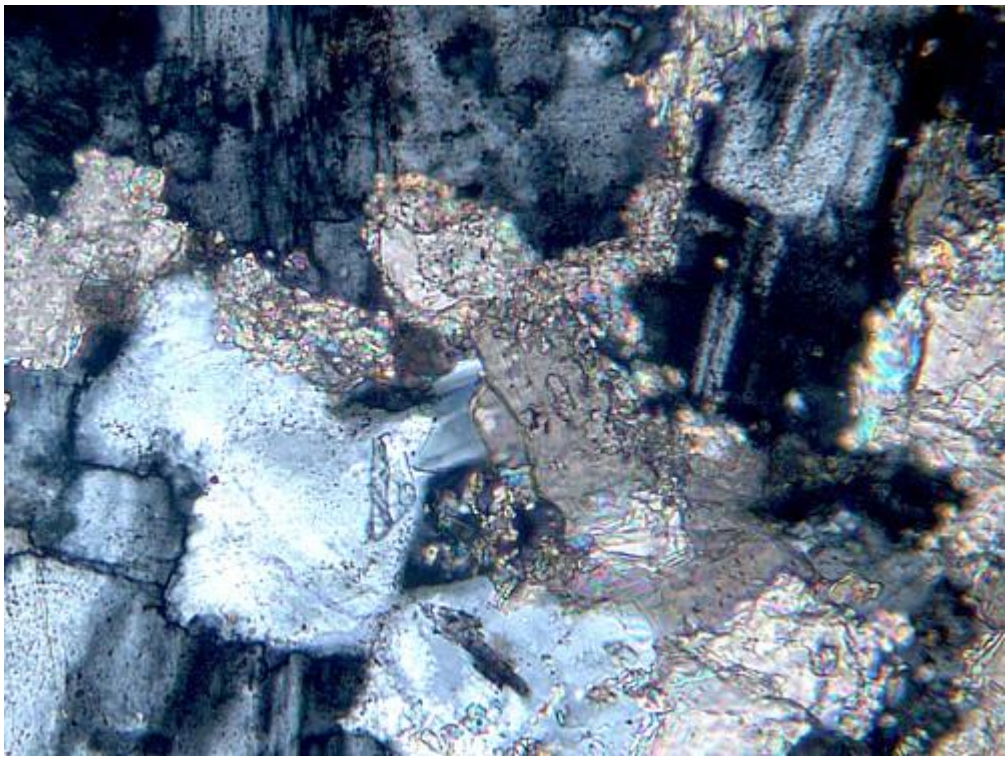
Pyrite is abundant, and the large subhedral-euhedral grains are associated predominantly with the second generation coarse-grained carbonates.

Detailed mineralogy

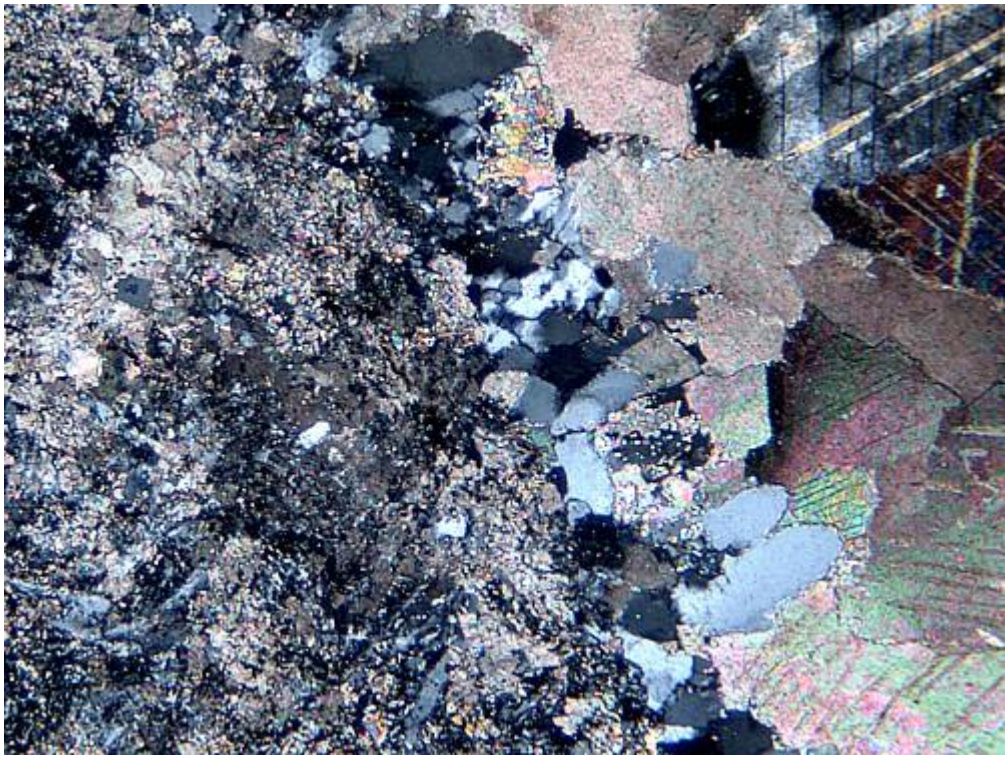
Mineral	%	Grain size(mm)	Comments
Carbonate	70	<0.05-3.0	Fine-grained anhedral carbonate partly replaced the original mineralogy in the rock. They form interlocking aggregates and occur as very fine-grained dusting on some of the lesser altered domains where the original plagioclase needles are preserved. Late-stage, coarse-grained carbonate occurs in aggregates and in discontinuous veins that cross-cut the fine-grained matrix carbonates. They partly replaced some of the quartz and chessboard albite.
Quartz	12	0.1-2.0	Anhedral quartz is part of the matrix and is interstitial to the fine-grained carbonates. Most grains are strained, they have undulose extinction and embayed, sutured grain boundaries, suggesting disequilibrium. Fine-grained and coarse-grained quartz also occurs in small

			discontinuous veinlets and as partial replacement after some of the needle-shaped plagioclase. Quartz pressure shadows are common on pyrite.
Plagioclase	10	0.1-1.5	Acicular plagioclase are relict grains that were part of the original volcanic rock. The needle-shaped grains occur in small domains within the carbonate-altered matrix. Other feldspars include secondary chessboard albite, some of which occur in aggregates with fine-grained secondary K-feldspars and quartz.
Sericite	1		Discontinuous sericite veinlets form a network interstitial to the matrix carbonate.
Pyrite	5	0.1-2.0	Pyrite are subhedral-euhedral grains that are mostly associated with the carbonates. Some occur in aggregates and some in veins. Several are rimmed by quartz pressure shadows.
Hematite	2	av. 0.2	Specular hematite forms a discontinuous vein that cross-cuts the early matrix carbonates. Some also form aggregates interstitial to pyrite.

Accessory minerals: K-feldspar, chlorite, apatite

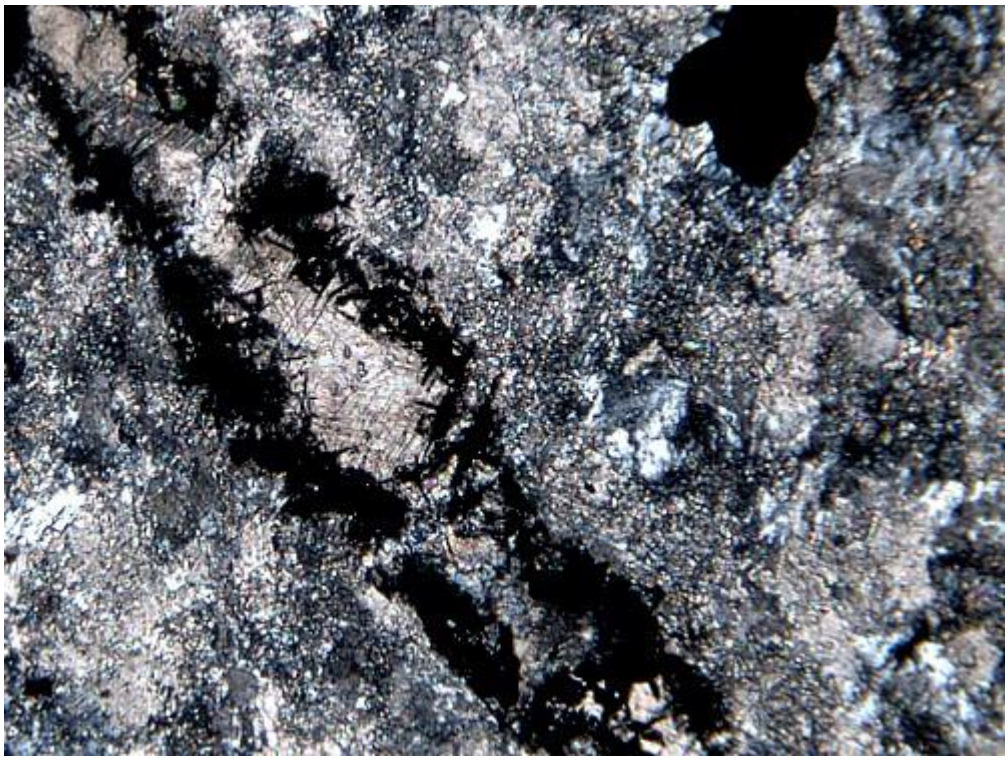


Chessboard albite and secondary K-feldspars are rimmed and partly replaced by carbonates. X-axis of photo: 0.64mm. XN.

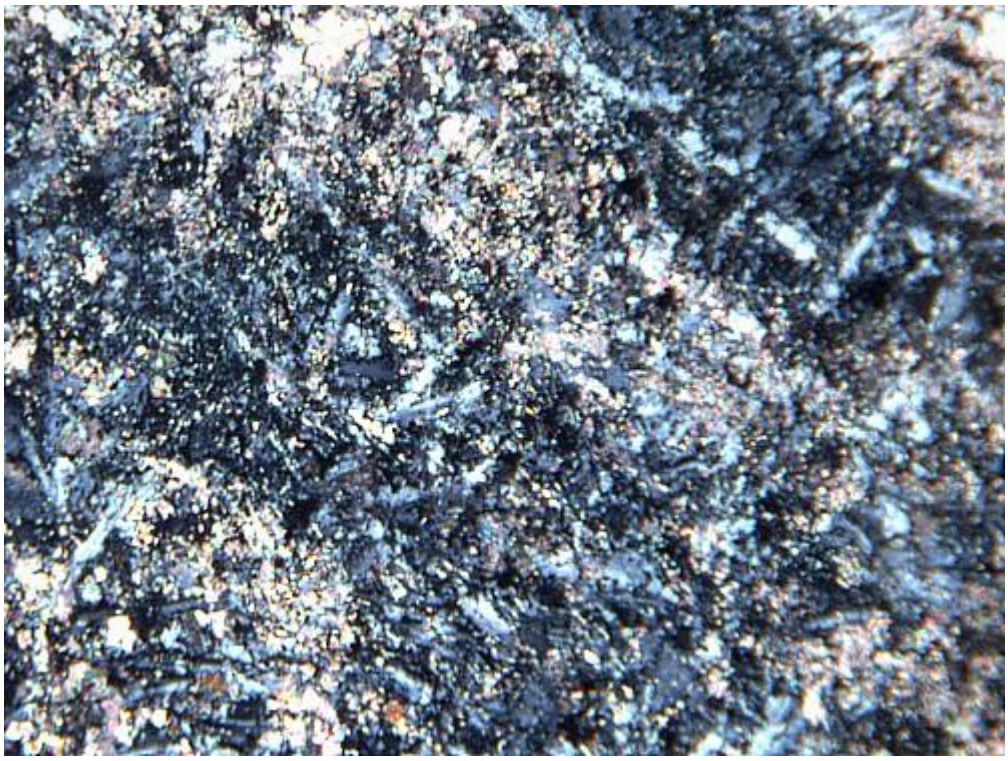


Two carbonate generations, Coarse-grained vein cross-cuts earlier carbonate altered volcanic rock. 1.6mm. XN.

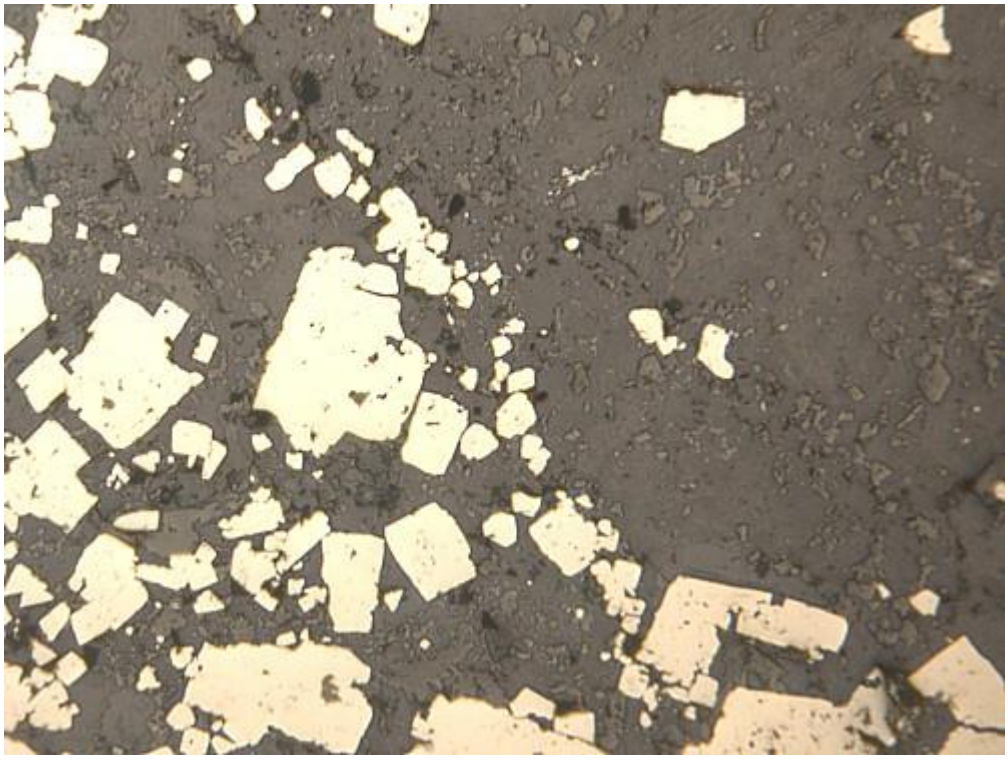
Specular hematite vein. X-axis of photo: 0.64mm. Refl. light.



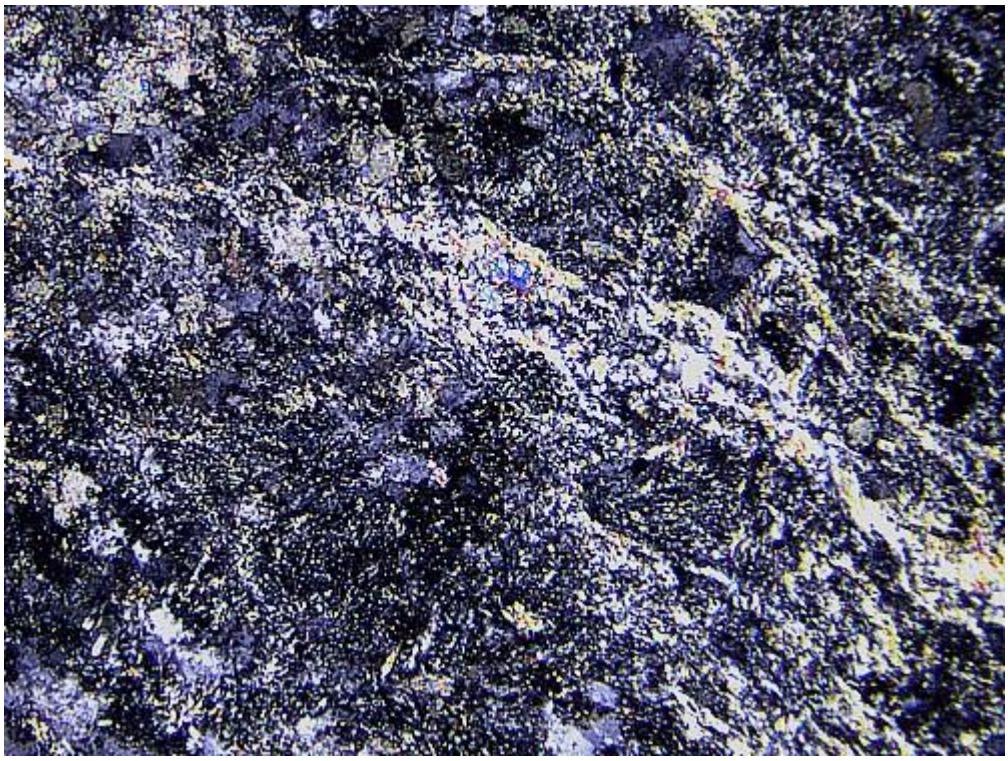
Above hematite vein cross-cuts the carbonate-altered matrix.
X-axis of photo: 0.64mm. XN.



Relict volcanic texture with interstitial fine-grained carbonate.
X-axis of photo: 1.6mm. XN.



Pyrite are part of a 5mm wide vein in a carbonate-altered domain.
X-axis of photo: 1.6mm. Refl. light.



Mottled sericite stringers cross-cut the carbonate-altered rock.
X-axis of photo: 1.6mm. XN.

Sample Number: TS-003 **Rock Type: Altered volcanic rock**

Petrographic Description:

An extensively carbonatized volcanic rock. Its mineralogy and texture are comparable to sample TS-002, The volcanic texture of the original rock is well preserved, as it contains several domains that consist of acicular plagioclase of unknown composition. Considering the type of alteration (mostly carbonate), it is suggested that the protolith was relatively Ca-rich, probably an andesite. Two carbonate generations were identified; fine-grained anhedral aggregates that form a network, replacing the matrix, and the more coarse-grained second generation carbonate that occurs in veins or in aggregates. The latter is intergrown with deformed, strained quartz, some of which were partly replaced by microcline. Late sericite veinlets form a network in some domains and cross-cut or form a rim on both generations of carbonate.

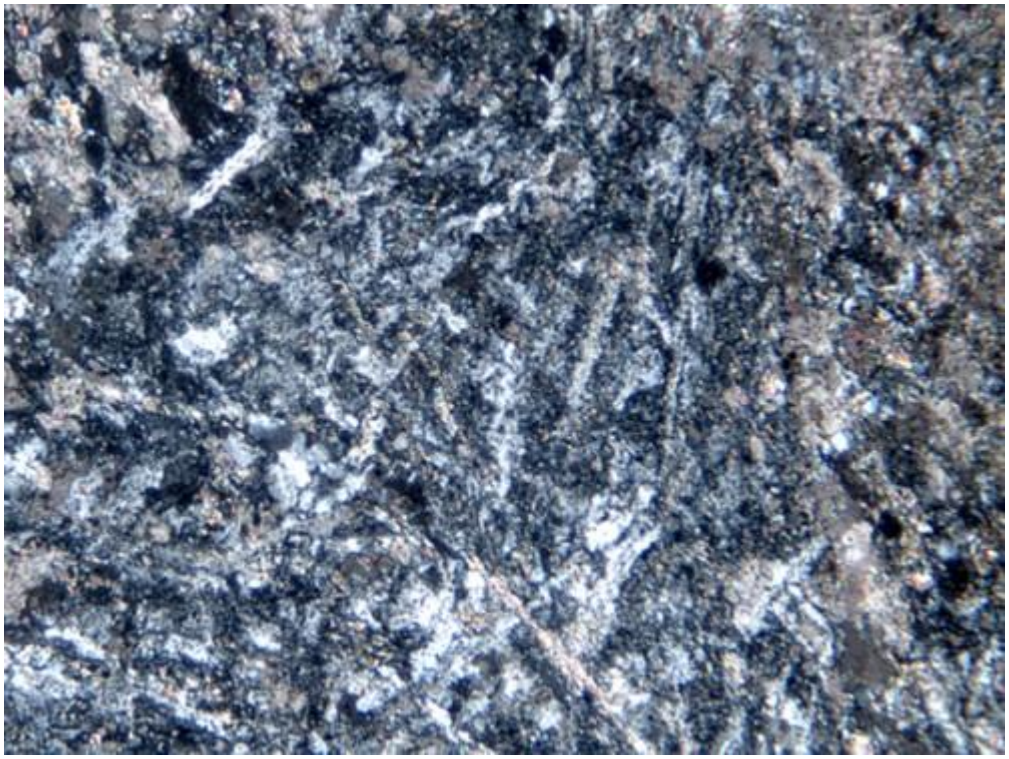
Pyrite is abundant, but localized. The subhedral-euhedral grains are included in some of the coarse-grained carbonate aggregates and veins

Detailed mineralogy

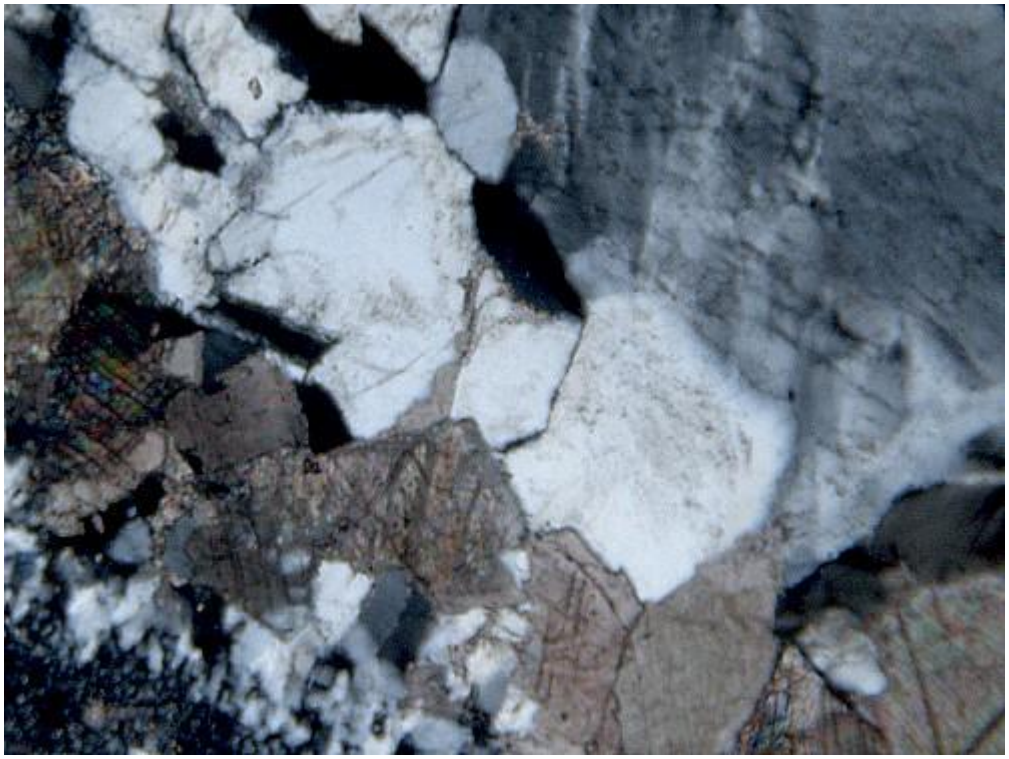
Mineral	%	Grain size(mm)	Comments
Carbonate	75	<0.1-2.0	Two carbonate generations co-exist, The earlier of the two forms a network and partly replace the volcanic rock. These carbonates are relatively fine-grained, and some occur as 'dusting' on the plagioclase. The second generation carbonates are more coarse-grained, they are intergrown with secondary quartz or form a rim on the quartz. In some domains they contain an abundance of pyrite with quartz pressure shadows.
Plagioclase	10	av. 1.5	Most plagioclase are acicular relict grains in the andesite domains. The radiating needles show weak twinning and the interstitial mineral includes fine-grained quartz and carbonate. A few grains of blocky second generation plagioclase are interstitial to the carbonates.
Quartz	10	microcrystalline-2.0	Fine-grained quartz is intergrown with some of the matrix carbonates. Coarse-grained quartz also occurs in discontinuous veins and aggregates

			interstitial to the coarse-grained second generation carbonates. The grains are generally strained, have undulose extinction, whereas some are granulated. Long quartz pressure shadows are common of the pyrite.
Sericite	2		Wispy sericite veinlets form a network in some domain. They boudinage the carbonates and cross-cut some of the second carbonate generation.
Pyrite	3	<0.1-2.0	Fine to coarse-grained pyrite are relatively abundant in some domains – and absent in others. Some of the larger grains are fragmented and the fractures are filled by fine-grained quartz or carbonate. Fine-grained carbonate also forms a rim on pyrite and also a network interstitial to pyrite. Most pyrite have quartz pressure shadows.

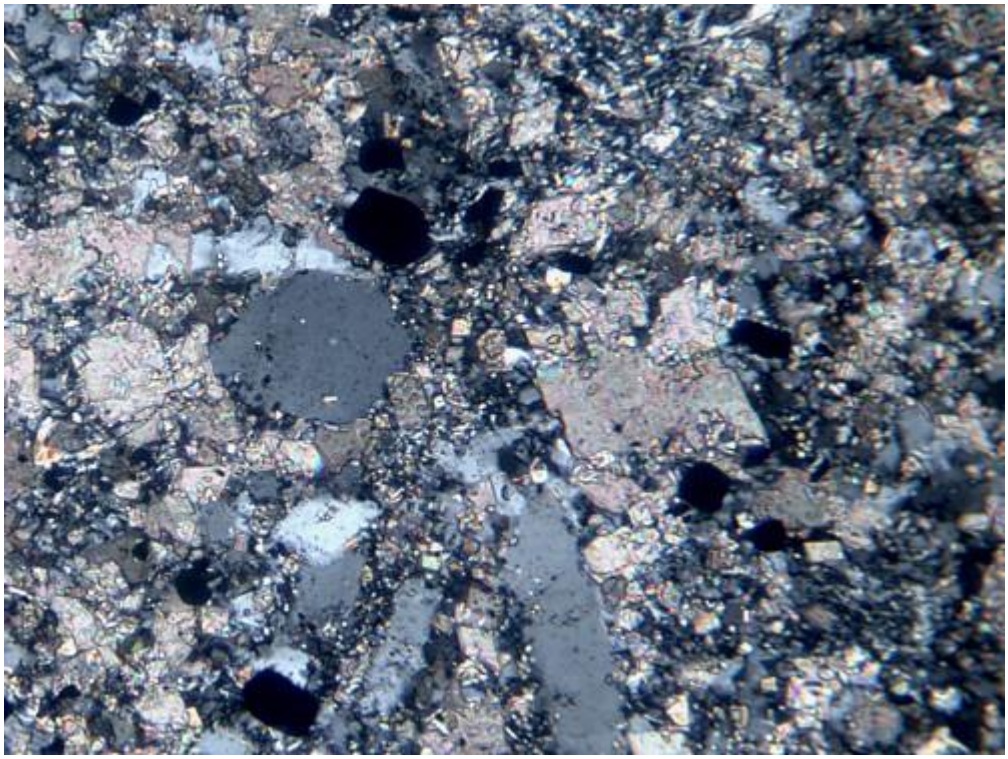
Accessory minerals: chlorite, hematite, apatite



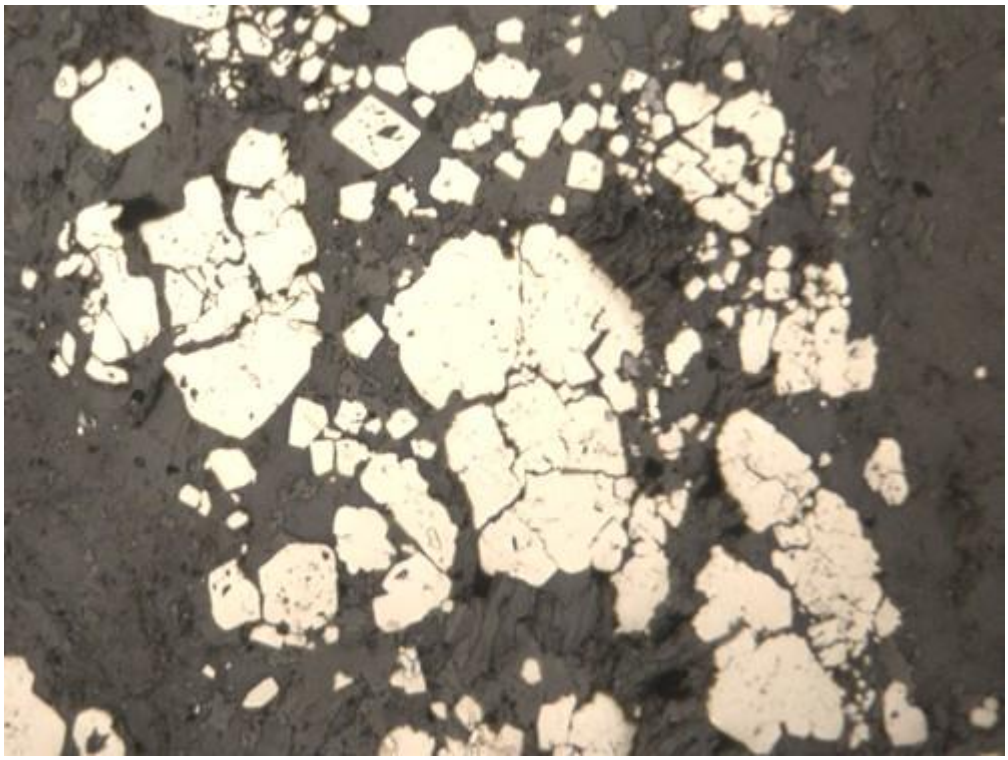
Relict volcanic rock domain in carbonate-altered rock. X-axis of photo: 1.6mm. XN.



Microcline and quartz are rimmed by carbonate X-axis of photo: 1.6mm. XN.



Fine-grained replacement carbonate aggregates. X-axis of photo: 1,6mm. XN.



Fragmented pyrite. X-axis of photo: 1.6mm. Refl. light.

Sample Number: TS-004 **Rock Type: Altered volcanic rock**

Petrographic Description:

An extensively altered volcanic rock. The original rock is cross-cut by coarse-grained quartz veins, some of which contain minor interstitial chessboard albite. Carbonate alteration is pervasive and fine to medium coarse-grained carbonates make up a significant part of the matrix. They are intercalated with anhedral, fine-grained quartz and minor albite. Some quartz veins also contain aggregates of carbonate. Discontinuous sericite veinlets cross-cut the altered matrix, suggesting that they represent the last alteration episode.

Fine-grained pyrite are disseminated through the matrix, whereas anhedral, coarse-grained pyrite occur only in a sericitized domain. Most fine-grained pyrite are euhedral and are often rimed by quartz pressure shadows,

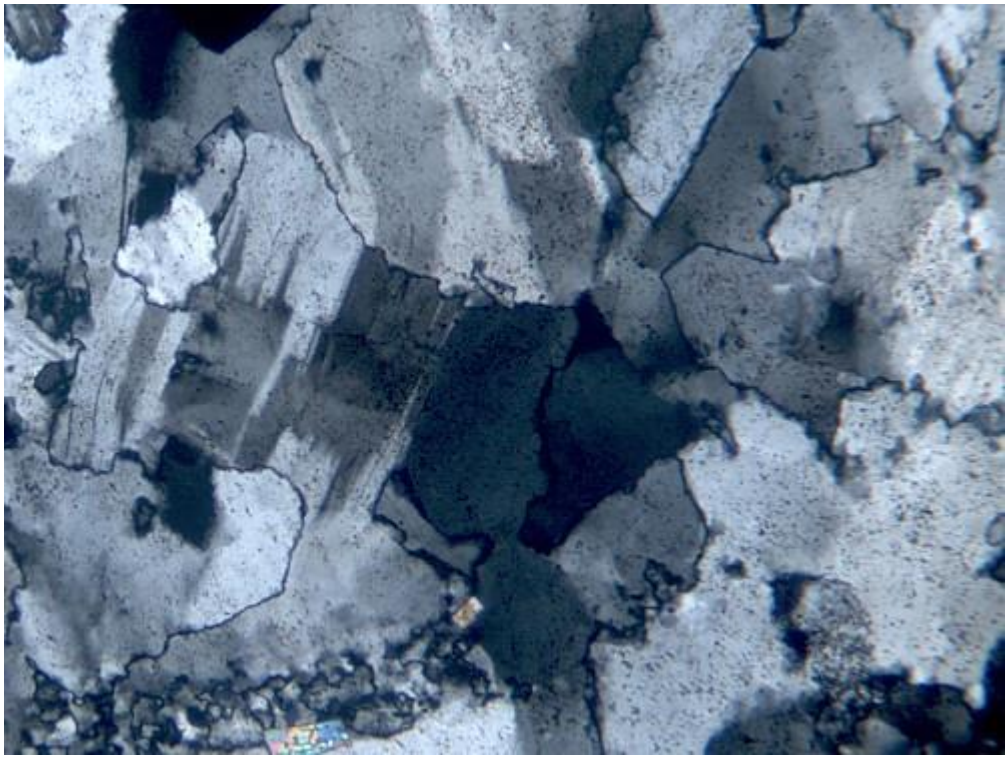
Fine-grained specular hematite are also disseminated through the rock. Some form discontinuous small veins along the quartz and carbonate veins.

Detailed mineralogy

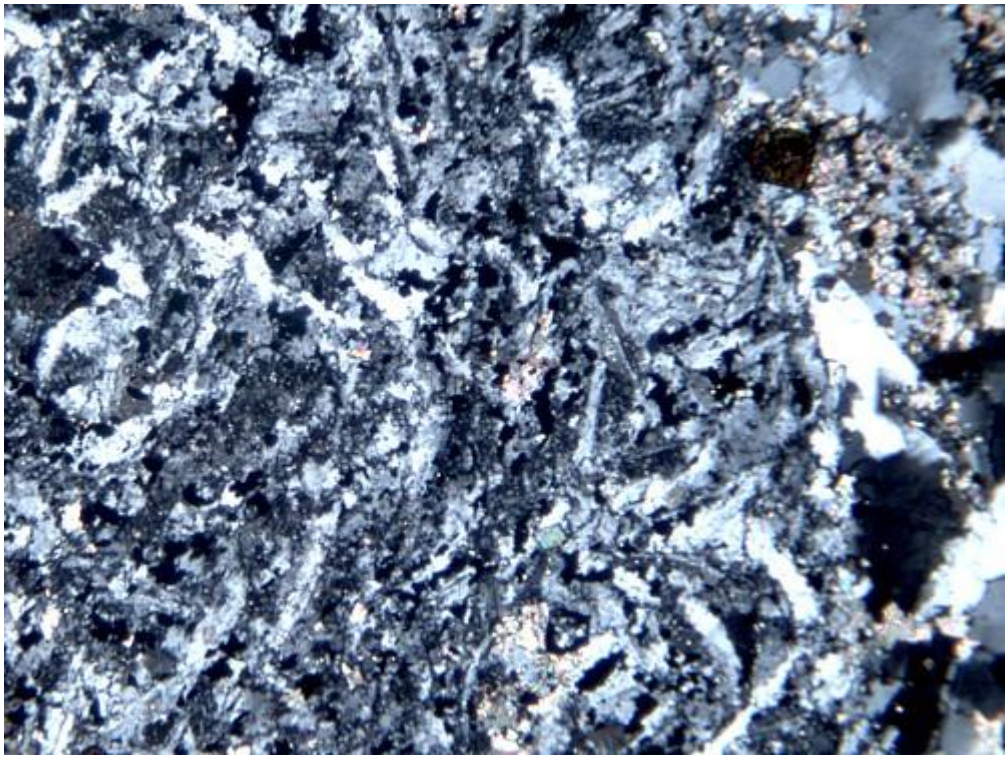
Mineral	%	Grain size(mm)	Comments
Carbonate	53	<0.1-2.5	The matrix carbonate is a replacement after the original mineralogy of the volcanic rock. The fine-grained aggregates have interlocking texture in some domains, and in others, they are intergrown with secondary quartz and metamorphic chessboard albite. The more coarse-grained carbonates occur in discontinuous veins and are also intergrown with some of the vein quartz.
Quartz	28	microcrystalline-3.0	Fine-grained quartz makes up part of the matrix. The anhedral grains are interstitial to the original plagioclase in the relict volcanic domains. Some matrix quartz are very fine-grained and granulated. Coarse-grained quartz that occurs in discontinuous veins are intergrown with the carbonates. They have undulose extinction.
Plagioclase	12	0.2-1.6	Two types of plagioclase were identified. The original plagioclase in the volcanic domains occur as slender lath or needle-

			shaped grains, Sutured, embayed and partly dissolved laths form slightly radiating aggregates. The morphology of the grains suggest disequilibrium. Secondary albite and chessboard albite occur within the matrix quartz and carbonates and some are intergrown with the fine and coarse-grained vein quartz. Pyrite are rimmed by quartz pressure shadows.
Pyrite	5	<0.05-2.0	Fine-grained, mostly euhedral pyrite are disseminated through the thin section. They are most abundant in the fine-grained carbonate-rich matrix. Coarse-grained, fractured anhedral pyrite are relict grains. Some contain inclusions of minor quartz and are rimmed by quartz pressure shadows.
Hematite	2	av. 0.1	Specular hematite are disseminated throughout the fine-grained matrix, and the small needles are included in the matrix carbonates. They also form discontinuous veins along the selvages of some altered quartz+carbonate veins.

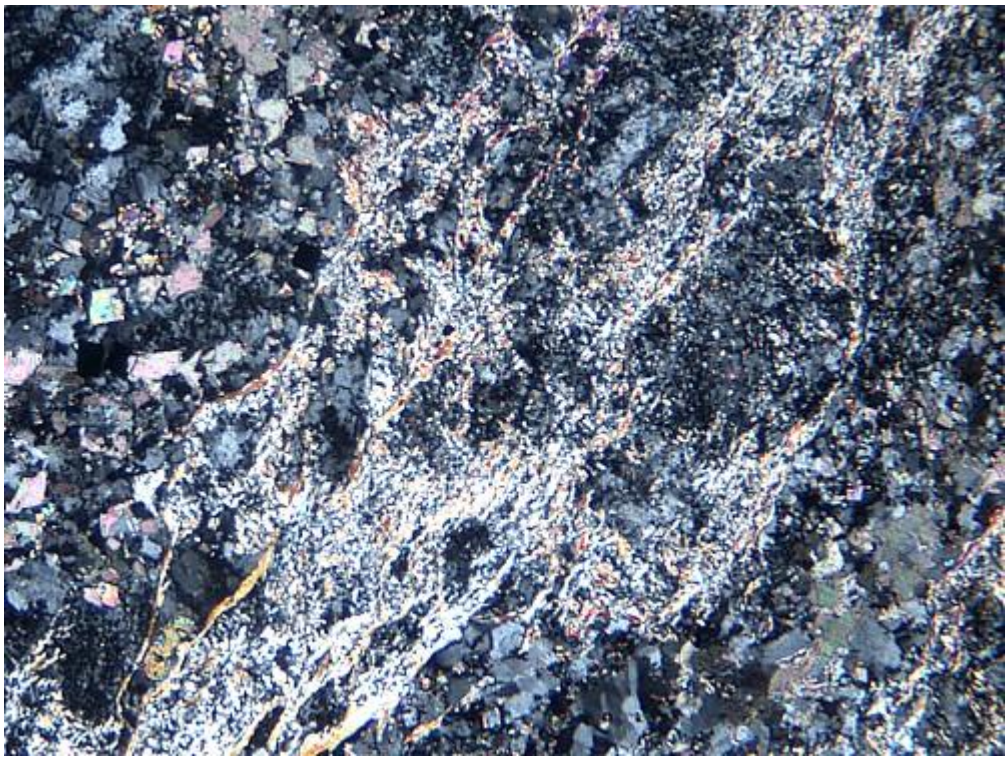
Accessory minerals: chlorite, apatite



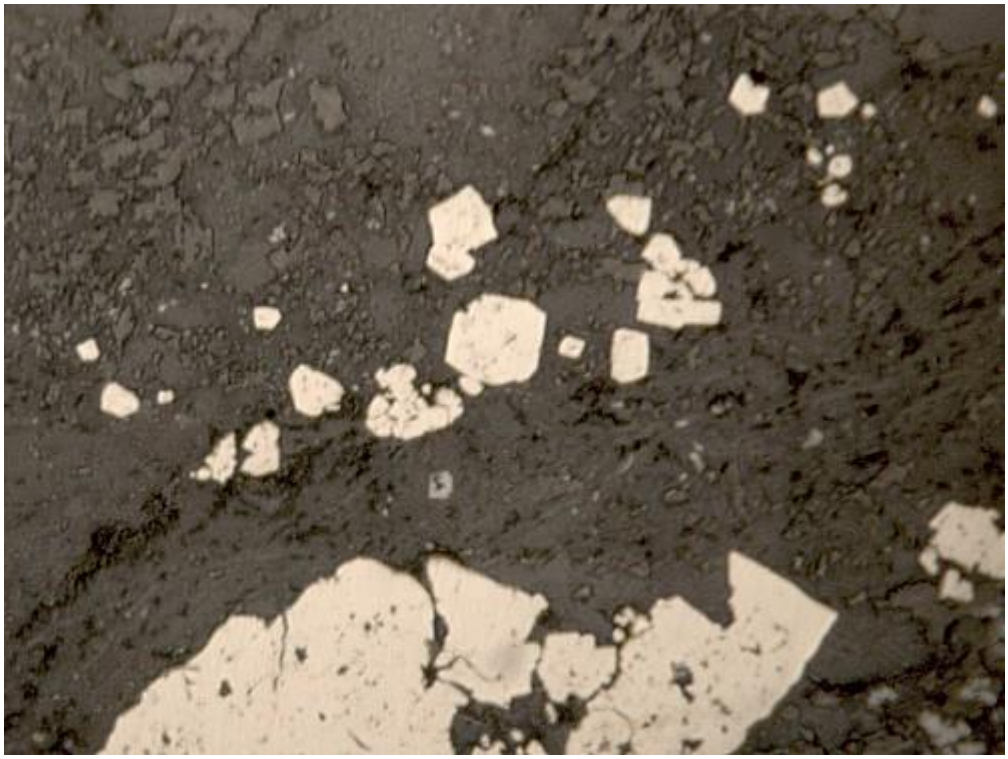
Secondary albite and chessboard albite aggregate. X-axis of photo: 0.64mm. XN.



Relict volcanic rock domain in altered rock. X-axis of photo: 1.6mm. XN.



Wispy, cross-cutting sericite veins. X-axis of photo: 1.6mm. XN.



Pyrite vein in andesite. X-axis of photo: 0.64mm. Refl. light.

Sample Number: TS-005 **Rock Type: Altered volcanic rock**

Petrographic Description:

An almost completely carbonatized volcanic rock. The original mineralogy, which consisted partly of acicular, radiating plagioclase was almost completely replaced by fine-grained carbonates. The carbonates form a 'mat-like' alteration over the volcanic rock, destroying not only the mineralogy, but also the original texture. The fine-grained carbonates form interlocking aggregates, having a slightly defined orientation. The matrix also contains anhedral grains of quartz, which are interstitial to the carbonates. Several small sericite veins are interstitial to the carbonates, and their orientation is parallel to the weakly defined rock fabric.

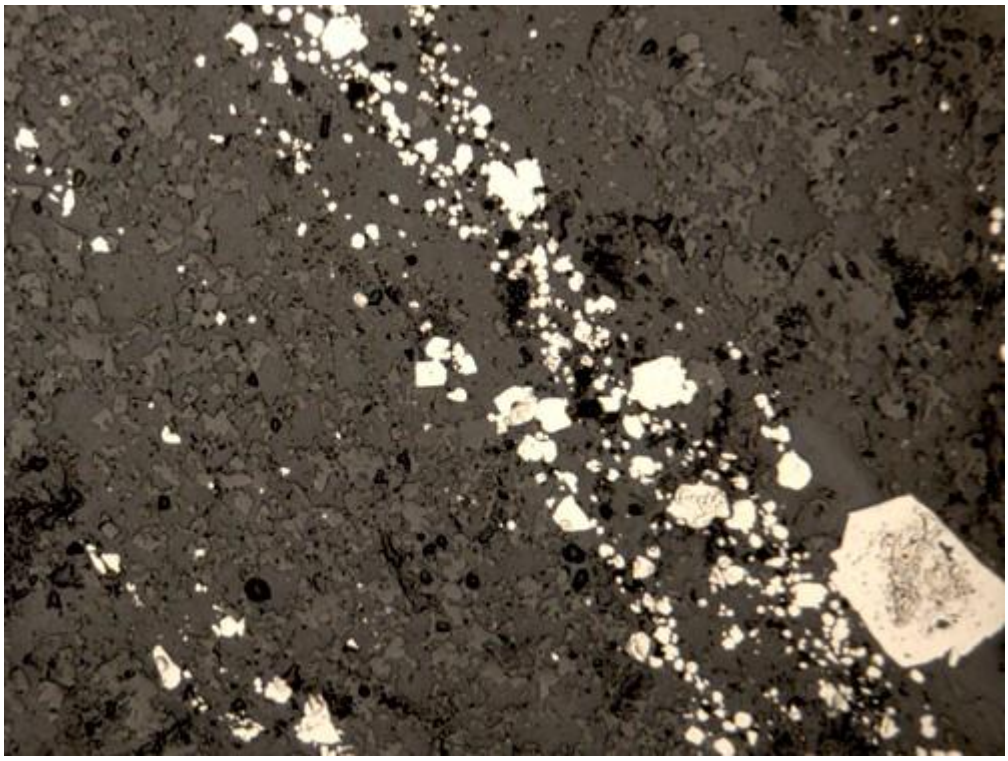
Pyrite is relatively abundant. They occur in parallel veins and are also disseminated through the matrix carbonate. Most pyrite are small, subhedral-euhedral grains, and the veins parallel the orientation of sericite veins.

Detailed mineralogy

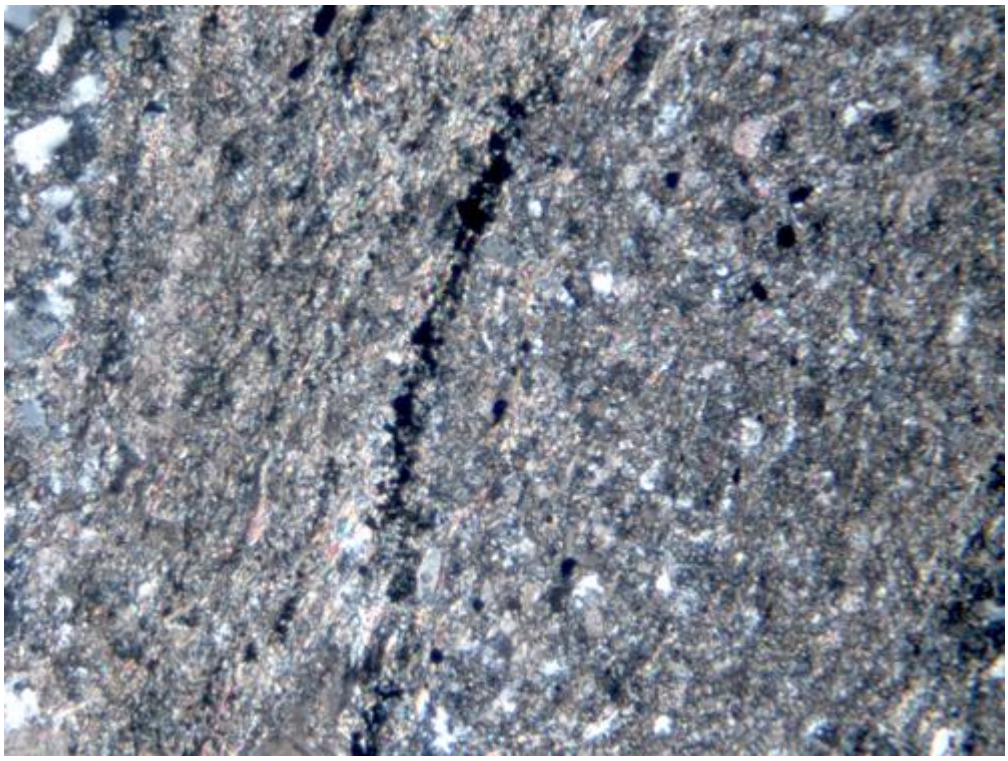
Mineral	%	Grain size(mm)	Comments
Carbonate	82	<0.05-1.2	Anhedral, mottled carbonates makes up a significant part of the rock. They represent an early replacement after the original minerals in the volcanic rock. Some grains are intergrown with fine-grained blocky quartz, and some occur in more coarse-grained aggregates with interstitial quartz. They have sutured grain boundaries.
Quartz	10	<0.1-1.0	Anhedral blocky quartz are interstitial to the matrix carbonate. They are secondary, and part of the alteration assemblage. Some of the larger grains form small domains and are partly intergrown with coarse-grained aggregates of carbonate.
Sericite	5		Small sericite veins boudinage the carbonates, and overall, parallel the rock fabric. They represent the last alteration episode in the metamorphic/hydrothermal evolution of the rock.
Pyrite	3	0.05-0.5	Fine-grained, subhedral-euhedral pyrite are disseminated through the rock matrix. Most pyrite form parallel veins, and

several of the grains are rimmed by quartz pressure shadows.

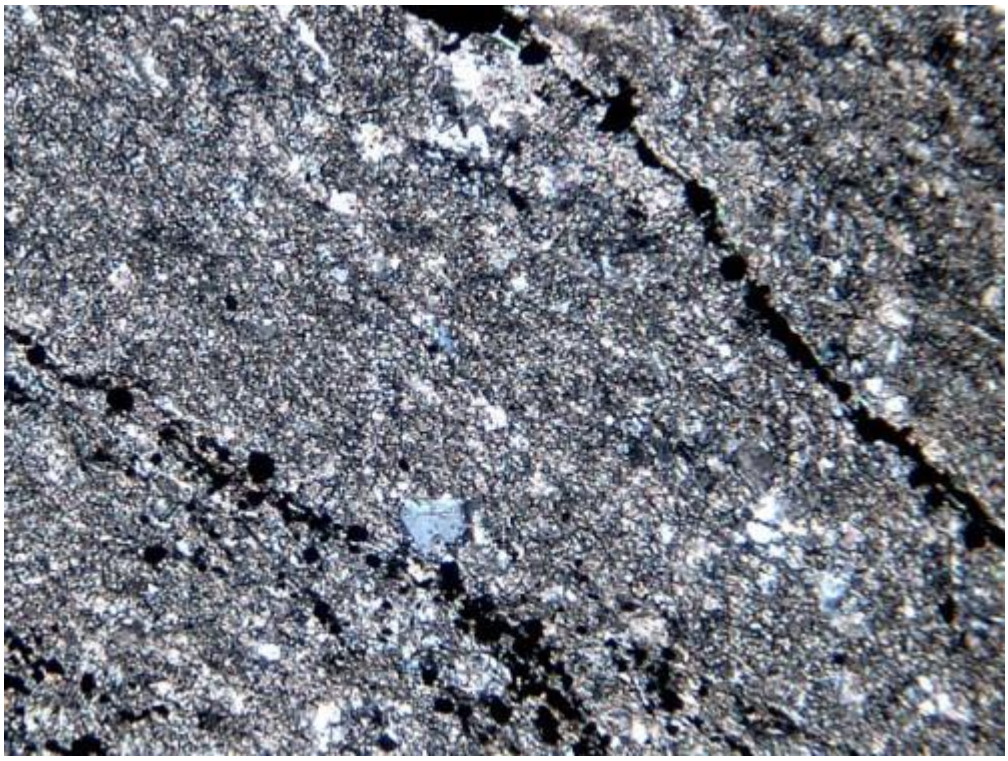
Accessory minerals: plagioclase, chessboard albite, hematite



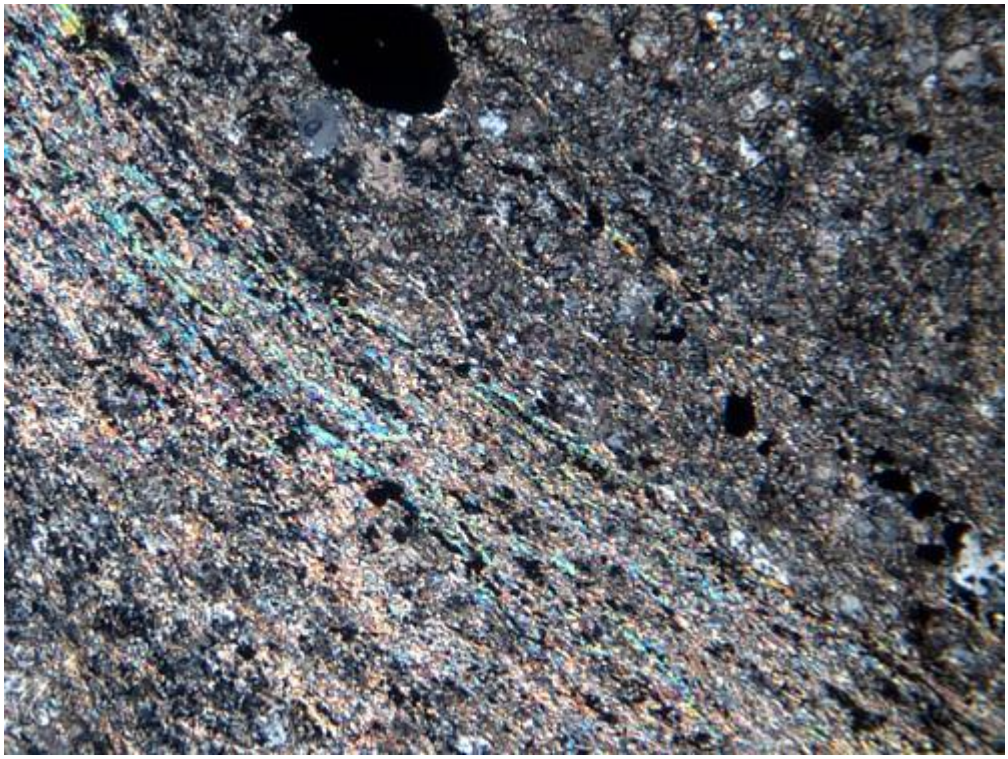
Fine-grained pyrite vein. X-axis of photo: 1.6mm. Refl. light.



Fine-grained carbonate replacement after andesite. X-axis of photo: 1.6mm. XN.



Fine-grained pyrite veins cross-cut the carbonate-altered volcanic rock. X-axis of photo: 1.6mm. XN.



Sericite vein cross-cuts carbonate-altered matrix. X-axis of photo: 1.6mm. XN.

Sample Number: TS-007 **Rock Type: Altered volcanic rock**

Petrographic Description:

Fine-grained, extensively altered and moderately sheared volcanic rock. The original mineralogy was replaced predominantly by carbonate, lesser quartz and sericite. Although replacement by secondary minerals destroyed both, mineralogy and texture, a few small domains show evidence of a volcanic protolith. Fine to medium coarse-grained carbonate makes up a significant part of the thin section. The matrix grains are weakly flattened, they are intercalated and intergrown with minor quartz. Most coarse-grained carbonate occurs in veins, some parallel and some are at right angle to the rock fabric. All carbonate veins contain interstitial quartz. Several sericite veins parallel the rock fabric, and the slightly anastomosing veins represent the last stage of alteration.

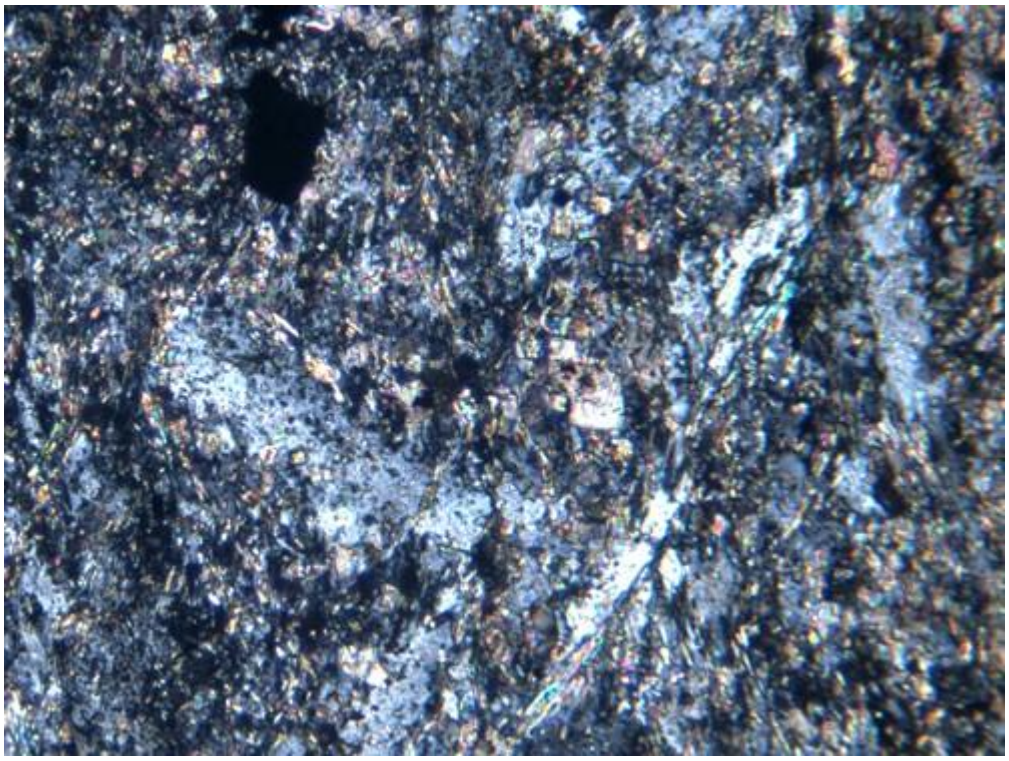
Fine-grained pyrite are disseminated through the thin section. Some occur in discontinuous veinlets and some are part of the matrix.

Detailed mineralogy

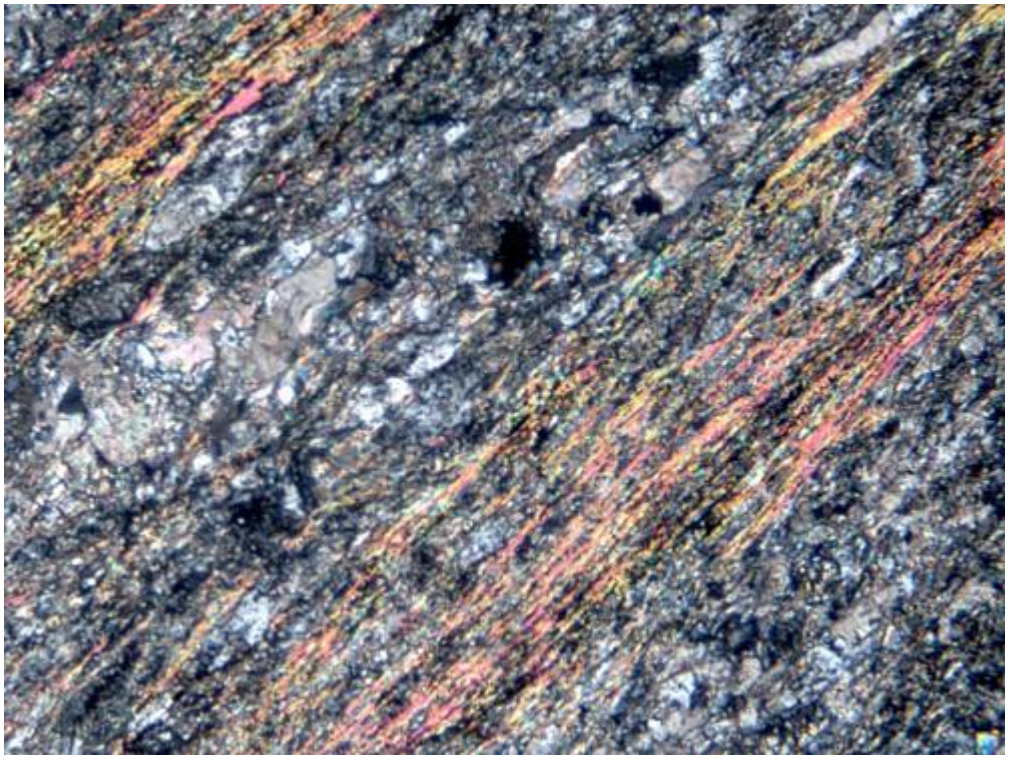
Mineral	%	Grain size(mm)	Comments
Carbonate	70	<0.1-0.6	Fine-grained carbonate makes up a significant part of the rock. The anhedral grains in the matrix are weakly flattened and show evidence of minor shearing. The grain selvages are slightly embayed.
Quartz	12	<0.1-1.0	Quartz occurs as part of the matrix and some are intergrown with the carbonates. Relatively coarse-grained quartz is part of some carbonate veins, where the carbonates form a rim on the quartz or partly replace it. All grains are strained and have undulose extinction.
Plagioclase	8	0.2-1.5	Small, corroded plagioclase laths are relict grains in small domains that are interstitial to the carbonates and also to the sericite veins. Their composition cannot be estimated as the twin lamellae were destroyed. All have sutured and embayed grain boundaries, suggesting disequilibrium.
Sericite	9		Sericite occurs most commonly in veins

			that partly boudinage the earlier carbonate aggregates. They evidently post-dated the carbonate and quartz veins, as they truncate some of the veins. Aggregates of sericite are interstitial to the matrix carbonate.
Pyrite	1	<0.05-0.4	Fine-grained anhedral-subhedral pyrite are disseminated through the thin section. Some occur in discontinuous veinlets that parallel the rock fabric.

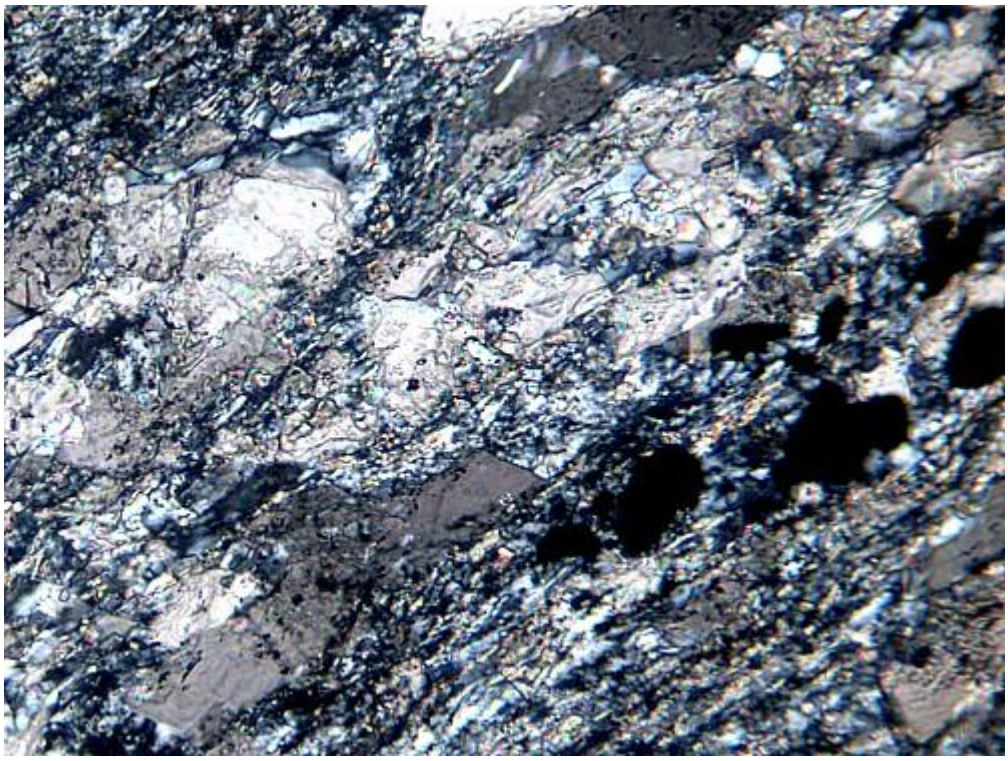
Accessory minerals: chlorite, apatite, pyrrhotite



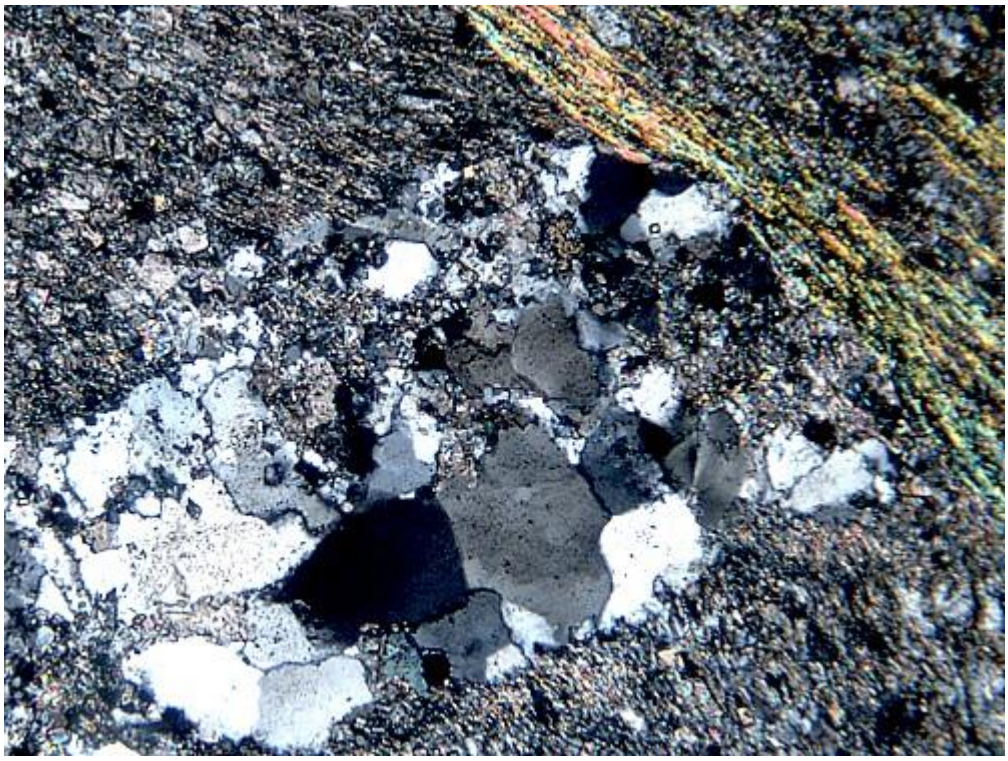
Relict plagioclase laths are partly replaced by fine-grained carbonate. X-axis of photo: 0.64mm. XN.



Sericite veins cross-cut carbonate-altered matrix. X-axis of photo: 1.6mm. XN.



Sheared carbonate vein. X-axis of photo: 1.6mm. XN.



Sericite vein cross-cuts earlier quartz vein. X-axis of photo: 1,6mm. XN.

Quartz grains are partly replaced by carbonate, X-axis of photo: 1,6mm XN,

Sample Number: TS-008 **Rock Type: Altered volcanic rock**

Petrographic Description:

A pervasively altered rock. It consists predominantly of fine-grained carbonate, lesser quartz, sericite and pyrite. Fine-grained relict plagioclase are interstitial to the carbonate and sericite-altered matrix, and fine-grained granular quartz are interstitial to the carbonates and to the plagioclase. A few discontinuous quartz and carbonate veins cross-cut the rock fabric. Sericite veins boudinage some of the carbonates and cross-cut some of the quartz and carbonate veins. Sericite represents the last replacement mineral in the rock.

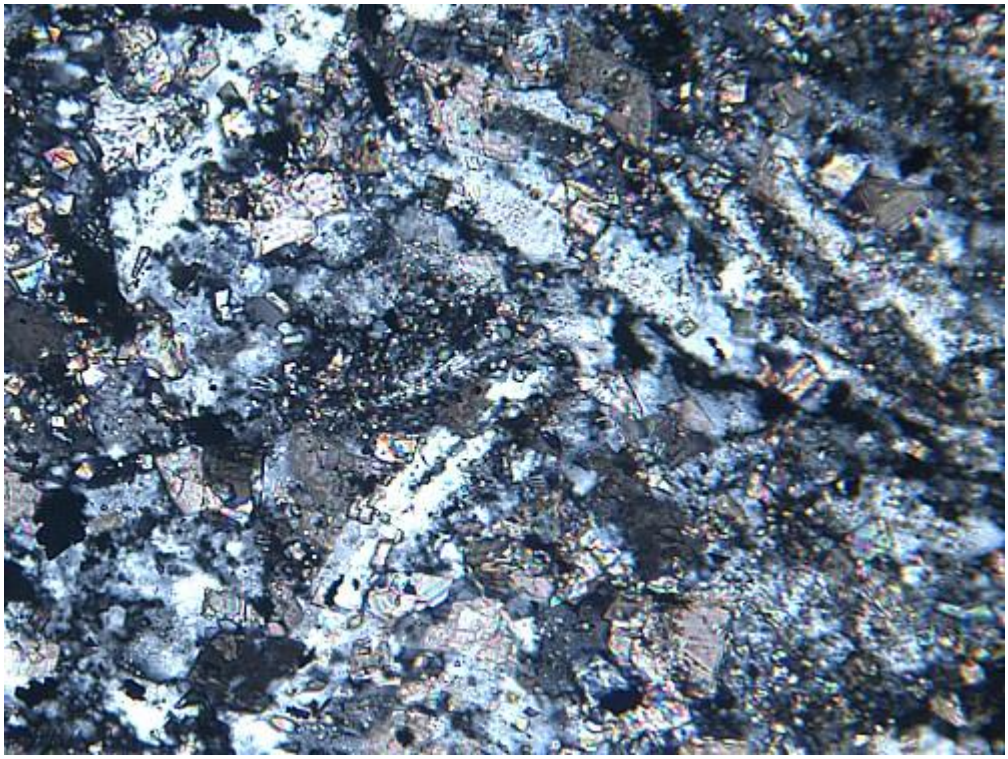
Fine-grained hematite occurs in veins, some of which contain interstitial pyrite. It also occurs in aggregates, some of which form a rim on pyrite

Detailed mineralogy

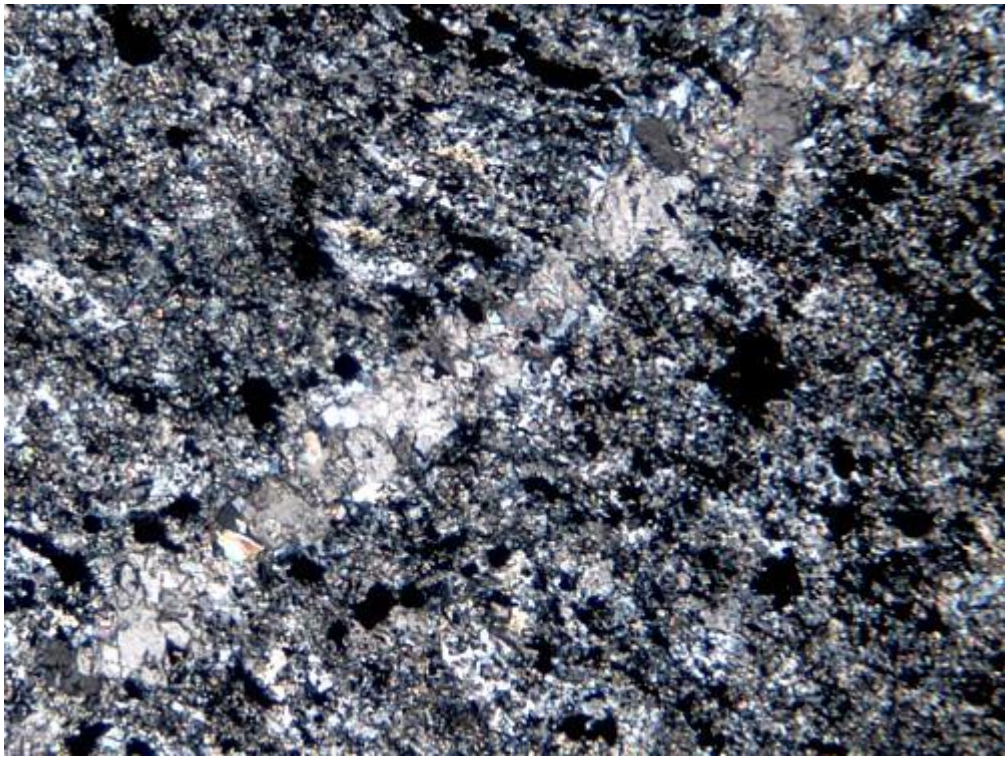
Mineral	%	Grain size(mm)	Comments
Carbonate	67	<0.05-2.0	Anhedral carbonate makes up a significant part of the rock. It is a replacement after the plagioclase, and also forms a network in the matrix. Some occur in discontinuous veins and they are intergrown with quartz. Relatively coarse-grained carbonate is part of a late vein.
Quartz	12	microcrystalline-1.5	Microcrystalline quartz is part of the matrix. The minute grains are interstitial to altered plagioclase and to some carbonate aggregates. Quartz clasts are interstitial to the carbonate-altered domains and they also occur in veins. Most grains have slightly embayed and/or sutured grain boundaries. Quartz also forms pressure shadows on pyrite.
Plagioclase	10	av. 0.5	Relict, corroded and altered plagioclase are part of the matrix. They are partly replaced by carbonate and the sutured, embayed grain boundaries suggest disequilibrium (dissolution).
Sericite	5		Small, discontinuous sericite veinlets are interstitial to the matrix carbonate, and parallel the selvages of some quartz and

			carbonate veins.
Pyrite	3	<0.05-1.2	Fine-grained anhedral pyrite are disseminated through the carbonate-rich matrix. Some grains are rimmed by fine-grained specular hematite, and some by quartz pressure shadows.
Hematite	3	<0.1-0.2	Fine-grained specular hematite occurs in veins and also in aggregates. They are commonly associated with pyrite. Aggregates of hematite are also interstitial to the carbonates.

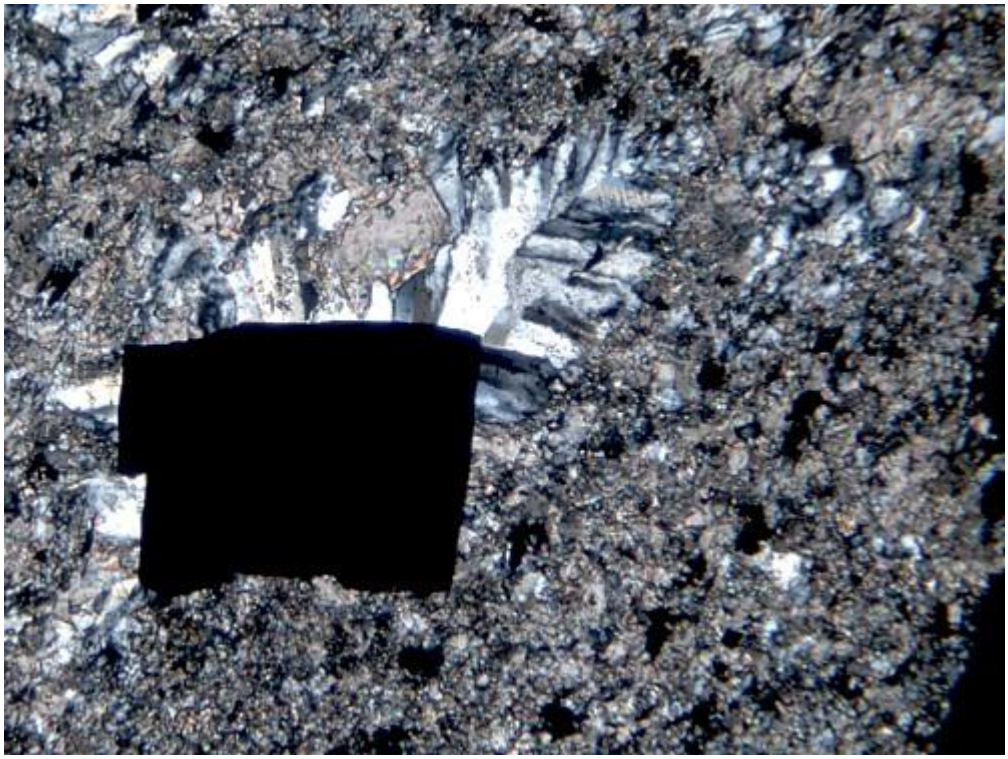
Accessory minerals: chlorite, apatite



Relict plagioclase laths, X-axis of photo: 0.64mm. XN.

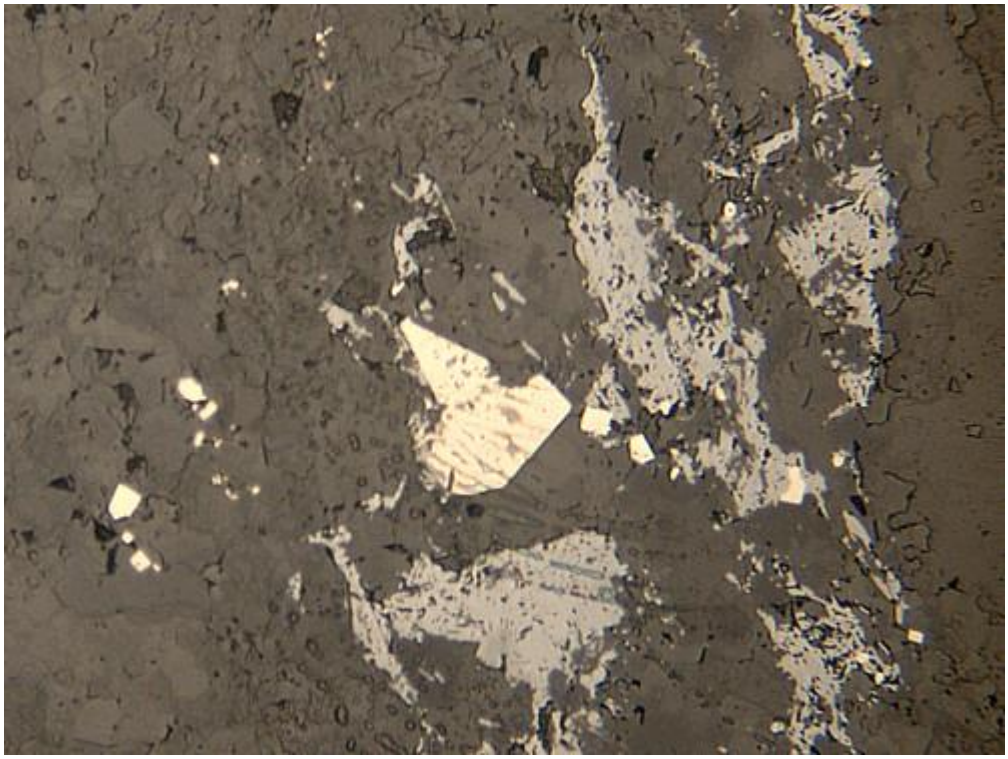


Carbonate vein cross-cuts carbonate-altered matrix. X-axis of photo: 1.6mm. XN.



Quartz pressure shadows on pyrite in carbonate-altered matrix.
X-axis of photo: 1.6mm. XN.

Fine-grained hematite + pyrite vein (in carbonate-rich matrix).
X-axis of photo: 1.6mm. Refl. light.



Pyrite (yellow) within hematite-rich domain. X-axis of photo: 0.64mm. Refl. light.

Sample Number: TS-009 **Rock Type: Altered volcanic rock**

Petrographic Description:

An extensively altered volcanic rock. Although the volcanic texture is evident, the original mineralogy was replaced by a secondary assemblage, consisting of quartz and lesser carbonate. The rock is cross-cut by numerous quartz veins, some of which contain minor carbonate. The matrix is very fine-grained devitrified glass that contains numerous recrystallized phenocrysts. Most 'phenocrysts' consist of aggregates of quartz, although the shape of the original grains would be more consistent with plagioclase.

Quartz veins of various width cross-cut the rock. Several generations of veins were identified. The wide veins represent the first generation, and they pre-dated shearing in the rock. They consist of extensively sheared and flattened quartz, whereas in the post-tectonic veins, the quartz (and carbonate) are unsheared and undeformed.

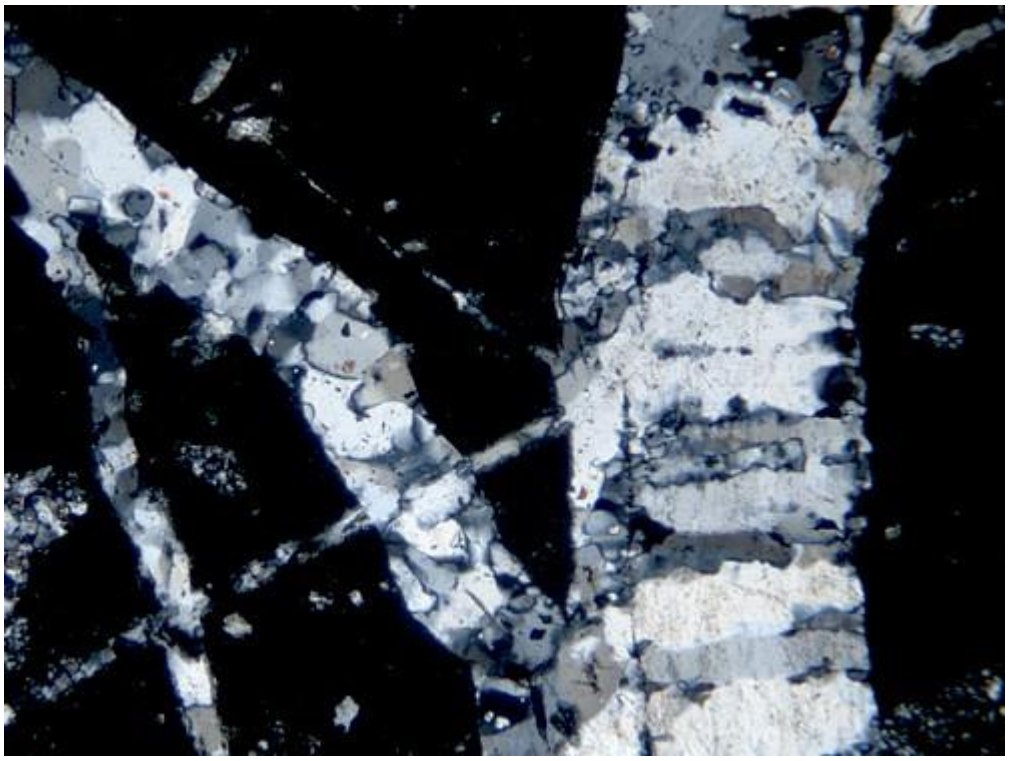
The matrix of the volcanic rock contains disseminated, fine-grained, and a few larger grains of pyrite. On the whole, pyrite makes up <0.5% of the rock.

Detailed mineralogy

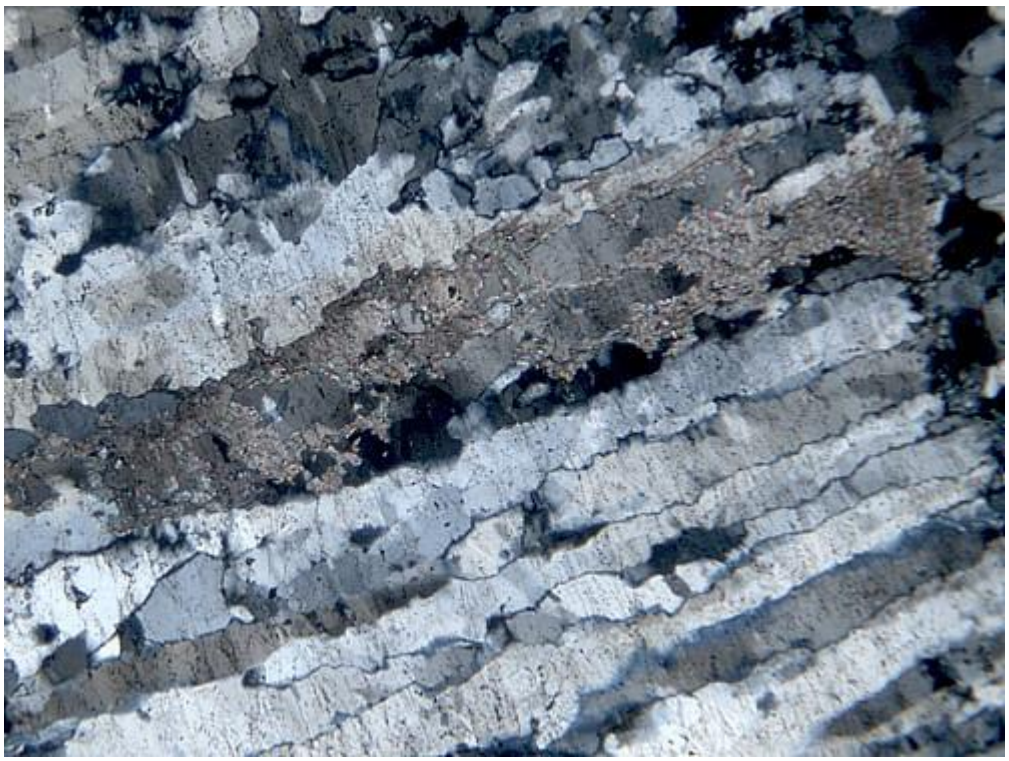
Mineral	%	Grain size(mm)	Comments
Quartz	42	microcrystalline-1.5	Quartz occurs as 1) replacement after feldspar phenocrysts in the volcanic rock. They occur in aggregates and most have sutured, embayed grain boundaries, as 2) a lithic fragment that consists of angular, granulated and fragmented quartz. The fragment is in-touch with the volcanic rock, and as 3) veins that cross-cut the volcanic rock. The strained, deformed early veins pre-dated shearing, whereas the cross-cutting smaller veins are post-shearing generations.
Carbonate	2	0.1-2.5	Anhedral grains and aggregates of carbonate are replacement after some of the original phenocrysts in the volcanic rock. They occur in aggregates, generally intergrown with quartz. Some carbonate aggregates are included in quartz veins, and a few small carbonate veins cross-cut the quartz.

Pyrite	<0.5	<0.05-0.4	Anhedral to subhedral pyrite are randomly distributed within the volcanic rock. They are mostly very fine-grained and occur in aggregates
Irresolvable matrix	56		Very fine-grained matrix of the volcanic rock is probably devitrified glass – as suggested by the dark, ‘opaque’ and sinuous texture.

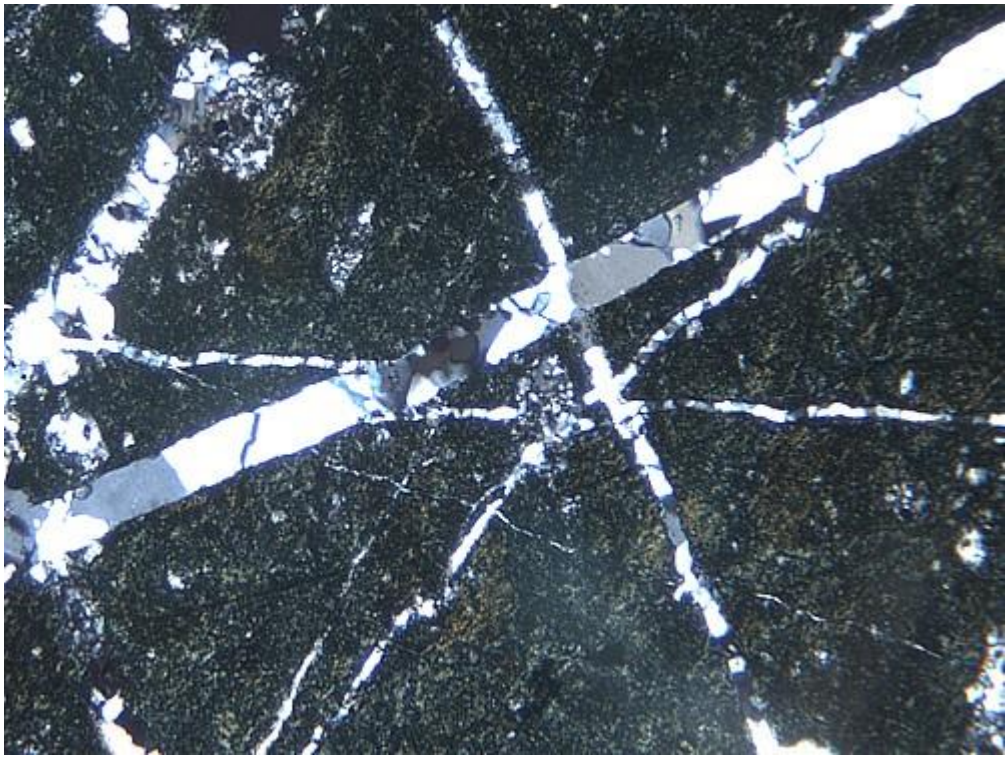
Accessory minerals: apatite, hematite



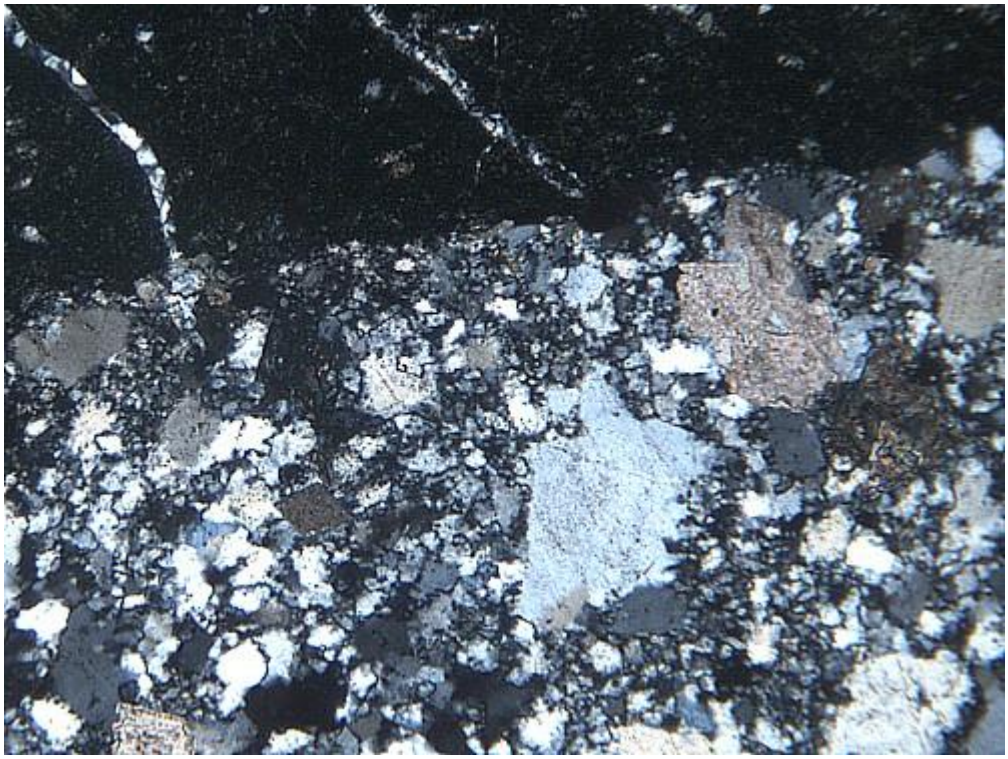
Three quartz vein generation in altered volcanic rock. X-axis of photo: 1.6mm. XN.



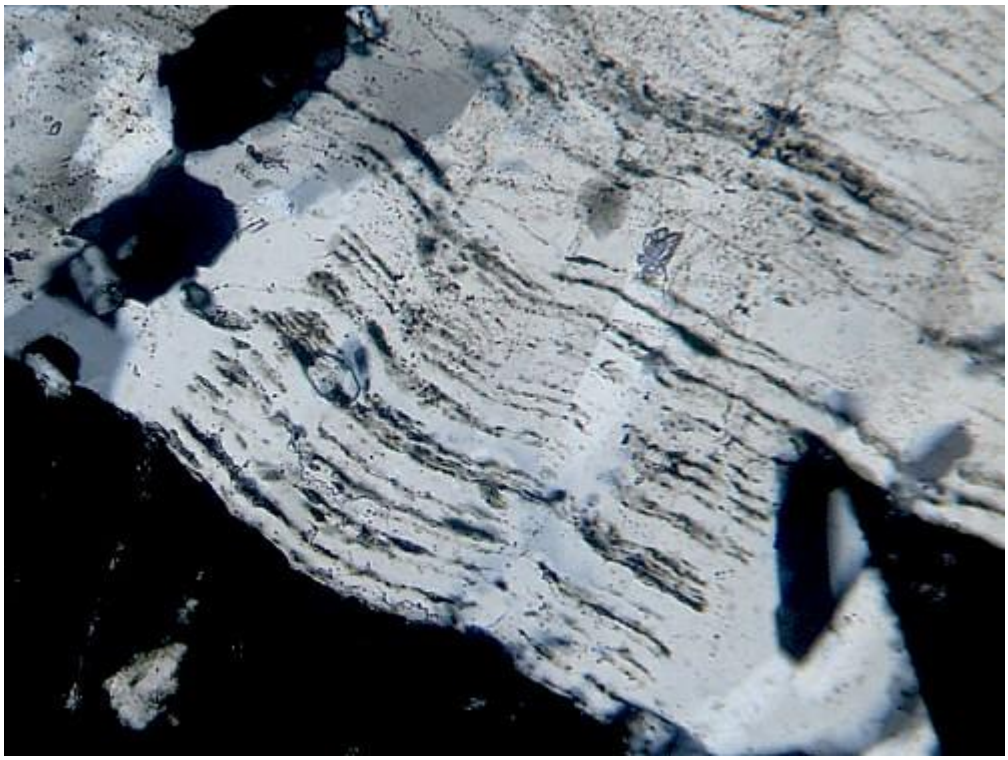
Sheared quartz vein. X-axis of photo: 1.6mm. XN.



Fine-grained matrix of volcanic rock is cross-cut by several generations of quartz veins. X-axis of photo: 0.64mm. Ppl.



Siliceous fragment in contact with volcanic rock (dark area). X-axis of photo: 1.6mm. XN.



Sheared and deformed vein quartz. X-axis of photo:0.64mm. XN.

Sample Number: TS-010 **Rock Type: Altered volcanic rock**

Petrographic Description:

A composite rock that consists of mafic and felsic components. The mafic fraction consists of an abundance of coarse-grained amphibole within a fine-grained matrix, and altered plagioclase. The felsic component consists of medium-grained, highly sericitized felsic feldspar-rich rock (intrusive?). The amphibole in the mafic rock have slightly graphic texture, suggesting contact metamorphism. The rock is sheared, some of the minerals are stretched and deformed and the mafic component contains a relative abundance of fine-grained clinozoisite (replacement after calcic plagioclase), and coarse-grained ilmenite.

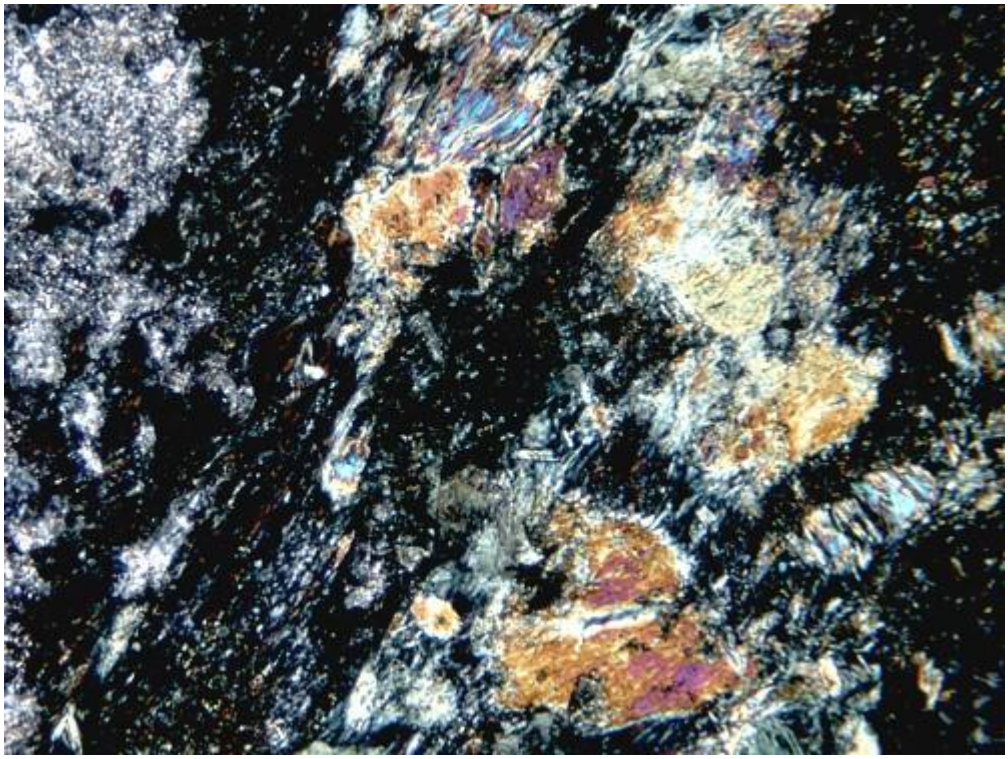
Coarse-grained ilmenite is relatively abundant in the amphibole-rich fragments, whereas pyrite and chalcopyrite are more abundant in the felsic fragment.

Detailed mineralogy

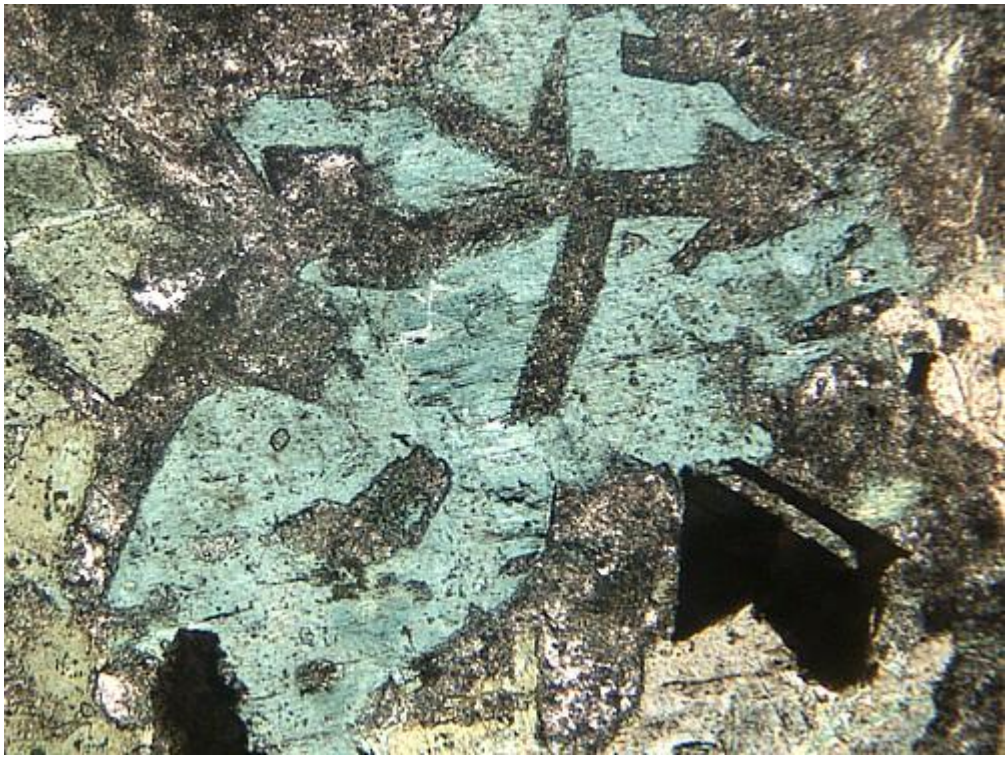
Mineral	%	Grain size(mm)	Comments
Plagioclase	35	0.5-2.0	Plagioclase is part of the felsic and mafic fragments. They are sericitized, and much of the twin lamellae were destroyed during alteration. Therefore, their composition cannot be estimated. But the dominance of sericite, the absence of carbonate, epidote and oxides suggest sodic composition in the felsic rock The plagioclase in the mafic fragment are altered to clays and aggregates of fine-grained clinozoisite.
Amphibole	40	0.4-2.2	Amphibole, having blue-green pleochroism (actinolitic composition) makes up a significant part of the mafic component. Several of the grains have graphic texture, suggesting possible contact metamorphism. Some phenocrysts are stretched and deformed.
Epidote	5	av. <0.1	Fine-grained clinozoisite is a replacement after the extensively altered plagioclase in the mafic fragment. The small grains occur within clays that partly replace the plagioclase. They form small clusters within the clays.

			Fine-grained, granular epidote (high birefringence) is part of the dark fine-grained matrix interstitial to the amphibole.
Sericite	2		Sericite is the most common secondary mineral in the felsic fragments. They partly replace the plagioclase, and are interstitial to the phenocrysts.
Ilmenite	5	0.3-1.5	Relatively coarse-grained blocky ilmenite are abundant within the mafic fragment. They are interstitial to the amphibole.
Chalcopyrite	1	variable up to 1.0	Chalcopyrite generally forms a rim on earlier pyrite. Some are partly replaced by chalcocite. Most occur within the felsic fragment
Irresolvable matrix	12		The dark matrix is interstitial to both the mafic and felsic fragments. The mineralogy is more or less irresolvable, although some contain fine-grained aggregates of epidote.

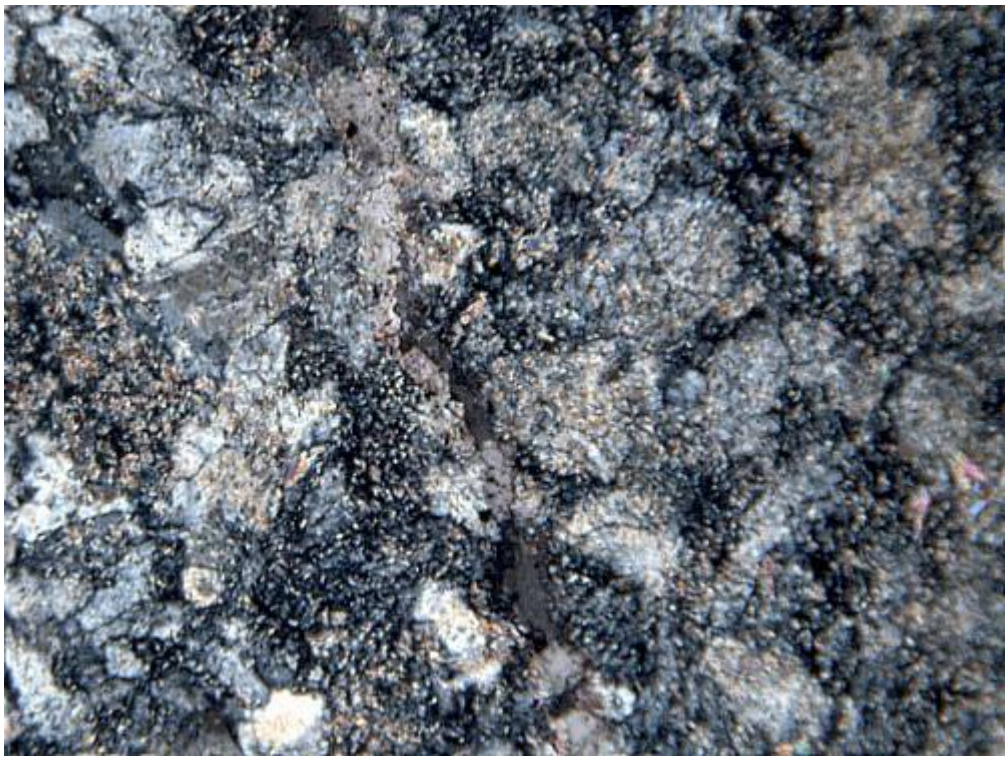
Accessory minerals: chlorite, apatite, pyrite, chalcocite, quartz, carbonate



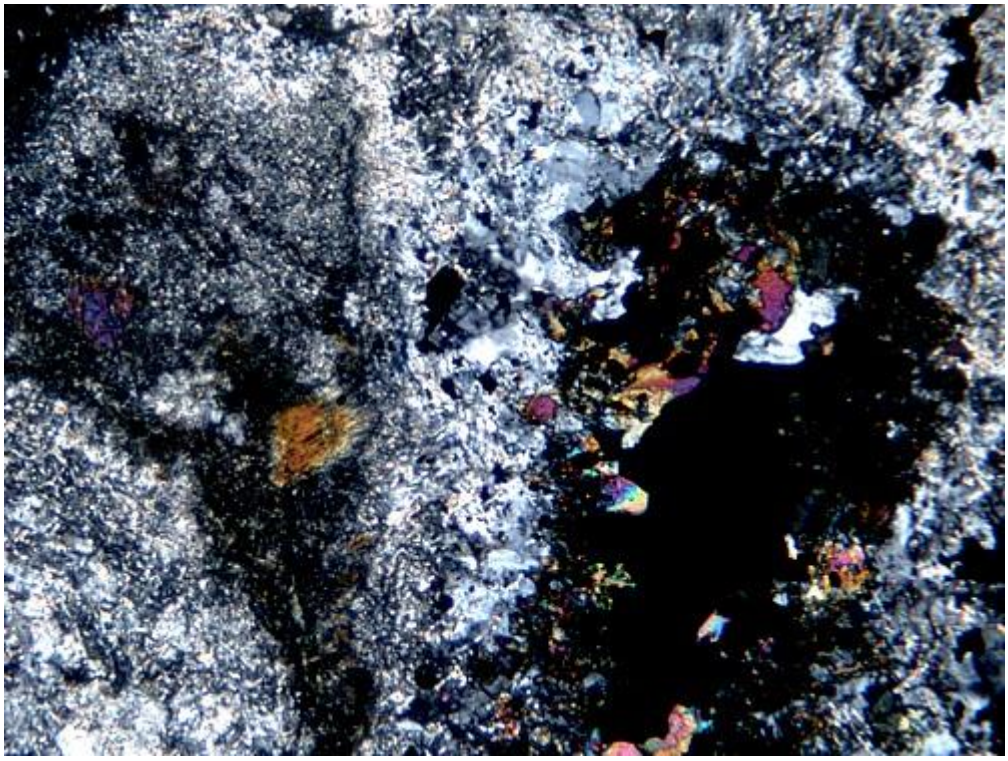
Mafic intrusive rock with fragmented amphibole (yellow-orange) in dark interstitial matrix
X-axis of photo: 1.6mm. XN.



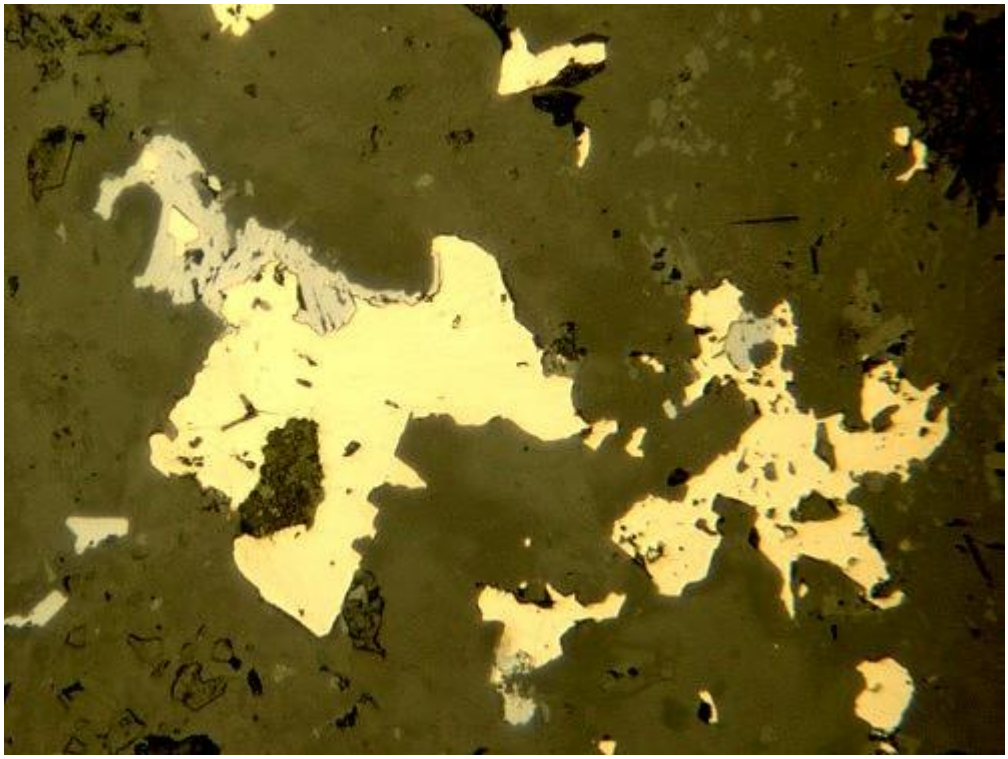
Mottled plagioclase phenocrysts are intergrown with amphibole (graphic texture).
X-axis of photo: 1.6mm. Ppl



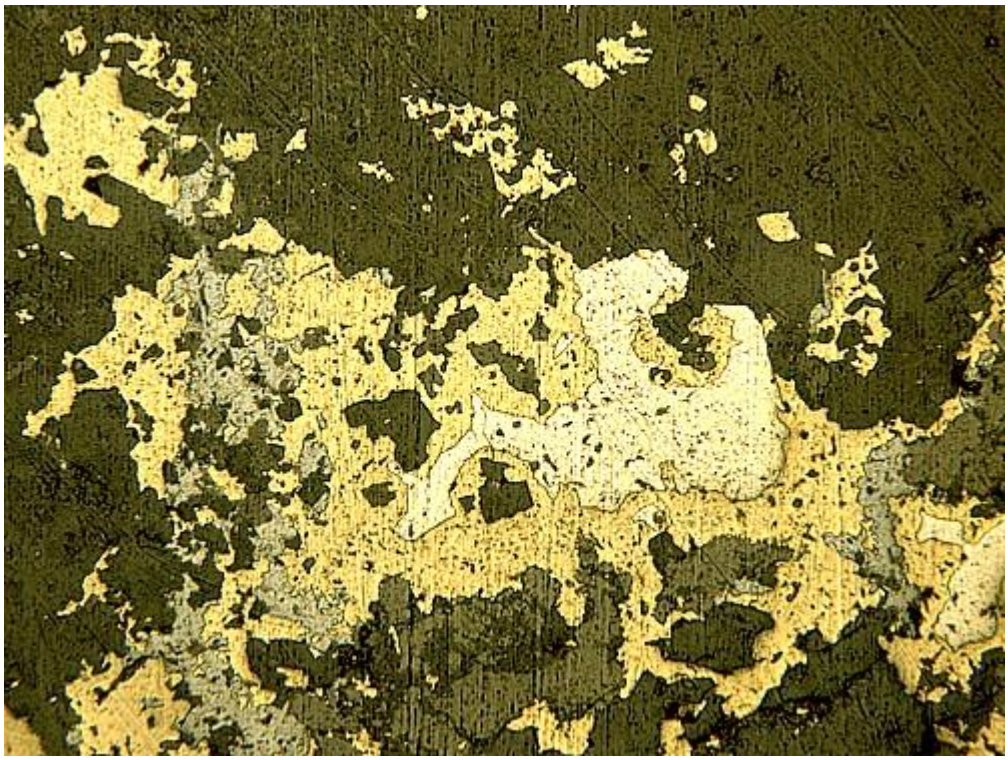
Dusting of fine-grained carbonate on feldspar-rich felsic rock. X-axis of photo: 1.6mm. XN.



Alternating felsic (light) and mafic (dark: chlorite+amphibole) components in intrusive rock. X-axis of photo: 1.6mm. XN.



Pyrite is rimmed by chalcopyrite. X-axis of photo: 0.32mm. Refl. light.



Pyrite is rimmed by chalcopyrite (yellow), which is weakly altered to chalcocite (blue-grey, on left) in felsic component. X-axis of photo: 1.6mm. Refl. light.

Sample Number: TS-011 **Rock Type: Altered volcanic rock**

Petrographic Description:

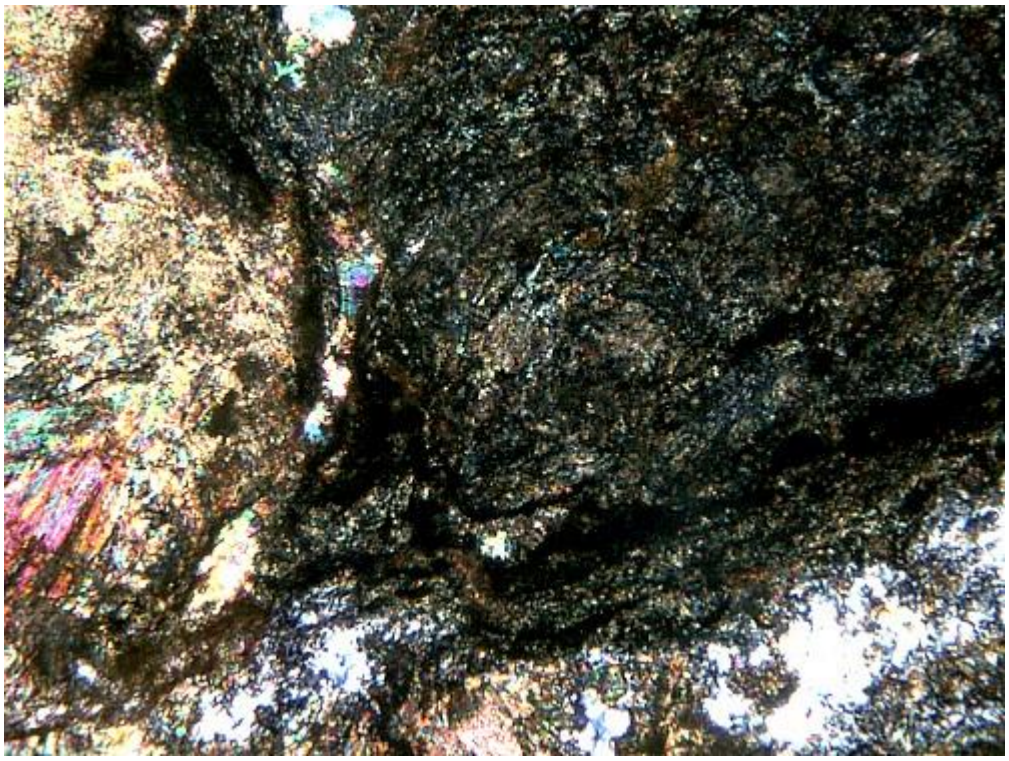
The rock is an extensively sheared and deformed volcanic. It consists of various fragments, some of which are cemented by carbonate and epidote. The above two minerals occur within the contact between sheared volcanic fragments.

The mineralogy of different rock fragments is difficult to identify, due to extensive alteration and shearing. Most fragments appear to have been derived from a volcanic rock of intermediate composition, and a few of the fragments occur as sheared, deformed bands. Some are in contact with felsic (quartz-rich) bands. The rock fragments are also in contact with carbonates. Some carbonates were partly replaced by epidote and the different rock fragments are partly cemented by carbonate + epidote aggregates.

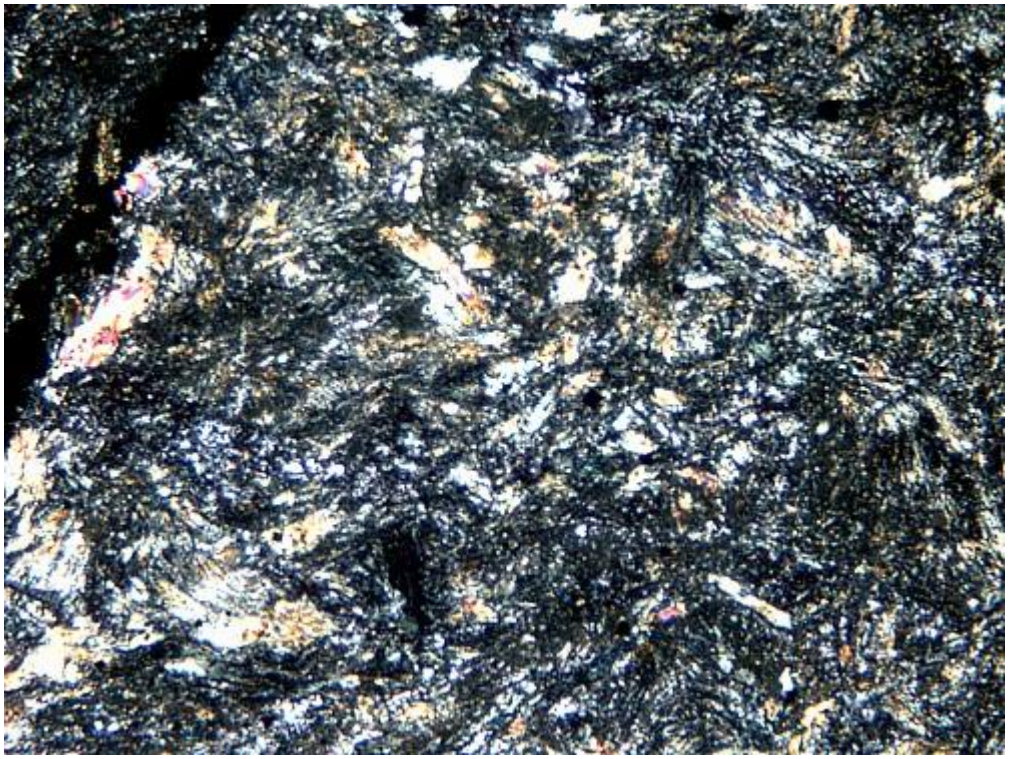
Oxides are rare, with the exception of a few grains. Fine-grained pyrite occurs in small clusters, and some are rimmed by chalcopyrite.

The visually estimated % minerals in the thin section is very approximate, as most minerals in the rock were partly replaced by clays.

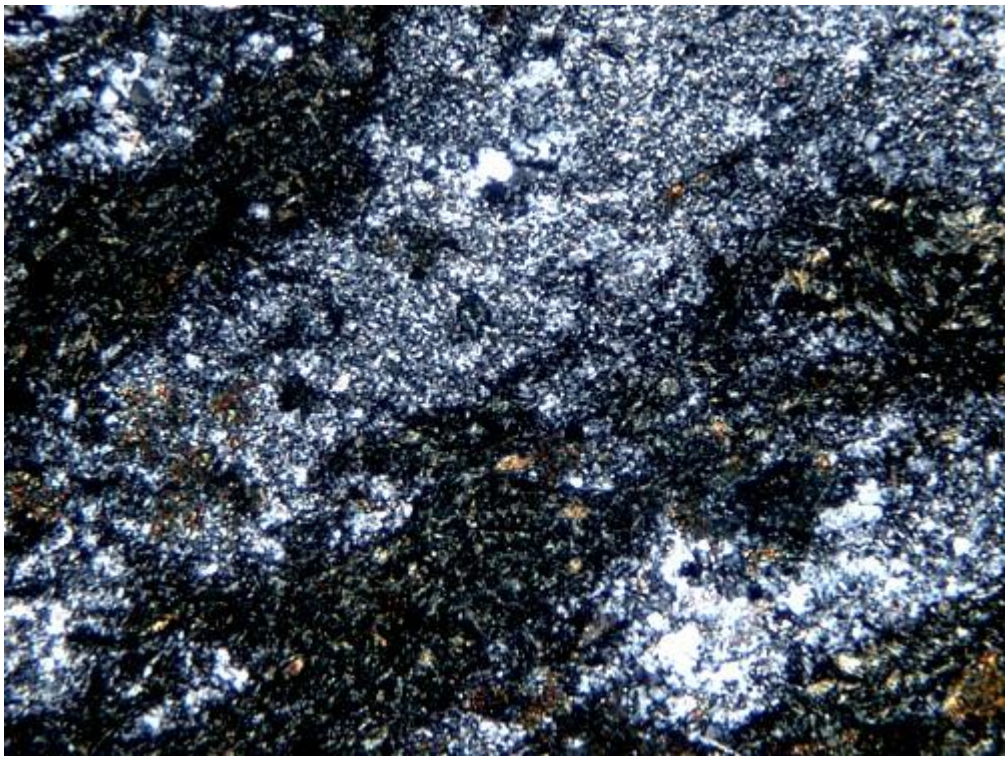
Mineral	**%**
Plagioclase	25
Clays	30
Amphibole	12
Chlorite	6
Carbonate	10
Epidote	7
Quartz	10
Pyrite	trace
Chalcopyrite	trace
Hematite	trace
Apatite	trace



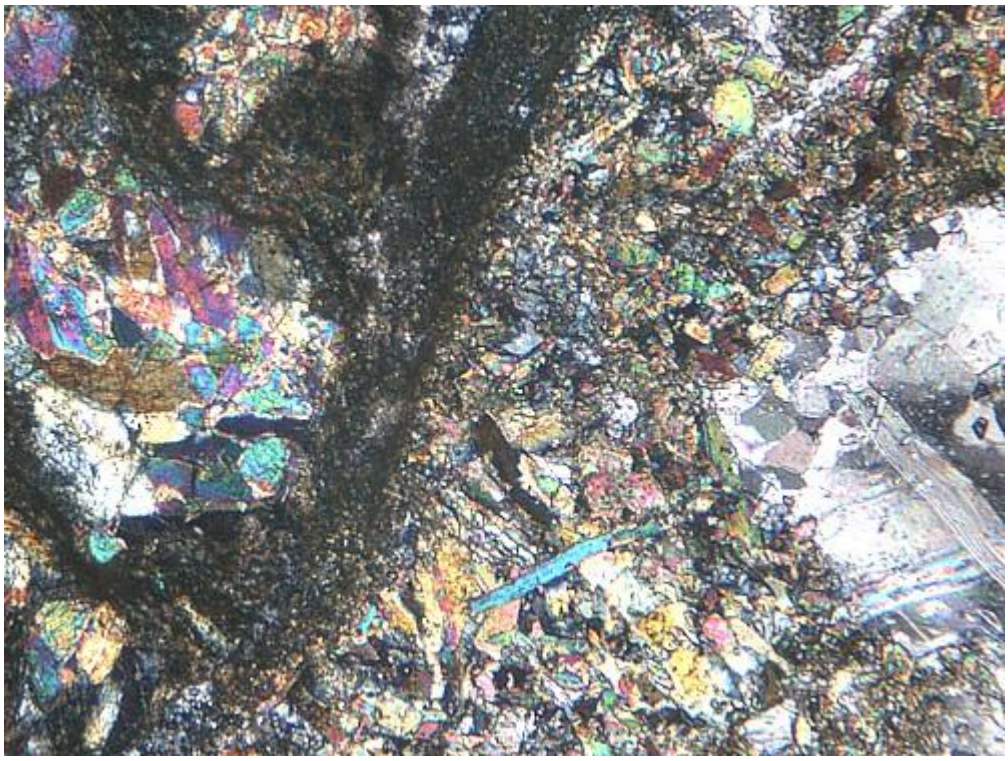
Epidote-rich contact zone (pink) between lithological units. Dark fragment is a sheared mafic rock .X-axis of photo: 1.6mm. XN.



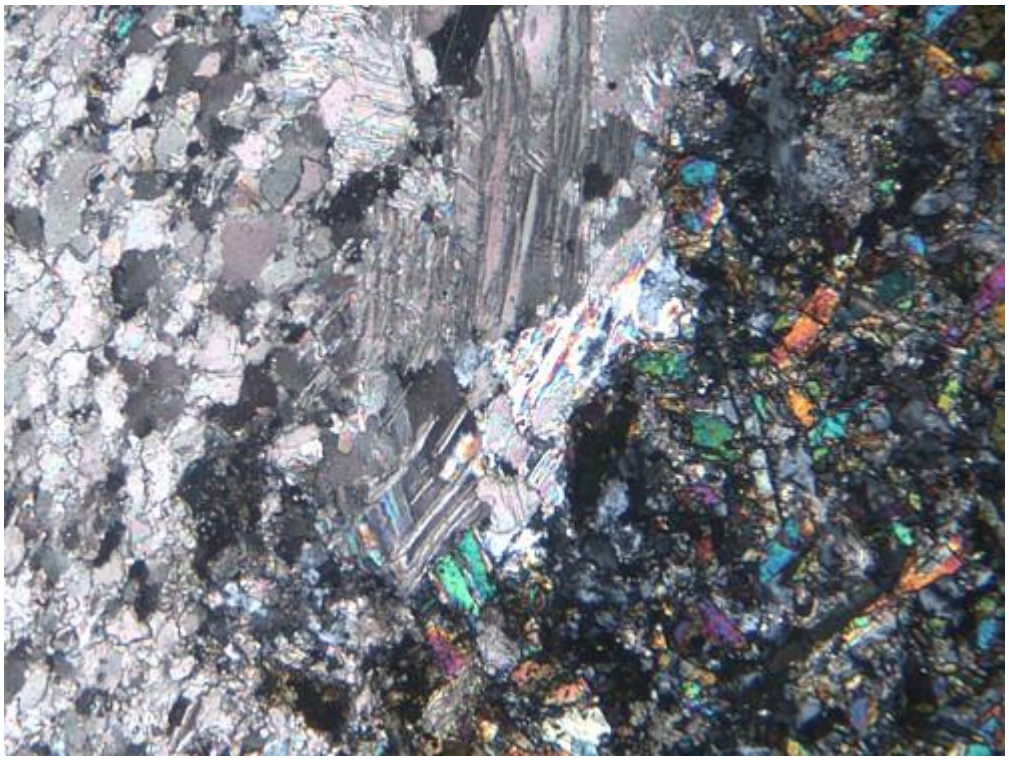
Altered volcanic fragment. X-axis of photo: 1.6mm. XN.



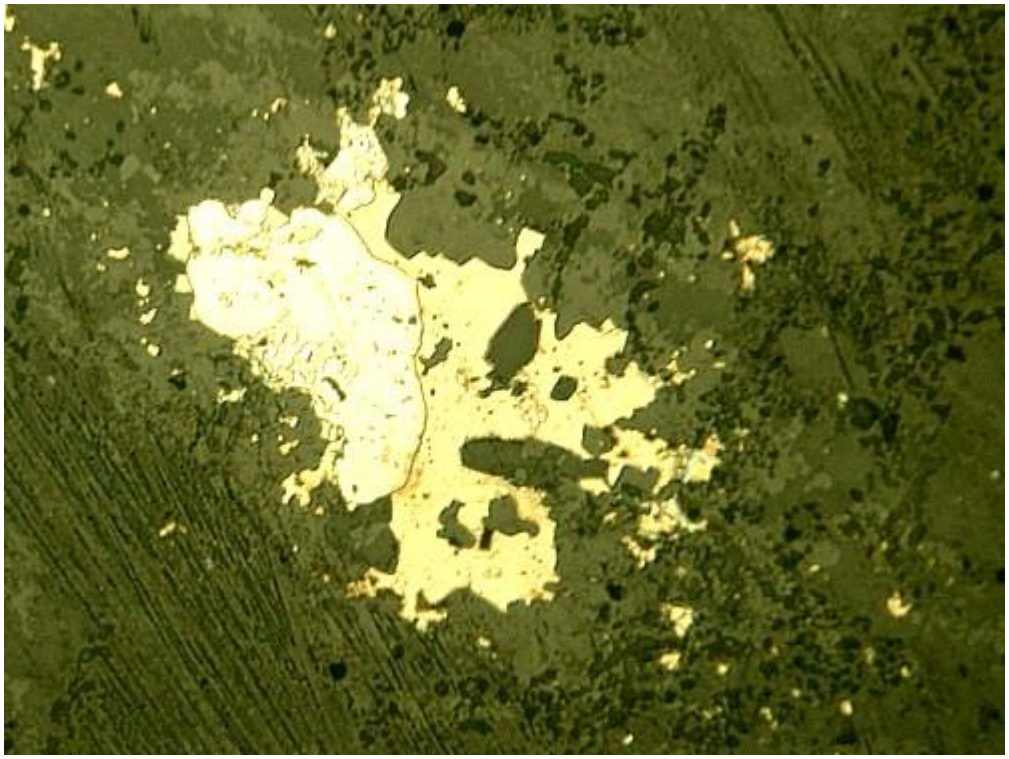
Alternating felsic and mafic bands (schlieren). X-axis of photo: 1.6mm. XN.



Epidote aggregates (multi color) within carbonate-rich domain.
X-axis of photo: 1.6mm. XN.



Carbonate-rich domain (left) is in contact with epidote-rich domain (multi color). X-axis of photo: 1.6mm. XN.



Pyrite is rimmed by chalcopyrite. X-axis of photo: 1.6mm. Refl. light.

Quality Analysis ... *Innovative Technologies*

Date Submitted: 14-Oct-16
Invoice No.: A16-10709
Invoice Date: 17-Nov-16
Your Reference: Geraldton

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

34 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-10709**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

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The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-10709**

Notes:

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If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
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ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
178785	6.86	0.5	2	< 100	73	< 1	1.7	5.86	< 0.1	14	39.1	78	108	0.8	7.84	1.5	0.67	5.8	5.9	3.34	< 0.1	53.9	0.036
178786	4.91	0.3	3	< 100	514	1	0.2	12.2	0.1	59	13.3	33	20.5	2.9	2.52	2.4	1.94	28.2	32.0	0.981	< 0.1	33.8	0.062
178787	7.18	< 0.1	< 1	< 100	87	< 1	1.1	6.05	< 0.1	15	44.9	83	101	1.0	8.10	1.7	0.77	6.2	6.8	3.63	0.6	58.4	0.038
178788	6.86	< 0.1	1	< 100	96	< 1	0.7	7.35	< 0.1	14	36.3	68	115	1.1	7.50	1.6	0.93	5.4	11.2	3.77	0.5	53.2	0.038
178789	7.27	< 0.1	2	< 100	69	< 1	1.0	7.00	< 0.1	15	40.0	70	117	0.8	7.59	1.5	0.65	6.0	7.0	3.81	0.2	57.0	0.037
178790	7.65	< 0.1	< 1	500	144	< 1	0.4	4.30	0.3	13	40.8	75	79.6	2.9	8.82	1.5	2.15	5.1	22.1	3.22	< 0.1	62.5	0.041
178791	7.03	< 0.1	< 1	< 100	131	< 1	1.6	6.88	< 0.1	15	46.1	80	94.5	1.3	8.02	1.8	1.17	6.3	9.6	3.08	0.4	60.3	0.034
178792	6.44	< 0.1	< 1	< 100	103	< 1	1.0	5.64	< 0.1	13	37.9	81	102	1.1	7.19	1.7	0.89	5.2	9.0	3.66	0.7	51.5	0.036
178793	7.19	< 0.1	1	< 100	93	< 1	0.8	5.60	< 0.1	15	42.6	86	115	1.1	8.39	1.9	0.77	6.0	13.7	3.58	3.4	57.7	0.043
178794	7.48	< 0.1	144	300	495	< 1	< 0.1	3.65	0.1	19	11.7	36	43.4	0.6	4.72	1.0	0.84	8.7	6.8	2.54	0.5	21.8	0.060
178795	6.78	< 0.1	< 1	< 100	94	< 1	0.6	6.78	< 0.1	14	37.4	71	92.0	1.5	7.26	1.7	1.05	5.5	17.1	3.66	0.3	54.2	0.037
178796	6.82	< 0.1	< 1	< 100	99	< 1	0.3	5.91	< 0.1	13	38.4	52	87.8	1.8	7.63	0.9	1.11	5.4	22.3	3.18	< 0.1	53.7	0.034
178797	6.79	< 0.1	< 1	< 100	103	< 1	0.8	7.29	0.1	14	42.0	62	117	1.6	7.86	1.8	1.14	5.7	18.8	3.61	0.3	54.3	0.038
178798	6.59	0.2	3	500	125	< 1	0.5	6.51	0.2	12	34.2	55	67.0	5.8	7.23	1.7	2.56	5.1	15.2	2.63	2.7	48.8	0.034
178799	6.02	0.8	4	1200	119	< 1	0.4	7.32	0.3	13	31.9	64	33.9	8.0	8.14	1.7	2.77	5.3	10.1	2.51	2.5	45.1	0.033
178800	6.90	0.2	5	< 100	96	< 1	0.2	6.49	0.1	14	37.9	57	78.5	13.1	8.31	1.9	2.80	5.7	15.3	2.18	2.9	50.7	0.039
178801	4.79	3.9	8	> 2000	67	< 1	1.1	5.62	0.5	10	40.6	54	72.9	7.1	7.35	1.4	1.78	4.1	4.6	1.86	2.0	47.8	0.028
178802	6.08	0.2	7	100	106	< 1	< 0.1	6.43	0.3	13	32.9	66	63.0	13.6	7.17	1.6	3.36	5.1	13.5	0.030	1.0	47.2	0.034
178803	6.11	0.1	5	100	99	< 1	< 0.1	6.12	0.3	12	31.6	65	56.9	13.0	7.05	1.4	3.07	5.0	12.9	0.027	< 0.1	45.6	0.032
178804	5.84	0.1	3	< 100	104	< 1	< 0.1	5.96	0.1	13	36.6	69	89.6	12.8	7.35	1.7	3.15	5.1	17.5	0.053	2.8	43.6	0.036
178805	6.20	< 0.1	2	< 100	92	< 1	< 0.1	4.83	0.2	14	35.7	70	104	13.2	7.45	1.7	2.90	5.7	19.3	0.066	< 0.1	49.5	0.034
178806	5.55	0.7	5	800	86	< 1	0.2	4.99	0.2	12	32.2	63	138	12.0	6.06	1.5	2.90	4.7	10.6	0.113	1.0	40.6	0.029
178807	5.56	0.2	1	200	84	< 1	< 0.1	5.92	0.2	13	36.4	54	107	11.3	7.45	1.4	2.72	5.2	18.5	0.174	0.2	45.1	0.034
178808	6.70	0.2	15	< 100	116	< 1	0.3	4.59	0.3	12	41.1	77	172	15.0	7.32	1.7	3.56	5.3	10.2	0.383	2.5	51.1	0.036
178809	6.88	0.1	9	< 100	121	< 1	0.1	5.91	0.3	14	31.6	66	119	15.7	6.91	1.9	3.93	5.5	11.6	0.063	3.0	46.6	0.035
178810	7.30	< 0.1	3	< 100	109	< 1	< 0.1	5.01	0.1	14	41.5	75	112	15.1	8.20	1.8	3.46	5.8	25.9	0.108	3.1	57.7	0.039
178811	7.04	< 0.1	3	< 100	125	< 1	< 0.1	5.26	0.2	15	37.6	67	90.5	16.4	7.89	1.9	3.72	6.2	17.6	0.197	3.1	54.1	0.040
178812	6.76	0.8	11	> 2000	595	< 1	0.4	2.72	0.5	22	11.7	65	64.1	1.0	4.98	0.9	0.90	10.3	14.2	2.25	< 0.1	38.5	0.078
178813	6.90	0.7	5	500	106	< 1	0.3	5.02	0.2	14	40.2	76	72.2	11.7	7.41	1.8	2.70	5.5	4.6	2.36	1.1	54.2	0.037
178814	5.09	1.8	3	> 2000	67	< 1	0.5	5.73	0.3	10	31.4	65	44.6	6.7	5.84	1.3	1.38	4.0	3.1	2.47	2.1	35.1	0.028
178815	7.28	0.3	11	100	129	< 1	0.3	4.65	0.1	14	44.5	81	104	17.6	7.90	1.6	3.13	5.7	7.9	1.34	0.1	60.1	0.037
178816	5.16	6.0	6	> 2000	56	< 1	0.7	6.88	0.3	10	41.9	54	79.1	5.0	6.08	1.3	1.09	3.9	3.7	2.99	2.0	41.2	0.030
178817	5.78	1.6	2	> 2000	109	< 1	0.1	6.33	0.4	13	31.0	58	110	11.4	5.98	1.5	2.67	5.3	6.1	1.34	0.5	37.6	0.031
178818	6.90	1.2	3	1700	148	< 1	0.2	4.47	0.3	13	33.3	72	106	15.8	5.90	1.9	3.43	5.1	6.8	1.51	1.6	47.9	0.037

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
178785	21.8	20.4	< 1	2.57	1350	1.4	0.2	33	0.8	109	< 0.1	1.0	0.389	0.19	0.3	203	< 0.1	17.1	73	51.1	< 5	
178786	58.3	15.6	< 1	3.64	585	< 0.1	< 0.1	7	1.1	202	< 0.1	8.8	0.246	0.18	1.8	56	< 0.1	12.8	59	95.6	< 5	
178787	23.9	12.6	< 1	2.70	1450	1.1	0.2	36	0.7	133	< 0.1	1.0	0.455	0.20	0.3	221	< 0.1	18.4	90	61.6	< 5	
178788	29.6	7.4	< 1	2.56	1360	4.6	1.0	33	0.8	95	< 0.1	0.9	0.408	0.28	0.3	203	< 0.1	16.9	82	56.1	< 5	
178789	19.3	6.8	< 1	2.52	1400	2.5	0.4	35	0.7	141	< 0.1	0.9	0.383	0.16	0.3	193	< 0.1	18.2	84	51.5	< 5	
178790	72.0	7.3	< 1	2.33	1240	2.0	0.4	36	0.6	56	< 0.1	1.0	0.318	0.63	0.3	191	< 0.1	16.8	124	55.4	513	
178791	32.5	13.0	2	2.41	1340	1.0	0.5	34	0.7	155	< 0.1	0.9	0.428	0.31	0.4	219	< 0.1	17.7	82	66.0	< 5	
178792	24.5	15.6	< 1	2.47	1290	0.9	0.2	31	0.8	87	< 0.1	0.9	0.429	0.21	0.3	209	< 0.1	16.4	85	61.4	5	
178793	20.1	9.2	< 1	3.01	1580	1.9	1.9	36	0.8	96	0.2	0.9	0.513	0.19	0.3	241	1.4	18.1	94	66.1	< 5	
178794	17.3	12.8	< 1	1.38	884	3.1	0.5	18	1.3	278	< 0.1	2.0	0.286	0.13	0.8	112	< 0.1	16.8	66	28.1	392	
178795	29.4	3.8	< 1	2.25	1270	1.1	0.3	34	0.7	77	< 0.1	0.9	0.423	0.27	0.3	208	< 0.1	17.5	89	62.3	< 5	
178796	31.7	2.6	< 1	3.16	1450	0.5	0.2	32	0.4	84	< 0.1	0.9	0.241	0.28	0.2	157	< 0.1	16.4	95	34.9	< 5	
178797	29.8	10.0	2	2.61	1400	0.5	0.3	32	0.6	127	< 0.1	0.9	0.410	0.28	0.5	209	< 0.1	15.8	91	65.2	7	
178798	85.8	10.4	< 1	2.79	1470	4.5	1.8	31	0.7	127	0.2	0.8	0.445	0.73	0.2	216	36.9	12.7	85	63.7	434	
178799	97.1	13.7	1	3.25	1890	16.8	2.1	30	0.7	124	0.1	0.8	0.422	0.80	0.2	247	57.8	11.9	81	65.1	1350	
178800	122	8.8	< 1	3.30	1570	1.3	3.4	33	0.7	120	0.2	0.9	0.478	0.84	0.3	242	22.9	11.5	113	74.1	13	
178801	71.4	21.9	4	2.18	1510	38.4	4.6	24	0.7	87	0.1	0.6	0.307	0.48	0.2	137	45.2	8.8	65	49.6	> 5000	5.66
178802	133	6.6	< 1	3.05	1290	17.8	2.3	30	0.6	82	< 0.1	0.8	0.373	0.93	0.2	201	5.3	12.1	114	64.4	194	
178803	119	6.2	< 1	2.85	1260	10.2	1.0	30	0.3	75	< 0.1	0.8	0.327	0.91	0.2	180	0.4	11.6	112	52.2	139	
178804	121	4.2	< 1	3.30	1080	4.4	3.4	30	0.8	87	0.2	0.8	0.448	0.88	0.2	209	17.2	11.2	89	62.0	133	
178805	110	6.4	< 1	2.68	1100	0.2	0.4	31	0.2	65	< 0.1	0.9	0.373	0.88	1.6	196	< 0.1	12.5	117	65.5	65	
178806	111	9.4	< 1	2.34	1090	15.0	1.7	27	0.9	63	< 0.1	0.7	0.376	0.81	0.2	189	19.0	10.6	76	57.4	700	
178807	103	6.7	< 1	3.09	1520	0.4	1.2	29	0.5	77	< 0.1	0.8	0.347	0.76	0.2	172	1.1	11.7	104	56.2	176	
178808	127	5.9	< 1	1.91	1180	2.8	1.9	31	0.8	48	< 0.1	0.9	0.438	0.93	0.2	225	31.4	11.1	93	65.6	29	
178809	138	7.0	< 1	2.52	1450	0.6	4.5	34	0.7	65	0.2	0.9	0.463	1.04	0.2	223	39.0	13.5	90	68.2	6	
178810	128	3.3	< 1	3.31	1120	0.7	3.6	35	0.7	74	0.2	1.0	0.482	0.98	0.3	237	16.5	12.4	117	75.6	< 5	
178811	140	3.9	< 1	2.92	1250	0.6	2.4	36	0.8	75	0.2	1.0	0.485	1.09	0.3	239	19.3	12.5	111	76.0	< 5	
178812	22.9	18.7	< 1	1.43	757	2.2	1.8	16	1.7	255	< 0.1	2.0	0.252	0.27	0.9	94	< 0.1	15.3	98	33.8	3830	
178813	99.1	6.4	1	1.87	1160	3.8	0.8	34	0.7	80	< 0.1	1.0	0.454	0.75	0.2	221	3.6	10.9	83	68.3	721	
178814	50.1	11.4	2	2.17	1300	20.7	3.2	24	0.6	98	0.1	0.6	0.327	0.40	0.2	159	53.3	8.8	58	50.0	2990	
178815	118	7.0	< 1	2.13	1170	1.2	0.8	36	0.4	80	< 0.1	1.0	0.355	1.05	0.3	213	0.4	12.1	96	65.8	24	
178816	41.4	49.0	2	2.78	1430	717	6.6	23	0.6	139	< 0.1	0.6	0.334	0.63	0.2	203	54.8	8.9	48	50.8	> 5000	7.27
178817	91.8	7.7	< 1	2.49	1330	7.3	1.2	29	0.6	95	< 0.1	0.8	0.400	0.71	0.2	184	5.2	11.1	61	62.6	2250	
178818	118	6.2	< 1	1.82	1030	4.3	1.0	34	0.8	71	< 0.1	1.0	0.473	0.92	3.9	231	13.7	12.1	78	78.3	1450	

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	4.78	29.7	418	> 2000	1150	1	1540	0.84	2.3	15	7.4	13	972	2.6	21.8	1.0	0.05	7.1	11.7	0.064	0.7	35.4	0.068
GXR-1 Cert	3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0	0.0650
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	6.16	3.2	104	1000	95	2	21.2	0.93	0.3	104	12.3	46	5580	2.4	2.80	1.3	3.85	51.3	10.7	0.524	9.9	37.1	0.156
GXR-4 Cert	7.20	4.0	98.0	470	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0	0.120
SDC-1 Meas	7.68		< 1		649	3		0.98		87	16.4	96	28.3	3.8	4.59	0.9	2.54	37.4	33.2	1.49	< 0.1	32.0	0.066
SDC-1 Cert	8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0	0.0690
GXR-6 Meas	13.1	< 0.1	224	100	1390	1	0.2	0.18	0.1	34	12.2	45	61.9	4.0	5.38	1.8	1.75	11.8	36.1	0.102	< 0.1	23.0	0.038
GXR-6 Cert	17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0	0.0350
DNC-1a Meas					105						54.1	332	89.2					3.4	4.9		1.7	245	
DNC-1a Cert					118						57	270	100					3.6	5.2		3	247	
OREAS203 Meas																							
OREAS203 Cert																							
SBC-1 Meas			23		664	3	0.8		0.4	100	21.0	83	27.6	7.4		3.4		44.5	165		10.3	79.7	
SBC-1 Cert			25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8	
SE68 Meas																							
SE68 Cert																							
OREAS 45d (4-Acid) Meas	7.96		8		194	< 1	0.4	0.18		37	30.9	532	351	3.6	14.4	2.7	0.39	16.1	21.7	0.098	0.2	231	0.044
OREAS 45d (4-Acid) Cert	8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0	0.042
OxK110 Meas																							
OxK110 Cert																							
SdAR-M2 (U.S.G.S.) Meas					1040	7	1.2		5.1	98	12.4	42	232	1.7		1.8		43.5	17.4		3.2	48.8	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8	
OxP116 Meas																							
OxP116 Cert																							
178785 Orig	6.82	0.5	1	< 100	73	< 1	1.7	5.81	< 0.1	14	39.1	82	110	0.9	7.83	1.7	0.67	5.8	5.9	3.36	0.1	54.7	0.034
178785 Dup	6.90	0.5	3	< 100	73	< 1	1.7	5.91	0.1	14	39.0	73	106	0.8	7.84	1.3	0.68	5.8	5.8	3.32	< 0.1	53.1	0.037
178795 Orig																							
178795 Dup																							
178804 Orig																							
178804 Dup																							
178814 Orig																							
178814 Dup																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	0.03	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	0.2	0.001

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank	< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	6	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.001	< 0.1	0.2	< 0.001
Method Blank	< 0.01	0.2	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.2	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	0.3	< 0.001

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
GXR-1 Meas	2.8	750	< 1	0.31	787	17.4	28.0	1	28.7	251	< 0.1	2.7	0.032	0.38	31.6	73	146	25.0	742	35.9		
GXR-1 Cert	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0		
DH-1a Meas												940			2470							
DH-1a Cert												910			2629							
GXR-4 Meas	129	49.7	2	1.64	134	326	4.4	7	7.5	184	0.5	19.1	0.285	3.28	5.7	79	35.8	12.2	70	42.7		
GXR-4 Cert	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186		
SDC-1 Meas	109	25.0		1.02	778		< 0.1	14	0.3	150	< 0.1	12.6	0.094	0.65	2.9	32	< 0.1		109	33.2		
SDC-1 Cert	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00		
GXR-6 Meas	71.1	103	< 1	0.62	935	0.1	0.2	24	0.5	33	< 0.1	5.4		2.20	1.5	86	< 0.1	11.6	133	57.5		
GXR-6 Cert	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110		
DNC-1a Meas	1.6	5.8					0.8	29		124			0.304			130		15.3	67	38.0		
DNC-1a Cert	5	6.3					0.96	31		144			0.29			148		18.0	70	38.0		
OREAS203 Meas																					835	
OREAS203 Cert																					871.000	
SBC-1 Meas	123	36.6				2.2	0.9	18	3.6	159	0.5	15.5	0.494	0.93	5.7	197	1.1	29.1	204	122		
SBC-1 Cert	147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0		
SE68 Meas																					603	
SE68 Cert																					599	
OREAS 45d (4-Acid) Meas	39.0	23.4	< 1	0.24	484	0.6	< 0.1	51	1.1	27	< 0.1	16.1	0.339	0.26	2.9	121	< 0.1	11.1	47	98.6		
OREAS 45d (4-Acid) Cert	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141		
OxK110 Meas																						3.62
OxK110 Cert																						3.602
SdAR-M2 (U.S.G.S.) Meas	119	838				12.4		3		127	< 0.1	15.1			2.6	22	< 0.1	24.4	840	80.7		
SdAR-M2 (U.S.G.S.) Cert	149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259		
OxP116 Meas																						14.7
OxP116 Cert																						14.92
178785 Orig	21.8	20.6	< 1	2.55	1340	1.5	0.2	33	0.7	112	< 0.1	0.9	0.407	0.19	0.3	222	< 0.1	17.1	74	57.5		
178785 Dup	21.9	20.2	< 1	2.59	1360	1.4	0.2	33	0.9	107	< 0.1	1.0	0.370	0.19	0.3	185	< 0.1	17.2	72	44.7		
178795 Orig																					< 5	
178795 Dup																					< 5	
178804 Orig																					140	
178804 Dup																					126	
178814 Orig																					3020	
178814 Dup																					2950	
Method Blank																					< 5	
Method Blank																					< 5	
Method Blank																						< 0.02
Method Blank	< 0.1	< 0.1	< 1	< 0.01	6	< 0.1	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	1.7		

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
Method Blank	< 0.1	< 0.1	< 1	< 0.01	7	< 0.1	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.2		
Method Blank	< 0.1	< 0.1	< 1	< 0.01	6	0.3	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	3	0.4		

Quality Analysis ... *Innovative Technologies*

Date Submitted: 14-Oct-16
Invoice No.: A16-10714
Invoice Date: 11-Nov-16
Your Reference: Geraldton

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

35 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-10714**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 14-Oct-16
Invoice No.: A16-10714
Invoice Date: 11-Nov-16
Your Reference: Geraldton

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

35 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-10714**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
178819	3.55	2.7	4	> 2000	66	< 1	0.3	6.68	0.3	9	23.7	39	40.5	6.0	5.26	0.9	1.36	3.4	4.8	1.24	1.4	27.0	0.018
178820	0.14	0.3	< 1	< 100	418	< 1	< 0.1	20.5	< 0.1	1	0.3	3	0.6	0.8	0.08	0.1	0.06	0.7	12.2	0.024	0.3	< 0.1	0.003
178821	8.59	< 0.1	5	< 100	221	1	0.3	2.04	< 0.1	11	41.8	83	105	24.0	8.23	2.3	4.88	4.1	23.6	0.030	3.1	61.5	0.044
178822	4.94	0.9	1	< 100	94	< 1	2.9	8.23	0.2	11	31.4	51	56.6	11.1	5.83	1.3	2.21	4.7	27.3	0.105	2.2	38.7	0.027
178823	6.51	< 0.1	< 1	< 100	90	< 1	1.2	6.80	< 0.1	14	47.4	68	80.6	9.7	7.92	1.8	1.87	5.9	40.2	1.37	1.2	54.6	0.033
178824	7.06	< 0.1	3	< 100	92	< 1	0.3	5.53	< 0.1	13	39.0	73	106	7.7	6.82	1.4	1.41	5.1	33.0	2.68	< 0.1	54.1	0.034
178825	7.28	< 0.1	2	< 100	108	< 1	0.4	5.49	< 0.1	14	45.1	73	98.3	8.8	8.38	2.0	1.65	5.7	35.8	2.51	0.6	56.8	0.039
178826	6.86	< 0.1	< 1	< 100	49	< 1	0.2	7.23	< 0.1	14	39.2	57	76.4	5.0	7.68	1.4	0.79	5.7	44.9	2.60	0.1	53.6	0.036
178827	7.38	< 0.1	2	< 100	57	< 1	0.2	6.06	< 0.1	14	44.7	75	124	6.3	8.39	1.9	1.17	5.7	41.8	2.75	1.9	59.6	0.041
178828	8.36	0.1	171	400	528	< 1	0.1	3.91	0.2	21	12.6	95	50.6	0.6	5.00	1.2	0.87	9.5	7.8	2.60	2.9	23.5	0.067
178829	5.83	0.6	4	800	101	< 1	0.3	7.09	0.3	12	36.8	58	88.1	14.0	6.34	1.7	2.87	4.9	9.4	1.11	2.6	45.6	0.034
178830	6.76	< 0.1	3	< 100	119	< 1	0.2	5.97	0.1	14	40.6	67	81.0	15.7	7.73	1.8	3.35	5.5	13.8	1.06	1.4	52.7	0.039
178831	6.47	< 0.1	3	< 100	131	< 1	0.3	5.42	0.1	13	38.8	78	89.4	17.5	7.25	1.8	3.71	5.2	7.5	0.547	1.9	56.6	0.035
178832	6.22	< 0.1	4	< 100	113	< 1	0.1	4.97	< 0.1	11	37.8	80	107	14.4	7.23	1.9	2.75	4.0	8.0	1.46	3.2	57.8	0.037
178833	6.56	< 0.1	4	< 100	118	< 1	0.2	5.72	0.1	13	40.6	76	73.9	13.4	7.59	1.8	2.72	5.2	9.9	1.76	0.8	51.2	0.037
178834	5.61	0.2	4	< 100	100	< 1	0.3	5.11	0.2	11	34.3	64	71.0	12.8	6.25	1.6	2.58	4.6	7.4	1.44	1.0	42.8	0.031
178835	6.41	< 0.1	1	< 100	103	< 1	< 0.1	4.93	0.1	13	38.7	62	102	13.3	7.22	1.4	3.04	5.1	22.9	0.612	0.1	54.0	0.033
178836	6.40	< 0.1	2	200	125	< 1	0.3	4.81	0.2	13	33.8	64	157	13.5	7.02	1.8	2.99	5.3	6.4	1.50	2.4	49.8	0.035
178837	6.94	< 0.1	3	< 100	133	< 1	0.3	4.85	0.2	14	36.0	71	101	15.2	7.30	1.9	3.33	6.1	6.8	1.39	2.9	56.9	0.039
178838	5.98	0.2	3	< 100	136	< 1	0.2	5.86	0.3	12	39.9	63	70.9	11.1	6.72	1.7	2.44	5.0	6.4	1.84	2.8	48.8	0.031
178839	6.72	< 0.1	3	300	90	< 1	0.2	4.96	0.2	13	43.9	56	139	9.0	7.47	1.8	1.92	5.4	24.5	2.28	3.2	60.3	0.037
178840	5.95	< 0.1	2	< 100	63	< 1	0.2	6.13	0.1	12	33.6	58	62.1	6.0	6.72	1.7	1.27	4.7	18.5	2.78	2.8	43.9	0.031
178841	6.68	< 0.1	1	< 100	92	< 1	0.2	6.00	0.1	14	39.9	68	95.4	10.4	7.46	1.2	2.36	5.7	29.1	1.51	< 0.1	52.6	0.035
178842	6.13	0.2	3	300	110	< 1	0.5	4.54	0.2	11	35.1	75	80.2	11.1	6.33	1.8	2.45	4.0	9.0	1.88	3.1	51.0	0.036
178843	5.94	< 0.1	2	200	121	< 1	0.2	5.28	0.3	13	37.0	70	67.5	10.7	6.42	1.7	2.50	5.1	7.2	1.49	1.3	49.3	0.030
178844	3.87	4.7	7	> 2000	56	< 1	0.7	5.98	0.4	8	31.3	39	27.4	2.9	5.93	1.0	0.72	3.1	1.6	2.46	1.5	36.3	0.022
178845	6.14	0.2	2	300	153	< 1	0.2	4.78	0.2	12	40.9	60	118	11.6	7.37	1.8	2.87	4.8	12.5	0.836	1.5	51.7	0.035
178846	6.07	0.6	9	> 2000	550	< 1	0.4	2.50	0.4	20	11.1	57	56.8	0.9	4.61	0.8	0.81	9.5	13.9	2.12	< 0.1	36.4	0.071
178847	6.54	0.1	4	< 100	185	< 1	0.2	5.57	0.2	14	40.6	60	88.0	11.3	7.54	1.8	2.74	5.5	20.8	0.995	2.4	53.1	0.037
178848	6.74	0.3	3	200	95	< 1	< 0.1	5.46	0.1	13	41.7	62	100	8.2	7.35	1.8	1.94	5.4	24.0	2.20	3.2	53.5	0.036
178849	6.57	0.3	3	500	89	< 1	< 0.1	5.16	0.1	14	43.0	65	96.8	6.7	7.48	1.9	1.62	5.9	27.2	2.45	3.2	55.5	0.039
178850	5.15	2.1	3	> 2000	79	< 1	0.1	6.98	0.3	10	30.5	57	71.1	5.4	5.95	1.5	1.46	4.3	4.3	2.31	2.3	36.1	0.029
178851	6.97	0.2	2	< 100	123	< 1	0.1	5.48	0.2	14	39.0	85	96.6	11.3	7.41	2.0	3.10	5.6	8.9	1.30	2.7	55.5	0.038
178852	5.84	0.1	1	< 100	85	< 1	0.1	5.44	0.3	12	32.7	64	91.9	5.5	6.45	1.6	1.44	4.7	13.9	2.55	0.8	44.9	0.031
178853	5.01	2.1	4	1800	92	< 1	1.2	4.54	0.2	19	40.8	26	62.9	4.2	10.4	2.8	1.19	7.9	7.6	2.45	4.5	27.8	0.054

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
178819	49.4	10.1	2	2.61	1440	44.9	2.9	18	0.6	88	< 0.1	0.4	0.227	0.37	0.1	124	30.6	7.9	48	35.0	4460	
178820	1.9	2.4	< 1	13.1	326	0.4	0.2	< 1	0.2	139	< 0.1	0.1	0.005	0.13	0.2	< 4	0.2	0.8	10	3.0	< 5	
178821	179	1.6	< 1	1.71	575	2.5	3.8	40	0.9	28	0.2	1.1	0.552	1.43	0.2	260	19.3	9.5	97	80.0	< 5	
178822	81.3	5.4	< 1	2.22	1620	35.2	2.9	23	0.6	103	0.1	0.6	0.325	0.64	0.2	161	21.7	8.5	98	47.5	16	
178823	68.5	3.0	< 1	2.59	1440	1.2	0.8	31	0.7	91	< 0.1	0.9	0.429	0.53	0.3	216	2.4	10.1	111	67.9	8	
178824	51.1	2.8	< 1	2.06	1080	0.6	0.4	34	0.4	81	< 0.1	0.9	0.277	0.40	0.2	171	< 0.1	10.0	85	50.0	< 5	
178825	60.0	3.3	< 1	2.24	1110	3.0	0.4	34	0.7	76	< 0.1	1.0	0.480	0.46	0.3	236	0.3	11.3	99	70.3	5	
178826	31.1	2.7	< 1	2.75	1350	0.9	0.3	33	0.4	103	< 0.1	0.9	0.354	0.22	0.2	176	< 0.1	8.6	104	51.1	6	
178827	42.6	4.3	< 1	2.58	1230	2.3	1.6	37	0.8	88	< 0.1	1.0	0.490	0.31	0.3	225	2.7	9.5	105	65.0	13	
178828	19.4	14.1	< 1	1.48	955	5.1	1.4	19	1.6	304	0.1	2.1	0.345	0.13	0.8	126	0.9	18.6	70	29.9	383	
178829	101	8.3	1	2.47	1680	7.0	2.6	30	0.8	77	0.2	0.8	0.426	0.77	0.2	187	50.0	11.3	65	63.9	1180	
178830	117	4.8	< 1	2.56	1540	6.6	1.5	33	0.7	60	< 0.1	0.9	0.446	0.89	0.2	208	7.8	11.3	100	63.9	57	
178831	132	5.4	< 1	2.08	1240	1.6	1.2	32	0.6	55	< 0.1	0.9	0.448	1.04	0.2	215	10.5	10.9	97	63.3	8	
178832	90.9	3.3	< 1	1.92	1220	2.3	2.6	30	0.8	57	0.2	0.7	0.478	0.85	0.2	216	12.5	9.8	101	68.9	< 5	
178833	100	4.7	< 1	2.64	1310	1.7	0.8	32	0.6	68	< 0.1	0.9	0.455	0.79	0.5	213	4.1	11.3	111	69.5	8	
178834	89.5	6.8	< 1	1.98	1290	122	1.2	28	0.6	55	< 0.1	0.8	0.403	0.70	0.2	193	11.5	10.8	72	60.1	96	
178835	103	4.1	< 1	2.70	1310	0.7	0.6	30	0.5	49	< 0.1	0.8	0.351	0.82	0.2	175	0.3	10.9	132	53.1	24	
178836	100	8.1	< 1	2.04	1230	3.1	1.1	32	0.6	55	< 0.1	0.9	0.460	0.79	0.2	215	18.7	11.5	88	68.3	77	
178837	110	7.5	< 1	2.10	1230	3.5	1.5	33	0.7	54	0.1	0.9	0.481	0.87	0.6	229	30.0	11.8	95	68.8	86	
178838	82.5	8.4	< 1	2.35	1500	37.4	2.4	30	0.7	69	0.2	0.8	0.449	0.65	0.2	217	36.7	10.1	73	68.2	138	
178839	65.1	7.4	< 1	2.74	1520	1.4	2.1	33	0.7	70	0.2	0.9	0.485	0.50	0.2	215	18.2	10.4	130	68.9	97	
178840	43.9	5.4	< 1	2.24	1390	2.7	1.8	28	0.7	101	0.2	0.8	0.423	0.32	0.2	207	18.6	9.3	70	58.5	130	
178841	78.4	4.8	< 1	2.24	1390	0.4	0.7	33	0.6	77	< 0.1	0.9	0.270	0.62	0.3	154	< 0.1	10.1	98	40.9	27	
178842	73.7	9.9	< 1	1.87	1140	8.8	2.5	30	0.8	67	0.2	0.7	0.474	0.63	0.6	205	27.3	9.5	75	62.3	258	
178843	80.9	14.8	< 1	2.39	1500	2.4	1.0	29	0.6	67	< 0.1	0.8	0.428	0.65	0.2	197	12.7	9.9	90	64.9	403	
178844	22.9	26.7	3	2.48	1610	158	2.0	18	0.5	91	< 0.1	0.5	0.248	0.18	0.1	108	36.0	7.4	53	38.4	> 5000	9.97
178845	89.1	14.9	< 1	2.25	1410	1.8	0.7	32	0.8	48	< 0.1	0.8	0.435	0.73	0.2	207	8.9	9.9	94	63.6	254	
178846	22.0	17.7	< 1	1.33	713	0.6	0.7	14	0.9	235	< 0.1	2.0	0.160	0.25	0.9	69	< 0.1	14.6	93	26.0	3810	
178847	84.9	8.4	< 1	2.75	1480	2.2	1.2	32	0.8	58	< 0.1	0.9	0.465	0.70	0.3	218	13.2	9.7	98	68.7	16	
178848	60.7	6.7	< 1	2.67	1430	1.2	2.1	33	0.8	66	0.2	0.9	0.490	0.55	0.2	222	12.4	9.9	97	66.0	202	
178849	51.2	11.6	< 1	2.67	1310	6.5	1.8	33	0.8	73	0.2	1.0	0.487	0.39	0.3	224	19.5	9.9	113	68.9	269	
178850	44.2	20.5	1	2.86	1620	23.1	2.1	24	0.7	112	0.1	0.7	0.345	0.35	0.3	150	28.3	8.4	63	52.7	2520	
178851	95.4	9.0	< 1	2.48	1490	1.8	1.5	34	0.8	94	0.1	0.9	0.467	0.78	0.3	228	16.6	9.1	97	75.3	96	
178852	46.4	8.4	< 1	2.56	1420	2.8	0.7	29	0.7	122	< 0.1	0.8	0.390	0.37	0.2	183	4.3	7.9	113	61.2	73	
178853	38.0	12.1	3	2.00	1490	22.5	1.7	28	0.9	124	0.3	1.4	0.635	0.31	0.4	273	59.8	11.2	95	105	907	

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	4.78	29.7	418	> 2000	1150	1	1540	0.84	2.3	15	7.4	13	972	2.6	21.8	1.0	0.05	7.1	11.7	0.064	0.7	35.4	0.068
GXR-1 Cert	3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0	0.0650
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	6.16	3.2	104	1000	95	2	21.2	0.93	0.3	104	12.3	46	5580	2.4	2.80	1.3	3.85	51.3	10.7	0.524	9.9	37.1	0.156
GXR-4 Cert	7.20	4.0	98.0	470	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0	0.120
SDC-1 Meas	7.68		< 1		649	3		0.98		87	16.4	96	28.3	3.8	4.59	0.9	2.54	37.4	33.2	1.49	< 0.1	32.0	0.066
SDC-1 Cert	8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0	0.0690
GXR-6 Meas	13.1	< 0.1	224	100	1390	1	0.2	0.18	0.1	34	12.2	45	61.9	4.0	5.38	1.8	1.75	11.8	36.1	0.102	< 0.1	23.0	0.038
GXR-6 Cert	17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0	0.0350
DNC-1a Meas					105						54.1	332	89.2					3.4	4.9		1.7	245	
DNC-1a Cert					118						57	270	100					3.6	5.2		3	247	
OREAS203 Meas																							
OREAS203 Cert																							
SBC-1 Meas			23		664	3	0.8		0.4	100	21.0	83	27.6	7.4		3.4		44.5	165		10.3	79.7	
SBC-1 Cert			25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8	
SE68 Meas																							
SE68 Cert																							
OREAS 45d (4-Acid) Meas	7.96		8		194	< 1	0.4	0.18		37	30.9	532	351	3.6	14.4	2.7	0.39	16.1	21.7	0.098	0.2	231	0.044
OREAS 45d (4-Acid) Cert	8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0	0.042
OxK110 Meas																							
OxK110 Cert																							
SdAR-M2 (U.S.G.S.) Meas					1040	7	1.2		5.1	98	12.4	42	232	1.7		1.8		43.5	17.4		3.2	48.8	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8	
OxP116 Meas																							
OxP116 Cert																							
178823 Orig	6.66	0.1	2	< 100	92	< 1	1.2	6.91	< 0.1	14	47.7	64	82.2	9.8	7.95	1.9	1.89	5.9	41.2	1.40	1.5	55.3	0.034
178823 Dup	6.35	< 0.1	< 1	< 100	88	< 1	1.1	6.68	0.1	14	47.2	73	79.0	9.6	7.88	1.8	1.85	5.9	39.2	1.35	1.0	53.9	0.032
178825 Orig	7.20	< 0.1	2	< 100	106	< 1	0.4	5.48	< 0.1	14	44.7	77	112	8.8	8.37	2.0	1.65	5.7	35.6	2.49	0.6	57.0	0.039
178825 Dup	7.35	< 0.1	2	< 100	110	< 1	0.4	5.49	< 0.1	14	45.5	69	85.0	8.9	8.39	1.9	1.65	5.6	35.9	2.54	0.7	56.7	0.040
178827 Orig																							
178827 Dup																							
178838 Orig																							
178838 Dup																							
178848 Orig																							
178848 Dup																							
Method Blank																							
Method Blank																							

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank																							
Method Blank	0.03	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	0.2	0.001
Method Blank	< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	6	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.001	< 0.1	0.2	< 0.001
Method Blank	< 0.01	0.2	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.2	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	0.3	< 0.001

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
GXR-1 Meas	2.8	750	< 1	0.31	787	17.4	28.0	1	28.7	251	< 0.1	2.7	0.032	0.38	31.6	73	146	25.0	742	35.9		
GXR-1 Cert	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0		
DH-1a Meas												940			2470							
DH-1a Cert												910			2629							
GXR-4 Meas	129	49.7	2	1.64	134	326	4.4	7	7.5	184	0.5	19.1	0.285	3.28	5.7	79	35.8	12.2	70	42.7		
GXR-4 Cert	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186		
SDC-1 Meas	109	25.0		1.02	778		< 0.1	14	0.3	150	< 0.1	12.6	0.094	0.65	2.9	32	< 0.1		109	33.2		
SDC-1 Cert	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00		
GXR-6 Meas	71.1	103	< 1	0.62	935	0.1	0.2	24	0.5	33	< 0.1	5.4		2.20	1.5	86	< 0.1	11.6	133	57.5		
GXR-6 Cert	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110		
DNC-1a Meas	1.6	5.8					0.8	29		124			0.304			130		15.3	67	38.0		
DNC-1a Cert	5	6.3					0.96	31		144			0.29			148		18.0	70	38.0		
OREAS203 Meas																					886	
OREAS203 Cert																					871.000	
SBC-1 Meas	123	36.6				2.2	0.9	18	3.6	159	0.5	15.5	0.494	0.93	5.7	197	1.1	29.1	204	122		
SBC-1 Cert	147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0		
SE68 Meas																					599	
SE68 Cert																					599	
OREAS 45d (4-Acid) Meas	39.0	23.4	< 1	0.24	484	0.6	< 0.1	51	1.1	27	< 0.1	16.1	0.339	0.26	2.9	121	< 0.1	11.1	47	98.6		
OREAS 45d (4-Acid) Cert	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141		
OxK110 Meas																						3.59
OxK110 Cert																						3.602
SdAR-M2 (U.S.G.S.) Meas	119	838				12.4		3		127	< 0.1	15.1			2.6	22	< 0.1	24.4	840	80.7		
SdAR-M2 (U.S.G.S.) Cert	149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259		
OxP116 Meas																						14.7
OxP116 Cert																						14.92
178823 Orig	70.1	3.2	1	2.63	1460	1.3	0.8	32	0.7	93	< 0.1	0.9	0.440	0.54	0.3	220	3.2	10.3	114	68.0		
178823 Dup	66.9	2.9	< 1	2.55	1420	1.0	0.8	30	0.7	89	< 0.1	0.8	0.419	0.52	0.3	211	1.7	9.9	109	67.7		
178825 Orig	59.2	3.2	< 1	2.20	1100	2.1	0.4	34	0.6	74	< 0.1	1.0	0.474	0.45	0.3	238	0.1	11.1	96	70.4		
178825 Dup	60.8	3.4	< 1	2.28	1120	3.9	0.5	34	0.7	78	< 0.1	1.0	0.485	0.46	0.3	234	0.5	11.4	101	70.2		
178827 Orig																					13	
178827 Dup																					13	
178838 Orig																					136	
178838 Dup																					140	
178848 Orig																					201	
178848 Dup																					202	
Method Blank																					< 5	
Method Blank																					< 5	

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
Method Blank																						< 0.02
Method Blank	< 0.1	< 0.1	< 1	< 0.01	6	< 0.1	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	1.7		
Method Blank	< 0.1	< 0.1	< 1	< 0.01	7	< 0.1	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.2		
Method Blank	< 0.1	< 0.1	< 1	< 0.01	6	0.3	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	3	0.4		

Quality Analysis ... *Innovative Technologies*

Date Submitted: 14-Oct-16
Invoice No.: A16-10718
Invoice Date: 20-Nov-16
Your Reference: Geraldton

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

35 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-10718**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 14-Oct-16
Invoice No.: A16-10718
Invoice Date: 20-Nov-16
Your Reference: Geraldton

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

35 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-10718**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
178854	0.05	< 0.1	< 1	< 100	160	< 1	< 0.1	19.1	< 0.1	1	0.3	4	1.8	0.4	0.07	< 0.1	0.03	0.6	14.9	0.029	< 0.1	< 0.1	0.004
178855	5.26	2.2	< 1	> 2000	94	< 1	0.2	4.47	0.2	23	38.0	9	99.6	3.9	9.32	3.0	1.14	9.4	5.4	2.97	< 0.1	14.8	0.058
178856	5.15	0.3	< 1	< 100	32	< 1	0.4	4.17	0.5	23	33.6	13	63.2	0.8	8.76	3.0	0.20	9.2	1.5	4.48	< 0.1	12.3	0.052
178857	5.82	< 0.1	1	< 100	121	< 1	< 0.1	4.13	0.2	25	39.0	4	139	4.9	10.3	1.7	1.61	10.4	20.3	2.05	< 0.1	14.2	0.065
178858	6.15	< 0.1	< 1	< 100	110	< 1	< 0.1	3.64	< 0.1	27	43.6	4	151	4.6	10.8	1.9	1.41	11.1	35.4	2.10	< 0.1	15.0	0.066
178859	5.15	< 0.1	< 1	< 100	115	< 1	0.1	4.52	0.2	24	35.7	4	129	3.8	8.97	3.0	1.17	9.8	11.0	2.30	< 0.1	13.2	0.054
178860	4.99	1.5	< 1	> 2000	128	< 1	0.2	4.02	0.4	21	35.5	10	101	3.9	8.41	3.0	1.26	8.6	17.8	1.71	< 0.1	13.8	0.053
178861	5.09	0.5	< 1	200	130	< 1	0.3	5.16	0.4	17	36.5	35	126	5.0	8.02	2.5	1.73	6.7	14.4	1.06	< 0.1	27.8	0.048
178862	7.55	0.1	152	200	492	< 1	< 0.1	3.72	0.2	20	11.8	38	40.6	0.6	4.71	1.1	0.82	8.6	7.0	2.49	1.2	21.3	0.060
178863	6.64	< 0.1	< 1	< 100	110	< 1	< 0.1	5.45	0.2	9	40.7	84	117	5.9	8.88	1.6	1.95	3.2	84.0	0.216	< 0.1	59.0	0.030
178864	6.40	< 0.1	< 1	100	91	< 1	< 0.1	6.17	0.2	8	44.0	64	135	6.0	8.59	1.1	1.92	3.0	79.2	0.256	< 0.1	53.2	0.034
178865	6.35	< 0.1	< 1	< 100	76	< 1	< 0.1	5.79	0.2	8	42.1	55	113	5.0	8.54	1.3	1.51	2.7	108	0.401	1.0	45.3	0.035
178866	6.31	< 0.1	< 1	< 100	78	< 1	< 0.1	5.99	< 0.1	8	40.6	43	105	4.4	8.21	1.1	1.41	2.8	82.0	0.816	0.2	42.8	0.033
178867	6.80	0.3	1	700	82	< 1	< 0.1	6.16	0.1	9	44.4	28	144	3.8	9.28	1.2	1.29	3.3	96.9	1.33	0.1	42.5	0.039
178868	6.46	0.3	< 1	600	120	< 1	< 0.1	6.48	0.4	7	42.2	29	141	4.3	8.63	1.0	1.34	2.5	72.9	1.43	< 0.1	41.6	0.035
178869	6.28	< 0.1	< 1	< 100	146	< 1	< 0.1	5.08	0.2	8	43.7	35	109	5.0	9.07	1.6	1.60	2.8	96.4	0.130	0.4	44.0	0.035
178870	5.26	0.2	5	< 100	90	1	0.4	2.81	< 0.1	5	28.7	80	114	1.9	5.69	1.1	0.61	2.0	18.6	0.498	1.7	43.8	0.029
178871	5.37	0.2	3	< 100	64	1	0.3	2.42	< 0.1	8	23.9	53	74.4	1.4	4.71	0.9	0.44	3.4	11.2	0.438	1.3	37.5	0.026
178872	7.07	< 0.1	2	< 100	276	< 1	0.1	3.29	< 0.1	37	24.3	90	78.2	4.5	6.13	2.1	1.22	16.9	85.3	2.13	0.2	63.1	0.060
178873	7.52	< 0.1	1	< 100	370	< 1	0.1	3.21	< 0.1	35	29.5	110	62.6	5.5	6.37	2.0	1.03	15.8	90.9	1.96	< 0.1	81.4	0.070
178874	6.90	< 0.1	1	< 100	276	< 1	0.1	3.26	< 0.1	37	21.1	80	39.2	7.1	5.15	2.3	0.97	17.8	75.8	1.81	< 0.1	57.2	0.057
178875	7.10	< 0.1	4	< 100	372	< 1	0.2	2.59	< 0.1	45	22.7	98	46.9	4.9	5.31	3.0	1.00	21.9	76.2	2.15	0.5	58.8	0.060
178876	6.69	< 0.1	1	< 100	320	< 1	< 0.1	2.98	< 0.1	37	19.0	135	51.2	3.2	4.92	2.8	0.80	16.8	72.5	2.59	3.9	52.1	0.061
178877	7.58	< 0.1	10	< 100	376	< 1	0.1	4.12	0.1	35	27.0	102	60.8	4.9	6.05	3.0	1.26	16.1	87.2	1.84	4.6	68.2	0.067
178878	7.30	< 0.1	2	< 100	319	< 1	0.1	4.08	< 0.1	34	29.7	99	63.5	4.7	6.41	2.7	1.12	15.7	101	1.47	2.4	75.3	0.065
178879	6.95	< 0.1	3	< 100	370	< 1	0.2	4.46	< 0.1	41	24.3	101	49.9	6.0	5.95	2.8	1.31	19.4	84.8	0.976	2.7	63.1	0.064
178880	6.33	0.7	10	> 2000	584	< 1	0.4	2.58	0.4	22	11.7	62	59.0	0.9	4.89	1.1	0.86	9.9	14.6	2.31	0.2	37.9	0.076
178881	6.15	< 0.1	< 1	< 100	320	< 1	0.1	3.48	< 0.1	25	23.9	121	55.7	5.5	5.51	2.5	0.95	10.1	104	0.957	3.6	63.0	0.056
178882	6.81	< 0.1	2	< 100	355	< 1	0.1	3.27	< 0.1	33	25.8	104	53.3	5.7	6.08	2.6	0.99	15.5	106	0.933	2.1	67.8	0.056
178883	6.76	< 0.1	< 1	< 100	326	< 1	0.1	4.01	0.1	35	23.6	91	57.9	5.3	5.71	2.3	0.91	16.4	84.7	0.978	0.2	60.3	0.054
178884	6.79	< 0.1	2	< 100	323	< 1	0.2	4.00	0.2	36	23.0	84	51.5	6.0	5.43	2.1	0.91	16.9	67.0	1.04	< 0.1	60.2	0.054
178885	6.80	< 0.1	4	< 100	301	< 1	0.1	3.92	0.4	37	20.9	83	50.8	6.5	5.20	2.3	0.94	17.8	72.1	0.986	< 0.1	60.2	0.053
178886	6.70	< 0.1	6	< 100	303	< 1	0.2	4.35	0.4	37	23.6	85	49.3	6.0	5.42	2.8	1.00	17.9	73.8	0.940	3.9	58.3	0.061
178887	5.99	< 0.1	8	< 100	280	< 1	0.3	3.40	0.3	41	20.9	76	49.2	5.1	4.72	2.4	0.89	19.7	61.9	0.826	4.1	48.6	0.048
178888	0.08	2.1	9	< 100	266	< 1	< 0.1	25.3	< 0.1	1	0.4	8	2.6	0.5	0.06	0.1	0.04	0.6	13.7	0.033	0.2	< 0.1	0.005

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
178854	1.0	4.0	< 1	13.0	308	0.2	0.2	< 1	0.2	122	< 0.1	0.1	0.003	0.07	5.5	< 4	0.1	0.5	21	2.4	< 5	
178855	36.8	15.0	2	1.88	1380	2.7	0.2	28	1.0	109	< 0.1	1.7	0.410	0.29	0.5	208	< 0.1	14.1	83	103	> 5000	7.20
178856	6.4	9.2	< 1	1.67	1360	1.8	0.3	28	1.0	143	< 0.1	1.6	0.414	< 0.05	0.4	212	< 0.1	12.8	78	105	167	
178857	49.0	5.2	< 1	1.73	1500	< 0.1	0.1	32	0.4	84	< 0.1	1.9	0.263	0.38	0.5	169	< 0.1	15.1	132	59.5	6	
178858	43.9	4.3	< 1	1.72	1470	0.2	0.3	34	0.3	73	< 0.1	2.0	0.270	0.35	0.6	170	< 0.1	16.0	160	70.0	< 5	
178859	36.5	7.6	< 1	1.66	1380	0.4	0.5	28	1.0	104	< 0.1	1.6	0.457	0.28	1.0	248	< 0.1	13.0	100	107	66	
178860	38.4	15.1	< 1	1.80	1420	20.8	0.6	28	1.1	86	< 0.1	1.6	0.471	0.31	0.4	223	< 0.1	11.8	86	112	2590	
178861	51.2	15.5	< 1	2.16	1550	3.4	1.0	27	0.9	105	< 0.1	1.2	0.502	0.42	0.3	233	0.2	9.8	83	92.5	381	
178862	18.8	13.5	< 1	1.38	857	2.1	0.8	18	1.0	284	< 0.1	2.0	0.258	0.13	0.8	104	0.5	17.7	67	31.6	380	
178863	59.4	6.0	< 1	3.52	1210	< 0.1	< 0.1	36	0.1	102	< 0.1	0.4	0.309	0.47	0.1	216	< 0.1	7.8	125	59.3	16	
178864	57.3	6.9	< 1	3.59	1260	0.1	0.4	36	0.2	109	< 0.1	0.3	0.352	0.45	< 0.1	190	< 0.1	8.3	117	37.3	268	
178865	46.8	3.7	< 1	4.10	1250	0.4	0.5	35	0.2	108	< 0.1	0.3	0.478	0.36	< 0.1	235	< 0.1	7.1	101	47.4	< 5	
178866	43.2	4.6	< 1	3.33	1350	0.2	0.2	35	0.2	110	< 0.1	0.3	0.438	0.33	0.2	208	< 0.1	6.6	100	40.1	8	
178867	39.5	4.6	< 1	3.48	1500	0.4	0.4	38	0.3	101	< 0.1	0.4	0.495	0.33	0.1	229	< 0.1	7.5	112	43.8	719	
178868	43.2	3.9	< 1	3.21	1580	0.4	0.8	36	0.6	121	< 0.1	0.3	0.370	0.33	0.1	178	< 0.1	6.7	97	33.5	618	
178869	51.1	3.7	< 1	3.24	1420	0.6	0.7	34	0.5	98	< 0.1	0.3	0.498	0.38	0.1	233	0.2	6.8	120	55.1	38	
178870	7.4	6.3	< 1	1.85	802	24.7	2.5	17	0.7	113	0.1	0.4	0.305	0.16	0.3	229	11.2	3.9	66	39.4	70	
178871	14.0	5.0	< 1	1.65	617	12.0	1.8	15	0.6	102	< 0.1	0.7	0.219	0.10	0.3	200	6.7	4.6	56	32.0	41	
178872	38.8	5.1	< 1	1.91	1160	0.2	0.5	21	0.6	104	< 0.1	4.2	0.282	0.30	1.1	102	< 0.1	9.8	76	81.7	8	
178873	35.2	5.6	< 1	2.05	945	< 0.1	0.3	23	0.4	115	< 0.1	3.8	0.222	0.26	1.1	89	< 0.1	10.7	92	77.2	13	
178874	33.1	8.1	< 1	1.67	894	0.2	0.6	18	0.7	125	< 0.1	4.4	0.253	0.25	1.3	82	< 0.1	9.4	72	84.4	6	
178875	34.2	9.3	< 1	1.60	785	0.8	0.6	17	0.7	125	< 0.1	6.6	0.365	0.26	2.1	116	< 0.1	9.0	78	115	25	
178876	27.4	5.3	< 1	1.74	1010	0.7	1.0	14	0.8	140	0.2	4.6	0.347	0.20	1.2	108	< 0.1	9.4	69	106	< 5	
178877	43.8	6.5	< 1	2.11	1170	0.9	1.7	22	1.0	156	0.3	4.4	0.459	0.34	1.3	147	0.4	10.4	87	111	8	
178878	41.0	7.3	< 1	2.19	1090	0.7	1.3	21	0.8	165	< 0.1	4.3	0.415	0.32	1.1	145	< 0.1	10.0	91	105	7	
178879	48.3	7.5	< 1	1.79	1090	1.7	1.4	18	0.8	191	< 0.1	5.3	0.392	0.39	1.5	126	< 0.1	9.2	75	107	8	
178880	23.3	18.2	< 1	1.43	734	1.8	0.7	15	0.9	246	< 0.1	2.1	0.261	0.26	0.9	101	0.2	15.3	100	34.5	3810	
178881	25.0	7.1	< 1	1.75	990	0.7	1.2	17	0.9	200	0.2	2.7	0.401	0.30	8.8	132	< 0.1	7.8	76	94.0	75	
178882	39.3	7.6	< 1	1.52	904	0.6	1.2	19	0.6	186	0.1	4.2	0.377	0.32	1.2	127	< 0.1	8.9	84	100	37	
178883	34.8	8.7	< 1	1.54	954	0.2	0.6	17	0.5	192	< 0.1	5.7	0.263	0.28	1.5	95	< 0.1	9.3	82	94.0	< 5	
178884	31.9	11.9	< 1	1.43	917	0.3	1.0	17	0.7	183	< 0.1	4.9	0.271	0.26	1.3	96	< 0.1	9.2	90	79.4	14	
178885	32.5	13.5	< 1	1.43	813	2.5	1.6	16	0.8	189	< 0.1	5.1	0.263	0.29	1.3	97	< 0.1	9.2	111	88.4	24	
178886	35.8	14.2	< 1	1.79	935	8.8	3.3	17	0.8	203	0.2	5.1	0.344	0.29	1.2	122	0.8	9.6	121	107	28	
178887	30.7	19.0	< 1	1.31	762	1.2	2.9	13	0.8	197	0.3	5.7	0.275	0.25	1.4	93	1.3	8.7	78	94.6	20	
178888	1.3	2.1	< 1	14.8	356	2.4	0.3	< 1	0.3	177	< 0.1	0.2	0.006	0.15	0.3	4	0.9	0.8	30	2.7	< 5	

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	4.78	29.7	418	> 2000	1150	1	1540	0.84	2.3	15	7.4	13	972	2.6	21.8	1.0	0.05	7.1	11.7	0.064	0.7	35.4	0.068
GXR-1 Cert	3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0	0.0650
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	6.16	3.2	104	1000	95	2	21.2	0.93	0.3	104	12.3	46	5580	2.4	2.80	1.3	3.85	51.3	10.7	0.524	9.9	37.1	0.156
GXR-4 Cert	7.20	4.0	98.0	470	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0	0.120
SDC-1 Meas	7.68		< 1		649	3		0.98		87	16.4	96	28.3	3.8	4.59	0.9	2.54	37.4	33.2	1.49	< 0.1	32.0	0.066
SDC-1 Cert	8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0	0.0690
GXR-6 Meas	13.1	< 0.1	224	100	1390	1	0.2	0.18	0.1	34	12.2	45	61.9	4.0	5.38	1.8	1.75	11.8	36.1	0.102	< 0.1	23.0	0.038
GXR-6 Cert	17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0	0.0350
DNC-1a Meas					105						54.1	332	89.2					3.4	4.9		1.7	245	
DNC-1a Cert					118						57	270	100					3.6	5.2		3	247	
OREAS203 Meas																							
OREAS203 Cert																							
SBC-1 Meas			23		664	3	0.8		0.4	100	21.0	83	27.6	7.4		3.4		44.5	165		10.3	79.7	
SBC-1 Cert			25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8	
SE68 Meas																							
SE68 Cert																							
OREAS 45d (4-Acid) Meas	7.96		8		194	< 1	0.4	0.18		37	30.9	532	351	3.6	14.4	2.7	0.39	16.1	21.7	0.098	0.2	231	0.044
OREAS 45d (4-Acid) Cert	8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0	0.042
OxK110 Meas																							
OxK110 Cert																							
SdAR-M2 (U.S.G.S.) Meas					1040	7	1.2		5.1	98	12.4	42	232	1.7		1.8		43.5	17.4		3.2	48.8	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8	
OxP116 Meas																							
OxP116 Cert																							
178861 Orig	5.16	0.6	< 1	200	130	< 1	0.3	5.22	0.3	17	36.8	35	126	5.0	8.08	2.5	1.75	6.6	14.6	1.06	0.1	27.4	0.050
178861 Dup	5.01	0.4	< 1	200	129	< 1	0.3	5.11	0.4	17	36.1	35	126	4.9	7.95	2.5	1.71	6.8	14.3	1.06	< 0.1	28.3	0.047
178863 Orig																							
178863 Dup																							
178866 Orig	6.09	< 0.1	< 1	< 100	76	< 1	< 0.1	5.76	0.1	8	38.9	40	102	4.3	7.95	1.1	1.36	2.7	79.7	0.786	0.3	40.8	0.032
178866 Dup	6.53	< 0.1	< 1	< 100	81	< 1	< 0.1	6.23	< 0.1	8	42.3	46	109	4.5	8.47	1.1	1.46	2.9	84.4	0.845	0.2	44.8	0.034
178873 Orig																							
178873 Dup																							
178883 Orig																							
178883 Dup																							
Method Blank																							
Method Blank																							

Analyte Symbol	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni	P
Unit Symbol	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%
Lower Limit	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1	0.001
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank																							
Method Blank	0.03	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	0.2	0.001
Method Blank	< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	6	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.001	< 0.1	0.2	< 0.001
Method Blank	< 0.01	0.2	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.2	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	0.3	< 0.001

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
GXR-1 Meas	2.8	750	< 1	0.31	787	17.4	28.0	1	28.7	251	< 0.1	2.7	0.032	0.38	31.6	73	146	25.0	742	35.9		
GXR-1 Cert	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0		
DH-1a Meas												940			2470							
DH-1a Cert												910			2629							
GXR-4 Meas	129	49.7	2	1.64	134	326	4.4	7	7.5	184	0.5	19.1	0.285	3.28	5.7	79	35.8	12.2	70	42.7		
GXR-4 Cert	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186		
SDC-1 Meas	109	25.0		1.02	778		< 0.1	14	0.3	150	< 0.1	12.6	0.094	0.65	2.9	32	< 0.1		109	33.2		
SDC-1 Cert	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00		
GXR-6 Meas	71.1	103	< 1	0.62	935	0.1	0.2	24	0.5	33	< 0.1	5.4		2.20	1.5	86	< 0.1	11.6	133	57.5		
GXR-6 Cert	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110		
DNC-1a Meas	1.6	5.8					0.8	29		124			0.304			130		15.3	67	38.0		
DNC-1a Cert	5	6.3					0.96	31		144			0.29			148		18.0	70	38.0		
OREAS203 Meas																					851	
OREAS203 Cert																					871.000	
SBC-1 Meas	123	36.6				2.2	0.9	18	3.6	159	0.5	15.5	0.494	0.93	5.7	197	1.1	29.1	204	122		
SBC-1 Cert	147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0		
SE68 Meas																					599	
SE68 Cert																					599	
OREAS 45d (4-Acid) Meas	39.0	23.4	< 1	0.24	484	0.6	< 0.1	51	1.1	27	< 0.1	16.1	0.339	0.26	2.9	121	< 0.1	11.1	47	98.6		
OREAS 45d (4-Acid) Cert	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141		
OxK110 Meas																						3.59
OxK110 Cert																						3.602
SdAR-M2 (U.S.G.S.) Meas	119	838				12.4		3		127	< 0.1	15.1			2.6	22	< 0.1	24.4	840	80.7		
SdAR-M2 (U.S.G.S.) Cert	149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259		
OxP116 Meas																						14.7
OxP116 Cert																						14.92
178861 Orig	51.6	15.6	< 1	2.17	1580	3.5	1.1	28	0.9	105	< 0.1	1.2	0.506	0.42	0.3	233	0.2	9.8	86	92.0		
178861 Dup	50.7	15.4	< 1	2.14	1520	3.2	1.0	27	0.8	105	< 0.1	1.2	0.497	0.41	0.3	233	0.2	9.8	80	92.9		
178863 Orig																					14	
178863 Dup																					18	
178866 Orig	41.8	4.2	< 1	3.22	1290	0.2	0.3	34	0.1	106	< 0.1	0.3	0.428	0.32	0.2	208	< 0.1	6.4	100	41.5		
178866 Dup	44.7	5.0	< 1	3.43	1400	0.2	0.2	36	0.3	114	< 0.1	0.3	0.448	0.35	0.1	209	< 0.1	6.7	101	38.6		
178873 Orig																					13	
178873 Dup																					12	
178883 Orig																					< 5	
178883 Dup																					5	
Method Blank																					< 5	
Method Blank																					< 5	

Analyte Symbol	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au	Au
Unit Symbol	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/tonne
Lower Limit	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	5	0.02
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-AA	FA-GRA
Method Blank																						< 0.02
Method Blank	< 0.1	< 0.1	< 1	< 0.01	6	< 0.1	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	1.7		
Method Blank	< 0.1	< 0.1	< 1	< 0.01	7	< 0.1	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.2		
Method Blank	< 0.1	< 0.1	< 1	< 0.01	6	0.3	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	3	0.4		

Quality Analysis ... *Innovative Technologies*

Date Submitted: 02-Nov-16
Invoice No.: A16-11538
Invoice Date: 23-Nov-16
Your Reference: Core-31-Oct-16-RJ2

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Dyane Duquette (res)

CERTIFICATE OF ANALYSIS

30 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11538**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 02-Nov-16
Invoice No.: A16-11538
Invoice Date: 23-Nov-16
Your Reference: Core-31-Oct-16-RJ2

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Dyane Duquette (res)

CERTIFICATE OF ANALYSIS

30 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-11538**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263001	6	6.87	< 0.1	< 1	< 100	725	< 1	< 0.1	5.47	< 0.1	13	40.9	69	78.9	2.7	7.30	1.0	1.10	5.8	9.6	2.23	0.1	53.4
263002	9	6.00	< 0.1	< 1	< 100	401	< 1	< 0.1	7.37	< 0.1	12	37.4	63	75.8	2.0	6.90	1.5	0.89	5.0	7.5	2.71	1.7	50.5
263003	87	5.81	0.1	< 1	< 100	98	< 1	< 0.1	8.07	< 0.1	11	38.0	57	216	2.0	6.10	1.4	0.59	5.0	7.0	3.09	0.9	51.0
263004	652	8.22	0.3	257	600	482	< 1	< 0.1	3.86	< 0.1	19	12.5	34	46.6	0.8	4.50	0.9	0.84	8.9	6.5	2.30	1.3	21.7
263005	46	5.63	0.2	< 1	< 100	93	< 1	< 0.1	7.98	< 0.1	12	39.7	57	103	2.2	6.89	1.5	0.49	5.3	9.2	2.85	2.6	52.7
263006	5	6.79	< 0.1	< 1	< 100	76	< 1	< 0.1	6.34	< 0.1	13	40.1	56	84.6	1.4	7.23	1.7	0.26	5.5	10.7	2.85	2.9	52.8
263007	5	7.60	< 0.1	< 1	< 100	97	< 1	< 0.1	5.79	< 0.1	15	44.2	58	91.7	1.0	7.23	1.7	0.29	6.7	9.1	2.97	2.3	59.5
263008	5	7.30	< 0.1	< 1	< 100	122	< 1	< 0.1	5.02	< 0.1	13	40.4	60	105	1.1	6.78	1.6	0.45	6.2	10.5	2.76	0.4	56.5
263009	5	6.65	< 0.1	< 1	< 100	127	< 1	< 0.1	6.95	< 0.1	13	36.9	65	92.8	1.0	6.56	1.3	0.38	5.7	9.8	2.33	0.3	52.6
263010	12	6.01	0.2	< 1	< 100	95	< 1	< 0.1	2.79	< 0.1	10	35.5	72	210	1.1	6.14	1.5	0.44	4.2	10.1	2.67	2.6	48.3
263011	< 5	0.06	< 0.1	< 1	< 100	172	< 1	< 0.1	17.8	< 0.1	1	0.3	4	1.0	0.4	0.06	0.1	0.03	0.8	11.1	0.020	0.1	< 0.1
263012	5	6.81	0.1	< 1	< 100	228	< 1	< 0.1	4.99	< 0.1	13	36.6	66	83.8	1.2	6.36	1.5	0.46	6.0	10.8	2.36	0.2	49.1
263013	< 5	6.42	0.2	< 1	< 100	74	< 1	< 0.1	6.19	< 0.1	13	37.9	56	46.5	0.9	6.38	1.4	0.36	5.6	8.4	3.01	0.2	50.6
263014	5	6.82	0.3	< 1	< 100	128	< 1	< 0.1	5.67	< 0.1	11	40.9	56	101	2.6	6.56	1.5	0.80	5.0	13.0	3.02	0.2	58.1
263015	< 5	6.57	< 0.1	< 1	< 100	93	< 1	< 0.1	7.14	< 0.1	11	37.5	49	87.7	2.6	6.72	2.1	0.72	4.9	13.9	2.72	0.4	54.1
263016	9	6.65	< 0.1	< 1	< 100	71	< 1	< 0.1	7.61	< 0.1	12	37.9	53	107	2.6	6.66	1.6	0.89	5.3	12.1	2.53	2.5	53.9
263017	13	6.39	< 0.1	< 1	< 100	80	< 1	< 0.1	8.19	< 0.1	12	37.6	53	108	3.4	6.42	1.5	1.07	5.5	15.2	2.27	2.2	51.8
263018	< 5	6.43	< 0.1	< 1	< 100	79	< 1	< 0.1	6.60	< 0.1	12	37.3	62	92.4	2.7	6.73	1.5	0.98	5.4	13.9	2.78	1.1	55.2
263019	7	6.18	0.2	< 1	< 100	83	< 1	< 0.1	7.58	< 0.1	11	36.2	57	115	3.2	6.36	1.4	1.00	4.9	10.8	1.40	1.1	53.4
263020	5	6.05	< 0.1	< 1	< 100	64	< 1	< 0.1	7.35	< 0.1	12	35.6	54	54.8	2.2	6.62	1.5	0.84	5.1	10.8	1.85	1.0	55.3
263021	< 5	5.95	< 0.1	< 1	< 100	53	< 1	< 0.1	6.35	< 0.1	10	35.1	48	71.4	1.9	6.72	1.2	0.47	4.5	13.5	1.99	0.5	54.0
263022	< 5	7.18	< 0.1	< 1	< 100	139	< 1	< 0.1	5.27	< 0.1	12	41.2	58	89.9	3.0	7.44	1.6	0.76	5.1	10.2	2.14	1.6	61.8
263023	< 5	7.10	< 0.1	1	< 100	90	< 1	< 0.1	7.86	< 0.1	14	39.7	56	81.8	1.3	7.53	1.7	0.64	6.2	5.3	2.25	2.2	55.4
263024	< 5	7.16	< 0.1	< 1	< 100	90	< 1	< 0.1	7.44	< 0.1	14	39.7	56	82.2	1.3	7.20	1.7	0.64	6.1	5.4	2.28	2.0	57.3
263025	7	6.56	< 0.1	< 1	< 100	80	< 1	< 0.1	8.71	< 0.1	14	37.9	57	104	1.0	7.28	1.6	0.55	6.1	4.7	2.39	1.8	51.8
263026	< 5	7.06	0.2	< 1	< 100	117	< 1	< 0.1	7.25	< 0.1	13	42.5	66	87.0	1.4	7.43	1.5	0.79	6.3	6.2	2.13	0.2	52.5
263027	5	6.95	0.1	< 1	< 100	85	< 1	< 0.1	5.88	< 0.1	12	42.2	84	88.6	2.4	7.75	1.7	0.65	5.6	15.5	1.68	2.9	52.8
263028	< 5	6.84	< 0.1	< 1	< 100	57	< 1	< 0.1	5.44	< 0.1	14	39.1	64	92.3	1.8	7.29	1.5	0.49	6.6	14.7	1.77	0.2	49.8
263029	5	6.46	< 0.1	< 1	< 100	77	< 1	< 0.1	7.08	< 0.1	12	38.0	58	76.2	1.1	6.77	1.3	0.66	5.4	12.3	1.61	0.1	46.7
263030	5	6.41	< 0.1	4	< 100	43	< 1	< 0.1	7.81	< 0.1	11	37.3	51	129	1.5	6.18	1.2	0.44	5.2	18.6	2.19	0.6	48.3

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263001	0.035	52.8	6.7	< 1	2.92	1300	1.5	< 0.1	32	0.4	143	< 0.1	0.8	0.235	0.42	< 0.1	162	< 0.1	17.2	93	42.1
263002	0.031	38.1	6.5	< 1	2.61	1410	3.7	0.1	29	0.6	206	< 0.1	0.7	0.403	0.30	< 0.1	224	2.7	13.2	76	58.9
263003	0.036	27.1	17.0	2	2.04	1340	0.9	< 0.1	28	0.6	163	< 0.1	0.7	0.366	0.18	< 0.1	205	1.6	14.5	70	53.1
263004	0.058	18.4	24.3	< 1	1.34	894	3.0	1.6	18	1.3	283	< 0.1	1.8	0.257	0.11	0.4	115	0.6	17.4	69	27.8
263005	0.033	21.3	17.5	< 1	2.57	1610	0.7	0.9	31	0.7	164	0.1	0.7	0.403	0.15	< 0.1	222	6.5	13.5	78	58.4
263006	0.037	10.8	2.7	< 1	3.11	1510	8.9	0.3	32	0.7	111	0.2	0.8	0.441	0.06	< 0.1	241	1.2	16.9	86	65.1
263007	0.039	10.8	5.0	< 1	3.35	1640	1.1	0.2	34	0.6	115	0.1	0.9	0.452	0.06	< 0.1	263	1.0	18.8	96	64.5
263008	0.034	16.6	3.7	< 1	3.00	1530	0.2	< 0.1	37	0.2	100	< 0.1	0.8	0.339	0.11	< 0.1	206	< 0.1	16.8	93	57.6
263009	0.033	14.0	6.0	< 1	2.91	1530	0.2	< 0.1	31	0.3	146	< 0.1	0.8	0.301	0.10	< 0.1	213	< 0.1	16.8	80	44.4
263010	0.031	17.2	56.7	< 1	2.47	1180	1.6	0.2	28	0.8	50	0.1	0.7	0.361	0.14	< 0.1	218	1.2	14.8	88	57.2
263011	0.002	0.9	0.5	< 1	11.9	239	0.2	< 0.1	< 1	0.3	140	< 0.1	0.3	0.004	< 0.05	6.0	< 4	< 0.1	0.8	11	2.3
263012	0.028	17.7	3.2	< 1	2.81	1360	< 0.1	< 0.1	30	0.2	124	< 0.1	0.8	0.208	0.12	< 0.1	196	< 0.1	15.6	93	51.5
263013	0.029	12.6	2.9	< 1	3.08	1380	0.2	< 0.1	31	0.2	100	< 0.1	0.8	0.255	0.09	< 0.1	184	< 0.1	15.3	83	50.0
263014	0.029	36.8	0.7	< 1	3.11	1190	0.1	< 0.1	37	0.2	74	< 0.1	0.7	0.329	0.25	< 0.1	193	< 0.1	15.4	78	52.5
263015	0.032	34.9	1.9	< 1	3.54	1270	1.1	< 0.1	34	0.5	72	< 0.1	0.7	0.361	0.24	< 0.1	188	< 0.1	14.8	74	85.6
263016	0.032	44.5	1.5	< 1	3.26	1330	0.3	0.7	31	0.7	99	0.1	0.7	0.468	0.27	< 0.1	220	2.7	10.8	71	61.7
263017	0.030	58.0	3.1	< 1	2.82	1280	0.7	1.0	31	0.7	83	0.1	0.7	0.427	0.39	< 0.1	211	1.7	10.8	78	55.3
263018	0.034	50.4	5.4	< 1	2.82	1260	0.3	< 0.1	32	0.4	54	< 0.1	0.7	0.404	0.31	< 0.1	202	0.2	12.1	71	54.1
263019	0.030	53.5	1.4	< 1	2.79	1120	0.5	0.4	26	0.7	71	< 0.1	0.6	0.320	0.41	< 0.1	205	0.5	10.8	83	54.9
263020	0.027	41.1	2.5	< 1	3.11	1010	0.6	< 0.1	26	0.8	42	< 0.1	0.6	0.341	0.25	< 0.1	201	0.2	11.4	90	54.3
263021	0.029	23.3	1.6	< 1	3.56	1020	0.2	< 0.1	27	0.6	41	< 0.1	0.6	0.261	0.15	< 0.1	146	< 0.1	14.4	77	41.4
263022	0.034	38.3	3.3	< 1	4.25	1280	0.4	< 0.1	31	0.5	77	< 0.1	0.8	0.393	0.39	1.3	209	0.1	16.0	91	62.2
263023	0.037	25.8	5.1	< 1	3.21	1510	6.8	0.6	30	0.8	161	< 0.1	0.8	0.405	0.18	< 0.1	211	0.4	16.9	106	61.2
263024	0.037	25.7	4.8	< 1	3.20	1480	6.7	0.5	28	0.8	170	< 0.1	0.8	0.393	0.18	< 0.1	212	0.2	17.1	82	60.0
263025	0.035	20.4	8.9	< 1	2.69	1400	2.0	< 0.1	27	0.7	171	< 0.1	0.8	0.389	0.14	< 0.1	208	0.2	17.3	71	66.9
263026	0.034	30.7	3.1	< 1	3.54	1330	3.1	< 0.1	37	0.3	173	< 0.1	0.8	0.367	0.24	< 0.1	211	< 0.1	17.4	79	51.7
263027	0.038	28.0	2.2	< 1	4.30	1010	1.0	0.6	34	0.8	127	0.2	0.6	0.497	0.25	< 0.1	253	1.5	15.6	87	58.8
263028	0.034	26.2	1.6	< 1	3.88	1010	0.2	< 0.1	34	0.2	114	< 0.1	0.8	0.302	0.15	< 0.1	195	< 0.1	17.0	86	52.1
263029	0.028	23.2	1.3	< 1	3.21	1130	1.6	< 0.1	33	0.2	101	< 0.1	0.7	0.281	0.17	< 0.1	184	< 0.1	15.0	85	49.3
263030	0.033	21.7	2.7	< 1	3.27	1190	6.4	< 0.1	33	0.7	52	< 0.1	0.7	0.389	0.13	< 0.1	193	< 0.1	14.4	70	46.5

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas		2.06	32.5	430	> 2000	655	< 1	1580	0.87	2.5	14	7.9	16	1040	2.6	23.7	0.5	0.04	7.2	9.1	0.044	0.8	39.2
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas		5.90	3.7	107	400	293	2	20.7	1.01	< 0.1	118	13.2	45	6120	2.7	3.05	1.2	3.45	58.8	9.7	0.529	8.7	39.6
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
SDC-1 Meas		7.13		< 1		598	2		0.84		80	13.7	50	26.5	3.9	3.97	0.9	1.23	38.3	32.7	1.24	1.2	32.2
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
GXR-6 Meas		12.9	0.1	267	< 100	1330	1	< 0.1	0.17	< 0.1	34	12.0	51	61.5	4.0	5.22	2.2	0.99	12.5	33.2	0.096	1.5	22.0
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
DNC-1a Meas						110						56.3	165	88.2					4.0	4.7		1.5	253
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
SBC-1 Meas				21		759	3	0.5		0.2	102	21.1	79	37.6	7.9		3.2		47.3	153		13.8	79.8
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SE68 Meas	615																						
SE68 Cert	599																						
SE68 Meas	620																						
SE68 Cert	599																						
OREAS 45d (4-Acid) Meas		7.32		5		179	< 1	< 0.1	0.19		38	29.8	497	357	3.9	14.1	2.0	0.36	17.2	19.8	0.091	1.0	233
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
SdAR-M2 (U.S.G.S.) Meas						1020	6	1.0		5.4	96	12.4	37	230	1.7		3.9		45.5	16.3		17.6	49.3
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
263010 Orig	9																						
263010 Dup	14																						
263018 Orig		6.53	< 0.1	< 1	< 100	84	< 1	< 0.1	6.81	< 0.1	12	38.3	59	97.6	2.7	7.07	1.6	0.97	5.3	14.4	2.89	1.3	58.0
263018 Dup		6.33	< 0.1	< 1	< 100	75	< 1	< 0.1	6.39	< 0.1	11	36.4	64	87.2	2.7	6.38	1.3	0.98	5.4	13.4	2.67	0.9	52.3
263020 Orig	5																						
263020 Dup	5																						
263023 Orig		7.20	< 0.1	1	< 100	93	< 1	< 0.1	7.81	< 0.1	13	40.0	57	83.6	1.3	7.37	1.6	0.66	6.3	5.2	2.35	1.6	56.0
263023 Dup		7.00	< 0.1	1	< 100	87	< 1	< 0.1	7.92	< 0.1	14	39.3	55	80.1	1.3	7.70	1.8	0.62	6.1	5.3	2.14	2.7	54.9
263030 Orig	5																						
263030 Dup	5																						
Method Blank	5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	2	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	< 0.1

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	0.066	2.3	726	< 1	0.19	854	17.3	30.1	1	25.2	260	< 0.1	2.2	0.026	0.35	32.5	75	140	26.0	806	20.3
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0
DH-1a Meas													761			2230					
DH-1a Cert													910			2629					
GXR-4 Meas	0.148	121	47.9	2	1.59	154	320	4.5	7	7.1	196	0.6	21.7	0.280	3.10	5.4	81	33.1	12.4	72	38.4
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	0.057	67.8	21.6		0.92	726		< 0.1	13	0.4	143	< 0.1	10.6	0.131	0.55	2.4	39	< 0.1		96	35.9
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	0.037	43.2	92.7	< 1	0.56	905	1.3	1.5	23	1.2	37	< 0.1	4.7		1.96	1.1	128	< 0.1	11.8	117	79.7
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110
DNC-1a Meas		3.1	4.6					0.4	29		130			0.301			135		15.1	62	35.9
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
SBC-1 Meas		84.7	33.0				1.9	0.8	18	3.7	161	0.9	14.1	0.505	0.81	5.2	195	1.3	28.3	191	118
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas																					
SE68 Cert																					
SE68 Meas																					
SE68 Cert																					
OREAS 45d (4-Acid) Meas	0.040	35.4	19.5	< 1	0.22	453	0.9	< 0.1	46	1.0	29	< 0.1	15.8	0.331	0.22	2.5	113	< 0.1	10.5	39	79.9
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
SdAR-M2 (U.S.G.S.) Meas		65.6	763				12.7		3		132	0.9	12.8			2.1	22	1.7	23.4	793	120
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259
263010 Orig																					
263010 Dup																					
263018 Orig	0.034	51.8	5.6	< 1	2.94	1270	0.4	< 0.1	32	0.3	55	< 0.1	0.7	0.424	0.32	< 0.1	215	0.2	12.4	74	58.2
263018 Dup	0.033	49.0	5.1	< 1	2.69	1250	0.3	< 0.1	32	0.4	54	< 0.1	0.7	0.384	0.30	< 0.1	188	0.1	11.9	68	49.9
263020 Orig																					
263020 Dup																					
263023 Orig	0.037	26.0	5.0	< 1	3.21	1560	6.2	0.5	29	0.7	163	< 0.1	0.8	0.386	0.18	< 0.1	201	0.1	16.6	87	57.5
263023 Dup	0.037	25.6	5.1	< 1	3.21	1450	7.5	0.7	30	0.8	160	0.2	0.8	0.423	0.18	< 0.1	220	0.6	17.1	125	64.8
263030 Orig																					
263030 Dup																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	4	< 0.1	< 0.1	< 1	0.4	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.8

Quality Analysis ... *Innovative Technologies*

Date Submitted: 04-Nov-16
Invoice No.: A16-11641
Invoice Date: 30-Nov-16
Your Reference: Core-03-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Dyane Duquette (res)

CERTIFICATE OF ANALYSIS

134 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-11641**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 04-Nov-16
Invoice No.: A16-11641
Invoice Date: 30-Nov-16
Your Reference: Core-03-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Dyane Duquette (res)

CERTIFICATE OF ANALYSIS

134 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11641**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263031	< 5	7.45	< 0.1	< 1	< 100	117	< 1	< 0.1	5.93	< 0.1	15	47.7	77	90.2	1.6	7.50	1.8	0.96	6.6	10.9	2.19	2.1	59.1
263032	5	6.60	0.3	< 1	< 100	103	< 1	0.7	6.71	< 0.1	14	44.9	78	92.9	1.7	7.37	1.7	0.76	6.4	6.8	2.46	1.5	58.0
263033	< 5	6.63	0.2	< 1	< 100	126	< 1	0.2	6.64	< 0.1	15	40.8	54	82.1	1.4	6.75	0.8	0.67	6.3	8.1	2.03	0.1	56.5
263034	< 5	7.07	< 0.1	< 1	< 100	102	< 1	0.1	6.63	< 0.1	14	39.7	52	132	1.4	7.09	1.4	0.82	6.1	8.8	2.23	0.9	57.4
263035	475	7.31	0.1	122	200	472	< 1	< 0.1	3.54	< 0.1	19	12.0	29	39.5	0.6	4.18	0.9	0.74	8.9	6.8	2.37	1.7	22.2
263036	< 5	7.20	< 0.1	1	< 100	94	< 1	0.2	7.46	< 0.1	16	43.5	54	124	2.1	7.64	1.8	0.66	6.7	9.7	1.82	2.5	64.1
263037	< 5	7.49	< 0.1	< 1	< 100	121	< 1	< 0.1	5.80	< 0.1	15	45.7	53	87.6	3.3	7.21	1.7	1.08	6.4	13.8	1.82	1.0	64.0
263038	< 5	6.98	< 0.1	1	< 100	103	< 1	< 0.1	6.33	< 0.1	14	40.3	53	112	2.2	6.90	1.7	0.72	6.2	10.1	2.35	2.2	59.0
263039	13	6.04	0.3	< 1	< 100	138	< 1	1.1	6.84	< 0.1	14	42.5	62	77.9	2.5	7.59	1.7	0.84	6.2	7.7	2.13	0.8	57.4
263040	6	6.30	0.4	< 1	< 100	99	< 1	0.5	7.55	< 0.1	12	38.9	70	60.0	1.2	7.19	1.5	0.62	5.6	6.8	2.21	2.4	49.4
263041	< 5	7.16	< 0.1	< 1	< 100	81	< 1	< 0.1	6.75	< 0.1	13	42.6	74	75.0	1.3	7.26	1.6	0.46	5.9	8.9	2.20	1.3	55.0
263042	< 5	6.83	< 0.1	< 1	< 100	59	< 1	< 0.1	5.79	< 0.1	13	41.5	56	97.6	1.2	7.25	1.5	0.40	6.1	15.7	2.06	0.2	53.4
263043	< 5	6.74	< 0.1	< 1	< 100	60	< 1	< 0.1	5.85	< 0.1	15	40.3	45	80.6	1.4	6.88	1.5	0.49	7.4	16.9	1.71	0.1	53.7
263044	< 5	7.63	< 0.1	< 1	< 100	65	< 1	< 0.1	5.77	< 0.1	15	45.0	54	71.4	1.9	7.88	1.8	0.46	7.0	21.0	1.58	1.9	57.2
263045	< 5	7.04	< 0.1	< 1	< 100	60	< 1	< 0.1	5.64	< 0.1	14	46.4	50	69.0	1.8	7.71	1.9	0.47	6.7	20.9	1.54	3.0	56.3
263046	< 5	7.11	< 0.1	< 1	< 100	119	< 1	< 0.1	5.25	< 0.1	14	55.3	53	82.1	1.9	7.77	1.7	0.57	6.4	19.1	2.21	2.0	74.9
263047	< 5	7.04	< 0.1	< 1	< 100	76	< 1	< 0.1	5.93	< 0.1	15	56.8	59	99.4	1.6	8.37	1.7	0.40	6.4	20.9	1.71	2.4	78.2
263048	< 5	6.99	0.1	< 1	< 100	59	< 1	< 0.1	5.49	< 0.1	14	42.3	56	59.7	1.3	8.01	1.6	0.38	6.7	19.9	1.69	1.4	55.7
263049	< 5	6.89	< 0.1	< 1	< 100	95	< 1	< 0.1	5.60	< 0.1	13	40.3	60	56.4	1.4	7.58	1.6	0.51	6.1	16.6	2.35	1.2	52.7
263050	< 5	6.48	< 0.1	< 1	< 100	130	< 1	< 0.1	5.85	< 0.1	14	40.0	72	111	1.8	7.07	1.8	0.64	6.4	11.8	1.69	2.5	51.6
263051	< 5	6.60	0.1	< 1	< 100	204	< 1	< 0.1	4.99	< 0.1	14	41.3	70	144	1.8	6.96	1.4	0.91	6.5	10.6	2.47	0.3	52.1
263052	6	6.58	< 0.1	< 1	< 100	169	< 1	< 0.1	4.76	< 0.1	13	42.1	67	77.1	2.0	7.15	1.5	0.73	6.1	12.6	2.75	0.2	52.3
263053	7	6.28	< 0.1	< 1	< 100	58	< 1	< 0.1	6.06	< 0.1	10	40.5	66	92.6	1.1	6.74	1.6	0.28	4.5	16.9	2.48	1.6	51.7
263054	655	7.60	0.2	243	500	482	< 1	< 0.1	3.77	< 0.1	19	12.2	34	42.2	0.8	4.47	1.0	0.80	9.3	6.8	2.26	2.2	19.9
263055	< 5	6.35	< 0.1	< 1	< 100	75	< 1	< 0.1	5.24	< 0.1	10	55.0	50	151	2.9	7.08	1.6	0.61	4.1	17.1	2.13	0.8	76.2
263056	< 5	6.94	< 0.1	< 1	< 100	98	< 1	< 0.1	5.58	< 0.1	10	54.2	48	127	4.7	7.15	1.7	0.74	4.5	16.8	1.85	2.2	76.7
263057	< 5	6.62	0.1	< 1	< 100	64	< 1	< 0.1	6.29	< 0.1	13	37.6	53	79.9	3.6	7.22	1.8	0.66	6.0	17.0	1.91	2.7	56.3
263058	5	6.17	< 0.1	< 1	< 100	66	< 1	< 0.1	6.97	< 0.1	13	35.3	51	65.4	2.9	6.87	1.7	0.65	6.3	14.6	1.83	2.4	51.8
263059	5	6.16	< 0.1	< 1	< 100	139	< 1	< 0.1	5.55	< 0.1	13	34.4	49	103	6.8	6.89	1.4	0.89	6.2	17.9	0.906	0.8	51.2
263060	27	5.56	< 0.1	< 1	< 100	75	< 1	< 0.1	6.17	< 0.1	11	30.8	54	74.4	4.8	6.20	1.5	1.33	5.3	6.1	1.76	2.2	45.1
263061	< 5	< 0.01	0.2	5	< 100	89	< 1	< 0.1	22.4	< 0.1	1	0.2	6	1.2	0.3	0.06	< 0.1	0.02	0.7	13.4	0.025	0.2	< 0.1
263062	56	6.20	< 0.1	4	< 100	78	< 1	0.2	5.59	< 0.1	9	39.3	71	85.2	4.7	6.90	1.5	1.91	3.9	5.6	1.79	2.4	50.3
263063	< 5	6.60	0.2	2	< 100	405	< 1	0.1	5.41	< 0.1	9	40.6	77	101	9.8	7.21	1.5	2.49	4.2	12.3	0.891	2.4	52.9
263064	6	6.96	< 0.1	2	< 100	159	< 1	0.1	5.54	< 0.1	10	41.6	78	99.4	6.5	6.74	1.5	2.16	4.2	11.0	1.55	2.8	53.4
263065	7	6.84	< 0.1	2	< 100	316	< 1	0.2	6.17	< 0.1	9	38.4	73	72.0	6.2	6.74	1.4	2.05	4.1	11.2	1.44	2.5	50.6
263066	< 5	6.78	< 0.1	2	< 100	642	< 1	0.3	6.30	< 0.1	10	41.9	74	97.2	3.9	6.76	1.6	1.30	4.6	14.0	1.89	2.9	52.4
263067	< 5	7.19	< 0.1	2	< 100	152	< 1	0.1	4.76	< 0.1	10	42.9	81	87.4	1.7	7.14	1.6	0.40	4.5	14.1	2.60	2.9	56.8
263068	< 5	7.87	< 0.1	1	< 100	30	< 1	0.2	4.35	< 0.1	11	49.8	90	125	1.3	8.39	1.8	0.16	4.4	14.8	3.25	3.5	65.0
263069	399	7.10	< 0.1	131	300	471	< 1	< 0.1	3.46	< 0.1	11	12.9	43	41.5	0.6	4.52	0.9	0.88	5.2	6.7	2.22	2.8	23.0
263070	< 5	7.19	< 0.1	1	< 100	38	< 1	0.3	4.96	< 0.1	10	45.4	89	54.2	1.1	7.09	1.5	0.19	4.2	11.5	2.77	2.4	57.9
263071	< 5	7.07	0.2	1	< 100	44	< 1	0.2	4.55	< 0.1	8	42.4	70	52.3	1.3	7.05	1.6	0.28	3.6	11.5	2.82	2.4	56.5
263072	< 5	7.45	0.2	1	< 100	78	< 1	0.3	3.77	< 0.1	10	45.7	68	102	1.6	7.91	1.3	0.37	4.3	12.9	2.58	0.8	61.5

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263073	< 5	7.56	0.2	< 1	< 100	64	< 1	0.5	4.51	< 0.1	10	46.8	78	111	0.8	7.93	1.6	0.26	4.5	12.6	2.94	1.6	60.0
263074	< 5	7.94	< 0.1	< 1	< 100	61	< 1	0.3	4.63	< 0.1	12	46.7	71	87.8	1.1	8.33	1.3	0.30	5.2	11.7	3.18	0.5	58.8
263075	< 5	7.93	< 0.1	< 1	< 100	38	< 1	0.2	4.57	< 0.1	9	46.9	76	83.3	1.0	7.90	1.6	0.25	3.9	14.5	3.27	1.7	62.2
263076	< 5	7.80	< 0.1	< 1	< 100	36	< 1	0.2	4.49	< 0.1	9	43.8	78	80.2	0.9	7.43	1.7	0.23	3.8	14.0	3.00	2.0	58.4
263077	< 5	6.74	< 0.1	2	< 100	29	< 1	< 0.1	10.1	< 0.1	4	41.2	120	97.0	1.8	6.49	0.8	0.31	1.8	18.5	2.24	1.0	120
263078	< 5	7.71	< 0.1	2	< 100	50	< 1	< 0.1	6.38	< 0.1	5	49.1	175	90.9	2.9	7.54	0.9	0.67	1.8	26.2	1.66	1.3	165
263079	< 5	8.45	< 0.1	2	< 100	49	< 1	< 0.1	6.46	< 0.1	5	54.3	183	98.0	2.8	8.02	1.0	0.73	1.9	24.6	1.48	1.4	190
263080	18	7.58	0.2	2	< 100	83	< 1	< 0.1	6.14	< 0.1	3	55.9	189	97.7	2.8	7.81	0.9	0.75	1.3	25.2	1.48	1.8	214
263081	< 5	8.73	< 0.1	3	< 100	68	< 1	< 0.1	6.54	< 0.1	4	55.6	173	94.5	3.1	7.86	1.0	0.82	1.7	25.9	1.41	1.3	216
263082	< 5	8.49	< 0.1	2	< 100	52	< 1	< 0.1	6.52	< 0.1	4	55.0	147	107	2.5	7.60	0.8	0.66	1.3	23.9	1.95	1.0	218
263083	< 5	8.94	< 0.1	2	< 100	49	< 1	< 0.1	6.36	< 0.1	4	57.8	133	96.5	2.6	7.90	0.9	0.76	1.3	24.0	1.66	0.9	231
263084	< 5	8.82	< 0.1	3	< 100	41	< 1	< 0.1	7.08	< 0.1	4	54.9	112	124	2.5	7.75	0.8	0.53	1.4	24.6	1.78	0.9	217
263085	< 5	8.96	< 0.1	2	< 100	45	< 1	< 0.1	5.96	< 0.1	4	56.7	124	103	2.4	7.89	0.9	0.62	1.5	26.3	1.88	1.1	228
263086	819	9.05	< 0.1	238	700	518	< 1	0.2	3.81	0.2	16	14.5	43	51.3	0.9	5.05	1.0	0.96	7.8	6.8	2.58	2.5	25.1
263087	< 5	8.63	< 0.1	3	< 100	29	< 1	< 0.1	7.15	< 0.1	4	54.1	117	104	2.0	7.56	0.8	0.43	1.5	27.2	1.58	0.8	215
263088	< 5	8.44	< 0.1	2	< 100	50	< 1	< 0.1	7.02	< 0.1	4	53.7	123	97.9	4.8	7.55	0.8	0.80	1.4	21.6	1.15	1.1	215
263089	< 5	8.09	0.3	2	< 100	48	< 1	< 0.1	6.98	< 0.1	4	53.1	123	86.1	7.9	7.10	0.8	1.55	1.3	22.0	0.912	1.1	203
263090	< 5	7.83	< 0.1	2	< 100	57	< 1	< 0.1	7.24	< 0.1	3	49.7	124	86.8	6.2	6.72	0.7	1.76	1.2	25.4	0.379	0.8	203
263091	< 5	5.47	< 0.1	2	< 100	51	< 1	< 0.1	8.11	< 0.1	2	51.3	149	79.1	3.9	6.49	0.5	2.00	0.7	18.7	0.064	1.2	207
263092	< 5	7.49	< 0.1	1	< 100	99	< 1	< 0.1	7.45	< 0.1	3	48.5	132	67.7	7.4	6.14	0.6	2.94	0.9	7.4	0.077	0.8	200
263093	67	6.78	0.4	18	< 100	195	< 1	0.7	10.3	< 0.1	5	50.1	100	30.4	7.3	6.08	0.9	2.82	2.4	6.0	1.49	1.4	151
263094	5	0.10	0.1	2	< 100	1600	< 1	< 0.1	23.9	0.1	< 1	0.6	4	1.1	0.6	0.13	< 0.1	0.06	0.5	16.1	0.029	0.2	< 0.1
263095	8	6.01	< 0.1	4	< 100	128	< 1	< 0.1	5.87	< 0.1	19	43.4	4	168	5.5	9.83	2.5	1.80	8.7	6.8	1.64	1.7	14.9
263096	< 5	6.61	0.2	4	< 100	125	< 1	< 0.1	4.68	< 0.1	22	48.6	10	173	5.9	10.9	1.6	1.31	9.8	13.0	1.45	0.5	15.5
263097	< 5	5.96	< 0.1	2	< 100	233	< 1	0.1	6.55	< 0.1	19	44.8	7	142	2.3	9.77	2.0	0.64	8.5	8.0	2.51	0.7	13.4
263098	< 5	7.14	< 0.1	3	< 100	102	< 1	< 0.1	3.28	< 0.1	22	47.6	14	164	3.3	10.8	1.6	0.99	9.9	11.7	1.75	0.3	16.4
263099	< 5	6.56	< 0.1	1	< 100	106	< 1	< 0.1	2.84	< 0.1	21	46.0	8	159	1.7	9.51	2.6	0.62	9.5	11.5	2.47	1.1	15.8
263100	< 5	6.85	< 0.1	7	< 100	95	< 1	0.1	2.35	0.2	22	48.2	5	150	1.1	9.99	2.8	0.57	9.8	9.6	3.31	1.1	16.2
263101	10	5.92	0.3	5	< 100	68	< 1	0.3	2.65	0.1	20	53.3	9	267	1.0	11.9	2.5	0.39	9.3	8.4	2.92	1.8	21.4
263102	9	6.83	0.4	2	< 100	145	< 1	0.4	2.47	0.1	20	54.1	18	116	1.3	11.3	2.3	1.09	8.0	8.1	3.33	0.6	24.3
263103	370	8.31	0.3	125	400	514	< 1	0.1	3.77	< 0.1	16	13.6	39	45.0	0.7	4.62	0.9	0.98	7.4	6.9	2.42	2.6	23.2
263104	6	6.43	< 0.1	2	< 100	100	< 1	0.2	3.73	0.1	15	48.5	32	146	1.1	9.88	2.2	0.77	6.6	8.5	3.24	0.3	31.6
263105	< 5	7.76	< 0.1	2	< 100	127	< 1	< 0.1	4.44	< 0.1	8	52.4	30	128	2.1	9.47	1.4	0.93	3.1	12.8	2.67	2.0	61.1
263106	6	7.56	< 0.1	2	< 100	220	< 1	< 0.1	5.78	< 0.1	7	52.3	37	169	2.5	9.51	1.4	1.50	2.9	10.0	2.66	1.6	63.8
263107	34	7.10	< 0.1	2	< 100	118	< 1	0.2	6.16	< 0.1	7	55.9	38	138	2.1	9.07	1.3	1.02	2.6	11.2	2.57	2.1	87.2
263108	5	7.76	< 0.1	2	< 100	91	< 1	< 0.1	6.13	< 0.1	6	57.3	31	130	2.2	9.26	1.4	0.88	2.5	10.0	2.48	2.0	102
263109	< 5	7.43	< 0.1	3	< 100	90	< 1	< 0.1	5.12	< 0.1	6	59.5	45	96.2	2.9	9.06	1.2	1.03	2.2	12.2	2.00	2.3	105
263110	< 5	7.73	< 0.1	< 1	< 100	54	< 1	< 0.1	5.61	< 0.1	7	60.2	36	122	2.2	9.23	1.4	0.80	2.7	12.5	2.10	0.2	102
263111	12	7.42	0.2	2	< 100	50	< 1	< 0.1	6.41	< 0.1	7	62.5	35	123	2.1	10.2	1.0	0.69	2.7	14.1	1.79	0.6	120
263112	10	7.44	< 0.1	2	< 100	48	< 1	< 0.1	6.47	< 0.1	7	59.8	33	119	2.0	9.85	1.5	0.73	2.7	13.8	1.78	2.0	115
263113	< 5	7.45	< 0.1	2	< 100	37	< 1	< 0.1	5.99	< 0.1	6	61.9	41	126	1.7	10.0	1.2	0.52	2.2	15.3	1.88	1.5	121
263114	23	7.89	< 0.1	2	< 100	41	< 1	< 0.1	6.25	< 0.1	6	67.7	37	92.9	1.6	10.7	1.4	0.64	2.4	17.8	1.74	1.9	137

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263115	8	7.68	< 0.1	3	< 100	44	< 1	< 0.1	6.43	< 0.1	7	65.7	34	137	1.8	10.7	1.6	0.61	2.8	15.6	1.68	2.5	129
263116	5	7.37	< 0.1	3	< 100	63	< 1	< 0.1	5.84	< 0.1	6	69.8	35	115	2.2	10.8	1.4	0.86	2.4	15.7	1.80	2.2	146
263117	< 5	7.40	< 0.1	1	< 100	66	< 1	< 0.1	5.69	< 0.1	5	74.3	46	92.6	3.3	10.7	1.0	1.16	1.8	16.4	1.41	0.7	170
263118	27	5.20	< 0.1	2	< 100	58	< 1	0.2	12.0	< 0.1	6	53.4	32	89.0	1.0	7.40	0.9	0.54	2.4	8.5	1.46	1.2	116
263119	706	6.58	< 0.1	219	300	440	< 1	0.1	3.48	0.1	10	12.8	42	42.8	0.7	4.63	0.9	0.86	4.4	6.2	2.34	2.6	23.4
263120	< 5	7.21	0.1	2	< 100	59	< 1	< 0.1	6.86	< 0.1	5	77.8	39	106	2.3	10.3	1.2	0.90	2.2	16.1	1.41	0.4	173
263121	< 5	6.99	< 0.1	< 1	< 100	56	< 1	< 0.1	6.35	< 0.1	6	79.1	54	92.1	2.6	10.5	1.2	0.86	2.3	18.3	1.20	0.2	174
263122	< 5	7.02	< 0.1	1	< 100	46	< 1	< 0.1	6.33	< 0.1	5	78.0	36	108	3.0	10.4	1.3	0.90	2.2	17.6	1.20	0.3	173
263123	< 5	7.10	< 0.1	3	< 100	54	< 1	< 0.1	5.88	< 0.1	5	86.0	35	108	3.2	10.8	1.1	1.08	1.9	19.6	1.10	1.3	200
263124	< 5	6.99	< 0.1	3	< 100	65	< 1	< 0.1	6.46	< 0.1	5	86.0	33	84.1	3.1	10.8	1.2	0.82	2.1	21.9	1.12	1.4	208
263125	< 5	6.84	< 0.1	4	< 100	48	< 1	< 0.1	6.08	< 0.1	6	85.7	33	79.5	2.5	10.6	1.3	0.70	2.2	20.4	1.29	1.8	201
263126	< 5	6.84	< 0.1	4	< 100	58	< 1	< 0.1	6.38	< 0.1	6	87.7	36	91.5	2.4	10.7	1.2	0.82	2.2	21.3	1.35	1.8	209
263127	6	6.81	< 0.1	5	< 100	64	< 1	< 0.1	7.01	< 0.1	5	84.8	37	106	2.9	10.3	1.2	1.05	2.1	20.8	0.969	1.5	212
263128	< 5	6.62	< 0.1	3	< 100	48	< 1	< 0.1	5.86	< 0.1	5	97.2	41	89.4	3.1	11.1	1.1	0.75	1.9	24.2	0.864	1.3	250
263129	< 5	0.11	0.2	2	< 100	207	< 1	< 0.1	> 40.0	0.2	2	0.7	3	4.4	1.0	0.14	< 0.1	0.11	1.4	25.2	0.074	0.5	< 0.1
263130	< 5	6.46	< 0.1	3	< 100	49	< 1	< 0.1	5.01	< 0.1	5	80.2	45	90.2	2.5	10.1	0.9	0.55	1.8	22.0	1.27	1.5	215
263131	< 5	5.98	< 0.1	1	< 100	35	< 1	< 0.1	5.05	< 0.1	5	85.0	40	102	2.3	10.4	0.9	0.45	2.0	23.2	0.966	0.9	231
263132	< 5	6.67	< 0.1	1	< 100	53	< 1	< 0.1	5.25	< 0.1	5	81.3	35	83.8	2.6	10.5	1.0	0.65	2.0	23.1	1.06	0.5	216
263133	21	6.52	< 0.1	3	< 100	45	< 1	< 0.1	5.73	< 0.1	5	83.9	35	95.3	2.6	10.3	0.9	0.65	2.0	23.3	0.916	1.2	227
263134	< 5	6.21	< 0.1	3	< 100	36	< 1	< 0.1	4.92	< 0.1	4	81.4	35	71.9	2.2	9.87	0.8	0.49	1.8	24.3	0.853	1.1	223
263135	< 5	6.54	< 0.1	2	< 100	60	< 1	< 0.1	5.88	< 0.1	5	82.8	37	96.6	2.3	10.3	0.9	0.58	1.9	21.0	1.00	1.4	222
263136	< 5	6.50	< 0.1	2	< 100	49	< 1	< 0.1	5.32	< 0.1	5	80.2	34	86.5	2.3	10.4	0.9	0.52	1.9	22.9	1.19	1.5	216
263137	5	6.59	0.2	3	< 100	60	< 1	< 0.1	5.72	< 0.1	5	79.4	40	108	2.6	10.1	1.1	0.53	2.2	23.5	1.31	1.8	209
263138	18	6.72	< 0.1	6	< 100	92	< 1	0.2	6.63	< 0.1	13	49.1	98	169	1.4	9.17	1.9	0.80	5.5	10.8	1.87	0.9	91.7
263139	< 5	7.75	< 0.1	9	< 100	124	< 1	< 0.1	5.62	< 0.1	10	45.5	78	111	1.7	8.16	1.0	1.04	4.6	11.2	2.21	0.3	63.9
263140	< 5	7.61	< 0.1	3	< 100	102	< 1	0.1	6.84	< 0.1	11	44.1	77	96.0	1.6	8.21	1.6	0.94	4.8	9.0	2.24	0.6	61.1
263141	6	7.40	< 0.1	4	< 100	103	< 1	0.2	6.20	< 0.1	10	45.2	65	108	1.1	8.22	1.7	1.10	4.6	5.9	2.77	2.2	63.1
263142	438	7.93	< 0.1	130	600	506	< 1	< 0.1	3.68	0.1	15	13.1	41	42.3	0.7	4.52	0.9	0.92	7.3	6.8	2.39	2.5	23.7
263143	< 5	8.07	0.1	3	< 100	112	< 1	0.2	6.13	< 0.1	12	49.2	76	108	1.3	9.10	1.8	1.12	5.0	7.0	3.16	2.8	64.9
263144	< 5	7.67	< 0.1	3	< 100	145	< 1	0.4	6.02	< 0.1	12	49.2	67	73.9	1.5	8.55	1.8	1.71	5.0	4.8	3.11	2.9	59.0
263145	< 5	7.84	< 0.1	3	< 100	119	< 1	0.3	6.80	< 0.1	12	47.8	69	79.9	1.1	8.63	1.5	1.18	5.2	4.8	2.77	1.6	61.3
263146	< 5	7.75	< 0.1	1	< 100	104	< 1	0.2	6.21	< 0.1	12	47.7	78	88.9	1.2	7.71	1.5	1.19	5.2	4.9	3.06	1.1	62.9
263147	32	7.79	2.0	2	< 100	117	< 1	0.3	5.73	< 0.1	11	46.3	94	117	1.4	8.15	1.7	1.61	4.7	5.2	3.01	2.5	59.9
263148	5	7.61	< 0.1	2	< 100	120	< 1	0.5	5.14	< 0.1	11	48.9	91	99.6	1.4	8.25	1.7	1.74	4.7	4.3	3.02	3.0	61.9
263149	< 5	7.75	< 0.1	2	< 100	79	< 1	0.3	7.19	< 0.1	11	50.6	97	112	1.2	8.94	1.6	0.97	5.0	4.7	2.46	2.5	67.4
263150	< 5	7.36	< 0.1	1	< 100	116	< 1	0.4	5.96	< 0.1	11	44.1	76	83.3	1.2	7.62	1.5	1.46	5.2	3.3	2.95	1.1	56.5
263151	< 5	7.43	< 0.1	< 1	< 100	116	< 1	0.3	5.77	< 0.1	11	45.2	62	95.0	1.2	8.20	0.9	1.31	4.7	4.6	2.81	0.3	57.9
263152	< 5	7.53	0.2	2	< 100	115	< 1	0.7	7.06	< 0.1	12	47.4	65	88.6	1.2	8.03	1.6	1.28	5.1	3.5	2.57	1.9	59.3
263153	< 5	7.81	< 0.1	3	< 100	107	< 1	0.8	6.72	< 0.1	12	47.5	73	88.1	1.3	8.27	1.8	1.23	5.2	4.8	2.98	2.8	61.1
263154	< 5	7.80	< 0.1	2	< 100	90	< 1	0.5	7.01	< 0.1	11	48.2	70	97.7	1.2	8.78	1.7	1.09	4.9	5.3	2.60	2.9	63.2
263155	< 5	7.48	< 0.1	2	< 100	90	< 1	0.5	6.94	< 0.1	11	45.7	72	93.3	1.2	8.63	1.8	1.11	5.0	5.3	2.47	3.1	60.5
263156	< 5	7.99	< 0.1	2	< 100	107	< 1	0.4	6.75	< 0.1	11	50.4	78	136	1.3	8.49	1.8	1.12	4.9	5.4	2.84	2.7	66.4

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263157	< 5	8.11	< 0.1	1	< 100	107	< 1	0.5	6.09	< 0.1	11	52.4	96	122	1.2	8.74	1.8	1.31	5.0	6.1	3.11	0.9	65.1
263158	13	6.76	< 0.1	2	< 100	96	< 1	0.6	6.12	0.1	11	44.0	79	95.5	1.1	7.46	1.7	1.19	4.6	4.6	2.88	2.9	55.4
263159	12	7.36	< 0.1	2	< 100	107	< 1	0.7	6.89	< 0.1	11	53.5	91	81.9	1.2	9.04	1.7	1.18	4.8	4.6	2.72	2.2	66.9
263160	< 5	7.65	< 0.1	1	< 100	100	< 1	0.4	6.89	< 0.1	11	46.6	71	89.5	1.1	8.41	1.0	1.16	4.7	4.4	2.64	0.5	61.3
263161	< 5	7.57	< 0.1	3	< 100	79	< 1	0.2	6.73	< 0.1	11	48.1	67	101	1.2	8.06	1.6	0.86	4.7	6.5	2.59	2.1	58.9
263162	< 5	7.39	< 0.1	2	< 100	73	< 1	0.2	6.25	< 0.1	10	46.8	69	65.3	1.1	7.77	1.7	0.80	4.4	5.7	2.55	2.5	58.4
263163	< 5	7.27	< 0.1	2	< 100	59	< 1	0.4	8.61	< 0.1	11	49.5	64	99.8	0.7	7.88	1.6	0.71	4.6	2.9	2.53	2.7	55.3
263164	700	8.55	< 0.1	236	400	493	< 1	0.1	3.81	0.2	16	13.7	38	45.8	0.8	4.90	1.0	0.97	7.4	6.8	2.52	2.5	22.8

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263031	0.040	35.0	2.3	< 1	4.09	1380	6.8	< 0.1	34	0.8	100	< 0.1	0.9	0.447	0.26	< 0.1	226	0.4	18.6	83	63.4
263032	0.035	29.5	7.8	1	3.53	1370	3.2	< 0.1	32	0.8	132	< 0.1	0.8	0.439	0.21	< 0.1	218	0.2	17.6	70	61.1
263033	0.032	23.4	4.3	< 1	3.79	1390	3.0	< 0.1	34	0.5	131	< 0.1	0.8	0.230	0.28	< 0.1	143	< 0.1	17.7	77	30.2
263034	0.034	28.7	3.3	< 1	3.81	1440	8.0	< 0.1	35	1.0	138	< 0.1	0.8	0.459	0.20	< 0.1	191	0.1	17.5	75	51.8
263035	0.053	15.8	11.2	< 1	1.31	801	2.7	1.1	18	1.3	264	< 0.1	1.7	0.272	0.09	0.4	95	0.7	16.5	61	25.3
263036	0.039	29.2	3.6	< 1	3.98	1570	9.1	0.4	38	1.0	159	0.1	0.9	0.555	0.18	< 0.1	245	0.7	19.9	82	71.1
263037	0.034	50.9	1.0	< 1	4.28	1380	2.3	< 0.1	39	0.4	102	< 0.1	0.9	0.428	0.38	< 0.1	202	< 0.1	18.1	91	61.9
263038	0.037	31.3	2.0	< 1	4.19	1240	4.8	0.2	33	0.8	113	< 0.1	0.8	0.506	0.20	< 0.1	220	0.6	17.3	82	64.3
263039	0.033	39.1	9.9	2	3.90	1270	0.5	< 0.1	32	0.6	122	< 0.1	0.8	0.460	0.26	< 0.1	210	0.1	18.1	100	61.1
263040	0.030	23.5	9.3	2	3.57	1220	2.4	0.4	30	0.9	149	0.1	0.9	0.409	0.16	< 0.1	217	1.3	14.7	80	57.0
263041	0.034	20.9	1.9	< 1	3.75	1330	2.3	< 0.1	31	0.8	140	< 0.1	0.8	0.380	0.13	< 0.1	198	0.1	17.2	76	56.3
263042	0.030	18.9	0.9	< 1	3.98	1360	0.3	< 0.1	33	0.2	115	< 0.1	0.8	0.234	0.11	< 0.1	182	< 0.1	17.5	83	54.3
263043	0.028	21.9	1.2	< 1	3.92	1320	0.2	< 0.1	32	0.3	112	< 0.1	0.9	0.241	0.13	< 0.1	160	< 0.1	17.5	81	53.9
263044	0.037	23.9	1.0	< 1	4.14	1540	0.3	< 0.1	36	0.6	114	< 0.1	1.0	0.440	0.13	< 0.1	227	0.5	18.7	90	66.4
263045	0.038	23.6	1.1	< 1	3.92	1530	0.3	0.3	34	0.9	109	0.2	0.9	0.468	0.13	< 0.1	238	1.5	18.0	89	68.0
263046	0.038	23.6	0.9	< 1	4.03	1440	0.5	< 0.1	35	0.5	92	< 0.1	0.9	0.414	0.16	< 0.1	219	0.4	17.3	83	63.8
263047	0.035	18.8	1.0	< 1	4.48	1640	0.8	0.1	35	0.7	118	0.1	0.9	0.440	0.11	< 0.1	235	0.7	18.9	82	60.8
263048	0.035	14.2	1.6	< 1	4.31	1500	0.7	< 0.1	36	0.5	113	< 0.1	0.9	0.391	0.09	< 0.1	205	0.1	18.4	92	61.0
263049	0.034	18.5	1.9	< 1	4.43	1420	1.1	< 0.1	34	0.3	83	< 0.1	0.8	0.429	0.11	< 0.1	210	0.2	17.4	95	62.0
263050	0.040	28.1	1.7	< 1	3.78	1310	2.8	0.4	31	0.7	149	0.1	0.9	0.498	0.23	< 0.1	230	0.9	18.4	81	65.0
263051	0.037	34.1	1.6	< 1	3.86	1260	0.2	< 0.1	33	0.5	107	< 0.1	0.9	0.319	0.24	< 0.1	194	< 0.1	18.3	87	52.6
263052	0.033	27.3	0.8	< 1	3.75	1230	1.9	< 0.1	33	0.3	68	< 0.1	0.8	0.339	0.19	< 0.1	187	< 0.1	16.6	92	58.3
263053	0.031	10.0	< 0.1	< 1	3.63	1220	0.5	< 0.1	31	0.8	40	< 0.1	0.7	0.398	0.05	< 0.1	212	< 0.1	15.7	104	56.2
263054	0.054	17.5	23.2	< 1	1.27	843	3.5	2.6	18	1.8	269	0.1	1.8	0.276	0.09	0.5	109	0.9	16.9	70	25.1
263055	0.030	31.1	< 0.1	< 1	3.74	1340	1.7	< 0.1	31	0.3	42	< 0.1	0.7	0.373	0.17	0.5	203	< 0.1	16.2	90	60.5
263056	0.032	47.9	< 0.1	< 1	3.66	1300	3.5	< 0.1	31	0.6	56	< 0.1	0.7	0.422	0.28	< 0.1	210	0.4	16.1	84	62.9
263057	0.035	37.8	0.3	< 1	3.61	1330	3.6	0.1	32	0.8	64	0.2	0.8	0.416	0.24	< 0.1	230	0.7	16.2	80	64.4
263058	0.033	42.5	0.5	< 1	3.42	1300	1.2	0.3	29	3.5	101	0.1	0.7	0.354	0.22	< 0.1	217	0.9	11.4	76	61.6
263059	0.032	67.1	1.2	< 1	3.30	1150	0.6	< 0.1	31	0.6	74	< 0.1	0.7	0.304	0.63	< 0.1	180	< 0.1	11.7	86	52.5
263060	0.035	92.6	0.8	< 1	2.71	1220	3.6	0.6	28	0.7	97	0.1	0.6	0.343	0.54	< 0.1	187	2.3	10.2	64	55.3
263061	0.003	0.6	2.3	< 1	10.6	368	0.8	0.2	< 1	0.3	153	< 0.1	0.1	0.003	< 0.05	0.2	< 4	0.3	0.5	17	1.8
263062	0.024	99.8	2.0	1	2.58	1250	3.2	0.8	29	0.9	100	0.1	0.7	0.374	0.51	0.3	206	4.8	7.7	71	56.5
263063	0.031	151	2.0	< 1	2.77	1310	3.8	0.8	31	0.8	59	0.1	0.7	0.387	0.91	0.2	221	2.1	8.1	76	64.1
263064	0.031	122	1.9	< 1	3.11	1430	2.8	0.8	32	0.8	75	0.2	0.8	0.383	0.69	0.2	243	1.7	7.7	72	63.3
263065	0.030	116	1.0	< 1	2.46	1190	1.0	1.1	29	0.7	80	0.2	0.7	0.347	0.63	0.2	214	1.9	8.9	66	59.1
263066	0.032	73.1	1.3	< 1	3.10	1260	0.8	1.2	31	0.9	100	0.2	0.8	0.401	0.43	0.2	236	2.0	9.4	77	66.7
263067	0.032	20.1	2.9	< 1	3.68	1160	1.7	0.9	32	0.8	73	0.2	0.8	0.404	0.14	0.2	253	1.4	9.2	83	64.2
263068	0.036	4.2	4.9	< 1	4.03	1290	2.5	0.8	35	1.0	67	0.3	0.8	0.468	< 0.05	0.3	288	2.0	11.5	100	74.7
263069	0.049	13.0	11.9	< 1	1.15	875	4.1	1.5	14	1.7	272	0.2	1.1	0.261	0.11	0.6	128	1.2	11.1	56	30.2
263070	0.032	6.5	2.7	< 1	3.48	1220	0.6	0.3	33	0.7	53	0.1	0.7	0.396	< 0.05	0.2	234	0.6	12.8	73	65.1
263071	0.032	8.7	1.3	< 1	3.24	1190	0.7	0.2	34	0.9	50	0.1	0.8	0.419	0.08	0.2	248	0.5	14.8	77	66.9
263072	0.032	12.3	2.2	< 1	3.26	1400	0.3	< 0.1	37	0.6	52	< 0.1	0.8	0.278	0.09	0.2	193	0.2	14.9	85	52.8

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263073	0.035	5.9	3.6	< 1	3.15	1340	0.4	0.2	37	1.0	56	< 0.1	0.8	0.430	< 0.05	0.2	251	0.5	16.3	90	69.8
263074	0.035	7.1	2.6	< 1	3.41	1310	0.4	< 0.1	36	0.4	65	< 0.1	0.9	0.256	0.06	0.2	188	0.1	15.7	99	55.5
263075	0.034	6.3	1.5	< 1	3.52	1220	0.8	0.2	37	0.7	50	< 0.1	0.8	0.411	< 0.05	0.2	243	0.4	13.9	97	67.2
263076	0.034	6.0	1.2	< 1	3.32	1120	1.0	0.2	37	0.6	48	0.1	0.8	0.428	< 0.05	0.2	250	0.4	13.8	89	66.9
263077	0.020	10.0	0.7	< 1	3.50	1290	0.8	0.1	30	0.4	39	< 0.1	0.2	0.295	0.06	< 0.1	190	0.4	10.3	82	30.5
263078	0.022	27.3	0.9	< 1	4.64	1350	0.2	0.3	32	0.4	67	< 0.1	0.2	0.328	0.17	< 0.1	211	0.4	10.7	94	34.7
263079	0.025	30.6	1.8	< 1	4.84	1410	0.8	0.4	35	0.6	119	< 0.1	0.2	0.384	0.17	< 0.1	219	0.2	11.5	90	37.5
263080	0.020	18.0	1.4	< 1	4.93	1380	0.8	0.6	29	0.5	117	0.2	0.1	0.358	0.24	< 0.1	203	0.7	8.8	82	36.1
263081	0.021	37.1	1.4	< 1	5.20	1370	0.8	0.5	34	0.5	120	< 0.1	0.1	0.364	0.23	< 0.1	201	0.5	10.9	81	37.6
263082	0.019	26.8	1.2	< 1	4.66	1350	0.5	0.4	31	0.4	115	< 0.1	0.1	0.323	0.16	< 0.1	188	0.3	9.5	76	31.3
263083	0.018	33.2	1.1	< 1	5.33	1370	0.3	0.5	33	0.4	120	< 0.1	0.1	0.361	0.20	< 0.1	204	0.3	9.6	78	30.1
263084	0.019	21.9	1.7	< 1	4.88	1350	1.3	0.5	33	0.5	140	< 0.1	0.2	0.331	0.13	< 0.1	203	0.4	9.4	77	28.8
263085	0.020	26.7	1.7	< 1	5.01	1350	0.3	0.4	33	0.3	138	< 0.1	0.1	0.331	0.16	< 0.1	197	0.5	10.3	79	31.8
263086	0.054	18.7	25.4	< 1	1.27	946	4.0	2.5	21	1.9	307	0.1	1.8	0.278	0.13	0.9	131	1.4	15.7	74	27.8
263087	0.020	18.6	1.3	< 1	4.82	1320	0.2	0.4	31	0.4	135	< 0.1	0.1	0.302	0.11	< 0.1	193	< 0.1	9.9	76	30.5
263088	0.020	49.6	0.9	< 1	4.61	1260	0.2	0.3	31	0.4	99	< 0.1	0.1	0.321	0.26	< 0.1	203	0.2	9.5	69	30.1
263089	0.019	86.7	1.4	< 1	4.47	1150	0.6	0.3	29	0.4	53	< 0.1	0.1	0.292	0.54	< 0.1	177	0.3	7.0	63	30.1
263090	0.017	95.9	0.6	< 1	4.26	1080	0.8	0.3	28	0.3	66	< 0.1	0.1	0.282	0.53	< 0.1	169	0.4	5.0	61	24.5
263091	0.015	38.4	0.6	< 1	4.08	1140	1.2	1.0	18	0.6	75	0.1	< 0.1	0.262	0.55	< 0.1	157	2.0	3.3	61	20.8
263092	0.013	131	1.2	< 1	4.24	1080	1.2	1.0	25	0.5	119	< 0.1	< 0.1	0.251	0.81	< 0.1	158	1.6	5.4	63	22.8
263093	0.021	143	6.2	4	2.13	1350	9.5	1.5	26	0.6	136	< 0.1	0.3	0.303	0.73	0.2	260	8.5	7.0	68	36.8
263094	0.004	1.7	4.4	< 1	11.5	321	0.3	0.2	< 1	0.3	190	< 0.1	< 0.1	0.005	< 0.05	0.3	< 4	0.3	0.5	42	1.7
263095	0.055	94.0	2.7	< 1	1.68	1610	0.4	0.5	34	0.9	108	< 0.1	1.6	0.492	0.59	0.4	268	1.8	14.5	105	98.1
263096	0.063	81.4	5.2	< 1	1.88	1620	0.6	< 0.1	36	0.4	78	< 0.1	1.7	0.235	0.53	0.6	190	< 0.1	20.2	144	66.0
263097	0.056	32.9	4.6	1	1.57	1530	0.6	< 0.1	32	0.9	90	< 0.1	1.6	0.370	0.22	0.5	185	< 0.1	24.2	140	79.4
263098	0.063	53.8	3.8	< 1	1.97	1640	0.2	< 0.1	37	0.6	140	< 0.1	1.8	0.198	0.36	0.5	172	< 0.1	28.2	185	63.6
263099	0.062	24.2	4.3	< 1	1.97	1740	0.4	< 0.1	36	1.3	117	< 0.1	1.7	0.446	0.18	0.5	264	0.4	26.2	269	104
263100	0.060	17.5	5.9	< 1	1.86	1410	1.2	< 0.1	37	1.6	59	< 0.1	1.8	0.554	0.14	0.5	290	0.2	28.0	364	114
263101	0.056	11.7	7.5	4	1.61	1230	2.5	0.3	32	1.8	65	< 0.1	1.7	0.599	0.10	0.5	305	0.5	23.8	303	100
263102	0.061	30.2	12.7	3	2.06	1390	0.5	< 0.1	36	0.9	59	< 0.1	1.7	0.494	0.24	0.7	189	0.1	27.2	224	92.9
263103	0.052	16.8	11.7	< 1	1.21	895	4.2	1.5	20	1.6	309	0.1	1.8	0.265	0.15	0.7	120	1.0	14.8	59	29.9
263104	0.047	20.3	8.5	2	2.13	1250	0.9	< 0.1	34	0.8	77	< 0.1	1.2	0.351	0.18	0.4	244	< 0.1	21.0	217	87.8
263105	0.036	27.4	3.8	< 1	3.55	1620	1.0	0.2	42	0.6	151	< 0.1	0.3	0.537	0.21	< 0.1	300	0.7	15.3	192	49.5
263106	0.033	48.4	4.1	< 1	3.37	1610	0.8	0.3	38	0.5	150	< 0.1	0.3	0.500	0.34	0.1	305	1.4	15.5	151	52.5
263107	0.032	34.2	4.7	< 1	3.78	1550	0.9	0.3	36	0.5	154	< 0.1	0.3	0.496	0.22	0.1	281	2.0	14.1	125	55.8
263108	0.031	33.0	2.7	< 1	4.16	1560	0.5	0.2	37	0.5	201	0.1	0.3	0.492	0.20	< 0.1	285	0.7	13.7	119	53.1
263109	0.028	42.2	2.2	< 1	4.11	1530	0.5	0.2	34	0.5	125	0.2	0.3	0.459	0.27	< 0.1	266	1.0	12.4	97	46.4
263110	0.025	33.5	2.0	< 1	4.10	1490	< 0.1	< 0.1	35	0.1	150	< 0.1	0.3	0.244	0.20	< 0.1	211	< 0.1	14.8	96	52.3
263111	0.031	31.2	2.5	< 1	4.23	1670	0.7	0.1	35	0.5	173	< 0.1	0.3	0.311	0.20	< 0.1	195	0.2	14.5	101	36.6
263112	0.034	30.1	2.4	< 1	4.17	1620	0.8	0.2	35	0.6	164	0.1	0.3	0.477	0.17	< 0.1	270	0.8	14.0	102	51.8
263113	0.027	20.9	1.9	< 1	4.30	1650	0.4	< 0.1	34	0.3	169	< 0.1	0.3	0.413	0.13	< 0.1	236	0.2	12.4	100	51.9
263114	0.030	25.8	2.3	< 1	4.93	1740	0.5	0.2	38	0.5	160	0.1	0.3	0.496	0.15	1.1	274	0.3	13.2	111	47.5

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263115	0.036	23.1	2.2	< 1	4.62	1710	1.3	0.2	35	0.6	168	0.1	0.3	0.508	0.14	< 0.1	298	0.6	14.9	107	55.4
263116	0.032	36.1	2.0	< 1	5.14	1790	0.3	0.2	35	0.5	109	0.1	0.3	0.520	0.21	< 0.1	287	0.4	13.3	104	50.4
263117	0.022	55.3	2.0	< 1	5.25	1760	0.2	< 0.1	35	0.2	95	< 0.1	0.2	0.355	0.32	< 0.1	238	< 0.1	10.6	101	37.0
263118	0.022	18.5	6.6	< 1	3.76	1450	1.5	0.3	23	0.5	142	< 0.1	0.2	0.310	0.12	< 0.1	180	1.0	10.1	78	33.3
263119	0.046	12.3	22.4	< 1	1.09	889	4.0	2.4	14	1.8	263	0.2	0.9	0.263	0.11	0.6	126	1.4	9.9	66	26.1
263120	0.026	37.3	2.4	< 1	5.28	1680	0.6	< 0.1	36	0.2	120	< 0.1	0.3	0.265	0.24	< 0.1	197	< 0.1	12.9	103	43.6
263121	0.025	36.4	2.0	< 1	5.76	1660	0.3	< 0.1	35	0.2	98	< 0.1	0.2	0.224	0.22	< 0.1	189	< 0.1	13.1	99	45.1
263122	0.024	39.1	1.5	< 1	5.37	1660	0.2	< 0.1	35	< 0.1	108	< 0.1	0.2	0.249	0.22	< 0.1	194	< 0.1	12.6	97	46.6
263123	0.025	45.6	1.1	< 1	5.91	1750	0.3	< 0.1	35	0.2	84	< 0.1	0.2	0.405	0.25	< 0.1	231	< 0.1	11.2	100	41.8
263124	0.028	34.5	1.8	< 1	6.33	1750	0.3	0.1	34	0.3	95	< 0.1	0.2	0.389	0.21	< 0.1	217	0.2	12.1	106	48.7
263125	0.030	27.6	1.4	< 1	6.03	1690	0.3	0.2	33	0.5	108	0.1	0.2	0.411	0.17	< 0.1	210	< 0.1	12.7	96	51.6
263126	0.028	32.4	1.6	< 1	6.30	1810	0.2	0.2	32	0.4	98	0.1	0.2	0.418	0.22	< 0.1	218	< 0.1	12.4	105	52.2
263127	0.028	38.3	2.1	< 1	5.99	1680	0.2	0.2	32	0.4	117	< 0.1	0.2	0.378	0.26	< 0.1	207	< 0.1	11.9	94	41.8
263128	0.025	31.2	1.5	< 1	6.84	1760	0.1	< 0.1	32	0.3	85	< 0.1	0.2	0.311	0.20	< 0.1	176	< 0.1	11.0	97	39.6
263129	0.006	2.6	4.8	< 1	16.6	537	0.8	0.1	< 1	0.2	286	< 0.1	< 0.1	0.008	0.14	0.4	4	0.4	1.6	43	3.9
263130	0.023	24.8	1.2	< 1	6.41	1630	1.0	< 0.1	28	0.3	58	< 0.1	0.2	0.323	0.16	< 0.1	185	< 0.1	10.4	91	34.6
263131	0.022	20.2	1.9	< 1	6.38	1670	0.1	< 0.1	29	0.2	62	< 0.1	0.2	0.270	0.12	< 0.1	190	< 0.1	11.0	94	38.2
263132	0.024	31.3	2.0	< 1	6.27	1710	0.2	< 0.1	28	0.2	86	< 0.1	0.2	0.268	0.14	< 0.1	173	< 0.1	11.4	98	40.4
263133	0.024	28.2	2.5	< 1	6.29	1640	0.3	0.1	28	3.6	95	< 0.1	0.2	0.334	0.17	< 0.1	196	0.4	9.9	94	34.6
263134	0.022	19.7	1.8	< 1	6.35	1600	0.1	< 0.1	26	0.3	80	< 0.1	0.2	0.281	0.12	< 0.1	166	< 0.1	9.5	92	34.3
263135	0.024	23.3	1.7	< 1	6.25	1600	0.2	0.1	28	0.4	115	< 0.1	0.2	0.330	0.14	< 0.1	187	< 0.1	10.7	96	35.2
263136	0.024	21.3	1.3	< 1	6.40	1690	0.4	< 0.1	28	0.5	68	< 0.1	0.2	0.372	0.14	< 0.1	195	0.1	10.6	96	35.5
263137	0.026	21.3	1.5	< 1	6.10	1660	0.8	0.1	31	0.5	83	0.1	0.2	0.396	0.17	< 0.1	206	0.4	11.4	107	40.6
263138	0.039	26.3	4.8	< 1	3.13	1280	1.0	< 0.1	35	0.7	180	< 0.1	1.0	0.372	0.21	0.2	222	0.1	18.6	93	76.4
263139	0.032	34.2	2.9	< 1	3.69	1410	0.9	< 0.1	37	0.3	140	< 0.1	0.8	0.203	0.26	0.2	161	< 0.1	15.2	94	38.5
263140	0.031	35.2	3.3	< 1	3.29	1440	1.0	< 0.1	37	0.2	167	< 0.1	0.9	0.297	0.25	0.2	219	< 0.1	15.1	83	62.3
263141	0.033	35.9	4.7	< 1	2.88	1580	1.8	0.3	37	0.7	176	0.1	0.8	0.421	0.26	0.3	231	0.6	15.2	87	64.3
263142	0.052	16.0	12.1	< 1	1.15	848	3.5	1.4	18	1.5	291	0.1	1.8	0.265	0.11	0.7	116	1.2	14.0	55	27.9
263143	0.038	37.3	7.6	< 1	3.45	1640	1.6	0.3	40	0.7	152	0.1	0.9	0.506	0.27	0.2	288	3.6	16.9	107	77.3
263144	0.038	55.4	5.9	< 1	2.91	1490	0.8	0.3	37	0.7	138	0.2	0.8	0.483	0.42	0.7	253	0.9	16.0	90	72.0
263145	0.035	39.3	4.6	< 1	3.10	1580	1.8	0.1	37	0.7	180	< 0.1	0.9	0.400	0.28	0.2	239	0.3	16.2	91	59.6
263146	0.037	39.1	3.9	< 1	3.07	1410	1.7	< 0.1	38	0.4	151	< 0.1	0.9	0.365	0.28	0.2	218	0.2	15.4	89	54.9
263147	0.036	55.8	5.3	< 1	3.12	1400	0.7	0.1	37	0.7	120	0.1	0.8	0.466	0.42	0.2	254	0.5	14.8	92	71.6
263148	0.035	56.6	7.6	1	3.09	1410	0.4	0.2	36	0.8	106	0.2	0.8	0.466	0.43	0.3	250	0.8	15.0	85	64.0
263149	0.035	32.4	4.3	< 1	3.27	1590	2.6	0.3	39	0.8	161	0.1	0.8	0.488	0.23	0.2	262	0.6	15.6	95	63.1
263150	0.034	49.5	5.6	< 1	2.72	1310	0.6	< 0.1	35	0.7	108	< 0.1	0.8	0.358	0.36	0.2	225	< 0.1	15.7	72	59.5
263151	0.034	42.9	4.2	< 1	3.07	1480	0.2	< 0.1	36	0.3	126	< 0.1	0.8	0.186	0.30	0.2	151	< 0.1	15.1	89	30.1
263152	0.036	45.2	5.8	< 1	2.98	1530	1.1	0.3	39	0.8	163	< 0.1	0.9	0.447	0.34	0.2	244	0.7	15.5	87	56.4
263153	0.036	40.9	6.9	< 1	3.08	1620	0.6	0.3	39	0.7	159	0.2	0.9	0.478	0.30	0.2	260	0.9	15.5	89	60.7
263154	0.038	36.1	5.1	< 1	3.41	1650	1.4	0.4	39	0.7	187	0.2	0.9	0.479	0.26	0.2	264	1.2	15.6	89	61.3
263155	0.037	35.4	5.2	< 1	3.34	1650	1.5	0.4	38	0.8	189	0.2	0.9	0.489	0.26	0.2	267	0.9	15.9	91	64.6
263156	0.038	37.7	5.0	< 1	3.21	1660	2.5	0.3	40	0.7	221	0.2	0.9	0.489	0.27	0.2	263	0.7	16.0	97	66.1

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263157	0.036	43.6	4.9	< 1	3.07	1720	0.8	< 0.1	39	0.6	192	< 0.1	0.9	0.370	0.32	0.3	253	< 0.1	15.4	103	69.2
263158	0.034	40.6	10.9	< 1	2.70	1510	0.5	0.2	34	0.7	165	0.2	0.8	0.451	0.29	0.3	239	2.0	14.3	84	71.4
263159	0.035	37.9	11.2	< 1	2.59	1650	0.2	< 0.1	37	0.7	251	< 0.1	0.8	0.466	0.29	0.3	285	0.6	15.8	83	63.5
263160	0.034	38.9	6.1	< 1	2.79	1680	1.6	< 0.1	37	0.5	279	< 0.1	0.8	0.272	0.29	0.2	173	< 0.1	15.0	79	40.4
263161	0.033	33.0	4.4	< 1	3.01	1600	1.6	0.2	36	0.7	255	0.1	0.8	0.436	0.25	0.2	236	0.7	14.3	81	58.8
263162	0.033	28.7	2.9	< 1	3.08	1560	3.1	0.3	36	0.7	230	0.1	0.8	0.448	0.21	0.2	234	1.0	14.2	81	57.8
263163	0.032	22.3	6.3	< 1	2.70	1620	0.6	0.6	35	0.7	316	0.2	0.8	0.456	0.17	0.2	247	1.0	14.5	74	61.0
263164	0.053	17.7	24.4	< 1	1.28	939	4.2	2.5	19	1.8	302	0.2	1.8	0.273	0.12	0.7	129	1.5	14.6	65	28.4

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas		5.10	34.7	360	> 2000	1180	< 1	1470	0.99	2.4	12	7.9	13	1100	3.0	24.6	0.8	0.06	6.2	11.7	0.066	1.0	40.7
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
GXR-1 Meas		2.06	32.5	430	> 2000	655	< 1	1580	0.87	2.5	14	7.9	16	1040	2.6	23.7	0.5	0.04	7.2	9.1	0.044	0.8	39.2
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas		6.87	3.6	93	400	313	2	19.8	1.02	0.2	87	15.0	46	7000	2.9	3.12	1.1	4.05	48.6	10.3	0.548	9.3	40.7
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
GXR-4 Meas		5.90	3.7	107	400	293	2	20.7	1.01	< 0.1	118	13.2	45	6120	2.7	3.05	1.2	3.45	58.8	9.7	0.529	8.7	39.6
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
SDC-1 Meas		8.92		< 1		666	3		1.01		69	18.3	45	27.9	4.1	4.79	1.1	2.15	34.0	32.5	1.57	4.2	35.2
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
SDC-1 Meas		8.76		< 1		658	3		1.02		69	18.2	47	33.1	4.3	4.92	1.0	2.06	32.8	32.7	1.44	2.4	36.4
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
SDC-1 Meas		7.13		< 1		598	2		0.84		80	13.7	50	26.5	3.9	3.97	0.9	1.23	38.3	32.7	1.24	1.2	32.2
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
GXR-6 Meas		14.3	< 0.1	256	< 100	1470	< 1	0.2	0.18	< 0.1	27	14.4	50	68.0	4.7	5.74	2.7	1.72	10.6	33.9	0.098	3.5	25.8
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
GXR-6 Meas		12.9	0.1	267	< 100	1330	1	< 0.1	0.17	< 0.1	34	12.0	51	61.5	4.0	5.22	2.2	0.99	12.5	33.2	0.096	1.5	22.0
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
DNC-1a Meas						114						63.7	237	100.0					3.1	4.6		1.4	294
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
DNC-1a Meas						106						59.0	152	103					2.9	4.4		1.9	280
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
DNC-1a Meas						110						56.3	165	88.2					4.0	4.7		1.5	253
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
SBC-1 Meas				22		859	4	0.7		0.3	88	25.3	75	42.7	9.2		3.2		43.4	164		11.6	96.1
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SBC-1 Meas				21		759	3	0.5		0.2	102	21.1	79	37.6	7.9		3.2		47.3	153		13.8	79.8
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SE68 Meas	595																						
SE68 Cert	599																						
SE68 Meas	585																						
SE68 Cert	599																						
SE68 Meas	598																						
SE68 Cert	599																						
SE68 Meas	588																						

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SE68 Cert	599																						
OREAS 45d (4-Acid) Meas		8.75		6		196	< 1	0.3	0.18		27	32.5	483	375	4.1	15.2	1.3	0.47	13.6	20.6	0.097	1.5	250
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
OREAS 45d (4-Acid) Meas		8.51		7		189	< 1	0.3	0.19		28	30.7	566	366	3.9	14.6	1.8	0.48	13.6	20.1	0.097	2.7	242
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
OREAS 45d (4-Acid) Meas		7.32		5		179	< 1	< 0.1	0.19		38	29.8	497	357	3.9	14.1	2.0	0.36	17.2	19.8	0.091	1.0	233
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
SdAR-M2 (U.S.G.S.) Meas						1040	7	1.0		4.9	73	13.9	41	238	1.9		3.2		35.3	16.6		16.2	50.4
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
SdAR-M2 (U.S.G.S.) Meas						1020	6	1.0		5.4	96	12.4	37	230	1.7		3.9		45.5	16.3		17.6	49.3
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
OREAS 16A (FA-Ancaster) Meas	1780																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1780																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1800																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1760																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263038 Orig		7.36	< 0.1	1	< 100	104	< 1	< 0.1	6.57	< 0.1	14	41.3	52	113	2.2	7.15	1.8	0.72	6.3	10.3	2.45	2.8	60.2
263038 Dup		6.59	< 0.1	1	< 100	102	< 1	< 0.1	6.09	< 0.1	14	39.4	55	111	2.2	6.66	1.6	0.72	6.1	10.0	2.24	1.5	57.8
263040 Orig	6	6.46	0.6	< 1	< 100	103	< 1	0.6	7.74	< 0.1	11	39.6	73	60.9	1.2	7.07	1.6	0.62	5.4	6.8	2.23	2.5	49.6

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263040 Dup	5	6.14	0.3	< 1	< 100	95	< 1	0.5	7.36	< 0.1	13	38.2	68	59.1	1.2	7.30	1.5	0.62	5.8	6.8	2.18	2.3	49.1
263050 Orig	< 5																						
263050 Dup	5																						
263060 Orig	31																						
263060 Dup	23																						
263067 Orig		7.07	< 0.1	2	< 100	151	< 1	0.1	4.73	< 0.1	10	42.3	81	87.0	1.7	7.05	1.6	0.41	4.5	14.0	2.55	2.9	56.0
263067 Dup		7.30	< 0.1	2	< 100	153	< 1	0.1	4.80	< 0.1	10	43.5	82	87.8	1.8	7.22	1.6	0.40	4.6	14.1	2.64	2.9	57.6
263075 Orig	< 5																						
263075 Dup	< 5																						
263080 Split Orig PREP DUP	18																						
263080 Split PREP DUP	< 5																						
263085 Orig	< 5																						
263085 Dup	< 5																						
263092 Orig		7.48	< 0.1	1	< 100	99	< 1	< 0.1	7.32	< 0.1	2	48.2	139	67.8	7.3	6.11	0.6	3.00	0.9	7.3	0.075	0.8	196
263092 Dup		7.50	< 0.1	2	< 100	100	< 1	< 0.1	7.57	< 0.1	3	48.9	125	67.5	7.4	6.17	0.6	2.87	1.0	7.5	0.079	0.8	204
263095 Orig	8																						
263095 Dup	8																						
263109 Orig	< 5																						
263109 Dup	< 5																						
263110 Orig		7.43	< 0.1	< 1	< 100	52	< 1	< 0.1	5.43	< 0.1	7	58.9	40	121	2.2	8.98	1.4	0.78	2.6	12.2	2.08	0.2	99.5
263110 Dup		8.02	< 0.1	< 1	< 100	55	< 1	< 0.1	5.78	< 0.1	7	61.5	32	124	2.3	9.48	1.4	0.82	2.7	12.8	2.13	0.3	105
263120 Orig	< 5																						
263120 Dup	< 5																						
263129 Orig	< 5																						
263129 Dup	< 5																						
263130 Split Orig PREP DUP	< 5																						
263130 Split PREP DUP	< 5																						
263130 Orig		6.32	< 0.1	3	< 100	49	< 1	< 0.1	4.90	< 0.1	4	77.7	42	88.0	2.5	9.79	0.9	0.54	1.8	21.2	1.24	1.8	211
263130 Dup		6.60	< 0.1	2	< 100	48	< 1	< 0.1	5.11	< 0.1	5	82.6	48	92.4	2.6	10.5	0.9	0.56	1.8	22.8	1.29	1.1	220
263143 Orig	6																						
263143 Dup	< 5																						
263153 Orig	< 5																						
263153 Dup	< 5																						
263157 Orig		8.27	< 0.1	2	< 100	106	< 1	0.5	6.12	< 0.1	11	51.8	94	125	1.2	8.77	1.8	1.31	4.9	6.1	3.10	1.0	65.1
263157 Dup		7.94	< 0.1	1	< 100	107	< 1	0.5	6.06	< 0.1	11	53.1	98	119	1.2	8.70	1.7	1.31	5.0	6.0	3.11	0.8	65.2
263160 Orig		7.82	0.2	1	< 100	103	< 1	0.4	7.09	< 0.1	11	47.9	75	90.6	1.1	8.57	0.8	1.20	4.8	4.4	2.72	0.4	62.3
263160 Dup		7.49	< 0.1	1	< 100	96	< 1	0.4	6.68	< 0.1	11	45.3	67	88.5	1.1	8.25	1.1	1.12	4.6	4.3	2.56	0.6	60.3
263163 Orig	< 5																						
263163 Dup	< 5																						

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank	< 5																						
Method Blank	5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	2	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	< 0.1
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.4	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	0.1	< 0.001	< 0.1	0.1
Method Blank		0.02	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	5	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.001	< 0.1	< 0.1
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	5	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.001	< 0.1	< 0.1

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	0.062	2.6	724	< 1	0.26	856	16.1	32.5	1	31.2	292	< 0.1	2.4	0.026	0.37	28.2	77	125	23.0	750	38.2
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	0.066	2.3	726	< 1	0.19	854	17.3	30.1	1	25.2	260	< 0.1	2.2	0.026	0.35	32.5	75	140	26.0	806	20.3
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0
DH-1a Meas													954			2630					
DH-1a Cert													910			2629					
DH-1a Meas													905			2360					
DH-1a Cert													910			2629					
DH-1a Meas													761			2230					
DH-1a Cert													910			2629					
GXR-4 Meas	0.145	119	49.4	2	1.57	136	314	3.7	7	7.9	220	0.5	18.3	0.250	2.85	5.4	86	30.1	11.3	61	40.8
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	0.148	121	47.9	2	1.59	154	320	4.5	7	7.1	196	0.6	21.7	0.280	3.10	5.4	81	33.1	12.4	72	38.4
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	0.061	86.0	23.8		0.92	802		< 0.1	15	1.1	176	0.3	12.3	0.265	0.56	2.8	62	< 0.1		96	44.8
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	0.059	84.2	23.4		0.92	835		< 0.1	15	0.5	174	0.1	11.9	0.181	0.54	2.9	49	< 0.1		92	41.4
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	0.057	67.8	21.6		0.92	726		< 0.1	13	0.4	143	< 0.1	10.6	0.131	0.55	2.4	39	< 0.1		96	35.9
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	0.039	60.7	103	< 1	0.53	1050	1.4	1.8	27	1.0	39	0.2	5.1		1.83	1.4	164	0.9	10.1	128	99.9
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	0.037	43.2	92.7	< 1	0.56	905	1.3	1.5	23	1.2	37	< 0.1	4.7		1.96	1.1	128	< 0.1	11.8	117	79.7
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110
DNC-1a Meas		2.8	5.8					0.5	33		143			0.270			148		13.6	60	38.8
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
DNC-1a Meas		3.0	5.8					0.5	32		143			0.264			143		13.6	59	43.0
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
DNC-1a Meas		3.1	4.6					0.4	29		130			0.301			135		15.1	62	35.9
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
SBC-1 Meas		107	36.1				2.2	0.8	22	3.2	189	0.9	15.6	0.451	0.81	5.7	224	0.9	27.9	208	123
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas		84.7	33.0				1.9	0.8	18	3.7	161	0.9	14.1	0.505	0.81	5.2	195	1.3	28.3	191	118
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas																					
SE68 Cert																					
SE68 Meas																					
SE68 Cert																					
SE68 Meas																					
SE68 Cert																					
SE68 Meas																					
SE68 Cert																					

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 45d (4-Acid) Meas	0.037	34.6	20.5	< 1	0.20	495	1.6	< 0.1	52	0.5	30	< 0.1	14.1	0.141	0.24	2.7	81	0.3	9.8	33	48.9
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
OREAS 45d (4-Acid) Meas	0.038	34.5	20.3	< 1	0.16	487	1.5	< 0.1	50	0.9	29	0.1	13.5	0.234	0.21	2.5	120	0.7	9.4	34	75.2
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
OREAS 45d (4-Acid) Meas	0.040	35.4	19.5	< 1	0.22	453	0.9	< 0.1	46	1.0	29	< 0.1	15.8	0.331	0.22	2.5	113	< 0.1	10.5	39	79.9
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
SdAR-M2 (U.S.G.S.) Meas		92.4	793				11.9		4		141	0.9	12.7			2.3	22	1.5	20.4	790	110
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas		65.6	763				12.7		3		132	0.9	12.8			2.1	22	1.7	23.4	793	120
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas																					
OREAS 16A (FA-Ancaster) Cert																					
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OREAS 16A (FA-Ancaster) Meas																					
OREAS 16A (FA-Ancaster) Cert																					
263038 Orig	0.038	31.8	2.2	< 1	4.26	1250	5.3	0.4	35	0.8	117	0.1	0.8	0.561	0.21	< 0.1	236	1.0	17.7	84	74.9
263038 Dup	0.036	30.7	1.8	< 1	4.11	1240	4.4	0.1	32	0.8	109	< 0.1	0.8	0.451	0.20	< 0.1	204	0.2	16.9	81	53.7
263040 Orig	0.030	22.1	9.1	2	3.62	1240	2.5	0.6	30	1.0	147	0.2	0.7	0.415	0.17	< 0.1	218	1.5	15.0	80	59.0
263040 Dup	0.029	25.0	9.5	2	3.52	1200	2.2	0.2	29	0.8	150	0.1	1.0	0.403	0.16	< 0.1	215	1.1	14.4	81	55.0

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263050 Orig																					
263050 Dup																					
263060 Orig																					
263060 Dup																					
263067 Orig	0.032	20.3	2.7	< 1	3.65	1140	1.7	0.9	31	0.8	74	0.2	0.8	0.404	0.14	0.2	255	1.5	9.4	84	64.6
263067 Dup	0.032	19.9	3.0	< 1	3.71	1180	1.7	1.0	33	0.7	73	0.2	0.8	0.404	0.13	0.2	251	1.3	9.0	82	63.8
263075 Orig																					
263075 Dup																					
263080 Split Orig PREP DUP																					
263080 Split PREP DUP																					
263085 Orig																					
263085 Dup																					
263092 Orig	0.013	132	1.1	< 1	4.16	1070	1.2	0.8	25	0.4	118	< 0.1	< 0.1	0.252	0.80	< 0.1	159	1.6	5.3	61	21.2
263092 Dup	0.013	130	1.2	< 1	4.32	1090	1.1	1.2	25	0.7	119	< 0.1	< 0.1	0.250	0.81	< 0.1	157	1.5	5.5	65	24.4
263095 Orig																					
263095 Dup																					
263109 Orig																					
263109 Dup																					
263110 Orig	0.024	32.3	2.0	< 1	4.00	1460	< 0.1	< 0.1	33	0.1	147	< 0.1	0.3	0.222	0.20	< 0.1	206	< 0.1	14.4	92	51.4
263110 Dup	0.026	34.6	2.0	< 1	4.21	1530	0.1	< 0.1	37	0.1	153	< 0.1	0.3	0.265	0.20	< 0.1	215	< 0.1	15.2	99	53.2
263120 Orig																					
263120 Dup																					
263129 Orig																					
263129 Dup																					
263130 Split Orig PREP DUP																					
263130 Split PREP DUP																					
263130 Orig	0.022	24.1	1.3	< 1	6.26	1600	1.5	0.1	27	0.4	57	0.2	0.2	0.331	0.16	< 0.1	183	0.3	10.2	90	34.9
263130 Dup	0.023	25.6	1.2	< 1	6.56	1660	0.5	< 0.1	29	0.3	59	< 0.1	0.2	0.315	0.16	< 0.1	188	< 0.1	10.6	93	34.2
263143 Orig																					
263143 Dup																					
263153 Orig																					
263153 Dup																					
263157 Orig	0.038	44.9	5.0	< 1	3.07	1740	0.8	0.2	39	0.7	192	0.1	0.9	0.380	0.32	0.2	258	0.9	15.4	105	69.1
263157 Dup	0.034	42.3	4.9	< 1	3.07	1690	0.8	< 0.1	38	0.6	191	< 0.1	0.9	0.360	0.31	0.3	249	< 0.1	15.3	101	69.2
263160 Orig	0.034	39.8	6.3	< 1	2.85	1710	1.9	< 0.1	38	0.5	285	< 0.1	0.8	0.277	0.31	0.2	164	< 0.1	15.3	81	40.8
263160 Dup	0.034	38.0	5.9	< 1	2.72	1640	1.3	0.1	35	0.5	274	< 0.1	0.8	0.267	0.28	0.2	181	0.1	14.7	77	40.0
263163 Orig																					
263163 Dup																					
Method Blank																					

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	4	< 0.1	< 0.1	< 1	0.4	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.8
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	5	0.2	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.3
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	8	0.2	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.3
Method Blank	< 0.001	< 0.1	0.1	< 1	< 0.01	6	0.3	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	< 0.1

Quality Analysis ... *Innovative Technologies*

Date Submitted: 04-Nov-16
Invoice No.: A16-11706
Invoice Date: 30-Nov-16
Your Reference: Core-04-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Dyane Duquette (res)

CERTIFICATE OF ANALYSIS

64 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-11706**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 04-Nov-16
Invoice No.: A16-11706
Invoice Date: 30-Nov-16
Your Reference: Core-04-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Dyane Duquette (res)

CERTIFICATE OF ANALYSIS

64 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11706**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263165	18	8.16	< 0.1	3	< 100	70	< 1	0.3	9.87	< 0.1	11	52.9	95	90.0	1.0	9.62	1.8	0.77	5.0	4.8	2.35	3.1	68.9
263166	< 5	8.46	< 0.1	3	< 100	94	< 1	0.3	8.18	< 0.1	12	54.2	87	108	1.3	9.43	1.9	1.22	5.3	6.0	2.81	3.0	72.1
263167	< 5	8.81	< 0.1	2	< 100	101	< 1	0.3	7.65	< 0.1	12	55.7	82	141	1.3	10.0	2.0	1.11	5.5	8.2	3.15	3.1	68.9
263168	< 5	8.40	< 0.1	2	< 100	105	< 1	0.2	6.36	< 0.1	11	51.9	79	102	1.5	9.06	1.9	1.08	4.8	7.8	3.83	2.7	68.1
263169	< 5	7.20	< 0.1	< 1	< 100	149	< 1	0.9	6.89	0.4	10	46.8	80	78.8	1.6	8.37	1.7	1.72	4.7	5.6	3.40	0.8	60.3
263170	< 5	0.18	< 0.1	< 1	< 100	115	< 1	< 0.1	23.1	< 0.1	1	0.3	8	0.8	0.5	0.09	< 0.1	0.05	0.6	10.4	0.026	< 0.1	< 0.1
263171	< 5	7.50	< 0.1	2	< 100	100	< 1	0.3	7.80	< 0.1	10	48.2	91	94.8	1.2	8.55	1.7	1.28	4.5	7.8	2.95	2.0	64.1
263172	< 5	8.10	< 0.1	< 1	< 100	89	< 1	0.2	7.45	< 0.1	11	51.8	80	75.9	1.2	8.92	1.6	1.14	4.9	5.8	2.81	0.6	68.9
263173	24	8.31	0.2	2	< 100	93	< 1	0.2	8.21	< 0.1	12	50.1	76	127	1.1	9.09	1.5	1.19	5.1	4.2	2.66	1.3	67.2
263174	8	7.92	< 0.1	2	< 100	123	< 1	0.2	6.31	< 0.1	11	50.2	69	108	1.7	8.57	1.3	1.49	4.8	7.6	3.40	0.8	65.1
263175	< 5	8.69	< 0.1	8	< 100	134	< 1	0.2	7.95	< 0.1	12	49.9	77	128	1.8	9.24	1.9	1.59	5.3	7.5	3.54	3.0	67.5
263176	14	7.31	< 0.1	3	< 100	94	< 1	0.2	7.59	0.3	10	47.3	68	183	1.6	8.22	1.8	1.04	4.6	11.6	3.35	2.8	62.5
263177	375	9.18	< 0.1	143	300	566	< 1	< 0.1	4.07	< 0.1	17	14.5	40	47.5	0.8	4.87	0.9	1.06	8.0	7.2	2.73	2.0	24.3
263178	15	8.09	< 0.1	3	< 100	94	< 1	0.2	7.98	< 0.1	12	53.2	74	84.9	1.2	9.14	1.6	0.96	5.2	7.3	3.32	2.1	68.7
263179	< 5	7.78	< 0.1	< 1	< 100	89	< 1	0.2	7.70	< 0.1	12	46.2	80	58.5	0.9	8.15	1.5	0.89	5.1	4.5	3.02	0.3	63.4
263180	< 5	8.01	< 0.1	3	< 100	83	< 1	0.4	8.71	< 0.1	12	49.8	103	132	1.0	8.58	1.7	0.75	5.0	5.0	2.70	3.0	65.1
263181	< 5	7.99	< 0.1	< 1	< 100	94	< 1	0.3	7.63	< 0.1	11	51.9	90	173	0.9	9.49	1.6	0.77	4.9	5.5	3.21	0.5	65.1
263182	< 5	7.79	< 0.1	1	< 100	105	< 1	0.6	6.50	< 0.1	10	48.3	76	108	1.6	8.70	1.8	0.95	4.6	12.9	3.27	2.1	62.8
263183	6	7.24	< 0.1	1	< 100	210	< 1	0.6	7.95	< 0.1	11	60.0	69	99.7	6.1	9.69	1.7	2.63	4.6	18.0	2.11	0.6	68.6
263184	87	6.63	0.7	4	< 100	121	< 1	0.4	7.31	0.1	10	46.8	63	110	2.0	7.64	1.5	1.51	4.2	12.1	2.84	1.5	55.6
263185	8	8.57	0.1	3	< 100	154	< 1	0.3	6.11	< 0.1	12	51.1	83	149	4.0	8.55	1.9	2.18	5.0	16.1	3.55	2.8	72.4
263186	7	8.29	< 0.1	2	< 100	137	< 1	0.3	6.81	< 0.1	11	51.3	76	142	3.1	8.95	1.8	1.78	4.8	15.7	3.53	2.5	69.2
263187	14	8.29	< 0.1	< 1	< 100	127	< 1	0.4	6.86	< 0.1	12	53.3	69	115	2.3	8.82	1.5	1.50	5.1	14.7	3.32	1.1	65.2
263188	5	8.20	< 0.1	1	< 100	131	< 1	0.2	6.94	< 0.1	12	54.0	62	102	1.7	8.43	1.7	1.34	5.0	11.0	3.49	1.2	63.9
263189	5	6.30	< 0.1	1	< 100	127	< 1	0.2	6.15	< 0.1	11	41.9	50	80.4	2.5	7.63	1.4	1.28	4.3	13.6	2.35	< 0.1	47.4
263190	< 5	7.66	< 0.1	7	< 100	182	< 1	< 0.1	6.18	< 0.1	11	48.7	65	103	3.5	8.37	1.6	2.65	4.6	20.1	1.72	0.6	65.3
263191	< 5	7.77	< 0.1	3	< 100	104	< 1	< 0.1	6.54	< 0.1	11	50.8	62	107	2.8	8.73	1.5	1.68	4.7	19.8	2.03	1.3	65.3
263192	24	8.04	< 0.1	3	< 100	95	< 1	0.1	6.69	< 0.1	12	51.3	60	119	2.7	9.07	1.8	1.63	5.0	17.8	2.12	2.6	65.6
263193	15	7.50	0.1	2	< 100	138	< 1	0.2	6.17	< 0.1	11	48.1	61	83.6	2.9	8.48	1.7	1.97	4.5	16.0	2.42	2.4	63.4
263194	7	8.05	0.1	2	< 100	127	< 1	0.2	7.04	< 0.1	12	49.7	62	93.7	2.6	8.59	1.8	1.75	5.1	15.0	2.61	2.6	63.8
263195	763	9.06	0.1	231	600	524	< 1	0.2	3.98	0.1	16	14.1	35	48.2	0.8	4.92	0.9	1.06	7.8	6.9	2.68	2.0	25.1
263196	< 5	8.22	< 0.1	4	< 100	103	< 1	0.1	7.20	< 0.1	11	49.8	72	110	2.3	8.83	1.8	1.60	4.9	13.9	2.86	2.5	69.5
263197	< 5	8.01	< 0.1	1	< 100	109	< 1	0.2	7.15	< 0.1	10	48.4	88	101	2.7	8.90	1.8	1.72	4.5	15.3	2.59	0.6	65.6
263198	< 5	7.77	< 0.1	2	< 100	142	< 1	0.2	6.11	< 0.1	10	46.8	89	90.6	1.8	8.55	1.8	1.29	4.5	12.8	3.19	3.3	63.1
263199	24	7.24	0.2	2	< 100	126	< 1	0.6	6.78	< 0.1	10	42.4	87	69.0	1.2	7.94	1.7	1.09	4.5	10.4	3.60	2.0	59.2
263200	< 5	7.68	< 0.1	< 1	< 100	128	< 1	0.2	6.95	< 0.1	11	48.1	66	104	1.6	8.86	1.6	1.34	4.6	13.0	2.81	0.5	63.2
263201	< 5	8.09	< 0.1	2	100	134	< 1	0.5	6.95	< 0.1	12	46.6	67	142	1.1	7.74	1.5	1.32	5.6	7.3	3.70	0.8	65.9
263202	14	7.64	< 0.1	2	< 100	122	< 1	0.3	6.16	< 0.1	11	45.7	65	94.8	1.4	7.97	1.7	1.33	4.8	8.2	3.55	2.3	60.9
263203	< 5	7.78	< 0.1	3	< 100	145	< 1	1.0	7.24	0.1	11	45.1	68	80.4	1.8	8.36	1.8	1.82	4.8	9.1	3.19	2.5	60.8
263204	< 5	7.67	< 0.1	< 1	< 100	101	< 1	0.2	4.86	0.2	10	42.7	64	96.6	1.6	7.65	1.7	1.21	4.4	16.9	3.32	2.4	58.0
263205	< 5	0.14	0.6	5	< 100	158	< 1	< 0.1	22.0	< 0.1	< 1	0.3	3	0.9	0.6	0.09	< 0.1	0.09	0.5	20.1	0.033	0.2	< 0.1
263206	9	7.77	< 0.1	4	< 100	182	< 1	0.4	6.75	< 0.1	10	37.6	69	91.2	7.4	7.89	1.7	2.85	4.4	19.1	2.52	2.3	58.1

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263207	109	8.07	0.4	1	100	187	< 1	1.1	7.10	< 0.1	11	53.7	72	113	1.6	9.23	1.7	1.57	5.2	11.6	3.34	0.9	69.0
263208	122	7.09	1.1	2	< 100	149	< 1	1.6	5.25	0.5	9	44.3	86	122	1.1	7.31	1.7	1.03	4.2	11.1	3.40	2.6	55.9
263209	494	8.12	1.3	2	300	198	< 1	0.9	5.57	< 0.1	11	45.9	80	183	1.3	8.05	1.8	1.43	4.8	10.5	3.96	2.5	60.7
263210	180	7.83	0.9	2	200	160	< 1	0.8	5.98	0.1	11	43.7	82	165	1.4	8.22	1.8	1.35	4.9	11.3	4.32	1.3	62.9
263211	34	6.99	0.3	1	< 100	158	< 1	0.5	5.62	< 0.1	9	40.1	61	117	1.5	7.42	1.6	1.47	4.1	11.0	3.44	2.2	54.5
263212	382	9.28	0.1	135	300	545	< 1	< 0.1	4.04	< 0.1	16	14.0	38	45.8	0.7	5.00	1.0	1.05	8.1	7.0	2.61	1.5	26.0
263213	< 5	8.15	< 0.1	3	< 100	175	< 1	0.7	6.33	< 0.1	11	50.9	69	111	1.5	8.50	1.9	1.58	4.8	14.2	3.78	2.8	64.0
263214	< 5	6.97	< 0.1	< 1	< 100	126	< 1	0.5	6.11	< 0.1	12	48.1	65	97.5	1.4	9.11	1.7	1.14	4.8	15.3	3.54	1.9	66.4
263215	< 5	8.79	< 0.1	2	< 100	143	< 1	0.2	6.69	< 0.1	11	49.8	91	120	1.3	8.61	1.9	1.62	4.9	11.0	4.03	2.5	65.5
263216	< 5	8.69	< 0.1	2	< 100	128	< 1	0.2	5.23	< 0.1	10	48.8	70	119	1.1	8.55	1.7	1.62	4.6	12.4	4.45	1.7	68.0
263217	< 5	8.97	< 0.1	1	< 100	125	< 1	0.3	6.18	< 0.1	12	50.2	73	94.7	1.2	9.16	1.7	1.60	5.2	12.1	3.78	1.7	69.2
263218	19	8.61	< 0.1	2	< 100	92	< 1	0.4	7.27	< 0.1	12	48.9	73	148	1.1	8.53	1.4	1.12	5.5	11.7	2.88	0.7	63.3
263219	16	8.06	< 0.1	3	< 100	93	< 1	0.4	7.16	< 0.1	11	49.7	99	144	1.1	8.49	1.6	1.09	4.9	11.5	2.94	3.3	64.8
263220	5	8.34	< 0.1	2	< 100	113	< 1	0.7	7.90	< 0.1	11	47.2	100	86.1	1.3	8.68	1.2	1.29	5.1	10.8	2.43	0.6	66.6
263221	< 5	8.01	< 0.1	2	< 100	94	< 1	0.4	7.70	< 0.1	11	48.7	82	131	1.1	8.21	1.2	1.09	4.9	12.3	3.04	0.6	64.3
263222	< 5	7.79	< 0.1	3	< 100	95	< 1	0.2	7.51	< 0.1	10	51.0	76	128	1.1	8.00	1.7	1.27	4.7	12.0	3.51	2.3	63.4
263223	< 5	7.99	< 0.1	2	< 100	96	< 1	0.3	7.60	< 0.1	11	51.9	78	131	1.1	8.13	1.8	1.24	4.8	12.2	3.57	2.5	65.5
263224	< 5	8.10	< 0.1	< 1	< 100	69	< 1	0.3	8.37	< 0.1	11	49.8	65	96.6	1.2	8.52	1.3	0.85	5.2	21.3	3.08	0.6	65.6
263225	< 5	8.46	< 0.1	< 1	< 100	90	< 1	0.1	6.75	< 0.1	11	49.1	67	111	1.8	9.04	1.7	1.09	4.8	34.4	2.56	1.1	64.8
263226	< 5	7.90	< 0.1	1	< 100	82	< 1	0.2	7.17	0.3	11	45.6	67	88.2	1.2	8.38	1.5	0.90	4.9	24.8	2.72	0.8	59.3
263227	18	7.63	< 0.1	< 1	< 100	65	< 1	0.3	8.43	< 0.1	11	40.7	64	112	0.9	7.72	1.2	0.68	4.9	18.5	3.22	0.7	56.1
263228	759	8.91	6.2	233	800	522	< 1	0.2	3.89	0.1	16	14.2	36	53.3	0.9	4.87	1.0	1.05	7.7	6.6	2.51	2.2	23.7

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263165	0.038	25.4	8.9	< 1	3.16	1880	4.8	0.4	40	0.8	364	0.2	1.0	0.506	0.21	0.3	288	1.8	16.7	90	65.2
263166	0.039	40.6	5.9	< 1	3.26	1890	4.9	0.6	41	0.7	302	0.2	1.0	0.519	0.31	0.3	281	1.7	17.4	97	70.4
263167	0.041	38.0	5.2	< 1	3.28	1900	2.2	0.4	43	1.0	302	0.2	1.1	0.578	0.28	0.3	289	1.6	18.3	101	73.3
263168	0.039	39.3	4.2	< 1	2.93	1730	4.4	0.2	41	0.8	181	0.1	0.9	0.485	0.28	0.3	271	2.3	16.2	92	69.8
263169	0.031	58.3	15.8	< 1	2.30	1550	0.4	< 0.1	35	0.7	137	< 0.1	0.8	0.370	0.43	0.3	225	0.1	14.7	70	64.2
263170	0.002	1.4	2.2	< 1	11.7	379	0.2	< 0.1	< 1	0.1	159	< 0.1	0.2	0.004	0.07	0.2	< 4	< 0.1	0.7	< 1	4.1
263171	0.033	41.5	5.0	< 1	2.68	1730	1.3	0.4	38	0.6	225	0.1	0.8	0.434	0.30	0.2	256	0.7	14.7	84	59.4
263172	0.033	39.4	4.9	< 1	3.01	1970	0.3	0.1	40	0.2	271	< 0.1	0.9	0.358	0.29	0.2	238	< 0.1	16.6	86	59.9
263173	0.036	39.3	5.3	< 1	2.64	1810	1.4	0.3	40	0.4	333	< 0.1	0.9	0.378	0.35	0.3	231	0.4	15.5	75	51.1
263174	0.035	51.4	4.9	< 1	2.94	1660	0.4	0.2	38	0.4	181	< 0.1	0.9	0.342	0.40	0.3	203	0.4	15.9	86	49.3
263175	0.037	54.9	6.6	< 1	3.03	1890	1.2	0.6	41	0.8	236	0.2	1.0	0.472	0.42	0.3	279	1.8	16.9	89	66.1
263176	0.034	35.9	6.6	< 1	2.56	1700	0.6	0.3	37	0.6	120	0.2	0.8	0.433	0.28	0.3	262	1.7	16.0	84	62.1
263177	0.060	17.6	13.2	< 1	1.34	953	3.9	1.2	22	1.5	324	< 0.1	2.0	0.262	0.12	0.8	120	0.7	15.7	65	27.7
263178	0.037	33.0	5.2	< 1	2.92	1770	1.1	0.4	39	0.6	225	0.1	0.9	0.425	0.25	1.0	254	0.8	15.9	80	60.5
263179	0.031	30.1	4.7	< 1	3.10	1710	0.1	< 0.1	37	< 0.1	233	< 0.1	0.9	0.281	0.22	0.2	212	< 0.1	15.3	69	51.6
263180	0.037	23.5	7.0	< 1	3.17	1830	3.4	1.0	39	0.7	279	0.2	0.9	0.454	0.19	0.2	263	1.0	14.8	80	57.9
263181	0.031	23.4	5.0	< 1	3.10	1970	1.1	0.2	38	0.3	250	< 0.1	0.9	0.314	0.22	0.2	230	0.1	15.7	81	60.2
263182	0.032	30.9	6.3	< 1	2.57	1680	0.7	0.3	37	0.6	124	0.1	0.9	0.430	0.25	0.2	242	0.9	15.4	83	62.5
263183	0.030	109	8.8	1	2.37	1770	0.9	0.1	35	0.4	81	< 0.1	0.8	0.356	0.76	0.2	237	0.3	16.2	109	64.8
263184	0.030	49.6	18.7	1	1.86	1440	2.7	0.2	31	0.5	88	< 0.1	0.8	0.380	0.37	0.2	221	2.0	13.8	87	65.6
263185	0.038	85.1	8.8	< 1	2.10	1560	1.6	0.5	40	0.8	85	0.1	1.1	0.476	0.59	6.1	263	4.5	15.6	107	86.0
263186	0.034	66.8	11.0	< 1	2.26	1690	1.2	0.4	38	0.8	101	0.1	0.9	0.466	0.48	0.2	259	3.6	17.0	98	70.8
263187	0.035	50.9	9.6	< 1	2.38	1830	0.4	0.2	38	0.4	108	< 0.1	0.9	0.383	0.40	0.3	223	0.6	16.4	87	56.2
263188	0.034	42.1	9.0	< 1	2.32	1990	2.3	0.2	39	0.2	130	< 0.1	0.9	0.400	0.33	0.2	230	1.7	16.7	91	58.7
263189	0.028	45.6	7.8	< 1	3.33	1500	2.2	< 0.1	30	0.3	116	< 0.1	0.7	0.264	0.40	0.2	185	< 0.1	14.1	74	53.0
263190	0.029	94.5	3.1	< 1	3.59	1450	1.0	0.2	37	0.1	122	< 0.1	0.9	0.315	0.73	0.2	204	0.4	15.3	87	59.7
263191	0.032	66.6	2.7	< 1	3.89	1410	0.5	0.3	37	0.4	144	< 0.1	0.9	0.362	0.50	0.2	197	< 0.1	15.5	82	54.0
263192	0.035	62.4	3.9	< 1	3.84	1490	0.8	1.2	37	0.6	172	0.1	0.9	0.441	0.51	0.2	243	0.7	15.6	86	76.5
263193	0.032	74.0	5.7	< 1	3.81	1380	2.3	0.4	36	0.6	114	0.2	0.8	0.432	0.55	0.2	246	1.5	14.7	88	69.2
263194	0.036	62.4	10.0	< 1	3.65	1400	2.4	0.6	37	0.7	211	0.2	0.9	0.443	0.47	0.3	268	2.0	15.4	93	65.1
263195	0.051	18.1	24.7	< 1	1.30	941	3.9	2.0	21	1.7	319	0.1	1.9	0.243	0.16	0.7	123	1.1	15.3	67	56.0
263196	0.033	62.0	4.1	< 1	3.67	1370	1.6	0.4	41	0.7	202	0.1	0.9	0.441	0.47	0.3	262	0.7	15.8	92	77.8
263197	0.029	63.6	4.4	< 1	3.61	1460	4.8	< 0.1	40	0.2	172	< 0.1	0.9	0.311	0.48	0.2	242	< 0.1	15.4	94	69.5
263198	0.033	45.2	3.9	< 1	3.26	1490	6.6	0.3	38	0.6	143	0.2	0.9	0.434	0.35	0.2	252	0.9	14.9	94	75.1
263199	0.032	35.5	10.7	< 1	2.93	1480	12.9	0.2	38	0.6	142	0.1	0.8	0.401	0.28	0.2	261	0.7	14.0	92	69.5
263200	0.031	45.0	4.8	< 1	3.21	1560	3.7	< 0.1	38	0.2	184	< 0.1	0.9	0.326	0.34	0.2	217	< 0.1	15.7	94	65.2
263201	0.033	41.6	8.7	< 1	2.48	1590	0.6	0.2	39	0.4	195	< 0.1	0.9	0.325	0.34	0.3	206	0.3	15.6	84	53.5
263202	0.033	43.5	7.9	< 1	2.55	1520	0.5	0.3	36	0.7	161	0.1	0.9	0.408	0.35	0.3	239	1.0	14.7	85	68.0
263203	0.032	59.9	15.8	< 1	2.71	1630	0.5	0.5	37	1.1	211	0.2	0.9	0.419	0.48	0.3	258	0.7	14.7	79	64.3
263204	0.033	38.6	7.3	< 1	2.82	1610	0.7	0.3	36	0.6	76	0.1	0.9	0.429	0.33	0.3	238	1.1	15.7	99	68.4
263205	0.002	1.7	1.9	< 1	12.2	280	0.6	< 0.1	< 1	< 0.1	141	< 0.1	0.1	0.007	0.08	0.2	< 4	< 0.1	0.9	< 1	4.6
263206	0.032	120	12.6	< 1	1.88	1490	1.0	0.6	37	0.6	59	0.1	0.8	0.430	0.82	0.3	260	10.3	15.1	88	63.6

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263207	0.031	50.1	17.7	< 1	2.44	1750	0.7	0.1	40	0.7	186	< 0.1	0.9	0.404	0.41	0.3	259	0.7	16.5	101	63.6
263208	0.030	31.4	50.8	1	2.19	1600	1.2	0.3	35	0.6	105	0.2	0.8	0.410	0.26	0.4	236	3.2	14.5	96	69.8
263209	0.033	43.4	84.8	< 1	2.52	1730	0.4	0.2	40	0.7	119	0.1	0.9	0.458	0.36	0.3	273	2.6	16.1	119	80.9
263210	0.031	41.3	223	< 1	2.19	1650	3.2	< 0.1	40	0.7	73	< 0.1	0.9	0.440	0.33	0.3	286	2.4	15.7	108	65.0
263211	0.031	44.3	31.7	< 1	2.46	1530	1.8	0.1	34	0.5	62	0.1	0.8	0.392	0.36	0.3	241	3.9	13.8	90	61.2
263212	0.057	17.9	12.7	< 1	1.32	944	3.2	0.9	20	1.4	330	< 0.1	1.9	0.239	0.17	0.8	117	0.5	16.2	56	29.1
263213	0.037	46.8	13.5	< 1	2.83	1680	2.0	0.2	38	0.6	94	0.2	0.9	0.461	0.39	0.2	274	2.4	16.6	93	79.3
263214	0.038	45.1	5.4	< 1	3.30	1660	10.3	0.4	40	0.6	136	0.1	0.9	0.472	0.37	0.2	240	0.4	15.4	75	57.8
263215	0.038	47.6	4.0	< 1	2.56	1550	1.4	0.2	42	0.7	114	0.1	0.9	0.462	0.37	0.3	268	1.0	17.3	91	75.8
263216	0.036	45.2	4.4	< 1	2.24	1320	0.8	< 0.1	41	0.6	69	< 0.1	0.9	0.410	0.36	0.3	257	0.8	16.5	82	66.5
263217	0.036	45.4	5.5	< 1	2.57	1630	0.5	0.1	41	0.4	158	< 0.1	0.9	0.436	0.36	0.3	266	0.5	17.2	88	71.0
263218	0.037	31.3	6.5	< 1	3.09	1650	3.6	0.2	41	0.2	222	< 0.1	0.9	0.335	0.26	0.2	222	< 0.1	16.7	92	49.7
263219	0.039	23.1	6.8	< 1	3.00	1660	7.5	0.6	37	0.7	214	0.3	0.8	0.462	0.24	0.2	266	1.6	15.7	87	63.1
263220	0.035	37.6	6.6	< 1	3.24	1680	7.4	0.2	39	0.2	230	< 0.1	0.9	0.303	0.30	0.2	212	< 0.1	16.3	81	43.0
263221	0.035	30.6	4.9	< 1	2.90	1620	3.4	0.3	39	0.6	156	< 0.1	0.9	0.288	0.28	0.6	200	0.5	16.0	91	41.4
263222	0.033	33.8	4.9	< 1	2.39	1660	2.3	0.3	39	0.6	110	0.1	0.9	0.423	0.28	0.2	244	2.8	15.7	84	62.4
263223	0.035	34.2	4.9	< 1	2.44	1660	2.3	0.3	39	0.6	110	0.1	0.9	0.434	0.29	0.2	254	2.7	16.0	84	74.1
263224	0.034	22.5	5.6	< 1	2.63	1600	4.1	< 0.1	39	0.5	121	< 0.1	0.9	0.294	0.19	0.2	208	1.1	16.0	96	49.3
263225	0.036	31.8	3.7	< 1	3.93	1580	1.0	< 0.1	40	0.3	112	< 0.1	0.9	0.382	0.25	0.2	236	0.4	16.9	94	63.9
263226	0.032	24.3	4.3	< 1	3.52	1440	1.0	< 0.1	38	0.2	142	< 0.1	0.9	0.359	0.20	0.2	228	0.3	15.8	87	56.8
263227	0.031	17.1	8.7	< 1	2.19	1190	4.0	< 0.1	36	0.4	129	< 0.1	0.8	0.300	0.15	0.2	204	2.2	14.9	88	50.6
263228	0.054	18.3	35.4	< 1	1.26	904	4.6	2.3	21	1.3	330	0.1	1.9	0.276	0.15	0.7	129	1.4	15.8	68	31.3

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas		5.10	34.7	360	> 2000	1180	< 1	1470	0.99	2.4	12	7.9	13	1100	3.0	24.6	0.8	0.06	6.2	11.7	0.066	1.0	40.7
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
GXR-1 Meas		2.06	32.5	430	> 2000	655	< 1	1580	0.87	2.5	14	7.9	16	1040	2.6	23.7	0.5	0.04	7.2	9.1	0.044	0.8	39.2
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas		6.87	3.6	93	400	313	2	19.8	1.02	0.2	87	15.0	46	7000	2.9	3.12	1.1	4.05	48.6	10.3	0.548	9.3	40.7
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
GXR-4 Meas		5.90	3.7	107	400	293	2	20.7	1.01	< 0.1	118	13.2	45	6120	2.7	3.05	1.2	3.45	58.8	9.7	0.529	8.7	39.6
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
SDC-1 Meas		8.92		< 1		666	3		1.01		69	18.3	45	27.9	4.1	4.79	1.1	2.15	34.0	32.5	1.57	4.2	35.2
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
SDC-1 Meas		8.76		< 1		658	3		1.02		69	18.2	47	33.1	4.3	4.92	1.0	2.06	32.8	32.7	1.44	2.4	36.4
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
SDC-1 Meas		7.13		< 1		598	2		0.84		80	13.7	50	26.5	3.9	3.97	0.9	1.23	38.3	32.7	1.24	1.2	32.2
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
GXR-6 Meas		14.3	< 0.1	256	< 100	1470	< 1	0.2	0.18	< 0.1	27	14.4	50	68.0	4.7	5.74	2.7	1.72	10.6	33.9	0.098	3.5	25.8
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
GXR-6 Meas		12.9	0.1	267	< 100	1330	1	< 0.1	0.17	< 0.1	34	12.0	51	61.5	4.0	5.22	2.2	0.99	12.5	33.2	0.096	1.5	22.0
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
DNC-1a Meas						114						63.7	237	100.0					3.1	4.6		1.4	294
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
DNC-1a Meas						106						59.0	152	103					2.9	4.4		1.9	280
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
DNC-1a Meas						110						56.3	165	88.2					4.0	4.7		1.5	253
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
SBC-1 Meas				22		859	4	0.7		0.3	88	25.3	75	42.7	9.2		3.2		43.4	164		11.6	96.1
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SBC-1 Meas				21		759	3	0.5		0.2	102	21.1	79	37.6	7.9		3.2		47.3	153		13.8	79.8
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SE68 Meas	589																						
SE68 Cert	599																						
SE68 Meas	598																						
SE68 Cert	599																						
OREAS 45d (4-Acid) Meas		8.75		6		196	< 1	0.3	0.18		27	32.5	483	375	4.1	15.2	1.3	0.47	13.6	20.6	0.097	1.5	250
OREAS 45d		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
(4-Acid) Cert																							
OREAS 45d (4-Acid) Meas		8.51		7		189	< 1	0.3	0.19		28	30.7	566	366	3.9	14.6	1.8	0.48	13.6	20.1	0.097	2.7	242
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
OREAS 45d (4-Acid) Meas		7.32		5		179	< 1	< 0.1	0.19		38	29.8	497	357	3.9	14.1	2.0	0.36	17.2	19.8	0.091	1.0	233
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
SdAR-M2 (U.S.G.S.) Meas						1040	7	1.0		4.9	73	13.9	41	238	1.9		3.2		35.3	16.6		16.2	50.4
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
SdAR-M2 (U.S.G.S.) Meas						1020	6	1.0		5.4	96	12.4	37	230	1.7		3.9		45.5	16.3		17.6	49.3
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
OREAS 16A (FA-Ancaster) Meas	1790																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1780																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263174 Orig	7																						
263174 Dup	8																						
263184 Orig	86																						
263184 Dup	87																						
263189 Orig		6.62	< 0.1	1	< 100	135	< 1	0.2	6.46	< 0.1	11	43.8	47	85.5	2.6	8.07	1.4	1.34	4.6	14.4	2.43	0.1	50.4
263189 Dup		5.98	< 0.1	1	< 100	120	< 1	0.2	5.83	< 0.1	10	40.0	54	75.3	2.4	7.19	1.3	1.22	4.0	12.9	2.27	< 0.1	44.4
263191 Orig		7.71	< 0.1	3	< 100	104	< 1	< 0.1	6.51	< 0.1	11	50.8	61	106	2.9	8.71	1.2	1.66	4.6	19.7	1.98	0.7	65.6
263191 Dup		7.83	< 0.1	3	< 100	103	< 1	< 0.1	6.57	< 0.1	11	50.9	63	107	2.8	8.75	1.7	1.69	4.8	19.9	2.07	1.9	65.1
263194 Orig	7																						
263194 Dup	7																						
263214 Split Orig PREP DUP	< 5	6.97	< 0.1	< 1	< 100	126	< 1	0.5	6.11	< 0.1	12	48.1	65	97.5	1.4	9.11	1.7	1.14	4.8	15.3	3.54	1.9	66.4
263214 Split PREP DUP	< 5	7.31	< 0.1	< 1	< 100	133	< 1	0.6	6.34	< 0.1	12	51.2	72	95.5	1.3	8.62	1.5	1.20	5.1	15.8	3.42	1.1	63.0
263218 Orig	19																						
263218 Dup	18																						
263227 Orig	17	7.63	< 0.1	2	< 100	66	< 1	0.4	8.44	< 0.1	11	40.5	66	113	1.0	7.78	1.3	0.68	5.0	18.6	3.27	0.9	56.2

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263227 Dup	19	7.62	< 0.1	< 1	< 100	63	< 1	0.3	8.41	< 0.1	10	40.8	62	111	0.9	7.66	1.1	0.68	4.7	18.5	3.18	0.6	56.0
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	2	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	0.002	< 0.1	< 0.1
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	4	0.4	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	0.1	< 0.001	< 0.1	0.1
Method Blank		0.02	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	5	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.001	< 0.1	< 0.1
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	5	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.001	< 0.1	< 0.1

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	0.062	2.6	724	< 1	0.26	856	16.1	32.5	1	31.2	292	< 0.1	2.4	0.026	0.37	28.2	77	125	23.0	750	38.2
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	0.066	2.3	726	< 1	0.19	854	17.3	30.1	1	25.2	260	< 0.1	2.2	0.026	0.35	32.5	75	140	26.0	806	20.3
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0
DH-1a Meas													954			2630					
DH-1a Cert													910			2629					
DH-1a Meas													905			2360					
DH-1a Cert													910			2629					
DH-1a Meas													761			2230					
DH-1a Cert													910			2629					
GXR-4 Meas	0.145	119	49.4	2	1.57	136	314	3.7	7	7.9	220	0.5	18.3	0.250	2.85	5.4	86	30.1	11.3	61	40.8
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	0.148	121	47.9	2	1.59	154	320	4.5	7	7.1	196	0.6	21.7	0.280	3.10	5.4	81	33.1	12.4	72	38.4
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	0.061	86.0	23.8		0.92	802		< 0.1	15	1.1	176	0.3	12.3	0.265	0.56	2.8	62	< 0.1		96	44.8
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	0.059	84.2	23.4		0.92	835		< 0.1	15	0.5	174	0.1	11.9	0.181	0.54	2.9	49	< 0.1		92	41.4
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	0.057	67.8	21.6		0.92	726		< 0.1	13	0.4	143	< 0.1	10.6	0.131	0.55	2.4	39	< 0.1		96	35.9
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	0.039	60.7	103	< 1	0.53	1050	1.4	1.8	27	1.0	39	0.2	5.1		1.83	1.4	164	0.9	10.1	128	99.9
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	0.037	43.2	92.7	< 1	0.56	905	1.3	1.5	23	1.2	37	< 0.1	4.7		1.96	1.1	128	< 0.1	11.8	117	79.7
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110
DNC-1a Meas		2.8	5.8					0.5	33		143			0.270			148		13.6	60	38.8
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
DNC-1a Meas		3.0	5.8					0.5	32		143			0.264			143		13.6	59	43.0
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
DNC-1a Meas		3.1	4.6					0.4	29		130			0.301			135		15.1	62	35.9
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
SBC-1 Meas		107	36.1				2.2	0.8	22	3.2	189	0.9	15.6	0.451	0.81	5.7	224	0.9	27.9	208	123
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas		84.7	33.0				1.9	0.8	18	3.7	161	0.9	14.1	0.505	0.81	5.2	195	1.3	28.3	191	118
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas																					
SE68 Cert																					
SE68 Meas																					
SE68 Cert																					
OREAS 45d (4-Acid) Meas	0.037	34.6	20.5	< 1	0.20	495	1.6	< 0.1	52	0.5	30	< 0.1	14.1	0.141	0.24	2.7	81	0.3	9.8	33	48.9
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
OREAS 45d	0.038	34.5	20.3	< 1	0.16	487	1.5	< 0.1	50	0.9	29	0.1	13.5	0.234	0.21	2.5	120	0.7	9.4	34	75.2

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
(4-Acid) Meas																					
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
OREAS 45d (4-Acid) Meas	0.040	35.4	19.5	< 1	0.22	453	0.9	< 0.1	46	1.0	29	< 0.1	15.8	0.331	0.22	2.5	113	< 0.1	10.5	39	79.9
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
SdAR-M2 (U.S.G.S.) Meas		92.4	793				11.9		4		141	0.9	12.7			2.3	22	1.5	20.4	790	110
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas		65.6	763				12.7		3		132	0.9	12.8			2.1	22	1.7	23.4	793	120
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas																					
OREAS 16A (FA-Ancaster) Cert																					
OREAS 16A (FA-Ancaster) Meas																					
OREAS 16A (FA-Ancaster) Cert																					
263174 Orig																					
263174 Dup																					
263184 Orig																					
263184 Dup																					
263189 Orig	0.030	48.0	8.5	< 1	3.50	1610	2.2	< 0.1	33	0.4	124	< 0.1	0.7	0.273	0.42	0.2	198	< 0.1	14.8	80	55.6
263189 Dup	0.026	43.1	7.1	< 1	3.16	1400	2.3	< 0.1	27	0.3	108	< 0.1	0.6	0.256	0.37	0.2	172	< 0.1	13.4	68	50.3
263191 Orig	0.031	66.6	2.8	< 1	3.82	1430	0.4	0.2	37	0.2	144	< 0.1	0.9	0.297	0.50	0.2	170	< 0.1	15.6	82	42.0
263191 Dup	0.033	66.6	2.7	< 1	3.97	1400	0.5	0.5	37	0.5	143	0.1	0.9	0.428	0.50	0.2	225	0.6	15.4	82	66.0
263194 Orig																					
263194 Dup																					
263214 Split Orig PREP DUP	0.038	45.1	5.4	< 1	3.30	1660	10.3	0.4	40	0.6	136	0.1	0.9	0.472	0.37	0.2	240	0.4	15.4	75	57.8
263214 Split PREP DUP	0.034	43.5	5.5	< 1	3.44	1720	7.7	0.2	41	0.6	141	< 0.1	1.0	0.472	0.38	0.3	224	0.5	15.9	77	49.2
263218 Orig																					
263218 Dup																					
263227 Orig	0.031	17.3	8.9	< 1	2.22	1200	4.4	0.1	36	0.5	134	< 0.1	0.8	0.322	0.15	0.2	216	2.7	15.2	88	58.3
263227 Dup	0.030	16.8	8.5	< 1	2.17	1180	3.5	< 0.1	36	0.3	124	< 0.1	0.8	0.278	0.14	0.2	193	1.6	14.7	87	42.9
Method Blank																					

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	4	< 0.1	< 0.1	< 1	0.4	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.8
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	5	0.2	< 0.1	< 1	0.2	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.3
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	8	0.2	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.3
Method Blank	< 0.001	< 0.1	0.1	< 1	< 0.01	6	0.3	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	< 0.1

Quality Analysis ... *Innovative Technologies*

Date Submitted: 07-Nov-16
Invoice No.: A16-11780
Invoice Date: 02-Dec-16
Your Reference: Core-07-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

61 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-11780**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Elitsa Hrischeva, Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 07-Nov-16
Invoice No.: A16-11780
Invoice Date: 02-Dec-16
Your Reference: Core-07-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

61 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-Geraldton Au - Fire Assay AA

REPORT **A16-11780**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Elitsa Hrischeva, Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263229	12	6.68	0.2	2	< 100	53	< 1	0.2	6.23	0.1	14	44.4	18	147	1.1	7.85	1.3	0.51	6.3	32.5	2.35	0.1	50.5
263230	< 5	6.53	0.2	3	< 100	50	< 1	0.1	4.91	0.2	13	44.9	33	96.2	0.9	8.50	1.8	0.50	5.5	34.7	2.44	2.7	57.3
263231	< 5	6.40	0.1	2	< 100	59	< 1	0.2	6.22	< 0.1	15	42.9	20	135	1.1	8.10	1.6	0.57	6.5	32.8	2.04	1.7	46.4
263232	< 5	6.72	< 0.1	3	< 100	119	< 1	0.2	5.55	< 0.1	15	44.1	9	80.9	2.1	8.69	2.0	1.16	6.5	21.3	2.87	2.8	45.3
263233	< 5	6.35	< 0.1	3	< 100	66	< 1	0.4	7.99	< 0.1	15	43.7	10	55.1	0.7	8.20	1.6	0.59	7.1	8.1	2.86	1.8	41.9
263234	< 5	5.88	0.1	9	< 100	75	< 1	0.4	6.87	0.3	13	33.6	11	96.3	0.8	7.75	1.6	0.59	5.7	10.1	3.19	0.5	37.3
263235	< 5	< 0.01	0.2	1	< 100	42	< 1	0.1	23.0	< 0.1	< 1	0.3	2	1.0	0.4	0.05	< 0.1	0.02	0.5	11.6	0.025	< 0.1	0.5
263236	< 5	6.57	< 0.1	3	< 100	70	< 1	0.3	8.29	< 0.1	15	41.7	10	75.3	0.8	8.22	1.1	0.60	7.3	9.8	2.61	0.1	41.9
263237	< 5	6.76	< 0.1	2	< 100	85	< 1	0.4	6.56	< 0.1	15	43.3	9	101	1.1	7.92	0.9	0.68	6.7	17.6	3.32	< 0.1	42.4
263238	< 5	6.96	< 0.1	1	< 100	84	< 1	0.3	6.29	< 0.1	15	45.1	10	94.8	0.9	8.19	1.2	0.65	7.0	22.4	3.08	0.2	47.1
263239	< 5	7.28	< 0.1	1	< 100	47	< 1	0.4	7.03	< 0.1	17	48.2	8	102	0.8	8.23	1.5	0.30	8.0	29.5	2.14	< 0.1	48.2
263240	< 5	7.22	< 0.1	< 1	< 100	45	< 1	0.4	7.05	< 0.1	17	48.0	9	114	0.9	8.33	1.6	0.24	7.8	33.5	1.99	< 0.1	47.8
263241	< 5	6.34	< 0.1	2	< 100	60	< 1	0.6	7.47	< 0.1	15	51.5	11	85.5	1.0	8.03	1.6	0.40	6.8	30.0	2.61	1.0	44.3
263242	< 5	6.14	1.1	1	< 100	52	< 1	3.3	5.13	< 0.1	14	42.8	13	110	2.0	7.46	1.7	0.37	6.1	34.2	2.92	1.7	41.8
263243	< 5	6.30	0.2	< 1	< 100	50	< 1	0.3	6.39	< 0.1	13	41.4	13	77.2	4.0	7.81	1.3	0.68	6.0	38.7	2.63	< 0.1	42.1
263244	< 5	5.97	< 0.1	< 1	< 100	29	< 1	0.4	8.14	< 0.1	14	44.3	8	81.4	2.2	7.60	1.5	0.32	6.3	36.2	2.94	0.1	42.1
263245	< 5	6.12	< 0.1	2	< 100	209	< 1	0.2	6.60	< 0.1	14	40.5	9	101	6.8	7.69	1.1	1.13	6.4	40.8	1.85	< 0.1	40.0
263246	< 5	6.12	< 0.1	6	< 100	161	< 1	0.1	6.68	< 0.1	14	41.5	7	103	6.8	7.89	1.0	1.09	6.4	40.4	1.90	< 0.1	41.4
263247	4000	5.42	0.8	2	> 2000	714	< 1	0.4	8.43	0.3	11	39.2	44	179	6.9	6.95	1.4	2.45	4.7	6.7	0.967	1.4	52.6
263248	> 5000	5.33	3.6	1	> 2000	363	< 1	0.5	7.70	0.4	11	39.1	39	174	7.2	6.86	1.3	2.60	5.0	6.1	0.579	1.2	48.2
263249	3930	6.18	2.1	2	> 2000	283	< 1	0.9	7.41	0.3	12	50.2	17	148	8.9	9.26	1.7	2.98	5.1	7.0	0.700	1.7	52.1
263250	474	6.48	0.6	3	800	86	< 1	0.3	5.73	0.2	14	41.0	13	193	8.0	7.82	1.7	2.53	6.2	4.1	1.26	2.0	43.9
263251	222	5.89	0.3	< 1	100	131	< 1	0.4	6.44	0.2	12	38.2	12	120	5.2	7.21	1.6	1.71	5.3	4.2	2.38	1.6	38.7
263252	534	5.39	0.4	1	400	358	< 1	0.2	6.62	0.2	12	38.6	12	75.5	8.7	7.39	1.4	1.21	5.1	13.7	0.379	1.3	42.5
263253	3890	6.37	0.6	13	> 2000	534	< 1	0.4	2.67	0.3	18	11.9	68	59.1	1.0	4.77	1.3	0.73	9.3	14.8	2.16	3.4	41.6
263254	17	6.51	0.3	< 1	< 100	110	< 1	0.3	5.87	0.2	13	43.0	16	109	8.1	7.84	1.8	1.37	5.6	4.9	1.53	1.4	44.6
263255	5	7.36	0.1	< 1	< 100	118	< 1	0.2	5.45	0.2	13	39.5	11	102	12.3	7.92	1.4	1.35	5.9	6.3	0.122	< 0.1	50.3
263256	75	5.87	< 0.1	< 1	< 100	187	< 1	0.1	6.92	0.3	11	35.9	37	69.8	9.7	7.11	0.9	2.39	4.9	5.6	0.380	< 0.1	53.4
263257	< 5	6.96	0.1	1	< 100	111	< 1	0.3	5.72	0.2	14	42.0	16	114	10.2	8.69	1.9	2.77	6.2	4.8	0.823	1.8	49.6
263258	211	6.75	0.1	< 1	200	128	< 1	0.1	6.05	0.2	12	41.5	51	72.0	11.2	7.53	1.5	2.42	5.3	4.6	0.241	1.7	73.8
263259	497	5.35	0.2	< 1	500	120	< 1	0.4	7.77	0.4	10	36.6	48	72.5	7.5	7.08	1.3	2.40	4.6	2.8	0.549	1.3	47.3
263260	< 5	< 0.01	0.1	< 1	< 100	31	< 1	< 0.1	23.1	< 0.1	< 1	0.4	< 1	0.9	0.4	0.08	< 0.1	0.02	0.3	6.0	0.014	< 0.1	1.0
263261	100	6.01	0.2	< 1	< 100	100	< 1	0.2	7.76	0.2	11	36.9	47	64.9	8.8	6.72	1.4	2.06	4.9	3.1	0.613	1.2	52.7
263262	239	6.02	0.2	< 1	100	150	< 1	0.8	7.24	0.3	11	39.1	54	127	7.9	7.01	1.5	2.13	4.8	2.3	0.624	1.5	55.4
263263	321	6.32	0.2	< 1	300	141	< 1	0.6	6.21	0.2	11	44.4	69	132	8.6	6.98	1.6	1.44	4.5	2.3	0.823	1.5	61.1
263264	2180	5.51	0.7	3	> 2000	113	< 1	0.4	6.93	0.3	11	35.6	65	114	7.8	6.68	1.4	1.15	4.8	2.4	0.182	1.9	50.4
263265	109	4.68	0.2	3	< 100	85	< 1	0.1	7.34	0.3	7	40.2	47	55.9	5.5	6.66	0.9	1.18	2.8	48.6	0.086	0.6	91.3
263266	490	7.52	0.2	150	500	470	< 1	0.1	3.83	0.1	18	12.6	28	41.6	0.8	4.48	0.9	0.78	8.7	7.4	2.45	1.9	23.6
263267	22	5.78	< 0.1	< 1	< 100	104	< 1	< 0.1	7.07	0.1	6	46.3	29	75.1	5.3	7.99	1.1	1.06	2.4	78.6	0.153	< 0.1	99.0
263268	> 5000	5.36	1.9	3	> 2000	199	< 1	0.3	7.54	0.4	9	37.8	39	92.1	7.1	6.91	1.3	2.23	3.8	6.0	0.169	1.0	44.4
263269	266	6.43	0.4	7	300	64	2	0.2	4.72	< 0.1	24	33.5	108	75.7	1.7	6.05	2.0	0.38	11.8	22.0	0.534	2.9	87.0
263270	11	7.32	0.1	2	< 100	252	< 1	0.1	3.53	< 0.1	33	27.2	93	58.9	5.8	5.92	2.4	1.30	16.5	93.5	1.81	2.1	73.4

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263271	22	7.22	0.1	11	< 100	287	< 1	0.1	3.62	< 0.1	32	26.6	92	55.5	4.8	5.89	1.9	1.13	15.0	98.0	1.79	0.4	72.3
263272	< 5	6.97	< 0.1	5	< 100	277	< 1	< 0.1	4.46	0.1	35	19.8	85	37.0	6.0	4.69	2.4	1.11	17.6	66.0	1.88	3.2	59.5
263273	< 5	6.55	< 0.1	11	< 100	253	< 1	< 0.1	4.09	< 0.1	30	18.3	74	41.7	5.5	4.47	2.3	1.02	15.6	63.4	1.88	2.5	55.4
263274	17	5.85	< 0.1	6	< 100	290	< 1	0.1	5.58	0.2	34	21.6	65	38.6	7.1	5.37	2.0	1.11	16.9	52.3	0.742	2.2	56.3
263275	121	6.95	0.2	3	< 100	289	< 1	0.1	4.39	0.3	35	23.9	75	47.6	9.0	5.09	2.1	1.23	17.7	66.7	0.980	1.5	63.8
263276	38	7.72	< 0.1	3	< 100	314	< 1	0.1	4.03	0.1	48	22.7	103	70.1	8.4	4.87	3.2	1.32	24.2	95.1	1.15	1.8	70.2
263277	< 5	7.39	< 0.1	3	< 100	310	< 1	0.1	3.53	0.2	37	21.9	93	64.3	7.7	4.95	2.4	1.22	18.4	91.8	1.02	3.3	60.1
263278	< 5	6.68	< 0.1	5	< 100	362	< 1	< 0.1	6.84	0.2	32	23.3	85	48.5	7.3	5.52	2.3	1.25	15.9	72.8	1.02	2.0	63.4
263279	43	7.37	< 0.1	2	< 100	306	< 1	0.1	3.94	< 0.1	38	21.2	75	66.1	8.2	4.86	2.1	1.22	19.2	62.6	1.18	1.1	61.9
263280	46	5.58	< 0.1	3	< 100	226	< 1	0.1	4.51	0.3	35	20.4	106	49.2	6.0	5.05	1.8	0.84	18.2	62.0	0.873	2.3	60.6
263281	650	8.01	0.1	263	1400	464	< 1	0.2	4.10	0.1	18	13.1	34	48.2	0.8	4.78	0.9	0.82	8.7	7.2	2.44	1.9	24.7
263282	27	6.93	0.1	3	200	291	< 1	0.1	3.33	< 0.1	32	24.5	83	57.7	7.3	5.84	1.9	1.15	16.8	71.6	1.05	2.5	69.5
263283	8	7.24	< 0.1	2	< 100	344	< 1	< 0.1	3.75	0.1	33	21.8	71	53.0	8.2	5.95	2.3	1.29	17.4	64.4	1.22	3.1	63.4
263284	5	7.14	< 0.1	2	< 100	349	< 1	0.1	3.50	0.1	36	22.9	83	47.9	8.6	5.24	2.0	1.28	18.7	71.3	1.13	0.8	76.9
263285	117	7.40	< 0.1	2	< 100	417	< 1	0.1	3.79	0.1	33	25.2	85	72.5	9.0	5.33	2.4	1.39	17.2	74.4	1.16	3.2	78.3
263286	17	7.38	< 0.1	5	< 100	328	< 1	0.2	3.42	0.3	42	25.9	97	67.4	8.0	5.52	2.6	1.18	22.4	74.0	1.26	3.6	67.0
263287	28	7.29	< 0.1	5	< 100	205	< 1	0.2	2.79	0.2	38	27.0	102	59.0	6.7	5.08	2.2	0.89	20.4	100	1.18	3.2	65.0
263288	< 5	< 0.01	< 0.1	< 1	< 100	53	< 1	< 0.1	25.0	< 0.1	< 1	0.3	3	0.7	0.4	0.06	< 0.1	0.01	0.4	7.3	0.023	< 0.1	0.2
263289	< 5	6.55	< 0.1	2	< 100	278	< 1	< 0.1	3.57	0.3	36	17.3	65	39.2	6.1	4.20	2.2	0.88	19.3	82.6	1.07	0.3	50.7

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	0.03
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-GRA
263229	0.038	16.3	8.4	< 1	3.36	1370	1.4	< 0.1	38	0.5	113	< 0.1	1.1	0.350	0.14	0.3	189	0.5	16.9	142	50.2	
263230	0.038	16.3	3.3	< 1	3.54	1400	2.5	0.4	39	0.7	78	< 0.1	1.0	0.500	0.17	0.3	254	2.7	16.8	122	71.8	
263231	0.038	20.1	4.0	< 1	3.29	1370	1.6	0.4	37	0.4	138	< 0.1	1.0	0.468	0.17	0.3	216	0.8	17.1	103	64.3	
263232	0.044	46.8	3.3	< 1	3.31	1430	12.1	0.6	39	0.7	100	< 0.1	1.1	0.534	0.37	0.3	246	1.1	18.1	100	78.1	
263233	0.036	18.0	6.8	< 1	2.02	1660	0.6	0.4	37	0.6	187	< 0.1	1.0	0.461	0.16	0.3	218	0.4	17.4	138	55.9	
263234	0.032	17.9	5.3	< 1	1.80	1480	2.2	0.2	34	0.6	87	< 0.1	1.0	0.386	0.17	0.3	199	0.3	15.8	142	60.6	
263235	0.003	0.6	2.8	< 1	12.5	341	0.7	< 0.1	< 1	0.2	131	< 0.1	0.1	0.002	0.07	0.7	< 4	< 0.1	0.3	10	0.7	
263236	0.037	17.4	6.8	< 1	2.47	1610	1.1	0.3	36	0.5	143	< 0.1	1.1	0.277	0.18	0.3	165	< 0.1	17.4	123	38.5	
263237	0.036	19.4	5.8	< 1	2.24	1670	1.6	0.3	38	0.4	91	< 0.1	1.1	0.229	0.19	0.3	144	< 0.1	17.7	104	36.2	
263238	0.038	18.0	6.0	< 1	2.08	1600	0.9	0.2	38	0.4	113	< 0.1	1.1	0.301	0.18	0.3	168	< 0.1	18.1	99	44.3	
263239	0.032	8.2	6.7	< 1	2.39	1770	1.1	0.2	40	< 0.1	196	< 0.1	1.2	0.278	0.07	0.3	209	< 0.1	19.2	105	57.9	
263240	0.031	6.6	6.6	< 1	2.45	1760	1.0	0.1	42	< 0.1	193	< 0.1	1.2	0.249	0.06	0.4	205	< 0.1	19.8	110	61.1	
263241	0.035	11.1	5.2	< 1	2.14	1720	0.5	0.3	35	0.6	89	< 0.1	1.0	0.458	0.11	0.3	227	0.1	17.4	97	64.3	
263242	0.036	19.3	14.2	< 1	2.28	1570	2.4	0.4	34	0.4	46	< 0.1	1.0	0.450	0.14	0.3	227	0.6	16.6	98	69.7	
263243	0.036	44.2	3.6	< 1	2.34	1610	2.5	0.1	38	0.2	49	< 0.1	1.0	0.337	0.30	0.3	207	< 0.1	15.3	100	50.6	
263244	0.033	19.1	4.9	1	2.31	1600	2.6	0.5	35	0.6	71	< 0.1	0.9	0.364	0.14	0.3	220	< 0.1	11.0	100	62.3	
263245	0.034	63.8	3.3	< 1	2.80	1380	0.9	0.7	35	0.5	62	< 0.1	0.9	0.312	0.52	0.3	180	< 0.1	10.1	111	42.4	
263246	0.034	61.0	3.4	< 1	2.98	1430	0.9	1.1	37	0.4	67	< 0.1	1.0	0.266	0.50	0.3	166	< 0.1	10.1	125	37.7	
263247	0.030	105	7.0	< 1	1.75	1350	5.2	1.6	32	0.5	124	< 0.1	0.7	0.342	0.73	0.2	221	17.0	6.9	114	53.1	
263248	0.029	107	10.4	1	1.87	1540	2.6	1.5	34	0.6	67	< 0.1	0.7	0.300	0.74	0.2	199	14.9	7.2	119	53.9	10.5
263249	0.038	121	8.0	2	2.36	1670	38.0	1.6	35	0.6	70	< 0.1	1.0	0.367	0.83	0.3	244	36.9	9.2	119	69.3	
263250	0.040	96.5	6.7	< 1	1.67	1260	4.7	1.5	37	0.6	51	< 0.1	1.0	0.431	0.76	0.2	259	27.5	9.3	110	70.9	
263251	0.036	66.6	8.7	< 1	1.86	1600	2.5	1.6	34	0.6	60	< 0.1	0.9	0.402	0.46	0.2	219	17.0	8.1	97	62.2	
263252	0.031	74.0	6.8	< 1	2.47	1520	5.4	1.8	32	0.5	77	< 0.1	0.8	0.363	0.71	0.2	220	12.9	7.7	90	56.1	
263253	0.071	19.5	16.7	< 1	1.38	798	7.2	5.0	18	1.8	254	< 0.1	1.8	0.365	0.23	1.0	140	4.2	13.9	104	46.4	
263254	0.038	75.4	6.5	< 1	1.99	1260	1.5	1.1	35	0.7	70	< 0.1	1.2	0.467	0.67	6.7	253	6.7	8.8	99	70.3	
263255	0.041	84.2	6.6	< 1	1.96	1110	0.3	0.5	41	0.3	61	< 0.1	1.1	0.255	0.96	0.3	198	1.5	10.2	115	50.6	
263256	0.027	92.7	5.6	< 1	3.14	1560	0.6	1.2	33	0.3	92	< 0.1	0.7	0.254	0.82	0.2	189	2.8	8.0	134	36.2	
263257	0.040	106	14.6	< 1	2.02	1160	2.0	1.1	40	0.6	71	< 0.1	1.1	0.459	0.88	0.3	279	7.7	10.0	112	71.4	
263258	0.034	91.9	4.4	< 1	2.47	1220	0.8	1.8	37	0.5	71	< 0.1	0.8	0.383	0.91	0.2	236	11.9	8.0	124	61.7	
263259	0.028	92.2	5.7	< 1	2.51	1650	6.2	2.1	30	0.5	89	< 0.1	0.6	0.290	0.65	0.1	215	23.1	7.4	128	49.8	
263260	0.003	1.0	1.0	< 1	13.2	377	0.2	< 0.1	< 1	< 0.1	146	< 0.1	< 0.1	0.004	< 0.05	0.2	< 4	0.5	0.3	10	1.1	
263261	0.029	73.8	5.1	< 1	2.56	1330	2.4	1.6	35	0.5	94	< 0.1	0.7	0.348	0.77	0.2	208	5.5	8.1	97	51.5	
263262	0.029	76.4	6.5	< 1	1.95	1460	1.9	1.2	35	0.5	75	< 0.1	0.8	0.410	0.71	0.2	237	17.1	8.8	101	59.1	
263263	0.033	67.5	6.0	< 1	1.67	1270	13.3	1.0	37	0.6	76	< 0.1	0.7	0.409	0.67	0.2	232	10.4	7.3	97	57.1	
263264	0.027	59.7	5.7	< 1	2.36	1420	3.0	2.5	32	0.5	91	< 0.1	0.7	0.366	0.60	0.2	211	22.8	7.8	106	52.3	
263265	0.020	44.7	4.4	< 1	3.41	1430	2.0	1.2	27	0.3	96	< 0.1	0.3	0.303	0.36	0.1	175	7.6	5.7	108	37.5	
263266	0.055	16.5	13.8	< 1	1.38	876	3.6	1.7	21	1.2	285	< 0.1	1.8	0.294	0.13	0.7	129	1.1	15.9	68	28.1	
263267	0.021	36.2	3.5	< 1	3.81	1280	0.3	0.2	34	< 0.1	98	< 0.1	0.3	0.249	0.35	0.1	201	0.3	6.2	133	41.1	
263268	0.028	71.6	7.5	2	2.66	1690	13.7	2.0	33	0.4	111	< 0.1	0.5	0.368	0.54	0.1	212	16.0	6.8	62	51.8	6.65
263269	0.043	12.3	11.0	< 1	2.67	1090	5.3	1.9	26	0.6	148	< 0.1	2.8	0.365	0.10	1.0	183	7.1	9.1	88	85.2	

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	0.03
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-GRA
263270	0.063	42.7	5.3	< 1	2.03	1120	0.8	1.0	25	0.6	111	< 0.1	3.4	0.340	0.35	0.9	150	0.4	9.1	86	101	
263271	0.060	37.4	5.8	< 1	2.02	1080	1.0	1.0	26	0.4	131	< 0.1	3.0	0.271	0.28	1.0	130	< 0.1	8.9	85	76.9	
263272	0.057	35.7	5.9	< 1	1.76	1080	0.6	1.2	19	0.4	147	< 0.1	4.3	0.334	0.29	1.1	128	0.4	8.2	67	98.0	
263273	0.047	33.6	5.7	< 1	1.64	1010	1.1	1.2	18	0.5	143	< 0.1	4.3	0.290	0.26	1.1	117	0.1	8.4	64	97.4	
263274	0.047	36.4	7.5	< 1	1.55	1210	0.9	1.3	18	0.5	154	< 0.1	3.8	0.292	0.31	1.9	122	0.1	8.4	69	86.5	
263275	0.054	42.0	8.6	< 1	0.70	983	2.3	1.5	20	0.7	155	< 0.1	3.8	0.284	0.33	1.1	120	0.3	8.6	80	95.3	
263276	0.053	45.5	8.1	< 1	0.81	884	0.9	1.4	21	0.7	175	< 0.1	9.7	0.282	0.36	2.7	120	< 0.1	10.2	78	133	
263277	0.057	44.2	7.7	< 1	1.44	905	0.8	1.4	20	0.7	166	< 0.1	4.9	0.337	0.34	1.1	135	< 0.1	7.8	84	101	
263278	0.058	45.1	8.8	< 1	2.16	1370	0.6	0.8	22	0.4	193	< 0.1	3.3	0.320	0.35	0.9	140	< 0.1	8.8	85	96.7	
263279	0.055	42.9	9.3	< 1	1.19	909	0.6	1.0	22	0.4	192	< 0.1	4.6	0.260	0.33	1.2	114	< 0.1	8.3	62	89.0	
263280	0.042	29.2	9.3	< 1	1.49	968	0.9	1.5	15	0.6	160	< 0.1	4.3	0.286	0.23	0.9	107	< 0.1	7.2	93	78.7	
263281	0.056	17.9	24.1	< 1	1.40	948	3.6	2.4	22	1.5	288	< 0.1	1.7	0.306	0.12	0.6	137	1.4	15.8	84	31.9	
263282	0.052	39.7	8.0	< 1	1.53	1070	1.1	1.7	20	0.7	179	< 0.1	4.0	0.297	0.32	1.2	127	< 0.1	7.5	88	83.4	
263283	0.055	45.4	8.6	< 1	1.48	1250	0.9	1.8	20	0.6	209	< 0.1	4.4	0.338	0.37	1.1	133	< 0.1	8.6	81	101	
263284	0.057	44.3	9.7	< 1	1.38	934	0.9	1.1	21	0.7	219	< 0.1	4.2	0.273	0.34	1.0	121	< 0.1	8.0	90	88.9	
263285	0.056	49.9	10.5	< 1	1.61	948	0.7	2.1	22	0.7	228	< 0.1	4.0	0.333	0.40	1.1	154	< 0.1	8.0	90	100	
263286	0.063	38.7	11.9	< 1	1.37	1020	1.0	2.5	20	0.7	200	< 0.1	5.5	0.307	0.31	1.3	148	0.5	8.6	93	108	
263287	0.051	28.1	11.1	< 1	1.40	779	1.0	3.2	21	0.6	176	< 0.1	4.7	0.312	0.23	1.2	145	6.3	7.9	115	93.8	
263288	0.004	0.6	0.8	< 1	13.4	421	0.4	< 0.1	< 1	< 0.1	155	< 0.1	< 0.1	0.003	< 0.05	0.2	< 4	< 0.1	0.3	11	0.7	
263289	0.049	27.4	11.1	< 1	1.47	781	0.7	0.6	16	0.4	179	< 0.1	4.8	0.254	0.21	1.2	103	< 0.1	7.8	86	89.8	

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas		4.27	32.4	383	> 2000	1100	< 1	1420	0.93	2.4	13	6.4	9	1040	2.8	21.8	0.6	0.04	6.9	11.1	0.055	0.5	38.9
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
GXR-1 Meas		3.93	31.5	393	> 2000	1050	< 1	1370	0.95	2.3	13	6.5	9	1030	2.7	21.7	0.8	0.04	6.9	10.5	0.052	0.5	36.0
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas		6.37	3.2	101	300	214	2	18.6	1.03	0.3	100	13.4	39	6620	2.7	2.71	1.0	2.85	53.7	11.1	0.494	8.0	40.3
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
GXR-4 Meas		6.65	3.5	110	500	240	2	18.8	1.05	0.4	105	14.1	40	7060	2.7	3.11	1.0	3.88	57.1	11.4	0.561	8.4	42.1
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
SDC-1 Meas		8.18		2		647	3		1.02		84	17.3	35	35.3	4.2	4.71	0.6	1.73	39.1	35.7	1.53	0.2	36.0
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
SDC-1 Meas		7.73		< 1		597	3		1.02		79	15.5	38	28.4	3.9	4.43	0.8	1.25	37.5	34.0	1.43	1.2	36.0
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
GXR-6 Meas		12.3	0.1	291	< 100	1240	1	0.2	0.17	< 0.1	30	12.6	80	65.8	4.1	5.15	2.4	1.11	11.2	36.1	0.089	3.9	23.9
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
GXR-6 Meas		13.2	0.1	274	< 100	1370	1	0.2	0.18	2.3	33	12.6	52	68.4	4.1	5.47	1.9	1.31	12.5	36.8	0.102	0.6	25.2
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
DNC-1a Meas						100						52.8	153	94.9					3.4	4.4		1.0	274
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
DNC-1a Meas						102						28.8	118	56.5					3.5	4.5		1.5	151
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
SBC-1 Meas				26		751	3	0.7		0.4	95	20.5	61	27.7	8.2		2.8		46.0	163		11.5	85.9
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SBC-1 Meas				27		791	3	0.7		0.4	99	20.0	87	30.6	7.9		3.1		48.1	162		14.8	88.4
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SE68 Meas	607																						
SE68 Cert	599																						
SE68 Meas	610																						
SE68 Cert	599																						
OREAS 45d (4-Acid) Meas		7.42		7		172	< 1	0.3	0.17		33	27.2	463	368	3.8	13.5	1.1	0.37	15.2	21.0	0.082	0.5	244
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
OREAS 45d (4-Acid) Meas		7.70		7		176	< 1	0.3	0.18		34	27.6	488	369	3.8	14.3	1.8	0.37	16.1	19.8	0.089	1.2	240
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
OxK110 Meas																							
OxK110 Cert																							

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SdAR-M2 (U.S.G.S.) Meas						930	7	1.1		4.9	88	12.1	39	234	1.7		1.2		41.7	18.5		11.0	51.5
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
SdAR-M2 (U.S.G.S.) Meas						1010	7	1.1		5.2	91	12.2	38	257	1.6		3.2		43.2	19.1		14.0	53.6
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
OxP116 Meas																							
OxP116 Cert																							
OREAS 16A (FA-Ancaster) Meas	1800																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1810																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263233 Orig		6.44	< 0.1	2	< 100	66	< 1	0.4	8.09	< 0.1	15	43.4	9	55.8	0.7	8.19	1.6	0.60	7.1	8.1	2.89	1.6	41.4
263233 Dup		6.25	< 0.1	3	100	66	< 1	0.4	7.90	< 0.1	15	43.9	11	54.3	0.7	8.22	1.6	0.58	7.0	8.0	2.83	2.0	42.4
263238 Orig	< 5	6.96	< 0.1	2	< 100	85	< 1	0.3	6.32	< 0.1	16	44.8	11	95.1	0.9	8.20	1.1	0.66	7.0	22.6	3.10	0.1	47.3
263238 Dup	< 5	6.96	< 0.1	1	< 100	84	< 1	0.3	6.26	0.1	15	45.4	9	94.5	0.9	8.18	1.2	0.65	7.0	22.2	3.06	0.3	47.0
263248 Orig	> 5000																						
263248 Dup	> 5000																						
263258 Orig	214																						
263258 Dup	207																						
263269 Orig		6.52	0.5	7	200	65	2	0.2	4.78	< 0.1	24	34.0	107	72.3	1.7	6.11	2.1	0.38	11.8	22.3	0.540	2.8	89.9
263269 Dup		6.35	0.4	8	400	63	2	0.2	4.66	0.2	24	33.0	109	79.2	1.7	5.99	2.0	0.37	11.7	21.6	0.527	3.0	84.1
263273 Orig	< 5																						
263273 Dup	< 5																						
263278 Split Orig PREP DUP	< 5	6.68	< 0.1	5	< 100	362	< 1	< 0.1	6.84	0.2	32	23.3	85	48.5	7.3	5.52	2.3	1.25	15.9	72.8	1.02	2.0	63.4
263278 Split PREP DUP	< 5	5.62	< 0.1	5	< 100	297	< 1	< 0.1	6.23	0.2	29	20.8	71	40.1	6.1	5.92	2.1	1.09	14.3	59.7	0.836	2.0	54.8
263280 Orig		5.69	< 0.1	3	< 100	229	< 1	0.1	4.58	0.3	36	20.5	99	51.2	6.1	5.08	1.8	0.85	18.5	63.4	0.897	1.9	61.5
263280 Dup		5.47	< 0.1	3	< 100	223	< 1	0.1	4.43	0.4	34	20.2	114	47.2	6.0	5.01	1.9	0.82	17.9	60.6	0.848	2.8	59.7
263283 Orig	9																						
263283 Dup	7																						
263289 Orig		6.67	< 0.1	2	100	285	< 1	< 0.1	3.66	0.3	37	17.2	70	38.9	6.2	4.25	2.2	0.89	19.6	83.3	1.08	0.4	51.7
263289 Dup		6.42	< 0.1	3	< 100	271	< 1	< 0.1	3.48	0.3	35	17.3	61	39.5	6.0	4.15	2.1	0.86	19.0	81.9	1.07	0.1	49.7
Method Blank	< 5																						

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank																							
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	< 1	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	0.1	0.001	< 0.1	< 0.1
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	2	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	0.1	0.001	< 0.1	< 0.1

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	0.03
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-GRA
GXR-1 Meas	0.061	2.5	687	< 1	0.28	803	14.1	15.4	1	22.3	260	< 0.1	2.4	0.027	0.32	28.7	75	97.8	23.1	779	26.8	
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-1 Meas	0.062	2.4	672	< 1	0.28	817	14.8	30.8	1	25.8	257	< 0.1	2.3	0.026	0.33	27.1	78	118	22.2	754	33.8	
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
DH-1a Meas													800			2200						
DH-1a Cert													910			2629						
DH-1a Meas													800			2090						
DH-1a Cert													910			2629						
GXR-4 Meas	0.150	106	47.5	2	1.60	145	294	4.6	8	6.0	208	0.2	16.8	0.269	2.74	4.9	87	24.4	12.1	78	32.5	
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
GXR-4 Meas	0.157	127	47.9	2	1.80	149	311	4.8	8	6.5	206	0.1	17.7	0.267	2.85	5.1	97	28.7	12.4	80	33.2	
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
SDC-1 Meas	0.063	70.6	24.2		0.75	842		< 0.1	17	0.1	170	< 0.1	11.9	0.071	0.58	2.5	28	0.7		112	18.0	
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00	
SDC-1 Meas	0.063	70.5	22.4		0.72	802		< 0.1	17	0.2	158	< 0.1	11.1	0.145	0.52	2.4	44	< 0.1		104	33.1	
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00	
GXR-6 Meas	0.040	53.4	93.5	< 1	0.56	1040	1.7	2.5	26	1.0	35	< 0.1	4.3		1.72	1.3	164	1.6	10.2	137	89.8	
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110	
GXR-6 Meas	0.040	53.2	95.3	< 1	0.59	1040	1.1	0.4	29	0.6	39	< 0.1	4.7		1.87	1.3	147	< 0.1	10.8	140	73.4	
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110	
DNC-1a Meas		2.9	6.1					0.6	33		129			0.282			148		14.0	72	34.5	
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0	
DNC-1a Meas		2.9	5.8					0.8	35		135			0.284			152		14.1	70	37.5	
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0	
SBC-1 Meas		94.1	33.7				2.2	1.0	21	2.7	165	0.3	13.4	0.471	0.77	4.8	215	1.5	26.2	202	107	
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SBC-1 Meas		103	33.2				2.7	1.0	22	3.3	169	0.5	14.1	0.479	0.82	5.0	235	1.3	27.8	207	115	
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SE68 Meas																						
SE68 Cert																						
SE68 Meas																						
SE68 Cert																						
OREAS 45d (4-Acid) Meas	0.037	33.4	20.2	< 1	0.21	474	1.1	< 0.1	54	0.6	27	< 0.1	12.9	0.161	0.22	2.4	89	0.6	9.4	49	39.1	
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141	
OREAS 45d (4-Acid) Meas	0.040	33.5	19.8	< 1	0.22	475	1.0	< 0.1	55	0.7	28	< 0.1	13.2	0.264	0.25	2.4	121	0.2	9.7	48	69.7	
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141	
OxK110 Meas																						3.60
OxK110 Cert																						3.602

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	0.03
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-GRA
SdAR-M2 (U.S.G.S.) Meas		69.2	771				11.0		4		131	0.2	11.7			2.1	24	0.9	21.7	861	60.9	
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259	
SdAR-M2 (U.S.G.S.) Meas		69.6	774				11.8		4		140	0.3	12.3			2.1	27	0.6	22.4	890	109	
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259	
OxP116 Meas																						14.7
OxP116 Cert																						14.92
OREAS 16A (FA-Ancaster) Meas																						
OREAS 16A (FA-Ancaster) Cert																						
OREAS 16A (FA-Ancaster) Meas																						
OREAS 16A (FA-Ancaster) Cert																						
263233 Orig	0.036	18.1	6.8	< 1	2.02	1660	0.7	0.3	37	0.6	188	< 0.1	1.0	0.454	0.16	0.3	215	0.2	17.5	137	55.3	
263233 Dup	0.036	18.0	6.8	< 1	2.02	1660	0.5	0.6	38	0.6	187	< 0.1	1.0	0.468	0.16	0.3	220	0.7	17.3	139	56.5	
263238 Orig	0.038	18.0	6.1	< 1	2.08	1610	0.9	0.3	38	0.5	113	< 0.1	1.1	0.281	0.18	0.3	160	< 0.1	18.3	101	42.1	
263238 Dup	0.037	18.0	6.0	< 1	2.08	1600	0.9	0.2	38	0.2	113	< 0.1	1.1	0.321	0.17	0.3	175	< 0.1	17.9	97	46.6	
263248 Orig																						
263248 Dup																						
263258 Orig																						
263258 Dup																						
263269 Orig	0.044	12.4	11.2	< 1	2.70	1100	5.1	1.9	25	0.6	150	< 0.1	2.8	0.374	0.09	1.1	183	7.5	9.1	88	86.3	
263269 Dup	0.042	12.1	10.9	< 1	2.64	1080	5.5	1.9	26	0.7	146	< 0.1	2.8	0.356	0.11	0.8	182	6.7	9.1	88	84.0	
263273 Orig																						
263273 Dup																						
263278 Split Orig PREP DUP	0.058	45.1	8.8	< 1	2.16	1370	0.6	0.8	22	0.4	193	< 0.1	3.3	0.320	0.35	0.9	140	< 0.1	8.8	85	96.7	
263278 Split PREP DUP	0.053	38.5	10.5	< 1	2.20	1400	0.7	0.7	19	0.5	179	< 0.1	3.1	0.276	0.30	0.8	121	< 0.1	8.0	71	84.5	
263280 Orig	0.042	29.6	9.1	< 1	1.52	973	0.9	1.4	15	0.6	165	< 0.1	4.2	0.285	0.24	0.9	108	< 0.1	7.3	95	73.6	
263280 Dup	0.041	28.7	9.4	< 1	1.46	963	0.9	1.7	15	0.6	155	< 0.1	4.3	0.286	0.23	0.9	106	0.1	7.1	91	83.8	
263283 Orig																						
263283 Dup																						
263289 Orig	0.049	27.8	11.5	< 1	1.47	798	0.6	0.5	16	0.6	180	< 0.1	5.1	0.256	0.21	1.1	105	0.6	7.7	90	94.2	
263289 Dup	0.048	27.0	10.8	< 1	1.46	764	0.8	0.6	15	0.2	179	< 0.1	4.6	0.253	0.21	1.2	101	< 0.1	7.9	82	85.3	
Method Blank																						

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	0.03
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	FA-GRA
Method Blank																						
Method Blank																						
Method Blank																						
Method Blank																						< 0.03
Method Blank	< 0.001	< 0.1	0.1	< 1	< 0.01	4	0.2	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.1	
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	6	0.2	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.2	

Quality Analysis ... *Innovative Technologies*

Date Submitted: 07-Nov-16
Invoice No.: A16-11781
Invoice Date: 23-Nov-16
Your Reference: Core-07-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

77 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-11781**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 07-Nov-16
Invoice No.: A16-11781
Invoice Date: 23-Nov-16
Your Reference: Core-07-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

77 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11781**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

kiwa ISO 9001 QUALITY
QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246001	7	1.8	5.94	19	583	< 1	3	3.23	< 0.3	44	14	127	9.54	17	< 1	1.17	1.55	10	1710	< 1	0.44	26	0.056
246002	10	3.3	5.09	7	196	< 1	2	5.58	< 0.3	43	9	227	10.2	14	< 1	1.22	1.71	5	1730	< 1	2.19	17	0.046
246003	5	2.3	5.56	6	502	< 1	2	4.57	< 0.3	39	11	116	9.54	16	< 1	1.21	1.27	9	1600	< 1	0.90	16	0.055
246004	5	3.2	5.47	11	446	< 1	5	4.45	0.4	45	27	161	9.54	15	< 1	1.29	1.54	5	1720	< 1	0.98	16	0.054
246005	10	2.1	5.55	11	483	< 1	4	4.05	0.4	46	24	104	9.78	16	< 1	1.49	1.63	5	1590	1	0.28	24	0.054
246006	5	0.9	5.82	10	418	< 1	4	6.21	0.4	38	68	79	8.04	11	1	1.20	2.65	6	1750	2	0.68	48	0.027
246007	3470	1.2	6.29	9	532	< 1	2	2.79	< 0.3	14	76	63	4.96	13	< 1	0.81	1.37	15	816	5	2.27	42	0.060
246008	8	0.5	5.99	< 3	351	< 1	< 2	6.18	< 0.3	37	100	71	6.81	12	< 1	1.35	3.21	7	1500	1	1.28	57	0.026
246009	243	1.6	4.89	17	59	< 1	3	5.28	< 0.3	37	215	104	5.94	12	6	0.87	1.97	4	1090	35	2.82	46	0.018
246010	51	0.7	4.18	11	828	< 1	< 2	7.51	< 0.3	37	221	92	6.29	11	< 1	1.27	3.05	8	1150	1	0.22	96	0.014
246011	91	1.5	5.63	5	277	< 1	3	7.26	0.4	41	147	333	6.42	11	< 1	1.83	3.14	10	1230	25	0.42	108	0.018
246012	8	0.5	5.77	5	851	< 1	4	6.11	< 0.3	45	246	78	6.87	12	< 1	1.86	3.59	9	1300	< 1	0.55	67	0.019
246013	209	2.1	3.44	5	82	< 1	< 2	4.81	< 0.3	30	60	39	5.39	7	< 1	0.58	1.34	4	753	66	2.07	35	0.015
246014	< 5	< 0.3	0.03	< 3	31	< 1	2	18.5	< 0.3	< 1	54	2	0.05	< 1	< 1	0.01	12.0	8	348	< 1	0.02	< 1	0.003
246015	250	3.8	2.28	< 3	54	< 1	2	2.38	< 0.3	16	51	24	2.98	3	< 1	0.06	0.65	1	497	101	1.79	20	0.012
246016	312	12.8	2.82	< 3	50	< 1	11	3.61	< 0.3	19	87	4280	3.92	7	< 1	0.42	0.90	5	658	38	1.67	27	0.013
246017	6	0.5	6.43	< 3	157	< 1	4	6.97	0.4	41	213	115	7.77	13	1	0.61	2.96	25	1560	2	2.88	56	0.024
246018	8	0.7	6.08	< 3	81	< 1	3	7.23	< 0.3	44	143	172	7.53	15	< 1	0.62	2.27	24	1530	2	3.14	54	0.024
246019	7	0.5	6.65	< 3	55	< 1	3	6.04	< 0.3	43	105	94	7.77	14	< 1	0.53	2.63	26	1480	< 1	3.17	59	0.026
246020	8	< 0.3	5.22	< 3	171	< 1	< 2	5.87	< 0.3	43	87	56	7.27	15	< 1	0.84	2.47	23	1210	< 1	2.72	55	0.028
246021	685	0.5	7.83	259	448	< 1	2	4.00	0.3	15	61	50	4.99	14	< 1	0.81	1.37	7	982	4	2.52	25	0.048
246022	5	0.4	6.43	< 3	300	< 1	4	6.16	< 0.3	41	74	102	7.18	13	2	0.92	2.40	23	1280	< 1	2.78	55	0.027
246023	179	< 0.3	6.28	< 3	112	< 1	3	7.76	< 0.3	41	62	91	7.30	14	< 1	1.84	2.55	8	1650	< 1	1.62	52	0.027
246024	305	0.4	5.87	< 3	110	< 1	< 2	7.39	0.4	39	54	92	6.94	11	< 1	2.01	2.56	5	1550	3	1.58	49	0.026
246025	160	< 0.3	6.39	< 3	149	< 1	< 2	7.36	< 0.3	46	80	133	7.64	16	< 1	2.43	2.38	4	1420	12	1.20	56	0.027
246026	1290	0.9	5.36	< 3	263	< 1	< 2	7.86	< 0.3	38	70	79	6.17	12	< 1	1.66	1.82	9	1130	< 1	1.37	48	0.026
246027	121	0.3	5.80	4	86	< 1	< 2	7.55	< 0.3	40	72	113	6.91	14	< 1	0.85	2.15	15	1220	< 1	2.20	49	0.025
246028	6	< 0.3	6.90	< 3	55	< 1	3	6.73	< 0.3	47	48	78	7.73	13	1	0.35	3.18	18	1680	< 1	2.57	59	0.027
246029	7	< 0.3	7.03	< 3	60	< 1	3	6.10	< 0.3	49	59	106	8.31	14	< 1	0.39	3.30	19	1660	< 1	2.49	63	0.029
246030	13	< 0.3	6.18	< 3	57	< 1	4	7.85	< 0.3	47	92	50	8.40	15	< 1	0.48	2.86	10	1730	2	2.45	59	0.031
246031	6	0.4	6.66	< 3	70	< 1	4	6.83	< 0.3	48	159	64	8.54	15	< 1	0.64	2.90	11	1740	< 1	2.54	61	0.029
246032	8	< 0.3	6.83	< 3	73	< 1	3	7.66	< 0.3	42	65	96	8.46	14	< 1	0.63	2.83	11	1600	< 1	2.24	50	0.027
246033	12	0.3	7.12	< 3	97	< 1	< 2	8.08	0.3	39	54	115	8.04	16	< 1	1.05	2.77	9	1620	< 1	2.05	56	0.027
246034	8	0.4	7.10	< 3	68	< 1	2	8.67	0.3	43	90	119	8.27	15	< 1	0.77	2.76	8	1710	< 1	2.27	59	0.025
246035	5	< 0.3	7.02	< 3	78	< 1	7	7.48	< 0.3	46	62	107	8.46	14	< 1	0.72	2.93	7	1700	3	2.72	59	0.028
246036	6	0.4	6.94	4	81	< 1	< 2	6.58	< 0.3	47	102	115	8.01	16	< 1	0.69	3.17	14	1650	2	2.53	58	0.029
246037	474	0.4	7.82	135	455	< 1	3	3.96	< 0.3	15	90	54	4.90	15	< 1	0.80	1.39	8	971	2	2.51	30	0.047
246038	< 5	0.4	7.32	7	74	< 1	3	7.38	< 0.3	47	54	100	8.18	15	2	0.69	2.99	8	1760	3	2.82	61	0.031
246039	< 5	< 0.3	7.39	< 3	72	< 1	3	7.23	< 0.3	49	113	93	9.12	17	< 1	0.72	2.91	7	1830	< 1	2.74	63	0.029
246040	5	0.4	7.30	6	84	< 1	2	7.70	< 0.3	49	192	185	9.15	17	< 1	0.97	2.59	6	1780	1	2.19	64	0.028
246041	< 5	0.3	7.16	< 3	51	< 1	4	7.42	< 0.3	48	150	82	8.72	15	< 1	0.39	3.16	7	1870	4	2.71	60	0.028
246042	5	< 0.3	7.12	< 3	53	< 1	4	8.18	< 0.3	45	87	99	8.29	15	< 1	0.45	3.03	6	1730	1	2.65	59	0.028

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246043	< 5	0.4	7.96	4	57	< 1	5	7.29	< 0.3	51	114	136	9.22	18	4	0.53	2.86	10	1810	1	2.54	69	0.030
246044	5	< 0.3	6.92	< 3	63	< 1	3	7.27	0.3	46	88	113	7.89	14	< 1	0.55	3.01	6	1700	< 1	2.72	61	0.027
246045	5	0.6	6.67	< 3	69	< 1	2	7.26	0.5	50	58	157	7.89	13	< 1	0.67	2.76	10	1530	1	3.13	59	0.026
246046	5	< 0.3	0.09	< 3	122	< 1	< 2	18.7	< 0.3	1	4	2	0.11	< 1	< 1	0.03	12.4	12	323	< 1	0.05	< 1	0.003
246047	8	0.4	6.98	< 3	57	< 1	3	7.09	< 0.3	47	60	145	8.54	14	< 1	0.56	2.81	11	1520	3	3.26	63	0.031
246048	5	0.4	7.38	4	65	< 1	4	8.61	< 0.3	48	56	156	9.12	15	< 1	0.56	3.03	6	1810	5	2.76	62	0.032
246049	5	0.4	6.29	< 3	73	< 1	4	7.32	< 0.3	47	99	109	8.61	15	< 1	0.79	2.61	7	1710	3	2.47	61	0.029
246050	6	0.3	6.85	< 3	43	< 1	2	7.61	< 0.3	46	124	73	8.14	14	< 1	0.37	3.03	7	1690	3	2.86	60	0.029
246051	< 5	< 0.3	7.17	< 3	62	< 1	3	7.22	< 0.3	47	108	115	8.75	14	< 1	0.53	2.99	7	1710	< 1	2.89	59	0.030
246052	5	0.3	7.41	< 3	60	< 1	4	7.39	< 0.3	51	50	128	9.05	16	< 1	0.55	3.16	8	1800	< 1	2.62	64	0.029
246053	5	0.4	7.14	< 3	82	< 1	3	6.48	< 0.3	46	47	78	8.26	13	< 1	0.67	3.25	7	1670	2	3.08	60	0.029
246054	726	0.4	7.90	230	447	< 1	3	3.98	< 0.3	14	37	51	4.99	13	< 1	0.79	1.37	7	969	< 1	2.53	24	0.046
246055	5	0.3	7.16	< 3	66	< 1	2	6.97	< 0.3	46	82	92	8.39	14	< 1	0.64	3.19	6	1740	4	3.03	61	0.030
246056	6	0.3	7.30	< 3	72	< 1	4	7.02	< 0.3	48	156	101	8.77	15	< 1	0.60	3.34	7	1780	< 1	2.89	60	0.032
246057	6	0.3	7.46	< 3	80	< 1	2	8.59	< 0.3	44	77	60	8.91	18	< 1	1.06	2.90	5	1720	2	2.25	57	0.031
246058	8	0.4	6.73	< 3	92	< 1	3	6.42	0.6	52	163	86	8.63	14	< 1	0.74	3.19	7	1770	2	2.96	58	0.033
246059	5	0.6	7.06	3	97	< 1	< 2	8.25	< 0.3	47	182	158	9.45	21	< 1	1.12	2.42	7	1520	11	1.96	63	0.031
246060	5	< 0.3	6.99	< 3	113	< 1	4	6.56	< 0.3	48	80	146	8.62	16	< 1	0.98	3.04	9	1650	< 1	2.44	61	0.028
246061	5	< 0.3	7.14	< 3	95	< 1	4	7.06	< 0.3	47	74	122	8.39	15	< 1	0.63	3.44	6	1660	2	2.91	63	0.029
246062	5	0.3	6.75	< 3	90	< 1	< 2	6.82	< 0.3	45	54	121	8.06	14	< 1	0.59	3.23	5	1610	2	2.73	61	0.028
246063	5	0.4	7.08	< 3	81	< 1	3	6.72	< 0.3	48	60	128	8.24	15	< 1	0.53	3.34	7	1700	3	2.97	60	0.030
246064	5	0.3	7.37	< 3	81	< 1	3	6.26	< 0.3	48	65	100	8.93	15	< 1	0.51	3.62	9	1780	6	3.16	63	0.034
246065	7	0.3	7.22	< 3	80	< 1	6	6.31	< 0.3	47	59	106	8.59	16	< 1	0.60	3.49	8	1690	4	2.97	58	0.033
246066	6	0.5	7.22	< 3	117	< 1	6	4.75	< 0.3	50	59	125	9.14	13	< 1	0.97	3.72	15	1750	1	2.97	65	0.033
246067	9	0.4	7.42	4	89	< 1	3	4.57	< 0.3	53	64	152	9.31	12	< 1	0.60	3.59	14	1720	2	3.21	64	0.034
246068	7	0.3	6.49	< 3	66	< 1	< 2	6.05	< 0.3	47	96	146	8.14	13	< 1	0.34	3.36	14	1680	< 1	2.64	58	0.032
246069	6	0.4	6.51	< 3	65	< 1	< 2	5.34	< 0.3	48	202	108	8.07	14	1	0.45	3.26	18	1570	< 1	2.94	57	0.030
246070	528	0.3	7.87	122	463	< 1	8	3.97	< 0.3	13	82	48	4.92	14	< 1	0.82	1.39	8	951	< 1	2.57	26	0.046
246071	6	0.4	6.93	< 3	37	< 1	4	6.83	< 0.3	48	62	111	8.79	15	< 1	0.34	3.49	20	1480	< 1	3.22	58	0.027
246072	5	0.3	6.55	< 3	38	< 1	3	7.22	< 0.3	46	90	63	8.86	16	< 1	0.70	3.78	23	1430	< 1	2.18	56	0.026
246073	19	0.4	6.76	< 3	58	< 1	2	8.64	< 0.3	48	58	97	7.97	18	< 1	1.58	2.84	18	1250	6	1.91	59	0.061
246074	17	0.8	6.99	8	30	< 1	3	6.64	< 0.3	55	85	37	8.75	16	< 1	0.42	3.24	25	1240	1	3.35	60	0.024
246075	8	< 0.3	6.59	7	31	< 1	3	8.23	< 0.3	40	53	115	7.52	12	< 1	0.35	2.32	19	1140	< 1	3.84	54	0.028
246076	7	0.6	6.60	< 3	47	< 1	5	7.31	< 0.3	43	58	34	8.29	15	< 1	0.51	3.05	20	1150	9	3.33	60	0.026
246077	7	< 0.3	7.02	5	101	< 1	< 2	6.00	< 0.3	47	77	119	8.03	14	2	0.68	2.71	15	1270	< 1	3.57	62	0.029

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246001	15	< 5	0.56	39	78	< 2	0.54	< 5	< 10	248	< 5	21	146	112
246002	23	< 5	1.17	34	200	2	0.47	< 5	< 10	237	< 5	19	98	114
246003	14	< 5	0.62	36	91	< 2	0.50	< 5	< 10	233	< 5	23	115	116
246004	13	< 5	0.93	35	101	< 2	0.69	< 5	< 10	279	< 5	21	137	127
246005	14	< 5	1.02	37	82	2	0.63	< 5	< 10	277	< 5	21	167	122
246006	9	< 5	0.30	35	176	< 2	0.39	< 5	< 10	199	6	13	123	62
246007	15	< 5	0.06	17	259	< 2	0.30	< 5	< 10	121	< 5	18	89	45
246008	4	< 5	0.19	36	319	< 2	0.39	< 5	< 10	208	5	12	95	57
246009	25	< 5	2.93	28	172	2	0.32	< 5	< 10	163	19	10	69	49
246010	7	< 5	0.62	23	259	< 2	0.31	< 5	< 10	187	9	6	102	30
246011	20	< 5	1.34	28	202	4	0.31	< 5	< 10	192	9	8	120	33
246012	< 3	< 5	0.43	37	298	< 2	0.36	< 5	< 10	198	< 5	9	74	32
246013	36	< 5	3.59	21	131	< 2	0.23	< 5	< 10	122	16	9	53	36
246014	< 3	< 5	0.02	< 4	132	< 2	< 0.01	< 5	< 10	3	< 5	< 1	8	< 5
246015	1420	< 5	2.17	12	92	2	0.14	< 5	< 10	30	15	6	21	22
246016	895	< 5	1.76	16	177	4	0.20	< 5	< 10	106	8	6	30	29
246017	10	< 5	0.06	37	102	< 2	0.25	< 5	< 10	180	< 5	18	83	55
246018	14	< 5	0.77	33	86	< 2	0.39	< 5	< 10	214	< 5	16	77	58
246019	17	< 5	0.10	38	94	< 2	0.26	< 5	< 10	172	< 5	15	86	45
246020	6	< 5	0.56	27	85	< 2	0.44	< 5	< 10	222	< 5	12	92	62
246021	16	< 5	0.07	22	299	< 2	0.32	< 5	< 10	132	< 5	21	70	34
246022	13	9	0.35	36	95	< 2	0.39	< 5	< 10	205	< 5	16	90	58
246023	< 3	< 5	1.48	34	114	< 2	0.35	< 5	< 10	211	< 5	13	73	55
246024	3	< 5	0.91	33	119	< 2	0.38	< 5	< 10	212	< 5	13	65	55
246025	< 3	< 5	2.64	35	121	4	0.44	< 5	< 10	246	11	13	56	57
246026	< 3	< 5	2.47	30	106	< 2	0.38	< 5	< 10	199	12	11	57	52
246027	< 3	< 5	1.36	31	79	< 2	0.38	< 5	< 10	204	< 5	15	68	53
246028	< 3	< 5	0.05	39	88	< 2	0.26	< 5	< 10	149	< 5	19	90	45
246029	< 3	< 5	0.09	41	86	< 2	0.26	< 5	< 10	153	< 5	20	94	42
246030	6	< 5	0.14	33	154	< 2	0.45	< 5	< 10	238	< 5	17	81	56
246031	4	< 5	0.02	39	163	< 2	0.33	< 5	< 10	213	< 5	20	84	59
246032	< 3	< 5	0.02	38	178	< 2	0.18	< 5	10	161	< 5	22	81	55
246033	10	< 5	0.05	39	236	< 2	0.24	< 5	< 10	179	< 5	21	73	47
246034	4	< 5	0.05	39	223	< 2	0.26	< 5	< 10	202	< 5	20	77	54
246035	4	< 5	0.10	40	166	< 2	0.36	< 5	< 10	197	< 5	21	82	57
246036	5	< 5	0.16	39	146	< 2	0.30	< 5	< 10	166	< 5	20	92	41
246037	7	< 5	0.05	21	301	< 2	0.19	< 5	< 10	90	< 5	20	62	24
246038	4	< 5	0.08	41	178	< 2	0.42	< 5	< 10	212	< 5	21	84	59
246039	3	< 5	0.24	42	194	< 2	0.31	< 5	< 10	187	< 5	22	83	46
246040	3	< 5	0.42	40	263	8	0.36	< 5	< 10	223	< 5	22	77	58
246041	< 3	< 5	0.06	40	166	< 2	0.29	< 5	< 10	187	< 5	21	96	53
246042	< 3	< 5	0.10	39	196	< 2	0.26	< 5	< 10	161	< 5	20	84	40

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246043	5	< 5	0.18	44	257	3	0.40	< 5	< 10	222	< 5	23	85	54
246044	< 3	< 5	0.13	38	168	< 2	0.22	< 5	< 10	137	< 5	20	82	35
246045	13	< 5	0.63	36	100	< 2	0.38	< 5	< 10	190	< 5	18	83	57
246046	7	< 5	0.02	< 4	135	< 2	< 0.01	< 5	< 10	4	< 5	< 1	18	< 5
246047	< 3	< 5	0.51	39	117	< 2	0.45	< 5	< 10	219	< 5	19	84	64
246048	< 3	< 5	0.34	40	197	< 2	0.48	< 5	< 10	244	< 5	19	79	65
246049	3	< 5	0.28	35	188	< 2	0.46	< 5	10	245	< 5	18	74	63
246050	< 3	< 5	0.07	39	168	< 2	0.35	< 5	< 10	205	< 5	19	90	58
246051	< 3	< 5	0.27	40	180	< 2	0.20	< 5	< 10	146	< 5	21	88	32
246052	5	< 5	0.18	42	221	< 2	0.26	< 5	< 10	158	< 5	21	88	36
246053	< 3	< 5	0.05	40	173	< 2	0.36	< 5	< 10	201	< 5	20	84	63
246054	20	< 5	0.06	21	298	2	0.19	< 5	< 10	93	< 5	20	69	22
246055	< 3	< 5	0.06	40	188	< 2	0.42	< 5	< 10	220	< 5	20	85	62
246056	< 3	< 5	0.08	40	200	2	0.48	< 5	< 10	243	< 5	20	88	66
246057	3	< 5	0.37	38	246	< 2	0.47	< 5	< 10	270	< 5	20	74	60
246058	5	< 5	0.11	37	175	< 2	0.47	< 5	< 10	234	< 5	20	85	69
246059	9	< 5	0.66	38	290	< 2	0.48	< 5	< 10	260	< 5	20	65	56
246060	< 3	< 5	0.25	41	222	< 2	0.16	< 5	< 10	140	< 5	20	82	27
246061	< 3	< 5	0.32	40	172	< 2	0.25	< 5	< 10	145	< 5	20	85	33
246062	< 3	< 5	0.31	39	167	< 2	0.26	< 5	< 10	153	< 5	19	78	37
246063	5	< 5	0.26	40	153	< 2	0.34	< 5	< 10	189	< 5	20	83	46
246064	< 3	< 5	0.24	42	118	< 2	0.49	< 5	< 10	252	< 5	21	89	66
246065	< 3	< 5	0.17	40	88	< 2	0.49	< 5	< 10	248	< 5	20	83	65
246066	13	< 5	0.17	42	68	< 2	0.50	< 5	< 10	248	< 5	20	97	71
246067	4	< 5	0.38	42	69	< 2	0.50	< 5	< 10	250	< 5	20	95	72
246068	< 3	< 5	0.23	37	67	< 2	0.46	< 5	< 10	239	< 5	19	83	63
246069	< 3	< 5	0.60	37	44	< 2	0.45	< 5	< 10	227	< 5	19	86	63
246070	9	< 5	0.05	22	300	< 2	0.10	< 5	< 10	68	< 5	20	62	16
246071	< 3	< 5	1.27	38	54	< 2	0.35	< 5	< 10	213	< 5	19	90	56
246072	< 3	< 5	0.69	38	62	< 2	0.35	< 5	< 10	236	< 5	18	98	62
246073	< 3	< 5	2.96	37	102	< 2	0.45	< 5	< 10	300	< 5	17	68	65
246074	4	< 5	0.96	37	49	< 2	0.41	< 5	< 10	253	< 5	19	95	64
246075	< 3	< 5	0.45	35	86	< 2	0.43	< 5	< 10	200	< 5	17	77	63
246076	< 3	< 5	0.72	36	82	< 2	0.43	< 5	< 10	226	< 5	18	105	62
246077	< 3	< 5	0.81	39	66	4	0.47	< 5	< 10	229	< 5	20	85	67

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.2	2.25	419	649	1	1370	0.86	2.9	7	43	1170	23.1	11	7	0.05	0.20	8	864	16	0.06	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		32.2	2.30	427	669	1	1400	0.87	2.5	8	27	1200	23.8	12	4	0.05	0.21	8	894	16	0.06	42	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.8	6.31	100	131	2	25	1.05	< 0.3	16	32	6460	3.10	16	< 1	3.31	1.67	11	171	333	0.51	41	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		4.0	6.27	104	191	2	19	1.06	< 0.3	16	47	6560	3.16	17	< 1	3.73	1.68	11	161	340	0.51	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			7.63	4	595	3		1.08		18	57	31	4.72	22	< 1	1.21	0.99	34	891		1.50	35	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.4	12.6	256	> 1000	1	5	0.17	< 0.3	15	52	84	5.93	29	2	1.23	0.62	35	1070	1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	12.5	310	> 1000	1	6	0.17	< 0.3	17	58	76	6.41	28	7	1.35	0.62	34	1100	1	0.10	28	0.037
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						156	193	335	9.50									6860	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						162	185	347	9.56									7100	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					95					55	233	102		12				5				258	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				18	742	3	4		0.4	23	86	34		26				157		2		88	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	615																						
SE68 Cert	599																						
SE68 Meas	599																						
SE68 Cert	599																						
SE68 Meas	582																						
SE68 Cert	599																						
SE68 Meas	604																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					998	7	< 2		5.2	15	30	254		17	< 1			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	2		5.2	15	34	251		17	< 1			18		13		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
246010 Orig	50																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246010 Dup	52																						
246013 Orig		2.0	3.37	4	74	< 1	< 2	4.74	< 0.3	28	51	40	5.31	7	< 1	0.56	1.31	4	745	65	2.05	35	0.015
246013 Dup		2.1	3.50	6	90	< 1	< 2	4.88	< 0.3	31	69	39	5.48	8	1	0.60	1.36	4	761	67	2.09	35	0.015
246020 Orig	9																						
246020 Dup	7																						
246027 Orig		0.4	5.76	4	87	< 1	< 2	7.53	0.4	38	88	113	6.89	14	< 1	0.86	2.14	15	1220	< 1	2.18	49	0.026
246027 Dup		0.3	5.83	5	86	< 1	< 2	7.58	< 0.3	41	56	113	6.92	14	< 1	0.85	2.17	15	1230	< 1	2.21	49	0.025
246030 Orig	18																						
246030 Dup	8																						
246045 Orig	5																						
246045 Dup	5																						
246050 Split Orig PREP DUP	6	0.3	6.85	< 3	43	< 1	2	7.61	< 0.3	46	124	73	8.14	14	< 1	0.37	3.03	7	1690	3	2.86	60	0.029
246050 Split PREP DUP	7	0.3	6.88	< 3	43	< 1	3	7.74	< 0.3	47	100	64	8.13	13	< 1	0.37	3.04	7	1670	3	2.87	60	0.027
246051 Orig		< 0.3	7.20	< 3	62	< 1	3	7.25	< 0.3	48	107	115	8.81	14	< 1	0.53	3.02	7	1720	< 1	2.91	60	0.030
246051 Dup		0.3	7.15	< 3	61	< 1	3	7.18	0.4	47	109	114	8.69	14	< 1	0.53	2.96	7	1710	1	2.87	58	0.030
246055 Orig	5																						
246055 Dup	5																						
246065 Orig	5	0.4	7.12	< 3	80	< 1	6	6.28	< 0.3	47	58	105	8.54	16	< 1	0.60	3.47	8	1680	3	2.95	58	0.033
246065 Dup	8	0.3	7.31	< 3	80	< 1	6	6.33	< 0.3	48	59	106	8.64	16	< 1	0.61	3.51	8	1700	4	2.99	58	0.033
Method Blank	5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	2	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		2	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	2	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	720	36	0.25	< 4	285	5	0.03	< 5	30	86	157	34	736	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	736	22	0.25	< 4	289	6	0.03	< 5	30	87	159	35	743	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	47	< 5	1.75	8	210	2	0.29	< 5	< 10	88	38	15	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	47	< 5	1.75	8	215	2	0.28	< 5	< 10	88	34	15	75	41
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	16	< 5		16	169		0.13	< 5	< 10	43	< 5		98	40
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	94	< 5	0.02	26	37	< 2		< 5	< 10	121	< 5	11	128	62
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	90	< 5	0.02	27	35	< 2		6	< 10	127	< 5	11	127	64
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.66											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.73											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	< 3	< 5		32	126		0.28			139		16	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	27	< 5		20	169		0.50	< 5	< 10	211	< 5	29	174	112
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	825			5	149				< 10	25	9	30	777	105
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	835			5	148				< 10	27	9	30	787	124
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
246010 Orig														
246010 Dup														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246013 Orig	35	< 5	3.49	21	128	2	0.23	< 5	< 10	120	17	9	54	35
246013 Dup	37	< 5	3.68	21	135	< 2	0.24	< 5	< 10	125	15	9	52	36
246020 Orig														
246020 Dup														
246027 Orig	< 3	< 5	1.37	31	79	3	0.38	< 5	< 10	203	< 5	15	68	53
246027 Dup	< 3	< 5	1.35	31	79	< 2	0.38	< 5	< 10	205	< 5	15	67	53
246030 Orig														
246030 Dup														
246045 Orig														
246045 Dup														
246050 Split Orig PREP DUP	< 3	< 5	0.07	39	168	< 2	0.35	< 5	< 10	205	< 5	19	90	58
246050 Split PREP DUP	< 3	< 5	0.06	40	172	< 2	0.30	< 5	< 10	183	< 5	20	85	53
246051 Orig	3	< 5	0.26	41	182	< 2	0.18	< 5	< 10	137	< 5	21	90	28
246051 Dup	< 3	< 5	0.28	40	179	< 2	0.23	< 5	< 10	155	< 5	21	85	36
246055 Orig														
246055 Dup														
246065 Orig	< 3	< 5	0.17	40	87	3	0.48	< 5	< 10	245	< 5	21	82	65
246065 Dup	< 3	< 5	0.17	40	89	< 2	0.49	< 5	< 10	251	< 5	20	83	65
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 07-Nov-16
Invoice No.: A16-11784
Invoice Date: 30-Nov-16
Your Reference: Core-07-Nov-R5-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

16 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11784**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 07-Nov-16
Invoice No.: A16-11784
Invoice Date: 30-Nov-16
Your Reference: Core-07-Nov-R5-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

16 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1EX/MA200 Total Digestion ICP/MS

REPORT **A16-11784**

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263290	1040	7.02	0.2	2	500	298	< 1	0.2	4.11	0.2	35	21.8	99	58.8	7.3	4.72	2.3	1.01	18.0	63.5	1.15	3.7	61.5
263291	11	7.46	< 0.1	7	< 100	375	< 1	0.1	2.57	0.2	32	23.8	99	49.8	8.1	4.93	2.3	1.08	16.0	63.8	1.20	2.7	73.5
263292	27	6.88	< 0.1	3	< 100	345	< 1	0.1	2.58	0.1	38	20.3	71	46.7	7.5	4.65	1.5	1.10	19.8	55.9	1.04	< 0.1	59.6
263293	15	5.25	< 0.1	4	< 100	288	< 1	0.2	2.82	< 0.1	35	18.4	60	70.9	5.8	4.06	1.8	0.96	18.5	53.4	0.661	2.5	42.7
263294	417	7.84	< 0.1	136	300	475	< 1	< 0.1	3.90	0.1	19	12.6	32	45.5	0.7	4.54	0.8	0.80	8.9	7.3	2.49	0.4	22.7
263295	14	6.72	< 0.1	7	< 100	326	< 1	0.1	2.14	0.2	37	17.1	68	43.6	7.5	4.93	2.2	1.14	19.2	78.7	0.807	2.3	52.5
263296	7	6.13	< 0.1	16	< 100	261	< 1	0.1	2.95	0.2	34	15.6	61	81.4	6.0	3.76	2.0	0.96	18.1	81.7	0.807	2.7	51.0
263297	15	6.97	< 0.1	26	< 100	291	< 1	0.1	3.27	0.4	37	12.3	74	29.1	6.8	4.28	2.2	1.08	19.0	92.6	0.938	2.9	32.4
263298	75	6.24	< 0.1	22	< 100	276	< 1	0.1	4.05	0.3	32	11.0	67	30.8	6.0	5.02	2.0	1.03	16.9	93.3	0.801	2.4	33.5
263299	11	6.36	< 0.1	15	1500	355	< 1	0.1	3.82	0.2	36	18.1	63	40.8	6.2	4.54	1.9	1.18	18.7	107	0.769	1.0	52.1
263300	11	6.93	< 0.1	27	< 100	348	< 1	0.1	2.48	0.2	37	21.5	78	53.9	6.5	4.34	2.1	1.15	19.7	181	0.824	2.3	58.6
263301	14	5.59	0.1	41	< 100	257	< 1	0.2	2.58	0.2	35	16.0	64	40.2	5.2	4.13	1.8	1.04	18.6	70.4	0.622	2.4	48.4
263302	12	5.97	< 0.1	36	< 100	271	< 1	0.2	2.55	0.2	37	18.0	68	43.1	5.5	4.31	1.9	1.17	19.5	75.5	0.678	1.0	53.5
263303	9	6.37	0.1	28	< 100	308	< 1	0.2	1.79	< 0.1	45	14.2	52	32.2	6.9	3.20	1.8	1.33	24.4	34.9	0.764	< 0.1	40.8
263304	12	6.87	< 0.1	34	< 100	371	< 1	0.2	1.88	< 0.1	51	16.9	64	56.1	7.3	3.46	1.9	1.22	27.4	35.1	0.815	< 0.1	46.5
263305	10	7.81	< 0.1	36	< 100	407	< 1	0.2	1.96	< 0.1	46	19.9	70	61.8	7.9	3.89	2.1	1.30	24.3	45.9	1.02	< 0.1	51.6

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
263290	0.050	35.2	13.0	< 1	1.45	875	1.1	2.9	19	0.7	218	< 0.1	4.4	0.314	0.32	1.0	124	0.8	7.8	97	92.5
263291	0.055	42.2	10.5	< 1	0.89	783	0.7	2.9	22	0.6	274	< 0.1	3.5	0.366	0.37	1.3	148	0.9	8.9	91	102
263292	0.044	38.4	9.7	< 1	0.82	729	0.3	0.6	20	0.4	300	< 0.1	4.6	0.232	0.32	1.2	107	< 0.1	8.2	75	61.1
263293	0.036	31.2	9.5	< 1	0.80	596	0.7	2.2	14	0.6	197	< 0.1	4.7	0.226	0.25	1.0	81	< 0.1	7.1	64	69.9
263294	0.056	16.8	12.3	< 1	1.38	922	1.9	0.8	21	0.9	299	< 0.1	1.8	0.216	0.12	0.7	101	< 0.1	16.4	69	24.9
263295	0.048	35.4	12.1	< 1	0.83	660	1.0	1.5	14	0.7	221	< 0.1	4.7	0.226	0.27	1.2	100	< 0.1	6.8	89	92.8
263296	0.040	28.8	22.8	< 1	0.88	560	0.9	1.7	13	0.5	213	< 0.1	4.5	0.215	0.22	1.1	96	0.7	7.1	104	86.8
263297	0.051	33.5	14.6	< 1	1.10	780	0.8	2.5	17	0.7	232	< 0.1	4.5	0.244	0.27	2.3	117	0.9	7.1	93	95.1
263298	0.048	33.2	15.1	< 1	1.66	1020	0.7	3.1	17	0.6	230	< 0.1	4.1	0.242	0.26	1.1	113	0.5	7.9	95	86.5
263299	0.047	36.9	15.4	< 1	1.53	817	0.9	1.8	17	0.5	266	< 0.1	4.2	0.252	0.30	1.0	104	< 0.1	8.2	82	79.8
263300	0.043	36.4	13.0	< 1	0.83	699	0.8	2.5	17	0.5	272	< 0.1	4.7	0.284	0.29	1.2	112	< 0.1	7.4	95	83.6
263301	0.036	33.4	15.4	< 1	0.91	659	1.4	4.0	13	0.5	206	< 0.1	4.9	0.245	0.29	1.4	89	0.3	7.3	92	71.5
263302	0.037	34.8	15.7	< 1	0.90	648	0.9	2.0	14	0.5	219	< 0.1	5.0	0.229	0.29	1.5	85	< 0.1	7.6	96	75.4
263303	0.027	42.7	10.7	< 1	0.62	453	0.7	0.6	11	0.7	278	< 0.1	6.1	0.153	0.38	1.3	55	< 0.1	7.0	41	60.4
263304	0.032	39.5	10.0	< 1	0.65	555	1.1	0.7	13	0.6	326	< 0.1	6.7	0.158	0.42	1.6	59	< 0.1	8.1	47	67.3
263305	0.046	42.3	10.7	< 1	0.74	700	0.5	0.5	15	0.3	346	< 0.1	6.4	0.184	0.47	1.8	88	< 0.1	9.4	51	81.6

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas		4.27	32.4	383	> 2000	1100	< 1	1420	0.93	2.4	13	6.4	9	1040	2.8	21.8	0.6	0.04	6.9	11.1	0.055	0.5	38.9
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
GXR-1 Meas		3.93	31.5	393	> 2000	1050	< 1	1370	0.95	2.3	13	6.5	9	1030	2.7	21.7	0.8	0.04	6.9	10.5	0.052	0.5	36.0
GXR-1 Cert		3.52	31.0	427	3300	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	1110	3.00	23.6	0.960	0.050	7.50	8.20	0.0520	0.800	41.0
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas		6.37	3.2	101	300	214	2	18.6	1.03	0.3	100	13.4	39	6620	2.7	2.71	1.0	2.85	53.7	11.1	0.494	8.0	40.3
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
GXR-4 Meas		6.65	3.5	110	500	240	2	18.8	1.05	0.4	105	14.1	40	7060	2.7	3.11	1.0	3.88	57.1	11.4	0.561	8.4	42.1
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
SDC-1 Meas		8.18		2		647	3		1.02		84	17.3	35	35.3	4.2	4.71	0.6	1.73	39.1	35.7	1.53	0.2	36.0
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
SDC-1 Meas		7.73		< 1		597	3		1.02		79	15.5	38	28.4	3.9	4.43	0.8	1.25	37.5	34.0	1.43	1.2	36.0
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
GXR-6 Meas		12.3	0.1	291	< 100	1240	1	0.2	0.17	< 0.1	30	12.6	80	65.8	4.1	5.15	2.4	1.11	11.2	36.1	0.089	3.9	23.9
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
GXR-6 Meas		13.2	0.1	274	< 100	1370	1	0.2	0.18	2.3	33	12.6	52	68.4	4.1	5.47	1.9	1.31	12.5	36.8	0.102	0.6	25.2
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
DNC-1a Meas						100						52.8	153	94.9					3.4	4.4		1.0	274
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
DNC-1a Meas						102						28.8	118	56.5					3.5	4.5		1.5	151
DNC-1a Cert						118						57	270	100					3.6	5.2		3	247
SBC-1 Meas				26		751	3	0.7		0.4	95	20.5	61	27.7	8.2		2.8		46.0	163		11.5	85.9
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SBC-1 Meas				27		791	3	0.7		0.4	99	20.0	87	30.6	7.9		3.1		48.1	162		14.8	88.4
SBC-1 Cert				25.7		788.0	3.20	0.70		0.40	108.0	22.7	109	31.0000	8.2		3.7		52.5	163.0		15.3	82.8
SE68 Meas	584																						
SE68 Cert	599																						
OREAS 45d (4-Acid) Meas		7.42		7		172	< 1	0.3	0.17		33	27.2	463	368	3.8	13.5	1.1	0.37	15.2	21.0	0.082	0.5	244
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
OREAS 45d (4-Acid) Meas		7.70		7		176	< 1	0.3	0.18		34	27.6	488	369	3.8	14.3	1.8	0.37	16.1	19.8	0.089	1.2	240
OREAS 45d (4-Acid) Cert		8.150		13.8		183.0	0.79	0.31	0.185		37.20	29.50	549	371	3.910	14.5	3.830	0.412	16.9	21.5	0.101	14.50	231.0
SdAR-M2 (U.S.G.S.) Meas						930	7	1.1		4.9	88	12.1	39	234	1.7		1.2		41.7	18.5		11.0	51.5
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8

Analyte Symbol	Au	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	ppb	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	5	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Method Code	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SdAR-M2 (U.S.G.S.) Meas						1010	7	1.1		5.2	91	12.2	38	257	1.6		3.2		43.2	19.1		14.0	53.6
SdAR-M2 (U.S.G.S.) Cert						990	6.6	1.05		5.1	98.8	12.4	49.6	236.0000	1.82		7.29		46.6	17.9		26.2	48.8
OREAS 16A (FA-Ancaster) Meas	1770																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263299 Orig	10																						
263299 Dup	12																						
263305 Orig		7.72	< 0.1	36	< 100	403	< 1	0.2	1.96	0.1	46	20.2	68	61.2	7.8	3.85	2.1	1.40	24.2	45.5	1.00	< 0.1	51.3
263305 Dup		7.90	< 0.1	36	< 100	412	< 1	0.2	1.96	< 0.1	46	19.6	72	62.4	7.9	3.93	2.1	1.19	24.4	46.3	1.03	< 0.1	51.8
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	< 1	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	0.1	0.001	< 0.1	< 0.1
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	2	0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	0.1	0.001	< 0.1	< 0.1

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	0.061	2.5	687	< 1	0.28	803	14.1	15.4	1	22.3	260	< 0.1	2.4	0.027	0.32	28.7	75	97.8	23.1	779	26.8
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	0.062	2.4	672	< 1	0.28	817	14.8	30.8	1	25.8	257	< 0.1	2.3	0.026	0.33	27.1	78	118	22.2	754	33.8
GXR-1 Cert	0.0650	14.0	730	0.257	0.217	852	18.0	122	1.58	54.0	275	0.175	2.44	0.036	0.390	34.9	80.0	164	32.0	760	38.0
DH-1a Meas													800			2200					
DH-1a Cert													910			2629					
DH-1a Meas													800			2090					
DH-1a Cert													910			2629					
GXR-4 Meas	0.150	106	47.5	2	1.60	145	294	4.6	8	6.0	208	0.2	16.8	0.269	2.74	4.9	87	24.4	12.1	78	32.5
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	0.157	127	47.9	2	1.80	149	311	4.8	8	6.5	206	0.1	17.7	0.267	2.85	5.1	97	28.7	12.4	80	33.2
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	0.063	70.6	24.2		0.75	842		< 0.1	17	0.1	170	< 0.1	11.9	0.071	0.58	2.5	28	0.7		112	18.0
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	0.063	70.5	22.4		0.72	802		< 0.1	17	0.2	158	< 0.1	11.1	0.145	0.52	2.4	44	< 0.1		104	33.1
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	0.040	53.4	93.5	< 1	0.56	1040	1.7	2.5	26	1.0	35	< 0.1	4.3		1.72	1.3	164	1.6	10.2	137	89.8
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	0.040	53.2	95.3	< 1	0.59	1040	1.1	0.4	29	0.6	39	< 0.1	4.7		1.87	1.3	147	< 0.1	10.8	140	73.4
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110
DNC-1a Meas		2.9	6.1					0.6	33		129			0.282			148		14.0	72	34.5
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
DNC-1a Meas		2.9	5.8					0.8	35		135			0.284			152		14.1	70	37.5
DNC-1a Cert		5	6.3					0.96	31		144			0.29			148		18.0	70	38.0
SBC-1 Meas		94.1	33.7				2.2	1.0	21	2.7	165	0.3	13.4	0.471	0.77	4.8	215	1.5	26.2	202	107
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas		103	33.2				2.7	1.0	22	3.3	169	0.5	14.1	0.479	0.82	5.0	235	1.3	27.8	207	115
SBC-1 Cert		147	35.0				2.40	1.01	20.0	3.3	178.0	1.10	15.8	0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas																					
SE68 Cert																					
OREAS 45d (4-Acid) Meas	0.037	33.4	20.2	< 1	0.21	474	1.1	< 0.1	54	0.6	27	< 0.1	12.9	0.161	0.22	2.4	89	0.6	9.4	49	39.1
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
OREAS 45d (4-Acid) Meas	0.040	33.5	19.8	< 1	0.22	475	1.0	< 0.1	55	0.7	28	< 0.1	13.2	0.264	0.25	2.4	121	0.2	9.7	48	69.7
OREAS 45d (4-Acid) Cert	0.042	42.1	21.8	0.049	0.245	490.000	2.500	0.82	49.30	2.78	31.30	1.02	14.5	0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
SdAR-M2 (U.S.G.S.) Meas		69.2	771				11.0		4		131	0.2	11.7			2.1	24	0.9	21.7	861	60.9
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas		69.6	774				11.8		4		140	0.3	12.3			2.1	27	0.6	22.4	890	109

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.1	0.1	1	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SdAR-M2 (U.S.G.S.) Cert		149	808				13.3		4.1		144	1.8	14.2			2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas																					
OREAS 16A (FA-Ancaster) Cert																					
263299 Orig																					
263299 Dup																					
263305 Orig	0.045	45.6	10.9	< 1	0.72	698	0.4	0.5	15	0.2	339	< 0.1	6.3	0.173	0.46	1.9	85	< 0.1	9.3	52	82.2
263305 Dup	0.046	39.0	10.6	< 1	0.75	702	0.6	0.5	16	0.4	353	< 0.1	6.5	0.195	0.48	1.8	90	< 0.1	9.4	51	81.0
Method Blank																					
Method Blank																					
Method Blank	< 0.001	< 0.1	0.1	< 1	< 0.01	4	0.2	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.1
Method Blank	< 0.001	< 0.1	< 0.1	< 1	< 0.01	6	0.2	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	0.2

Quality Analysis ... *Innovative Technologies*

Date Submitted: 08-Nov-16
Invoice No.: A16-11798
Invoice Date: 23-Nov-16
Your Reference: Core-08-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

29 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11798**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 08-Nov-16
Invoice No.: A16-11798
Invoice Date: 23-Nov-16
Your Reference: Core-08-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

29 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-11798**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246078	< 5	< 0.3	0.10	< 3	63	< 1	< 2	18.4	< 0.3	< 1	12	2	0.07	< 1	< 1	0.03	12.3	9	348	< 1	0.04	1	0.004
246079	< 5	1.1	6.40	< 3	128	< 1	4	5.66	< 0.3	49	103	161	7.55	12	< 1	0.78	2.53	13	1410	< 1	3.17	57	0.027
246080	< 5	0.3	7.38	< 3	142	< 1	3	6.40	< 0.3	49	94	151	8.24	15	< 1	0.66	2.91	14	1780	< 1	2.74	64	0.029
246081	< 5	0.5	7.15	< 3	184	< 1	4	6.83	0.3	50	54	74	8.16	15	< 1	0.72	3.05	12	1750	2	2.40	62	0.031
246082	51	8.1	4.11	< 3	104	< 1	9	4.43	0.4	53	61	161	8.62	10	< 1	0.40	1.54	8	939	31	1.59	44	0.021
246083	5	1.6	6.99	< 3	224	< 1	4	6.40	0.5	49	55	187	8.87	16	< 1	0.60	3.14	9	1700	5	2.84	59	0.032
246084	< 5	0.4	7.36	< 3	155	< 1	3	6.88	< 0.3	46	68	127	8.38	16	< 1	0.60	3.14	8	1610	< 1	3.00	60	0.033
246085	< 5	0.6	7.20	< 3	293	< 1	5	6.78	< 0.3	46	61	91	7.98	14	< 1	0.92	3.31	10	1690	7	2.90	63	0.033
246086	718	0.5	8.09	248	465	< 1	3	4.06	0.5	15	36	53	5.21	16	1	0.85	1.43	7	1000	2	2.61	25	0.049
246087	< 5	0.5	6.38	< 3	186	< 1	4	7.71	< 0.3	45	84	186	8.68	18	< 1	0.56	2.90	9	1730	11	2.25	60	0.032
246088	13	0.8	6.29	< 3	403	< 1	< 2	7.05	< 0.3	44	84	181	6.80	14	< 1	0.80	2.88	6	1590	7	3.08	55	0.028
246089	< 5	< 0.3	7.18	< 3	574	< 1	2	5.74	< 0.3	47	74	137	8.31	14	< 1	0.74	3.31	8	1800	< 1	3.56	61	0.030
246090	< 5	0.5	6.93	< 3	413	< 1	< 2	5.86	< 0.3	49	70	108	8.11	13	< 1	0.74	3.12	7	1670	5	3.65	61	0.030
246091	< 5	0.5	6.91	< 3	242	< 1	< 2	6.96	< 0.3	49	76	122	8.56	14	< 1	0.60	3.23	6	1770	8	3.04	59	0.031
246092	< 5	0.5	7.70	< 3	191	< 1	5	7.05	< 0.3	60	74	160	9.72	18	5	0.56	3.09	9	1730	4	2.65	69	0.032
246093	< 5	0.5	6.81	< 3	186	< 1	3	6.69	< 0.3	46	50	112	8.13	13	< 1	0.50	3.37	5	1670	2	3.22	59	0.031
246094	< 5	< 0.3	6.99	< 3	201	< 1	2	6.51	< 0.3	49	73	152	8.37	12	< 1	0.54	3.36	6	1720	2	3.13	63	0.032
246095	< 5	< 0.3	7.30	3	151	< 1	3	7.59	< 0.3	46	54	112	8.07	16	< 1	0.42	2.98	5	1630	3	3.12	61	0.031
246096	60	7.9	7.08	< 3	176	< 1	9	6.11	0.4	52	66	169	8.90	17	< 1	0.51	3.00	7	1620	3	3.32	59	0.031
246097	125	1.4	5.75	8	259	< 1	3	7.35	< 0.3	43	126	64	6.90	13	1	0.77	2.16	6	1630	18	3.53	50	0.026
246098	< 5	< 0.3	6.61	< 3	191	< 1	4	5.38	< 0.3	44	82	70	8.13	13	< 1	0.53	3.03	6	1650	< 1	3.74	60	0.029
246099	< 5	< 0.3	6.83	4	105	< 1	4	6.65	< 0.3	45	70	145	7.82	14	< 1	0.51	2.80	5	1720	< 1	3.53	58	0.028
246100	< 5	< 0.3	6.89	7	128	< 1	3	6.21	< 0.3	43	53	94	8.08	14	< 1	0.73	2.85	7	1660	< 1	3.74	58	0.028
246101	5	0.4	7.26	< 3	88	< 1	< 2	6.55	< 0.3	50	61	120	8.31	16	< 1	0.69	2.67	6	1650	2	3.21	61	0.031
246102	440	< 0.3	7.56	117	443	< 1	2	3.83	< 0.3	14	66	46	4.77	16	< 1	0.79	1.34	7	940	< 1	2.46	24	0.045
246103	< 5	0.4	6.83	4	87	< 1	3	6.88	< 0.3	45	44	91	7.58	13	< 1	0.63	2.59	5	1590	< 1	3.32	57	0.030
246104	< 5	0.4	7.03	< 3	113	< 1	3	5.80	< 0.3	53	61	85	9.13	16	< 1	1.13	2.57	6	1820	< 1	3.04	61	0.030
246105	5	0.6	6.78	< 3	91	< 1	3	7.55	< 0.3	45	49	112	8.23	14	< 1	0.81	3.13	8	1450	6	2.43	57	0.031
246106	< 5	0.3	6.65	4	83	< 1	< 2	7.23	< 0.3	43	47	122	8.55	13	< 1	0.67	2.82	7	1490	2	2.96	46	0.037

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246078	< 3	< 5	0.02	< 4	131	< 2	< 0.01	7	10	4	< 5	< 1	10	< 5
246079	250	< 5	0.89	37	71	< 2	0.42	< 5	< 10	208	< 5	19	81	62
246080	15	< 5	0.12	43	193	< 2	0.28	< 5	< 10	153	< 5	21	94	42
246081	54	< 5	0.45	40	210	< 2	0.40	< 5	< 10	203	< 5	20	92	49
246082	3050	< 5	4.92	28	156	4	0.33	< 5	< 10	154	< 5	14	55	48
246083	393	< 5	1.12	40	281	6	0.47	< 5	< 10	238	< 5	20	90	62
246084	22	< 5	0.63	41	219	< 2	0.48	< 5	< 10	245	< 5	20	89	64
246085	< 3	< 5	0.25	39	241	6	0.45	< 5	< 10	226	< 5	19	94	62
246086	20	< 5	0.07	22	306	< 2	0.26	< 5	< 10	114	< 5	20	75	25
246087	7	< 5	0.17	35	391	12	0.48	< 5	< 10	252	< 5	18	87	56
246088	123	< 5	0.65	35	237	< 2	0.40	< 5	< 10	200	< 5	16	82	55
246089	30	< 5	0.19	42	249	< 2	0.15	< 5	< 10	127	< 5	21	101	29
246090	11	< 5	0.97	39	201	< 2	0.41	< 5	< 10	209	< 5	18	94	60
246091	10	< 5	0.73	39	236	< 2	0.42	< 5	< 10	212	< 5	19	91	53
246092	3	< 5	1.03	43	296	< 2	0.50	< 5	< 10	251	< 5	20	95	56
246093	< 3	< 5	0.23	39	220	< 2	0.43	< 5	< 10	216	< 5	19	91	55
246094	< 3	< 5	0.33	40	229	< 2	0.49	< 5	< 10	235	< 5	19	92	64
246095	< 3	< 5	0.37	39	251	2	0.48	8	< 10	236	< 5	19	81	60
246096	3420	< 5	1.53	38	240	14	0.48	< 5	< 10	236	< 5	18	89	61
246097	72	< 5	1.77	31	145	< 2	0.38	< 5	< 10	178	< 5	18	73	55
246098	7	< 5	0.22	39	160	< 2	0.32	< 5	< 10	193	< 5	20	90	57
246099	6	< 5	0.25	40	222	< 2	0.17	< 5	< 10	124	< 5	20	87	27
246100	4	< 5	0.14	39	176	< 2	0.17	< 5	< 10	121	< 5	20	93	25
246101	4	< 5	0.39	42	227	< 2	0.45	< 5	< 10	235	< 5	22	90	61
246102	7	< 5	0.05	21	291	< 2	0.19	< 5	< 10	94	< 5	20	57	21
246103	4	< 5	0.42	38	205	< 2	0.45	< 5	< 10	224	< 5	19	86	64
246104	< 3	< 5	0.85	40	151	< 2	0.48	< 5	< 10	270	< 5	21	86	69
246105	< 3	< 5	0.25	38	192	< 2	0.45	< 5	< 10	222	< 5	19	80	64
246106	< 3	< 5	0.33	36	142	< 2	0.43	< 5	< 10	202	< 5	22	76	63

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.2	2.25	419	649	1	1370	0.86	2.9	7	43	1170	23.1	11	7	0.05	0.20	8	864	16	0.06	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		32.2	2.30	427	669	1	1400	0.87	2.5	8	27	1200	23.8	12	4	0.05	0.21	8	894	16	0.06	42	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.8	6.31	100	131	2	25	1.05	< 0.3	16	32	6460	3.10	16	< 1	3.31	1.67	11	171	333	0.51	41	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		4.0	6.27	104	191	2	19	1.06	< 0.3	16	47	6560	3.16	17	< 1	3.73	1.68	11	161	340	0.51	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			7.63	4	595	3		1.08		18	57	31	4.72	22	< 1	1.21	0.99	34	891		1.50	35	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.4	12.6	256	> 1000	1	5	0.17	< 0.3	15	52	84	5.93	29	2	1.23	0.62	35	1070	1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	12.5	310	> 1000	1	6	0.17	< 0.3	17	58	76	6.41	28	7	1.35	0.62	34	1100	1	0.10	28	0.037
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						156	193	335	9.50									6860	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						162	185	347	9.56									7100	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					95					55	233	102		12				5				258	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				18	742	3	4		0.4	23	86	34		26				157		2		88	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	611																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					998	7	< 2		5.2	15	30	254		17	< 1			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	2		5.2	15	34	251		17	< 1			18		13		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
246087 Orig	< 5																						
246087 Dup	< 5																						
246090 Orig		0.6	6.89	4	412	< 1	3	5.82	< 0.3	48	85	107	8.06	13	< 1	0.74	3.10	7	1660	3	3.65	61	0.029
246090 Dup		0.4	6.97	< 3	415	< 1	< 2	5.90	< 0.3	49	55	109	8.17	14	< 1	0.74	3.15	7	1690	8	3.65	61	0.031
246097 Orig	126																						
246097 Dup	124																						
246104 Orig		0.4	7.08	< 3	113	< 1	2	5.81	< 0.3	53	58	85	9.17	16	< 1	1.14	2.57	6	1800	< 1	3.07	60	0.030

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246104 Dup		0.3	6.99	< 3	112	< 1	4	5.79	< 0.3	53	63	84	9.09	16	< 1	1.13	2.56	6	1830	2	3.02	61	0.030
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	2	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		2	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	2	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	720	36	0.25	< 4	285	5	0.03	< 5	30	86	157	34	736	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	736	22	0.25	< 4	289	6	0.03	< 5	30	87	159	35	743	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	47	< 5	1.75	8	210	2	0.29	< 5	< 10	88	38	15	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	47	< 5	1.75	8	215	2	0.28	< 5	< 10	88	34	15	75	41
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	16	< 5		16	169		0.13	< 5	< 10	43	< 5		98	40
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	94	< 5	0.02	26	37	< 2		< 5	< 10	121	< 5	11	128	62
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	90	< 5	0.02	27	35	< 2		6	< 10	127	< 5	11	127	64
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.66											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.73											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	< 3	< 5		32	126		0.28			139		16	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	27	< 5		20	169		0.50	< 5	< 10	211	< 5	29	174	112
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	825			5	149				< 10	25	9	30	777	105
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	835			5	148				< 10	27	9	30	787	124
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
246087 Orig														
246087 Dup														
246090 Orig	11	< 5	0.96	39	201	< 2	0.38	< 5	< 10	201	< 5	18	93	58
246090 Dup	10	< 5	0.98	40	201	< 2	0.44	< 5	< 10	218	< 5	18	94	63
246097 Orig														
246097 Dup														
246104 Orig	< 3	< 5	0.85	40	152	2	0.48	< 5	< 10	269	< 5	21	86	69
246104 Dup	6	< 5	0.84	40	149	< 2	0.48	< 5	< 10	271	< 5	21	86	69

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-Nov-16
Invoice No.: A16-11899
Invoice Date: 23-Nov-16
Your Reference: Core-09-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11899**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 09-Nov-16
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Invoice Date: 23-Nov-16
Your Reference: Core-09-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-11899**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246107	< 5	0.4	6.55	4	108	< 1	3	5.96	0.4	44	76	152	8.29	13	1	0.72	3.25	15	1500	8	2.48	54	0.031
246108	< 5	0.5	6.79	3	83	< 1	2	6.30	< 0.3	45	81	103	8.55	15	1	0.64	3.51	13	1500	< 1	2.46	56	0.030
246109	< 5	0.4	7.05	< 3	76	< 1	6	6.51	< 0.3	44	68	115	8.30	15	< 1	0.55	2.88	10	1620	< 1	3.05	64	0.027
246110	< 5	< 0.3	0.11	< 3	107	< 1	< 2	19.1	< 0.3	< 1	3	4	0.13	< 1	< 1	0.02	12.6	10	337	< 1	0.05	< 1	0.003
246111	< 5	< 0.3	7.11	< 3	63	< 1	3	7.22	< 0.3	46	58	71	7.83	15	< 1	0.44	2.88	7	1650	1	3.31	59	0.030
246112	< 5	0.4	7.20	< 3	94	< 1	2	6.73	< 0.3	46	69	141	8.63	16	< 1	0.63	3.25	10	1790	1	2.85	62	0.031
246113	< 5	0.5	6.82	< 3	84	< 1	< 2	5.99	< 0.3	45	54	124	7.98	14	< 1	0.41	2.77	8	1590	1	3.23	57	0.030
246114	< 5	0.4	7.09	< 3	80	< 1	4	6.19	< 0.3	46	61	83	8.24	14	< 1	0.33	3.11	11	1700	< 1	2.75	58	0.029
246115	< 5	0.5	6.80	8	59	< 1	3	6.48	< 0.3	46	63	109	8.11	13	< 1	0.24	2.97	14	1620	3	2.34	56	0.033
246116	< 5	0.5	7.05	< 3	72	< 1	3	7.03	< 0.3	49	76	106	8.51	15	< 1	0.29	2.97	15	1630	< 1	2.74	61	0.032
246117	< 5	0.4	6.22	4	93	< 1	4	8.12	< 0.3	49	73	110	8.29	14	< 1	0.46	2.69	16	1420	< 1	2.68	60	0.027
246118	685	0.5	8.00	206	452	< 1	7	4.02	0.7	19	27	49	5.08	16	< 1	0.81	1.39	7	959	< 1	2.55	25	0.045
246119	< 5	0.4	6.35	< 3	98	< 1	3	8.21	0.3	43	57	100	7.19	12	< 1	0.59	2.92	13	1390	2	2.62	54	0.027
246120	48	0.6	4.65	< 3	237	< 1	< 2	7.74	< 0.3	37	46	61	6.01	10	< 1	0.51	2.01	8	1110	3	2.32	44	0.051
246121	38	0.4	6.41	< 3	164	< 1	3	9.34	< 0.3	38	44	145	7.94	19	< 1	2.15	2.52	16	1370	< 1	1.30	49	0.033
246122	11	< 0.3	6.43	< 3	137	< 1	< 2	7.16	< 0.3	42	48	74	7.64	15	< 1	1.00	2.88	18	1230	4	1.39	56	0.027
246123	146	< 0.3	6.43	< 3	65	< 1	2	7.75	< 0.3	45	52	96	8.07	15	1	0.87	3.28	15	1290	6	1.97	51	0.029
246124	< 5	0.3	7.19	< 3	113	< 1	2	6.47	< 0.3	48	54	109	8.51	15	< 1	0.73	3.30	10	1560	5	2.91	62	0.032
246125	< 5	0.4	7.82	4	90	< 1	4	6.59	< 0.3	48	72	120	8.64	19	< 1	0.42	2.56	7	1610	< 1	3.28	62	0.031
246126	< 5	0.3	6.90	< 3	131	< 1	5	6.18	< 0.3	56	93	123	9.17	18	< 1	0.47	2.32	8	1700	< 1	3.03	63	0.032
246127	< 5	0.3	7.34	< 3	181	< 1	4	6.13	< 0.3	50	97	117	8.86	16	< 1	0.48	2.30	5	1590	< 1	3.67	64	0.031
246128	< 5	0.3	7.37	< 3	102	< 1	2	7.20	< 0.3	47	82	122	8.88	18	2	0.46	2.55	5	1650	< 1	3.10	63	0.031
246129	< 5	< 0.3	6.85	< 3	53	< 1	4	7.41	< 0.3	45	56	58	8.30	13	< 1	0.29	2.68	3	1660	< 1	3.41	58	0.028
246130	< 5	< 0.3	7.39	< 3	41	< 1	< 2	8.29	< 0.3	46	49	52	7.85	16	< 1	0.28	2.48	4	1570	< 1	3.16	60	0.030
246131	< 5	0.4	7.23	< 3	44	< 1	4	8.31	< 0.3	48	48	107	8.56	16	< 1	0.30	2.70	4	1660	< 1	2.80	61	0.031
246132	< 5	0.6	7.06	< 3	81	< 1	5	7.30	< 0.3	46	50	93	8.73	15	< 1	0.58	3.01	6	1710	< 1	2.95	56	0.033
246133	< 5	0.5	7.43	< 3	109	< 1	3	7.18	0.3	47	54	160	9.17	15	< 1	0.78	3.47	7	1650	2	2.62	57	0.035
246134	367	0.6	7.87	128	453	< 1	< 2	3.91	< 0.3	15	37	54	4.85	14	< 1	0.78	1.38	8	956	3	2.50	29	0.048
246135	< 5	0.5	7.20	3	71	< 1	4	7.89	< 0.3	47	62	109	8.78	15	< 1	0.52	2.98	4	1710	< 1	2.99	57	0.034
246136	< 5	0.5	6.61	6	79	< 1	3	6.36	< 0.3	45	75	86	8.14	13	1	0.57	2.78	4	1670	1	3.36	55	0.031
246137	< 5	0.3	6.88	< 3	67	< 1	4	6.11	< 0.3	45	78	109	8.05	13	< 1	0.46	2.91	4	1660	< 1	3.48	59	0.028
246138	< 5	< 0.3	6.87	< 3	63	< 1	4	6.04	< 0.3	46	80	122	7.70	13	< 1	0.41	2.90	4	1610	< 1	3.74	60	0.029
246139	< 5	0.7	7.19	4	74	< 1	5	6.56	< 0.3	46	56	112	8.30	16	1	0.61	2.81	6	1690	< 1	3.42	60	0.029
246140	< 5	0.5	7.20	4	82	< 1	2	6.38	< 0.3	46	51	103	7.74	14	< 1	0.70	2.84	7	1620	< 1	3.42	60	0.032
246141	< 5	0.3	7.12	4	49	< 1	2	8.29	< 0.3	45	44	84	8.26	15	< 1	0.49	3.26	4	1660	5	2.54	60	0.030
246142	< 5	< 0.3	0.10	< 3	34	< 1	< 2	18.2	< 0.3	< 1	18	24	0.11	< 1	1	0.02	12.5	7	342	< 1	0.05	< 1	0.004
246143	< 5	0.4	7.18	< 3	73	< 1	2	7.70	< 0.3	52	57	100	8.74	15	< 1	0.64	3.09	5	1730	< 1	2.75	60	0.034
246144	< 5	0.3	6.92	< 3	92	< 1	7	6.14	< 0.3	47	52	140	8.11	13	< 1	0.74	3.04	4	1790	1	3.60	57	0.032
246145	< 5	0.4	7.12	< 3	60	< 1	4	7.32	< 0.3	48	57	118	8.62	16	< 1	0.57	2.90	5	1790	3	3.32	57	0.033
246146	< 5	0.4	6.88	4	78	< 1	< 2	6.77	< 0.3	46	77	140	8.35	14	< 1	0.74	2.86	5	1680	1	3.38	70	0.031
246147	< 5	0.4	7.03	< 3	71	< 1	3	7.01	< 0.3	48	67	108	8.25	14	< 1	0.68	2.98	6	1750	< 1	3.35	63	0.030
246148	< 5	0.4	7.26	< 3	85	< 1	4	5.89	< 0.3	47	58	101	8.69	15	< 1	0.68	3.06	6	1780	< 1	3.56	63	0.031

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246149	< 5	0.5	7.23	< 3	90	< 1	5	5.68	< 0.3	49	58	104	8.75	15	< 1	0.72	3.09	6	1800	1	3.67	62	0.033
246150	887	0.6	8.08	232	457	< 1	3	4.03	< 0.3	15	25	51	5.12	15	< 1	0.80	1.40	7	988	2	2.60	25	0.047

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246107	< 3	< 5	0.09	37	103	2	0.46	< 5	< 10	209	< 5	19	87	67
246108	< 3	< 5	0.25	39	122	< 2	0.27	< 5	< 10	180	< 5	20	86	49
246109	8	< 5	0.20	40	127	< 2	0.17	< 5	< 10	146	< 5	21	86	29
246110	< 3	< 5	< 0.01	< 4	170	< 2	< 0.01	< 5	10	5	< 5	< 1	9	< 5
246111	< 3	< 5	0.27	39	142	< 2	0.42	< 5	< 10	219	< 5	20	82	58
246112	< 3	< 5	0.06	41	146	< 2	0.45	9	< 10	235	< 5	20	89	64
246113	14	< 5	0.41	38	156	< 2	0.46	< 5	< 10	228	< 5	20	83	67
246114	< 3	< 5	0.07	39	168	< 2	0.40	< 5	< 10	224	< 5	20	92	61
246115	4	< 5	0.50	38	150	4	0.46	< 5	< 10	229	< 5	20	82	63
246116	< 3	< 5	0.76	38	153	< 2	0.48	< 5	< 10	240	< 5	20	86	63
246117	5	< 5	2.22	34	101	< 2	0.34	< 5	< 10	195	< 5	18	79	53
246118	22	< 5	0.07	22	305	< 2	0.13	< 5	< 10	83	6	20	70	16
246119	10	< 5	0.45	36	119	< 2	0.39	< 5	< 10	194	< 5	17	88	55
246120	18	< 5	2.34	30	131	6	0.32	< 5	< 10	150	10	12	62	45
246121	< 3	< 5	1.65	32	137	< 2	0.35	< 5	< 10	274	< 5	12	87	51
246122	< 3	< 5	0.24	37	86	< 2	0.31	< 5	< 10	169	< 5	13	84	46
246123	< 3	< 5	0.52	36	105	2	0.44	< 5	< 10	220	6	14	75	63
246124	< 3	< 5	0.15	40	91	< 2	0.47	< 5	< 10	233	< 5	20	80	67
246125	< 3	< 5	0.44	41	112	< 2	0.51	< 5	< 10	272	< 5	21	77	63
246126	5	< 5	0.88	40	114	< 2	0.49	< 5	< 10	274	< 5	21	79	62
246127	6	< 5	0.68	41	119	< 2	0.42	< 5	< 10	221	< 5	23	75	60
246128	< 3	< 5	0.19	42	112	< 2	0.41	< 5	< 10	223	< 5	21	79	51
246129	< 3	< 5	0.31	38	101	< 2	0.30	< 5	< 10	158	< 5	19	85	39
246130	< 3	< 5	0.37	40	160	< 2	0.39	< 5	< 10	212	< 5	20	76	44
246131	4	< 5	0.19	40	142	< 2	0.42	9	< 10	218	< 5	21	82	50
246132	< 3	< 5	0.21	39	130	< 2	0.49	< 5	< 10	241	< 5	21	87	67
246133	< 3	< 5	0.18	40	165	< 2	0.50	< 5	< 10	237	< 5	21	91	66
246134	7	< 5	0.05	21	298	< 2	0.24	< 5	< 10	102	< 5	20	61	26
246135	< 3	< 5	0.24	38	156	< 2	0.49	< 5	< 10	247	< 5	21	82	64
246136	< 3	< 5	0.17	38	116	< 2	0.46	< 5	< 10	229	< 5	19	78	67
246137	< 3	< 5	0.20	39	109	< 2	0.17	< 5	< 10	150	< 5	20	82	32
246138	3	< 5	0.26	40	109	< 2	0.24	< 5	< 10	143	< 5	19	90	37
246139	< 3	< 5	0.24	40	173	< 2	0.38	< 5	< 10	218	< 5	20	82	54
246140	< 3	< 5	0.64	39	124	< 2	0.47	< 5	< 10	240	< 5	20	79	65
246141	4	< 5	0.19	38	175	< 2	0.35	< 5	< 10	194	< 5	19	80	44
246142	< 3	< 5	0.01	< 4	129	< 2	< 0.01	< 5	10	5	< 5	< 1	9	< 5
246143	< 3	< 5	0.60	41	186	< 2	0.51	< 5	< 10	243	< 5	21	82	65
246144	5	< 5	0.55	38	122	8	0.47	< 5	< 10	231	< 5	19	81	67
246145	< 3	< 5	0.16	38	163	< 2	0.49	< 5	< 10	250	< 5	20	84	65
246146	< 3	< 5	0.28	39	148	< 2	0.39	< 5	< 10	201	< 5	20	85	53
246147	< 3	< 5	0.31	40	134	< 2	0.29	< 5	< 10	161	< 5	20	86	42
246148	< 3	< 5	0.70	40	132	< 2	0.45	< 5	< 10	230	< 5	20	89	67

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246149	5	< 5	0.71	40	121	< 2	0.48	< 5	< 10	239	< 5	20	90	69
246150	19	< 5	0.07	22	306	< 2	0.20	< 5	< 10	97	< 5	20	74	21

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.2	2.25	419	649	1	1370	0.86	2.9	7	43	1170	23.1	11	7	0.05	0.20	8	864	16	0.06	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		32.2	2.30	427	669	1	1400	0.87	2.5	8	27	1200	23.8	12	4	0.05	0.21	8	894	16	0.06	42	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.8	6.31	100	131	2	25	1.05	< 0.3	16	32	6460	3.10	16	< 1	3.31	1.67	11	171	333	0.51	41	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		4.0	6.27	104	191	2	19	1.06	< 0.3	16	47	6560	3.16	17	< 1	3.73	1.68	11	161	340	0.51	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			7.63	4	595	3		1.08		18	57	31	4.72	22	< 1	1.21	0.99	34	891		1.50	35	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.4	12.6	256	> 1000	1	5	0.17	< 0.3	15	52	84	5.93	29	2	1.23	0.62	35	1070	1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	12.5	310	> 1000	1	6	0.17	< 0.3	17	58	76	6.41	28	7	1.35	0.62	34	1100	1	0.10	28	0.037
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						156	193	335	9.50									6860	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						162	185	347	9.56									7100	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					95					55	233	102		12				5				258	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				18	742	3	4		0.4	23	86	34		26				157		2		88	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	595																						
SE68 Cert	599																						
SE68 Meas	613																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					998	7	< 2		5.2	15	30	254		17	< 1			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	2		5.2	15	34	251		17	< 1			18		13		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
246116 Orig	< 5																						
246116 Dup	< 5																						
246126 Orig	< 5																						
246126 Dup	< 5																						
246129 Orig		0.4	6.78	3	53	< 1	4	7.41	< 0.3	44	59	60	8.28	12	< 1	0.29	2.66	3	1660	< 1	3.38	58	0.028

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246129 Dup		< 0.3	6.92	< 3	53	< 1	4	7.41	< 0.3	46	52	55	8.31	13	< 1	0.29	2.69	3	1670	< 1	3.44	58	0.029
246136 Orig	< 5																						
246136 Dup	< 5																						
246143 Orig		0.3	7.17	< 3	72	< 1	3	7.72	< 0.3	52	55	91	8.64	16	< 1	0.63	3.09	5	1720	< 1	2.74	60	0.033
246143 Dup		0.4	7.18	3	73	< 1	2	7.69	< 0.3	51	58	109	8.84	15	< 1	0.65	3.10	5	1730	< 1	2.76	61	0.034
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	2	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		2	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	2	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	720	36	0.25	< 4	285	5	0.03	< 5	30	86	157	34	736	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	736	22	0.25	< 4	289	6	0.03	< 5	30	87	159	35	743	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	47	< 5	1.75	8	210	2	0.29	< 5	< 10	88	38	15	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	47	< 5	1.75	8	215	2	0.28	< 5	< 10	88	34	15	75	41
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	16	< 5		16	169		0.13	< 5	< 10	43	< 5		98	40
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	94	< 5	0.02	26	37	< 2		< 5	< 10	121	< 5	11	128	62
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	90	< 5	0.02	27	35	< 2		6	< 10	127	< 5	11	127	64
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.66											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.73											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	< 3	< 5		32	126		0.28			139		16	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	27	< 5		20	169		0.50	< 5	< 10	211	< 5	29	174	112
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	825			5	149				< 10	25	9	30	777	105
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	835			5	148				< 10	27	9	30	787	124
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
246116 Orig														
246116 Dup														
246126 Orig														
246126 Dup														
246129 Orig	4	< 5	0.31	38	100	< 2	0.26	< 5	< 10	140	< 5	19	85	33
246129 Dup	< 3	< 5	0.31	38	101	< 2	0.34	< 5	< 10	176	< 5	19	85	45

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246136 Orig														
246136 Dup														
246143 Orig	4	< 5	0.60	41	185	< 2	0.51	< 5	< 10	241	< 5	20	82	64
246143 Dup	< 3	< 5	0.61	41	187	< 2	0.51	< 5	< 10	244	< 5	21	82	66
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-Nov-16
Invoice No.: A16-11907
Invoice Date: 23-Nov-16
Your Reference: Core-09-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

54 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11907**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 09-Nov-16
Invoice No.: A16-11907
Invoice Date: 23-Nov-16
Your Reference: Core-09-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

54 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-11907**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263306	< 5	0.6	7.32	5	97	< 1	3	7.18	< 0.3	48	57	82	8.74	14	< 1	0.75	3.28	6	1730	1	3.06	61	0.033
263307	< 5	0.4	7.34	< 3	68	< 1	< 2	7.71	< 0.3	47	57	85	8.99	17	< 1	0.46	3.54	6	1770	3	2.82	63	0.033
263308	< 5	0.6	7.46	< 3	92	< 1	< 2	8.06	< 0.3	47	57	121	8.85	15	< 1	0.50	3.39	5	1710	5	2.84	60	0.034
263309	748	0.5	8.36	268	475	< 1	2	4.16	0.3	15	49	52	5.42	15	< 1	0.86	1.46	8	1030	3	2.69	25	0.050
263310	< 5	1.2	7.10	< 3	76	< 1	5	7.11	< 0.3	47	81	92	8.07	16	< 1	0.63	2.99	5	1570	3	2.79	58	0.031
263311	< 5	0.3	6.98	3	66	< 1	< 2	7.29	0.3	45	82	101	7.92	14	< 1	0.58	2.94	5	1590	< 1	2.81	59	0.030
263312	< 5	0.5	7.12	< 3	46	< 1	< 2	8.18	< 0.3	45	94	124	8.31	15	< 1	0.38	2.97	3	1680	2	2.77	61	0.030
263313	< 5	< 0.3	7.39	< 3	89	< 1	2	6.72	< 0.3	48	90	103	8.23	14	< 1	0.72	2.89	6	1580	2	3.27	64	0.029
263314	< 5	0.4	7.19	< 3	65	< 1	< 2	7.58	< 0.3	46	145	80	8.28	15	< 1	0.57	2.82	5	1610	3	2.95	60	0.030
263315	< 5	0.7	7.46	< 3	69	< 1	4	8.88	< 0.3	58	92	121	9.08	17	< 1	0.68	2.60	5	1550	6	2.32	65	0.029
263316	< 5	< 0.3	0.14	< 3	56	< 1	< 2	18.1	< 0.3	2	3	3	0.11	< 1	< 1	0.02	12.8	11	367	< 1	0.05	< 1	0.006
263317	< 5	< 0.3	7.39	< 3	74	< 1	3	6.91	< 0.3	46	132	137	8.52	15	< 1	0.70	3.10	6	1630	5	3.06	61	0.031
263318	< 5	0.4	7.21	< 3	82	< 1	3	7.24	< 0.3	50	57	126	8.75	15	1	0.58	3.39	6	1660	4	2.86	60	0.032
263319	< 5	0.4	7.33	4	79	< 1	4	7.31	< 0.3	47	61	94	8.67	15	< 1	0.68	3.29	5	1600	4	2.82	60	0.031
263320	< 5	0.4	6.74	< 3	62	< 1	2	7.08	< 0.3	46	118	116	7.76	13	< 1	0.43	3.29	4	1520	8	2.91	57	0.030
263321	< 5	0.5	6.84	4	111	< 1	< 2	5.94	< 0.3	46	73	93	9.34	14	< 1	1.23	3.21	6	1730	< 1	2.71	60	0.031
263322	< 5	< 0.3	6.91	< 3	79	< 1	7	8.98	< 0.3	44	67	94	8.17	15	< 1	0.75	3.20	4	1610	5	2.41	57	0.030
263323	688	0.3	7.98	125	459	< 1	3	3.97	< 0.3	14	64	47	4.95	15	< 1	0.80	1.39	8	950	1	2.54	25	0.047
263324	< 5	0.5	7.05	< 3	72	< 1	4	7.65	< 0.3	47	46	111	8.58	14	< 1	0.61	3.54	5	1590	6	2.68	61	0.030
263325	< 5	< 0.3	7.00	< 3	81	< 1	3	6.99	0.3	47	48	84	8.59	15	6	0.67	3.39	7	1700	3	2.96	60	0.031
263326	< 5	0.4	7.07	3	92	< 1	3	7.06	< 0.3	48	92	144	9.15	15	< 1	0.74	3.34	6	1640	6	2.85	60	0.031
263327	< 5	0.5	7.15	< 3	78	< 1	< 2	7.45	< 0.3	47	89	111	8.75	15	< 1	0.64	3.32	6	1650	6	2.97	59	0.030
263328	< 5	0.4	7.04	< 3	76	< 1	3	7.46	< 0.3	50	58	122	9.24	15	< 1	0.66	3.40	7	1680	4	2.82	61	0.030
263329	< 5	< 0.3	7.37	3	87	< 1	4	6.63	< 0.3	48	60	94	8.50	15	< 1	0.78	3.40	6	1620	4	3.01	59	0.033
263330	< 5	0.3	6.91	< 3	79	< 1	< 2	6.31	< 0.3	45	84	85	8.05	13	< 1	0.73	3.23	6	1560	3	2.87	57	0.032
263331	< 5	0.4	6.96	< 3	75	< 1	2	7.90	< 0.3	48	79	88	8.61	15	< 1	0.70	3.43	5	1660	6	2.43	59	0.030
263332	< 5	0.4	6.90	7	92	< 1	< 2	7.28	< 0.3	45	64	89	8.48	14	< 1	0.80	3.41	7	1750	4	2.78	57	0.031
263333	< 5	0.6	7.68	< 3	82	< 1	5	7.34	< 0.3	56	143	124	10.3	17	< 1	0.67	3.36	9	1810	5	2.53	67	0.034
263334	< 5	0.5	7.37	4	74	< 1	2	7.76	< 0.3	46	58	106	8.59	16	< 1	0.73	3.23	6	1640	5	2.69	60	0.032
263335	< 5	0.4	7.13	< 3	74	< 1	< 2	6.78	< 0.3	45	93	142	8.39	14	< 1	0.64	3.23	5	1580	3	3.10	59	0.030
263336	< 5	0.4	7.29	< 3	58	< 1	4	7.44	< 0.3	49	57	126	8.88	15	< 1	0.51	3.19	6	1670	10	2.87	61	0.032
263337	651	0.4	7.91	253	448	< 1	4	3.98	< 0.3	15	29	59	5.02	16	< 1	0.81	1.38	7	965	3	2.52	25	0.048
263338	< 5	0.5	7.26	< 3	63	< 1	< 2	7.94	< 0.3	46	49	92	8.51	16	< 1	0.56	3.42	5	1680	7	2.73	59	0.032
263339	< 5	0.3	6.97	4	63	< 1	4	8.21	< 0.3	45	59	90	8.14	14	< 1	0.59	3.30	5	1620	4	2.86	58	0.030
263340	< 5	0.4	7.06	5	72	< 1	2	7.13	< 0.3	45	98	120	8.10	15	< 1	0.67	3.24	6	1530	13	3.17	56	0.030
263341	< 5	0.4	7.23	< 3	108	< 1	2	6.11	< 0.3	47	71	117	8.57	14	2	0.84	3.54	8	1600	5	3.34	58	0.033
263342	< 5	0.3	6.85	4	90	< 1	3	6.13	< 0.3	48	63	74	8.41	14	< 1	0.77	3.32	7	1550	4	3.40	60	0.030
263343	< 5	0.4	6.73	< 3	68	< 1	< 2	5.23	< 0.3	47	56	38	9.08	13	1	0.73	3.31	8	1640	< 1	3.75	60	0.030
263344	< 5	< 0.3	0.12	< 3	40	< 1	< 2	18.7	< 0.3	< 1	11	2	0.11	< 1	< 1	0.04	12.6	8	404	< 1	0.08	< 1	0.004
263345	5	0.6	7.55	< 3	112	< 1	6	3.90	< 0.3	55	59	118	8.65	15	< 1	1.18	2.80	10	1410	5	4.00	63	0.035
263346	5	0.4	7.16	7	91	< 1	2	4.38	< 0.3	46	60	78	8.23	17	< 1	0.79	2.80	8	1390	< 1	4.10	59	0.032
263347	< 5	0.3	6.96	< 3	79	< 1	< 2	6.37	< 0.3	44	82	84	8.24	15	< 1	0.98	3.29	8	1560	< 1	3.21	56	0.031

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263348	< 5	0.4	7.08	7	58	< 1	4	6.84	< 0.3	53	69	161	9.05	16	< 1	0.57	3.55	10	1650	5	2.80	63	0.032
263349	< 5	0.3	7.06	< 3	80	< 1	2	6.28	0.3	45	81	92	8.37	13	1	0.77	3.19	10	1690	9	2.93	59	0.032
263350	< 5	0.4	6.72	< 3	69	< 1	3	7.64	< 0.3	44	73	122	8.19	15	1	0.66	3.54	10	1640	3	2.59	56	0.029
263351	< 5	< 0.3	6.96	< 3	93	< 1	3	7.09	< 0.3	47	73	115	8.37	15	< 1	0.90	3.42	9	1580	5	2.65	59	0.030
263352	370	< 0.3	7.74	120	453	< 1	4	3.91	< 0.3	15	31	49	4.81	14	< 1	0.78	1.36	7	936	< 1	2.48	25	0.045
263353	< 5	0.3	7.14	3	87	< 1	3	6.65	< 0.3	44	47	151	8.65	14	< 1	0.77	3.35	9	1580	1	3.28	61	0.032
263354	< 5	0.5	6.95	5	84	< 1	4	5.41	< 0.3	55	62	223	9.68	16	10	0.79	3.32	10	1570	< 1	3.24	61	0.031
263355	< 5	0.4	6.90	< 3	93	< 1	4	7.25	< 0.3	45	45	125	8.24	15	< 1	0.92	3.47	8	1620	11	2.94	61	0.031
263356	< 5	0.4	6.98	< 3	115	< 1	5	5.90	< 0.3	50	98	78	9.02	15	< 1	1.08	3.48	9	1710	3	2.99	61	0.033
263357	< 5	< 0.3	7.01	< 3	81	< 1	6	7.27	< 0.3	45	56	105	8.37	15	< 1	0.77	3.01	6	1610	2	3.13	60	0.033
263358	< 5	0.4	6.87	< 3	103	< 1	4	6.03	< 0.3	43	55	86	8.27	14	< 1	0.90	3.10	8	1590	< 1	3.49	57	0.032
263359	< 5	0.4	6.34	< 3	98	< 1	3	5.73	< 0.3	45	73	106	8.11	12	< 1	0.85	2.98	8	1560	< 1	3.40	53	0.032

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263306	< 3	< 5	0.47	40	148	< 2	0.49	< 5	< 10	242	< 5	20	84	66
263307	< 3	< 5	0.28	40	170	3	0.47	< 5	< 10	237	< 5	19	86	61
263308	< 3	< 5	0.18	41	207	< 2	0.47	< 5	10	231	< 5	20	83	59
263309	19	< 5	0.07	22	316	< 2	0.31	< 5	< 10	129	< 5	19	73	26
263310	< 3	< 5	0.44	39	160	< 2	0.46	< 5	< 10	228	< 5	19	77	64
263311	5	< 5	0.45	40	154	< 2	0.39	6	< 10	187	< 5	20	75	51
263312	3	< 5	0.19	40	187	< 2	0.26	< 5	< 10	156	< 5	20	82	38
263313	< 3	< 5	0.25	42	181	< 2	0.38	< 5	< 10	200	< 5	21	84	56
263314	< 3	< 5	0.22	39	188	< 2	0.42	< 5	< 10	219	< 5	20	80	54
263315	< 3	< 5	1.09	41	280	< 2	0.42	< 5	< 10	235	< 5	20	71	52
263316	< 3	< 5	0.01	< 4	153	< 2	< 0.01	8	10	4	< 5	< 1	13	< 5
263317	4	< 5	0.45	40	189	< 2	0.48	< 5	< 10	242	< 5	19	79	64
263318	< 3	< 5	0.63	39	175	< 2	0.48	< 5	< 10	239	< 5	20	83	64
263319	< 3	< 5	0.71	39	173	3	0.48	< 5	< 10	240	< 5	19	80	63
263320	< 3	< 5	0.29	38	148	2	0.46	< 5	< 10	224	< 5	18	78	64
263321	4	< 5	0.85	38	155	< 2	0.40	< 5	< 10	229	< 5	23	82	62
263322	< 3	< 5	0.33	39	215	< 2	0.38	< 5	10	198	< 5	19	77	47
263323	9	< 5	0.05	22	307	3	0.20	< 5	< 10	98	< 5	20	60	19
263324	< 3	< 5	0.33	40	184	< 2	0.39	< 5	< 10	201	< 5	21	84	54
263325	3	< 5	0.20	39	179	< 2	0.40	< 5	< 10	207	< 5	20	84	56
263326	< 3	< 5	0.87	39	189	< 2	0.47	< 5	< 10	239	< 5	20	80	64
263327	< 3	< 5	0.35	39	193	< 2	0.46	< 5	< 10	235	< 5	19	78	60
263328	< 3	< 5	0.90	36	161	< 2	0.48	< 5	< 10	248	< 5	18	91	58
263329	< 3	< 5	0.43	40	157	< 2	0.49	< 5	10	246	< 5	19	82	65
263330	< 3	< 5	0.41	40	147	< 2	0.46	< 5	< 10	233	< 5	19	77	65
263331	< 3	< 5	0.36	40	171	< 2	0.41	< 5	< 10	217	< 5	20	77	53
263332	5	< 5	0.48	39	182	< 2	0.44	< 5	< 10	223	< 5	20	81	59
263333	< 3	< 5	0.74	44	255	< 2	0.54	< 5	< 10	271	< 5	23	92	68
263334	109	< 5	0.61	40	223	< 2	0.48	< 5	< 10	250	< 5	20	82	63
263335	< 3	< 5	0.65	39	214	11	0.47	< 5	< 10	232	< 5	19	81	64
263336	< 3	< 5	0.40	41	247	< 2	0.45	< 5	< 10	224	< 5	21	83	55
263337	17	< 5	0.08	21	303	< 2	0.28	< 5	< 10	121	< 5	19	70	25
263338	3	< 5	0.38	39	224	< 2	0.47	< 5	< 10	244	< 5	19	81	61
263339	6	< 5	0.41	38	235	< 2	0.45	< 5	< 10	234	< 5	19	77	59
263340	< 3	< 5	0.34	37	214	< 2	0.45	< 5	< 10	221	< 5	19	78	61
263341	< 3	< 5	0.29	40	212	4	0.49	< 5	< 10	235	< 5	20	103	63
263342	< 3	< 5	0.49	39	157	< 2	0.45	< 5	< 10	228	< 5	20	86	64
263343	< 3	< 5	0.36	40	93	< 2	0.44	< 5	< 10	232	< 5	21	85	65
263344	< 3	< 5	< 0.01	< 4	117	< 2	< 0.01	< 5	10	4	< 5	< 1	11	< 5
263345	11	< 5	1.42	41	96	< 2	0.50	< 5	< 10	235	< 5	20	95	73
263346	< 3	< 5	1.02	38	99	< 2	0.46	< 5	< 10	251	< 5	19	97	69
263347	< 3	< 5	0.18	39	168	< 2	0.44	< 5	< 10	230	< 5	20	77	59

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263348	< 3	< 5	0.46	40	223	< 2	0.48	< 5	< 10	243	< 5	20	90	65
263349	< 3	< 5	0.12	39	206	2	0.45	< 5	< 10	227	< 5	20	84	62
263350	< 3	< 5	0.14	38	213	< 2	0.37	< 5	< 10	206	< 5	19	90	53
263351	< 3	< 5	0.19	39	219	< 2	0.42	< 5	< 10	218	< 5	19	84	55
263352	9	< 5	0.05	21	302	< 2	0.16	< 5	< 10	81	< 5	20	60	19
263353	29	< 5	0.18	39	190	< 2	0.47	< 5	< 10	232	< 5	19	92	63
263354	6	< 5	0.61	41	152	< 2	0.50	< 5	< 10	254	< 5	21	97	68
263355	6	< 5	0.24	37	180	< 2	0.44	< 5	< 10	228	< 5	19	87	58
263356	< 3	< 5	0.52	39	152	< 2	0.48	< 5	< 10	251	< 5	20	88	67
263357	4	< 5	0.16	39	173	3	0.48	< 5	< 10	239	< 5	19	83	60
263358	< 3	< 5	0.36	38	124	3	0.45	< 5	< 10	230	< 5	19	80	63
263359	< 3	< 5	0.43	36	115	< 2	0.46	< 5	< 10	227	< 5	19	76	65

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.2	2.25	419	649	1	1370	0.86	2.9	7	43	1170	23.1	11	7	0.05	0.20	8	864	16	0.06	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		32.2	2.30	427	669	1	1400	0.87	2.5	8	27	1200	23.8	12	4	0.05	0.21	8	894	16	0.06	42	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.8	6.31	100	131	2	25	1.05	< 0.3	16	32	6460	3.10	16	< 1	3.31	1.67	11	171	333	0.51	41	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		4.0	6.27	104	191	2	19	1.06	< 0.3	16	47	6560	3.16	17	< 1	3.73	1.68	11	161	340	0.51	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			7.63	4	595	3		1.08		18	57	31	4.72	22	< 1	1.21	0.99	34	891		1.50	35	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.4	12.6	256	> 1000	1	5	0.17	< 0.3	15	52	84	5.93	29	2	1.23	0.62	35	1070	1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	12.5	310	> 1000	1	6	0.17	< 0.3	17	58	76	6.41	28	7	1.35	0.62	34	1100	1	0.10	28	0.037
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						156	193	335	9.50									6860	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						162	185	347	9.56									7100	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					95					55	233	102		12				5				258	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				18	742	3	4		0.4	23	86	34		26				157		2		88	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	611																						
SE68 Cert	599																						
SE68 Meas	612																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					998	7	< 2		5.2	15	30	254		17	< 1			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	2		5.2	15	34	251		17	< 1			18		13		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
263313 Orig		0.3	7.38	< 3	89	< 1	2	6.71	< 0.3	48	54	103	8.25	14	< 1	0.72	2.89	6	1590	1	3.26	63	0.030
263313 Dup		< 0.3	7.40	< 3	89	< 1	2	6.74	< 0.3	47	125	102	8.20	14	< 1	0.71	2.89	6	1570	2	3.27	64	0.029
263315 Orig	< 5																						
263315 Dup	< 5																						
263325 Orig	< 5																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263325 Dup	< 5																						
263327 Orig		0.4	7.20	< 3	78	< 1	< 2	7.46	< 0.3	47	69	112	8.79	15	1	0.64	3.32	6	1640	6	2.97	59	0.031
263327 Dup		0.6	7.09	< 3	78	< 1	< 2	7.44	< 0.3	48	109	110	8.71	15	< 1	0.64	3.32	6	1650	7	2.98	59	0.030
263335 Orig	< 5																						
263335 Dup	< 5																						
263350 Orig	< 5																						
263350 Dup	< 5																						
263352 Orig		< 0.3	7.79	120	455	< 1	3	3.93	< 0.3	14	33	48	4.85	14	< 1	0.79	1.37	7	925	< 1	2.49	25	0.046
263352 Dup		< 0.3	7.69	120	451	< 1	6	3.89	0.6	16	30	49	4.77	14	5	0.78	1.35	7	948	1	2.46	24	0.045
263355 Split Orig PREP DUP	< 5																						
263355 Split PREP DUP	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	2	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		2	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	2	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	720	36	0.25	< 4	285	5	0.03	< 5	30	86	157	34	736	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	736	22	0.25	< 4	289	6	0.03	< 5	30	87	159	35	743	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	47	< 5	1.75	8	210	2	0.29	< 5	< 10	88	38	15	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	47	< 5	1.75	8	215	2	0.28	< 5	< 10	88	34	15	75	41
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	16	< 5		16	169		0.13	< 5	< 10	43	< 5		98	40
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	94	< 5	0.02	26	37	< 2		< 5	< 10	121	< 5	11	128	62
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	90	< 5	0.02	27	35	< 2		6	< 10	127	< 5	11	127	64
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.66											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.73											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	< 3	< 5		32	126		0.28			139		16	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	27	< 5		20	169		0.50	< 5	< 10	211	< 5	29	174	112
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	825			5	149				< 10	25	9	30	777	105
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	835			5	148				< 10	27	9	30	787	124
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
263313 Orig	< 3	< 5	0.26	42	181	< 2	0.38	< 5	< 10	196	< 5	21	83	56
263313 Dup	< 3	< 5	0.25	42	182	< 2	0.38	< 5	< 10	203	< 5	21	85	56
263315 Orig														
263315 Dup														
263325 Orig														
263325 Dup														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263327 Orig	< 3	< 5	0.35	39	194	2	0.45	< 5	< 10	231	< 5	19	77	58
263327 Dup	< 3	< 5	0.35	39	192	< 2	0.47	< 5	< 10	239	< 5	19	79	61
263335 Orig														
263335 Dup														
263350 Orig														
263350 Dup														
263352 Orig	7	< 5	0.05	21	305	2	0.17	< 5	< 10	82	< 5	20	61	20
263352 Dup	11	< 5	0.05	21	300	< 2	0.15	< 5	< 10	79	< 5	20	59	18
263355 Split Orig PREP DUP														
263355 Split PREP DUP														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 10-Nov-16
Invoice No.: A16-11975
Invoice Date: 27-Nov-16
Your Reference: Core-10-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

24 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11975**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 10-Nov-16
Invoice No.: A16-11975
Invoice Date: 27-Nov-16
Your Reference: Core-10-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

24 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-11975**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263360	< 5	< 0.3	6.81	< 3	79	< 1	4	6.12	< 0.3	40	71	94	7.37	14	< 1	0.62	3.19	7	1560	< 1	3.35	57	0.028
263361	< 5	< 0.3	6.75	5	47	< 1	7	5.44	0.3	42	72	99	7.75	18	< 1	0.51	2.80	14	1380	< 1	3.46	57	0.028
263362	110	0.4	6.30	< 3	108	< 1	4	5.29	< 0.3	35	74	90	7.37	19	< 1	1.33	2.08	10	1070	< 1	2.94	58	0.029
263363	< 5	< 0.3	6.75	4	38	< 1	6	4.71	< 0.3	37	80	39	7.45	13	< 1	0.47	2.70	12	1250	< 1	3.52	57	0.026
263364	6	< 0.3	6.86	< 3	78	< 1	5	5.70	0.5	41	80	111	7.46	14	< 1	0.81	2.89	9	1500	1	3.33	55	0.028
263365	< 5	< 0.3	7.13	< 3	73	< 1	5	5.95	< 0.3	44	135	147	7.76	16	< 1	0.69	3.11	9	1590	< 1	3.21	59	0.031
263366	715	0.4	8.07	298	436	< 1	5	3.94	< 0.3	13	48	46	4.81	15	< 1	0.87	1.31	7	941	4	2.42	25	0.046
263367	< 5	< 0.3	7.08	11	80	< 1	4	6.59	< 0.3	43	80	122	7.82	15	< 1	0.70	3.08	7	1610	< 1	2.92	58	0.028
263368	< 5	< 0.3	7.42	< 3	88	< 1	8	5.37	< 0.3	49	83	149	8.57	16	< 1	0.74	3.22	12	1740	< 1	2.93	62	0.031
263369	< 5	< 0.3	6.15	< 3	83	< 1	6	5.59	< 0.3	41	151	139	7.31	15	< 1	0.75	2.78	7	1510	< 1	3.15	58	0.027
263370	< 5	< 0.3	7.49	< 3	121	< 1	4	6.60	< 0.3	48	78	94	8.74	19	< 1	1.28	2.48	8	1600	< 1	2.83	65	0.026
263371	5	< 0.3	7.14	13	97	< 1	6	6.78	< 0.3	41	73	56	7.58	16	2	1.13	2.20	6	1360	< 1	3.08	56	0.025
263372	5	< 0.3	7.08	< 3	102	< 1	4	8.04	< 0.3	42	71	104	7.70	16	< 1	0.95	2.46	7	1620	2	2.80	62	0.025
263373	< 5	< 0.3	0.12	< 3	62	< 1	< 2	19.2	< 0.3	< 1	5	3	0.14	< 1	< 1	0.03	11.7	7	367	< 1	0.06	< 1	0.003
263374	< 5	< 0.3	6.49	< 3	55	< 1	4	6.44	< 0.3	38	71	143	7.09	15	< 1	0.46	2.56	8	1380	1	3.71	49	0.025
263375	6	0.4	6.93	< 3	93	< 1	3	6.06	< 0.3	39	71	81	7.22	15	< 1	0.72	2.39	7	1470	< 1	3.85	60	0.023
263376	10	0.4	6.87	< 3	102	< 1	4	5.06	< 0.3	43	72	123	7.13	15	< 1	0.97	2.21	5	1370	< 1	3.90	59	0.025
263377	7	0.3	7.09	< 3	74	< 1	4	6.75	0.3	43	80	79	7.62	19	< 1	0.54	2.37	5	1450	< 1	3.41	60	0.026
263378	5	0.7	7.02	5	103	< 1	4	6.69	< 0.3	42	72	115	7.31	16	< 1	0.83	2.47	5	1540	< 1	3.33	58	0.026
263379	15	0.3	6.31	< 3	139	< 1	3	5.90	< 0.3	45	80	104	7.15	15	< 1	0.80	2.25	5	1470	1	3.48	58	0.027
263380	374	0.5	7.87	165	437	< 1	< 2	3.85	0.4	14	44	43	4.62	14	< 1	0.82	1.28	7	921	4	2.37	24	0.046
263381	11	0.3	6.90	< 3	146	< 1	3	5.74	< 0.3	40	77	122	7.24	18	< 1	0.62	2.53	7	1450	< 1	3.72	55	0.028
263382	8	0.3	7.07	< 3	220	< 1	4	5.27	< 0.3	45	62	114	7.59	14	< 1	0.77	2.84	6	1450	2	3.89	60	0.026
263383	8	< 0.3	6.81	< 3	123	< 1	5	5.45	< 0.3	43	58	123	7.47	16	< 1	0.67	2.81	8	1480	< 1	3.96	57	0.026

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263360	5	< 5	0.16	36	85	5	0.22	< 5	< 10	165	< 5	18	83	40
263361	20	< 5	0.28	37	30	< 2	0.24	< 5	< 10	157	< 5	20	83	39
263362	15	< 5	0.94	34	35	5	0.41	< 5	< 10	246	< 5	18	77	66
263363	< 3	< 5	0.05	37	47	< 2	0.31	< 5	< 10	193	< 5	19	77	62
263364	< 3	< 5	0.10	37	84	5	0.31	< 5	< 10	186	< 5	19	73	57
263365	< 3	< 5	0.12	38	122	3	0.43	< 5	< 10	231	< 5	19	80	61
263366	20	< 5	0.06	21	293	< 2	0.31	< 5	< 10	129	< 5	20	68	36
263367	< 3	< 5	0.14	38	154	7	0.41	< 5	< 10	219	< 5	20	82	60
263368	5	< 5	0.21	41	161	5	0.48	< 5	< 10	244	< 5	21	96	77
263369	15	< 5	0.03	26	120	4	0.43	< 5	< 10	224	< 5	17	80	62
263370	< 3	< 5	0.03	41	125	3	0.29	< 5	< 10	234	< 5	21	79	68
263371	< 3	15	0.02	39	103	< 2	0.20	9	< 10	176	< 5	20	71	64
263372	7	< 5	0.16	37	87	< 2	0.20	< 5	< 10	140	< 5	21	80	34
263373	3	< 5	< 0.01	< 4	134	< 2	< 0.01	< 5	< 10	6	< 5	< 1	10	< 5
263374	8	< 5	0.57	34	96	2	0.35	< 5	< 10	202	< 5	18	95	55
263375	< 3	< 5	0.54	36	132	3	0.30	< 5	< 10	204	< 5	18	87	57
263376	7	< 5	1.01	38	101	4	0.33	< 5	< 10	201	< 5	20	80	62
263377	4	< 5	0.63	38	163	3	0.30	< 5	< 10	209	< 5	19	83	55
263378	11	< 5	0.34	38	156	4	0.32	< 5	< 10	190	< 5	19	82	50
263379	7	< 5	0.71	30	150	5	0.44	< 5	< 10	224	< 5	17	84	62
263380	8	< 5	0.05	21	291	8	0.31	< 5	< 10	128	< 5	20	59	39
263381	6	< 5	0.44	37	121	< 2	0.37	< 5	< 10	219	< 5	19	91	60
263382	< 3	< 5	0.67	38	150	3	0.38	< 5	< 10	203	< 5	20	90	60
263383	7	< 5	0.64	36	110	5	0.35	< 5	< 10	213	< 5	19	108	60

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		30.9	2.62	462	693	1	1370	0.86	2.1	6	14	1100	22.8	16	5	0.06	0.21	9	840	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.4	2.37	472	646	1	1400	0.87	2.7	6	15	1140	23.2	16	3	0.05	0.20	8	861	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		4.1	6.87	122	238	2	27	1.08	0.3	15	45	6530	3.30	20	< 1	4.07	1.69	11	156	356	0.52	44	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.64	118	171	2	24	1.06	< 0.3	15	44	6320	3.16	18	< 1	3.93	1.62	11	162	344	0.50	43	0.127
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.26	< 3	603	3		1.10		19	60	29	4.72	24	< 1	1.63	0.97	33	888		1.47	37	0.052
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.4	13.2	333	> 1000	1	6	0.18	0.3	15	81	72	6.02	31	< 1	1.69	0.60	33	1110	< 1	0.10	29	0.038
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	13.6	257	> 1000	1	6	0.18	0.4	15	54	71	5.93	35	< 1	1.42	0.61	35	1070	< 1	0.10	28	0.035
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						149	203	310	9.46									6450	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						144	174	293	8.95									6370	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					97					57	130	98		13				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					98					53	250	96		14				5				267	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				24	778	3	10		0.7	24	98	33		29				162		2		94	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				26	761	3	5		0.4	23	89	33		28				155		2		91	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	584																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	< 2		5.5	14	39	247		18	< 1			18		15		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					983	7	3		5.5	14	38	231		18	2			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1740																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
OREAS 16A (FA-Ancaster) Cert	1810																						
263369 Orig	< 5																						
263369 Dup	< 5																						
263372 Orig		< 0.3	6.97	< 3	101	< 1	5	7.92	< 0.3	42	87	103	7.59	16	< 1	1.03	2.42	7	1570	2	2.77	64	0.025
263372 Dup		< 0.3	7.18	< 3	104	< 1	3	8.16	0.4	42	56	106	7.81	17	< 1	0.87	2.49	7	1670	2	2.84	60	0.026
263379 Orig	15																						
263379 Dup	15																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		4	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		5	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		3	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	717	45	0.24	< 4	283	18	0.03	< 5	30	85	158	34	717	32
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	727	34	0.25	< 4	289	17	0.03	< 5	30	86	156	35	729	31
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	49	< 5	1.78	9	223	< 2	0.29	< 5	< 10	90	37	15	77	48
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	48	< 5	1.71	8	216	4	0.28	< 5	< 10	88	36	15	76	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	24	< 5		17	171		0.14	< 5	< 10	51	< 5		98	44
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	93	< 5	0.02	27	36	< 2		< 5	< 10	143	< 5	11	130	82
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	95	< 5	0.02	27	37	< 2		< 5	< 10	103	< 5	12	130	60
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.53											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.51											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	< 3	< 5		31	129		0.28			140		16	58	36
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		32	128		0.28			141		16	60	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		21	182		0.54	< 5	< 10	225	< 5	30	183	122
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	27	< 5		21	175		0.52	< 5	< 10	216	< 5	31	181	124
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	829			5	149				< 10	28	11	29	794	136
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	813			5	145				< 10	22	8	29	768	114
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster)														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Cert														
263369 Orig														
263369 Dup														
263372 Orig	7	< 5	0.16	37	86	< 2	0.16	< 5	< 10	128	< 5	21	79	29
263372 Dup	6	< 5	0.16	38	87	4	0.24	< 5	< 10	152	< 5	21	81	39
263379 Orig														
263379 Dup														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 10-Nov-16
Invoice No.: A16-11977
Invoice Date: 05-Dec-16
Your Reference: Core-10-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

40 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-11977**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 10-Nov-16
Invoice No.: A16-11977
Invoice Date: 05-Dec-16
Your Reference: Core-10-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

40 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-11977**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246151	5	< 0.3	7.10	< 3	81	< 1	5	7.17	< 0.3	42	50	71	7.49	15	< 1	0.77	2.91	5	1650	< 1	2.98	56	0.029
246152	< 5	< 0.3	7.22	3	91	< 1	5	6.23	< 0.3	44	56	112	8.06	15	< 1	0.71	3.37	10	1720	2	2.96	59	0.030
246153	< 5	0.3	6.96	< 3	125	< 1	5	6.84	< 0.3	44	82	95	7.70	13	< 1	0.67	3.31	10	1560	2	3.13	56	0.030
246154	5	0.3	6.97	< 3	158	< 1	3	7.78	< 0.3	43	56	156	7.74	14	< 1	0.71	3.04	6	1600	1	2.94	58	0.027
246155	32	< 0.3	7.36	< 3	87	< 1	4	6.69	< 0.3	45	63	71	8.00	17	< 1	0.68	2.55	5	1610	< 1	3.09	64	0.028
246156	< 5	< 0.3	6.37	< 3	56	< 1	4	6.14	0.3	41	82	118	6.97	15	< 1	0.56	2.49	5	1490	1	3.35	57	0.029
246157	5	0.5	7.24	< 3	92	< 1	4	6.00	< 0.3	47	79	128	8.52	18	< 1	0.78	2.99	6	1600	1	3.11	59	0.030
246158	< 5	0.5	7.13	3	94	< 1	5	5.89	< 0.3	45	68	128	8.40	18	< 1	0.77	3.01	6	1570	< 1	3.12	60	0.027
246159	< 5	< 0.3	6.75	< 3	77	< 1	4	7.39	< 0.3	41	57	83	7.35	14	< 1	0.76	2.90	7	1550	< 1	2.95	55	0.027
246160	< 5	< 0.3	7.19	< 3	121	< 1	5	6.04	0.3	43	50	92	7.73	15	< 1	0.77	3.07	7	1670	< 1	3.39	58	0.028
246161	< 5	< 0.3	7.30	< 3	82	< 1	5	5.39	< 0.3	44	56	75	8.27	15	< 1	0.70	3.04	6	1750	< 1	3.50	61	0.031
246162	< 5	< 0.3	7.00	4	103	< 1	5	7.02	0.3	41	49	106	7.68	16	< 1	0.77	2.71	5	1570	< 1	3.02	56	0.029
246163	< 5	0.4	7.49	< 3	76	< 1	6	5.07	< 0.3	45	62	88	9.48	18	< 1	0.85	2.66	7	1780	< 1	3.41	63	0.030
246164	< 5	0.4	7.50	6	68	< 1	4	5.23	< 0.3	47	61	106	9.04	16	< 1	0.58	2.72	8	1790	< 1	3.49	62	0.030
246165	< 5	< 0.3	6.64	3	47	< 1	5	6.49	< 0.3	39	58	99	7.11	15	< 1	0.43	2.50	12	1370	< 1	3.58	56	0.027
246166	400	< 0.3	7.62	150	430	< 1	4	3.71	< 0.3	13	34	42	4.46	14	< 1	0.81	1.24	7	872	2	2.31	24	0.044
246167	57	3.1	2.96	< 3	214	< 1	14	5.86	< 0.3	20	55	38	3.28	6	< 1	0.81	1.02	6	634	97	0.92	75	0.006
246168	5	< 0.3	7.02	< 3	144	< 1	3	7.14	< 0.3	44	92	80	6.33	11	< 1	0.91	4.16	27	1080	1	0.46	191	0.013
246169	< 5	< 0.3	7.34	< 3	67	< 1	6	6.49	1.1	46	69	76	6.63	13	< 1	1.05	4.59	35	1090	< 1	1.01	194	0.010
246170	< 5	< 0.3	7.36	< 3	51	< 1	2	6.14	< 0.3	50	77	91	6.93	13	< 1	0.91	4.80	38	1110	< 1	1.06	209	0.013
246171	< 5	< 0.3	7.60	< 3	58	< 1	5	5.69	< 0.3	50	91	85	7.09	13	< 1	1.07	4.91	39	1130	< 1	0.76	205	0.016
246172	5	< 0.3	7.29	< 3	134	< 1	3	5.79	< 0.3	47	84	81	6.77	13	< 1	1.87	4.59	27	1160	< 1	0.26	187	0.013
246173	< 5	< 0.3	6.30	< 3	83	< 1	5	6.93	< 0.3	39	100	108	6.88	12	< 1	1.05	3.77	16	1220	< 1	0.12	97	0.017
246174	< 5	< 0.3	0.08	4	233	< 1	< 2	18.1	< 0.3	< 1	5	2	0.10	< 1	< 1	0.02	11.6	7	367	< 1	0.02	1	0.004
246175	17	< 0.3	3.86	9	68	< 1	< 2	7.29	< 0.3	40	155	100	6.77	14	< 1	0.82	2.95	5	1280	< 1	0.08	71	0.014
246176	86	0.4	5.18	4	41	< 1	4	4.91	< 0.3	41	29	70	8.19	15	< 1	0.33	1.60	2	1300	< 1	3.70	25	0.041
246177	40	0.6	5.61	5	31	< 1	3	4.92	< 0.3	40	25	104	9.64	15	< 1	0.11	1.74	6	1500	< 1	3.61	16	0.043
246178	36	< 0.3	5.11	< 3	21	< 1	4	5.41	< 0.3	40	11	184	7.84	14	< 1	0.10	1.59	5	1620	< 1	3.51	14	0.043
246179	17	0.4	5.10	< 3	49	< 1	5	5.51	< 0.3	38	12	90	8.17	15	< 1	0.44	1.59	2	1780	< 1	3.38	14	0.042
246180	6	0.4	5.90	< 3	46	< 1	4	3.49	< 0.3	42	11	147	10.0	20	< 1	0.35	1.91	12	1840	2	3.15	16	0.047
246181	12	0.4	6.13	< 3	70	< 1	4	3.51	< 0.3	45	6	142	9.92	19	< 1	0.40	1.90	10	1670	< 1	3.43	16	0.050
246182	682	0.4	8.31	277	449	< 1	5	3.98	< 0.3	14	35	47	4.99	15	< 1	0.86	1.34	7	960	3	2.48	25	0.046
246183	6	0.3	6.23	10	61	< 1	6	3.17	< 0.3	47	11	129	10.2	19	< 1	0.47	1.95	13	1570	2	3.09	15	0.056
246184	7	< 0.3	5.92	< 3	98	< 1	4	3.99	< 0.3	43	5	142	9.82	18	< 1	0.87	1.88	11	1640	1	2.71	15	0.048
246185	8	< 0.3	5.22	< 3	90	< 1	7	4.28	< 0.3	39	7	134	8.71	17	< 1	1.13	1.68	7	1560	< 1	1.66	15	0.052
246186	80	< 0.3	5.63	7	132	< 1	4	4.75	< 0.3	36	13	121	9.23	18	< 1	1.02	1.62	5	1680	< 1	1.58	15	0.050
246187	11	0.4	5.70	< 3	81	< 1	2	4.14	0.4	38	9	161	9.49	18	< 1	0.96	1.54	5	1640	< 1	2.88	15	0.051
246188	24	0.4	5.55	8	68	< 1	3	4.57	< 0.3	36	13	186	8.80	20	< 1	0.88	1.40	5	1410	< 1	3.00	21	0.047
246189	23	0.4	5.51	< 3	86	< 1	4	5.69	< 0.3	37	7	128	9.32	19	< 1	0.90	1.53	4	1630	< 1	2.93	16	0.043
246190	20	< 0.3	5.62	< 3	86	< 1	4	5.80	< 0.3	36	9	125	9.38	21	< 1	0.99	1.56	4	1670	< 1	3.01	15	0.045

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246151	< 3	< 5	0.35	37	193	4	0.36	< 5	< 10	181	< 5	19	80	50
246152	< 3	< 5	0.27	39	143	4	0.46	< 5	< 10	229	< 5	19	100	72
246153	6	< 5	0.39	37	156	2	0.45	< 5	< 10	229	< 5	18	98	66
246154	5	< 5	0.46	37	196	6	0.37	< 5	< 10	200	< 5	18	88	55
246155	6	< 5	0.55	39	202	< 2	0.37	< 5	< 10	199	< 5	20	84	55
246156	< 3	< 5	0.61	32	139	4	0.43	< 5	< 10	223	< 5	17	79	66
246157	12	< 5	1.29	38	163	5	0.46	< 5	< 10	242	< 5	19	90	72
246158	12	< 5	1.26	38	158	< 2	0.36	< 5	< 10	219	< 5	19	92	62
246159	5	< 5	0.43	36	149	4	0.34	< 5	< 10	189	< 5	17	82	52
246160	10	< 5	0.24	38	100	4	0.32	< 5	< 10	187	< 5	19	89	49
246161	4	< 5	0.14	40	98	5	0.47	< 5	< 10	237	< 5	20	93	74
246162	6	< 5	0.36	38	93	4	0.34	< 5	< 10	174	8	19	84	46
246163	10	< 5	0.70	39	74	4	0.46	< 5	< 10	263	< 5	21	89	72
246164	18	< 5	0.51	41	81	4	0.48	< 5	< 10	258	< 5	21	93	74
246165	10	< 5	0.57	35	54	< 2	0.34	< 5	< 10	197	< 5	17	78	56
246166	6	< 5	0.05	20	280	< 2	0.23	< 5	< 10	107	< 5	19	56	30
246167	54	< 5	1.51	12	92	7	0.12	< 5	< 10	69	5	5	35	15
246168	< 3	< 5	0.16	27	70	< 2	0.22	< 5	< 10	124	< 5	7	62	19
246169	< 3	< 5	0.01	27	69	5	0.17	< 5	< 10	129	< 5	6	55	22
246170	< 3	< 5	0.03	30	68	< 2	0.22	< 5	< 10	146	< 5	6	65	27
246171	< 3	< 5	0.02	31	58	4	0.25	< 5	< 10	156	< 5	7	61	30
246172	< 3	< 5	0.02	29	51	7	0.26	< 5	< 10	151	< 5	8	58	26
246173	< 3	< 5	0.06	35	68	4	0.31	< 5	< 10	179	< 5	8	71	31
246174	< 3	< 5	0.01	< 4	153	< 2	< 0.01	< 5	10	5	< 5	< 1	19	< 5
246175	< 3	< 5	0.22	21	112	3	0.37	< 5	< 10	239	< 5	6	69	36
246176	< 3	< 5	1.21	31	121	10	0.49	< 5	< 10	254	< 5	11	50	101
246177	5	< 5	0.88	34	99	4	0.34	< 5	< 10	194	< 5	17	106	123
246178	3	< 5	1.22	32	93	9	0.34	< 5	< 10	151	< 5	18	80	80
246179	< 3	< 5	1.01	30	90	7	0.30	< 5	< 10	169	< 5	21	60	88
246180	< 3	< 5	0.47	37	61	6	0.52	< 5	< 10	247	< 5	24	119	104
246181	< 3	< 5	0.52	38	77	7	0.49	< 5	< 10	228	< 5	26	110	112
246182	18	< 5	0.07	22	302	5	0.25	< 5	< 10	111	< 5	20	70	26
246183	< 3	< 5	0.46	38	83	10	0.70	< 5	< 10	300	< 5	24	128	136
246184	< 3	< 5	0.49	37	88	6	0.46	< 5	< 10	232	< 5	24	109	107
246185	< 3	< 5	0.36	33	77	7	0.58	< 5	< 10	255	< 5	17	93	126
246186	< 3	< 5	0.42	35	81	4	0.39	< 5	< 10	198	< 5	18	73	89
246187	5	< 5	0.26	35	92	10	0.18	< 5	< 10	140	< 5	21	99	46
246188	13	< 5	0.35	34	93	< 2	0.26	< 5	< 10	161	10	17	81	48
246189	5	< 5	0.55	35	100	3	0.30	< 5	< 10	224	< 5	16	75	81
246190	4	< 5	0.46	35	102	4	0.34	< 5	< 10	226	< 5	15	77	83

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		30.4	1.93	433	681	1	1380	0.86	2.0	10	11	1170	22.3	11	5	0.04	0.20	8	844	17	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.62	462	693	1	1370	0.86	2.1	6	14	1100	22.8	16	5	0.06	0.21	9	840	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.4	2.37	472	646	1	1400	0.87	2.7	6	15	1140	23.2	16	3	0.05	0.20	8	861	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.5	6.37	102	132	2	19	1.07	< 0.3	14	57	6460	2.92	17	< 1	2.19	1.68	11	152	345	0.52	42	0.129
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		4.1	6.87	122	238	2	27	1.08	0.3	15	45	6530	3.30	20	< 1	4.07	1.69	11	156	356	0.52	44	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.64	118	171	2	24	1.06	< 0.3	15	44	6320	3.16	18	< 1	3.93	1.62	11	162	344	0.50	43	0.127
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.26	< 3	603	3		1.10		19	60	29	4.72	24	< 1	1.63	0.97	33	888		1.47	37	0.052
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.6	12.1	329	> 1000	1	7	0.17	< 0.3	15	95	70	5.51	29	4	0.70	0.59	34	1110	1	0.10	28	0.037
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	13.2	333	> 1000	1	6	0.18	0.3	15	81	72	6.02	31	< 1	1.69	0.60	33	1110	< 1	0.10	29	0.038
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	13.6	257	> 1000	1	6	0.18	0.4	15	54	71	5.93	35	< 1	1.42	0.61	35	1070	< 1	0.10	28	0.035
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						141	220	321	8.76									6430	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				< 3						149	203	310	9.46									6450	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						144	174	293	8.95									6370	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					101					55	243	101		12				5				257	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	130	98		13				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					98					53	250	96		14				5				267	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				22	688	3	3		0.3	22	104	32		25				160		1		85	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	778	3	10		0.7	24	98	33		29				162		2		94	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Meas				26	761	3	5		0.4	23	89	33		28				155		2		91	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	621																						
SE68 Cert	599																						
SE68 Meas	579																						
SE68 Cert	599																						
SE68 Meas	580																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					994	7	< 2		5.4	13	59	240		17	< 1			18		13		52	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	< 2		5.5	14	39	247		18	< 1			18		15		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					983	7	3		5.5	14	38	231		18	2			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1740																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1750																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1790																						
OREAS 16A (FA-Ancaster) Cert	1810																						
246153 Orig		0.3	6.97	< 3	126	< 1	4	6.84	< 0.3	44	78	95	7.77	13	< 1	0.67	3.33	10	1570	3	3.10	56	0.031
246153 Dup		0.3	6.95	4	125	< 1	7	6.84	< 0.3	44	87	94	7.62	14	< 1	0.67	3.29	10	1550	2	3.17	56	0.030
246160 Orig	< 5																						
246160 Dup	< 5																						
246170 Orig	< 5																						
246170 Dup	< 5																						
246178 Orig		< 0.3	5.16	4	21	< 1	3	5.46	< 0.3	40	10	189	7.98	14	< 1	0.11	1.61	5	1630	< 1	3.57	14	0.044

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246178 Dup		0.5	5.05	< 3	21	< 1	4	5.36	0.4	41	11	178	7.70	14	< 1	0.10	1.56	5	1610	< 1	3.45	13	0.043
246180 Orig	5																						
246180 Dup	7																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		4	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		5	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		3	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	724	13	0.25	< 4	291	7	0.03	< 5	30	87	154	36	732	27
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	717	45	0.24	< 4	283	18	0.03	< 5	30	85	158	34	717	32
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	727	34	0.25	< 4	289	17	0.03	< 5	30	86	156	35	729	31
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	44	< 5	1.79	8	215	< 2	0.29	7	< 10	90	39	15	71	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	49	< 5	1.78	9	223	< 2	0.29	< 5	< 10	90	37	15	77	48
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	48	< 5	1.71	8	216	4	0.28	< 5	< 10	88	36	15	76	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	24	< 5		17	171		0.14	< 5	< 10	51	< 5		98	44
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	94	< 5	0.01	26	38	2		< 5	< 10	187	< 5	12	128	104
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	93	< 5	0.02	27	36	< 2		< 5	< 10	143	< 5	11	130	82
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	95	< 5	0.02	27	37	< 2		< 5	< 10	103	< 5	12	130	60
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.62											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.53											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.51											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	5	< 5		31	127		0.28			138		16	60	35
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		31	129		0.28			140		16	58	36
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		32	128		0.28			141		16	60	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	30	< 5		20	172		0.41	< 5	< 10	209	< 5	30	179	110
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	28	< 5		21	182		0.54	< 5	< 10	225	< 5	30	183	122
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	27	< 5		21	175		0.52	< 5	< 10	216	< 5	31	181	124
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	821			< 4	142				< 10	27	10	28	782	133
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	829			5	149				< 10	28	11	29	794	136
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	813			5	145				< 10	22	8	29	768	114
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
246153 Orig	8	< 5	0.39	37	156	2	0.45	< 5	< 10	230	5	18	98	67
246153 Dup	5	< 5	0.40	38	156	2	0.44	< 5	< 10	229	< 5	18	98	64
246160 Orig														
246160 Dup														
246170 Orig														
246170 Dup														
246178 Orig	4	< 5	1.23	32	93	13	0.35	< 5	< 10	157	< 5	18	81	83
246178 Dup	3	< 5	1.22	32	93	5	0.33	< 5	< 10	146	< 5	17	79	77
246180 Orig														
246180 Dup														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 14-Nov-16
Invoice No.: A16-12074
Invoice Date: 05-Dec-16
Your Reference: Core-11-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

64 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12074**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 14-Nov-16
Invoice No.: A16-12074
Invoice Date: 05-Dec-16
Your Reference: Core-11-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

64 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12074**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246191	12	< 0.3	5.21	4	95	< 1	4	5.79	0.4	34	11	116	9.12	18	< 1	0.99	1.56	3	1800	< 1	2.31	14	0.044
246192	26	< 0.3	5.03	< 3	40	< 1	4	5.39	< 0.3	34	20	142	8.50	15	< 1	0.34	1.48	2	1700	< 1	3.49	13	0.042
246193	11	< 0.3	6.20	< 3	208	< 1	5	4.30	0.4	42	9	132	10.5	20	< 1	1.10	1.67	20	1700	2	2.03	16	0.054
246194	< 5	0.3	6.27	< 3	94	< 1	5	4.30	< 0.3	42	22	131	10.3	21	< 1	0.58	1.61	22	1600	< 1	2.63	16	0.050
246195	6	0.6	5.20	7	84	< 1	5	4.28	0.3	43	12	128	10.1	19	< 1	0.65	1.53	19	1690	7	2.14	16	0.055
246196	9	0.4	5.66	13	128	< 1	3	5.36	< 0.3	41	15	156	9.59	18	< 1	0.59	1.47	13	1660	< 1	2.60	15	0.051
246197	22	< 0.3	6.04	< 3	98	< 1	7	4.68	< 0.3	41	16	132	9.98	20	< 1	0.50	1.65	15	1550	< 1	2.73	16	0.050
246198	418	< 0.3	7.92	128	442	< 1	5	3.85	< 0.3	13	27	44	4.68	14	< 1	0.84	1.29	7	923	< 1	2.39	24	0.043
246199	103	1.1	6.19	< 3	114	< 1	2	3.47	< 0.3	42	16	164	10.5	20	< 1	0.81	1.64	17	1730	< 1	1.85	17	0.050
246200	20	0.4	6.29	5	86	< 1	3	4.26	0.6	43	8	205	10.3	20	< 1	0.59	1.65	16	1750	< 1	2.15	16	0.053
246201	18	0.4	6.18	< 3	99	< 1	5	4.23	< 0.3	44	7	160	10.3	20	< 1	0.60	1.66	16	1560	< 1	2.51	16	0.049
246202	8	0.4	5.89	< 3	133	< 1	4	4.83	< 0.3	40	9	118	10.2	18	< 1	1.02	1.62	17	1590	< 1	1.70	16	0.048
246203	146	0.6	5.67	< 3	180	< 1	5	5.13	< 0.3	38	13	146	9.29	19	< 1	1.68	1.47	6	1530	< 1	1.64	14	0.050
246204	8	0.4	5.82	< 3	183	< 1	5	4.42	< 0.3	38	11	126	9.91	18	< 1	1.18	1.64	6	1640	5	2.08	15	0.049
246205	113	0.5	4.15	7	62	< 1	4	4.13	0.3	29	33	95	7.25	13	< 1	0.22	1.14	1	1030	13	3.06	13	0.080
246206	< 5	< 0.3	0.06	4	52	< 1	2	18.0	< 0.3	< 1	3	2	0.08	< 1	< 1	0.02	11.6	7	316	< 1	0.04	< 1	0.005
246207	7	< 0.3	5.56	6	179	< 1	3	4.18	< 0.3	38	11	145	9.78	19	< 1	0.81	1.66	5	1200	< 1	2.10	15	0.046
246208	13	< 0.3	5.67	13	131	< 1	2	4.31	< 0.3	38	20	128	9.83	17	< 1	1.12	1.63	4	1270	< 1	1.74	15	0.049
246209	16	< 0.3	5.44	9	119	< 1	5	5.09	< 0.3	38	13	128	9.39	18	< 1	1.19	1.57	4	1240	< 1	1.41	15	0.045
246210	13	0.4	5.94	< 3	113	< 1	3	4.77	< 0.3	43	13	152	10.5	20	< 1	0.96	1.78	16	1210	< 1	1.16	17	0.050
246211	6	0.4	5.87	< 3	97	< 1	7	5.44	0.3	43	13	148	10.4	19	< 1	0.89	1.72	15	1260	< 1	1.80	16	0.058
246212	9	0.4	6.03	< 3	113	< 1	5	4.89	< 0.3	41	22	155	10.7	20	5	1.09	1.75	14	1230	< 1	1.73	20	0.052
246213	9	0.4	5.92	< 3	83	< 1	4	5.39	< 0.3	39	11	207	10.5	18	3	0.77	1.71	12	1290	< 1	2.36	17	0.050
246214	717	0.5	9.38	275	421	< 1	5	3.82	0.4	12	39	45	4.74	14	< 1	0.86	1.34	7	897	5	2.31	24	0.047
246215	6	< 0.3	5.76	< 3	71	< 1	3	4.97	< 0.3	36	9	127	10.1	18	< 1	0.56	1.60	11	1280	< 1	2.38	15	0.051
246216	5	0.3	6.23	< 3	94	< 1	5	3.95	< 0.3	46	9	165	11.0	21	5	0.59	1.84	14	1330	< 1	1.90	18	0.050
246217	8	< 0.3	6.19	< 3	87	< 1	6	4.55	< 0.3	43	8	151	10.9	20	< 1	0.61	1.84	14	1390	< 1	1.77	16	0.049
246218	6	0.4	6.01	< 3	126	< 1	4	4.72	< 0.3	44	12	171	10.7	20	< 1	0.85	1.77	10	1280	< 1	2.19	16	0.046
246219	8	0.5	5.76	5	99	< 1	4	4.94	< 0.3	41	12	126	10.1	19	< 1	0.60	1.68	5	1220	< 1	3.38	15	0.046
246220	16	0.5	5.49	< 3	33	< 1	4	5.04	< 0.3	39	10	120	9.60	17	< 1	0.28	1.53	3	1230	< 1	3.80	15	0.046
246221	5	0.4	5.99	< 3	197	< 1	5	5.54	< 0.3	42	8	133	10.8	20	< 1	0.92	1.76	10	1230	5	2.35	15	0.055
246222	6	< 0.3	5.69	< 3	187	< 1	6	5.31	< 0.3	38	17	124	10.1	19	< 1	0.86	1.64	9	1180	2	2.18	14	0.050
246223	7	< 0.3	5.99	5	139	< 1	5	5.20	< 0.3	43	10	183	10.8	18	< 1	0.62	1.82	10	1370	< 1	2.37	22	0.052
246224	6	0.4	5.18	4	74	< 1	7	3.93	< 0.3	41	6	136	10.7	20	< 1	0.41	1.72	12	1400	< 1	1.84	14	0.058
246225	7	< 0.3	6.24	12	76	< 1	4	3.81	< 0.3	43	14	141	11.1	20	5	0.52	1.88	11	1410	< 1	1.94	18	0.054
246226	18	< 0.3	6.15	< 3	97	< 1	6	3.80	< 0.3	43	9	144	11.1	19	5	0.62	1.82	11	1370	< 1	1.78	16	0.051
246227	7	0.3	6.44	< 3	122	< 1	4	3.82	< 0.3	43	9	189	11.4	21	5	0.65	1.93	11	1360	< 1	2.09	17	0.043
246228	7	0.5	5.82	7	94	< 1	6	5.16	< 0.3	40	7	154	10.6	19	< 1	0.86	1.70	10	1340	< 1	1.98	15	0.044
246229	9	0.5	6.31	6	113	< 1	6	3.93	< 0.3	44	21	196	11.2	20	5	0.64	1.97	11	1470	< 1	1.89	19	0.051
246230	374	< 0.3	8.04	134	446	< 1	9	3.86	< 0.3	13	32	49	4.73	15	< 1	0.85	1.30	7	920	< 1	2.40	25	0.044
246231	8	0.5	5.98	< 3	102	< 1	5	4.08	< 0.3	43	9	142	10.6	18	2	0.62	2.08	13	1460	< 1	1.71	15	0.057
246232	23	0.5	5.13	< 3	64	< 1	4	5.49	0.4	40	7	192	9.53	16	< 1	0.53	1.62	8	1220	1	2.41	14	0.046

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246233	12	0.5	6.37	< 3	154	< 1	5	3.88	0.4	45	7	127	11.2	21	1	1.01	1.96	9	1330	< 1	2.24	17	0.054
246234	12	0.6	5.23	5	100	< 1	6	3.88	< 0.3	42	4	163	10.0	18	< 1	0.83	1.67	7	1090	3	2.36	16	0.055
246235	7	0.4	5.65	< 3	133	< 1	6	4.92	0.4	42	7	119	10.2	20	< 1	0.85	1.65	7	1010	< 1	2.63	16	0.047
246236	13	< 0.3	5.93	< 3	98	< 1	5	4.62	< 0.3	41	83	160	10.6	19	< 1	0.77	1.71	10	1200	< 1	2.15	19	0.051
246237	6	0.3	6.24	< 3	136	< 1	6	3.95	0.4	45	10	168	11.1	21	10	0.74	1.89	11	1510	< 1	1.60	17	0.051
246238	5	< 0.3	0.08	< 3	37	< 1	2	19.7	< 0.3	2	2	3	0.13	< 1	1	0.02	11.9	5	341	2	0.03	< 1	0.003
246239	18	< 0.3	6.14	7	126	< 1	4	4.50	< 0.3	42	9	125	10.8	20	4	0.62	1.88	5	1390	< 1	2.45	17	0.050
246240	25	0.7	6.68	< 3	144	< 1	4	4.54	< 0.3	46	22	168	11.0	20	< 1	0.77	2.07	8	1490	4	2.20	23	0.053
246241	14	0.5	6.39	< 3	149	< 1	7	3.88	< 0.3	45	6	154	11.2	21	< 1	0.77	1.91	9	1420	< 1	2.50	17	0.050
246242	15	0.6	6.64	7	129	< 1	8	3.93	0.4	48	9	201	11.8	21	3	0.69	2.05	11	1490	< 1	2.10	17	0.054
246243	9	0.6	6.45	< 3	75	< 1	4	4.55	< 0.3	45	9	173	11.3	22	< 1	0.52	2.11	13	1510	< 1	1.31	17	0.051
246244	26	0.6	5.91	< 3	80	< 1	5	4.23	0.3	43	14	141	10.8	21	< 1	0.46	1.88	12	1370	< 1	1.95	15	0.045
246245	15	0.5	5.78	< 3	88	< 1	6	4.69	0.3	40	7	128	10.1	19	< 1	0.98	1.74	13	1290	< 1	1.44	16	0.044
246246	705	< 0.3	8.19	233	440	< 1	8	3.91	< 0.3	14	27	46	4.87	14	1	0.86	1.30	7	931	< 1	2.41	25	0.042
246247	9	0.3	5.89	< 3	294	< 1	7	4.55	< 0.3	40	5	144	10.1	19	< 1	0.89	1.72	12	1260	< 1	2.41	15	0.044
246248	39	0.5	5.83	7	79	< 1	4	4.08	0.4	40	20	196	9.86	18	< 1	0.70	1.85	15	1160	1	2.30	16	0.047
246249	23	0.3	6.00	4	132	< 1	7	4.34	< 0.3	43	11	141	10.4	19	< 1	0.94	1.87	15	1330	< 1	2.06	16	0.046
246250	80	0.4	5.39	< 3	363	< 1	4	4.16	< 0.3	37	6	186	9.33	17	< 1	1.39	1.54	7	1160	< 1	2.21	13	0.045
246251	26	0.4	5.38	3	77	< 1	4	4.72	< 0.3	39	88	136	9.28	17	< 1	0.84	1.65	3	1290	< 1	3.17	14	0.044
246252	84	0.5	4.70	20	50	< 1	5	4.58	< 0.3	36	11	122	9.03	16	< 1	0.66	1.45	2	1230	3	3.17	15	0.045
246253	70	0.4	5.12	< 3	65	< 1	4	4.81	< 0.3	37	14	128	8.97	16	< 1	0.73	1.53	2	1360	< 1	3.12	14	0.043
246254	95	0.5	5.14	< 3	65	< 1	4	4.89	< 0.3	37	15	128	8.95	16	< 1	0.74	1.55	2	1310	< 1	3.13	14	0.042

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246191	5	< 5	0.32	34	104	4	0.18	< 5	< 10	152	< 5	14	72	36
246192	< 3	< 5	1.09	32	124	4	0.37	< 5	< 10	165	< 5	16	70	92
246193	4	< 5	0.35	38	83	< 2	0.51	< 5	< 10	228	< 5	29	125	97
246194	< 3	< 5	0.45	38	62	4	0.44	< 5	< 10	237	< 5	33	119	123
246195	< 3	< 5	0.43	31	68	10	0.75	< 5	< 10	303	< 5	29	112	138
246196	11	< 5	0.55	35	108	10	0.39	< 5	< 10	193	< 5	26	103	90
246197	< 3	< 5	0.52	37	79	2	0.34	< 5	< 10	177	< 5	32	114	68
246198	10	< 5	0.05	21	294	6	0.15	< 5	< 10	80	< 5	20	58	18
246199	6	< 5	0.11	39	83	< 2	0.17	< 5	< 10	148	< 5	38	111	37
246200	5	< 5	0.16	39	90	7	0.22	< 5	< 10	161	< 5	37	111	60
246201	< 3	< 5	0.38	39	68	6	0.40	< 5	< 10	211	< 5	33	111	92
246202	7	< 5	0.11	36	82	3	0.30	< 5	< 10	180	< 5	24	113	78
246203	5	< 5	2.04	34	101	3	0.40	< 5	< 10	225	< 5	19	81	121
246204	4	< 5	0.42	36	98	5	0.47	< 5	< 10	239	< 5	22	89	107
246205	5	< 5	1.61	26	112	18	0.52	< 5	< 10	215	5	16	50	97
246206	< 3	< 5	0.02	< 4	134	< 2	< 0.01	< 5	10	4	< 5	< 1	11	< 5
246207	4	< 5	0.38	34	90	17	0.30	< 5	< 10	178	< 5	20	60	70
246208	5	< 5	0.24	36	78	< 2	0.15	< 5	< 10	140	< 5	20	72	39
246209	< 3	< 5	0.33	34	88	3	0.19	< 5	< 10	149	< 5	18	92	39
246210	< 3	< 5	0.18	38	62	< 2	0.30	< 5	< 10	172	< 5	23	119	69
246211	< 3	< 5	0.54	36	81	10	0.50	< 5	< 10	239	< 5	24	108	110
246212	3	< 5	0.37	37	67	16	0.45	< 5	< 10	206	< 5	28	111	91
246213	9	< 5	0.40	37	90	5	0.54	< 5	< 10	263	< 5	30	103	124
246214	19	5	0.07	27	288	< 2	0.31	< 5	< 10	124	< 5	25	64	42
246215	6	< 5	0.33	35	81	4	0.25	< 5	< 10	167	< 5	33	100	56
246216	< 3	< 5	0.44	39	84	15	0.33	< 5	< 10	195	< 5	37	117	72
246217	< 3	< 5	0.50	38	87	< 2	0.35	< 5	< 10	211	< 5	36	112	87
246218	3	< 5	0.70	37	78	3	0.35	< 5	< 10	235	< 5	36	109	120
246219	5	< 5	1.08	36	114	7	0.35	< 5	< 10	225	< 5	20	98	118
246220	7	< 5	1.82	32	110	2	0.37	< 5	< 10	200	< 5	16	78	112
246221	3	< 5	0.40	36	91	6	0.58	< 5	< 10	248	< 5	31	124	124
246222	< 3	< 5	0.39	35	86	6	0.49	< 5	< 10	217	< 5	29	118	105
246223	< 3	< 5	0.33	37	68	< 2	0.51	< 5	< 10	240	< 5	34	112	104
246224	< 3	< 5	0.14	31	96	13	0.62	< 5	< 10	264	< 5	32	118	133
246225	< 3	< 5	0.29	39	94	11	0.15	< 5	< 10	178	< 5	37	118	61
246226	5	< 5	0.17	39	102	5	0.13	< 5	< 10	140	< 5	37	118	29
246227	< 3	< 5	0.09	40	106	6	0.25	< 5	< 10	239	< 5	38	122	108
246228	3	< 5	0.56	36	57	4	0.34	< 5	< 10	229	< 5	34	120	108
246229	277	< 5	0.26	40	106	< 2	0.33	< 5	< 10	198	< 5	36	141	76
246230	9	< 5	0.05	21	293	5	0.15	< 5	< 10	75	< 5	20	59	21
246231	8	< 5	0.33	38	76	< 2	0.35	< 5	< 10	203	< 5	40	169	95
246232	20	< 5	2.38	32	65	17	0.41	< 5	< 10	202	< 5	30	138	114

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246233	< 3	< 5	1.11	38	53	< 2	0.51	< 5	< 10	244	< 5	36	126	120
246234	6	< 5	1.01	32	65	17	0.75	< 5	< 10	285	5	32	109	141
246235	< 3	< 5	1.34	35	76	13	0.38	6	< 10	244	< 5	32	95	124
246236	4	< 5	0.29	36	55	4	0.22	< 5	< 10	153	< 5	36	116	42
246237	< 3	< 5	0.20	39	106	3	0.26	< 5	< 10	173	< 5	38	125	55
246238	< 3	< 5	< 0.01	< 4	141	< 2	< 0.01	10	10	4	< 5	< 1	6	< 5
246239	< 3	< 5	0.31	38	145	9	0.32	< 5	< 10	180	< 5	36	110	63
246240	5	< 5	0.25	40	162	11	0.55	8	< 10	240	< 5	37	116	100
246241	7	< 5	0.49	40	101	5	0.52	< 5	< 10	264	< 5	38	122	129
246242	8	< 5	0.65	40	139	8	0.57	< 5	< 10	289	< 5	37	127	139
246243	6	< 5	0.54	40	164	< 2	0.37	< 5	< 10	225	< 5	38	131	107
246244	9	< 5	0.68	36	135	3	0.38	8	< 10	261	< 5	34	115	130
246245	27	< 5	0.40	35	46	5	0.33	< 5	< 10	217	< 5	33	115	84
246246	18	< 5	0.06	21	296	< 2	0.15	< 5	< 10	84	< 5	20	68	18
246247	7	< 5	0.67	36	79	< 2	0.37	< 5	< 10	217	< 5	30	107	107
246248	11	< 5	1.67	36	71	4	0.37	< 5	< 10	189	< 5	28	261	97
246249	6	< 5	0.60	37	73	3	0.50	< 5	< 10	246	< 5	26	175	119
246250	7	< 5	0.56	33	89	6	0.39	< 5	< 10	194	< 5	24	109	98
246251	5	< 5	0.98	32	119	7	0.47	< 5	< 10	235	< 5	18	62	120
246252	5	< 5	1.94	28	117	17	0.67	< 5	< 10	269	9	14	57	122
246253	3	< 5	1.93	31	101	20	0.51	< 5	< 10	236	< 5	15	66	115
246254	4	< 5	1.90	32	103	12	0.40	< 5	< 10	214	< 5	15	69	97

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		30.4	1.93	433	681	1	1380	0.86	2.0	10	11	1170	22.3	11	5	0.04	0.20	8	844	17	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.62	462	693	1	1370	0.86	2.1	6	14	1100	22.8	16	5	0.06	0.21	9	840	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.4	2.37	472	646	1	1400	0.87	2.7	6	15	1140	23.2	16	3	0.05	0.20	8	861	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.5	6.37	102	132	2	19	1.07	< 0.3	14	57	6460	2.92	17	< 1	2.19	1.68	11	152	345	0.52	42	0.129
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		4.1	6.87	122	238	2	27	1.08	0.3	15	45	6530	3.30	20	< 1	4.07	1.69	11	156	356	0.52	44	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.64	118	171	2	24	1.06	< 0.3	15	44	6320	3.16	18	< 1	3.93	1.62	11	162	344	0.50	43	0.127
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.26	< 3	603	3		1.10		19	60	29	4.72	24	< 1	1.63	0.97	33	888		1.47	37	0.052
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.6	12.1	329	> 1000	1	7	0.17	< 0.3	15	95	70	5.51	29	4	0.70	0.59	34	1110	1	0.10	28	0.037
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	13.2	333	> 1000	1	6	0.18	0.3	15	81	72	6.02	31	< 1	1.69	0.60	33	1110	< 1	0.10	29	0.038
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	13.6	257	> 1000	1	6	0.18	0.4	15	54	71	5.93	35	< 1	1.42	0.61	35	1070	< 1	0.10	28	0.035
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						141	220	321	8.76									6430	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				< 3						149	203	310	9.46									6450	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						144	174	293	8.95									6370	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					101					55	243	101		12				5				257	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	130	98		13				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					98					53	250	96		14				5				267	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				22	688	3	3		0.3	22	104	32		25				160		1		85	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	778	3	10		0.7	24	98	33		29				162		2		94	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Meas				26	761	3	5		0.4	23	89	33		28				155		2		91	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	585																						
SE68 Cert	599																						
SE68 Meas	584																						
SE68 Cert	599																						
SE68 Meas	594																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					994	7	< 2		5.4	13	59	240		17	< 1			18		13		52	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.00 00		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	< 2		5.5	14	39	247		18	< 1			18		15		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.00 00		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					983	7	3		5.5	14	38	231		18	2			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.00 00		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1790																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1770																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1790																						
OREAS 16A (FA-Ancaster) Cert	1810																						
246192 Orig		0.3	5.01	< 3	40	< 1	3	5.37	0.4	34	18	140	8.43	15	< 1	0.34	1.47	2	1680	< 1	3.49	13	0.041
246192 Dup		< 0.3	5.05	< 3	40	< 1	5	5.41	< 0.3	35	22	143	8.57	15	< 1	0.35	1.49	2	1710	< 1	3.50	14	0.043
246200 Orig	24																						
246200 Dup	15																						
246210 Orig	12																						
246210 Dup	14																						
246217 Orig		< 0.3	6.16	< 3	86	< 1	7	4.53	< 0.3	45	9	149	10.8	20	< 1	0.61	1.82	14	1380	< 1	1.75	16	0.050

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246217 Dup		< 0.3	6.23	< 3	88	< 1	6	4.57	< 0.3	42	6	152	11.0	20	< 1	0.62	1.85	14	1400	< 1	1.79	16	0.047
246220 Orig	19																						
246220 Dup	13																						
246231 Orig		0.5	5.94	4	101	< 1	4	4.06	< 0.3	43	6	141	10.7	18	4	0.63	2.07	13	1460	< 1	1.71	14	0.057
246231 Dup		0.6	6.03	< 3	102	< 1	6	4.10	< 0.3	43	12	142	10.6	18	1	0.61	2.09	13	1460	< 1	1.71	15	0.057
246235 Orig	7																						
246235 Dup	7																						
246240 Split Orig PREP DUP	25	0.7	6.68	< 3	144	< 1	4	4.54	< 0.3	46	22	168	11.0	20	< 1	0.77	2.07	8	1490	4	2.20	23	0.053
246240 Split PREP DUP	23	0.5	6.61	5	142	< 1	7	4.53	< 0.3	44	18	167	10.8	20	< 1	0.76	2.05	8	1470	3	2.15	22	0.052
246240 Split PREP DUP	23																						
246245 Orig	16																						
246245 Dup	14																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		4	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		5	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		3	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	724	13	0.25	< 4	291	7	0.03	< 5	30	87	154	36	732	27
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	717	45	0.24	< 4	283	18	0.03	< 5	30	85	158	34	717	32
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	727	34	0.25	< 4	289	17	0.03	< 5	30	86	156	35	729	31
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	44	< 5	1.79	8	215	< 2	0.29	7	< 10	90	39	15	71	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	49	< 5	1.78	9	223	< 2	0.29	< 5	< 10	90	37	15	77	48
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	48	< 5	1.71	8	216	4	0.28	< 5	< 10	88	36	15	76	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	24	< 5		17	171		0.14	< 5	< 10	51	< 5		98	44
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	94	< 5	0.01	26	38	2		< 5	< 10	187	< 5	12	128	104
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	93	< 5	0.02	27	36	< 2		< 5	< 10	143	< 5	11	130	82
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	95	< 5	0.02	27	37	< 2		< 5	< 10	103	< 5	12	130	60
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.62											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.53											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.51											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	5	< 5		31	127		0.28			138		16	60	35
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		31	129		0.28			140		16	58	36
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		32	128		0.28			141		16	60	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	30	< 5		20	172		0.41	< 5	< 10	209	< 5	30	179	110
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	28	< 5		21	182		0.54	< 5	< 10	225	< 5	30	183	122
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	27	< 5		21	175		0.52	< 5	< 10	216	< 5	31	181	124
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	821			< 4	142				< 10	27	10	28	782	133
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	829			5	149				< 10	28	11	29	794	136
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	813			5	145				< 10	22	8	29	768	114
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
246192 Orig	< 3	< 5	1.08	32	124	3	0.36	< 5	< 10	162	< 5	15	70	90
246192 Dup	< 3	< 5	1.10	32	124	5	0.39	< 5	< 10	167	< 5	16	71	95
246200 Orig														
246200 Dup														
246210 Orig														
246210 Dup														
246217 Orig	< 3	< 5	0.50	38	87	10	0.34	< 5	< 10	191	< 5	36	111	71
246217 Dup	< 3	< 5	0.50	38	87	< 2	0.35	< 5	< 10	232	< 5	37	114	104
246220 Orig														
246220 Dup														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246231 Orig	7	< 5	0.33	37	76	< 2	0.33	< 5	< 10	200	< 5	40	168	98
246231 Dup	8	< 5	0.33	38	77	< 2	0.36	5	< 10	205	< 5	41	171	93
246235 Orig														
246235 Dup														
246240 Split Orig PREP DUP	5	< 5	0.25	40	162	11	0.55	8	< 10	240	< 5	37	116	100
246240 Split PREP DUP	9	< 5	0.25	40	162	13	0.46	< 5	< 10	226	14	36	115	92
246240 Split PREP DUP														
246245 Orig														
246245 Dup														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 14-Nov-16
Invoice No.: A16-12075
Invoice Date: 27-Nov-16
Your Reference: Core-11-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

33 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12075**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 14-Nov-16
Invoice No.: A16-12075
Invoice Date: 27-Nov-16
Your Reference: Core-11-Nov-16-R5-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

33 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12075**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263384	< 5	< 0.3	6.86	< 3	113	< 1	4	5.45	< 0.3	39	61	117	7.29	17	< 1	0.62	2.75	8	1520	< 1	4.15	57	0.028
263385	5	0.5	6.22	7	129	< 1	4	3.24	< 0.3	37	54	152	6.70	15	< 1	0.77	2.04	5	1130	< 1	3.92	52	0.026
263386	< 5	< 0.3	7.00	< 3	84	< 1	5	6.42	< 0.3	40	48	79	7.54	14	2	0.51	2.81	6	1530	< 1	3.93	55	0.029
263387	< 5	< 0.3	7.00	< 3	85	< 1	4	6.55	0.4	41	54	85	7.62	14	< 1	0.52	2.85	6	1560	< 1	3.92	56	0.029
263388	< 5	0.4	6.97	< 3	119	< 1	3	5.21	< 0.3	45	64	70	7.81	15	< 1	0.60	2.83	8	1470	< 1	4.05	57	0.028
263389	< 5	0.4	7.13	< 3	172	< 1	9	6.84	< 0.3	40	69	64	7.79	15	< 1	0.58	2.79	6	1720	< 1	3.80	60	0.029
263390	< 5	0.4	7.10	3	126	< 1	3	7.15	< 0.3	41	57	52	7.97	16	< 1	0.64	2.37	6	1610	2	3.46	58	0.028
263391	< 5	0.3	6.63	< 3	109	< 1	4	5.73	1.2	39	94	84	6.72	13	< 1	0.71	2.37	5	1400	2	3.74	54	0.028
263392	< 5	< 0.3	6.91	< 3	79	< 1	4	6.66	< 0.3	43	86	93	7.62	14	< 1	0.56	2.40	3	1520	< 1	3.45	59	0.027
263393	< 5	< 0.3	7.86	< 3	81	< 1	7	6.41	< 0.3	49	89	130	9.10	21	< 1	0.58	2.44	7	1670	< 1	2.95	73	0.028
263394	751	0.4	8.14	237	437	< 1	4	3.95	< 0.3	13	27	47	4.84	16	< 1	0.84	1.31	7	924	1	2.40	24	0.043
263395	< 5	< 0.3	7.90	< 3	72	< 1	5	8.08	0.5	42	62	98	7.66	19	< 1	0.60	2.07	3	1440	2	3.21	64	0.028
263396	14	< 0.3	7.44	< 3	74	< 1	8	5.25	< 0.3	47	59	112	7.76	15	< 1	0.66	2.21	3	1420	< 1	4.03	65	0.028
263397	10	< 0.3	7.36	< 3	77	< 1	4	7.87	< 0.3	44	49	108	7.94	16	< 1	0.56	2.70	4	1690	< 1	3.07	61	0.029
263398	< 5	< 0.3	7.28	< 3	96	< 1	3	7.29	< 0.3	42	53	129	8.20	15	< 1	0.73	3.09	6	1550	2	2.96	59	0.030
263399	< 5	< 0.3	7.43	3	101	< 1	5	7.01	< 0.3	44	57	93	8.52	17	< 1	0.91	3.62	9	1360	6	2.47	58	0.031
263400	< 5	0.3	7.57	< 3	98	< 1	7	6.81	< 0.3	46	80	125	8.64	17	< 1	0.96	3.54	10	1420	1	2.61	60	0.032
263401	5	< 0.3	7.15	5	61	< 1	4	7.19	< 0.3	42	65	107	7.88	15	< 1	0.54	3.07	6	1480	2	2.72	59	0.027
263402	< 5	< 0.3	0.08	< 3	42	< 1	< 2	17.8	< 0.3	< 1	4	5	0.10	< 1	< 1	0.02	11.6	8	337	1	0.04	2	0.004
263403	< 5	< 0.3	7.01	< 3	64	< 1	6	7.10	< 0.3	41	53	88	7.72	15	< 1	0.60	2.79	5	1520	< 1	2.82	56	0.026
263404	< 5	0.4	7.25	< 3	76	< 1	5	5.94	< 0.3	45	69	61	7.83	15	< 1	0.80	2.63	5	1500	1	3.43	60	0.028
263405	< 5	0.4	7.03	< 3	68	< 1	4	6.36	< 0.3	41	44	79	7.80	16	< 1	0.74	2.98	7	1440	5	2.95	56	0.029
263406	< 5	0.5	7.14	5	81	< 1	5	6.40	0.4	44	52	101	8.10	16	< 1	0.83	3.33	10	1400	4	2.64	59	0.028
263407	< 5	0.8	7.06	< 3	94	< 1	3	6.69	< 0.3	43	54	173	7.85	16	< 1	0.97	3.25	9	1330	4	2.69	57	0.028
263408	< 5	0.4	7.24	< 3	87	< 1	6	6.37	< 0.3	44	54	85	8.13	17	< 1	0.83	3.28	9	1350	2	2.87	59	0.030
263409	415	0.4	7.92	152	441	< 1	5	3.85	< 0.3	14	39	44	4.66	15	< 1	0.83	1.30	7	893	3	2.39	26	0.045
263410	16	0.4	6.20	5	82	< 1	3	7.37	0.4	39	75	92	7.43	19	< 1	0.88	2.14	5	1400	< 1	2.76	56	0.026
263411	< 5	< 0.3	7.08	< 3	117	< 1	5	6.00	< 0.3	44	88	86	7.84	18	< 1	0.75	2.19	5	1490	< 1	2.95	60	0.024
263412	< 5	0.4	7.94	4	77	< 1	5	5.81	< 0.3	49	90	125	8.55	20	< 1	0.83	2.33	5	1610	< 1	3.56	68	0.029
263413	< 5	< 0.3	7.46	< 3	57	< 1	4	7.68	< 0.3	43	61	117	7.87	16	< 1	0.60	2.56	3	1560	< 1	3.09	60	0.027
263414	12	< 0.3	7.29	9	132	< 1	4	8.84	< 0.3	42	46	134	7.73	20	< 1	0.67	2.29	2	1380	< 1	2.34	57	0.027
263415	< 5	< 0.3	7.01	3	47	< 1	4	7.48	< 0.3	41	42	61	7.00	15	< 1	0.44	2.44	4	1330	< 1	2.79	56	0.024
263416	< 5	0.5	7.36	< 3	54	< 1	4	7.88	0.5	44	50	64	7.52	16	< 1	0.52	2.65	5	1460	< 1	2.85	60	0.029

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263384	15	< 5	0.37	38	87	4	0.38	< 5	< 10	218	< 5	20	109	61
263385	33	< 5	0.48	34	60	< 2	0.39	6	< 10	212	< 5	17	73	63
263386	3	< 5	0.26	37	91	4	0.45	< 5	< 10	235	< 5	18	81	68
263387	4	< 5	0.25	37	91	< 2	0.45	< 5	< 10	237	< 5	19	80	68
263388	4	< 5	0.33	38	80	5	0.45	5	< 10	239	< 5	19	88	69
263389	5	< 5	0.18	37	167	4	0.45	6	< 10	234	< 5	19	90	66
263390	< 3	< 5	0.16	37	157	3	0.42	< 5	< 10	223	< 5	18	77	58
263391	4	< 5	0.37	35	94	4	0.42	< 5	< 10	218	< 5	18	78	66
263392	< 3	< 5	0.25	37	132	2	0.25	< 5	< 10	167	< 5	19	77	42
263393	5	< 5	0.41	44	175	< 2	0.33	< 5	< 10	195	< 5	24	98	45
263394	20	< 5	0.06	21	299	6	0.17	< 5	< 10	92	< 5	20	67	19
263395	4	< 5	0.31	41	160	< 2	0.26	< 5	< 10	164	< 5	21	73	36
263396	< 3	< 5	1.07	40	110	4	0.37	< 5	< 10	208	< 5	21	82	64
263397	4	< 5	0.22	38	161	4	0.42	< 5	< 10	220	< 5	19	81	57
263398	4	< 5	0.29	38	186	5	0.46	< 5	< 10	238	< 5	19	91	68
263399	< 3	< 5	0.06	38	144	< 2	0.47	< 5	< 10	232	< 5	19	82	72
263400	< 3	< 5	0.16	39	140	7	0.49	< 5	< 10	241	< 5	20	87	74
263401	< 3	< 5	0.26	37	162	< 2	0.23	< 5	< 10	136	< 5	20	81	33
263402	< 3	< 5	< 0.01	< 4	150	< 2	< 0.01	< 5	10	4	< 5	< 1	10	< 5
263403	< 3	< 5	0.19	37	159	< 2	0.17	< 5	< 10	125	< 5	20	78	27
263404	6	< 5	0.54	38	146	5	0.46	< 5	< 10	232	< 5	20	85	71
263405	< 3	< 5	0.09	37	177	2	0.41	< 5	< 10	214	< 5	20	77	64
263406	< 3	< 5	0.13	37	154	< 2	0.44	< 5	< 10	225	< 5	19	80	68
263407	5	< 5	0.16	36	131	9	0.38	< 5	< 10	197	< 5	18	77	60
263408	< 3	< 5	0.45	38	159	4	0.46	< 5	< 10	231	< 5	19	84	70
263409	6	< 5	0.05	20	293	< 2	0.26	< 5	< 10	106	< 5	18	57	25
263410	< 3	< 5	0.23	31	144	< 2	0.43	< 5	< 10	245	< 5	18	75	57
263411	9	< 5	0.76	38	147	< 2	0.29	< 5	< 10	219	< 5	20	78	60
263412	5	< 5	0.25	43	156	4	0.38	< 5	< 10	198	< 5	21	85	54
263413	5	< 5	0.28	39	159	4	0.29	< 5	< 10	167	< 5	20	80	40
263414	13	< 5	0.32	37	172	15	0.30	< 5	< 10	194	< 5	19	69	39
263415	< 3	< 5	0.05	37	138	4	0.31	< 5	< 10	176	< 5	18	75	46
263416	< 3	< 5	0.12	39	139	4	0.43	< 5	< 10	225	< 5	19	79	53

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		30.9	2.62	462	693	1	1370	0.86	2.1	6	14	1100	22.8	16	5	0.06	0.21	9	840	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.4	2.37	472	646	1	1400	0.87	2.7	6	15	1140	23.2	16	3	0.05	0.20	8	861	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		4.1	6.87	122	238	2	27	1.08	0.3	15	45	6530	3.30	20	< 1	4.07	1.69	11	156	356	0.52	44	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.64	118	171	2	24	1.06	< 0.3	15	44	6320	3.16	18	< 1	3.93	1.62	11	162	344	0.50	43	0.127
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.26	< 3	603	3		1.10		19	60	29	4.72	24	< 1	1.63	0.97	33	888		1.47	37	0.052
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.4	13.2	333	> 1000	1	6	0.18	0.3	15	81	72	6.02	31	< 1	1.69	0.60	33	1110	< 1	0.10	29	0.038
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	13.6	257	> 1000	1	6	0.18	0.4	15	54	71	5.93	35	< 1	1.42	0.61	35	1070	< 1	0.10	28	0.035
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						149	203	310	9.46									6450	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						144	174	293	8.95									6370	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					97					57	130	98		13				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					98					53	250	96		14				5				267	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				24	778	3	10		0.7	24	98	33		29				162		2		94	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				26	761	3	5		0.4	23	89	33		28				155		2		91	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	596																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	< 2		5.5	14	39	247		18	< 1			18		15		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					983	7	3		5.5	14	38	231		18	2			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1740																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
OREAS 16A (FA-Ancaster) Cert	1810																						
263384 Orig		< 0.3	6.82	3	112	< 1	3	5.43	< 0.3	38	66	115	7.24	18	< 1	0.61	2.72	8	1510	< 1	4.18	56	0.028
263384 Dup		0.3	6.91	< 3	115	< 1	4	5.46	0.3	39	56	118	7.34	17	< 1	0.62	2.79	8	1520	< 1	4.12	57	0.029
263393 Orig	< 5																						
263393 Dup	< 5																						
263398 Orig		< 0.3	7.25	< 3	95	< 1	3	7.26	< 0.3	42	50	127	8.14	15	< 1	0.73	3.07	6	1540	1	2.94	60	0.030
263398 Dup		0.4	7.30	7	96	< 1	3	7.32	< 0.3	42	56	131	8.27	15	< 1	0.74	3.11	6	1560	2	2.98	59	0.030
263403 Orig	< 5																						
263403 Dup	< 5																						
263413 Orig	< 5	< 0.3	7.50	< 3	58	< 1	2	7.69	< 0.3	42	73	117	7.91	16	< 1	0.61	2.58	3	1570	< 1	3.11	60	0.028
263413 Dup	< 5	< 0.3	7.43	< 3	57	< 1	6	7.66	< 0.3	43	48	116	7.83	17	< 1	0.60	2.54	3	1550	< 1	3.08	59	0.026
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		4	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		5	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		3	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	717	45	0.24	< 4	283	18	0.03	< 5	30	85	158	34	717	32
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	727	34	0.25	< 4	289	17	0.03	< 5	30	86	156	35	729	31
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	49	< 5	1.78	9	223	< 2	0.29	< 5	< 10	90	37	15	77	48
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	48	< 5	1.71	8	216	4	0.28	< 5	< 10	88	36	15	76	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	24	< 5		17	171		0.14	< 5	< 10	51	< 5		98	44
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	93	< 5	0.02	27	36	< 2		< 5	< 10	143	< 5	11	130	82
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	95	< 5	0.02	27	37	< 2		< 5	< 10	103	< 5	12	130	60
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.53											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.51											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	< 3	< 5		31	129		0.28			140		16	58	36
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		32	128		0.28			141		16	60	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		21	182		0.54	< 5	< 10	225	< 5	30	183	122
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	27	< 5		21	175		0.52	< 5	< 10	216	< 5	31	181	124
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	829			5	149				< 10	28	11	29	794	136
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	813			5	145				< 10	22	8	29	768	114
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster)														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Cert														
263384 Orig	13	< 5	0.37	38	87	5	0.35	< 5	< 10	202	< 5	20	109	56
263384 Dup	16	< 5	0.36	38	87	3	0.42	< 5	< 10	234	< 5	20	110	66
263393 Orig														
263393 Dup														
263398 Orig	4	< 5	0.29	38	186	6	0.46	< 5	< 10	235	< 5	19	90	69
263398 Dup	4	< 5	0.30	38	187	5	0.46	< 5	< 10	240	< 5	19	93	68
263403 Orig														
263403 Dup														
263413 Orig	6	< 5	0.29	39	160	4	0.33	< 5	< 10	176	< 5	20	79	44
263413 Dup	4	< 5	0.27	39	158	4	0.25	< 5	< 10	157	< 5	20	80	36
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 14-Nov-16
Invoice No.: A16-12079
Invoice Date: 27-Nov-16
Your Reference: Core-14-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

57 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12079**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 14-Nov-16
Invoice No.: A16-12079
Invoice Date: 27-Nov-16
Your Reference: Core-14-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

57 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12079**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246255	121	0.6	5.63	8	109	< 1	6	4.81	< 0.3	38	9	139	9.95	20	< 1	1.58	1.69	3	1410	< 1	2.26	17	0.040
246256	133	2.1	3.00	45	22	< 1	5	2.98	< 0.3	23	21	39	5.49	8	< 1	0.10	0.89	< 1	733	88	2.24	10	0.018
246257	153	0.7	5.62	8	63	< 1	7	5.50	< 0.3	43	30	309	8.95	18	< 1	0.59	2.14	3	1130	17	3.78	32	0.043
246258	45	< 0.3	5.42	5	122	< 1	2	5.10	< 0.3	36	30	152	7.33	13	< 1	1.32	2.90	4	1340	3	2.20	46	0.024
246259	6	< 0.3	6.18	< 3	109	< 1	3	5.66	< 0.3	46	39	117	8.13	14	< 1	1.40	3.47	8	1340	< 1	1.11	70	0.022
246260	< 5	< 0.3	5.61	< 3	> 1000	< 1	4	6.16	< 0.3	53	40	80	8.14	12	< 1	1.28	4.70	13	1410	< 1	1.59	129	0.019
246261	< 5	< 0.3	5.91	< 3	626	< 1	4	5.39	0.3	62	42	97	8.65	14	< 1	0.76	5.18	18	1380	< 1	1.72	148	0.021
246262	501	0.4	7.89	141	440	< 1	4	3.81	0.4	12	32	50	4.61	15	< 1	0.83	1.30	7	891	2	2.37	29	0.043
246263	< 5	< 0.3	5.57	< 3	134	< 1	4	6.35	< 0.3	61	25	79	8.59	12	< 1	0.62	5.12	19	1490	< 1	1.11	153	0.018
246264	690	0.5	5.99	< 3	34	< 1	4	6.94	0.3	62	31	444	8.73	13	< 1	0.49	4.70	21	1470	< 1	1.15	131	0.024
246265	726	0.6	6.84	< 3	56	< 1	3	6.56	< 0.3	50	50	165	7.89	15	< 1	1.00	3.38	17	1370	< 1	1.87	72	0.028
246266	5	0.4	7.35	< 3	71	< 1	5	6.20	< 0.3	44	53	102	8.07	17	< 1	1.01	3.21	17	1390	2	1.97	58	0.031
246267	< 5	0.9	6.72	< 3	68	< 1	5	5.57	< 0.3	39	62	109	7.48	14	< 1	0.63	3.14	16	1450	< 1	2.14	56	0.028
246268	< 5	< 0.3	6.50	< 3	78	< 1	3	6.51	0.4	38	71	94	7.11	13	< 1	0.73	2.83	14	1370	1	2.42	55	0.029
246269	< 5	< 0.3	6.24	< 3	33	< 1	5	6.88	< 0.3	38	68	91	7.07	14	< 1	0.44	2.67	11	1270	< 1	2.88	51	0.026
246270	< 5	< 0.3	0.10	6	63	< 1	< 2	18.0	< 0.3	< 1	5	2	0.10	< 1	1	0.04	11.3	7	344	< 1	0.04	1	0.003
246271	199	0.4	5.77	4	55	< 1	5	6.91	< 0.3	34	50	77	6.59	13	< 1	0.71	2.32	8	1190	2	2.53	47	0.037
246272	< 5	< 0.3	6.58	< 3	38	< 1	4	6.60	< 0.3	41	56	102	7.33	16	< 1	0.40	2.84	11	1360	< 1	3.08	54	0.028
246273	5	< 0.3	6.88	< 3	38	< 1	3	5.17	< 0.3	43	57	88	7.53	16	< 1	0.41	2.85	11	1280	< 1	3.30	57	0.029
246274	< 5	< 0.3	6.51	< 3	51	< 1	4	7.38	< 0.3	39	46	61	7.26	14	< 1	0.53	2.97	12	1410	< 1	2.74	52	0.026
246275	< 5	< 0.3	6.83	< 3	147	< 1	4	7.20	< 0.3	41	45	113	7.74	17	< 1	1.07	3.09	13	1470	3	2.19	54	0.028
246276	< 5	< 0.3	6.75	4	95	< 1	4	6.23	< 0.3	42	55	85	7.66	16	< 1	0.80	2.88	12	1340	1	2.42	57	0.028
246277	< 5	0.3	7.90	< 3	72	< 1	3	6.18	< 0.3	49	63	59	8.40	15	< 1	0.70	2.84	7	1630	< 1	3.37	64	0.032
246278	418	< 0.3	8.23	149	456	< 1	3	3.94	1.2	19	35	45	4.79	16	< 1	0.85	1.33	8	932	3	2.46	26	0.046
246279	< 5	< 0.3	7.06	3	98	< 1	4	5.33	< 0.3	42	67	114	7.83	15	< 1	0.73	3.14	9	1580	< 1	2.52	58	0.028
246280	< 5	< 0.3	7.42	< 3	92	< 1	5	6.21	< 0.3	44	58	108	8.29	16	< 1	0.74	3.29	12	1620	< 1	2.41	59	0.029
246281	< 5	< 0.3	6.72	4	64	< 1	3	5.88	< 0.3	42	49	91	7.49	16	< 1	0.70	2.94	12	1450	< 1	2.81	55	0.027
246282	< 5	0.5	7.47	< 3	79	< 1	5	6.43	< 0.3	51	88	175	9.18	19	< 1	0.86	3.08	11	1810	2	2.33	67	0.030
246283	< 5	0.3	7.20	6	89	< 1	5	6.27	< 0.3	44	59	113	8.34	16	6	0.98	3.24	6	1730	< 1	2.72	58	0.029
246284	< 5	0.4	7.42	< 3	81	< 1	4	6.32	< 0.3	45	66	141	8.79	18	< 1	0.99	3.33	6	1780	< 1	2.79	63	0.033
246285	< 5	0.3	7.54	< 3	102	< 1	4	5.20	< 0.3	45	69	93	8.90	17	< 1	1.10	3.17	7	1780	2	3.08	62	0.030
246286	< 5	0.3	7.60	6	103	< 1	5	5.23	< 0.3	45	107	96	8.95	17	< 1	1.10	3.23	7	1800	2	3.09	65	0.031
246287	< 5	< 0.3	6.70	< 3	88	< 1	3	7.31	< 0.3	40	77	88	7.51	16	< 1	0.84	2.66	6	1640	1	2.22	56	0.028
246288	< 5	0.3	6.77	3	77	< 1	5	7.81	< 0.3	41	77	83	7.61	15	< 1	0.71	2.58	7	1700	< 1	2.83	56	0.027
246289	< 5	< 0.3	7.01	< 3	93	< 1	4	6.75	< 0.3	40	72	70	7.87	17	< 1	0.82	3.15	15	1580	< 1	2.63	55	0.028
246290	< 5	< 0.3	7.04	< 3	77	< 1	5	6.89	< 0.3	40	57	87	7.64	16	< 1	0.71	2.99	14	1410	< 1	2.65	55	0.026
246291	< 5	< 0.3	6.90	< 3	56	< 1	4	5.86	< 0.3	41	48	96	7.61	15	< 1	0.69	2.86	14	1470	< 1	2.91	56	0.029
246292	< 5	< 0.3	6.91	< 3	77	< 1	4	7.37	< 0.3	41	52	91	7.71	15	< 1	1.07	2.95	16	1420	< 1	2.49	56	0.027
246293	< 5	< 0.3	6.50	7	79	< 1	6	6.77	< 0.3	38	48	81	7.05	14	< 1	0.94	2.78	13	1380	< 1	2.49	53	0.024
246294	2030	2.4	6.36	8	483	< 1	< 2	3.16	1.6	14	61	61	4.74	12	< 1	0.86	1.34	13	814	2	2.07	43	0.057
246295	< 5	0.4	7.23	< 3	87	< 1	5	6.36	< 0.3	43	57	94	7.92	16	< 1	0.79	2.80	14	1390	< 1	3.07	59	0.028
246296	< 5	< 0.3	7.02	< 3	58	< 1	4	6.74	< 0.3	40	55	56	7.77	16	< 1	0.67	3.08	14	1480	< 1	2.99	57	0.028

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246297	< 5	< 0.3	6.52	< 3	59	< 1	4	6.52	< 0.3	38	71	73	7.35	14	< 1	0.59	2.73	13	1440	1	2.99	57	0.028
246298	< 5	< 0.3	6.95	5	77	< 1	6	5.99	< 0.3	40	83	88	7.62	14	< 1	0.72	3.08	10	1490	< 1	3.26	56	0.026
246299	< 5	0.3	7.13	< 3	139	< 1	6	5.51	0.5	42	77	84	7.78	15	< 1	1.05	3.25	9	1570	< 1	2.77	58	0.027
246300	< 5	< 0.3	7.24	< 3	114	< 1	5	6.37	< 0.3	43	71	90	8.07	15	< 1	0.98	2.95	9	1510	< 1	3.02	58	0.029
246301	< 5	0.3	7.58	9	80	< 1	6	7.04	< 0.3	44	56	101	8.81	17	< 1	0.70	3.01	7	1680	< 1	2.50	62	0.030
246302	< 5	< 0.3	0.09	4	31	< 1	2	19.1	< 0.3	< 1	3	2	0.11	< 1	< 1	0.02	12.1	10	367	< 1	0.05	< 1	0.003
246303	< 5	< 0.3	7.19	3	82	< 1	7	7.04	0.4	43	49	94	7.88	16	< 1	0.63	3.28	7	1600	< 1	2.61	58	0.025
246304	< 5	< 0.3	7.45	< 3	54	< 1	3	7.68	< 0.3	44	57	89	7.78	18	< 1	0.39	2.49	4	1610	< 1	2.96	61	0.027
246305	< 5	< 0.3	7.42	< 3	102	< 1	4	6.15	0.3	45	59	92	8.30	16	< 1	0.71	2.82	6	1660	< 1	3.45	59	0.029
246306	< 5	0.3	6.57	7	93	< 1	3	6.97	< 0.3	39	73	58	7.26	16	< 1	0.76	2.39	6	1540	2	2.62	56	0.027
246307	< 5	< 0.3	7.56	< 3	84	< 1	5	8.78	0.3	44	84	99	7.95	18	< 1	0.83	2.44	8	1630	6	2.31	60	0.026
246308	< 5	< 0.3	7.61	< 3	90	< 1	4	8.20	0.3	41	70	48	7.84	19	< 1	0.78	2.58	6	1500	3	2.80	59	0.029
246309	6	0.4	7.26	< 3	65	< 1	4	8.50	< 0.3	40	72	83	7.50	17	< 1	0.47	2.76	7	1570	< 1	2.68	62	0.025
246310	616	0.5	8.25	238	444	< 1	6	4.00	< 0.3	13	66	48	4.90	14	< 1	0.83	1.33	7	913	1	2.44	26	0.044
246311	6	< 0.3	7.36	< 3	81	< 1	5	6.98	< 0.3	44	61	69	7.68	17	< 1	0.61	2.88	7	1660	< 1	2.92	65	0.027

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246255	8	< 5	1.69	35	98	4	0.51	< 5	< 10	295	< 5	16	89	123
246256	23	< 5	3.85	17	89	< 2	0.37	< 5	< 10	94	25	15	34	69
246257	9	< 5	4.06	32	148	4	0.62	< 5	< 10	306	7	14	76	98
246258	< 3	< 5	0.35	33	129	3	0.44	< 5	< 10	213	< 5	10	87	52
246259	< 3	< 5	0.52	34	147	4	0.33	< 5	< 10	202	< 5	8	74	47
246260	< 3	< 5	0.48	30	149	9	0.36	< 5	< 10	184	< 5	9	70	44
246261	< 3	< 5	0.21	31	92	3	0.34	< 5	< 10	181	< 5	9	74	45
246262	10	< 5	0.05	21	291	< 2	0.19	< 5	< 10	93	< 5	20	59	19
246263	< 3	< 5	0.50	29	89	4	0.33	< 5	< 10	177	< 5	8	72	39
246264	< 3	< 5	0.38	31	97	8	0.38	< 5	< 10	191	5	9	80	47
246265	< 3	< 5	0.31	35	73	8	0.41	< 5	< 10	204	< 5	15	75	57
246266	< 3	< 5	0.05	38	75	4	0.45	< 5	< 10	224	< 5	19	78	58
246267	< 3	< 5	0.18	35	61	< 2	0.38	< 5	< 10	198	< 5	17	83	56
246268	< 3	< 5	0.27	35	57	13	0.42	< 5	< 10	210	< 5	18	72	63
246269	< 3	< 5	0.68	33	78	5	0.33	< 5	< 10	188	< 5	17	76	58
246270	< 3	< 5	0.02	< 4	108	< 2	< 0.01	9	10	4	< 5	< 1	9	< 5
246271	8	< 5	1.94	30	109	8	0.33	< 5	< 10	179	< 5	13	62	51
246272	5	< 5	0.67	35	66	4	0.42	10	< 10	215	< 5	19	82	66
246273	< 3	< 5	0.56	38	60	< 2	0.44	< 5	< 10	220	< 5	19	79	70
246274	< 3	< 5	0.27	34	93	10	0.26	< 5	< 10	154	< 5	18	67	40
246275	5	< 5	0.26	36	96	3	0.36	< 5	< 10	191	< 5	18	66	47
246276	< 3	< 5	0.58	35	82	8	0.43	< 5	< 10	226	< 5	18	71	65
246277	< 3	< 5	0.04	40	138	5	0.47	< 5	< 10	237	< 5	20	81	68
246278	13	< 5	0.05	21	302	5	0.23	< 5	< 10	94	7	20	60	27
246279	5	< 5	0.22	38	140	< 2	0.33	< 5	< 10	187	< 5	20	82	52
246280	4	< 5	0.16	39	131	2	0.34	< 5	< 10	186	< 5	20	85	52
246281	< 3	< 5	0.48	34	54	3	0.42	< 5	< 10	218	< 5	19	74	66
246282	4	< 5	0.66	40	162	12	0.48	< 5	< 10	251	< 5	20	86	73
246283	< 3	8	0.47	38	177	5	0.45	< 5	< 10	235	< 5	20	80	71
246284	4	< 5	0.63	40	165	2	0.48	< 5	< 10	247	< 5	20	81	72
246285	< 3	< 5	0.29	40	157	< 2	0.47	< 5	< 10	239	< 5	20	84	72
246286	6	< 5	0.26	39	157	6	0.49	< 5	< 10	245	< 5	20	86	74
246287	< 3	< 5	0.29	35	188	11	0.43	< 5	< 10	223	< 5	18	71	65
246288	4	< 5	0.62	35	154	13	0.30	< 5	< 10	205	< 5	19	71	61
246289	< 3	< 5	0.16	37	91	3	0.30	< 5	< 10	184	< 5	19	80	48
246290	< 3	< 5	0.24	37	94	< 2	0.25	< 5	< 10	156	< 5	19	77	41
246291	< 3	< 5	0.35	36	68	4	0.38	< 5	< 10	197	< 5	18	75	56
246292	< 3	< 5	0.64	36	77	4	0.44	< 5	< 10	214	< 5	19	77	69
246293	< 3	< 5	0.72	34	80	3	0.40	< 5	< 10	204	< 5	17	76	63
246294	311	< 5	0.09	17	269	3	0.24	< 5	< 10	104	< 5	17	258	37
246295	< 3	< 5	0.65	37	51	6	0.46	< 5	< 10	222	< 5	19	79	70
246296	4	< 5	0.14	36	44	3	0.38	< 5	< 10	201	< 5	18	82	58

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246297	< 3	< 5	0.17	35	53	5	0.42	< 5	< 10	213	< 5	18	72	67
246298	3	< 5	0.19	37	75	< 2	0.19	6	< 10	131	< 5	19	75	34
246299	< 3	< 5	0.08	39	108	4	0.36	< 5	< 10	207	< 5	19	82	68
246300	3	< 5	0.10	38	101	6	0.36	< 5	< 10	184	< 5	20	73	59
246301	< 3	< 5	0.46	39	226	4	0.48	< 5	< 10	251	< 5	20	79	74
246302	< 3	< 5	0.01	< 4	190	< 2	< 0.01	< 5	10	5	< 5	< 1	12	< 5
246303	5	< 5	0.03	38	163	< 2	0.32	< 5	< 10	199	< 5	19	81	58
246304	< 3	< 5	0.19	38	162	4	0.38	< 5	< 10	201	< 5	19	74	46
246305	< 3	< 5	0.30	38	121	5	0.41	< 5	< 10	205	< 5	20	80	60
246306	< 3	< 5	0.14	35	146	7	0.42	< 5	10	218	< 5	18	70	64
246307	3	< 5	0.09	39	169	4	0.32	< 5	< 10	216	< 5	20	79	52
246308	< 3	< 5	0.12	38	139	< 2	0.39	< 5	< 10	217	< 5	19	72	50
246309	< 3	< 5	0.07	36	152	< 2	0.32	< 5	< 10	204	< 5	18	79	52
246310	19	< 5	0.06	22	299	10	0.17	5	< 10	91	< 5	20	70	20
246311	< 3	< 5	0.19	37	153	5	0.32	< 5	< 10	181	< 5	19	83	47

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		30.9	2.62	462	693	1	1370	0.86	2.1	6	14	1100	22.8	16	5	0.06	0.21	9	840	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.4	2.37	472	646	1	1400	0.87	2.7	6	15	1140	23.2	16	3	0.05	0.20	8	861	16	0.06	42	0.057
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		4.1	6.87	122	238	2	27	1.08	0.3	15	45	6530	3.30	20	< 1	4.07	1.69	11	156	356	0.52	44	0.130
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.64	118	171	2	24	1.06	< 0.3	15	44	6320	3.16	18	< 1	3.93	1.62	11	162	344	0.50	43	0.127
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.26	< 3	603	3		1.10		19	60	29	4.72	24	< 1	1.63	0.97	33	888		1.47	37	0.052
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.4	13.2	333	> 1000	1	6	0.18	0.3	15	81	72	6.02	31	< 1	1.69	0.60	33	1110	< 1	0.10	29	0.038
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.5	13.6	257	> 1000	1	6	0.18	0.4	15	54	71	5.93	35	< 1	1.42	0.61	35	1070	< 1	0.10	28	0.035
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				< 3						149	203	310	9.46									6450	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				6						144	174	293	8.95									6370	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					97					57	130	98		13				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					98					53	250	96		14				5				267	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				24	778	3	10		0.7	24	98	33		29				162		2		94	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				26	761	3	5		0.4	23	89	33		28				155		2		91	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	582																						
SE68 Cert	599																						
SE68 Meas	587																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	< 2		5.5	14	39	247		18	< 1			18		15		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					983	7	3		5.5	14	38	231		18	2			17		10		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
OREAS 16A (FA-Ancaster) Meas	1810																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1700																						
OREAS 16A (FA-Ancaster) Cert	1810																						
246264 Orig	699																						
246264 Dup	680																						
246265 Orig		0.5	6.73	< 3	56	< 1	4	6.45	< 0.3	49	47	168	7.78	14	< 1	0.99	3.32	17	1350	< 1	1.84	72	0.027
246265 Dup		0.7	6.94	< 3	57	< 1	3	6.67	< 0.3	51	54	162	7.99	15	< 1	1.01	3.44	18	1390	< 1	1.90	73	0.028
246274 Orig	< 5																						
246274 Dup	< 5																						
246284 Orig	< 5																						
246284 Dup	< 5																						
246290 Orig		< 0.3	7.05	< 3	77	< 1	5	6.88	< 0.3	40	67	88	7.69	16	< 1	0.71	3.00	14	1420	< 1	2.66	54	0.026
246290 Dup		< 0.3	7.04	< 3	77	< 1	6	6.89	0.4	40	47	86	7.60	16	< 1	0.71	2.98	14	1400	< 1	2.64	55	0.027
246299 Orig	< 5																						
246299 Dup	< 5																						
246304 Split Orig PREP DUP	< 5	< 0.3	7.45	< 3	54	< 1	3	7.68	< 0.3	44	57	89	7.78	18	< 1	0.39	2.49	4	1610	< 1	2.96	61	0.027
246304 Split PREP DUP	6	< 0.3	7.88	< 3	56	< 1	5	7.96	< 0.3	47	66	94	8.25	18	< 1	0.41	2.62	4	1690	< 1	3.13	64	0.029
246304 Orig		< 0.3	7.44	< 3	54	< 1	3	7.64	< 0.3	44	56	88	7.72	18	< 1	0.39	2.47	4	1600	< 1	2.93	60	0.027
246304 Dup		< 0.3	7.46	8	54	< 1	4	7.72	< 0.3	45	59	90	7.84	17	< 1	0.40	2.50	4	1620	< 1	2.99	61	0.028
246309 Orig	5																						
246309 Dup	6																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		4	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		5	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		3	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	717	45	0.24	< 4	283	18	0.03	< 5	30	85	158	34	717	32
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	727	34	0.25	< 4	289	17	0.03	< 5	30	86	156	35	729	31
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	49	< 5	1.78	9	223	< 2	0.29	< 5	< 10	90	37	15	77	48
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	48	< 5	1.71	8	216	4	0.28	< 5	< 10	88	36	15	76	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	24	< 5		17	171		0.14	< 5	< 10	51	< 5		98	44
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	93	< 5	0.02	27	36	< 2		< 5	< 10	143	< 5	11	130	82
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	95	< 5	0.02	27	37	< 2		< 5	< 10	103	< 5	12	130	60
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.53											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.51											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	< 3	< 5		31	129		0.28			140		16	58	36
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		32	128		0.28			141		16	60	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		21	182		0.54	< 5	< 10	225	< 5	30	183	122
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	27	< 5		21	175		0.52	< 5	< 10	216	< 5	31	181	124
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	829			5	149				< 10	28	11	29	794	136
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	813			5	145				< 10	22	8	29	768	114
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster)														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
246264 Orig														
246264 Dup														
246265 Orig	< 3	< 5	0.32	35	73	13	0.39	< 5	< 10	191	< 5	14	73	51
246265 Dup	4	< 5	0.31	35	74	3	0.44	< 5	< 10	217	< 5	15	76	62
246274 Orig														
246274 Dup														
246284 Orig														
246284 Dup														
246290 Orig	< 3	< 5	0.23	37	94	< 2	0.25	< 5	< 10	157	< 5	19	79	43
246290 Dup	< 3	< 5	0.24	36	95	< 2	0.24	< 5	< 10	155	< 5	19	75	39
246299 Orig														
246299 Dup														
246304 Split Orig PREP DUP	< 3	< 5	0.19	38	162	4	0.38	< 5	< 10	201	< 5	19	74	46
246304 Split PREP DUP	< 3	< 5	0.20	40	169	3	0.44	< 5	< 10	227	< 5	20	77	54
246304 Orig	< 3	< 5	0.19	38	162	4	0.34	11	< 10	185	< 5	19	74	43
246304 Dup	< 3	< 5	0.19	38	163	3	0.42	< 5	< 10	217	< 5	19	74	49
246309 Orig														
246309 Dup														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 15-Nov-16
Invoice No.: A16-12167-Au
Invoice Date: 23-Nov-16
Your Reference: Core-15-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

46 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12167-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 15-Nov-16
Invoice No.: A16-12167-Au
Invoice Date: 23-Nov-16
Your Reference: Core-15-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

46 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12167-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263417	< 5
263418	< 5
263419	62
263420	9
263421	104
263422	86
263423	3610
263424	279
263425	234
263426	6
263427	14
263428	< 5
263429	< 5
263430	< 5
263431	22
263432	6
263433	12
263434	28
263435	15
263436	7
263437	422
263438	14
263439	< 5
263440	< 5
263441	< 5
263442	10
263443	6
263444	< 5
263445	8
263446	< 5
263447	< 5
263448	< 5
263449	< 5
263450	716
263451	< 5
263452	< 5
263453	< 5
263454	< 5
263455	< 5
263456	< 5
263457	< 5
263458	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263459	86
263460	< 5
263461	< 5
263462	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	621
SE68 Cert	599
SE68 Meas	602
SE68 Cert	599
263426 Orig	6
263426 Dup	6
263436 Orig	6
263436 Dup	8
263446 Orig	< 5
263446 Dup	< 5
263461 Orig	< 5
263461 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 15-Nov-16
Invoice No.: A16-12167
Invoice Date: 05-Dec-16
Your Reference: Core-15-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

46 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12167**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 15-Nov-16
Invoice No.: A16-12167
Invoice Date: 05-Dec-16
Your Reference: Core-15-Nov-16-R5-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

46 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12167**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263417	< 5	0.4	6.87	6	57	< 1	< 2	6.37	< 0.3	49	78	144	7.75	14	< 1	0.40	2.70	10	1530	< 1	3.03	59	0.028
263418	< 5	< 0.3	6.74	4	65	< 1	< 2	7.20	< 0.3	48	77	102	7.80	15	3	0.38	2.44	12	1380	< 1	2.76	59	0.024
263419	62	0.4	6.45	5	43	< 1	< 2	9.39	< 0.3	41	73	56	7.37	15	< 1	0.53	2.35	10	1410	< 1	3.29	53	0.028
263420	9	< 0.3	6.44	5	39	< 1	4	10.2	< 0.3	36	61	4	7.35	19	< 1	0.54	2.19	14	1410	< 1	3.30	44	0.024
263421	104	0.3	5.96	< 3	82	< 1	< 2	8.00	< 0.3	36	69	46	6.13	12	< 1	0.85	1.71	9	1200	< 1	3.02	47	0.026
263422	86	0.5	5.63	< 3	103	< 1	< 2	6.55	< 0.3	39	67	51	6.40	11	< 1	1.10	1.74	3	1170	< 1	3.16	49	0.024
263423	3610	0.9	6.32	8	563	< 1	< 2	2.79	< 0.3	14	68	58	4.90	12	< 1	0.83	1.33	15	812	4	2.25	40	0.058
263424	279	0.5	6.49	< 3	100	< 1	< 2	7.58	< 0.3	44	75	126	7.15	14	< 1	1.50	1.85	3	1360	< 1	3.19	52	0.030
263425	234	< 0.3	6.30	< 3	106	< 1	< 2	6.97	< 0.3	46	78	139	7.43	14	< 1	1.58	1.93	8	1450	< 1	2.82	58	0.027
263426	6	< 0.3	6.34	4	60	< 1	< 2	6.49	< 0.3	42	84	47	7.39	12	< 1	0.57	2.41	18	1440	< 1	3.20	55	0.027
263427	14	< 0.3	6.27	< 3	61	< 1	< 2	8.07	< 0.3	41	75	106	6.99	13	< 1	0.74	2.32	14	1590	< 1	2.77	52	0.024
263428	< 5	< 0.3	6.78	< 3	56	< 1	< 2	5.94	< 0.3	43	123	100	7.56	13	< 1	0.36	2.62	16	1550	< 1	3.09	57	0.026
263429	< 5	< 0.3	7.10	< 3	58	< 1	3	5.54	< 0.3	46	64	53	8.19	16	< 1	0.36	2.70	15	1660	< 1	3.15	58	0.028
263430	< 5	< 0.3	0.02	< 3	22	< 1	< 2	18.2	0.3	1	3	1	0.04	< 1	< 1	0.01	12.1	10	347	< 1	0.02	< 1	0.002
263431	22	0.4	6.91	< 3	83	< 1	4	4.92	< 0.3	47	67	74	7.72	13	< 1	0.56	2.70	12	1430	< 1	3.19	58	0.021
263432	6	< 0.3	6.54	< 3	111	< 1	2	6.23	< 0.3	44	67	99	7.62	13	< 1	0.69	3.20	15	1290	< 1	2.79	52	0.025
263433	12	0.6	5.25	< 3	67	< 1	< 2	5.05	< 0.3	36	69	84	6.13	10	< 1	0.41	2.38	12	1120	12	2.73	45	0.022
263434	28	0.4	6.41	< 3	107	< 1	< 2	6.02	< 0.3	44	69	89	7.69	13	< 1	0.68	2.63	13	1510	< 1	3.19	52	0.026
263435	15	0.5	6.22	< 3	48	< 1	< 2	6.10	< 0.3	42	72	72	6.87	13	< 1	0.41	2.30	11	1360	1	3.34	50	0.025
263436	7	< 0.3	6.16	< 3	73	< 1	< 2	6.16	< 0.3	41	74	57	7.28	14	< 1	0.67	2.17	12	1590	< 1	3.38	53	0.027
263437	422	< 0.3	7.86	144	488	< 1	< 2	3.97	< 0.3	14	42	43	4.83	13	1	0.79	1.35	8	966	3	2.55	24	0.047
263438	14	0.3	6.39	< 3	61	< 1	< 2	5.27	< 0.3	45	80	119	7.74	13	< 1	0.68	2.98	15	1200	2	3.11	53	0.027
263439	< 5	0.3	6.10	< 3	61	< 1	< 2	7.67	< 0.3	39	62	69	7.43	13	< 1	0.87	2.85	12	1460	< 1	2.75	49	0.023
263440	< 5	< 0.3	6.16	< 3	49	< 1	< 2	7.41	< 0.3	42	45	110	7.73	12	< 1	0.57	2.68	12	1480	< 1	3.01	50	0.025
263441	< 5	< 0.3	6.41	< 3	69	< 1	2	7.78	< 0.3	41	45	74	7.15	13	1	0.60	2.67	14	1600	< 1	2.98	53	0.025
263442	10	< 0.3	6.77	< 3	58	< 1	< 2	5.42	< 0.3	48	63	106	7.38	13	< 1	0.44	2.62	15	1540	< 1	3.20	57	0.026
263443	6	< 0.3	6.34	< 3	72	< 1	< 2	7.52	< 0.3	41	56	101	6.99	13	< 1	0.49	2.55	12	1480	< 1	3.04	52	0.026
263444	< 5	0.3	6.19	< 3	71	< 1	< 2	7.39	< 0.3	41	52	101	6.80	12	< 1	0.47	2.50	12	1450	< 1	2.98	50	0.025
263445	8	0.4	6.56	< 3	62	< 1	< 2	6.69	< 0.3	42	65	83	7.62	13	< 1	0.59	2.61	12	1370	< 1	3.25	53	0.022
263446	< 5	1.6	6.54	< 3	77	< 1	2	5.49	< 0.3	45	80	104	7.33	12	1	0.54	2.84	12	1630	< 1	3.12	55	0.029
263447	< 5	0.4	7.07	< 3	69	< 1	< 2	6.35	< 0.3	47	75	111	8.06	13	< 1	0.37	2.89	7	1680	< 1	3.23	55	0.026
263448	< 5	< 0.3	7.14	4	102	< 1	< 2	5.32	< 0.3	47	73	124	8.30	13	4	0.68	3.00	7	1680	< 1	3.51	57	0.028
263449	< 5	0.6	7.31	< 3	116	< 1	3	4.91	< 0.3	53	73	103	9.05	16	6	0.88	2.75	8	1600	< 1	3.33	61	0.026
263450	716	< 0.3	8.16	228	484	< 1	3	4.06	< 0.3	14	28	46	5.00	13	< 1	0.83	1.35	7	968	< 1	2.56	22	0.044
263451	< 5	0.3	6.90	< 3	93	< 1	< 2	6.41	< 0.3	47	52	93	7.88	15	4	0.63	2.84	6	1580	< 1	3.36	55	0.027
263452	< 5	< 0.3	7.08	< 3	168	< 1	< 2	5.45	< 0.3	46	54	127	7.76	13	< 1	0.79	2.92	9	1630	9	3.16	56	0.027
263453	< 5	0.5	7.66	< 3	172	< 1	< 2	3.81	< 0.3	48	67	121	8.14	16	< 1	0.87	2.88	13	1510	4	3.81	61	0.031
263454	< 5	0.4	7.66	< 3	105	< 1	< 2	5.36	< 0.3	48	59	140	8.52	16	2	0.58	2.88	12	1620	< 1	3.46	60	0.026
263455	< 5	0.8	6.56	< 3	86	< 1	< 2	6.52	< 0.3	43	56	59	7.06	15	< 1	0.64	2.41	12	1450	< 1	2.73	54	0.025
263456	< 5	< 0.3	6.59	< 3	55	< 1	< 2	6.85	< 0.3	44	73	46	7.34	14	< 1	0.42	2.65	15	1430	< 1	3.06	54	0.027
263457	< 5	< 0.3	0.02	< 3	26	< 1	< 2	18.4	< 0.3	< 1	3	1	0.03	< 1	1	< 0.01	12.1	5	327	< 1	0.02	< 1	0.004
263458	7	< 0.3	6.76	< 3	60	< 1	< 2	7.06	< 0.3	43	71	121	6.90	12	< 1	0.61	2.54	16	1350	< 1	3.22	53	0.025

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263459	86	0.5	5.79	< 3	117	< 1	< 2	9.74	< 0.3	37	44	46	6.38	13	< 1	1.36	1.32	11	1090	< 1	2.30	46	0.021
263460	< 5	< 0.3	6.57	< 3	103	< 1	3	7.13	< 0.3	48	55	68	7.75	14	< 1	1.31	3.20	18	1360	1	1.76	55	0.026
263461	< 5	< 0.3	6.20	< 3	89	< 1	< 2	7.39	< 0.3	47	47	104	7.58	12	< 1	1.11	3.55	24	1380	< 1	1.46	50	0.027
263462	< 5	< 0.3	6.23	< 3	72	< 1	< 2	8.21	< 0.3	42	49	85	6.88	12	< 1	0.85	2.69	19	1300	< 1	2.53	50	0.027

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263417	6	< 5	0.42	37	92	< 2	0.43	< 5	< 10	228	< 5	18	84	59
263418	3	< 5	0.58	36	91	< 2	0.38	< 5	< 10	229	< 5	18	77	51
263419	< 3	< 5	1.34	34	122	5	0.41	< 5	< 10	248	< 5	15	77	52
263420	< 3	< 5	0.64	29	86	< 2	0.36	< 5	< 10	276	< 5	13	70	44
263421	< 3	< 5	2.61	31	100	9	0.39	< 5	< 10	216	7	11	57	53
263422	4	< 5	4.87	30	100	2	0.36	< 5	< 10	182	12	12	53	53
263423	13	< 5	0.06	17	253	< 2	0.30	< 5	< 10	121	< 5	17	86	44
263424	4	< 5	4.76	32	116	5	0.41	< 5	< 10	206	16	12	58	57
263425	4	< 5	2.08	35	83	4	0.44	< 5	< 10	252	9	13	68	61
263426	10	< 5	0.09	34	84	3	0.41	< 5	< 10	213	< 5	14	82	55
263427	< 3	< 5	0.40	34	96	< 2	0.41	< 5	< 10	224	< 5	14	72	56
263428	< 3	< 5	0.19	37	73	< 2	0.28	< 5	< 10	196	< 5	18	79	48
263429	9	< 5	0.12	39	82	< 2	0.19	< 5	< 10	147	< 5	19	85	30
263430	3	< 5	< 0.01	< 4	101	< 2	< 0.01	< 5	< 10	2	< 5	< 1	18	< 5
263431	< 3	< 5	0.01	39	99	3	0.19	< 5	< 10	184	< 5	20	83	62
263432	< 3	< 5	0.08	37	104	< 2	0.23	< 5	< 10	164	< 5	19	85	50
263433	26	< 5	0.45	30	84	3	0.34	< 5	< 10	184	< 5	16	81	54
263434	38	< 5	0.52	35	126	3	0.39	< 5	< 10	215	< 5	18	90	62
263435	24	< 5	0.91	34	109	< 2	0.40	< 5	< 10	220	< 5	17	86	56
263436	< 3	< 5	0.36	33	127	2	0.42	< 5	< 10	234	< 5	17	86	60
263437	11	< 5	0.05	21	293	< 2	0.29	< 5	< 10	125	< 5	19	60	31
263438	< 3	< 5	0.99	35	101	< 2	0.40	5	< 10	237	< 5	18	117	63
263439	< 3	< 5	0.50	33	144	3	0.33	< 5	< 10	206	< 5	13	84	54
263440	3	< 5	0.26	34	121	< 2	0.16	< 5	< 10	124	< 5	17	89	23
263441	6	< 5	0.15	35	74	< 2	0.14	< 5	< 10	113	< 5	18	80	24
263442	< 3	< 5	0.49	37	64	3	0.41	< 5	< 10	208	< 5	18	86	55
263443	6	< 5	0.55	34	92	< 2	0.39	< 5	< 10	208	< 5	17	88	53
263444	6	< 5	0.54	33	90	5	0.38	< 5	< 10	204	< 5	16	74	52
263445	17	< 5	1.26	34	81	2	0.31	< 5	< 10	203	< 5	16	78	57
263446	11	< 5	0.40	36	68	< 2	0.44	< 5	10	231	< 5	17	85	64
263447	4	< 5	0.30	39	154	< 2	0.32	< 5	< 10	204	< 5	19	86	52
263448	8	< 5	0.44	40	119	9	0.38	< 5	< 10	219	< 5	19	92	59
263449	11	< 5	1.36	40	145	5	0.36	< 5	< 10	227	< 5	19	105	62
263450	20	< 5	0.06	21	301	< 2	0.15	< 5	< 10	87	< 5	19	69	19
263451	5	< 5	1.01	38	138	< 2	0.36	< 5	< 10	210	< 5	18	92	56
263452	15	< 5	0.48	38	147	7	0.37	< 5	< 10	193	< 5	18	98	49
263453	6	< 5	0.46	42	113	6	0.49	< 5	10	249	< 5	19	98	73
263454	4	< 5	0.28	42	183	10	0.35	< 5	< 10	222	< 5	20	103	51
263455	6	< 5	0.27	36	96	< 2	0.19	< 5	< 10	137	< 5	18	79	27
263456	< 3	< 5	0.58	36	78	< 2	0.39	< 5	< 10	223	< 5	18	81	57
263457	< 3	< 5	< 0.01	< 4	105	< 2	< 0.01	< 5	< 10	3	< 5	< 1	10	< 5
263458	3	< 5	0.44	36	96	3	0.39	< 5	< 10	213	< 5	17	90	52

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263459	4	< 5	4.36	31	105	9	0.38	< 5	< 10	209	15	14	45	51
263460	< 3	< 5	0.33	36	96	3	0.30	5	< 10	170	< 5	15	78	44
263461	< 3	< 5	0.40	35	99	3	0.38	< 5	< 10	201	< 5	13	80	56
263462	< 3	< 5	0.62	34	98	< 2	0.39	< 5	< 10	212	< 5	14	75	56

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.0	2.31	437	730	1	1410	0.89	2.1	10	28	1190	22.7	12	7	0.04	0.21	8	852	16	0.05	40	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.37	447	724	1	1400	0.89	1.9	10	58	1180	22.7	12	7	0.05	0.21	8	866	16	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.3	2.40	434	727	1	1390	0.88	1.4	10	31	1100	23.4	11	5	0.04	0.21	8	886	17	0.05	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.7	6.52	101	100	2	33	1.08	< 0.3	15	44	6730	2.98	18	< 1	3.48	1.71	11	148	343	0.52	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.60	107	109	2	21	1.11	0.4	16	43	6660	3.03	17	< 1	3.91	1.74	11	155	351	0.53	43	0.134
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.7	6.67	110	139	2	13	1.10	< 0.3	16	55	6530	3.19	18	< 1	4.07	1.73	11	159	349	0.54	42	0.133
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.03	< 3	677	3		1.10		18	42	30	4.67	22	< 1	1.97	1.00	34	868		1.55	37	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
SDC-1 Meas			7.84	< 3	630	3		1.06		18	55	28	4.67	21	< 1	1.03	0.95	34	852		1.48	34	0.051
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.5	273	> 1000	1	5	0.15	0.4	15	66	74	5.82	28	3	1.81	0.60	33	1060	< 1	0.09	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.3	13.1	245	> 1000	1	5	0.16	< 0.3	15	50	73	5.72	29	7	1.72	0.61	34	1040	< 1	0.10	28	0.034
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	12.9	261	> 1000	1	3	0.15	< 0.3	15	51	71	6.09	29	5	1.49	0.61	34	1130	< 1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				4						145	217	320	8.80									6470	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				9						146	162	335	8.98									6660	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				4						158	243	325	9.73									6870	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					103					57	172	106		13				5				261	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					106					55	233	104		12				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	216	123		11				5				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				29	838	3	6		< 0.3	22	90	33		28				168		2		90	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	834	3	5		< 0.3	25	81	34		26				168		2		94	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				22	808	3	< 2		< 0.3	25	78	31		25				167		1		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	621																						
SE68 Cert	599																						
SE68 Meas	602																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.6	14	40	256		18	< 1			18		13		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.3	14	36	245		17	1			17		11		53	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.1	15	32	241		17	1			18		9		55	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1690																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1710																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263426 Orig	6																						
263426 Dup	6																						
263429 Orig		< 0.3	7.18	< 3	58	< 1	3	5.61	< 0.3	46	64	53	8.28	16	< 1	0.36	2.72	15	1690	< 1	3.19	60	0.028
263429 Dup		0.3	7.03	< 3	57	< 1	3	5.47	< 0.3	46	63	54	8.11	15	< 1	0.35	2.67	15	1640	< 1	3.11	57	0.027
263436 Orig	6																						
263436 Dup	8																						
263443 Orig		< 0.3	6.31	< 3	72	< 1	< 2	7.56	< 0.3	41	56	102	6.98	13	< 1	0.49	2.55	12	1490	< 1	3.03	53	0.026
263443 Dup		0.4	6.38	< 3	71	< 1	2	7.48	< 0.3	40	56	100	7.00	13	< 1	0.48	2.55	12	1470	< 1	3.06	51	0.026
263446 Orig	< 5																						
263446 Dup	< 5																						
263461 Orig	< 5																						
263461 Dup	< 5																						
Method Blank	< 5																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	730	21	0.25	< 4	294	5	0.03	< 5	40	87	176	37	726	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	741	16	0.26	< 4	297	6	0.03	< 5	40	88	171	36	755	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	709	22	0.24	< 4	292	11	0.03	< 5	40	87	157	35	724	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	45	< 5	1.83	8	216	4	0.29	< 5	< 10	89	40	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	45	< 5	1.83	8	217	4	0.29	< 5	< 10	91	40	16	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	44	< 5	1.80	9	219	3	0.29	< 5	< 10	92	38	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	22	< 5		17	174		0.06	< 5	< 10	29	< 5		101	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	19	< 5		16	166		0.20	< 5	< 10	52	< 5		95	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	97	< 5	0.02	26	34	< 2		< 5	< 10	133	< 5	12	131	69
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	98	< 5	0.02	27	36	< 2		< 5	< 10	107	< 5	12	131	57
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	97	< 5	0.02	27	34	< 2		< 5	< 10	114	< 5	11	131	59
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.63											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	6	< 5		32	130		0.28			139		17	60	35
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	5	< 5		33	132		0.28			143		17	62	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		31	122		0.27			136		15	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		20	179		0.53	< 5	< 10	223	< 5	31	188	115
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	31	< 5		21	182		0.54	< 5	< 10	224	< 5	31	204	117
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Meas	28	< 5		21	172		0.51	< 5	< 10	220	< 5	30	184	114
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	878			5	153				< 10	28	10	33	829	134
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	829			4	150				< 10	26	9	31	798	92
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	834			5	148				< 10	23	8	29	791	117
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
263426 Orig														
263426 Dup														
263429 Orig	10	< 5	0.12	40	83	< 2	0.18	< 5	< 10	146	< 5	20	85	29
263429 Dup	9	< 5	0.12	39	80	< 2	0.19	< 5	< 10	147	< 5	19	84	31
263436 Orig														
263436 Dup														
263443 Orig	6	< 5	0.55	34	93	< 2	0.40	< 5	< 10	209	< 5	17	102	53
263443 Dup	7	< 5	0.55	34	92	4	0.39	< 5	< 10	207	< 5	17	75	53
263446 Orig														
263446 Dup														
263461 Orig														
263461 Dup														
Method Blank														
Method Blank														
Method Blank														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	8	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 16-Nov-16
Invoice No.: A16-12248-Au
Invoice Date: 23-Nov-16
Your Reference: Core-16-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

61 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12248-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 16-Nov-16
Invoice No.: A16-12248-Au
Invoice Date: 23-Nov-16
Your Reference: Core-16-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

61 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12248-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263463	< 5
263464	424
263465	< 5
263466	7
263467	< 5
263468	< 5
263469	< 5
263470	< 5
263471	< 5
263472	< 5
263473	< 5
263474	< 5
263475	< 5
263476	< 5
263477	< 5
263478	675
263479	< 5
263480	< 5
263481	< 5
263482	17
263483	< 5
263484	< 5
263485	< 5
263486	< 5
263487	< 5
263488	6
263489	< 5
263490	< 5
263491	< 5
263492	1940
263493	52
263494	73
263495	133
263496	171
263497	81
263498	82
263499	75
263500	254
263501	170
263502	127
263503	24
263504	55

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263505	73
263506	397
263507	105
263508	< 5
263509	14
263510	23
263511	< 5
263512	< 5
263513	< 5
263514	< 5
263515	< 5
263516	< 5
263517	7
263518	< 5
263519	< 5
263520	610
263521	6
263522	< 5
263523	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	609
SE68 Cert	599
SE68 Meas	581
SE68 Cert	599
263472 Orig	< 5
263472 Dup	< 5
263482 Orig	20
263482 Dup	14
263494 Orig	74
263494 Dup	72
263507 Orig	106
263507 Dup	103
263512 Split Orig PREP DUP	< 5
263512 Split PREP DUP	< 5
263517 Orig	7
263517 Dup	7
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 16-Nov-16
Invoice No.: A16-12248
Invoice Date: 05-Dec-16
Your Reference: Core-16-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

61 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12248**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 16-Nov-16
Invoice No.: A16-12248
Invoice Date: 05-Dec-16
Your Reference: Core-16-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

61 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12248**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263463	< 5	0.4	6.74	5	63	< 1	< 2	7.22	< 0.3	43	60	82	7.49	14	< 1	0.49	2.55	12	1440	< 1	2.96	53	0.028
263464	424	< 0.3	7.72	118	480	< 1	8	3.88	< 0.3	13	41	43	4.73	14	< 1	0.79	1.31	8	930	< 1	2.49	24	0.044
263465	< 5	0.4	6.79	< 3	85	< 1	< 2	6.36	< 0.3	46	82	78	7.60	17	< 1	0.50	2.75	10	1590	2	2.85	57	0.030
263466	7	0.6	6.61	< 3	97	< 1	2	5.47	< 0.3	45	79	90	6.73	13	1	0.70	2.31	5	1320	6	3.80	55	0.029
263467	< 5	0.5	6.75	< 3	141	< 1	< 2	4.11	< 0.3	48	101	87	7.30	12	< 1	1.04	2.89	6	1500	< 1	3.73	58	0.027
263468	< 5	< 0.3	7.45	< 3	133	< 1	< 2	3.99	< 0.3	54	60	110	8.92	16	5	0.90	3.11	9	1670	< 1	3.78	66	0.026
263469	< 5	0.4	6.14	< 3	99	< 1	< 2	5.14	< 0.3	48	53	128	8.07	15	1	0.51	3.23	14	1860	< 1	2.95	57	0.022
263470	< 5	0.3	6.86	< 3	72	< 1	3	3.34	< 0.3	51	58	93	7.63	12	< 1	0.70	3.06	10	1640	< 1	3.64	57	0.028
263471	< 5	0.5	7.03	< 3	73	< 1	< 2	3.43	< 0.3	51	58	94	7.86	13	< 1	0.72	3.16	10	1690	< 1	3.76	59	0.029
263472	< 5	0.5	7.21	< 3	119	< 1	2	3.25	< 0.3	62	74	166	10.8	20	6	0.93	2.72	9	1630	< 1	3.32	66	0.021
263473	< 5	0.3	7.32	< 3	75	< 1	< 2	6.63	< 0.3	49	60	124	8.27	15	2	0.63	2.63	3	1620	< 1	3.54	63	0.032
263474	< 5	0.4	7.10	3	75	< 1	2	7.71	< 0.3	46	55	101	8.31	16	2	0.76	2.38	3	1640	< 1	3.09	58	0.030
263475	< 5	0.5	6.43	< 3	77	< 1	2	5.57	< 0.3	42	83	78	7.25	13	< 1	0.78	2.29	4	1490	7	3.39	55	0.029
263476	< 5	0.3	7.16	< 3	65	< 1	< 2	6.69	< 0.3	48	88	100	7.48	14	< 1	0.60	2.74	4	1580	< 1	3.26	57	0.029
263477	< 5	0.4	7.05	< 3	63	< 1	< 2	6.93	< 0.3	48	83	102	7.45	15	< 1	0.68	2.43	4	1410	< 1	3.32	59	0.025
263478	675	0.4	8.09	231	490	< 1	< 2	4.04	< 0.3	14	28	47	5.06	14	< 1	0.85	1.37	7	942	< 1	2.60	24	0.044
263479	< 5	0.4	7.46	< 3	80	< 1	3	5.83	< 0.3	50	57	112	7.89	15	< 1	0.80	2.66	7	1550	< 1	3.51	64	0.028
263480	< 5	0.4	6.94	< 3	71	< 1	< 2	5.84	< 0.3	46	50	90	7.70	15	< 1	0.74	2.40	10	1520	< 1	3.57	57	0.027
263481	< 5	< 0.3	7.42	< 3	79	< 1	3	6.14	< 0.3	47	57	127	8.06	16	< 1	0.72	2.54	8	1610	< 1	3.66	59	0.027
263482	17	0.5	6.70	< 3	66	< 1	< 2	7.02	< 0.3	48	52	94	7.58	13	< 1	0.76	2.69	10	1500	< 1	3.32	56	0.028
263483	< 5	0.4	6.60	< 3	67	< 1	< 2	5.50	< 0.3	43	53	105	8.18	14	1	0.70	3.68	18	1400	2	2.81	53	0.029
263484	< 5	< 0.3	6.43	< 3	52	< 1	2	5.44	< 0.3	42	54	81	7.73	15	< 1	0.52	3.02	17	1310	< 1	3.15	50	0.027
263485	< 5	< 0.3	0.03	< 3	32	< 1	< 2	18.1	< 0.3	< 1	4	< 1	0.04	< 1	< 1	0.01	11.5	5	368	< 1	0.02	< 1	0.003
263486	< 5	0.5	6.69	< 3	53	< 1	< 2	4.43	< 0.3	46	86	258	7.38	13	< 1	0.54	2.64	12	1200	< 1	3.56	57	0.028
263487	< 5	0.4	6.91	< 3	72	< 1	< 2	5.31	< 0.3	50	86	136	7.70	13	< 1	0.74	2.58	12	1300	< 1	3.39	62	0.028
263488	6	0.3	6.52	4	52	< 1	< 2	5.84	< 0.3	50	68	102	7.40	11	< 1	0.57	2.45	11	1370	1	3.34	55	0.025
263489	< 5	< 0.3	6.59	< 3	31	< 1	4	6.06	< 0.3	42	85	75	7.24	12	< 1	0.40	2.44	14	1360	< 1	3.41	54	0.025
263490	< 5	< 0.3	6.48	< 3	106	< 1	< 2	6.39	< 0.3	48	54	54	7.23	12	< 1	1.07	2.22	8	1430	3	3.66	55	0.026
263491	< 5	< 0.3	6.01	< 3	117	< 1	< 2	6.53	< 0.3	41	51	76	6.88	12	< 1	1.14	2.18	4	1440	2	3.50	50	0.024
263492	1940	2.2	5.88	8	506	< 1	8	3.09	1.3	14	59	57	4.56	12	< 1	0.82	1.29	13	870	< 1	2.03	42	0.054
263493	52	0.3	5.81	< 3	185	< 1	< 2	6.11	< 0.3	42	58	85	6.64	12	< 1	1.49	1.97	3	1320	< 1	2.86	50	0.021
263494	73	0.4	5.88	< 3	51	< 1	< 2	6.67	< 0.3	39	111	88	6.41	12	< 1	1.29	2.08	3	1430	2	3.06	48	0.025
263495	133	0.6	6.01	< 3	70	< 1	< 2	8.60	< 0.3	40	57	70	7.08	12	< 1	1.36	1.61	5	1400	1	3.11	49	0.032
263496	171	0.5	6.01	< 3	176	< 1	< 2	8.36	< 0.3	41	71	99	7.03	13	< 1	2.09	1.87	9	1430	3	2.09	52	0.026
263497	81	0.4	6.63	< 3	141	< 1	3	8.86	< 0.3	43	42	52	7.22	17	1	2.04	2.05	6	1450	2	2.56	53	0.028
263498	82	< 0.3	4.94	< 3	137	< 1	< 2	4.73	< 0.3	18	27	11	3.54	9	< 1	0.31	1.58	< 1	867	3	3.61	24	0.028
263499	75	< 0.3	5.14	< 3	139	< 1	2	4.78	< 0.3	19	26	12	3.64	10	< 1	0.31	1.61	< 1	854	3	3.72	25	0.029
263500	254	0.6	5.39	< 3	111	< 1	< 2	6.05	< 0.3	40	38	46	6.45	14	< 1	1.37	2.09	2	1120	2	2.59	49	0.032
263501	170	0.8	5.99	< 3	41	< 1	< 2	6.89	< 0.3	45	42	50	7.86	18	< 1	2.10	2.51	4	1380	< 1	1.98	54	0.026
263502	127	0.9	5.31	< 3	159	< 1	< 2	6.50	< 0.3	37	41	97	6.10	11	< 1	0.85	2.27	2	1310	< 1	3.21	43	0.029
263503	24	0.3	5.97	< 3	153	< 1	< 2	7.04	< 0.3	39	61	115	7.12	12	< 1	1.09	2.48	2	1480	< 1	3.38	48	0.024
263504	55	0.9	2.70	< 3	184	< 1	< 2	3.74	< 0.3	16	45	212	2.79	8	< 1	0.34	0.19	2	588	8	1.76	20	0.013

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263505	73	1.3	0.94	< 3	432	< 1	2	2.22	< 0.3	9	44	16	1.49	3	< 1	0.09	0.06	< 1	322	51	0.71	7	0.011
263506	397	< 0.3	7.63	133	485	< 1	< 2	3.90	< 0.3	15	41	43	4.75	16	< 1	0.82	1.33	7	936	< 1	2.49	23	0.045
263507	105	0.5	6.19	< 3	229	< 1	< 2	7.53	< 0.3	42	75	263	7.27	13	< 1	1.22	2.84	7	1330	< 1	3.08	48	0.026
263508	< 5	< 0.3	6.37	< 3	297	< 1	3	7.61	< 0.3	44	42	136	7.72	13	< 1	0.76	2.63	14	1420	< 1	3.11	50	0.025
263509	14	0.3	6.43	< 3	98	< 1	< 2	6.74	< 0.3	45	46	114	7.46	13	< 1	0.86	2.70	18	1370	2	2.74	51	0.027
263510	23	0.5	6.37	< 3	164	< 1	< 2	6.65	< 0.3	43	50	87	7.26	14	< 1	1.30	3.01	20	1440	2	1.98	51	0.028
263511	< 5	0.4	7.06	< 3	144	< 1	3	5.26	< 0.3	46	53	97	7.99	13	8	1.07	3.54	15	1640	< 1	2.44	54	0.030
263512	< 5	0.4	7.36	< 3	124	< 1	< 2	5.38	< 0.3	48	57	116	7.99	14	5	0.91	3.72	13	1680	3	2.65	59	0.031
263513	< 5	< 0.3	0.02	< 3	58	< 1	< 2	18.8	< 0.3	< 1	6	2	0.05	< 1	< 1	< 0.01	11.8	6	468	< 1	0.02	< 1	0.003
263514	< 5	0.3	6.83	< 3	132	< 1	< 2	5.38	< 0.3	45	84	91	7.59	14	< 1	0.96	3.50	11	1610	< 1	2.52	55	0.028
263515	< 5	< 0.3	7.49	< 3	116	< 1	3	5.85	< 0.3	52	84	81	8.48	15	< 1	1.02	3.92	12	1760	2	2.14	81	0.026
263516	< 5	0.3	7.17	< 3	125	< 1	< 2	4.90	< 0.3	51	84	111	7.94	14	< 1	1.01	3.72	14	1600	< 1	2.47	75	0.028
263517	7	0.6	6.20	< 3	63	< 1	< 2	5.66	< 0.3	43	59	80	7.12	13	< 1	0.72	2.86	11	1110	26	2.86	49	0.023
263518	< 5	< 0.3	6.60	9	68	< 1	< 2	6.32	< 0.3	45	45	89	7.31	13	< 1	0.62	3.13	12	1150	< 1	3.06	53	0.030
263519	< 5	< 0.3	6.90	< 3	80	< 1	< 2	5.62	< 0.3	45	54	97	8.49	13	5	0.55	3.24	14	2020	1	2.55	56	0.029
263520	610	0.4	8.24	247	497	< 1	2	4.10	< 0.3	14	32	52	5.16	14	< 1	0.86	1.39	7	1000	< 1	2.61	23	0.045
263521	6	0.9	6.66	5	46	< 1	4	4.56	< 0.3	54	108	124	16.0	12	3	0.30	3.66	16	2700	3	1.35	88	0.027
263522	< 5	0.6	7.07	7	46	< 1	4	5.70	< 0.3	54	124	124	10.4	13	4	0.35	4.12	16	1930	< 1	1.61	111	0.024
263523	< 5	< 0.3	7.09	< 3	60	< 1	< 2	6.52	< 0.3	52	174	89	7.96	12	4	0.46	4.56	17	1570	1	1.55	146	0.021

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263463	< 3	< 5	0.58	37	85	2	0.40	13	< 10	222	< 5	18	76	53
263464	9	< 5	0.04	21	288	3	0.13	< 5	< 10	69	< 5	19	58	19
263465	< 3	< 5	0.58	36	145	2	0.45	< 5	< 10	260	< 5	17	87	58
263466	3	< 5	0.81	35	81	4	0.43	< 5	< 10	232	< 5	18	80	63
263467	< 3	< 5	0.53	39	77	5	0.40	< 5	< 10	230	< 5	19	98	68
263468	< 3	< 5	0.29	42	69	< 2	0.26	< 5	< 10	167	< 5	19	101	39
263469	8	< 5	0.39	35	29	2	0.38	< 5	< 10	222	< 5	22	99	58
263470	6	< 5	0.45	39	37	2	0.44	< 5	< 10	236	< 5	17	93	68
263471	4	< 5	0.43	39	38	2	0.46	< 5	< 10	243	< 5	18	96	70
263472	12	< 5	1.31	39	56	7	0.45	< 5	< 10	287	< 5	16	101	66
263473	6	< 5	0.23	39	128	7	0.49	< 5	< 10	258	< 5	19	80	65
263474	22	< 5	0.46	39	143	< 2	0.42	< 5	< 10	244	< 5	19	74	52
263475	5	< 5	0.36	35	148	4	0.45	< 5	10	238	< 5	18	76	63
263476	8	< 5	0.41	39	170	3	0.41	< 5	< 10	238	< 5	19	95	59
263477	16	< 5	0.61	38	158	3	0.35	< 5	< 10	222	< 5	19	82	58
263478	22	< 5	0.06	21	300	< 2	0.13	< 5	< 10	83	< 5	20	69	19
263479	< 3	< 5	0.44	41	178	< 2	0.31	< 5	< 10	163	< 5	23	94	34
263480	9	< 5	0.57	37	79	2	0.38	< 5	< 10	211	< 5	18	85	55
263481	4	< 5	0.37	41	105	< 2	0.31	< 5	< 10	188	< 5	21	88	42
263482	< 3	< 5	0.69	37	90	3	0.41	< 5	< 10	218	< 5	18	95	60
263483	< 3	< 5	0.19	36	71	3	0.43	< 5	< 10	237	< 5	20	115	67
263484	3	< 5	0.23	36	64	< 2	0.22	< 5	< 10	156	< 5	19	92	38
263485	< 3	< 5	< 0.01	< 4	121	3	< 0.01	5	< 10	2	< 5	< 1	7	< 5
263486	< 3	< 5	0.53	36	62	3	0.45	< 5	< 10	245	< 5	18	96	67
263487	< 3	< 5	0.67	39	55	8	0.41	< 5	< 10	229	< 5	19	88	63
263488	< 3	< 5	0.87	35	72	< 2	0.37	< 5	10	211	< 5	17	86	60
263489	4	< 5	0.20	37	68	< 2	0.16	< 5	< 10	140	< 5	15	92	30
263490	< 3	< 5	0.58	35	63	2	0.37	< 5	< 10	208	< 5	12	72	57
263491	< 3	< 5	0.66	33	68	< 2	0.37	< 5	< 10	208	< 5	11	54	56
263492	303	< 5	0.08	16	261	7	0.13	< 5	< 10	75	< 5	17	256	28
263493	< 3	< 5	1.59	31	71	< 2	0.38	< 5	< 10	207	< 5	10	55	54
263494	3	< 5	3.72	31	86	4	0.38	< 5	< 10	203	14	9	53	53
263495	< 3	< 5	4.36	30	97	10	0.38	11	< 10	207	17	10	53	52
263496	< 3	< 5	2.34	32	84	3	0.41	< 5	< 10	216	10	11	67	58
263497	< 3	< 5	4.55	34	104	4	0.40	< 5	< 10	254	19	10	67	55
263498	< 3	< 5	1.82	18	105	3	0.21	< 5	< 10	62	12	5	44	30
263499	< 3	< 5	1.89	18	107	3	0.21	< 5	< 10	63	13	5	45	31
263500	6	< 5	4.45	28	123	3	0.38	< 5	< 10	205	24	8	69	53
263501	5	< 5	5.31	35	129	< 2	0.42	< 5	< 10	322	28	9	83	59
263502	7	< 5	3.69	27	122	7	0.34	< 5	< 10	179	16	8	57	49
263503	5	< 5	2.36	32	159	3	0.38	< 5	< 10	219	< 5	10	60	56
263504	10	< 5	1.29	14	30	4	0.17	< 5	< 10	92	5	5	28	25

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263505	13	< 5	0.90	< 4	29	< 2	0.05	< 5	< 10	17	< 5	2	10	8
263506	7	< 5	0.05	20	289	8	0.19	< 5	< 10	98	< 5	19	58	28
263507	< 3	< 5	0.99	34	140	6	0.32	< 5	< 10	207	< 5	12	67	64
263508	< 3	< 5	0.18	35	77	< 2	0.20	< 5	< 10	140	< 5	12	97	34
263509	< 3	< 5	0.39	35	83	3	0.38	< 5	< 10	201	< 5	12	102	56
263510	< 3	< 5	1.13	35	76	3	0.42	< 5	< 10	218	< 5	14	102	62
263511	< 3	< 5	0.94	38	71	4	0.45	< 5	< 10	235	< 5	20	90	65
263512	5	< 5	0.31	39	95	2	0.49	< 5	< 10	246	< 5	20	91	69
263513	4	< 5	< 0.01	< 4	245	< 2	< 0.01	< 5	< 10	3	< 5	< 1	10	< 5
263514	5	< 5	0.41	38	80	< 2	0.42	< 5	< 10	218	< 5	19	81	66
263515	< 3	< 5	0.17	41	95	< 2	0.17	< 5	< 10	137	< 5	19	90	28
263516	< 3	< 5	0.47	40	64	< 2	0.40	< 5	< 10	222	< 5	20	94	57
263517	< 3	< 5	1.43	34	54	< 2	0.37	< 5	< 10	234	< 5	15	73	59
263518	< 3	< 5	0.56	36	63	< 2	0.40	< 5	< 10	202	< 5	15	78	56
263519	< 3	< 5	0.22	39	65	< 2	0.26	< 5	< 10	164	< 5	22	117	46
263520	20	< 5	0.07	22	304	< 2	0.21	< 5	< 10	103	< 5	19	73	22
263521	4	< 5	1.65	36	92	< 2	0.44	< 5	< 10	228	< 5	19	137	52
263522	< 3	< 5	1.07	37	108	4	0.40	< 5	< 10	217	< 5	16	91	41
263523	< 3	< 5	0.06	35	103	3	0.37	< 5	< 10	207	< 5	12	67	30

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.0	2.31	437	730	1	1410	0.89	2.1	10	28	1190	22.7	12	7	0.04	0.21	8	852	16	0.05	40	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.37	447	724	1	1400	0.89	1.9	10	58	1180	22.7	12	7	0.05	0.21	8	866	16	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.3	2.40	434	727	1	1390	0.88	1.4	10	31	1100	23.4	11	5	0.04	0.21	8	886	17	0.05	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.7	6.52	101	100	2	33	1.08	< 0.3	15	44	6730	2.98	18	< 1	3.48	1.71	11	148	343	0.52	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.60	107	109	2	21	1.11	0.4	16	43	6660	3.03	17	< 1	3.91	1.74	11	155	351	0.53	43	0.134
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.7	6.67	110	139	2	13	1.10	< 0.3	16	55	6530	3.19	18	< 1	4.07	1.73	11	159	349	0.54	42	0.133
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.03	< 3	677	3		1.10		18	42	30	4.67	22	< 1	1.97	1.00	34	868		1.55	37	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
SDC-1 Meas			7.84	< 3	630	3		1.06		18	55	28	4.67	21	< 1	1.03	0.95	34	852		1.48	34	0.051
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.5	273	> 1000	1	5	0.15	0.4	15	66	74	5.82	28	3	1.81	0.60	33	1060	< 1	0.09	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.3	13.1	245	> 1000	1	5	0.16	< 0.3	15	50	73	5.72	29	7	1.72	0.61	34	1040	< 1	0.10	28	0.034
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	12.9	261	> 1000	1	3	0.15	< 0.3	15	51	71	6.09	29	5	1.49	0.61	34	1130	< 1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				4						145	217	320	8.80									6470	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				9						146	162	335	8.98									6660	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				4						158	243	325	9.73									6870	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					103					57	172	106		13				5				261	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					106					55	233	104		12				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	216	123		11				5				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				29	838	3	6		< 0.3	22	90	33		28				168		2		90	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	834	3	5		< 0.3	25	81	34		26				168		2		94	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				22	808	3	< 2		< 0.3	25	78	31		25				167		1		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	609																						
SE68 Cert	599																						
SE68 Meas	581																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.6	14	40	256		18	< 1			18		13		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.3	14	36	245		17	1			17		11		53	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.1	15	32	241		17	1			18		9		55	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1750																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1780																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263468 Orig		< 0.3	7.50	< 3	134	< 1	2	4.00	< 0.3	54	61	110	8.98	16	2	0.90	3.13	9	1690	< 1	3.82	66	0.026
263468 Dup		< 0.3	7.39	4	132	< 1	< 2	3.98	< 0.3	53	59	110	8.86	16	8	0.90	3.10	9	1660	< 1	3.73	65	0.027
263472 Orig	< 5																						
263472 Dup	< 5																						
263482 Orig	20	0.5	6.78	< 3	68	< 1	< 2	7.09	< 0.3	48	54	95	7.68	13	< 1	0.77	2.73	10	1520	< 1	3.41	56	0.028
263482 Dup	14	0.5	6.63	< 3	65	< 1	< 2	6.96	< 0.3	48	51	94	7.48	13	< 1	0.75	2.66	10	1490	< 1	3.23	55	0.028
263494 Orig	74																						
263494 Dup	72																						
263507 Orig	106	0.5	6.01	< 3	223	< 1	< 2	7.33	< 0.3	41	101	255	6.97	14	1	1.13	2.74	7	1290	< 1	3.02	47	0.025
263507 Dup	103	0.5	6.38	< 3	235	< 1	3	7.73	< 0.3	43	49	270	7.58	13	< 1	1.31	2.95	7	1380	< 1	3.14	49	0.027
263512 Split Orig PREP DUP	< 5	0.4	7.36	< 3	124	< 1	< 2	5.38	< 0.3	48	57	116	7.99	14	5	0.91	3.72	13	1680	3	2.65	59	0.031
263512 Split	< 5	0.4	7.44	< 3	125	< 1	< 2	5.45	< 0.3	50	54	117	8.13	15	< 1	0.93	3.79	13	1660	4	2.69	59	0.032

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
PREP DUP																							
263517 Orig	7																						
263517 Dup	7																						
263520 Orig		0.4	8.13	235	490	< 1	2	4.05	< 0.3	14	34	46	5.09	15	< 1	0.84	1.37	7	986	< 1	2.58	23	0.044
263520 Dup		0.4	8.35	259	504	< 1	2	4.15	< 0.3	14	31	58	5.23	14	< 1	0.88	1.41	8	1020	4	2.64	24	0.047
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	730	21	0.25	< 4	294	5	0.03	< 5	40	87	176	37	726	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	741	16	0.26	< 4	297	6	0.03	< 5	40	88	171	36	755	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	709	22	0.24	< 4	292	11	0.03	< 5	40	87	157	35	724	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	45	< 5	1.83	8	216	4	0.29	< 5	< 10	89	40	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	45	< 5	1.83	8	217	4	0.29	< 5	< 10	91	40	16	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	44	< 5	1.80	9	219	3	0.29	< 5	< 10	92	38	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	22	< 5		17	174		0.06	< 5	< 10	29	< 5		101	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	19	< 5		16	166		0.20	< 5	< 10	52	< 5		95	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	97	< 5	0.02	26	34	< 2		< 5	< 10	133	< 5	12	131	69
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	98	< 5	0.02	27	36	< 2		< 5	< 10	107	< 5	12	131	57
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	97	< 5	0.02	27	34	< 2		< 5	< 10	114	< 5	11	131	59
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.63											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	6	< 5		32	130		0.28			139		17	60	35
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	5	< 5		33	132		0.28			143		17	62	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		31	122		0.27			136		15	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		20	179		0.53	< 5	< 10	223	< 5	31	188	115
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	31	< 5		21	182		0.54	< 5	< 10	224	< 5	31	204	117
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Meas	28	< 5		21	172		0.51	< 5	< 10	220	< 5	30	184	114
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	878			5	153				< 10	28	10	33	829	134
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	829			4	150				< 10	26	9	31	798	92
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	834			5	148				< 10	23	8	29	791	117
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
263468 Orig	< 3	< 5	0.29	42	70	< 2	0.23	< 5	< 10	157	< 5	20	100	35
263468 Dup	3	< 5	0.30	41	69	< 2	0.30	< 5	< 10	177	< 5	19	101	42
263472 Orig														
263472 Dup														
263482 Orig	< 3	< 5	0.70	37	92	2	0.41	< 5	< 10	221	< 5	18	95	61
263482 Dup	< 3	< 5	0.68	36	89	3	0.41	< 5	< 10	216	< 5	18	94	59
263494 Orig														
263494 Dup														
263507 Orig	5	< 5	0.95	33	136	7	0.31	< 5	< 10	199	< 5	12	65	62
263507 Dup	< 3	< 5	1.02	35	143	5	0.33	< 5	< 10	215	< 5	12	69	66
263512 Split Orig PREP DUP	5	< 5	0.31	39	95	2	0.49	< 5	< 10	246	< 5	20	91	69
263512 Split PREP DUP	4	< 5	0.31	39	97	3	0.49	< 5	< 10	248	< 5	19	92	67
263517 Orig														
263517 Dup														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263520 Orig	20	< 5	0.06	21	299	< 2	0.16	< 5	< 10	86	< 5	19	70	20
263520 Dup	21	< 5	0.07	22	309	< 2	0.26	< 5	< 10	120	< 5	19	76	25
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	8	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 16-Nov-16
Invoice No.: A16-12250
Invoice Date: 05-Dec-16
Your Reference: Core-16-Nov-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

57 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12250**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 16-Nov-16
Invoice No.: A16-12250
Invoice Date: 05-Dec-16
Your Reference: Core-16-Nov-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

57 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12250**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246312	< 5	0.3	7.11	4	98	< 1	< 2	7.10	< 0.3	45	83	61	7.99	13	< 1	0.66	3.06	7	1750	< 1	2.97	59	0.028
246313	< 5	< 0.3	7.32	< 3	112	< 1	4	7.16	< 0.3	49	72	103	8.51	13	3	0.63	3.01	7	1750	1	2.65	60	0.028
246314	< 5	0.3	7.17	< 3	81	< 1	2	7.47	< 0.3	46	48	85	8.11	15	3	0.50	2.90	8	1720	< 1	2.52	57	0.025
246315	< 5	< 0.3	6.95	< 3	94	< 1	3	7.35	< 0.3	45	60	94	7.80	15	1	0.69	2.89	9	1640	< 1	2.99	56	0.026
246316	< 5	0.4	7.34	8	105	< 1	5	8.02	< 0.3	45	55	101	8.79	17	1	0.92	3.01	7	1720	< 1	2.04	61	0.029
246317	< 5	0.4	7.03	4	90	< 1	< 2	7.35	< 0.3	45	52	99	8.13	15	3	0.77	2.80	6	1590	< 1	2.74	56	0.029
246318	< 5	0.4	7.23	8	92	< 1	3	7.44	< 0.3	45	60	99	8.34	15	1	0.78	2.85	6	1640	< 1	2.83	58	0.030
246319	< 5	0.6	7.54	< 3	101	< 1	< 2	7.87	< 0.3	49	53	86	8.98	15	4	0.83	3.26	10	1670	1	2.52	61	0.029
246320	< 5	< 0.3	7.34	< 3	88	< 1	< 2	8.59	< 0.3	48	73	88	8.71	15	4	0.74	3.23	9	1660	1	2.18	58	0.028
246321	< 5	0.4	7.21	< 3	72	< 1	< 2	6.78	< 0.3	50	66	120	8.56	14	7	0.58	3.41	14	1490	< 1	2.18	101	0.025
246322	< 5	< 0.3	7.30	< 3	50	< 1	< 2	7.90	< 0.3	51	66	142	8.91	14	4	0.38	2.91	8	1660	< 1	2.45	59	0.030
246323	< 5	0.5	7.31	< 3	76	< 1	3	9.10	< 0.3	42	106	89	8.25	16	8	0.59	2.61	9	1650	< 1	1.95	57	0.024
246324	< 5	< 0.3	7.22	< 3	103	< 1	< 2	6.61	< 0.3	49	53	104	8.71	14	6	0.99	3.48	18	1510	< 1	1.71	58	0.026
246325	< 5	0.4	7.14	< 3	92	< 1	< 2	6.98	< 0.3	46	49	130	8.41	14	1	0.90	3.26	15	1410	< 1	1.91	56	0.028
246326	546	0.4	7.83	127	488	< 1	< 2	3.94	< 0.3	14	31	43	4.83	14	< 1	0.82	1.34	7	950	< 1	2.51	24	0.044
246327	37	6.6	5.61	< 3	56	< 1	19	8.26	0.7	40	46	76	6.28	11	< 1	0.69	2.34	13	1330	< 1	2.71	46	0.017
246328	< 5	0.3	7.28	< 3	65	< 1	2	7.02	< 0.3	48	56	100	8.48	15	1	0.62	2.77	18	1540	3	2.98	59	0.029
246329	< 5	0.4	7.58	7	123	< 1	< 2	7.31	< 0.3	52	102	92	8.95	15	1	1.02	3.19	14	1710	4	2.61	62	0.031
246330	< 5	0.4	6.82	5	125	< 1	< 2	6.16	< 0.3	49	89	121	7.98	13	< 1	1.04	3.04	12	1630	7	2.64	58	0.030
246331	8	0.7	6.71	4	110	< 1	2	6.58	< 0.3	45	77	86	8.25	14	5	1.06	3.10	14	1540	< 1	2.74	51	0.028
246332	5	0.4	7.41	< 3	119	< 1	< 2	5.88	< 0.3	48	70	99	8.58	15	2	1.07	3.19	10	1630	< 1	3.12	57	0.026
246333	< 5	< 0.3	7.37	< 3	115	< 1	4	6.72	< 0.3	46	60	95	7.92	15	< 1	1.01	2.35	7	1500	< 1	3.40	58	0.026
246334	< 5	< 0.3	0.03	< 3	29	< 1	< 2	18.9	< 0.3	< 1	5	1	0.04	< 1	1	0.01	12.4	6	356	< 1	0.02	< 1	0.003
246335	5	< 0.3	7.04	< 3	104	< 1	< 2	6.76	< 0.3	45	51	118	7.81	14	4	0.88	2.76	7	1560	< 1	3.01	58	0.029
246336	5	0.3	7.02	4	92	< 1	< 2	6.20	< 0.3	45	54	98	8.09	12	2	0.66	2.91	11	1540	1	3.40	58	0.028
246337	5	< 0.3	7.63	< 3	63	< 1	2	7.13	< 0.3	50	59	80	8.05	17	2	0.46	2.43	7	1450	4	3.12	60	0.030
246338	6	0.4	6.99	4	59	< 1	2	7.30	< 0.3	44	54	87	8.02	14	6	0.41	2.61	15	1630	< 1	3.21	56	0.028
246339	5	0.3	7.60	< 3	79	< 1	2	6.88	< 0.3	51	63	134	8.46	14	2	0.55	2.77	15	1670	3	3.21	62	0.029
246340	5	0.4	6.79	< 3	92	< 1	3	7.45	< 0.3	47	78	100	7.70	13	< 1	0.68	2.76	12	1650	< 1	2.91	56	0.029
246341	< 5	0.3	7.04	< 3	77	< 1	< 2	7.10	< 0.3	53	93	84	7.98	14	2	0.50	2.35	9	1590	< 1	3.12	63	0.027
246342	738	0.6	8.34	213	504	< 1	7	4.14	< 0.3	15	30	48	5.19	15	< 1	0.88	1.40	8	966	< 1	2.62	24	0.045
246343	5	< 0.3	7.06	< 3	63	< 1	4	7.02	< 0.3	47	65	96	7.78	15	4	0.46	2.66	13	1620	< 1	3.05	58	0.027
246344	10	4.7	6.86	< 3	103	< 1	6	4.71	< 0.3	47	56	111	7.15	12	< 1	0.74	2.33	17	1430	< 1	3.35	56	0.026
246345	10	0.4	6.71	< 3	83	< 1	< 2	6.03	< 0.3	43	65	70	7.34	12	< 1	0.72	2.13	17	1430	< 1	3.64	57	0.029
246346	122	< 0.3	7.03	< 3	103	< 1	< 2	5.97	< 0.3	46	56	86	8.18	15	< 1	0.95	3.73	29	1460	< 1	2.02	59	0.027
246347	6	0.5	7.40	< 3	139	< 1	< 2	5.25	< 0.3	49	55	49	8.70	15	< 1	1.11	3.99	31	1450	< 1	2.25	61	0.028
246348	6	0.4	7.16	< 3	96	< 1	2	5.46	< 0.3	48	66	90	8.44	14	7	0.96	3.91	37	1420	< 1	2.02	59	0.027
246349	167	0.4	7.05	< 3	72	< 1	< 2	6.21	< 0.3	47	143	107	8.20	14	< 1	0.72	3.91	38	1330	1	2.37	56	0.029
246350	291	0.4	5.85	< 3	86	< 1	2	8.83	< 0.3	39	63	74	6.64	12	< 1	1.40	2.88	23	1140	3	1.60	47	0.025
246351	> 5000	3.9	6.63	< 3	71	< 1	3	6.17	9.9	43	72	101	7.46	13	< 1	1.20	3.72	35	1200	1	1.54	56	0.027
246352	> 5000	4.1	6.58	4	71	< 1	2	6.17	12.6	42	56	105	7.40	14	3	1.19	3.68	35	1180	< 1	1.50	57	0.027
246353	81	0.3	6.83	< 3	76	< 1	4	5.32	< 0.3	44	53	90	7.64	14	3	0.86	3.86	37	1190	2	2.26	58	0.026

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246354	139	0.4	6.98	< 3	78	< 1	4	5.78	< 0.3	44	48	57	7.59	15	1	0.78	3.80	30	1240	2	2.86	60	0.025
246355	92	0.4	7.12	< 3	98	< 1	3	5.52	< 0.3	45	48	98	7.90	15	2	1.04	3.94	35	1270	< 1	2.26	58	0.026
246356	32	0.5	6.98	< 3	62	< 1	2	5.82	< 0.3	45	49	106	7.95	14	4	0.64	4.03	43	1290	< 1	2.21	62	0.025
246357	79	0.4	7.10	< 3	65	< 1	3	5.65	< 0.3	46	55	107	8.03	15	< 1	0.68	4.03	44	1280	< 1	1.93	60	0.028
246358	35	0.4	6.93	3	71	< 1	4	6.18	< 0.3	43	72	102	7.95	15	2	0.80	3.81	39	1310	< 1	2.03	56	0.028
246359	145	0.4	6.41	< 3	82	< 1	4	7.16	< 0.3	39	71	121	7.12	14	< 1	0.81	3.09	31	1320	9	2.42	48	0.028
246360	393	0.4	7.84	146	493	< 1	< 2	3.94	< 0.3	14	61	45	4.57	14	< 1	0.85	1.35	7	906	3	2.52	24	0.048
246361	2610	1.4	6.20	< 3	192	< 1	< 2	7.80	< 0.3	39	55	85	7.03	14	< 1	1.20	2.93	29	1150	4	2.07	49	0.025
246362	3050	32.3	3.87	< 3	169	< 1	< 2	7.57	9.4	31	23	134	5.41	8	< 1	2.11	2.65	5	1500	16	0.99	33	0.017
246363	4950	3.6	5.85	< 3	178	< 1	3	6.08	0.4	41	30	166	6.94	13	< 1	3.28	2.77	7	1320	19	0.68	43	0.027
246364	36	0.5	6.38	7	122	< 1	3	5.63	< 0.3	45	56	87	6.87	14	< 1	3.09	2.52	5	1380	2	1.41	57	0.025
246365	72	0.6	6.61	5	95	< 1	5	5.96	< 0.3	42	59	72	7.16	14	< 1	2.69	2.61	5	1380	7	2.13	56	0.028
246366	> 5000	10.5	4.99	4	100	< 1	2	5.96	2.1	37	52	58	5.87	10	< 1	1.85	2.30	3	1350	38	1.85	43	0.021
246367	> 5000	6.3	5.61	< 3	73	< 1	2	6.29	0.5	36	54	94	6.32	12	< 1	2.28	2.55	5	1370	22	1.75	46	0.022
246368	< 5	< 0.3	0.04	< 3	36	< 1	< 2	17.8	0.4	< 1	6	1	0.05	< 1	< 1	0.02	12.2	6	338	< 1	0.02	< 1	0.003

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
246312	< 3	< 5	0.13	39	160	< 2	0.31	< 5	< 10	204	< 5	20	83	58	
246313	< 3	< 5	0.22	40	185	< 2	0.21	< 5	< 10	153	< 5	21	84	33	
246314	< 3	< 5	0.23	39	193	< 2	0.17	< 5	< 10	141	< 5	20	81	26	
246315	< 3	< 5	0.30	38	129	< 2	0.22	< 5	< 10	146	< 5	19	77	32	
246316	6	< 5	0.28	40	201	< 2	0.18	< 5	< 10	143	< 5	20	80	32	
246317	< 3	< 5	0.30	38	163	2	0.40	< 5	< 10	217	< 5	20	74	56	
246318	< 3	< 5	0.31	39	166	4	0.45	< 5	< 10	243	< 5	20	76	63	
246319	< 3	< 5	0.03	40	163	< 2	0.36	< 5	< 10	209	< 5	21	85	68	
246320	< 3	< 5	0.04	39	168	< 2	0.34	< 5	10	212	< 5	20	83	64	
246321	< 3	< 5	0.02	39	161	< 2	0.23	< 5	< 10	188	< 5	20	84	65	
246322	3	< 5	0.37	40	209	2	0.36	< 5	< 10	193	< 5	20	78	47	
246323	< 3	< 5	0.07	38	208	< 2	0.26	< 5	< 10	201	< 5	20	70	57	
246324	< 3	< 5	0.03	40	142	2	0.27	< 5	< 10	196	< 5	21	85	66	
246325	< 3	< 5	0.09	39	147	6	0.34	< 5	< 10	188	< 5	20	77	55	
246326	11	< 5	0.04	21	294	8	0.15	< 5	< 10	80	< 5	19	59	20	
246327	78	< 5	0.67	31	70	3	0.37	< 5	< 10	183	< 5	14	66	55	
246328	< 3	< 5	0.16	40	119	< 2	0.45	< 5	< 10	240	< 5	20	79	62	
246329	< 3	< 5	0.18	42	183	3	0.46	< 5	< 10	242	< 5	20	82	65	
246330	< 3	< 5	0.05	37	152	< 2	0.46	< 5	< 10	229	< 5	18	80	66	
246331	4	< 5	0.16	37	101	3	0.29	< 5	< 10	189	< 5	20	84	60	
246332	6	< 5	0.06	41	155	< 2	0.24	< 5	< 10	194	< 5	22	90	64	
246333	4	< 5	0.21	39	146	< 2	0.18	< 5	< 10	150	< 5	20	78	33	
246334	< 3	< 5	< 0.01	< 4	156	< 2	< 0.01	< 5	10	3	< 5	< 1	8	< 5	
246335	5	< 5	0.18	39	165	3	0.39	< 5	< 10	214	< 5	20	79	56	
246336	< 3	< 5	0.25	38	100	< 2	0.39	< 5	< 10	207	< 5	19	82	59	
246337	< 3	< 5	0.71	39	152	3	0.48	< 5	< 10	251	< 5	18	75	58	
246338	3	< 5	0.18	37	86	3	0.43	< 5	< 10	226	< 5	19	81	58	
246339	< 3	< 5	0.22	40	138	2	0.45	< 5	< 10	241	< 5	19	87	56	
246340	< 3	< 5	0.19	37	114	< 2	0.45	6	< 10	235	< 5	18	82	63	
246341	< 3	< 5	0.59	39	151	< 2	0.38	< 5	< 10	226	< 5	20	79	56	
246342	21	< 5	0.06	22	307	< 2	0.12	< 5	< 10	81	< 5	20	71	15	
246343	4	< 5	0.24	39	103	< 2	0.21	< 5	< 10	141	< 5	20	83	31	
246344	39	< 5	0.42	39	68	< 2	0.33	< 5	< 10	158	< 5	20	80	40	
246345	6	< 5	0.69	36	63	< 2	0.42	< 5	< 10	206	< 5	19	79	61	
246346	< 3	< 5	0.06	39	169	2	0.34	< 5	< 10	207	< 5	20	80	60	
246347	< 3	< 5	< 0.01	40	179	3	0.34	< 5	< 10	200	< 5	20	88	67	
246348	< 3	< 5	0.02	40	112	< 2	0.34	< 5	< 10	201	< 5	20	84	63	
246349	< 3	< 5	0.13	37	62	< 2	0.42	< 5	< 10	219	10	18	87	62	
246350	3	< 5	0.85	31	160	< 2	0.36	< 5	< 10	195	< 5	17	81	57	
246351	94	< 5	0.41	36	90	3	0.40	< 5	< 10	210	< 5	19	277	62	12.5
246352	104	< 5	0.42	36	91	< 2	0.34	< 5	< 10	173	5	19	320	48	12.1

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
246353	3	< 5	0.07	38	70	< 2	0.29	< 5	< 10	179	< 5	20	108	58	
246354	5	< 5	< 0.01	38	96	< 2	0.24	< 5	< 10	170	< 5	21	81	68	
246355	4	< 5	0.03	38	116	< 2	0.29	< 5	< 10	189	< 5	21	82	66	
246356	5	< 5	< 0.01	38	103	< 2	0.27	< 5	< 10	179	< 5	21	83	63	
246357	3	< 5	0.03	38	90	< 2	0.33	< 5	< 10	197	< 5	20	81	61	
246358	< 3	< 5	0.07	36	64	< 2	0.40	< 5	< 10	220	< 5	19	80	62	
246359	< 3	< 5	0.13	34	81	< 2	0.42	< 5	10	218	< 5	17	70	60	
246360	8	< 5	0.05	21	303	4	0.29	< 5	< 10	123	< 5	21	59	32	
246361	7	< 5	1.12	33	93	< 2	0.37	< 5	< 10	199	< 5	15	96	60	
246362	25	< 5	1.90	21	90	6	0.26	< 5	< 10	113	31	9	447	40	
246363	4	< 5	1.26	32	75	5	0.40	< 5	< 10	208	8	9	101	64	
246364	14	< 5	0.64	35	61	3	0.41	< 5	< 10	223	12	9	82	65	
246365	7	< 5	0.96	36	63	3	0.42	< 5	< 10	232	20	9	86	66	
246366	13	< 5	2.41	25	62	3	0.31	< 5	< 10	142	37	8	139	51	24.3
246367	6	< 5	1.70	29	63	3	0.35	< 5	< 10	172	34	8	75	55	11.8
246368	< 3	< 5	< 0.01	< 4	132	5	< 0.01	< 5	< 10	3	< 5	< 1	39	< 5	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.0	2.31	437	730	1	1410	0.89	2.1	10	28	1190	22.7	12	7	0.04	0.21	8	852	16	0.05	40	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.37	447	724	1	1400	0.89	1.9	10	58	1180	22.7	12	7	0.05	0.21	8	866	16	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.3	2.40	434	727	1	1390	0.88	1.4	10	31	1100	23.4	11	5	0.04	0.21	8	886	17	0.05	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.7	6.52	101	100	2	33	1.08	< 0.3	15	44	6730	2.98	18	< 1	3.48	1.71	11	148	343	0.52	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.60	107	109	2	21	1.11	0.4	16	43	6660	3.03	17	< 1	3.91	1.74	11	155	351	0.53	43	0.134
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.7	6.67	110	139	2	13	1.10	< 0.3	16	55	6530	3.19	18	< 1	4.07	1.73	11	159	349	0.54	42	0.133
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.03	< 3	677	3		1.10		18	42	30	4.67	22	< 1	1.97	1.00	34	868		1.55	37	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
SDC-1 Meas			7.84	< 3	630	3		1.06		18	55	28	4.67	21	< 1	1.03	0.95	34	852		1.48	34	0.051
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.5	273	> 1000	1	5	0.15	0.4	15	66	74	5.82	28	3	1.81	0.60	33	1060	< 1	0.09	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.3	13.1	245	> 1000	1	5	0.16	< 0.3	15	50	73	5.72	29	7	1.72	0.61	34	1040	< 1	0.10	28	0.034
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	12.9	261	> 1000	1	3	0.15	< 0.3	15	51	71	6.09	29	5	1.49	0.61	34	1130	< 1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				4						145	217	320	8.80									6470	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				9						146	162	335	8.98									6660	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				4						158	243	325	9.73									6870	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					103					57	172	106		13				5				261	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					106					55	233	104		12				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	216	123		11				5				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				29	838	3	6		< 0.3	22	90	33		28				168		2		90	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	834	3	5		< 0.3	25	81	34		26				168		2		94	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				22	808	3	< 2		< 0.3	25	78	31		25				167		1		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	601																						
SE68 Cert	599																						
SE68 Meas	587																						
SE68 Cert	599																						
OxK110 Meas																							
OxK110 Cert																							
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.6	14	40	256		18	< 1			18		13		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.3	14	36	245		17	1			17		11		53	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.1	15	32	241		17	1			18		9		55	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OxP116 Meas																							
OxP116 Cert																							
OREAS 16A (FA-Ancaster) Meas	1710																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1720																						
OREAS 16A (FA-Ancaster) Cert	1810																						
246321 Orig	< 5																						
246321 Dup	< 5																						
246331 Orig	8																						
246331 Dup	8																						
246333 Orig		< 0.3	7.33	< 3	115	< 1	5	6.72	< 0.3	46	61	94	7.86	15	< 1	0.99	2.33	7	1490	< 1	3.37	58	0.026
246333 Dup		< 0.3	7.41	5	116	< 1	3	6.72	< 0.3	46	58	97	7.98	15	6	1.03	2.36	7	1510	< 1	3.43	57	0.027
246341 Orig	< 5																						
246341 Dup	5																						
246347 Orig		0.5	7.47	< 3	140	< 1	2	5.28	< 0.3	50	54	50	8.77	15	< 1	1.12	4.03	31	1450	< 1	2.27	62	0.027

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246347 Dup		0.5	7.33	< 3	138	< 1	< 2	5.22	< 0.3	49	56	47	8.63	14	2	1.09	3.95	31	1440	< 1	2.23	60	0.029
246356 Orig	42																						
246356 Dup	21																						
246361 Split Orig PREP DUP	2610	1.4	6.20	< 3	192	< 1	< 2	7.80	< 0.3	39	55	85	7.03	14	< 1	1.20	2.93	29	1150	4	2.07	49	0.025
246361 Split PREP DUP	2830	1.5	6.28	< 3	181	< 1	< 2	7.81	< 0.3	40	54	86	7.11	14	< 1	1.18	2.97	29	1160	2	2.16	50	0.025
246366 Orig	> 5000																						
246366 Dup	> 5000																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank																							
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
GXR-1 Meas	730	21	0.25	< 4	294	5	0.03	< 5	40	87	176	37	726	29	
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-1 Meas	741	16	0.26	< 4	297	6	0.03	< 5	40	88	171	36	755	30	
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-1 Meas	709	22	0.24	< 4	292	11	0.03	< 5	40	87	157	35	724	30	
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-4 Meas	45	< 5	1.83	8	216	4	0.29	< 5	< 10	89	40	15	72	42	
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
GXR-4 Meas	45	< 5	1.83	8	217	4	0.29	< 5	< 10	91	40	16	74	43	
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
GXR-4 Meas	44	< 5	1.80	9	219	3	0.29	< 5	< 10	92	38	15	72	42	
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
SDC-1 Meas	22	< 5		17	174		0.06	< 5	< 10	29	< 5		101	30	
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00	
SDC-1 Meas	19	< 5		16	166		0.20	< 5	< 10	52	< 5		95	30	
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00	
GXR-6 Meas	97	< 5	0.02	26	34	< 2		< 5	< 10	133	< 5	12	131	69	
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110	
GXR-6 Meas	98	< 5	0.02	27	36	< 2		< 5	< 10	107	< 5	12	131	57	
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110	
GXR-6 Meas	97	< 5	0.02	27	34	< 2		< 5	< 10	114	< 5	11	131	59	
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110	
Oreas 72a (4 Acid Digest) Meas			1.63												
Oreas 72a (4 Acid Digest) Cert			1.74												
Oreas 72a (4 Acid Digest) Meas			1.68												
Oreas 72a (4 Acid Digest) Cert			1.74												
Oreas 72a (4 Acid Digest) Meas			1.68												
Oreas 72a (4 Acid Digest) Cert			1.74												
DNC-1a Meas	6	< 5		32	130		0.28			139		17	60	35	
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0	
DNC-1a Meas	5	< 5		33	132		0.28			143		17	62	37	
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0	
DNC-1a Meas	< 3	< 5		31	122		0.27			136		15	58	34	
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0	
SBC-1 Meas	28	< 5		20	179		0.53	< 5	< 10	223	< 5	31	188	115	
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SBC-1 Meas	31	< 5		21	182		0.54	< 5	< 10	224	< 5	31	204	117	

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SBC-1 Meas	28	< 5		21	172		0.51	< 5	< 10	220	< 5	30	184	114	
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SE68 Meas															
SE68 Cert															
SE68 Meas															
SE68 Cert															
OxK110 Meas															3.57
OxK110 Cert															3.602
SdAR-M2 (U.S.G.S.) Meas	878			5	153				< 10	28	10	33	829	134	
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259	
SdAR-M2 (U.S.G.S.) Meas	829			4	150				< 10	26	9	31	798	92	
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259	
SdAR-M2 (U.S.G.S.) Meas	834			5	148				< 10	23	8	29	791	117	
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259	
OxP116 Meas															14.9
OxP116 Cert															14.92
OREAS 16A (FA-Ancaster) Meas															
OREAS 16A (FA-Ancaster) Cert															
OREAS 16A (FA-Ancaster) Meas															
OREAS 16A (FA-Ancaster) Cert															
246321 Orig															
246321 Dup															
246331 Orig															
246331 Dup															
246333 Orig	4	< 5	0.21	40	146	< 2	0.14	< 5	< 10	140	< 5	20	78	24	
246333 Dup	4	< 5	0.22	39	146	< 2	0.23	< 5	< 10	161	< 5	20	78	41	
246341 Orig															
246341 Dup															
246347 Orig	< 3	< 5	< 0.01	41	182	3	0.30	< 5	< 10	188	< 5	21	89	68	
246347 Dup	< 3	< 5	< 0.01	39	176	3	0.38	< 5	< 10	212	< 5	19	87	65	

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
246356 Orig															
246356 Dup															
246361 Split Orig PREP DUP	7	< 5	1.12	33	93	< 2	0.37	< 5	< 10	199	< 5	15	96	60	
246361 Split PREP DUP	< 3	< 5	1.06	34	93	< 2	0.34	< 5	< 10	193	< 5	15	95	60	
246366 Orig															
246366 Dup															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank															< 0.02
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	8	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5	

Quality Analysis ... *Innovative Technologies*

Date Submitted: 17-Nov-16
Invoice No.: A16-12325
Invoice Date: 05-Dec-16
Your Reference: Core-17-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

25 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12325**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 17-Nov-16
Invoice No.: A16-12325
Invoice Date: 05-Dec-16
Your Reference: Core-17-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

25 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12325**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246369	2370	1.8	5.25	3	294	< 1	< 2	6.29	0.6	33	67	75	6.01	11	< 1	1.76	2.52	4	1450	11	2.10	42	0.023
246370	> 5000	20.1	3.27	< 3	87	< 1	4	7.44	3.0	47	43	43	6.00	6	1	0.46	2.93	1	1730	1230	2.18	41	0.019
246371	> 5000	6.4	5.50	3	91	< 1	2	8.05	1.4	25	62	42	6.17	12	< 1	1.50	3.09	3	1730	32	2.49	43	0.030
246372	> 5000	11.9	3.64	< 3	53	< 1	5	8.37	1.2	33	37	33	6.71	7	< 1	0.79	3.22	2	1780	187	1.92	42	0.020
246373	1220	1.2	4.73	< 3	188	< 1	< 2	7.43	0.9	28	54	164	5.86	12	< 1	2.43	2.90	3	1450	13	0.27	42	0.018
246374	4550	2.6	4.71	< 3	230	< 1	2	7.72	1.4	30	38	93	6.06	11	< 1	2.39	2.86	4	1450	13	0.16	40	0.021
246375	> 5000	3.1	5.69	< 3	284	< 1	< 2	7.98	1.0	32	45	172	6.75	13	< 1	2.65	2.97	15	1530	1	0.11	41	0.023
246376	> 5000	6.9	5.32	71	33	< 1	5	1.50	12.4	11	34	1220	6.52	14	< 1	1.37	1.82	12	588	83	1.21	55	0.041
246377	> 5000	4.4	5.46	< 3	259	< 1	3	6.91	0.5	34	66	166	6.54	12	< 1	1.80	2.73	24	1540	27	0.31	55	0.032
246378	330	0.5	6.31	< 3	264	< 1	4	3.92	< 0.3	28	120	69	5.98	14	< 1	1.59	2.05	67	1150	< 1	1.39	68	0.048
246379	13	0.4	7.53	< 3	310	< 1	< 2	3.34	< 0.3	31	139	65	5.78	17	< 1	1.31	2.04	77	939	< 1	1.82	71	0.049
246380	10	< 0.3	7.54	< 3	303	< 1	4	3.61	< 0.3	30	78	61	5.64	17	< 1	1.24	2.18	81	922	< 1	2.21	71	0.048
246381	8	< 0.3	7.57	< 3	332	< 1	< 2	3.39	< 0.3	28	96	62	6.00	16	< 1	1.17	2.06	89	1060	< 1	2.05	76	0.043
246382	18	0.3	7.70	< 3	315	< 1	4	2.98	< 0.3	26	75	43	5.82	18	< 1	1.18	1.87	91	1030	< 1	2.44	72	0.047
246383	13	0.4	7.67	< 3	302	< 1	< 2	3.12	< 0.3	30	90	75	6.09	17	< 1	1.12	2.08	105	1030	< 1	2.40	73	0.044
246384	12	0.4	7.31	< 3	280	< 1	3	3.40	< 0.3	23	87	50	5.31	16	< 1	1.08	1.91	89	1070	< 1	2.59	65	0.046
246385	10	0.4	7.53	4	275	< 1	< 2	3.50	< 0.3	24	91	50	5.45	16	< 1	1.05	1.98	91	1090	< 1	2.78	68	0.048
246386	17	0.4	7.56	< 3	371	< 1	3	3.27	< 0.3	28	135	68	5.72	17	< 1	1.15	1.90	93	1000	< 1	1.92	74	0.048
246387	16	0.4	7.13	< 3	365	< 1	2	3.72	< 0.3	23	71	60	5.17	16	< 1	1.19	1.73	78	1080	< 1	1.69	55	0.042
246388	13	0.4	7.03	< 3	332	< 1	3	4.04	< 0.3	23	91	62	5.28	14	< 1	1.13	1.56	78	1050	< 1	1.84	65	0.045
246389	19	< 0.3	7.13	< 3	302	< 1	3	4.14	< 0.3	27	89	65	5.69	14	< 1	1.08	1.89	91	1090	< 1	1.94	71	0.044
246390	35	0.4	7.40	< 3	354	< 1	3	4.87	< 0.3	26	89	65	5.71	16	< 1	1.18	1.38	89	1070	< 1	1.43	67	0.042
246391	178	0.5	7.25	< 3	278	< 1	2	4.51	< 0.3	23	76	59	5.08	15	1	1.11	1.18	75	977	< 1	1.22	61	0.041
246392	23	0.4	7.51	5	274	< 1	3	4.55	< 0.3	25	84	64	5.19	17	< 1	1.01	0.95	75	916	< 1	1.30	63	0.046
246393	716	< 0.3	8.05	235	497	< 1	3	4.05	< 0.3	14	32	49	4.80	15	< 1	0.87	1.38	7	922	1	2.54	24	0.046

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
246369	5	< 5	1.12	29	77	< 2	0.34	< 5	< 10	160	19	9	69	53	
246370	86	< 5	3.72	19	99	4	0.23	< 5	< 10	74	27	7	167	33	28.3
246371	19	< 5	2.40	31	123	< 2	0.38	< 5	< 10	163	14	10	92	47	15.0
246372	30	< 5	3.88	23	123	3	0.27	< 5	< 10	97	27	8	72	34	24.3
246373	7	< 5	0.88	29	118	5	0.36	< 5	< 10	180	< 5	9	92	44	
246374	7	< 5	0.74	29	121	< 2	0.34	< 5	< 10	177	16	9	104	43	
246375	9	< 5	0.84	35	129	5	0.44	< 5	< 10	224	27	9	135	43	5.73
246376	195	< 5	4.20	12	186	< 2	0.17	< 5	< 10	74	20	13	2330	40	5.72
246377	12	< 5	1.30	28	150	< 2	0.38	< 5	< 10	156	23	10	93	62	10.8
246378	< 3	< 5	0.16	22	122	2	0.43	< 5	< 10	154	< 5	10	75	100	
246379	< 3	< 5	0.14	25	118	< 2	0.28	< 5	< 10	129	< 5	12	75	103	
246380	7	< 5	0.09	23	139	< 2	0.15	< 5	< 10	84	< 5	11	74	53	
246381	6	< 5	0.09	24	116	< 2	0.17	< 5	< 10	90	< 5	11	73	52	
246382	< 3	< 5	0.09	21	113	4	0.23	< 5	< 10	101	< 5	12	70	74	
246383	7	< 5	0.13	25	109	< 2	0.25	< 5	< 10	114	< 5	11	74	74	
246384	6	< 5	0.06	20	120	< 2	0.29	< 5	< 10	108	< 5	10	62	83	
246385	< 3	< 5	0.05	20	125	< 2	0.33	< 5	< 10	123	< 5	10	65	92	
246386	5	< 5	0.11	23	113	< 2	0.36	< 5	< 10	138	< 5	11	71	89	
246387	6	< 5	0.09	18	129	3	0.32	< 5	< 10	114	< 5	10	59	91	
246388	< 3	< 5	0.08	20	126	2	0.21	< 5	< 10	92	< 5	12	63	72	
246389	8	< 5	0.11	23	131	< 2	0.17	< 5	< 10	98	< 5	13	64	55	
246390	4	< 5	0.12	22	162	< 2	0.19	< 5	< 10	97	< 5	11	68	62	
246391	7	< 5	0.11	19	173	2	0.24	< 5	< 10	105	< 5	10	60	81	
246392	6	< 5	0.18	21	167	3	0.21	< 5	< 10	102	< 5	10	64	79	
246393	22	< 5	0.06	21	309	< 2	0.20	< 5	< 10	99	< 5	20	70	23	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.0	2.31	437	730	1	1410	0.89	2.1	10	28	1190	22.7	12	7	0.04	0.21	8	852	16	0.05	40	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.37	447	724	1	1400	0.89	1.9	10	58	1180	22.7	12	7	0.05	0.21	8	866	16	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.3	2.40	434	727	1	1390	0.88	1.4	10	31	1100	23.4	11	5	0.04	0.21	8	886	17	0.05	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.7	6.52	101	100	2	33	1.08	< 0.3	15	44	6730	2.98	18	< 1	3.48	1.71	11	148	343	0.52	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.60	107	109	2	21	1.11	0.4	16	43	6660	3.03	17	< 1	3.91	1.74	11	155	351	0.53	43	0.134
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.7	6.67	110	139	2	13	1.10	< 0.3	16	55	6530	3.19	18	< 1	4.07	1.73	11	159	349	0.54	42	0.133
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.03	< 3	677	3		1.10		18	42	30	4.67	22	< 1	1.97	1.00	34	868		1.55	37	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
SDC-1 Meas			7.84	< 3	630	3		1.06		18	55	28	4.67	21	< 1	1.03	0.95	34	852		1.48	34	0.051
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.5	273	> 1000	1	5	0.15	0.4	15	66	74	5.82	28	3	1.81	0.60	33	1060	< 1	0.09	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.3	13.1	245	> 1000	1	5	0.16	< 0.3	15	50	73	5.72	29	7	1.72	0.61	34	1040	< 1	0.10	28	0.034
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	12.9	261	> 1000	1	3	0.15	< 0.3	15	51	71	6.09	29	5	1.49	0.61	34	1130	< 1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				4						145	217	320	8.80									6470	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				9						146	162	335	8.98									6660	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				4						158	243	325	9.73									6870	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					103					57	172	106		13				5				261	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					106					55	233	104		12				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	216	123		11				5				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				29	838	3	6		< 0.3	22	90	33		28				168		2		90	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	834	3	5		< 0.3	25	81	34		26				168		2		94	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				22	808	3	< 2		< 0.3	25	78	31		25				167		1		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	575																						
SE68 Cert	599																						
OxK110 Meas																							
OxK110 Cert																							
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.6	14	40	256		18	< 1			18		13		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.3	14	36	245		17	1			17		11		53	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.1	15	32	241		17	1			18		9		55	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OxP116 Meas																							
OxP116 Cert																							
OREAS 16A (FA-Ancaster) Meas	1750																						
OREAS 16A (FA-Ancaster) Cert	1810																						
246375 Orig		3.2	5.73	4	284	< 1	< 2	8.04	0.9	32	41	172	6.73	13	< 1	2.61	2.97	15	1540	1	0.11	41	0.023
246375 Dup		2.9	5.64	< 3	283	< 1	3	7.93	1.1	31	49	172	6.77	13	< 1	2.68	2.96	15	1520	2	0.11	40	0.023
246378 Orig	310																						
246378 Dup	349																						
246388 Orig	12																						
246388 Dup	13																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank																							

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
GXR-1 Meas	730	21	0.25	< 4	294	5	0.03	< 5	40	87	176	37	726	29	
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-1 Meas	741	16	0.26	< 4	297	6	0.03	< 5	40	88	171	36	755	30	
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-1 Meas	709	22	0.24	< 4	292	11	0.03	< 5	40	87	157	35	724	30	
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-4 Meas	45	< 5	1.83	8	216	4	0.29	< 5	< 10	89	40	15	72	42	
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
GXR-4 Meas	45	< 5	1.83	8	217	4	0.29	< 5	< 10	91	40	16	74	43	
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
GXR-4 Meas	44	< 5	1.80	9	219	3	0.29	< 5	< 10	92	38	15	72	42	
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
SDC-1 Meas	22	< 5		17	174		0.06	< 5	< 10	29	< 5		101	30	
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00	
SDC-1 Meas	19	< 5		16	166		0.20	< 5	< 10	52	< 5		95	30	
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00	
GXR-6 Meas	97	< 5	0.02	26	34	< 2		< 5	< 10	133	< 5	12	131	69	
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110	
GXR-6 Meas	98	< 5	0.02	27	36	< 2		< 5	< 10	107	< 5	12	131	57	
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110	
GXR-6 Meas	97	< 5	0.02	27	34	< 2		< 5	< 10	114	< 5	11	131	59	
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110	
Oreas 72a (4 Acid Digest) Meas			1.63												
Oreas 72a (4 Acid Digest) Cert			1.74												
Oreas 72a (4 Acid Digest) Meas			1.68												
Oreas 72a (4 Acid Digest) Cert			1.74												
Oreas 72a (4 Acid Digest) Meas			1.68												
Oreas 72a (4 Acid Digest) Cert			1.74												
DNC-1a Meas	6	< 5		32	130		0.28			139		17	60	35	
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0	
DNC-1a Meas	5	< 5		33	132		0.28			143		17	62	37	
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0	
DNC-1a Meas	< 3	< 5		31	122		0.27			136		15	58	34	
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0	
SBC-1 Meas	28	< 5		20	179		0.53	< 5	< 10	223	< 5	31	188	115	
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SBC-1 Meas	31	< 5		21	182		0.54	< 5	< 10	224	< 5	31	204	117	

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SBC-1 Meas	28	< 5		21	172		0.51	< 5	< 10	220	< 5	30	184	114	
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SE68 Meas															
SE68 Cert															
OxK110 Meas															3.58
OxK110 Cert															3.602
SdAR-M2 (U.S.G.S.) Meas	878			5	153				< 10	28	10	33	829	134	
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259	
SdAR-M2 (U.S.G.S.) Meas	829			4	150				< 10	26	9	31	798	92	
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259	
SdAR-M2 (U.S.G.S.) Meas	834			5	148				< 10	23	8	29	791	117	
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259	
OxP116 Meas															14.7
OxP116 Cert															14.92
OREAS 16A (FA-Ancaster) Meas															
OREAS 16A (FA-Ancaster) Cert															
246375 Orig	8	< 5	0.84	36	129	3	0.44	< 5	< 10	222	22	9	140	45	
246375 Dup	9	< 5	0.84	34	129	6	0.45	< 5	< 10	226	31	8	130	42	
246378 Orig															
246378 Dup															
246388 Orig															
246388 Dup															
Method Blank															
Method Blank															
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	8	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5	

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
Method Blank															< 0.02

Quality Analysis ... *Innovative Technologies*

Date Submitted: 17-Nov-16
Invoice No.: A16-12327
Invoice Date: 05-Dec-16
Your Reference: Core-17-Nov-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

72 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12327**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 17-Nov-16
Invoice No.: A16-12327
Invoice Date: 05-Dec-16
Your Reference: Core-17-Nov-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

72 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12327**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263524	< 5	0.4	7.45	5	55	< 1	3	7.45	< 0.3	49	101	86	7.78	14	4	0.56	4.85	21	1530	< 1	1.56	154	0.016
263525	9	0.3	7.55	4	47	< 1	4	7.59	< 0.3	52	102	117	8.34	13	2	0.60	4.79	19	1340	< 1	1.73	146	0.020
263526	< 5	< 0.3	8.10	< 3	55	< 1	4	7.17	0.7	56	145	112	8.28	14	4	0.76	5.20	19	1400	< 1	1.50	174	0.019
263527	< 5	< 0.3	6.84	3	52	< 1	3	6.79	< 0.3	50	242	103	7.72	13	3	0.69	4.83	18	1350	< 1	1.42	165	0.018
263528	< 5	< 0.3	7.81	< 3	61	< 1	3	6.75	0.5	55	170	72	7.94	13	3	0.65	5.16	21	1380	< 1	1.61	164	0.015
263529	< 5	< 0.3	7.81	< 3	46	< 1	5	7.09	< 0.3	51	133	83	7.93	14	< 1	0.54	4.99	20	1350	< 1	1.44	165	0.017
263530	< 5	< 0.3	8.01	< 3	65	< 1	4	6.52	< 0.3	55	103	107	8.08	14	4	0.78	5.23	22	1400	< 1	1.17	171	0.016
263531	< 5	0.7	8.01	< 3	87	< 1	4	7.06	0.6	54	94	141	8.13	13	8	0.80	5.26	20	1460	< 1	1.64	172	0.019
263532	< 5	0.3	7.70	7	40	< 1	2	7.38	0.6	48	75	102	7.82	14	4	0.46	4.97	24	1350	< 1	1.59	168	0.023
263533	< 5	0.4	7.85	4	67	< 1	3	7.41	0.5	55	87	108	8.02	14	1	0.75	5.20	20	1360	< 1	1.47	169	0.018
263534	356	0.3	8.15	154	510	< 1	< 2	4.02	< 0.3	14	35	47	4.83	15	< 1	0.89	1.42	8	921	4	2.59	25	0.049
263535	< 5	< 0.3	8.25	6	53	< 1	6	7.12	< 0.3	54	96	120	8.44	14	3	0.61	5.29	24	1410	< 1	1.24	176	0.019
263536	< 5	0.3	8.29	< 3	44	< 1	< 2	7.38	0.6	56	128	109	8.44	14	5	0.50	5.26	23	1440	< 1	1.37	176	0.020
263537	< 5	0.3	6.93	< 3	46	< 1	3	7.00	0.7	51	170	120	7.60	13	4	0.47	4.87	19	1310	< 1	1.44	181	0.016
263538	< 5	< 0.3	7.56	6	35	< 1	4	7.27	< 0.3	50	175	109	7.44	12	5	0.49	4.95	23	1270	< 1	1.42	180	0.016
263539	5	0.5	6.96	< 3	24	< 1	4	9.20	5.6	47	135	156	6.96	12	< 1	0.31	4.19	20	1120	1	2.24	159	0.015
263540	< 5	0.4	7.87	< 3	34	< 1	3	7.51	< 0.3	52	122	102	7.86	13	1	0.44	5.16	21	1340	< 1	1.58	190	0.015
263541	< 5	< 0.3	0.07	< 3	147	< 1	< 2	18.3	< 0.3	< 1	3	2	0.07	< 1	< 1	0.03	12.6	11	353	< 1	0.03	< 1	0.004
263542	5	< 0.3	7.56	< 3	34	< 1	4	7.89	0.5	53	80	98	7.54	12	3	0.46	4.90	25	1250	< 1	1.51	180	0.016
263543	5	0.5	7.77	3	91	< 1	3	7.39	0.4	53	95	94	7.74	12	< 1	0.61	5.12	24	1340	< 1	1.70	184	0.016
263544	5	< 0.3	8.22	< 3	38	< 1	4	7.57	< 0.3	56	106	170	8.22	14	< 1	0.43	5.48	24	1400	< 1	1.95	195	0.018
263545	< 5	< 0.3	8.03	< 3	40	< 1	5	7.21	< 0.3	53	106	106	7.99	13	6	0.38	5.13	20	1380	< 1	2.32	184	0.016
263546	5	0.4	8.12	7	60	< 1	4	7.28	0.4	53	104	87	7.97	13	1	0.58	5.19	21	1350	2	2.22	184	0.019
263547	5	0.4	7.16	< 3	52	< 1	3	6.86	< 0.3	48	173	120	7.39	13	< 1	0.68	4.92	17	1340	< 1	1.73	178	0.019
263548	704	0.4	8.07	257	497	< 1	3	4.04	< 0.3	14	44	49	4.90	15	1	0.88	1.40	7	925	2	2.59	24	0.047
263549	< 5	< 0.3	7.98	4	39	< 1	3	7.53	0.5	52	134	103	7.71	13	4	0.65	5.06	20	1290	< 1	1.44	184	0.017
263550	5	0.3	7.78	6	51	< 1	4	7.94	< 0.3	52	109	102	7.46	13	4	0.65	4.93	18	1230	18	1.64	180	0.019
263551	5	0.4	8.24	< 3	54	< 1	< 2	6.73	< 0.3	59	92	104	7.59	12	6	0.75	5.48	26	1280	< 1	1.56	205	0.015
263552	5	< 0.3	8.11	< 3	49	< 1	4	7.20	0.8	56	87	110	7.73	13	2	0.71	5.54	22	1310	< 1	1.54	211	0.015
263553	7	1.7	6.99	< 3	38	< 1	11	8.19	< 0.3	46	78	91	6.45	11	< 1	0.46	4.60	16	1090	4	1.66	173	0.013
263554	6	< 0.3	8.15	< 3	50	< 1	5	7.09	0.5	56	98	108	7.77	13	3	0.72	5.27	22	1350	< 1	1.37	193	0.016
263555	5	< 0.3	8.25	8	51	< 1	4	7.09	0.6	55	90	110	7.88	13	3	0.75	5.35	23	1360	< 1	1.41	193	0.016
263556	5	< 0.3	8.40	9	63	< 1	6	6.77	< 0.3	56	100	106	8.04	13	5	0.90	5.65	26	1360	< 1	1.25	208	0.017
263557	6	0.3	8.14	< 3	55	< 1	5	7.09	0.5	51	130	100	7.40	14	< 1	0.71	5.17	22	1260	< 1	1.33	198	0.016
263558	5	< 0.3	8.11	5	51	< 1	2	7.21	0.4	53	111	98	7.38	13	1	0.78	5.19	22	1210	< 1	1.56	199	0.016
263559	5	< 0.3	7.94	5	22	< 1	3	7.23	0.4	53	91	100	7.06	12	< 1	0.49	5.30	36	1160	< 1	1.66	205	0.016
263560	< 5	< 0.3	7.86	< 3	23	< 1	5	5.88	0.5	50	74	98	6.50	10	1	0.61	5.51	42	1090	< 1	1.93	222	0.013
263561	5	0.6	8.30	< 3	43	< 1	2	6.55	< 0.3	54	78	93	7.07	12	3	0.81	5.60	30	1130	< 1	1.76	240	0.013
263562	386	0.3	7.65	126	485	< 1	4	3.80	< 0.3	12	32	45	4.48	17	< 1	0.81	1.32	7	849	< 1	2.48	24	0.045
263563	5	< 0.3	8.48	9	60	< 1	3	6.55	< 0.3	60	78	111	7.43	12	4	0.94	6.13	27	1230	< 1	1.48	257	0.013
263564	5	< 0.3	8.54	7	64	< 1	2	6.51	< 0.3	60	86	76	7.43	12	3	0.88	6.02	28	1230	< 1	1.51	251	0.013
263565	< 5	0.3	8.70	6	55	< 1	5	6.45	0.8	58	111	79	7.56	13	3	0.92	6.03	29	1240	< 1	1.38	236	0.014

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263566	5	0.8	7.92	< 3	37	< 1	3	6.47	< 0.3	57	162	91	7.16	13	< 1	0.84	5.71	28	1230	< 1	1.29	231	0.014
263567	5	0.4	8.76	< 3	34	< 1	6	6.49	< 0.3	57	166	101	7.69	13	2	0.79	5.97	30	1280	< 1	1.51	252	0.015
263568	5	0.4	8.29	< 3	41	< 1	6	6.16	< 0.3	54	122	92	7.14	13	< 1	0.84	5.71	32	1170	< 1	1.31	232	0.015
263569	< 5	< 0.3	0.04	< 3	55	< 1	< 2	18.0	< 0.3	< 1	4	2	0.05	< 1	< 1	0.02	12.7	10	333	< 1	0.03	< 1	0.003
263570	5	< 0.3	7.28	< 3	42	< 1	4	7.73	< 0.3	50	63	81	6.45	11	< 1	1.24	5.01	30	1060	< 1	1.12	210	0.014
263571	< 5	< 0.3	7.58	< 3	43	< 1	3	7.65	< 0.3	52	66	83	6.63	11	< 1	1.54	5.29	29	1050	< 1	0.64	218	0.013
263572	5	< 0.3	7.69	< 3	46	< 1	5	6.94	0.7	50	73	84	6.74	12	< 1	1.36	5.32	29	1030	< 1	0.80	213	0.012
263573	8	< 0.3	7.01	< 3	78	< 1	3	7.38	< 0.3	48	67	96	6.86	12	< 1	1.98	4.21	15	1050	< 1	0.04	177	0.016
263574	5	< 0.3	6.29	< 3	548	< 1	2	8.71	< 0.3	43	87	75	6.19	13	< 1	3.29	3.95	10	1270	< 1	0.19	156	0.012
263575	33	0.4	2.33	< 3	27	< 1	< 2	3.85	< 0.3	19	59	6	4.32	6	< 1	0.08	0.89	1	827	10	1.87	20	0.055
263576	616	0.4	7.88	256	485	< 1	2	3.96	< 0.3	14	60	47	4.73	15	< 1	0.86	1.36	7	917	2	2.55	24	0.046
263577	20	0.5	5.47	9	34	< 1	3	5.95	< 0.3	37	12	142	9.64	16	3	0.08	1.65	1	1420	< 1	4.33	14	0.039
263578	9	0.4	5.72	< 3	38	< 1	4	5.15	< 0.3	35	10	294	9.47	16	3	0.51	1.67	3	1590	< 1	3.96	15	0.047
263579	5	0.3	5.68	< 3	76	< 1	4	4.65	< 0.3	45	6	131	10.1	16	2	0.84	1.69	8	1440	< 1	3.24	16	0.045
263580	8	0.4	5.59	< 3	99	< 1	4	4.78	< 0.3	42	10	147	9.59	15	2	0.58	1.59	5	1510	< 1	3.59	15	0.042
263581	7	0.5	5.71	6	91	< 1	5	4.07	< 0.3	40	39	132	10.1	17	3	0.47	1.66	6	1400	< 1	3.79	18	0.046
263582	85	0.6	5.31	< 3	141	< 1	3	4.94	< 0.3	41	16	213	9.46	14	< 1	0.14	1.59	< 1	1500	< 1	4.19	14	0.045
263583	71	0.6	5.31	< 3	143	< 1	5	4.90	< 0.3	40	11	205	9.38	14	3	0.14	1.58	1	1500	< 1	4.19	14	0.047
263584	6	0.4	5.63	< 3	131	< 1	3	5.27	< 0.3	36	15	137	9.96	16	< 1	0.41	1.63	2	1660	2	4.02	14	0.046
263585	8	0.4	5.49	7	78	< 1	4	3.78	< 0.3	43	10	146	9.84	16	2	0.39	1.72	12	1530	< 1	3.05	15	0.053
263586	8	0.6	5.07	< 3	41	< 1	4	7.27	< 0.3	40	7	149	9.22	13	4	0.13	1.33	12	1660	2	3.06	13	0.050
263587	6	0.4	5.76	< 3	72	< 1	4	4.19	< 0.3	44	23	148	9.82	17	1	0.51	1.63	17	1300	< 1	2.84	15	0.047
263588	6	< 0.3	5.66	6	101	< 1	4	4.14	< 0.3	40	22	142	9.58	19	2	0.92	1.77	10	1490	< 1	2.69	16	0.049
263589	1310	1.1	5.77	< 3	162	< 1	5	4.94	< 0.3	42	14	168	9.13	19	2	1.36	1.66	5	1310	< 1	2.67	15	0.047
263590	1760	2.3	5.94	9	522	< 1	7	3.09	1.4	14	65	61	4.44	12	< 1	0.84	1.32	13	778	< 1	2.08	40	0.056
263591	37	0.5	5.37	< 3	120	< 1	5	4.72	< 0.3	38	34	124	9.14	16	1	0.82	1.65	2	1400	< 1	3.17	14	0.043
263592	7	0.3	5.70	3	77	< 1	6	3.55	< 0.3	39	12	136	9.86	16	3	0.67	1.75	5	1370	< 1	3.45	16	0.052
263593	234	0.6	5.50	6	104	< 1	4	3.84	< 0.3	39	10	146	9.74	16	4	0.88	1.76	2	1270	< 1	3.15	15	0.058
263594	11	0.5	5.71	< 3	83	< 1	4	3.98	< 0.3	41	8	146	9.98	17	2	0.88	1.88	12	1320	< 1	2.56	14	0.053
263595	8	0.4	5.62	< 3	81	< 1	3	4.33	< 0.3	44	10	151	9.60	16	2	1.28	1.77	7	1360	< 1	2.22	16	0.050

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263524	< 3	< 5	0.06	37	82	< 2	0.38	< 5	< 10	214	< 5	13	77	24
263525	3	< 5	0.83	36	83	< 2	0.49	< 5	< 10	225	< 5	14	71	33
263526	< 3	< 5	0.11	36	104	< 2	0.41	< 5	< 10	210	< 5	13	74	32
263527	< 3	< 5	0.10	32	98	2	0.40	< 5	< 10	201	< 5	11	69	33
263528	< 3	< 5	0.06	37	116	< 2	0.27	< 5	< 10	183	< 5	13	68	31
263529	< 3	< 5	0.09	36	123	< 2	0.30	< 5	< 10	180	< 5	14	71	32
263530	< 3	< 5	0.05	37	108	< 2	0.28	< 5	< 10	187	< 5	14	73	33
263531	< 3	< 5	0.20	37	127	< 2	0.40	< 5	< 10	199	< 5	14	72	34
263532	< 3	< 5	0.07	31	119	< 2	0.39	< 5	< 10	187	< 5	14	69	34
263533	< 3	< 5	0.14	34	126	< 2	0.38	< 5	< 10	197	< 5	13	68	32
263534	10	< 5	0.05	21	310	6	0.31	< 5	< 10	130	< 5	20	61	29
263535	< 3	< 5	0.04	35	130	3	0.42	< 5	< 10	223	< 5	12	73	30
263536	5	< 5	0.07	35	147	< 2	0.40	< 5	< 10	211	< 5	13	72	31
263537	< 3	< 5	0.09	31	147	< 2	0.36	< 5	< 10	202	< 5	10	68	28
263538	< 3	< 5	0.05	34	111	< 2	0.32	< 5	< 10	194	< 5	12	65	27
263539	28	< 5	1.16	30	74	< 2	0.33	< 5	< 10	180	< 5	11	61	24
263540	< 3	< 5	0.06	35	125	< 2	0.30	< 5	< 10	186	< 5	13	71	28
263541	< 3	< 5	0.02	< 4	197	< 2	< 0.01	11	< 10	4	< 5	< 1	10	< 5
263542	< 3	< 5	0.46	33	111	< 2	0.35	< 5	< 10	184	< 5	12	68	24
263543	3	< 5	0.08	34	126	< 2	0.35	< 5	< 10	190	< 5	12	79	29
263544	< 3	< 5	0.10	35	142	< 2	0.38	< 5	< 10	202	< 5	12	75	27
263545	< 3	< 5	0.08	33	154	< 2	0.36	< 5	< 10	202	< 5	11	73	26
263546	< 3	< 5	0.23	32	136	< 2	0.37	< 5	< 10	196	< 5	12	74	32
263547	< 3	< 5	0.26	31	113	< 2	0.36	< 5	< 10	188	< 5	12	69	34
263548	22	< 5	0.07	21	309	< 2	0.27	< 5	< 10	124	< 5	21	70	30
263549	< 3	< 5	0.06	34	117	< 2	0.29	< 5	< 10	177	< 5	14	68	33
263550	< 3	< 5	0.50	33	123	< 2	0.36	< 5	< 10	189	< 5	13	67	34
263551	< 3	< 5	0.08	33	117	< 2	0.34	< 5	< 10	184	< 5	11	70	26
263552	5	< 5	0.14	34	132	< 2	0.34	< 5	< 10	191	< 5	11	72	26
263553	23	< 5	0.78	28	141	5	0.29	< 5	< 10	161	< 5	10	59	24
263554	< 3	< 5	0.08	32	146	< 2	0.35	< 5	< 10	196	< 5	11	73	27
263555	< 3	< 5	0.08	32	150	< 2	0.36	< 5	< 10	195	< 5	11	73	27
263556	< 3	< 5	0.06	32	137	< 2	0.35	< 5	< 10	189	< 5	11	72	27
263557	< 3	< 5	0.05	32	145	< 2	0.31	< 5	< 10	173	< 5	12	65	28
263558	< 3	< 5	0.06	32	137	< 2	0.30	< 5	< 10	170	< 5	12	64	28
263559	< 3	< 5	0.19	31	82	< 2	0.30	< 5	< 10	157	< 5	12	69	23
263560	< 3	< 5	0.12	28	30	9	0.26	< 5	< 10	144	< 5	10	58	20
263561	< 3	< 5	0.02	29	91	4	0.26	< 5	< 10	153	< 5	10	58	20
263562	9	< 5	0.05	20	293	< 2	0.20	< 5	< 10	95	< 5	20	59	22
263563	< 3	< 5	0.04	30	120	2	0.29	6	< 10	166	< 5	10	64	24
263564	< 3	< 5	0.01	30	136	< 2	0.26	< 5	< 10	156	< 5	10	63	23
263565	< 3	< 5	0.03	30	141	< 2	0.27	< 5	< 10	161	< 5	10	64	24

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263566	< 3	< 5	0.02	28	138	3	0.30	< 5	< 10	167	< 5	9	61	25
263567	< 3	< 5	0.02	31	139	< 2	0.27	< 5	< 10	165	< 5	10	69	25
263568	< 3	< 5	0.02	29	132	< 2	0.23	< 5	< 10	141	< 5	12	66	30
263569	< 3	< 5	< 0.01	< 4	149	< 2	< 0.01	< 5	< 10	3	< 5	< 1	12	< 5
263570	< 3	< 5	0.56	26	47	< 2	0.27	< 5	< 10	145	< 5	10	61	26
263571	< 3	< 5	0.22	27	44	< 2	0.28	< 5	< 10	153	< 5	9	62	25
263572	< 3	< 5	0.04	28	59	< 2	0.28	< 5	< 10	162	< 5	6	59	21
263573	< 3	< 5	0.17	29	70	< 2	0.33	< 5	< 10	186	< 5	6	66	22
263574	< 3	< 5	0.55	25	133	< 2	0.27	< 5	< 10	179	< 5	8	66	23
263575	4	8	2.01	14	77	4	0.24	< 5	< 10	115	6	9	28	41
263576	22	< 5	0.07	21	304	< 2	0.28	< 5	< 10	123	< 5	20	70	29
263577	13	< 5	2.12	31	120	4	0.36	< 5	< 10	270	< 5	16	52	106
263578	10	< 5	0.39	36	103	7	0.29	< 5	10	177	< 5	19	59	50
263579	11	< 5	0.49	36	80	< 2	0.38	< 5	< 10	223	< 5	25	84	88
263580	11	< 5	0.99	35	86	3	0.34	< 5	< 10	225	< 5	22	68	106
263581	17	< 5	0.79	35	86	8	0.42	< 5	< 10	250	< 5	23	85	117
263582	12	< 5	2.09	33	120	< 2	0.46	< 5	< 10	235	< 5	18	58	113
263583	14	< 5	2.06	33	120	16	0.52	< 5	10	240	< 5	18	60	114
263584	10	< 5	0.66	34	117	< 2	0.57	< 5	< 10	274	< 5	19	75	116
263585	7	< 5	0.41	34	67	9	0.59	< 5	< 10	264	< 5	23	120	119
263586	12	< 5	3.35	29	135	7	0.60	< 5	< 10	233	< 5	21	81	108
263587	7	< 5	0.44	36	58	6	0.35	< 5	< 10	195	< 5	25	122	71
263588	7	< 5	0.29	36	74	< 2	0.18	< 5	< 10	137	< 5	22	112	29
263589	6	< 5	2.64	36	109	7	0.47	< 5	< 10	281	< 5	18	88	97
263590	301	< 5	0.08	16	267	4	0.13	< 5	< 10	76	< 5	18	258	23
263591	7	< 5	1.84	32	106	3	0.46	< 5	< 10	223	< 5	17	82	108
263592	5	< 5	0.36	36	86	7	0.45	< 5	< 10	204	< 5	19	113	81
263593	7	< 5	2.01	33	108	< 2	0.56	< 5	< 10	244	< 5	18	95	122
263594	3	< 5	0.47	35	85	8	0.62	< 5	< 10	267	< 5	18	143	124
263595	4	< 5	0.28	36	82	3	0.19	< 5	< 10	143	< 5	20	99	37

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.0	2.31	437	730	1	1410	0.89	2.1	10	28	1190	22.7	12	7	0.04	0.21	8	852	16	0.05	40	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.37	447	724	1	1400	0.89	1.9	10	58	1180	22.7	12	7	0.05	0.21	8	866	16	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.3	2.40	434	727	1	1390	0.88	1.4	10	31	1100	23.4	11	5	0.04	0.21	8	886	17	0.05	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.7	6.52	101	100	2	33	1.08	< 0.3	15	44	6730	2.98	18	< 1	3.48	1.71	11	148	343	0.52	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.60	107	109	2	21	1.11	0.4	16	43	6660	3.03	17	< 1	3.91	1.74	11	155	351	0.53	43	0.134
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.7	6.67	110	139	2	13	1.10	< 0.3	16	55	6530	3.19	18	< 1	4.07	1.73	11	159	349	0.54	42	0.133
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.03	< 3	677	3		1.10		18	42	30	4.67	22	< 1	1.97	1.00	34	868		1.55	37	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
SDC-1 Meas			7.84	< 3	630	3		1.06		18	55	28	4.67	21	< 1	1.03	0.95	34	852		1.48	34	0.051
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.5	273	> 1000	1	5	0.15	0.4	15	66	74	5.82	28	3	1.81	0.60	33	1060	< 1	0.09	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.3	13.1	245	> 1000	1	5	0.16	< 0.3	15	50	73	5.72	29	7	1.72	0.61	34	1040	< 1	0.10	28	0.034
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	12.9	261	> 1000	1	3	0.15	< 0.3	15	51	71	6.09	29	5	1.49	0.61	34	1130	< 1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				4						145	217	320	8.80									6470	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				9						146	162	335	8.98									6660	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				4						158	243	325	9.73									6870	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					103					57	172	106		13				5				261	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					106					55	233	104		12				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	216	123		11				5				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				29	838	3	6		< 0.3	22	90	33		28				168		2		90	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	834	3	5		< 0.3	25	81	34		26				168		2		94	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				22	808	3	< 2		< 0.3	25	78	31		25				167		1		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	601																						
SE68 Cert	599																						
SE68 Meas	602																						
SE68 Cert	599																						
SE68 Meas	606																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.6	14	40	256		18	< 1			18		13		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.3	14	36	245		17	1			17		11		53	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.1	15	32	241		17	1			18		9		55	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1750																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1690																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1710																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1730																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263530 Orig		0.3	8.02	< 3	65	< 1	4	6.58	< 0.3	56	109	106	8.06	14	4	0.79	5.25	22	1410	< 1	1.17	173	0.016

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263530 Dup		< 0.3	8.01	< 3	65	< 1	4	6.46	0.7	53	98	107	8.09	14	3	0.78	5.21	23	1390	< 1	1.16	168	0.017
263533 Orig	< 5																						
263533 Dup	< 5																						
263543 Orig	5																						
263543 Dup	5																						
263544 Orig		< 0.3	8.32	< 3	39	< 1	5	7.66	0.4	60	106	216	8.29	14	5	0.44	5.54	24	1410	< 1	1.97	198	0.018
263544 Dup		0.3	8.12	4	38	< 1	3	7.48	< 0.3	53	107	124	8.16	14	< 1	0.42	5.43	24	1380	< 1	1.93	193	0.018
263553 Orig	7																						
263553 Dup	6																						
263568 Orig	5																						
263568 Dup	5																						
263569 Orig		< 0.3	0.04	< 3	54	< 1	< 2	17.8	< 0.3	< 1	2	2	0.05	< 1	< 1	0.02	12.6	10	331	< 1	0.02	< 1	0.003
263569 Dup		< 0.3	0.04	< 3	57	< 1	< 2	18.2	< 0.3	1	5	1	0.06	< 1	< 1	0.02	12.8	10	335	< 1	0.03	< 1	0.004
263573 Split Orig PREP DUP	8	< 0.3	7.01	< 3	78	< 1	3	7.38	< 0.3	48	67	96	6.86	12	< 1	1.98	4.21	15	1050	< 1	0.04	177	0.016
263573 Split PREP DUP	6	< 0.3	7.07	< 3	78	< 1	< 2	7.32	< 0.3	48	87	95	6.74	13	< 1	2.18	4.23	15	1040	< 1	0.04	181	0.016
263578 Orig	9																						
263578 Dup	9																						
263582 Orig		0.7	5.30	4	141	< 1	3	4.94	< 0.3	41	14	214	9.46	13	< 1	0.14	1.59	< 1	1500	< 1	4.15	15	0.045
263582 Dup		0.5	5.32	< 3	141	< 1	3	4.95	< 0.3	41	18	212	9.47	14	1	0.14	1.59	< 1	1500	< 1	4.24	14	0.045
263588 Orig	6																						
263588 Dup	6																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	730	21	0.25	< 4	294	5	0.03	< 5	40	87	176	37	726	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	741	16	0.26	< 4	297	6	0.03	< 5	40	88	171	36	755	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	709	22	0.24	< 4	292	11	0.03	< 5	40	87	157	35	724	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	45	< 5	1.83	8	216	4	0.29	< 5	< 10	89	40	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	45	< 5	1.83	8	217	4	0.29	< 5	< 10	91	40	16	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	44	< 5	1.80	9	219	3	0.29	< 5	< 10	92	38	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	22	< 5		17	174		0.06	< 5	< 10	29	< 5		101	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	19	< 5		16	166		0.20	< 5	< 10	52	< 5		95	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	97	< 5	0.02	26	34	< 2		< 5	< 10	133	< 5	12	131	69
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	98	< 5	0.02	27	36	< 2		< 5	< 10	107	< 5	12	131	57
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	97	< 5	0.02	27	34	< 2		< 5	< 10	114	< 5	11	131	59
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.63											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	6	< 5		32	130		0.28			139		17	60	35
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	5	< 5		33	132		0.28			143		17	62	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		31	122		0.27			136		15	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		20	179		0.53	< 5	< 10	223	< 5	31	188	115
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	31	< 5		21	182		0.54	< 5	< 10	224	< 5	31	204	117
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Meas	28	< 5		21	172		0.51	< 5	< 10	220	< 5	30	184	114
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	878			5	153				< 10	28	10	33	829	134
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	829			4	150				< 10	26	9	31	798	92
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	834			5	148				< 10	23	8	29	791	117
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
263530 Orig	< 3	< 5	0.05	37	108	< 2	0.28	8	< 10	184	< 5	14	73	33
263530 Dup	< 3	< 5	0.05	36	108	< 2	0.29	< 5	< 10	190	< 5	13	73	33
263533 Orig														

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263533 Dup														
263543 Orig														
263543 Dup														
263544 Orig	< 3	< 5	0.11	35	145	4	0.38	< 5	< 10	203	< 5	12	76	28
263544 Dup	< 3	< 5	0.09	34	140	< 2	0.38	< 5	< 10	201	< 5	11	74	27
263553 Orig														
263553 Dup														
263568 Orig														
263568 Dup														
263569 Orig	< 3	< 5	< 0.01	< 4	148	< 2	< 0.01	6	< 10	2	< 5	< 1	12	< 5
263569 Dup	< 3	< 5	< 0.01	< 4	150	< 2	< 0.01	< 5	< 10	3	< 5	< 1	12	< 5
263573 Split Orig PREP DUP	< 3	< 5	0.17	29	70	< 2	0.33	< 5	< 10	186	< 5	6	66	22
263573 Split PREP DUP	< 3	< 5	0.14	28	71	< 2	0.36	< 5	< 10	198	< 5	6	64	24
263578 Orig														
263578 Dup														
263582 Orig	13	< 5	2.08	33	120	< 2	0.46	< 5	< 10	233	< 5	18	59	113
263582 Dup	12	< 5	2.09	33	120	8	0.46	< 5	< 10	236	< 5	18	57	113
263588 Orig														
263588 Dup														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	8	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 17-Nov-16
Invoice No.: A16-12328-Au
Invoice Date: 23-Nov-16
Your Reference: Core-17-Nov-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

13 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12328-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 17-Nov-16
Invoice No.: A16-12328-Au
Invoice Date: 23-Nov-16
Your Reference: Core-17-Nov-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

13 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12328-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246394	18
246395	26
246396	29
246397	9
246398	17
246399	10
246400	< 5
246401	24
246402	16
246403	51
246404	61
246405	88
246406	36

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	589
SE68 Cert	599
246403 Orig	58
246403 Dup	44
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 17-Nov-16
Invoice No.: A16-12328
Invoice Date: 05-Dec-16
Your Reference: Core-17-Nov-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

13 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12328**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 17-Nov-16
Invoice No.: A16-12328
Invoice Date: 05-Dec-16
Your Reference: Core-17-Nov-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

13 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12328**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246394	18	0.4	7.52	< 3	325	< 1	4	4.03	< 0.3	25	85	63	4.96	19	< 1	1.10	1.33	76	740	< 1	1.22	69	0.045
246395	26	< 0.3	7.40	< 3	302	< 1	< 2	4.46	< 0.3	27	89	84	5.47	17	3	0.99	1.43	82	916	< 1	1.20	65	0.042
246396	29	0.4	6.76	< 3	330	< 1	< 2	5.27	< 0.3	24	90	53	5.64	14	< 1	1.02	1.81	80	1080	< 1	1.06	66	0.041
246397	9	< 0.3	7.36	< 3	300	< 1	3	4.62	< 0.3	25	96	72	5.30	17	< 1	1.09	1.21	72	891	< 1	1.27	61	0.048
246398	17	< 0.3	7.10	3	286	< 1	< 2	4.71	< 0.3	24	81	43	5.49	16	< 1	0.99	1.38	75	965	< 1	1.24	65	0.042
246399	10	0.4	6.89	< 3	304	< 1	< 2	4.60	< 0.3	23	106	55	5.45	15	< 1	0.95	1.45	67	1030	< 1	1.18	55	0.043
246400	< 5	< 0.3	0.03	< 3	57	< 1	< 2	18.1	< 0.3	< 1	2	< 1	0.04	< 1	< 1	0.02	12.9	13	357	< 1	0.03	< 1	0.004
246401	24	0.3	6.98	< 3	297	< 1	3	4.51	< 0.3	25	104	57	5.65	14	< 1	1.08	1.41	67	1020	< 1	1.18	66	0.042
246402	16	0.5	5.77	< 3	262	< 1	3	4.91	0.3	25	102	46	5.30	14	< 1	0.97	1.32	63	1030	< 1	1.20	63	0.046
246403	51	0.4	7.10	< 3	266	< 1	3	4.38	< 0.3	23	128	47	5.48	15	< 1	1.08	1.32	67	1130	< 1	1.27	58	0.042
246404	61	0.6	7.01	3	364	< 1	4	3.87	< 0.3	25	92	64	5.67	15	< 1	1.14	1.47	67	1060	< 1	1.23	64	0.040
246405	88	< 0.3	7.41	< 3	392	< 1	4	3.90	< 0.3	23	78	83	5.16	16	< 1	1.32	1.35	63	872	< 1	1.33	66	0.042
246406	36	0.3	6.63	< 3	384	< 1	3	4.86	< 0.3	24	81	51	5.26	16	< 1	1.18	1.67	59	936	< 1	1.16	59	0.043

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
246394	9	< 5	0.11	20	163	9	0.16	< 5	< 10	87	< 5	12	69	75
246395	11	< 5	0.15	23	176	< 2	0.20	< 5	< 10	95	< 5	12	73	69
246396	10	< 5	0.14	20	197	< 2	0.19	< 5	< 10	92	< 5	11	75	55
246397	10	< 5	0.17	21	204	< 2	0.19	< 5	< 10	98	< 5	10	71	65
246398	14	< 5	0.11	19	194	< 2	0.20	< 5	< 10	90	< 5	10	82	70
246399	6	< 5	0.11	20	194	< 2	0.33	< 5	< 10	124	< 5	10	66	93
246400	< 3	< 5	0.01	< 4	133	3	< 0.01	< 5	< 10	3	< 5	< 1	9	< 5
246401	13	< 5	0.10	20	184	2	0.28	< 5	< 10	112	< 5	10	79	82
246402	27	< 5	0.10	16	183	< 2	0.38	< 5	< 10	137	< 5	9	89	107
246403	11	< 5	0.09	22	192	< 2	0.34	< 5	< 10	126	< 5	11	73	102
246404	7	< 5	0.10	21	246	< 2	0.24	< 5	< 10	108	< 5	11	71	71
246405	11	< 5	0.11	21	267	< 2	0.16	< 5	< 10	89	< 5	11	67	57
246406	15	< 5	0.10	20	254	< 2	0.17	< 5	< 10	82	< 5	10	64	52

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.0	2.31	437	730	1	1410	0.89	2.1	10	28	1190	22.7	12	7	0.04	0.21	8	852	16	0.05	40	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		30.9	2.37	447	724	1	1400	0.89	1.9	10	58	1180	22.7	12	7	0.05	0.21	8	866	16	0.05	41	0.059
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-1 Meas		31.3	2.40	434	727	1	1390	0.88	1.4	10	31	1100	23.4	11	5	0.04	0.21	8	886	17	0.05	42	0.058
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.7	6.52	101	100	2	33	1.08	< 0.3	15	44	6730	2.98	18	< 1	3.48	1.71	11	148	343	0.52	42	0.132
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.8	6.60	107	109	2	21	1.11	0.4	16	43	6660	3.03	17	< 1	3.91	1.74	11	155	351	0.53	43	0.134
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
GXR-4 Meas		3.7	6.67	110	139	2	13	1.10	< 0.3	16	55	6530	3.19	18	< 1	4.07	1.73	11	159	349	0.54	42	0.133
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.03	< 3	677	3		1.10		18	42	30	4.67	22	< 1	1.97	1.00	34	868		1.55	37	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
SDC-1 Meas			7.84	< 3	630	3		1.06		18	55	28	4.67	21	< 1	1.03	0.95	34	852		1.48	34	0.051
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.5	273	> 1000	1	5	0.15	0.4	15	66	74	5.82	28	3	1.81	0.60	33	1060	< 1	0.09	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.3	13.1	245	> 1000	1	5	0.16	< 0.3	15	50	73	5.72	29	7	1.72	0.61	34	1040	< 1	0.10	28	0.034
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
GXR-6 Meas		0.4	12.9	261	> 1000	1	3	0.15	< 0.3	15	51	71	6.09	29	5	1.49	0.61	34	1130	< 1	0.10	28	0.036
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
Oreas 72a (4 Acid Digest) Meas				4						145	217	320	8.80									6470	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				9						146	162	335	8.98									6660	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
Oreas 72a (4 Acid Digest) Meas				4						158	243	325	9.73									6870	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					103					57	172	106		13				5				261	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					106					55	233	104		12				5				266	
DNC-1a Cert					118					57	270	100		15				5.2				247	
DNC-1a Meas					97					57	216	123		11				5				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				29	838	3	6		< 0.3	22	90	33		28				168		2		90	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				24	834	3	5		< 0.3	25	81	34		26				168		2		94	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SBC-1 Meas				22	808	3	< 2		< 0.3	25	78	31		25				167		1		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	589																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.6	14	40	256		18	< 1			18		13		56	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.3	14	36	245		17	1			17		11		53	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
SdAR-M2 (U.S.G.S.) Meas					> 1000	8	< 2		5.1	15	32	241		17	1			18		9		55	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1750																						
OREAS 16A (FA-Ancaster) Cert	1810																						
246403 Orig	58																						
246403 Dup	44																						
246405 Orig		< 0.3	7.52	< 3	397	< 1	3	3.95	< 0.3	23	85	88	5.23	17	< 1	1.33	1.37	64	884	< 1	1.35	66	0.043
246405 Dup		0.3	7.31	< 3	386	< 1	4	3.86	< 0.3	23	72	78	5.08	15	1	1.31	1.34	62	859	< 1	1.31	65	0.040
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	730	21	0.25	< 4	294	5	0.03	< 5	40	87	176	37	726	29
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	741	16	0.26	< 4	297	6	0.03	< 5	40	88	171	36	755	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	709	22	0.24	< 4	292	11	0.03	< 5	40	87	157	35	724	30
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	45	< 5	1.83	8	216	4	0.29	< 5	< 10	89	40	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	45	< 5	1.83	8	217	4	0.29	< 5	< 10	91	40	16	74	43
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	44	< 5	1.80	9	219	3	0.29	< 5	< 10	92	38	15	72	42
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	22	< 5		17	174		0.06	< 5	< 10	29	< 5		101	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	19	< 5		16	166		0.20	< 5	< 10	52	< 5		95	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	97	< 5	0.02	26	34	< 2		< 5	< 10	133	< 5	12	131	69
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	98	< 5	0.02	27	36	< 2		< 5	< 10	107	< 5	12	131	57
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	97	< 5	0.02	27	34	< 2		< 5	< 10	114	< 5	11	131	59
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas			1.63											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
Oreas 72a (4 Acid Digest) Meas			1.68											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	6	< 5		32	130		0.28			139		17	60	35
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	5	< 5		33	132		0.28			143		17	62	37
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 3	< 5		31	122		0.27			136		15	58	34
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		20	179		0.53	< 5	< 10	223	< 5	31	188	115
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	31	< 5		21	182		0.54	< 5	< 10	224	< 5	31	204	117
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Meas	28	< 5		21	172		0.51	< 5	< 10	220	< 5	30	184	114
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	878			5	153				< 10	28	10	33	829	134
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	829			4	150				< 10	26	9	31	798	92
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas	834			5	148				< 10	23	8	29	791	117
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
246403 Orig														
246403 Dup														
246405 Orig	12	< 5	0.11	21	269	< 2	0.19	< 5	< 10	95	< 5	11	68	66
246405 Dup	9	< 5	0.10	21	265	6	0.14	< 5	< 10	82	< 5	11	67	48
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	8	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 18-Nov-16
Invoice No.: A16-12366-Au
Invoice Date: 23-Nov-16
Your Reference: Core-18-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12366-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 18-Nov-16
Invoice No.: A16-12366-Au
Invoice Date: 23-Nov-16
Your Reference: Core-18-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12366-Au**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263596	217
263597	< 5
263598	40
263599	40
263600	9
263601	43
263602	21
263603	14
263604	707
263605	84
263606	9
263607	210
263608	127
263609	584
263610	425
263611	338
263612	547
263613	37
263614	102
263615	7
263616	7
263617	6
263618	358
263619	64
263620	7
263621	9
263622	7
263623	14
263624	266
263625	5
263626	12
263627	6
263628	7
263629	8
263630	247
263631	8
263632	645
263633	< 5
263634	< 5
263635	< 5
263636	< 5
263637	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263638	< 5
263639	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	601
SE68 Cert	599
SE68 Meas	584
SE68 Cert	599
263605 Orig	83
263605 Dup	85
263615 Orig	8
263615 Dup	6
Method Blank	< 5
Method Blank	5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 18-Nov-16
Invoice No.: A16-12366-TD
Invoice Date: 07-Dec-16
Your Reference: Core-18-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12366-TD**

Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P	Pb
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%	ppm
Lower Limit	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001	3
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263596	0.5	5.24	< 3	125	< 1	3	4.30	< 0.3	42	21	144	8.68	16	< 1	1.49	1.73	2	1250	< 1	2.03	15	0.042	5
263597	< 0.3	0.03	< 3	37	< 1	< 2	18.6	< 0.3	< 1	4	1	0.05	< 1	< 1	0.01	12.7	8	327	< 1	0.02	< 1	0.003	< 3
263598	0.6	5.43	< 3	106	< 1	4	4.15	< 0.3	40	21	135	9.02	15	< 1	1.22	1.75	2	1300	< 1	2.68	16	0.047	8
263599	0.7	5.04	< 3	331	< 1	3	4.66	< 0.3	37	21	130	8.66	14	< 1	0.60	1.54	2	1350	16	3.31	15	0.066	9
263600	0.5	5.39	5	125	< 1	3	4.97	< 0.3	46	29	141	9.47	16	2	0.84	1.53	3	1250	< 1	3.24	16	0.048	6
263601	0.6	5.00	5	133	< 1	4	4.50	< 0.3	44	12	148	9.14	17	< 1	1.41	1.55	3	1310	< 1	2.48	15	0.054	8
263602	0.7	4.69	4	52	< 1	5	5.38	< 0.3	38	16	117	8.52	13	< 1	0.34	1.41	2	1450	12	3.43	13	0.055	10
263603	0.7	5.64	< 3	209	< 1	4	4.94	< 0.3	41	8	120	9.71	16	4	0.30	1.61	2	1280	< 1	4.16	15	0.050	11
263604	0.5	7.98	223	491	< 1	3	4.01	< 0.3	13	35	48	4.79	15	< 1	0.84	1.37	7	909	< 1	2.51	24	0.045	22
263605	0.7	5.53	< 3	95	< 1	3	4.76	< 0.3	39	21	154	9.30	16	4	0.61	1.58	4	1230	< 1	3.54	15	0.048	10
263606	< 0.3	5.59	< 3	205	< 1	3	4.05	< 0.3	43	5	159	9.32	17	2	1.61	1.64	4	1340	< 1	2.00	15	0.051	9
263607	0.9	5.50	< 3	53	< 1	4	4.81	< 0.3	39	23	243	9.42	15	6	0.42	1.53	2	1220	< 1	3.92	15	0.057	10
263608	0.8	5.39	< 3	48	< 1	4	4.71	0.3	47	12	142	9.63	14	< 1	0.38	1.51	3	1260	17	3.93	15	0.070	< 3
263609	1.2	6.08	8	56	< 1	4	5.11	< 0.3	45	72	147	10.0	15	< 1	0.33	1.62	2	1210	16	4.42	16	0.043	8
263610	0.9	5.66	< 3	131	< 1	< 2	5.62	< 0.3	45	91	184	10.5	17	1	0.83	1.74	4	1470	< 1	3.34	16	0.030	12
263611	0.7	5.73	8	115	< 1	5	5.67	< 0.3	44	16	178	10.2	16	3	0.78	1.76	4	1480	< 1	3.42	16	0.031	10
263612	1.3	5.77	4	87	< 1	5	4.79	< 0.3	44	26	120	9.66	16	< 1	0.66	1.42	8	1230	3	3.43	13	0.057	9
263613	0.6	5.46	8	110	< 1	4	4.82	< 0.3	39	10	155	9.63	17	7	1.15	1.56	9	1300	< 1	2.58	16	0.040	7
263614	0.5	5.65	< 3	88	< 1	3	5.49	< 0.3	40	10	144	9.33	15	2	0.71	1.57	7	1380	< 1	3.23	15	0.043	7
263615	< 0.3	5.57	< 3	126	< 1	4	4.39	< 0.3	39	7	137	9.80	18	4	1.37	1.61	10	1390	< 1	1.65	15	0.046	6
263616	0.4	5.90	< 3	107	< 1	4	4.92	< 0.3	42	5	160	10.4	18	4	0.93	1.72	19	1330	< 1	1.70	15	0.050	4
263617	< 0.3	5.86	4	98	< 1	4	4.80	< 0.3	42	7	127	10.4	17	5	0.62	1.65	15	1420	< 1	2.64	13	0.056	7
263618	0.4	7.93	144	499	< 1	< 2	3.99	< 0.3	13	35	46	4.66	14	< 1	0.84	1.36	8	906	1	2.51	24	0.047	8
263619	0.4	5.42	4	126	< 1	2	5.32	< 0.3	40	13	116	9.49	17	4	1.28	1.65	9	1320	< 1	1.62	15	0.044	8
263620	0.3	4.91	< 3	93	< 1	5	4.41	< 0.3	42	7	145	9.94	17	3	1.43	1.71	12	1400	< 1	0.72	16	0.052	5
263621	0.4	5.57	< 3	136	< 1	3	5.32	< 0.3	38	5	163	9.55	18	4	1.44	1.59	9	1490	< 1	0.62	13	0.050	< 3
263622	< 0.3	5.94	6	143	< 1	4	3.88	< 0.3	47	13	186	10.4	18	4	1.24	1.82	14	1380	< 1	1.60	18	0.051	8
263623	0.4	5.28	< 3	69	< 1	3	5.96	< 0.3	34	11	129	9.07	15	4	0.61	1.33	5	1510	< 1	3.34	14	0.043	7
263624	0.5	4.91	6	24	< 1	4	5.57	< 0.3	36	10	103	8.21	12	< 1	0.15	1.36	2	1430	< 1	3.70	13	0.049	3
263625	< 0.3	0.02	< 3	28	< 1	< 2	18.3	< 0.3	< 1	3	4	0.05	< 1	< 1	< 0.01	13.0	9	325	< 1	0.02	1	0.003	< 3
263626	0.4	5.93	< 3	171	< 1	4	4.31	< 0.3	44	11	180	10.6	19	2	1.57	1.75	16	1270	< 1	1.39	16	0.054	4
263627	0.3	5.85	< 3	115	< 1	4	4.99	< 0.3	42	13	159	10.1	18	< 1	1.15	1.65	16	1380	2	1.92	14	0.053	11
263628	< 0.3	6.13	7	199	< 1	5	4.39	< 0.3	46	65	176	10.9	19	< 1	0.92	1.86	18	1400	< 1	2.50	17	0.053	13
263629	0.6	5.36	4	157	< 1	3	4.59	< 0.3	38	8	194	9.21	15	4	0.68	1.47	3	1370	2	3.51	14	0.043	12
263630	1.1	3.31	< 3	97	< 1	6	3.67	< 0.3	37	29	85	5.66	9	< 1	0.25	1.00	1	916	8	2.56	11	0.035	8
263631	0.3	5.51	< 3	94	< 1	3	5.02	< 0.3	34	35	163	9.47	18	2	1.19	1.73	3	1330	< 1	3.04	13	0.046	7
263632	0.4	8.07	224	493	< 1	3	3.99	< 0.3	13	36	50	4.85	17	< 1	0.87	1.38	7	922	< 1	2.57	24	0.045	22
263633	0.5	5.78	< 3	116	< 1	3	4.67	< 0.3	36	8	155	10.2	18	< 1	1.54	1.82	5	1410	< 1	2.82	16	0.048	10
263634	0.3	5.63	5	67	< 1	4	4.38	< 0.3	42	11	154	9.87	17	2	0.90	1.75	9	1290	< 1	3.00	15	0.048	12
263635	0.3	5.96	< 3	98	< 1	3	4.38	< 0.3	43	9	150	10.6	18	7	1.31	2.13	19	1260	< 1	1.55	21	0.051	5
263636	< 0.3	5.98	< 3	97	< 1	4	4.30	< 0.3	43	7	191	10.5	19	4	1.32	2.11	22	1320	< 1	1.21	26	0.053	7
263637	< 0.3	6.15	< 3	102	< 1	5	3.38	< 0.3	44	6	153	10.7	18	< 1	1.37	1.99	19	1350	< 1	1.51	11	0.063	8

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P	Pb
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%	ppm
Lower Limit	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001	3
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263638	< 0.3	6.02	< 3	113	< 1	5	3.96	< 0.3	44	18	151	10.6	19	3	1.42	1.96	18	1400	< 1	1.37	16	0.052	7
263639	< 0.3	5.98	< 3	112	< 1	5	3.92	< 0.3	44	4	150	10.5	18	2	1.32	1.94	18	1390	< 1	1.35	16	0.052	9

Analyte Symbol	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263596	< 5	0.90	33	98	5	0.42	< 5	< 10	231	< 5	18	113	104
263597	< 5	0.02	< 4	132	< 2	< 0.01	< 5	< 10	3	< 5	< 1	11	< 5
263598	< 5	1.42	34	113	4	0.56	< 5	< 10	261	< 5	18	94	117
263599	< 5	1.05	31	107	5	0.60	< 5	< 10	244	< 5	17	77	114
263600	< 5	2.15	33	98	3	0.49	< 5	< 10	227	< 5	19	63	114
263601	< 5	0.98	31	86	9	0.72	< 5	< 10	322	< 5	16	86	132
263602	< 5	2.17	31	98	2	0.62	< 5	< 10	218	< 5	18	56	116
263603	< 5	1.95	34	97	4	0.40	< 5	< 10	219	< 5	18	47	107
263604	< 5	0.07	21	303	< 2	0.15	< 5	< 10	85	< 5	20	71	19
263605	< 5	2.11	34	99	16	0.38	< 5	< 10	185	< 5	18	60	96
263606	< 5	0.37	36	85	< 2	0.24	< 5	< 10	153	< 5	18	87	41
263607	< 5	3.92	34	130	12	0.56	< 5	10	193	< 5	16	86	97
263608	< 5	4.92	32	137	9	0.73	< 5	< 10	216	16	20	76	123
263609	< 5	5.93	35	158	10	0.75	< 5	< 10	191	21	15	85	119
263610	< 5	4.45	37	165	8	0.61	< 5	< 10	260	6	16	97	121
263611	< 5	4.12	37	165	18	0.53	< 5	< 10	231	< 5	16	97	99
263612	< 5	4.77	31	138	8	0.68	< 5	10	194	< 5	18	71	116
263613	< 5	0.64	35	123	< 2	0.39	< 5	< 10	246	< 5	20	75	104
263614	< 5	1.57	35	122	< 2	0.37	< 5	< 10	204	< 5	20	86	99
263615	< 5	0.26	36	74	< 2	0.15	< 5	< 10	149	< 5	19	120	32
263616	< 5	0.18	38	78	3	0.24	< 5	< 10	163	< 5	23	134	53
263617	< 5	0.23	35	82	2	0.31	< 5	< 10	165	< 5	24	119	70
263618	< 5	0.05	21	305	< 2	0.22	< 5	< 10	98	< 5	20	61	24
263619	< 5	1.64	33	101	3	0.35	< 5	< 10	229	< 5	18	107	103
263620	< 5	0.07	32	65	9	0.63	< 5	< 10	286	< 5	15	119	127
263621	< 5	0.16	35	78	6	0.27	5	< 10	195	< 5	18	96	96
263622	< 5	0.16	39	67	4	0.18	< 5	< 10	157	< 5	22	156	50
263623	< 5	0.51	33	91	< 2	0.37	< 5	< 10	182	< 5	19	53	80
263624	< 5	1.43	29	98	5	0.34	< 5	10	195	< 5	15	46	97
263625	< 5	< 0.01	< 4	148	< 2	< 0.01	< 5	< 10	2	< 5	< 1	8	< 5
263626	< 5	0.37	38	64	5	0.38	< 5	< 10	194	< 5	23	127	77
263627	< 5	0.16	37	68	6	0.29	< 5	< 10	166	< 5	25	113	65
263628	< 5	0.36	39	74	< 2	0.44	< 5	< 10	229	< 5	27	128	84
263629	< 5	0.55	34	76	8	0.41	< 5	< 10	229	< 5	19	49	103
263630	< 5	2.76	20	68	10	0.47	< 5	< 10	138	9	12	35	81
263631	< 5	0.44	35	100	3	0.34	< 5	10	209	< 5	18	67	86
263632	< 5	0.07	21	306	< 2	0.17	< 5	< 10	89	< 5	20	70	21
263633	< 5	0.41	36	79	3	0.33	< 5	< 10	186	< 5	21	82	56
263634	< 5	0.57	35	70	3	0.39	< 5	< 10	207	< 5	25	100	93
263635	< 5	0.47	38	57	4	0.37	< 5	< 10	197	< 5	23	129	67
263636	< 5	0.16	38	52	< 2	0.18	< 5	< 10	139	< 5	24	127	46
263637	< 5	0.31	36	47	5	0.28	< 5	< 10	126	< 5	28	116	63

Analyte Symbol	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263638	< 5	0.21	38	52	< 2	0.14	< 5	< 10	150	< 5	24	116	30
263639	< 5	0.22	39	52	< 2	0.15	< 5	< 10	146	< 5	24	114	34

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P	Pb
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%	ppm
Lower Limit	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001	3
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	31.0	2.31	437	730	1	1410	0.89	2.1	10	28	1190	22.7	12	7	0.04	0.21	8	852	16	0.05	40	0.060	730
GXR-1 Cert	31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650	730
GXR-1 Meas	30.9	2.37	447	724	1	1400	0.89	1.9	10	58	1180	22.7	12	7	0.05	0.21	8	866	16	0.05	41	0.059	741
GXR-1 Cert	31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650	730
GXR-1 Meas	31.3	2.40	434	727	1	1390	0.88	1.4	10	31	1100	23.4	11	5	0.04	0.21	8	886	17	0.05	42	0.058	709
GXR-1 Cert	31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650	730
GXR-4 Meas	3.7	6.52	101	100	2	33	1.08	< 0.3	15	44	6730	2.98	18	< 1	3.48	1.71	11	148	343	0.52	42	0.132	45
GXR-4 Cert	4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120	52.0
GXR-4 Meas	3.8	6.60	107	109	2	21	1.11	0.4	16	43	6660	3.03	17	< 1	3.91	1.74	11	155	351	0.53	43	0.134	45
GXR-4 Cert	4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120	52.0
GXR-4 Meas	3.7	6.67	110	139	2	13	1.10	< 0.3	16	55	6530	3.19	18	< 1	4.07	1.73	11	159	349	0.54	42	0.133	44
GXR-4 Cert	4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120	52.0
SDC-1 Meas		8.03	< 3	677	3		1.10		18	42	30	4.67	22	< 1	1.97	1.00	34	868		1.55	37	0.053	22
SDC-1 Cert		8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690	25.00
SDC-1 Meas		7.84	< 3	630	3		1.06		18	55	28	4.67	21	< 1	1.03	0.95	34	852		1.48	34	0.051	19
SDC-1 Cert		8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690	25.00
GXR-6 Meas	0.5	12.5	273	> 1000	1	5	0.15	0.4	15	66	74	5.82	28	3	1.81	0.60	33	1060	< 1	0.09	28	0.036	97
GXR-6 Cert	1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350	101
GXR-6 Meas	0.3	13.1	245	> 1000	1	5	0.16	< 0.3	15	50	73	5.72	29	7	1.72	0.61	34	1040	< 1	0.10	28	0.034	98
GXR-6 Cert	1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350	101
GXR-6 Meas	0.4	12.9	261	> 1000	1	3	0.15	< 0.3	15	51	71	6.09	29	5	1.49	0.61	34	1130	< 1	0.10	28	0.036	97
GXR-6 Cert	1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350	101
Oreas 72a (4 Acid Digest) Meas			4						145	217	320	8.80									6470		
Oreas 72a (4 Acid Digest) Cert			14.7						157	228	316	9.63									6930.000		
Oreas 72a (4 Acid Digest) Meas			9						146	162	335	8.98									6660		
Oreas 72a (4 Acid Digest) Cert			14.7						157	228	316	9.63									6930.000		
Oreas 72a (4 Acid Digest) Meas			4						158	243	325	9.73									6870		
Oreas 72a (4 Acid Digest) Cert			14.7						157	228	316	9.63									6930.000		
DNC-1a Meas				103					57	172	106		13				5				261		6
DNC-1a Cert				118					57	270	100		15				5.2				247		6.3
DNC-1a Meas				106					55	233	104		12				5				266		5
DNC-1a Cert				118					57	270	100		15				5.2				247		6.3
DNC-1a Meas				97					57	216	123		11				5				249		< 3
DNC-1a Cert				118					57	270	100		15				5.2				247		6.3
SBC-1 Meas			29	838	3	6		< 0.3	22	90	33		28				168		2		90		28
SBC-1 Cert			25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8		35.0
SBC-1 Meas			24	834	3	5		< 0.3	25	81	34		26				168		2		94		31

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P	Pb
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%	ppm
Lower Limit	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001	3
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Cert			25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8		35.0
SBC-1 Meas			22	808	3	< 2		< 0.3	25	78	31		25				167		1		86		28
SBC-1 Cert			25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8		35.0
SdAR-M2 (U.S.G.S.) Meas				> 1000	8	< 2		5.6	14	40	256		18	< 1			18		13		56		878
SdAR-M2 (U.S.G.S.) Cert				990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8		808
SdAR-M2 (U.S.G.S.) Meas				> 1000	8	< 2		5.3	14	36	245		17	1			17		11		53		829
SdAR-M2 (U.S.G.S.) Cert				990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8		808
SdAR-M2 (U.S.G.S.) Meas				> 1000	8	< 2		5.1	15	32	241		17	1			18		9		55		834
SdAR-M2 (U.S.G.S.) Cert				990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8		808
263608 Orig	0.9	5.41	4	49	< 1	4	4.75	0.3	47	7	144	9.75	15	< 1	0.39	1.53	3	1280	17	3.96	14	0.071	< 3
263608 Dup	0.8	5.37	< 3	47	< 1	4	4.67	0.3	47	18	139	9.51	14	< 1	0.38	1.50	3	1240	16	3.89	15	0.069	< 3
263623 Orig	0.4	5.31	< 3	70	< 1	4	5.99	< 0.3	35	15	128	9.07	15	3	0.61	1.33	5	1530	< 1	3.38	13	0.044	6
263623 Dup	0.4	5.25	< 3	69	< 1	3	5.93	< 0.3	34	7	131	9.08	15	6	0.61	1.33	5	1500	< 1	3.31	15	0.042	7
263637 Orig	< 0.3	6.22	< 3	103	< 1	5	3.40	< 0.3	45	7	155	10.7	19	< 1	1.36	2.00	19	1350	< 1	1.53	12	0.063	9
263637 Dup	0.3	6.07	< 3	101	< 1	4	3.36	< 0.3	43	6	152	10.6	18	5	1.38	1.97	19	1340	< 1	1.50	11	0.062	6
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3

Analyte Symbol	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	21	0.25	< 4	294	5	0.03	< 5	40	87	176	37	726	29
GXR-1 Cert	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	16	0.26	< 4	297	6	0.03	< 5	40	88	171	36	755	30
GXR-1 Cert	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-1 Meas	22	0.24	< 4	292	11	0.03	< 5	40	87	157	35	724	30
GXR-1 Cert	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	< 5	1.83	8	216	4	0.29	< 5	< 10	89	40	15	72	42
GXR-4 Cert	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	< 5	1.83	8	217	4	0.29	< 5	< 10	91	40	16	74	43
GXR-4 Cert	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
GXR-4 Meas	< 5	1.80	9	219	3	0.29	< 5	< 10	92	38	15	72	42
GXR-4 Cert	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	< 5		17	174		0.06	< 5	< 10	29	< 5		101	30
SDC-1 Cert	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
SDC-1 Meas	< 5		16	166		0.20	< 5	< 10	52	< 5		95	30
SDC-1 Cert	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	< 5	0.02	26	34	< 2		< 5	< 10	133	< 5	12	131	69
GXR-6 Cert	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	< 5	0.02	27	36	< 2		< 5	< 10	107	< 5	12	131	57
GXR-6 Cert	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
GXR-6 Meas	< 5	0.02	27	34	< 2		< 5	< 10	114	< 5	11	131	59
GXR-6 Cert	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
Oreas 72a (4 Acid Digest) Meas		1.63											
Oreas 72a (4 Acid Digest) Cert		1.74											
Oreas 72a (4 Acid Digest) Meas		1.68											
Oreas 72a (4 Acid Digest) Cert		1.74											
Oreas 72a (4 Acid Digest) Meas		1.68											
Oreas 72a (4 Acid Digest) Cert		1.74											
DNC-1a Meas	< 5		32	130		0.28			139		17	60	35
DNC-1a Cert	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 5		33	132		0.28			143		17	62	37
DNC-1a Cert	0.96		31	144		0.29			148		18.0	70	38.0
DNC-1a Meas	< 5		31	122		0.27			136		15	58	34
DNC-1a Cert	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	< 5		20	179		0.53	< 5	< 10	223	< 5	31	188	115
SBC-1 Cert	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SBC-1 Meas	< 5		21	182		0.54	< 5	< 10	224	< 5	31	204	117
SBC-1 Cert	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0

Analyte Symbol	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
SBC-1 Meas	< 5		21	172		0.51	< 5	< 10	220	< 5	30	184	114
SBC-1 Cert	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SdAR-M2 (U.S.G.S.) Meas			5	153				< 10	28	10	33	829	134
SdAR-M2 (U.S.G.S.) Cert			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas			4	150				< 10	26	9	31	798	92
SdAR-M2 (U.S.G.S.) Cert			4.1	144				2.53	25.2	2.8	32.7	760	259
SdAR-M2 (U.S.G.S.) Meas			5	148				< 10	23	8	29	791	117
SdAR-M2 (U.S.G.S.) Cert			4.1	144				2.53	25.2	2.8	32.7	760	259
263608 Orig	< 5	4.93	32	139	8	0.73	< 5	< 10	217	17	20	77	124
263608 Dup	< 5	4.90	32	136	9	0.72	< 5	10	215	16	20	75	122
263623 Orig	< 5	0.51	33	91	2	0.38	< 5	10	180	< 5	20	50	79
263623 Dup	< 5	0.51	33	91	< 2	0.36	< 5	< 10	184	< 5	19	56	82
263637 Orig	< 5	0.33	37	47	7	0.29	< 5	< 10	126	< 5	28	117	63
263637 Dup	< 5	0.30	36	47	2	0.28	< 5	< 10	126	< 5	28	116	62
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	8	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	2	< 5	< 1	< 1	< 5
Method Blank	< 5	< 0.01	< 4	< 1	< 2	0.01	< 5	< 10	4	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 21-Nov-16
Invoice No.: A16-12425
Invoice Date: 06-Dec-16
Your Reference: Core-21-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

16 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12425**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 21-Nov-16
Invoice No.: A16-12425
Invoice Date: 06-Dec-16
Your Reference: Core-21-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

16 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12425**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263640	< 5	0.3	5.40	3	97	< 1	4	4.34	< 0.3	42	10	132	9.84	17	4	0.79	1.75	16	1290	< 1	1.50	14	0.052
263641	16	3.1	3.44	< 3	71	< 1	8	4.04	< 0.3	28	33	97	6.43	10	< 1	0.50	1.06	1	968	54	2.16	10	0.033
263642	22	9.3	3.27	< 3	46	< 1	28	3.90	0.3	26	22	32	6.35	8	< 1	0.10	1.10	< 1	865	6	2.69	8	0.032
263643	15	< 0.3	5.63	< 3	98	< 1	4	4.73	0.3	41	5	127	9.84	17	2	0.78	1.82	9	1350	< 1	2.59	15	0.051
263644	< 5	0.5	5.74	< 3	67	< 1	4	5.11	0.4	45	16	146	9.80	17	3	0.57	1.90	13	1300	< 1	2.83	15	0.049
263645	5	0.4	5.63	< 3	46	< 1	5	5.34	0.4	46	9	172	10.1	16	3	0.53	2.08	14	1450	2	2.50	13	0.045
263646	447	< 0.3	7.70	138	444	< 1	< 2	3.77	< 0.3	14	38	43	4.60	13	< 1	0.74	1.30	7	892	2	2.39	23	0.046
263647	< 5	0.4	5.87	< 3	71	< 1	4	3.63	0.3	47	14	145	10.5	18	6	0.71	2.25	15	1370	< 1	2.15	15	0.052
263648	18	0.9	5.64	3	92	< 1	4	3.83	< 0.3	46	31	207	9.00	16	< 1	0.20	1.99	11	1260	52	3.30	15	0.049
263649	32	1.6	5.46	8	57	< 1	4	2.21	3.1	62	37	290	11.9	16	5	0.49	1.61	9	1030	11	2.92	38	0.047
263650	< 5	0.5	6.40	4	65	< 1	< 2	4.38	0.5	43	45	143	8.27	14	1	0.73	2.98	15	1280	1	2.73	47	0.033
263651	< 5	0.4	6.07	< 3	85	< 1	5	6.77	< 0.3	48	29	128	8.24	13	< 1	0.82	3.27	16	1540	< 1	2.04	56	0.027
263652	< 5	< 0.3	6.75	< 3	119	< 1	4	4.21	0.4	50	26	111	8.86	14	4	0.88	3.55	17	1360	< 1	2.36	66	0.022
263653	< 5	< 0.3	0.02	< 3	37	< 1	< 2	17.1	< 0.3	< 1	1	1	0.05	< 1	< 1	0.01	12.1	11	358	< 1	0.03	< 1	0.003
263654	< 5	< 0.3	6.72	< 3	94	< 1	3	4.36	0.6	50	29	128	8.86	15	< 1	0.83	3.59	17	1370	< 1	2.20	62	0.024
263655	19	< 0.3	6.23	4	58	< 1	< 2	6.07	0.3	48	31	112	8.22	13	< 1	0.78	3.48	16	1420	< 1	2.14	61	0.024

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263640	4	< 5	0.40	47	65	10	0.35	< 5	< 10	205	< 5	23	109	88
263641	47	< 5	1.38	29	77	9	0.48	< 5	10	176	< 5	17	39	85
263642	65	< 5	2.04	29	75	< 2	0.46	< 5	10	156	< 5	15	26	82
263643	7	< 5	0.42	51	85	10	0.34	< 5	< 10	163	< 5	21	93	64
263644	4	< 5	1.04	50	93	4	0.42	< 5	< 10	215	< 5	24	105	107
263645	7	< 5	1.02	49	95	6	0.44	< 5	< 10	253	< 5	23	116	119
263646	7	< 5	0.05	28	294	11	0.27	< 5	< 10	116	< 5	20	57	30
263647	4	< 5	0.59	53	62	12	0.45	< 5	< 10	227	< 5	25	149	103
263648	16	< 5	2.78	49	80	6	0.73	< 5	< 10	262	< 5	28	103	132
263649	9	< 5	5.41	40	42	< 2	0.57	< 5	< 10	211	7	24	658	122
263650	< 3	< 5	0.60	52	64	10	0.51	< 5	10	230	< 5	16	209	75
263651	< 3	< 5	0.88	50	83	9	0.48	< 5	< 10	221	< 5	14	100	55
263652	< 3	< 5	0.03	55	76	4	0.27	< 5	< 10	196	< 5	16	89	43
263653	< 3	< 5	< 0.01	< 4	187	< 2	< 0.01	< 5	20	3	< 5	< 1	25	< 5
263654	4	< 5	0.03	56	83	3	0.32	< 5	< 10	200	< 5	17	92	45
263655	< 3	< 5	0.48	51	89	< 2	0.39	< 5	< 10	213	< 5	13	81	42

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.4	2.28	433	636	1	1380	0.89	3.0	12	25	1170	24.0	12	10	0.04	0.21	8	895	18	0.05	43	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.6	6.51	101	219	2	18	1.08	< 0.3	16	41	6460	3.06	17	< 1	3.78	1.69	11	162	352	0.52	41	0.131
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.21	< 3	630	3		1.08		20	44	29	4.77	22	1	1.35	0.98	34	872		1.51	36	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.8	275	> 1000	1	3	0.16	< 0.3	15	53	69	5.69	29	3	1.36	0.60	33	1060	< 1	0.09	27	0.035
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
OREAS 14P Meas										695		9370	33.2									> 10000	
OREAS 14P Cert										750		9970	37.2									21000	
Oreas 72a (4 Acid Digest) Meas				4						158	234	326	9.58									6490	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					94					55	226	96		12				4				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				26	767	3	4		0.5	24	94	32		26				161		2		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	599																						
SE68 Cert	599																						
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	< 2		5.2	15	33	243		18	< 1			18		14		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.000		17.6	1.44			17.9		13.3		48.8	
OREAS 16A (FA-Ancaster) Meas	1760																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263649 Orig	34																						
263649 Dup	30																						
263652 Orig		0.3	6.70	6	118	< 1	4	4.19	0.4	51	28	111	8.86	13	5	0.88	3.53	17	1340	< 1	2.35	65	0.022
263652 Dup		< 0.3	6.81	< 3	119	< 1	4	4.24	0.3	49	25	111	8.86	15	3	0.89	3.56	17	1370	< 1	2.37	67	0.023
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	2	< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	723	48	0.25	< 4	288	13	0.03	< 5	40	88	162	35	730	28
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
GXR-4 Meas	43	< 5	1.78	12	216	6	0.29	< 5	< 10	90	33	15	72	46
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	20	< 5		24	171		0.10	< 5	< 10	36	< 5		99	30
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	91	< 5	0.02	37	36	< 2		< 5	< 10	131	< 5	12	127	73
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
OREAS 14P Meas														
OREAS 14P Cert														
Oreas 72a (4 Acid Digest) Meas			1.66											
Oreas 72a (4 Acid Digest) Cert			1.74											
DNC-1a Meas	3	< 5		20	125		0.28			137		14	57	36
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0
SBC-1 Meas	28	< 5		29	176		0.52	< 5	< 10	219	< 5	32	185	119
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
SE68 Meas														
SE68 Cert														
SdAR-M2 (U.S.G.S.) Meas	825			6	147				< 10	27	9	29	786	126
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259
OREAS 16A (FA-Ancaster) Meas														
OREAS 16A (FA-Ancaster) Cert														
263649 Orig														
263649 Dup														
263652 Orig	4	< 5	0.03	54	75	3	0.25	< 5	< 10	196	< 5	16	89	42
263652 Dup	< 3	< 5	0.03	56	76	5	0.28	< 5	< 10	197	< 5	16	90	44
Method Blank														
Method Blank														
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	6	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	6	< 10	< 2	< 5	< 1	< 1	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 21-Nov-16
Invoice No.: A16-12426
Invoice Date: 29-Nov-16
Your Reference: Core-21-Nov-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

55 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12426**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228501	< 5
228502	17
228503	15
228504	5
228505	6
228506	< 5
228507	10
228508	< 5
228509	< 5
228510	< 5
228511	< 5
228512	< 5
228513	460
228514	7
228515	< 5
228516	5
228517	< 5
228518	13
228519	< 5
228520	7
228521	< 5
228522	< 5
228523	< 5
228524	8
228525	19
228526	24
228527	< 5
228528	< 5
228529	< 5
228530	8
228531	5
228532	< 5
228533	626
228534	< 5
228535	< 5
228536	6
228537	8
228538	< 5
228539	< 5
228540	< 5
228541	8
228542	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228543	6
228544	< 5
228545	31
228546	779
228547	49
228548	76
228549	1930
228550	21
228551	10
228552	6
228553	7
228554	17
228555	16

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	613
SE68 Cert	599
SE68 Meas	584
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1720
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
228510 Orig	< 5
228510 Dup	< 5
228520 Orig	6
228520 Dup	7
228530 Orig	10
228530 Dup	6
228545 Orig	29
228545 Dup	32
228550 Split Orig PREP DUP	21
228550 Split PREP DUP	29
228555 Orig	20
228555 Dup	12
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 22-Nov-16
Invoice No.: A16-12463
Invoice Date: 28-Nov-16
Your Reference: Core-22-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

48 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12463**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228556	< 5
228557	< 5
228558	26
228559	< 5
228560	8
228561	< 5
228562	< 5
228563	< 5
228564	34
228565	< 5
228566	< 5
228567	< 5
228568	< 5
228569	690
228570	< 5
228571	< 5
228572	< 5
228573	< 5
228574	6
228575	< 5
228576	< 5
228577	< 5
228578	< 5
228579	54
228580	< 5
228581	< 5
228582	6
228583	9
228584	< 5
228585	< 5
228586	5
228587	425
228588	< 5
228589	< 5
228590	< 5
228591	781
228592	10
228593	< 5
228594	26
228595	10
228596	< 5
228597	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228598	< 5
228599	10
228600	< 5
228601	< 5
228602	< 5
228603	912

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	582
SE68 Cert	599
SE68 Meas	585
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
228565 Orig	< 5
228565 Dup	< 5
228575 Orig	16
228575 Dup	< 5
228585 Orig	< 5
228585 Dup	< 5
228600 Orig	< 5
228600 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 23-Nov-16
Invoice No.: A16-12538
Invoice Date: 29-Nov-16
Your Reference: Core-23-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

40 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12538**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228604	< 5
228605	< 5
228606	< 5
228607	< 5
228608	< 5
228609	< 5
228610	< 5
228611	< 5
228612	< 5
228613	< 5
228614	< 5
228615	< 5
228616	< 5
228617	13
228618	< 5
228619	< 5
228620	< 5
228621	< 5
228622	< 5
228623	< 5
228624	< 5
228625	< 5
228626	< 5
228627	443
228628	49
228629	7
228630	< 5
228631	< 5
228632	< 5
228633	12
228634	< 5
228635	13
228636	66
228637	< 5
228638	< 5
228639	< 5
228640	< 5
228641	10
228642	16
228643	22

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	605
SE68 Cert	599
SE68 Meas	583
SE68 Cert	599
SE68 Meas	594
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1720
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
228613 Orig	< 5
228613 Dup	< 5
228623 Orig	< 5
228623 Dup	< 5
228633 Orig	11
228633 Dup	13
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 23-Nov-16
Invoice No.: A16-12539
Invoice Date: 28-Nov-16
Your Reference: Core-23-Nov-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

64 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12539**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246407	5
246408	401
246409	5
246410	6
246411	5
246412	5
246413	13
246414	5
246415	9
246416	12
246417	8
246418	8
246419	5
246420	< 5
246421	6
246422	6
246423	< 5
246424	743
246425	< 5
246426	10
246427	< 5
246428	< 5
246429	< 5
246430	< 5
246431	5
246432	< 5
246433	< 5
246434	5
246435	5
246436	7
246437	5
246438	5
246439	6
246440	422
246441	6
246442	14
246443	10
246444	10
246445	8
246446	7
246447	7
246448	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246449	5
246450	6
246451	11
246452	5
246453	7
246454	19
246455	9
246456	656
246457	20
246458	19
246459	6
246460	5
246461	8
246462	8
246463	6
246464	5
246465	6
246466	6
246467	9
246468	12
246469	5
246470	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	616
SE68 Cert	599
SE68 Meas	576
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1700
OREAS 16A (FA-Ancaster) Cert	1810
246416 Orig	6
246416 Dup	18
246426 Orig	13
246426 Dup	6
246436 Orig	5
246436 Dup	9
246451 Orig	15
246451 Dup	7
246457 Split Orig PREP DUP	20
246457 Split PREP DUP	8
246461 Orig	8
246461 Dup	7
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 25-Nov-16
Invoice No.: A16-12632
Invoice Date: 01-Dec-16
Your Reference: Core-24-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

60 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12632**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246471	< 5
246472	396
246473	5
246474	< 5
246475	< 5
246476	5
246477	< 5
246478	< 5
246479	15
246480	15
246481	24
246482	7
246483	11
246484	< 5
246485	6
246486	13
246487	8
246488	746
246489	22
246490	9
246491	9
246492	39
246493	56
246494	8
246495	6
246496	7
246497	13
246498	10
246499	6
246500	9
246501	5
246502	5
246503	5
246504	508
246505	6
246506	10
246507	5
246508	5
246509	6
246510	19
246511	7
246512	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246513	10
246514	8
246515	10
246516	15
246517	11
246518	6
246519	5
246520	880
246521	5
246522	5
246523	6
246524	6
246525	8
246526	7
246527	14
246528	7
246529	6
246530	20

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	609
SE68 Cert	599
SE68 Meas	620
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1720
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1750
OREAS 16A (FA-Ancaster) Cert	1810
246480 Orig	24
246480 Dup	5
246490 Orig	13
246490 Dup	5
246500 Orig	10
246500 Dup	8
246515 Orig	10
246515 Dup	10
246521 Split Orig PREP DUP	5
246521 Split PREP DUP	8
246525 Orig	7
246525 Dup	8
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 25-Nov-16
Invoice No.: A16-12633
Invoice Date: 06-Dec-16
Your Reference: Core-25-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

76 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12633**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 25-Nov-16
Invoice No.: A16-12633
Invoice Date: 06-Dec-16
Your Reference: Core-25-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

76 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1F2-Tbay Total Digestion ICP(TOTAL)

REPORT **A16-12633**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263656	5	< 0.3	6.51	< 3	68	< 1	5	5.24	0.4	54	38	106	8.81	14	2	0.62	3.92	19	1360	< 1	1.89	78	0.026
263657	< 5	< 0.3	6.22	< 3	99	< 1	2	6.33	0.5	49	23	118	8.29	13	2	0.62	3.85	17	1390	< 1	1.55	78	0.022
263658	6	0.4	6.16	< 3	101	< 1	4	4.38	0.4	58	37	99	8.55	13	< 1	0.81	4.25	20	1190	< 1	1.55	108	0.023
263659	< 5	0.4	5.28	6	61	< 1	4	5.63	< 0.3	68	33	103	8.60	11	6	0.60	5.15	21	1420	< 1	0.95	137	0.022
263660	684	< 0.3	7.76	249	440	< 1	< 2	3.82	0.4	14	47	46	4.70	15	< 1	0.79	1.30	7	941	4	2.40	22	0.045
263661	< 5	< 0.3	5.95	3	38	< 1	3	5.40	0.5	79	39	74	9.54	11	4	0.34	6.36	25	1500	< 1	0.58	182	0.019
263662	< 5	< 0.3	5.89	< 3	20	< 1	2	5.15	0.6	80	33	70	9.60	10	6	0.25	6.73	28	1520	< 1	0.36	197	0.017
263663	< 5	< 0.3	5.78	< 3	24	< 1	2	5.14	0.8	81	25	68	9.78	10	4	0.22	6.96	29	1480	< 1	0.18	211	0.018
263664	< 5	< 0.3	5.78	< 3	33	< 1	5	5.13	1.1	78	26	79	9.56	10	< 1	0.28	6.62	29	1450	< 1	0.30	196	0.019
263665	< 5	< 0.3	6.03	< 3	35	< 1	< 2	5.34	0.6	73	26	69	9.22	11	1	0.35	6.09	28	1470	< 1	0.84	176	0.021
263666	5	< 0.3	6.86	< 3	144	< 1	< 2	6.39	< 0.3	42	56	95	7.10	15	< 1	0.95	2.80	13	1370	< 1	3.14	57	0.028
263667	5	< 0.3	6.72	< 3	147	< 1	5	6.31	0.5	42	56	95	7.02	14	< 1	0.77	2.75	12	1360	< 1	3.09	56	0.027
263668	5	0.4	6.65	< 3	906	< 1	5	5.35	0.4	48	65	101	8.25	15	< 1	1.40	2.91	22	1200	< 1	2.47	61	0.024
263669	6	< 0.3	5.58	< 3	359	< 1	4	5.85	< 0.3	47	75	91	7.78	15	< 1	0.72	2.74	24	1220	< 1	2.95	53	0.026
263670	5	< 0.3	6.76	< 3	83	< 1	5	5.26	0.3	44	83	83	7.98	14	< 1	0.75	3.13	25	1210	< 1	2.92	54	0.029
263671	< 5	< 0.3	6.64	< 3	61	< 1	4	6.71	< 0.3	42	67	84	7.31	14	1	0.68	2.46	17	1400	< 1	3.23	53	0.026
263672	< 5	0.5	6.98	< 3	72	< 1	5	6.06	0.4	47	54	90	7.87	15	< 1	0.53	2.95	19	1440	< 1	2.73	57	0.024
263673	< 5	< 0.3	7.19	< 3	115	< 1	3	4.79	< 0.3	47	47	93	7.79	14	< 1	0.59	3.24	21	1510	< 1	2.90	57	0.027
263674	443	< 0.3	7.65	122	449	< 1	5	3.77	< 0.3	14	39	43	4.64	13	< 1	0.77	1.31	7	893	< 1	2.42	23	0.044
263675	< 5	< 0.3	6.59	< 3	72	< 1	5	6.01	< 0.3	44	44	88	7.45	13	2	0.54	2.98	19	1480	< 1	2.73	55	0.025
263676	18	0.5	6.88	< 3	93	< 1	< 2	5.34	< 0.3	47	61	157	7.76	13	< 1	0.62	3.07	37	1550	< 1	2.84	57	0.029
263677	< 5	< 0.3	7.16	< 3	103	< 1	4	6.36	0.3	40	51	72	7.41	18	< 1	0.72	2.65	20	1560	< 1	2.93	51	0.026
263678	< 5	< 0.3	6.54	< 3	76	< 1	3	6.46	< 0.3	38	57	60	7.27	16	< 1	0.59	2.72	20	1520	< 1	2.68	50	0.026
263679	< 5	< 0.3	6.71	< 3	60	< 1	< 2	5.14	0.4	43	80	101	7.58	15	< 1	0.50	2.98	25	1580	< 1	2.80	52	0.026
263680	8	< 0.3	6.34	< 3	128	< 1	3	6.14	< 0.3	42	73	125	6.98	15	< 1	0.63	2.25	24	1450	< 1	2.97	49	0.023
263681	7	0.3	5.94	< 3	52	< 1	3	5.44	< 0.3	40	69	101	6.59	13	< 1	0.63	2.49	22	1350	3	2.41	48	0.024
263682	< 5	< 0.3	0.03	< 3	90	< 1	< 2	17.2	< 0.3	< 1	3	1	0.05	< 1	< 1	< 0.01	11.7	8	322	< 1	0.02	< 1	0.002
263683	6	0.9	6.21	5	82	< 1	6	6.00	0.5	40	64	118	6.98	14	< 1	0.59	2.27	19	1420	< 1	2.96	49	0.024
263684	10	0.4	6.23	< 3	210	< 1	< 2	7.93	< 0.3	35	46	91	6.85	13	< 1	0.80	1.87	21	1390	< 1	2.97	46	0.027
263685	13	< 0.3	6.28	< 3	163	< 1	< 2	7.68	< 0.3	37	50	98	6.43	13	1	0.75	2.20	30	1230	< 1	2.69	49	0.025
263686	64	0.7	6.55	< 3	139	< 1	4	6.91	< 0.3	40	59	87	7.16	14	< 1	1.01	2.37	31	1180	3	2.70	53	0.027
263687	6	< 0.3	6.53	< 3	98	< 1	< 2	6.83	< 0.3	40	72	65	6.65	12	< 1	0.72	2.38	34	1210	< 1	2.72	52	0.025
263688	6	< 0.3	5.76	< 3	65	< 1	3	7.21	0.3	41	69	109	6.22	12	< 1	0.57	2.04	25	1420	< 1	3.05	47	0.026
263689	6	< 0.3	6.58	< 3	78	< 1	5	5.76	< 0.3	45	76	119	7.21	13	< 1	0.82	2.33	34	1310	< 1	2.92	54	0.027
263690	131	3.1	6.23	< 3	182	< 1	3	5.52	< 0.3	40	84	72	6.88	14	< 1	0.94	1.93	20	1370	< 1	3.46	49	0.026
263691	5	< 0.3	0.03	< 3	57	< 1	< 2	17.0	< 0.3	< 1	4	1	0.04	< 1	< 1	0.01	12.0	9	325	< 1	0.02	< 1	0.003
263692	51	0.8	5.73	< 3	130	< 1	< 2	6.90	0.4	39	48	162	6.24	12	< 1	0.82	2.47	11	1410	2	3.47	49	0.024
263693	54	3.2	5.49	< 3	83	< 1	9	5.71	0.3	35	44	86	5.99	12	< 1	1.25	2.68	14	1170	14	2.64	49	0.024
263694	12	0.3	5.73	< 3	302	< 1	< 2	5.69	0.3	37	52	84	6.52	13	< 1	0.95	2.97	13	1300	< 1	3.28	51	0.024
263695	48	< 0.3	5.75	< 3	271	< 1	2	5.99	0.4	39	51	75	6.75	11	< 1	0.74	3.20	10	1250	< 1	3.36	50	0.024
263696	994	0.5	4.64	< 3	84	< 1	2	5.61	< 0.3	27	50	79	4.97	10	1	0.90	2.24	3	1130	2	1.83	35	0.024
263697	1680	0.8	5.68	< 3	75	< 1	3	5.30	< 0.3	34	74	52	6.23	11	< 1	0.90	2.05	2	1300	1	2.29	46	0.030

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
263698	1150	0.7	5.10	< 3	100	< 1	< 2	6.10	0.3	36	66	67	5.99	10	< 1	1.25	2.24	3	1500	2	1.79	42	0.025
263699	> 5000	7.4	5.25	65	146	< 1	4	1.40	12.2	11	43	1130	6.48	12	2	1.20	1.74	12	598	84	1.15	52	0.038
263700	594	0.5	5.74	< 3	145	< 1	3	5.92	0.4	44	66	123	7.58	14	< 1	1.21	2.56	12	1530	3	0.58	57	0.027
263701	74	0.3	6.59	< 3	152	< 1	4	4.89	< 0.3	45	74	101	6.86	14	1	1.45	2.27	11	1260	< 1	1.13	54	0.026
263702	2650	1.5	5.87	< 3	198	< 1	< 2	5.85	0.6	38	45	136	7.00	14	< 1	1.92	2.42	18	1350	10	0.59	42	0.031
263703	< 5	< 0.3	0.07	< 3	191	< 1	< 2	17.6	< 0.3	< 1	1	2	0.07	< 1	< 1	0.03	12.0	8	352	< 1	0.03	1	0.004
263704	3710	1.2	5.06	4	195	< 1	3	6.72	0.5	39	66	60	6.98	12	< 1	1.60	2.47	6	1510	8	0.22	51	0.025
263705	20	< 0.3	7.43	< 3	235	< 1	3	3.27	< 0.3	31	99	58	6.55	15	< 1	0.86	2.00	70	1080	< 1	2.12	77	0.048
263706	8	0.3	6.80	< 3	253	< 1	< 2	3.54	< 0.3	22	99	52	4.90	14	< 1	0.94	1.84	51	1000	< 1	2.24	56	0.046
263707	142	1.1	6.99	< 3	270	< 1	< 2	3.36	< 0.3	27	114	47	5.76	15	< 1	0.81	1.92	67	1160	< 1	2.13	64	0.049
263708	44	0.4	6.91	< 3	299	< 1	< 2	3.03	< 0.3	23	92	60	4.75	14	< 1	0.98	1.59	55	932	< 1	2.27	56	0.045
263709	20	< 0.3	6.87	< 3	275	< 1	< 2	3.38	< 0.3	26	105	46	5.46	14	< 1	0.97	1.77	63	1040	< 1	1.93	60	0.043
263710	25	< 0.3	6.71	< 3	323	< 1	< 2	3.99	< 0.3	24	104	58	5.36	13	< 1	0.81	1.84	56	1190	< 1	1.43	59	0.045
263711	51	< 0.3	7.02	< 3	263	< 1	< 2	3.48	< 0.3	27	68	48	5.73	14	< 1	0.82	1.97	77	1170	< 1	2.10	64	0.040
263712	49	0.4	7.12	< 3	285	< 1	< 2	3.15	< 0.3	27	71	48	5.39	15	< 1	0.94	1.82	73	1030	< 1	2.11	63	0.041
263713	13	0.3	7.70	< 3	347	< 1	< 2	2.95	< 0.3	34	128	65	6.29	16	< 1	0.88	1.97	92	1060	< 1	2.02	82	0.043
263714	7	< 0.3	7.21	< 3	290	< 1	< 2	3.21	< 0.3	22	62	45	5.08	14	1	0.78	1.65	76	1020	< 1	2.54	58	0.042
263715	8	< 0.3	7.20	< 3	214	< 1	2	2.89	< 0.3	26	93	51	5.71	14	< 1	0.71	1.86	91	1060	< 1	2.76	70	0.054
263716	8	< 0.3	7.39	< 3	307	< 1	2	2.93	< 0.3	26	64	66	5.19	15	< 1	0.80	1.72	86	1010	< 1	2.48	53	0.044
263717	20	< 0.3	7.22	5	270	< 1	3	3.23	< 0.3	27	89	60	6.15	15	< 1	0.89	1.71	97	1100	< 1	2.12	64	0.043
263718	24	< 0.3	6.86	< 3	366	< 1	< 2	2.45	< 0.3	20	76	45	3.93	14	< 1	1.15	1.16	57	659	< 1	1.54	50	0.038
263719	11	< 0.3	6.96	< 3	317	< 1	2	2.48	< 0.3	21	63	48	4.30	14	< 1	1.11	1.41	68	727	< 1	1.95	49	0.042
263720	664	0.3	8.03	237	451	< 1	< 2	3.90	0.4	15	22	47	4.86	14	1	0.80	1.34	7	928	2	2.47	23	0.045
263721	17	< 0.3	6.91	< 3	318	< 1	3	3.60	< 0.3	25	61	82	5.25	14	< 1	1.14	1.49	79	915	< 1	1.00	59	0.043
263722	22	< 0.3	7.48	< 3	309	< 1	< 2	2.81	< 0.3	29	86	55	6.61	16	< 1	0.98	1.55	103	992	< 1	1.17	72	0.048
263723	17	< 0.3	7.26	< 3	326	< 1	4	4.09	< 0.3	28	85	65	5.84	15	1	0.91	1.28	88	1010	< 1	1.15	66	0.041
263724	13	< 0.3	6.98	< 3	217	< 1	< 2	5.13	< 0.3	30	101	67	6.07	15	< 1	0.81	1.35	96	1080	< 1	1.46	72	0.044
263725	32	0.4	7.10	4	262	< 1	2	4.22	0.3	27	112	63	5.62	15	< 1	0.96	1.15	90	1020	< 1	0.99	59	0.043
263726	25	0.4	8.51	< 3	307	< 1	4	2.77	< 0.3	33	166	70	6.53	16	< 1	0.76	1.33	96	1020	< 1	1.53	75	0.049
263727	10	0.3	7.29	< 3	307	< 1	3	2.82	< 0.3	31	103	68	6.34	15	1	0.91	1.87	113	908	< 1	1.47	69	0.049
263728	5	< 0.3	0.05	< 3	610	< 1	< 2	17.1	< 0.3	< 1	9	1	0.05	< 1	< 1	0.02	11.8	8	321	< 1	0.03	< 1	0.003
263729	16	< 0.3	6.81	4	265	< 1	< 2	3.23	< 0.3	26	58	66	5.32	14	< 1	0.77	2.11	104	1020	< 1	1.72	59	0.038
263730	46	< 0.3	7.09	< 3	267	< 1	3	3.52	< 0.3	25	71	53	5.56	14	< 1	0.83	1.78	89	1050	< 1	1.97	60	0.042
263731	15	0.3	7.08	< 3	277	< 1	3	4.14	< 0.3	26	66	49	5.61	15	< 1	0.95	1.40	76	1030	< 1	1.34	59	0.042

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
263656	< 3	< 5	0.13	52	86	< 2	0.43	< 5	10	218	< 5	12	85	46	
263657	< 3	< 5	0.28	48	102	3	0.24	< 5	< 10	139	< 5	11	77	24	
263658	< 3	< 5	0.35	48	64	2	0.39	< 5	< 10	199	< 5	13	80	46	
263659	< 3	< 5	0.34	39	67	3	0.40	< 5	< 10	186	< 5	14	81	43	
263660	20	< 5	0.07	29	294	9	0.31	< 5	< 10	127	< 5	20	66	34	
263661	< 3	< 5	0.01	42	64	< 2	0.30	< 5	< 10	166	< 5	14	85	40	
263662	< 3	< 5	< 0.01	41	56	< 2	0.26	< 5	< 10	156	< 5	13	85	37	
263663	< 3	< 5	0.01	41	59	< 2	0.25	< 5	< 10	151	< 5	13	86	36	
263664	< 3	< 5	0.08	41	55	3	0.35	< 5	< 10	174	< 5	13	83	39	
263665	< 3	< 5	0.02	43	57	5	0.37	< 5	< 10	178	< 5	15	86	46	
263666	< 3	< 5	0.46	52	80	< 2	0.39	< 5	< 10	204	< 5	18	71	59	
263667	< 3	< 5	0.44	51	82	3	0.38	< 5	10	201	< 5	18	70	58	
263668	< 3	< 5	0.36	51	458	< 2	0.38	< 5	< 10	237	< 5	17	102	65	
263669	< 3	< 5	1.69	38	50	5	0.43	< 5	< 10	217	< 5	16	81	65	
263670	< 3	< 5	0.57	51	48	< 2	0.45	< 5	< 10	222	< 5	17	86	69	
263671	4	< 5	0.21	52	75	3	0.21	< 5	10	156	< 5	18	77	38	
263672	< 3	< 5	0.01	54	120	4	0.22	< 5	< 10	183	< 5	20	84	59	
263673	4	< 5	0.12	56	140	< 2	0.22	< 5	< 10	139	< 5	20	88	36	
263674	10	< 5	0.05	29	289	2	0.16	< 5	< 10	84	< 5	20	57	21	
263675	< 3	< 5	0.04	51	82	3	0.28	< 5	10	190	< 5	19	80	58	
263676	< 3	< 5	0.23	54	71	< 2	0.34	< 5	< 10	194	< 5	20	98	54	
263677	< 3	< 5	0.04	51	90	2	0.33	< 5	< 10	216	< 5	19	77	59	
263678	< 3	< 5	0.21	48	66	< 2	0.18	< 5	< 10	157	< 5	19	71	30	
263679	< 3	< 5	0.25	52	48	3	0.30	< 5	< 10	199	< 5	16	87	52	
263680	< 3	< 5	0.78	46	45	4	0.34	< 5	< 10	197	< 5	16	77	60	
263681	< 3	< 5	0.52	46	51	3	0.38	< 5	10	197	< 5	16	74	60	
263682	< 3	< 5	< 0.01	< 4	113	< 2	< 0.01	< 5	< 10	3	< 5	< 1	19	< 5	
263683	24	< 5	0.65	47	67	6	0.40	< 5	< 10	206	< 5	15	71	61	
263684	< 3	< 5	0.37	46	76	5	0.39	< 5	10	212	< 5	15	60	55	
263685	< 3	< 5	0.26	47	57	4	0.29	< 5	< 10	181	< 5	14	70	48	
263686	< 3	< 5	0.53	49	61	< 2	0.42	< 5	< 10	237	7	16	69	65	
263687	4	< 5	0.22	49	63	< 2	0.22	< 5	< 10	152	< 5	12	76	38	
263688	< 3	< 5	0.34	44	54	3	0.39	< 5	< 10	190	< 5	14	58	59	
263689	< 3	< 5	0.14	50	46	3	0.44	< 5	10	224	< 5	14	87	67	
263690	4	< 5	1.11	48	47	3	0.41	< 5	< 10	235	< 5	13	63	62	
263691	< 3	< 5	< 0.01	< 4	126	< 2	< 0.01	< 5	< 10	3	< 5	< 1	11	< 5	
263692	4	< 5	1.11	45	82	10	0.36	< 5	< 10	197	5	11	55	54	
263693	9	< 5	0.78	41	85	5	0.36	< 5	< 10	194	6	11	53	55	
263694	< 3	< 5	0.84	43	110	8	0.36	< 5	< 10	191	< 5	11	59	56	
263695	< 3	< 5	1.26	43	135	3	0.38	< 5	< 10	189	7	12	78	60	
263696	3	< 5	1.59	36	107	5	0.30	< 5	< 10	169	16	8	51	45	

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
263697	< 3	< 5	2.55	42	97	< 2	0.36	< 5	< 10	192	23	8	68	54	
263698	< 3	< 5	1.93	39	104	3	0.34	< 5	< 10	177	39	9	65	53	
263699	189	< 5	3.90	16	180	4	0.18	< 5	< 10	70	15	12	2190	50	5.54
263700	< 3	< 5	1.05	46	97	3	0.39	< 5	< 10	218	26	10	97	60	
263701	4	< 5	0.73	50	92	5	0.44	< 5	< 10	233	23	11	92	67	
263702	4	< 5	1.18	46	106	< 2	0.45	< 5	< 10	224	6	11	97	78	
263703	6	< 5	0.01	< 4	253	< 2	< 0.01	< 5	< 10	3	< 5	< 1	12	< 5	
263704	5	< 5	2.20	37	127	4	0.38	< 5	< 10	191	26	10	66	59	
263705	< 3	< 5	0.15	36	121	< 2	0.36	< 5	< 10	140	< 5	11	81	87	
263706	< 3	< 5	0.05	26	146	3	0.25	< 5	< 10	98	< 5	11	57	98	
263707	< 3	< 5	0.08	30	121	3	0.40	< 5	< 10	142	< 5	14	66	102	
263708	4	< 5	0.08	26	140	4	0.32	< 5	< 10	116	< 5	11	54	98	
263709	< 3	< 5	0.19	29	129	< 2	0.32	< 5	< 10	121	< 5	11	61	89	
263710	5	< 5	0.18	27	148	< 2	0.20	< 5	< 10	91	< 5	11	53	65	
263711	5	< 5	0.12	32	133	< 2	0.20	< 5	< 10	97	< 5	12	67	59	
263712	12	< 5	0.14	30	133	8	0.25	< 5	< 10	108	< 5	12	64	81	
263713	4	< 5	0.14	37	121	< 2	0.28	< 5	< 10	128	< 5	11	74	79	
263714	5	< 5	0.04	25	141	3	0.20	< 5	< 10	82	< 5	11	56	68	
263715	4	< 5	0.10	28	131	5	0.34	< 5	< 10	117	< 5	12	65	99	
263716	5	< 5	0.08	32	141	4	0.22	< 5	< 10	106	< 5	11	60	76	
263717	< 3	< 5	0.11	30	117	< 2	0.25	< 5	< 10	114	< 5	11	68	78	
263718	< 3	< 5	0.20	22	112	3	0.19	< 5	< 10	70	< 5	9	49	77	
263719	< 3	< 5	0.15	23	120	4	0.24	< 5	< 10	89	< 5	11	53	95	
263720	22	< 5	0.07	30	297	< 2	0.21	< 5	< 10	106	< 5	20	68	23	
263721	< 3	< 5	0.12	25	149	4	0.25	< 5	< 10	103	< 5	11	63	87	
263722	3	< 5	0.13	31	126	3	0.31	< 5	< 10	126	< 5	11	76	94	
263723	4	< 5	0.13	32	165	< 2	0.20	< 5	< 10	104	< 5	10	68	67	
263724	4	< 5	0.11	34	175	< 2	0.22	< 5	< 10	104	< 5	12	72	75	
263725	7	< 5	0.31	28	175	< 2	0.30	< 5	< 10	105	< 5	10	63	96	
263726	4	< 5	0.22	40	149	3	0.44	< 5	< 10	158	< 5	16	79	119	
263727	< 3	< 5	0.13	35	137	2	0.35	< 5	< 10	142	< 5	12	78	98	
263728	< 3	< 5	0.02	< 4	172	< 2	< 0.01	< 5	< 10	3	< 5	< 1	7	< 5	
263729	< 3	< 5	0.09	30	162	5	0.23	< 5	< 10	103	< 5	10	61	65	
263730	3	< 5	0.08	28	176	< 2	0.20	< 5	< 10	91	< 5	10	66	72	
263731	9	< 5	0.12	27	182	< 2	0.29	< 5	< 10	114	< 5	10	78	89	

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas		31.4	2.28	433	636	1	1380	0.89	3.0	12	25	1170	24.0	12	10	0.04	0.21	8	895	18	0.05	43	0.060
GXR-1 Cert		31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650
GXR-4 Meas		3.6	6.51	101	219	2	18	1.08	< 0.3	16	41	6460	3.06	17	< 1	3.78	1.69	11	162	352	0.52	41	0.131
GXR-4 Cert		4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120
SDC-1 Meas			8.21	< 3	630	3		1.08		20	44	29	4.77	22	1	1.35	0.98	34	872		1.51	36	0.053
SDC-1 Cert			8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690
GXR-6 Meas		0.5	12.8	275	> 1000	1	3	0.16	< 0.3	15	53	69	5.69	29	3	1.36	0.60	33	1060	< 1	0.09	27	0.035
GXR-6 Cert		1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350
OREAS 14P Meas										695		9370	33.2									> 10000	
OREAS 14P Cert										750		9970	37.2									21000	
Oreas 72a (4 Acid Digest) Meas				4						158	234	326	9.58									6490	
Oreas 72a (4 Acid Digest) Cert				14.7						157	228	316	9.63									6930.000	
DNC-1a Meas					94					55	226	96		12				4				249	
DNC-1a Cert					118					57	270	100		15				5.2				247	
SBC-1 Meas				26	767	3	4		0.5	24	94	32		26				161		2		86	
SBC-1 Cert				25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8	
SE68 Meas	582																						
SE68 Cert	599																						
SE68 Meas	597																						
SE68 Cert	599																						
SE68 Meas	588																						
SE68 Cert	599																						
OxK110 Meas																							
OxK110 Cert																							
SdAR-M2 (U.S.G.S.) Meas					> 1000	7	< 2		5.2	15	33	243		18	< 1			18		14		54	
SdAR-M2 (U.S.G.S.) Cert					990	6.6	1.05		5.1	12.4	49.6	236.0000		17.6	1.44			17.9		13.3		48.8	
OxP116 Meas																							
OxP116 Cert																							
OREAS 16A (FA-Ancaster) Meas	1830																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1760																						
OREAS 16A (FA-Ancaster)	1810																						

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Cert																							
OREAS 16A (FA-Ancaster) Meas	1760																						
OREAS 16A (FA-Ancaster) Cert	1810																						
OREAS 16A (FA-Ancaster) Meas	1740																						
OREAS 16A (FA-Ancaster) Cert	1810																						
263665 Orig	< 5																						
263665 Dup	< 5																						
263666 Orig		< 0.3	6.85	< 3	144	< 1	4	6.38	< 0.3	42	60	95	7.13	15	< 1	1.08	2.80	13	1370	< 1	3.12	57	0.028
263666 Dup		0.4	6.88	< 3	144	< 1	< 2	6.39	0.3	42	52	95	7.08	15	< 1	0.83	2.80	13	1370	< 1	3.15	57	0.028
263675 Orig	< 5																						
263675 Dup	< 5																						
263685 Orig	13																						
263685 Dup	12																						
263691 Orig		< 0.3	0.03	< 3	56	< 1	< 2	17.2	< 0.3	< 1	5	1	0.04	< 1	< 1	0.01	12.1	9	326	< 1	0.02	< 1	0.003
263691 Dup		< 0.3	0.03	3	58	< 1	< 2	16.9	< 0.3	< 1	2	1	0.04	< 1	< 1	0.01	11.9	9	323	< 1	0.02	< 1	0.004
263700 Orig	589																						
263700 Dup	598																						
263705 Split Orig PREP DUP	20	< 0.3	7.43	< 3	235	< 1	3	3.27	< 0.3	31	99	58	6.55	15	< 1	0.86	2.00	70	1080	< 1	2.12	77	0.048
263705 Split PREP DUP	26	0.4	7.89	< 3	255	< 1	4	3.19	< 0.3	34	126	62	6.92	18	< 1	0.70	2.08	77	1040	< 1	2.08	83	0.052
263705 Orig		0.4	7.50	4	236	< 1	3	3.28	< 0.3	31	104	58	6.66	14	< 1	0.94	2.01	71	1090	< 1	2.15	78	0.047
263705 Dup		< 0.3	7.37	< 3	233	< 1	3	3.26	0.3	31	94	57	6.45	16	< 1	0.78	1.99	70	1060	< 1	2.09	77	0.049
263709 Orig	23																						
263709 Dup	16																						
263719 Orig	11																						
263719 Dup	10																						
263729 Orig		< 0.3	6.84	5	265	< 1	< 2	3.24	< 0.3	26	62	66	5.33	15	1	0.76	2.12	104	1030	< 1	1.72	59	0.039
263729 Dup		< 0.3	6.79	3	264	< 1	4	3.21	< 0.3	26	53	66	5.31	13	< 1	0.78	2.10	103	1010	< 1	1.72	58	0.037
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank																							
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1	2	< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%
Lower Limit	5	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001
Method Code	FA-AA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001
Method Blank		< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
GXR-1 Meas	723	48	0.25	< 4	288	13	0.03	< 5	40	88	162	35	730	28	
GXR-1 Cert	730	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0	
GXR-4 Meas	43	< 5	1.78	12	216	6	0.29	< 5	< 10	90	33	15	72	46	
GXR-4 Cert	52.0	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
SDC-1 Meas	20	< 5		24	171		0.10	< 5	< 10	36	< 5		99	30	
SDC-1 Cert	25.00	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00	
GXR-6 Meas	91	< 5	0.02	37	36	< 2		< 5	< 10	131	< 5	12	127	73	
GXR-6 Cert	101	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110	
OREAS 14P Meas															
OREAS 14P Cert															
Oreas 72a (4 Acid Digest) Meas			1.66												
Oreas 72a (4 Acid Digest) Cert			1.74												
DNC-1a Meas	3	< 5		20	125		0.28			137		14	57	36	
DNC-1a Cert	6.3	0.96		31	144		0.29			148		18.0	70	38.0	
SBC-1 Meas	28	< 5		29	176		0.52	< 5	< 10	219	< 5	32	185	119	
SBC-1 Cert	35.0	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0	
SE68 Meas															
SE68 Cert															
SE68 Meas															
SE68 Cert															
SE68 Meas															
SE68 Cert															
OxK110 Meas															3.60
OxK110 Cert															3.602
SdAR-M2 (U.S.G.S.) Meas	825			6	147				< 10	27	9	29	786	126	
SdAR-M2 (U.S.G.S.) Cert	808			4.1	144				2.53	25.2	2.8	32.7	760	259	
OxP116 Meas															14.8
OxP116 Cert															14.92
OREAS 16A (FA-Ancaster) Meas															
OREAS 16A (FA-Ancaster) Cert															
OREAS 16A (FA-Ancaster) Meas															
OREAS 16A (FA-Ancaster)															

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
Cert															
OREAS 16A (FA-Ancaster) Meas															
OREAS 16A (FA-Ancaster) Cert															
OREAS 16A (FA-Ancaster) Meas															
OREAS 16A (FA-Ancaster) Cert															
263665 Orig															
263665 Dup															
263666 Orig	< 3	< 5	0.46	52	82	3	0.41	< 5	10	215	< 5	18	70	63	
263666 Dup	< 3	< 5	0.46	51	79	< 2	0.37	< 5	< 10	193	< 5	18	71	56	
263675 Orig															
263675 Dup															
263685 Orig															
263685 Dup															
263691 Orig	< 3	< 5	< 0.01	< 4	127	2	< 0.01	< 5	10	4	< 5	< 1	11	< 5	
263691 Dup	< 3	< 5	< 0.01	< 4	126	< 2	< 0.01	< 5	< 10	3	< 5	< 1	11	< 5	
263700 Orig															
263700 Dup															
263705 Split Orig PREP DUP	< 3	< 5	0.15	36	121	< 2	0.36	< 5	< 10	140	< 5	11	81	87	
263705 Split PREP DUP	< 3	< 5	0.20	38	120	< 2	0.40	< 5	< 10	156	< 5	11	88	95	
263705 Orig	< 3	< 5	0.15	36	122	< 2	0.34	< 5	< 10	136	< 5	11	82	84	
263705 Dup	4	< 5	0.15	35	120	6	0.38	< 5	< 10	143	< 5	11	81	90	
263709 Orig															
263709 Dup															
263719 Orig															
263719 Dup															
263729 Orig	4	< 5	0.09	30	162	2	0.24	< 5	< 10	107	< 5	10	61	70	
263729 Dup	< 3	< 5	0.09	30	162	7	0.22	< 5	< 10	100	< 5	11	61	59	
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank															< 0.02
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	6	< 10	< 2	< 5	< 1	< 1	< 5	

Analyte Symbol	Pb	Sb	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr	Au
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g/tonne
Lower Limit	3	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5	0.02
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	FA-GRA
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5	
Method Blank	< 3	< 5	< 0.01	< 4	< 1	< 2	< 0.01	6	< 10	< 2	< 5	< 1	< 1	< 5	

Quality Analysis ... *Innovative Technologies*

Date Submitted: 29-Nov-16
Invoice No.: A16-12775
Invoice Date: 07-Dec-16
Your Reference: Core-28-Nov-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

66 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12775**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228644	< 5
228645	737
228646	< 5
228647	< 5
228648	< 5
228649	< 5
228650	< 5
228651	< 5
228652	< 5
228653	< 5
228654	< 5
228655	< 5
228656	27
228657	< 5
228658	7
228659	< 5
228660	< 5
228661	< 5
228662	< 5
228663	372
228664	< 5
228665	14
228666	12
228667	7
228668	< 5
228669	< 5
228670	< 5
228671	< 5
228672	5
228673	9
228674	9
228675	11
228676	9
228677	11
228678	5
228679	< 5
228680	776
228681	< 5
228682	< 5
228683	< 5
228684	< 5
228685	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228686	< 5
228687	27
228688	< 5
228689	< 5
228690	< 5
228691	< 5
228692	< 5
228693	7
228694	< 5
228695	< 5
228696	< 5
228697	449
228698	< 5
228699	< 5
228700	< 5
228701	< 5
228702	< 5
228703	6
228704	25
228705	< 5
228706	< 5
228707	6
228708	< 5
228709	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	604
SE68 Cert	599
SE68 Meas	606
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
228653 Orig	< 5
228653 Dup	< 5
228664 Orig	< 5
228664 Dup	< 5
228673 Orig	11
228673 Dup	7
228688 Orig	< 5
228688 Dup	< 5
228693 Split Orig PREP DUP	7
228693 Split PREP DUP	< 5
228698 Orig	< 5
228698 Dup	< 5
228708 Orig	< 5
228708 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 29-Nov-16
Invoice No.: A16-12777
Invoice Date: 08-Dec-16
Your Reference: Core -28-Nov-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

108 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12777**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246531	< 5
246532	< 5
246533	< 5
246534	< 5
246535	< 5
246536	402
246537	< 5
246538	< 5
246539	< 5
246540	< 5
246541	< 5
246542	< 5
246543	< 5
246544	< 5
246545	< 5
246546	< 5
246547	< 5
246548	< 5
246549	< 5
246553	695
246554	< 5
246555	5
246556	< 5
246557	< 5
246558	< 5
246559	< 5
246560	< 5
246561	< 5
246562	< 5
246563	< 5
246564	< 5
246565	< 5
246566	< 5
246567	< 5
246568	< 5
246573	< 5
246574	< 5
246575	< 5
246576	< 5
246577	< 5
246578	< 5
246579	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246580	< 5
246581	< 5
246582	< 5
246583	< 5
246584	< 5
246585	< 5
246586	< 5
246587	< 5
246588	< 5
246589	839
246590	< 5
246591	< 5
246592	< 5
246593	< 5
246594	< 5
246595	< 5
246596	< 5
246597	< 5
246598	< 5
246599	7
246608	< 5
246609	< 5
246610	< 5
246611	< 5
246612	< 5
246613	< 5
246614	6
246615	6
246616	8
246625	677
246626	< 5
246627	< 5
246628	< 5
246629	< 5
246630	< 5
246631	< 5
246632	6
246633	5
246634	< 5
246635	< 5
246636	< 5
246637	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246638	< 5
246639	< 5
246640	< 5
246641	< 5
246642	< 5
246643	374
246644	25
246645	5
246646	26
246647	5
246648	5
246649	9
246650	10
246651	5
246652	6
246653	5
246654	6
246655	5
246656	5
246657	< 5
246658	< 5
246659	< 5
246660	< 5
246661	432

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	618
SE68 Cert	599
SE68 Meas	611
SE68 Cert	599
SE68 Meas	580
SE68 Cert	599
SE68 Meas	599
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1730
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1700
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1750
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
246540 Orig	< 5
246540 Dup	< 5
246549 Orig	8
246549 Dup	< 5
246563 Orig	< 5
246563 Dup	< 5
246582 Orig	< 5
246582 Dup	< 5
246587 Split Orig PREP DUP	< 5
246587 Split PREP DUP	< 5
246592 Orig	< 5
246592 Dup	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246610 Orig	< 5
246610 Dup	< 5
246632 Orig	6
246632 Dup	6
246642 Orig	< 5
246642 Dup	< 5
246652 Orig	6
246652 Dup	5
246653 Split Orig PREP DUP	5
246653 Split PREP DUP	5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 30-Nov-16
Invoice No.: A16-12837
Invoice Date: 30-Nov-16
Your Reference: Core-29-Nov-16-MC-1

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Michelle Cote(res)

CERTIFICATE OF ANALYSIS

23 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12837**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246550	14
246551	28
246552	5
246569	14
246570	8
246571	393
246572	6
246600	< 5
246601	281
246602	376
246603	291
246604	640
246605	153
246606	< 5
246607	2060
246617	< 5
246618	62
246619	95
246620	77
246621	198
246622	17
246623	9
246624	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	589
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1710
OREAS 16A (FA-Ancaster) Cert	1810
246602 Orig	378
246602 Dup	374
246621 Orig	202
246621 Dup	194
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 30-Nov-16
Invoice No.: A16-12858
Invoice Date: 08-Dec-16
Your Reference: Core-30-Nov-16-TS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

68 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12858**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228710	7
228711	< 5
228712	< 5
228713	5
228714	718
228715	9
228716	13
228717	9
228718	10
228719	6
228720	5
228721	8
228722	< 5
228723	9
228724	32
228725	6
228726	6
228727	6
228728	8
228729	7
228730	5
228731	403
228732	6
228733	8
228734	< 5
228735	< 5
228736	< 5
228737	< 5
228738	< 5
228739	< 5
228740	< 5
228741	< 5
228742	9
228743	5
228744	9
228745	12
228746	< 5
228747	21
228748	690
228749	< 5
228750	< 5
228751	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228752	< 5
228753	< 5
228754	< 5
228755	< 5
228756	< 5
228757	< 5
228758	< 5
228759	< 5
228760	< 5
228761	< 5
228762	< 5
228763	< 5
228764	< 5
228765	< 5
228766	414
228767	< 5
228768	< 5
228769	< 5
228770	< 5
228771	< 5
228772	< 5
228773	< 5
228774	< 5
228775	6
228776	6
228777	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	597
SE68 Cert	599
SE68 Meas	602
SE68 Cert	599
SE68 Meas	590
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1730
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
228719 Orig	5
228719 Dup	6
228729 Orig	7
228729 Dup	7
228739 Orig	< 5
228739 Dup	< 5
228754 Orig	< 5
228754 Dup	< 5
228759 Split Orig PREP DUP	< 5
228759 Split PREP DUP	< 5
228763 Orig	5
228763 Dup	< 5
228773 Orig	< 5
228773 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 30-Nov-16
Invoice No.: A16-12881
Invoice Date: 01-Dec-16
Your Reference: Core-30-Nov-16-TS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

10 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12881**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246693	< 5
246694	17
246695	< 5
246696	< 5
246697	658
246712	1660
246799	1290
246800	17
246801	< 5
246802	47

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	611
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1730
OREAS 16A (FA-Ancaster) Cert	1810
246802 Orig	38
246802 Dup	56
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 01-Dec-16
Invoice No.: A16-12902
Invoice Date: 07-Dec-16
Your Reference: Core-30-Nov-16-TS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

131 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12902**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246662	< 5
246663	< 5
246664	< 5
246665	< 5
246666	8
246667	5
246668	< 5
246669	< 5
246670	< 5
246671	< 5
246672	< 5
246673	< 5
246674	5
246675	6
246676	< 5
246677	< 5
246678	< 5
246679	656
246680	< 5
246681	< 5
246682	< 5
246683	< 5
246684	< 5
246685	14
246686	< 5
246687	5
246688	7
246689	< 5
246690	66
246691	5
246692	< 5
246698	< 5
246699	15
246700	< 5
246701	6
246702	6
246703	6
246704	< 5
246705	< 5
246706	< 5
246707	7
246708	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246709	< 5
246710	< 5
246711	< 5
246713	< 5
246714	< 5
246715	516
246716	8
246717	< 5
246718	< 5
246719	< 5
246720	< 5
246721	< 5
246722	< 5
246723	< 5
246724	< 5
246725	< 5
246726	< 5
246727	< 5
246728	< 5
246729	< 5
246730	11
246731	< 5
246732	< 5
246733	708
246734	< 5
246735	< 5
246736	406
246737	6
246738	< 5
246739	< 5
246740	< 5
246741	< 5
246742	< 5
246743	< 5
246744	< 5
246745	< 5
246746	20
246747	< 5
246748	< 5
246749	< 5
246750	< 5
246751	395

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246752	< 5
246753	< 5
246754	5
246755	< 5
246756	< 5
246757	< 5
246758	< 5
246759	< 5
246760	< 5
246761	< 5
246762	< 5
246763	< 5
246764	< 5
246765	< 5
246766	< 5
246767	< 5
246768	< 5
246769	653
246770	< 5
246771	< 5
246772	< 5
246773	< 5
246774	< 5
246775	< 5
246776	< 5
246777	< 5
246778	< 5
246779	< 5
246780	< 5
246781	< 5
246782	< 5
246783	< 5
246784	< 5
246785	< 5
246786	< 5
246787	438
246788	< 5
246789	< 5
246790	< 5
246791	< 5
246792	< 5
246793	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246794	< 5
246795	< 5
246796	< 5
246797	< 5
246798	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	610
SE68 Cert	599
SE68 Meas	599
SE68 Cert	599
SE68 Meas	598
SE68 Cert	599
SE68 Meas	602
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1740
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1740
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
246671 Orig	< 5
246671 Dup	< 5
246681 Orig	< 5
246681 Dup	< 5
246691 Orig	5
246691 Dup	5
246711 Orig	< 5
246711 Dup	< 5
246717 Split Orig PREP DUP	< 5
246717 Split PREP DUP	< 5
246722 Orig	< 5
246722 Dup	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246732 Orig	5
246732 Dup	< 5
246746 Orig	17
246746 Dup	23
246756 Orig	< 5
246756 Dup	< 5
246766 Orig	< 5
246766 Dup	< 5
246767 Split Orig PREP DUP	< 5
246767 Split PREP DUP	< 5
246780 Orig	< 5
246780 Dup	< 5
246790 Orig	< 5
246790 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 01-Dec-16
Invoice No.: A16-12904
Invoice Date: 07-Dec-16
Your Reference: Core-01-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

20 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12904**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246803	40
246804	10
246805	732
246806	7
246807	17
246808	< 5
246809	< 5
246810	< 5
246811	< 5
246812	< 5
246813	< 5
246814	< 5
246815	< 5
246816	< 5
246817	8
246818	6
246819	6
246820	5
246821	27
246822	30

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	582
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1740
OREAS 16A (FA-Ancaster) Cert	1810
246812 Orig	5
246812 Dup	< 5
246822 Orig	31
246822 Dup	28
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 01-Dec-16
Invoice No.: A16-12905
Invoice Date: 07-Dec-16
Your Reference: Core-01-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

68 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12905**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228778	< 5
228779	< 5
228780	< 5
228781	< 5
228782	< 5
228783	649
228784	< 5
228785	< 5
228786	< 5
228787	7
228788	< 5
228789	< 5
228790	< 5
228791	< 5
228792	< 5
228793	< 5
228794	< 5
228795	< 5
228796	< 5
228797	< 5
228798	< 5
228799	< 5
228800	331
228801	< 5
228802	< 5
228803	< 5
228804	< 5
228805	< 5
228806	< 5
228807	< 5
228808	< 5
228809	< 5
228810	< 5
228811	< 5
228812	< 5
228813	< 5
228814	< 5
228815	< 5
228816	< 5
228817	848
228818	< 5
228819	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228820	< 5
228821	< 5
228822	< 5
228823	150
228824	5
228825	< 5
228826	8
228827	5
228828	< 5
228829	< 5
228830	< 5
228831	< 5
228832	< 5
228833	421
228834	< 5
228835	< 5
228836	< 5
228837	< 5
228838	< 5
228839	< 5
228840	< 5
228841	< 5
228842	< 5
228843	< 5
228844	< 5
228845	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	593
SE68 Cert	599
SE68 Meas	605
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
228787 Orig	7
228787 Dup	6
228797 Orig	< 5
228797 Dup	< 5
228807 Orig	< 5
228807 Dup	< 5
228822 Orig	< 5
228822 Dup	< 5
228827 Split Orig PREP DUP	5
228827 Split PREP DUP	5
228832 Orig	< 5
228832 Dup	< 5
228842 Orig	< 5
228842 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 01-Dec-16
Invoice No.: A16-12927
Invoice Date: 05-Dec-16
Your Reference: Core-01-Dec-16-TS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

29 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12927**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246860	< 5
246861	5
246862	26
246863	23
246864	61
246865	< 5
246866	< 5
246867	2820
246868	2950
246869	458
246870	985
246871	159
246872	246
246873	474
246874	< 5
246875	< 5
246876	264
246877	1930
246878	86
246879	< 5
246880	10
246881	5
246882	< 5
246883	< 5
246884	< 5
246885	< 5
246886	< 5
246887	< 5
246888	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	615
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
246869 Orig	471
246869 Dup	444
246879 Orig	< 5
246879 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 02-Dec-16
Invoice No.: A16-12954
Invoice Date: 09-Dec-16
Your Reference: Core-02-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12954**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228846	< 5
228847	< 5
228848	731
228849	< 5
228850	< 5
228851	< 5
228852	< 5
228853	5
228854	< 5
228855	< 5
228856	< 5
228857	5
228858	< 5
228859	5
228860	6
228861	5
228862	6
228863	446
228864	6
228865	6
228866	6
228867	6
228868	6
228869	6
228870	6
228871	5
228872	6
228873	< 5
228874	< 5
228875	< 5
228876	< 5
228877	< 5
228878	< 5
228879	592
228880	< 5
228881	< 5
228882	< 5
228883	7
228884	15
228885	6
228886	< 5
228887	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228888	< 5
228889	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	623
SE68 Cert	599
SE68 Meas	593
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1690
OREAS 16A (FA-Ancaster) Cert	1810
228855 Orig	< 5
228855 Dup	< 5
228865 Orig	5
228865 Dup	6
228875 Orig	< 5
228875 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 02-Dec-16
Invoice No.: A16-12956
Invoice Date: 12-Dec-16
Your Reference: Core-02-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

20 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12956**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246823	371
246824	< 5
246825	7
246826	10
246827	< 5
246828	< 5
246829	< 5
246830	< 5
246831	6
246832	< 5
246833	< 5
246834	< 5
246835	< 5
246836	5
246837	< 5
246838	< 5
246839	< 5
246840	< 5
246841	643
246842	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	597
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
246832 Orig	5
246832 Dup	< 5
246842 Orig	5
246842 Dup	6
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 02-Dec-16
Invoice No.: A16-12957
Invoice Date: 12-Dec-16
Your Reference: Core-02-Dec-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

45 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-12957**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229001	< 5
229002	< 5
229003	8
229004	< 5
229005	< 5
229006	< 5
229007	378
229008	6
229009	5
229010	< 5
229011	< 5
229012	< 5
229013	19
229014	< 5
229015	< 5
229016	< 5
229017	50
229018	< 5
229019	< 5
229020	< 5
229021	654
229022	10
229023	11
229024	9
229025	8
229026	62
229027	6
229028	260
229029	268
229030	10
229031	21
229032	14
229033	6
229034	9
229035	< 5
229036	391
229037	< 5
229038	5
229039	< 5
229040	5
229041	5
229042	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229043	< 5
229044	< 5
229045	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	584
SE68 Cert	599
SE68 Meas	592
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1710
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1700
OREAS 16A (FA-Ancaster) Cert	1810
229010 Orig	< 5
229010 Dup	< 5
229020 Orig	< 5
229020 Dup	< 5
229030 Orig	9
229030 Dup	11
229045 Orig	< 5
229045 Dup	7
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Dec-16
Invoice No.: A16-13024
Invoice Date: 09-Dec-16
Your Reference: Core-02-Dec-16-TS-4

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

42 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13024**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246843	9
246844	6
246845	5
246846	6
246847	5
246848	5
246849	18
246850	5
246851	6
246852	7
246853	8
246854	7
246855	6
246856	< 5
246857	< 5
246858	< 5
246859	386
246889	< 5
246890	< 5
246891	13
246892	< 5
246893	< 5
246894	< 5
246895	437
246896	< 5
246897	< 5
246898	< 5
246899	< 5
246900	22
246901	< 5
246902	< 5
246903	< 5
246904	< 5
246905	< 5
246906	< 5
246907	45
246908	< 5
246909	< 5
246910	< 5
246911	< 5
246912	< 5
246913	646

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	594
SE68 Cert	599
SE68 Meas	596
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
246852 Orig	6
246852 Dup	7
246891 Orig	12
246891 Dup	13
246901 Orig	< 5
246901 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Dec-16
Invoice No.: A16-13025
Invoice Date: 12-Dec-16
Your Reference: Core-05-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

92 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13025**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228890	< 5
228891	< 5
228892	< 5
228893	< 5
228894	< 5
228895	522
228896	< 5
228897	< 5
228898	< 5
228899	< 5
228900	< 5
228901	< 5
228902	< 5
228903	< 5
228904	< 5
228905	< 5
228906	< 5
228907	< 5
228908	< 5
228909	678
228910	< 5
228911	< 5
228912	< 5
228913	< 5
228914	< 5
228915	< 5
228916	< 5
228917	< 5
228918	< 5
228919	< 5
228920	< 5
228921	5
228922	< 5
228923	< 5
228924	< 5
228925	< 5
228926	454
228927	< 5
228928	16
228929	< 5
228930	< 5
228931	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228932	< 5
228933	< 5
228934	< 5
228935	< 5
228936	< 5
228937	< 5
228938	8
228939	< 5
228940	< 5
228941	740
228942	< 5
228943	< 5
228944	< 5
228945	5
228946	< 5
228947	< 5
228948	< 5
228949	< 5
228950	< 5
228951	< 5
228952	7
228953	< 5
228954	7
228955	< 5
228956	5
228957	412
228958	8
228959	6
228960	< 5
228961	< 5
228962	< 5
228963	< 5
228964	< 5
228965	< 5
228966	< 5
228967	< 5
228968	< 5
228969	< 5
228970	< 5
228971	80
228972	706
228973	8

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228974	< 5
228975	5
228976	5
228977	6
228978	< 5
228979	< 5
228980	< 5
228981	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	608
SE68 Cert	599
SE68 Meas	612
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1750
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1730
OREAS 16A (FA-Ancaster) Cert	1810
228899 Orig	< 5
228899 Dup	< 5
228908 Orig	< 5
228908 Dup	< 5
228919 Orig	< 5
228919 Dup	< 5
228934 Orig	< 5
228934 Dup	< 5
228939 Split Orig PREP DUP	< 5
228939 Split PREP DUP	< 5
228944 Orig	< 5
228944 Dup	< 5
228954 Orig	7
228954 Dup	6
228968 Orig	< 5
228968 Dup	< 5
228978 Orig	< 5
228978 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Dec-16
Invoice No.: A16-13027
Invoice Date: 12-Dec-16
Your Reference: Core-05-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

49 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13027**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263751	< 5
263752	< 5
263753	< 5
263754	< 5
263755	< 5
263756	< 5
263757	< 5
263758	391
263759	< 5
263760	< 5
263761	< 5
263762	< 5
263763	< 5
263764	< 5
263765	< 5
263766	< 5
263767	< 5
263768	< 5
263769	< 5
263770	7
263771	< 5
263772	< 5
263773	< 5
263774	666
263775	< 5
263776	< 5
263777	< 5
263778	< 5
263779	< 5
263780	12
263781	7
263782	< 5
263783	< 5
263784	< 5
263785	< 5
263786	6
263787	5
263788	5
263789	< 5
263790	415
263791	5
263792	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263793	< 5
263794	< 5
263795	< 5
263796	6
263797	5
263798	< 5
263799	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	599
SE68 Cert	599
SE68 Meas	612
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1740
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1710
OREAS 16A (FA-Ancaster) Cert	1810
263760 Orig	< 5
263760 Dup	< 5
263770 Orig	6
263770 Dup	7
263780 Orig	8
263780 Dup	15
263795 Orig	5
263795 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Dec-16
Invoice No.: A16-13028
Invoice Date: 12-Dec-16
Your Reference: Core-05-Dec-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

36 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13028**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246914	8
246915	< 5
246916	20
246917	23
246918	11
246919	52
246920	11
246921	83
246922	< 5
246923	12
246924	18
246925	15
246926	8
246927	6
246928	9
246929	6
246930	< 5
246931	411
246932	6
246933	13
246934	7
246935	6
246936	5
246937	5
246938	11
246939	40
246940	51
246941	55
246942	10
246943	8
246944	31
246945	26
246946	12
246947	18
246948	24
246949	630

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	616
SE68 Cert	599
SE68 Meas	596
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1710
OREAS 16A (FA-Ancaster) Cert	1810
246923 Orig	13
246923 Dup	11
246933 Orig	14
246933 Dup	11
246943 Orig	7
246943 Dup	8
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Dec-16
Invoice No.: A16-13029
Invoice Date: 09-Dec-16
Your Reference: Core-05-Dec-16-RS-4

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

12 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13029**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246950	9
246951	6
246952	60
246953	9
246954	5
246955	19
246956	< 5
246957	13
246958	< 5
246959	8
246960	21
246961	9

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	623
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1750
OREAS 16A (FA-Ancaster) Cert	1810
246959 Orig	7
246959 Dup	8
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 06-Dec-16
Invoice No.: A16-13070
Invoice Date: 13-Dec-16
Your Reference: Core-06-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

33 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13070**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
228982	11
228983	32
228984	24
228985	< 5
228986	< 5
228987	372
228988	< 5
228989	< 5
228990	7
228991	< 5
228992	< 5
228993	< 5
228994	< 5
228995	< 5
228996	< 5
228997	< 5
228998	< 5
228999	< 5
229000	< 5
269001	< 5
269002	810
269003	< 5
269004	< 5
269005	< 5
269006	< 5
269007	< 5
269008	< 5
269009	< 5
269010	< 5
269011	< 5
269012	< 5
269013	< 5
269014	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	601
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
228991 Orig	< 5
228991 Dup	< 5
269001 Orig	< 5
269001 Dup	< 5
269011 Orig	< 5
269011 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 06-Dec-16
Invoice No.: A16-13072
Invoice Date: 14-Dec-16
Your Reference: Core-06-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

37 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13072**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246962	6
246963	5
246964	5
246965	5
246966	6
246967	6
246968	6
246969	6
246970	383
246971	5
246972	6
246973	6
246974	6
246975	6
246976	6
246977	6
246978	6
246979	6
246980	10
246981	9
246982	6
246983	29
246984	40
246985	9
246986	6
246987	6
246988	612
246989	6
246990	8
246991	7
246992	7
246993	7
246994	8
246995	7
246996	< 5
246997	< 5
246998	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	597
SE68 Cert	599
SE68 Meas	596
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
246971 Orig	5
246971 Dup	5
246981 Orig	6
246981 Dup	11
246991 Orig	7
246991 Dup	7
Method Blank	5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 06-Dec-16
Invoice No.: A16-13075
Invoice Date: 13-Dec-16
Your Reference: Core-06-Dec-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

109 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13075**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263800	< 5
263801	< 5
263802	< 5
263803	< 5
263804	< 5
263805	< 5
263806	753
263807	< 5
263808	< 5
263809	< 5
263810	< 5
263811	< 5
263812	7
263813	< 5
263814	< 5
263815	< 5
263816	< 5
263817	< 5
263818	< 5
263819	< 5
263820	< 5
263821	< 5
263822	426
263823	< 5
263824	< 5
263825	< 5
263826	< 5
263827	< 5
263828	< 5
263829	< 5
263830	< 5
263831	< 5
263832	< 5
263833	< 5
263834	< 5
263835	< 5
263836	< 5
263837	< 5
263838	731
263839	< 5
263840	8
263841	11

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263842	< 5
263843	< 5
263844	< 5
263845	< 5
263846	< 5
263847	< 5
263848	20
263849	21
263850	6
263851	5
263852	12
263853	< 5
263854	422
263855	< 5
263856	< 5
263857	< 5
263858	< 5
263859	6
263860	26
263861	< 5
263862	< 5
263863	< 5
263864	< 5
263865	< 5
263866	< 5
263867	< 5
263868	< 5
263869	7
263870	750
263871	< 5
263872	< 5
263873	6
263874	< 5
263875	6
263876	< 5
263877	< 5
263878	< 5
263879	< 5
263880	< 5
263881	< 5
263882	< 5
263883	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263884	< 5
263885	412
263886	< 5
263887	7
263888	< 5
263889	< 5
263890	< 5
263891	6
263892	< 5
263893	< 5
263894	< 5
263895	< 5
263896	< 5
263897	< 5
263898	< 5
263899	84
263900	729
263901	5
263902	45
263903	< 5
263904	< 5
263905	< 5
263906	< 5
263907	< 5
263908	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	621
SE68 Cert	599
SE68 Meas	620
SE68 Cert	599
SE68 Meas	597
SE68 Cert	599
SE68 Meas	610
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1890
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
263809 Orig	< 5
263809 Dup	< 5
263819 Orig	< 5
263819 Dup	< 5
263829 Orig	< 5
263829 Dup	< 5
263844 Orig	< 5
263844 Dup	< 5
263849 Split Orig PREP DUP	21
263849 Split PREP DUP	< 5
263853 Orig	< 5
263853 Dup	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263863 Orig	< 5
263863 Dup	5
263878 Orig	< 5
263878 Dup	< 5
263888 Orig	< 5
263888 Dup	< 5
263898 Orig	< 5
263898 Dup	< 5
263899 Split Orig PREP DUP	84
263899 Split PREP DUP	84
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 08-Dec-16
Invoice No.: A16-13188
Invoice Date: 14-Dec-16
Your Reference: Core-07-Dec--MC-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

43 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13188**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
246999	5
247000	6
247001	5
247002	5
247003	5
247004	6
247005	6
247006	406
247007	6
247008	6
247009	6
247010	6
247011	8
247012	8
247013	7
247014	14
247015	7
247016	7
247017	7
247018	7
247019	7
247020	8
247021	7
247022	7
247023	8
247024	730
247025	8
247026	7
247027	7
247028	8
247029	7
247030	7
247031	7
247032	7
247033	8
247034	8
247035	8
247036	8
247037	8
247038	8
247039	8
247040	8

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247041	8

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	591
SE68 Cert	599
SE68 Meas	579
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1720
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
247008 Orig	6
247008 Dup	6
247018 Orig	7
247018 Dup	7
247028 Orig	8
247028 Dup	8
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 08-Dec-16
Invoice No.: A16-13189
Invoice Date: 14-Dec-16
Your Reference: Core-07-Dec--MC-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

45 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13189**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229046	< 5
229047	< 5
229048	< 5
229049	6
229050	772
229051	6
229052	5
229053	11
229054	< 5
229055	< 5
229056	< 5
229057	5
229058	5
229059	< 5
229060	10
229061	6
229062	5
229063	12
229064	6
229065	396
229066	5
229067	22
229068	5
229069	13
229070	< 5
229071	5
229072	< 5
229073	5
229074	5
229075	6
229076	5
229077	5
229078	8
229079	705
229080	49
229081	6
229082	9
229083	6
229084	15
229085	6
229086	6
229087	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229088	5
229089	5
229090	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	595
SE68 Cert	599
SE68 Meas	593
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
229055 Orig	< 5
229055 Dup	< 5
229064 Orig	6
229064 Dup	5
229075 Orig	6
229075 Dup	6
229090 Orig	6
229090 Dup	6
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 08-Dec-16
Invoice No.: A16-13190
Invoice Date: 14-Dec-16
Your Reference: Core-07-Dec--MC-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

37 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13190**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269127	< 5
269128	< 5
269129	< 5
269130	< 5
269131	< 5
269132	< 5
269133	5
269134	5
269135	< 5
269136	< 5
269137	< 5
269138	5
269139	667
269140	10
269141	5
269142	5
269143	5
269144	5
269145	5
269146	< 5
269147	5
269148	5
269149	11
269150	5
269151	6
269152	6
269153	6
269154	25
269155	430
269156	7
269157	7
269158	7
269159	6
269160	7
269161	6
269162	7
269163	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	609
SE68 Cert	599
SE68 Meas	586
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
269136 Orig	< 5
269136 Dup	< 5
269146 Orig	< 5
269146 Dup	< 5
269156 Orig	7
269156 Dup	7
Method Blank	5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 08-Dec-16
Invoice No.: A16-13192
Invoice Date: 15-Dec-16
Your Reference: Core-08-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

51 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13192**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247042	474
247043	< 5
247044	8
247045	< 5
247046	6
247047	5
247048	5
247049	< 5
247050	5
247051	< 5
247052	5
247053	5
247054	5
247055	6
247056	6
247057	5
247058	6
247059	6
247060	735
247061	8
247062	6
247063	6
247064	9
247065	6
247066	6
247067	7
247068	6
247069	5
247070	6
247071	10
247072	6
247073	11
247074	7
247075	8
247076	6
247077	423
247078	375
247079	13
247080	9
247081	20
247082	13
247083	3060

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247084	36
247085	78
247086	1180
247087	1020
247088	332
247089	91
247090	47
247091	10
247092	142

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	584
SE68 Cert	599
SE68 Meas	591
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1720
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
247051 Orig	< 5
247051 Dup	5
247061 Orig	8
247061 Dup	8
247071 Orig	9
247071 Dup	10
247086 Orig	1200
247086 Dup	1160
247091 Split Orig PREP DUP	10
247091 Split PREP DUP	10
Method Blank	< 5
Method Blank	5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 08-Dec-16
Invoice No.: A16-13193
Invoice Date: 16-Dec-16
Your Reference: Core-08-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

112 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13193**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA-GRA
269015	5	
269016	5	
269017	397	
269018	6	
269019	6	
269020	6	
269021	6	
269022	23	
269023	9	
269024	5	
269025	8	
269026	7	
269027	6	
269028	7	
269029	10	
269030	43	
269031	6	
269032	681	
269033	6	
269034	7	
269035	19	
269036	6	
269037	6	
269038	7	
269039	6	
269040	6	
269041	6	
269042	6	
269043	6	
269044	7	
269045	8	
269046	7	
269047	8	
269048	11	
269049	15	
269050	460	
269051	6	
269052	5	
269053	6	
269054	6	
269055	6	

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA-GRA
269056	7	
269057	7	
269058	8	
269059	< 5	
269060	206	
269061	8	
269062	6	
269063	12	
269064	8	
269065	178	
269066	10	
269067	849	
269068	10	
269069	6	
269070	11	
269071	9	
269072	7	
269073	12	
269074	8	
269075	8	
269076	8	
269077	9	
269078	10	
269079	9	
269080	12	
269081	13	
269082	9	
269083	10	
269084	8	
269085	471	
269086	8	
269087	8	
269088	49	
269089	42	
269090	19	
269091	38	
269092	10	
269093	11	
269094	9	
269095	5	
269096	8	
269097	8	

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA-GRA
269098	8	
269099	11	
269100	26	
269101	9	
269102	11	
269103	> 5000	22.4
269104	4360	
269105	1940	
269106	2580	
269107	27	
269108	13	
269109	12	
269110	12	
269111	13	
269112	83	
269113	142	
269114	32	
269115	25	
269116	3140	
269117	50	
269118	27	
269119	73	
269120	11	
269121	16	
269122	13	
269123	396	
269124	22	
269125	175	
269126	164	

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA-GRA
SE68 Meas	584	
SE68 Cert	599	
SE68 Meas	579	
SE68 Cert	599	
SE68 Meas	611	
SE68 Cert	599	
SE68 Meas	607	
SE68 Cert	599	
OxK110 Meas		3.62
OxK110 Cert		3.602
OxP116 Meas		14.6
OxP116 Cert		14.92
OREAS 16A (FA-Ancaster) Meas	1850	
OREAS 16A (FA-Ancaster) Cert	1810	
OREAS 16A (FA-Ancaster) Meas	1790	
OREAS 16A (FA-Ancaster) Cert	1810	
OREAS 16A (FA-Ancaster) Meas	1740	
OREAS 16A (FA-Ancaster) Cert	1810	
OREAS 16A (FA-Ancaster) Meas	1790	
OREAS 16A (FA-Ancaster) Cert	1810	
269024 Orig	5	
269024 Dup	5	
269034 Orig	7	
269034 Dup	6	
269044 Orig	7	
269044 Dup	7	
269059 Orig	< 5	
269059 Dup	6	
269064 Split Orig	8	

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA-GRA
PREP DUP		
269064 Split PREP DUP	8	
269069 Orig	6	
269069 Dup	6	
269079 Orig	8	
269079 Dup	9	
269093 Orig	10	
269093 Dup	11	
269103 Orig	> 5000	
269103 Dup	> 5000	
269113 Orig	138	
269113 Dup	145	
269114 Split Orig PREP DUP	32	
269114 Split PREP DUP	27	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank		< 0.02

Quality Analysis ... *Innovative Technologies*

Date Submitted: 08-Dec-16
Invoice No.: A16-13194
Invoice Date: 15-Dec-16
Your Reference: Core-08-Dec-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

32 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13194**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263909	< 5
263910	< 5
263911	< 5
263912	< 5
263913	< 5
263914	< 5
263915	< 5
263916	484
263917	< 5
263918	< 5
263919	< 5
263920	< 5
263921	< 5
263922	6
263923	< 5
263924	< 5
263925	< 5
263926	5
263927	< 5
263928	< 5
263929	< 5
263930	< 5
263931	647
263932	< 5
263933	< 5
263934	< 5
263935	< 5
263936	< 5
263937	< 5
263938	< 5
263939	5
263940	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	618
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
263918 Orig	< 5
263918 Dup	< 5
263928 Orig	< 5
263928 Dup	< 5
263938 Orig	< 5
263938 Dup	5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 08-Dec-16
Invoice No.: A16-13196
Invoice Date: 15-Dec-16
Your Reference: Core-08-Dec-16-RS-4

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

10 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13196**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229091	30
229092	< 5
229093	< 5
229094	< 5
229095	434
229096	< 5
229097	< 5
229098	< 5
229099	< 5
229100	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	604
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
229100 Orig	< 5
229100 Dup	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-Dec-16
Invoice No.: A16-13228
Invoice Date: 16-Dec-16
Your Reference: Core-09-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

83 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13228**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247093	102
247094	31
247095	78
247096	846
247097	1050
247098	16
247099	8
247100	19
247101	7
247102	9
247103	8
247104	12
247105	6
247106	16
247107	11
247108	37
247109	10
247110	20
247111	8
247112	9
247113	10
247114	411
247115	20
247116	63
247117	21
247118	48
247119	9
247120	8
247121	14
247122	11
247123	12
247124	44
247125	10
247126	12
247127	9
247128	11
247129	9
247130	10
247131	14
247132	744
247133	8
247134	9

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247135	78
247136	9
247137	9
247138	10
247139	30
247140	9
247141	8
247142	10
247143	32
247144	122
247145	10
247146	11
247147	24
247148	14
247149	10
247150	384
247151	16
247152	10
247153	12
247154	9
247155	9
247156	10
247157	10
247158	10
247159	9
247160	9
247161	9
247162	9
247163	10
247164	9
247165	10
247166	9
247167	9
247168	8
247169	12
247170	743
247171	13
247172	21
247173	19
247174	9
247175	12

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	618
SE68 Cert	599
SE68 Meas	577
SE68 Cert	599
SE68 Meas	600
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1750
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
247102 Orig	8
247102 Dup	10
247112 Orig	11
247112 Dup	7
247122 Orig	12
247122 Dup	9
247137 Orig	9
247137 Dup	8
247142 Split Orig PREP DUP	10
247142 Split PREP DUP	9
247147 Orig	23
247147 Dup	24
247157 Orig	9
247157 Dup	10
247171 Orig	13
247171 Dup	12
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 09-Dec-16
Invoice No.: A16-13229
Invoice Date: 15-Dec-16
Your Reference: Core-09-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

19 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13229**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265001	20
265002	232
265003	119
265004	37
265005	5
265006	< 5
265007	< 5
265008	5
265009	16
265010	< 5
265011	746
265012	< 5
265013	< 5
265014	10
265015	39
265016	5
265017	444
265018	14
265019	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	619
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1890
OREAS 16A (FA-Ancaster) Cert	1810
265010 Orig	< 5
265010 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-Dec-16
Invoice No.: A16-13238
Invoice Date: 16-Dec-16
Your Reference: Core-09-Dec-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13238**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263941	22
263942	21
263943	2050
263944	14
263945	12
263946	7
263947	9
263948	8
263949	8
263950	8
263951	8
263952	8
263953	8
263954	8
263955	7
263956	8
263957	8
263958	7
263959	7
263960	7
263961	8
263962	8
263963	369
263964	8
263965	8
263966	8
263967	8
263968	8
263969	8
263970	8
263971	8
263972	8
263973	8
263974	8
263975	8
263976	10
263977	9
263978	9
263979	700
263980	9
263981	8
263982	9

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263983	10
263984	9

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
SE68 Meas	598
SE68 Cert	599
SE68 Meas	603
SE68 Cert	599
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
263950 Orig	8
263950 Dup	8
263960 Orig	7
263960 Dup	7
263970 Orig	8
263970 Dup	8
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 13-Dec-16
Invoice No.: A16-13396
Invoice Date: 21-Dec-16
Your Reference: Core-12-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

46 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13396**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247294	< 5
247295	< 5
247296	< 5
247297	367
247298	< 5
247299	< 5
247300	< 5
247301	416
247302	< 5
247303	< 5
247304	< 5
247305	< 5
247306	< 5
247307	< 5
247308	< 5
247309	< 5
247310	< 5
247311	< 5
247312	< 5
247313	< 5
247314	< 5
247315	< 5
247316	< 5
247317	< 5
247318	< 5
247319	< 5
247320	747
247321	< 5
247322	< 5
247323	< 5
247324	< 5
247325	< 5
247326	< 5
247327	< 5
247328	< 5
247329	< 5
247330	< 5
247331	< 5
247332	< 5
269164	< 5
269165	< 5
269166	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269167	< 5
269168	< 5
269169	691
269170	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	413
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
247303 Orig	< 5
247303 Dup	< 5
247313 Orig	< 5
247313 Dup	< 5
247323 Orig	5
247323 Dup	< 5
269170 Orig	< 5
269170 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 13-Dec-16
Invoice No.: A16-13398
Invoice Date: 21-Dec-16
Your Reference: Core-12-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

109 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13398**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247176	< 5
247177	< 5
247178	< 5
247179	< 5
247180	< 5
247181	< 5
247182	< 5
247183	< 5
247184	< 5
247185	< 5
247186	< 5
247187	< 5
247188	468
247189	< 5
247190	8
247191	< 5
247192	< 5
247193	< 5
247194	< 5
247195	< 5
247196	< 5
247197	< 5
247198	< 5
247199	< 5
247200	< 5
247201	< 5
247202	< 5
247203	< 5
247204	< 5
247205	< 5
247206	620
247207	< 5
247208	< 5
247209	< 5
247210	< 5
247211	6
247212	< 5
247213	< 5
247214	< 5
247215	< 5
247216	< 5
247217	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247218	5
247219	5
247220	< 5
247221	< 5
247222	< 5
247223	< 5
247224	< 5
247225	468
247226	< 5
247227	110
247228	< 5
247229	97
247230	56
247231	< 5
247232	< 5
247233	< 5
247234	< 5
247235	< 5
247236	< 5
247237	< 5
247238	13
247239	< 5
247240	< 5
247241	< 5
247242	6
247243	797
247244	< 5
247245	114
247246	12
247247	257
247248	18
247249	13
247250	8
247251	7
247252	< 5
247253	49
247254	11
247255	93
247256	20
247257	75
247258	26
247259	37

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247260	34
247261	478
247262	14
247263	20
247264	26
247265	7
247266	6
247267	6
247268	9
247269	5
247270	5
247271	< 5
247272	6
247273	8
247274	6
247275	37
247276	8
247277	8
247278	11
247279	684
247280	6
247281	39
247282	23
247283	43
247284	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	400
OxD128 Cert	424.000
OxD128 Meas	419
OxD128 Cert	424.000
OxD128 Meas	410
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
247185 Orig	< 5
247185 Dup	< 5
247195 Orig	< 5
247195 Dup	< 5
247205 Orig	< 5
247205 Dup	< 5
247220 Orig	< 5
247220 Dup	< 5
247226 Split Orig PREP DUP	< 5
247226 Split PREP DUP	< 5
247230 Orig	60
247230 Dup	51

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247240 Orig	< 5
247240 Dup	< 5
247254 Orig	11
247254 Dup	10
247264 Orig	22
247264 Dup	30
247274 Orig	6
247274 Dup	6
247275 Split Orig PREP DUP	37
247275 Split PREP DUP	29
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 13-Dec-16
Invoice No.: A16-13399
Invoice Date: 20-Dec-16
Your Reference: Core-13-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

52 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13399**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247333	< 5
247334	< 5
247335	< 5
247336	< 5
247337	< 5
247338	373
247339	< 5
247340	< 5
247341	< 5
247342	< 5
247343	< 5
247344	< 5
247345	< 5
247346	< 5
247347	< 5
247348	< 5
247349	< 5
247350	< 5
247351	< 5
247352	< 5
247353	< 5
247354	< 5
247355	< 5
247356	675
247357	< 5
247358	< 5
247359	< 5
247360	< 5
247361	< 5
247362	< 5
247363	< 5
247364	< 5
247365	< 5
247366	< 5
247367	< 5
247368	< 5
247369	< 5
247370	< 5
247371	< 5
247372	< 5
247373	< 5
247374	389

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247375	< 5
247376	< 5
247377	< 5
247378	< 5
247379	< 5
247380	< 5
247381	< 5
247382	< 5
247383	< 5
247384	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	414
OxD128 Cert	424.000
OxD128 Meas	411
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
247342 Orig	< 5
247342 Dup	< 5
247352 Orig	< 5
247352 Dup	5
247362 Orig	< 5
247362 Dup	< 5
247377 Orig	< 5
247377 Dup	< 5
247382 Split Orig PREP DUP	< 5
247382 Split PREP DUP	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 13-Dec-16
Invoice No.: A16-13400
Invoice Date: 20-Dec-16
Your Reference: Core-13-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

9 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13400**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247285	9
247286	52
247287	40
247288	< 5
247289	98
247290	24
247291	11
247292	6
247293	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	413
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 13-Dec-16
Invoice No.: A16-13402
Invoice Date: 20-Dec-16
Your Reference: Core-13-Dec-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

22 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13402**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265020	< 5
265021	< 5
265022	< 5
265023	< 5
265024	< 5
265025	< 5
265026	< 5
265027	< 5
265028	< 5
265029	< 5
265030	5
265031	< 5
265032	474
265033	< 5
265034	6
265035	< 5
265036	5
265037	< 5
265038	< 5
265039	< 5
265040	< 5
265041	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
265029 Orig	< 5
265029 Dup	< 5
265039 Orig	< 5
265039 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 15-Dec-16
Invoice No.: A16-13483
Invoice Date: 21-Dec-16
Your Reference: Core-15-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

42 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13483**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247385	< 5
247386	< 5
247387	< 5
247388	< 5
247389	< 5
247390	< 5
247391	< 5
247392	798
247393	< 5
247394	< 5
247395	< 5
247396	< 5
247397	< 5
247398	< 5
247399	< 5
247400	< 5
247401	< 5
247402	< 5
247403	< 5
247404	< 5
247405	< 5
247406	< 5
247407	< 5
247408	< 5
247409	< 5
247410	386
247411	< 5
247412	< 5
247413	< 5
247414	< 5
247415	< 5
247416	< 5
247417	< 5
247418	< 5
247419	< 5
247420	< 5
247421	< 5
247422	< 5
247461	< 5
247462	< 5
247463	< 5
247464	635

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	407
OxD128 Cert	424.000
OxD128 Meas	402
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1740
OREAS 16A (FA-Ancaster) Cert	1810
247394 Orig	< 5
247394 Dup	< 5
247404 Orig	< 5
247404 Dup	< 5
247414 Orig	< 5
247414 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 16-Dec-16
Invoice No.: A16-13546
Invoice Date: 21-Dec-16
Your Reference: Core-16-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

63 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13546**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247423	< 5
247424	< 5
247425	< 5
247426	< 5
247427	< 5
247428	732
247429	< 5
247430	< 5
247431	< 5
247432	< 5
247433	< 5
247434	< 5
247435	< 5
247436	< 5
247437	< 5
247438	< 5
247439	< 5
247440	< 5
247441	< 5
247442	< 5
247443	< 5
247444	< 5
247445	< 5
247446	396
247447	< 5
247448	< 5
247449	< 5
247450	< 5
247451	< 5
247452	< 5
247453	< 5
247454	< 5
247455	< 5
247456	< 5
247457	< 5
247458	< 5
247459	< 5
247460	< 5
247465	< 5
247466	< 5
247467	< 5
247468	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247469	< 5
247470	< 5
247471	< 5
247472	< 5
247473	< 5
247474	< 5
247475	< 5
247476	< 5
247477	5
247478	< 5
265176	16
265177	5
265178	12
265179	172
265180	10
265181	33
265182	666
265183	< 5
265184	10
265185	< 5
265186	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	421
OxD128 Cert	424.000
OxD128 Meas	410
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
247432 Orig	< 5
247432 Dup	< 5
247442 Orig	< 5
247442 Dup	< 5
247452 Orig	< 5
247452 Dup	< 5
247471 Orig	< 5
247471 Dup	< 5
247476 Split Orig PREP DUP	< 5
247476 Split PREP DUP	< 5
265178 Orig	11
265178 Dup	12
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 16-Dec-16
Invoice No.: A16-13547
Invoice Date: 20-Dec-16
Your Reference: Core-16-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
365 Bay Street, Suite 500
Toronto ON M5H 2V1
Canada

ATTN: Maggie Currie (Conf emails/res)

CERTIFICATE OF ANALYSIS

19 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13547**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229101	< 5
229102	< 5
229103	< 5
229104	< 5
229105	< 5
229106	< 5
229107	< 5
229108	< 5
229109	< 5
229110	763
229111	< 5
229112	< 5
229113	< 5
229114	5
229115	46
229116	< 5
229117	< 5
229118	< 5
229119	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
229111 Orig	< 5
229111 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 19-Dec-16
Invoice No.: A16-13582
Invoice Date: 21-Dec-16
Your Reference: Core-19-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

124 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13582**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247479	< 5
247480	7
247481	< 5
247482	471
247483	< 5
247484	< 5
247485	< 5
247486	< 5
247487	< 5
247488	< 5
247489	< 5
247490	< 5
247491	< 5
247492	8
247493	< 5
247494	< 5
247495	< 5
247496	< 5
247497	11
247498	< 5
247499	< 5
247500	711
247501	< 5
247502	< 5
247503	< 5
247504	< 5
247505	< 5
247506	< 5
247507	5
247508	< 5
247509	< 5
247510	< 5
247511	< 5
247512	< 5
247513	< 5
247514	< 5
247515	< 5
247516	< 5
247517	< 5
247518	426
247519	< 5
247520	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247521	< 5
247522	< 5
247523	< 5
247524	< 5
247525	< 5
247526	< 5
247527	< 5
247528	< 5
247529	< 5
247530	< 5
247531	< 5
247532	< 5
247533	< 5
247534	< 5
247535	< 5
247536	776
247537	< 5
247538	< 5
247539	< 5
247540	< 5
247541	< 5
247542	< 5
247543	< 5
247544	< 5
247545	< 5
247546	< 5
247547	< 5
247548	12
247549	< 5
247550	< 5
247551	< 5
247552	< 5
247553	< 5
247554	405
247555	< 5
247556	< 5
247557	< 5
247558	< 5
247559	< 5
247560	< 5
247561	< 5
247562	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247563	< 5
247564	< 5
247565	< 5
247566	< 5
247567	< 5
247568	< 5
247569	< 5
247570	< 5
247571	< 5
247572	710
247573	< 5
247574	< 5
247575	< 5
247576	< 5
247577	< 5
247578	5
247579	< 5
247580	< 5
247581	< 5
247582	41
247583	14
247584	17
247585	< 5
247586	13
247587	10
247588	< 5
247589	50
247590	392
247591	18
247592	< 5
247593	< 5
247594	5
247595	< 5
247596	< 5
247597	25
247598	5
247599	< 5
247600	< 5
247601	< 5
247602	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	427
OxD128 Cert	424.000
OxD128 Meas	413
OxD128 Cert	424.000
OxD128 Meas	424
OxD128 Cert	424.000
OxD128 Meas	430
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1880
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
247488 Orig	< 5
247488 Dup	< 5
247498 Orig	< 5
247498 Dup	< 5
247508 Orig	< 5
247508 Dup	< 5
247523 Orig	< 5
247523 Dup	< 5
247528 Split Orig PREP DUP	< 5
247528 Split	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
PREP DUP	
247533 Orig	< 5
247533 Dup	< 5
247543 Orig	< 5
247543 Dup	< 5
247557 Orig	< 5
247557 Dup	< 5
247567 Orig	< 5
247567 Dup	< 5
247577 Orig	< 5
247577 Dup	< 5
247578 Split Orig PREP DUP	5
247578 Split PREP DUP	< 5
247591 Orig	16
247591 Dup	19
247601 Orig	< 5
247601 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 19-Dec-16
Invoice No.: A16-13583
Invoice Date: 21-Dec-16
Your Reference: Core-19-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

22 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13583**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229120	< 5
229121	< 5
229122	< 5
229123	< 5
229124	< 5
229125	< 5
229126	367
229127	< 5
229128	< 5
229129	< 5
229130	< 5
229131	< 5
229132	< 5
229133	39
229134	< 5
229135	20
229136	< 5
229137	< 5
229138	< 5
229139	< 5
229140	< 5
229141	801

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OxD128 Meas	410
OxD128 Cert	424.000
OREAS 16A (FA-Ancaster) Meas	1880
OREAS 16A (FA-Ancaster) Cert	1810
229129 Orig	< 5
229129 Dup	< 5
229139 Orig	< 5
229139 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 20-Dec-16
Invoice No.: A16-13636
Invoice Date: 28-Dec-16
Your Reference: Core-20-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

56 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13636**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229142	7
229143	< 5
229144	< 5
229145	< 5
229146	< 5
229147	< 5
229148	< 5
229149	< 5
229150	< 5
229151	< 5
229152	< 5
229153	< 5
229154	< 5
229155	106
229156	386
229157	< 5
229158	< 5
229159	< 5
229160	< 5
229161	< 5
229162	< 5
229163	< 5
229164	< 5
229165	< 5
229166	< 5
229167	< 5
229168	< 5
229169	< 5
229170	< 5
229171	706
229172	< 5
229173	< 5
229174	< 5
229175	< 5
229176	< 5
229177	< 5
229178	< 5
229179	< 5
229180	< 5
229181	< 5
229182	6
229183	27

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229184	< 5
229185	< 5
229186	467
229187	< 5
229188	27
229189	< 5
229190	< 5
229191	< 5
229192	< 5
229193	< 5
229194	< 5
229195	< 5
229196	< 5
229197	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	504
OREAS 251 Cert	504.00
OREAS 251 Meas	522
OREAS 251 Cert	504.00
229151 Orig	< 5
229151 Dup	< 5
229161 Orig	< 5
229161 Dup	< 5
229172 Orig	< 5
229172 Dup	< 5
229185 Orig	< 5
229185 Dup	< 5
229191 Split Orig PREP DUP	< 5
229191 Split PREP DUP	< 5
229195 Orig	< 5
229195 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 20-Dec-16
Invoice No.: A16-13637
Invoice Date: 28-Dec-16
Your Reference: Core-20-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

44 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13637**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247603	< 5
247604	< 5
247605	< 5
247606	5
247607	< 5
247608	753
247609	< 5
247610	< 5
247611	< 5
247612	< 5
247613	5
247614	< 5
247615	< 5
247616	< 5
247617	< 5
247618	< 5
247619	8
247620	< 5
247621	< 5
247622	< 5
247623	< 5
247624	5
247625	9
247626	< 5
247627	9
247628	433
247629	8
247630	< 5
247631	13
247632	< 5
247633	< 5
247634	< 5
247635	8
247636	7
247637	5
247638	37
247639	< 5
247640	< 5
247641	< 5
247642	< 5
247643	< 5
247644	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247645	< 5
247646	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	534
OREAS 251 Cert	504.00
OREAS 251 Meas	518
OREAS 251 Cert	504.00
247612 Orig	< 5
247612 Dup	< 5
247622 Orig	< 5
247622 Dup	< 5
247632 Orig	< 5
247632 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 21-Dec-16
Invoice No.: A16-13716
Invoice Date: 28-Dec-16
Your Reference: Core-21-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

13 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13716**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229198	6
229199	< 5
229200	5
229201	< 5
229202	743
229203	< 5
229204	< 5
229205	5
229206	6
229207	< 5
229208	6
229209	5
229210	12

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	517
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
229207 Orig	6
229207 Dup	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 21-Dec-16
Invoice No.: A16-13718
Invoice Date: 29-Dec-16
Your Reference: Core-21-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

40 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13718**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247647	910
247648	19
247649	< 5
247650	< 5
247651	< 5
247652	< 5
247653	< 5
247654	< 5
247655	< 5
247656	< 5
247657	< 5
247658	< 5
247659	< 5
247660	11
247661	< 5
247662	< 5
247663	< 5
247664	8
247665	< 5
247666	< 5
247667	7
247668	5
247669	< 5
247670	542
247671	70
247672	< 5
247673	< 5
247674	< 5
247675	< 5
247676	< 5
247677	< 5
247678	< 5
247679	< 5
247680	< 5
247681	< 5
247682	< 5
247683	< 5
247684	< 5
247685	< 5
247686	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	524
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1920
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	527
OREAS 251 Cert	504.00
OREAS 251 Meas	534
OREAS 251 Cert	504.00
247656 Orig	< 5
247656 Dup	< 5
247666 Orig	< 5
247666 Dup	< 5
247676 Orig	< 5
247676 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 22-Dec-16
Invoice No.: A16-13770
Invoice Date: 28-Dec-16
Your Reference: Core-22-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

27 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13770**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247687	< 5
247688	< 5
247689	< 5
247690	< 5
247691	< 5
247692	< 5
247693	5
247694	659
247695	5
247696	< 5
247697	< 5
247698	< 5
247699	11
247700	6
247701	< 5
247702	49
247703	< 5
247704	< 5
247705	< 5
247706	< 5
247707	< 5
247708	< 5
247709	< 5
247710	< 5
247711	9
247712	6
247713	491

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	528
OREAS 251 Cert	504.00
247696 Orig	5
247696 Dup	< 5
247706 Orig	< 5
247706 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 22-Dec-16
Invoice No.: A16-13771
Invoice Date: 28-Dec-16
Your Reference: Core-22-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

47 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13771**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229211	< 5
229212	< 5
229213	5
229214	9
229215	5
229216	17
229217	531
229218	5
229219	14
229220	40
229221	27
229222	< 5
229223	5
229224	< 5
229225	5
229226	< 5
229227	5
229228	< 5
229229	8
229230	< 5
229231	779
229232	5
229233	5
229234	< 5
229235	< 5
229236	< 5
229237	< 5
229238	< 5
229239	< 5
229240	< 5
229241	< 5
229242	< 5
229243	< 5
229244	< 5
229245	< 5
229246	< 5
229247	438
229248	< 5
229249	14
229250	9
229251	22
229252	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229253	< 5
229254	< 5
229255	< 5
229256	< 5
229257	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	523
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	524
OREAS 251 Cert	504.00
229220 Orig	46
229220 Dup	34
229230 Orig	5
229230 Dup	< 5
229240 Orig	< 5
229240 Dup	< 5
229255 Orig	< 5
229255 Dup	5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 23-Dec-16
Invoice No.: A16-13821
Invoice Date: 30-Dec-16
Your Reference: Core-23-Dec-16-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

74 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13821**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247714	< 5
247715	< 5
247716	< 5
247717	< 5
247718	< 5
247719	< 5
247720	< 5
247721	< 5
247722	< 5
247723	< 5
247724	< 5
247725	< 5
247726	< 5
247727	< 5
247728	< 5
247729	< 5
247730	622
247731	< 5
247732	< 5
247733	< 5
247734	< 5
247735	< 5
247736	< 5
247737	5
247738	< 5
247739	< 5
247740	< 5
247741	< 5
247742	< 5
247743	< 5
247744	12
247745	< 5
247746	< 5
247747	< 5
247748	399
247749	< 5
247750	< 5
247751	< 5
247752	< 5
247753	< 5
247754	< 5
247755	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247756	< 5
247757	< 5
247758	< 5
247759	< 5
247760	< 5
247761	< 5
247762	< 5
247763	< 5
247764	< 5
247765	< 5
247766	< 5
247767	669
247768	< 5
247769	< 5
247770	< 5
247771	< 5
247772	< 5
247773	< 5
247774	< 5
247775	< 5
247776	< 5
247777	< 5
247778	< 5
247779	< 5
247780	< 5
247781	< 5
247782	< 5
247783	< 5
247784	< 5
247785	< 5
247786	416
247787	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1880
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	532
OREAS 251 Cert	504.00
OREAS 251 Meas	529
OREAS 251 Cert	504.00
OREAS 251 Meas	515
OREAS 251 Cert	504.00
247723 Orig	< 5
247723 Dup	5
247733 Orig	< 5
247733 Dup	< 5
247743 Orig	< 5
247743 Dup	< 5
247758 Orig	< 5
247758 Dup	< 5
247763 Split Orig PREP DUP	< 5
247763 Split PREP DUP	5
247768 Orig	< 5
247768 Dup	< 5
247778 Orig	< 5
247778 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 23-Dec-16
Invoice No.: A16-13822
Invoice Date: 30-Dec-16
Your Reference: Core-23-Dec-16-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

36 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13822**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229258	< 5
229259	< 5
229260	< 5
229261	803
229262	5
229263	< 5
229264	9
229265	< 5
229266	< 5
229267	< 5
229268	< 5
229269	< 5
229270	< 5
229271	< 5
229272	5
229273	< 5
229274	< 5
229275	5
229276	407
229277	< 5
229278	< 5
229279	< 5
229280	< 5
229281	< 5
229282	< 5
229283	< 5
229284	< 5
229285	< 5
229286	< 5
229287	< 5
229288	< 5
229289	< 5
229290	< 5
229291	664
229292	6
229293	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	514
OREAS 251 Cert	504.00
OREAS 251 Meas	518
OREAS 251 Cert	504.00
229267 Orig	< 5
229267 Dup	< 5
229277 Orig	< 5
229277 Dup	< 5
229287 Orig	< 5
229287 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 23-Dec-16
Invoice No.: A16-13823
Invoice Date: 30-Dec-16
Your Reference: Core-23-Dec-16-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

29 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A16-13823**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
263985	< 5
263986	< 5
263987	< 5
263988	< 5
263989	< 5
263990	< 5
263991	< 5
263992	< 5
263993	< 5
263994	< 5
263995	429
263996	< 5
263997	< 5
263998	< 5
263999	< 5
264000	5
264001	5
264002	< 5
264003	< 5
264004	< 5
264005	62
264006	5
264007	< 5
264008	6
264009	16
264010	825
264011	11
264012	< 5
264013	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	505
OREAS 251 Cert	504.00
263994 Orig	< 5
263994 Dup	< 5
264004 Orig	< 5
264004 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 03-Jan-17
Invoice No.: A17-00015
Invoice Date: 06-Jan-17
Your Reference: Core-03-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

73 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00015**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264014	34
264015	276
264016	2070
264017	24
264018	78
264019	8
264020	5
264021	5
264022	< 5
264023	6
264024	5
264025	8
264026	5
264027	6
264028	5
264029	6
264030	< 5
264031	543
264032	7
264033	< 5
264034	< 5
264035	< 5
264036	8
264037	< 5
264038	< 5
264039	10
264040	< 5
264041	< 5
264042	< 5
264043	7
264044	8
264045	716
264046	630
264047	7
264048	7
264049	5
264050	5
264051	< 5
264052	< 5
264053	< 5
264054	< 5
264055	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264056	< 5
264057	< 5
264058	5
264059	< 5
264060	< 5
264061	9
264062	449
264063	28
264064	5
264065	5
264066	< 5
264067	5
264068	< 5
264069	< 5
264070	< 5
264071	< 5
264072	8
264073	5
264074	< 5
264075	< 5
264076	5
264077	11
264078	< 5
264079	746
264080	8
264081	5
264082	7
264083	12
264084	11
264085	< 5
264086	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
264023 Orig	6
264023 Dup	6
264033 Orig	8
264033 Dup	< 5
264043 Orig	6
264043 Dup	8
264058 Orig	5
264058 Dup	5
264063 Split Orig PREP DUP	28
264063 Split PREP DUP	43
264068 Orig	< 5
264068 Dup	< 5
264078 Orig	5
264078 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 03-Jan-17
Invoice No.: A17-00016
Invoice Date: 06-Jan-17
Your Reference: Core-03-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

68 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00016**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247788	< 5
247789	< 5
247790	< 5
247791	< 5
247792	< 5
247793	< 5
247794	< 5
247795	< 5
247796	< 5
247797	< 5
247798	< 5
247799	< 5
247800	< 5
247801	< 5
247802	< 5
247803	< 5
247804	< 5
247805	< 5
247806	< 5
247807	809
247808	< 5
247809	< 5
247810	< 5
247811	< 5
247812	< 5
247813	< 5
247814	< 5
247815	< 5
247816	< 5
247817	< 5
247818	< 5
247819	< 5
247820	< 5
247821	< 5
247822	< 5
247823	< 5
247824	< 5
247825	< 5
247826	< 5
247827	396
247828	7
247829	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247830	9
247831	6
247832	< 5
247833	< 5
247834	< 5
247835	< 5
247836	< 5
247837	< 5
247838	7
247839	6
247840	< 5
247841	< 5
247842	< 5
247843	39
247844	< 5
247845	10
247846	8
247847	< 5
247848	347
247849	770
247850	< 5
247851	< 5
247852	< 5
247853	< 5
247854	< 5
247855	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	509
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
247797 Orig	< 5
247797 Dup	< 5
247806 Orig	< 5
247806 Dup	< 5
247817 Orig	< 5
247817 Dup	< 5
247832 Orig	< 5
247832 Dup	< 5
247837 Split Orig PREP DUP	< 5
247837 Split PREP DUP	< 5
247841 Orig	< 5
247841 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 04-Jan-17
Invoice No.: A17-00051
Invoice Date: 11-Jan-17
Your Reference: Core-04-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

81 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00051**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247856	< 5
247857	< 5
247858	< 5
247859	< 5
247860	< 5
247861	8
247862	6
247863	6
247864	5
247865	10
247866	12
247867	23
247868	5
247869	60
247870	411
247871	15
247872	17
247873	48
247874	901
247875	469
247876	62
247877	18
247878	944
247879	1020
247880	433
247881	22
247882	9
247883	9
247884	15
247885	15
247886	73
247887	14
247888	148
247889	746
247890	15
247891	10
247892	13
247893	35
247894	20
247895	14
247896	17
247897	8

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247898	11
247899	11
247900	< 5
247901	5
247902	100
247903	5
247904	14
247905	12
247906	216
247907	33
247908	53
247909	55
247910	10
247911	7
247912	378
247913	14
247914	8
247915	8
247916	7
247917	7
247918	22
247919	10
247920	7
247921	8
247922	10
247923	10
247924	20
247925	14
247926	28
247927	38
247928	9
247929	685
247930	9
247931	8
247932	110
247933	< 5
247934	22
247935	6
247936	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	519
OREAS 251(FA-Anaster) Cert	504
OREAS 251(FA-Anaster) Meas	508
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1690
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	516
OREAS 251 Cert	504.00
247865 Orig	11
247865 Dup	8
247875 Orig	461
247875 Dup	477
247885 Orig	16
247885 Dup	14
247900 Orig	< 5
247900 Dup	< 5
247905 Split Orig PREP DUP	12

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247905 Split PREP DUP	16
247910 Orig	10
247910 Dup	10
247920 Orig	7
247920 Dup	7
247934 Orig	29
247934 Dup	15
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 04-Jan-17
Invoice No.: A17-00052
Invoice Date: 10-Jan-17
Your Reference: Core-04-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

118 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00052**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264087	5
264088	6
264089	5
264090	< 5
264091	< 5
264092	8
264093	386
264094	8
264095	5
264096	9
264097	37
264098	< 5
264099	< 5
264100	< 5
264101	13
264102	6
264103	5
264104	6
264105	6
264106	8
264107	5
264108	6
264109	29
264110	19
264111	1860
264112	24
264113	< 5
264114	8
264115	6
264116	< 5
264117	< 5
264118	< 5
264119	6
264120	26
264121	5
264122	< 5
264123	786
264124	84
264125	5
264126	10
264127	< 5
264128	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264129	8
264130	12
264131	14
264132	8
264133	7
264134	5
264135	7
264136	11
264137	6
264138	437
264139	6
264140	10
264141	7
264142	6
264143	19
264144	5
264145	10
264146	< 5
264147	< 5
264148	< 5
264149	< 5
264150	< 5
264151	5
264152	70
264153	629
264154	5
264155	9
264156	10
264157	8
264158	5
264159	< 5
264160	8
264161	< 5
264162	< 5
264163	5
264164	11
264165	< 5
264166	16
264167	5
264168	39
264169	380
264170	20

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264171	34
264172	6
264173	12
264174	6
264175	6
264176	< 5
264177	5
264178	5
264179	5
264180	5
264181	8
264182	5
264183	6
264184	682
264185	7
264186	7
264187	9
264188	6
264189	12
264190	5
264191	< 5
264192	< 5
264193	< 5
264194	< 5
264195	< 5
264196	< 5
264197	< 5
264198	8
264199	< 5
264200	379
264201	6
264202	< 5
264203	< 5
264204	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	498
OREAS 251 Cert	504.00
OREAS 251 Meas	488
OREAS 251 Cert	504.00
OREAS 251 Meas	518
OREAS 251 Cert	504.00
OREAS 251 Meas	528
OREAS 251 Cert	504.00
264096 Orig	8
264096 Dup	9
264106 Orig	9
264106 Dup	7
264116 Orig	< 5
264116 Dup	< 5
264131 Orig	13
264131 Dup	14
264136 Split Orig PREP DUP	11
264136 Split PREP DUP	7
264141 Orig	6
264141 Dup	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264151 Orig	5
264151 Dup	5
264165 Orig	< 5
264165 Dup	5
264175 Orig	5
264175 Dup	6
264185 Orig	6
264185 Dup	7
264186 Split Orig PREP DUP	7
264186 Split PREP DUP	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Jan-17
Invoice No.: A17-00097
Invoice Date: 16-Jan-17
Your Reference: Core-05-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

55 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00097**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264205	11
264206	8
264207	6
264208	7
264209	10
264210	5
264211	5
264212	6
264213	10
264214	7
264215	23
264216	5
264217	647
264218	9
264219	< 5
264220	8
264221	8
264222	10
264223	18
264224	14
264225	12
264226	7
264227	9
264228	8
264229	9
264230	11
264231	481
264232	8
264233	8
264234	8
264235	16
264236	7
264237	7
264238	8
264239	8
264240	7
264241	8
264242	9
264243	8
264244	8
264245	10
264246	11

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264247	706
264248	10
264249	37
264250	17
264251	19
264252	384
264253	1140
264254	726
264255	2110
264256	2400
264257	120
264258	15
264259	13

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	514
OREAS 251(FA-Anaster) Cert	504
OREAS 251(FA-Anaster) Meas	516
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1730
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	487
OREAS 251 Cert	504.00
OREAS 251 Meas	503
OREAS 251 Cert	504.00
264214 Orig	5
264214 Dup	8
264224 Orig	14
264224 Dup	14
264234 Orig	8
264234 Dup	8
264249 Orig	36

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264249 Dup	37
264254 Split Orig PREP DUP	726
264254 Split PREP DUP	756
264259 Orig	12
264259 Dup	13
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 05-Jan-17
Invoice No.: A17-00098
Invoice Date: 12-Jan-17
Your Reference: Core-05-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

69 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00098**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
247937	8
247938	5
247939	< 5
247940	5
247941	6
247942	5
247943	< 5
247944	7
247945	5
247946	< 5
247947	439
247948	5
247949	5
247950	8
247951	6
247952	5
247953	< 5
247954	6
247955	9
247956	5
247957	< 5
247958	7
247959	5
247960	36
247961	50
247962	42
247963	732
247964	73
247965	8
247966	9
247967	6
247968	11
247969	9
247970	12
247971	8
247972	6
247973	5
247974	6
269171	5
269172	7
269173	8
269174	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269175	6
269176	10
269177	6
269178	5
269179	6
269180	8
269181	6
269182	5
269183	5
269184	6
269185	8
269186	5
269187	399
269188	7
269189	9
269190	10
269191	6
269192	6
269193	6
269194	7
269195	75
269196	68
269197	53
269198	56
269199	57
269200	8
269201	8

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	527
OREAS 251 Cert	504.00
OREAS 251 Meas	509
OREAS 251 Cert	504.00
247946 Orig	< 5
247946 Dup	5
247956 Orig	5
247956 Dup	5
247966 Orig	11
247966 Dup	7
269177 Orig	6
269177 Dup	5
269182 Split Orig PREP DUP	5
269182 Split PREP DUP	5
269188 Orig	6
269188 Dup	7
269197 Orig	54
269197 Dup	52
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 05-Jan-17
Invoice No.: A17-00099
Invoice Date: 11-Jan-17
Your Reference: Core-05-Jan-17-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

15 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00099**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229294	< 5
229295	39
229296	31
229297	305
229298	5
229299	5
229300	< 5
229301	< 5
229302	< 5
229303	< 5
229304	< 5
229305	11
229306	394
229307	< 5
229308	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	509
OREAS 251 Cert	504.00
229303 Orig	< 5
229303 Dup	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 06-Jan-17
Invoice No.: A17-00131
Invoice Date: 12-Jan-17
Your Reference: Core-06-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

102 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00131**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269202	11
269203	8
269204	10
269205	696
269206	7
269207	6
269208	6
269209	5
269210	7
269211	6
269212	5
269213	6
269214	5
269215	8
269216	8
269217	7
269218	5
269219	7
269220	6
269221	7
269222	7
269223	439
269224	6
269225	7
269226	6
269227	5
269228	13
269229	5
269230	6
269231	8
269232	5
269233	6
269234	6
269235	6
269236	6
269237	7
269238	725
269239	< 5
269240	9
269241	< 5
269242	< 5
269243	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269244	5
269245	< 5
269246	< 5
269247	< 5
269248	< 5
269249	< 5
269250	< 5
269251	< 5
269252	< 5
269253	< 5
269254	< 5
269255	< 5
269256	< 5
269257	5
269258	5
269259	6
269260	5
269261	9
269262	7
269263	7
269264	7
269265	< 5
269266	6
269267	< 5
269268	716
269269	6
269270	9
269271	5
269272	< 5
269273	< 5
269274	< 5
269275	< 5
269276	< 5
269277	< 5
269278	12
269279	5
269280	< 5
269281	11
269282	< 5
269283	406
269284	< 5
269285	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269286	< 5
269287	< 5
269288	< 5
269289	< 5
269290	< 5
269291	< 5
269292	< 5
269293	< 5
269294	< 5
269295	< 5
269296	< 5
269297	< 5
269298	693
269299	< 5
269300	< 5
269301	< 5
269302	< 5
269303	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	517
OREAS 251 Cert	504.00
OREAS 251 Meas	509
OREAS 251 Cert	504.00
269211 Orig	7
269211 Dup	5
269221 Orig	5
269221 Dup	8
269231 Orig	10
269231 Dup	6
269246 Orig	< 5
269246 Dup	< 5
269251 Split Orig PREP DUP	< 5
269251 Split PREP DUP	6
269256 Orig	< 5
269256 Dup	< 5
269266 Orig	5
269266 Dup	7
269280 Orig	< 5
269280 Dup	< 5
269290 Orig	< 5
269290 Dup	< 5
269300 Orig	< 5
269300 Dup	< 5
269301 Split Orig	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
PREP DUP	
269301 Split PREP DUP	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 06-Jan-17
Invoice No.: A17-00132
Invoice Date: 12-Jan-17
Your Reference: Core-06-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

27 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00132**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265042	8
265043	< 5
265044	5
265045	< 5
265046	< 5
265047	787
265048	< 5
265049	6
265050	5
265051	18
265052	20
265053	6
265054	5
265055	6
265056	< 5
265057	6
265058	< 5
265059	5
265060	< 5
265061	5
265062	5
265063	< 5
265064	< 5
265065	6
265066	5
265067	46
265068	10

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	516
OREAS 251 Cert	504.00
265051 Orig	18
265051 Dup	17
265061 Orig	5
265061 Dup	5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 06-Jan-17
Invoice No.: A17-00133
Invoice Date: 11-Jan-17
Your Reference: Core-06-Jan-17-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

9 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00133**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
264260	9
264261	27
264262	45
264263	10
264264	8
264265	14
264266	20
264267	7
264268	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	529
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-Jan-17
Invoice No.: A17-00157
Invoice Date: 12-Jan-17
Your Reference: Core-09-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

149 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00157**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269304	< 5
269305	< 5
269306	< 5
269307	< 5
269308	< 5
269309	< 5
269310	5
269311	12
269312	6
269313	435
269314	6
269315	21
269316	7
269317	5
269318	5
269319	7
269320	6
269321	5
269322	6
269323	7
269324	10
269325	< 5
269326	20
269327	823
269328	8
269329	5
269330	5
269331	< 5
269332	7
269333	< 5
269334	< 5
269335	11
269336	5
269337	8
269338	26
269339	9
269340	15
269341	9
269342	465
269343	7
269344	56
269345	11

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269346	5
269347	5
269348	5
269349	5
269350	6
269351	5
269352	5
269353	7
269354	6
269355	5
269356	679
269357	6
269358	7
269359	6
269360	6
269361	7
269362	6
269363	6
269364	5
269365	7
269366	7
269367	6
269368	6
269369	6
269370	6
269371	373
269372	6
269373	< 5
269374	< 5
269375	< 5
269376	< 5
269377	< 5
269378	< 5
269379	< 5
269380	< 5
269381	< 5
269382	< 5
269383	< 5
269384	< 5
269385	690
269386	< 5
269387	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269388	< 5
269389	< 5
269390	< 5
269391	< 5
269392	< 5
269393	< 5
269394	< 5
269395	< 5
269396	< 5
269397	< 5
269398	< 5
269399	< 5
269400	< 5
269401	< 5
269402	< 5
269403	420
269404	< 5
269405	< 5
269406	< 5
269407	< 5
269408	< 5
269409	< 5
269410	< 5
269411	< 5
269412	< 5
269413	< 5
269414	< 5
269415	< 5
269416	< 5
269417	5
269418	< 5
269419	786
269420	< 5
269421	< 5
269422	< 5
269423	< 5
269424	< 5
269425	5
269426	5
269427	5
269428	< 5
269429	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269430	< 5
269431	< 5
269432	433
269433	< 5
269434	< 5
269435	< 5
269436	5
269437	< 5
269438	< 5
269439	< 5
269440	< 5
269441	< 5
269442	5
269443	< 5
269444	< 5
269445	< 5
269446	675
269447	< 5
269448	< 5
269449	5
269450	< 5
269451	< 5
269452	12

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	521
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1700
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	525
OREAS 251 Cert	504.00
OREAS 251 Meas	492
OREAS 251 Cert	504.00
OREAS 251 Meas	532
OREAS 251 Cert	504.00
OREAS 251 Meas	522
OREAS 251 Cert	504.00
269314 Orig	6
269314 Dup	5
269323 Orig	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269323 Dup	7
269333 Orig	5
269333 Dup	< 5
269348 Orig	5
269348 Dup	5
269353 Split Orig PREP DUP	7
269353 Split PREP DUP	7
269358 Orig	6
269358 Dup	7
269368 Orig	6
269368 Dup	6
269382 Orig	< 5
269382 Dup	< 5
269392 Orig	< 5
269392 Dup	< 5
269402 Split Orig PREP DUP	< 5
269402 Split PREP DUP	5
269402 Orig	< 5
269402 Dup	< 5
269416 Orig	< 5
269416 Dup	< 5
269426 Orig	5
269426 Dup	5
269436 Orig	5
269436 Dup	5
269451 Orig	< 5
269451 Dup	5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-Jan-17
Invoice No.: A17-00158
Invoice Date: 13-Jan-17
Your Reference: Core-09-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

107 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00158**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265069	< 5
265070	< 5
265071	< 5
265072	< 5
265073	892
265074	< 5
265075	< 5
265076	< 5
265077	< 5
265078	< 5
265079	< 5
265080	< 5
265081	< 5
265082	< 5
265083	< 5
265084	< 5
265085	< 5
265086	< 5
265087	< 5
265088	< 5
265089	< 5
265090	429
265091	< 5
265092	< 5
265093	5
265094	< 5
265095	5
265096	5
265097	5
265098	< 5
265099	5
265100	5
265101	5
265102	< 5
265103	< 5
265104	< 5
265105	< 5
265106	< 5
265107	< 5
265108	< 5
265109	< 5
265110	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265111	< 5
265112	< 5
265113	< 5
265114	< 5
265115	< 5
265116	< 5
265117	859
265118	6
265119	< 5
265120	83
265121	22
265122	< 5
265123	< 5
265124	< 5
265125	< 5
265126	< 5
265127	< 5
265128	< 5
265129	< 5
265130	< 5
265131	< 5
265132	< 5
265133	< 5
265134	< 5
265135	< 5
265136	< 5
265137	< 5
265138	5
265139	6
265140	6
265141	442
265142	5
265143	< 5
265144	88
265145	8
265146	9
265147	7
265148	8
265149	< 5
265150	12
265151	< 5
265152	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265153	< 5
265154	< 5
265155	< 5
265156	< 5
265157	< 5
265158	< 5
265159	< 5
265160	21
265161	< 5
265162	400
265163	9
265164	7
265165	< 5
265166	6
265167	< 5
265168	8
265169	5
265170	< 5
265171	< 5
265172	59
265173	8
265174	6
265175	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	477
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1730
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1720
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	502
OREAS 251 Cert	504.00
OREAS 251 Meas	515
OREAS 251 Cert	504.00
OREAS 251 Meas	531
OREAS 251 Cert	504.00
265078 Orig	< 5
265078 Dup	< 5
265088 Orig	< 5
265088 Dup	< 5
265098 Orig	< 5
265098 Dup	5
265113 Orig	< 5
265113 Dup	< 5
265118 Split Orig PREP DUP	6
265118 Split	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
PREP DUP	
265123 Orig	< 5
265123 Dup	< 5
265133 Orig	< 5
265133 Dup	< 5
265147 Orig	6
265147 Dup	7
265157 Orig	< 5
265157 Dup	< 5
265167 Orig	< 5
265167 Dup	< 5
265168 Split Orig PREP DUP	8
265168 Split PREP DUP	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-Jan-17
Invoice No.: A17-00159
Invoice Date: 13-Jan-17
Your Reference: Core-09-Jan-17-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

81 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00159**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229309	< 5
229310	< 5
229311	6
229312	5
229313	6
229314	5
229315	< 5
229316	7
229317	6
229318	< 5
229319	10
229320	6
229321	801
229322	7
229323	< 5
229324	< 5
229325	5
229326	67
229327	15
229328	11
229329	11
229330	6
229331	25
229332	38
229333	< 5
229334	5
229335	6
229336	364
229337	5
229338	< 5
229339	< 5
229340	21
229341	5
229342	7
229343	6
229344	< 5
229345	< 5
229346	< 5
229347	< 5
229348	< 5
229349	< 5
229350	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229351	< 5
229352	627
229353	< 5
229354	< 5
229355	9
229356	7
229357	< 5
229358	< 5
229359	< 5
229360	< 5
229361	6
229362	7
229363	11
229364	8
229365	6
229366	< 5
229367	425
229368	< 5
229369	< 5
229370	< 5
229371	< 5
229372	< 5
229373	< 5
229374	< 5
229375	< 5
229376	< 5
229377	6
229378	5
229379	< 5
229380	5
229381	803
229382	< 5
229383	< 5
229384	< 5
229385	< 5
229386	< 5
229387	< 5
229388	< 5
229389	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1750
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	500
OREAS 251 Cert	504.00
OREAS 251 Meas	506
OREAS 251 Cert	504.00
OREAS 251 Meas	522
OREAS 251 Cert	504.00
229318 Orig	< 5
229318 Dup	< 5
229328 Orig	10
229328 Dup	11
229338 Orig	8
229338 Dup	< 5
229353 Orig	< 5
229353 Dup	< 5
229358 Split Orig PREP DUP	< 5
229358 Split PREP DUP	6
229363 Orig	10
229363 Dup	11
229373 Orig	< 5
229373 Dup	5
229387 Orig	< 5
229387 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 10-Jan-17
Invoice No.: A17-00207
Invoice Date: 13-Jan-17
Your Reference: Core-10-Jan-17-TS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

23 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00207**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269453	5
269454	< 5
269455	< 5
269456	< 5
269457	< 5
269458	< 5
269459	< 5
269460	< 5
269461	405
269462	< 5
269463	< 5
269464	< 5
269465	< 5
269466	< 5
269467	< 5
269468	< 5
269469	< 5
269470	< 5
269471	< 5
269472	< 5
269473	< 5
269474	< 5
269475	733

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	513
OREAS 251 Cert	504.00
269462 Orig	< 5
269462 Dup	< 5
269472 Orig	< 5
269472 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 10-Jan-17
Invoice No.: A17-00209
Invoice Date: 13-Jan-17
Your Reference: Core-10-Jan-17-TS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

41 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00209**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229390	< 5
229391	< 5
229392	< 5
229393	< 5
229394	< 5
229395	< 5
229396	425
229397	< 5
229398	< 5
229399	< 5
229400	< 5
229401	< 5
229402	< 5
229403	< 5
229404	< 5
229405	< 5
229406	5
229407	< 5
229408	< 5
229409	< 5
229410	793
229411	5
229412	5
229413	< 5
229414	< 5
229415	< 5
229416	< 5
229417	< 5
229418	< 5
229419	532
229420	26
229421	10
229422	12
229423	5
229424	44
229425	553
229426	< 5
229427	< 5
229428	19
229429	< 5
229430	9

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	487
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	528
OREAS 251 Cert	504.00
229399 Orig	< 5
229399 Dup	< 5
229409 Orig	< 5
229409 Dup	< 5
229419 Orig	512
229419 Dup	551
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 10-Jan-17
Invoice No.: A17-00210
Invoice Date: 13-Jan-17
Your Reference: Core-10-Jan-17-TS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

67 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00210**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265187	< 5
265188	< 5
265189	< 5
265190	< 5
265191	< 5
265192	< 5
265193	< 5
265194	113
265195	75
265196	444
265197	22
265198	< 5
265199	< 5
265200	5
265201	< 5
265202	< 5
265203	< 5
265204	666
265205	9
265206	< 5
265207	< 5
265208	< 5
265209	< 5
265210	< 5
265211	< 5
265212	< 5
265213	< 5
265214	< 5
265215	< 5
265216	< 5
265217	< 5
265218	< 5
265219	< 5
265220	< 5
265221	< 5
265222	< 5
265223	17
265224	5
265225	5
265226	5
265227	488
265228	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265229	< 5
265230	< 5
265231	< 5
265232	< 5
265233	< 5
265234	< 5
265235	< 5
265236	< 5
265237	< 5
265238	< 5
265239	< 5
265240	< 5
265241	< 5
265242	< 5
265243	< 5
265244	< 5
265245	< 5
265246	39
265247	< 5
265248	739
265249	< 5
265250	112
265251	< 5
265252	< 5
265253	8

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	504
OREAS 251 Cert	504.00
OREAS 251 Meas	511
OREAS 251 Cert	504.00
265196 Orig	436
265196 Dup	451
265206 Orig	< 5
265206 Dup	< 5
265216 Orig	< 5
265216 Dup	< 5
265231 Orig	< 5
265231 Dup	< 5
265236 Split Orig PREP DUP	< 5
265236 Split PREP DUP	< 5
265241 Orig	< 5
265241 Dup	< 5
265251 Orig	< 5
265251 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 11-Jan-17
Invoice No.: A17-00251
Invoice Date: 13-Jan-17
Your Reference: Core-11-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

43 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00251**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
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E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265254	< 5
265255	5
265256	5
265257	< 5
265258	5
265259	< 5
265260	5
265261	< 5
265262	5
265263	< 5
265264	< 5
265265	< 5
265266	< 5
265267	< 5
265268	< 5
265269	< 5
265270	< 5
265271	< 5
265272	< 5
265273	< 5
265274	< 5
265275	< 5
265276	393
265277	< 5
265278	< 5
265279	< 5
265280	< 5
265281	5
265282	< 5
265283	< 5
265284	5
265285	5
265286	< 5
265287	5
265288	5
265289	< 5
265290	< 5
265291	< 5
265292	5
265293	45
265294	5
265295	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265296	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	524
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1890
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	532
OREAS 251 Cert	504.00
265263 Orig	< 5
265263 Dup	< 5
265273 Orig	< 5
265273 Dup	< 5
265283 Orig	< 5
265283 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 11-Jan-17
Invoice No.: A17-00252
Invoice Date: 13-Jan-17
Your Reference: Core-11-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

20 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00252**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229431	< 5
229432	< 5
229433	< 5
229434	< 5
229435	50
229436	20
229437	23
229438	76
229439	725
229440	207
229441	113
229442	451
229443	42
229444	16
229445	42
229446	88
229447	79
229448	120
229449	50
229450	11

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	523
OREAS 251 Cert	504.00
229440 Orig	209
229440 Dup	205
229450 Orig	11
229450 Dup	10
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 11-Jan-17
Invoice No.: A17-00253
Invoice Date: 13-Jan-17
Your Reference: Core-11-Jan-17-RS-3

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

32 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00253**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
229451	< 5
229452	5
229453	5
229454	< 5
229455	5
229456	5
229457	377
229458	< 5
229459	< 5
229460	31
229461	< 5
229462	5
229463	< 5
229464	5
229465	5
229466	< 5
229467	5
229468	5
229469	20
229470	< 5
229471	< 5
229472	753
229473	5
229474	5
229475	< 5
229476	< 5
229477	8
229478	< 5
229479	< 5
229480	5
229481	5
229482	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	527
OREAS 251 Cert	504.00
229460 Orig	32
229460 Dup	29
229470 Orig	< 5
229470 Dup	< 5
229480 Orig	5
229480 Dup	5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 12-Jan-17
Invoice No.: A17-00283
Invoice Date: 16-Jan-17
Your Reference: Core-12-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

42 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00283**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265297	< 5
265298	< 5
265299	< 5
265300	< 5
265301	< 5
265302	6
265303	723
265304	< 5
265305	< 5
265306	< 5
265307	6
265308	52
265309	< 5
265310	< 5
265311	< 5
265312	< 5
265313	< 5
265314	< 5
265315	< 5
265316	< 5
265317	< 5
265318	< 5
265319	385
265320	< 5
265321	< 5
265322	< 5
265323	< 5
265324	< 5
265325	< 5
265326	< 5
265327	< 5
265328	< 5
265329	< 5
265330	< 5
265331	< 5
265332	< 5
265333	< 5
265334	< 5
265335	< 5
265336	< 5
265337	< 5
265338	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	519
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	512
OREAS 251 Cert	504.00
265306 Orig	< 5
265306 Dup	< 5
265316 Orig	< 5
265316 Dup	< 5
265326 Orig	< 5
265326 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 12-Jan-17
Invoice No.: A17-00284
Invoice Date: 16-Jan-17
Your Reference: Core-12-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

52 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00284**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269476	6
269477	6
269478	< 5
269479	< 5
269480	< 5
269481	< 5
269482	< 5
269483	< 5
269484	< 5
269485	< 5
269486	5
269487	< 5
269488	14
269489	6
269490	412
269491	7
269492	15
269493	5
269494	11
269495	20
269496	6
269497	6
269498	5
269499	6
269500	6
269501	6
269502	8
269503	10
269504	662
269505	7
269506	6
269507	7
269508	6
269509	6
269510	6
269511	< 5
269512	< 5
269513	< 5
269514	< 5
269515	< 5
269516	< 5
269517	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269518	< 5
269519	404
269520	< 5
269521	< 5
269522	< 5
269523	< 5
269524	< 5
269525	< 5
269526	6
269527	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1760
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	495
OREAS 251 Cert	504.00
269485 Orig	6
269485 Dup	< 5
269495 Orig	20
269495 Dup	20
269505 Orig	7
269505 Dup	7
269520 Orig	< 5
269520 Dup	< 5
269527 Split Orig PREP DUP	6
269527 Split PREP DUP	6
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 13-Jan-17
Invoice No.: A17-00314
Invoice Date: 17-Jan-17
Your Reference: Core-13-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

74 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00314**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269528	< 5
269529	5
269530	< 5
269531	< 5
269532	< 5
269533	< 5
269534	774
269535	< 5
269536	< 5
269537	< 5
269538	< 5
269539	< 5
269540	< 5
269541	< 5
269542	< 5
269543	< 5
269544	< 5
269545	< 5
269546	< 5
269547	< 5
269548	< 5
269549	432
269550	73
269551	< 5
269552	< 5
269553	< 5
269554	< 5
269555	< 5
269556	< 5
269557	< 5
269558	< 5
269559	< 5
269560	< 5
269561	< 5
269562	< 5
269563	739
269564	< 5
269565	< 5
269566	< 5
269567	< 5
269568	< 5
269569	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269570	< 5
269571	< 5
269572	< 5
269573	< 5
269574	< 5
269575	< 5
269576	12
269577	5
269578	424
269579	41
269580	< 5
269581	< 5
269582	< 5
269583	< 5
229483	< 5
229484	< 5
229485	< 5
229486	< 5
229487	437
229488	< 5
229489	5
229490	< 5
229491	< 5
229492	5
229493	< 5
229494	< 5
229495	< 5
229496	< 5
229497	< 5
229498	< 5
229499	< 5
229500	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	519
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	501
OREAS 251 Cert	504.00
OREAS 251 Meas	531
OREAS 251 Cert	504.00
269537 Orig	< 5
269537 Dup	< 5
269547 Orig	< 5
269547 Dup	< 5
269557 Orig	< 5
269557 Dup	< 5
269572 Orig	< 5
269572 Dup	< 5
269577 Split Orig PREP DUP	5
269577 Split PREP DUP	< 5
269582 Orig	< 5
269582 Dup	< 5
229491 Orig	5
229491 Dup	< 5
Method Blank	< 5
Method Blank	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 13-Jan-17
Invoice No.: A17-00328
Invoice Date: 17-Jan-17
Your Reference: Core-13-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

62 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00328**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265339	< 5
265340	< 5
265341	< 5
265342	< 5
265343	< 5
265344	< 5
265345	662
265346	< 5
265347	< 5
265348	< 5
265349	< 5
265350	< 5
265351	< 5
265352	< 5
265353	< 5
265354	< 5
265355	< 5
265356	< 5
265357	< 5
265358	< 5
265359	< 5
265360	< 5
265361	< 5
265362	< 5
265363	< 5
265364	< 5
265365	< 5
265366	< 5
265367	5
265368	< 5
265369	463
265370	10
265371	< 5
265372	< 5
265373	< 5
265374	5
265375	< 5
265376	757
265377	738
265378	4780
265379	3590
265380	44

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265381	18
265382	8
265383	11
265384	< 5
265385	9
265386	12
265387	104
265388	32
265389	5
265390	10
265391	376
265392	17
265393	21
265394	15
265395	625
265396	9
265397	5
265398	5
265399	10
265400	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1870
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	522
OREAS 251 Cert	504.00
OREAS 251 Meas	523
OREAS 251 Cert	504.00
265348 Orig	< 5
265348 Dup	< 5
265358 Orig	< 5
265358 Dup	< 5
265368 Orig	< 5
265368 Dup	< 5
265383 Orig	12
265383 Dup	9
265388 Split Orig PREP DUP	32
265388 Split PREP DUP	45
265393 Orig	22
265393 Dup	20
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 16-Jan-17
Invoice No.: A17-00360
Invoice Date: 18-Jan-17
Your Reference: Core-16-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

110 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00360**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265401	11
265402	673
265403	< 5
265404	< 5
265405	12
265406	< 5
265407	< 5
265408	< 5
265409	< 5
265410	< 5
265411	8
265412	< 5
265413	< 5
265414	< 5
265415	< 5
265416	< 5
265417	422
265418	< 5
265419	< 5
265420	< 5
265421	< 5
265422	< 5
265423	< 5
265424	< 5
265425	< 5
265426	< 5
265427	< 5
265428	< 5
265429	744
265430	< 5
265431	< 5
265432	< 5
265433	< 5
265434	< 5
265435	< 5
265436	< 5
265437	< 5
265438	< 5
265439	< 5
265440	< 5
265441	< 5
265442	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265443	< 5
265444	407
265445	< 5
265446	< 5
265447	< 5
265448	7
265449	< 5
265450	< 5
265451	< 5
265452	< 5
265453	< 5
265454	< 5
265455	< 5
265456	< 5
265457	< 5
265458	10
265459	708
265460	< 5
265461	< 5
265462	< 5
265463	< 5
265464	< 5
265465	< 5
265466	< 5
265467	< 5
265468	< 5
265469	< 5
265470	< 5
265471	6
265472	< 5
265473	5
265474	461
265475	< 5
265476	< 5
265477	< 5
265478	< 5
265479	< 5
265480	< 5
265481	< 5
265482	< 5
265483	5
265484	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265485	< 5
265486	< 5
265487	5
265488	961
265489	< 5
265490	< 5
265491	< 5
265492	< 5
265493	< 5
265494	15
265495	< 5
265496	< 5
265497	< 5
265498	< 5
265499	< 5
265500	< 5
265501	< 5
265502	459
265503	< 5
265504	< 5
265505	< 5
265506	< 5
265507	< 5
265508	< 5
265509	< 5
265510	5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	532
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1820
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	526
OREAS 251 Cert	504.00
OREAS 251 Meas	520
OREAS 251 Cert	504.00
OREAS 251 Meas	514
OREAS 251 Cert	504.00
265410 Orig	< 5
265410 Dup	< 5
265420 Orig	< 5
265420 Dup	< 5
265430 Orig	< 5
265430 Dup	< 5
265445 Orig	< 5
265445 Dup	< 5
265450 Split Orig PREP DUP	< 5
265450 Split	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
PREP DUP	
265455 Orig	< 5
265455 Dup	< 5
265465 Orig	< 5
265465 Dup	< 5
265479 Orig	< 5
265479 Dup	6
265489 Orig	< 5
265489 Dup	< 5
265499 Orig	< 5
265499 Dup	< 5
265500 Split Orig PREP DUP	< 5
265500 Split PREP DUP	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 16-Jan-17
Invoice No.: A17-00364
Invoice Date: 18-Jan-17
Your Reference: Core-16-Jan-17-RS-2

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

111 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00364**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269584	< 5
269585	< 5
269586	< 5
269587	< 5
269588	< 5
269589	< 5
269590	< 5
269591	< 5
269592	< 5
269593	658
269594	< 5
269595	< 5
269596	< 5
269597	< 5
269598	< 5
269599	< 5
269600	< 5
269601	< 5
269602	< 5
269603	< 5
269604	< 5
269605	< 5
269606	< 5
269607	369
269608	< 5
269609	< 5
269610	< 5
269611	< 5
269612	< 5
269613	< 5
269614	< 5
269615	< 5
269616	< 5
269617	< 5
269618	6
269619	< 5
269620	< 5
269621	< 5
269622	690
269623	< 5
269624	< 5
269625	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269626	< 5
269627	< 5
269628	< 5
269629	< 5
269630	< 5
269631	< 5
269632	6
269633	5
269634	< 5
269635	< 5
269636	5
269637	425
269638	< 5
269639	< 5
269640	< 5
269641	< 5
269642	< 5
269643	< 5
269644	< 5
269645	< 5
269646	< 5
269647	< 5
269648	< 5
269649	< 5
269650	9
269651	9
269652	748
269653	8
269666	6
269667	457
269668	7
269669	6
269670	6
269671	6
269672	7
269673	8
269674	7
269675	7
269676	7
269677	7
269678	< 5
269679	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269680	< 5
269681	< 5
269682	712
269683	< 5
269684	< 5
269685	< 5
269686	< 5
269687	< 5
269688	< 5
269689	< 5
269690	< 5
269691	< 5
269692	< 5
269693	< 5
269694	< 5
269695	< 5
269696	< 5
269697	397
269698	< 5
269699	< 5
269700	< 5
269701	< 5
269702	< 5
269703	< 5
269704	< 5
269705	< 5
269706	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	520
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	529
OREAS 251 Cert	504.00
OREAS 251 Meas	521
OREAS 251 Cert	504.00
OREAS 251 Meas	534
OREAS 251 Cert	504.00
269592 Orig	< 5
269592 Dup	< 5
269603 Orig	< 5
269603 Dup	< 5
269613 Orig	< 5
269613 Dup	< 5
269628 Orig	< 5
269628 Dup	< 5
269633 Split Orig PREP DUP	5
269633 Split	6

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
PREP DUP	
269638 Orig	< 5
269638 Dup	< 5
269648 Orig	< 5
269648 Dup	< 5
269674 Orig	7
269674 Dup	7
269684 Orig	< 5
269684 Dup	< 5
269694 Orig	< 5
269694 Dup	< 5
269695 Split Orig PREP DUP	< 5
269695 Split PREP DUP	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 19-Jan-17
Invoice No.: A17-00530
Invoice Date: 23-Jan-17
Your Reference: Core-19-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

136 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00530**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269707	< 5
269708	< 5
269709	< 5
269710	< 5
269711	< 5
269712	< 5
269713	758
269714	< 5
269715	< 5
269716	< 5
269717	< 5
269718	< 5
269719	< 5
269720	< 5
269721	6
269722	7
269723	16
269724	5
269725	< 5
269726	< 5
269727	< 5
269728	478
269729	< 5
269730	5
269731	< 5
269732	< 5
269733	< 5
269734	< 5
269735	< 5
269736	< 5
269737	< 5
269738	< 5
269739	< 5
269740	< 5
269741	< 5
269742	19
269743	804
269744	< 5
269745	< 5
269746	8
269747	< 5
269748	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269749	< 5
269750	< 5
269751	< 5
269752	< 5
269753	< 5
269754	< 5
269755	< 5
269756	< 5
269757	468
269758	< 5
269759	< 5
269760	< 5
269761	< 5
269762	< 5
269763	< 5
269764	< 5
269765	< 5
269766	< 5
269767	< 5
269768	< 5
269769	< 5
269770	6
269771	8
269772	676
269773	5
269774	< 5
269775	< 5
269654	< 5
269655	< 5
269656	< 5
269657	< 5
269658	< 5
269659	< 5
269660	< 5
269661	< 5
269662	< 5
269663	< 5
269664	20
269665	7
269828	24
269829	37
269830	380

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269831	153
269832	6
269833	1940
269834	21
269835	< 5
269836	7
269837	5
269838	< 5
269839	5
269840	< 5
269841	33
269842	246
269843	13
269844	8
269845	10
269846	39
269847	15
269848	410
269849	18
269850	59
269851	11
269852	< 5
269853	16
269854	12
269855	13
269856	13
269857	7
269858	20
269859	48
269860	37
269861	28
269862	11
269863	2060
269864	6
269865	7
269866	13
269867	20
269868	6
269869	29
269870	< 5
269871	26
269872	25

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269873	6
269874	32
269875	11
269876	279
269877	24
269878	590
269879	46
269880	27
269881	6
269882	10

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1850
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1780
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1840
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	520
OREAS 251 Cert	504.00
OREAS 251 Meas	531
OREAS 251 Cert	504.00
269716 Orig	< 5
269716 Dup	< 5
269726 Orig	< 5
269726 Dup	< 5
269736 Orig	< 5
269736 Dup	< 5
269751 Orig	5
269751 Dup	< 5
269756 Split Orig PREP DUP	< 5
269756 Split PREP DUP	< 5
269761 Orig	< 5
269761 Dup	< 5
269771 Orig	5
269771 Dup	10
269663 Orig	< 5
269663 Dup	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269835 Orig	5
269835 Dup	< 5
269845 Orig	10
269845 Dup	9
269846 Split Orig PREP DUP	39
269846 Split PREP DUP	15
269859 Orig	47
269859 Dup	49
269869 Orig	30
269869 Dup	27
269879 Orig	46
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 20-Jan-17
Invoice No.: A17-00562
Invoice Date: 24-Jan-17
Your Reference: Core-20-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

76 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00562**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

kiwa ISO 9001 QUALITY QUALITY MANAGEMENT

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269776	10
269777	< 5
269778	24
269779	6
269780	< 5
269781	< 5
269782	< 5
269783	6
269784	5
269785	5
269786	10
269787	482
269788	5
269789	< 5
269790	< 5
269791	5
269792	5
269793	12
269794	7
269795	5
269796	10
269797	5
269798	< 5
269799	< 5
269800	8
269801	< 5
269802	< 5
269803	2030
269804	5
269805	< 5
269806	10
269807	5
269808	8
269809	5
269810	< 5
269811	9
269812	5
269813	< 5
269814	33
269815	6
269816	7
269817	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269818	392
269819	6
269820	5
269821	45
269822	19
269823	23
269824	20
269825	22
269826	32
269827	74
265511	5
265512	< 5
265513	< 5
265514	< 5
265515	< 5
265516	6
265517	2090
265518	8
265519	7
265520	5
265521	5
265522	33
265523	6
265524	< 5
265525	7
265526	32
265527	33
265528	< 5
265529	10
265530	6
265531	428
265532	5
265533	< 5
265534	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	512
OREAS 251(FA-Anaster) Cert	504
OREAS 251(FA-Anaster) Meas	525
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1790
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1800
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	520
OREAS 251 Cert	504.00
OREAS 251 Meas	490
OREAS 251 Cert	504.00
269795 Orig	5
269795 Dup	5
269805 Orig	< 5
269805 Dup	< 5
269820 Orig	5
269820 Dup	5
269826 Split Orig PREP DUP	32

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
269826 Split PREP DUP	29
265513 Orig	5
265513 Dup	< 5
265523 Orig	6
265523 Dup	5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 23-Jan-17
Invoice No.: A17-00627
Invoice Date: 26-Jan-17
Your Reference: Core-23-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

97 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00627**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265535	12
265536	< 5
265537	6
265538	< 5
265539	< 5
265540	6
265541	5
265542	7
265543	6
265544	< 5
265545	7
265546	2040
265547	6
265548	< 5
265549	< 5
265550	< 5
265551	< 5
265552	< 5
265553	< 5
265554	< 5
265555	< 5
265556	< 5
265557	< 5
265558	< 5
265559	< 5
265560	< 5
265561	432
265562	< 5
265563	< 5
265564	< 5
265565	< 5
265566	< 5
265567	< 5
265568	< 5
265569	< 5
265570	5
265571	8
265572	< 5
265573	< 5
265574	6
265575	< 5
265576	1740

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265577	< 5
265578	5
265579	< 5
265580	< 5
265581	6
265582	< 5
265583	< 5
265584	< 5
265585	5
265586	< 5
265587	< 5
265588	9
265589	< 5
265590	< 5
265591	352
265592	< 5
265593	5
265594	9
265595	< 5
265596	< 5
265597	12
265598	9
265599	< 5
265600	14
265601	10
265602	16
265603	17
265604	15
265605	29
265606	16
265607	1950
265608	5
265609	< 5
265610	6
265611	6
265612	6
265613	11
265614	8
265615	7
265616	7
265617	9
265618	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265619	6
265620	8
265621	8
265622	390
265623	< 5
265624	6
265625	12
265626	6
265627	5
265628	6
265629	< 5
265630	10
265631	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 16A (FA-Ancaster) Meas	1770
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1830
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1810
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	498
OREAS 251 Cert	504.00
OREAS 251 Meas	505
OREAS 251 Cert	504.00
OREAS 251 Meas	520
OREAS 251 Cert	504.00
265544 Orig	< 5
265544 Dup	< 5
265554 Orig	< 5
265554 Dup	< 5
265564 Orig	6
265564 Dup	< 5
265579 Orig	< 5
265579 Dup	< 5
265585 Split Orig PREP DUP	5
265585 Split PREP DUP	< 5
265589 Orig	6
265589 Dup	< 5
265599 Orig	< 5
265599 Dup	< 5
265613 Orig	11
265613 Dup	10
265623 Orig	< 5
265623 Dup	< 5
Method Blank	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted: 24-Jan-17
Invoice No.: A17-00699
Invoice Date: 30-Jan-17
Your Reference: Core-24-Jan-17-RS-1

Greenstone Gold Mines GP Inc.
135 Hardrock Road
Geraldton ON P0T 1M0
Canada

ATTN: Tom Salmi(res)

CERTIFICATE OF ANALYSIS

46 Core samples were submitted for analysis.

The following analytical package(s) were requested: Code 1A2-50-Geraldton Au - Fire Assay AA

REPORT **A17-00699**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
801 Main Street, P.O. Box 999, Geraldton, Ontario, Canada, P0T 1M0
TELEPHONE +807 854-2020 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Geraldton@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265632	5
265633	< 5
265634	< 5
265635	< 5
265636	< 5
265637	2090
265638	< 5
265639	8
265640	5
265641	< 5
265642	10
265643	< 5
265644	5
265645	< 5
265646	< 5
265647	< 5
265648	< 5
265649	< 5
265650	< 5
265651	< 5
265652	429
265653	< 5
265654	< 5
265655	< 5
265656	< 5
265657	< 5
265658	< 5
265659	< 5
265660	< 5
265661	< 5
265662	< 5
265663	< 5
265664	< 5
265665	< 5
265666	14
265667	1910
265668	< 5
265669	< 5
265670	< 5
265671	< 5
265672	< 5
265673	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
265674	< 5
265675	< 5
265676	< 5
265677	< 5

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
OREAS 251(FA-Anaster) Meas	524
OREAS 251(FA-Anaster) Cert	504
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 16A (FA-Ancaster) Meas	1860
OREAS 16A (FA-Ancaster) Cert	1810
OREAS 251 Meas	511
OREAS 251 Cert	504.00
265641 Orig	< 5
265641 Dup	< 5
265651 Orig	< 5
265651 Dup	< 5
265661 Orig	< 5
265661 Dup	< 5
265676 Orig	< 5
265676 Dup	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5