REPORT ON THE DAYOHESSARAH LAKE PROPERTY
2012 EXPLORATION PROGRAMS,
SAULT STE. MARIE MINING DIVISION,
ONTARIO

PREPARED ON BEHALF OF HARTE GOLD CORP

Gregory McKay, G.I.T.
14/05/13

HARTE GOLD CORP

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SUMMARY

The Dayohessarah Lake Property is located equidistant from Sault Ste. Marie and Thunder Bay, Ontario, 60 km east of the Hemlo Gold Camp and approximately 25 km north of the town of White River, Ontario. The property encompasses the entire Dayohessarah Greenstone Belt, including the Sugar Zone and the newly discovered Wolf Zone. The property consists of 413 contiguous mining claims comprised of 1,840 claim units. Most of the property is in the name of Harte Gold Corp., except for three claims, which are under option from Lloyd Halverson, and are subject to an option agreement. A large number of the claims, including those which cover the Sugar Zone and Wolf Zone areas, are subject to a 3.5% net smelter royalty. This report describes the exploration programs between January 2012 and December 2012.

Exploration for gold and base metals on the property began in 1969. After an initial exploration program by Canex Aerial Exploration Ltd., the property was not explored again for over 10 years until 1983, after the discovery of the nearby Hemlo Gold Camp. The Sugar Zone was first discovered in 1991 by Hemlo Gold Mines Inc. There have been 8 diamond drill programs on the Sugar Zone between its discovery and 2012. Most of the exploration on the property has consisted of geophysical surveys, diamond drilling and prospecting.

The Dayohessarah Greenstone Belt is situated between the larger Hemlo Greenstone Belt to the west and the Kabinakagami Greenstone Belt to the east, which together make up the Schreiber-White River Belt of the Wawa Subprovince of the Superior Craton. The late Archean Dayohessarah Greenstone Belt trends northwards and forms a narrow, eastward concave crescent. The belt is approximately 36 km in length and between 1.5 and 5.5 km in width. The belt mostly consists of moderately to highly deformed metamorphosed volcanics, volcanoclastics and sediments, which have been enclosed and intruded by tonalitic to granodioritic quartz-porphyry plutons.

The belt has been metamorphosed to upper greenschist to amphibolite facies. The belt has been strongly foliated and strained, caused by the emplacement of the Strickland Pluton. The main area of focus on the belt is the gold-bearing Sugar Zone.

A prospecting program was conducted on the property. The program covered a large portion of the property but focused on four main areas:
1) An IP anomaly along the northeast corner of Dayohessarah Lake with old prospecting samples returning grades up to 7.0 g/t Au.

2) A potential nickel-copper anomaly at the north end of Dayohessarah Lake, defined in an airborne VTEM survey.
3) A few ground IP targets on the Wolf Zone Grid, east and north of the Wolf Zone.
4) Follow up on the Gossan Zone on the west side of Dayohessarah Lake.

Only the first area of focus returned any gold assays of interest, with samples up to 1.7 g/t Au. Overburden thickness continues to be a problem during prospecting as it reduces the amount of outcropping.

A thin section analysis of the Peacock Boulders was performed to help determine the source location of the Peacock Boulders. This was done after visual inspection of the Peacock Boulders compared to the Wolf Zone indicated that the Wolf Zone was not the source of the Peacock Boulders. The analysis showed that the Peacock Boulders are from a zone of schistose amphibolite which has undergone an extensive ductile to brittle-ductile deformation history within a shear zone.

In an effort to obtain enough bulk material for a representative bulk sample for ball mill test work of the Sugar Zone ore, a trenching and blasting program was undertaken. Four trenches were created along strike of the Sugar Zone, in the southern half of the Block Model Area. Three of the new trenches, along with three older trenches were chosen to blast and take samples from. The trenches were chosen based on grade and zone width.

A total of 6,283.92 meters was drilled in 12 holes on the Sugar Zone as well as 375.00 meters in two holes targeting an IP anomaly north-east of Dayohessarah Lake, and 333.00 meters in two holes north of the Wolf Zone. Drilling on the Sugar Zone was successful in expanding the defined mineralized Sugar Zone to depths up to 600 vertical meters, and in confirming the Sugar Zone mineralization at a depth of 1,000 vertical meters. The four drill holes outside of the Sugar Zone were not successful in intersecting any significant gold mineralization.

1.0. INTRODUCTION

1.1 GENERAL

In 1998, Harte Gold Corp. (Harte) entered into an option agreement on most of the unpatented mining claims comprising the Dayohessarah Lake Property, including the Sugar Zone. Harte Subsequently entered into a Joint Venture agreement with Corona Gold Corp.

The original claims are subject to a 3.5% net smelter royalty (“NSR”). The Joint Venture participants, namely Corona (51%) and Harte (49%), have the option of acquiring 1.5% of the 3.5% NSR for $1.5 million, in proportion to their respective interest and have, in addition, the right of first refusal on the remaining 2.0% NSR.

Harte and Corona entered into an Option Agreement (the “Corona Option”) dated May 28, 2010, entitling Harte to acquire Corona’s 51% interest in the Sugar Zone Joint Venture upon completion of certain conditions. Effective March 10, 2010, Harte became the Operator of the Sugar Zone Joint Venture for as long as the Corona Option remained in good standing. Harte completed all required conditions and as of May 23, 2012 acquired Corona’s 51% interest to became the 100% owner and operator of all of the claims which were previously part of the Sugar Zone Joint Venture.

On June 28, 2010, Harte entered into an Option Agreement to acquire three mining claims contiguous to the claims previously held. In November 2010, eighty-three additional unpatented mining claims were staked around the Sugar Zone Property in order to provide a buffer zone around the core mining claims. As of the date hereof, Harte holds a total of a total of 413 mining claims covering an area of approximately 29,300 hectares.

This report has been written to summarize the exploration program, and the results obtained from the field operations, by Harte Gold Corp. on the Dayohessarah Lake Property between January 2012 and December 2012.

1.2 SOURCES OF INFORMATION

Documents used in the preparation of this report are listed under "References".

1.3 UNITS AND CURRENCY

Metric units are used throughout this report. Tonnages are shown as tonnes (1,000 kg), linear measurements as m ("m"), or kilometres ("km") and precious metal values as grams ("g"), grams of gold per tonne ("g/t Au").

Best drill hole gold assay intersections have been tabulated in metric units. Gold ("Au") is the principal mineral of economic interest. Any results from historic work, which is represented in imperial units, have been converted to metric units using the following conversions.

1.0 ounce per short ton (opt) = 34.2857 grams per metric tonne (g/t)
1.0 metric ton (1,000 kg) = tonne (T) = 1.10231 short tons
1.0 metre = 3.28 feet

2.0. PROPERTY DESCRIPTION AND LOCATION

2.1 LOCATION AND ACCESS

The Dayohessarah Lake Property is situated approximately 25 km northeast of the Town of White River (Trans-Canada Highway No. 17) and 60 km east of the Hemlo gold camp. The Property is approximately equidistant from Sault Ste. Marie to the south-east and Thunder Bay to the west (Figure 1). The overall Property encompasses NTS zones 42C/ 10, 11, 14 and 15 and the gold mineralized occurrences are exposed at Latitude 48°48' north, Longitude 85°10' west. The property covers parts of the Odlum, Strickland, Gourlay, Tedder and Hambleton Townships, and falls within the Sault Ste. Marie Mining Division.

The Property can be accessed via a series of logging roads and drill trails extending north from the community of White River. Access is also available by way of float plane, based in

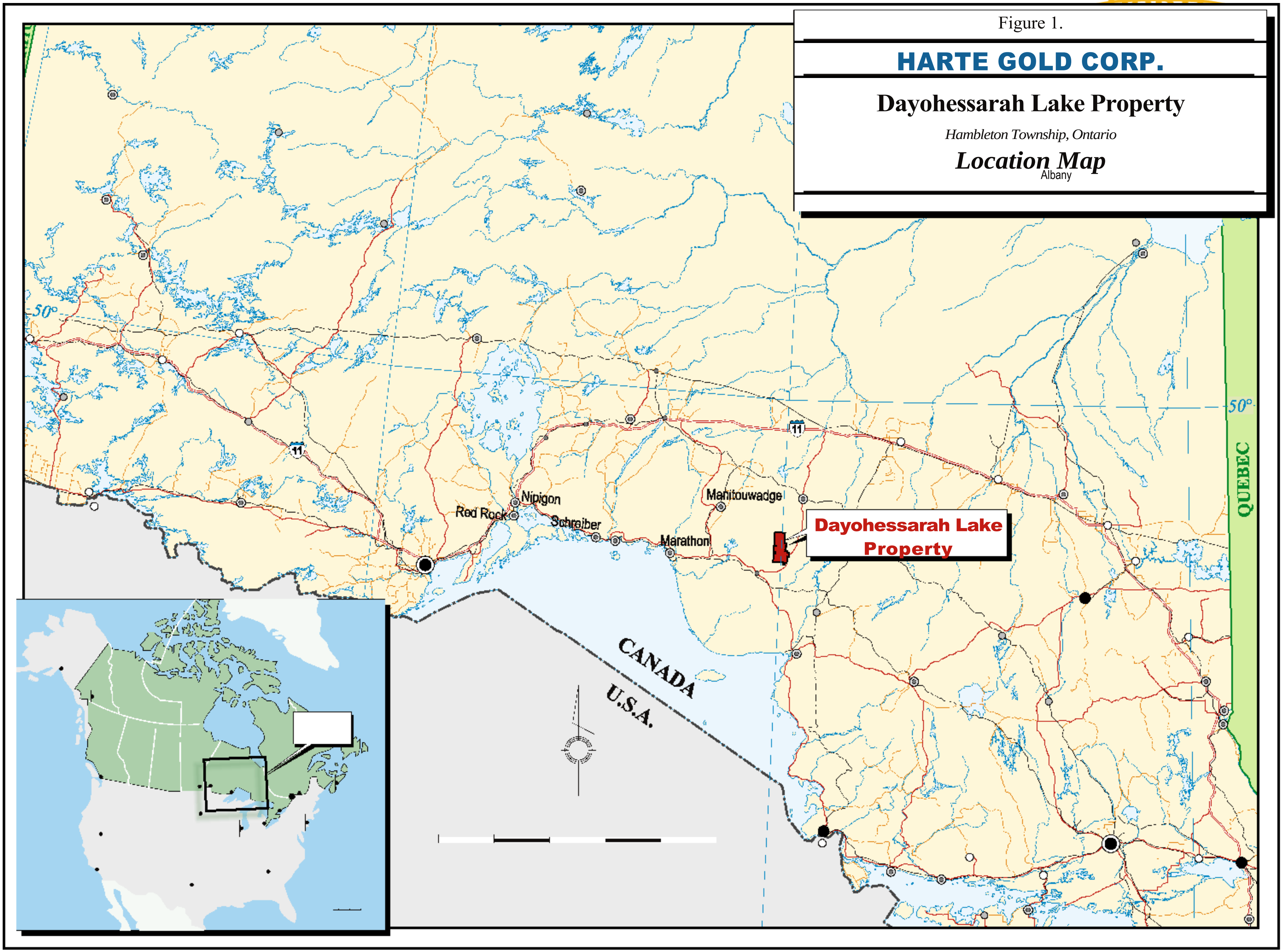


Figure 1.

HARTE GOLD CORP.

Dayohessarah Lake Property

Hambleton Township, Ontario

Location Map

Watts, Griffis and McOuat

White River via Dayohessarah Lake or Hambleton Lake, and by helicopter based in Wawa or Marathon.

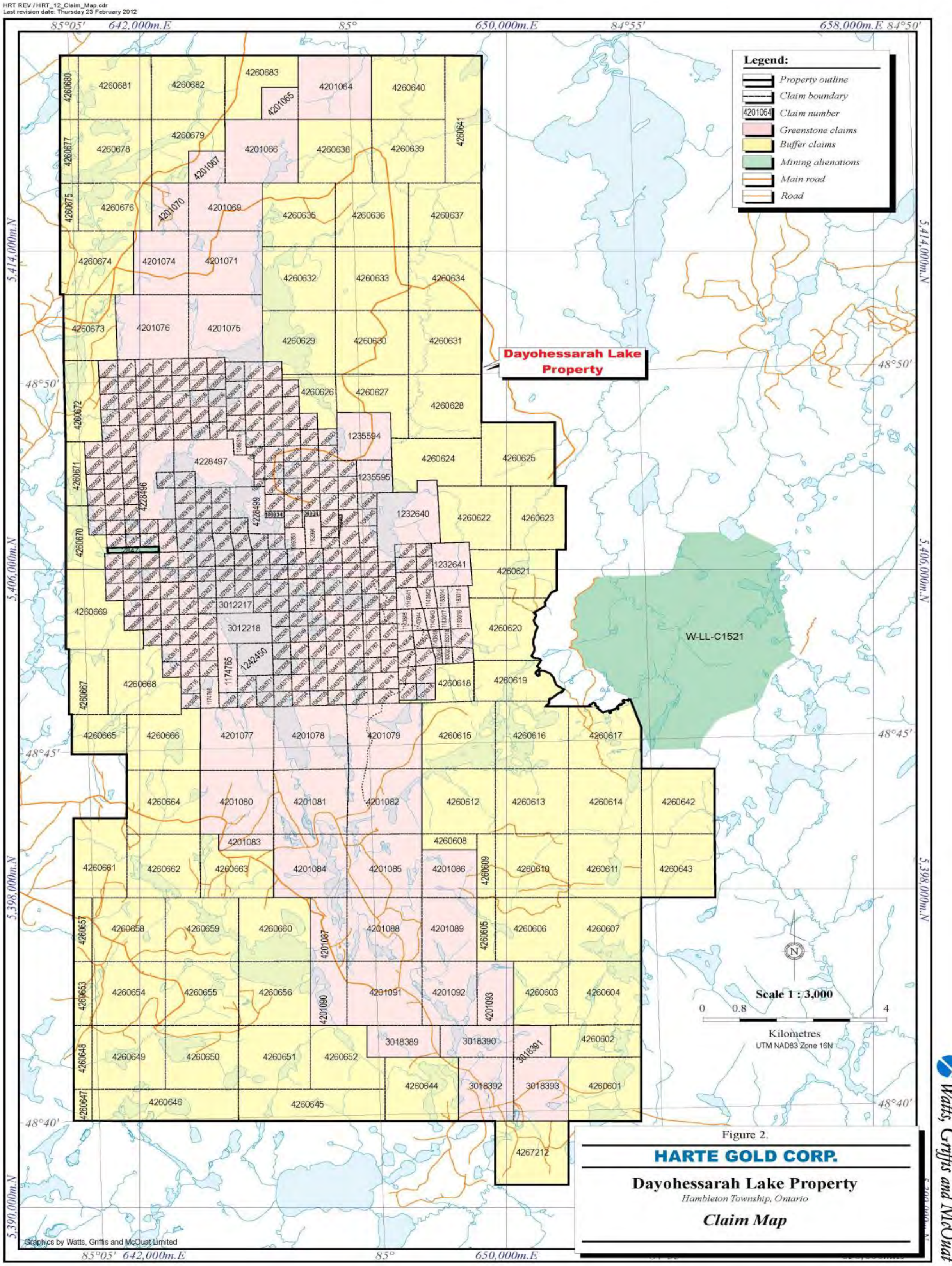
The western and southern portions of the Property are accessible via a series of logging roads controlled by White River Forest Products Limited. Road No. 100 extends north from the western end of White River. Road No. 200 intersects Road No. 100 20 km from Highway 17 and provides access to the western and southern portions of the property. Road No. 300 intersects Road No. 100 36 km from Highway 17 and provides access to the very northern portion of the Property. Road No. 305 intersects Road No. 300 6 km from Road No. 100 and provides access to northern and eastern parts of the Property. Road access to within 400 m of the Sugar Zone is available via a small road heading south and southwest from Road No. 305 for 8.8 km. From there, access to the Sugar Zone is available via all-terrain or tracked vehicles in the summer, and snowmobiles, tracked vehicles and trucks in the winter. The distance from White River to the Sugar Zone is approximately 60 km by road.

Areas surrounding Dayohessarah, Hambleton, Strickland and Pike Lakes are designated by the Ontario Ministry of Natural Resources as 'Restricted Access'. Locked gates on Road No. 200 and Road No. 305 control vehicular access in order to prevent access to remote lodge operations on two lakes. Permits are required for road access to most of the Sugar Zone property for mineral exploration purposes.

2.2 DESCRIPTION OF MINING CLAIMS

The Dayohessarah Lake Property consists of 413 unpatented, unsurveyed, contiguous mining claims comprising 1,840 claim units, and covering approximately 28,600 hectares. All claims are held in the name of Harte Gold Corp., except for SSM 4228496, 4228497 and 4228499, which are held in the name of Lloyd Joseph Halverson and are subject to an option agreement. The Property boundaries are marked by claim lines but have not been surveyed (Figure 2).

There are two mining alienations which border parts of Harte's current claim block. The largest (W-LL-C1521) lies to the east of the current claim area and shortly borders claim 4260617 on the east, and Hwy 631 on the west. The second alienation (No. 2847) lies completely within Harte's current claim block, west of Dayohessarah Lake. Surface rights are held by the Crown and timber cutting rights are held by White River Forest Products Ltd.


HRT REV / HRT_12_Claim_Map.cdr
Last revision date: Thursday 23 February 2012
Legend:
Property outline
Claim boundary
Claim number
Greenstone claims
Buffer claims
Mining alienations
Main road
Road
Dayohessarah Lake Property
W-LL-C1521
Scale 1 : 3,000
Kilometres
UTM NAD83 Zone 16N
Figure 2.
HARTE GOLD CORP.
Dayohessarah Lake Property
Hambleton Township, Ontario
Claim Map
Graphics by Watts, Griffis and McOuat Limited
Watts, Griffis and McOuat

The Property comprises the following unpatented mining claims: SSM 937765 – 768, SSM 937770 – 772, SSM 1043698, SSM 1043701 – 712, SSM 1043715 – 717, SSM 1043803, SSM 1043806 – 812, SSM 1043814 – 828, SSM 1044094 – 097, SSM 1044100 – 103, SSM 1055500 – 543, SSM 1055576 – 589, SSM 1069100, SSM 1069120 and 121, SSM 1069186 – 194, SSM 1069196 – 199, SSM 1069300 – 350, SSM 1069352 – 376, SSM 1069378 – 391, SSM 1078243 – 259, SSM 1078265 – 277, SSM 1078314 – 319, SSM 1135498 and 499, SSM 1140638 – 649, SSM 1140658 – 660, SSM 1174765 – 766, SSM 1182993 and 994, SSM 1183012 – 021, SSM 1194337, SSM 1194339 and 340, SSM 1232640 and 641, SSM 1235594 and 595, SSM 3012217 – 218, SSM 3018389 – 393, SSM 4201064 – 067, SSM 4201069 – 071, SSM 4201074 – 081, SSM 4201082 – 093, SSM 4228496 and 497, SSM 4228499, 4260601 – 683, and SSM 4267212. All claims are within the Sault Ste. Marie Mining Division of Ontario.

3.0. PHYSIOGRAPHY AND VEGETATION

The climate is northern boreal, with short hot summers and cold, snowy winters. Some field operations, such as drilling, can be carried out year-round while other operations, such as prospecting and mapping, can only be carried out during the late spring, summer and early autumn months.

The temperatures can range from -35ºC in the winter to +30ºC in the summer; though the mean temperatures are around -21ºC to +20ºC. Rainfall is about 727 mm annual average, with the wettest month being September (120 mm average). Snow is abundant, often reaching several metres with December and January having the heaviest snowfall (about 80 cm). Snow is on the ground by late October and the ice begins to thaw on the lakes by April.

The topography on the Property varies from moderate to rugged, with lake levels generally at 390 m above sea level, and occasional hills up to 480 m elevation. The overburden is generally between 0 to 20 m deep on the Property, with occasional bouldered terrain, and normally approximately 2 to 3 m overlying the Sugar Zone. Vegetation is boreal, with jack pine, fir, poplar and birch occupying dry uplands and cedar, tamarack and spruce growth on more poorly drained terrain.

4.0. HISTORY

Exploration for gold and base metals has been conducted on the Dayohessarah Greenstone Belt property since 1969. After over 10 years of very little work, exploration started to pick up on the property again in 1983, after the discovery of the Hemlo Gold camp. A complete timeline of mineral exploration on the Dayohessarah Greenstone Belt is presented below.

1969 Canex Aerial Exploration Ltd. drilled three diamond drill holes in the vicinity of the mafic/ultramafic intrusives and flows near the north end of Dayohessarah Lake. Results include an intersection of 0.326% Ni and 0.08% Cu over 5 ft. in metagabbroic rocks.

1983-1986 Pezamerica Resources Limited conducted an exploration program which included an airborne Mag and EM survey that outlined thirty-one (31) geophysical anomalies in the area. Twenty-four (24) of these anomalies were investigated by Teck Exploration on behalf of Pezamerica. Teck Exploration drilled nine airborne geophysical targets based on coincidental soil gold anomaly trends. In all cases, the airborne anomalies were explained by pyrite/pyrrhotite rich horizons within felsic volcanics. Hole PZ-6 returned appreciable amounts of sphalerite mineralization (0.47% Zn over 2.8 feet). None of the assayed core returned significant gold values.

1990 Most of the Dayohessarah Greenstone Belt is staked by a prospecting syndicate.

1991 The Property is optioned from the prospectors by Hemlo Gold Mines Inc. Initial prospecting uncovered the gold-bearing Sugar Zone deposit. Based on bedrock exposure and trenching, the Sugar Zone was traced for 750 m, and a ground IP survey outlined the Sugar Zone structure extending for 1,500m.

1993 Hemlo Gold conducted a preliminary diamond drill program to test the Sugar Zone for economic gold mineralization. A grid was cut with a 6 km baseline and tie-lines ranging in spacing between 100 m and 1,000 m. Six diamond drill holes were completed totalling 800 m. All drill holes intersected significant gold mineralization in the Sugar Zone. A small trenching program is initiated on the Sugar Zone.

1994 Hemlo Gold proceeds with initial geological mapping, prospecting and a follow-up drill program. Fifteen diamond drill holes are completed on the Property, totalling 2,416 m.

Eight of the drill holes intersected the Sugar Zone. An I.P. survey is completed over the southern portion of the Property, and a Mag survey is completed over the entire grid. After the exploration program, the Property was returned to the prospecting syndicate who initially staked the ground, due to legal reasons.

1998-1999 Most of the Property is optioned from the prospectors syndicate. The mining claims were subject to a Joint Venture agreement between Corona Gold Corporation (51%) and Harte Gold Corp. (49%). Corona was the operator. The initial 313 claims are subject to a 3.5% net smelter royalty ("NSR"), and the Joint Venture participants have the option to acquire 1.5% of the 3.5% NSR for $1.5 million, and have the right of first refusal on the remaining 2.0% NSR.

Corona carries out an extensive exploration program. The existing grid was rehabilitated and new grid lines established east of Dayohessarah Lake. In total, 96.1 km of grid lines with 100 m spacing oriented at 320º azimuth are cut over the Sugar Zone area. An oriented soil sampling program is carried out on the grid, as well as mapping and sampling. Prospecting was limited to the Sugar Zone and extensions of the Sugar Zone to the south and to the north. A surface power trenching program is conducted on parts of the Sugar Zone and six trenches were excavated, washed, channel sampled and mapped in detail. A detailed Mag-VLF and reconnaissance gradient I.P. survey is performed on the Property.

A diamond drilling program totalling 9,937 m of NQ core in 53 holes is completed, mostly into and around the Sugar Zone. The drill holes cover 3 km of strike length, and intersect the zone at approximately 50 m spacing at shallow depths. A secondary purpose of the program was to follow-up low grade mineralization encountered in previous drilling by Hemlo Gold and to test previously untested/poorly tested I.P. anomalies west of the Sugar Zone and east of Dayohessarah Lake.

Preliminary Mineral Resource estimates of the Sugar Zone mineralization in the 12000 N to 13100 N area were prepared, based on the drilling program noted above. Another estimate was made, using revised and refined criteria and polygonal methods, in the spring 1999, following additional data evaluation (Drost et Al, 1998).

2003-2004	Corona conducts a diamond drilling program totalling 7,100 m in 26 holes. The drill program mostly intersects the Sugar Zone and is successful in its purpose of expanding the strike and dip extent of the zone, as well as increasing the level of confidence in the continuity of mineralization by in-fill drilling.
2004	Corona conducts another diamond drilling program totalling 3,588 m in 11 holes. The program is successful in increasing the mineralization extent of the Sugar Zone, as well as increasing the defined Sugar Zone depth to a vertical depth of 300 m. A new Mineral Resource estimate was completed.
2008	A helicopter airborne geophysical survey was flown over the Property by Fugro Airborne Surveys Corp., under contract from Corona. The survey used a DIGHEM multi-coil, multi-frequency electromagnetic system along with a high sensitivity cesium magnetometer. A total of 1,917 line km were flown. It was recommended by Dave Hunt P.Geo. that compilation of historic exploration data on the remainder of the property be followed by a program of reconnaissance mapping and prospecting to evaluate the Fugro airborne conductor axes on the ground, as well as to identify additional target areas extending both north and south of existing Sugar Zone mineralization and elsewhere on the property.
2009	During March, Corona undertook a drilling program totalling 2,020 m in 10 holes. The purpose of the program was to test airborne electromagnetic conductors, magnetic anomalies, induced polarization chargeability anomalies and geologically defined possible extensions to the north and the south of the known Sugar Zone mineralization. During July to September, a prospecting, reconnaissance geological mapping and channel sampling program was undertaken on geophysical targets outlined by the Fugro airborne geophysical anomalies. Highlights included sampling of a float rock (Peacock Boulders) returning a value of 87.80 g/t Au, as well as grab samples from quartz veining east of the Sugar Zone returning values of 30.40 and 9.04 g/t Au.
2010	Harte Gold Corp. initiated it first drilling program. During March, a diamond drill program totalling 2,097.31 m in 12 holes, two of which were aborted before reaching the Sugar Zone. The program was successful in locating a high grade area of the Sugar Zone located near surface and directly under a series of surface trenches. The drill

program was also successful in determining that the Sugar Zone has significant mineralization below 300 m depth.

Ground IP is completed over a grid totalling 20,475 meters. Chargeability from the survey outlines a potential zone north of the Peacock Boulder discovery of 2009. 5 Trenches totalling 1,850 square meters were completed over and around the newly discovered Wolf Zone.

A total of 5,387.94 m of diamond drilling totalling 33 drill holes was completed on the newly discovered Wolf Zone. Results outlined a small, high grade zone with a strike length up to 600 m and a depth up to 250 meters.

2011

Between May and June 2011 two more grids totalling 60,800 meters were completed over the fold nose near the north end of the of the Dayohessarah Lake Property, on the west side of Hambleton Lake. Follow up ground IP was completed on the grids by JVX Geophysical Surveys. A small 5,200 meter grid was also cut and ground IP completed on the west side of Dayohessarah Lake, in an attempt to outline a Gossan Zone.

A Bore Hole survey was completed In August 2011 on eleven deep drill holes in the Sugar Zone. The Bore Hole survey outlined several conductors in the area. An airborne VTEM survey was completed at the end of August by Geotech Ltd. The survey covered the entire property and outlined 5 large moderate to strong conductive areas of interest. The most exciting result of the survey was a potential copper-nickel ore body below the surface, under the komatiite volcanics at the northern end of Dayohessarah Lake.

There were two main drill programs in 2011. The first was on the Sugar Zone, between February 11 to April 13, and again between July 17 and November 24, 2011, and totalled 7,885.74 meters of diamond drilling in 27 drill holes. The drilling was designed to expand the resource estimate both at depth, and to upgrade inferred resource to indicated resource. The second drill program targeted IP anomalies on the Fold Nose grid. A total of 3,430.93 meters were drilled in 15 diamond drill holes. Most IP anomalies were explained by sedimentary layers, and no significant intercepts were observed.

5.0. GEOLOGICAL SETTING

5.1 REGIONAL GEOLOGY

The Dayohessarah Greenstone Belt is situated between two larger greenstone belts; the Hemlo Greenstone Belt to the west and the Kabinakagami Greenstone Belt to the east. These greenstone belts are part of the larger, east trending Schreiber-White River Belt of the Wawa Subprovince of the Superior Craton (Figure 3). The Late Archean Dayohessarah Greenstone Belt trends northwest and forms a narrow, eastward concave crescent (Figure 4). The belt is approximately 36 km in length and varies in width from 1.5 to 5.5 km. Principal lithologies in the belt are moderately to highly deformed metamorphosed volcanics, volcanoclastics and sediments that have been enclosed and intruded by tonalitic to granodioritic quartz-porphyry plutons.

The greenstone belt is bordered to the east by the Strickland Pluton and to the west by the Black Pic Batholith. The Danny Lake Stock borders the south western edge of the Dayohessarah Greenstone Belt. The Strickland Pluton is characterized by a granodioritic composition, quartz phenocrysts, fine grained titanite, and hematitic fractures. The Black Pic Batholith is similar to the Strickland Pluton, but locally more potassic. The Black Pic Batholith also contains interlayers of monzogranite. The Danny Lake Stock is characterized by hornblende porphyritic quartz monzonite to quartz monzodiorite (G. M. Stott, 1999).

The Dayohessarah Greenstone Belt has been metamorphosed to upper greenschist to amphibolite facies. The Strickland Pluton seems to have squeezed the greenstone belt and imposed upon it a thermal metamorphism. Most of the mafic volcanics are composed primarily of plagioclase and hornblende. Almandine garnets are widely observed in the clastic metasediments and locally, along with pyrope garnets, in the mafic volcanics (G.M. Stott, 1996).

Alteration throughout the belt consists of diopsidation, albatization, weak magnesium biotization, weak carbonatization and moderate to strong silicification which accompanied the emplacement of the porphyry dykes/sills and quartz veining.

HRT REV / HRT_14_Rgnl_Geol.cdr
Last revision date: Monday 27 February 2012

Watts, Griffis and McOuat

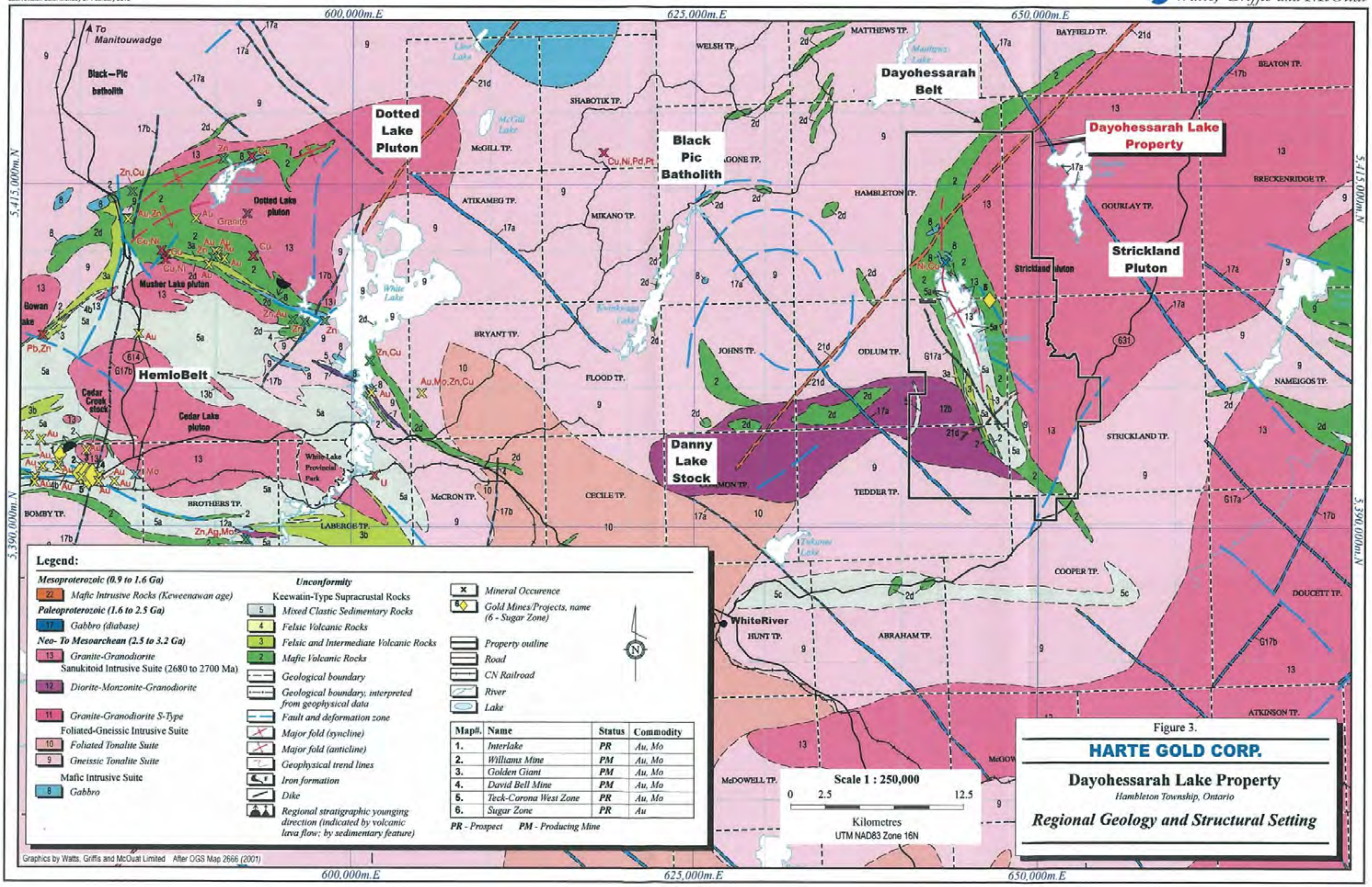


Figure 3.
HARTE GOLD CORP.
Dayohessarah Lake Property
Hambleton Township, Ontario
Regional Geology and Structural Setting

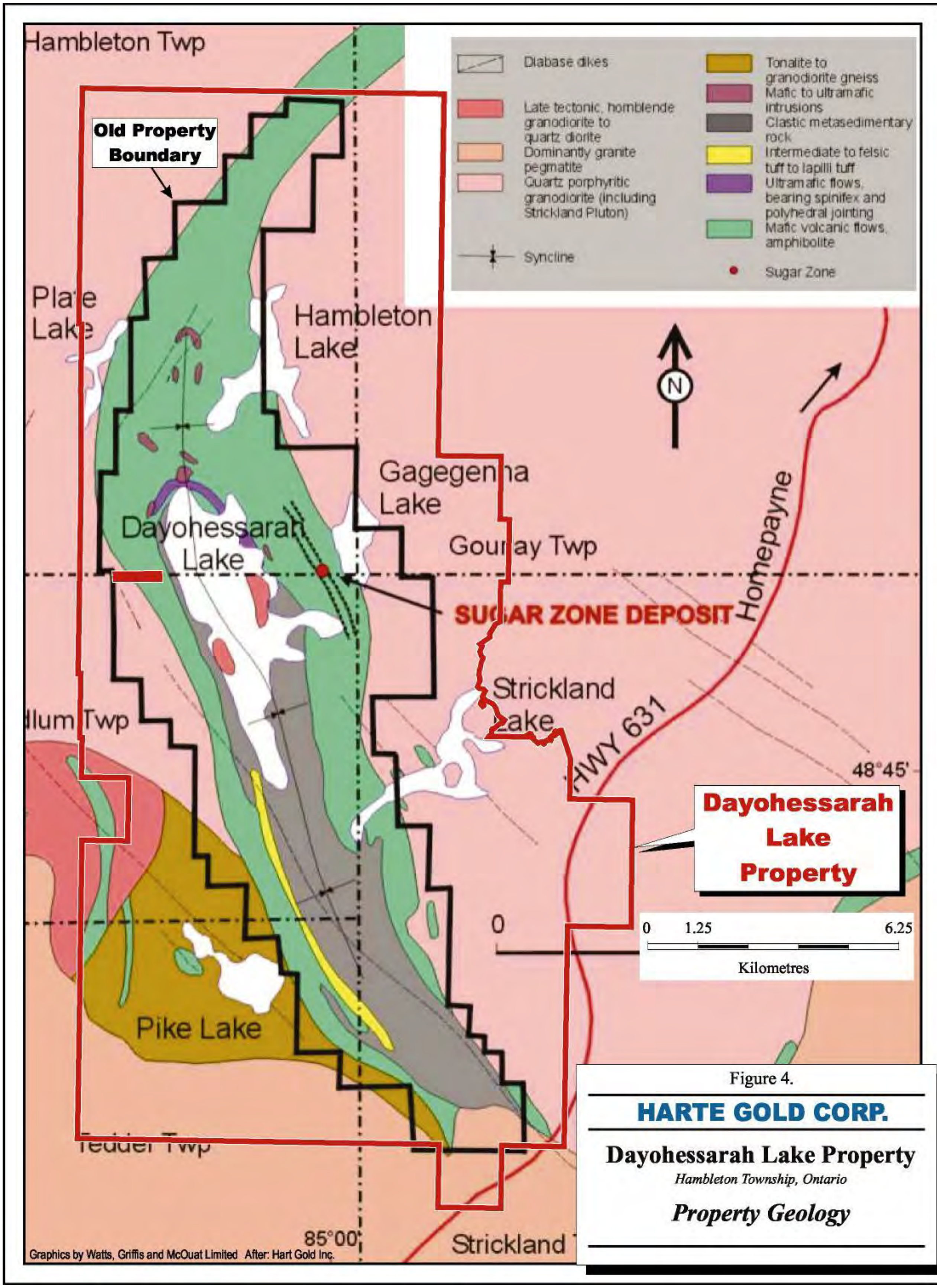


Figure 4.

HARTE GOLD CORP.

Dayohessarah Lake Property

Hambleton Township, Ontario

Property Geology

The belt has been strongly foliated, flattened and strained. Deformation seen in the supracrustal rocks has been interpreted to be related to the emplacement of the Strickland Pluton. Strongly developed metamorphic mineral lineations in the supracrustal rocks closely compare with the orientations of the quartz phenocryst lineations seen in the Strickland Pluton. This probably reflects a constant strain aureole imposed by the pluton upon the belt (G.M. Stott, 1996). The strain fabric is best observed a few hundred meters from the Strickland Pluton in the Sugar Zone, which has been characterized as the most severely strained part of the belt. The Sugar Zone is defined by sets of parallel mineralized quartz veining, quartz flooding of strongly altered wallrock, thin intermediate porphyry lenses and dykes/sills parallel to stratigraphy and foliation, and gold mineralization.

Foliations and numerous top indicators define a synclinal fold in the central portion of the belt. The synclinal fold has been strongly flattened and stands upright with the fold hinge open to the south and centred along Dayohessarah Lake.

5.2 PROPERTY GEOLOGY

Near Dayohessarah Lake, the belt is dominated by a basal sequence of massive to pillowed mafic volcanics, commonly with ellipsoidal, bleached alteration pods, overlain by intermediate tuff and lapilli tuff. The tuffaceous units rapidly grade upwards to a sedimentary sequence consisting of greywacke and conglomerates derived from volcanics, sediments and felsic intrusive sources (G. M. Stott, 1996). Several thin, continuous cherty sulphide facies iron formations are found in the mafic volcanic sequence. Spinifex textured komatiitic flows stratigraphically underlie the main sedimentary sequence and can be traced around the north end of Dayohessarah Lake. Also at the north end of Dayohessarah Lake, mafic and ultramafic sills and stocks underlie the komatiites (Figure 4).

Several fine to medium grained, intermediate feldspar porphyry dykes/sills have intruded and swarmed the belt. Swarming of the intermediate porphyry dykes is more intense east of Dayohessarah Lake. Stott has interpreted the porphyry sills and associated porphyry bodies to be related to the Strickland Pluton. A smaller granitic quartz porphyry body containing some sulphide mineralization is located northwest of Dayohessarah Lake. The porphyritic texture of the dykes/sills is often nearly, or completely, obliterated by the degree of foliation in the greenstone belt, or by the degree of shear in the Sugar Zone. These intermediate dykes/sills vary in abundance across the Property, but increase in regularity within, and around, the Sugar Zone. There is also a consistent, weak pervasive silicic alteration in the intermediate intrusives, as well as consistently trace amounts of very fine grained disseminated pyrite.

The major linear structure recognized on the Property is the Sugar Deformation Zone (SDZ), which trends northwest-southeast for approximately 3.5 km and dips southwest between 65° and 75°. The SDZ appears to be spatially related to the Strickland Pluton and is a complex system with strain intensities varying from strongly deformed-pillow mafic volcanics to undeformed massive mafic flows to anastomosing linear areas. Stratigraphically-conformable porphyritic intermediate intrusions swarm through the SDZ. Both the mafic volcanics and the intermediate intrusives exhibit moderate linear fabrics along with hydrothermal alteration (i.e., silicification).

In general, the north-westerly striking, south-westerly dipping stratigraphy hosting the gold mineralized portions of the Sugar Zone can be subdivided into the following units:

- Hanging Wall Volcanics;
- Upper Zone (Sugar Zone mineralization);
- Interzone Volcanics;
- Lower Zone (Sugar Zone mineralization);
- Footwall Volcanics.

The Hanging Wall, Interzone and Footwall volcanic horizons consist predominantly of massive and pillowed basalt flows generally striking northwest and dipping at an average angle of 64° to the southwest. Coarse to very coarse grained, locally gabbroic-textured phases form a significant component of the Hanging Wall mafic volcanic package. It is believed that these phases represent thick, slowly-cooled portions of the massive mafic flows, as they commonly grade into finer grained, more recognizable basaltic flows, and eventually even pillow flows. In much of the area which drilling on the Sugar Zone was carried out, a distinctive, very coarse grained mafic volcanic flow was observed consistently about 15 m stratigraphically above the Upper Zone. Other than this unit, specific mafic flows, as well as intermediate porphyry units, are nearly impossible to interpret/distinguish between holes.

The Upper and Lower zones range in thickness from 1.5 to 10 m, strike at 140° and dip between 65° and 75° with minor undulations.

The auriferous Wolf Zone lies in the northern extent of the SDZ, but drilling between the two zones indicates that the zones are complexly separate from each other. Like the Sugar Zone, the Wolf Zone is north-north-westerly striking and south-westerly dipping. Unlike the Sugar Zone, there is only one gold mineralized zone, and not two or more parallel zones.

A northerly-striking, sub-vertically dipping, dark grey-black, diabase dyke intrudes the older rock types in the greenstone belt, and crosscuts the SDZ. The diabase obliterates the SDZ when it is encountered. The diabase dyke is aphanitic around the edges and, where thick enough to do so, grades to a coarse grained euhedral rock in the middle of the dyke. The dyke exhibits very coarse grained greenish quartz-epidote phenocrysts up to 3 cm across throughout. The dyke is weakly pervasively magnetic. A very small amount of lateral movement of the zones has been interpreted locally on either side of the dyke, suggesting that very minor dyke-related faulting has occurred. There are at least two more diabase dykes on the property. They strike at 35 degrees across the northern portion of the belt. These dykes are up to 40 m across, and are similar in appearance and mineralogy to the dyke that cuts through the Sugar Zone.

Other than the diabase, the youngest intrusive rocks observed on the Property are white to pale grey, fine grained to medium grained and occasionally pegmatitic felsite dykes. The dykes generally consist of varying amounts of plagioclase, quartz and muscovite. These generally thin dykes strike northeast and where they intersect the SDZ, they completely wipe out the zone. These dykes are undeformed and clearly postdate the mineralization and deformation events.

6.0. MINERALIZATION

6.1 SUGAR ZONE

The auriferous Upper and Lower zones of the Sugar Zone lie within the SDZ. They are defined as highly strained packages consisting of variously altered mafic volcanic flows, intermediate porphyritic intrusions and boudinaged auriferous quartz veins. The two zones range in true thickness from about 1.5 to 10 m, and are separated by 20 to 30 m of barren volcanics.

Each zone is made up of one or more porphyritic intrusions, flanked by altered basalt and hosting stratigraphically conformable quartz veins. Alteration within the mafic volcanic potions of the zones consists primarily of silicification (both pervasive and as quartz veining), diopsidation and biotization. The porphyry units of the zones exhibit biotite and silica alteration as well, but no diopside alteration.

The Upper and Lower zones appear geologically consistent both down dip and along strike. The Lower Zone has consistently larger widths, as well as mostly consistently higher grades of gold mineralization, however both the width and the gold grade within each zone seem to follow the same trends across the zone. That is to say, that where the Upper Zone exhibits larger widths and higher gold grades, the Lower Zone also exhibits larger widths and higher gold grades. The zones are observed on surface to pinch and swell over distances of 50 m or more.

Gold mineralization mostly occurs in quartz veins, stringers and quartz flooded zones predominantly associated with porphyry zones, porphyry contact zones, hydrothermally altered basalts and, rarely, weakly altered or unaltered basalt within the Upper and Lower zones.

Fine to coarse grained specks and blebs of visible gold are common in the Sugar Zone quartz veins, usually occurring within marginal, laminated or refractured portions of the veins. The visible gold itself is often observed to be concentrated within thin fractures, indicating some degree of remobilization. Quartz veins and floods also contain varying amounts of pyrrhotite, pyrite, chalcopyrite, galena, sphalerite, molybdenite and arsenopyrite. The presence of galena, sphalerite and/or arsenopyrite is a strong indicator of the presence of visible gold. Pyrite, chalcopyrite and, rarely, molybdenite form a minor component of total sulphides and do not appear to be directly related to the presence of gold mineralization.

Other mineralized zones have been observed between, above and below the Sugar Zone Upper and Lower zones, in diamond drilling. Most of these intercepts are believed to be quartz veining originating in either the Upper or Lower zone, that have been diverted from the sheared part of the zone, up to 30 m from the main bodies of mineralization. One of these zones is the historically discovered Zoe Zone, which has been recently renamed the Lynx Zone, which lies east of the southern end of the Sugar Zone.

6.2 WOLF ZONE

The auriferous Wolf Zone lies along strike of the Sugar Zone, and may represent the northern extension of the SDZ. It is defined as highly strained packages consisting of variously altered mafic volcanic flows and gabbros. The zone ranges in true thickness from 0.5 to 8 m.

The zone is made up of highly sheared mafic volcanics, and a network of intrusive, intermediate quartz-feldspar porphyry dykes/sills. Alteration in the mafic volcanic and gabbro units consists mainly of silicification (both pervasive and quartz veining), diopside alteration and magnesium-rich brown biotite alteration. Alteration within the intermediate porphyry units consist of mostly silicification, with small amounts of magnesium-rich brown biotite, and no diopside. The zone is observed in trenches to pinch and swell over 30 m.

Gold mineralization mostly occurs in quartz veins, stringers and quartz flooded zones predominantly associated with porphyry zones, and hydrothermally altered basalts and gabbros.

Fine grained specks of visible gold are occasionally observed in the Wolf Zone quartz veins. The visible gold itself is often observed to be concentrated within thin fractures, indicating some degree of remobilization. Quartz veins and floods also contain varying amounts of pyrrhotite, pyrite and occasional galena. The presence of galena is a strong indicator of the presence of visible gold. Pyrite and pyrrhotite form most of the total sulphides, but do not appear to be directly related to the presence of gold mineralization.

7.0. PROSPECTING PROGRAM

Prospecting on the Dayohessarah Greenstone Belt was conducted by Terry Halverson and Tim Sauriol with help from Gregory "Greg" McKay and Brogan Kiss, and focused on several areas of interest across the property. Between June 12 and June 16, 2012 Terry Halverson and Greg McKay flew to a remote fishing lodge on the western shore of Dayohessarah Lake, and prospected proximal to the shoreline. A total of 108 samples were taken between April 30, 2012 and October 1, 2012. The sample descriptions are located in Appendix II and a map of the prospecting samples is in the back pocket. Table 1 shows the highlights from the 2012 prospecting program.

Prospecting focused on four areas. The first area of interest was an IP anomaly along the North-East corner of Dayohessarah Lake. Ground IP showed a chargeability, resistivity and magnetic signature similar to the Wolf Zone, and historic prospecting data returned samples up to 7 g/t Au. Prospecting in the area was completed between April 30 and May 29, 2012. Sampling showed finely laminated and sheared rusty sedimentary boulders in the area that assayed up to 1.7 g/t Au. There were no significant assay values taken from bedrock sampling in the area. The sampling led to a small 2-hole diamond drill program.

The second area of focus was a potential copper-nickel ore body, discovered by the VTEM Survey in 2011, at the north end of Dayohessarah Lake. The VTEM survey suggested that there was a large conductive body, which was interpreted as a potential copper-nickel anomaly. According to the VTEM survey, the anomaly does not extend to surface. Prospecting in the area was done between May 15th and June 14th, 2012. Prospecting showed the area to be primarily ultramafic komatiitic flows and mafic volcanic flows with limited shearing or veining. Sampling returned values up to 12 ppb Au.

TABLE 1.
HIGHLIGHTS OF THE 2012 PROSPECTING PROGRAM

Sample Number	Easting	Northing	Zone	Gold Value (g/t)
1370003	643861	5409365	Halverson Grid	1.06
1370004	643861	5409365	Halverson Grid	1.70
1370005	643861	5409365	Halverson Grid	1.04
1370068	648353	5396785	South Dayo	0.131
1370069	648747	6395795	South Dayo	0.103

The third area of interest was ground IP targets on the Wolf Zone Grid, east and north of the Wolf Zone. Targets were chosen based on chargeability, resistivity and magnetic signatures similar to the Wolf Zone. Overburden thickness created a problem while prospecting, and limited the sampling program. Samples returned values up to 30 ppb Au. A small diamond drill program was undertaken to test an IP target north, and on strike of the Wolf Zone.

The final prospecting target was follow up on the Gossan Zone, and the west and south sides of Dayohessarah Lake. Access was a small problem and should be improved to some areas, with the construction of a forestry road from HWY 631 to the Sugar Zone in early 2013. Prospecting targets mostly included VTEM and airborne magnetic geophysical targets. Sampling was done on several areas of rusty sediment, small shear zones and silicified boulders. Overburden was a problem in several areas. Sampling returned values up to 131 ppb Au.

All prospecting samples were sampled at Activation Laboratories (217 Round Bl., Thunder Bay, ON). Every sample was assayed for gold using a 50 g fire assay. An additional 10 samples from the first area of interest were assayed for base elements using an Aqua Regia – ICP analysis.

8.0 AIRBORNE VTEM AND MAGNETIC GEOPHYSICAL SURVEY

During the period of April 4-12, 2012 Geotech Ltd. carried out a helicopter borne geophysical survey over the Dayohessarah Lake Property. The program was completed as an extension of the airborne VTEM survey conducted in 2011 which totaled 302 line-km of data over the northern parts of Dayohessarah Lake and western parts of Hambleton Lake and the shore line. The 2012 program totalled 1,153 line-km of data essentially covering the rest of the Dayohessarah Greenstone Belt.

Principal geophysical sensors from the survey included a versatile time-domain electromagnetic (VTEM) system, and horizontal magnetic gradiometer. Principal geophysical sensors from the survey included a versatile time-domain electromagnetic system, and caesium magnetometer.

Two very large conductive VTEM anomalies were considered desirable targets. The first is nearly 8 km long and strikes around 320 degrees from the south-western shore of Dayohessarah Lake to the south. The second is two large round conductive anomalies to the east and south of the Sugar Zone separated by about 800 m. Follow up prospecting has been performed on the first anomaly and is described in section 7.0 Prospecting. A comprehensive report of the airborne geophysical survey is presented in Appendix VI.

9.0 THIN SECTION ANALYSIS OF PEACOCK BOULDERS

A thin section analysis was performed on the Peacock Boulders in an effort to better understand the host rock, and to help determine the origin of the boulders. The Peacock Boulders were discovered by Gary Peacock and subsequently located by George Flach during a summer prospecting program in 2009. The boulders returned assay values of 87.30 g/t Au, 52.80 g/t Au and 37.20 g/t Au and led to the discovery of the Wolf Zone. Initial visual comparison of the boulders to the Wolf Zone indicated that the Wolf Zone was not the source of the Peacock Boulders as alteration and mineralization differed. It was initially believed that the zones were of sedimentary origin.

In July of 2012, a total of 10 rock samples from the four Peacock Boulders were cut by rock saw and sent to Pleason Geoscience (Thunder Bay, Ontario) for thin section analysis. The results of the Thin Section Analysis indicate that the Peacock Boulders are from a zone of schistose amphibolite which has undergone an extensive ductile to brittle-ductile deformation history within a shear zone similar to gold-bearing zones at the Hemlo and Musslewhite gold camps. The full results and written report from the Thin Section Analysis are presented in Appendix V.

10.0 TRENCHING AND BLASTING PROGRAM

Between October 30, 2012 and November 2, 2012 four mechanical trenches were made along the surface exposure of the Sugar Zone. The purpose of the trenches was to expose enough high grade material from the Lower Zone of the Sugar Zone for a reasonably representative blasting program. The total area of the trenches is 1,799 square meters. Table 2 shows the area and locations of each trench. A map of the trenched area is provided in the back pocket.

TABLE 2.
SUMMARY OF 2012 TRENCHING

Trench	Area (m^2)	Easting	Northing	Claim Number
Trench 12-1	430	646,198	5,407,322	1135498
Trench 12-2	443	646,291	5,407,204	1135498
Trench 12-3	245	646,376	5,407,136	1182993
Trench 12-4	681	646,436	5,407,048	1069352

Kabi Lake Forest Products (Industrial Park Rd., White River, ON.) was contracted to provide an excavator services for the trenching. Two Wajax water pumps and 1,000 meters of hose were rented from Valley Fire and Protection Services (811 Victoria Ave. E., Thunder Bay, On.). In total 47.5 hours of excavator time was used to complete the four trenches, and the water pumps and hoses were rented for two weeks.

Trenches 12-2, 12-3 and 12-4 all showed very strong Lower Zone intercepts at surface, while trench 12-1 did not intersect the Lower Zone. Trenching on 12-1 was not continued in an effort to locate the Lower Zone, because of problems with the Wajax water pump used to clean the rock, and freezing temperatures. The geology of the trenches was not mapped in detail due to snow cover.

Six trenches were chosen to create ore grade material for Metallurgic testing. The trenches were to be blasted, based on the location of the trenches and the presence of a large Lower Zone intercept, in order to get the most representative sample reasonably possible. After the area to be blasted was outlined, channels were cut across the blast area and separated into lithology. This was done in an attempt to estimate the average grade of each lithology from each piece of blasted rock before it was sent to be tested. Table 3 lists the channel samples as well as the lithologies and trenches they were from. A map of the blasted trenches is presented in the back pocket.

TABLE 3.
SUMMARY OF CHANNEL SAMPLING ON BLASTED AREAS

SAMPLE NUMBER	TRENCH NUMBER	DESCRIPTION	AU G/T
878051	04-4	SHEARED MAFIC VOLCANICS	0.048
878052	04-4	SHEARED INTERMEDIATE PORPHYRY	0.016
878053	04-4	QUARTZ VEIN / QUARTZ STOCKWORK	0.048
878054	04-3	QUARTZ VEIN / QUARTZ STOCKWORK	7.73
878055	04-3	SHEARED MAFIC VOLCANICS	0.107
878056	04-3	SHEARED INTERMEDIATE PORPHYRY	0.099
878057	04-1	SHEARED MAFIC VOLCANICS	0.738
878058	04-1	QUARTZ VEIN / QUARTZ STOCKWORK	0.959
878059	04-1	SHEARED INTERMEDIATE PORPHYRY	0.035
878060	12-2	QUARTZ VEIN / QUARTZ STOCKWORK	11.9
878061	12-2	SHEARED INTERMEDIATE PORPHYRY	0.068
878062	12-2	SHEARED MAFIC VOLCANICS	0.383
878063	12-3	SHEARED MAFIC VOLCANICS	0.138
878064	12-3	SHEARED INTERMEDIATE PORPHYRY	0.199
878065	12-3	QUARTZ VEIN / QUARTZ STOCKWORK	3.38
878066	12-4	SHEARED MAFIC VOLCANICS	0.020
878067	12-4	SHEARED INTERMEDIATE PORPHYRY	0.028
878068	12-4	QUARTZ VEIN / QUARTZ STOCKWORK	0.742

Between November 16 and November 19, 2012, blasting was done by Louis Marcotte and Shawn Woodrow of Manroc Development (7 Black Rd. Manitouwadge, ON.). Approximately 500 lbs. of ore was blasted from each site and separated by lithology to match the lithologies assayed for in the channel samples.

11.0. 2012 DIAMOND DRILLING PROGRAM

11.1 SAMPLING PROCEDURE

11.1.1. SAMPLE COLLECTION, PREPERATION, ANALYSIS AND SECURITY

All diamond drill holes were NQ in diameter. The core is placed in wooden core boxes by the drillers. The boxes are sealed by the drillers at the drill site and delivered to the core logging facility in White River, at the end of every drill shift.

The core logging protocol by Harte geologists is summarized as follows:

- A geotechnician orients the core in the core box and measures the core marking 1.0 m intervals with a green China marker; these are measured against the depth blocks inserted by the drillers at the end of every run. The core is re-measured by the geologist that also checks that the drillers' metre blocks are correctly placed and labelled. The meterage at the start and end of each box is also recorded on the core using a green China marker. Any lost or ground core, zones of poor RQD (i.e. <75%) or reaming are noted within the drill log;

- After being measured, and before being logged, the core is photographed using a digital camera, in three or four box pictures, except at the end of the hole when there are less boxes available. The pictures are then copied onto the office computer, and labelled accordingly. In each picture, the hole number, meterage and box numbers are recorded on a dry erase board centred below the bottom box of core;

- The core boxes are then labelled using a metal dymo tag, which is stapled onto the left end of the box. The dymo tag label has a record of the drill hole number, box number and meterage; and

- The core is logged in detail and recorded in a digital format using a Microsoft Excel spreadsheet. Core displaying obvious mineralization and preferable alteration is sampled. Depending on the lithology, alteration and mineralization, the sample widths taken are predominantly between 0.2 m to 1.1 m in length.

- The samples are entered on the drill logs and for each sample the percentage of quartz-carbonate veining and sulphide mineralization are estimated and entered on the log. Other noticeable features, such as degree of alteration, magnetism, foliation and shearing, are also recorded in the log. The samples are then cut in half by a Harte geotechnician using a Vancor diamond core saw. Any visible gold is circled using a red China.
- Half the core is placed in a plastic bag with a sample ticket, displaying only the sample number, and the other half is put back in the box with a duplicate sample ticket, displaying the metre interval and sample number. The bagged samples are placed in rice bags and are delivered via Greyhound bus shipping, or delivered in person by one of the Harte staff, to Actlabs in Thunder Bay. The leftover core is then stored in the fenced core yard behind the core logging facility in White River.

11.1.2. HARTE QUALITY ASSURANCE AND QUALITY CONTROL

A Certified Gold Reference Standard and Gold Blank are inserted into the sample stream at frequencies of one control sample every 25th regular/routine sample. Blanks Samples are made up of granite from near the intersection of Road 100 and Highway 17. The granite Blank was originally assayed by sending 20 samples to Actlabs and 20 samples to SGS Labs, Toronto, ON. All of the sampled Blanks returned assay values less than the detection limit of 5 ppb Au. These Blanks are inserted after samples that are expected to have the highest gold values; which is determined visually during logging. The Certified Gold Reference Standards are mostly OREAS 10C (certified gold value of 6.60 g/t Au) and OREAS 16A (certified gold value of 1.81 g/t Au).

11.1.3 SAMPLE PREPERATION AND PROCEDURE

Sample preparation and gold analysis procedure at Actlabs are as follows:

Sample Preparation

Once the samples have been received and sorted, they are given an Actlabs reference number in a file batch. The samples are then checked for dryness prior to any sample preparation and dried if needed. The samples are then crushed to 70% passing 10 mesh (2 mm) and then split into 250 g sub-sample size using a Jones Riffle Splitter. These sub-samples are then pulverized (using rings and pucks to 90% passing 200 mesh (0.075 mm)) and homogenized prior to analysis. Compressed air is used to clean crushers, riffles and pans between each sample to prevent any cross contamination. Random screen analysis is performed daily to check for attainable mesh size.

Gold Analysis

All routine gold analysis is performed using a 30 g charge by Fire Assay using lead collection with a silver inquart. The detection limit is 5 ppb Au. The beads are then digested and an Atomic Absorption finish is used. The gravimetric finish was performed for all samples which originally assayed over 3.0 g/t. The metallic screen assaying was performed on all samples which originally assayed over 10.0 g/t Au, or when there was too much of a discrepancy between the original fire assay value and the gravimetric fire assay value.

Gold Gravimetric Analysis

All samples with an initial fire assay value greater than 3.0 g/t Au and less than or equal to 10 g/t Au are subject to a gold gravimetric analysis. For a gravimetric fire assay at Actlabs a sample size of 30 g is used. The sample is mixed with fire assay fluxes (borax, soda ash, silica, and litharge); the flux is free of silver. The mixture is placed in a fire clay crucible, is preheated at 850º C, intermediate at 950º C and is finished at 1060º C; the entire fusion process lasts 60 minutes. The crucibles are then removed from the assay furnace and the molten slag is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel which absorbs the lead when cupelled at 950º C to recover the Ag and Au. The cupellation bead is controlled in the final point by the volatile of the silver. Au is separated from the Ag in the dore bead by parting with nitric acid. The gold flake remaining is weighed gravimetrically on a microbalance.

Gold Pulp Metallic Analysis

All samples with an initial assay value greater than 10.0 g/t Au are subject to a gold pulp metallic analysis. For the metallic screen fire assay at Actlabs, a representative 500 g split is sieved at 100 mesh with fire assays performed on the entire +100 mesh, and 2 splits on the -100 mesh fraction. The total amount of the sample and the +100 mesh and -100 mesh fraction is weighed for assay reconciliation. Measured amounts of cleaner sand is used between samples and saved as gold may plate on the mill. The entire metallic screen is mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with Ag added as a collector, and the mixture is placed in a fire clay crucible, preheated at 850º C, intermediate at 950º C and finished at 1060º C; the entire fusion process lasts 60 minutes. The crucibles are then removed from the assay furnace and the molten slag is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel which absorbs the lead when cupelled at 950º C to recover the Ag and Au. The cupellation bead is controlled in the final point by the volatile of the silver. Au is separated from the Ag in the dore bead by parting with nitric acid. The gold flake remaining is weighed gravimetrically on a microbalance.

Two splits on the -100 mesh fraction is weighed and analyzed by fire assay with a gravimetric finish. A final assay is calculated based on the weight of each separated fraction and the values.

11.2. SUGAR ZONE DRILLING

During the period January 21, 2012 to July 20, 2012 a total of 6,283.92 meters were drilled in 12 diamond drill holes targeting the Sugar Zone. The drilling was carried out by Major Drilling Group International Inc. The drill program was supervised by Greg McKay. A 31 day work stoppage was taken in the drilling program during the spring breakup between March 24 and April 22, 2012. The work stoppage was taken to avoid damaging roads and trails as the upper layer of ground thawed. The Sugar Zone drilling survey data is presented in Table 4.

TABLE 4.
SUGAR ZONE DRILL HOLE SURVEY DATA

Hole Number	Easting (Nad 83)	Northing (Nad 83)	Elevation (M.A.S.L.)	Azimuth (Degrees)	Collar Dip (Degrees)	Depth (Meters)
SZ-12-28	645900.593	5407027.036	433.638	50	-70	680.00
SZ-12-29A	645905.000	5407022.000	437.000	50	-62	143.32
SZ-12-29B	645905.000	5407022.000	437.000	50	-64	78.00
SZ-12-29C	645958.193	5407068.461	435.894	50	-70	45.00
SZ-12-29	645958.193	5407068.461	435.894	50	-80	516.00
SZ-12-30A	645864.248	5407104.454	432.500	48	-75	38.60
SZ-12-30	645864.248	5407104.454	432.500	48	-80	563.00
SZ-12-31	645761.239	5407277.489	406.689	50	-78	487.00
SZ-12-32	645818.008	5407185.669	422.637	50	-78	486.00
SZ-12-33	645600.698	5407350.468	418.797	50	-70	591.00
SZ-12-34	645759.949	5407145.037	416.825	50	-78	613.00
SZ-12-35	646018.857	5406922.352	439.637	50	-73	510.00
SZ-12-36	646070.277	5406928.459	435.537	50	-73	438.00
SZ-12-37	645532.547	5407138.296	413.384	50	-80	1164.00
SZ-12-38	645532.547	5407138.296	413.384	50	-80	420.00
SZ-12-39	646114.487	5406909.474	436.815	50	-70	393.00

The purpose of the diamond drilling program was to expand the current Mineral Resource Estimate of the Sugar Zone at vertical depths below 400 m, and to test the continuity, grade and width of the zone at 1,000 m vertical depth. The original program design was for 16 diamond drill holes, but the program was terminated at 12 diamond drill holes. The highlights of the drilling program are summarized in Table 5, and specific hole by hole results are summarized below. Specific diamond drill hole logs are presented in Appendix I.

TABLE 5.
SUGAR ZONE SIGNIFICANT DRILL HOLE RESULTS

Hole Number	Zone	From (m)	To (m)	Width (m)	Grade (g/t Au)	VG
SZ-12-28	Lower Zone	505.20	507.75	2.55	1.94	-
	Incl.	506.00	506.60	0.60	4.95	-
SZ-12-29	Lower Zone	464.00	466.40	2.40	11.50	VG
	Incl.	464.41	465.45	1.04	25.21	VG
	Incl.	465.04	465.45	0.41	35.00	VG
SZ-12-30	Lower Zone	502.00	512.80	10.80	1.17	VG
	Incl.	505.15	507.30	2.15	5.13	VG
SZ-12-31	Lower Zone	463.25	471.65	8.40	0.94	VG
	Incl.	469.03	470.20	2.17	3.46	VG
	Incl.	468.03	469.08	1.05	5.58	VG
SZ-12-32	Lower Zone	461.30	463.71	2.41	2.31	-
	Incl.	462.21	463.21	1.00	5.41	-
SZ-12-33	Upper Zone	511.37	512.00	0.63	0.93	-
SZ-12-34	Lower Zone	605.87	607.00	1.13	0.56	-
SZ-12-35	Upper Zone	441.50	442.00	0.50	1.78	VG
	Lower Zone	494.40	497.00	2.10	5.55	VG
	Incl.	495.44	495.94	0.50	22.00	VG
SZ-12-36	Upper Zone	377.70	378.40	0.70	4.63	VG
	Lower Zone	432.00	433.64	1.64	57.60	VG
	Incl.	433.08	433.64	0.56	162.00	VG
SZ-12-37	Lower Zone	1111.50	1114.70	3.20	10.50	VG
	Incl.	1114.00	1114.70	0.70	43.30	VG
SZ-12-39	Upper Zone	314.50	319.65	5.15	1.03	VG
	Incl.	314.50	315.00	0.50	4.72	VG
	Lower Zone	360.84	365.30	4.46	7.06	VG
	Incl.	362.66	363.52	0.86	34.20	VG

SZ-12-28

SZ-12-28 was drilled between Jan 22, 2012 and February 2, 2012 and totalled 680 meters. The Upper Zone consists entirely of a sheared mafic volcanic flow and was intersected between 563.68 and 564.88

m depth. The Lower Zone also consists entirely of sheared mafic volcanic flow and was intersected between 612.00 and 612.50 m depth. Neither intersection had any significant gold grade. A third zone was intersected in the hanging wall between 505.20 and 507.75 m depth and assayed 1.95 g/t Au over 2.55 m depth including 4.95 g/t Au over 0.60 m from 506.00 to 506.60 m depth. The Diabase Dyke was not intersected in the drill hole.

SZ-12-29

SZ-12-29 was drilled between February 2 and February 21, 2012. The hole was started and cancelled three times between 45 and 143 m depth because of unpredictable veering of the drilling. The final attempt totalled 516.00 m depth. The Upper Zone was intersected between 427.44 and 428.77 m depth and consists of a sheared intermediate dyke and sheared mafic volcanic unit. The Lower Zone was intersected between 464.00 and 465.45 m depth and consists of a strongly sheared quartz vein with 10% diopside altered mafic inclusions, 6% pyrrhotite, 1% galena and 1% pyrite as well as 36 specks of visible gold throughout the zone. The Diabase Dyke was not intersected in the drill hole.

SZ-12-30

SZ-12-30 was drilled between February 21, 2012 and March 7, 2012. The hole was started and cancelled once at 38.6 m depth because of unpredictable veering of the drill hole. The final depth of the hole was 563.00 m. The Upper Zone was intersected between 459.05 and 459.49 m depth and consists of a sheared intermediate porphyry dyke with <1% fine grained disseminated pyrite. The Lower Zone was intersected between 502.64 and 511.18 m depth and consists of sheared interlayering intermediate feldspar porphyry dykes and sheared mafic volcanics. The intermediate dykes have up to 8% quartz veinlets and include 12 specs of visible gold within the quartz. The Diabase Dyke was not intersected in the drill hole.

SZ-12-31

SZ-12-31 was drilled between March 8, 2012 and March 18, 2012. The final depth of the hole was 487.00 meters. The Upper Zone was intersected between 432. 18 and 434.24 m depth and consists of a sheared intermediate dyke with 1-2% fine grained disseminated pyrite. The Lower Zone was intersected between 463.25 and 471.65 m depth and consists of two sheared intermediate dykes separated by sheared mafic volcanics and a 51 cm mineralized quartz vein. The intermediate dykes and mafic volcanics are stockworked with up to 10% quartz veinlets and stringers. There are 13 specs of visible gold throughout the zone. The Diabase dyke was intersected from 416.40 to 416.52 m depth.

SZ-12-32

SZ-12-32 was drilled from March 19, 2012 to May 1, 2012 including a 31 day break from March 24 through April 22, 2012. The final hole depth was 486.00 meters. The Upper Zone was intersected between 421.80 and 423.50 m depth and consists of a sheared intermediate feldspar porphyry dyke with 2-3% fine grained disseminated pyrite and pyrrhotite. The Lower Zone was intersected between 461.71 and 463.71 m depth and consists of a sheared intermediate feldspar porphyry dyke with 5-8% very fine grained disseminated pyrite and pyrrhotite and 10% quartz veinlets and stringers. The Diabase Dyke was intersected between 429.56 and 430.04 m depth and again between 434.04 and 434.73 m depth.

SZ-12-33

SZ-12-33 was drilled from May 2 to May 5 2012. The hole was an extension of the previously drilled CH-45, drilled in 1998 and stopped short of the Sugar Zone at 483 m depth. The final hole depth was 591.00 meters. The Upper Zone was intersected between 511.37 and 514.25 m depth and consists of a sheared intermediate dyke and a sheared mafic volcanic unit. All together the zone contains about 2% disseminated pyrite and pyrrhotite and 2-3% quartz veinlets. The Lower Zone was intersected between 567.34 and 570.53 m depth and consists of a sheared intermediate dyke and a small amount of sheared mafic volcanics. The Lower Zone contains about 10% quartz veining and 1-2% fine grained disseminated pyrite with trace amounts of arsenopyrite. The Diabase Dyke was intersected between the Upper and Lower Zones between 531.20 and 560.84 m depth.

SZ-12-34

SZ-12-34 was drilled between May 5 and May 20, 2012. The final hole depth was 613.00 meters. The Upper Zone was intersected between 553.66 and 555.54 meters depth and consists of an intermediate dyke with 3-4% quartz veining and 5% fine to coarse grained pyrite. The Lower Zone was intersected between 605.18 and 609.35 meters depth and consists of two sheared intermediate feldspar porphyry dykes around a sheared mafic volcanic unit. The Zone includes 1% quartz veinlets and 3-4% fine grained disseminated pyrite. There is a 45 cm barren felsite dyke cross cutting the upper intermediate dyke. The Diabase Dyke was not intersected.

SZ-12-35

SZ-12-35 was drilled between May 21 and May 26, 2012. The final depth of the hole is 510.00 meters depth. The Upper Zone was intersected between 483.54 and 445.30 m depth and consists of two sheared intermediate dykes around a sheared mafic volcanic unit. The zone contains 2-3% fine grained disseminated pyrite and pyrrhotite and 1-2% quartz veinlets and stringers. There is one spec of visible gold in the upper intermediate dyke. The Lower Zone was intersected between 490.75 and 498.49

meters depth and consists of a sheared intermediate dyke between two sheared mafic volcanic units. The zone contains 3-5% quartz veining with 2-3% disseminated and seamed pyrite and pyrrhotite mineralization and 9 specs of visible gold. The Diabase Dyke was not intersected.

SZ-12-36

SZ-12-36 was drilled between May 27, 2012 and May 31, 2012. The final hole depth was 438.00 meters. The Upper Zone was intersected between 375.67 and 384.67 meters depth and consists of two sheared intermediate feldspar porphyry dykes in between three sheared mafic volcanic units. Together they contain about 2-3% quartz veinlets and 3-4% fine grained disseminated and ribboned pyrite and pyrrhotite as well as 5 specs of visible gold. The Lower Zone was intersected between 430.70 and 436.60 meters depth and consists of a 56 cm mineralized quartz vein in between two sheared intermediate feldspar porphyry dykes surrounded by sheared mafic volcanics. Together the zone consists of about 15% quartz veining and 5-10% fine grained disseminated pyrite. The 56 cm quartz vein contains 15% ribboned and disseminated pyrite and pyrrhotite, trace galena, sphalerite and chalcopyrite and 40 specs and blebs of visible gold. The Diabase Dyke was not intersected.

SZ-12-37

SZ-12-37 was designed to test the width and grade of the Sugar Zone at 800 meters vertical depth, but because of a fault wedge, intersected the Sugar Zone at 1000 meters vertical depth. The hole was drilled between June 1, 2012 and July 2, 2012. The hole totalled 1164.00 meters depth. A first shear zone was intersected between 811.60 and 812.00 meters depth and assayed 0.913 g/t Au. The Upper Zone was intersected between 1066.90 and 1069.20 meters depth and consists of a sheared mafic volcanic and a sheared intermediate feldspar porphyry dyke. The zone contains 3-4% quartz-carbonate veinlets and stringers and 2% fine grained disseminated pyrite. The Lower Zone was intersected between 1107.00 and 1117.60 meters depth and consists of 2 sheared intermediate dykes and 2 sheared mafic volcanic units. The zone contains up to 10% quartz veining, mostly in the lower intermediate dyke and mafic volcanic units. There is 3% pyrite and up to 2% pyrrhotite, <1% galena and trace amounts of sphalerite as well as 20 specs of visible gold within the quartz veining in the lower intermediate dyke. The Diabase Dyke was not intersected.

SZ-12-38

SZ-12-38 was designed to wedge off of SZ-12-37 at 400 meters depth, and intersect the Sugar Zone near 800 meters vertical depth. The hole was drilled from July 3, 2012 to July 9, 2012 and was stopped at 420.00 meters depth well short of the zone. A steel wedge was put in hole SZ-12-37 at 399 meters depth to start hole SZ-12-38. After 21 meters of drilling the steel wedge collapsed and the hole was lost.

SZ-12-39

SZ-12-39 was drilled between July 13, 2012 and July 20 2012. The final hole depth was 393.00 meters. The Upper Zone was intersected between 314.50 and 322.52 meters depth and consists of a sheared intermediate feldspar porphyry dyke with a small sheared mafic volcanic unit above it. The zone contains 8% quartz veining with 3% fine grained disseminated and ribboned pyrite and pyrrhotite, trace galena and 5 specs of visible gold. The Lower Zone was intersected between 360.84 and 364.69 meters depth and consists of an 86 cm quartz vein between two sheared intermediate dykes. In total the zone contains about 30 % quartz veining. The 86 cm quartz vein contains 3% seamed and disseminated pyrrhotite, trace galena and 5 specs of visible gold. The Diabase dyke was not intersected.

11.3. EXPLORATION DRILLING

During the period July 21, 2012 to July 26, 2012 a total of 375.00 meters were drilled in 2 diamond drill holes targeting an IP anomaly north-east of Dayohessarah Lake. The drilling was carried out by Major Drilling Group International Inc. The drill program was supervised by Greg McKay. The exploration drilling survey data is presented in Table 6.

TABLE 6.
EXPLORATION DRILL HOLE SURVEY DATA

Hole Number	Easting (Nad 83)	Northing (Nad 83)	Elevation (M.A.S.L.)	Azimuth (Degrees)	Collar Dip (Degrees)	Depth (Meters)
HG-12-16	643472.034	5409494.253	391.697	50	-50	180
HG-12-17	643794.135	5409039.411	411.289	50	-50	195

The purpose of the diamond drilling program was to test an IP anomaly which was supported by surface prospecting samples grading up to 1.7 g/t Au. The drilling program did not intersect any significant values, and the I.P. anomaly remains unexplained. Specific hole by hole results are summarized below.

HG-12-16

HG-12-16 was drilled between July 21, 2012 and July 23, 2012 and totalled 180.00 meters depth. A 1.80 meter quartz stockwork zone was intersected between 63.50 and 65.30 meters depth. No significant gold values were returned.

HG-12-17

HG-12-17 was drilled between July 24, 2012 and July 26, 2012 and totalled 195.00 meters depth. There were no significant intersections, and no significant assay values were returned.

11.4. WOLF ZONE EXTENSION DRILLING

During the period July 27, 2012 to August 2, 2012 a total of 333.00 meters were drilled in 2 diamond drill holes targeting an extension of the Wolf Zone. The drilling was carried out by Major Drilling Group International Inc. The drill program was supervised by Gregory McKay, G.I.T, and Brogan Kiss. The Wolf Zone drilling survey data is presented in Table 7.

The purpose of the diamond drilling program was to test an I.P. anomaly similar in character to the Wolf Zone. The I.P. anomaly is located 600 meters north-west, and along strike of the High Grade Wolf Zone, and past an intrusive gabbroic body cutting off the north end of the Wolf Zone. The drilling proved unsuccessful in extending the Wolf Zone mineralization as only trace amounts of gold were assayed, although there was similar shearing as in the Wolf Zone. Specific hole by hole results are summarized below.

TABLE 7.
WOLF ZONE DRILL HOLE SURVEY DATA

Hole Number	Easting (Nad 83)	Northing (Nad 83)	Elevation (M.A.S.L.)	Azimuth (Degrees)	Collar Dip (Degrees)	Depth (Meters)
WZ-12-33	644390.039	5409584.086	401.520	50	-50	171
WZ-12-34	644394.508	5409716.784	408.753	50	-50	162

WZ-12-33

WZ-12-33 was drilled from July 27, 2012 to July 29, 2012 and reached a total depth of 171.00 meters. An 11.50 meter shear zone was intersected between 36.00 and 47.50 meters depth and contains 2-3%

quartz veining and <1% pyrite mineralization. A 55 cm quartz vein was intersected between 136.25 and 136.80 meters depth. Samples from the hole only returned assayed gold values up to 45 ppb Au.

WZ-12-34

WZ-12-34 was drilled between July 30, 2012 and Aug 2, 2012 and reached a total depth of 162.00 meters. A small shear zone was intersected between 95.50 and 96.60 meters depth. No significant gold values were returned.

11.5. HALVERSON ZONE DRILLING

A diamond drill program was designed to test the Nickel-Copper anomaly in the Halverson Claim Group at the northern end of Dayohessarah Lake. The program was to consist of 4 diamond drill holes totalling 1,100 meters from two different pads. As the area was blocked off from access due to a cool water outlet stream from Dayohessarah Lake, the program was to be a fly in program.

For four days between April 20 and May 17, 2012 two diamond drill pads were cut by Terry Halverson and Tim Sauriol for use in the fly program. Due to difficulties in program details the program was suspended and rescheduled to be conducted early in 2013.

12.0 DISCUSSION AND CONCLUSIONS

12.1. DISCUSSION

The main focus of exploration in 2012 was the deep drilling on the Sugar Zone for the purpose of expanding the Block Model to depths of 500-600 vertical meters, and to extend the known mineralization of the Sugar Zone to depths greater than 800 vertical meters. The results of the drilling on the Sugar Zone continue to provide encouraging results at depths below 400 vertical meters. The best gold mineralization, as well as all of the occurrences of visible gold, occurs within quartz veining in the Upper and Lower Zones. The trenching has confirmed that the Sugar Zone displays some degree of pinching and swelling not only in regard to zone width, but also to gold grade within the zones.

A less aggressive exploration program was conducted in 2012, in comparison to 2011 mainly due to personnel time being used for further design and permitting of a large, underground Bulk Sample Project on the Sugar Zone. Limited access to the western and southern parts of the greenstone belt has caused some problems in regards to early stage summer exploration programs. Those problems are expected to be partially alleviated after the completion of a forestry road extending from Hwy 631 through the south-eastern part of the greenstone belt to the Sugar Zone site.

The results of the thin section analysis of the Peacock Boulders indicate that the origin of the boulders is a ductile to ductile-brittle shear zone within a schistose amphibolite. As most of the Dayohessarah Greenstone Belt is made up of amphibolite, and given the high grade of the Peacock Boulders, a greater effort should be made through the use of geophysics combined with prospecting to locate the Shear Zone where these boulders may have come from.

Ground IP seems to be the best method of geophysical exploration, and has led to the discovery of the Wolf Zone, and also outlines the Sugar Zone. With careful attention to detail, most sedimentary zones and diabase dykes can be ignored in IP maps, leaving high potential IP anomalies to be looked at in more detail through prospecting or exploration drill holes.

Further sampling of the Gossan Zone on the western edge of Dayohessarah Lake returned insignificant gold values. The samples were taken from fresher rock then those taken in 2011. It was thought that a leaching effect might have caused the gossan to lose some of its gold value on surface, but this does not appear to be the case now. If access ever improves, and a channel sample can be taken from the zone, then it should be, but no drilling on the Gossan Zone is recommended as the gold grade is too low.

12.2. CONCLUSIONS

The main focus of the 2012 exploration program was the expansion of the defined Sugar Zone block model at depths up to 600 vertical meters, and confirmation and definition of the Sugar Zone at depths below 800 vertical meters. 10 of the twelve holes intersected the Sugar Zone at vertical depths between 350 and 600 vertical meters, and will significantly impact a revised block model and resource estimate of the Sugar Zone. Also SZ-12-37 intersected strong Sugar Zone mineralization at 1000 vertical meters confirming the continued vertical extent of the Sugar Zone.

Airborne VTEM outlined a good looking zone near the northern shore of Dayohessarah Lake which was interpreted by Steve Balch as a potential nickel-copper zone. Drilling is to take place early in 2013.

In conclusion, the Dayohessarah Greenstone Belt has been shown to exhibit a high potential for the mineralization of gold. The Sugar Zone and Wolf Zone already show that isothermal gold deposits can and have formed within the belt. The Sugar Zone shows that these deposits can be large enough for a bulk sample, and underground mining operation. Thin section analysis of the Peacock Boulders show that there is probably another high grade deposit near the eastern to north-eastern part of the greenstone belt, which has yet to be discovered.

13.0. RECOMMENDATIONS

The primary recommendation is for continued ground IP and magnetic surveys over the Sugar Zone, and high potential areas east of the Wolf Zone, and along the western edge of Dayohessarah Lake. The survey over the Sugar Zone will provide a blueprint of the Sugar Zone-type gold-hosting shear zone IP signature, and has the potential to locate parallel zones between the Sugar Zone and Dayohessarah Lake, especially along the mafic volcanic - sedimentary contact. The other IP surveys will supply IP maps for areas where overburden thickness prevents productive prospecting, and provide targets for further exploration.

A second recommendation is to drill a minimum of three more deep holes into the Sugar Zone between 800 and 1000 meters vertical depth. This will confirm the degree of mineralization of the Sugar Zone at depth, as well as provide a better understanding of the strike and dip of the zone as it bends at depth. The drilling should also look to extend the lateral extent of the Sugar Zone at 1000 meters vertical.

Further drilling is needed to accurately extend the block model to a consistent depth of 400 vertical meters according to the guidelines set forth in the National Instrument 43-101. A planned underground bulk sample may eliminate the need for further drilling.

14.0. STATEMENT OF QUALIFICATIONS

I, Greg McKay, do hereby certify that:

1. I am a Geologist.
2. I reside at: 128 Bronte Rd. Apt#202, Oakville ON. L6L 3C2
3. I have approximately 4 years work related experience exploration for gold mineralization in the Beardmore-Geraldton and Dayohessarah Greenstone Belts of Northwestern Ontario; programs such as geological mapping, prospecting and the design and running of diamond drilling programs.
4. I graduated from Carleton University, Ottawa, Ontario, in 2009 with the degree of B.Sc. (Earth Science and Physical Geography).
5. I am currently a G.I.T. certified member of APGO
6. I am responsible for the preparation of this report.

SIGNATURE (Greg McKay)	**DATE**
Greg McKay	Dec 31, 2012

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REFERENCES

Stott, Greg M. 1999
Precambrian Geology of the Dayohessarah Lake Area, White River, Ontario.

Drost, Abraham P., Hunt, David S., Roach, Steven. 1998
Report on Power Stripping For Corona Gold Corporation on the Dayohessarah Lake Property

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GOLD CORP

APPENDIX I

DIAMOND DRILL HOLE LOGS

APPENDIX II

PROSPECTING SAMPLE DESCRIPTIONS

APPENDIX III

DIAMOND DRILLING SAMPLE and PROSPECTING SAMPLE

ASSAY CERTIFICATES

APPENDIX IV

2012 DIAMDOND DRILL PLAN SECTION

AND LONG SECTION and CROSS SECTIONS

APPENDIX V

THIN SECTION REPORT –

A PETROGRAPHIC STUDY ON FLOAT SAMPLES FOR HARTE GOLD CORP

APPENDIX VI

AIRBORNE VTEM SURVEY REPORT

APPENDIX VII

METTALURGICAL TESTING REPORTS

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-28
	CLAIM NO:	1182994	Drill Rig	Major-50

Location		Drill Hole Orientation				
UTM Zone 16				Dates Drilled:	From: 22-Jan-12	To: 02-Feb-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645905					
Northing	5407022	Dip:	-70	Dates Logged:	From: 23-Jan-12	To: 18-Feb-12
Elevation	437					
Final		Depth:	680	Logged By:	Greg McKay	
Easting	645900.590					
Northing	5407027.040	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	433.640					

Purpose of Hole	Test Sugar Zone below 400 m depth
Results	no VG. Zones are weak.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
11.0	46.4	-69.7	5788	Reflex Test
35.0	47.8	-69.2	5660	
59.0	48.5	-68.6	5590	
83.0	62.6	-68.2	6185	magnetic
107.0	47.6	-67.7	5678	
131.0	47.2	-67.2	5662	
155.0	49.2	-66.9	5668	
179.0	49.8	-66.5	5661	
203.0	50.5	-66.3	5645	
227.0	50.7	-65.6	5680	
251.0	49.7	-64.8	5666	
275.0	50.5	-64.5	5663	
299.0	49.3	-64.0	5671	
323.0	48.8	-63.5	5671	
347.0	50.2	-63.1	5677	
371.0	50.9	-62.8	5700	
395.0	50.3	-62.3	5671	
419.0	49.9	-61.7	5676	
443.0	49.1	-61.0	5679	
467.0	49.3	-60.6	5692	
491.0	48.4	-60.0	5713	
515.0	49.2	-59.5	5683	
539.0	49.7	-59.2	5683	
563.0	48.9	-58.7	5675	
587.0	48.1	-57.7	5686	
611.0	48.1	-56.2	5693	
635.0	47.9	-55.9	5682	
659.0	50.3	-55.1	5858	

From	To	Interval	Code	Description
0.00	3.39	3.39	OB	overburden
3.39	12.79	9.40	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 40 TCA. 3% diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate veinlets and stringers, mostly parallel to foliation, and rusty coloured near the top of the hole. no visible sulphides. a sharp irregular lower contact intersecting at a shallow angle.
12.79	13.33	0.54	4D	felsite dyke. Dirty white colour. Fine grained to aphenetic. Strong silica content. Anhedral crystals. 10% mafic crystals up to 2 mm across. No visible sulphides. An irregular sharp lower contact intersecting at a shallow angle.
13.33	15.60	2.27	1A	massive mafic volcanic flow. Dark grey-green colour. Weakly foliated intersecting at 55 TCA. Aphenetic crystals. 2% diopside alteration bands. 1% thin quartz-carbonate stringers. No visible sulphides a gradational lower contact.
15.60	21.30	5.70	1B	mafic pillow flow. Medium to light green-grey colour. Moderately foliated intersecting at 50 TCA. Well defined, dark grey to black pillow selvages parallel to foliation. 3-4% thin quartz-carbonate veinlets and stringers, normally parallel to foliation. trace sericite alteration bands. a gradational lower contact.
21.30	35.21	13.91	1A	massive mafic volcanic flow. Dark grey colour. Moderatley foliated intersecting at 55 TCA. Aphenetic crystals. 15% to locally 50% diopside alteration bands parallel to foliation. <1% brown biotite alteration. 2-3% thin quartz-carbonate stringers, mostly in diopside bands. two pink felsite dykelts up to 25 cm across at 31.95 and 32.57 m depth. a sharp lower contact intersecting at 30 TCA.
35.21	36.40	1.19	6E	intermediate feldspar porphyry dyke. Medium to dark grey colour. 25% coarse grained plagioclasse phenocrysts up to 8 mm across. Weakly to moderately foliated intersecting at 45 TCA. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
36.40	43.92	7.52	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. 1% diopside alteration bands parallel to foliation. 2% thin quartz and quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
43.92	44.98	1.06	6E	intermediate hornblende-feldspar porphyry dyke. 20% coarse grained plagioclasse phenocrysts and 15% needle shaped, medium grained hornblende phenocrysts in a fine grained medium-dark grey matrix. Weakly to moderately foliated intersecting at 45 TCA. trace very fine grained disseminated pyrite. 25% grey-brown aphenetic intermediate dykelets between 40.0 and 40.55 m depth. a sharp lower contact intersecting at 35 TCA.
44.98	54.75	9.77	1A	massive mafic volcanic flow. Medium dark greenish grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. 15% lighter green diopside alteration bands parallel to foliation. No visible sulphides. A gradational lower contact.

From	To	Interval	Code	Description
54.75	77.10	22.35	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately to locally strongly foliated intersecting at 50 TCA. 2-3% medium green-beige diopside alteration bands parallel to foliation. Locally disseminated, coarse grained pyrope garnets. <1% seams local seams of pyrrhotite. moderately magnetic around the pyrrhotite. <1% quartz veinlets. a gradational lower contact.
77.10	78.70	1.60	SH/1A	Biotite shear in a massive mafic volcanic flow. Moderately sheared and strongly foliated. Strong pervasive biotite alteration. A 40 cm quartz-carbonate veinlet in the middle of the unit. Trace disseminated fine grained pyrite. A gradational lower contact.
78.70	89.55	10.85	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. Locally weakly sheared with pervasive silicic alteration and up to 8% pyrrhotite. Moderately magnetic around the pyrrhotite. 3-4% and locally 8% diopside alteration bands parallel to foliation. a sharp lower contact intersecting at 30 TCA.
89.55	90.15	0.60	QV	pinkish-red quartz vein. Occasionally dark grey in colour. Moderately fractured. 3% very coarse grained disseminated pyrrhotite. 1% coarse grained, elongated galena. A sharp lower contact intersecting at 30 TCA.
90.15	97.70	7.55	1A	massive mafic volcanic flow. Medium to light grey colour. Moderately foliated intersecting at 40 TCA. Moderate to strong pervasive carbonate (calcite and dolomite) alteration. 10% thin quartz-carbonate stringers, mostly parallel to foliation. A gradational lower contact.
97.70	106.72	9.02	1A	Massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Locally weakly sheared with weak pervasive silicic alteration and up to 8% pyrrhotite seams. Moderately magnetic around the pyrrhotite. 1% thin quartz and quartz-carbonate veinlets and stringers. a sharp lower contact intersecting at 45 TCA.
106.72	108.98	2.26	6E	intermediate feldspar porphyry dyke. Dark grey colour. 20% medium to coarse grained, subhedral plagioclasse phynocrysts. Moderately foliated intersecting at 45 TCA. A 10 cm rounded quartz blob at 107.3 cm depth. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
108.98	118.00	9.02	1A	Massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. moderately foliated intersecting at 45 TCA. Locally weakly sheared with weak pervasive silicic alteration and up to 7% pyrrhotite seams. Moderately magnetic around the pyrrhotite. A 40 cm intermediate feldspar porphyry dyke at 114.85 m depth. <1% thin quartz and quartz-carbonate veinlets and stringers. a gradational lower contact.
118.00	126.33	8.33	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderatly foliated intersecting at 45 TCA. 15% stringy diopside alteration bands, parallel to foliation. <1% thin quartz-carbontae stringers. No visible sulphides. A gradational lower contact.

From	To	Interval	Code	Description
126.33	180.97	54.64	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Mweakly to moderately foliated intersecting at 40 TCA. Several local areas of weak pervasive diopside alteration slightly lightening the colour. occasionally up to 3-4% diopside alteration bands parallel to foliation. <1% brown biotite alteration bands in areas. 2% thin quartz and quartz-carbonate veinlets and stringers, mostly parallel to the foliation. trace local leucoxene. a 30 felsite dykelet at 153.45 m depth. a sharp lower contact intersecting at 40 TCA.
180.97	183.59	2.62	6E	intermediate feldspar porphyry dyke. Dark greyish colour. 10% medium to coarse grained subhedral plagioclasse phenocrysts. Weak pervasive silicic alteration. Weakly foliated intersecting at 40 TCA. A 7 cm white-grey quartz vein at 182.8 m depth. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
183.59	217.48	33.89	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 15-20% diopside alteration bands up to 3 cm across, parallel to foliation. trace brown biotite alteration bands. 1% thin quartz and quartz-carbonate veinlets, usually within diopside alteration bands. trace medium grained pyrite in the quartz. trace local potassic alteration. a sharp irregular lower contact in a quartz-carbonate veinlet.
217.48	218.89	1.41	6E	intermediate dyke. Subhedral to anhedral crystals. Dark grey-purple colour. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. Trace remenant porphyritic texture. 2-3% fine grained muscovite in areas. Trace very fine grained dissemianted pyrite. a sharp lower contact intersecting at 60 TCA.
218.89	221.11	2.22	1A	massive mafic volcanic flow. Medium to dark greenish-grey colour. Weakly bleached near the upper contact. Weakly foliated intersecting at 50 TCA. A 13 cm felsite dykelet at 220.9 m depth. <1% very thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
221.11	221.76	0.65	6E	intermediate dyke. Subhedral to anhedral crystals. Dark grey-purple colour. Moderately to strongly foliated intersecting at 40 TCA. Weak pervasive silicic alteration. Trace remenant porphyritic texture with needled hornblende crystals. A 13 cm felsite dyke at 221.15 m depth. no visible sulphides. a sharp lower contact intersectring at 45 TCA.
221.76	247.40	25.64	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained and locally medium grained crystals. Moderately foliated intersecting at 40 TCA. 1-2% quartz veinlets up to 4 cm across. A 32 cm felsite-quartz-plagioclasse-muscovite dyke at 225.15 m depth and another 25 cm dyke at 228.5 m depth. a gradational lower contact.
247.40	251.90	4.50	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. 7-10% diopside alteration bands up to 3 cm across, parallel to foliation. 1% thin quartz-carbonate veinlets and stringers. No visible sulphides. a sharp lower contact intersecting at 45 TCA.
251.90	253.08	1.18	6E	intermediate feldspar porphyry dyke. Dark grey-purple coloru. Weakly foliated intersecting at 50 TCA. 15% coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. <1% thin quartz-carbonate stringers. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 50 TCA.

From	To	Interval	Code	Description
253.08	285.00	31.92	1B	mafic volcanic pillowed flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. Aphenetic crystals. 15% diopside alteration bands parallel to foliation. Well defined thin, black pillow selvages throughout. A 40 cm felsite dyke at 266.7 m depth. <1% pyrope garnets in the diopside alteration bands. <1% thin quartz-carbonate veinlets and stringers. moderately fractured and broken up rock at 272.4 m depth. a 39 cm intermediate feldspar porphyry dyke at 283.32 m depth.a gradational lower contact.
285.00	294.22	9.22	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained. Moderately foliated intersecting at 40 TCA. <2% diospide alteration in the upper half and 10% diopside alteration bands in the lower half, parallel to foliation. 1% quartz and quartz-carbonate veinlets up to 3 cm across. trace very fine grained pyrite. a sharp irregular lower contact.
294.22	296.11	1.89	6E	intermediate feldspar porphyry dyke. Medium to light grey colour. Moderately foliated intersecting at 40 TCA. Moderate pervasive silicic alteration, nearly obliterating the porphyritic texture. 3% very thin fracture controlled quartz stringers. <1% very fine grained disseminated pyrite. a sharp, irregular lower contact intersecting at roughly 40 TCA.
296.11	298.75	2.64	1A	mafic volcanic pillowed flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. Aphenetic crystals. 15% diopside alteration bands parallel to foliation. moderately defined thin, black pillow selvages throughout. No veining. No visible sulphides. a sharp lower contact intersecing at 35 TCA, and oblique to the foliation.
298.75	299.88	1.13	4D	felsite dyke. Light pink colour. Mostly anhedral crystals with 10% coarse grained muscovite. Stronly pevasive silica content. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
299.88	305.53	5.65	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. 8% thin diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets, mostly within diopside alteration bands. no visible sulphides. a sharp, irregular lower contact intersecting at roughly 45 TCA.
305.53	306.35	0.82	6E	intermediate dyke. Dark grey-purple to nearly black colour. Moderately foliated intersecting at 40 TCA. Aphenetic crystals. 3% fracture controlled sericite-diopside alteration. <1% very fine grained disseminated pyrite. a seam of pyrrhotite at the lower contact. A sharp lower contact intersecting at 45 TCA.
306.35	317.70	11.35	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 15 to locally 30% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers, mostly within diopside alteration. trace almandine garnets. possibly locally pillowed. trace brown biotite alteration. a gradational lower contact.
317.70	356.53	38.83	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 1% thin diopside alteration bands parallel to foliation. 2% thin quartz and quartz-carbonate veinlets and stringers, mostly parallel to foliation. a 10 cm felsite dykelet at 318.45. a 24 cm fine grained mafic dyke at 348.0 m depth. trace pyrrhotite. a sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
356.53	357.57	1.04	6E	intermediate feldspar porphyry dyke. Medium grey colour. 25% coarse grained plagioclasse phenocrysts in an aphenetic matrix. Weakly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
357.57	400.40	42.83	1B	mafic pillow flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. Well defined, black pillow selvages, often with almandine and pyrope garnets. 15% light greyish diopside alteration bands parallel to foliation. 4 small grey quartz veins with pyrrhotite mineralization between 361.4 and 362.5 m depth. a 41 cm mederately pervasive silicified section at 370.5 m depth. 1-2% thin quartz-carbonate stringers. a sharp lower contact intersecting at 30 TCA.
400.40	400.96	0.56	6E	intermediate dyke. Medium to loght grey colour. Moderately foliated intersecting at 45 TCA. Weak to locally moderatel pervasive silicic alteration. 2% thin quartz-carbonate veinlets. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 30 TCA.
400.96	409.00	8.04	1B	mafic volcanic pillowed flow. Dark grey-green colour. Aphenetic crysals. Moderately foliated intersecting at 45 TCA. 15% thin diopside alteration bands parallel to foliatino. Well defined black pillow selvages. Pillow selvages are often up to 15% almandine garnets. 2% quartz and quartz-carbonate veinlets. no visible sulphides. a gradational lower contact.
409.00	419.60	10.60	1Z	massive mafic flow to gabbroic end-member. Medium to locally coarse grained or porphyritic. Weakly to locally moderately foliated intersecting at 45 TCA. <1% thin quartz veinlets. No visible sulphides. A gradational lower contact.
419.60	420.74	1.14	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. A 35 cm intermediate dyke at 420.75 m depth. 2% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets and stringers. no visible sulphides. a sharp lower contact intersecting at 35 TCA.
420.74	422.88	2.14	6E	intermediate dyke. Dark purple-grey colour. Probably feldspar porphyry dyke, but porphyry texture has been wiped out in foliatino. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 2% greyish quartz veinlets. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 50 TCA.
422.88	442.12	19.24	1B	mafic volcanic pillow flow. Dark green-grey colour. Aphenetic crystals moderately foliated intersecting at 45 TCA. A few moderately defined dark grey-black pillow selvages, often with up to 30% almandine replacement. <1% brown biotite alteration. 1% thin quartz and quartz-carbonate veinlets. trace pyrite in quartz. trace seams of pyrrhotite. a sharp lower contact intersecting at 35 TCA.
442.12	445.43	3.31	6E	intermediate feldspar porphyry dyke, almost granodioritic. Dark grey-purple to locally medium or light beige-grey colour. Weakly to moderately foliated intersecting at 40 TCA. Weak to locally strong pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
445.43	462.97	17.54	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 50 TCA. possible locally pillowed. 15% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets and stringers. Trace brown biotite alteration bands. Trace seams of pyrrhotite. a sharp lower contact intersecting at 50 TCA.
462.97	464.65	1.68	6E	intermediate feldspar porphyry dyke. Dark grey-purple colour. Moderately foliated intersecting at 50 TCA. 15% coarse grained plagioclasse phenocrysts, wiped out near the lower contact. Weak pervasive silicic alteration. A 23 cm mafic inclusion followed immediately by an 18 cm felsite dyke at 263.57 m depth. trace very fine grained disseminated pyrite, and seamed pyrrhotite. no veining. a sharp lower contact intersecting at 55 TCA.
464.65	468.47	3.82	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 50 TCA. Possibly locally pillowed. A 20 felsite dyke at 465.48 m depth. 5% diopside alteration bands parallel to foliation. An 18 cm intermediate dyke at 468.0 m depth. 1% brown biotite alteration. trace pyrite. a sharp lower contact intersecting at 50 TCA.
468.47	470.20	1.73	6E	intermediate dyke. Dark grey-purple colouw. Moderately to strongly foliated at 40 TCA, obliterating any previous porphyritic texture. Weak pervasive silicic alteration. A 15 cm mafic inclusion at 469.35 m depth. 3% quartz veining. <1% very fine grained disseminated pyrite and pyrrhotite. a sharp lower contact intersecting at 45 TCA.
470.20	477.00	6.80	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. possibly locally pillowed. 15% to locally 25% diopside alteration bands parallel to foliation. 2% brown biotite alteration bands. 1-2% thin quartz veinlets. Trace pyrite in veinlets. A sharp lower contact intersecting at 40 TCA.
477.00	477.56	0.56	6E	intermediate dyke. Moderately foliated intersecting at 40 TCA. Dark purple-grey colour. Fine grained crystals. Trace pervasive silicic alteration. <1% quartz-carbonate veinlets. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
477.56	478.89	1.33	1A	massive mafic volcanic flow. Dark green-grey coolour. Aphenetic crystals. Possibly pillowed. Moderately foliated intersecting at 45 TCA. 10% diopside alteration bands parallel to foliation. 2% thin quartz-carbonate veinlets. Trace pyrite. A sharp lower contact intersecting at 50 TCA.
478.89	479.81	0.92	6E	intermediate dyke. Dark purple-grey colour. Aphenetic. Weak pervasive silicic alteration. Moderately foliated intersecting at 45 TCA. 3% silica alteration bands parallel to foliation. <1% very fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 50 TCA.
479.81	480.65	0.84	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 2% thin quartz-carbonate veinlets and stringers, mostly parallel to foliation. 4% diopside alteration bands parallel to foliation. No visible sulphides. a sharp lower contact intersecting at 55 TCA.

From	To	Interval	Code	Description
480.65	482.00	1.35	6E	intermediate dyke. Dark purple-grey colour. Fine grained crystals moderately foliated intersecting at 45 TCA. Trace pervasive silicic alteration. <1% very fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 40 TCA.
482.00	496.92	14.92	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting between 45 and 50 TCA. A 48 cm intermediate dyke at 485.2 m depth. 15% to locally 25% diopside alteration bands parallel to foliation. <1% quartz veining. No visible sulphides. a sharp lower contact intersecting at 40 TCA.
496.92	498.09	1.17	6E	intermediate dyke. Medium greyish colour. Mottled texture. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. Medium grained. Trace very fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 50 TCA.
498.09	500.29	2.20	1B	mafic volcanic pillow flow. Dark green-grey colour. Aphenetic crystals. Well defined, dark black pillow selvages. Moderately foliated intersecting at 50 TCA. 15% diopside alteration bands parallel to foliation, possibly from between pillows. <1% quartz veinlets. no visible sulphides. a sharp lower contact intersecting at 45 TCA.
500.29	501.60	1.31	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclase phenocrysts in an intermediate, medium grained matrix. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 55 TCA.
501.60	506.00	4.40	1B	mafic volcanic pillow flow. Aphenetic crystals. Dark green colour. Well defined black pillow selvages with up to 20% almandine replacement. 10% diopside alteration bands parallel to foliation. <1% pyrite, pyrrhotite, mostly in and around quartz. A gradational lower contact.
506.00	507.75	1.75	SH/1B	DEEP ZONE. Sheared mafic pillow flow. Dark green colour. Aphenetic crystals. Moderately sheared and foliated intersecting at 40 TCA. 20% diopside alteration and 5% brown biotite alteration. 25% dark grey, cloudy quartz veining. 5% thin quartz-carbonate veinlets and stringers parallel to shear. No visible gold. 8% seamed and disseminated pyrrhotite and 1% fine grained disseminated pyrite, mostly in quartz. a gradational lower contact.
507.75	526.44	18.69	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 2% thin quartz-carbonate veinlets and stringers. 5% diopside alteration bands, parallel to foliation. Trace pyrite, pyrrhotite near upper contact. possibly locally pillowed. a sharp lower contact intersecting at 50 TCA.
526.44	530.35	3.91	6E	intermediate feldspar porphyry dyke. Medium to dark grey colour. 15% coarse grained plagioclasse phenocrysts. Moderately foliated intersecting at 45 TCA. 2 mafic flow inclusions up to 25 TCA. A 12 cm felsite dyke at 529.5 m depth. A sharp lower contact intersecting at 40 TCA.
530.35	532.03	1.68	4D	medium to coarse grained felsite dyke. Subhedral crytals. Medium to light white-greyish colour. Strong silica content. Erratic upper contact after 22 cm of mafic volcanics. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
532.03	542.00	9.97	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 20% diopside alteration bands parallel to foliation. A 27 cm bull quartz vein at 539.7 m depth. <1% thin quartz-carbonate stringers. Trace very fine grained pyrite in the quartz. a gradational lower contact.
542.00	563.68	21.68	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 5% dioipside alteration bands parallel to foliation. 3-4% thin quartz and quartz-carbonate veinlets, mostly parallel to foliation. Trace pyrite and pyrrhotite in quartz. a semi-gradational lower contact.
563.68	564.88	1.20	SH/1A	UPPER ZONE. Massive mafic volcanic flow. Weakly sheared and moderately to strongly foliated intersecting at 45 TCA. A 24 cm sheared intermediate dyke at 564.16 m depth. 20% diopside alteration in mafics. 5% brown biotite alteration bands parallel to shear. 5% quartz and quartz-carbonate veinlets. <1% pyrite, trace pyrrhotite, mostly in quartz. a semi-gradational lower contact.
564.88	568.71	3.83	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 3% diopside alteration. <1% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
568.71	575.25	6.54	6E	intermediate feldspar porphyry dyke. Dark purple-grey and light grey colours. Moderate pervasive silicic alteration caising bleached bands. 15% coarse grained plagioclasse phenocrysts. A 12 cm mafic inclusion at 570.35 m depth. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
575.25	581.10	5.85	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 2% brown biotite alteration bands. 1% diopside alteration. 2-3% quartz and quartz-carbonate veinltes. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
581.10	584.56	3.46	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. 15% coarse grained euhedral plagioclasse phenocrysts in a fine grained intermediate matrix. Weak to moderate pervasive silicic alteration, causing areas of local bleaching. Moderately foliated intersecting at 50 TCA. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 70 TCA.
584.56	586.43	1.87	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. 3% diopside alteration. 1% thin quartz-carbonate veinlets. 1% brown biotite alteration. <1% locally fine grained, disseminated pyrrhotite. a sharp lower contact intersecting at 50 TCA.
586.43	587.01	0.58	6E	intermediate dyke. Dark grey-purple colour. Fine grained to intermediate. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
587.01	599.44	12.43	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 50 TCA. 2-3% diopside alteration bands, usually parallel to foliation. 1% thin quartz-carbonate veinlets and stringers. Trace pyrite. a sharp lower contact intersecting at 55 TCA.

From	To	Interval	Code	Description
599.44	600.52	1.08	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. 15% coarse grained plagioclasse phenocrysts and 5% medium grained hornblende phenocrysts in a fine grained intermediate matrix. a 10 cm mafic inclusion at 599.8 m depth. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
600.52	602.50	1.98	1E	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Locally amygdualoidal. Weakly foliated intersecting at 50 TCA. 2% diopside alteration bands parallel to foliation. No visible sulphides. A sharp lower contact intersectign at 50 TCA.
602.50	603.40	0.90	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. 15% coarse grained plagioclasse phenocrysts and 5% medium grained hornblende phenocrysts in a fine grained intermediate matrix. a 12 cm mafic inclusion at 602.65 m depth. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 50 TCA.
603.40	612.00	8.60	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. <1% diopside alteration bands. 1-2% thin quartz veinlets, mostly parallel to foliation. <1% fine to medium grained pyrrhotite and pyrite in quartz. a semi-gradational lower contact.
612.00	612.50	0.50	SH/1A	LOWER ZONE. Sheared massive mafic volcanic flow. Weakly sheared and moderately foliated intersecting at 50 TCA. Dark green-grey colour. 5% diopside alteration bands. 1% brown biotite alteration. 3% quartz veinlets. 1% pyrrhotite and <1% pyrite in quartz. a gradational lower contact.
612.50	680.00	67.50	1A/1E	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Weakly foliated intersecting at 50 TCA. Locally weakly amygdualoidal. 1% diopside alteration. <1% thin quartz-carbonate veinlets. No visible sulphides.
680.00				E.O.H

Sample #	From	To	Interval	Code	Description	Au (ppm)
876532	89.00	89.55	0.55	1A	mafic flow. Mod fol. No veining. Nvs.	0.003
876533	89.55	90.15	0.60	QV	quartz vein. Pink and dark grey colour. Mod frac. 3% po, 1% gl.	0.137
876534	90.15	91.74	1.59	1A	mafic flow. Mod fol. 3% thin qcs. 1% diop alt. nvs.	0.003
876535	360.60	361.40	0.80	1B	bracket sample. Mafic pillow flow. Mod fol. 20% diop alt. 3% brown-bio alt. 2% thin qcs.	0.003
876536	361.40	362.00	0.60	1B	mafic pillow flow. Mod fol. 10% diop alt. 1% garnet. 4% grey qv. 3% po in qtz. Mod mag around po.	0.003
876537	362.00	362.62	0.62	1B	mafic pillow flow. Mod fol. 5% diop alt. 15% grey qv. 4% po in qtz. <1% garnets. Wk mag around po.	0.003
876538	362.62	363.20	0.58	1B	bracket sample. Mafic pillow flow. Mod fol. 1% thin qcs. 5% diop alt. tr po.	0.003
876539	502.85	503.55	0.70	1B	mafic pillow flow. Mod fol. 10% diop alt. 4% qv. <1% py in qtz.	0.003
876540	503.55	504.40	0.85	1B	mafic pillow flow. Mod fol. 15% diop alt. 6% qv and qcv. 2% brown bio alt. <1% fg py in qtz.	0.003
876541	504.40	505.20	0.80	1B	mafic pillow flow. Mod fol. 7% diop alt. 3% qcv. Tr po in diop alt.	0.006
876542	505.20	506.00	0.80	1B	mafic pillow flow. Mod fol. 5% thin diop alt bands. 4% thin qcv and qcs. 2% brown bio alt. <1% garnets. Tr po.	0.444
876543	506.00	506.60	0.60	SH/1B	sheared mafic pillow flow. Mod sh. Str fol. 50% dark grey, cloudy qv. 5% thin qcv and qcs. 10% diop alt bands. 8% seamed and diss po in qtz. 1% vfg diss py in qtz.	4.950
876544	506.60				Standard 16A	1.700
876545	506.60	507.16	0.56	SH/1B	sheared mafic pillow flow. Mod sh. Str fol. 15% diop alt. 4% brown bio alt. 10% thin qcv and qcs parallel to sh. Wk perv cb alt. 1% fg diss po, py.	0.352
876546	507.16	507.75	0.59	QV	quartz vein in a sheared mafic pillow flow. 80% dark grey cloudy qtz vein. 20% diop alt mafic flow. Mod sh, str fol. 12% fg diss and seamed po in qtz. 1% fg diss py.	2.440
876547	507.75				Blank	0.003
876548	507.75	508.50	0.75	1B	mafic volcanic flow. Mod fol. 5% diop alt. 2% thin qcs. Tr po, py.	0.020
876549	508.50	509.00	0.50	1B	mafic volcanic flow. Mod fol. 10% diop alt. no veining. Nvs.	0.003
876550	539.10	539.60	0.50	1A	mafic volcanic flow. Mod fol. 15% diop alt. no veining. Nvs.	0.003
876551	539.60	540.00	0.40	QV	quartz vein in a mafic volcanic flow. 85% qv. White colour. <1% vfg diss py.	0.003
876552	540.00	540.50	0.50	1A	mafic volcanic flow. Mod fol. 10% diop alt. no veining. Nvs.	0.003
876553	563.00	563.68	0.68	1A	mafic volcanic flow. Mod fol. 1% thin qcs. Nvs.	0.007
876554	563.68	564.16	0.48	SH/1A	UPPER ZONE. Mafic volcanic flow. Str fol. Wk shear. 15% intermediate dyke. 10% brown bio alt. 10% diop alt. 8% qv. 1% py, <1% po.	0.003
876555	564.16	564.42	0.26	SH/1A	UPPER ZONE. Intermediate dyke. Mod fol. Wk sh. Wk perv sil alt. 1% fg-vfg py. Tr po.	0.003

Sample #	From	To	Interval	Code	Description	Au (ppm)
876556	564.42	564.88	0.46	SH/1A	UPPER ZONE. Mafic flow. Str fol. Mod sh. 25% diop alt. 10% qv. <1% py, po.	0.003
876557	564.88	565.50	0.62	1A	mafic flow. Mod fol. 3% diop alt. nvs.	0.003
876558	610.00	611.00	1.00	1A	mafic volcanic flow. Mod fol. 2% diop alt. 1% thin qcs. <1% seamed po in qtz.	0.029
876559	611.00	612.00	1.00	1A	mafic volcanic flow. Mod fol. 3% diop alt. 3% qv. Tr py, po.	0.017
876560	612.00	612.50	0.50	SH/1A	LOWER ZONE. Mafic flow. Wk sh. Mod fol. 5% qv. <1% po, py in qtz. 5% diop alt. 1% brown bio alt.	0.077
876561	612.50	613.00	0.50	1A	mafic volcanic flow. Mod fol. 1% diop alt. nvs.	0.008

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-29
	CLAIM NO:	1135498	Drill Rig	Major-50

Location		Drill Hole Orientation				
UTM Zone 16				Dates Drilled:	From: 08-Feb-12	To: 21-Feb-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645966					
Northing	5407073	Dip:	-80	Dates Logged:	From: 20-Feb-12	To: 22-Feb-12
Elevation	372					
Final		Depth:	516.00	Logged By:	Greg McKay	
Easting	645958.190					
Northing	5407068.460	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	435.890					

Purpose of Hole	
Results	26 Specs VG in lower zone.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
9.0	65.3	-80.7	5710	magnetic
33.0	50.1	-80.3	5620	
57.0	50.5	-79.8	5634	
81.0	50.0	-79.7	5671	
105.0	53.1	-79.0	5686	
129.0	53.3	-79.0	5712	
153.0	52.9	-78.1	5697	
177.0	52.6	-76.9	5697	
201.0	119.1	-76.6	372	magnetic
225.0	54.6	-75.5	5701	
240.0				wedge
249.0	52.0	-72.2	5666	
255.0	52.1	-71.7	5673	
279.0	52.7	-71.2	5703	
303.0	54.5	-70.6	5666	
304.0				wedge
312.0	50.3	-67.9	5691	
318.0	52.4	-67.6	5681	
327.0	51.9	-65.4	5656	
333.0	50.6	-64.5	5663	
357.0	53.6	-63.8	5685	
381.0	53.2	-63.1	5677	
382.0				wedge
390.0	52.7	-60.4	5686	
396.0	51.7	-59.5	5685	
397.0				wedge
405.0	19.9	-56.2	1572	magnetic
408.0	333.0	-55.7	1322	magnetic
432.0	51.5	-54.7	5698	
456.0	51.0	-53.5	5710	
480.0	53.2	-51.0	5716	

Dip Tests (Cont)

Depth	Az.	Dip	Mag	Notes
504.0	52.1	-45.9	5705	

From	To	Interval	Code	Description
0.00	2.60	2.60	OB	overburden
2.60	6.33	3.73	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly foliated intersecting at 30 TCA. Dark black colour. <1% thin quartz veinlets. <1% seamed pyrrhotite in quartz. A sharp lower contact intersecting at 15 TCA.
6.33	10.22	3.89	6E	intermediate feldspar porphyry cyke. 20% medium to coarse grained plagioclasse phenocrysts in an intermediate to mafic fine grained matrix. Moderately foliated intersecting at 30 TCA. No veining. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 30 TCA.
10.22	21.55	11.33	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly foliated intersecting at 30 TCA. Dark black colour. <1% thin quartz veinlets. Weak local iron formations characterized by strong silicic alteration and 3-5% seamed and disseminayed pyrrhotite. A sharp lower contact intersecting at 40 TCA.
21.55	22.10	0.55	6E	intermediate feldspar porphyry cyke. 20% medium to coarse grained plagioclasse phenocrysts in an intermediate to mafic fine grained matrix. Weakly foliated intersecting at 30 TCA. No veining. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
22.10	23.00	0.90	3D/1A	Iron formation in a massive mafic volcanic flow. Dark grey to black colour. Strongly foliated intersecting at 30 TCA. Moderately magnetic. Weak to moderate pervasive silicic alteration. 2% diopside alteration bands parallel to foliatino. 25% fine grained disseminated and seamed pyrrhotite. a gradational lower contact.
23.00	27.25	4.25	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 30 TCA. <1% thin quartz-carbonate veinlets. <1% thin seams of pyrrhotite. A gradational lower contact.
27.25	28.50	1.25	3D/1A	Iron formation in a massive mafic volcanic flow. Dark grey to black colour. Strongly foliated intersecting at 30 TCA. Moderately magnetic. Weak to strong locally pervasive silicic alteration. 4% diopside alteration bands parallel to foliatino. 15% fine grained disseminated and seamed pyrrhotite. a gradational lower contact.
28.50	52.15	23.65	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 30 TCA. 3-4% diopside alteration bands parallel to foliation. Locally weakly magnetic with weak iron formations and locally up to 3-4% pyrrhotite. Trace garnets. <1% quartz and quartz-carbonate veinlets. a sharpish lower contact.
52.15	52.96	0.81	QTSW/1A	quartz stockwork in a massive mafic volcanic flow. 60% white quartz veining up to 20 cm across. Bull quartz. No shear and no visible sulphides. A sharp lower contact intersecting at 55 TCA.
52.96	73.35	20.39	1A	massive mafic volcanic flow. Dark grey to black colour. Fine to medium grained. Moderately foliated intersecting at 30 TCA. 2% diopside alteration bands parallel to foliation. A 16 cm felstie dyke at 53.6 m depth and a 32 cm felsite dyke at 65.1 m depth. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
73.35	74.83	1.48	6E	intermediate feldspar porphyry dyke, medium greyish-purple colour. 10% medium grained plagioclasse phenocrysts in a fine grained to aphenetic intermediate matrix. Moderately foliated intersecting at 35 TCA. <1% thin quartz-carbonate veinlets. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
74.83	76.40	1.57	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals moderately foliated intersecting at 35 TCA. 5% diopside alteration bands parallel to foliation. 2-3% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
76.40	77.63	1.23	6E	intermediate feldspar porphyry dyke, medium greyish-purple colour. 10% medium grained plagioclasse phenocrysts in a fine grained to aphenetic intermediate matrix. Moderately foliated intersecting at 35 TCA. 2-3% thin quartz-carbonate veinlets. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
77.63	80.88	3.25	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. 5% quartz veining. 15% to locally 35% diopside alteration bands parallel to foliation, usually enveloping the quartz. 1-2% brown biotite alteration. Trace pyrrhtotie. A sharp irregular lower contact.
80.88	81.71	0.83	4D	felsite dyke. Light grey to white colour. Fine grained to medium grained. Subhedral to anhedral crstals. 10% mafic crystals. No foliation of visible sulphides. A shrap lower contact intersecting at roughly 50 TCA.
81.71	107.25	25.54	1A	massive mafic volcanic flow. Medium-dark grey-green colour. Fine grained euhedral crystals. Weakly foliated intersecting at 35 TCA. 2-3% diopside alteration bands parallel to foliation, and usually enveloping quartz veining. 2-3% quartz veinlets up to 10 cm across. trace thin felsite dyklets intersecting at random angles. a sharp lower contact intersecting at 35 TCA.E13
107.25	110.76	3.51	6E	intermediate feldspar porphyry dyke. 15% elongated feldspar porphyry phenocrysts in an aphenetic intermediate matrix. Moderately to locally strongly foliated intersecting at 35 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
110.76	146.26	35.50	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. 15% to locally 35% diopside alteration bands parallel to foliation. diopside alteration increases towards the lower contact up to 50%. 2% thin quartz and quartz-carbonate veinlets. Trace pyrite. <1% brown biotite altreration bands. possibly locally pillowed. a sharp lower contact intersecting at 30 TCA.
146.26	147.42	1.16	6E	intermediate feldspar porphyry dyke. 15% medium grained plagioclasse phenocrytss in an aphenetic dark grey-purple matrix. Moderately foliated intersecting at 35 TCA. Weak pervasive silicic alteration. 20% grey quartz veining up to 25 cm across. 1-2% black biotite and 1% pyrite in the quartz. a sharp lower contact intersecting at 30 TCA.
147.42	152.22	4.80	1A	massive mafic volcanic flow. Dark grey to black and locally medium green-grey colour. Strongly foliated intersecting at 25 TCA. No veining. No visible sulphides. Fine grained crystals. A sharp lower contact intersecting at 25 TCA.

From	To	Interval	Code	Description
152.22	154.28	2.06	6E	intermediate hornblende porphyry dyke. 15% very elongated hornblende phenocrysts in an aphenetic intermediate matrix. Modererately to strongly foliated intersecting 20 TCA. Moderate pervasive silicic alteration. 2-3% quartz-carbonate veinlets. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 65 TCA.
154.28	159.17	4.89	1A	massive mafic volcanic flow. Medium grey-green colour. Fine grianed to aphenetic. Moderately foliated intersecting at 25 TCA. 1% thin quartz-carbonate veinlets and stringers. No visible sulphides. A semi-gradational lower contact.
159.17	159.70	0.53	3D/1A	iron formation in a massive mafic volcanic flow. Strong pervasive silicic alteration/veining. Moderately foliated intersectign at 35 TCA. 20% semi-massive pyrrhotite. Moderately magnetic. A semi-gradational lower contact.
159.70	165.76	6.06	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderatly foliated intersecting at 35 TCA. 1% brown biotite alteration. 1-2% diopside alteration. No visible sulphides. A sharp irregular lower contact.
165.76	166.32	0.56	QV	quartz vein. Milky white colour. 5% small mafic flow and diopside inclusions. Weakly fractured. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
166.32	191.00	24.68	1A	massive mafic volcanic flow. Dark grey colour. Fine to medium grained. Moderately foliated intersecting at 35 TCA. 2% thin, mostly erratic quartz and quartz-carbonate veinlets and stringers. No visible sulphides. A gradational lower contact.
191.00	198.03	7.03	1B	mafic pillow flow. Dark grey-green colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 35 TCA. 2-3% diopside alteration bands, mostly parallel to foliation. <1% brown biotite alteration. Occasionally well defined, black pillow selvages. <1% thin quartz-carbonate veinlets. no visible sulphides. a sharp lower contact intersecting at 35 TCA.
198.03	199.41	1.38	6E	intermediate dyke. Dark purple-grey colour. Moderately foliated intesecting at 35 TCA. 15% silica flooding causing bleaching. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 30 TCA.
199.41	239.00	39.59	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. 3-4% diopside alteration bands parallel to foliation. 1-2% thin quartz and quartz-carbonate veinlets. A 5 cm felsite dyke running down the core for 35 cm at 208.7 m depth. and two more felsite dykes up to 40 cm across at 214.95 and 217.20 m depth. an 18 cm feldspar porphyry dyke at 235.4 m depth. trace pyrite in quartz. a gradationa lower contact.
239.00	243.60	4.60	1Z	medium to coarse grained massive mafic volcanic flow, or gabbroic end-member. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. A 31 cm intermediate dyke at 239.3 m depth. <1% quartz veinlets. No visible sulphides. A gradational lower contact.

From	To	Interval	Code	Description
243.60	250.50	6.90	1B	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Locally pillowed. Moderately foliated intersecting at 35 TCA. 15% diopside alteration bands parallel to foliation. 1% quartz veinlets. Trace pyrite in the quartz. A sharp lower contact intersecting at 30 TCA.
250.50	252.09	1.59	6E/BX	brecciated intermediate feldspar porphyry dyke. Medium greyish colour. Moderately to strongly foliated intersecting at 35 TCA. Moderate pervasive silicic alteration. Moderately brecciated around the edges. 3% very thin, fracture controlled quartz-carbonate stringers. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
252.09	252.98	0.89	1A	massive mafic volcanic flow. Medium to dark green-grey colour. Fine grained to aphenetic. 15% diopside alteration bands parallel to foliation. Weakly to moderately foliated intersecting at 30 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
252.98	256.67	3.69	6B	mafic dyke. Medium grained. Dark grey colour. Weakly to moderately foliated intersecting at 35 TCA. 1-2% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 55 TCA.
256.67	278.60	21.93	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. 10% to locally 20% diopside alteration bands parallel to foliation. Locally up to 3% brown biotite alteration bands. 1% thin quartz-carbonate veinlets. A 17 cm brecciated intermediate dyke at 263.4 m depth. a sharp lower contact intersecting at 55 TCA.
278.60	279.54	0.94	4D	coarse grained felsite to pegmatite dyke. Subhedral to anhedral crystals. Light grey to white colour. 3% mafic crystals. 6% coarse grained muscovite. No visible sulphides. A sharp lower contact intersecting at 80 TCA.
279.54	318.60	39.06	1A	massive mafic volcanic flow. Dark green-grey to locally black colour. Moderately foliated intersecting at 35 TCA. Locally pillowed with occasional dark grey to black pillow selvages. 2% thin quartz-carbonate veinlets. 4-5% thin diopside alteration bands parallel to foliation. <1% brown biotite alteration. no visible sulphides. A 35 cm coarse grained gabbro dyke at 311.9 m depth. a sharp lower contact intersecting at 55 TCA.
318.60	321.02	2.42	6E	intermediate feldspar poprhyry dyke. 15% medium to coarse grained plagioclasse phenocrysts in a dark grey aphenetic matrix. Weakly foliated intersecting at 35 TCA. Weak pervasive silicic alteration. No veining. Trace seamed pyrrhotite. A sharp lower contact intersecting at 50 TCA.
321.02	330.52	9.50	1A	massive mafic volcanic floe. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. <1% almandine garnets. Possibly locally pillowed. 3-4% diopside alteration bands parallel to foliation. A sharp, wavy lower contact intersecting at roughly 25 TCA.
330.52	331.12	0.60	4D	pink felsite dyke. Medium grained. Granitic composition. Not foliated. Moderately broken rock. No veining. No visible sulphides. A sharp lower contact intersecting at roughly 25 TCA.

From	To	Interval	Code	Description
331.12	339.04	7.92	1A	massive mafic volcanic flow. Dark grey-green colour. Moderately foliated intersecting at 45 TCA. 4% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
339.04	340.23	1.19	6B	mafic dyke. Medium grained. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
340.23	376.00	35.77	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. Possibly locally pillowed. 10-15% diopside alteration bands parallel to foliation. 2% thin quartz-carbonate veinlets. Trace pyrrhotite and chalcopyrite. a gradational lower contact.
376.00	387.33	11.33	1Z	mafic volcanic flow, or gabbroic end member. Dark green-grey colour. Medium to coarse grained, subhedral to euhedral crystals. Slightly mottled texture. Moderately foliated intersecting at 50 TCA. 2-3% and locally up to 10% quartz veinlets up to 10 cm across. trace pyrite in quartz. ahsarp lower contact intersecting at 50 TCA.
387.33	388.03	0.70	6E	intermediate dyke. Medium to dark purple -grey colour. Fine grained. Moderately foliated intesecting at 50 TCA. Weak to moderate pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
388.03	388.90	0.87	1A	massive mafic volcanic flow. Dark green colour. Fine grained crystals. Moderately foliated intersecting at 50 TCA. 2% thin quartz-carbonate veinlets and stringers. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
388.90	390.39	1.49	6E	intermediate dyke. Medium-dark purple-grey cllour. Fine grained moderately foliated intersecting at 50 TCA. Moderate pervasive silicic alteration. 3% silica bleached bands. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
390.39	410.76	20.37	1A	mafic volcanic flow. Dark green colour. Moderately foliated intersecting at 45 TCA. 10% light gree diopside alteration bands parallel to foliation. 2-3% quartz veinlets up to 5 cm across. a 39 cm silicified flooded dyke with up to 2% pyrrhotite and <1% chalcopyrite mineralization at 407.55 m depth. <1% coarse grained almandine garnets. A 34 cm felsite dyke at 408.4 m depth. <1% pyrrhotite and chalcopyrite in the quartz. a sharp lower contact intersecting at 70 TCA.
410.76	411.53	0.77	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in a dark purple, aphenetic, intermediate matrix. Moderately foliated intersecting at 70 TCA. Moderate pervasive silcic alteration. <1% very fine grained disseminated pyrrhotite. a sharp lower contact intersecting at 50 TCA.
411.53	414.15	2.62	1A	massive mafic volcanic flow. Dark green colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 50 TCA. 5% thin diopside alteration bands parallel to foliation. 2% thin quartz-carbonate veinlets. <1% brown biotite alteration. trace pyrite. a sharp lower contact intersecting at 65 TCA.
414.15	414.73	0.58	6F	mafic dyke. Dark grey colour. Fine grained to possibly weakly porphyritic. Weakly foliated intersecting at 45 TCA.<1% very thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 60 TCA.

From	To	Interval	Code	Description
414.73	427.44	12.71	1A	massive mafic volcanic flow. Dark green colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 55 TCA. 15% diopide alteration bands parallel to foliation. <1% thin quartz-carbonate veining. Moderately sheared for 20 cm near the lower contact. <1% pyrrhotite and pyrite. a sharp lower contact intersecting at 50 TCA.
427.44	428.77	1.33	SH/6E	UPPER ZONE. Sheared intermediate dyke. Dark purple-grey colour. Fine grained. Moderately sheared and strongly foliated intersecting at 55 TCA. Moderate to strong pervasive silicic alteration. 5-6% fine grained disseminated and ribboned pyrrhotite. Trace chalopyrite. a sharp lower contact intersecting at 45 TCA.
428.77	429.48	0.71	SH/1A	UPPER ZONE. Sheared massive mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 55 TCA. Moderate pervasive diopside alteration. Weak pervasive silicic alteration. 2-3% brown biotite alteration. <1% pyrite, pyrrhotite, fine grained and disseminated. a gradational lower contact.
429.48	430.45	0.97	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals. Moderately foliated intersectign at 55 TCA. 10% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets. Trace pyrrhotite. A sharp lower contact intersecting at 60 TCA.
430.45	431.07	0.62	SH/6E	sheared intermediate dyke. Dark purple-grey colour. Fine grained in the centre to medium grained around the edges. Weak to moderate pervasive silicic alteration. Moderately foliated intersecting at 55 TCA. 3% bleached silica flooded bands. 1% very fine grained pyrite, mostly near silica flooding. a sharp lower contact intersecting at 45 TCA.
431.07	433.12	2.05	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated, and possibly weakly sheared intersecting at 60 TCA. 5% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. 2% and locally up to 5% seams of pyrrhitite. a sharp lower contact intersecting at 45 TCA.
433.12	433.61	0.49	6E	intermediate dyke. Dark grey-purple colour. Moderately foliated intersecting at 60 TCA. Weak pervasive silicic alteration. 1% very fine grained disseminated pyrrhotite and pyrite. A sharp lower contact intersecting at 55 TCA.
433.61	439.18	5.57	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals. Moderately foliated intersecting at 55 TCA. 15% diopside alteration bands parallel to foliation. 1% brown biotite alteration. <1% thin quartz-carbonate veinlets. No visible sulphides. A sharp wavy lower contact intersecting at roughly 50 TCA.
439.18	440.85	1.67	6E	intermediate dyke. Dark purple colour. Moderately foliated intesecting at 55 TCA. Moderate pervasive silicic alteration. A 20 cm mafic volcanic unit at 439.6 m depth. 10% bleached silica flooded bands. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 60 TCA.
440.85	441.95	1.10	1A	massive mafic volcanic flow. Dark green colour. Moderately foliated intersecting at 55 TCA. 10% diopside alteration bands parallel to foliation. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
441.95	442.93	0.98	6E	intermediate dyke. Medium to dark purple-grey colour. Moderately foliated intersecting at 55 TCA. Moderate pervasive silicic alteration. 3% silica flooded bleached bands. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
442.93	445.78	2.85	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals. Moderately foliated intersecting at 55 TCA. 15% diopside alteration bands parallel to foliation. 1% quartz veining. 1% brown biotite alteration bands. <1$ small almandine garnets. No visible sulphides. sharp lower contact intersecting at 50 TCA.
445.78	447.84	2.06	6E	intermdiate feldspar porphyry dyke. Medium to dark grey-purple colour. 15% medium grained plagioclasse phenocrysts in an aphenetic matrix. Moderately foliated intersecting at 55 TCA. Weak pervasive silicic alteration. 5% silica flooded bleached bands. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 60 TCA.
447.84	455.79	7.95	1A	massive mafic volcanic flow. Dark green colour. Possibly locally pillowed. Aphenetic crystals. Moderately foliated intersecting at 55 TCA. 8% diopside alteration bands parallel to foliation. 1% quartz veinlets. 1% brown biotite alteration. Trace pyrope garnets. trace pyrite in quartz. a sharp lower contact intersecting at 50 TCA.
455.79	457.05	1.26	6E	intermediate dyke. Medium grained. Medium grey colour. Weakly foliated intersecting at 55 TCA. Weak pervasive silicic alteration. Weak pervasive silicic alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
457.05	459.46	2.41	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals moderately foliated intersecting at 50 TCA. 2% quartz veining. 10% diopside alteration bands parallel to foliation. Locally 1% leucoxene alteration. No visible sulphides. A sharp lower contact intesecting at 50 TCA.
459.46	460.92	1.46	6E	intermediate dyke. Medium grained. Dark grey-purple colour with 10% white bleached areas. Moderately foliated intersecting at 50 TCA. <1% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
460.92	464.41	3.49	1A	massive mafic volcanic flow. Dark greey colour. Aphenetic crystals. Moderately foliated intersecting at 55 TCA. 15% light green diopside alteration bands parallel to foliation. A 30 cm white quartz vein at 463.2 m depth. 3% brown biotite alteration. weakly sheared near the lower contact. <1% pyrite, pyrrhotite in quartz. a sharp lower contact intersecting at 55 TCA.
464.41	465.45	1.04	QV	LOWER ZONE. Strongly sheared quartz vein. Dark grey colour with 10% diopside altered mafic flow sections. Strongly sheared intersecting at 50 TCA. A 20 cm felsite dyke at 464.85 m depth. 6% fine grained disseminated and ribboned pyrrhotite. 1% ribboned galena. 1% fine grained pyrite. 36 SPECS OF VG throughout the zone. a sharp lower contact intersecting at 55 TCA.
465.45	467.50	2.05	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals. Moderately foliated intersecting at 55 TCA. 8% diopside alteration bands parallel to foliation. 2% thin quartz veinlets. <1% brown biotite alteration. Moderately sheared near the upper contact. 1% almandine garnets. <1% fine grained pyrite and pyrrhotite. gradational lower contact.

From	To	Interval	Code	Description
467.50	481.55	14.05	1B	mafic pillowed flow. Dark grey-green colour. Moderately foliated intersecting at 55 TCA. Occasionally well defined, black pillow selvages. 15% medium greenish-grey diopside alteration bands parallel to fhe foliation. <1% thin quartz veinlets. <1% brown biotite alteration bands. no visible sulphides. a sharp lower contact intersecting at 65 TCA.
481.55	482.70	1.15	6E	intermediate dyke. Locally feldspar porphyrytic near the lower contact. Dark grey-purple coloue. Fine grained to aphenetic. Trace pervasive silicic alteration. <1% very thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 55 TCA.
482.70	483.29	0.59	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals. Moderately foliated intersecting at 55 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 55 TCA.
483.29	484.35	1.06	6E	intermediate feldspar porphyry dyke. 10% coarse grained plagioclasse phenocrysts in an aphenetic matrix. Moderately foliated intersecting at 55 TCA. No visible sulphides. A sharp lower contact intersecting at 55 TCA.
484.35	510.24	25.89	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 60 TCA. 15% grading to 5% diopside alteration bands parallel to foliation. 1-2% quartz veinlets up to 10 cm across. A 44 cm intermediate feldspar porphyry dyke at 489.2 m depth. trace pyrite. a sharp lower contact intersecting at 60 TCA.
510.24	511.05	0.81	6E	intermediate feledpar porphyry dyke. 30% medium grained plagioclasse phenocrysts in a fine grained to aphenetic, intermediate matrix. Moderately foliated intersecting at 60 TCA. No veining. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 60 TCA.
511.05	516.00	4.95	1Z	porphyritic mafic volcanic flow, or gabbroic end-member. Medium to dark greenish colour with black phenocrysts. Weakly foliated intersecting at 60 TCA. No visible sulphides.
516.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876562	145.61	146.26	0.65	1A	massive mafic volcanic flow. Str fol. 50% diop alt. <1% thin qcs. Nvs.	0.003
876563	146.26	146.80	0.54	6E	intermediate feldspar porphyry dyke. Mod fol. 10% qv. <1% py in qtz.	0.003
876564	146.80	147.42	0.62	6E	intermediate feldspar porphyry dyke. Mod fol. Wk sh. 40% qv. 1% py in qtz.	0.003
876565	147.42	148.00	0.58	1A	mafic volcanic flow. Mod fol. Tr qcs. Nvs.	0.003
876566	405.70	406.20	0.50	1A	mafic volcanic flow. Mod fol. 5% diop alt. 2% garnets. 1% thin qcs. <1% fg po.	0.003
876567	406.20	406.80	0.60	1A	mafic volcanic flow. Mod fol. 15% diop alt. 15% grey and white qcv. 1% py, tr po in qtz.	0.003
876568	406.80	407.54	0.74	1A	mafic volcanic flow. Mod fol. 15% diop alt. <1% thin qcs. Nvs.	0.003
876569	407.54	408.00	0.46	6F	mafic dyke. Strong perv sil alt. mod fol. 5% qv. 2% fg-mg po in frac.	0.003
876570	408.00	408.40	0.40	1A	mafic volcanic flow. Mod fol. 10% diop alt. 2% thin qcv. <1% fg diss po, py.	0.003
876571	426.50	427.00	0.50	1A	mafic volcanic flow. Mod fol. 8% diop alt. 1% thin qcs. <1% py in qtz.	0.006
876572	427.00	427.44	0.44	1A	mafic volcanic flow. Mod fol. Wk sh. 10% diop alt. 1% thin qcs. <1% fg diss py.	0.013
876573	427.44	427.90	0.46	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 6% fg diss po. Tr cpy.	0.020
876574	427.90	428.40	0.50	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod-str perv sil alt. 8% fg diss and ribboned po. Tr py, cpy.	0.086
876575	428.40	428.77	0.37	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Str perv sil alt. 5% vfg diss po. Tr py, cpy.	0.073
876576	428.77	429.48	0.71	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. Mod perv diop alt. wk perv isl alt. 3% brown bio alt. 2% fg diss po. <1 py.	0.106
876577	429.48	430.00	0.52	1A	mafic volanic flow. Mod fol. 5% diop alt. <1% thin qcs. Tr gar. Tr po, py.	0.023
876578	430.00	430.44	0.44	1A	mafic volcanic flow. Mod fol. 15% diop alt. 1% thin qcs. Tr po, py.	0.025
876579	430.44	431.06	0.62	SH/6E	sheared intermediate dyke. Wk sh. Mod fol. Mod perv sil alt. 1% fg diss py.	0.003
876580	431.06	431.62	0.56	1A	mafic volcanic flow. Mod fol.21% thin qcs. 3% diop alt. 1% brown bio alt. 1% fg diss py.	0.080
876581	431.62	432.35	0.73	1A	mafic volcanic flow. Mod fol. 3% diop alt bands. <1% thin qcs. Nvs.	0.028
876582	432.35	433.12	0.77	SH/1A	sheared mafic volcanic flow. Wk shear. Str fol. 20% diop alt. <1% thin qcs. 3% seamed po. Tr py, cpy.	0.019
876583	433.12	433.61	0.49	6E	intermediate dyke. Str fol. Mod perv sil alt. tr vfg diss py.	0.010
876584	433.61	434.20	0.59	1A	mafic volcanic flow. Mod fol. 10% diop alt. 5% intermediate dyke. 1% thin qcs. Tr py.	0.057
876585	462.66	463.17	0.51	1A	mafic volcanic flow. Mod fol. 20% diop alt. <1% thin qcs. Nvs.	0.009

Sample #	From	To	Interval	Code	Description	Au (ppm)
876586	463.17	463.47	0.30	QV	quartz vein. Milky white colour. Wk frac. 5% mafic incl. nvs.	0.003
876587	463.47	464.00	0.53	1A	mafic volcanic flow. Mod fol. 5% diop alt. 2% brown bio alt. 3% qv. 1% po in qtz.	0.082
876588	464.00	464.41	0.41	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 50% diop alt. 3% brown bio alt. 1% thin qs. 1% fg po, tr py.	0.199
876589	464.41	464.84	0.43	QC/SH	sheared quartz vein. Dark grey colour. Str sh. 8% mafic incl. 8% fg diss and ribboned po. 1% py. 1% ribboned gl. 21 SPECKS VG.	29.000
876590	464.84				Blank	0.003
876591	464.84	465.04	0.20	4D	felsite dyke. Vcg. 4% mineralized qv on either side. 1% po, <1% py, in qtz.	1.190
876592	465.04	465.45	0.41	QC/SH	sheared quartz vein. Dark grey colour. Str sh. 6% mafic incl. 8% fg diss and ribboned po. 1% py. 1% ribboned gl. 15 SPECKS VG.	35.500
876593	465.45				Standard 10C	6.410
876594	465.45	465.86	0.41	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. Wk perv sil alt. 60% diop alt. 3% brown bio alt. 6% fg diss po. Tr py.	0.398
876595	465.86	466.40	0.54	1A	mafic volcanic flow. Mod fol. 15% diop alt. 3% qv. 3% garnet. <1% fg diss py.	0.390
876596	466.40	467.00	0.60	1A	mafic volcanic flow. Mod fol. 5% diop alt. 3% garnet. Tr py.	0.003

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-12A
	CLAIM NO:	1182994	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					02-Feb-12	03-Feb-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645905					
Northing	5407022	Dip:	-62	Dates Logged:	From:	To:
Elevation	437				18-Feb-12	18-Feb-12
Final		Depth:	143.32	Logged By:	Greg McKay	
Easting						
Northing		Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation						

Purpose of Hole	
Results	abandoned before intersection with Sugar Zone.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
24.0	50.8	-60.8	5718	Reflex Test
48.0	50.5	-56.2	5654	
72.0	102.2	-53.4	4953	magnetic
96.0	50.3	-52.2	5647	
120.0	53.0	-51.4	5669	

From	To	Interval	Code	Description
0.00	5.60	5.60	OB	overburden
5.60	24.80	19.20	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Weakly foliated intersecting at 55 TCA. 2-3% thin diopside alteration bands parallel to foliation. Trace garnets. A 13 cm felsite dyke at 10.8 m depth. <1% thin quartz veinlets and quartz-carbonate stringers. no visible sulphides. a gradational lower contact.
24.80	31.92	7.12	1A	massive mafic volcanic flow. Dark grey to black colour. Moderately foliated intersecting at 55 TCA. 20% medium greensih diopside alteration bands parallel to foliation. 1% brown biotite alteration bands. 1% thin quartz veinlets. Trace very fine grained pyrite. a sharp lower contact intersecting at 60 TCA.
31.92	32.72	0.80	6E	intermediate feldspar porphyry dyke. 20% coarse grained plagioclasse phenocrysts in an aphenetic dark grey matrix. Trace foliation intersecting at 55 TCA. <1% thin quartz-carbonate veinlet. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
32.72	34.47	1.75	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly foliated intersecting at 55 TCA. 1% diopside alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
34.47	38.67	4.20	6E	intermediate feldspar porphyry dyke. 20% coarse grained white and pink plagioclasse phenocrysts in a fine grained to aphenetic matrix. Weakly foliated intersecting at 55 TCA. Weak locally pervasive pottasic alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
38.67	41.00	2.33	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly foliated intersecting at 55 TCA. 1% diopside alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
41.00	41.67	0.67	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in an apenetic dark grey matrix. Weakly foliated intersecting at 55 TCA. An 8 cm felsite dykelet at 41.5 m depth. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 60 TCA.
41.67	53.60	11.93	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly to moderately foliated intersecting at 55 TCA. Two pink felsite dykes near the top of the unit at 43.4 and 44.1 m depth, up to 40 cm across. 5% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. trace local pyrrhotite. a gradational lower contact.
53.60	56.40	2.80	3D/1A	iron formation in a mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 60 TCA. 4% diopside alteration bands parallel to folation. Locally up to 7% fine grained disseminated pyrrhotite. Weakly bleached. Locally up to 40% large pyrope garnets. locally mottled texture. locally moderately magnetic. a gradational lower contact.
56.40	59.90	3.50	1U	ultramafic komatiitic flow. Medium grey colour.fine grained. Moderately magnetic. Weakly effervesent. Moderately soft rock. Weakly to moderately foliated intersecting at 60 TCA. Trace very fine grained pyrrhotite. <1% very thin quartz-calcite veinlets and stringers. a gradational lower contact.

From	To	Interval	Code	Description
59.90	65.75	5.85	1A	massive mafic volcanic flow. Dark grey colour. Weakly to moderately foliated intersecting at 65 TCA. <1% thin quartz-carbonate veinlets. Trace fine to medium grained disseminated pyrite and pyrrhotite. A gradational lower contact.
65.75	69.80	4.05	1U	Ultramafic komatiitic flow. Medium to dark grey colour.fine grained. Moderately magnetic. Weakly effervesent. Moderately soft rock. Weakly to moderately foliated intersecting at 65 TCA. Trace very fine grained pyrrhotite. 2% very thin quartz-calcite stringers parallel to foliation. a gradational lower contact.
69.80	71.00	1.20	3D/1A	iron formation in a mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 65 TCA. Locally up to 10% fine grained disseminated and seamed pyrrhotite. Weakly bleached. Locally up to 10% pyrope garnets. Slight cherty texture. A gradational lower contact.
71.00	77.50	6.50	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. 5% and locally up to 15% diopside alteration bands parallel to foliation. <1% very thin quartz-carbonate stringers. No visible sulphides. A gradational lower contact.
77.50	82.60	5.10	1U	Ultramafic komatiitic flow. Medium to dark grey colour.fine grained. Moderately magnetic. Weakly effervesent. Moderately soft rock. Weakly to moderately foliated intersecting at 65 TCA. A 15 cm iron formation at the lower contact with up to 8% seamed and disseminated pyrrhotite. a gradational lower contact.
82.60	87.97	5.37	1A	massive mafic volcanic flow. Dark dark grey colour. Aphenetic crystals. Weakly foliated intersectign at 60 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
87.97	89.34	1.37	6E	intermediate feldspar porphyry dyke. 15% medium grained plagioclasse phencrysts in a fine grained intermediate matrix. Moderately foliated intersecting at 60 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 60 TCA.
89.34	119.00	29.66	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Weakly foliated intersecting at 65 TCA. A 34 cm intermediate feldspar porphyr dyke at 92.65 m depth. two strongly silicified iron formations up to 40 cm across at 93.0 and 95.8 m depth, as well as several smaller ones. a gradational lower contact.
119.00	126.80	7.80	1A	massive mafic volcanic flow. Dark grey to black colour. Moderately foliated intersecting at 60 TCA. 5% diopside alteration bands, mostly parallel to foliation, but occasionally nearly parallel to foliation. 5% quartz veining up to 23 cm across. All quartz is milky white bull quartz with little fracturing and no sulphides. no visible sulphides. a sharp lower contact intersecting at 50 TCA.
126.80	127.27	0.47	6E	intermediate dyke. Medium greyish colour. Fine grained to aphenetic. Poorly defined plagioclasse phenocrysts. Weak pervasive silicic alteration. Weakly to moderately foliated intersecting at 60 TCA. Locally bleached areas. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 50 TCA.

From	To	Interval	Code	Description
127.27	143.32	16.05	1A	massive mafic volcanic flow. Dark grey colour. Fine grained. Moderately foliated intersecting at 55 TCA. Locally 2-3% fine grained disseminated leucoxene alteration. <1% diopside alteration bands parallel to foliation. 1% thin quartz veinlets and stringers. a felsite dyke running parallel to the core for the last 1.32 meters. no visible sulphides.
143.32				E.O.H.

SZ-12-29A

Sample #	From	To	Interval	Code	Description	Au (ppm)
					No Samples Taken	

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-12B
		CLAIM NO:	1182994	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					04-Feb-12	07-Feb-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645905					
Northing	5407022	Dip:	-64	Dates Logged:	From:	To:
Elevation	437				19-Feb-12	19-Feb-12
Final		Depth:	78.00	Logged By:	Greg McKay	
Easting						
Northing		Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation						

Purpose of Hole	
Results	abandoned before intersection with Sugar Zone.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
12.0	49.5	-62.5	5755	Reflex Test
36.0	50.1	-61.7	5686	
60.0	78.2	-58.7	5763	magnetic
63.0	53.5	-58.1	5525	
72.0	56.4	-58.4	5564	
78.0	57.3	-57.5	5511	

From	To	Interval	Code	Description
0.00	2.98	2.98	OB	overburden
2.98	22.00	19.02	1B	mafic volcanic pillow flow. Dark grey colour. Aphenetic crystals. Occasional, well defined, black pillow selvages. Moderately foliated intersecting at 50 TCA. Trace brown biotite alteration. 1% diopside alteration bands parallel to foliation. 2% thin quartz-carbonate veinlets, mostly parallel to foliation. trace pyrrhotite. a gradational lower contact.
22.00	29.79	7.79	1A	massive mafic volcanic flow. Dark grey colour. Moderately to strongly foliated intersecting at 60 TCA. Aphanetic crystals. 20% diopside alteration bands and 1% brown biotite alteration bands parallel to foliation. Two intermediate dykes up to 12 cm in width at 26.33 and 26.57 m depth. 2% thin quartz-carbonate veinlets. trace pyrite. a sharp lower contact intersecting at 55 TCA.
29.79	31.55	1.76	6E	intermediate feldspar porphyry dyke. 25% coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. Weakly foliated intersecting at 55 TCA. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 55 TCA.
31.55	32.21	0.66	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crytsals. Moderately foliated intersecting at 55 TCA. 1% very thin quartz-carbonate stringers. No visible sulphides. A 2 cm erratic felsite dykelet near the lower contact. A sharp lower contact intersecting at 55 TCA.
32.21	36.18	3.97	6E	intermediate feldspar porphyry dyke. 25% coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. moderately foliated intersecting at 55 TCA. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 55 TCA.
36.18	38.68	2.50	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crytsals. weakly foliated intersecting at 55 TCA. <1% very thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
38.68	39.28	0.60	6E	intermediate feldspar porphyry dyke. 20% coarse grained plagioclasse phenocrysts in an aphenetic intermediate to mafic matrix. Weakly foliated intersecting at 55 TCA. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
39.28	55.60	16.32	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Weakly to locally moderately foliated itnersecting at 55 TCA. 3% thin diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets and stringers. A 42 cm felsite dyke at 44.2 m depth. 40 cm of pyrrhotite mineralized mafic flow with moderate to strong foliation at 52.7 m depth. a gradational lower contact.
55.60	71.00	15.40	1U	ultramafic komatiitic flow. Medium grey to locally black colour. Moderately foliated intersecting at 55 TCA. Moderately magnetic. Effervesent in the calcite bleached medium grey parts. <1% to locally 4% fine grained disseminated and seamed pyrrhotite. weak local silicic alteration near the seamed pyrrhotite. a gradational lower contact.
71.00	78.00	7.00	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 55 TCA. Locally mottled texture. Fine grained to locally medium grained. 2-3% diopside alteration bands parallel to foliation. No veining. No visible sulphides.

From	To	Interval	Code	Description
78.00				E.O.H.

SZ-12-29B

Sample #	From	To	Interval	Code	Description	Au (ppm)
					No Samples Taken	

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-12C
		CLAIM NO:	1135498	Drill Rig	Major-50

Location		Drill Hole Orientation				
UTM Zone 16				Dates Drilled:	From: 08-Feb-12	To: 09-Feb-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645966					
Northing	5407073	Dip:	-70	Dates Logged:	From: 19-Feb-12	To: 19-Feb-12
Elevation	372					
Final		Depth:	45.00	Logged By:	Greg McKay	
Easting						
Northing		Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation						

Purpose of Hole	
Results	abandoned before intersection with Sugar Zone.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
9.0	65.1	-71.6	5603	Reflex Test
15.0	60.3	-71.1	5584	magnetic
21.0	50.2	-70.3	5650	
45.0	51.5	-67.1	5635	

From	To	Interval	Code	Description
0.00	2.30	2.30	OB	overburden
2.30	3.99	1.69	1A	massive mafic volcanic flow. Dark grey to black colour. Moderately to strongly foliated intersecting at 35 TCA. Fine grained crystals. No veining. No visible sulphides. A sharp lower contact intersecting at 65 TCA.
3.99	6.46	2.47	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained plagioclasse phenocrysts in an aphenetic, medium to dark grey intermediate matrix. Weakly foliated intersecting at 40 TCA. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
6.46	16.81	10.35	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 35 TCA. Possibly locally pillowed. Locally up to 30% coarse grained almandine garnets. <1% thin quartz-carbonate stringers. Locally iron formation in small areas. <1% to locally 4% seamed pyrrhotite, mostly in iron formations. a sharp lower contact intersecting at 40 TCA.
16.81	17.27	0.46	6E	intermediate feldspar porphyry dyke. 30% coarse grained plagioclasse phenocrysts in an aphenetic dark grey matrix. Very weakly foliated intersecting at 35 TCA. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
17.27	17.92	0.65	3D/1A	iron formation in a mafic volcanic flow. Strongly foliated intersecting at 35 TCA. Moderate to strong pervasive silicic alteration. Weakly magnetic. 6-8% fine grained disseminated and seamed pyrrhotite and <1% pyrite. 3-4% brown biotite alteration. A gradational lower contact.
17.92	40.00	22.08	1A	massive mafic volcanic flow. Dark grey to black colour. Moderately foliated intersecting at 40 TCA. 2-3% diopside alteration bands parallel to foliation. <1% brown biotite alteration. Small local iron formations. 1-2% thin quartz-carbonate veinlets. trace pyrrhotite, mostly in the iron formations. a gradational lower contact.
40.00	45.00	5.00	1A	massive mafic volcanic flow. Fine to medium grained. Subhedral crystals. Weakly foliated. 5% white leucoxene alteration. 1-2% thin quartz-carbonate veinlets. No visible sulphides.
45.00				

Sample #	From	To	Interval	Code	Description	Au (ppm)
					No Samples Taken	

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-30
		CLAIM NO:	1182994	Drill Rig	Major-50

Location		Drill Hole Orientation				
UTM Zone 16				Dates Drilled:	From: 22-Feb-12	To: 07-Mar-12
Prelim		Azimuth:	48	Drilled By:	Major Drilling	
Easting	645865					
Northing	5407103	Dip:	-80	Dates Logged:	From: 24-Feb-12	To: 08-Mar-12
Elevation	429					
Final		Depth:	563.00	Logged By:	Greg McKay	
Easting	645864.250					
Northing	5407104.450	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	432.500					

Purpose of Hole	
Results	
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
9.0	57.1	-79.4	5667	Reflex Test
33.0	57.8	-78.8	5730	
57.0	59.1	-78.2	5708	
81.0	54.7	-78.1	5808	
108.0	60.8	-78.3	5699	
132.0	60.0	-78.1	5699	
144.0	56.7	-77.3	5674	
168.0	59.9	-77.3	5710	
169.0				Wedge
177.0	56.8	-75.3	5694	
195.0	54.5	-74.6	5705	
219.0	56.0	-74.4	5697	
243.0	56.1	-74.1	5694	
255.0	56.2	-74.1	5743	
256.0				Wedge
264.0	52.1	-71.9	5694	
276.0	53.4	-71.1	5699	
300.0	52.0	-70.1	5700	
303.0				Wedge
315.0	49.4	-67.6	5692	
339.0	50.9	-66.8	5691	
363.0	49.5	-64.9	5714	
387.0	49.8	-62.4	5695	
411.0	51.5	-62.3	5702	
435.0	49.7	-61.3	5723	
459.0	51.3	-60.9	5713	
483.0	52.9	-60.9	5708	
507.0	52.7	-60.4	5702	
531.0	54.5	-59.4	5704	
555.0	53.0	-56.2	5699	

From	To	Interval	Code	Description
0.00	0.00	0.00	OB	overburden
0.00	14.10	14.10	1A	massive mafic volcanic flow. Dark green-grey to locally black colour. Fine grained to aphenetic. Moderately foliated intersecting at 30 TCA. 15% and locally <2% diopside alteration bands parallel to foliation. 1-2% quartz veining. Trace pyrite in quartz. a 34 cm intermediate dyke at 11.6 m depth. a sharp lower contact intersecting at 45 TCA.
14.10	15.36	1.26	6E	intermdiate feldspar porphyry dyke. A 4 cm felsite dyke running most of the length of the unit. 15% coarse grained plagioclasse phenocrysts in an aphenetic matrix. Moderately foliated intersecting at 30 TCA. Weak to moderate pervasive silicic alteration. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
15.36	17.33	1.97	1A	massive mafic volcanic flow. Dark grey colour. 20% green diopside alteration bands parallel to foliation. 2-3% brown biotite alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. 2% felsite dykelet. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
17.33	19.73	2.40	6E	intermdiate feldspar porphyry dyke. 25% coarse grained plagioclasse phenocrysts in a black fine grained matrix. Moderately foliated intersecting at 35 TCA. Weak to moderate pervasive silicic alteration. An 18 cm felsite dyke near the upper contact and a 7 cm felsite dyke at 18.7 m depth. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 20 TCA.
19.73	29.42	9.69	1A	massive mafic volcanic flow. Dark gren colour. Fine grained to aphenetic crystals. 15% thin green diopside alteration bands parallel to the foliation. Moderately foliated intersecting at 40 TCA. <1% quartz veinlets. A 16cm felsite dyke at 29.0 m depth. Trace pyrite a sharp lower contact intersecting at 30 TCA.
29.42	30.00	0.58	4D	felsite dyke. Light grey and white colour. Fine to medium grained. Subhedral to locally anhedral crystals. 2% quartz veinlet. No visible sulphides. A sharp irregular lower contact intersecting at 15 TCA.
30.00	30.76	0.76	6E	intermdaite feldspar porphyry dyle. 15% coarse grained plagioclasse phenocrysts in a dark black aphenetic matrix. Moderately foliated intersecting at 30 TCA. Moderate pervasive silicic alteration. 5% quartz veinlet. 1% fine grained disseminated pyrrhotite, trace pyrite, mostly around quartz. a sharp lower contact intersecting at 35 TCA.
30.76	47.00	16.24	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. A 43 cm felsite dyke at 44.15 m depth, as well as 2% other smaller felsite dykelets between 33 and 37 m depth. <1% brown biotite alteration. <1% diopside alteration bands. 1% quartz veinlets. no visible sulphides. a gradational lower contact.
47.00	48.60	1.60	1U	ultramafic komatiitic flow. Medium greyish colour. Moderately magnetic. Weakly effervesent. Soft rock. Moderately foliated intersectign at 35 TCA. No veining. No visible sulphides. A gradational lower contact.
48.60	51.50	2.90	1A/3D	iron formation in a massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. Weak pervasive silicic alteration. 5% to locally 20% coarse grained almandine garnets. 8-10% seamed and semi-massive pyrrhotite. moderately magnetic. no veining. a gradational lower contact.

From	To	Interval	Code	Description
51.50	63.00	11.50	1Z	coarse grained mafic volanic flow or gabbaroic end-member. Coarse grained, mottled texture. Weakly foliated intersecting at 35 TCA. <1% quartz veinlets. 1% to locally up to 5% medium to fine grained disseminated pyrrhotite. A gradational lower contact.
63.00	78.40	15.40	1U	ultramafic komatiitic flow. Medium greyish colour. Weakly to moderately magnetic. Moderately foliated intersecting at 35 TCA. 2% thin quartz-carbonate veinlets. Soft rock. Weakly effervesent. No visible sulphides. A gradational lower contact.
78.40	82.40	4.00	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crytsals. Weakly foliated intersecting at 35 TCA. A 26 cm feldspar porphyry dyke at 79.9 m depth. 1% very thin quartz-carbonate veinlets and stringers. No visible sulphides. A gradational lower contact.
82.40	89.50	7.10	1U	ultramafic komattitic flow. Medium greyish clour. Moderately magnetic. Very soft rock. Weakly effervesent. 1% thin quartz-carbonate stringers. Moderately foliated intersecting at 35 TCA. No visible sulphides. A gradational lower contact.
89.50	90.60	1.10	1A/3D	iron formation in a massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. Trace pervasive silicic alteration. 5% to locally 10% coarse grained almandine garnets. 8-10% seamed and semi-massive pyrrhotite. moderately magnetic. no veining. a gradational lower contact.
90.60	100.63	10.03	1A	massive mafic volcanic flow. Dark greyish colour. Fine grained to aphenetic. Moderately foliated intersecting at 35 TCA. Local areas of iron formation with up to 5% semi-massive pyrrhotite. Locally up to 4% coarse grained almandine garnets, mostly around the iron formations. 1% thin quartz-carbonate veinlets. a sharp lower contact intersecting at 45 TCA.
100.63	103.29	2.66	6E	intermediate feldspar porphyry dyke. 20% medium to coarse grained plagioclasse phenocrysts in a fine grained intermediate matrix. Weakly locally foliated intersecting at 35 TCA. 5% mafic inclusions. A 25 cm felsite dykelet at 101.2 m depth. 3% quartz vein. no visible sulphides. a sharp, slightly wavy lower contact intersecting at about 25 TCA.
103.29	104.33	1.04	1A/3D	cherty iron formation in a massive mafic volcanic flow. Moderately magnetic. Aphenetic crystals. Strongly foliated intersecting at 25 TCA. Strong pervasive silica alteration to silica flooding. 8% fine grained and semi-massive pyrrhotite. 1% fine to medium grained chalcopyrite. a sharp lower contact intersecting at 25 TCA.
104.33	126.00	21.67	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 25 TCA. up to 10% diopside alteration in the bottom half. A 30 cm iron formation at 110.9 m depth. <1% quartz veinlets. Possibly locally pillowed. <1% pyrrhotite, mostly in the iron formation. A gradational lower contact.
126.00	137.59	11.59	1Z	coarse grained mafic volcanic flow of porphyritic gabbroic end-member. Dark grey colour. Phenocrysts up to 5 mm across. Subhedral crystals. Moderately foliated intersecting at 30 TCA. 1% quartz-carbonate veinlets parallel to foliation. No visible sulphides. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
137.59	138.62	1.03	4D	fine to medium grained felsite dyke. Light grey to white colour. 5% mafics. 65% feldspar and 30% quartz grains. Subhedral crystals. 1% quartz veining. No visible sulphides. A sharp lower contact intersecting at 20 TCA.
138.62	146.05	7.43	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 30 TCA. 2% quartz veinlets. Locally up to 5% medium grained leucoxene alteration. <1% and locally up to 5% fine grained disseminated pyrrhotite and pyrite. a sharp lower contact intersecting at 85 TCA.
146.05	146.92	0.87	QV	quartz vein. Medium grey to white coluot. Mostly grey in the middle with white edges. Weakly microfractured. 15% mafic flow inclusion. <1% fine grained pyrite. A sharp lower contact intersecting at roughly 60 TCA.
146.92	173.51	26.59	1A	massive mafic volcanic flow. Fine grained. Subheral to euhedral crystals. Dark grey colour. Weakly foliated intersecting at 30 TCA. <1% thin quartz veinlets. 2-3% diopside alteration bands, mostly parallel to foliation. 1% brown biotite bands. A 15 cm felsite dyke at 161.3 m depth. trace fine grained pyrite, mostly in quartz. locally up to 5% fine grained disseminated leucoxene alteration. a sharp lower contact intersecting at 15 TCA.
173.51	175.33	1.82	6E	intermediate feldspar porphyry dyke. Medium greyish colour. 15-20% coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. Weak pervasive silicic alteration. Subhedral crystals. Weakly foliated intersecting at 30 TCA. <1% thin quartz veinlets. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
175.33	176.50	1.17	1A	massive mafic volcanic flow. Dark green colour. Fine grained to aphenetic crystals. Weakly to moderately foliated intersecting at 35 TCA. 1% thin quartz-carbonate stringers. 2% brown biotite alteration. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
176.50	178.34	1.84	6E	intermediate feldspar porphyry dyke. Medium greyish colour. 15-20% coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. Weak pervasive silicic alteration. Subhedral crystals. Weakly foliated intersecting at 30 TCA. <1% thin felsite dykelet. no veining. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
178.34	190.91	12.57	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. 15% diopside alteration bands parallel to foliation. 1-2% thin quartz veinlets. A 30 cm felsite dyke at 189.0 m depth. Trace pyrite in diopside bands. a sharp lower contact intersecting at 85 TCA.
190.91	193.10	2.19	4E	very coarse grained felsite dyke, or pegmatite dyke. Light grey to white colour. Subhedral to anhedral crystals. 20% very coarse grained yellowish muscovite. No veining. No visible sulphides. A sharp waby lower contact intersecting at roughly 75 TCA.
193.10	200.63	7.53	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 15% medium green diopside alteration bands parallel to foliation. <1% thin quartz-veinlets. No visible sulphides. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
200.63	202.20	1.57	6E	intermediate dyke. Medium to dark grey-purple colour. Moderately to strongly foliated intersecting at 35 TCA. Weak to moderate pervasive silciic alteration. <1% thin quartz-carbonate veinlet. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
202.20	223.00	20.80	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. 10-15% diopside alteration bands parallel to foliation. A 26 cm intermediate dyke at 203.3 m depth, and a 33 cm dyke at 206.35 m depth. A 40 cm and a 39 cm felsite dykes at 208.35 and 212.35 m depth respectively. no visible sulphides. 1% quartz veinlets. a gradational lower contact.
223.00	236.16	13.16	1B	mafic pillowed flow. Dark grey colour. Fine grained. Occasional pillow selvages. Moderately to strongly foliated intersecting at 25 TCA. 10% medium green-grey diopside alteration bands parallel to foliatino. 5% brown biotite alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets and stringers. no visible sulphides. a sharp lower contact intersecting at 30 TCA.
236.16	239.59	3.43	6E	intermediate dyke. Medium to dark grey colour. Fine grained moderately foliated intersecting at 40 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
239.59	240.22	0.63	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 35 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
240.22	241.02	0.80	6E	intermediate dyke. Dark grey colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 20 TCA.
241.02	247.00	5.98	1A	massive mafic volcanic flow. Dark grey to medium grey-green colour. Moderately foliated intersecting at 40 TCA. Subhedral to anhedral crystasl. A 17 cm and a 15 cm intermediate dykes at 244.05 and 244.55 m depth. 1% very thin quartz-carbonate stringers. no visible sulphides. a gradational lower contact.
247.00	249.50	2.50	1A/3D	weak iron formation in a massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 25 TCA. <1% thin quartz-carbonate stringers. 1-2% brown biotite alteration bands. Weakly magnetic. 2% fine grained disseminated and seamed pyrrhotite. a gradational lower contact.
249.50	252.00	2.50	1B	mafic pillow flow. Dark grey colour. Well defined black pillow selvages. Fine grained crystals. Moderately to strongly foliated intersecting at 30 TCA. <1% thin quartz veinlets. Trace pyrrhotite and pyrite including a 7mm seam of pyrite/pyrrhotite at 252.6 m depth. a gradational lower contact.
252.00	277.97	25.97	1Z	coarse grained mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 35 TCA. 1-2% diopside alteration bands parallel to foliation. A 28 cm felsite dyke at 264.35 m depth and an 18 cm felsite dyke at 270.4 m depth. <1% pyrrhotite in diopside alteration. a sharp lower contact intersecting at 75 TCA.
277.97	279.00	1.03	4E	felsite or pegmatite dyke. Very coarse grained subhedral to anhedral crystasl. 40% quartz, 45% feldspar, 10% muscovite and 5% biotite. No veining. No visible sulphides. A sharp, slightly erratic lower contact intersecting at roughly 80 TCA.

From	To	Interval	Code	Description
279.00	285.70	6.70	1A	massive mafic volcanic flow. Dark grey-green colour. Fine to locally medium grained. Moderately foliated intersecting at 35 TCA. 4% diopside alteration bands parallel to foliation. 1% brown biotite alteration. <1% thin quartz-carbonate veinlets. A sharp, slightly wavy lower contact intersecting at roughly 45 TCA.
285.70	287.00	1.30	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in a fine grained, dark grey matrix. Weak pervasive silicic alteration. Weakly foliated intersecting at 40 TCA. Trace fine grained disseminated and fracture controlled pyrite. a sharp lower contact intersecting at 45 TCA.
287.00	290.47	3.47	1B	mafic pillow flow. Dark green-grey colour. Fine grained crystals. 15% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. Occasional well defined pillow selvages. No visible sulphides. A sharp lower contact intersecting at 55 TCA.
290.47	292.26	1.79	6E	intermediate feldspar porphyry dyke. Medium grey colour. 10% medium to coarse grained plagioclasse in an aphenetic matrix. Moderately foliated intersecting at 40 TCA. A 30 cm grey-white quartz vein at 291.1 m depth. <1% pyrite in quartz. Weak pervasive silicic alteration in intermediate dyke. a sharp lower contact intersecting at 33 TCA.
292.26	333.49	41.23	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Moderately foliated intersecting at 35 TCA. 15% diopside alteration bands parallel to foliation. <1% brown biotite alteration. Locally pillowed. A 44 cm intermediate feldspar porphyry dyke at 320.0 m depth. trace fine grained pyrite. a sharp lower contact intersecting at 40 TCA.
333.49	334.47	0.98	6E	intermediate dyke. Medium grey colour. Medium grained subhedral crystals. 40% hornblende. 40% feldspar. 20% quartz. 5% quartz veining. Weakly foliated intersecting at 50 TCA. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
334.47	335.34	0.87	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. 15% diopside alteration bands parallel to foliation. 2% quartz-carbonate veinlets. Trace fracture controlled pyrite. A sharp lower contact intersecting at 45 TCA.
335.34	336.34	1.00	6E/BX	brecciated intermediate dyke. Medium to light green-grey colour. Anhedral crystals. Moderately brecciated. Moderate pervasive silicic alteration. Weak pervasive sericite alteration. No visible sulphides. A sharp, hard to define, lower contact.
336.34	337.57	1.23	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained crystals. 20% diopside alteration bands parallel to foliation. Moderately foliated intersecting at 50 TCA. 2% thin, fracture controlled quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
337.57	338.16	0.59	6E	intermediate feldspar porphyry dyke. Medium grey-pink colour. Subhedral to anhedral crystals. 10-15% medium grained plagioclasse phenocrysts. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. Weak to moderate pervasive potassic alteration. no visible sulphides. strongly fractured and broken up rock. a sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
338.16	341.08	2.92	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 35 TCA. 1% quartz-carbonate veinlets. 15-20% diopside alteration bands parallel to foliation. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
341.08	341.96	0.88	6E/6F	intermediate to mafic dyke. Fine to medium grained crystals subhedral crystals. Medium to dark greyish colour. Weakly foliated intersecting at 40 TCA. Weak pervasive silicic alteration. No visible sulphides. No veining. A sharp lower contact intersecting at 35 TCA.
341.96	347.84	5.88	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. Fine grained to aphenetic crystals. 15 to 20% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets. A sharp lower contact intersecting in some broken rock.
347.84	348.69	0.85	6E	intermediate dyke. Light grey colour. Possibly a feldspar porphyry. Moderate to strong pervasise silicic alteraion. Moderately foliated intersecting at 40 TCA. Weakly brecciated. <1% quartz-carbonate veinlet. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
348.69	393.00	44.31	1B	mafic pillow flow. Dark green-grey colour. Aphenetic crystals. Moderately to stongly foliated intersecting at 40 TCA. Occasional well defined thin black pillow selvages. 10% diopside alteration bands parallel to foliation. Up to 15% pyrope garnets in pillow selvages. 3-4% thin quartz-carbonate veinlets and stringers, mostly parallel to foliation. trace pyrite in quartz. a small seem of pyrrhotite at 392.5 m depth. a 31 cm porphyritic mafic dyke at 378.9 m depth. a gradational lower contact.
393.00	401.02	8.02	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained. Moderately foliated intersecting at 45 TCA. 2% thin diopside alteration bands parallel to foliation. 3-4% thin quartz-carbonate veinlets and stringers parallel to foliation. No visible sulphides. a sharp lower contact intersecting at 45 TCA.
401.02	402.07	1.05	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in a fine grained intermediate, dark grey matrix. Moderately foliated intersecting at 40 TCA. 2-3% silica-diopside alteration bands parallel to foliation. Weak pervasive silicic alteration. Trace very fine grained pyrite. A sharp lower contact intersecting at 45 TCA.
402.07	420.50	18.43	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Moderately foliated intersecting at 35 TCA. 1-% thin diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate veinlets. 1% brown biotite alteration bands parallel to foliation. no visible sulphides. a gradational lower contact.
420.50	459.05	38.55	1B	mafic pillow flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 10% diopside alteration bands parallel to foliation. 1-2% brown biotite alteration bands parallel to foliation. Well defined black pillow selvages up to 50 cm apart, and as close as 3 cm. <1% thin quartz-carbonate veinlets and stringers. no visible sulphides. weakly sheared at lower contact. a sharp wavy lower contact intersecting at roughly 40 TCA.

From	To	Interval	Code	Description
459.05	459.49	0.44	6E/SH	UPPER ZONE. sheared intermediate dyke. Medium purple colour-grey colour. Fine grained to aphenetic. Moderately foliated intersecting at 45 TCA. No veining. Weak pervasive silicic alteration. <1% fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
459.49	471.00	11.51	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 1% thin quartz-carbonate veinlets. Locally medium to coarse grained. 1-2% diopside alteration bands parallel to foliation. Trace pyrite. a gradational lower contact.
471.00	488.47	17.47	1B	mafic pillow flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 15% diopside alteration bands parallel to foliation. 1-2% thin quartz and quartz-carbonate veinlets. A 37 cm and a 35 cm intermediate dyke at 484.3 and 485.2 m depth respectively. a 10 cm felsite dykelet at 482.3 m depth. trace pyrite in quartz. a sharp lower contact intersecting at 40 TCA.
488.47	489.78	1.31	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 25% coarse grained plagioclasse phenocrysts in an aphennetic intermediate matrix. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
489.78	507.64	17.86	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Moderately foliated intersecting at 40 TCA. 15% diopside alteration bands parallel to foliation. <1% fine grained and seamed pyrrhotite. 1-2% thin quartz veinlets. A gradational lower contact.
502.64	505.15	2.51	SH/1A	LOWER ZONE. Sheared mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 40 TCA. 25% diopside alteration. 10% thin quartz and quartz-carbonate veinlets and stringers, mostly parallel to shear. 1-2% brown biotite alteration. 1% pyrrhtotite, mostly in quartz. trtace pyrite. a sharp lower contact intersecting at 35 TCA.
505.15	507.30	2.15	SH/6E	LOWER ZONE. Sheared intermedidtae dyke. Medium grey colour. Moderately sheared and strongly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 15% grey quartz veinlets and thin quartz-carbonate stringers. 2% fine grained disseminated pyrrhotite. trace pyrite. 9 SPECKS OF VG in qtz. a sharp lower contact intersecting at 40 TCA.
507.30	508.51	1.21	SH/1A	LOWER ZONE. sheared mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 45 TCA. Moderate pervasive diopside alteration. 15% dark grey quartz veinlets. 3% very fine grained pyrrhotite, mostly in quartz. <1% pyrite. A sharp lower contact intersecting at 40 TCA.
508.51	509.71	1.20	SH/6E	LOWER ZONE. sheared intermediate dyke. Moderately sheared and strongly foliated intersecting at 40 TCA. Medium to dark grey colour. Weak pervasive silicic alteration. 8% dark grey quartz veining. 5% very thin quartz-carbonate stringers. 3 SPECKS OF VG in qtz. A sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
509.71	510.58	0.87	SH/1A	LOWER ZONE. sheared mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 45 TCA. 35% diopside alteration bands parallel to shear. Weak pervasive silicic alteration. 4-5% fine grained disseminated pyrrhotite. Trace pyrite. 3% quartz veinlets and quartz-carbonate stringers. a sharp lower contact intersecting at 50 TCA.
510.58	511.18	0.60	SH/6E	LOWER ZONE. sheared intermediate dyke. Weakly sheared and moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. Dark greyish colour. 8% quartz veining. 1% very fine grained disseminated pyrrhotite and pyrite. A sharp lower contact intersecting at 40 TCA.
511.18	516.92	5.74	1A	mafic pillow flow. Dark green-grey colour. Aphenetic crystals. well defined black pillow selvages. Moderately foliated intersecting at 45 TCA. 4% diopside alteration bands parallel to foliation. 4% thin quartz-carbonate stringers, also parallel to foliation. 1-2% garnets in pillow selvages. trace pyrite, pyrrhotite in quartz. a sharp lower contact intersecting at 40 TCA.
516.92	517.88	0.96	6E	Intermediate dyke. Dark grey-purple colour. Fine grained. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 3% thin quartz-carbonate stringers. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
517.88	524.99	7.11	1B	mafic pillow flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. Well defined black pillow selvages. 15% thin diopside alteration bands parallel to folaition. 4-5% thin quartz-carbonate veinlets and stringers. trace pyrrhotite. a sharp lower contact intersecting at 40 TCA.
524.99	525.51	0.52	6E	intermediate dyke. Fine grained. Medium to dark grey-purple colour. Moderately to strongly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
525.51	526.28	0.77	1B	mafic pillow flow. Dark green colour. Moderately foliated intersecting at 45 TCA. Aphenetic crystals. Well defined, biotite altered pillow selvages. 3-4% diopside alteration bands parallel to foliation. 3-4% thin quartz and quartz-carbonate veinlets and stringers. no visible sulphides. a sharp wavy lower contact.
526.28	527.17	0.89	6E	intermediate dyke. Fine grained. Dark grey-purple colour. Moderately foliated intersecting at 45 TCA. Weak to moderate pervasive silicic alteration. 3-4% silica flooded bands. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
527.17	529.51	2.34	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 3% quartz veinlets and thin quartz-carbonate stringers. Trace pyrite in quartz. A sharp lower contact intersecting at 40 TCA.
529.51	530.26	0.75	6E	intermediate dyke. Medium grey-purple colour. Moderately foliated intersecting at 45 TCA. Weak to moderate pervasive silciic alteration. 1% thin quartz-carbonate stringers. Trace fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
530.26	534.44	4.18	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals moderately foliated intersecting at 40 TCA. 1-2% thin quartz-carbonate stringers. <1% brown biotite alteration. A 42 cm intermediate dyke at 531.9 m depth. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
534.44	535.44	1.00	6E	intermediate feldspar poprhyry dyke. Dark grey-purple colour. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
535.44	537.03	1.59	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Weakly foliated intersecting at 50 TCA. 3-4% thin diopside alteration bands parallel to foliation. <1% very thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
537.03	537.89	0.86	6E	intermediate feldspar porphyry dyke. Dark grey-purple colour. 15% coarse grained subhedral plagioclasse phenocrysts in an aphenetic intermediate matrix. Weakly foliated intersecting at 50 TCA. Trace pervasive silicic alteration. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
537.89	543.65	5.76	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. 8% diopside alteration bands parallel to folaition. Weakly foliated intersecting at 50 TCA. <1% thin quartz veinlets. <1% fine grained pyrrhotite in diopside alteration. A 25 cm felsite dyke at 542.9 m depth. a sharp lower contact intersecting at 20 TCA.
543.65	544.61	0.96	4D	medium to coarse grained felsite dyke. Subhedral to locally anhedral crystals. Light grey colour. 60% plagioclasse, 5% biotite, 5% muscovite and 30% quartz. No veining. No visible sulphides. A sharp lower contact intersecting at 75 TCA.
544.61	554.02	9.41	1A	massive mafic volcanic flow. Dark green colour. Aphenetic crystals. Weakly foliated intersecting at 55 TCA.1% thin, irregular felsite dykelets intersecting at all different angles. 1-2% brown biotite alteration. 2% thin diopside alteration bands parallel to foliation. no visible sulphides. a sharp lower contact intersecting at 45 TCA.
554.02	554.80	0.78	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained plagioclasse phenocrysts in an aphnetic intermediate matrix. Trace foliation intersecting at 55 TCA. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
554.80	563.00	8.20	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 60 TCA. Possibly weakly pillowed. 10% diopside alteration bands parallel to foliation. 3% thin quartz-carbonate veinlets and stringers. No visible sulphides.
563.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876597	145.60	146.05	0.45	1A	mafic volcanic flow. Mod fol. No veining. Nvs.	0.003
876598	146.05	146.92	0.87	QV	quartz vein. White-grey colour. Wk micro-frac. <1% fg frac-cont py.	0.003
876599	146.92	147.40	0.48	1A	mafic volcanic flow. Mod fol. No veining. Nvs.	0.003
876600	290.50	291.10	0.60	6E	intermeidtae dyke. Mod fol. Wk perv sil alt. 4% qv. Tr fg diss py.	0.003
876601	291.10	291.40	0.30	QV	quartz vein. Wk frac. Wk sh. 3% intermediate and felsite dykelets. 1% fg diss py.	0.003
876602	291.40	292.00	0.60	6E	intermediate dyke. Mod fol. Wk perv sil alt. 5% qv. <1% fg diss py.	0.003
876603	458.50	459.05	0.55	1A	mafic volcanic flow. Wk fol. Wk sh at lower cont. 3% qv. <1% diop alt. <1% py, po.	0.003
876604	459.05	459.49	0.44	6E	intermediate dyke. Wk sh, mod fol. Wk perv sil alt. no veining. <1% fg diss py.	0.003
876605	459.49	460.00	0.51	1A	mafic volcanic flow. Mod fol. 2% thin qcs. <1% py in qtz.	0.003
876606	502.00	502.64	0.64	1A	mafic volcanic flow. Mod fol. 15% diop alt. 3% thin qcs. 2% brown bio alt. tr vfg diss po.	0.160
876607	502.64	503.27	0.63	SH/1A	sheared mafic volcanic flow. Mod sh, str fol. 25% diop alt. 15% qcv and qcs. <1% brown bio alt. <1% vfg diss po, py.	0.255
876608	503.27	504.00	0.73	SH/1A	sheared mafic volcanic flow. Mod sh, str fol. 40% diop alt. 10% qv and qcs. 4% fg diss po and seamed in qtz.	0.091
876609	504.00	504.60	0.60	SH/1A	sheared mafic volcanic flow. Mod sh, str fol. 5% diop alt. 3% thin qcs. 1% vfg diss po, py.	0.172
876610	504.60	505.15	0.55	SH/1A	sheared mafic volcanic flow. Mod sh, str fol. 230% diop alt. 5% qv. 5% fg diss po, py.	0.046
876611	505.15	505.69	0.54	SH/6E	sheared intermediate dyke. Mod sh, str fol. Wk perv sil alt. 30% QV. 6% po, mostly in qtz. Tr py.	5.450
876612	505.69	506.40	0.71	SH/6E	sheared intermediate dyke. Mod sh, str fol. Wk perv sil alt. 2% thin qv. 1% vfg diss po, py.	0.138
876613	506.40	507.30	0.90	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 15% QV. 7 specs VG in qtz.	8.880
876614	507.30				Blank	0.003
876615	507.30	507.90	0.60	SH/1A	sheared mafic flow. Mod sh. Str fol. Wk perv sil alt. mod perv diop alt. 10% qv and qcs. 3% fg diss po, py.	0.090
876616	507.90	508.51	0.61	SH/1A	sheared mafic flow. Mod sh. Str fol. 25% qv. 4% fg py, po. Mod perv diop alt.	0.067
876617	508.51	509.10	0.59	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 5% thin qcs. 4% fg diss po. Tr py.	0.243
876618	509.10				Standard 10C	6.470
876619	509.10	509.71	0.61	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 4% qv. 2 specs VG in qtz. 4% fg diss po. Tr py.	0.764
876620	509.71	510.10	0.39	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 35 % diop alt. 5% thin qv and qcs. Wk perv sil alt. 5% fg diss po. Tr py.	0.092

Sample #	From	To	Interval	Code	Description	Au (ppm)
876621	510.10	510.58	0.48	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 35 % diop alt. 5% thin qv and qcs. Wk perv sil alt. 5% fg diss po. Tr py.	0.060
876622	510.58	511.18	0.60	SH/6E	sheared intermediate dyke. Wk sh. Mod fol. Wk perv sil alt. 7% qv and qcs. 3% fg diss po, py.	0.012
876623	511.18	512.00	0.82	1A	mafic volcanic flow. Mod fol. 3% diop alt. 2% thin qcs. Tr py.	0.098
876624	512.00	512.80	0.80	1A	mafic pillow flow. Mod fol. 3% diop alt. 2% thin qcs. Tr py.	0.399

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-30A
		CLAIM NO:	1182994	Drill Rig	Major-50

Location	
UTM Zone 16	
Prelim	
Easting	645865
Northing	5407103
Elevation	429
Final	
Easting	
Northing	
Elevation	

Drill Hole Orientation	
Azimuth:	48
Dip:	-75
Depth:	38.60
Core Size:	NQ

	From:	To:
Dates Drilled:	21-Feb-12	22-Feb-12
Drilled By:	Major Drilling	
Dates Logged:	24-Feb-12	24-Feb-12
Logged By:	Greg McKay	
Assayed By:	Activation Laboratories Ltd, Thunder Bay	

Purpose of Hole	
Results	Hole cancelled because of bad dip.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
9.0	58.1	-74.8		Reflex Test
33.0	52.1	-72.8	5747	

From	To	Interval	Code	Description
0.00	0.30	0.30	OB	overburden
0.30	4.49	4.19	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 5% beige-green diopside alteration bands parallel to foliation. 2% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 15 TCA.
4.49	10.20	5.71	4D	medium to coarse grained felsite dyke. Subhedral crystals to anhedral around the edges. 5% mafic crystals. 40% quartz and 55% plagioclasse. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
10.20	12.50	2.30	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained. Moderately to strongly foliated intersecting at 40 TCA. 15-20% diopside alteration bands parallel to the foliation. 1% quartz veinlets. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
12.50	13.46	0.96	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in a dark grey aphenetic matrix. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. <1% fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
13.46	15.47	2.01	1A	massive mafic volcanic flow. Dark green colour. Fine grained crystals. Moderately to strongly foliated intersecting at 40 TCA. 25% diopside alteration bands parallel to foliation. 5% brown biotite alteration bands. <1% thin quartz-carbonate veinlets. No visible sulphides. a sharp lower contact intersecting at 45 TCA.
15.47	17.32	1.85	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in a dark grey aphenetic matrix. Moderately foliated intersecting at 40 TCA. Moderate pervasive silicic alteration. 15% quartz veining, mostly near the upper contact. <1% fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
17.32	21.20	3.88	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 15% diopside alteration bands parallel to the foliation. 1% thin quartz-carbonate veinlets. 1% brown biotite alteration bands. No visible sulphides. A gradational lower contact.
21.20	26.53	5.33	1A	massive mafic volcanic flow. Dark grey to black colour. Moderately foliated intersecting at 45 TCA. 1-2% diopside alteration bands parallel to foliation. 1-2% quartz and quartz-carbonate veinlets. Trace pyrite in quartz. A sharp lower contact intersecting at 45 TCA.
26.53	27.24	0.71	6E	intermediate to mafic feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in an aphenetic matirx. Dark grey colour. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
27.24	38.60	11.36	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 1-2% diopside alteration bands parallel to foliation. 1% quartz veinlets. Trace pyrite in quartz.
38.60				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
					No Samples Taken	

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-31
	CLAIM NO:	1182994	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					08-Mar-12	18-Mar-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645760					
Northing	5407281	Dip:	-78	Dates Logged:	From:	To:
Elevation	406				23-Mar-12	25-Mar-12
Final		Depth:	487.00	Logged By:	Greg McKay	
Easting	645761.240					
Northing	5407277.490	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	406.690					

Purpose of Hole	
Results	
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
15.0	41.8	-78.8	5698	Reflex Test
30.0	42.8	-77.8	5682	
54.0	41.8	-76.4	5699	
78.0	42.8	-76.1	5663	
102.0	43.6	-75.8	5636	
126.0	43.2	-75.6	5674	
150.0	42.7	-75.5	5688	
174.0	42.0	-75.1	5665	
201.0	42.0	-74.3	5692	
225.0	42.2	-73.6	5667	
228.0				Wedge
237.0	46.4	-70.6	5703	
243.0	46.3	-69.8	5704	
267.0	46.3	-68.0	5708	
291.0	49.5	-68.4	5707	
303.0	47.7	-64.9	5702	
306.0				Wedge
312.0	48.7	-61.8	5713	
336.0	51.4	-59.6	5602	
361.0	49.1	-58.6	5705	
385.0	49.7	-58.0	5702	
409.0	49.3	-57.0	5694	
433.0	52.0	-55.8	5684	
457.0	52.0	-55.2	5686	
481.0	51.1	-55.2	5679	

Dip Tests (Cont.)

Depth	Az.	Dip	Mag	Notes

From	To	Interval	Code	Description
0.00	8.56	8.56	OB	overburden
8.56	24.55	15.99	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Weakly foliated intersecting at 40 TCA. 5% diopside alteration bands parallel to foliatino. <1% thin quartz-carbonate stringers. No visible sulphides. 2% brown biotite alteration. a sharp lower contact intersecting at 35 TCA.
24.55	25.03	0.48	6E	intermediate to mafic feldspar porphyry dyke. 15% euhedral plagioclasse phenocrysts in an aphenetic, dark black matrix. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
25.03	28.30	3.27	1Z	mafic porphyritic flow or gabbro end-member. Dark grey to black colour. Medium grained subhedral crystals. Weakly foliated intersecting at 35 TCA. <1% fracture controlled diopside alteration. No visible sulphides. A semi-gradational lower contact.
28.30	33.11	4.81	1U	ultramafic komatiitic flow. Medium grey colour. Moderately magnetic. Fine grained to aphenetic. Strongly foliated intersecting at 45 TCA. Moderately effervesent. 1-2% thin quartz-calcite stringers. Weakly fractured and broken in areas. Very soft rock. No visible sulphides. a sharp irregular lower contact.
33.11	35.13	2.02	6E	intermediate dyke. Medium grained. Dioritic in composition. Medium to coarse grained subhedral crystals. Weak pervasive silicic alteration. Weakly foliated intersecting at 45 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
35.13	40.78	5.65	1A	massive mafic volcanic flow. Dark grey to green-grey colour. Fine grained crystals. Weakly to moderately foliated intersecting at 40 TCA. 5% diopside alteration bands parallel to foliation. 2-3% fine grained disseminated pyrrhotite. A semi-gradational lower contact.
40.78	41.80	1.02	3D/1A	iron formation in a mafic volcanic flow. Dark green-grey, brown and white colours. Moderately to strongly foliated intersecting at 35 TCA. Mdoerate pervasive silciic alteration. Moderately magnetic. 40% diopside alteration. 20% brown biotite alteration. 5% fine grained disseminated and seamed pyrrhotite. a gradational lower contact.
41.80	53.45	11.65	1A	Massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Weakly to moderately foliated intersecting at 45 TCA. 2% diopside alteration bands. Grades to a medium-dark grey colour. A few thin, white felsite dykelets near the lower contact, up to 10 cm across. a sharp wavy lower contact.
53.45	55.30	1.85	6E	intermediate feldspar-hornblende porphyry dyke. Medium grey colour. 15% coarse grained plagioclasse and 12% medium grained hornblende phenocrysts in a medium grey intermediate matrix. Moderately foliated intersecting at 35 TCA. A few felsite dykets intersecting near the upper contact including one up to 45 cm across. no visible sulphides. no veining. a sharp lower contact intersecting at 30 TCA.
55.30	116.50	61.20	1A	massive mafic volcanic flow. Dark grey-green to black colour. Aphenetic crystals. Moderately foliated intersecting at 30 TCA. 4% and locally up to 10% green diopside alteration bands parallel to foliation. 1% thin quartz veinlets. 1% to locally 5% brown biotite alteration. trace pyrite. a sharp lower contact intersecting at 30 TCA.

From	To	Interval	Code	Description
116.50	117.10	0.60	6E	intermediate feldspar-porphyry dyke. 15% subhedral, coarse grained plagioclasse phenocrysts in an aphenetic, dark purplish matrix. Moderately foliated intersecting at 35 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
117.10	136.11	19.01	1B	mafic pillow flow. Dark grey colour. Moderately defined, biotite altered pillow sevlages. Moderately foliated intersecting at 45 TCA. 5% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. No visible sulphides. A sharp, slightly wavy lower contact.
136.11	136.93	0.82	4E	felsic pegmatite dyke. Very coarse grained, subhedral crystals. 60% plagioclasse. 15% quartz. 10% biotite and 15% muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
136.93	138.18	1.25	1A	massive mafic volcanic flow. Fine grained crystals. Dark greyish colour. Weakly to moderately foliated intersecting at 45 TCA. 3% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate stringers. No visible sulphides. 1% brown biotite alteration. a sharp lower contact intersecting at 30 TCA.
138.18	142.15	3.97	4D	fine to medium grained felsite dyke. Light grey to white colour. 60% plagioclasse. 20% quartz. 15% muscovite and 5% biotite. No veining. No visible sulphides. A sharp, irregular lower contact intersecting at rouhgly 15 TCA.
142.15	152.70	10.55	1B	mafic pillow flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 50-60% light green diopside alteration bands parallel to foliation. 1% brown biotite alteration. Occasional poorly defined pillow selvages. <1% thin quartz-carbonate stringers. an 18 cm felsite dykelet at 149.2 m depth. trace pyrrhotite. a sharp, wavy lower contact.
152.70	153.49	0.79	6E	intermediate dyke. Dark purple colour. Moderatley foliated intersecting at 45 TCA. Trace pervasive silicic alteration. 1% thin quartz veinlets. No visible sulphides. A shrap lower contact intersecting at 40 TCA.
153.49	168.77	15.28	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. A 45 cm felsite dyke at 159.25 m depth. A 16 cm bull quartz vein at 168.02 m depth. Fine grained crystals. 5-7% diopside alteration bands parallel to foliation. a sharp lower contact intersecting at 30 TCA.
168.77	169.26	0.49	6E	intermediate dyke. Medium to dark grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
169.26	193.50	24.24	1A	massive mafic volcanic flow. Dark grey colour. Fine grained aphenetic crystals. Moderately foliated intersecting at 40 TCA. Two felsite dykes up to 18 cm across between 183 and 184 m depth. 1% diopside alteration bands parallel to foliation. No visible sulphides. a gradational lower contact.
193.50	200.00	6.50	1A	massive mafic volcanic flow, or possibly an end-member gabbro. Medium grained subhedral crystals. Moderately foliated intersecting at 35 TCA. 2% thin quartz-carbonate stringers and veinlets. No visible sulphides. A gradational lower contact.

From	To	Interval	Code	Description
200.00	227.50	27.50	1B	mafic pillow flow. Dark grey to black colour. Fine grained crystals. Occasional aphenetic, black pillow selvages with up to 20% almandine garnet inclusions. 3% quartz-carbonate veinlets. 2-3% diopside alteration, mostly haloed around the quartz veinlets. trace pyrrhotite. a gradational lower contact.
227.50	242.00	14.50	1Z	porphyritic mafic volcanic flow or gabbroic end-member. Coarse grained, subhedral crystals. Moderately foliated intersecting at 40 TCA. 2% quartz-carbonate veinlets. 1% diopside alteration around some of the quartz-carbonate veinlets. A 47 cm intermediate feldspar porphyry dyke at 237.95 m depth. a gradational lower contact.
242.00	252.90	10.90	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic crystals. 10% diopside alteration bands, mostly parallel to the foliation. Moderately foliated intersecting at 45 TCA. <1% thin quartz-carbonate stringers. No visible sulphides. a sharp, erratic lower contact.
252.90	255.20	2.30	5A	quartz-rich granite. 70% quartz. 15% feldspar and 15% mafics. Moderately foliated intersecting at 40 TCA. No veining. No visible sulphides. Fine to medium grained. Subhedral to locally euhedral crystals. A sharp irregular lower contact.
255.20	256.70	1.50	1A	massive mafic volcanic flow. Fine grained aphenetic crystals dark grey colour. Moderately foliated intersecting at 40 TCA. 8% diopside alteration. No visible sulphides. A sharpish lower contact intersecting at 50 TCA.
256.70	257.25	0.55	QTSW	quartz-stockwork. In a massive mafic volcanic flow. 60% quartz and quartz-carbonate veining. Veining is sugary white. No visible sulphides. 1% pyrope garnets. A sharpish lower contact.
257.25	262.58	5.33	1A	massive mafic volcanic flow. Fine to medium grained. Subhedral to anhedral crystals. Moderately foliated intersecting at 40 TCA. <1% very thin quartz-carbonate stringers. Trace pyrrhotite. A sharp lower contact intersecting at 35 TCA.
262.58	263.57	0.99	6E	intemediate dyke. Dark purple-grey to black colour. Fine to medium grained, subhedral crystals. Moderately foliated intersecting at 40 TCA. 1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
263.57	273.36	9.79	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to locally porphyritic. <1% thin quart veinlets. <1% fracture controlled diopside alteration. No visible sulphides. Moderately foliated intersecting at 40 TCA. A sharp lower contact intersecting at 35 TCA.
273.36	276.45	3.09	6E	intermediate feldspar porphyry dyke. Medium green-grey grading to darkk grey-purple colour towards the centre. 15% plagioclasse phenocrysts in an aphenetic matirx. Weak to locally moderate pervasive silicic alteration. No veining. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
276.45	286.69	10.24	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. 3% diopside alteration bands parallel to foliation, mostly near the lower contact. 1% thin quartz and quartz-carbonate veinlets. No visible sulphides. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
286.69	287.42	0.73	6E	intermediate dyke. Medium dark grey to grey-purple colour. 5% plagioclasse phenocrysts, nearly obliterated by foliation. Moderately to strongly foliated intersecting at 40 TCA. Weak pervasive silicic alteration. Trace very fine grained, disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
287.42	301.00	13.58	1B	mafic pillowed flow. Dark green-grey colour. Moderately to strongly foliated intersecting at 40 TCA. Local well defined, black pillow selvages. 55% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. No visible sulphides. a gradational lower contact.
301.00	312.50	11.50	1A	massive mafic volcanic flow. Dark grey colour. Fine grained subhedral to anhedral crystals. Moderately foliated intersecting at 45 TCA. A 4 cm felsite dyklet at 307.6 m depth. <1% thin quartz-carbonate veinlets. No visible sulphides. A gradational lower contact.
312.50	315.14	2.64	1B	mafic pillow flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. Well defined, black pillow selvages up to 40 cm apart. 15% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. no visible sulphides. a sharp lower contact intersecting at 50 TCA.
315.14	315.68	0.54	6E	intermediate dioritic dyke. Medium grained, subhedral crystals. Medium grey colour. Moderate pervasive silicic alteration. A 4 cm quartz veinlet at 315.2 m depth. <1% fine to medium grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
315.68	358.20	42.52	1B	mafic pillowed flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. Poorly defined, black pillow selvages. a 31 cm intermediate feldspar porphyry dyke at 353.25 m depth. 1-2% thin quartz and quartz-carbonate veinlets. Trace semi-maassive pyrrhotite. A gradational lower contact.
358.20	367.10	8.90	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to locally medium grained, subhedral crystals. Moderately foliated intersecting at 50 TCA. 1% thin quartz-carbonate stringers. No visible sulphides. A gradational lower contact.
367.10	396.40	29.30	1B	mafic pillowed flow, basalt. Moderately foliated intersecting at 45 TCA. Well defined black pillow selvages. 3% greyish diopside alteration bands parallel to foliation. A 24 cm grey quartz vein at 367.8 m depth. a 19 cm intermediate dykelet at 394.9 m depth. 1-2% thin quartz and quartz-carbonate veinlets and stringers. trace pyrite in quartz. a sharp lower contact intersecting at 50 TCA.
396.40	397.13	0.73	6E	intermediate dyke. Medium to dark grey-purple colour. Fine grained crystals. Moderately to strongly foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 4% quartz veining. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
397.13	413.30	16.17	1A	massive mafic volcanic flow. Dark green colour. Fine grained crystals. Moderately foliated intersecting at 50 TCA. Locally amygdualoidal. 1% milky white quartz veinlets up to 5 cm across. No visible sulphides. A gradational lower contact.

From	To	Interval	Code	Description
413.30	416.40	3.10	1B	mafic pillow flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. Moderately defined pillow selvages. 15% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. No visible sulphides. a sharp lower contact intersecting at 60 TCA.
416.40	416.92	0.52	7A	diabase dyke. Fine grained euhedral crystals. Weakly magnetic. Dark grey colour. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
416.92	425.00	8.08	1B	mafic pillow flow. Dark green-grey colour. Moderately foliated intersecting at 50 TCA. Moderately defined pillow selvages. 15% diopside alteration bands parallel to foliation. 2-3% quartz veining. Trace pyrite. A sharp lower contact intersecting at 50 TCA.
425.00	426.93	1.93	6E	intermediate feldspar porphyry dyke. Moderately to strongly foliated intersecting at 50 TCA. Weak to locally moderate pervasive silicic alteration. No veining. 1-2% fine grained to very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
426.93	432.18	5.25	1B	mafic pillow flow. Dark green-grey colour. Fine grained crystals. Moderately defined pillow selvages with up to 15% almandine garnet replacement. Moderately foliated intersecting at 50 TCA. 1% thin quartz-carbonate veinlets. <1% fine grained, locally disseminated pyrite. a sharp lower contact intersecting at 50 TCA.
432.18	434.24	2.06	SH/6E	UPPER ZONE. Sheared intermediate dyke. Weakly sheared and moderately to strongly foliated intersecting at 45 TCA. Medium grey colour. Weak to locally moderate pervasive silicic alteration. 1-2% fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
434.24	439.58	5.34	1B	mafic pillow flow. Dark green-grey colour. Moderately foliated intersecting at 50 TCA. A 13 cm intermediate dyke at 439.15 m depth. Fine grained crystals. 3% quartz veinlets. Trace pyrite in quartz. A sharp lower contact intersecting at 55 TCA.
439.58	440.50	0.92	6E	intermediate dyke. Medium grey-purplish to grey colour. Moderately to strongly foliated intersecting at 50 TCA. Trace pervasive silicic alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
440.50	458.55	18.05	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 55 TCA. Fine grained crystals. 3% diopside alteration bands parallel to foliation. 1-2% thin quartz and quartz-carbonate stringers and veinlets. Trace pyrite. A sharp lower contact intersecting at 45 TCA.
458.55	459.89	1.34	6E	intermediate dyke. Medium greyish-purple colour. Fine grained. Moderately to strongly foliated intersecting at 50 TCA. Weak to moderate pervasive silicic alteration. No veining. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
459.89	463.25	3.36	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 50 TCA. 2% diopside alteration. 2% thin quartz veinlets. <1% seamed and disseminated pyrrhotite and chalcopyrite. A gradational lower contact.

From	To	Interval	Code	Description
463.25	466.66	3.41	SH/1A	LOWER ZONE. sheared massive mafic volcanic flow. Weakly sheared and moderately to strongly foliated intersecting at 50 TCA. Dark green-grey colour. 50% diopside alteration, mostly as bands parallel to foliation. A 26 cm intermediate dyke at 463.6 m depth. 1% thin quartz veinlets. 1-2% fine grained, disseminated pyrite in the diopside. a sharp lower contact intersecting at 45 TCA.
466.66	468.03	1.37	SH/6E	LOWER ZONE. sheared intermediate dyke. Moderately to strongly sheared and strongly foliated intersecting at 50 TCA. Moderate to strong pervasive silicic alteration. 5% quartz veining. 3% fine grained pyrrhotite, mostly around quartz. A sharp lower contact intersecting at 50 TCA.
468.03	468.54	0.51	QV	LOWER ZONE. Quartz vein. Whiteish colour. 1% mafic inclusion. Moderately fractured, but not broken up. 11 SPECS OF VG. 3% fine grained fracture controlled pyrite. Trace pyrrhotite. A sharp lower contact intersecting at 50 TCA.
468.54	469.08	0.54	SH/1A	LOWER ZONE. Sheared mafic volcanic flow. Medium greyish colour. Strongly sheared and foliated intersecting at 50 TCA. Fine grained to aphenetic. Moderate pervasive silicic alteration. 5-10% quartz veining. 2% very fine grained disseminated pyrite. A sharp lower contact intersecting at 469.3
469.08	471.65	2.57	SH/6E	LOWER ZONE. Sheared intermediate dyke. Locally plagioclasse porphyritic. Weakly sheared and moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 4% quartz veining. 2 SPECS OF VG in the quartz veining. 2% very fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
471.65	472.35	0.70	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 50 TCA. 15% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
472.35	472.90	0.55	6E	intermediate feldspar porphyry dyke. 20% medium grained plagioclasse phenocrysts in an aphenetic, dark grey-purple matrix. Weak pervasive silicic alteration. Weakly foliated intersecting at 55 TCA. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
472.90	473.82	0.92	6E	intermediate dyke. Fine grained to aphenetic crystals. Moderately foliated intersecting at 55 TCA. Weak pervasive silicic alteration. 2-3% silica flooded bands parallel to foliation. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
473.82	487.00	13.18	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 55 TCA. 10-15% diopside alteration bands parallel to foliation. A 30 cm intermediate dyke at 474.4 m depth. 1-2% quartz veinlets up to 6 cm across. Trace pyrite and pyrrhotite.
487.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876625	367.20	367.76	0.56	1B	mafic pillow flow. Mod fol. 5% diop alt. 1% thin qv. Nvs.	0.006
876626	367.76	368.06	0.30	QV	medium grey quartz vein. 3% mafic incl. 1% fg py along frac.	0.003
876627	368.06	368.49	0.43	1B	mafic pillow flow. Mod fol. 2% thin qv. Nvs.	0.003
876628	425.00	425.80	0.80	6E	intermediate feldspar porphyyr dyke. Mod fol. Wk perv sil alt. no veining. <1% vfg diss py.	0.003
876629	425.80	426.47	0.67	6E	intermediate feldspar porphyry dyke. Mod fol. Mod perv sil alt. 20% mafic volc incl. <1% fg diss py.	0.003
876630	426.47	426.93	0.46	SH/6E	slightly sheared intermediate dyke. Mod perv sil alt. mod-str fol. 2% thin qcv. 1% fg diss py, po.	0.003
876631	426.93	427.80	0.87	1B	mafic pillow flow. Mod fol. 5% diop alt. 1% thin frac-cont qcs. Nvs.	0.003
876632	427.80	428.70	0.90	1B	mafic pillow flow. Mod fol. 5% diop alt. 1% thin frac-cont qcs. Nvs.	0.005
876633	428.70	429.60	0.90	1B	mafic pillow flow. Mod fol. 5% diop alt. 1% thin frac-cont qcs. Nvs.	0.003
876634	429.60	430.50	0.90	1B	mafic pillow flow. Mod fol. 8% diop alt. 2% garnets. <1% fg diss py.	0.005
876635	430.50	431.40	0.90	1B	mafic pillow flow. Mod fol 6% diop alt. 1% thin qcs. 1% fg diss py. 2% garnets.	0.007
876636	431.40	432.18	0.78	1B	mafic pillow flow. Mod fol. 15% diop alt. 2% brown bio alt. tr sil alt. <1% fg diss py.	0.040
876637	432.18	432.90	0.72	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Wk-mod perv sil alt. 2% fg diss py.	0.067
876638	432.90	433.60	0.70	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Mod perv sil alt. 3% fg diss py.	0.076
876639	433.60	434.24	0.64	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Wk-mod perv sil alt. 2% fg diss py.	0.016
876640	434.24	435.00	0.76	1B	mafic pillow flow. Mod fol. 5% brown bio alt. 1% thin qcs. Tr py.	0.070
876641	435.00	435.50	0.50	1B	mafic pillow flow. Mod fol. 15% diop alt. <1% thin qs. Nvs.	0.017
876642	462.00	462.75	0.75	1A	mafic volcanic flow. Mod fol. 5% diop alt. 1% thin qcs. Nvs.	0.011
876643	462.75	463.25	0.50	1A	mafic volcanic flow. Mod fol. 7% diop alt. 1% thin qcs. Nvs.	0.016
876644	463.25	464.00	0.75	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. 30% intermediate dyklet. 35% diop alt. 1% thin qcs. ,1% fg diss py.	0.021
876645	464.00	464.70	0.70	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. 5% diop alt. 2% qv. <1% py in qtz.	0.013
876646	464.70	465.40	0.70	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 40% diop alt. <1% fg diss py.	0.035
876647	465.40	466.00	0.60	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 30% diop alt. 2% qcv. <1% fg diss py.	0.013
876648	466.00	466.66	0.66	SH/1A	sheared massive mafic volcanic flow. Mod sh. Str fol. 3% fg diss py.	0.032

Sample #	From	To	Interval	Code	Description	Au (ppm)
876649	466.66	467.30	0.64	SH/6E	sheared intermediate dyke. Str sh. Str fol. Mod perv sil alt. wk perv bio alt. 6% qv. 3-4% fg diss py.	0.060
876650	467.30	468.03	0.73	SH/6E	sheared intermediate dyke. Str sh. Str fol. Mod perv sil alt. wk perv bio alt. 10% qv. 5% fg diss py.	0.403
876651	468.03	468.54	0.51	QV	quartz vein. Mod frac. 1% maf incl. 11 SPECS VG. 3% fg, frac-cont py. Tr po.	9.890
876652	468.54				Blank	0.003
876653	468.54	469.08	0.54	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. Mod perv sil alt. 10% qv. 2% fg diss py in qtz.	1.510
876654	469.08	469.70	0.62	SH/6E	sheared intermediate feldspar porphyry dyke. Wk sh. Mod fol. Wk perv sil alt. 2% fg diss py.	0.114
876655	469.70				Standard 16A	1.800
876656	469.70	470.20	0.50	SH/6E	sheared intermediate dyke. Mod shear. Wk perv sil alt. 20% qv. 2 SPECS VG. 1% fg diss py.	3.140
876657	470.20	471.00	0.80	SH/6E	sheared intermediate dyke. Wk sh. Mod fol. Wk perv sil alt. 2% fg diss py.	0.057
876658	471.00	471.65	0.65	SH/6E	sheared intermediate dyke. Wk sh. Mod fol. Wk perv sil alt. 2% fg diss py.	0.045
876659	471.65	472.35	0.70	1A	massive mafic volcanic flow. Mod fol. 20% diop alt. 1% thin qcs. Tr py in qtz.	0.037
876660	472.35	472.90	0.55	6E	intermediate feldspar porphyry dyke. Mod fol. Wk perv sil alt. 1% vfg diss py.	0.010
876661	472.90	473.83	0.93	6E	intermediate dyke. Mod fol. Wk perv sil alt. 3% sil-flooded bands. Tr vfg diss py.	0.087
876662	473.83	474.40	0.57	1A	mafic volcanic flow. Mod fol. 25% diop alt. <1% thin qcs. Nvs.	0.003

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-32
		CLAIM NO:	1182994	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From: 19-Mar-12	To: 01-May-12
UTM Zone 16						
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645821					
Northing	5407189	Dip:	-78	Dates Logged:	From: 05-Apr-12	To: 02-May-12
Elevation						
Final		Depth:	486.00	Logged By:	Greg McKay	
Easting	645818.010					
Northing	5407185.670	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	422.640					

Purpose of Hole	
Results	
Comments	Core Stored at White River Core Yard. Hole was stopped at 276 m for three weeks for breakup.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
13.0	52.2	-77.9	5705	Reflex Test
37.0	54.5	-78.1	5629	
61.0	59.8	-77.7	5768	
85.0	51.4	-77.3	5768	
109.0	50.3	-76.5	5707	
133.0	57.7	-76.2	5704	
136.0				Wedge
147.0	51.3	-73.9	5702	
156.0	51.0	-73.1	5700	
180.0	50.9	-72.9	5705	
204.0	52.4	-72.9	5706	
228.0	52.8	-73.1	5713	
252.0	48.6	-72.5	5784	
276.0	52.2	-72.4	5692	
282.0				Wedge
285.0	53.7	-69.6	5683	
297.0	53.6	-68.5	5714	
303.0				Wedge
306.0	55.0	-65.7	5698	
318.0	54.2	-65.4	5717	
330.0	54.5	-65.1	5705	
333.0				Wedge
339.0	53.0	-61.5	5719	
363.0	55.5	-61.1	5720	
387.0	55.8	-60.1	5707	
411.0	53.9	-59.3	5691	
435.0	54.9	-58.5	5716	
459.0	55.1	-56.1	5687	
483.0	59.7	-53.9	5685	

From	To	Interval	Code	Description
0.00	1.57	1.57	OB	overburden
1.57	17.50	15.93	1Z	medium to coarse grained porphyritic mafic volcanic flow to gabbroic end-member. Dark grey colour. Subhedral, mostly rounded crystals. Weakly foliated intersecting at 40 TCA. <1% thinn quartz-carbonate stringers and veinlets. No visible sulphides. A gradational lower contact.
17.50	33.37	15.87	1A	massive mafic volcanic flow. Aphenetic crystals. Dark grey to black colour. Moderately foliated intersecting at 40 TCA. 15% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers and veinlets. Trace, and up to 4% near the lower contact, fine grained disseminated pyrrhotite. a sharp lower contact in some broken core.
33.37	34.56	1.19	1U	ultramafic komatiitic flow. Medium grey colour. Moderately broken near the upper contact. Weakly effervesent. Moderately pervasively magnetic. Soft rock. <1% thin quartz-calcite stringers. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
34.56	43.15	8.59	1A	massive mafic volcanic flow. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. Dark grey to black colour. A 42 cm intermediate feldspar porphyry dyke at 36.4 m depth. 5% thin diopside alteration bands parallel to foliation. A 22 cm felsite dyklet at 42.85 m depth. no visible sulphides. a gradational lower contact.
43.15	45.71	2.56	1A	fine to medium grained mafic volcanic, or gabbroic end-member. Subhedral to locally euhedral crystals. 40% pyroxene, 30% plagioclasse, 20% amphibole, 5% olivene and 5% leucoxene. Weakly foliated intersecting at 45 TCA. Trace quartz veinlets. No visible sulphides. a very gradational lower contact.
45.71	56.40	10.69	1U	ultramafic komatiitic flow. Medium to light grey colour. Fine grained to locally aphenetic. Moderately foliated intersecting between 35 and 45 TCA. Moderately magnetic. Weakly to locally strongly effervesent. Soft rock. 2-3% very thin quartz-calcite stringers. no visible sulphides. a gradational lower contact.
56.40	59.55	3.15	1A/3D	massive mafic volcanic flow, iron formation. Moderately foliated intersecting at 35 TCA. Weakly to moderately magnetic. 5% to locally 15% semi-massive and ribboned pyrrhotite. 3% diopside alteration bands. <1% thin quartz-carbonate stringers. A sharp, slightly wavy lower contact.
59.55	61.59	2.04	QTSW	quartz-carbonate stockwork in a mafic volcanic. 40% quartz-carbonate veining up to 15 cm across. 60% medium green-brown diopside-epidote altered mafic volcanic. Moderately to strongly foliated intersecting at 40 TCA. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
61.59	64.85	3.26	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic. Moderately foliated intersecting at 40 TCA. 1% quartz veinlets. A 21 cm feldspar porphyry dyke at 64.2 m depth. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
64.85	65.88	1.03	1A/3D	iron formation in a mafic volcanic flow. Dark greyish to purple colour. Aphenetic crystals. Strongly foliated intersecting at 35 TCA. Weakly to locally strongly magnetic. 30% and locally up to 65% semi-massive pyrrhotite. A sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
65.88	67.05	1.17	6E	intermediate feldspar porphyry dyke. Medium greyish colour. 10% medium grained plagioclasse phenocrysts in a fine grained intermediate matrix. Moderately foliated intersecting at 40 TCA. No veining. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
67.05	69.00	1.95	1A/3D	iron formation in a mafic volcanic flow. Dark greyish to purple colour. Aphenetic crystals. Strongly foliated intersecting at 35 TCA. Weakly to locally moderately magnetic. 3-5% fine to medium grained disseminated and ribboned pyrrhitite. 5% diopside alteration. 3% thin quartz-carbonate veinlets parallel to foliation. a gradational lower contact.
69.00	73.64	4.64	1A	massive mafiv volcanic flow. Dark grey to black colour. Fine grianed subhedral crystals. Moderately foliated intersecting at 30 TCA. 3-4% thin diopside alteration bands parallel to foliation. 1-2% quartz veinlets up to 3 cm across. <1% fine grained disseminated pyrrhotite. a sharp lower contact intersecting at 40 TCA.
73.64	74.41	0.77	4D	medium grained felsite dyke. Milky white and brownish colours. Subhedral to anhedral crystals. 60% plagioclasse, 15% muscovite, 15% quartz, 10% biotite. No veining. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
74.41	79.96	5.55	1A	massive mafic volcanic flow. Dark grey to locally black colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. Weakly to locally moderately magnetic due to locally up to 20% ribboned pyrrhoite. 2% felstie dyklets. No veining. A sharp lower contact intersecting at 20 TCA.
79.96	80.68	0.72	4D	coarse grained felsite dyke. Milky white and brownish colours. Subhedral crystals. 55% plagioclasse, 15% muscovite, 15% quartz, 15% biotite. No veining. No visible sulphides. A sharp, wavy lower contact intersecting at roughly 10 TCA.
80.68	83.73	3.05	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. Locally porphyitic near the lower contact. 20% felsite dyklets up to 30 cm across, usually running nearly parallel to the core angle. 10% fine grained brown biotite alteration. a sharp lower contact intersecting at 25 TCA.
83.73	85.49	1.76	4D	medium grained felsite dyke. Milky white and brownish colours. Subhedral crystals. 50% plagioclasse, 35% muscovite, 10% quartz, 5% biotite. No veining. No visible sulphides. A sharp lower contact intersecting at 20 TCA.
85.49	91.34	5.85	1Z	massive mafic volcanic flow or gabbroic end-member. Dark grey colour. Rounded phenocrysts up to 6 mm across. Subhedral crystals. Moderately foliated intersecring at 35 TCA. <1% thin quartz veinlets. 1% felsite dyklets up to 3 cm across. Locally 5% fine grained leucoxene alteration. no visible sulphides. a sharp irregular lower contact.
91.34	92.09	0.75	QV	Quartz vein. 10% mafic inclusions. White-grey transpleucent colour. Weakly fractured. No visible sulphides. 5% epidote inclusions. A sharp, irregular lower contact.

From	To	Interval	Code	Description
92.09	116.32	24.23	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to locally porphyritic or medium grained, subhedral crystals. Moderately foliated intersecting at 40 TCA. 2% quartz veinlets. 1-2% semi-pervasive diopside alteration. A 46 cm felsite dyke at 99.3 m depth. locally 5% fine grained disseminated pyrrhotite between 103.5 and 105.1 m depth. a sharp lower contact intersecting at 30 TCA.
116.32	120.43	4.11	6A	intermediate dioritic dyke. Medium grey colour. Medium grained subhedral crystals. 70% plagioclasse, 20% biotite and 10% hornblende/pyroxene. Moderately foliated intersecting at 35 TCA. Weak pervasive silicic alteration. 2 mafic inlusions up to 30 cm across at 119.0 and 119.65 m depth. <1% thin felsite dyklet. 2-3% very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
120.43	124.35	3.92	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. 1-2% diopside alteration bands. 1% quartz-carbonate veinlets, usually enveloped by diopside alteration. No visible sulphides. A sharp, wavy lower contact.
124.35	125.08	0.73	4E	felsite pegmatite. Milky white, and cloudy grey colour. Very coarse grained subhedral to anhedral. 60% plagioclasse, 30% quartz, 5% muscovite and 5% biotite. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
125.08	137.00	11.92	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Weakly to moderately foliated intersecting at 25 TCA. 1% thin felstie dyklets. Locally 2-3% fine grained leucoxene alteration. <1% thin quartz-carbonate stringers. No visible sulphides. a sharp lower contact intersecting at 40 TCA.
137.00	137.52	0.52	4D	felsite dyke. Milky white in the centre and brown-white on the edges. Medium to coarse grained anhedral to subhedral crystals. 70% plagioclasse, 5% quartz, 15% muscovite and 10% biotite. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
137.52	167.46	29.94	1A	massive mafic volcanic flow. Dark grey to green-grey colour. Moderately foliated intersecting at 35 TCA. 15 to locally 30% diopside alteration bands parallel to foliation. Possibly pillowed. 5% brown biotite alteration bands. A 47 cm felsite dyke at 156.35 m depth. <1% thin quartz-carbonate stringers. no visible sulphides. a sharp lower contact intersecting at 30 TCA.
167.46	168.19	0.73	6E	intermediate, brecciated dyke. Light green-grey colour. Weakly brecciated. Moderate to strong pervasive silicic alteration. Moderately to s trongly foliated intersecting at 35 TCA. Medium grained subhedral crystals. No visible sulphides. 2-3% very small quartz-carbonate stringers. a sharp lower contact intersecting at 30 TCA.
168.19	169.72	1.53	6E	intermediate dyke. Dark purple-grey colour. Fine grained subhedral crystals. Moderately foliated intersecting at 30 TCA. Weak pervasive silicic alteration. 2-3% fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
169.72	174.10	4.38	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic. Moderately foliated intersecting at 35 TCA. 2% thin diopside alteration bands parallel to foliation. A 3 cm felstie dyklet at 172.28 m depth. <1% thin quartz-carbonate stringers. no visible sulphides. a gradational lower contact.
174.10	193.70	19.60	1A	massive mafic volcanic flow. Fine grained to aphenetic crystals. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. 40% diopside alteration bands parallel to foliation. 1-2% brown biotite alteration bands. 1% quartz-carbonate stringers and veinlets up to 2 cm across. a few small felsite dyklets up to 2 cm across. trace fine grained pyrrhotite. a sharp loewr contact intersecting at 45 TCA.
193.70	195.00	1.30	4D	medium grained felsite dyke. Subhedral crystals. White and greyish colours. 60% plagioclasse, 15% biotite, 15% muscovite and 10% quartz. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
195.00	197.77	2.77	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 1% thin quartz and quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
197.77	199.92	2.15	6E	intermediate dyke. Dark purple-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. Trace pervasive silicic alteration. 1% fine grained disseminated pyrite. A 40 cm felsite dyke at 199.10 m depth. A sharp lower contact intersecting at 30 TCA.
199.92	208.08	8.16	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. Locally up to 40% pyrrhotite between 203.92 and 204.15 m depth, but overall about 1% pyrrhotite. 2-3% diopsode alteration bands parallel to foliation. moderately magnetic around pyrrhotite. two felsite dylets up to 10 cm across. 1% thin quartz veinlets. a sharp lower contact intersecting at 65 TCA.
208.08	209.42	1.34	4E	felsite pegmatite. Milky white, and cloudy grey colour. Very coarse grained subhedral to anhedral. 60% plagioclasse, 10% quartz, 20% muscovite and 10% biotite. No visible sulphides. A sharp, slightly wavy lower contact intersecting at roughly 50 TCA.
209.42	211.40	1.98	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
211.40	212.08	0.68	6F	mafic dyke. Dark grey colour. Fine grained crystals. Mostly biotitic. Moderately foliated intersecting at 40 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
212.08	263.94	51.86	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic, and locally porphyritic, subhedral to anhedral crystals. Moderately foliated intersecting at 40 TCA. Locally up to 10% brown biotite alteration. <1% quartz veinlets. Trace pyrrhotite. weakly magnetic around the pyrrhotite. a 10 cm intermediate dyke at 233.2 m depth. up to 5% diopside alteration bands parallel to foliation after 250.0 m depth. a sharp lower contact intersecting at 25 TCA.

From	To	Interval	Code	Description
263.94	265.00	1.06	4D	medium grained felsite dyke. Subhedral crystals. White and greyish colours. 60% plagioclasse, 20% biotite, 5% muscovite and 15% quartz. A 3 cm quartz vein at 264.45 m depth. No visible sulphides. A sharp wavy lower contact intersecting at roughly 15 TCA.
265.00	269.37	4.37	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. 5-8% diopside alteration bands parallel to foliation. 1% quartz veinlets. Trace pyrite. A sharp lower contact intersecting at 40 TCA.
269.37	269.86	0.49	6E	intermediate feldspar porphyry dyke. 20% medium to coarse grained plagioclasse phenocrysts in a dark grey-purple matrix. Weakly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 1% very fine grained, disseminated and fracture controlled pyrite. a sharp lower contact intersecting at 45 TCA.
269.86	270.93	1.07	4D	felsiite dyke. Light grey to white colour. Subhedral crystals. 15% biotite, 60% plagioclasse feldspar, 15% quartz and 10% muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
270.93	288.75	17.82	1A	massive mafic volcanic flow. Dark grey-green colour. Very fine grained to locally aphenetic. Moderately foliated intersecting at 45 TCA. Possibly locally pillowed. 10% diopside alteration, usually banded. 3% quartz-carbonate veinlets parallel to foliation. trace seamed pyrrhtite. trace pyrite. a sharp lower contact intersecting at 25 TCA.
288.75	289.92	1.17	6A	intermediate diorite dyke. Medium grey colour. Fine to medium grey subhedral crystals. 60% plagioclasse, 20% biotite, 10% sericite and 10% hornblende and pyroxene. A 3 cm quartz vein at 289.8 m depth. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
289.92	323.00	33.08	1B	mafic volcanic pillow flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. 20% diopside alteration bands parallel to foliation. Two areas of brecciated k-spar-rich felsite dyklets up to 25 cm across at 296.5 and 296.95 m depth. trace pyrrhotite, pyrite. <1% quarte veining. up to 5% pyrrhotite in quartz veining between 311.4 and 311.7 m depth. a sharp wavy loewr contact.
323.00	324.45	1.45	4D	felsite dyke. Light grey to white colour. Fine grained subhedral to anhedral crystals. 15% biotite. Not foliated. No visible sulphides. No veining. A sharp lower contact intersecting at 15 TCA.
324.45	336.03	11.58	1B	mafic pillow flow. Dark grey to grey-green colour. Moderately foliated intersecting at 55 TCA. Very well defined, black pillow selvages, squeezed and flattened. Pillow selvages not more than 10 cm apart. 3-4% almandine garnets, mostly in the pillow selvages. 15% thin diopside alteration bands parallel to foliation. three medium grained felsite dyklets up to 25 cm across at 329.3, 329.55 and 332.25 m depth. 2-3% thin quartz veinlets. trace pyrite and pyrrhotite. a sharp lower contact intersecting at 60 TCA.
336.03	338.20	2.17	4D	medium grained, subhedral felsite dyke. Light grey colour. A 34 cm mafic volcanic unit at 337.17 m depth. 50% plagioclasse, 25% quartz, 5% muscovite and 20% biotite. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
338.20	370.37	32.17	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 1% diopside alteration bands parallel to foliation. 1% quartz and quartz-carbonate veinlets. Trace pyrite around the quartz veinlets. locally possibly pillowed. <1% brown biotite alteration bands. a sharp lower contact intersecting at 45 TCA.
370.37	371.01	0.64	6A	intermediate feldspar porphyry dyke. Medium to dark grey-purple colour. 25% plagioclasse phenocrysts in a fine to medium grained intermediate matrix, grading to dioritic near the lower contact. Weak pervasive silicic alteration. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
371.01	383.00	11.99	1A	massive mafic volcanic flow. Dark grey colour grading to dark green-grey in areas. Fine grained to aphenetic. Moderately foliated intersecting at 40 TCA. 1% thin quartz and quartz-carbonate stringers. 2% diopside alteration bands parallel to foliation, and usually enveloping the quartz veinlets. a gradational lower contact.
383.00	416.00	33.00	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. 15% diopside alteration bands parallel to foliatino. 3-4% thin quartz and quartz-carbonate veinlets and stringers. <1% fine to medium grained pyrrhotite, mostly around quartz. weakly to moderately brecciated between 395.85 and 396.45 m depth. a gradational lower contact.
416.00	420.80	4.80	1B	mafic pillow flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. Well defined, thick, dark black pillow selvages with up to 30% almandine garnet replacement. 2-3% thin quartz-carbonate stringers and veinlets. <1% pyrite and pyrrhotite in the quartz. a sharp lower contact intersecting at 30 TCA.
420.80	422.89	2.09	SH/6E	UPPER ZONE. Sheared intermediate dyke. Dark purple-grey colour. Moderately sheared and strongly foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 2-3% very fine grained disseminated pyrite and pyrrhotite. 1% thin quartz-carbonate stringers. a sharp lower contact intersecting at 40 TCA.
422.89	429.56	6.67	1A	massive mafic volcanic flow. Dark green-grey colour grading to dark grey. Moderately foliated, and weakly sheared near the upper contact, at 40 TCA. 1-2% thin quartz-carbonate and quartz veinlets. <1% thin diopside alteration bands parallel to foliation. <1% bands of pyrrhotite and fine grained disseminated pyrite and pyrrhotite in quartz. a sharp lower contact intersecting at 50 TCA.
429.56	430.13	0.57	7B	fine to medium grained mafic dyke. Dark grey colour. Subhedral crystals. Moderately foliated intersecting at 50 TCA. 15% quartz-eyes. No veining. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
430.13	434.04	3.91	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Locally porphyritit. Moderately foliated intersecting at 45 TCA. 2% thin felsite dykelets. <1% thin quartz-carbonate veinlets and stringers. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
434.04	434.73	0.69	7B	fine to medium grained mafic dyke. Dark grey colour. Subhedral crystals. Moderately foliated intersecting at 50 TCA. 15% quartz-eyes. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
434.73	448.41	13.68	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Possibly locally pillowed. Moderately foliated intersecing at 50 TCA. 15% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate stringers. 2-3% thin biotite alteration bands. two silicified intermediate dykes up to 35 cm across at 446.65 and 447.5 m depth. a sharp lower contact intersecting at 55 TCA.
448.41	449.43	1.02	6E	intermediate feldspar porphyry dyke. Moderately foliated grading to weakly foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 20-25% medium to coarse grained plagioclasse phenocrysts in a fine grained intermediate matrix. 3-4% very fine grained disseminated pyrrhotite and pyrite. a sharp lower contact intersecting at 45 TCA.
449.43	461.71	12.28	1B	mafic pillow flow. Dark grey to dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 50 TCA. Well defined, black pillow selvages with up to 20% almandine garnets. 2-3% thin quartz-carbonate stringers. Locally weakly sheared between 450 and 450.3 m depth. the last 40 cm are sheeared as the hole enters the Lower Zone shear system. a sharp lower contact intersecting at 55 TCA.
461.71	463.71	2.00	SH/6E	LOWER ZONE. Sheared intermediate dyke. Dark grey-purple colour. Moderately sheared and strongly foliated intersecting at 45 TCA. Moderate pervasive silicic alteration. 10% thin quartz and quartz-carbonate veinlets, mostly parallal to foliation. 5-8% very fine grained to fine grained pyrite and pyrrhotite, mostly disseminated or within quartz veining. a sharp lower contact intersecting at 50 TCA.
463.71	476.78	13.07	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. Two silica altered intermediate dykes up to 35 cm across at 467.25 and 471.8 m depth. 15% diopside alteration bands parallel to foliation. 2-3% quartz veinlets and thin quartz-carbonate stringers. <1% fine grained pyrite, usually around quartz. a sharp lower contact intersecting at 35 TCA.
476.78	477.30	0.52	6E	intermediate dyke. Medium-dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
477.30	486.00	8.70	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 50 TCA. 15% diopside alteration bands parallel to foliation. 2% thin quartz-carbonate stringers. Trace pyrite. Two thin felsite dykes running nearly parallel to the core between 482.45 and 484.65.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876663	59.55	60.55	1.00	QTCSW	quartz-carbonate stockwork. 40% quartz. 60% str diop-epi alt mafic vol. <1% fg-mg py, po.	0.0025
876664	60.55	61.59	1.04	QTCSW	quartz-carbonate stockwork. 50% quartz. 50% str diop-epi alt mafic vol. <1% fg-mg py, po.	0.0025
876665	419.80	420.30	0.50	1B	mafic pillow flow. Mod fol. 10% diop alt. 1% thin qcs. Tr po.	0.0025
876666	420.30	420.80	0.50	1B	mafic pillow flow. Mod fol. Wk sh. 5% diop alt. 3% qv. <1% vfg py and po in qtz.	0.0025
876667	420.80	421.30	0.50	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 3% vfg diss po, py.	0.0025
876668	421.30	421.80	0.50	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 5% vfg diss po, py.	0.006
876669	421.80	422.37	0.57	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 4% vfg diss po, py.	0.0025
876670	422.37	422.87	0.50	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 3% vfg diss po, py.	0.017
876671	422.87	423.50	0.63	SH/1A	sheared massive mafic volcanic flow. Wk sh. Mod fol. 15% diop alt. 1% thin qcs. 1% banded po. Tr py in qtz.	0.006
876672	423.50	424.20	0.70	1A	mafic volcanic flow. Mod fol. Wk sh. 5% diop alt. 2% thin qcs. <1% banded po.	0.0025
876673	424.20	425.00	0.80	1A	mafic volcanic flow. Mod fol. 5% diop alt. 3% thin qcs. 1% banded po.	0.0025
876674	447.00	447.50	0.50	1A	mafic volcanic flow. Mod fol. 8% diop alt. 1% thin qcs. Nvs.	0.012
876675	447.50	447.90	0.40	6E	intermediate dyke. Str fol. Str perv sil alt. 4-5% fg-vfg diss and ribboned po, py.	0.0025
876676	447.90	448.41	0.51	1A	mafic volcanic flow. Mod fol. 8% diop alt. 3% thin qcs. Nvs.	0.0025
876677	448.41	449.43	1.02	6E	intermediate feldspar porphyry dyke. Mod fol. Wkl perv sil alt. 4% vfg diss po, py.	0.0025
876678	449.43	449.80	0.37	1B	mafic pillow flow. Mod fol. 5% diop alt. 2% thin qcs. Nvs.	0.007
876679	449.80	450.40	0.60	SH/1B	sheared mafic volcanic flow. Mod sh. Mod fol. 15% brown bio alt. 25% qcs and qv. 2% po, py in qtz.	0.011
876680	450.40	451.00	0.60	1B	mafic pillow flow. Mod fol. 25% garnet replacement in pillow selvages. 1% thin qcs. Nvs.	0.006
876681	460.00	460.70	0.70	1B	mafic pillow flow. Mod fol. 10% diop alt. 4% thin qcs. Nvs.	0.039
876682	460.70	461.30	0.60	1B	mafic pillow flow. Mod fol. 10% diop alt. 2% thin qcs. <1% fg diss py.	0.017
876683	461.30	461.71	0.41	SH/1B	sheared mafic pillow flow. Mod sh. Str fol. 70% diop alt. 5% brown bio alt. 2% thin qcs. 15% fg diss and ribboned py, po.	0.117
876684	461.71	462.21	0.50	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 5% fg diss py, po.	0.094
876685	462.21	462.71	0.50	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 10% qv. 8% fg diss py, po.	4.29
876686	462.71				Standard 16A	1.81
876687	462.71				Blank - Granite	0.0025

Sample #	From	To	Interval	Code	Description	Au (ppm)
876688	462.71	463.21	0.50	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 2% qv. 2% fg diss py, po.	6.53
876689	463.21	463.71	0.50	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 4% qv. 2% fg diss py, po.	0.142
876690	463.71	464.40	0.69	1A	mafic volcanic flow. Mod fol. 8% diop alt. 4% thin qcs. 3% brown bio alt. tr py, po.	0.058
876691	464.40	465.00	0.60	1A	mafic volcanic flow. Mod fol. 5% diop alt. 3% thin qcs. Tr po, py.	0.084
876692	471.00	471.81	0.81	1A	mafic volcanic flow. Mod fol. 5% diop alt. 7% qv and thin qcs. <1% fg py in qtz.	0.038
876693	471.81	472.07	0.26	6E	intermediate dyke. Mod fol. Str perv sil alt. 1% vfg diss py.	0.057
876694	472.07	472.75	0.68	1A	mafic volcanic flow. Mod fol. 15% diop alt. 5% qv and thin qcs. <1% ribboned py.	0.008

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-33
	CLAIM NO:	1069347	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					02-May-12	05-May-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645610					
Northing	5407340	Dip:	-70	Dates Logged:	From: 03-May-12	To: 05-May-12
Elevation						
Final		Depth:	591.00	Logged By:	Greg McKay	
Easting	645600.700					
Northing	5407350.470	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	418.800					

Purpose of Hole	To extend old CH-45 hole through the Sugar Zone. First 483m already drilled.
Results	
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
51.0	158.5	-67.3	5857	magnetic
102.0	44.2	-67.0	6169	magnetic
153.0	50.7	-66.2	5735	
204.0	51.3	-64.9	5730	
255.0	52.8	-63.6	5739	
306.0	54.1	-63.0	5697	
357.0	54.9	-61.4	5703	
408.0	55.1	-62.3	5708	
459.0	54.4	-59.1	5702	
507.0	53.9	-57.3	5686	
531.0	53.3	-55.6	5732	
555.0	53.3	-55.5	5759	
579.0	56.8	-54.5	5772	

From	To	Interval	Code	Description
0.00	483.00	483.00		Old CH Hole
483.00	485.27	2.27	1A	massive mafic volcanic flow. Dark grey to dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 1-2% thin quartz-carbonate stringers. <1% thin seams of pyrrhotite. A sharp lower contact intersecting at roughly 55 TCA.
485.27	486.00	0.73	QV	quartz vein. Grey-white coloue. Moderately fractured, but not broken apart. 5% mafic inclusions. A 15 cm felstie dyke in the middle. <1% fine grained pyrite along fractures and contacts. A sharp irregular lower contact.
486.00	487.20	1.20	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. Weakly bleached. <1% fine grained ribboned pyrite. A gradational lower contact.
487.20	490.00	2.80	QTSW/1A	quartz-stockwork in a massive mafic volcanic flow. Possibly pillowed. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. 25% quartz veining up to 25 cm across. Most of the veining is milky white, some is greyish colour. <1% fine grained pyrite along contacts of quartz. a gradational lower contact.
490.00	497.45	7.45	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. 2% thin quartz-carbonate stringers. Trace pyrite. A gradational lower contact.
497.45	498.85	1.40	SH/1A	sheared massive mafic volcanic flow. Weakly sheared and moderately foliated intersecting at 45 TCA. 30% brown biotite alteration. 5% quartz-carbonate veinlets and stringers. 1% pyrrhotite and <1% pyrite, mostly in quartz. A sharp lower contact intersecting at 40 TCA.
498.85	499.40	0.55	SH/6E	sheared intermediate dyke. Weakly sheared and moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 3% thin quartz veinlets and stringers. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
499.40	500.30	0.90	SH/1A	sheared massive mafic volcanic flow. Moderately grading to weakly sheared and foliated intersecting at 40 TCA. 25% brown biotite alteration, grading with shear. 10% quartz veinlets and stringers. 3-4% pyrrhotite, trace pyrite, mostly in quartz. A gradational lower contact.
500.30	509.75	9.45	1A	massive mafic volcanic flow. Dark grey to dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. <1% diopside alteration bands. 2% thin quartz-carbonate veinlets and stringers. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
509.75	510.32	0.57	6E	intermediate feldspar porphyry dyke. Dark grey-purpleish colour. Moderately foliated intersecting at 40 TCA. 20% medium to coarse grained, subhedral plagioclasse phenocrysts in a fine grained intermediate matrix. Weak pervasive silicic alteration. <1% vfg diss and fg seamed pyrite. a sharp lower contact intersecting at 45 TCA.
510.32	511.37	1.05	1A	massive mafic volcanic flow. Dark green colour. Fine grained crysals. Moderately foliated intersecting at 50 TCA. 3-4% brown biotite alteration. 2% thin quartz-carbonate stringers. Trace very fine grained pyrite. Weakly sheared towards to lower contact. a sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
511.37	512.00	0.63	SH/6E	UPPER ZONE. Sheared intermediate dyke. Medium-dark grey-purpleish colour. Moderately sheared and foliated intersecting at 50 TCA. Moderate pervasive silicic alteration. 3% quartz veinlets. 1-2% fg to very fine grained disseminated pyrite/pyrrhotite. A sharp, slightly wavy lower contact intersecting at roughly 50 TCA.
512.00	514.25	2.25	SH/1A	UPPER ZONE. Sheared mafic volcanic flow. Moderately sheared grading to weakly sheared. Moderately foliated parallel to shear, at 50 TCA. 25% brown biotite alteration grading to 5%. 3-4% thin quartz-carbonate veinlets and stringers. <1% fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
514.25	517.31	3.06	6E	intermediate dyke. Medium greyish colour. Moderately foliated intersecting at 55 TCA. Moderate pervasive silicic alteration. 2-3% quartz veining up to 10 cm across. 1% very fine grained disseminated pyrite. A 40 cm mafic flow inclusion at 516.1 m depth. a sharp lower contact intersecting at 45 TCA.
517.31	531.20	13.89	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. 2% thin felstie dyklets up to 3 cm across, intersecting at several angles. 2% diopside alteration grading to 25% towards the lower contact. A 10cm milky white quartz vein at 528.55 m depth. a sharp irregular lower contact intersecting at 20 TCA.
531.20	560.84	29.64	7A	diabase dyke. Medium grey colour. Fine grained at the edges grading to medium grained in the middle. Euhedral crystals. 40% plagioclasse feldspar, 40% amphibole/pyroxe and 20% olivene. 1% coarse grained quartz-epidote pheocrysts up to 1.5 cm across. No veining. no visible sulphides. a sharp, irregular lower contact intersecting at 20 TCA.
560.84	567.34	6.50	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Possibly locally pillowed. Moderately foliated intersecting at 50 TCA. 10% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. <1% fine grained pyrite, mostly in or around quartz. a sharp, slightly wavy lower contact intersecting at roughly 50 TCA.
567.34	570.15	2.81	SH/6E	LOWER ZONE. Sheared intermediate feldspar porphyry dyke. Medium to dark greyish colour. Moderately sheared and foliated intersecting at 55 TCA. Weak pervasive silicic alteration. 5% quartz veining, increasing to 60% towards the lower contact. 1% very fine grained disseminated pyrite in the dyke and up to 8% fine grained disseminated pyrite in the quartz. a sharp lower contact intersecting at 55 TCA.
570.15	570.53	0.38	SH/1A	LOWER ZONE. Sheared mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 55 TCA. 60% diopside alteration. 20% grey quartz veining. <1% fine grained arsenopyrite in wallrock. <1% fine grained pyrite ad pyrrhotite in quartz. A sharp lower contact intersecting at 50 TCA.
570.53	571.27	0.74	6E	intrmediate feldspar porphyry dyke. Moderately foliated intersecting at 55 TCA. 25% medium to coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. Weak pervasive silicic alteration. 1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 55 TCA.

From	To	Interval	Code	Description
571.27	588.45	17.18	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 55 TCA. 15% diopside alteration bands parallel to foliation. 1% grey quartz veining up to 15 cm across. Trace pyrite around quartz. a sharp lower contact intersecting at 45 TCA.
588.45	589.51	1.06	6E	intermediate dyke. Medium grey-purple colour. Fine grained, subhedral crystals. Moderately foliated intersecting at 60 TCA. Weak pervasive silcicic alteration. 2-3% thin silica flooded bands. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 55 TCA.
589.51	591.00	1.49	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 50 TCA. 15% diopside alteration bands parallel to foliation. 5% brown biotite alteration. 2% thin quartz-carbonate stringers and quartz veining. Trace pyrrhotite around quartz.
591.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876695	484.70	485.27	0.57	1A	mafic volcanic flow. Mod fol. <1% thin qv. <1% fg py.	0.0025
876696	485.27	486.00	0.73	QV	quartz vein. Mod frac. 20% felsite. 5% mafic flow incl. <1% fg py.	0.0025
876697	486.00	486.60	0.60	1A	mafic volcanic flow. Mod fol. <1% fg diss py.	0.006
876698	486.60	487.20	0.60	1A	mafic volcanic flow. Mod fol. 3% thin qcs. <1% fg diss py.	0.006
876699	487.20	487.90	0.70	QTSW/1A	quartz stockwork in a mafic flow. Mod fol. 25% qv and qcv. Tr py.	0.0025
876700	487.90	488.60	0.70	QTSW/1A	quartz stockwork in a mafic flow. Mod fol. 30% qv. Possibly pillowed. 1% ribboned po, py.	0.0025
876701	488.60	489.30	0.70	QTSW/1A	quartz stockwork in a mafic flow. Mod fol. 35% qv and qcv. <1% thin ribboned py.	0.0025
876702	489.30	490.00	0.70	QTSW/1A	quartz stockwork in a mafic flow. Mod fol. 5% qv and qcv. <1% ribboned po.	0.0025
876703	490.00	490.50	0.50	1A	mafic volcanic flow. Mod fol. 1% very thin qcs. Tr po.	0.0025
876704	497.00	497.45	0.45	1A	mafic volcanic flow. Mod fol. 4% thin qcs and qcv. Tr fg diss py.	0.007
876705	497.45	498.10	0.65	SH/1A	sheared mafic volcanic flow. Mod sh. Mod fol. 20% brown bio alt. 8% thin qcv. Tr py in qtz.	0.43
876706	498.10	498.85	0.75	SH/1A	sheared mafic volcanic flow. Mod sh. Mod fol. 25% brown bio alt. 10% thin qcv and qcs. 1% fg diss and ribbond po, py.	0.006
876707	498.85	499.40	0.55	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. <1% fg diss py/po.	0.0025
876708	499.40	499.85	0.45	SH/1A	sheared mafic volcanic flow. Mod sh. Mod fol. 3% diop alt. 10% thin qcv and qcs. 2% fg diss and ribboned po.	0.007
876709	499.85	500.30	0.45	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 5% brown bio alt. 2% thin qcs. 1% fg ribboned po.	0.0025
876710	500.30	500.80	0.50	1A	mafic volcanic flow. Mod fol. 2% diop alt. 2% thin qcs. <1% fg ribboned po.	0.0025
876711	509.75	510.32	0.57	6E	intermediate feldspar porphyry dyke. Mod fol. Wk perv sil alt. 1% vfg diss py.	0.0025
876712	510.32	510.82	0.50	1A	mafic volcanic flow. Mod fol. Mod fol. 3% brown bio alt. 2% thin qcs. Tr py.	0.024
876713	510.82	511.37	0.55	1A	mafic volcanic flow. Mod fol. 5% brown bio alt. 4% thin qcs. Tr py.	0.016
876714	511.37	512.00	0.63	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Mod perv sil alt. 3% qv and qcs. 1% vfg diss po, py.	0.937
876715	512.00	512.50	0.50	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 15% brown bio alt. 5% thin qcs and qcv. 1% py in qtz.	0.089
876716	512.50				Standard 16A	1.76
876717	512.50				Blank Granite	0.0025
876718	512.50	513.10	0.60	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 15% brown bio alt. 10% diop alt. 3% thin qcs. <1% vfg diss py/po.	0.132
876719	513.10	513.70	0.60	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 4% thin qcs. Tr vfg diss py.	0.031

Sample #	From	To	Interval	Code	Description	Au (ppm)
876720	513.70	514.25	0.55	1A	mafic volcanic flow. Mod fol. 3% thin qcs. Tr vfg diss py.	0.137
876721	514.25	515.00	0.75	6E	intermediate dyke. Mod fol. Str perv sil alt. 10% qv. 1% vfg diss po, py.	0.012
876722	515.00	515.50	0.50	6E	intermediate dyke. Mod fol. Mod perv sil alt. 2% qv. 1% vfg diss po, py.	0.059
876723	515.50	516.10	0.60	6E	intermediate dyke. Mod fol. Mod perv sil alt. 2% vfg diss py.	0.015
876724	516.10	516.50	0.40	1A	mafic volcanic flow inclusions. Mod fol. 5% diop alt. 2% thin qcs. Tr py.	0.051
876725	516.50	517.32	0.82	6E	intermediate dyke. Mod fol. Mod perv sil alt. 1% vfg diss py.	0.007
876726	517.32	518.00	0.68	1A	mafic volcanic flow. Mod fol. 3% thin qcs. 3% thin diop alt. 1% fg and ribboned po, py.	0.011
876727	564.00	564.50	0.50	1A	massive mafic volcanic. Mod fol. 15% diop alt. 1% qcv. Nvs.	0.0025
876728	564.50	564.90	0.40	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 35% diop alt. 3% qcv. 1-2% fg-mg py in qtz.	0.05
876729	564.90	565.70	0.80	1A	mafic volcanic flow. Mod fol. 5% diop alt. <1% thin qcs. Nvs.	0.014
876730	565.70	566.54	0.84	1A	mafic volcanic flow. Mod fol. 8% diop alt. <1% thin qcs. Nvs.	0.012
876731	566.54	567.34	0.80	1A	mafic volcanic flow. Mod fol. 10% diop alt. <1% thin qcs. Nvs.	0.036
876732	567.34	568.00	0.66	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 10% felsite dyklet. 1-2% vfg diss py, po.	0.035
876733	568.00	568.60	0.60	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 2% thin qv. 1-2% fg diss py, po.	0.047
876734	568.60	569.00	0.40	QTSW/6E	quartz-stockwork in a sheared intermediate dyke. Mod sh. Str fol. 60% qv. 5% mafic. 8% py, po, mostly in qtz.	0.46
876735	569.00				Standard 10C	6.34
876736	569.00				Blank - Granite	0.0025
876737	569.00	569.60	0.60	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 1% vfg diss po, py. 2% thin qcv.	0.026
876738	569.60	570.15	0.55	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 3% thin qcv. 1% vfg diss po, py.	0.013
876739	570.15	570.53	0.38	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 60% diop alt. 20% qv. <1% fg aspy in wallrock. 1-2% fg py in qtz.	0.069
876740	570.53	571.27	0.74	6E	intermediate feldspar porphyry dyke. Mod fol. Wk perv sil alt. <1% vfg diss py.	0.053
876741	571.27	571.70	0.43	1A	mafic volcanic flow. Mod fol. 10% diop alt. 1% thin qcv. Tr py.	0.016
876742	571.70	572.10	0.40	1A	mafic volcanic flow. Mod fol. 25% diop alt. 8% qv. <1% py around qtz.	0.022
876743	572.10	572.80	0.70	1A	mafic volcanic flow. Mod fol. 8% diop alt. 3% qv. Tr py in qtz.	0.006

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-34
		CLAIM NO:	1182994	Drill Rig	Major-50

Location		Drill Hole Orientation				
UTM Zone 16				Dates Drilled:	From: 05-May-12	To: May 20,2012
Prelim						
Easting	645765	Azimuth:	50	Drilled By:	Major Drilling	
Northing	5407146	Dip:	-78	Dates Logged:	From: 06-May-12	To: 31-May-12
Elevation	417					
Final						
Easting	645759.949	Depth:	613.00	Logged By:	Greg McKay	
Northing	5407145.037	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	416.825					

Purpose of Hole	
Results	
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
10.0	54.0	-77.7	5783	Reflex Test
34.0	54.2	-77.1	5712	
58.0	54.3	-76.4	5721	
82.0	54.9	-76.1	5704	
106.0	51.9	-75.4	5705	
130.0	54.9	-75.1	5726	
154.0	54.9	-74.4	5647	
178.0	58.9	-74.4	6083	magnetic
202.0	52.9	-73.9	5713	
226.0	54.3	-73.9	5699	
241.0	53.1	-73.8	5698	
242.0				Wedge
250.0	51.1	-71.9	5707	
262.0	51.2	-71.3	5708	
286.0	50.4	-70.3	5711	
310.0	51.9	-69.8	5724	
334.0	53.1	-69.5	5674	
358.0	51.3	-69.7	5724	
382.0	54.8	-69.5	5707	
406.0	55.2	-68.2	5719	
430.0	55.9	-67.0	5719	
454.0	55.7	-66.6	5707	
478.0	55.4	-66.1	5698	
502.0	55.1	-65.9	5710	
526.0	56.6	-64.8	5673	
550.0	56.4	-64.5	5743	
574.0	57.9	-64.1	5704	
598.0	58.5	-63.7	5713	

From	To	Interval	Code	Description
0.00	1.96	1.96	OB	overburden
1.96	9.00	7.04	1A	massive mafic volcanic flow. Dark grey colour. Medium grained. Moderately to strongly foliated intersecting at 35 TCA. Trace very thin quartz-carbonate stringers. No veisible sulphides. A sharp lower contact intersecting at 20 TCA.
9.00	9.87	0.87	QV	quartz vein. Milky white colour. Weakly fractured, and broken up in all angles. 5% milky white opaque, and 95% whitish translucent. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
9.87	15.50	5.63	1A	massive mafic volcanic flow. Dark grey colour. Medium grained. Moderately to strongly foliated intersecting at 35 TCA. Trace very thin quartz-carbonate stringers. Becoming moderately sheared towards the loewr contact with a moderate pervasive silicic alteration and up to 15% fine grained and ribboned and disseminated pyrite. a sharp, irregular lower contact.
15.50	16.69	1.19	6C	mafic dyke. Medium jade-green colour. Weakly fractured, and fractures are filled with pyrite and amphiboles. Weakly foliated in areas. 5% fine grained disseminated, fracture filled and ribboned pyrite. 3-4% muscovite. A sharp lower contact intersecting at 45 TCA.
16.69	38.38	21.69	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to apheneitc. Moderately foliated intersectign at 35 TCA. <1% thin quartz-carbonate stringers. Trace pyrite. A sharp lower contact intersecting at 25 TCA.
38.38	39.73	1.35	4C	medium to coarse grained granodiorite, or quartz-feldspar porphyry dyke. Weak to moderate silicic alteration around the edges. 30% plagioclasse, 50% quartz and 20% hornblende and biotite. No visible sulphides. A sharp, slightly wavy lower contact intersecting at roughly 45 TCA.
39.73	42.54	2.81	1Z	coarse grained or porphyritic gabbroic end-member of a massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 45 TCA. 15% brown biotite alteration. 3% quartz veinlets. 1% fine grained pyrite. A sharp lower contact intersecting at 45 TCA.
42.54	44.73	2.19	4D	medium grained granodiorite, or felsite dyke. Weak to moderate silicic alteration around the edges. 30% plagioclasse, 40% quartz, 15% hornblende and biotite and 15% muscovite. No visible sulphides. A sharp lower contact intersecting at 65 TCA.
44.73	51.50	6.77	1Z	coarse grained gabbroic end-member of a massive mafic volcanic flow. Dark grey colour. graines up to 8-10mm across. Weakly foliated intersecting at 45 TCA. 5% brown biotite alteration. <1% quartz veinlets. <1% fine grained pyrite. A gradational lower contact.
51.50	105.58	54.08	1A	massive mafic volcanic flow. Dark grey to dark grey-green colour. Moderately foliated intersecting at 35 TCA. 15% diopside alteration bands parallel to foliation. 15% ribboned pyrrhotite between 51.95 and 52.3 m depth, in a weak iron formation. <1% thin quartz-carbonate veinlets and stringers. A 25 cm feldspar porphyry dyke at 62.0 m depth, and a 37 cm pegmatite dyke at 85.25 m depth. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
105.58	111.39	5.81	6E	intermediate feldspar porphyry dyke. 15% coarse grained, white plagioclasse phenocrysts in an aphenetic dark grey to black matrix. Weakly foliated intersecting at 35 TCA. Trace pervasive silicic alteration. A 20cm aphenetic felsite dyke at 106.95 m depth. 1-2% fine to very fine grained disseminated pyrrhotite. weakly locally magnetic. <1% thin quartz veinlets. a sharp lower contact intersecting at 25 TCA.
111.39	112.20	0.81	SH/1A	sheared massive mafic volcanic flow. Dark grey-green colour. Moderately sheared and foliated intersecting at 35 TCA. 40% diopside alteration. 15% quartz and quartz-carbonate veinlets. Trace pyrite. A gradational lower contact.
112.20	114.97	2.77	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to apheneitc. Moderately foliated intersecting at 30 TCA. 5% diopside alteration bands parallel to foliation. No visible sulphide. A sharp lower contact intersecting at 45 TCA.
114.97	122.11	7.14	4E	very coarse grained pegmatitic felsite dyke. Subhedral crystals. 40% quartz, 40% feldspar, 10% muscovite and 10% biotite. No visible sulphides. White to pink or black in colour. No veining. A sharp lower contact intersecting at 30 TCA.
122.11	132.20	10.09	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 2% thin quartz and quartz-carbonate veinlets. 15% diopside alteration bands parallel to foliation, and occasionally enveloping thin quartz veinlets. a 28 cm mafic dyke at 131.37 m depth. trace pyrrhotite. a gradational lower contact.
132.20	135.21	3.01	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Weakly foliated intersecting at 45 TCA, locally weakly magnetic. 2% thin quartz-carbonate veinlets. <1% pyrrhotite. A semi-sharp lower contact intersecting at 30 TCA.
135.21	136.03	0.82	3D/1A	iron formation in a massive mafic volcanic flow. Moderately to strongly foliated intersecting at 35 TCA. Moderately magnetic. Dark grey colour. Moderate pervasive silicic alteration. 5-6% fine grained ribboned pyrrhotite. 15% medium grained pyrope garnets. a sharp lower contact intersecting at 35 TCA.
136.03	143.30	7.27	1A	massive mafic volcanic flow. Fine to medium grained, subhedral crysals. Dark grey to black colour. Weakly to moderately foliated intersecting at 40 TCA. A 51 cm quartz-carbonate stockwork system at 139.9. trace very fine grained pyrrhotite. A gradational lower contact.
143.30	144.60	1.30	1U	ultramafic komatite flow. Medium to dark greyish colour. Moderately to locally strongly magnetic. Softer than a knife. No visible sulphides. No veining. A gradational lower contact.
144.60	145.30	0.70	1A	massive mafic volcanic flow. Dark grey colour. Fine to medium grained crystals. Moderately foliated intersecting at 40 TCA. 5% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. <1% fine grianed, fracture controlled pyrite. a semi-gradational lower contact.
145.30	146.60	1.30	3D/1A	iron formation in a massive mafic volcanic flow. Dark grey colour. Moderately to strongly foliated intersecting at 35 TCA. Weak pervasive silicic alteration. 8% fine grianed ribboned pyrrhotite. Moderately magnetic. 15% brown biotite alteration. 5% pyrope garnets. a semi-gradational lower contact.

From	To	Interval	Code	Description
146.60	156.30	9.70	1A	massive mafic volcanic flow. Dark grey to black colour. Fine to medium, and occasionally coarse grained, subhedral crystals. Weakly to moderately foliated intersecting at 45 TCA. Trace magnetics. No veining. No visible sulphides. A gradational lower contact.
156.30	161.21	4.91	1U	ultramafic komatite flow. Medium grey colour. Moderately to strongly foliated intersecting at 45 TCA. Moderately pervasively magnetic. Locally effervesent. Very soft rock. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
161.21	161.68	0.47	3D	iron formation unitl dark brown-grey colour. Moderately foliated intersecting at 40 TCA. Weakly to moderately magnetic. 5-6% ribboned pyrrhotite. Aphenetic crystals. Weak pervasive silicic alteration. No veining. A sharp lower contact intersecting at 35 TCA.
161.68	166.47	4.79	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic. Moderately foliated intersecting at 45 TCA. 1% pyrope garnets. 3% diopside alteration. <1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
166.47	167.69	1.22	6E	intermediate feldspar porphyry dyke. 10% medium to coarse grained plagioclasse phenocrysts in an aphenetic, dark grey matrix. Weakly foliated intersecting at 45 TCA. A 15 cm quartz vein at the top of the unit. <1% fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
167.69	171.25	3.56	1A	massive mafic volcanic flow. Dark grey colour. Fine grained, subhedral crystals. Weakly foliated intersecting at 45 TCA. Trace thin quartz-carbonate stringers. No visible sulphides. A gradational lower contact.
171.25	178.70	7.45	1U	ultramafic komatite flow. Medium to dark grey colour. Moderately to strongly foliated intersecting at 50 TCA. Moderately to strongly, pervasively magnetic. Softer than a knife. Moderate pervasive carbonate content. Moderately effervesent. A gradational lower contact.
178.70	192.10	13.40	1A/3D	massive mafic volcanic flow with interlayering igenous iron formations. Dark grey to black, and dark purple-grey in the iron formation sections. Moderately to strongly foliated intersecting at 40 TCA. Moderately magnetic in iron formations. Up to 8% ribboned pyrrhotite in iron formation. iron formation units are up between 30 and 150 cm across. <1% thin quartz-carbonate veinlets. 2-3% diopside alteration in mafic volcanic units. a sharp lower contact intersecting at 50 TCA.
192.10	193.83	1.73	6E	intermediate feldpar porphyry dyke. 20% medium grained plagioclasse phenocrysts in a dark grey, aphenetic matrix. Moderately foliated intersecting at 45 TCA. No veining. Trace very fine grained disseminated pyrite. A sharp, irregular lower contact.
193.83	198.22	4.39	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersectign at 45 TCA. 5% diopside alteration bands parallel to foliation. 3% brown biotite alteration. 1% quartz veining. <1% fine grained pyrite around quartz. a sharp, wavy lower contact.
198.22	198.94	0.72	4D	felsite dyke. Yellow-white colour. 70% subhedral quartz and feldspar, 20% fine to medium grained muscovite and 10% fine grained biotite. No visibile sulphides. No veining. A sharp wavy lower contact.

From	To	Interval	Code	Description
198.94	210.30	11.36	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. <1% thin quartz veinlets. Trace fine grained disseminated, and ribboned pyrite. 5% fine grained leucoxene after 209.4 m depth. a sharp lower contact intersecting at 40 TCA.
210.30	211.52	1.22	4D	fine grained felsite dyke. Medium to light greyish colour. Subhedral crystals. 60% feldspar, 25% quartz, 10% biotite and 5% muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 80 TCA.
211.52	216.15	4.63	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly foliated intersecting at 45 TCA. 1% diopside alteration. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
216.15	217.23	1.08	4E	very coarse grained pegmatitic dyke. 55% quartz, 25% feldspar, 15% biotite and 5% muscovite. Mostly quartz in the middle, with the biotite and muscovite closer to the edges. No veining. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
217.23	263.90	46.67	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained subhedral crystals grading to locally medium grained porphyritic in the middle of the unit. Moderately foliated intersecting at 45 TCA. Locally up to 5% fine grained leucoxene. 3-4% thin diopside alteration bands parallel to foliation. 2% thin quartz veinlets. trace pyrite in quartz. the diopside alteration is usually enveloping a quartz vein. trace brown biotite alteration. A sharp lower contact intersecting at 40 TCA.
263.90	267.19	3.29	6E	intermediate feldspar porphyry dyke. Dark grey-purple colour. 15% subhedral, medium to coarse grained plagioclasse phenocrysts in an aphenetic, intermediate matrix. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 2% fine to very fine grained disseminated pyrrhotite. <1% quartz veinlets. a sharp lower contact intersecting at 30 TCA.
267.19	281.85	14.66	1A	massive mafic volcanic flow. Dark green colour. Fine grained to aphenetic. Moderately foliated intersecting at 35 TCA. 15% diopside alteration bands parallel to foliation. 1% brown biotite alteration bands. Trace pyrite. A sharp lower contact intersecting at 30 TCA.
281.85	282.78	0.93	6E	intermediate dyke. Dark purple-grey colour. Moderately to strongly foliated intersecting at 35 TCA. Weak pervasive silicic alteration. 1% mafic inclusions. Plagioclasse phenocrysts have been stretched and obliterated in foliation. 1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
282.78	285.50	2.72	SH/1A	sheared massive mafic volcanic flow. Weakly sheared. Moderately to strongly foliated intersecting at 40 TCA. A 15 cm quartz stockwork zone at 283.35 immediately followed by at 35 cm sheared intermediate dyke. 30% diopside alteration in bands, and locally semi-pervasive. 1-2% brown biotite alteration. 3% thin quartz-carbonate veinlets and stringers. <1% and locally up to 3-4% fine grained disseninated pyrite and pyrrhotite. a gradational lower contact.

From	To	Interval	Code	Description
285.50	320.74	35.24	1A	massive mafic volcanic flow. Dark grey to dark green-grey colour. Moderately foliated intersecting at 30 TCA. 35% to locally 60% diopside alteration. A 23 cm felsite dyke at 296.75 m depth and a 31 cm intermediate feldspar porphyry dyke with 15 cm of quartz vein at 309.4 m depth. trace pyrite and pyrrhotite, and locally up to 3% seamed pyrrhotite. a sharp lower contact intersecting at 40 TCA.
320.74	321.83	1.09	6E	intermediate feldspar porphyry dyke. Dark greyish colour. 15% subhedral to anhedral plagioclasse phenocrysts in an aphenetic matrix. Moderately to strongly foliated intersecting at 40 TCA. Weak pervasive silicic alteration. No veining. 1% very fine grained disseminated pyrrhotite, pyrite. a sharp lower contact intersecting at 40 TCA.
321.83	352.00	30.17	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. Local weak silicic alteration with up to 5% fg diss py between 341.65 and 342.0 m depth. 1-2% quartz veining. <1% diopside alteration bands. a gradational lower contact.
352.00	369.28	17.28	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to locally medium grained subhedral crystals. Moderately foliated intersecting at 40 TCA. <1% diopside alteration bands parallel to foliatino. 1% thin quartz veinlets. Trace pyrrhotite. A 43 cm felsite dyke at 355.95 m depth. a sharp lower contact intersecting at 40 TCA.
369.28	369.95	0.67	6F	mafic dyke. Dark grey colour. Medium grained, subhedral crystals. Moderately foliated intersecting at 40 TCA. 15% fine grained biotite. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
369.95	391.64	21.69	1A	massive mafic volcanic flow. Dark grey colour to dark grey-green colour. Moderately foliated intesecting at 35 TCA. 10% diopside alteration bands parallel to foliation. 1% brown biotite alteration. Possibly locally pillowed. <1% quartz veinlets. Trace pottasic alteration in one of the quartz veinlets. no visible sulphides. a sharp lower contact intersecting at 35 TCA.
391.64	392.27	0.63	6E	intermediate feldspar porphyry dyke. 15% medium to coarse grained plagioclasse phenocrysts in an aphenetic, dark black matrix. Weakly foliated intersecting at 40 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
392.27	407.89	15.62	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 35 TCA. 5% diopside alteration bands parallel to foliation. 1-2% quartz veining. Trace fine grained pyrrhotite in diopside alteration bands. a sharp lower contact intersecting at 40 TCA.
407.89	408.29	0.40	6E	intermediate feldspar porphyry dyke. 15% medium grained subhedral plagioclasse phenocrysts in an aphenetic, dark grey-purple matrix. Moderately foliated intersectign at 40 TCA. Weak pervasive silciic alteration. 2% very fine grained disseminated pyrite. a 35 cm mafic inclusion at 407.7 m depth. a sharp lower contact intersecting at 40 TCA.
408.29	415.90	7.61	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. 5% diopside alteration bands parallel to foliation. 1% quartz veinlets. Trace garnet in diopside. Trace pyrite in quartz. A sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
415.90	419.34	3.44	6E	intermediate to felsite feldspar porphyry dyke. Dark purple grading to light grey colour in the middle of the dyke. Moderate to locally strong pervasive silicic alteration. Moderately foliated intersecting at 40 TCA. Plagioclasse phenocrysts are obliterated by foliation in most parts. no veining. no visible sulphides. a sharp lower contact intersecting at 40 TCA.
419.34	421.07	1.73	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. 15% diopside alteration bands parallel to foliation. Moderately foliated intersecting at 40 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 55 TCA.
421.07	421.90	0.83	6F	mafic dyke. Dark grey colour. Medium grained subhedral to anhedral mottled texture. Moderately foliated intersecting at 45 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
421.90	431.43	9.53	1A	massive mafic volcanic flow. Dark grey to dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 10% diopside alteration bands parallel to foliation. <1% quartz veinlets. Two intermediate dykes up to 40 cm across at 427.5 and 428.65 m depth. no visible sulphides. a sharp, irregular lower contact.
431.43	435.24	3.81	4D	felsite dyke. Light grey to white colour. Fine grained subhedral to anhedral crystals. A meter of half mafic volcanic, and half felsite, running wavy, nearly parallel to foliation starting at 433.05 m depth. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
435.24	447.15	11.91	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately to strongly foliated. Finely banded. 5% and locally up to 15% thin diopside alteration bands parallel to foliation. 2-3% brown biotite alteration bands. 1% quartz veinlets. <1% pyrrhotite in the diopside alteration bands. a sharp lower contact intersecting at 40 TCA.
447.15	447.61	0.46	6F	porphyritic mafic dyke. Dark green-grey to black colour. 25% coarse grained hornblene phenocrysts in a fine grained mafic matrix. Moderately foliated intersecting at 45 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
447.61	495.00	47.39	1B	Mafic pillow flow. Dark grey colour. Fine grained to aphenetic. Moderately foliated intersecting at 45 TCA. Moderately to poorly defined pillow selvages, more visible when dry. 5% diopside alteration bands parallel to foliation. A 23 cm bull quartz vein at 450.0 m depth. a 12 cm felsite dyke at 451.6 m depth. locally 5% pyrope garnets in some quartz between 455.30 and 455.45 m depth. a 30 cm granodiorite dyke at 478.4 m depth. a gradational lower contact.
495.00	525.00	30.00	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderatelty foliated intersecting at 30 TCA. 3-4% thin quartz-carbonate veinlets up to 1 cm acorss. Possibly weakly pillowed. Locally strongly foliated. A 33 cm felsite dyke at 514.3 m depth. trace almandine garnets. no visible sulphides. a gradational lower contact.

From	To	Interval	Code	Description
525.00	553.66	28.66	1B	mafic pillow flow. Dark green-grey colour. Aphenetic crytals. Moderately foliated intersecting at 35 TCA. Well defined pillow selvages up to 1 cm across with up to 10% almandine and pyrope garnets. 1% quartz and quartz-carbonate veinlets. Trace seams of pyrrhotite. 3-4% diopside alteration bands parallel to foliation. 2% brown biotite alteration. a sharp lower contact intersecting at 35 TCA.
553.66	555.54	1.88	SH/6E	UPPER ZONE. Sheared intermediate dyke. Medium to dark grey-purple colour. Moderately sheared and strongly foliated intersecting at 30 TCA. Moderate pervasive silicic alteration. 3-4% quartz veining up to 12 cm across. 5% very fine grained disseminated pyrite, and up to 4% medium to coarse grained pyrite in the quartz. a sharp lower contact intersecting at 35 TCA.
555.54	563.00	7.46	1A	massive mafic volcanic flow. Locally amygdualoidal. Moderately foliated intersecting at 35 TCA. Dark green-grey colour. Trace pervasive diopside alteration. 1% thin quartz-carnonate stringers, mostly parallel to foliation. Fine grained crytstals. A gradational lower contact.
563.00	575.00	12.00	1Z	mafic porphyritic flow. Dark grey colour. Moderately foliated intersecting at 35 TCA. Phenocrysts up to 3 mm across. Weak interstitial diopside alteration. '1% thin quartz-carbonate veinlets. No visible sulphides. A gradational lower contact.
575.00	579.00	4.00	1A	massive mafic volcanic flow. Dark grey to grey-green colour. Fine grained crystals. Moderately to weakly foliated intersecting at 35 TCA. 1-2% diopside alteration bands parallel to foliation. <1% thin quartz veining. No visible sulphides. A gradational lower contact.
579.00	590.20	11.20	1B	mafic pillow flow. Dark grey to grey-green colour. Moderately to well defined pillow selvages. Moderately foliated intersecting at 40 TCA. 5% diopside alteration bands parallel to foliation. 2% thin quartz-carbonate veinlets and stringers. Trace pyrite. a sharp lower contact intersecting at 40 TCA.
590.20	591.91	1.71	6E	intermediate feldspar porphyry dyke. Medium grey to grey-purple colour. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 2% fine to very fine grained disseminated pyrite. 1-2% thin quartz and quartz-carbonate veinlets. plagioclasse phenocrysts are obliterated in spots. a sharp lower contact intersecting at 50 TCA.
591.91	602.41	10.50	1A	massive mafic volcanic flow. Dark grey to grey-green colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. Locally pillowed. 10% diopside alteration bands parallel to foliation. 1-2% thin quartz-carboanate stringers. <1% pyrope garnets. no visible sulphides. a sharp, erratic lower contact.
602.41	604.21	1.80	4D	fine to medium grained felsite dyke. Light grey colour. 70% plagioclasse feldspar, 15% quartz, 10% muscovite and 5% biotite. No veining. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
604.21	605.18	0.97	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 5% diopside alteration bands parallel to foliation. 3% brown biotite alteration bands. 2% quartz-carbonate veinlets. <1% fine grained pyrite in quartz. A sharp lower contact intersecting at 65 TCA.

From	To	Interval	Code	Description
605.18	608.20	3.02	SH/6E	LOWER ZONE. Sheared intermediate dyke. Medium grey-purple colour. Moderately sheared and moderately to strongly foliated intersecting at 45 TCA. Moderate pervasive silicic alteration. A 45 cm felsite dyke cutting through the zone at 605.42 m depth. 1-2% very fine grained disseminated pyrite and pyrrhotite. trace veining. a sharp lower contact intersecting at 45 TCA.
608.20	608.92	0.72	SH/1A	LOWER ZONE. Sheared massive mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 45 TCA. 5% brown biotite alteraion bands. 20% very thin diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. 5-6% fine grained disseminated pyrite, usually around diopside. a sharp lower contact intersecting at 40 TCA.
608.92	609.35	0.43	SH/6E	LOWER ZONE. Sheared intermediate dyke. Moderately sheared and strongly foliated intersecting at 40 TCA. Weak to moderate pervasive silicic alteration. 1% quartz veining. 3-4% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
609.35	613.00	3.65	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 10% diopside alteration bands parallel to foliation. 2-3% quartz veinlets. Trace pyrite.
613.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876744	14.20	15.00	0.80	1A	mafic volcanic flow. Mod fol. Tr thin qcs. Nvs.	0.003
876745	15.00	15.50	0.50	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. Mod-str perv sil alt. 10% fg ribboned py.	0.012
876746	15.50	16.10	0.60	6C	mafic dyke. Wk fol. Wk frac. Jade green colour. 2% muscovite. 15% frac-cont and ribboned py.	0.003
876747	16.10	16.69	0.59	6C	mafic dyke. Wk fol. Wk frac. Jade green colour. 4% muscovite. 15% frac-cont and ribboned py.	0.028
876748	16.69	17.43	0.74	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. Wk perv sil alt. 5% qv. Tr bo. 5% ribboned py.	0.003
876749	17.43	18.07	0.64	1A	mafic volcanic flow. Mod fol. Tr qcs. Nvs	0.003
876750	110.80	111.39	0.59	6E	intermediate feldspar porphyry dyke. Wk fol. 3% qv. 10% brown bio alt. 1% vfg diss po.	0.003
876751	111.39	112.20	0.81	SH/1A	sheared massive mafic volcanic flow. Mod sh. Mod fol. 40% diop alt. 15% qv and qcv. Tr py.	0.003
876752	112.20	113.00	0.80	1A	massive mafic volcanic flow. Mod fol. 10% diop alt. nvs.	0.003
876753	281.85	282.78	0.93	6E	intermediate dyke. Str fol. Wk perv sil alt. 1-2% fg-vfg diss py. 1% mafic incl.	0.003
876754	282.78	283.15	0.37	1A	mafic volcanic flow. Mod fol. 5% diop alt. 1% brown bio alt. 3% qcs. Tr py.	0.008
876755	283.15	283.52	0.37	SH/1A	sheared mafic volcanic flow with 15 cm of quartz stockwork. 40% quartz veining. Mod sh. Mod fol. 3% fg seamed and diss py, po.	0.033
876756	283.52	283.86	0.34	SH/6E	sheared intermediate dyke. Mod sh. Mod fol. Wk perv sil alt. 1% vfg dis py, po. 3% thin qcs.	0.045
876757	283.86	284.75	0.89	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 10% diop alt. 5% thin qcs and qcv. 2% brown bio alt. <1% fg diss py.	0.009
876758	284.75	285.50	0.75	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 15% diop alt. 5% thin qcs and qcv. 1% brown bio alt. <1% fg diss py.	0.010
876759	285.50	286.00	0.50	1A	mafic volcanic flow. Mod fol. 5% diop alt. 2% thin qcs. Tr py.	0.010
876760	552.30	553.00	0.70	1B	massive mafic volcanic flow. Mod fol. 4% thin qcs. 1% diop alt. nvs. 1% garnet.	0.003
876761	553.00	553.66	0.66	1B	mafic pillow flow. Mod fol. 8% thin qcs. <1% diop alt. nvs.	0.003
876762	553.66	554.13	0.47	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 15% qv. 5% vfg diss py, and 4% fg-mg py in qtz.	0.006
876763	554.13	554.58	0.45	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 2% thin qv. 4% vfg diss py.	0.003
876764	554.58	555.10	0.52	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 4% qv. 5% vfg diss py.	0.003
876765	555.10	555.54	0.44	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 5% qv. 3% vfg diss py.	0.003
876766	555.54	556.00	0.46	1A	mafic volcanic flow. Mod fol. 10% diop alt, mostly near upper contact. 4% fg po in diop. No veining.	0.003
876767	556.00	556.70	0.70	1A	mafic volcanic flow. Mod fol. Wk amygdualoidal. No veining. Nvs.	0.003

Sample #	From	To	Interval	Code	Description	Au (ppm)
876768	590.20	590.90	0.70	6E	intermediate dyke. Mod fol. Wk perv sil alt. 2% vfg diss py. No veining.	0.003
876769	590.90	591.34	0.44	6E	intermediate dyke. Mod fol. Mod perv sil alt. 10% qv. 1% fg diss py, po.	0.003
876770	591.34	591.91	0.57	6E	intermediate feldspar porphyry dyke. Mod fol. Wk perv sil alt. 1% thin qcs. 2% vfg diss py.	0.003
876771	591.91	592.23	0.32	1A	massive mafic volcanic flow. Mod fol. 30% diop alt. 4% thin qcs. 2% fg diss po.	0.003
876772	604.50	605.18	0.68	1A	mafic volcanic flow. Mod fol. 4% qcv and qcs. Tr py in qtz.	0.067
876773	605.18	605.42	0.24	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod-str perv sil alt. 2% vfg diss py. 4% felsite dyke.	0.044
876774	605.42	605.87	0.45	4D	felsite dyke cross-cutting the zone. No veining. No sulphides. 5% intermediate dyke.	0.030
876775	605.87	606.39	0.52	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. <1% thin qcs. 1% vfg diss py.	0.880
876776	606.39	607.00	0.61	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 5% diop alt. 2% qcv and qcs. 1% py in qtz. 1% brown bio alt.	0.293
876777	607.00				Standard 16A	1.800
876778	607.00				Blank - Granite	0.003
876779	607.00	607.60	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 2% vfg diss py. No veining.	0.028
876780	607.60	608.20	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 1% qv. 1% brown bio alt. 1% vfg diss py.	0.773
876781	608.20	608.92	0.72	SH/1A	sheared massive mafic volcanic flow. Mod sh. Str fol. 20% diop alt. 5% brown bio alt. 2% thin qcs. 5-6% fg py in diop.	0.131
876782	608.92	609.35	0.43	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Mod perv sil alt. 3% vfg diss py. No veining.	0.015
876783	609.35	610.00	0.65	1A	massive mafic volcanic flow. Mod fol. 10% diiop alt. no veining. Nvs.	0.012

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-35
		CLAIM NO:	1135499	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					21-May-12	26-May-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	646022					
Northing	5406930	Dip:	-73	Dates Logged:	From:	To:
Elevation	442				01-Jun-12	02-Jun-12
Final		Depth:	510.00	Logged By:	Greg McKay	
Easting	646018.857					
Northing	5406922.352	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	439.637					

Purpose of Hole	Test Sugar Zone at 400 meters vertical
Results	Lower Zone between 490.75 and 500.00 m depth. 7 Specks VG.
Comments	Core Stored at White River Core Yard. Stopped at 480.00, then extended to 510.00 on July 10-12.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
12.0	50.0	-72.8	5713	Reflex Test
36.0	70.9	-72.5	5706	magnetic
39.0	64.9	-72.1	5612	magnetic
45.0	44.9	-72.0	5694	magnetic
69.0	53.2	-71.9	5854	
93.0	40.0	-70.9	6611	magnetic
117.0	48.7	-70.3	5666	
141.0	47.9	-69.8	5688	
165.0	51.7	-69.7	5666	
189.0	52.1	-69.8	5691	
213.0	49.6	-68.8	5702	
237.0	51.3	-68.5	5689	
261.0	52.3	-68.1	5713	
285.0	50.6	-67.6	5697	
309.0	53.0	-66.1	5719	
333.0	52.1	-65.4	5712	
357.0	54.3	-65.3	5691	
381.0	55.3	-65.4	5702	
405.0	52.8	-64.8	5701	
429.0	53.5	-64.3	5692	
453.0	55.2	-64.4	5695	
477.0	54.9	-63.8	5700	
504.0	55.2	-63.2	5699	

From	To	Interval	Code	Description
0.00	2.00	2.00	OB	overburden
2.00	24.00	22.00	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to locally aphenetic, and locally medium grained. Weakly to moderately foliated intersecting at 45 TCA. Hornblende facies. 5-7% diopside alteration bands parallel to foliation, mostly in aphenetic areas. 1% quartz-carbonate veinlets. a 23 cm barren quartz-calcite veinlet at 8.25 m depth. no visible sulphides. a gradational lower contact.
24.00	30.80	6.80	1A/3D	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 40 TCA. Interbedded igneous iron formations, normally defined by up to 10% pyrrhotite, 1% chalcopyrite in a silica flooded unit. Iron formations are up to 1 m across. weakly to locally moderately magnetic. 15% iron formation units. a few rusty seams. 1% quartz veinlets. a gradational lower contact.
30.80	44.20	13.40	1U	ultramafic komatiitic flow. Medium to dark grey colour. Moderate pervasive magnetism. Weakly effervesent due to a weak to locally moderate interstitial calcite alteration. Slight mottled texture in areas. No veining. No visible sulphides. Strongly fractured and broken apart between 40.2 and 40.7 m depth. no visible sulphides. a gradational lower contact.
44.20	62.00	17.80	1A	massive mafic volcanic flow. Dark grey to black colour. Fine to medium grained, subhedral crystals. Locally moderately magnetic. Moderately foliated intersecting at 45 TCA. 1% and locally up to 5-8% fine grained, elongated pyrrhotite, causing local magnetism. 1% brown biotite alteration. no veining. a gradational lower contact.
62.00	64.45	2.45	1A/3D	massive mafic volcanic flow with interlayered igneous iron formations. Moderately to locally strongly magnetic. Stongly foliated intersecting at 45 TCA. Dark grey to locally dark purple-grey colour. No veining. 2-3% seamed pyrrhotite, <1% chalcopyrite in the pyrhhotite seams. a gradational lower contact.
64.45	70.90	6.45	1A	massive mafic volcanic flow. Dark green to grey colour. Fine grained to medium grained, subhedral crystals. Moderately foliated intersecting at 55 TCA. 5% thin diopside alteration bands parallel to foliation. No visible sulphides. <1% thin quartz-carbonate veinlets and stringers. a gradational lower contact.
70.90	75.70	4.80	1U	ultramafic komatiitic flow. Medium grey colour. Moderately to locally strongly magnetic. Weakly to locally strongly effervesent. Soft rock. Moderately to strongly foliated intersecting at 50 TCA. No visible sulphides. 2% quartz-calcite veining. A gradational lower contact.
75.70	81.19	5.49	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained subhedral crystals. Moderately foliated intersecting at 50 TCA. A small iron formation unit near the upper contact. <1% thin quartz-carbonate stringers. <1% and locally up to 3% pyrrhotite seams, mostly in iron formation. a sharp lower contact intersecting at 45 TCA.
81.19	84.17	2.98	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained plagioclasse phenocrysts in a fine grained, subhedral, intermediate matrix. Moderately foliated intersecting at 45 TCA. 4% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
84.17	84.78	0.61	1A/3D	iron formation in a massive mafic volcanic flow. Medium to dark brown colour. Strongly foliated intersecting at 50 TCA. Moderately magnetic. Strong pervasive silicic alteration. 30% brown biotite alteration. 10% semi-massive pyrrhotite. A semi-gradational lower contact.
84.78	113.51	28.73	1A	massive mafic volcanic flow. Dark grey to black colour. Moderately foliated intersecting at 45 TCA. A 1.5 m pyrrhotite-rich iron formation unit at 88.9 m depth. 1% thin quartz-carbonate veinlets. 2-3% brown biotite alteration. 2-3% diopside alteration bands parallel to foliation. trace pyrite outside of iron formations. two mafic dykes up to 1.0 m across at 93.75 and 104.35 m depth. a sharp lower contact intersecting at 35 TCA.
113.51	114.29	0.78	6E	intermediate hornblende-feldspar porphyry dyke. Dark purple-grey colour. 5-10% sub-rounded plagioclasse phenocrysts and 15% elongated hornblende phenocrysts in an aphenetic, intermediate matrix. Moderately foliated intersecting at 35 TCA. 3% fine grained disseminated pyrrhotite. 2% quartz veining. a sharp lower contact intersecting at 35 TCA.
114.29	117.73	3.44	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 40 TCA. 15% green diopside alteration bands parallel to foliation. 10% brown biotite alteration bands. 1% thin quartz and quartz-carbonate stringers. Trace pyrite in quartz. a sharp lower contact intersecting at 40 TCA.
117.73	118.29	0.56	6E	intermediate hornblende-feldspar porphyry dyke. Dark purple-grey colour. 5-10% sub-rounded plagioclasse phenocrysts and 15% elongated hornblende phenocrysts in an aphenetic, intermediate matrix. Moderately foliated intersecting at 40 TCA. 2-3% fine grained disseminated pyrite. 1% thin quartz-carbonate stringers. a sharp lower contact intersecting at 35 TCA.
118.29	121.14	2.85	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crytsals. Moderately foliated intersecting at 40 TCA. 2% brown biotite alteration. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
121.14	123.58	2.44	6E	intermediate feldspar porphyry dyke. 20% medium to coarse grained plagioclasse phenocrysts in a fine grained aphenetic matrix. Weakly to moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
123.58	124.90	1.32	1A	massive mafic volcanic flow.d ark green-grey colour. Aphenetic crystals. Moderately foliated intersectign at 40 TCA. 5% thin diopside alteration bands parallel to foliation. 1% brown biotite. Trace sericite. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
124.90	125.51	0.61	6E	intermediate feldspar porphyry dyke. 10% medium grained plagioclasse phenocrysts in an aphenetic matrix. Moderately foliated intersecting at 40 TCA. Weak pervasive silciic alteration. No veining. 20% silica flooded band. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
125.51	144.72	19.21	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 35% medium green diopside alteration bands parallel to foliation. <1% quartz and quartz-carbonate veinlets. A 24 cm pegmatite dyke at 136.35 m depth. 1% brown biotite alteration. trace fine grained pyrite. a sharp lower contact intersecting at 45 TCA.
144.72	145.40	0.68	6E	intermediate dyke. Medium to dark greyish colour. Moderately foliated intersecting at 40 TCA. Weak to locally moderate pervasive silicic alteration. 5% silica flooded bands. 1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
145.40	146.71	1.31	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Weakly foliated intersecting at 40 TCA. No veining. No visible sulphides. 1% diopside alteration bands parallel to foliation. A sharp lower contact intersecting at 35 TCA.
146.71	147.67	0.96	4D	felsite or pegmatite dyke. 60% plagioclasse, 15% quartz, 20% muscovite and 5% biotite. Subhedral crystals up to 1 cm across. No veining. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
147.67	148.19	0.52	6E	intermediate dyke. Medium to dark greyish colour. Moderately foliated intersecting at 40 TCA. Weak to locally moderate pervasive silicic alteration. 2% silica flooded bands. 10 cm of mafic flow at the beginning of the unit. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 25 TCA.
148.19	167.80	19.61	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic crystals. Weakly to moderately foliated intersecting at 40 TCA. Locally weakly magnetic. 2% brown biotite alteration. No veining. No visible sulphides. A gradational lower contact.
167.80	182.74	14.94	1A	massive mafic volcanic flow. Dark grey to black colour. Weakly to moderately foliated intersecting at 40 TCA. 15% green diopside alteration bands parallel to foliation. <1% brown biotite alteration. <1% quartz and quartz-carbonate veinlets. Trace pyrite. a sharp lower contact intersecting at 45 TCA.
182.74	184.25	1.51	6E	intermediate dyke. Dark grey-purple colour. Weakly foliated intersecting at 40 TCA. Trace pervasive silicic alteration. <1% very fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 40 TCA.
184.25	225.71	41.46	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. 15% green diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate veinlets and stringers, usually enveloped by diopside alteration. a 44 cm mafic dyke at 202.17 m depth. trace pyrite. locally possibly pillowed. 2% brown biotite alteration. a sharp lower contact intersecting at 40 TCA.
225.71	227.05	1.34	6E	intermediate dyke. Darl purple-grey colour. Fine grained to aphenetic. Weakly foliated intersecting at 40 TCA. A 7 cm felsite dykelet at 226.65 m depth. Trace pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
227.05	285.00	57.95	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic crystals. Weakly foliated intersecting at 40 TCA. 15% diopside alteration bands parallel to foliation. some diopside alteration has re-altered into sericite. A 20 cm intermediate feldspar porphyry dyke at 230.2 m depth and a 29 cm dyke at 246.5 m depth .A 30 cm pyrrhotite-silica iron formation at 244.3 m depth. a 14 cm pink, felsite dyke at 244.05 m depth.<1% thin quartz-carbonate veinlets. <1% pyrite in some quartz veins. a gradational lower contact.
285.00	298.25	13.25	1B	mafic pillow flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. Moderately defined pillow selvages when dry, hard to see when wet. 3% thin quartz-carbonate veinlets and stringers. 2% diopside alteration bands parallel to foliation. pillow selvages have up to 15% almandine garnet replacement. no visible sulphides. a sharp lower contact intersecting at 40 TCA.
298.25	300.84	2.59	6E/6F	intermediate to mafic dyke. Dark grey colour. Fine to locally medium grained. Moderately foliated intersecting at 50 TCA. Subhedral crystals. No veining. 1% very fine grained disseminated pyrite. Trace fracture controlled pyrrhotite and chalcopyrite. A sharp lower contact intersecting at 45 TCA.
300.84	310.41	9.57	1A	massive mafic volcanic flow. Dark grey to dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. 3% diopside alteration. <1% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
310.41	311.26	0.85	4D	very coarse grained felsic pegmatite. A 20 cm unit of fine grained to aphenetic material in the middle. 60% plagioclasse feldspar, 25% quartz, 5% pottasium feldspar, 10% biotite. Trace muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
311.26	317.51	6.25	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 35 TCA. 2-3% very thin, green diopside alteration bands parallel to foliation. A 36 cm felsite dyke at 315.00 m depth. 1% brown biotite alteration. <1% thin quartz-carbonate veinlets and stringers. no visible sulphides. a sharp lower contact intersecting at 50 TCA.
317.51	318.78	1.27	6E	intermediate feldspar porphyyr dyke. 20% medium grained, rounded plagioclasse phenocrysts in an aphenetic, dark grey, intermediate matrix. Weakly to moderately foliated intersecting at 40 TCA. No veining. 2% very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
318.78	337.62	18.84	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. 15% breen diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets, usually enveloped by diopside alteration. trace pyrite in quartz. a sharp lower contact intersecting at 45 TCA.
337.62	338.72	1.10	6F	mafic dyke. Dark grey colour. Fine grained crystals. Slight mottled texture. Moderately foliated intersecting at 50 TCA. No veining. 2% very fine grained disseminated pyrrhotite. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
338.72	401.15	62.43	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic. Weakly to moderately foliated intersecting at 50 TCA. 5% green diopside alteration bands parallel to foliation. <1% quartz veinlets up to 2 cm across, usually enveloped by diopside alteration. trace fine grained pyrite in quartz. a 29 cm coarse grained, mafic dyke at 349.7 m depth. a 45 cm intermediate dyke at 374.42 m depth and a 38 cm dyke at 386.8 m depth. trace brown biotite alteration. a sharp lower contact intersecting at 40 TCA.
401.15	402.13	0.98	6E	intermediate dyke. Dark purple-grey colour. Moderate pervasive silicic alteration. A 15 cm mafic inclusion in the middle. 5% fracture controlled sericite alteration. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
402.13	412.51	10.38	1A	massive mafic volcanic flow. Dark grey to locally black colour. Fine grained to aphenetic crystals. Locally possibly pillowed. Moderately foliated intersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. trace garnets. no visible sulphides. a sharp lower contact intersecting at 45 TCA.
412.51	414.88	2.37	6E	intermediate dyke. Dark purple-grey colour. Fine to medium grained, and locally porphyritic. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. <1% very fine grained disseminated pyrite. No veining. A 24 cm mafic inclusion at 413.12 m depth. a sharp lower contact intersecting at 45 TCA.
414.88	438.54	23.66	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 10% green diopside alteration bands parallel to foliation. 1% quartz veinlets. Trace pyrite, chalcopyrite and pyrrhotite in quartz. A 21 cm barren, quartz stockwork at 427.25 m depth. a sharp lower contact intersecting at 50 TCA.
438.54	443.20	4.66	SH/6E	UPPER ZONE. Sheared intermediate dyke. 1 SPEC VG. Dark grey to dark grey-purple colour. Weakly sheared and moderately to strongly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 3-4% and locally up to 15% fine to very fine grained disseminated pyrrhotite, and pyrite. no veining. a sharp lower contact intersecting at 50 TCA.
443.20	444.15	0.95	SH/1A	UPPER ZONE. sheared massive mafic volcanic flow. Dark green-grey colour. Weakly sheared and moderately to strongly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 25% diopside alteration bands parallel to foliation. 2-3% brown biotite alteration bands. 2% and locally up to 5% fine to very fine grained disseminated pyrite and pyrrhotite in diopside alteration. a 22 cm intermediate dyke at 443.75 m depth. no veining. trace very thin quartz-carbonate stringers. a sharp lower contact intersecting at 50 TCA.
444.15	445.30	1.15	SH/6E	UPPER ZONE. Sheared intermediate dyke. Dark grey to dark grey-purple colour. Weakly sheared and moderately to strongly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 31-2% very fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 40 TCA.
445.30	448.00	2.70	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 6-8% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. 1% almandine garnets. Trace pyrite in quartz. A sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
448.00	449.23	1.23	6E	intermediate dyke. Medium grey-purple colour. Moderately to strongly foliated intersecting at 40 TCA. Weak pervasive silicic alteration. No veining. 1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
449.23	453.89	4.66	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderatetly foliated intersecting at 45 TCA. 10% green-grey diopside alteration bands parallel to foliation. 1% thin quartz veinlets. Trace pyrite a sharp lower contact intersecting at 40 TCA.
453.89	454.41	0.52	6E	intermediate dyke. Dark purple-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 Tca. Weak pervasive silicic alteration. 1% very fine graine disseminated pyrite. 1% quartz veinlets. A sharp lower contact intersecting at 50 TCA.
454.41	463.58	9.17	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. 3% diopside alteration bands parallel to foliation. 2-3% thin quartz-carbonate veinlets. 1% brown biotite alteration. trace pyrite in quartz. a 32 cm barren, white quartz vein at 456.5 m depth. a sharp lower contact intersecting at 40 TCA.
463.58	464.29	0.71	6E	intermediate dyke. Dark grey-purple colour. Weakly foliated intersecting at 45 TCA. Medium grained, subhedral crystals. Locally porphyritic. <1% fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 45 TCA.
464.29	467.42	3.13	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Weakly foliated intersecting at 50 TCA. 1% brown biotite alteration. 2% thin quartz-carbonate veinlets. 1-2% diopside alteration bands. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
467.42	468.53	1.11	6E	intermediate dyke. Dark grey-purple colour. Weakly foliated intersecting at 45 TCA. Medium grained, subhedral crystals. Locally porphyritic. <1% fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 50 TCA.
468.53	475.07	6.54	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Weakly foliated intersecting at 50 TCA. 1% brown biotite alteration. 2% thin quartz-carbonate veinlets. 1-2% diopside alteration bands. No visible sulphides. A sharp lower contact intersecting at 5 TCA.
475.07	475.92	0.85	4D	felsite dyke. Medium grained subhedral crystals. 60% plagioclasse feldspar, 20% quartz, 10% muscovite and 10% biotite. No veining. No visible sulphides. A sharp, irregular lower contact.
475.92	490.75	14.83	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Weakly foliated intersecting at 50 TCA. 1% brown biotite alteration. 1% thin quartz-carbonate veinlets. 1-2% diopside alteration bands. No visible sulphides. a 45 cm intermediate dyke at 476.8 m depth. a gradational lower contact.
490.75	495.44	4.69	SH/1A	LOWER ZONE. Sheared massive mafic volcanic flow. Locally weakly to moderately sheared and moderately to strongly foliated intersecting at 45 TCA. 25% diopside alteration bands up to 3 cm across, parallel to shear. 2-3% quartz veinlets. 1% fine grained pyrite/pyrrhotite mostly in quartz. a sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
495.44	498.44	3.00	SH/6E	LOWER ZONE. Seared intermediate dyke. Moderately sheared and strongly foliated intersecting at 45 TCA. Medium grey-purplish colour. Moderate pervasive silicic alteration. 5% quartz veining including a 7 cm quartz vein at 495.85 m depth, with VG mineralization. a 23 cm mafic inclusion at 495.95 m depth. 2% seamed, ribboned and disseminated pyrite and pyrrhotite. 9 SPECKS OF VG. a sharp lower contact intersecting at 40 TCA.
498.44	500.00	1.56	SH/1B	sheared mafic pillow flow. Weakly to locally moderatly sheared and moderately to strongly foliated intersecting at 45 TCA. 20% diopside alteration bands. 4% brown biotite alteration bands. <1% pyrite. 1% thin quartz veinlets. A gradational lower contact.
500.00	510.00	10.00	1B	mafic pillow flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. Moderaely defined pillow selvages with up to 10% garnet replacement. 1-2% thin quartz stringers. 5% diopside alteration bands parallel to foliation. no visible sulphides.
510.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876784	437.40	438.00	0.60	1A	mafic volcanic flow. Mod fol. 1% diop alt. 1% thin qcs. 2% garnet. Nvs.	0.003
876785	438.00	438.54	0.54	1A	mafic volcanic flow. Mod fol. 3% diop alt. 5% brown bio alt. 2% thin qcs. Tr fg py.	0.018
876786	438.54	439.10	0.56	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Wk perv sil alt. 2-3% vfg diss po, py. No veining.	0.018
876787	439.10	439.70	0.60	SH/6E	sheared intermediate dyke. Wk sh. Str fol. mod perv sil alt. 2% qv. 2-3% fg diss py.	0.199
876788	439.70	440.30	0.60	SH/6E	sheared intermediate dyke. Wk sh. Mod fol. Mod perv sil alt. 5% fg diss py, po.	0.029
876789	440.30	440.90	0.60	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Wk perv sil alt. 2% felsite dyke. 2% vfg diss py.	0.019
876790	440.90	441.50	0.60	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Mod perv sil alt. 2% vfg diss py, po.	0.058
876791	441.50	442.00	0.50	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Wk perv sil alt. tr brown bio alt. 2% vfg diss py. 1 Spec VG.	1.780
876792	442.00	442.60	0.60	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Mod perv sil alt. 2% vfg diss py. No veining.	0.146
876793	442.60	443.20	0.60	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Mod perv sil alt. 3-4% vfg diss po, py. 1-2% thin qcs.	0.112
876794	443.20	443.75	0.55	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 25% diop alt. 5% brown bio alt. 3% qv. 5-6% fg py, po in diop alt.	0.058
876795	443.75				Standard CDN-GS-3F	3.200
876796	443.75				Blank - Granite	0.003
876797	443.75	444.15	0.40	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. 40% intermediate dyke. 25% diop alt. 3% brown bio alt. 3% fg diss po, py in diop.	0.006
876798	444.15	444.70	0.55	SH/6E	sheared intermediate dyke. Wk sh. Mod fol. Mod perv sil alt. 5% fg diss and seamed po, py.	0.005
876799	444.70	445.30	0.60	SH/6E	sheared intermediaye dyke. Wk sh. Mod fol. Mod perv sil alt. 4% fg diss po, py.	0.056
876800	445.30	446.20	0.90	1A	mafic volcanic flow. Mod fol. 10% diop alt. 2% thin qcs. Nvs.	0.170
876801	446.20	447.10	0.90	1A	mafic volcanic flow. Mod fol. 2% diop alt. 1% thin qcs. Tr py.	0.006
876802	447.10	448.00	0.90	1A	mafic volcanic flow. Mod fol. 10% diop alt. 3% almandine garnets. <1% thin qs. Nvs.	0.006
876803	448.00	448.60	0.60	6E	intermediate dyke. Mod fol. Mod perv sil alt. 1% vfg diss py.	0.005
876804	448.60	449.23	0.63	6E	intermediate dyke. Mod fol. Mod perv sil alt. 1% vfg diss py. No veining.	0.006
876805	449.23	450.00	0.77	1A	mafic volcanic flow. Mod fol. 5% diop alt. no veining. Nvs.	0.013
876915	490.00	490.75	0.75	1A	mafic volcanic flow. Mod fol. 3% qv. 2% diop alt. nvs.	0.007
876916	490.75	491.50	0.75	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 15% diop alt. 3% qcs. Tr py, po.	0.014
876917	491.50	492.25	0.75	1A	mafic volcanic flow. Mod fol. 8% diop alt. 1% thin qcs. Nvs.	0.009

Sample #	From	To	Interval	Code	Description	Au (ppm)
876918	492.25	493.00	0.75	1A	mafic volcanic flow. Mod fol. 12% diop alt. 2% thin qcs. Nvs.	0.049
876919	493.00	493.50	0.50	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 30% diop alt. 3% brown bio alt. 5% qv. 5% po/py around qtz.	0.073
876920	493.50	494.25	0.75	1A	mafic volcanic flow. Mod fol. 2% diop alt. 1% thin qcs. Nvs.	0.015
876921	494.25	494.90	0.65	1A	mafic volcanic flow. Mod fol. 4% diop alt. <1% thin qcs. Nvs.	0.026
876922	494.90	495.44	0.54	SH/1A	sheared mafic volcanic flow. Mod sh. 60% diop alt. wk perv sil alt. 10% fg diss py, po.	0.306
876923	495.44	495.94	0.50	SH/6E	quartz stockwork in a sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 15% qv. 9 SPECS VG in qtz. 3-4% fg diss and ribboned po/py mostly around qtz.	22.000
876924	495.94				Standard 10C	6.520
876925	495.94				Blank - Granite	0.007
876926	495.94	496.30	0.36	SH/1A	sheared mafic volcanic inclusion in an intermediate dyke. Mod sh. Ste fol. 65% mafic incl. wk-mod perv sil alt. 4% qcv. 1% vfg diss py.	0.274
876927	496.30	497.00	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 2% thin qcs. 1-2% vfg diss po/py.	0.570
876928	497.00	497.75	0.75	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 12% qv. 3% fg ribboned py in qtz..	0.046
876929	497.75	498.44	0.69	SH/6E	sheared intermediate dyke. wk sh. mod fol. Mod perv sil alt. 2% thin qcs. 1% vfg diss po/py.	0.039
876930	498.44	499.30	0.86	SH/1A	mafic volcanic flow. 30% sh. 5% qv. 3% diop alt. 1-2% fg diss py/po mostly in qtz.	0.022
876931	499.30	500.00	0.70	SH/1A	mafic volcanic flow. 30% sh. Mod fol. 20% diop alt. 3% thin qcs. Tr po/py.	0.133

Harte Gold Corporation		TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-36
		CLAIM NO:	1135499	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					27-May-12	31-May-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	646075					
Northing	5406925	Dip:	-73	Dates Logged:	From:	To:
Elevation	442				03-Jun-12	08-Jun-12
Final		Depth:	438.00	Logged By:	Greg McKay	
Easting	646070.277					
Northing	5406928.459	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	435.537					

Purpose of Hole	Drill Sugar Zone at 400 vertical meters.
Results	good looking Upper and Lower Zones. VG in both zones.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
12.0	57.5	73.0	5603	Reflex Test
36.0	50.0	-72.7	5616	
60.0	48.9	-72.6	5653	
84.0	83.9	-72.3	5395	magnetic
108.0	49.5	-71.8	5685	
132.0	52.3	-71.9	5688	
156.0	50.6	-70.1	5694	
180.0	51.1	-69.0	5702	
204.0	51.1	-68.8	5694	
228.0	57.9	-68.8	5680	magnetic
252.0	52.4	-68.4	5703	
276.0	50.5	-68.0	5714	
300.0	52.8	-67.9	5703	
324.0	51.3	-67.3	5703	
348.0	53.4	-67.4	5742	
372.0	53.7	-66.3	5708	
396.0	53.8	-66.7	5708	
420.0	54.1	-66.4	5690	

From	To	Interval	Code	Description
0.00	1.66	1.66	OB	overburden
1.66	3.85	2.19	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Weakly foliated intersecting at 45 TCA. 2% diopside alteration bands parallel to foliation. No visible sulphides. Trace quartz-carbonate veinlets. A gradational lower contact.
3.85	7.50	3.65	1U	ultramafic komatiitic flow. Medium grey colour. Moderately to locally strongly magnetic. Weakly effervesent. Soft rock due to talc and calcite content. Moderately foliated intersecting at 40 TCA. No visible sulphides. 3-4% thin, fracture controlled calcite stringers. a gradational lower contact.
7.50	9.89	2.39	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. 25 cm of 15% semi-massive pyrrhotite at 7.7 m depth. Trace quartz-carbonate stringers. A sharp lower contact intersecting at 45 TCA.
9.89	12.11	2.22	6E	intermediate feldspar porphyry dyke. 15% medium grained, rounded plagioclasse phenocrysts. Weakly foliated intersecting at 35 TCA. No veining. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
12.11	15.20	3.09	1A	massive mafic volcanic flow. Dark grey-green to black colour. Fine grained crystals. Moderately foliated intersecting at 50 TCA. 1% quartz veinlets. Trace pyrite near quartz. A gradational lower contact.
15.20	15.72	0.52	1A/3D	igneous iron formation in a massive mafic volcanic flow. Dark grey to black colour. Moderately magnetic. Moderately to strongly foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 15% seamed and disseminated pyrrhotite, 1% chalcopyrite. A sharp lower contact intersecting at 50 TCA.
15.72	16.49	0.77	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained, rounded plagioclasse phenocrysts in a dark grey, intermediate matrix. Moderately foliated intersecting at 40 TCA. Trace pervasive silicic alteration. 4-5% very fine grained disseminated pyrite. no veining. a sharp lower contact intersecting at 45 TCA.
16.49	30.00	13.51	1A/3D	masssive mafic volcanic flow with interlayered iron formation units up to 1.2 m across. Dark grey to black colour. Moderately foliated intersecting at 45 TCA. The iron formations have a moderate pervasive silicic alteration, dark purple colour and up to 8% seamed, and semi-massive pyrrhotite, with trace chalcopyrite. a gradational lower contact.
30.00	33.28	3.28	1A	massive mafic volcanic flow. Dark grey-greenish colour. Fine grained crystals. Weakly foliated intersecting at 45 TCA. 1% thin quartz-carbonate stringers. Trace pyrite in quartz. A sharp lower contact intersecting at 30 TCA.
33.28	33.82	0.54	QV	glassy white, bull quartz vein. Weakly fractured. 15% mafic inclusions. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
33.82	47.05	13.23	1A	massive mafic volcanic flow. Dark grey colour. Fine grained. Weakly foliated intersecting at 45 TCA. Three medium grained felsite dyklets up to 30 cm across at 42.9, 43.7 and 45.05 m depth. 2-3% diopside alteration bands parallel to foliation, mostly near the lower contact. trace veining. no visible sulphides. a sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
47.05	47.77	0.72	6E	intermediate feldspar porphyry dyke. 10% medium grained plagioclasse phenocrysts in a dark purple, intermediate matrix. Weak to moderate pervasive silicic alteration. Moderately foliated intersecting at 45 TCA. 1% pyrope garnets. 1-2% very fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
47.77	55.13	7.36	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. Trace quartz-carbonate stringers. A 13 cm and a 43 cm intermediate dykes at 48.2 and 48.7 m depth respectively. no visible sulphides. a sharp lower contact intersecting at 35 TCA.
55.13	57.59	2.46	6E	intermediate dyke. Dark purple-grey colour. Moderately foliated intersecting at 35 TCA. Weak pervasive silicic alteration. 2% silica flooded bands. 1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
57.59	59.24	1.65	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately to strongly foliated intersecting at 40 TCA. 25% diopside alteration bands parallel to foliation. 2-3% brown biotite alteration bands. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
59.24	59.78	0.54	6E	intermediate feldspar porphyry dyke. 15% medium grained, rounded plagioclasse phenocrysts in a aphenetic, dark purple, intermediate matrix. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
59.78	61.65	1.87	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. 2% brown biotite alteration bands. <1% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
61.65	62.29	0.64	6E	intermediate dyke. Dark purple -grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 4% fine grained pyrite. No veining. Weakly sheared parallel to foliation. A sharp lower contact intersecting at 45 TCA.
62.29	81.34	19.05	1A	massive mafic volcanic flow. Dark grey to dark green-grey colour. Moderately foliated intersecting at 40 TCA. 10-15% light green diopside alteration bands parallel to foliation. 2% thin quartz veinlets up to 5 cm across. 1% brown biotite alteration. trace pyrite near quartz. a 15 cm iron formation uni tiwht 10% pyrrhotite at 78.95 m depth. a sharp lower contact intersecting at 40 TCA.
81.34	83.14	1.80	6E	intermediate dyke. Medium grey-purple colour. Moderately foliated intersecting at 45 TCA. Weak to moderate pervasive silicic alteration. A 30 cm foliated, milky white felsite dyke at 82.6 m depth. No veining. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
83.14	85.54	2.40	1A/3D	massive mafic volcanic flow with interlayering of iron formation, msotly around the contacts. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. Iron formations are up to 25 cm across, and have up to 15% seamed and disseminated pyrrhotite. trace thin quartz-carbonate stringers. a sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
85.54	87.19	1.65	6E	intermediate dyke. Medium grey-purple colour. Moderately foliated intersecting at 45 TCA. Weak to moderate pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
87.19	117.16	29.97	1A	massive mafic volcanic flow. Dark grey-green to black colour. Fine grained to aphenetic crystals. Weakly to moderately foliated intersecting at 45 TCA. 4% green diopside alteration bands, mostly parallel to foliation. Trace quartz-carbonate stringers, enveloped by diopside alteration. trace pyrite. a sharp lower contact intersecting at 35 TCA.
117.16	118.48	1.32	6E	intermediate dyke. Dark purple colour. Moderately foliated intersecting at 45 TCA. Moderate pervasive silicic alteration. 5% silica flooded bands. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
118.48	163.14	44.66	1A	massive mafic vlcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 10% diopside alteration bands parallel to foliation. Trace quartz-carbonate stringers enveloped in diopside alteration. 1% brown biotite alteration. locally pillowed. a 28 cm felsite dyke at 151.9 m depth. a sharp lower contact intersecting at 45 TCA.
163.14	164.40	1.26	6E	intermediate dyke. Dark grey-[urple colour. Weak to moderate pervasive silicic alteration. Moderately foliated intersecting at 40 TCA. 5% fracture controlled sericite alteration. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
164.40	201.08	36.68	1A	massive mafic volcanic flow. Dark green-grey colour. Mdoerately foliated itnersecting at 45 TCA. 5% light green diopside alteration. 1-2% thin quartz and quartz-carbonate veinlets. Several small felsite dyklets up to 30 cm across. A 25 cm intermediate dyke at 179.6 immediately below a 40 cm pink, felsite dyke. trace pyrite in quartz. a sharp, erratic lower contact.
201.08	201.65	0.57	4D	felsite dyke. Pink and white colours. Anhedral crystals. 65% pottasic pink colour. 35% milky white. Moderately fractured and broken rock. No veining. No visible sulphides. A sharp, erratic lower contact.
201.65	250.89	49.24	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphentic crystals. Moderately foliated intersecting at 50 TCA. A 30 cm fine grained mafic dyke at 209.35 m depth. A 12 cm mineralized quartz vein with 3% red pottasic bands and 5% pyrrhotite. 7% diopside alteration bands parallel to foliation. a 37 cm quartz-felsite dyke at 225.65 m depth. a sharp lower contact intersecting at 40 TCA.
250.89	252.15	1.26	6E	intermediate feldspar porphyry dyke. 15% medium grained plagioclasse phenocrsyts in a dark grey intermediate matrix. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 3% light beige-green colour around fractures. <1% fine grained disseminated pyrite. no veining. a sharp lower contact intersecting at 50 TCA.
252.15	258.50	6.35	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. 3% thin green-beige diopside alteration bands parallel to foliation. Trace very thin quartz-carbonate stringers. No visible sulphides. a gradational lower contact.

From	To	Interval	Code	Description
258.50	290.00	31.50	1A	massive mafic volcanic flow. Dark grey-green colour. Moderately foliated intersecting at 45 TCA. 15% light green diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets and stringers. Trace pyrope garnets. Trace pyrite. A gradational lower contact.
290.00	303.90	13.90	1A	massive mafic volcanic flow. Dark grey colour. Fine grained, and locally porphyritic. Subhedral crystals, created slight mottled texture. Moderately foliated intersecting at 45 TCA. <1% thin quartz-carbonate stingers. 2-3% green-grey, thin diopside alteration bands parallel to foliation. 30% semi-massive pyrrhotite in the bottom 5 cm of the unit creating a moderately magnetic area. a sharp lower contact intersecting at 55 TCA.
303.90	305.27	1.37	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. Moderately to strongly foliated intersecting at 50 TCA. Moderate pervasive silicic alteration. Alteration and foliation obliterate porphyritic texture. 10% silica flooded bands. 3% fine grained disseminated pyrrhotite and pyrite. a sharp lower contact intersecting at 55 TCA.
305.27	312.94	7.67	1A	massive mafic volcanic flow. Dark grey colour. Fine grained, subhedral crystals. Weakly foliated intersecting at 50 TCA. 4 quartz veins up to 25 cm across. 1% and locally up to 5% fine grained disseminated, and seamed pyrrhotite. Weakly magnetic in areas. grading to a weak iron formation near the lower contact. a sharp loewr contact intersecting at 35 TCA.
312.94	313.46	0.52	6E	intermediate feldspar porphyry dyke. Dark purple colour. Moderately to strongly foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 3% silica flooding bands parallel to foliation. No veining. 1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
313.46	321.82	8.36	1A	massive mafic volcanic flow. Dark grey grading to a dark green colour. Fine grained, subhedral crystals. Moderately foliated intersecting at 50 TCA, 1% thin quartz-carbonate stringers. Trace pyrrhotite near the upper contact. A sharp lower contact intersecting at 50 TCA.
321.82	322.65	0.83	6E/4D	intermediate dyke with a 50 cm felsite dyke cross-cutting the middle of it. Intermediate dyke is dark purple, moderately foliated with a weak pervasive silicic alteration. The felsite dyke is milky white, fine to very coarse grained, subhedral crystals. There is no veining. no visible sulphides. a sharp lower contact intersecitng at 45 TCA.
322.65	338.30	15.65	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 15-20% medium green-beige diopside alteration bands parallel to foliation. <1% quartz veinlets up to 3 cm across. Trace fracture controlled chalcopyrite. A sharp, hard to define, lower contact intersecting at roughly 40 TCA.
338.30	339.42	1.12	6E	intermediate dyke. Medium purple-grey colour. Fine to medium grained, subhedral crystals. Moderately foliated intersecting at 50 TCA. Weak to moderate pervasive silicic alteration. 1% quartz veinlets. 15% sericite alteration around fractures. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
339.42	349.82	10.40	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic. Weakly to foliated intersecting at 50 TCA. 15% green-beige diopside alteration bands parallel to foliation. 2% quartz veinlets up to 14 cm across. <1% fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
349.82	350.97	1.15	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. Weakly to moderately foliated intersecitng at 40 TCA. Weak to moderate pervasive silicic alteration. 5% weak silica flooded bands. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
350.97	375.67	24.70	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 5% dark green-beige diopside alteration bands parallel to foliation. 1% quartz veinlets up to 2 cm across. Trace local pyrrhotite.a gradational lower contact.
375.67	376.41	0.74	SH/1A	UPPER ZONE. Sheared massive mafic volcanic flow. Dark green-grey colour. Moderately sheared and strongly foliated intersecting at 40 TCA. 20% thin diopside alteration bands parallel to shear. 2% thin quartz-carbonate stingers and veinlets. 3-4% and up to 15% very fine grained disseminated pyrrhotite near the lower contact. a sharp lower contact intersecting at 40 TCA.
376.41	381.82	5.41	SH/6E	UPPER ZONE. Sheared intermediate feldspar porphyry dyke. Dark purple-grey colour. Moderately sheared and strongly foliated intersecting at 35 TCA. Moderate pervasive silicic alteration. Feldspar phenocrysts have been strognly silica altered, and nearly obliterated in shear. 2% sheared mafic inclusions. 3-4% silica flooded bands parallel to shear. 2% quartz and quartz-carbonate veinlets. 5-6% very fine grained disseminated pyrrhotite and pyrite. 5 SPECS VG in quartz. a sharp lower contact intersecting at 35 TCA.
381.82	382.43	0.61	SH/1A	UPPER ZONE. sheared massive mafic volcanic flow. Weakly sheared and moderately foliated intersecting at 35 TCA. 15% thin diopside alteration bands parallel to shear. <1% brown biotite alteration. 1% fine grained disseminated pyrite. 1-2% thin quartz-carbonate stringers. a sharp lower contact intersecting at 40 TCA.
382.43	383.71	1.28	SH/6E	UPPER ZONE. Intermediate dyke. Dark grey-purple colour. Weakly sheared and strongly foliated intersecting at 40 TCA. 1% very fine grained disseminated pyrite.pyrrhotite. A sharp lower contact intersecting at 35 TCA.
383.71	384.67	0.96	SH/1A	UPPER ZONE. Sheared massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Weakly sheared and strongly foliated intersecting at 40 TCA. 15% diopside alteration bands parallel to foliation. 5% quartz veining up to 6 cm across. trace pyrite. a sharp lower contact intersecting at 40 TCA.
384.67	385.85	1.18	6E	intermediate dyke. Dark purple-grey colour. Moderately to strongly foliated intersecting at 45 TCA. Weak to moderate pervasive silicic alteration. 10% silica flooded bands. <1% very fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
385.85	387.57	1.72	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated itnersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. <1% very thin quartz-carbonate stringers. Trace pyrite. A sharp, wavy lower contact.
387.57	388.26	0.69	6E	intermediate dyke. Dark purple colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 25% silica flooded areas. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
388.26	403.45	15.19	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. 20% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. Trace pyrite. A sharp lower contact intersecting at 35 TCA.
403.45	404.55	1.10	6E	intermediate feldspar porphyry dyke. Medium-dark grey-purplish colour. 15% medium to coarse grained plagioclasse phenocrysts, mostly visible around the edges of the unit, and partially obliterated in the centre. Moderately foliated intersecting at 35 TCA. a 9 cm quartz vein at 403.6 m depth. 1% fine to very fine grained disseminated pyrite. a sharp lower contact intersecting at 45 TCA.
404.55	405.88	1.33	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. 1% diopside alteration bands parallel to foliation. 5% brown biotite alteration. <1% thin quartz-carbonate stringers. No visible sulphides. a sharp lower contact intersecting at 50 TCA.
405.88	406.60	0.72	4D/4C	medium grained felsite to dioritic dyke. Subhedral crystals. 15% mafic grains, 85% silica altered felsic grains. No veining. No visible sulphides. A sharp lower contact intersecting at 15 TCA.
406.60	407.81	1.21	6E	intermediate feldspar porphyry dyke. Dark greyish colour. Moderately foliated intersecting at 50 TCA. 15% elongated plagioclasse phenocrysts in an aphenetic matrix. Weak pervasive silicic alteration. 3% silica flooded bands. 1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
407.81	415.53	7.72	1A	massive mafic volcanic flow. Dark green-grey colour.aphenetic crystals. Moderately foliated intersecting at 45 TCA. 6-8% diopside alteration bands parallel to foliation. A 20 cm medium grained felsite dyke at 410.9 m depth. 2% quartz veinlets up to 5 cm across. trace pyrite. a sharp, slightly wavy lower contact intersecting at approxamitely 40 TCA.
415.53	416.64	1.11	6E	intermediate feldspar porphyry dyke. 15% medium grained, elongated plagioclasse phenocrysts in an aphenetic matrix. Moderately foliated intersecting at 40 TCA. Weak to moderate pervasive silicic alteration. <1% fine grained disseminated pyrite. No veining. a sharp lower contact intersecting at 35 TCA.
416.64	430.70	14.06	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 50 TCA. A 20 cm iron formation unit with 6-7% seamed pyrrhotite. Trace pyrite. A gradational lower contact.

From	To	Interval	Code	Description
430.70	432.55	1.85	SH/1A	LOWER ZONE. Sheared massive mafic volcanic flow. Dark green-grey colour. Moderately sheared and strongly foliated interesecting at 45 TCA. 20% diopside alteration bands parallel to shear. 5% quartz and quartz-carbonate veining. 4% brown biotite alterat. 3% fine grained, white leucoxene in highly sheared parts. 5% fine grianed disseminated pyrite, mostly around quartz veinlets. a sharp lower contact intersecting at 35 TCA.
432.55	433.08	0.53	SH/6E	LOWER ZONE. Sheared intermediate dyke. Moderately sheared and strongly foliated intersecting at 40 TCA. Medium to dark grey-purple colour. Moderate to strong pervasive silicic alteration. 10% silica flooded bands. 3-4% thin quartz-carbonate veinlets. 5% to locally 20% fine grianed disseminated pyrite and pyrrhotite. a sharp lower contact intersecting at 30 TCA.
433.08	433.64	0.56	QV	LOWER ZONE. Strongly mineralized quartz vein. Dark grey colour. Mdoerately fractured, but not broken up. 12% ribboned and disseminated pyrrhotite and pyrite. Trace galena and sphalerite. Trace chalcopyrite. 40 SPECS AND BLEBS OF VG. A sharp lower contact intersecting at 45 TCA.
433.64	436.04	2.40	SH/6E	LOWER ZONE. Sheared intermediate dyke. Moderately sheared and strongly foliated intersecting at 45 TCA. Medium to dark grey colour. Fine grained crystals. Moderate pervasive silicic alteration. 5% silica flooded bands, mostly parallel to shear. 1-2% thin quartz-carbonate stringers. 2-3% very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
436.04	436.60	0.56	SH/1A	LOWER ZONE. Sheared massive mafic volcanic flow. Dark green-grey colour. Moderately sheared and strongly foliated intersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. 5% brown biotite alteration. 3-4% quartz veining. 3-4% fine grained disseminated pyrrhotite and pyrite, mostly near the quartz. a gradational lower contact.
436.60	438.00	1.40		massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals moderately foliated intersecting at 40 TCA. Possibly pillowed. 5% diopside alteration bands parallel to foliation. 2-3% thin quartz-carbonate stringers and veinlets. Trace garnets in pillow selvages. trace pyrite.
438.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876806	61.00	61.65	0.65	1A	mafic volcanic flow. Mod fol. 10% diop alt. 4% brown bio alt. <1% thin qcs. Tr py.	0.003
876807	61.65	62.29	0.64	SH/6E	sheared intermediate dyke. Wk sh. Str fol. Wk perv sil alt. 4-5% vfg diss py.	0.003
876808	62.29	63.00	0.71	1A	mafic volcanic flow. Mod fol. 20% diop alt. 1% garnet. Tr thin qcs. Tr py.	0.003
876809	374.40	375.00	0.60	1A	mafic volcanic flow. Mod fol. 4% diop alt. tr thin qcs. Tr py.	0.005
876810	375.00	375.67	0.67	1A	mafic volcanic flow. 2% thin qcs. 15% diop alt. <1% fg ribboned po. 1% brown bio alt. tr py.	0.009
876811	375.67	376.05	0.38	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 25% diop alt. 2% thin qcs. 1% brown bio alt. 1% vfg diss po, py.	0.019
876812	376.05	376.41	0.36	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 25% diop alt. 2% thin qcs. 1% brown bio alt. tr po, py.	0.057
876813	376.41	377.00	0.59	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 3% sil flooding. 3% vfg diss py, po.	0.050
876814	377.00	377.70	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 4% sil flooding. 6% vfg diss po, py.	0.041
876815	377.70	378.40	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 4% qv. 8% fg-vfg diss po, py. 5 SPECS VG in qtz. 2% sph. 5% diop alt in mafic incl.	4.630
876816	378.40				Blank - Granite	0.003
876817	378.40				Standard 10C	6.620
876818	378.40	379.00	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 8% vfg diss py, po. 1% qcv.	0.046
876819	379.00	379.60	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 2% silica flooding. 2% vfg diss po, py.	0.051
876820	379.60	380.20	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 1% silica flooding. 5% fg diss, and seamed po, py.	0.040
876821	380.20	380.70	0.50	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 3% mafic incl. 12% fg-vfg diss po. Tr py. 1% qv.	0.177
876822	380.70	381.30	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk-mod perv sil alt. 2% mafic incl. 5% silica flooding. 1% thin qcs. 4% vfg diss and frac-cont po, py.	0.158
876823	381.30	381.82	0.52	SH/6E	sheared intermediate dyke. Mod she. Str fol. Wk-mod perv sil alt. 3% sil flooding. 1% brown bio alt. 5% vfg diss po, py.	0.190
876824	381.82	382.43	0.61	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 15% thin diop alt. 2% thin qv. 1-2% vfg diss py, po, mostly around qtz.	0.069
876825	382.43	383.10	0.67	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 1% mafic incl. 4% sil flooding. 2% fg diss and seamed po, py.	0.008
876826	383.10	383.71	0.61	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 10% sil flooding. 1% thin qv. 1% vfg diss po, py.	0.055

Sample #	From	To	Interval	Code	Description	Au (ppm)
876827	383.71	384.15	0.44	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. 15% diop alt. 5% qv and qcs. 1% brown bio alt. <1% fg diss po, py.	0.003
876828	384.15	384.67	0.52	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. 15% diop alt. 1% thin qcs. <1% brown bio alt. <1% vfg diss py.	0.011
876829	384.67	385.25	0.58	6E	intermediate dyke. Mod-str fol. Wk perv sil alt. 10% sil flooding. 2% vfg diss po, py.	0.006
876830	385.25	385.85	0.60	6E	intermediate dyke. Mod-str fol. Wk perv sil alt. 3% sil flooding. 1-2% vfg diss po, py.	0.003
876831	385.85	386.70	0.85	1A	mafic volcanic flow. Mod fol. 15% diop alt. ,1% thin qcs. 1% brown bio alt. tr py.	0.012
876832	386.70	387.57	0.87	1A	mafic volcanic flow. Mod fol. 15% diop alt. tr thin qcs. Tr py.	0.012
876833	387.57	388.26	0.69	6E	intermediate dyke. Mod fol. Mod perv sil alt. 15% sil flooding. Tr vfg diss po, py.	0.003
876834	388.26	388.90	0.64	1A	mafic volcanic flow. Mod fol. 20% diop alt. no veining. Tr py.	0.009
876835	388.90	389.48	0.58	1A	mafic volcanic flow. Mod fol. 10% diop alt. <1% thin qs. Nvs.	0.006
876836	429.30	430.00	0.70	1A	mafic volcanic flow. Mod fol. 10% diop alt. <1% thin qcs. Tr py.	0.022
876837	430.00	430.70	0.70	1A	mafic volcanic flow. Mod fol. 4% diop alt. 1% thin qcs. Tr py.	0.042
876838	430.70	431.20	0.50	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 25% diop alt. 10% brown bio alt. 3% thin qv. 10 fg diss po, py.	0.075
876839	431.20	432.00	0.80	SH/1A	sheared mafic volcanic flow. Mod she. Str fol. 5% diop alt. 2% brown bio alt. 2% thin qcv. 1% fg diss py.	0.081
876840	432.00	432.55	0.55	SH/1A	sheared mafic volcanic flow. Mod sh, str fol. 40% diop alt. wk perv sil alt. 5% thin qcv and qv. 5-6% brown bio alt. 40% fg diss py, po.	1.780
876841	432.55	433.08	0.53	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 10% silica flooded bands. 5% fg diss and ribboned po, py. 3% qcs.	5.260
876842	433.08	433.64	0.56	QV	quartz vein. Mod frac. 12% fg diss and ribbnoed po, py. Tr sph. Tr gal. tr cpy. 40 SPECS AND BLEBS VG.	162.000
876843	433.64				Standard 10C	6.800
876844	433.64				Blank - Granite	0.007
876845	433.64	434.24	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 10% sil flooding. 2% vfg diss py, po. 1% thin qcs.	0.090
876846	434.24	434.84	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 15% silica flooded bands. 2% vfg diss po, py.	0.015
876847	434.84	435.44	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 2% silica flooded bands. 1-2% vfg diss po, py.	0.043

Sample #	From	To	Interval	Code	Description	Au (ppm)
876848	435.44	436.04	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk to locally str perv sil alt. 50% silica flooded bands. 2-3% fg-vfg diss py, po.	0.373
876849	436.04	436.60	0.56	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 25% diop alt. 5% brown bio alt. 4% qv. 4% fg diss and seamed po, py around qtz.	0.138
876850	436.60	437.20	0.60	1A	mafic volcanic flow. Mod fol. 5% diop alt. 1% thin qcs. Tr py.	0.047
876851	437.20	438.00	0.80	1A	mafic pillow flow. Mod fol. 8% diop alt. 1% thin qcs. Tr py.	0.020

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-37
	CLAIM NO:	1069347	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From: 01-Jun-12	To: 02-Jul-12
UTM Zone 16		Azimuth:	50	Drilled By:	Major Drilling	
Prelim		Dip:	-80	Dates Logged:	From: 09-Jun-12	To: 14-Jul-12
Easting	645528	Depth:	1164.00	Logged By:	Greg McKay	
Northing	5407128	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	420					
Final						
Easting	645532.547					
Northing	5407138.296					
Elevation	413.384					

Purpose of Hole	Intersect Sugar Zone at 800 v meters.
Results	first wedge went the wrong way, caused 3 extra wedges to get back on track.
Comments	Intersected Lower Zone at 1000 vertical M. >20 Specks of VG. Lower Zone between 1107.04 and 1117.04 m depth.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
12.0	50.7	-79.9	5639	Reflex Test
36.0	45.2	-79.5	5666	
60.0	48.6	-79.5	5660	
84.0	46.2	-79.3	5678	
108.0	46.6	-78.7	5664	
137.0	49.3	-78.0	5665	
156.0	48.3	-78.4	5665	
180.0	48.8	-78.1	5674	
204.0	46.6	-78.0	5672	
228.0	49.8	-78.0	5609	
252.0	46.5	-77.4	5665	
276.0	51.1	-77.2	5660	
300.0	47.1	-76.5	5672	
324.0	51.5	-76.9	5681	
348.0	47.7	-76.2	5658	
372.0	45.7	-76.2	5698	
396.0	46.1	-75.9	5663	
420.0	45.1	-76.0	5681	
444.0	45.4	-75.8	5660	
452.0				Wedge, went wrong
459.0	51.0	-78.3	5681	
462.0	46.5	-77.9	5692	
480.0	50.8	-78.4	5671	
480.0				Wedge
489.0	51.0	-76.0	5721	
513.0	54.5	-76.3	5702	
520.0				Wedge
528.0	54.8	-73.7	5665	
552.0	55.5	-69.1	5656	
561.0	57.1	-68.5	5657	
585.0	63.8	-68.4	5733	magnetic

Dip Tests (Cont'd)

Depth	Az.	Dip	Mag	Notes
588				Wedge
609	58.1	-66.3	5997	magnetic
633	53.8	-66.5	5747	magnetic
657	56.8	-66.5	5687	
681	56.5	-65.2	5695	
705	56.7	-64.7	5696	
729	58.1	-64.9	5718	
753	57.8	-64.5	5865	
777	59.2	-64.4	5697	
801	59.4	-63.7	5699	
825	59.4	-62.9	5696	

Dip Tests (Cont'd)					Dip Tests (Cont'd)				
Depth	Az.	Dip	Mag	Notes	Depth	Az.	Dip	Mag	Notes
849	59.8	-62.6	5700						
873	60.4	-62.1	5697						
897	62.7	-62.4	5738						
921	64.2	-59.0	5700						
945	65.0	-57.2	5689						
969	66.3	-56.8	5718						
993	65.6	-56.3	5690						
1017	68.1	-56.3	5659	magnetic					
1041	65.7	-54.9	5685						
1065	67.4	-53.2	5677						
1089	71.2	-52.6	5648						
1113	70.0	-52.2	5674						
1161	69.3	-50.1	5692						

From	To	Interval	Code	Description
0.00	1.08	1.08	OB	overburden
1.08	7.86	6.78	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to locally medium grained subhedral crystals. A 31 cm intermediate feldspar porphyry dyke at 3.3 m depth. Trace thin quartz-carbonate veinlets. No visible sulphides.a sharp, wavy lower contact intersecting at roughly 55 TCA.
7.86	8.37	0.51	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. 20% sub-rounded plagioclasse phenocrysts in an aphenetic, intermediate matrix. Moderate pervasive silicic alteration. <1% fine grained disseminated pyrite. A sharp lower contact intersecting at 55 TCA.
8.37	9.85	1.48	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to locally medium grained subhedral crystals. Trace thin quartz-stringers. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
9.85	10.85	1.00	6E	intermediate feldspar porphyry dyke. 20% sub-rounded plagiolcasse phenocrysts. Weak to moderate pervasive silicic alteration, mostly acting on the plagioclasse. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
10.85	28.00	17.15	1A	massive mafic volcanic flow. Dark grey to grey-green colour. Fine to medium grained, subhedral crystals. Moderately foliated intersecting at 35 TCA. 1-2% diopside alteration bands parallel to foliation. 1-2% brown biotite alteration. 4% quartz-diopside bands. trace pyrite. a gradational lower contact.
28.00	41.57	13.57	1Z	coarse grained mafic volcanic flow, or gabbroic end-member. Dark grey to black colour. Moderately foliated intersecting at 35 TCA. 10% fine grained, whitish leucoxene alteration. 1% diopside alteration bands parallel to foliation. A strong, black biotite content. a 49 cm felsite dyke at 34.0 m depth. no visible sulphides. a sharp lower contact intersecting at 25 TCA.
41.57	44.42	2.85	6A	intermediate, dioritic intrusion. Coarse grained, subhedral crystals. 60% felsic grains and 40% mafic graineds. Moderately foliated intersecting at 25 TCA. Weak pervasive silicic alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
44.42	47.68	3.26	1A	massive mafic volcanic flow. Dark grey to black colour. Coarse grained, subhedral crystals. Moderately foliated intersecting at 35 TCA. 10% fine grianed leucoxene. No veining. No visible sulphides. A 27 cm felsic pegmatite dyke at the lower contact.
47.68	48.48	0.80	6E	intermediate feldspar porphyry dyke. Medium grey colour. 15% coarse grained plagioclasse phenocrysts in a fine grained intermediate matrix. Trace foliation around the edges indicating later stage intrusion. Weak, brown biotite alteration. Weak pervasive silicic alteation. no veining. no visible sulphides. a sharp lower contact intersecting at 40 TCA.
48.48	49.76	1.28	1A	massive mafic volcanic flow. Dark grey to black colour. Weakly foliated intersecting at 35 TCA. Coarse grained. 10-15% fine grained leucoxene alteration. No veining. No visible sulphides. A sharp, erratic lower contact.
49.76	51.15	1.39	4D	fine to very coarse grained felsite, and locally pegmatitic dyke. Light pink to white colour. Subhedral to locally anhedral crystals. No veining. No visible sulphides. A sharp, irregular lower contact intersecting at roughly 5 TCA.

From	To	Interval	Code	Description
51.15	65.00	13.85	1A	massive mafic volcanic flow. Massive mafic volcanic flow. Dark grey colour. Medium grained, subheral crystals. Moderately foliated intersecting at 35 TCA. Locally mottled texture. A 13 cm felsite dyke followed immediately by a 14 cm epidote dyke at 53.58 m depth. 5% fine grained, white leucoxene alteration. no veining. no visible sulphides. a gradational lower contact.
65.00	95.09	30.09	1Z	porphyrytic mafic volcanic flow, or gabbroic end-member. Dark grey to black colour. Weakly foliated intersecting at 35 TCA. 15-20% amphibole phenocrysts up to 6-7 mm across. 1-2, and locally up to 5% fine grained white-beige leucoxene. Trace thin quartz stringers. a 45 cm intermediate feldspar porphyry dyke at 93.55 m depth. a 47 cm felsite dyke at 92.85 m depth. no visible sulphides. a sharp lower contact intersecting at 35 TCA.
95.09	96.95	1.86	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained plagioclasse phenocrysts in a dark grey to black, aphenetic matrix. Weakly foliated intersecting at 40 TCA. Very weak pervasive silicic alteration. 1-2% very fine grained disseminated pyrite. a 22 cm foliated gabbroic dyke at 96.1 m depth. a sharp lower contact intersecting at 25 TCA.
96.95	110.00	13.05	1Z	porphyrytic mafic volcanic flow, or gabbroic end-member. medium to dark grey to black colour. Weakly foliated intersecting at 35 TCA. 15-20% amphibole phenocrysts up to 6-7 mm across. No veining. No visible sulphides. A gradational lower contact.
110.00	123.66	13.66	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Weakly foliated intersecting at 35 TCA. <1% thin quartz-carbonate stringers. A 34 cm intermediate feldspar porphyry dyke at 109.62 m depth and a 16 cm dyke at 121.8 m depth. A 43 cm felsite dyke at 118.25 m depth. trace pyrrhotite. a sharp lower contact intersecting at 35 TCA.
123.66	124.49	0.83	4D	felsite dyke. Medium grained, subhedral crystals. Light pink and beige to whitish colour. No veining. No visible sulphides. About 60% feldspar, 20% muscovite, 10% quartz and 10% biotite. A sharp, wavy lower contact.
124.49	130.47	5.98	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. 5% thin feldspar porphyry dykes, parallel to foliation. 1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
130.47	131.06	0.59	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. 20% medium to coarse grained plagioclasse phenocrysts in an aphenetic, intermediate matrix. Moderately foliated intersecting at 45 TCA. Weak to locally moderate pervasive silicic alteration. 1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
131.06	131.68	0.62	1A	massive mafic volcanic flow. Dark green-beige colour. Aphenetic crystals. Moderately foliated intersecting at 40 TCA. 10% fine to medium grained disseminated brown biotite. 10% diopside alteration band. 1% fine grained disseminated pyrite. No veining. A sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
131.68	136.07	4.39	6E	intermediate feldspar porphyry dyke. Dark grey colour. 25% coarse grained plagioclasse phenocrysts in a dark grey, intermediate to mafic matrix. Moderately foliated intersecting at 40 TCA. Locally weak pottasic alteration in the feldspar phenocrysts. locally strongly foliated. <1% very fine grained disseminated pyrite. no veining. a sharp lower contact intersecting at 30 TCA.
136.07	140.07	4.00	1Z	coarse grained mafic volcanic flow, or gabbroic end-member. Dark grey to black colour. Moderately foliated intersecting at 40 TCA. Locally moderate to strong, interstitial hematite alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
140.07	155.08	15.01	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained plagioclasse phenocrysts in a dark grey, aphenetic intermediate matrix. Weakly foliated. Weak to trace pervasive silicic alteration. 5% mafic flow inclusions up to 50 cm across. No veining. trace very fine grained disseminated pyrite. locally moderately foliated with trace sericite and diopside alteration. a sharp lower contact intersecting at 40 TCA.
155.08	160.98	5.90	1A	massive mafic volcanic flow. Dark grey colour. Mottled texture. Weakly foliated intersecting at 40 TCA. A 45 cm intermediate feldspar porphyry dyke at 155.94 m depth, and a 27 cm dyke at 159.96 m depth. Trace thin quartz-carbonate veinlet. No visible sulphides. a sharp lower contact intersecting at 45 TCA.
160.98	166.56	5.58	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained plagioclasse phenocrysts in a fine grained, dark grey, intermediate to mafic matrix. Weakly foliated intsecting at 45 TCA. Weak pervasive silicic alteration, acting on the plagioclasse phenocrysts. no veining. trace very fine grained disseminated pyrite. a sharp, irregular lower contact.
166.56	166.71	0.15	5A	felsic, granitic dyke. White to locally pink colour. Medium grained, subhedral to euhedral crystals. 35% plagioclasse and pottasium feldspar, 50% quartz, 10% muscovite and 5% biotite. A 3 cm brown quartz vein at 165.5 m depth. No visible sulphides. A sharp lower contact intersecting at 40 TCA, obleque to the foliation of the host rock.
166.71	184.60	17.89	6E/6A	intermediate feldspar porphyry dyke grading into a dioritic dyke. 25% medium to coarse grained plagioclasse phenocrysts in a fine to medium grained, dark grey, intermediate matrix. Weakly foliated intersecting at 40 TCA. Weak pervasive silicic alteration, mostly acting on the plagioclasse. 1% felsite dyklets up to 3 cm across. no veining. no visible sulphides. a 45 cm mafic inclusion at 178.71 m depth. a sharp lower contact intersecting at 40 TCA.
184.60	185.51	0.91	1Z	coarse grained mafic flow, or gabbroic end-member. Dark green-grey colour. Subhedral crystals. Mottled texture. Weakly foliated intersecting at 40 TCA. No veining. 5% interstitial diopside alteration. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
185.51	186.42	0.91	6E	intermediate feldspar porphyry dyke. 20% medium to coarse grained plagioclasse phenocrysts in an aphenetic intermediate to mafic matrix. Trace foliation intersecting at 40 TCA. Trace pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
186.42	189.39	2.97	1Z	coarse grained mafic flow or gabbroic end-member. Dark green colour. Subhedral to anhedral crystals. Mottled texture. Weakly foliated intersecting at 40 TCA. 1% diopside alteration. 5% fine grained leucoxene alteration. No veining. No visible sulphides. a sharp lower contact intersecting at 30 TCA.
189.39	192.07	2.68	6E	intermediate hornblende-feldspar porphyry dyke. 15% medium grained, rounded plagioclasse, and 10% elongated hornblende phenocrysts, both subhedral, in an aphenetic medium grey matrix. Moderately foliated intersecting at 30 TCA. Weak to moderate pervasive silicic alteration. 1-2% very fine grained disseminated pyrite. no veining. a sharp lower contact interesecting at 25 TCA.
192.07	193.14	1.07	1Z	coarse grained mafic volcanic flow or gabbroic end-member. Dark green-grey colour. Subhedral to anhedral crystals. Mottled texture. Weakly foliated intersecting at 35 TCA. No veining. 5% fine grained brown biotite alteration. No visible sulphides. A sharp, irregular lower contact.
193.14	195.22	2.08	6E	intermediate hornblende-feldspar porphyry dyke. 5% fine grained plagioclasse phenocrysts and 15% elongated hornblende phenocrysts in an aphenetic, medium to dark grey, intermediate matrix. Moderately foliated intersecting at 35 TCA. Weak to moderate pervasive silicic alteratino. trace very fine grained disseminated pyrite. grading to a medium grained plagioclasse porphyry near the lower contact. a sharp lower contact intersecting at 70 TCA.
195.22	196.17	0.95	4E	felsite pegmatite dyke. Light pink colour. Subhedral to anhedral, very coarse grained crystals. 65% feldspar, 15% quartz, 15% muscovite anf 5% biotite. No veining. No visible sulphides. A sharp lower contact interseting at 75 TCA.
196.17	198.26	2.09	6E	intermediate feldspar porphyry dyke. A 42 cm coarse grained mafic volcanic at the upper contact. 15% medium grained plagioclasse phenocrysts in a fine grained dark grey intermediate matrix. Moderately foliated intersecting at 30 TCA. Elongated hornblende phenocrysts at the lower contact. no veining. no visible sulphides. weak pervasive silicic alteration. a sharp lower contact intersecting at 35 TCA.
198.26	200.14	1.88	1Z	coarse grained mafic volcanic flow, or gabbroic end-member. Dark green to black colour. Subhedral crystals. Mottled texture. Weakly foliated intersecting at 40 TCA. An 11 cm intermediate dyke at 199.03 m depth. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
200.14	202.66	2.52	6E	intermediate feldspar porphyry dyke. 10-15% medium grained plagioclasse phenocrysts in a fine grained, dark grey intermediate to mafic matrix. A 39 cm mafic inclusion at 200.95 m depth. Moderately grading to weakly foliated intersecting at 35 TCA. Weak pervasive silicic alteration. <1% quartz veinlets. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
202.66	205.32	2.66	1Z	mafic volcanic flow or gabbroic end-member. Dark green to black colour. Anhedral crystals. Slight mottled texture. Weakly foliated intersecting at 35 TCA. A 10 cm felsite dyklet at 204.0 m depth. No veining. 3-4% fine grained disseminated brown biotite alteration. no visible sulphides. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
205.32	207.31	1.99	6E	intermediate feldspar porphyry dyke. 15-20% medium to coarse grained plagioclasse phenocrysts in an aphenetic matrix. Trace grading to moderately foliated intersecitng at 35 TCA. Weak to moderate pervasive silicic alteration. No veining. 3% mafic inclusions up to 8 cm across. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
207.31	209.49	2.18	1A	massive mafic volcanic flow. Dark green colour. Fine grained crystals. Moderately to strongly foliated intersecting at 35 TCA. 10% brown biotite alteration. 5% diopside alteration bands, parallel to foliation. A 31 cm intermediate feldspar porphyry dyke at 208.56 m depth. no visible sulphides. 1% thin quartz-carbonate veinlets. a sharp lower contact intersecting at 30 TCA.
209.49	213.79	4.30	6E	intermediate hornblende-feldspar porphyry dyke. 25% elongated hornblende phenocrysts and 10% sub-roiunded plagioclasse phenocrysts in an aphenetic, medium-dark grey, intermediate matrix. Moderately foliated intersecting at 35 TCA. A thin felsite dyke intersecting nearly parallel to the core for 1.1 m. a 15 cm mafic inclusion at 213.05 m depth. no veining. 1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
213.79	216.03	2.24	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately to strongly foliated intersecting at 35 TCA. A 35 cm intermediate feldspar porphyry dyke at 215.2 m depth. 1% quartz veinlets. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
216.03	218.39	2.36	6E	intermediate feldspar pirphyry dyke. 15% medium grained, rounded plagioclasse phenocrysts and 15% elongated hornblende phenocrysts in an aphenetic, medium-dark grey, intermediate matrix. Moderately foliated intersecting at 35 TCA. No veining. 1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 25 TCA.
218.39	219.17	0.78	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic. 5% diopside alteration. No veining. No visible sulphides. Moderately foliated intersecting at 30 TCA. A sharp lower contact intersecting at 35 TCA.
219.17	220.47	1.30	6E	intermediate feldspar pirphyry dyke. 15% medium grained, rounded plagioclasse phenocrysts and 15% elongated hornblende phenocrysts in an aphenetic, medium-dark grey, intermediate matrix. Moderately foliated intersecting at 35 TCA. No veining. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
220.47	221.67	1.20	1A	massive mafic volcanic flow. Dark green-grey to black colour. 20% cloudy diopside alteration. Weakly to moderately foliated intersecting at 35 TCA. Fine grained to aphenetic crystals. An 8 cm intermediate dyke at 220.6 m depth. <1% quartz veinlet. No visible sulphides. a sharp lower contact intersecting at 45 TCA.
221.67	223.54	1.87	6E	intermediate feldspar pirphyry dyke. 15% medium grained, rounded plagioclasse phenocrysts and 5% elongated hornblende phenocrysts in an aphenetic, medium-dark grey, intermediate matrix. Moderately foliated intersecting at 35 TCA. weak pervasive silicic alteration. No veining. <1% very fine grained disseminated pyrite. a sharp, wavy lower contact intersecting at about 30 TCA.

From	To	Interval	Code	Description
223.54	230.40	6.86	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Moderately to weakly foliated intersecting at 35 TCA. 5% diopside alteration bands parallel to foliation. No veining. No visible sulphides. A gradational lower contact.
230.40	237.00	6.60	3D/1A	massive mafic volcanic flow with several interlayered pyrrhotite-iron formation units. Moderately to strongly foliated, and bedded intersecting at 45 TCA. Moderately magnetic in the iron formation units. Iron formations are characterized by up to 20% semi-massive pyrrhotite in a dark purple-grey, well bedded sediment with a weak pervasive silicic alteration, usually on the edges of intermediate feldspar porphyry dykes. 10% intermediate feldspar porphyry dykes up to 50 cm across. a gradational lower contact.
237.00	246.43	9.43	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 30 TCA. 15-20% thin diopside alteration bands parallel to foliation. 1% quartz veinlets. Up to 5% intermediate dykes up to 30 cm across, mostly near the upper contact. 1% brown biotite alteration. no visible sulphides. a sharp lower contact intersecting at 30 TCA.
246.43	249.20	2.77	6E	intermediate feldspar porphyry dyke. 15% rounded plagioclasse phenocrysts in a dark purple-grey aphenetic, intermediate matrix. Moderately foliated intersecting at 35 TCA. Moderate pervasive silicic alteration. 1-2% quartz veinlets. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 10 TCA.
249.20	250.16	0.96	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. 10% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
250.16	250.90	0.74	6F	mafic dyke. Dark purple-grey colour. Fine grained crystals. Moderately foliated intersecting at 35 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
250.90	251.73	0.83	6E	intermediate hornblende-feldspar porphyry dyke with 29 cm of mafic volcanic flow at the upper contact. 15% medium grained, rounded plagioclasse phenocrysts and 15% elongated hornblende phenocrysts in an aphenetic, dark purple-grey intermediate matrix. moderately foliated intersecting at 35 TCA. weak pervasive silicic alteration. no veining. no visible sulpahides. a sharp lower contact intersecting at 45 TCA.
251.73	253.82	2.09	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. 5% diopside alteration bands parallel to foliation. 2% thin quartz veining up to 10 cm across. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
253.82	256.63	2.81	6E	intermediate hornblende-feldspar porphyry dyke. 15% medium grained, rounded plagioclasse phenocrysts and 15% elongated hornblende phenocrysts in an aphenetic, dark purple-grey intermediate matrix. moderately foliated intersecting at 35 TCA. a 24 cm mafic flow inclusion at 255.1 m depth. weak pervasive silicic alteration. no veining. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.

From	To	Interval	Code	Description
256.63	261.17	4.54	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 35 TCA. 3-4% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate stringers, usually enveloped by diopside alteration. a 16 cm intermediate porphyry dyke at 258.47 m depth. no visible sulphides. a sharp lower contact intersecting at 35 TCA.
261.17	263.06	1.89	6E	intermediate feldspar porphyry dyke. Medium grey colour. 120% coarse to medium grained plagioclasse phenocrysts in a fine grained intermediate matrix. Weakly foliated intersecting at 35 TCA. Trace pervasive silicic alteration. A 33 cm mafic inclusion at 262.36 m depth. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting in some broken rock.
263.06	271.40	8.34	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 30 TCA. Several intermediate porphyry dykes up to 30 cm across. 6-8% diopside alteration bands parallel to foliation. A 6 cm felsite dyke at 265.4 m depth. 2% quartz-carbonate veining. no visible sulphides. a sharp, irregular lower contact.
271.40	272.05	0.65	6F	intermediate to mafic dyke. Dark grey colour. Moderately foliated intersecting at 35 TCA. 15% medium grained hornblende phenocrysts in a medium-dark grey, fine grained matrix. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
272.05	280.80	8.75	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. 15% diopside alteration bands parallel to foliation. 1 24 cm and a 47 cm intermediate feldspar porphyry dykes at 273.4 and 274.5 m depth respectively. up to 15% semi-massive pyrrhotite in the last 5 cm of the unit. Trace thin quartz-carbonate stringers. a sharp lower contact intersecting at 30 TCA.
280.80	281.60	0.80	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in a dark purple-grey intermediate matrix. Moderately foliated intersecting at 30 TCA. No veining. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 30 TCA.
281.60	285.31	3.71	1A	massive mafic volcanic flow. Dark green to black colour. Moderately foliated intersecting at 30 TCA. 5% diopside alteration bands. <1% thin quartz-carbonate stringers. Grading to a pyrrhotite rich iron formation in the last 5 cm. a sharp lower contact intersecting at 45 TCA.
285.31	288.31	3.00	6E/3D	intermediate hornblende-feldspar porphyry dyke. 10% medium grained plagioclasse and 15% medium grained, elongated hornblende phenocrysts in an intermediate, aphenetic, dark purple-grey matrix. Moderately foliated intersecting at 30 TCA. Weak pervasive silicic alteration. trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
288.31	297.75	9.44	3D/1A	silicate facies iron fromation in a mafic volcanic. Dark green and brown colours. Moderately to strongly foliated intersecting at 35 TCA. Strong, grading to weak pervasive silicic alteration. 30% diopside alteration bands parallel to foliation. Up to 10% seamed and ribboned pyrrhotite in the silica altered parts. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
297.75	298.91	1.16	6E	intermediate hornblende-feldspar porphyry dyke. 5% medium grained, rounded plagioclasse phenocrysts and 15% medium grained elongated hornblende phenocrysts in a medium-dark grey intermediate, aphenetic matrix. Moderately foliated intersecting at 35 TCA. weak pervasive silicic alteration. trace very fine grained disseminated pyrite. no veining. a sharp lower contact intersecting at 30 TCA.
298.91	305.95	7.04	1A	massive mafic volcanic flow. Dark grey-green to black colour. Fine grained crystals. Mottled texture. Weakly foliated intersecting at 35 TCA. <1% thin quartz-carbonate veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
305.95	306.46	0.51	6A	coarse grained dioritic dyke. Subhedral crystals due to a weak pervasive silicic alteration. Weakly foliated intersecting at 35 TCA. 35% plagioclasse, 25% quartz, 25% hornblende, 10% biotite and 5% muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
306.46	314.67	8.21	1A	massive mafic volcanic flow. Dark green-grey colour. Mottled teture. Weakly foliated intersecting at 35 TCA. <1% thin felsite dyklets. 2% brown biotite alteration, mostly around the edges. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
314.67	315.50	0.83	6E	intermediate feldspar porphyry dyke. 10% medium grained plagioclasse pheoncrysts in an aphenetic, dark purple-grey, intermediate matrix. Moderately foliated interecting at 30 TCA. Weak to moderate pervasive silicic alteration. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
315.50	319.73	4.23	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. Possibly locally pillowed. 15% diopside alteration. A 21 cm intermediate dyke at 318.9 m depth. No veining. No visible sulphides. A sharp, slightly wavy lower contact intersecting at roughly 25 TCA oblique to the foliation.
319.73	320.63	0.90	6B	coarse grained, early stage gabbro. Weakly foliated intersecting at 30 TCA. Subhedral to anhedral crystals. 2-3% diopside alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 25 TCA oblique to the foliation.
320.63	323.88	3.25	1A	massive mafic volcanic flow. Dark grey-green to black colour. Aphenetic crystals. Weakly foliated intersecting at 30 TCA. 1% thin quartz-carbonate stringers. No visible sulphides. A sharp, irregular lower contact.
323.88	325.00	1.12	4D	felsite dyke. Anhedral crystals. 2% brown quartz veining. No visible sulphides. A sharp, slightly wavy lower contact intersecting at roughly 15 TCA.
325.00	333.00	8.00	1B	mafic pillow flow. Dark green to black colour. Weakly foliated intersecting at 35 TCA. Poorly defined darker green to black pillow selvages. 3% diopside alteration a 23 cm intermediate dyke at 330.85 m depth. <1% thin quartz-carbonate stringers. no visible sulphides. A gradational lower contact.
333.00	342.57	9.57	1A	massive mafic volcanic flow. Dark grey to black colour. Weakly foliated intersecting at 35 TCA. Fine grained to aphenetic crystals. No veining. No visible sulphides. A sharp lower contact intersecting at 25 TCA.

From	To	Interval	Code	Description
342.57	343.48	0.91	6E	intermediate hornblende porphyry dyke. 25% medium to coarse grained, elongated hornblende phenocrysts in a medium grey, aphenetic, intermediate matrix. Moderatley foliated intersecting at 35 TCA. Weak to moderate pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 25 TCA.
343.48	351.91	8.43	1A	massive mafic volcanic flow. Dark green-grey to black colour. Fine grained crystals. Weakly foliated intersecting at 35 TCA. A thin, grey quartz vein running down the core for 65 cm starting at 347.65 m depth. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
351.91	352.66	0.75	5A	medium grained granitic dyke. Light grey to white colour. 50% feldspars, 40% quartz and 10% pyroxene and biotite. No veining. No visible sulphides. A sharp lower contact in some broken rock.
352.66	375.37	22.71	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Weakly foliated intersecting at 35 TCA. 2-3% quartz-diopside banding. Trace pyrite around the quartz. Trace biotite alteration. A sharp lower contact intersecting at 20 TCA.
375.37	376.68	1.31	3D/1A	interbedded silicate facies iron formation. Dark purple-grey colour. Moderately foliated intersecting at 30 TCA. Weakly to locally moderately magnetic. 5% fine grained disseminated, and locally seamed pyrrhotite. 1% thin quartz veinlets. Weak to moderate pervasive silicic alteration. a sharp lower contact intersecting at 25 TCA.
376.68	393.42	16.74	1A	massive mafic volcanic flow. Fine to medium grained, mottled texture. Dark green to black colour. Moderately foliated intersecting at 25 TCA. <1% thin quartz veinlets and stringers. A 13 cm felsite dyke at 386.35 m depth. A sharp lower contact intersecting at 30 TCA.
393.42	394.04	0.62	6E	intermediate dyke. Dark purple-grey colour. Fine grained crystals. 3% medium grained plagioclasse phenocrysts. Weakly foliated intersecting at 30 TCA. 1% brown biotite alteration. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
394.04	408.50	14.46	1A	massive mafic volcanic flow. Dark green to black colour. Fine to medium grained crystals. Moderately foliated intersecting at 35 TCA. 1% quartz veining, at the top of the unit. A few felsite dyklets up to 30 cm across. <1% diopside alteration bands. No visible sulphides. a gradational lower contact.
408.50	438.00	29.50	1Z	porphyritic mafic volcanic flow or coarse grained gabbroic end-member. Dark green to black colour. Grains grading from 3 up to 8 mm across. Locally mottled textures. Weakly foliated intersecting at 30 TCA. <1% thin quartz veinlets. A 20 cm felsite dyke at 409.3 m depth. no visible sulphides. a gradational lower contact.
438.00	450.71	12.71	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Weakly foliated intersecting at 30 TCA. A 50 cm weak, interbedded iron formation unit at 439.15 m depth. 1-2% brown biotite alteration. Up to 5% pyrrhotite in the iron formation. no veining. a sharp irregular lower contact.
450.71	452.00	1.29	4D	felsite dyke. Light grey colour. Anhedral crystals. No veining. No visible sulphides. Lower contact is lost in reamed core from wedging, so exact depth is unknown.

From	To	Interval	Code	Description
452.00	454.37	2.37	1A	massive mafic volcanic flow. Dark green colour. Fine grained to aphenetic crysta.s weakly to moderately foliated intersecting at 20 TCA. 3% thin felsite dyketls. 1% thin quartz-carbonate stringers. 3-4% thin diopside alteration bands parallel to foliation. no visible sulphides. a sharp lower contact intersecting at 20 TCA.
454.37	455.04	0.67	6E	intermediate dyke. Dark purple-grey colour. Fine grained to aphenetic crysals. Moderately foliated intersecting at 25 TCA. Moderate pervasive silicic alteration. 1% very fine grained disseminmated pyrite. A sharp lower contact intersecting at 15 TCA.
455.04	460.68	5.64	1A	massive mafic volcanic flow. Dark green colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 20 TCA. 5% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 15 TCA.
460.68	461.64	0.96	6E	intermediate feldspar porphyry dyke. 20% coarse grained plagioclasse phenocrysts in an aphenetic, intermediate dark purple-grey matrix. Trace foliation intersecting at 20 TCA. Trace pervasive silicic alteration. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 20 TCA.
461.64	488.65	27.01	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 20 TCA. 15% diopside alteration bands parallel to foliation. Two 30 cm felsite dykes at 463.5 and 469.75 m depth. <1% thin quartz-carbonate stringers. Trace pyrite. a sharp lower contact intersecting at 20 TCA.
488.65	492.24	3.59	6E	intermediate feldspar porphyry dyke. 20% coarse grained plagioclasse phenocrysts in an aphenetic, intermediate, medium-dark grey matrix. Weakly foliated intersecting at 25 TCA. Weak pervsaive silicic alteration. 1% quartz veinlets. Trace pyrite in quartz. a sharp lower contact intersecting at 20 TCA.
492.24	541.56	49.32	1A	massive mafic volcanic flow. Dark grey-green to black colour. Aphenetic crystals. Weakly foliated intersecting at 25 TCA. Possibly locally pillowed. 1% felsite dykes up to 25 cm across. <1% quartz veinlets. 3% diopside alteration bands, mostly parallel to foliation. <1% brown biotite alteration. locally grading to fine grained. a sharp lower contact intersecting at 25 TCA.
541.56	543.94	2.38	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in an intermediate, fine grained matrix. Weakly to moderately foliated intersecting at 30 TCA. Trace pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 25 TCA.
543.94	548.00	4.06	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Weakly foliated intersecting at 30 TCA. 1% thin quartz veinlets. No visible sulphides. A gradational lower contact.
548.00	552.12	4.12	1Z	porphyrytic mafic volcanic flow or gabbroic end-member. Weakly sheared intersecting at 25 TCA. Dark green-grey colour. 2 10 cm quartz veins intersecting at 20 TCA at 549.15 and 549.7 m depth. No visible sulphides. A sharp lower contact intersecting at 25 TCA.

From	To	Interval	Code	Description
552.12	561.30	9.18	6E	intermediate feldspar porphyry dyke. 25% coarse grained plagioclasse phenocrysts in a fine to medium grained, intermediate matrix. Subhedral crystals. Moderately foliated intersecting at 25 TCA. Trace very fine grained disseminated pyrite. Trace pervasive silicic alteration. <1% thin quartz veinlets. a sharp lower contact intersecting at 25 TCA.
561.30	566.50	5.20	1Z	porphyritic mafic volcanic flow or coarse grained gabbroic end-member. Dark green colour. Weakly foliated intersecting at 25 TCA. A 25 cm felsite dyke at 562.85 m depth, and a 45 cm intermediate dyke at 565.5 m depth. 2% diopside alteration bands parallel to foliation. a gradational lower contact.
566.50	575.72	9.22	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 25 TCA. 2-3% thin quartz and quartz-cabronate veinlets. <1% diopside alteration bands. Trace pyrite. A gradational lower contact.
575.72	582.00	6.28	3D/1A	a weak silicate facies iron formation interbedded in a mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 20 TCA. 25% diopside alteration. 5% thin quartz and quartz-carbonate veinlets and stringers. 5% seamed and semi-massive pyrrhotite, mostly in the diopside and quartz. weakly magnetic. a gradational lower contact.
582.00	588.02	6.02	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained to aphenetic crystals. Weakly foliated intersecting at 35 TCA. 5% diopside alteration, mostly near the lower contact. Trace thin quartz-carbonate stringers. Trace brown biotite alteration. no visible sulphides. a gradational lower contact.
588.02	591.89	3.87	1U	ultramafic komatiitic flow. Medium grey colour. Weakly to moderately foliated intesecting at 35 TCA. Moderately magnetic. Locally moderately effervesent due to calcite stringers. Very soft rock. No visible sulphides. A sharp lower contact intersecting at 25 TCA.
591.89	592.82	0.93	6E	intermediate dyke. Dark purple-grey colour. Moderately foliated intersecting at 30 TCA. Aphenetic crystals. Moderate pervasive silicic alteration. A 2 cm reb quartz veinlet in the middle, with a strong silica flooded envelope. 5% fine grained disseminated, and ribboned pyrite and pyrrhotite. a sharp lower contact intersecting at 35 TCA.
592.82	605.00	12.18	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to locally coarse grained or porphyritic. Weakly foliated intersecting at 35 TCA. A 35 cm felsite dyke at 602.35 m depth and a 20 cm dyke at 603.1 m depth. No veining. No visible sulphides. a sharp lower contact intersecting at 40 TCA.
605.00	610.31	5.31	4E	very coarse grained felsic pegnatite. 45% plagioclasse, 35% quartz, 10% biotite and 10% muscovite. No foliation, veining or sulphides. A sharp lower contact intersecting at 50 TCA.
610.31	617.55	7.24	1A	massive mafic volcanic flow. Dark grey to black colour. Weakly foliated intersecting at 40 TCA. Locally weak iron formation for 30 cm at 612.9 m depth. 5% diopside alteration. Fine grained. Weak to locally strong black biotite alteration. Up to 5% pyrrhotite in iron formation. no veining. a gradational lower contact.

From	To	Interval	Code	Description
617.55	621.44	3.89	1U	ultramafic komatiitic flow. Medium grey colour. Weakly to moderately foliated intesecting at 35 TCA. Moderately magnetic. Locally moderately effervesent due to calcite stringers. Very soft rock. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
621.44	622.00	0.56	3D/1A	weak iron formation interbedded in a massive mafic volcanic flow. Moderately foliated intersecting at 30 TCA. Moderate pervasive silicic alteration. Weakly magnetic. 5% seamed and ribboned pyrrhotite. 2% quartz veinlets. A gradational lower contact.
622.00	636.71	14.71	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 30 TCA. Weak local silicic alteration. 3% diopside alteration bands. A 30 cm weak silicate facies iron formation at 631.9 m depth and a 40 cm iron formation at 632.85 m depth. several intermediate feldspar porphyry dykes up to 25 cm across near the lower contact. a sharp lower contact intersecting at 35 TCA.
636.71	638.69	1.98	6E	intermediate feldspar porphyry dyke. 15% coarse grained plagioclasse phenocrysts in an apheneitc, intermediate, dark purple-grey matrix. Weakly foliated intersecting at 30 TCA. Weak pervasive silicic alteration. No veining. <1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
638.69	654.00	15.31	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. 3% diopside alteration bands parallel to foliation. 1% thin intermediate dyklets. 2% brown biotite alteration. 1% quartz veinlets. Fine grained to aphenetic crystals. a gradational lower contact.
654.00	673.33	19.33	1A	massive mafic volcanic flow. Dark grey to black colour. Fine to medium grained and locally porphyritic. Weakly to moderately foliated intersecting at 35 TCA. 1% and locally up to 8% fine grained disseminated leucoxene alteration. <1% quartz veinlets. <1% diopside alteration. trace brown biotite alteration. no visible sulphides. a sharp lower contact intersecting at 20 TCA.
673.33	675.13	1.80	6E	intermediate feldspar-porphyry dyke. 15% medium to coarse grained plagioclasse phenocrysts in a fine grained, intermediate matrix. Weakly foliated intersecting at 30 TCA. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
675.13	679.11	3.98	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. 10% diopside alteration bands parallel to foliation. A 12 cm intermediate dyke followed by an 8 cm quartz vein at 676.3 m depth. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
679.11	680.00	0.89	4D	felsite dyke. Light grey to white colour. Fine to medium grained, subhedral to anhedral crystals. No veining. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
680.00	690.77	10.77	1A	massive mafic volcanic flow. Massive mafic volcanic flow. Dark green-grey colour. Weakly foliated intersecting at 35 TCA. Possibly weakly pillowed. Locally up to 5% fine grained disseminated leucoxene. 1% diopside alteration bands. 2% quartz veinlets. A sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
690.77	691.46	0.69	4D	medium grained felsite dyke. Subhedral to anhedral crystals. White to light grey colour. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
691.46	699.20	7.74	1A	massive mafic volcanic flow. Fine grained crystals. Dark green colour. Weakly foliated intersecting at 35 TCA. 15% diopside alteration bands, usually enveloping a thin quartz-carbonate stringer. 1% thin quartz-carbonate stringers. Locally up to 5% fine grained disseminated leucoxene. a sharp lower contact intersecting at 45 TCA.
699.20	700.30	1.10	4E	very coarse grained felsic pegmatite dyke. Subhedral to anhedral crystals. 60% plagioclasse, 25% quartz, 10% biotite and 5% muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
700.30	716.89	16.59	1A	massive mafic volcanic flow. Fine grained crystals. Dark green colour. Weakly foliated intersecting at 35 TCA. 10% diopside alteration bands. 1-2% brown biotite alteration. 1% thin quartz-carbonate stringers. Locally up to 5% fine grained disseminated leucoxene. a sharp lower contact intersecting at 65 TCA.
716.89	719.29	2.40	4E	very coarse grained felsic pegmatite dyke. Subhedral crystals. 60% plagioclasse. 35% quartz, 5% biotite and 10% muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
719.29	734.59	15.30	1A	massive mafic volcanic flow. Possibly locally pillowed. Dark green-grey to black colour. Fine grained crystals. Weakly to moderately foliated intersecting at 30 TCA. 3% thin quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 60 TCA.
734.59	736.13	1.54	4E	two very coarse grained felsic pegmatite dykes seperated by 30 cm of mafic volcanic flow. Subhedral crystals. 60% plagioclasse. 35% quartz, 5% biotite and 10% muscovite. No veining. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
736.13	741.87	5.74	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 35 TCA. A 16 cm pegmatite dyke at 739.35 m depth. 2-3% diopside alteration, mostly around quartz veinlets near the upper contact. 2% quartz veinlets. 3-4% brown biotite alteration. a sharp, irregular lower contact.
741.87	742.77	0.90	4D	coarse grained felsite dyke. Anhedral crystals. Light grey to white colour. 60% plagioclasse, 30% quartz, 15% muscovite and 5% biotite. No veining. No visible sulphides. A sharp, irregular lower contact.
742.77	747.31	4.54	1A	massive mafic volcanic flow. Dark green colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 30 TCA. 15% diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
747.31	747.81	0.50	6E	intermediate dyke. Fine grained crystals. Dark purple-grey colour. Moderately foliated intersecting at 30 TCA. Weak pervasive silicic alteration. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 30 TCA.
747.81	766.13	18.32	1A	massive mafic volcanic flow. Dark green to black colour. Fine grained crystals. Moderately foliated intersecting at 30 TCA. 15% diopside alteration bands parallel to foliation. 2-3% quartz veinlets up to 2 cm across. No visible sulphides. A sharp, irregular lower contact.

From	To	Interval	Code	Description
766.13	767.06	0.93	4E	very coarse grained felsic pegmatite. Subhedral to anhedral crystals. 65% plagioclasse, 25% quartz, 15% muscovite and 5% biotite. No veining. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
767.06	769.17	2.11	6E	intermediate dyke. Dark grey-[urple colour. Weakly foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 30 cm felsite dyke at 767.6 m depth. No veining. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
769.17	770.26	1.09	1A	massive mafic volcanic flow. Dark green colour. Fine grained to medium grained crystals. Weakly foliated intersecting at 40 TCA. No veining. No visible sulphides. A sharp, irregular lower contact.
770.26	771.90	1.64	6E	intermediate dyke. Medium grey-purple colour. Moderately foliated intersecting at 35 TCA. Moderate pervasive silicic alteration. Trace very fine grained disseminated pyrite. 2% quartz veining. A sharp irregular lower contact.
771.90	793.00	21.10	1A	massive mafic volcanic flow. Dark green-grey to black colour. Fine to medium grained, subhedral crystals. Weakly foliated intersecting at 35 TCA. <1% thin quartz-carbonate stringers. No visible sulphides. A gradational lower contact.
793.00	798.50	5.50	3D/1A	weak silicate facies iron formation interbedded in a massive mafic volcanic flow. Moderately foliated intersecting at 20 TCA. 25% diopsdie alteration. 5% semi-massive, seamed and disseminated pyrrhotite and pyrite. 4% quartz veining. Trace local magnetic. a gradational lower contact.
798.50	822.80	24.30	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained crystals. Moderately foliated intersecting at 30 TCA. 1-2% quartz veinlets up to 10 cm across. <1% brown biotite alteration. Locally up to 10% fine grained disseminated pyrite and pyrrhotite in a quartz veinlet at 811.7 m depth. a 36 cm granodiorite dyke at 815.4 m depth. a sharp lower contact intersecting at 80 TCA.
822.80	823.75	0.95	4E	very coarse grained felsic pegmatite dyke. Pink colour. Subhedral to anhedral crystals. No veining. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
823.75	825.05	1.30	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Weakly foliated intersecting at 40 TCA. A 12 cm felsite dyke at thte lower contact. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
825.05	826.27	1.22	6E	intermediate feldspar porphyry dyke. Medium grey colour. Moderately foliated intersecting at 30 TCA. 10% medium grained plagioclasse phenocrysts in an aphenetic, medium-dark grey matrix. Weak pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
826.27	839.44	13.17	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. 5% brown biotite alteration. 3% diopside alteration bands. 3% felsite dykes up to 10 cm across. 1-2% thin quartz-carbonate veinlets. Trace pyrite. A sharp, irregular lower contact.
839.44	840.00	0.56	4D	felsite dyke. Light grey to white colour. Medium grained subhedral to anhedral crysals. A rounded, 8 cm mafic volcanic inclusion at 839.8 m depth. No veining. No visible sulphides. A sharp, irregular lower contact.

From	To	Interval	Code	Description
840.00	861.00	21.00	1A	massive mafic volcanic flow. Dark green-grey to black colour. Medium grained crystals. Weakly foliated intersecting at 40 TCA. Locally up to 5% white, fine grained leucoxene alteration. <1% thin felsite dyklets. Trace seam of pyrrhotite. A gradational lower contact.
861.00	876.50	15.50	1A	massive mafic volcanic flow. Fine grained crystals. Dark grey to black colour. Moderately foliated intersecting at 40 TCA. A 23 cm intermediate feldspar porphyry dyke at 866.33 m depth and a 40 cm felsite kyke at 872.75 m depth. <1% diopside alteration bands parallel to foliation. trace pyrite. a gradational lower contact.
876.50	892.00	15.50	1B	mafic pillow flow. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. Well defined, black pillow selvages with up to 10 % almandine garnet replacement. 15% diopside alteration bands parallel to foliation. A slightly mineralized 14 cm grey quartz vein at 883.17 m depth. 1-2% quartz-carbonate veinlets. a 15 cm felsite dyke at 888.51 m depth. <1% pyrite, chalcopyrite in quartz veining. a gradational lower contact.
892.00	900.40	8.40	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained crystals. Weakly to moderately foliated intersecting at 40 TCA. 1% diopside alteration bands, mostly near the upper contact. 1-2% thin quartz stringers and veinlets. No visible sulphides. a sharp lower contact intersecting at 35 TCA.
900.40	901.33	0.93	6E	intermediate feldspar porphyry dyke. Medium grey colour. 15% medium grained plagioclasse phenocrysts in a fine grained intermediate matrix. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 3% quartz-biotite. A sharp lower contact intersecting at 35 TCA.
901.33	902.66	1.33	6F	mafic dyke. Fine grained, subhedral crystals. Dark grey colour. Weakly foliated intersecting at 35 TCA. 15 cm of mafic volcanic flow on each contact. '1% thin quartz stringers. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
902.66	904.61	1.95	6E	intermediate hornblende-feldspar porphyry dyke. Medium grey colour. 15% medium grained plagioclasse and 15% medium grained hornblende phenocrysts in a fine grained intermediate matrix. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 2% quartz veining. no visible sulphides. a sharp lower contact intersecting at 35 TCA.
904.61	944.00	39.39	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. 15% diopside alteration bands parallel to foliation. 1-2% quartz and quartz-carbonate veinlets including an 18 cm pyrite mineralized quartz stockwork at 909.7 m depth and a 7 cm quartz veinlet with pyrrhotite mineralization at 939.35 m depth. a very gradational lower contact.
944.00	969.72	25.72	1A	massive mafic volcanic flow. Dark grey-green to black colour. fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. Locally pillowed. 5% diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate stringers. A few felsite and felsic pegmatite dykes up to 30 cm across. a 30 cm porphyritic gabbro dyke at 955.6 m depth. 2-3% brown biotite alteration bands. trace pyrrhotite. a sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
969.72	970.95	1.23	6E	intermediate feldspar porphyry dyke. 15% coarse grained, rounded plagioclasse phenocrysts in an aphenetic intermediate matrix. Moderately foliated interesecting at 40 TCA. Moderate pervasive silicic alteration. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
970.95	996.00	25.05	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 35 TCA. 5-10% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate stringers and veinlets, usually enveloped by diopside alteration. 1% brown biotite alteration. a gradational lower contact.
996.00	1022.00	26.00	1B	mafic pillow flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 10% diopside alteration bands parallel to foliation. Well defined black pillow selvages. Aphenetic crystals. 2-3% thin quartz and quartz-carbonate veinlets. Trace seamed and ribboned pyrrhotite, mostly in quartz. a gradational lower contact.
1022.00	1031.00	9.00	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained grading to medium grained crystals. Moderately foliated intersecting at 45 TCA. Three intermediate dykes up to 45 cm across at 1027.0, 1028.9 and 1029.6 m depth. Trace pyrite in the intermediate dykes. 2-3% diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate veinlets and stringers. trace pyrrhotite. a gradational lower contact.
1031.00	1048.68	17.68	1A	massive mafic volcanic flow. Dark grey to black colour. Medium grained crystals. Moderately foliated intersecting at 40 TCA. 2% thin quartz veinlets and stringers parallel to foliation. No visible sulphides. A gradational lower contact.
1048.68	1049.60	0.92	SH/1A	sheared mafic volcanic flow. Dark grey colour. Moderately sheared and stringly foliated intersecting at 40 TCA. 60% diopside alteration. 8% brown biotite alteration. 5% disseminated pyrrhotite. Moderately magnetic. A gradational lower contact.
1049.60	1055.69	6.09	1A	massive mafic volcanic flow. Dark grey to black colour. Moderately foliated intersecting at 45 TCA. Fine grained to aphenetic crystals. 1% diopside alteration. <1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
1055.69	1056.34	0.65	6E	intermediate feldspar porphyry dyke. Moderately foliated intersecting at 35 TCA. Dark purple-grey colour. Weak to moderate pervasive silicic alteration. 5% silica flooded bands. <1% very fine grained pyrite. A sharp lower contact intersecting at 35 TCA.
1056.34	1066.90	10.56	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. 35 cm felsite dyke intersecting oblque to the foliation at 1062.1 m depth. 3% diopside alteration bands. Trace garnets. <1% thin quartz veinlets. A gradational lower contact.
1066.90	1067.85	0.95	SH/1A	UPPER ZONE. Sheared mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 40 TCA. 8% diopside alteration. 5% brown biotite alteration. 5% quartz veining, mostly near the lower contact. 2-3% fine grained pyrite and pyrrhotite in quartz. a sharp lower contact intersecting at 40 TCA.

From	To	Interval	Code	Description
1067.85	1069.45	1.60	SH/6E	UPPER ZONE. Sheared intermediate feldspar porphyry dyke. Dark purple-grey colour. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 2% quartz-carbonate and quartz veinlets. <1% very thin sericite filled fractures. 1% very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
1069.45	1072.09	2.64	1A	massive mafic volcanic flow. Dark grey-green to black colour. Moderately foliated intersecting at 40 TCA. Fine grained crystals. <1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
1072.09	1072.84	0.75	6E	intermediate dyke. Medium purple-grey colour, grading to light grey-purple near the upper contact. Moderately to strongly foliated intersecting at 40 TCA. Weak to moderate pervasive silicic alteration. <1% fine grained disseminated pyrite. A sharp lower contact intersecting at 35 TCA.
1072.84	1088.59	15.75	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 40 TCA. Locally weakly sheared. 10% and locally up to 40% diopside alteration bands parallel to foliation. A 24 cm felsite dyke at 1078.12 m depth. 2% brown biotite alteration, mostly in the sheared parts. trace pyrite. 1% thin quartz-carbonate stringers. a sharp lower contact intersecting at 35 TCA.
1088.59	1090.16	1.57	6E	intermediate dyke. Medium grained crystals. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. Medium grey-purple colour. 2% silica flooded bands. Trace very fine grained disseminated pyrite. A sharp, slightly wavy lower contact intersecting at 40 TCA.
1090.16	1090.92	0.76	1B	mafic pillow flow. Dark green colour. Moderately foliated intersecting at 40 TCA. 20% diopside alteration bands parallel to foliation. An 11 cm quartz vein at 1090.35 m depth. 2% brown biotite alteration. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
1090.92	1091.47	0.55	6E	intermediate dyke. Medium grey to grey-purple colour. Fine grained crystals. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. 2% silica flooded bands. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
1091.47	1098.94	7.47	1A	massive mafic volcanic flow or pillow flow. Dark green-grey colour. Moderately foliated and locally weakly sheared intersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. 1-2% quartz veinlets. <1% brown biotite alteration. No visible sulphides. a sharp lower contact intersecting at 35 TCA.
1098.94	1100.60	1.66	6E	intermediate feldspar porphyry dyke. 20% medium to coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. Weakly to moderately foliated intersecting at 40 TCA. Trace pervasive silicic alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
1100.60	1107.04	6.44	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 10% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 35 TCA.

From	To	Interval	Code	Description
1107.04	1108.20	1.16	SH/6E	LOWER ZONE. Sheared intermediate dyke. Dark purple-grey colour. Weakly sheared and moderately foliated intersecting at 40 TCA. Weak to moderate pervasive silicic alteration. 2% quartz veining. 1-2% fine grained disseminated and ribboned pyrite and pyrrhotite. a sharp lower contact intersecting at 40 TCA.
1108.20	1110.89	2.69	SH/1A	LOWER ZONE. Sheared mafic volcanic flow. Dark green-grey colour. Weakly sheared and moderately foliated intersecting at 45 TCA. A 35 cm intermediate dyke at 109.1 m depth. 5% diopside alteration bands parallel to foliation. 1% thin quartz veinlets. <1% fine grained seamed pyrite and pyrrhotite. a sharp lower 45 TCA.
1110.89	1116.21	5.32	SH/6E	LOWER ZONE. Sheared intermediate dyke. Medium grey-purple colour. Moderately to strongly sheared and strongly foliated intersecting at 45 TCA. Moderate pervasive silicic alteration. 10-15% quartz veining with fracturing. Trace sphalerite, <1% galena in quartz veins. 3% pyrite and 1-2% pyrrhotite, mostly in and around quartz veins. up to 20 SPECKS VG, in quartz veins. a sharp lower contact intersecting at 35 TCA.
1116.21	1117.04	0.83	SH/1A	LOWER ZONE. Sheared mafic volcanic flow. Moderately sheared and strongly foliated intersecting at 45 TCA. Dark green colour. 35% diopside alteration. 3% brown biotite alteration. 10% quartz veining. 3-4% pyrite and pyrrhotite, seamed and disseminate, mostly around quartz. a sharp lower contact intersecting at 40 TCA.
1117.04	1117.52	0.48	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained plagioclasse phenocrysts in a fine grained intermediate matrix. Weakly foliated intersecting at 45 TCA. Trace pervasive silicic alteration. No veining. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
1117.52	1125.21	7.69	1A	mafic pillow flow. Dark green-grey colour. Moderately foliated intersecting at 40 TCA. 10% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets and stringers. No visible sulphides. Moderately defined black pillow selvages. A sharp lower contact intersecting at 75 TCA.
1125.21	1131.62	6.41	4E	felsic pegmatite dyke. Very coarse grained subhedral to locally euhedral crystals. 60% plagioclasse and and alkali feldspar. 15% quartz. 15% muscovite and 10% biotite. No veining. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
1131.62	1156.99	25.37	1A	massive mafic volcanic flow. Dark green to green-grey colour. Moderately foliated intersecting at 40 TCA. 10-12% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets and stringers. Trace brown biotite alteration. Trace garnets in pillow selvages. locally pillowed. 2-3% felsite dykes up to 25 cm across. a sharp lower contact intersecting at 75 TCA.
1156.99	1157.50	0.51	4E	felsic pegmatite dyke. Subhedral to anhedral crystals. 70% feldspar, 15% quartz, 10% biotite and 5% muscovite. 1% molybdenite. No veining. A sharp lower contact intersecting at 70 TCA.
1157.50	1164.00	6.50	1A	massive mafic volcanic flow. Dark green colour. Moderately foliated intersecting at 50 TCA. 10% diopside alteration. 2% local pottasic alteration bands, mostly near the end of the hole. 2% thin felsite dykelets. 1% thin quartz-carbonate stringers. No visible sulphides.
1164.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876852	575.72	576.50	0.78	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 15% diop alt. 5% brown bio alt. 10% qv. 4% seamed po.	0.051
876853	576.50	577.30	0.80	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 10% diop alt. 10% brown bio alt. wk mag. 4% qv. 5% fg diss po.	0.020
876854	577.30	578.10	0.80	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 20% diop alt. wk mag. 5% qv. 3% brown bio alt. 2% seamed and diss po.	0.013
876855	578.10	578.90	0.80	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 5% diop alt. 3% qv. 2% brown bio alt. 1% fg diss po.	0.003
876856	578.90	579.70	0.80	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 40% diop alt. 3% qv. 2% brown bio alt. 2% fg diss and seamed po.	0.019
876857	579.70	580.50	0.80	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 25% diop alt. 5% qv. 15% semi-massive po. Mod mag.	0.069
876858	580.50	581.30	0.80	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 15% diop alt. 2% thin qv. 8% seamed and semi-massive po. Wk-mod mag.	0.102
876859	581.30	582.00	0.70	3D/1A	weak iron formation in a mafic volcanic flow. Mod fol. 15% diop alt. 3% qv. 5% seamed po. Wk mag.	0.046
876860	591.40	591.89	0.49	1U	ultramafic komattite flow. Wk fol. Tr mag. No veining. Nvs.	0.003
876861	591.89	592.82	0.93	6E	intermediate dyke. Mod fol. Mod perv sil alt. 2% qv. 4% sil flooding. 5% fg diss and ribboned po, py.	0.003
876862	592.82	593.50	0.68	1A	mafic volcanic flow. Mod fol. 15% diop alt. tr perv sil alt. tr py.	0.003
876863	793.00	794.00	1.00	3D/1A	weak silicate facies iron formation in a mafic volcanic flow. Mod fol. 25% diop alt. 3% qv. 1% seamed po, py.	0.009
876864	794.00	795.00	1.00	3D/1A	weak silicate facies iron formation in a mafic volcanic flow. Mod fol. 20% diop alt. 15% qv. 10% semi-massive po.	0.008
876865	795.00	796.00	1.00	3D/1A	weak silicate facies iron formation in a mafic volcanic flow. Mod fol. 10% diop alt. <1% thin qv. 1% fg diss and seamed po.	0.003
876866	796.00	797.00	1.00	3D/1A	weak silicate facies iron formation in a mafic volcanic flow. Mod fol. 20% diop alt. 1% thin qcv. <1%fg diss po.	0.003
876867	797.00	798.00	1.00	3D/1A	weak silicate facies iron formation in a mafic volcanic flow. Mod fol. 20% diop alt. <1% thin qcv. 1% brown bio alt. <1% fg diss and seamed po.	0.003
876868	811.15	811.60	0.45	1A	mafic volcanic flow. Mod fol. Wk perv sil alt. 2% lcx alt. tr py.	0.008
876869	811.60	812.00	0.40	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 25% qv. 5% po, py in qtz.	0.913

Sample #	From	To	Interval	Code	Description	Au (ppm)
876870	812.00	812.40	0.40	1A	mafic volcanic flow. Mod fol. 30% qv. 3% diss lcx alt. tr py.	0.017
876871	812.40	813.00	0.60	1A	mafic volcanic flow. Mod fol. 5% qv. Tr py.	0.007
876872	881.60	882.40	0.80	1A	mafic pillow flow. Mod fol. 15% diop alt. 3% thin qcv. Nvs.	0.003
876873	882.40	883.15	0.75	1A	mafic pillow flow. Wk sh. Mod fol. 15% diop alt. 1% very thin qcs. Tr py.	0.003
876874	883.15	883.75	0.60	QTSW/1A	quartz stockwork in a mafic pillow flow. Mod fol. 30% qv up to 14 cm. <1% py, cpy in qtz.	0.003
876875	883.75				Standard 16A	1.780
876876	883.75				Blank - Granite	0.003
876877	883.75	884.60	0.85	1A	mafic pillow flow. Mod fol. 1% diop alt. 2% thin qcv. Nvs.	0.003
876878	909.00	909.50	0.50	1A	mafic volcanic flow. Mod fol. 15% diop alt. no veining. Nvs.	0.003
876879	909.50	910.00	0.50	QTSW/1A	quartz stockwork in a mafic volcanic flow. Mod fol. 10% diop alt. 20% QV. 3-4% po in qtz. Mod mag around po.	0.003
876880	910.00	910.50	0.50	1A	mafic volcanic flow. Mod fol. 30% diop alt. no veining. Nvs.	0.003
876881	1048.10	1048.68	0.58	1A	mafic volanic flow. Mod fol. Minor vein.	0.008
876882	1048.68	1049.10	0.42	SH/1A	mafic flow. Mod shearing. Veining. 15% diopside alt. 5% po	0.034
876883	1049.10	1049.60	0.50	1A	mafic volcanic flow. Mod fol. Minor vein. 5% diopside alt. minor po	0.003
876884	1066.40	1066.90	0.50	1A	mafic volcanic flow. Mod fol. No vein	0.224
876885	1066.90	1067.50	0.60	1A	mafic volcanic flow. Mod fol. Weak sh at end of sample. 5% diopside alt. 5% py/po	1.730
876886	1067.50	1068.00	0.50	SH/6E	quartz veining/diopside alt/min contact to fsp porph. Weak sh. 15% po/py. No vg. weak mag around po	0.045
876887					Standard 10C	6.490
876888					blank	0.003
876889	1068.00	1068.60	0.60	SH/6E	qtz-fsp porph. Mod fol. Mod sh.	0.010
876890	1068.60	1069.20	0.60	SH/6E	fsp porph. Mod fol. Mod sh.	0.008
876891	1069.20	1069.70	0.50	6E	fsp porph. Mod fol. Minor sh.	0.037
876892	1069.70	1070.10	0.40	6E/1A	intermediate porphyry in contact with a mafic volcanic.	0.019
876893	1070.10	1070.70	0.60	1A	mafic flow. Mod fol.	0.011
876894	1106.50	1107.00	0.50	1A	mafic flow. 15% diopside. Qtz vein	0.222
876895	1107.00	1107.60	0.60	6E	qtz-fsp porph. Mod fol. Wk sh. Minor sulphides	0.012
876896	1107.60	1108.20	0.60	6E	qtz-fsp porph. Mod fol. Wk sh. Minor sulphides	0.009
876897	1108.20	1109.10	0.90	1A	mafic flow. Diopside alt. 15% qtz veining. 5% sulphides. Mod fol. Wk sh.	0.339
876898	1109.10	1109.70	0.60	6E	felsic porph. Flecks of po/py throughout. Minor qtz veining. Wk sh. Contact to mafic flow	0.029
876899	1109.70	1110.40	0.70	1A	mafic flow. Mod fol. Wk sh. Minor qtz veins	0.014
876900	1110.40	1110.90	0.50	1A/7A	mafic flow. Diabase dike 20cm with qtz blobs	0.013
876901	1110.90	1111.50	0.60	6E	felsic/int intrusive. Wk fol. mod sh.	0.017

Sample #	From	To	Interval	Code	Description	Au (ppm)
876902	1111.50	1112.10	0.60	6E	felsic/int intrusive. Large qtz vein with blebs of po, diss. 10%po. Qtz dk grey to white. Mod fol. Mod sh.	2.680
876903	1112.10	1112.60	0.50	6E	felsic/int intrusive. Wk fol. Mod sh. Vfg	0.768
876904	1112.60	1113.10	0.50	QV/SH	qtz vein with 1 spec vg. Po seams throughout. Cpy seams. Trace sphal. Qtz dark grey.	1.630
876905					standard 16A	1.840
876906					blank	0.003
876907	1113.10	1114.00	0.90	6E	felsic/int intrusive. Mod fol. Mod sh	0.519
876908	1114.00	1114.70	0.70	QV/SH	quartz vein. 15 specs of vg. Blebs/diss po/py. 20-30% po/py. Some diopside	43.300
876909					blank	0.006
876910					Standard 16A	1.740
876911	1114.70	1115.40	0.70	6E	int intrusive. Mod fol. mod sh.	0.190
876912	1115.40	1116.00	0.60		int intrusive. Mod fol. Wk sh. Minor qtz veins.	0.153
876913	1116.00	1116.70	0.70	1A	mafic flow. Mod fol. Mod sh. Qtz veins up to 12cm thick. Diopside alteration	0.385
876914	1116.70	1117.60	0.90	1A/6E	mafic flow mod shear contacts qtz-fsp porph wk to no sh. Some diopside alt. white qtz.	0.043

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-38
	CLAIM NO:	1069347	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					03-Jul-12	09-Jul-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	645528					
Northing	5407128	Dip:	-80	Dates Logged:	From: 15-Jul-12	To: 15-Jul-12
Elevation	420					
Final		Depth:	420.00	Logged By:	Greg McKay	
Easting	645532.547					
Northing	5407138.296	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	413.384					

Purpose of Hole	Wedged from SZ-12-37 at 300 m to intersect 200 m vertical of SZ-12-37.
Results	Steel wedge collapsed and hole was lost
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests (Cont'd)

Depth	Az.	Dip	Mag	Notes

Dip Tests

Depth	Az.	Dip	Mag	Notes
12.0	50.7	-79.9	5639	Reflex Test
36.0	45.2	-79.5	5666	
60.0	48.6	-79.5	5660	
84.0	46.2	-79.3	5678	
108.0	46.6	-78.7	5664	
137.0	49.3	-78.0	5665	
156.0	48.3	-78.4	5665	
180.0	48.8	-78.1	5674	
204.0	46.6	-78.0	5672	
228.0	49.8	-78.0	5609	
252.0	46.5	-77.4	5665	
276.0	51.1	-77.2	5660	
300.0	47.1	-76.5	5672	
300.0				Wedge
312.0	49.0	-74.0	5708	
324.0	50.7	-73.0	5699	
336.0	51.5	-72.1	5702	
336.0				Wedge
345.0	51.9	-69.7	5703	
369.0	52.1	-69.1	5694	
393.0	51.9	-68.0	5691	
417.0	53.5	-68.0	5688	

From	To	Interval	Code	Description
0.00	298.93	298.93		SZ-12-37
298.93	313.15	14.22	1A	massive mafic volcanic flow locally grading to a porphyritic mafic volcanic. Weakly foliated intersecting at 35 TCA. Dark green-grey colour. <1% diopside alteration. No veining. No visible sulphides. A sharp lower contact intersecting at 30 TCA.
313.15	313.99	0.84	6E	intermediate feldspar porphyry dyke. 15% medium to coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. Moderately foliated intersecting at 35 TCA. Trace pervasive silicic alteration. No veining. 1-2% fine to very fine grained disseminated pyrite. a sharp lower contact intersecting at 30 TCA.
313.99	318.18	4.19	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 35 TCA. 10% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate veinlets. 5% brown biotite alteration. A 26 cm intermediate dyke at 317.15 m depth. a sharp lower contact intersecting at 40 TCA.
318.18	319.00	0.82	6E/4D	intermediate feldspar porphyry dyke with a 55 cm felsite dyke in the middle. Intermediate dyke is dark grey, moderately foliated at 35 TCA. No veining. No visible sulphides. A sharp lower cintact intersecting at 30 TCA.
319.00	336.00	17.00	1A	massive mafic volcanic flow. Dark green-grey colour. Weakly to moderately foliated intersecting at 40 TCA. A 25 cm intermediate dyke at 327.55 m depth. 5% diopside alteration bands parallel to foliation. 1% thin felsite dykelets. <1% thin quartz-carbonate veinlets. no visible sulphides. a sharp lower contact in some reamed core in a wedge.
336.00	337.80	1.80	6E	intermediate hornblende porphyry dyke. 15% elongated medium grained hornblende phenocrysts in a medium grey-purple coloured matrix. Moderately foliated intersecting at 35 TCA. Weak pervasive silciic alteration. No veining. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
337.80	352.50	14.70	1A	massive mafic volcanic flow. Dark green-grey colour. Weakly to moderately foliated intersecting at 35 TCA. Trace thin quartz-tourmaine veinlet at 348.35m depth. No visible sulphides. A gradational lower contact.
352.50	361.70	9.20	1B	mafic pillow volcanic. Dark green-grey colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. Well defined, black pillow selvages. 3-4% diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate stringers. No visible sulphides. a sharp lower contact intersecting at 35 TCA.
361.70	363.13	1.43	3D/6E	iron formation in an intermediate dyke. Medium to dark grey colour. Weak to moderate pervasive silicic alteration near the contacts. Moderately foliated intersecting at 40 TCA. Locally moderately magnetic. 8% seamed and ribboned pyrrhotite around the edges and 2-3% fine gained and ribboned pyrrhotite near the middle. a sharp lower contact intersecting at 30 TCA.
363.13	403.50	40.37	1A/1Z	mafic porphyritic flow. Fine grained grading to coarse grained mafic phenocrysts up to 8 mm across. Dark grey to black colour. Weakly to moderately foliated intersecting at 45 TCA. <1% quartz veinlets. No visible sulphides. A couple of small iron formations up to 30 cm across, between 392 and 401 m depth. a gradational lower contact.

From	To	Interval	Code	Description
403.50	405.00	1.50	3D/1A	iron formation in a mafic volcanic flow. Dark grey-green-purple colour. Moderately foliated intersecting at 30 TCA. Weak to moderate pervasive silicic alteration. Locally weakly magnetic. 3% and locally up to 8% ribboned and disseminated pyrrhotite. A gradational lower contact.
405.00	420.00	15.00	1A	massive mafic volcanic flow. Dark grey-green colour. Aphenetic crystals. Moderately foliated intersecting at 35 TCA. 5% diopside alteration bands parallel to foliation. Two intermediate dykes up to 30 cm across at 415.55 and 416.35 m depth. No veining. no visible sulphides.
420.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
					No Samples	

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	SZ-12-39
	CLAIM NO:	11354989	Drill Rig	Major-50

Location		Drill Hole Orientation				
UTM Zone 16				Dates Drilled:	From: 13-Jul-12	To: 20-Jul-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	646115					
Northing	5406912	Dip:	-70	Dates Logged:	From: 16-Jul-12	To: 21-Jul-12
Elevation	442					
Final		Depth:	393.00	Logged By:	Greg McKay	
Easting	646114.487					
Northing	5406909.474	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	436.815					

Purpose of Hole	To Extend Sugar Zone Resource Estimate at Depth.
Results	VG in upper and lower zone.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
15.0	39.7	-70.2	5693	Reflex Test
39.0	49.4	-70.0	5666	
63.0	40.8	-69.2	5664	
87.0	40.0	-68.3	5692	
111.0	41.3	-67.9	5581	
135.0	42.8	-67.7	5686	
159.0	41.1	-67.3	5703	
168.0				Wedge
171.0	47.2	-64.8	5667	
195.0	51.2	-63.2	5660	
219.0	51.2	-62.8	5700	
243.0	48.5	-62.3	5707	Magnetic
267.0	51.0	-62.3	5691	
291.0	49.6	-62.2	5680	
315.0	49.9	-62.0	5693	
339.0	50.6	-60.9	5711	
363.0	52.5	-60.7	5744	
387.0	54.1	-60.1	5688	

From	To	Interval	Code	Description
0.00	1.40	1.40	OB	overburden
1.40	7.06	5.66	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 40 TCA. 5% brown biotite alteration bands parallel to foliation. 1-2% thin quartz-carbonate veinlets and stringers. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
7.06	7.87	0.81	6E	intermediate dyke. Dark purple-greyish colour. Moderately foliated intersecting at 45 TCA. 5% felsite inclusions. 1% quartz veinlets. 1% fine grained disseminated pyrite. <1% garnet inclusions. A sharp lower contact intersecting at 40 TCA.
7.87	17.23	9.36	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 5% diopside alteration badns parallel to foliation. 1-2% thin quartz-carbonate stringers. <1% brown biotite alteration. A 20 cm and a 33 cm intermiate dyke near the lower contact. a sharp lower contact intersecting at 40 TCA.
17.23	18.14	0.91	6E	intermediate feldspar porphyry dyke. 15% medium grained rounded plagioclasse phenocrysts in an aphenetic intermediate matirx. Moderately foliated intersecting at 40 TCA. Weak pervasive silicic alteration. <1% fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
18.14	43.45	25.31	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 45 TCA. 20-25% thin diopside alteration bands parallel to foliation. <1% thin quartz-carbonate veinlets. A 47 cm intermediate dyke at 25.35 m depth. Trace pyrite. A sharp lower contact intersecting at 45 TCA.
43.45	44.11	0.66	6E	intermediate dyke. Dark purple-grey colour. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. Anhedral crystals. 3% silica flooded bands. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.
44.11	65.84	21.73	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 45 TCA. 2% brown biotite alteration bands. 1-2% diopside alteration. No visible sulphides. A sharp lower contact intersecting at 15 TCA.
65.84	66.50	0.66	4D	felsite dyke. Light beige-white colour. Subhedral to anhedral crystals. 10% biotite and 90% felsic grains. No veining. No visible sulphides. A sharp lower contact intersecting at 65 TCA.
66.50	76.20	9.70	1A	massive mafic volcanic flow. Dark green-grey colour. Fine grained to aphenetic. Moderately foliated intersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. 1% thin quartz-carbonate stringers. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
76.20	77.34	1.14	6E	intermediate dyke. Dark purple-grey colour. Fine to medium grained, subhedral crystals. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 4% silica flooded bands. <1% very fine grained disseminated pyrite. A sharp lower contact intersecting at 20 TCA.
77.34	78.07	0.73	4D	felsite dyke. Light grey to white colour. Anhedral crystals. Strong silica content. No veining. No visible sulphides. A sharp, irregular lower contact intersecting at roughly 20 TCA.

From	To	Interval	Code	Description
78.07	122.23	44.16	1A	massive mafic volcanic flow. Dark grey-green to black colour. Moderately foliated intersecting at 45 TCA. 15% diopside alteration bands parallel to foliation. Trace brown biotite alteration. An erratic felsite dyke running down part of the core between 100.85 and 101.65 m depth and a 38 cm felsite dyke at 107.8 m depth. a sharp lower contact intersecting at 40 TCA.
122.23	122.80	0.57	4D	felsite dyke. Light greyish colour. Fine grained, anhedral crystals. 3% quartz veining. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
122.80	123.20	0.40	1A	massive mafic volcanic flow. Dark grey colour. 5% green diopside alteration bands parallel to foliation. Moderately foliated intersecting at 45 TCA. 1% brown biotite alteration. No veining. Trace pyrite. A sharp lower contact intersecting at 45 TCA.
123.20	124.77	1.57	6E	intermediate feldspar porphyry dyke. Dark purple-grey colour. 10% medium to coarse grained plagioclasse phenocrysts in an aphenetic intermediate matrix. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 1% thin quartz veinlets. <1% very fine grained disseminated pyrite. a sharp lower contat intersecting at 50 TCA.
124.77	133.91	9.14	1A	massive mafic volcanic flow. Dark grey-green to black colour. 15% diopside alteration bands parallel to foliation. 1-2% thin quartz-carbonate stringers. Trace pyrite. A sharp lower contact intersecting at 45 TCA.
133.91	134.80	0.89	6F	mafic dyke. Dark grey to black colour. Medium grained subhedral crysals. Trace pervasive silicic alteration. Moderately foliated intersectign at 45 TCA. No veining. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
134.80	176.00	41.20	1A	massive mafic volcanic flow. Dark grey-green colour. Moderately foliated intersecting at 50 TCA. 15% thin green diopside alteration bands parallel to foliation. Local thin iron formations around 141.0 to 143.0 m depth. 1% quartz veinlets. A 33 cm felsite dyke at 161.5 m depth. trace pyrope garnets. trace pyrite. a gradational lower contact.
176.00	205.38	29.38	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 50 TCA. 1% brown biotite alteration bands. 3% thin diopside alteration bands parallel to foliation. <1% quartz veinlets. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
205.38	206.49	1.11	6E	intermediate feldspar porphyry dyke. 25% coarse grained plagioclasse phenocrysts in an aphenetic, dark grey intermediate matrix. moderately foliated intersecting at 50 TCA. weak pervasive silicic alteration. <1% quartz veinlets. 1% fine grained to very fine grained disseminated pyrite. a sharp, irregular lower contact into a felsite dyke.
206.49	244.00	37.51	1A	massive mafic volcanic flow. Dark grey colour. Fine grianed to aphenetic. Moderately foliated intersecting at 50 TCA. 15% thin diopside alteration bands parallel to foliation. 1% brown biotite alteration bands. <1% thin pyrrhotite seams. A 35 cm felsite dyke at the upper contact. a 38 cm porphyritic mafic dyke at 234.35 m depth. <1% quartz veinlets. a gradational lower contact.

From	To	Interval	Code	Description
244.00	249.92	5.92	1Z/3D	porphyritic mafic volcanic flow. Dark grey to black colour. Moderately foliated intersecting at 50 TCA. 1% thin quartz-carbonate veinlets. Trace pyrrhotite grading to a weak iron formation near the lower contact. A sharp lower contact intersecting at 50 TCA.
249.92	251.24	1.32	6E	intermediate dyke. Very dark grey-purple colour. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. A 15 cm white, bull-quartz vein at 250.5 m depth. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
251.24	268.01	16.77	1A	massive mafic volcanic flow. Dark grey to black colour. Fine grained crystals. Moderately foliated intersecting at 50 TCA. 1-2% brown biotite alteration bands. 3% very thin, fracture controlled diopside alteration. <1% quartz-carbonate stringers. A 41 cm intermediate dyke at 258.4 m depth. a weak shear just below the intermeidate dyke with up to 3% fine grained disseminated pyrite mineralizationa dn 2% quartz veining. a sharp lower contact intersecting at 60 TCA.
268.01	268.79	0.78	6E	intermediate dyke. Dark grey-purple colour. Moderately folated intersecting at 60 TCA. Weak to moderate pervasive silicic alteration. 4% silica flooded bands. 2% very fine grained disseminated pyrite. A sharp lower contact intersecting at 60 TCA.
268.79	291.98	23.19	1A	massive mafic volcanic flow. Dark grey colour. 15% green diopside alteration bands parallel to foliation. 1% felsic pegmatite dykelets. <1% quartz veinlets. A 42 cm intermediate dyke at 283.98 m depth. Trace pyrite. A sharp lower contact intersecting at 50 TCA.
291.98	293.20	1.22	6E	intermediate dyke. Dark purple-grey colour. 15% silica flooded bands with a porphyritic texture. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. <1% quartz veinlets. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
293.20	314.50	21.30	1A	massive mafic volcanic flow. Dark grey to black coloru. Fine grained to aphenetic crystalsd. Moderately foliated intersecting at 55 TCA. 15% green diopside alteration bands parallel to foliation. 1% quartz veinlets. Trace pyrite. A gradational lower contact broken by a felstie dyke.
314.50	315.42	0.92	SH/1A	UPPER ZONE. Sheared mafic volcanic flow. Dark grey-green colour. Moderately sheared and strongly foliated intersecting at 45 TCA. 25% diopside alteration. 5% brown biotite alteration. 10% quartz veining. 2-3% pyrrhotite mineralization in quartz. A sharp lower contact intersecting at 45 TCA.
315.42	322.52	7.10	SH/6E	UPPER ZONE. Sheared intermediate dyke. Moderately sheared and strongly foliated intersecting at 45 TCA. Dark greyish coluor. 5% brown biotite alteration. Weak to moderate pervasive silicic alteration. 8% dark grey quartz veining. 5 SPECKS OF VG in quartz veining. 3% fine grained disseminated, seamed and ribboned pyrrhotite and pyrite. trace galena. a sharp lower contact intersecting at 50 TCA.
322.52	326.33	3.81	1A	massive mafic volcanic flow. Dark grey-green colour. Moderately foliated intersecting at 50 TCA. 10% green diopside alteration bands parallel to foliation. A 27 cm quartz stockwork in an intermediate dyke at 323.18 m depth. Trace pyrite/pyrrhotite. A sharp lower contact intersecting at 55 TCA.

From	To	Interval	Code	Description
326.33	327.04	0.71	QV	quartz vein. Mostly glassy white. Weakly fractured. 5% mafic inclusions. <1% pyrite around contacts. A sharp lower contact intersecting at 55 TCA.
327.04	342.26	15.22	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 50 TCA. 5% diopside alteration. Locally pillowed with well defined, black pillow selvages. 2-3% quartz veinlets. A small felsite dyke near the bottom contact. A sharp lower contact intersectign at 40 TCA.
342.26	343.48	1.22	6E	intermediate dyke. Dark puyrple-grey colour. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 3% felsite dykelets. 1-2% very fine grained disseminated pyrite and pyrrhotite. No veining. A sharp lower contact intersecting at 50 TCA.
343.48	347.12	3.64	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 50 TCA. 5% diopside alteration bands parallel to foliation. 1-2% thin quartz veinlets. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
347.12	348.23	1.11	6E	intermediate feldspar porphyry dyke. 25% coarse grained plagioclasse phenocrysts in an aphenetic, dark purple-grey matrix. Trace pervasive silicic alteration. Trace very fine grained disseminated pyrite, pyrrhotite. A sharp lower contact intersecting at 35 TCA.
348.23	351.72	3.49	1A	massive mafic volcanic flow. Dark green-grey ciolour. 10% thick diopside alteration bands parallel to foliation. Moderately foliated intersecting at 50 TCA. A 10 cm quartz vein at 349.45 m depth. No visible sulphides. A sharp lower contact intersecting at 45 TCA.]
351.72	352.47	0.75	6E	intermediate dyke. Dark pyrple-grey colour. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteation. Subhedral to anhedral crystals. <1% very fine grained disseminated pyrite and pyrrhottie. A sharp lower contact intersecting at 50 TCA.
352.47	360.84	8.37	1A	massive mafic volcanic flow. Dark green-grey colour. Moderately foliated intersecting at 50 TCA. 10% diopside alteration bands parallel to foliation. A 34 cm intermediate dyke at 357.42 m depth. <1% thin quartz-carbonate stringers. Trace pyrite. Weakly neared in spots near the lower contact. a sharp lower contact intersecting at 45 TCA.
360.84	362.66	1.82	SH/6E	LOWER ZONE. Sheared intermediate dyke. Moderaely sheared and strongly foliated intersecting at 55 TCA. Weak pervasive silicic alteration. 3% quartz veining. 2-3% very fine grained disseminated and ribboned pyrite and pyrrhotite. A sharp irregular lower contact.
362.66	363.52	0.86	QV	LOWER ZONE. Quartz vein. Light to dark grey colour. Moderately fractured. 8% mafic inclusions near the lower contact. 3% seamed and diesseminated pyrrhotite. 1% fine grained disseminated pyrite. Trace fine grained galena. 5 SPECKS VG. A sharp lower contact intersecting at 55 TCA.
363.52	364.69	1.17	SH/6E	LOWER ZONE. Sheared intermediate dyke. Medium grey colour. Moderately sheared and strongly foliated intersecting at 55 TCA. Moderate pervasive silicic alteration. 3-4% quartz veining. 1-2% fine to very fine grained disseminated pyrite and pyrrhotite, mostly around quartz veining. a sharp lower contact intersecting at 50 TCA.

From	To	Interval	Code	Description
364.69	372.97	8.28	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 55 TCA. 15% diopside alteration bands parallel to foliation. 1% thin quartz and quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
372.97	377.34	4.37	4D	felsite dyke. Medium beige colour. Weakly foliated intersecting at 50 TCA. Moderate pervasive sericite alteration. Anhedral crystals. No veining. No visible sulphides. A sharp lower contact intersecting at 40 TCA.
377.34	380.37	3.03	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Moderately to weakly foliated intersecting at 55 TCA. 5% diopside alteration bands parallel to foliation. 2-3% quartz veining. <1% brown biotite alteration. No visible sulphides. a sharp lower contact intersecting at 50 TCA.
380.37	380.92	0.55	6E	intermediate feldspar porphyry dyke. 25% medium to coarse grained, rounded plagioclasse phenocrysts in an aphenetic, intermediate matrix. Weakly foliated intersecting at 50 TCA. Trace pervasive silicic alteration. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
380.92	382.63	1.71	1A	massive mafic volcanic flow. Dark grey to black colour. Aphenetic crystals. Weakly foliated intersecting at 50 TCA. 2% thin quartz-carbonate stringers. No visible sulphides. 15 cm of intermediate dyke at the lower contact. A sharp lower contact intersecting at 15 TCA.
382.63	388.07	5.44	6B	medium grained granodiorite dyke. Subhedral crystals. 55% plagioclasse feldspar, 30% quartz and 15% hornblende and biotite. Locally anhedral. <1% quartz veining. No visible sulphides. A sharp lower contact intersecting at 15 TCA.
388.07	393.00	4.93	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Weakly foliated intersecting at 50 TCA. 4% thin diopside alteration badns parallel to foliation. 1-2% thin quartz veinlets. No visible sulphides.
393.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876932	258.40	258.83	0.43	6E	intermediate dyke. Wk shear. Wk perv sil alt. 2% vfg diss py.	0.019
876933	258.83	259.50	0.67	SH/1A	sheared mafic volcanic. Mod sh. Str fol. 15% brown bio alt. 10% diop alt. 3% qv. 2% fg-vfg diss py.	0.022
876934	259.50	260.00	0.50	1A	mafic volcanic flow. Mod fol. No veining. Nvs.	0.097
876935	313.80	314.50	0.70	1A	mafic volcanic flow. Mod fol. 10% diop alt. 3% felsite. No veining. Nvs.	0.037
876936	314.50	315.00	0.50	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 25% diop alt. 15% brown bio alt. 25% qv. 4% po/py in qv.	4.720
876937	315.00	315.42	0.42	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 25% diop alt. 10% brown bio alt. 5% qv. 2% fg diss po, py in qv.	2.260
876938	315.42	316.15	0.73	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 4% sil flooded bands. 2% qv. 2% vfg diss po.	0.021
876939	316.15	316.85	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 3% qv. 2% vfg diss po.	0.212
876940	316.85	317.55	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 2% sil flooded bands. 1% qv. 1% vfg diss po/py.	0.035
876941	317.55	318.25	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 30% sh mafic incl. 5% qv. 3% vfg diss po, py.	0.240
876942	318.25	318.95	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 10% qv. 4% fg diss po,py. Tr gl. 3 SPECKS VG.	1.900
876943	318.95	319.65	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 35% sh mafic incl. 5% qv. 3-4% vfg diss and ribboned po,py.	0.460
876944	319.65	320.35	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 2% sil flooded bands. 2% vfg diss po.	0.097
876945	320.35	321.05	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. St perv sil alt. 1% thin qcv. 2% vfg diss po.	0.075
876946	321.05	321.75	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 1% qv. 1% vfg diss po,py.	0.177
876947	321.75	322.52	0.77	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 20% qv. 2% vfg diss po, py.	0.015
876948	322.52	323.17	0.65	1A	mafic volcanic flow. Mod fol. 3% diop alt. 2% qv. 1% brown bio alt. tr py.	0.139
876949	323.17	323.46	0.29	QTSW/6E	quartz stockwork in an intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 35% qv. <1% vfg diss py, po.	0.122
876950	323.46	324.46	1.00	1A	mafic volcanic flow. Mod fol. 12% diop alt. 2% brown bio alt. 1% thin qcs. Tr py.	0.051
876951	324.46	325.40	0.94	1A	mafic volcanic flow. Mod fol. 10% diop alt. 1% qv. Nvs.	0.019
876952	325.40	326.33	0.93	1A	mafic volcanic flow. Mod fol. 15% diop alt. no veining. Nvs.	0.010

Sample #	From	To	Interval	Code	Description	Au (ppm)
876953	326.33	327.04	0.71	QV	quartz vein. Wk frac. 5% mafic incl. <1% py around contacts.	0.003
876954	327.04	327.50	0.46	1A	mafic volcanic flow. Mod fol. 15% qv. <1% py in qtz. 10% diop alt. <1% grn.	0.013
876955	327.50	328.03	0.53	1A	mafic volcanic flow. Mod fol. 8% diop alt. no veining. Nvs.	0.006
876956	359.00	359.60	0.60	1A	mafic volcanic flow. Mod fol. 5% diop alt. <1% thin qcs. Nvs.	0.011
876957	359.60	360.20	0.60	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 15% diop alt. 3% brown bio alt. <1% thin qcs. Nvs.	0.022
876958	360.20	360.84	0.64	SH/1A	sheared mafic volcanic flow. Wk sh. Mod fol. 1% qv and thin qcs. Tr py.	0.078
876959	360.84	361.45	0.61	SH/6E	sheared interemediate dyke. Mod sh. Str fol. Mod perv sil alt. 1% vfg diss po, py.	0.237
876960	361.45	362.05	0.60	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 2% thin qv. 2% vfg diss py, po.	1.300
876961	362.05	362.66	0.61	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 5% qv. 3% vfg diss and ribboned po, py.	0.253
876962	362.66	363.52	0.86	QV	quartz vein. Mod frac. Med-dark grey colour. 5% mafic incl. 3% ribboned and diss fg po. 1% fg diss py. Tr gl. 5 SPECKS VG.	34.200
876963	363.52				Standard CDN-GS-3F	3.150
876964	363.52				Blank - Granite	0.003
876965	363.52	364.15	0.63	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. <1% thin qv. 1% fg diss po, py.	0.178
876966	364.15	364.69	0.54	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. 5% qv. 2% po fg diss and ribboned po. 1% fg diss py. 2% mafic incl.	1.120
876967	364.69	365.30	0.61	1A	mafic volcanic flow. Mod fol. 8% thin diop alt. tr thin qcs. Nvs.	0.493
876968	365.30	366.00	0.70	1A	mafic volcanic flow. Mod fol. 12% diop alt. no veining. Nvs.	0.064

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	HG-12-16
	CLAIM NO:	1055519	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					21-Jul-12	23-Jul-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	643470					
Northing	5409490	Dip:	-50	Dates Logged:	From:	To:
Elevation					23-Jul-12	24-Jul-12
Final		Depth:	180.00	Logged By:	Greg McKay	
Easting	643472.034					
Northing	5409494.253	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	391.697					

Purpose of Hole	To test IP Target
Results	
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
15.0	53.7	-49.2	5769	Reflex Test
39.0	52.9	-48.1	5671	
63.0	52.3	-47.4	5707	
87.0	71.6	-45.0	5664	
111.0	51.4	-43.6	5669	
135.0	50.5	-42.3	5654	
159.0	51.7	-41.5	5642	

From	To	Interval	Code	Description
0.00	4.00	4.00	OB	overburden
4.00	37.70	33.70	1A/3A	mafic volcanic flow and mafic greywacke sediments interbedded. Moderately foliated and bedded intersecting at 45 TCA. Dark grey colour. 15% brown biotite alteration bands parallel to foliation. 2-3% and locally up to 15% thin quartz and quartz-carbonate veinlets, mostly parallel to foliation and bedding. 1-2% pyrope garnets, mostly in brown biotite altered areas. trace fine grained or seamed pyrrhotite, mostly in the quartz. a sharp lower contact intersecting at 50 TCA.
37.70	54.40	16.70	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic with a mottled texture. Moderately foliated intersecting at 45 TCA. Moderate pervasive brown biotite alteration. <1% quartz-carbonate veinlets. No visible sulphides. A sharp lower contact intersecting at 55 TCA.
54.40	67.00	12.60	1A/3A	mafic volcanic flow and mafic greywacke sediments interbedded. Moderately foliated and bedded intersecting at 50 TCA. Dark grey and locally dark purple-grey colour. 15% brown biotite alteration bands parallel to foliation. 1-2% and locally up to 15% thin quartz and quartz-carbonate veinlets, mostly parallel to foliation and bedding. trace pyrope garnets, mostly in brown biotite altered areas. trace fine grained or seamed pyrrhotite. a gradational lower contact.
67.00	93.97	26.97	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Weakly foliated intersecting at 55 TCA. 1% brown biotite alteration bands parallel to foliation. 1% thin quartz veinlets and stringers. A 15 cm granite dyke at 88.3 m depth. a sharp lower contact intersecting at 50 TCA.
93.97	94.60	0.63	6E	intermediate dyke. Intermediate granodiorite dyke. Medium grained, subhedral crystals. Moderately foliated intersecting at 50 TCA. Weak pervasive silicic alteration. 3% quartz veining. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 50 TCA.
94.60	130.00	35.40	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly foliated intersecting at 55 TCA. 2% and locally up to 8% brown biotite alteration. <1% thin quartz and quartz-diopside stringers. A gradataional lower contact.
130.00	131.10	1.10	QTSW/1A	quartz stockwork in a massive mafic volcanic flow. Dark grey-brwon colour. Aphenetic crystals. Weakly foliated intersecting at 55 TCA. 40% pervasive brown biotite alteration. 15% quartz veining up to 4 cm across. No visible sulphides. A gradational lower contact.
131.10	180.00	48.90	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly foliated intersecting at 55 TCA. 1% brown biotite alteration. <1% thin quartz and quartz-diopside stringers. A 17 cm intermediate feldspar porphyry dyke at 138.5 m depth. A 12 cm bull quartz vein at 161.35 m depth.
180.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876969	63.50	64.40	0.90	QTSW/1A	quartz stockwork in a mafic volcanic flow. 25% qv. 3% brown bio alt. tr py in qtz.	0.003
876970	64.40	65.30	0.90	QTSW/1A	quartz stockwork in a mafic flow. Mod fol. 15% qv. Tr py in qtz. 1% brown bio alt. 2% diop alt.	0.003

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	HG-12-17
	CLAIM NO:	4228497	Drill Rig	Major-50

Location		Drill Hole Orientation				
UTM Zone 16				Dates Drilled:	From: 24-Jul-12	To: 26-Jul-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	643790					
Northing	5409050	Dip:	-50	Dates Logged:	From: 27-Jul-12	To: 27-Jul-12
Elevation						
Final		Depth:	195.00	Logged By:	Greg McKay	
Easting	643794.135					
Northing	5409039.411	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	411.289					

Purpose of Hole	Test IP Target
Results	
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
12.0	59.7	-50.2	5816	Magnetic
36.0	50.5	-49.8	5663	
60.0	52.9	-49.1	5672	
84.0	50.7	-49.7	5649	
108.0	49.2	-47.1	5652	
132.0	50.2	-48.9	5645	
156.0	50.0	-48.3	5649	
180.0	47.5	-47.0	5708	

From	To	Interval	Code	Description
0.00	2.66	2.66	OB	overburden
2.66	10.87	8.21	1A/3A	interbedded mafic volcanic flow and greywacke/argillite sediments. Moderately foliated and bedded intersectign at 40 TCA. Dark grey to dark grey-brown colour. <1% diopside alteration bands. <1% quartz veining. A sharp lower contact intersecting at 40 TCA.
10.87	11.49	0.62	6E	intermediate feldspar porphyry dyke. 15% rounded, medium grained plagioclasse pehnocrysts in a dark grey-brown aphenetic matrix. Moderately foliated intersecting at 40 TCA. Weak to moderate pervasive silicic alteration. 5-6% fine grained disseminated pyrite. a sharp lower contact intersecting at 40 TCA.
11.49	34.00	22.51	1A/3A	Interbedded mafic volcanic flow and greywacke/argillite sediments. Moderately foliated and bedded intersectign at 40 TCA. Dark grey to dark grey-brown colour. 5% and locally up to 15% pyrope garnets up to 10 mm across. <1% diopside alteration bands. 1-2% quartz veining including a 25 cm quartz-carbonate stockwork at 32.85 m depth. a gradational lower contact.
34.00	39.50	5.50	1A	massive mafic volcanic flow. Dark to medium greyish-green colour. Fine to medium grained. Moderately foliated intersecting at 45 TCA. Moderate pervasive diopside alteration. 2% quartz and quartz-carbonate veinlets and stringers. No visible sulphides. A gradational lower contact.
39.50	53.25	13.75	1A/3A	Interbedded mafic volcanic flow and greywacke/argillite sediments. Moderately foliated and bedded intersectign at 45 TCA. Dark grey to dark grey-brown colour. 1% pyrope garnets up to 5 mm across. 3% diopside alteration bands. 1-2% quartz stringers. A sharp lower contact intersecting at 50 TCA.
53.25	54.96	1.71	7A	diabase dyke. Medium-dark grey colour. Fine grained to aphenetic crystals. <1% thin yellowish quartz stringers. Weakly magnetic. No visible sulphides. A sharp lower contact intersecting at 50 TCA.
54.96	68.30	13.34	1A/3A	Interbedded mafic volcanic flow and greywacke/argillite sediments. Moderately foliated and bedded intersectign at 45 TCA. Dark grey to dark grey-brown colour. trace pyrope garnets. weak locally pervasive silicic alteration. 3% diopside alteration bands in the mafic volcanics. 1-2% quartz stringers. no visible sulphides...
68.30	72.80	4.50	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Weakly to moderately foliated intersecting at 45 TCA. 10% diopside alteration. 1-2% thin quartz-carbonate stringers. No visible sulphides. A gradational lower contact.
72.80	80.77	7.97	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Weakly foliated intersecting at 45 TCA. 1-2% diopside alteration. 2% quartz veining. <1% fracture controlled epidote alteration. 1% brown biotite alteration. A gradational lower contact.
80.77	82.00	1.23	4D	felsite dyke. Light beige colour. Moderately foliated intersecting at 45 TCA. Anhedral crystals. Weakly fractured and fracture filled. <1% thin quartz-carbonate stringers. No visible sulphides. A gradational lower contact.

From	To	Interval	Code	Description
82.00	108.56	26.56	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Moderately to strongly foliated intersecting at 45 TCA. 1% brown biotite alteration. Weak pervasive diopside alteration. 2-3% quartz stringers and quartz-carbonate-epidote veinlets. No visible sulphides. a sharp lower contact intersecting at 35 TCA.
108.56	109.63	1.07	6E	intermediate feldspar porphyry dyke. 15% rounded, medium grained plagioclasse pehnocrysts in a dark grey-brown aphenetic matrix. Moderately foliated intersecting at 45 TCA. Weak pervasive silicic alteration. 3-4% very fine grained disseminated pyrite. A sharp lower contact intersecting at 60 TCA.
109.63	128.59	18.96	1A	massive mafic volcanic flow. Dark grey colour. Weakly foliated intersecting at 45 TCA. Fine grained crystals. Fark grey colour. 1-2% diopside and epidote alteration bands, mostly parallel to foliation. A 40 cm intermediate feldspar porphyry dyke at 116.9 m depth. and a 41 cm bull quartz vein at 122.1 m depth. no visible sulphides. a sharp lower cotnact intersecting at 35 TCA.
128.59	129.41	0.82	6E	intermediate feldspar porphyry dyke. 20% coarse grained plagioclasse phenocrysts in a fine to medium grained intermediate matrix. Weakly to moderately foliated interssecting at 40 TCA. Weak pervasive silicic alteration. No veining. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
129.41	139.00	9.59	1A	massive mafic volcanic flow. Dark grey colour. Aphenetic crystals. Moderately foliated intersecting at 45 TCA. Weak locally pervasive brown biotite alteration. 1% thin quartz veinlets and stringers. A 43 cm intermediate feldspar porphyry dyke at 157.95 m depth. no visible sulphides. a sharp lower contact intersecting at 55 TCA.
139.00	140.31	1.31	6E	intermediate feldspar porphyry dyke. Dark grey colour. 15% coarse grained plagioclasse phenocrysts in a dark grey, fine grained intermediate matrix. Moderately foliated intersecting at 50 TCA. No veining. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 55 TCA.
140.31	141.89	1.58	1A	massive mafic volcanic flow. Dark green-grey colour. Aphenetic crystals. Moderately foliated itnersecting at 55 TCA. 2% quartz veinlets. 1-2% brown biotite alteration bands. No visible sulphides. A sharp lower contact intersecting at 45 TCA.
141.89	142.66	0.77	6E	intermediate feldspar porphyry dyke. 25% coarse grained plagioclasse phenocrysts in a fine grained, dark grey intermediate matrix. Weakly to moderately foliated intersecting at 45 TCA. Trace pervasive silicic alteration. Trace very fine grained disseminated pyrite. no veining. a sharp lower contact intersecting at 45 TCA.
142.66	167.61	24.95	1A	massive mafic volcanic flow. Dark grey colour. Fine grained to aphenetic crystals. Moderately foliated intersecting at 45 TCA. <1% diopside alteration bands. <1% quartz veining. Trace very fine grained pyrite in quartz. A sharp lower contact intersecting at 50 TCA.
167.61	168.35	0.74	6E	intermediate feldspar porphyry dyke. 30% coarse grained plagioclasse phenocrysts in a fine grained intermediate matrix. Weakly foliated intersecting at 45 TCA. Trace pervasive silicic alteration. Trace very fine grained disseminated pyrite. A sharp lower contact intersecting at 45 TCA.

From	To	Interval	Code	Description
168.35	180.10	11.75	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained crystals. Weakly foliated intersecting at 45 TCA. 1% quartz-carbonate veinlets. Locally pillowed. No visible sulphides. A sharp lower contact intersecting at 35 TCA.
180.10	182.12	2.02	6E	intermediate feldpspar porphyry dyke. 10% medium grained plagioclasse phenocrysts in an aphenetic, intermediate matirx. Weakly to locally moderately foliated intersecting at 40 TCA. 5% silica flooded bands parallel to foliation. Trace very fine grained disseminated pyrite. a sharp lower contact intersecting at 35 TCA.
182.12	195.00	12.88	1A	massive mafic volcanic flow. Dark greyish-green colour. Aphenetic crystals. Weakly foliated intersecting at 40 TCA. Locally pillowed. 1% brown biotite alteration bands parallel to foliation. 1-2% thin quartz-carbonate stringers. No visible sulphides.
195.00				E.O.H.

HG-12-17

Sample #	From	To	Interval	Code	Description	Au (ppm)
876971	10.30	10.87	0.57	1A/3A	mafic volcanic flow interbedded with greywacke. Mod fol/bed. 8% garnet. No veining. Nvs.	0.003
876972	10.87	11.49	0.62	6E	intermediate feldspar porphyry dyke. Mod fol. Mod perv sil alt. 5-6 fg diss py.	0.003
876973	11.49	12.00	0.51	1A/3A	mafic volcanic flow interbedded with greywacke. Mod fol/bed. 4% diop alt. No veining. Nvs.	0.003
876974	108.00	108.56	0.56	1A	mafic volcanic flow. Mod fol. 2% brown bio alt. no veining. Nvs.	0.003
876975	108.56	109.10	0.54	6E	intermediate feldspar porphyry dyke. Mod fol. Wk perv sil alt. 5% sil flooding. 3-4% vfg diss py.	0.003
876976	109.10	109.63	0.53	6E	intermediate feldspar porphyry dyke. Mod fol. Wk perv sil alt. 3-4% vfg diss py.	0.003
876977	109.63	110.20	0.57	1A	mafic volcanic flow. Mod fol. 5% qv. 1-2% fg py in qtz.	0.003

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	WZ-12-33
	CLAIM NO:	1069314	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					27-Jul-12	29-Jul-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	644380					
Northing	5409570	Dip:	-50	Dates Logged:	From:	To:
Elevation					28-Jul-12	30-Jul-12
Final		Depth:	171.00	Logged By:	Greg McKay	
Easting	644390.039					
Northing	5409584.086	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	401.520					

Purpose of Hole	To Test IP Target North of Wolf Zone.
Results	11.5 m os shear similar to wolf zone from 36.0 to 47.5 m depth.
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
15.0	52.2	-50.8	5781	Reflex Test
39.0	52.3	-50.2	5688	
63.0	51.8	-50.2	5680	
87.0	52.3	-50.3	5602	
111.0	50.9	-49.3	5686	
135.0	50.5	-48.5	5688	
159.0	50.4	-47.3	5695	

From	To	Interval	Code	Description
0.00	3.60	3.60	OB	overburden
3.60	7.57	3.97	6B	gabbro in a larger migmatite unit. Coarse grained subhedral to euhedral crystals. Black colour. 65% amphibole, 25% plagioclasse, 10% biotite and olivine. <1% thin quartz veinlets. Trace fine grained disseminated pyrite. A sharp, irregular lower contact.
7.57	14.12	6.55	5A	coarse grained granite as part of a larger migmatite unit. Light grey to white colour. Weakly foliated intersecting at 75 TCA. Subhedral crystals. 30% quartz, 40% plagioclasse, 20% hornblende and 10% biotite and muscovite. Trace fine grained pyrite. 8% mafic inclusions up to 3 cm across. two mafic volcanic inclusions 40 and 60 cm across at 10.7 and 11.75 m depth respectively. a sharp lower contact intersecting at 75 TCA.
14.12	17.38	3.26	6B	gabbro in a larger migmatite unit. Coarse grained subhedral to euhedral crystals. Dark grey colour. 65% amphibole, 25% plagioclasse, 10% biotite and olivine. <1% thin quartz stringers. Trace fine grained disseminated pyrite. A sharp lower contact intersecting at 30 TCA.
17.38	18.44	1.06	5A	coarse grained granite as part of a larger migmatite unit. Light grey to white colour. Weakly foliated intersecting at 75 TCA. Subhedral crystals. 30% quartz, 40% plagioclasse, 20% hornblende and 10% biotite and muscovite. 8% mafic inclusions up to 3 cm across. <1% fine to medium grained pyrite along edges of mafic inclusions]. a sharp lower contact intersecting at 35 TCA.
18.44	19.31	0.87	1A	massive mafic volcanic flow inclusion. Dark green-grey colour. 15% diopside alteration. 2-3% quartz veinlets. 1% brown biotite alteration. Trace pyrite. A sharp lower contact intersecting at 55 TCA.
19.31	20.48	1.17	5A	coarse grained granite as part of a larger migmatite unit. Light grey to white colour. Weakly foliated intersecting at 75 TCA. Subhedral to euhedral crystals. 30% quartz, 40% plagioclasse, 20% hornblende and 10% biotite and muscovite. 2-3% mafic inclusions up to 3 cm across. trace fine to medium grained pyrite along edges of mafic inclusions. a sharp lower contact intersecting at 40 TCA.
20.48	21.15	0.67	6B	gabbro as part of a larger migmatite unit. Coarse grained subhedral crystals. Dark grey colour. 65% amphibole, 25% plagioclasse, 10% biotite and olivine. strongly broken up rock. no veining. No visible sulphides. A sharp irregular lower contact.
21.15	23.42	2.27	5A	coarse grained granite as part of a larger migmatite unit. Light grey to white colour. Subhedral to euhedral crystals. 30% quartz, 40% plagioclasse, 20% hornblende and 10% biotite and muscovite. 2-3% mafic inclusions up to 2 cm across. strong fractured and broken rock. no visible sulphides. a sharp lower contact intersecting at 50 TCA.
23.42	24.96	1.54	1A	massive mafic volcanic flow inclusion. Dark grey colour. Moderately foliated intersecting at 40 TCA. 2% thin diopside alteration bands. <1% thin quartz veinlets. Trace fine grained disseminated pyrite. A sharp lower contact intersecting at 40 TCA.
24.96	31.11	6.15	5A	coarse grained granite as part of a larger migmatite unit. Light grey to white colour. Subhedral to euhedral crystals. weakly foliated intersecting at 55 TCA. 30% quartz, 40% plagioclasse, 20% hornblende and 10% biotite and muscovite. 3-5% mafic inclusions up to 3 cm across. a 45 cm mafic flow inclusion at 28.95 m depth. locally strongly fractured and broken rock. trace pyrite in mafic inclusions. a sharp lower contact intersecting at 65 TCA.

From	To	Interval	Code	Description
31.11	33.67	2.56	1A	massive mafic volcanic flow. Dark grey colour. Fine grained crystals. Trace foliation intersecting at 80 TCA. 4-5% and locally up to 12% fine to medium grained disseminated pyrite. Weakly locally fractured. 1% quartz veining. A sharp lower contact intersecting at 60 TCA.
33.67	36.00	2.33	5B	coarse grained granodiorite as part of a larger migmatite unit. Euhedral to subhedral crystals. 30% plagioclasse, 40% hornblende, 15% biotite and 10% quartz and 5% muscovite. No visible sulphides. Trace local pervasive silicic alteration. No visible sulphides. a sharp lower contact in some broken rock.
36.00	38.36	2.36	SH/1A	sheared mafic volcanic flow. 5% interlayed thin intermediate dykelets. Light green and dark brown colours. Moderately sheared and strongly foliated intersecting at 75 TCA. Well banded colours. 2% quartz veinlets and stringers. <1% thin felsite dykelets. <1% pyrite. a sharp lower contact intersecting at 75 TCA.
38.36	45.37	7.01	SH/6E	sheared intermediate dyke. 20% interlayed sheared mafic volcanics. Dark purple-brown-grey and medium greenish colours. Moderately foliated intersecting at 75 TCA. Weak to trace pervasive silicic aleration and locally strong diopside alteration. locally up to 30% coarse to very coarse pyrope garnets. A 10 cm felsite dyke at 40.4 m depth. 1% quartz veining. 1-2% fine grained disseminated pyrite. a sharp lower contact intersecting at 75 TCA.
45.37	47.50	2.13	SH/1A	sheared massive mafic volcanic flow. Weakly sheared and moderately to strognly foliated intersecting at 70 TCA. Dark green-grey colour. 5% fine grained leucoxene alteration. 2-3% brown biotite alteration, mostly near the lower contact. 10% quartz veining, mostly near the lower contact. 3% diopside alteration bands. 1% fine grained pyrite, mostly near the quartz. a gradational lower contact.
47.50	55.50	8.00	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 75 TCA. 10% medium to fine grained beige leucoxene alteration. 3-4% diopside alteration bands parallel to foliation. <1% thin quartz-carbonate stringers and veinlets, mostly with diopside alteration envelopes. trace pyrite. a gradational lower contact.
55.50	112.00	56.50	1Z	porphyrytic mafic volcanic flow. Dark green-grey colour. Mafic phenocrysts up to 6mm across. Weakly foliated intersecting at 60 TCA. 2-3% thick diopside alteration bands. <1% epidote alteration. 1-2% quartz veinlets. Trace almandine garnets.a 30 cm quartz stockwork at 75.7 m depth and a 40 cm quartz stockwork at 89.55 m depth. a gradational lower contact.
112.00	125.55	13.55	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained crystals. Weakly foliated intersecting at 60 TCA. <1% thin quartz veinlets. No visible sulphides. A gradational lower contact.
125.55	126.30	0.75	QTSW/1A	quartz-stockwork in a massive mafic volcanic flow. 60% irregular quartz veining. Medium white-grey colour. Mafic flow has 15% diopside alteration. <1% almandine garnets. Trace fine grained pyrite. A gradational lower contact.
126.30	133.00	6.70	1A/1Z	massive mafic volcanic flow. Medium to coarse grained dark grey-greenish colour. Subhedral crystals. Weakly foliated intersecting at 60 TCA. 1-2% thin quartz veinlets. No visible sulphides. A gradational lower contact.

From	To	Interval	Code	Description
133.00	136.25	3.25	1A	massive mafic volcanic flow. Dark grey-green colour. Fine grained crystals. Weakly foliated intersecting at 60 TCA. 3-4% thin diopside alteration bands parallel to foliaiton. 1-2% thin quartz and quartz-carbonate stringers. 1% brown biotite alteration. no visible sulphides. a sharp, irregular lower contact.
136.25	136.80	0.55	QV	quartz vein. Light grey-white colour. Weakly fractured and not broken. Trace pyrite near lower contact. A sharp, erratic lower contact.
136.80	171.00	34.20	1B/1A	massive mafic volcanic flow to mafic pillow flow. Dark green-grey colour. Fine grained to aphenetic crystals. Weakly to locally moderately foliated intersecting at 55 TCA. Moderately defined pillow selvages with up to 35% almandine garnet replacement. A 25 cm quartz vein at 146.9 m depth. 4-5% diopside alteration bands parallel to foliation. trace brown biotite alteration.
171.00				E.O.H.

Sample #	From	To	Interval	Code	Description	Au (ppm)
876978	30.66	31.11	0.45	5A	granite. 2% mafic incl. no veining. Nvs.	0.003
876979	31.11	32.00	0.89	1A	mafic volcanic flow. Wk fol. 4% fg-mg diss py. No veining.	0.031
876980	32.00	32.80	0.80	1A	mafic volcanic flow. Wk fol. 6-7% fg-mg diss py. 3% qv.	0.040
876981	32.80	33.67	0.87	1A	mafic volcanic flow. Wk fol. 3-4% fg to mg diss py. No veining.	0.026
876982	33.67	34.50	0.83	5B	granodiorite. No veining. Nvs. Tr perv sil alt.	0.003
876983	34.50	35.30	0.80	5B	granodiorite. No veining. Nvs. Tr perv sil alt.	0.003
876984	35.30	36.00	0.70	5B	granodiorite. No veining. Nvs. Tr perv sil alt.	0.003
876985	36.00	36.60	0.60	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 5% intermediate dykes. Mod perv diop alt. mod local perv sil alt. 2% qv. 1-2% fg diss py.	0.009
876986	36.60	37.20	0.60	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 10% intermediate dykes. Mod perv diop alt. mod local perv sil alt. 2% qv. 1-2% fg diss py.	0.003
876987	37.20	37.80	0.60	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 3% intermediate dykes. Mod perv diop alt. mod local perv sil alt. 2% qv. 1-2% fg diss py.	0.018
876988	37.80	38.36	0.56	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 5% intermediate dykes. Mod perv diop alt. mod local perv sil alt. 3% qv. 1-2% fg diss py.	0.007
876989	38.36				Standard 16A	1.830
876990	38.36				Blank	0.003
876991	38.36	39.06	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Mod perv sil alt. <1% qv. 2% fg diss py.	0.003
876992	39.06	39.76	0.70	SH/6E	sheared intermediate dyke. 40% sh mafic flow incl. mod sh. Str fol. 8% felsite dyke. Wk perv sil alt. 4% fg diss py. No veining.	0.014
876993	39.76	40.46	0.70	SH/6E	sheared intermediate dyke. 45% sh mafic flow incl. mod sh. Str fol. 12% felsite dyke. Wk perv sil alt. no veining. <1% fg diss py.	0.005
876994	40.46	41.16	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. 45% mafic flow incl. wk-mod perv sil alt. 2% thin qcv. 1% fg diss py.	0.003
876995	41.16	41.86	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. 35% mafic incl. wk perv sil alt. no veining. <1% fg diss py.	0.003
876996	41.86	42.56	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. 40% garnet. Wk perv sil alt. 35% mafic flow incl. <1% fg diss py. No veining.	0.003
876997	42.56	43.26	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. 3% garnet. Mod perv sil alt. 1% qv. 1% fg diss py.	0.003
876998	43.26	43.96	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. 5% mafic flow incl. wk-mod perv sil alt. 2% fg diss py.	0.003
876999	43.96	44.66	0.70	SH/6E	sheared intermediate dyke. Mod sh. Str fol. Wk perv sil alt. 3% mafic incl. banded. 2% qv. <1% fg diss py.	0.003
877000	44.66	45.37	0.71	SH/6E	sheared intermediate dyke. Mod sh. Str fol. 15% mafic incl. 2% thin qv. 3-4% fg-vfg diss py.	0.003

Sample #	From	To	Interval	Code	Description	Au (ppm)
878001	45.37	46.10	0.73	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. 15% very thin diop alt. 3% fg lx. Tr py.	0.003
878002	46.10	46.80	0.70	SH/1A	sheared mafic volcanic flow. Wk sh. Str fol. 5% very thin diop alt. 12% fg lx. Tr py. No veining.	0.003
878003	46.80	47.50	0.70	SH/1A	sheared mafic volcanic flow. Mod sh. Str fol. 20% brown bio alt. 2% diop alt. 20% qv. 1% py in qv.	0.003
878004	47.50	48.00	0.50	1A	mafic volcanic flow. Mod fol. 3% diop alt. 5% fg-mg lx alt.	0.003
878005	125.00	125.55	0.55	1A	mafic volcanic flow. Wk fol. <1% thin qv. Nvs.	0.003
878006	125.55	126.30	0.75	QTSW/1A	quartz stockwork in a mafic volcanic flow. 60% white-grey qtz. 15% diop alt in mafic flow. <1% gar. Tr py.	0.018
878007	126.30	127.00	0.70	1A	mafic volcanic flow. Wk fol. No veining. Nvs.	0.003
878008	135.80	136.25	0.45	1A	mafic volcanic flow. Mod fol. 3% diop alt. 1% thin qcs. Nvs.	0.010
878009	136.25	136.80	0.55	QV	quartz vein. Wk frac. Tr py. 5% mafic vol.	0.042
878010	136.80	137.40	0.60	1A	mafic volcanic flow. Mod fol. 5% diop alt. 3% brown bio alt. 1% thin qv. Nvs.	0.045

Harte Gold Corporation	TWP. OR AREA:	Hambleton	HOLE NUMBER:	WZ-12-34
	CLAIM NO:	1069314	Drill Rig	Major-50

Location		Drill Hole Orientation		Dates Drilled:	From:	To:
UTM Zone 16					30-Jul-12	02-Aug-12
Prelim		Azimuth:	50	Drilled By:	Major Drilling	
Easting	644400					
Northing	5409720	Dip:	-50	Dates Logged:	From: 02-Aug-12	To: 06-Aug-12
Elevation						
Final		Depth:	162.00	Logged By:	Greg McKay/Brogan Kiss	
Easting	644394.508					
Northing	5409716.784	Core Size:	NQ	Assayed By:	Activation Laboratories Ltd, Thunder Bay	
Elevation	408.753					

Purpose of Hole	Te test IP Target north of Wolf Zone
Results	
Comments	Core Stored at White River Core Yard.

azimuth corrected to 7.2 degrees west declination

Dip Tests

Depth	Az.	Dip	Mag	Notes
15.0	50.2	-49.8	5759	Reflex Test
39.0	48.1	-48.9	5656	
66.0	49.3	-48.6	5647	
90.0	43.3	-47.8	5668	Magnetic
114.0	47.0	-47.2	5666	
138.0	42.9	-46.9	5656	Magnetic

From	To	Interval	Code	Description
0.00	6.30	6.30	OB	overburden
6.30	21.00	14.70	1A	massive mafic volcanic flow. Dark grey colour. Slightly mottled texture. Weakly foliated intersecting at 60 TCA. Fine to medium grained, subhedral crystals. No veining. No visible sulphides. A gradational lower contact.
21.00	35.10	14.10	1B	mafic pillow flow. Dark grey colour. Fine grained to aphenetic crystals. Weak to moderately foliated intersecting at 55 TCA. 10% to locally 25% diopside alteration bands parallel to foliation. 1-2% brown biotite bands, mostly near lower contact. <1% quartz veining, mostly in diopside alteration. trace fine grained pyrrhotite. weakly magnetic around pyrrhotite. gradational lower contact.
35.10	72.00	36.90	1A	massive mafic volcanic flow. Dark grey-green colour. Weak to moderately foliated intersecting at 60 TCA. Fine to medium grained crystals. 10-15% diopside alteration bands parallel to foliation. A 32 cm quartz vein at 40.68 m depth. Trace brown biotite alteration. trace pyrrhotite. weakly locally magnetic around pyrrhotite. trace almandine garnets. trace fracture filled-filled pyrite. a 15 cm quartz vein at 66.95m depth with up to 2% fine grained pyrite...
72.00	80.00	8.00	1Z	coarse grained, porphyritic mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 75 TCA. 1% quartz-carbonate veining. No visible sulphides. A gradational lower contact.
80.00	90.70	10.70	1B	mafic pillow flow. Dark grey colour. Well defined black pillow selvages with 5% almandine garnet replacement. Fine grained crystals. Moderately foliated intersecting 65 TCA. 15% diopside alteration bands parallel to foliation. <1% quartz-calcite veinlets and blebs. <1% fine grained pyrrhotite. weakly magnetic around pyrrhotite. gradational lower contact.
90.70	95.50	4.80	1A	massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 65 TCA. Trace diopside alteration. 1% quartz-calcite veinlets. Trace very fine grained disseminated pyrrhotite. Gradational lower contact.
95.50	96.60	1.10	SH/1A	sheared mafic volcanic flow. Dark reddish-grey colour. Weakly to moderately sheared and strongly foliated intersecting at 70 TCA. Trace diopside alteration, banded, parallel to foliation. Moderately pervasive brown biotite alteration. 5% thin quartz-calcite veinlets. <1% banded and disseminated pyrrhotite. locally weakly magentic around pyrrhotite. gradational lower contact.
96.60	106.40	9.80	1B	mafic pillow flow. Dark grey-green colour. Poorly defined pillow selvages. Weakly foliated intersecting at 65 TCA. <1% diopside alteration bands parallel to foliation. <1% pyrope garnets in pillow selvages. Locally 1% epidote blebs with fine grained pyrope garnets. 2-3% quartz-calcite stringers. 1% very fine to fine grained pyrrhotite. weakly magnetic. gradational lower contact.
106.40	117.50	11.10	1A	medium grained massive mafic volcanic flow. Dark grey colour. Moderately foliated intersecting at 70 TCA. 15% brown biotite alteration bands parallel to foliation. <1% garnets. 3% thin quartz-calcite veinlets. Locally 1% fine grained pyrite. A gradational lower contact.

From	To	Interval	Code	Description
117.50	130.30	12.80	1B	mafic pillow flow. Well defined black pillow selvages. Dark grey colour. Fine grained crystals. Moderately foliated intersecting at 70 TCA. 5% diopside alteration bands, mostly near lower contact. Locally 15% brown biotite alteration, mostly near the lower contact. 5-10% fine to coarse grained garnet replacement, mostly in pillow selvages. 8% thin quartz-calcite veinlets. no visible sulphides. a gradational lower contact.
130.30	162.00	31.70	1Z/1A	medium grained mafic flow to locally porphyritic near the upper contact grading to fine grained near the lower contact. Dark grey colour. Moderately foliated intersecting at 65 TCA. 5 to locally 15% diopside alteration parallel to foliation. Locally pillowed. 1-2% thin quartz-calcite veinlets. <1% disseminated and banded pyrrhotite.
162.00				E.O.H.

WZ-12-34

Sample #	From	To	Interval	Code	Description	Au (ppm)
878011	66.69	67.20	0.51	QTSW/1A	quartz stockwork in a mafic volcanic. Wk sh. Mod fol. 1-2% gar. 35% qv. 2% fg py in qtz.	0.003
878012	95.50	96.60	1.10	SH/1A	shear zone in mafic volcanic. Wk-mod sh. Str fol. Mod perv brown bio alt. 5% qv. <1% fg po ban/diss	0.003

Sample #	Date	Sampler	UTM East (NAD 83)	UTM North (Nad 83)	Elevation	Zone/Area	Rock Type Code	Description	Analyte Symbol	Au
									Unit Symbol	ppb
									Detection Limit	5
									Analysis Method	FA-AA
659467	**Apr 30-12**	TH-GM-TT	643877	5409435		Wolf Zone Grid		grey & rusty qv, from old hemlo gold trench, glossy texture, 2% tourmaline, 5% mafic vol with 3-5% vfg sulphides(py)	659467	**< 5**
659468		TH-GM-TT	643877	5409435		Wolf Zone Grid		white-grey qv, from old hemlo gold trench, 3% mafic vol, 1% mg py near contact	659468	< 5
659469		TH-GM-TT	643877	5409435		Wolf Zone Grid		strongly foliated mafic possibily sediment. Rusty weathered colour, 3-4% fg-vfg diss py	659469	15
659470		TH-GM-TT	643877	5409435		Wolf Zone Grid		strongly foliated mafic possibily sediment. Rusty weathered colour, 3-4% fg-vfg diss py	659470	14
659471		TH-GM-TT	644042	5409087		Wolf Zone Grid		course grained gabbro, rusty weathered colour, biotite alt, 1% fg diss py, <1% very thini qcs	659471	6
659472		TH-GM-TT	643861	5409365		Wolf Zone Grid		mod foliated mafic vol, very rusty colour, wk perv silicic alt, 2-3% fg diss py	659472	551
659473		TH-GM-TT	644042	5409087		Wolf Zone Grid		rusty course grained gabbro, wk foliated, wk perv sil alt, biotite alt, 1-2% vfg diss py	659473	**10**
659474		TH-GM-TT	644082	5409142		Wolf Zone Grid		rusty argillite sediment, mod perv sil alt, thinly laminated, NVS	659474	< 5
659475		TH-GM-TT	644028	5409085		Wolf Zone Grid		mafic vol, rusty weathered colour on weathered surface, mod perv silicic alt, wk foliation, 2-3% vfg diss py	659475	< 5
659476		TH-GM-TT	644030	5409085		Wolf Zone Grid		mafic vol, rusty weathered colour on weathered surface, laminated, wk-mod perv sil alt, 1-2% fg diss py	659476	6
659477		TH-GM-TT	644030	5409085		Wolf Zone Grid		mafic sediment, wk rusty colour on weathered surface, laminated, wk-mod perv sil alt, 3-5% fg diss py	659477	< 5
659478		TH-GM-TT	644034	5409085		Wolf Zone Grid		cherty, finely laminated mafic sediments, isolated bands of muscovite schist, <1% fg-vfg py	659478	< 5
659479	**May 1-12**	TH-GM-TT	645243	5407259		Dayo East		cherty, finely laminated sediment, rusty zone 2-3m wide exposed, 1% fg diss py	659479	< 5
659480	**May 7-12**	TH	645346	5409023		Wolf Zone Grid		M/V float, 80% qtz-qv, rusty surface colour, chl alt, 1-2% py	659480	< 5
659481		TH	645345	5409021		Wolf Zone Grid		M/V float, 80% qtz-qv, rusty surface colour, chl alt, 1-2% py	659481	< 5
659482		TH	645342	5409016		Wolf Zone Grid		Float- qtz-qv, rusty surface colour, chl alt, 1% py	659482	< 5
659483		TH	645340	5409015		Wolf Zone Grid		Float- qtz-qv, rusty surface colour, chl alt, 1% py	659483	< 5
659484	**May 17-12**	TH	643055	5409284		Halverson Grid		Trench 1- loose rock near trench, silica flooded/strongly silicifed muscovite schist, white fresh colour, rusty surface colour, wk biotite alt, <1% py.	659484	< 5
659485	**May 15-12**	GM	642981	5408958		Halverson Grid		very rusty mafic vol boulder near shore of Dayohesarrah, fine grained, non magnetic, 10% fg diss py	659485	< 5
659486		GM	642459	5408984		Halverson Grid		fine grained mafic volcanic, moderately foliated, rusty weathered colour, 3% rusty qv, tr vfg py, from trench 2(near Lake)	659486	< 5
659487		GM	642956	5408980		Halverson Grid		fine grained mafic vol, wk foliated, wk perv sil alt, rusty colour, 1% fg diss py, trench 2	659487	< 5
659488	**May 17-12**	TH	642958	5408983		Halverson Grid		Trench #2 -- strongly silicified m/v, dark rusty colour, wk chl alt, schisty looking, 3-5% fg-mg diss py with a 2 cm band of massive py, mod magnetic. From trench #2 near Dayohessarah Lake, Strike 320-330deg, steep dip 90-100 deg.	659488	< 5

Sample #	Date	Sampler	UTM East (NAD 83)	UTM North (Nad 83)	Elevation	Zone/Area	Rock Type Code	Description	Analyte Symbol	Au
									Unit Symbol	ppb
659489	**May 17-12**	TH	642957	5408982		Halverson Grid		silicified m/v, rusty surface colour, wkly foloiated, 2-3% fg-mg diss py, wk-mod magnetic, Trench 2	659489	< 5
659490	**May 17-12**	TH	643050	5409284		Halverson Grid		Trench #1-- sheared sediment, rusty surface colour, strongly silicified, 10-20% muscovite&biotite alt, 1% vfg diss py, trace cpy. Non magnetic. not sure on strike/dip- big slabs of rock/shear in rusty soil, rocks are either frost heive or not from far.	659490	< 5
659491	**May 17-12**	TH	643050	5409284		Halverson Grid		qtz-vein on contact with sheared sed(659490), very rusty stained colour qtz, 5% muscovite in around contact area, 1% py in fractures and in around contact area. Trench 1	659491	< 5
659492	**May 17-12**	TH	643051	5409284		Halverson Grid		silica flooded-strongly silicified muscovite schist/sed. 10% biotite alt, 1-2% vfg diss py, tr cpy Trench 1	659492	< 5
659493	**May 17-12**	TH	643052	5409284		Halverson Grid		sheared sed. Strongly silicified, 10-20% biotite alt, 3-5% vfg diss py, <1% cpy	659493	< 5
659494	**May 22-12**	TH	643793	5408789		Halverson Grid		Rusty ultra mafic. Very magnetic, 30-40% vfg magnetite, epidote alt, <1% po	659494	< 5
659495		TH	643755	5408781		Halverson Grid		rusty sed shear zone, finely laminated, 20-30% qtz-qtz stringers. <1% sulphides	659495	< 5
659496		TH	643755	5408776		Halverson Grid		strongly sheared rusty sed. Tr py	659496	< 5
659497		TH	643757	5408759		Halverson Grid		rusty ultr mafic. Wk-mod mag, wkly sheared/schisted. Tr py	659497	6
659498		TH	643728	5408873		Halverson Grid		rusty sed zone, 30-40% qtz, strongly altered, tr py	659498	< 5
659499		TH	643907	5409265		Wolf Zone Grid		sed floats, very rusty and finely laminated. silicified. 1% py	659499	38
659500		TH	644713	5408669		Wolf Zone Grid		silica facies Iron Formation. 10-20% bands of magnetite. 1% py-po	659500	15
1370001	**May 29-12**	TH	643861	5409365		Wolf Zone Grid		Samples 1370001-1370005 are from a bunch of floats found in soil in an area together where 1 ran 555ppb. #1 - rusty sed float, 20-30% qvs, biotite alt, 1-2% diss py, non magnetic	1370001	162
1370002		TH	643861	5409365		Wolf Zone Grid		#2 - finely laminated/sheared rusty sed float, 30-40% qtz stringers, non magnetic, biotite alt, 1-2% diss py	1370002	131
1370003		TH	643861	5409365		Wolf Zone Grid		#3 - biotite schist float, rusty brownm non magnetic. Tr py	1370003	1060
1370004		TH	643861	5409365		Wolf Zone Grid		#4 - sheared rusty sed float, 20-30% qtz stringers, non magnetic, biotite alt, 1-2% diss py	1370004	1700
1370005		TH	643861	5409365		Wolf Zone Grid		#5 - finly laminated sed float, 5% qtz, biotite alt, non magnetic, 1% diss py	1370005	1040
1370006	**June 6-12**	TH	643271	5408869		Halverson Grid		silicified volcanic. Rusty float boulder.tr py	1370006	<5
1370007	**June 13-12**	TH-GM	642267	5407191		Halverson Grid		rusty iron formation. Strongly foliated. Mod-str mag. 5% thin qcs. 1% py in qtz	1370007	< 5
1370008		TH-GM	642564	5408610		Halverson Grid		rusty shear zne on shoreline. Mod shear. 1% fine to med grained pyrope garnets. Tr py. Str muscovite-biotite alt	1370008	< 5
1370009		TH-GM	642139	5408610		Halverson Grid		silicified mafic sed, rusty colour. Wk shear zone followed along strike for 60m. Mod perv silic alt1-5% fg diss py, tr chl	1370009	< 5
1370010		TH-GM	642139	5408610		Halverson Grid		silicififed rusty sheared mafic sed. 3-5% qv, 20% fg diss py, mod sh	1370010	10
1370011		TH-GM	642166	5408648		Halverson Grid		rusty mafic sed, 10% thin qv, wk-mod bio alt, <1% fg diss py	1370011	< 5
1370012		TH-GM	642181	5408758		Halverson Grid		rusty mafic sed, finely bedded, rusty and weathered. 1-2% vfg py	1370012	12
1370013	**June 14-12**	TH-GM	642776	5409297		Halverson Grid		rusty altered mafic vol. 3-5m wide rusty outcrop. 1% vfg diss po-py, tr cpy	1370013	**< 5**

Sample #	Date	Sampler	UTM East (NAD 83)	UTM North (Nad 83)	Elevation	Zone/Area	Rock Type Code	Description	Analyte Symbol	Au
									Unit Symbol	ppb
1370014		TH-GM	642784	5409298		Halverson Grid		rusty altered mafic vol. 3-5m wide rusty outcrop. 1% vfg diss po-py, tr cpy	1370014	< 5
1370015		TH-GM	642965	5409453		Halverson Grid		silicified mafic vol, very rusty, wkly sheared, 1% vfg diss py-po	1370015	< 5
1370016		TH-GM	642982	5409466		Halverson Grid		silicified mafiv/vol, rusty surface colour, biotite/carb alt, wkly sheared, 1-2% diss py-po, wkly mag	1370016	< 5
1370017		TH-GM	643054	5409356		Halverson Grid		very rusty sed, huge float-possibly outcrop. Siliciifed with muscovite alt, finely laminated, 1-2% vfg diss py	1370017	8
1370018		TH-GM	643061	5409356		Halverson Grid		silicifифed sed. Finely laminated, muscovite alt, very rusty. Outcrop. 5% qtz, 1-2% vfg diss py,	1370018	14
1370019		TH-GM	643081	5409337		Halverson Grid		silicififed sed. Finely laminated, muscovite alt, very rusty. Outcrop. 5% qtz, 1-2% vfg diss py,	1370019	< 5
1370020		TH-GM	642738	5409192		Halverson Grid		sheared komatiite, str mag, slight rust on weathered surface, effervesent, tr vfg diss py	1370020	< 5
1370021		TH-GM	642828	5409128		Halverson Grid		rusty mafic vol, 1% vfg diss py. Wk shear	1370021	**8**
1370022		TH-GM	642814	5409122		Halverson Grid		rusty mafic vol, 1% vfg diss py. Wk shear	1370022	< 5
1370023		TH-GM	643613	5408486		Halverson Grid		rusty mafic vsed, well bedded cherty, 3-5% thin qv, 2-4% fg py around qtz	1370023	< 5
1370024	**June 15-12**	TH-GM	645752	5405619		Sugar Zone		rusty sheasred mafic vol, mod shear, dark black fresh colour, 1% fg diss py	1370024	130
1370025		TH-GM	645594	5405853		Sugar Zone		mafic sed, rusty colour, 1-2% fg diss py	1370025	< 5
1370026		TH-GM	645466	5406623		Sugar Zone		strongly and silicified mafic vol, mod shear,w 5-10% qv, 3-5% fg diss py	1370026	< 5
1370027		TH-GM	645466	5406626		Sugar Zone		sheared mafic vol, rusty colour, 5% qv, mod shear, 3-5% fg diss and seamed py	1370027	< 5
1370033	**Aug 10-12**	TH-BK	644853	5410284		Wolf Zone Grid		mafic vol, 20% qv, 1-2% py in mostly the qv	1370033	< 5
1370034		TH-BK	644825	5410223		Wolf Zone Grid		qv with <1% py in massive mafic vol, rusty alteration. Esp qtz	1370034	< 5
1370035		TH-BK	643866	5409412		Wolf Zone Grid		sheared biotite schist float,	1370035	30
1370036		TH-BK	643877	5409505		Wolf Zone Grid		sheared biotite schist float,	1370036	7
1370037		TH-BK	643876	5409439		Wolf Zone Grid		sheared biotite schist float,	1370037	15
1370038	**Aug 13-12**	TH	644743	5408665		Wolf Zone Grid		mafic vol, finely laminated, 30-40% qvs, 1% py, rusty sheared.	1370038	8
1370039	**Aug 27-12**	TH	642982	5405226		Gossin Zone		FelsicVolcanic?, 30% qvs, 1% py.SER alt	1370039	< 5
1370040		TH	642934	5405285		Gossin Zone		Qtz muscovite schist, 2-5% py. 10-20% qtz vein	1370040	74
1370041		TH	642934	5405285		Gossin Zone		Qtz muscovite schist, 2-5% py. 10-20% qtz vein	1370041	< 5
1370042		TH	642934	5405285		Gossin Zone		Qtz muscovite schist, 2-5% py. 10-20% qtz vein	1370042	< 5
1370043		TH	642934	5405285		Gossin Zone		Qtz muscovite schist, 2-5% py. 10-20% qtz vein	1370043	< 5
1370044		TH	642928	5405290		Gossin Zone		very rusty qv in a muscovite schist. 5% py	1370044	27
1370045		TH	642945	5405306		Gossin Zone		Qtz muscovite schist, 1% py	1370045	8
1370046		TH	642958	5405338		Gossin Zone		rusty qv in a mafic float, possible sub-crop. Tr py	1370046	< 5
1370047		TH	642934	5405285		Gossin Zone		sample from in shop, qtz muscovite schist	1370047	78
1370048	**Aug 28-12**	TH	642934	5405285				granite out-crop from beside road. Rusty brown, tr py	1370048	< 5
1370049	**Sept 4-12**	TH	642406	5406327		Dayo West		sediment float, silicified. 2-3% diss py. Sericite alt,	1370049	< 5
1370050		TH	642405	5406334		Dayo West		sediment float, silicified. 2-3% diss py. Sericite alt,	1370050	< 5

Sample #	Date	Sampler	UTM East (NAD 83)	UTM North (Nad 83)	Elevation	Zone/Area	Rock Type Code	Description	Analyte Symbol	Au
									Unit Symbol	ppb
1370051		TH	642404	5406338		Dayo West		silicate facies iron formation, or just a siliciifed sediment., 5-10% py, 1% magnetite, 1% qv	1370051	< 5
1370052		TH	642320	5406266		Dayo West		silicified m/v, <1% py, 1-2m wide rusty zone	1370052	< 5
1370053	**Sept 7-12**	TH	644752	5399418		Dayo West		Rusty Sed zone. Silicified. Tr py	1370053	< 5
1370054		TH	645062	5399424		Dayo West		siliciifed sediment, 2-3% diss py. Magnetic	1370054	< 5
1370055		TH	645062	5399424		Dayo West		siliciifed sediment, 2-3% diss py. Magnetic	1370055	< 5
1370056		TH	645062	5399421		Dayo West		siliciifed sediment, 2-3% diss py. Magnetic	1370056	< 5
1370057		TH	645063	5399412		Dayo West		siliciifed sediment, 2-3% diss py. Magnetic	1370057	< 5
1370058	**Sept 10-12**	TH	647361	5401625		Dayo West		qv on a felsic?, tr py	1370058	< 5
1370059		TH	647337	5401676		Dayo West		grano-diorite, tr py	1370059	< 5
1370060		TH	647221	5401627		Dayo West		silicified sediment, 3% fg diss py, rusty shear	1370060	< 5
1370061	**Sept 11-12**	TH	647685	5396825		Dayo West		rusty sed, sheared with biotite alteration, tr py	1370061	< 5
1370062		TH	647686	5396827		Dayo West		rusty sed, sheared with biotite alteration, tr py	1370062	< 5
1370063		TH	647729	5396829		Dayo West		strongly siliciifed sediment float, rusty colour, biotite alt, tr py	1370063	< 5
1370064		TH	648321	5396620		Dayo West		silicicified sed/vol, sheared, tr py	1370064	< 5
1370065		TH	648318	5396614		Dayo West		sed/felsic biotite breccia? Tr py	1370065	< 5
1370066		TH	648319	5396608		Dayo West		strongly sheared sediment, biotite alt, rusty brown colour, silicified, tr py	1370066	< 5
1370067		TH	648352	5396546		Dayo West		sheared sediment, rusty brown, tr py	1370067	< 5
1370068		TH	648353	5396785		Dayo West		silicified sed float, tr py	1370068	131
1370069	**Sept 12-12**	TH	648747	5395795		Dayo West		rusty sed float with 20-30% qtz veining, tr py	1370069	103
1370070		TH	648811	5395817		Dayo West		strongly altered sed float?, silicifed and cooked., tr py	1370070	28
1370071		TH	648826	5395820		Dayo West		rusty sed float., tr py	1370071	34
1370072		TH	648547	5395868		Dayo West		rusty qv in m/v, tr py&cpy	1370072	< 5
1370073	**Oct 1-12**	TH	644070	5401223		Dayo West		rusty qtz pegmetite float. Tr py	1370073	< 5
1370074		TH	644068	5401223		Dayo West		rusty sed zone, silicified, tr py	1370074	< 5
1370075		TH	643915	5401435		Dayo West		sediment, 10% qvs, tr py	1370075	< 5
1370076		TH	643991	5401260		Dayo West		sed/vol, 20-30% qvs, 1% py	1370076	< 5
1370077		TH	643999	5401233		Dayo West		rusty qtz pegmetite/felsic?. Tr py	1370077	< 5
1370078		TH	644089	5401585		Dayo West		mafic volcanic , 1% py	1370078	< 5
1370079		TH	644085	5401160		Dayo West		felsic volcanic, silicifed, rusty outcrop, 2-3% stringer and diss py	1370079	< 5

Sample #	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
659467																
659468																
659469																
659470																
659471																
659472																
659473																
659474																
659475																
659476																
659477																
659478																
659479																
659480																
659481																
659482																
659483																
659484	0.2	< 0.5	162	76	4	3	< 2	8	0.83	6	< 10	39	< 0.5	< 2	0.17	1
659485	0.2	0.9	127	712	< 1	145	< 2	32	1.59	3	< 10	30	< 0.5	< 2	1.67	47
659486	0.5	0.6	70	394	20	25	2	22	1.73	4	< 10	64	< 0.5	< 2	2.79	10
659487	0.7	0.7	109	398	< 1	25	6	17	1.19	4	< 10	49	< 0.5	< 2	1.87	9
659488	0.5	1	249	320	< 1	167	4	103	1.1	17	< 10	< 10	< 0.5	< 2	0.76	166

Sample #	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
659489	0.5	0.7	162	472	< 1	128	8	50	1.15	3	< 10	49	< 0.5	< 2	1.94	42
659490	0.3	< 0.5	186	109	3	2	3	8	0.89	< 2	< 10	74	< 0.5	< 2	0.06	3
659491	< 0.2	< 0.5	273	67	2	9	2	3	0.19	< 2	< 10	18	< 0.5	< 2	0.03	5
659492	< 0.2	< 0.5	644	126	1	8	4	14	0.76	< 2	< 10	60	< 0.5	< 2	0.09	18
659493	0.3	< 0.5	661	274	1	14	< 2	53	1.72	12	< 10	100	< 0.5	< 2	0.14	24
659494																
659495																
659496																
659497																
659498																
659499																
659500																
1370001																
1370002																
1370003																
1370004																
1370005																
1370006																
1370007																
1370008																
1370009																
1370010																
1370011																
1370012																
1370013																

Sample #	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
1370014																
1370015																
1370016																
1370017																
1370018																
1370019																
1370020																
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1370026																
1370027																
1370033																
1370034																
1370035																
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1370042																
1370043																
1370044																
1370045																
1370046																
1370047																
1370048																
1370049																
1370050																

Sample #	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
~~1370051~~																
1370052																
1370053																
1370054																
1370055																
1370056																
1370057																
1370058																
1370059																
1370060																
1370061																
1370062																
1370063																
1370064																
1370065																
1370066																
1370067																
1370068																
1370069																
1370070																
1370071																
1370072																
1370073																
1370074																
1370075																
1370076																
1370077																
1370078																
1370079																

Sample #	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl
	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm
	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2
	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
659467																
659468																
659469																
659470																
659471																
659472																
659473																
659474																
659475																
659476																
659477																
659478																
659479																
659480																
659481																
659482																
659483																
659484	62	0.78	< 10	< 1	0.35	19	0.14	0.068	0.05	0.16	< 2	1	3	0.04	< 1	< 2
659485	430	7.7	< 10	< 1	0.22	< 10	1.39	0.147	0.074	3.8	4	11	27	0.4	4	< 2
659486	335	4.88	< 10	< 1	0.11	< 10	0.59	0.075	0.083	0.2	< 2	7	194	0.4	< 1	< 2
659487	299	6.41	< 10	< 1	0.12	< 10	0.37	0.075	0.068	0.76	4	7	65	0.37	< 1	< 2
659488	373	14.8	< 10	2	0.22	< 10	0.82	0.085	0.07	11.4	5	6	14	0.28	1	< 2

Sample #	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl
	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm
659489	381	6.16	< 10	< 1	0.14	< 10	0.62	0.085	0.102	2.27	3	8	40	0.33	6	< 2
659490	12	3.13	< 10	< 1	0.45	12	0.18	0.08	0.025	0.36	< 2	2	5	0.09	< 1	< 2
659491	206	2.07	< 10	< 1	0.07	< 10	0.03	0.031	0.003	0.22	< 2	< 1	2	0.01	< 1	< 2
659492	18	1.67	< 10	< 1	0.33	22	0.14	0.116	0.032	0.28	< 2	2	6	0.08	< 1	< 2
659493	98	3.6	< 10	< 1	0.87	13	1.37	0.087	0.044	0.61	< 2	3	3	0.11	< 1	< 2
659494																
659495																
659496																
659497																
659498																
659499																
659500																
1370001																
1370002																
1370003																
1370004																
1370005																
1370006																
1370007																
1370008																
1370009																
1370010																
1370011																
1370012																
1370013																

Sample #	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl
	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm
1370014																
1370015																
1370016																
1370017																
1370018																
1370019																
1370020																
1370021																
1370022																
1370023																
1370024																
1370025																
1370026																
1370027																
1370033																
1370034																
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1370041																
1370042																
1370043																
1370044																
1370045																
1370046																
1370047																
1370048																
1370049																
1370050																

Sample #	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl
	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm
1370051																
1370052																
1370053																
1370054																
1370055																
1370056																
1370057																
1370058																
1370059																
1370060																
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1370075																
1370076																
1370077																
1370078																
1370079																

Sample #	U	V	W	Y	Zr	Au (g/tonne) 0.03 FA-GRA	Au + 100 mesh (g/mt)	Au - 100 mesh (A) g/mt	Au - 100 mesh (B) g/mt	**Total Au g/mt**
	ppm	ppm	ppm	ppm	ppm	g/tonne				
	10	1	10	1	1	0.03				
	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FA-GRA				
659467										
659468										
659469										
659470										
659471										
659472										
659473										
659474										
659475										
659476										
659477										
659478										
659479										
659480										
659481										
659482										
659483										
659484	< 10	11	< 10	3	10					
659485	< 10	136	< 10	11	7					
659486	< 10	104	< 10	8	5					
659487	< 10	105	< 10	5	7					0.0025
659488	< 10	120	< 10	7	8					0.0025

Sample #	U	V	W	Y	Zr	Au (g/tonne) 0.03 FA-GRA	Au + 100 mesh (g/mt)	Au - 100 mesh (A) g/mt	Au - 100 mesh (B) g/mt	**Total Au g/mt**
	ppm	ppm	ppm	ppm	ppm	g/tonne				
659489	< 10	99	< 10	7	6					0.0025
659490	< 10	21	< 10	3	27					0.0025
659491	< 10	3	< 10	< 1	6					0.0025
659492	< 10	22	< 10	3	15					0.0025
659493	< 10	24	< 10	3	20					0.0025
659494										0.0025
659495										0.0025
659496										0.0025
659497										0.006
659498										0.0025
659499										0.038
659500										0.015
1370001										0.162
1370002										0.131
1370003										1.06
1370004										1.7
1370005										1.04
1370006										0.0025
1370007										0.0025
1370008										0.0025
1370009										0.0025
1370010										0.01
1370011										0.0025
1370012										0.012
1370013										0.0025

Sample #	U	V	W	Y	Zr	Au (g/tonne) 0.03 FA-GRA	Au + 100 mesh (g/mt)	Au - 100 mesh (A) g/mt	Au - 100 mesh (B) g/mt	**Total Au g/mt**
	ppm	ppm	ppm	ppm	ppm	g/tonne				
1370014										0.0025
1370015										0.0025
1370016										0.0025
1370017										0.008
1370018										0.014
1370019										0.0025
1370020										0.0025
1370021										0.008
1370022										0.0025
1370023										0.0025
1370024										0.13
1370025										0.0025
1370026										0.0025
1370027										0.0025
1370033										0.0025
1370034										0.0025
1370035										0.03
1370036										0.007
1370037										0.015
1370038										0.008
1370039										0.0025
1370040										0.074
1370041										0.0025
1370042										0.0025
1370043										0.0025
1370044										0.027
1370045										0.008
1370046										0.0025
1370047										0.078
1370048										0.0025
1370049										0.0025
1370050										0.0025

Sample #	U	V	W	Y	Zr	Au (g/tonne) 0.03 FA-GRA	Au + 100 mesh (g/mt)	Au - 100 mesh (A) g/mt	Au - 100 mesh (B) g/mt	**Total Au g/mt**
	ppm	ppm	ppm	ppm	ppm	g/tonne				
1370051										0.0025
1370052										0.0025
1370053										0.0025
1370054										0.0025
1370055										0.0025
1370056										0.0025
1370057										0.0025
1370058										0.0025
1370059										0.0025
1370060										0.0025
1370061										0.0025
1370062										0.0025
1370063										0.0025
1370064										0.0025
1370065										0.0025
1370066										0.0025
1370067										0.0025
1370068										0.131
1370069										0.103
1370070										0.028
1370071										0.034
1370072										0.0025
1370073										0.0025
1370074										0.0025
1370075										0.0025
1370076										0.0025
1370077										0.0025
1370078										0.0025
1370079										0.0025

Quality Analysis ... *Innovative Technologies*

Date Submitted:	27-Feb-12
Invoice No.:	A12-01799
Invoice Date:	01-Mar-12
Your Reference:	Sugar Zone

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C 1B5

ATTN: Vice President George Flach

CERTIFICATE OF ANALYSIS

2 Pulp samples and 63 Rock samples were submitted for analysis.

The following analytical packages were requested:

Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)
Code 1A4 (100mesh)-Tbay Au-Fire Assay-Metallic Screen-500g

REPORT **A12-01799**

Notes:
A representative 500 gram split is seived at 100 mesh (149 micron) with assays performed on the entire +100 mesh and 2 splits of the -100 mesh fraction. A final assay is calculated based on the weight of each fraction.
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876532	< 5								
876533	137								
876534	< 5								
876535	< 5								
876536	< 5								
876537	< 5								
876538	< 5								
876539	< 5								
876540	< 5								
876541	6								
876542	444								
876543	> 3000	4.95							
876544	1700								
876545	352								
876546	2440								
876547	< 5								
876548	20								
876549	< 5								
876550	< 5								
876551	< 5								
876552	< 5								
876553	7								
876554	< 5								
876555	< 5								
876556	< 5								
876557	< 5								
876558	29								
876559	17								
876560	77								
876561	8								
876562	< 5								
876563	< 5								
876564	< 5								
876565	< 5								
876566	< 5								
876567	< 5								
876568	< 5								
876569	< 5								
876570	< 5								
876571	6								
876572	13								
876573	20								
876574	86								
876575	73								
876576	106								
876577	23								
876578	25								
876579	< 5								
876580	80								
876581	28								
876582	19								

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876583	10								
876584	57								
876585	9								
876586	< 5								
876587	82								
876588	199								
876589	> 3000		18.8	28.6	30.1	29.0	18.86	476.20	495.06
876590	< 5								
876591	1190								
876592	> 3000		45.4	33.9	36.4	35.5	15.94	543.60	559.54
876593	> 3000	6.41							
876594	398								
876595	390								
876596	< 5								

Quality Control

Analyte Symbol	Au	Au	Total Au	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g
Detection Limit	5	0.03	0.07	
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT
SP37 Meas			18.3	
SP37 Cert			18.14	
OxE86 Meas	595			
OxE86 Cert	613.00			
OxE86 Meas	604			
OxE86 Cert	613.00			
OxE86 Meas	614			
OxE86 Cert	613.00			
CDN-GS-8B Meas		7.88		
CDN-GS-8B Cert		7.72		
OxF85 Meas	798			
OxF85 Cert	805.000			
OxF85 Meas	784			
OxF85 Cert	805.000			
876541 Orig	6			
876541 Dup	5			
876543 Orig		4.74		
876543 Dup		5.17		
876551 Orig	< 5			
876551 Dup	< 5			
876561 Orig	8			
876561 Split	9			
876561 Orig	8			
876561 Dup	8			
876576 Orig	97			
876576 Dup	114			
876581 Orig	28			
876581 Split	23			
876586 Orig	< 5			
876586 Dup	< 5			
876591 Orig	1190			
876591 Split	1220			
876591 Orig	1210			
876591 Dup	1170			
876596 Orig	< 5			
876596 Dup	< 5			
Method Blank				0.00000

Quality Analysis ... **Actlabs** Innovative Technologies

Date Submitted:	27-Mar-12
Invoice No.:	A12-03206
Invoice Date:	02-Apr-12
Your Reference:	Sugar Zone

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C1B5

ATTN: Vice President Tim Campbell

CERTIFICATE OF ANALYSIS

2 Pulp samples and 64 Rock samples were submitted for analysis.

The following analytical packages were requested:

Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)

REPORT **A12-03206**

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Notes:
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Detection Limit	5	0.03
Analysis Method	FA-AA	FA-GRA
876597	< 5	
876598	< 5	
876599	< 5	
876600	< 5	
876601	< 5	
876602	< 5	
876603	< 5	
876604	< 5	
876605	< 5	
876606	160	
876607	255	
876608	91	
876609	172	
876610	46	
876611	> 3000	5.45
876612	138	
876613	> 3000	8.88
876614	< 5	
876615	90	
876616	67	
876617	243	
876618	> 3000	6.47
876619	764	
876620	92	
876621	60	
876622	12	
876623	98	
876624	399	
876625	6	
876626	< 5	
876627	< 5	
876628	< 5	
876629	< 5	
876630	< 5	
876631	< 5	
876632	5	
876633	< 5	
876634	5	
876635	7	
876636	40	
876637	67	
876638	76	
876639	16	
876640	70	
876641	17	
876642	11	
876643	16	
876644	21	
876645	13	
876646	35	
876647	13	
876648	32	

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Detection Limit	5	0.03
Analysis Method	FA-AA	FA-GRA
876649	60	
876650	403	
876651	> 3000	9.89
876652	< 5	
876653	1510	
876654	114	
876655	1800	
876656	> 3000	3.14
876657	57	
876658	45	
876659	37	
876660	10	
876661	87	
876662	< 5	

Quality Control

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Detection Limit	5	0.03
Analysis Method	FA-AA	FA-GRA
CDN-GS-20A Meas		20.7
CDN-GS-20A Cert		21.12
OxE86 Meas	626	
OxE86 Cert	613.00	
OxE86 Meas	614	
OxE86 Cert	613.00	
OxE86 Meas	606	
OxE86 Cert	613.00	
CDN-GS-2K Meas	2010	
CDN-GS-2K Cert	1970.00	
CDN-GS-2K Meas	2150	
CDN-GS-2K Cert	1970.00	
876616 Orig	62	
876616 Dup	71	
876626 Orig	< 5	
876626 Split	< 5	
876626 Orig	< 5	
876626 Dup	< 5	
876641 Orig	16	
876641 Dup	18	
876646 Orig	35	
876646 Split	32	
876651 Orig	> 3000	
876651 Dup	> 3000	
876656 Orig		3.19
876656 Dup		3.08
876657 Orig	57	
876657 Split	60	
876661 Orig	91	
876661 Dup	84	

Quality Analysis ... *Innovative Technologies*

Date Submitted: 09-May-12
Invoice No.: A12-04889 (i)
Invoice Date: 22-May-12
Your Reference: Sugar Zone

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C 1B5

ATTN: Vice President George Flach

CERTIFICATE OF ANALYSIS

3 Pulp samples and 95 Rock samples were submitted for analysis.

The following analytical packages were requested:
Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)

REPORT **A12-04889 (i)**

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Notes:
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Detection Limit	5	0.03
Analysis Method	FA-AA	FA-GRA
876663	< 5	
876664	< 5	
876665	< 5	
876666	< 5	
876667	< 5	
876668	6	
876669	< 5	
876670	17	
876671	6	
876672	< 5	
876673	< 5	
876674	12	
876675	< 5	
876676	< 5	
876677	< 5	
876678	7	
876679	11	
876680	6	
876681	39	
876682	17	
876683	117	
876684	94	
876685	> 3000	4.29
876686	1810	
876687	< 5	
876688	> 3000	6.53
876689	142	
876690	58	
876691	84	
876692	38	
876693	57	
876694	8	
876695	< 5	
876696	< 5	
876697	6	
876698	6	
876699	< 5	
876700	< 5	
876701	< 5	
876702	< 5	
876703	< 5	
876704	7	
876705	430	
876706	6	
876707	< 5	
876708	7	
876709	< 5	
876710	< 5	
876711	< 5	
876712	24	
876713	16	
876714	937	

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Detection Limit	5	0.03
Analysis Method	FA-AA	FA-GRA
876715	89	
876716	1760	
876717	< 5	
876718	132	
876719	31	
876720	137	
876721	12	
876722	59	
876723	15	
876724	51	
876725	7	
876726	11	
876727	< 5	
876728	50	
876729	14	
876730	12	
876731	36	
876732	35	
876733	47	
876734	460	
876735	> 3000	6.34
876736	< 5	
876737	26	
876738	13	
876739	69	
876740	53	
876741	16	
876742	22	
876743	6	
659467	< 5	
659468	< 5	
659469	15	
659470	14	
659471	6	
659472	551	
659473	10	
659474	< 5	
659475	< 5	
659476	6	
659477	< 5	
659478	< 5	
659479	< 5	
659480	< 5	
659481	< 5	
659482	< 5	
659483	< 5	

Quality Control

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Detection Limit	5	0.03
Analysis Method	FA-AA	FA-GRA
CDN-GS-20A Meas		20.9
CDN-GS-20A Cert		21.12
OxE86 Meas	636	
OxE86 Cert	613.00	
OxE86 Meas	627	
OxE86 Cert	613.00	
OxE86 Meas	630	
OxE86 Cert	613.00	
OxA89 Meas	81	
OxA89 Cert	84	
OxA89 Meas	77	
OxA89 Cert	84	
OxA89 Meas	86	
OxA89 Cert	84	
876672 Orig	< 5	
876672 Dup	< 5	
876682 Orig	17	
876682 Dup	17	
876688 Orig		6.72
876688 Dup		6.35
876692 Orig	38	
876692 Split	36	
876692 Orig	35	
876692 Dup	40	
876707 Orig	< 5	
876707 Dup	5	
876712 Orig	24	
876712 Split	15	
876717 Orig	< 5	
876717 Dup	< 5	
876722 Orig	59	
876722 Split	61	
876727 Orig	< 5	
876727 Dup	< 5	
876742 Orig	31	
876742 Dup	14	
659475 Orig	< 5	
659475 Split	< 5	
659475 Orig	< 5	
659475 Dup	< 5	
659483 Orig	< 5	
659483 Dup	< 5	

Date Submitted: 22-May-12
Invoice No.: A12-05360
Invoice Date: 28-May-12
Your Reference: West

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C 1B5

ATTN: Vice President George Flach

CERTIFICATE OF ANALYSIS

10 Rock samples were submitted for analysis.

The following analytical packages were requested: Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A12-05360**

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

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La	Mg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	%
Detection Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10	0.01
Analysis Method	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
659484	< 5	0.2	< 0.5	162	76	4	3	< 2	8	0.83	6	< 10	39	< 0.5	< 2	0.17	1	62	0.78	< 10	< 1	0.35	19	0.14
659485	< 5	0.2	0.9	127	712	< 1	145	< 2	32	1.59	3	< 10	30	< 0.5	< 2	1.67	47	430	7.70	< 10	< 1	0.22	< 10	1.39
659486	< 5	0.5	0.6	70	394	20	25	2	22	1.73	4	< 10	64	< 0.5	< 2	2.79	10	335	4.88	< 10	< 1	0.11	< 10	0.59
659487	< 5	0.7	0.7	109	398	< 1	25	6	17	1.19	4	< 10	49	< 0.5	< 2	1.87	9	299	6.41	< 10	< 1	0.12	< 10	0.37
659488	< 5	0.5	1.0	249	320	< 1	167	4	103	1.10	17	< 10	< 10	< 0.5	< 2	0.76	166	373	14.8	< 10	2	0.22	< 10	0.82
659489	< 5	0.5	0.7	162	472	< 1	128	8	50	1.15	3	< 10	49	< 0.5	< 2	1.94	42	381	6.16	< 10	< 1	0.14	< 10	0.62
659490	< 5	0.3	< 0.5	186	109	3	2	3	8	0.89	< 2	< 10	74	< 0.5	< 2	0.06	3	12	3.13	< 10	< 1	0.45	12	0.18
659491	< 5	< 0.2	< 0.5	273	67	2	9	2	3	0.19	< 2	< 10	18	< 0.5	< 2	0.03	5	206	2.07	< 10	< 1	0.07	< 10	0.03
659492	< 5	< 0.2	< 0.5	644	126	1	8	4	14	0.76	< 2	< 10	60	< 0.5	< 2	0.09	18	18	1.67	< 10	< 1	0.33	22	0.14
659493	< 5	0.3	< 0.5	661	274	1	14	< 2	53	1.72	12	< 10	100	< 0.5	< 2	0.14	24	98	3.60	< 10	< 1	0.87	13	1.37

Analyte Symbol	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
659484	0.068	0.050	0.16	< 2	1	3	0.04	< 1	< 2	< 10	11	< 10	3	10
659485	0.147	0.074	3.80	4	11	27	0.40	4	< 2	< 10	136	< 10	11	7
659486	0.075	0.083	0.20	< 2	7	194	0.40	< 1	< 2	< 10	104	< 10	8	5
659487	0.075	0.068	0.76	4	7	65	0.37	< 1	< 2	< 10	105	< 10	5	7
659488	0.085	0.070	11.4	5	6	14	0.28	1	< 2	< 10	120	< 10	7	8
659489	0.085	0.102	2.27	3	8	40	0.33	6	< 2	< 10	99	< 10	7	6
659490	0.080	0.025	0.36	< 2	2	5	0.09	< 1	< 2	< 10	21	< 10	3	27
659491	0.031	0.003	0.22	< 2	< 1	2	0.01	< 1	< 2	< 10	3	< 10	< 1	6
659492	0.116	0.032	0.28	< 2	2	6	0.08	< 1	< 2	< 10	22	< 10	3	15
659493	0.087	0.044	0.61	< 2	3	3	0.11	< 1	< 2	< 10	24	< 10	3	20

Quality Control

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La	Mg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	%
Detection Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10	0.01
Analysis Method	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas		30.8	3.4	1250	858	14	35	674	684	0.33	356	11	385	0.8	1430	0.89	1	6	25.7	< 10	3	0.03	< 10	0.13
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50	0.217
GXR-4 Meas		4.0	0.7	6630	171	301	40	55	83	2.66	106	< 10	57	1.3	22	1.09	15	54	3.61	10	1	1.44	49	1.80
GXR-4 Cert		4.00	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5	1.66
GXR-6 Meas		0.3	0.9	76	1130	2	25	107	126	7.01	235	< 10	815	0.8	2	0.18	15	81	6.66	20	< 1	0.98	11	0.42
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9	0.609
OREAS 13P Meas				2780			2270												6.28					
OREAS 13P Cert				2500			2260												7.58					
OxE86 Meas	592																							
OxE86 Cert	613.00																							
659493 Orig	< 5	0.3	< 0.5	661	274	1	14	< 2	53	1.72	12	< 10	100	< 0.5	< 2	0.14	24	98	3.60	< 10	< 1	0.87	13	1.37
659493 Split	< 5	0.4	0.6	686	271	2	14	< 2	50	1.75	16	< 10	102	< 0.5	< 2	0.15	26	98	3.58	< 10	< 1	0.88	14	1.38
659493 Orig	< 5	0.3	0.5	651	283	2	15	< 2	54	1.70	11	< 10	100	< 0.5	< 2	0.15	23	99	3.69	< 10	< 1	0.86	13	1.36
659493 Dup	< 5	0.2	< 0.5	670	266	1	14	< 2	53	1.73	12	< 10	99	< 0.5	< 2	0.14	25	97	3.52	< 10	< 1	0.88	13	1.38
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01

Quality Control

Analyte Symbol	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.059	0.045	0.20	78	1	189		11	< 2	31	71	195	22	12
GXR-1 Cert	0.0520	0.0650	0.257	122	1.58	275		13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	0.120	0.133	1.84	4	7	72		3	< 2	< 10	74	17	11	9
GXR-4 Cert	0.564	0.120	1.77	4.80	7.70	221		0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.107	0.037	0.02	5	23	32		< 1	< 2	< 10	161	< 10	6	11
GXR-6 Cert	0.104	0.0350	0.0160	3.60	27.6	35.0		0.0180	2.20	1.54	186	1.90	14.0	110
OREAS 13P Meas														
OREAS 13P Cert														
OxE86 Meas														
OxE86 Cert														
659493 Orig	0.087	0.044	0.61	< 2	3	3	0.11	< 1	< 2	< 10	24	< 10	3	20
659493 Split	0.087	0.044	0.61	< 2	3	3	0.11	1	< 2	< 10	24	< 10	3	20
659493 Orig	0.087	0.044	0.62	< 2	3	4	0.11	< 1	< 2	< 10	24	< 10	3	20
659493 Dup	0.086	0.043	0.61	< 2	3	3	0.11	< 1	< 2	< 10	23	< 10	3	20
Method Blank	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ... *Innovative Technologies*

Date Submitted: 31-May-12
Invoice No.: A12-05903
Invoice Date: 12-Jun-12
Your Reference: West

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C 1B5

ATTN: Vice President George Flach

CERTIFICATE OF ANALYSIS

12 Rock samples were submitted for analysis.

The following analytical package was requested: Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)

REPORT **A12-05903**

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Notes:
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
659494	< 5
659495	< 5
659496	< 5
659497	6
659498	< 5
659499	38
659500	15
1370001	162
1370002	131
1370003	1060
1370004	1700
1370005	1040

Quality Control

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
OxE86 Meas	637
OxE86 Cert	613.00
1370003 Orig	1010
1370003 Dup	1100
1370005 Orig	1040
1370005 Split	1090

Date Submitted:	13-Jun-12
Invoice No.:	A12-06435
Invoice Date:	25-Jun-12
Your Reference:	Sugar Zone

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C 1B5

ATTN: Vice President George Flach

CERTIFICATE OF ANALYSIS

4 Pulp samples and 107 Rock samples were submitted for analysis.

The following analytical packages were requested:

Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)
Code 1A4 (100mesh)-Tbay Au-Fire Assay-Metallic Screen-500g

REPORT **A12-06435**

Notes:

A representative 500 gram split is seived at 100 mesh (149 micron) with assays performed on the entire +100 mesh and 2 splits of the -100 mesh fraction. A final assay is calculated based on the weight of each fraction.
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876744	< 5								
876745	12								
876746	< 5								
876747	28								
876748	< 5								
876749	< 5								
876750	< 5								
876751	< 5								
876752	< 5								
876753	< 5								
876754	8								
876755	33								
876756	45								
423801	2270								
423802	28								
1370006	< 5								
876757	9								
876758	10								
876759	10								
876760	< 5								
876761	< 5								
876762	6								
876763	< 5								
876764	< 5								
876765	< 5								
876766	< 5								
876767	< 5								
876768	< 5								
876769	< 5								
876770	< 5								
876771	< 5								
876772	67								
876773	44								
876774	30								
876775	880								
876776	293								
876777	1800								
876778	< 5								
876779	28								
876780	773								
876781	131								
876782	15								
876783	12								
876784	< 5								
876785	18								
876786	18								
876787	199								
876788	29								
876789	19								
876790	58								
876791	1780								

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876792	146								
876793	112								
876794	58								
876795	> 3000	3.20							
876796	< 5								
876797	6								
876798	5								
876799	56								
876800	170								
876801	6								
876802	6								
876803	5								
876804	6								
876805	13								
876806	< 5								
876807	< 5								
876808	< 5								
876809	5								
876810	9								
876811	19								
876812	57								
876813	50								
876814	41								
876815	> 3000	4.63							
876816	< 5								
876817	> 3000	6.62							
876818	46								
876819	51								
876820	40								
876821	177								
876822	158								
876823	190								
876824	69								
876825	8								
876826	55								
876827	< 5								
876828	11								
876829	6								
876830	< 5								
876831	12								
876832	12								
876833	< 5								
876834	9								
876835	6								
876836	22								
876837	42								
876838	75								
876839	81								
876840	1780								
876841	> 3000	5.26							
876842	> 3000		489	152	150	162	16.14	482.70	498.84

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876843	> 3000	6.80							
876844	7								
876845	90								
876846	15								
876847	43								
876848	373								
876849	138								
876850	47								
876851	20								

Quality Control

Analyte Symbol	Au	Au	Total Au	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g
Detection Limit	5	0.03	0.07	
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT
CDN-GS-20A Meas		21.3	22.0	
CDN-GS-20A Cert		21.12	21.12	
OxA89 Meas	74			
OxA89 Cert	84			
OxA89 Meas	77			
OxA89 Cert	84			
OxA89 Meas	82			
OxA89 Cert	84			
OxE-101 Meas	631			
OxE-101 Cert	607.000			
OxE-101 Meas	615			
OxE-101 Cert	607.000			
OxE-101 Meas	610			
OxE-101 Cert	607.000			
OxE-101 Meas	624			
OxE-101 Cert	607.000			
876753 Orig	< 5			
876753 Dup	< 5			
876760 Orig	< 5			
876760 Dup	< 5			
876770 Orig	< 5			
876770 Split	< 5			
876770 Orig	< 5			
876770 Dup	< 5			
876785 Orig	19			
876785 Dup	16			
876790 Orig	58			
876790 Split	70			
876796 Orig	< 5			
876796 Dup	< 5			
876800 Orig	170			
876800 Split	159			
876805 Orig	14			
876805 Dup	11			
876820 Orig	36			
876820 Dup	44			
876830 Orig	< 5			
876830 Split	< 5			
876830 Orig	< 5			
876830 Dup	< 5			
876840 Orig	1780			
876840 Split	1570			
876840 Orig	1580			
876840 Dup	1980			
876841 Orig		4.96		
876841 Dup		5.57		
876845 Orig	97			
876845 Dup	84			
876851 Orig	23			
876851 Dup	17			
Method Blank				0.00000

Quality Analysis ... *Innovative Technologies*

Date Submitted: 03-Jul-12
Invoice No.: A12-07063
Invoice Date: 09-Jul-12
Your Reference:

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C1B5

ATTN: Vice President Tim Campbell

CERTIFICATE OF ANALYSIS

21 Rock samples were submitted for analysis.

The following analytical package was requested: Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)

REPORT **A12-07063**

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Notes:
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
1370007	< 5
1370008	< 5
1370009	< 5
1370010	10
1370011	< 5
1370012	12
1370013	< 5
1370014	< 5
1370015	< 5
1370016	< 5
1370017	8
1370018	14
1370019	< 5
1370020	< 5
1370021	8
1370022	< 5
1370023	< 5
1370024	130
1370025	< 5
1370026	< 5
1370027	< 5

Quality Control

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
OxE-101 Meas	621
OxE-101 Cert	607.000
1370016 Orig	< 5
1370016 Dup	< 5
1370026 Orig	< 5
1370026 Dup	< 5
1370027 Orig	< 5
1370027 Split	< 5

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted: 16-Jul-12
Invoice No.: A12-07606
Invoice Date: 24-Jul-12
Your Reference: Sugar Zone

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C1B5

ATTN: Vice President Tim Campbell

CERTIFICATE OF ANALYSIS

75 Core samples and 5 Pulp samples were submitted for analysis.

The following analytical packages were requested:

Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)
Code 1A4 (100mesh)-Tbay Au-Fire Assay-Metallic Screen-500g

REPORT **A12-07606**

Notes:
A representative 500 gram split is seived at 100 mesh (149 micron) with assays performed on the entire +100 mesh and 2 splits of the -100 mesh fraction. A final assay is calculated based on the weight of each fraction.
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876852	51								
876853	20								
876854	13								
876855	< 5								
876856	19								
876857	69								
876858	102								
876859	46								
876860	< 5								
876861	< 5								
876862	< 5								
876863	9								
876864	8								
876865	< 5								
876866	< 5								
876867	< 5								
876868	8								
876869	913								
876870	17								
876871	7								
876872	< 5								
876873	< 5								
876874	< 5								
876875	1780								
876876	< 5								
876877	< 5								
876878	< 5								
876879	< 5								
876880	< 5								
876881	8								
876882	34								
876883	< 5								
876884	224								
876885	1730								
876886	45								
876887	> 3000	6.49							
876888	< 5								
876889	10								
876890	8								
876891	37								
876892	19								
876893	11								
876894	222								
876895	12								
876896	9								
876897	339								
876898	29								
876899	14								
876900	13								
876901	17								
876902	2680								

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876903	768								
876904	1630								
876905	1840								
876906	< 5								
876907	519								
876908	> 3000		456	32.5	29.4	43.3	14.15	472.50	486.65
876909	6								
876910	1740								
876911	190								
876912	153								
876913	385								
876914	43								
876915	7								
876916	14								
876917	9								
876918	49								
876919	73								
876920	15								
876921	26								
876922	306								
876923	> 3000		138	20.2	19.1	22.0	9.120	446.80	455.92
876924	> 3000	6.52							
876925	7								
876926	274								
876927	> 3000		21.8	0.10	0.10	0.57	10.24	464.90	475.14
876928	46								
876929	39								
876930	22								
876931	133								

Quality Control

Analyte Symbol	Au	Au	Total Au	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g
Detection Limit	5	0.03	0.07	
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT
CDN-GS-20A Meas			22.0	
CDN-GS-20A Cert			21.12	
CDN-GS-20A Meas			20.1	
CDN-GS-20A Cert			21.12	
OxK79 Meas		3.51		
OxK79 Cert		3.53		
OxA89 Meas	80			
OxA89 Cert	84			
OxA89 Meas	83			
OxA89 Cert	84			
OxA89 Meas	80			
OxA89 Cert	84			
OxD87 Meas	449			
OxD87 Cert	417.000			
OxD87 Meas	453			
OxD87 Cert	417.000			
OxD87 Meas	447			
OxD87 Cert	417.000			
876861 Orig	< 5			
876861 Dup	< 5			
876871 Orig	6			
876871 Dup	8			
876881 Orig	8			
876881 Split	< 5			
876881 Orig	10			
876881 Dup	6			
876896 Orig	9			
876896 Dup	8			
876901 Orig	17			
876901 Split	31			
876906 Orig	< 5			
876906 Dup	< 5			
876911 Orig	190			
876911 Split	209			
876916 Orig	14			
876916 Dup	14			
876930 Orig	22			
876930 Dup	21			
Method Blank				0.00000
Method Blank				0.00000

Quality Analysis ... **Actlabs** *Innovative Technologies*

Date Submitted:	24-Jul-12
Invoice No.:	A12-07930
Invoice Date:	30-Jul-12
Your Reference:	Sugar Zone

Harte Gold Corp.
8 King Street East, Suite 1700
Toronto Ontario M5C1B5

ATTN: Vice President Tim Campbell

CERTIFICATE OF ANALYSIS

1 Pulp sample and 36 Rock samples were submitted for analysis.

The following analytical packages were requested:

Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)
Code 1A4 (100mesh)-Tbay Au-Fire Assay-Metallic Screen-500g

REPORT **A12-07930**

Notes:

A representative 500 gram split is seived at 100 mesh (149 micron) with assays performed on the entire +100 mesh and 2 splits of the -100 mesh fraction. A final assay is calculated based on the weight of each fraction.
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
876932	19								
876933	22								
876934	97								
876935	37								
876936	> 3000	4.72							
876937	2260								
876938	21								
876939	212								
876940	35								
876941	240								
876942	1900								
876943	460								
876944	97								
876945	75								
876946	177								
876947	15								
876948	139								
876949	122								
876950	51								
876951	19								
876952	10								
876953	< 5								
876954	13								
876955	6								
876956	11								
876957	22								
876958	78								
876959	237								
876960	1300								
876961	253								
876962	> 3000		168	29.6	27.0	34.2	20.71	472.20	492.91
876963	> 3000	3.15							
876964	< 5								
876965	178								
876966	1120								
876967	493								
876968	64								

Quality Control

Analyte Symbol	Au	Au	Total Au	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g
Detection Limit	5	0.03	0.07	
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT
CDN-GS-20A Meas		21.1	20.8	
CDN-GS-20A Cert		21.12	21.12	
OxA89 Meas	81			
OxA89 Cert	84			
OxA89 Meas	77			
OxA89 Cert	84			
OxA89 Meas	84			
OxA89 Cert	84			
OxD87 Meas	438			
OxD87 Cert	417.000			
876941 Orig	248			
876941 Dup	233			
876951 Orig	20			
876951 Dup	19			
876961 Orig	253			
876961 Split	260			
876962 Orig	> 3000			
876962 Dup	> 3000			
876968 Orig	60			
876968 Dup	69			
Method Blank				0.00000

Quality Analysis ... Actlabs Innovative Technologies

Date Submitted:	08-Aug-12
Invoice No.:	A12-08480
Invoice Date:	17-Aug-12
Your Reference:	Sugar Zone

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C1B5

ATTN: Vice President Tim Campbell

CERTIFICATE OF ANALYSIS

1 Pulp sample and 48 Rock samples were submitted for analysis.

The following analytical package was requested: Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)

REPORT **A12-08480**

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Notes:
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
876969	< 5
876970	< 5
876971	< 5
876972	< 5
876973	< 5
876974	< 5
876975	< 5
876976	< 5
876977	< 5
876978	< 5
876979	31
876980	40
876981	26
876982	< 5
876983	< 5
876984	< 5
876985	9
876986	< 5
876987	18
876988	7
876989	1830
876990	< 5
876991	< 5
876992	14
876993	5
876994	< 5
876995	< 5
876996	< 5
876997	< 5
876998	< 5
876999	< 5
877000	< 5
1370028	9
1370029	< 5
1370030	< 5
1370031	< 5
1370032	< 5
878001	< 5
878002	< 5
878003	< 5
878004	< 5
878005	< 5
878006	18
878007	< 5
878008	10
878009	42
878010	45
878011	< 5
878012	< 5

Quality Control

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
OxD87 Meas	421
OxD87 Cert	417.000
OxD87 Meas	434
OxD87 Cert	417.000
876978 Orig	< 5
876978 Dup	< 5
876988 Orig	6
876988 Dup	7
876998 Orig	< 5
876998 Split	< 5
876999 Orig	< 5
876999 Dup	< 5
878008 Orig	9
878008 Dup	10

Date Submitted: 06-Sep-12
Invoice No.: A12-09724
Invoice Date: 13-Sep-12
Your Reference: West

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C1B5

ATTN: Vice President Tim Campbell

CERTIFICATE OF ANALYSIS

20 Rock samples were submitted for analysis.

The following analytical package was requested: Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)

REPORT **A12-09724**

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Notes:
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
133033	< 5
133034	< 5
133035	30
133036	7
133037	15
133038	8
133039	< 5
133040	74
133041	< 5
133042	< 5
133043	< 5
133044	27
133045	8
133046	< 5
133047	78
133048	< 5
133049	< 5
133050	< 5
133051	< 5
133052	< 5

Quality Control

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
OxD87 Meas	465
OxD87 Cert	417.000
133042 Orig	< 5
133042 Dup	< 5
133051 Orig	< 5
133051 Dup	< 5
133052 Orig	< 5
133052 Split	< 5

Quality Analysis ... *Innovative Technologies*

Date Submitted:	03-Oct-12
Invoice No.:	A12-10926
Invoice Date:	18-Oct-12
Your Reference:	West

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C 1B5

ATTN: Vice President George Flach

CERTIFICATE OF ANALYSIS

29 Rock samples were submitted for analysis.

The following analytical package was requested: Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)

REPORT **A12-10926**

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Notes:
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
1370053	< 5
1370054	< 5
1370055	< 5
1370056	< 5
1370057	< 5
1370058	< 5
1370059	< 5
1370060	< 5
1370061	< 5
1370062	< 5
1370063	< 5
1370064	< 5
1370065	< 5
1370066	< 5
1370067	< 5
1370068	131
1370069	103
1370070	28
1370071	34
1370072	< 5
1370073	< 5
1370074	< 5
1370075	< 5
1370076	< 5
1370077	< 5
1370078	< 5
1370079	< 5
423834	< 5
423835	< 5

Quality Control

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
OxD87 Meas	447
OxD87 Cert	417.000
SF57 Meas	925
SF57 Cert	848.000
1370062 Orig	< 5
1370062 Dup	< 5
1370072 Orig	< 5
1370072 Dup	< 5
423835 Orig	< 5
423835 Split	< 5
423835 Split	< 5
Method Blank	< 5
Method Blank	< 5

Date Submitted:	21-Nov-12
Invoice No.:	A12-13068
Invoice Date:	03-Dec-12
Your Reference:	Sugar Zone

Harte Gold Corp.
8 King Street East
Suite 1700
Toronto Ontario M5C1B5

ATTN: Vice President Tim Campbell

CERTIFICATE OF ANALYSIS

18 Rock samples were submitted for analysis.

The following analytical packages were requested:

Code 1A2-50-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay)
Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)
Code 1A4 (100mesh)-Tbay Au-Fire Assay-Metallic Screen-500g

REPORT **A12-13068**

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Notes:
A representative 500 gram split is seived at 100 mesh (149 micron) with assays performed on the entire +100 mesh and 2 splits of the -100 mesh fraction. A final assay is calculated based on the weight of each fraction.
If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited LAB 266
LAB 266 Accrédité CCN

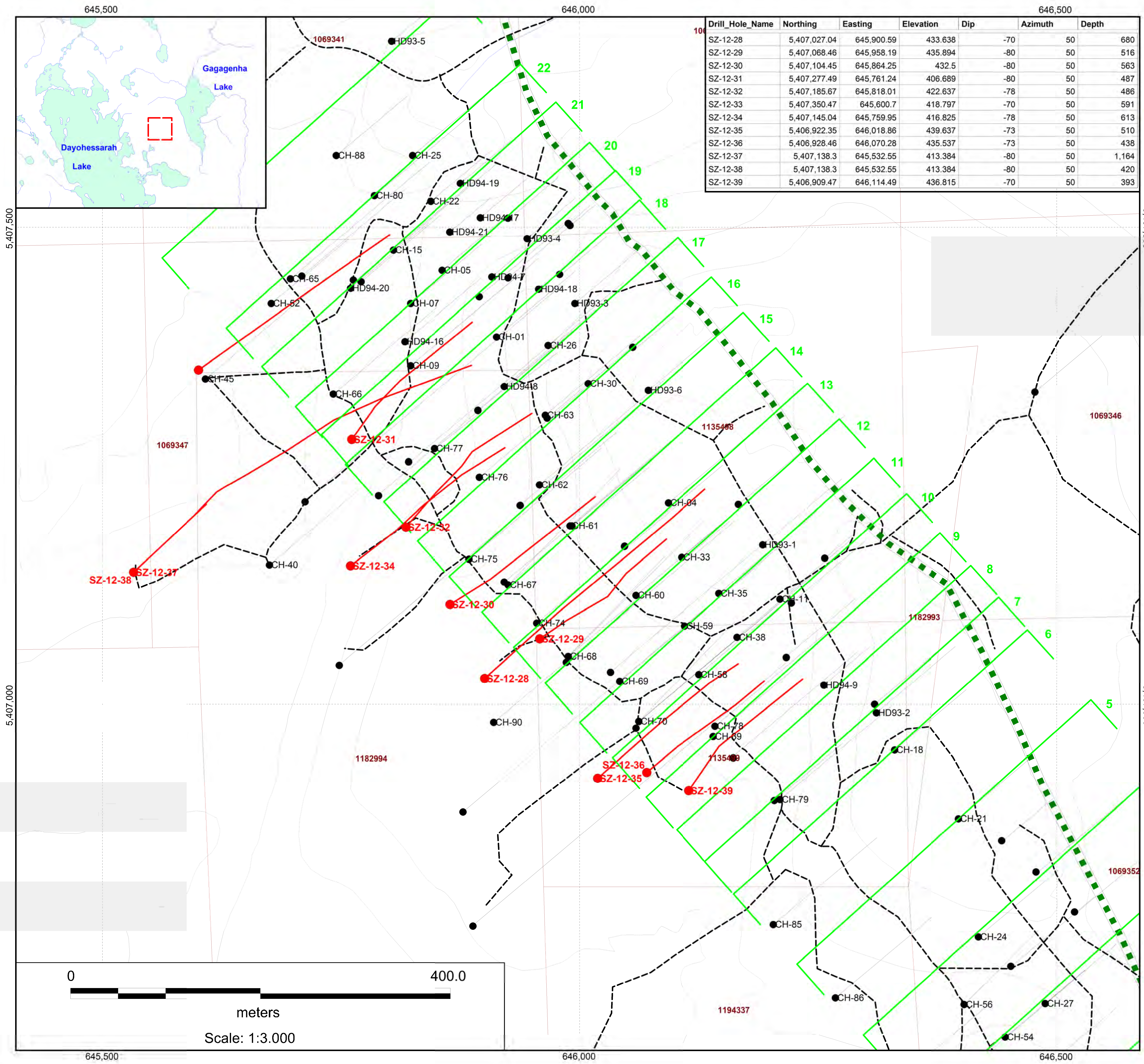
ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au	Au + 100 mesh	Au - 100 mesh (A)	Au - 100 mesh (B)	Total Au	+ 100 mesh	- 100 mesh	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g/mt	g/mt	g/mt	g	g	g
Detection Limit	5	0.03	0.07	0.07	0.07	0.07			
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT	FA-MeT
878051	48								
878052	16								
878053	48								
878054	> 3000	7.73							
878055	107								
878056	99								
878057	738								
878058	959								
878059	35								
878060	> 3000		4.44	12.0	12.2	11.9	11.94	456.00	467.94
878061	68								
878062	383								
878063	138								
878064	199								
878065	> 3000	3.38							
878066	20								
878067	28								
878068	742								

Quality Control

Analyte Symbol	Au	Au	Total Au	Total Weight
Unit Symbol	ppb	g/tonne	g/mt	g
Detection Limit	5	0.03	0.07	
Analysis Method	FA-AA	FA-GRA	FA-MeT	FA-MeT
OxK69 Meas		3.38		
OxK69 Cert		3.583		
SK52 Meas		4.01	4.32	
SK52 Cert		4.107	4.107	
OxD108 Meas	453			
OxD108 Cert	414.000			
SF67 Meas	771			
SF67 Cert	835.000			
SF67 Meas	788			
SF67 Cert	835.000			
878060 Orig	> 3000			
878060 Dup	> 3000			
878068 Orig	742			
878068 Split	693			
878068 Orig	702			
878068 Dup	781			
Method Blank	< 5			
Method Blank		< 0.03		
Method Blank	< 5			
Method Blank				0.00000



Drill_Hole_Name	Northing	Easting	Elevation	Dip	Azimuth	Depth
SZ-12-28	5,407,027.04	645,900.59	433.638	-70	50	680
SZ-12-29	5,407,068.46	645,958.19	435.894	-80	50	516
SZ-12-30	5,407,104.45	645,864.25	432.5	-80	50	563
SZ-12-31	5,407,277.49	645,761.24	406.689	-80	50	487
SZ-12-32	5,407,185.67	645,818.01	422.637	-78	50	486
SZ-12-33	5,407,350.47	645,600.7	418.797	-70	50	591
SZ-12-34	5,407,145.04	645,759.95	416.825	-78	50	613
SZ-12-35	5,406,922.35	646,018.86	439.637	-73	50	510
SZ-12-36	5,406,928.46	646,070.28	435.537	-73	50	438
SZ-12-37	5,407,138.3	645,532.55	413.384	-80	50	1,164
SZ-12-38	5,407,138.3	645,532.55	413.384	-80	50	420
SZ-12-39	5,406,909.47	646,114.49	436.815	-70	50	393

HARTE GOLD CORP

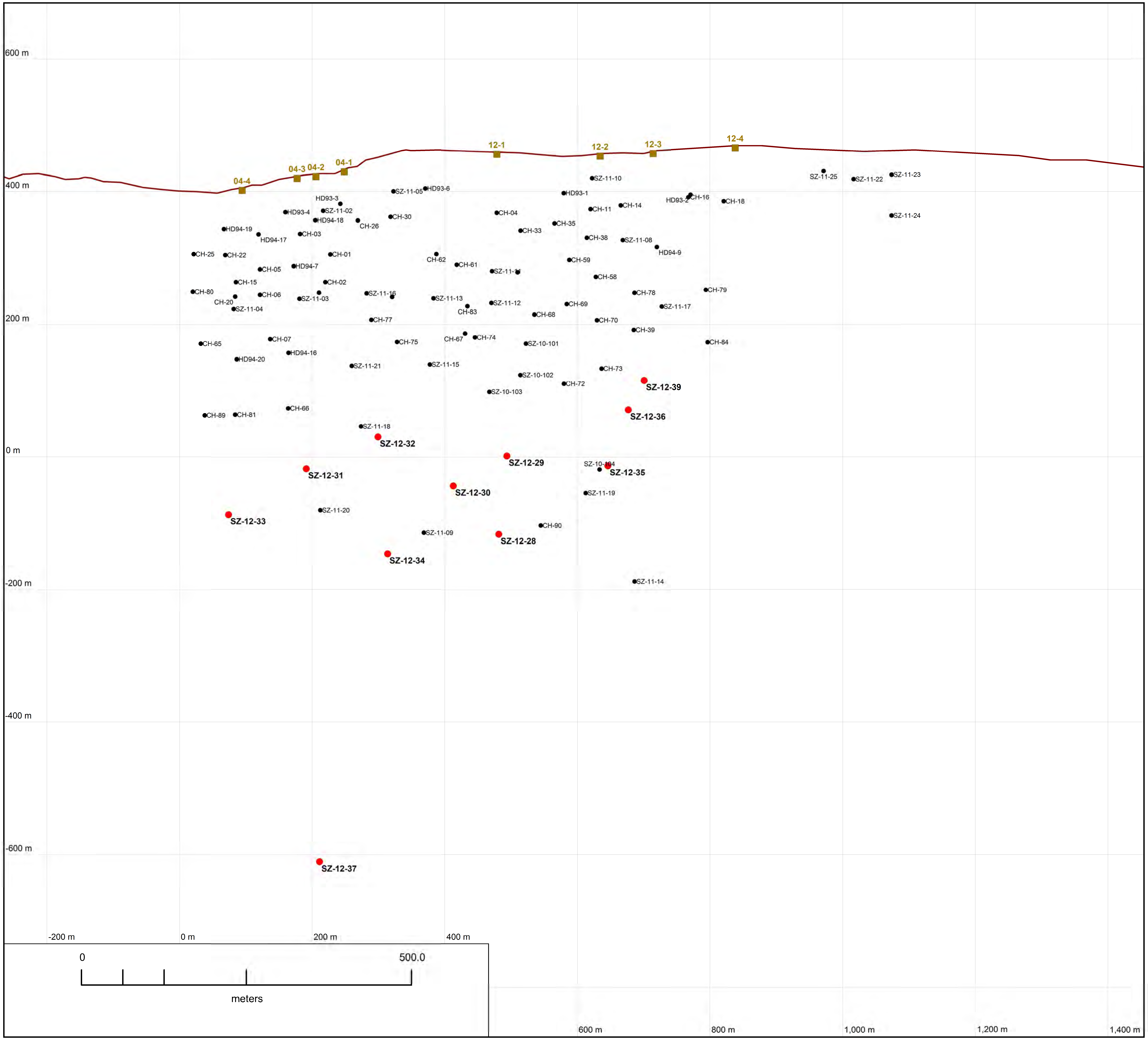
Legend

- 2012 Drill Trace
- 2012 Drill Collar
- Historic Drill Trace
- Historic Drill Collar
- Sugar Zone Surface Trace
- Drill Trails
- Mining Claims
- Vertical Section Breaks

2012 Sugar Zone Drill Program

Plan Section

May 8, 2013
NAD 83 UTM Zone 16



HARTE GOLD CORP

2012 Drill Hole Intercepts

Pre-2012 Drill Hole Intercepts

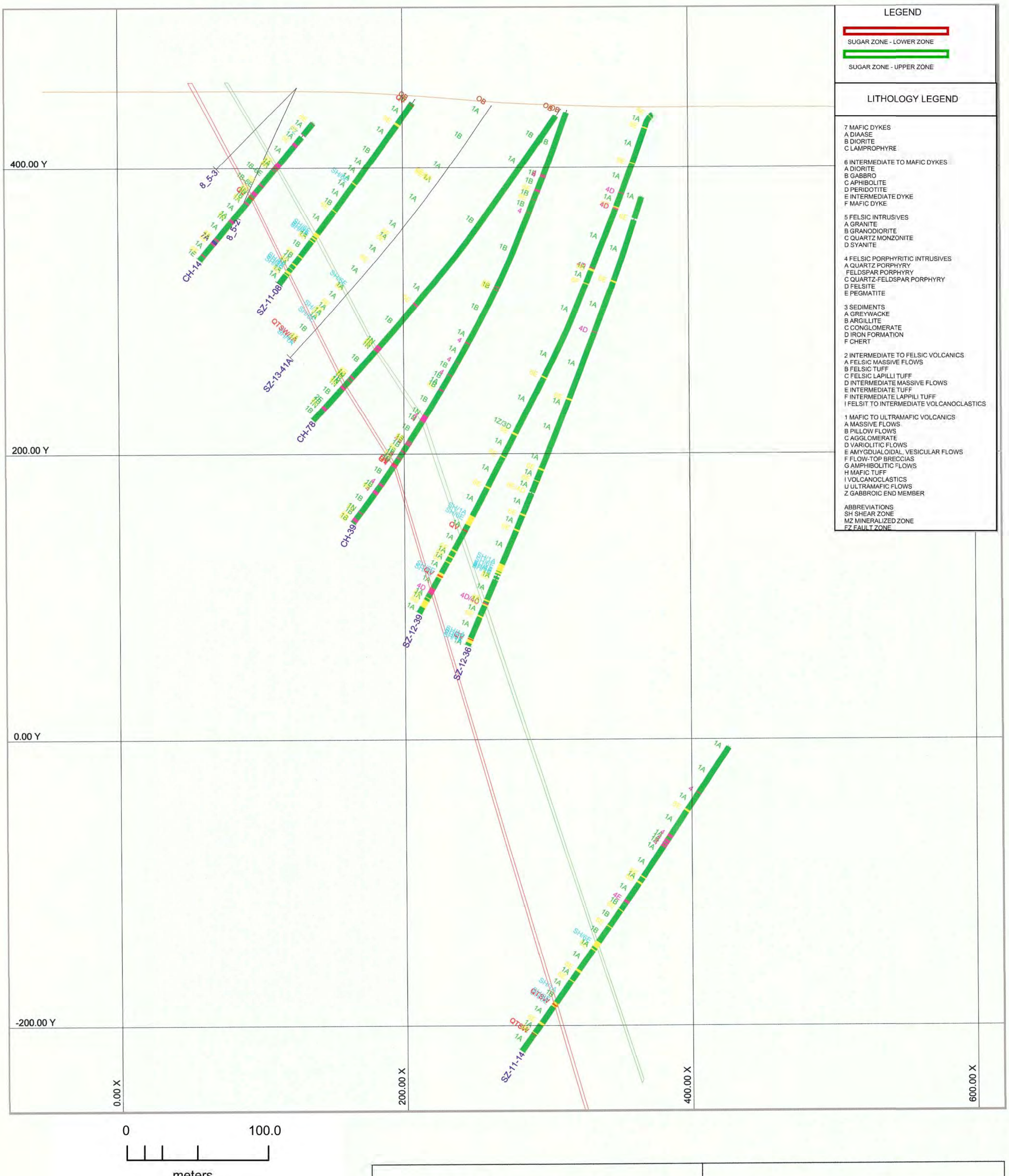
Trenches

Topography

SUGAR ZONE

LONGITUDINAL SECTION

North 40° West



HARTE GOLD CORP

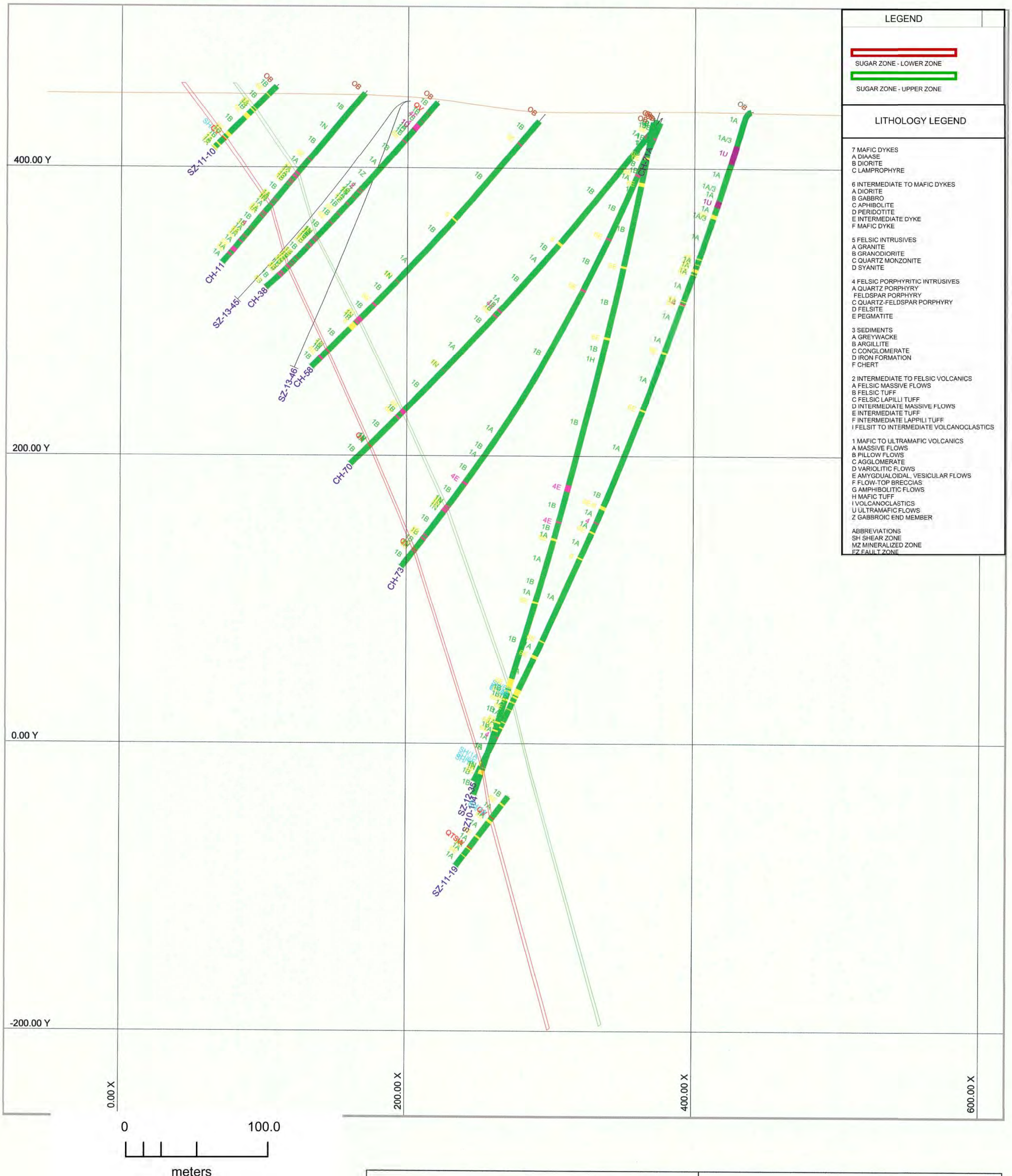
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Scale: 1:2000 | Units: Meters | Date: May 7, 2013

Section: 9NW

Claim: 1135499



HARTE GOLD CORP

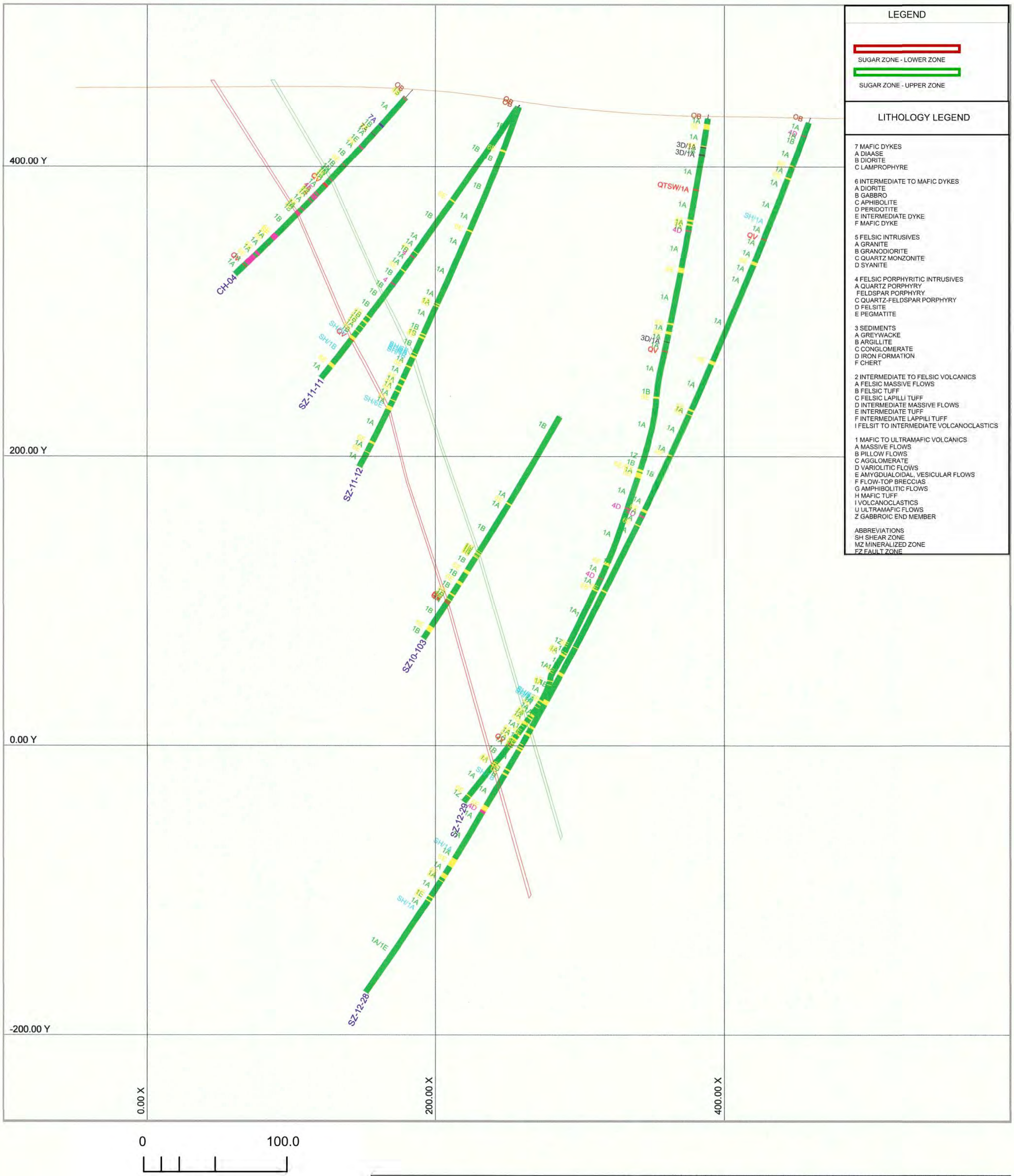
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Section: 10NW

Scale: 1:2000 Units: Meters Date: May 7, 2013

Claim: 1135498



HARTE GOLD CORP

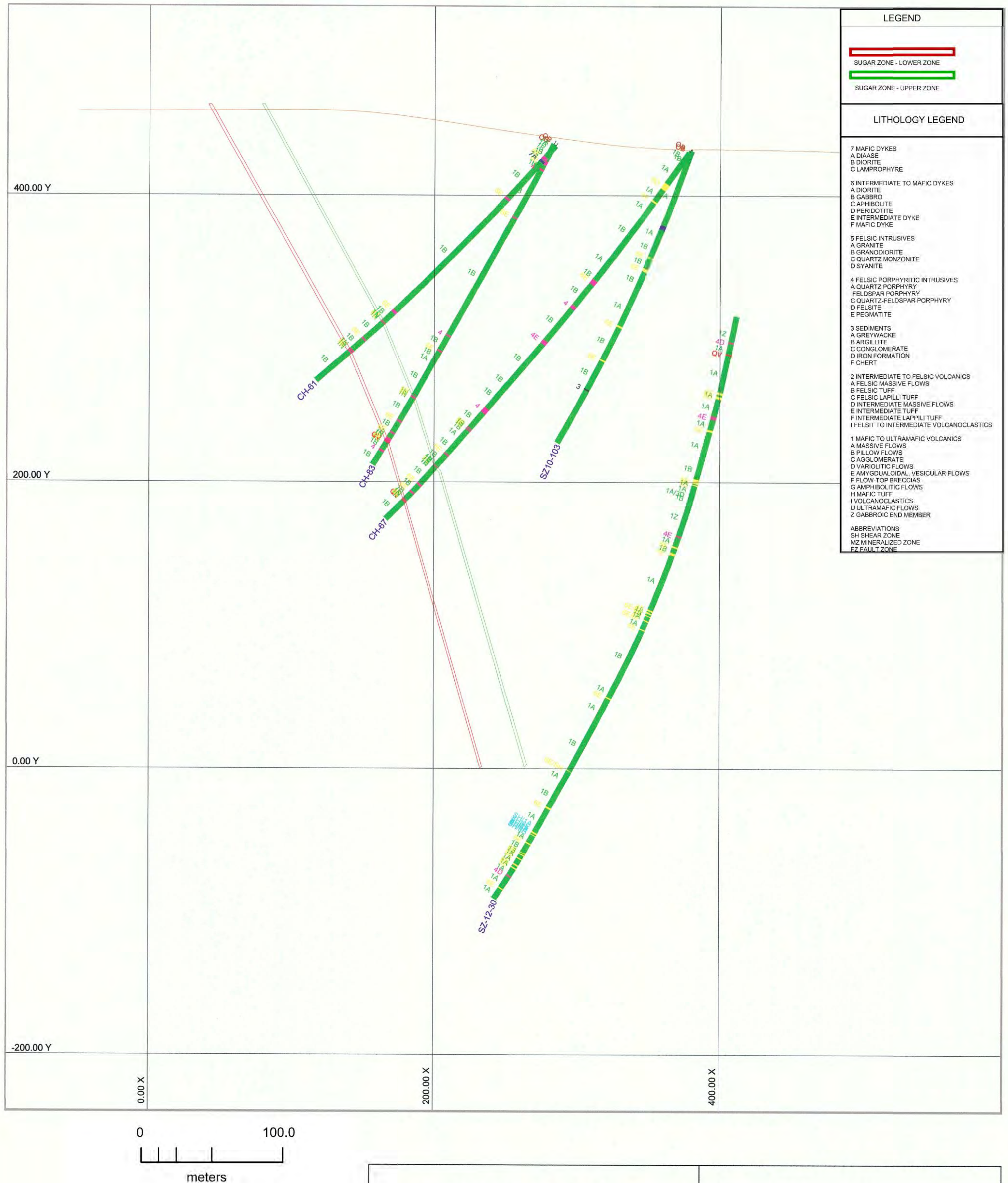
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Scale: 1:2000 | Units: Meters | Date: May 7, 2013

Section: 13NW

Claim: 1135498



HARTE GOLD CORP

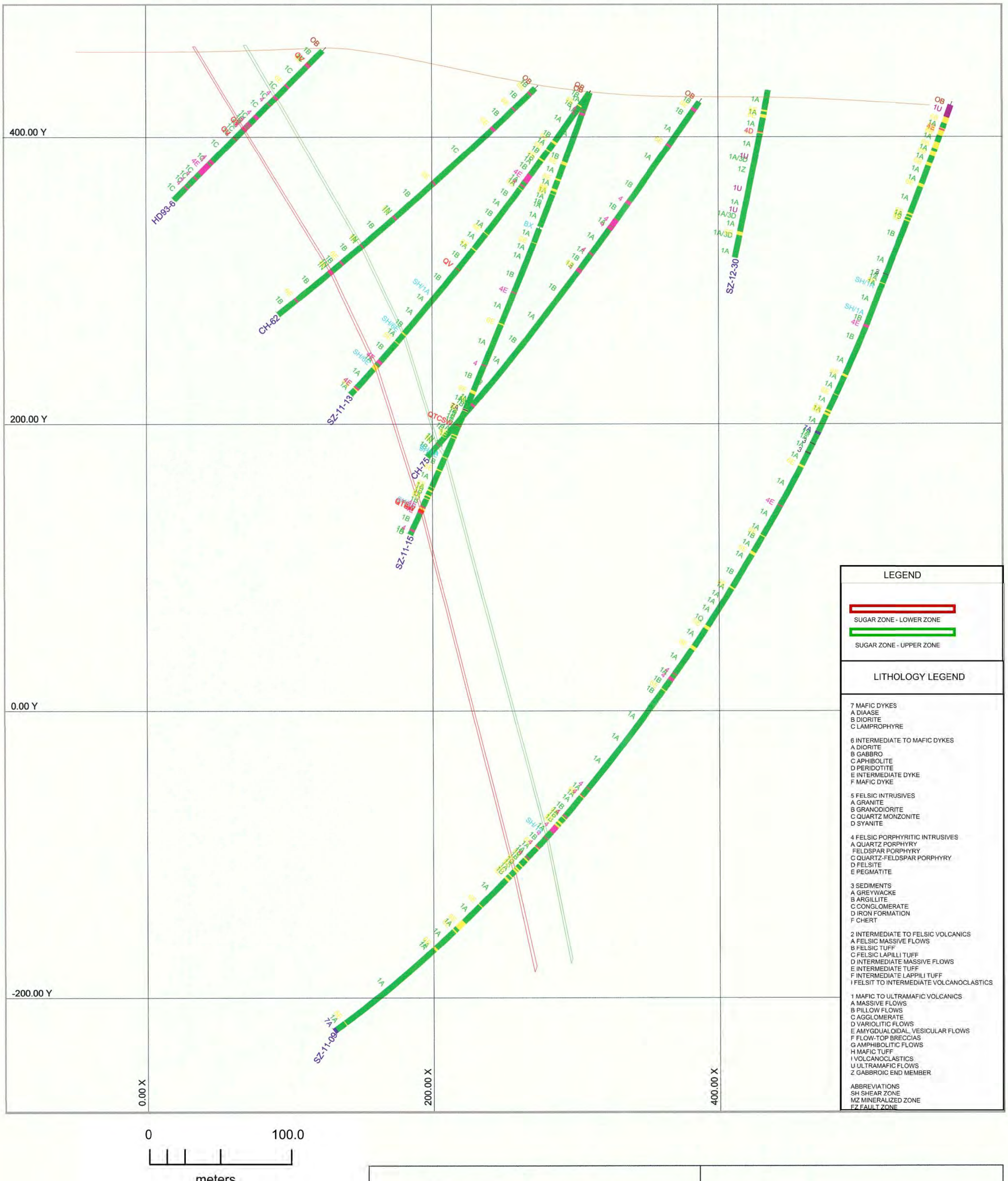
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Scale: 1:2000 Units: Meters Date: May 7, 2013

Section: 14NW

Claim: 1135498



HARTE GOLD CORP

HARTE GOLD CORP

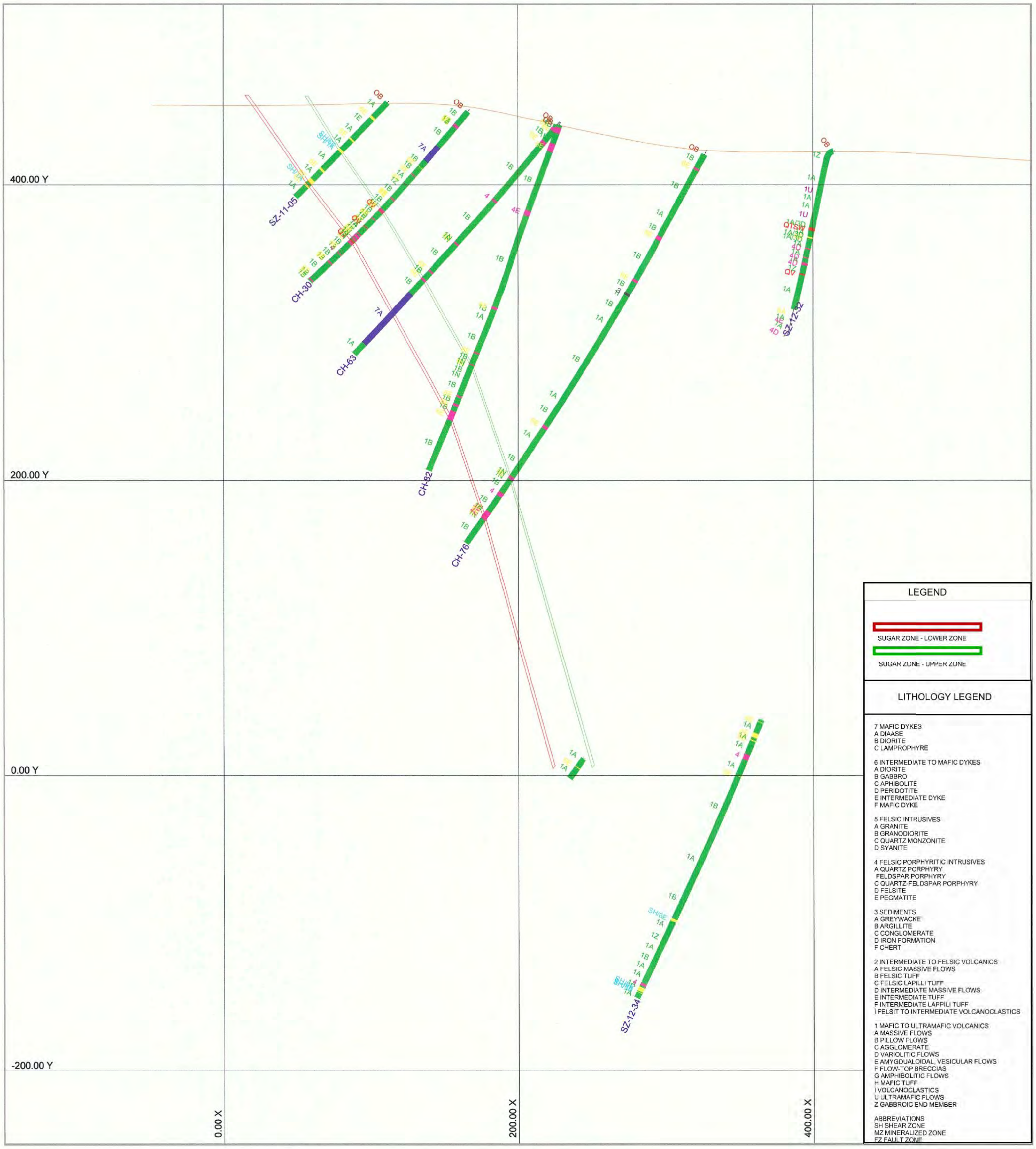
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Section: 15NW

Scale: 1:2000 Units: Meters Date: May 7, 2013

Claim: 1135498



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meters

HARTE GOLD CORP

HARTE GOLD CORP

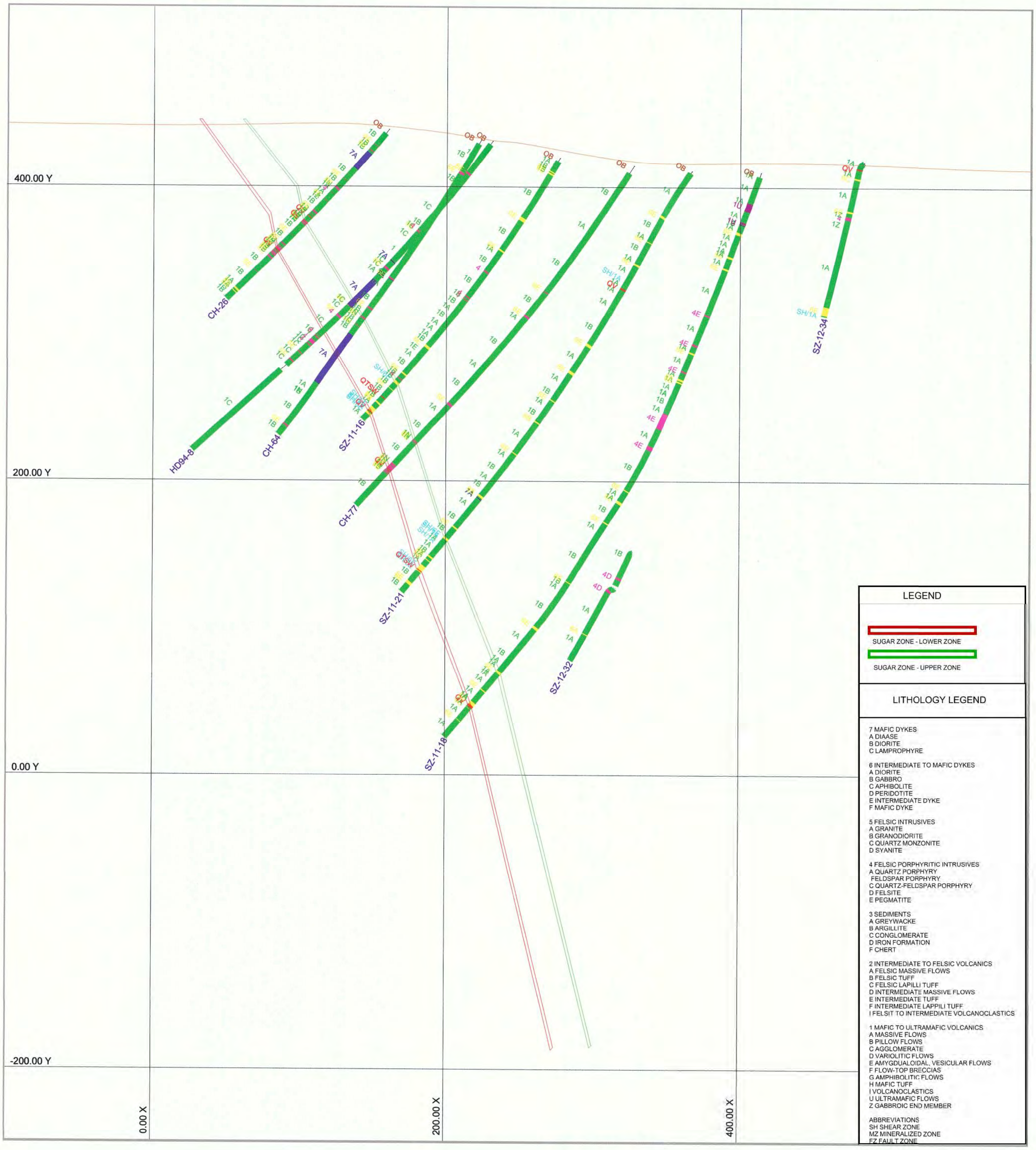
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Scale: 1:2000 Units: Meters Date: May 7, 2013

Section: 16NW

Claim: 1135498



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GOLD CORP

HARTE GOLD CORP

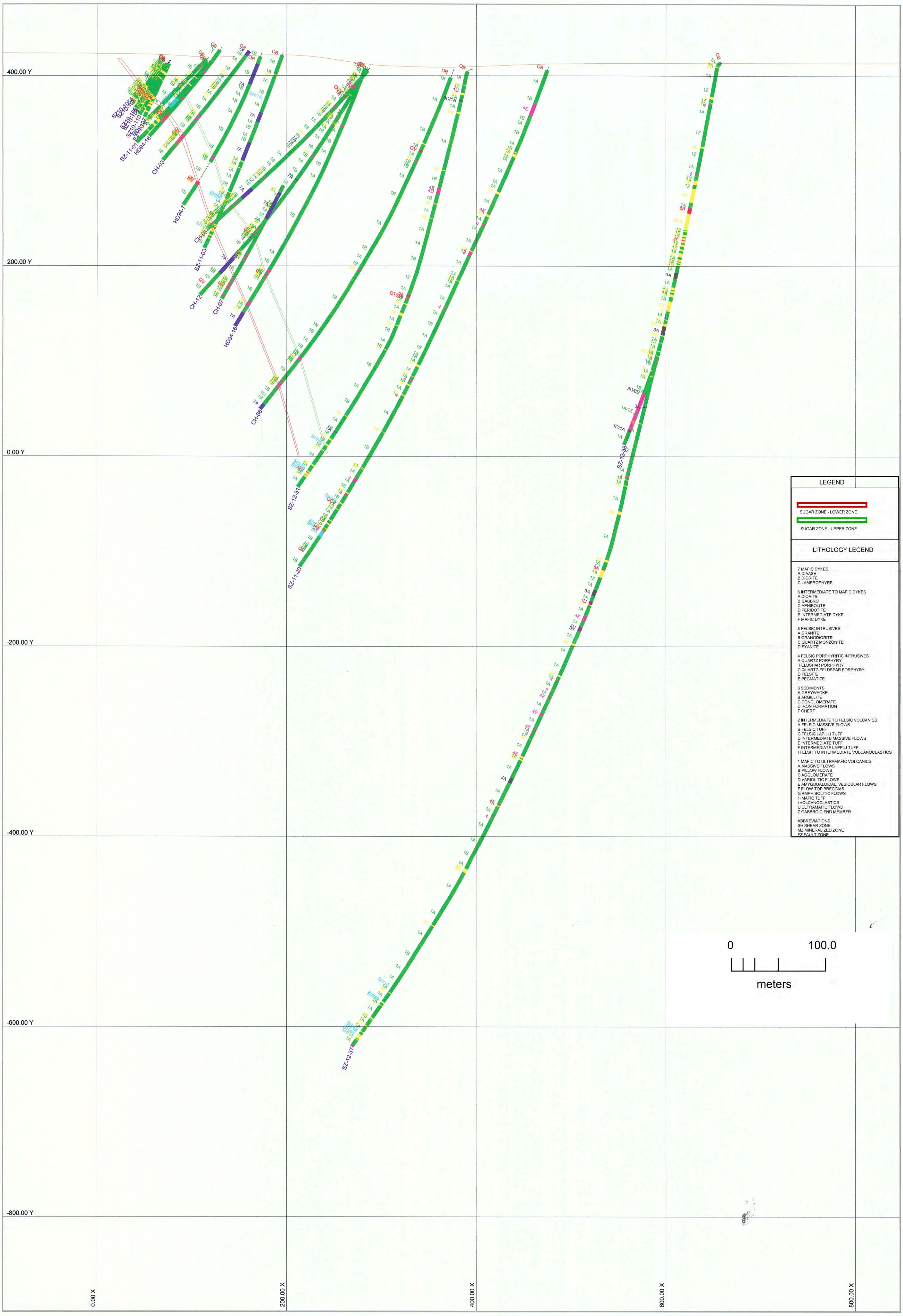
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Scale: 1:2000 | Units: Meters | Date: May 7, 2013

Section: 17NW

Claim: 1135498



HARTE GOLD CORP

HARTE GOLD CORP

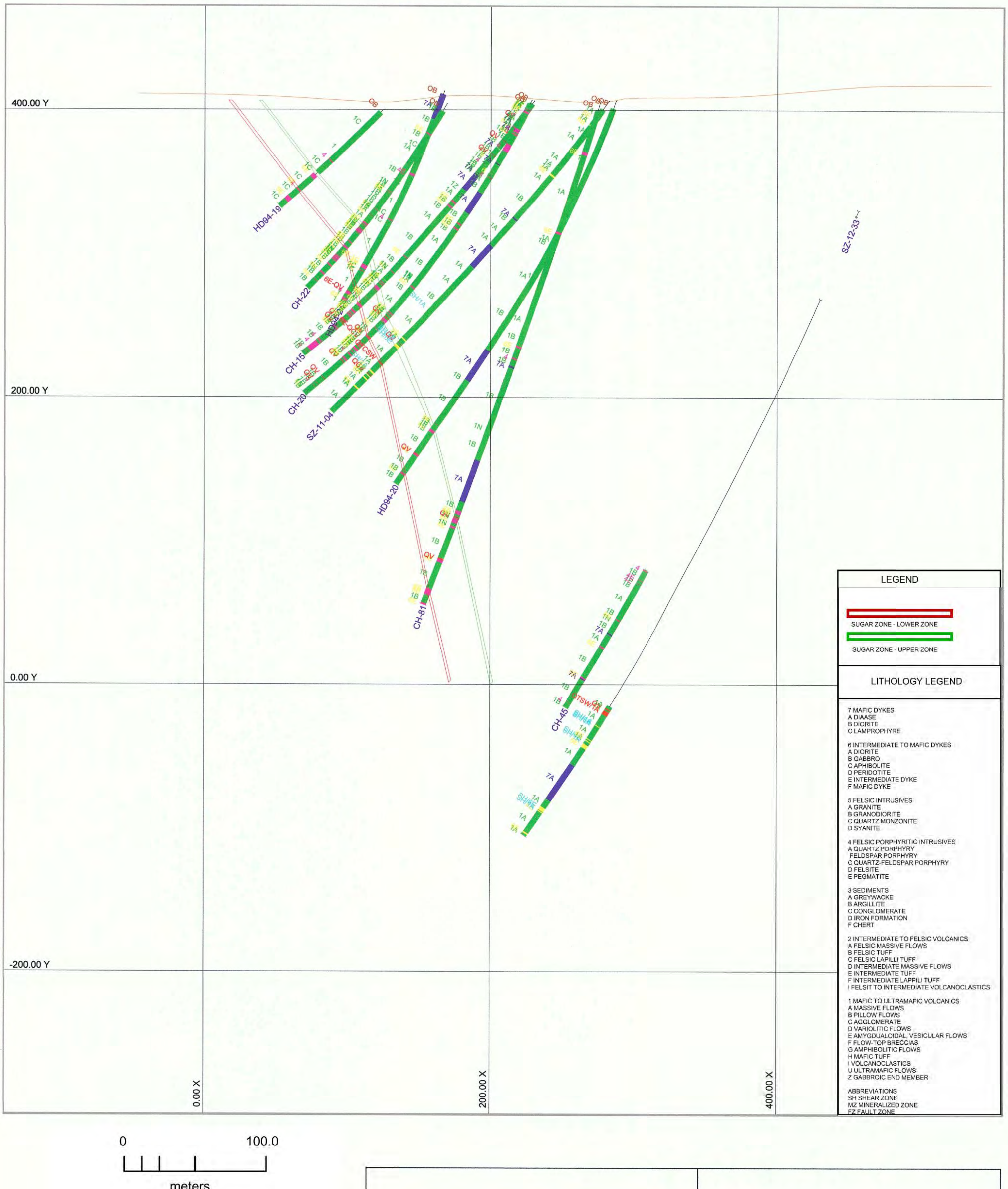
8 King St. E.
Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Scale: 1:2000 | Units: Meters | Date: May 7, 2013

Section: 19NW

Claim: 1069347



HARTE GOLD CORP

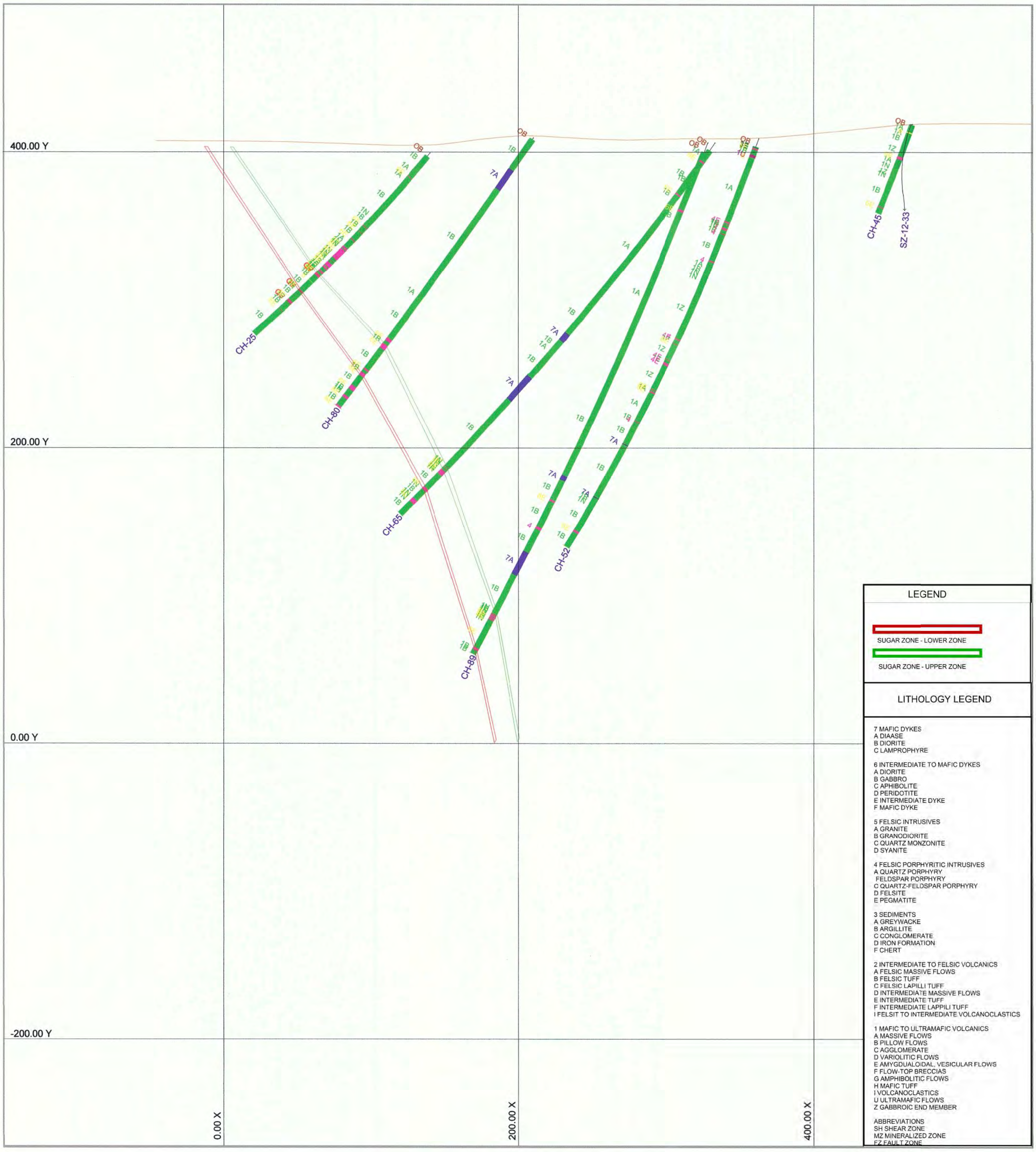
8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Section: 21NW

Scale: 1:2000 Units: Meters Date: May 7, 2013

Claim: 1069342



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meters

GOLD CORP

HARTE GOLD CORP

8 King St. E. Suite 1700
Toronto ON.
M5C 1B5

Sugar Zone

Scale: 1:2000 Units: Meters Date: May 7, 2013

Section: 22NW

Claim: 1069342

A Petrographic Study on Float Samples for Harte Gold Corporation

July 2012

Conducted and submitted by

Victoria Stinson of Pleson Geoscience Inc.

1. INTRODUCTION

This petrographic report on rock samples collected from float during exploration in and around White River, Ontario was requested by Greg McKay of Harte Gold Corporation.

The purpose of this study was to determine using transmitted and reflective light microscopy the location and distribution of gold and gold minerals within the samples.

2. PROCEDURE

The scope of the study was discussed with Greg McKay in Thunder Bay, Ontario. A total of 10 rock samples were shipped to Thunder Bay. Of the 10 rock samples 8 were chosen as representative samples. The 8 samples were cut and slabbed. 8 samples were prepared as thin sections for transmitted and/or reflected light microscopy. The samples are named and numbered: 1A, 1B, 2A, 2B, 3B, 4A, 4B, and 4C.

The thin sections were prepared by Alex Pleson, Kerrilyn Stinson, and Victoria Stinson of Pleson Geoscience Inc. The sections were examined and described by Victoria Stinson using a petrographic microscope under plane-polarized (PP), cross-polarized (XP), and reflective light (RL). Photomicrographs were taken to illustrate various relationships and textures. Estimates of modal percentage were given however accurate estimates for alteration products, like white micas after feldspar were described as strong, moderate, or weak.

3. SAMPLE DESCRIPTIONS

The rock samples are lithologically similar and only differ in trace mineralogy or textures. The modal percentages of the samples are described below.

Samples 1A-4C
Quartz: 20%
Hornblende: 20%
Plagioclase (weak to strong sericite alteration): 20%
Biotite: 10%
Pyrite: 10%
Epidote: 5%
Chlorite: 5%
Clinozoisite: 4%
Tourmaline (schrol): 2%
Magnetite: 2%
Titanite: 1%
Arsenopyrite: 1%
Zircon: Trace
Gold: Trace
Chalcopyrite: Trace
Pyrrhotite: Trace
Ilmenite: Trace
Cobaltite: Trace

Schistose bands of quartz, biotite, and pyrite dominate the samples. The foliation is penetrative, anastomosing, and smooth in hand sample (Winter, 2010). However, on the microscopic scale the foliation is moderately rough as ductilely deformed, wavy quartz veins and boudins within the schistose bands (Fig. 1) (Winter, 2002; Trouw et al., 2009).

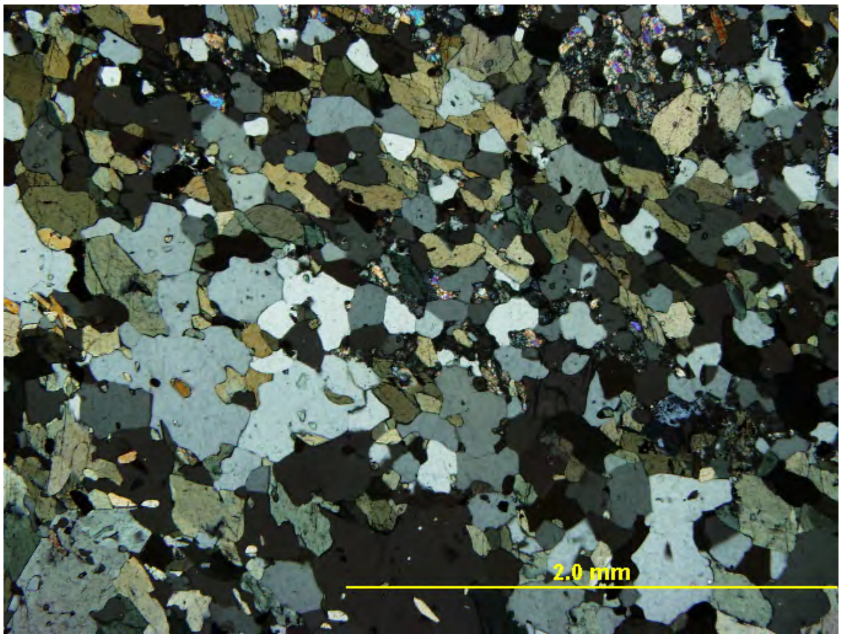


Fig. 1: Quartz veins within amphibolite (XP)

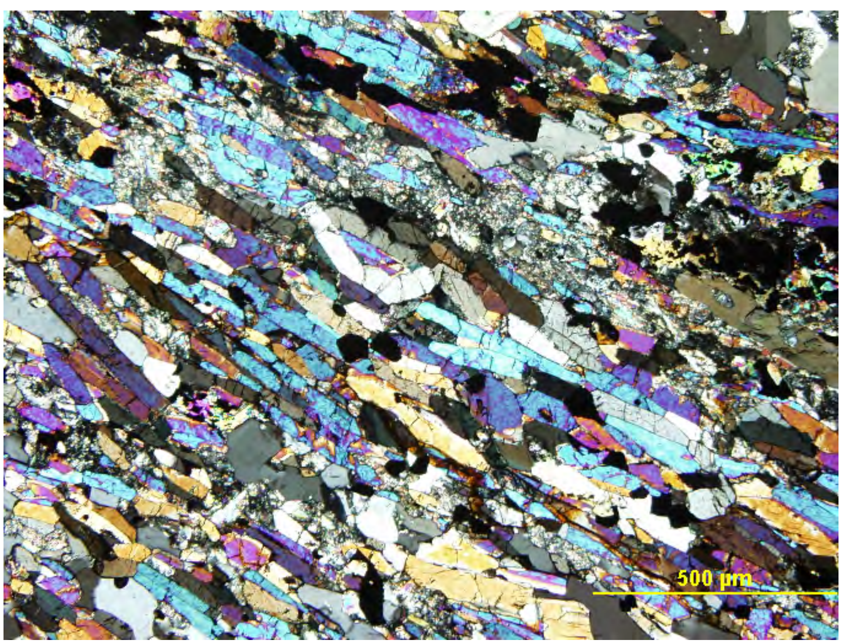


Fig. 2: Hornblende defining foliation and lineation (XP)

The biotite, hornblende, and quartz define the foliation (Fig. 2). Folding and kink bands are occasionally noted within biotite (Winter, 2002). The hornblende also defines the lineation (Fig. 2). The beginning of gnessic banding has occurred with the plagioclase-rich bands separate from the hornblende-rich bands. The International Union of Geological Sciences (IUGS) defines the rock samples from the suite as "amphibolite" (Coutinho, et al., 2007). However due to the amount of quartz veins and boudins the whole rock geochemistry may suggest that the samples are too rich in silica for this classification.

Quartz is the dominant mineral within all of the samples. It occurs bimodally as fine-grained, rotated and deformed boudins as well as coarse-grained, straight to wavy quartz veins (Fig. 3).

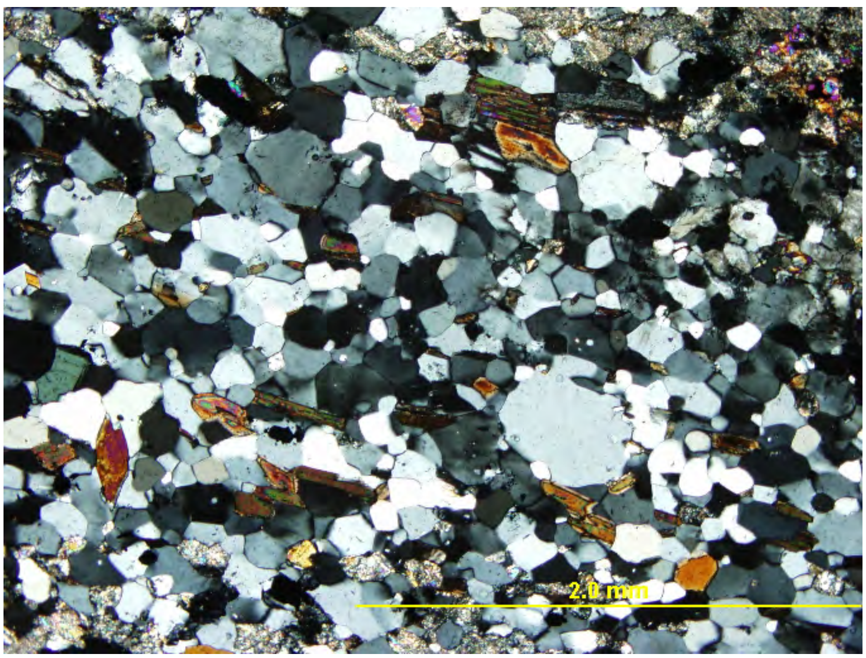


Fig. 3: Bimodal quartz (XP)

The quartz that composes the boudins commonly displays smooth, 60°- 60°- 60° grain boundary contacts with other quartz grains due to recrystallization, grain size reduction, and grain boundary area reduction during deformation (Tullis, 2002; Passchier and Trouw, 2005). The quartz veins exhibit irregular grain boundaries, subgrains, grain bulging, and undulatory extinction (Fig. 4). Quartz ribbons are rarely present and host gold mineralization along subgrains in the ribbon (Fig. 5 and 6).

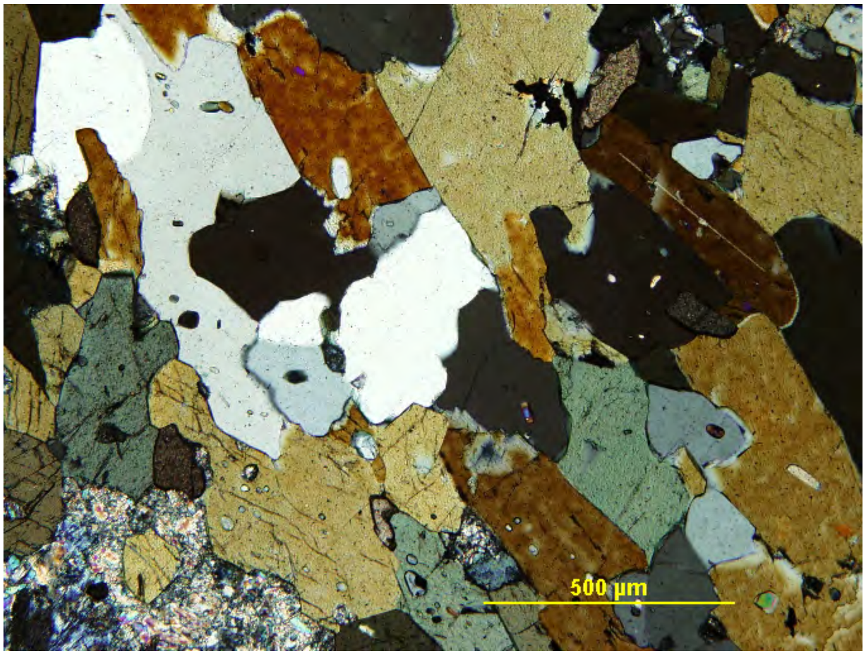


Fig. 4: Irregular grain boundaries and grain bulging in quartz (XP)

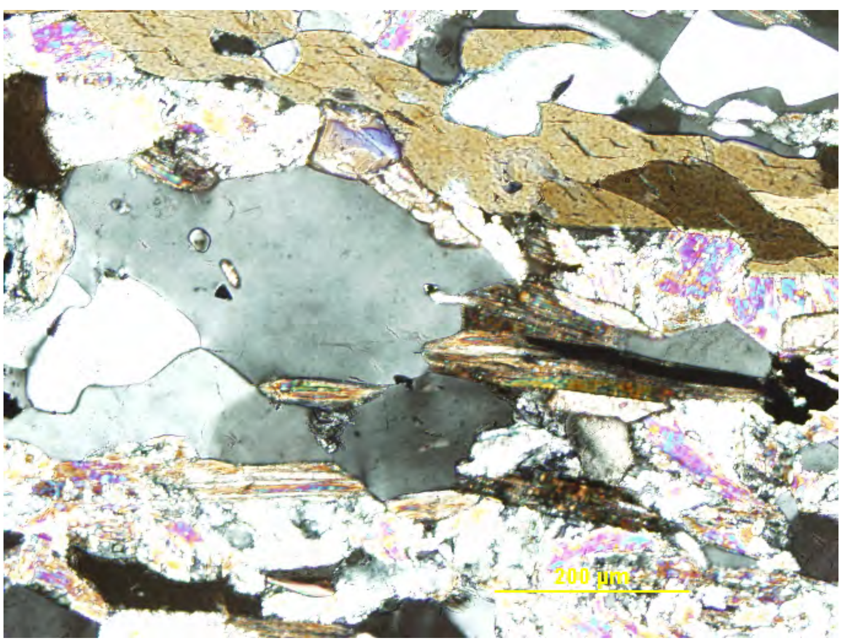


Fig. 5: Subgrains in quartz ribbon host gold mineralization (PP)

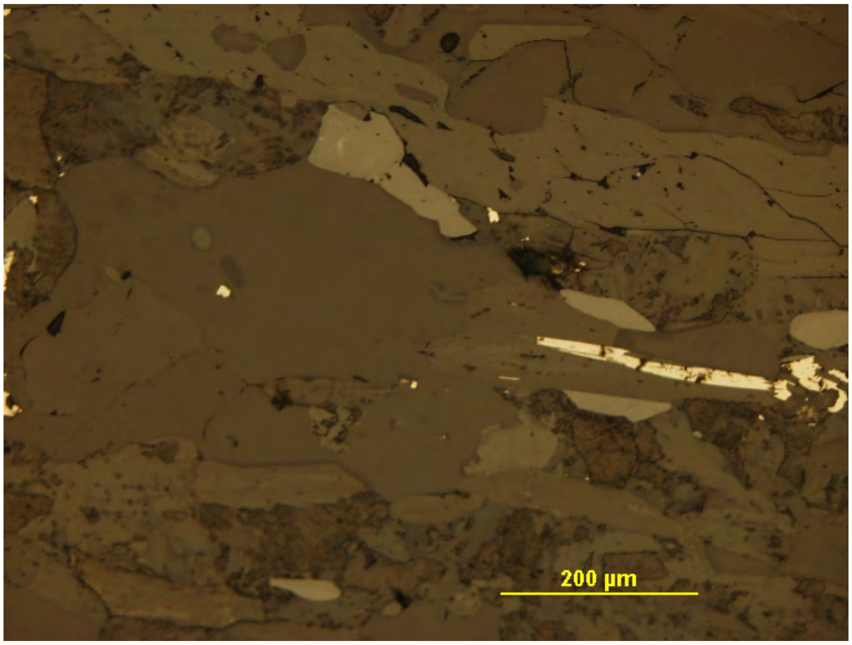


Fig. 6: Subgrains in quartz ribbon host gold mineralization (RL)

Linear arrays of fluid inclusions are observed throughout both types of quartz grains. The presence of quartz boudins overprinted by wavy quartz veins suggests a long period of ductile and brittle-ductile deformation.

Gold mineralization occurs within arrays of fluid inclusions within quartz veins and along grain boundaries between quartz and other competent minerals, like pyrite, titanite, and amphibole (Figs. 7 and 8). The quartz microstructures suggest that gold mineralization occurred during ductile to brittle-ductile deformation.

Hornblende amphibole is the second most common mineral present within the sample set. The hornblende is fine to medium-grained, euhedral, and displays deep green to yellow pleochroism. The hornblende defines both the dominant foliation as well as the lineation. The hornblende is commonly replaced by chlorite, epidote, clinozoisite, and biotite and especially so when adjacent to quartz veins and boudins (Fig. 9).

Fluid is required for retrograde metamorphic reactions to produce these minerals and appears to have been supplied from the quartz veins (Vernon and Clarke, 2008; Winter, 2010). Gold mineralization occurs commonly within hornblende and chlorite, epidote, clinozoisite, and biotite that replace hornblende. Gold is located at grain boundaries between amphibole and minerals that have replaced amphibole, as well as brittle-ductilely deformed fractures within amphibole (Figs. 10 and 11).

Fig. 7: Linear array of fluid inclusions in quartz with gold (PP)

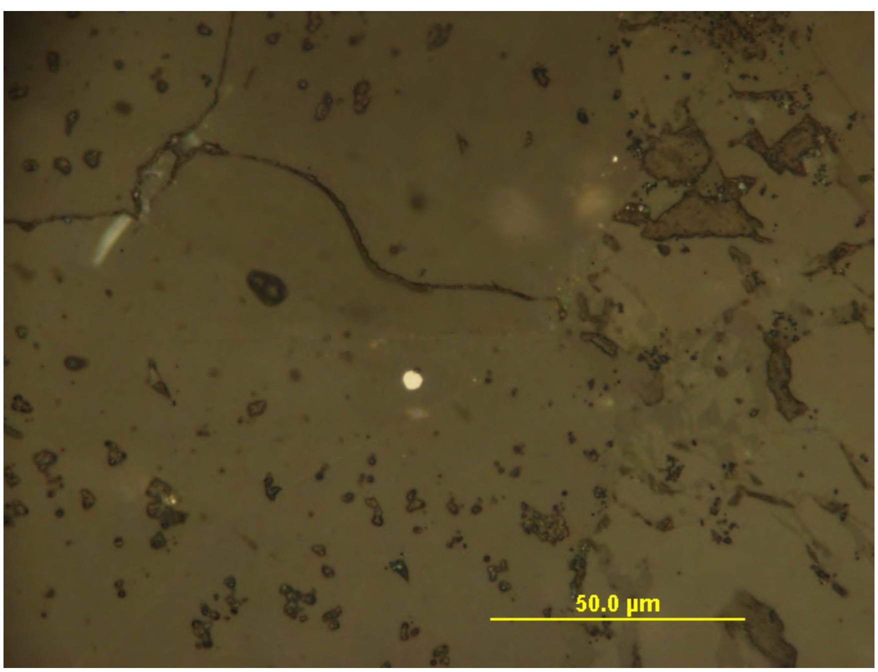


Fig. 8: Linear array of fluid inclusions in quartz with gold (XP)

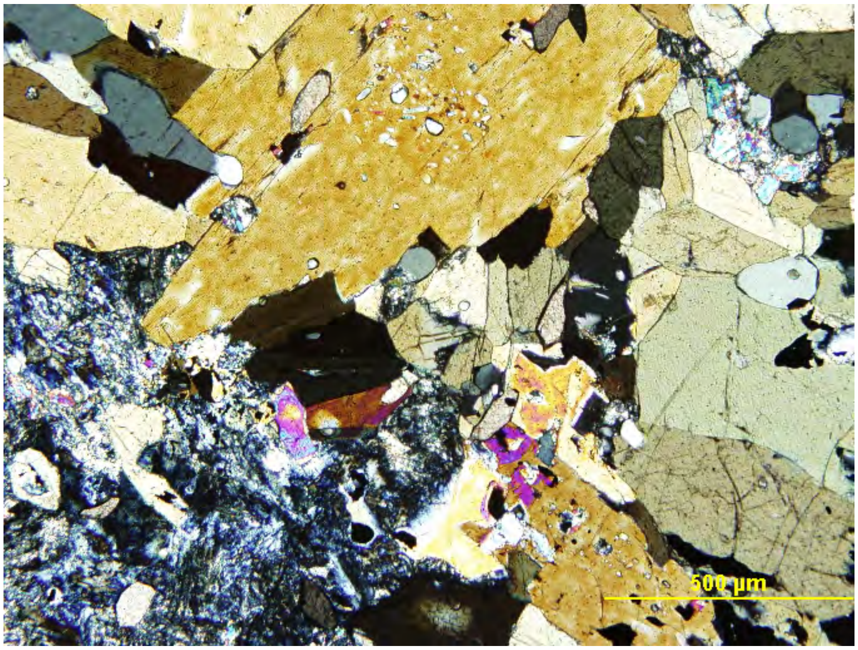


Fig. 9: Hornblende replaced by epidote and chlorite (XP)

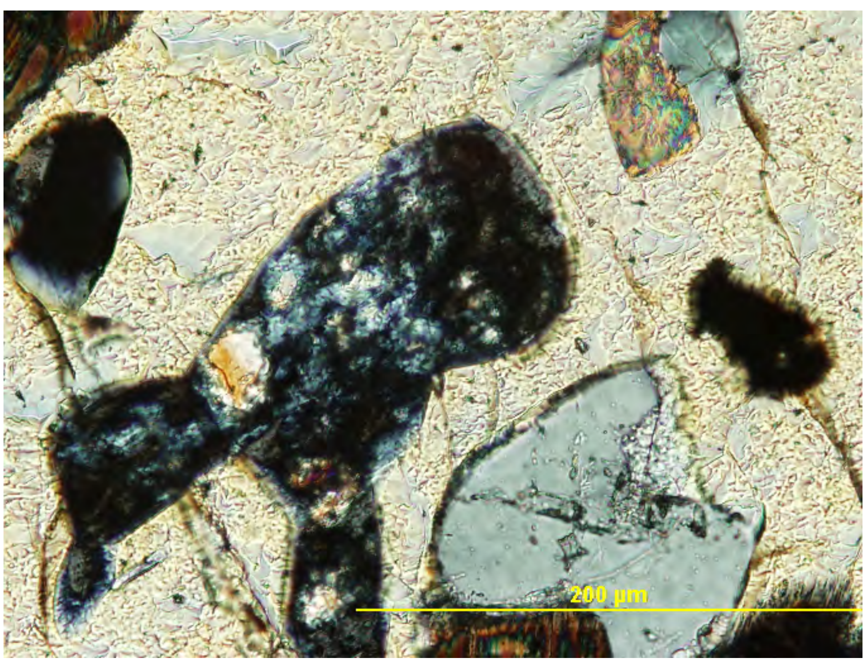


Fig. 10: Gold in brittle-ductilely deformed fracture in chlorite within amphibole (XP)

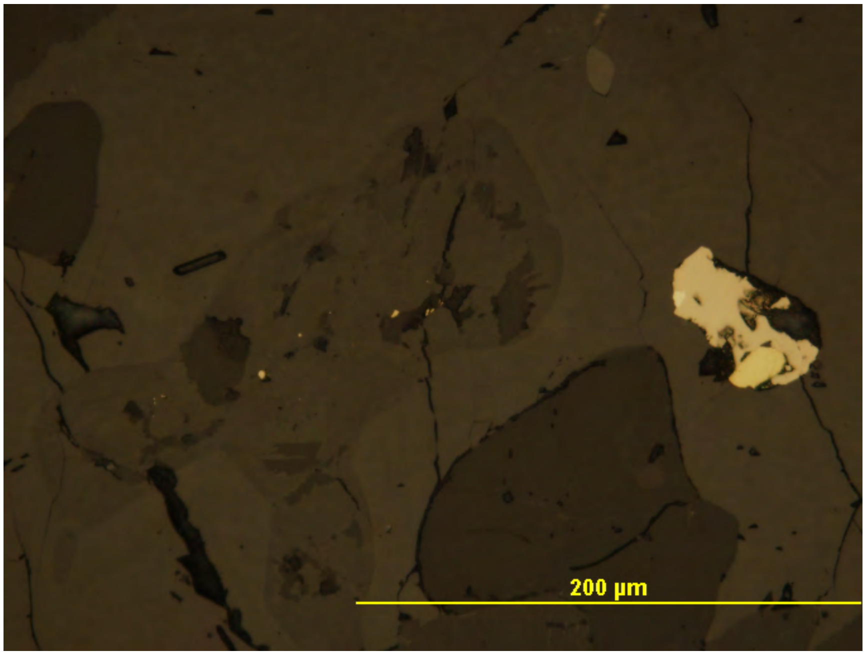


Fig. 11: Gold in brittle-ductilely deformed fracture in chlorite within amphibole (RL)

The brittle-ductilely deformed fractures suggest that amphibole was competent during ductile deformation. The presence of gold mineralization within areas of deformed quartz veins and chlorite, epidote, and biotite after hornblende suggest that ductile deformation and gold mineralization were long lived and occurred well into the realm of retrograde metamorphism.

Plagioclase is the third most common mineral within the samples. The plagioclase ranges from weakly altered by white mica (sericite) to strongly altered (Fig. 12). The weakly sericitized plagioclase is fine to medium-grained and displays irregular grain boundaries, subgrains, and undulatory extinction (Fig. 13) (Tullis, 2002; Trouw et al., 2009). Rare deformation twins are also noted within weakly altered plagioclase (Trouw et al., 2009). The moderately to strongly sericitized plagioclase displays no such textures as white mica have consumed the plagioclase. Gold mineralization occurs along plagioclase-hornblende grain boundaries within the sample suite.

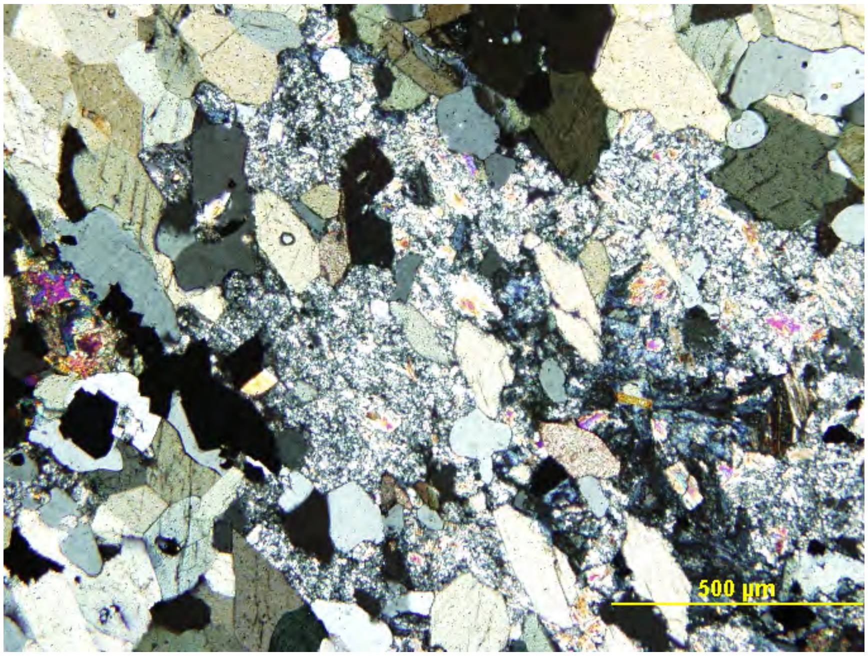


Fig. 12: Plagioclase completely altered to white mica (sericite) (XP)

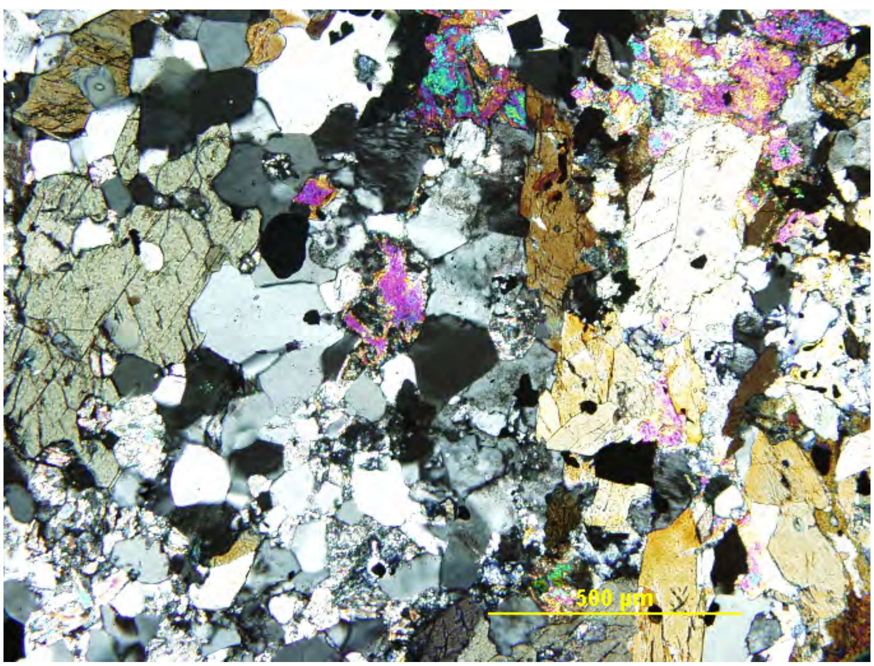


Fig. 13: Irregular grain boundaries, subgrains, and undulatory extinction in plagioclase (XP)

Biotite is fine-grained, euhedral, and defines two distinct foliations (Fig. 14). The foliations display an S-C fabric with the S fabric intersecting the C fabric at 40-60°.

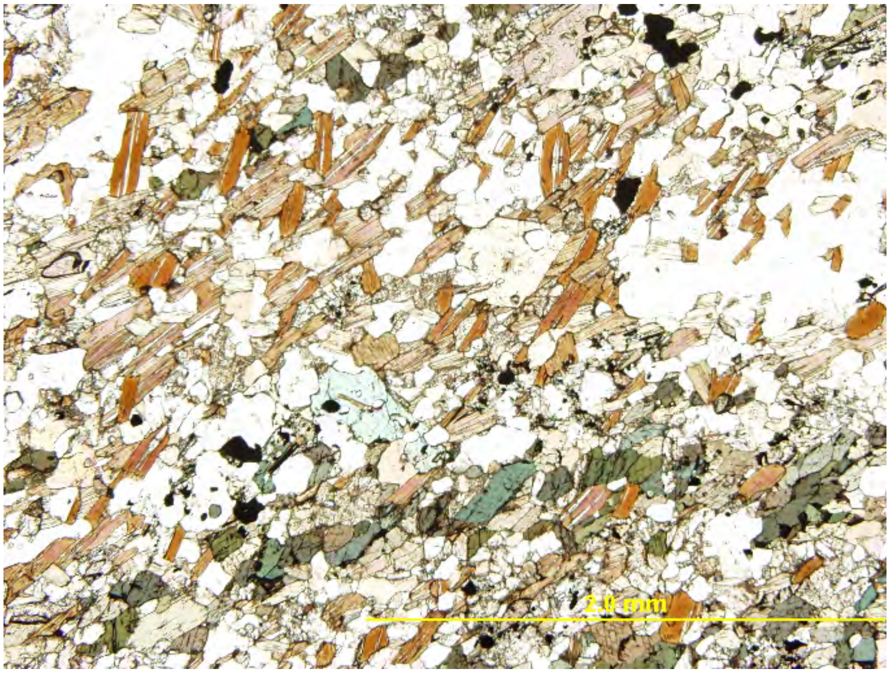


Fig. 14: Biotite and hornblende defining S-C fabric (PP)

The biotite that defines the S-foliation occasionally hosts minor quartz veins within cleavage planes of the biotite (Winter, 2010). The biotite is common along the quartz vein and boudin contact with hornblende amphibole. The biotite is also commonly replaced by chlorite. The biotite that defines the C-foliation commonly displays undulatory extinction. The biotite that defines the S-foliation commonly hosts gold mineralization. The pyrite and gold mineralization is typically located along the grain boundary between two biotite grains or within the cleavage planes of single biotite grains (Figs. 15-18).

Pyrite occurs in three distinct populations within the sample suite. Euhedral pyrite is coarse-grained with quartz and plagioclase occasionally displaying partially recrystallized fringe around the pyrite (Fig. 19). Subhedral pyrite is also common and is typically fine-grained. The third population of pyrite is skeletal, colloform, anhedral, and displays radiating growth textures (Fig. 20).

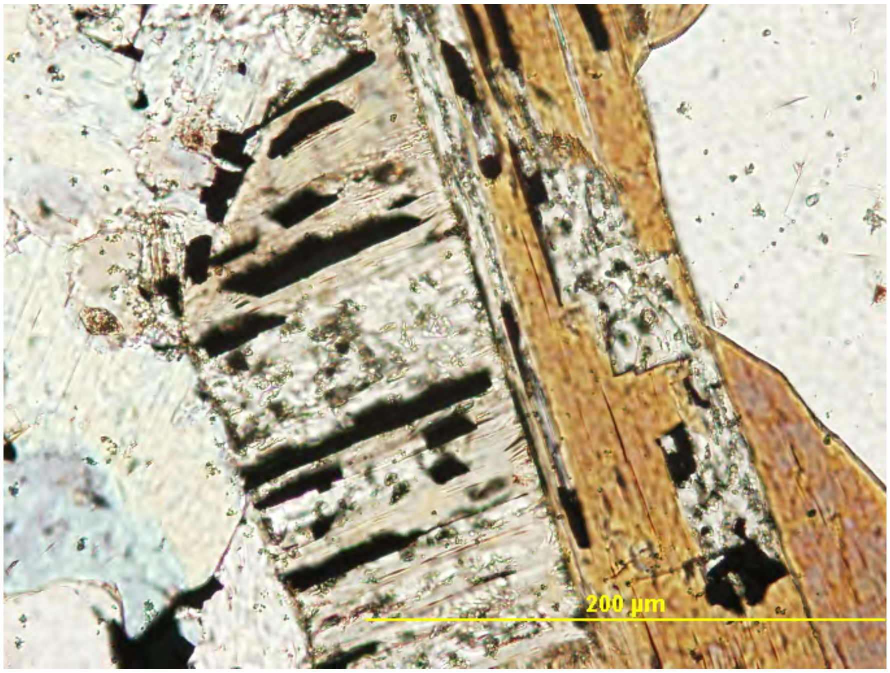


Fig. 15: Pyrite filling cleavage planes in biotite (PP)

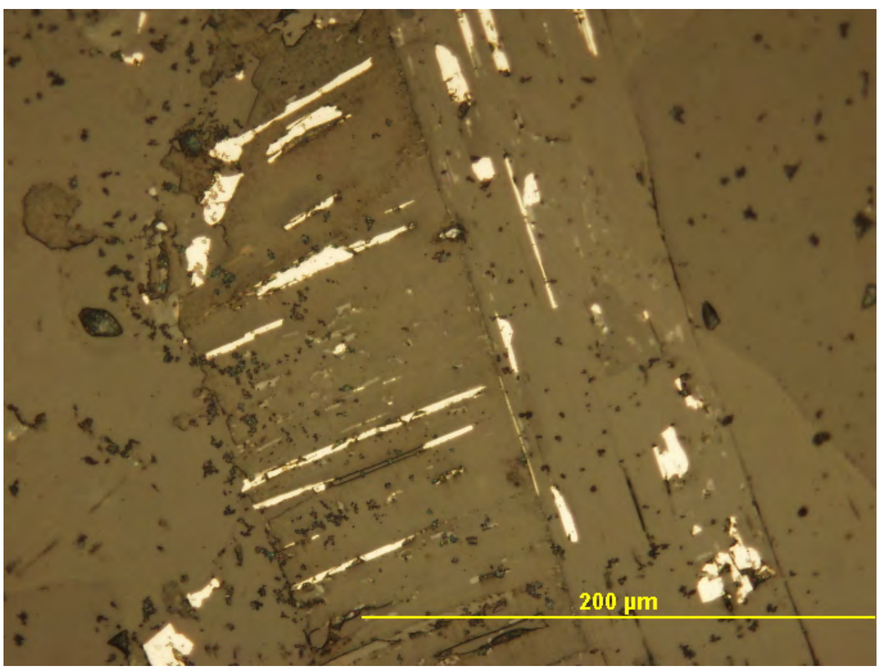


Fig. 16: Pyrite filling cleavage planes in biotite (RL)

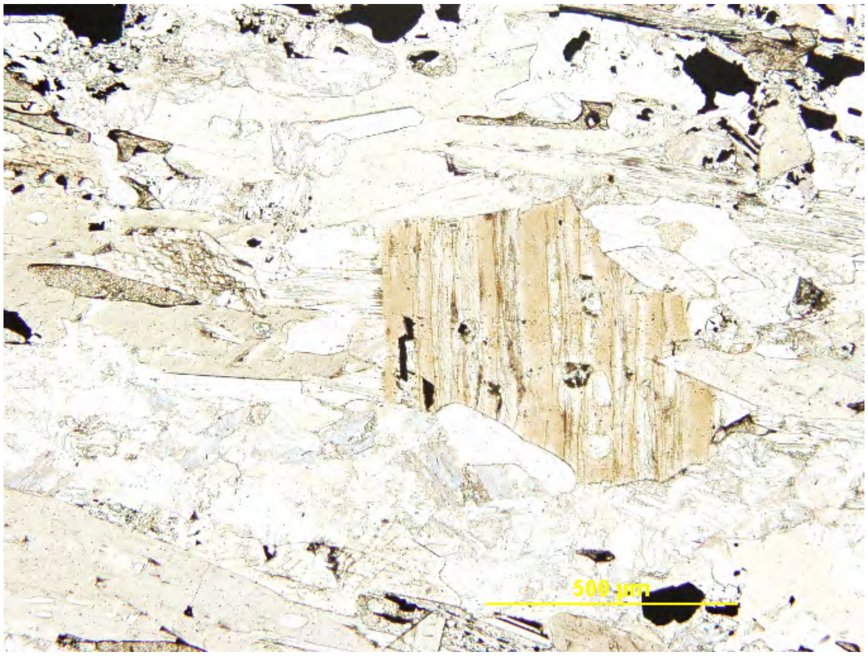


Fig. 17: Gold in biotite cleavage planes (PP)

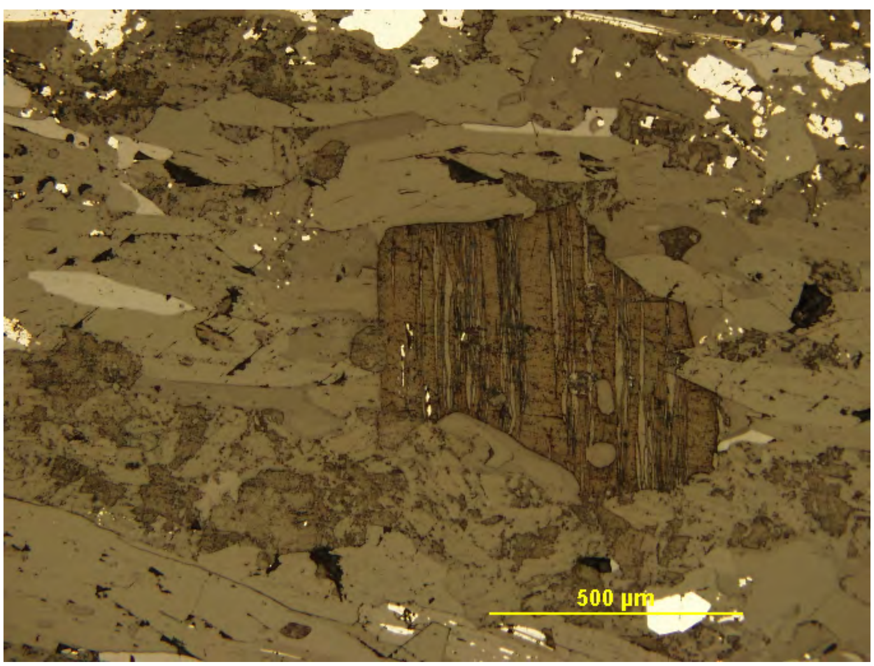


Fig. 18: Gold in biotite cleavage planes (RL)

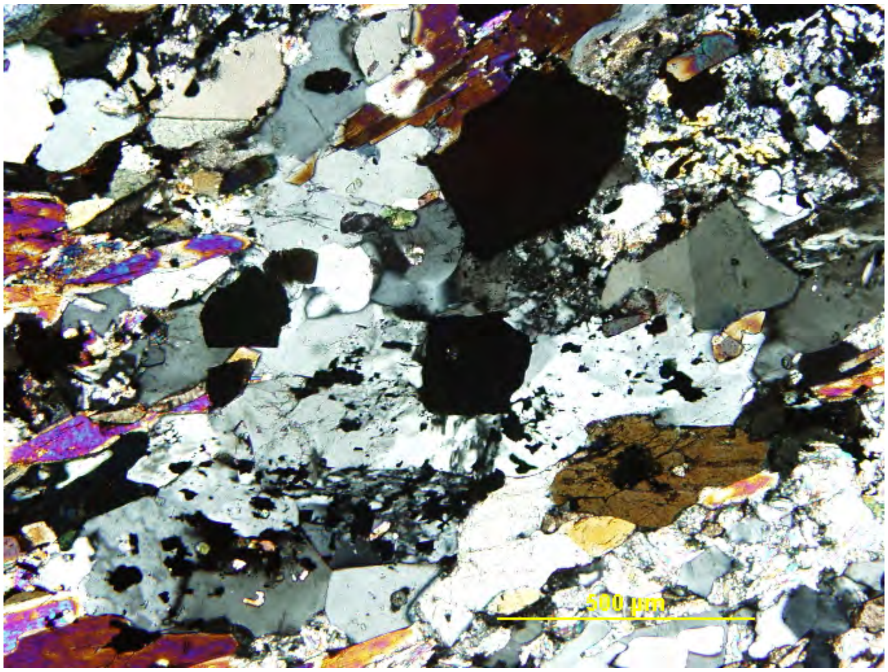


Fig. 19: Partially recrystallized quartz fringe around pyrite (XP)

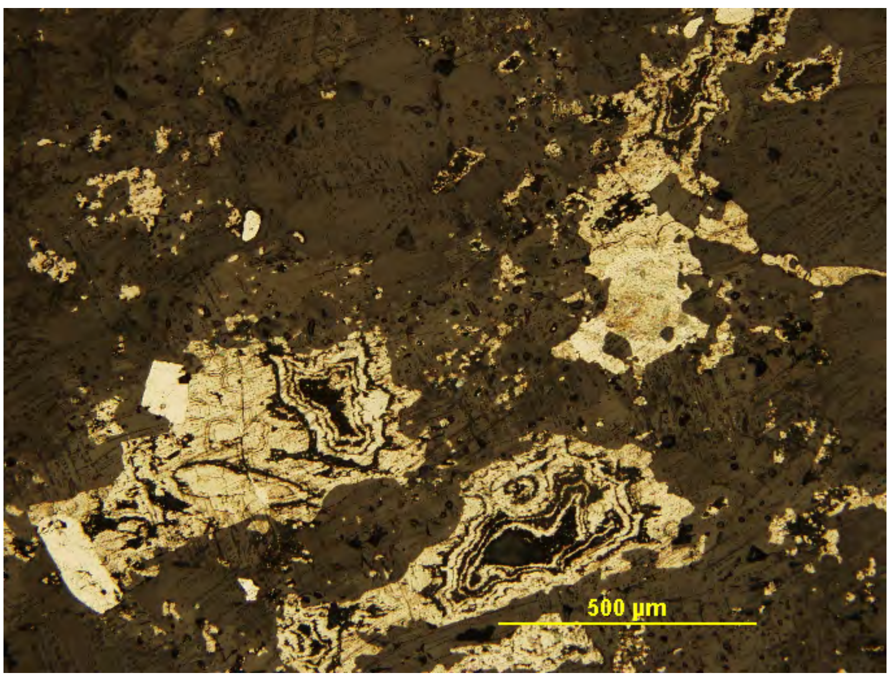


Fig. 20: Colloform and skeletal pyrite with minor euhedral pyrite (RL)

The euhedral and subhedral pyrite define the foliation within the samples. The fringe around the euhedral pyrite suggests it was present during ductile deformation while the anhedral pyrite textures suggest it grew during supergene processes. Gold mineralization is located within pressure shadows around euhedral pyrite, at grain boundaries with other minerals, and as anhedral inclusions within euhedral to subhedral pyrite (Fig. 21).

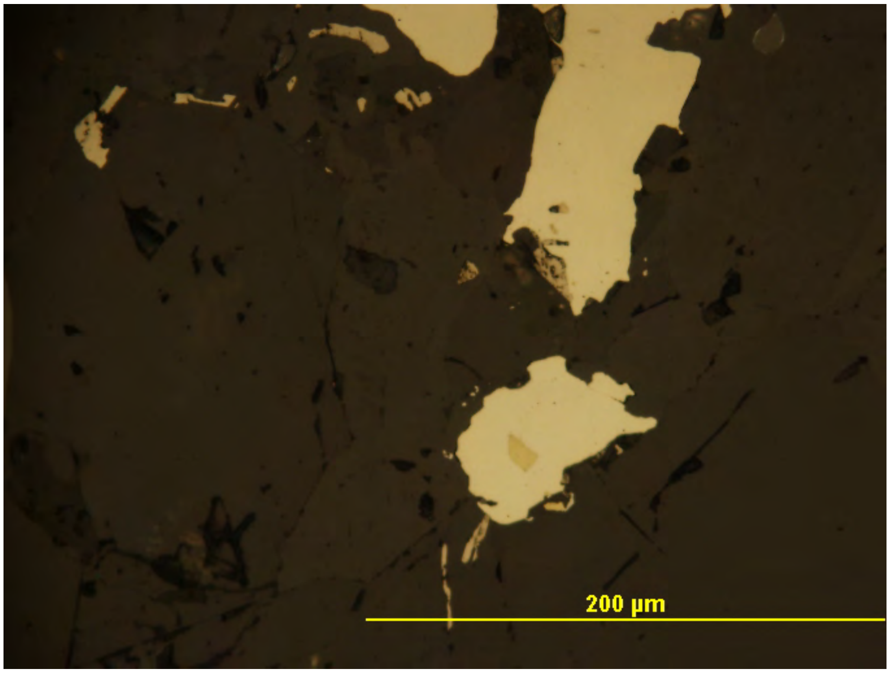


Fig. 21: Gold inclusions in subhedral pyrite and in pressure shadows (RL)

No gold mineralization is related to anhedral, skeletal pyrite. Anhedral inclusions of gold, magnetite, pyrrhotite, and cobaltite are present within pyrite.

Epidote and clinozoisite replace hornblende amphibole throughout the sample suite. Epidote is euhedral, fine-grained, and has yellow pleochroism. The clinozoisite is less common and is clear in plane polarized light. Both epidote and clinozoisite host gold mineralization as well as along grain boundaries with other minerals, like chlorite.

Chlorite is fine-grained and typically displays a radial form. The chlorite commonly replaces amphibole and biotite within the sample suite. Gold mineralization is commonly present within chlorite after hornblende as well as chlorite after biotite (Figs. 22 and 23).

Titanite (sphene) is present in the sample suite and is typically sub- to euhedral. The titanite is common within the bands of amphibole and not the quartz veins or boudins. No rutile is present within the sample suite. Gold mineralization is located along titanite-quartz and pyrite-titanite grain boundaries.

Arsenopyrite is commonly euhedral and rarely subhedral. Arsenopyrite can be seen fractured within brittle-ductilely deformed zones of breccia, suggesting that the arsenopyrite was present during brittle-ductile deformation. Inclusions of anhedral pyrrhotite and gold are present within euhedral arsenopyrite (Fig. 24 and 25).

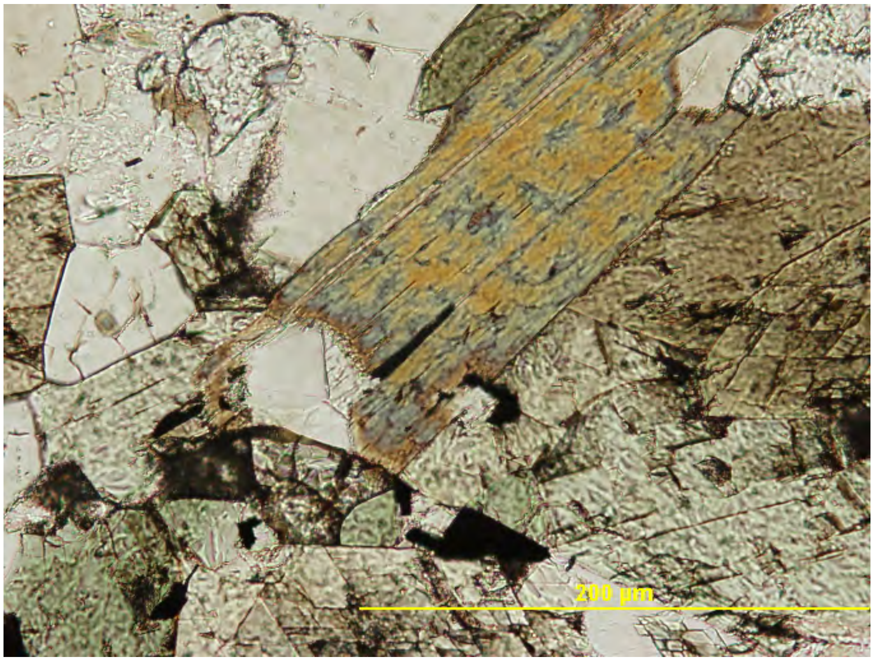


Fig. 22: Chlorite after biotite with gold in cleavage planes (XP)

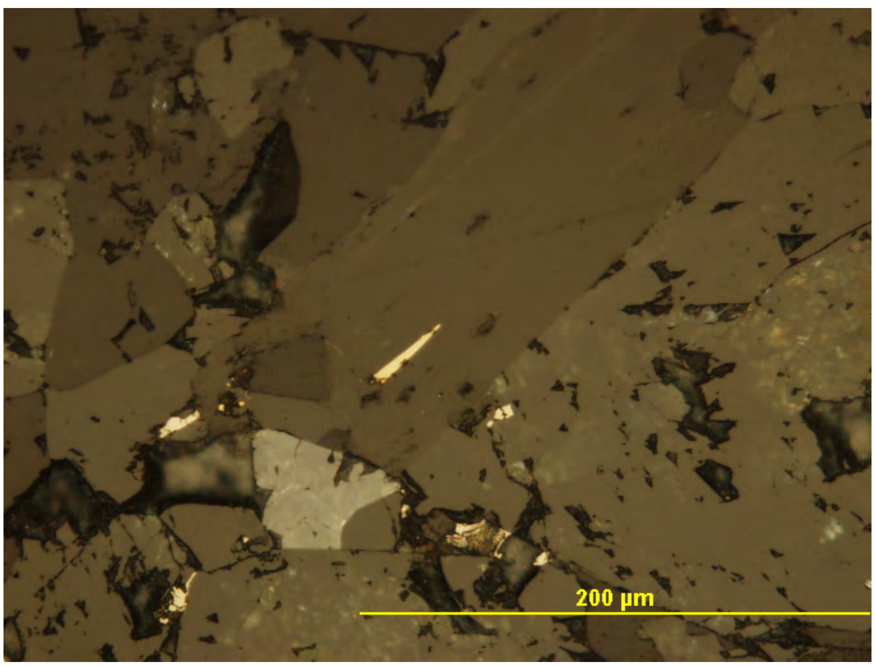


Fig. 23: Chlorite after biotite with gold in cleavage planes (RL)

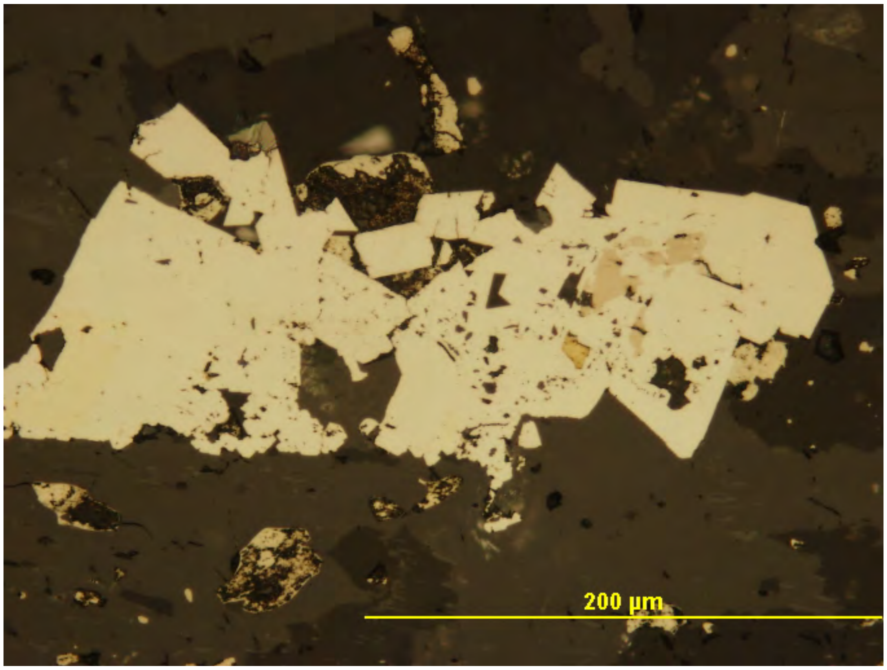


Fig. 24: Euhedral arsenopyrite with inclusions of gold and pyrrhotite (RL)

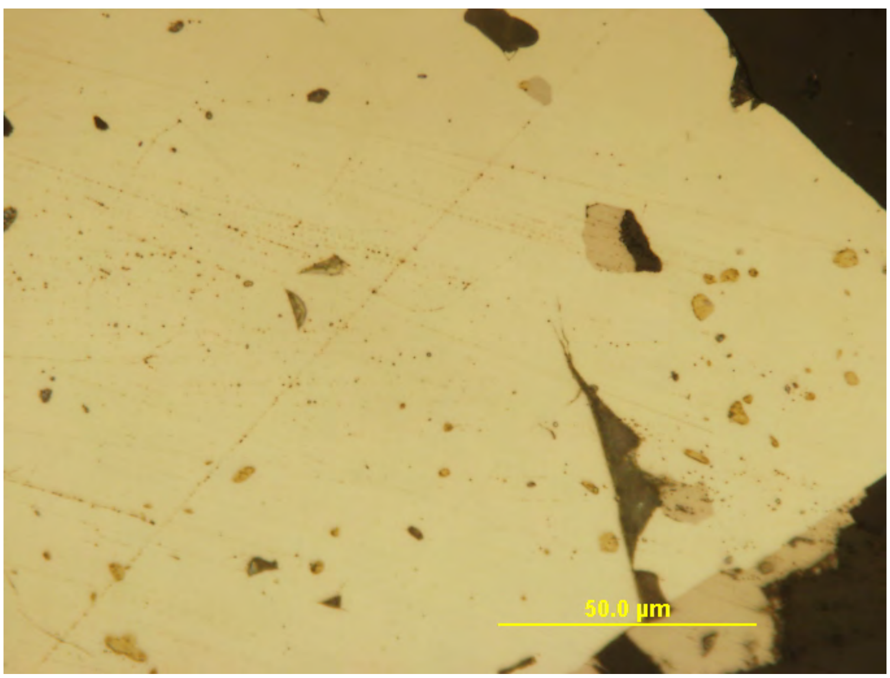


Fig. 25: Euhedral arsenopyrite with inclusions of gold and pyrrhotite (RL)

Anhedral magnetite, ilmenite, and chalcopyrite are present in the samples but are not in contact with gold mineralization.

In addition to gold mineralization occurring within minerals and along grain and subgrain boundaries it also occurs with brittle-ductilely deformed zones of breccia (Fig. 26 and 27) (Passchier and Trouw, 2005; Trouw et al., 2009)

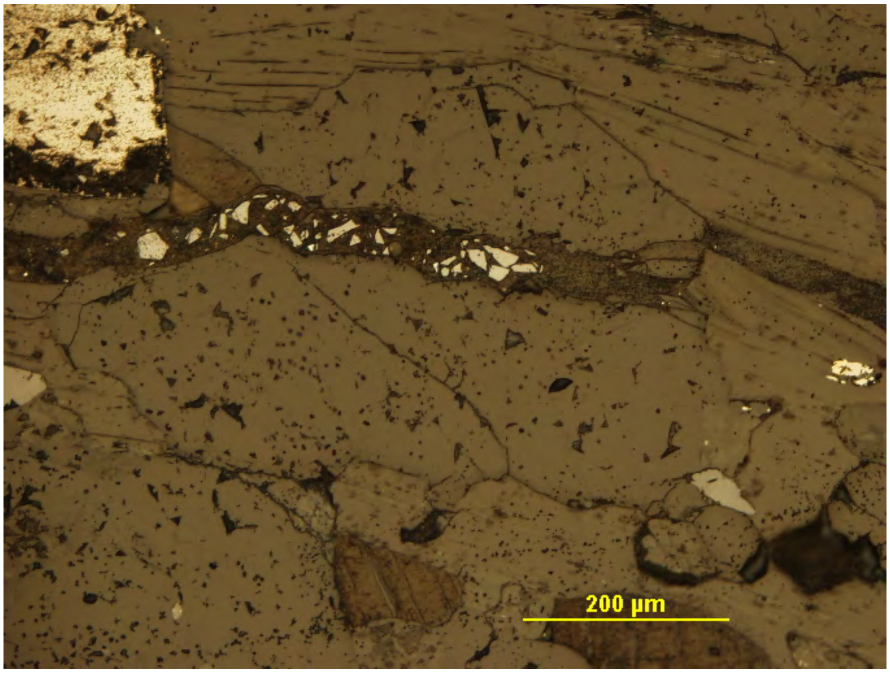


Fig. 26: Brittle-ductilely deformed breccia with fractured arsenopyrite (RL)

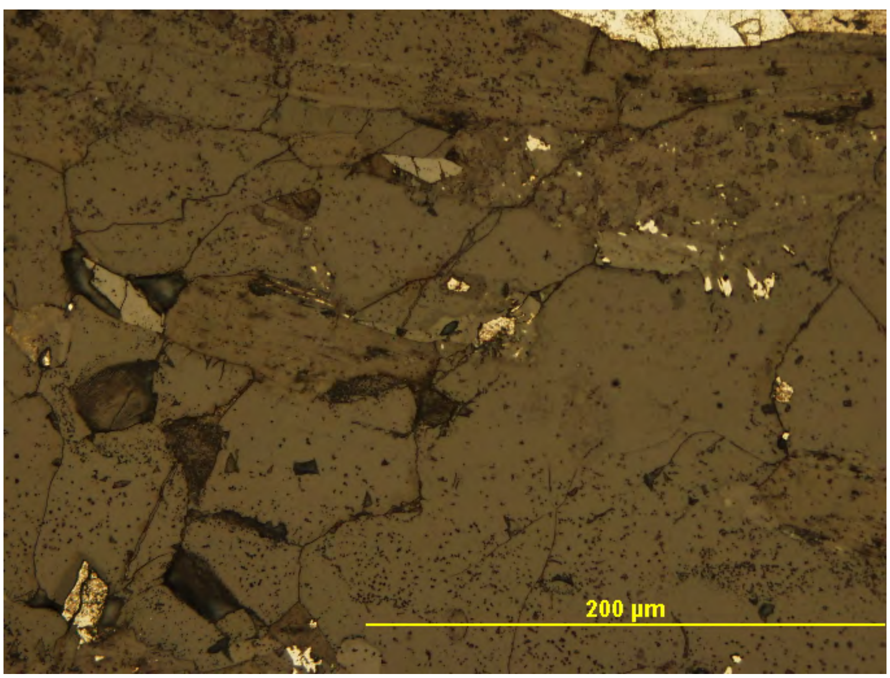


Fig. 27: Brittle-ductilely deformed breccia with gold mineralization (RL)

4- GOLD MINERALIZATION

Point counting for gold mineralization was conducted on four samples in reflective light to quantitatively test the occurrence and distribution within the sample suite (Table 1). The y-axis denotes the number of gold grains and the x-axis describes the location and association of gold.

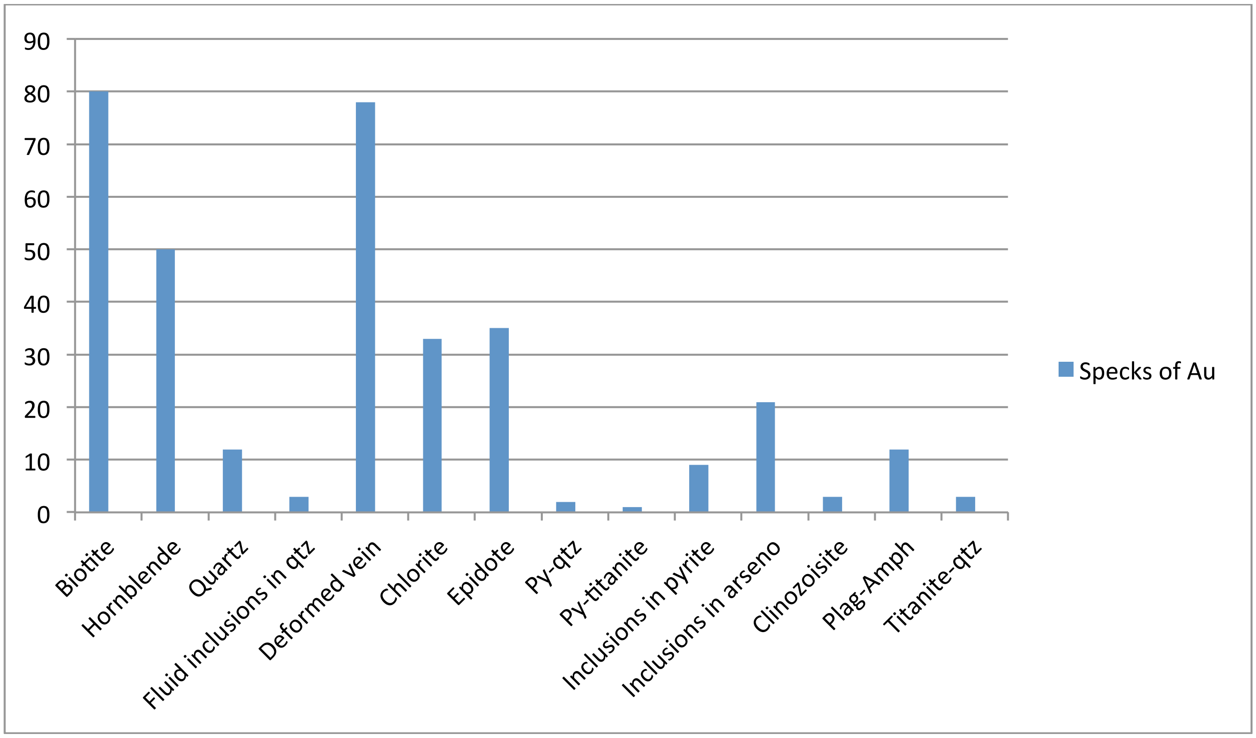


Table 1: Graph of gold mineralization occurrence and distribution

The table above describes the gold mineralization occurring within biotite or biotite-biotite grain boundaries, within hornblende or hornblende-hornblende grain boundaries, quartz or quartz-quartz grain boundaries or subgrain boundaries, within or associated with fluid inclusions in quartz, within brittle-ductilely deformed brecciated veins or zones, within chlorite or chlorite-chlorite grain boundaries, within epidote or epidote-epidote grain boundaries, along pyrite-quartz grain boundaries, along pyrite-titanite grain boundaries, as inclusions in pyrite, as inclusions in arsenopyrite, within clinozoisite or clinozoisite-clinozoisite grain boundaries, along plagioclase-hornblende amphibole grain boundaries, and along titanite-quartz grain boundaries. The specks of gold grains range in size from ~2µm- 50 µm.

5- CONCLUSIONS

The gold mineralization hosted within schistose amphibolite has undergone an extensive ductile to brittle-ductile deformation history within a shear zone, as denoted by folded and boudinaged quartz veins, tight foliations and strong lineation. Multiple episodes of fracturing and quartz infilling have occurred throughout prograde and retrograde metamorphism, as seen through the microstructures and metamorphic reaction products present. Gold mineralization and ductile deformation occurred at amphibolite facies temperatures or higher, as gold is commonly associated with ductilely deformed plagioclase and fractured amphibole (Tullis, 2002). Gold mineralization continued during greenschist facies retrograde metamorphism as gold is common within epidote, chlorite, and biotite after hornblende. The microstructures of quartz support this as quartz commonly displays evidence of ductile deformation during greenschist facies temperatures (Tullis, 2002). The gold mineralization within the S-C fabric, specifically within biotite and chlorite cleavage planes, suggests gold mineralization occurred within dextral transpression. Brittle deformation is commonly observed within the samples being overprinted by ductile deformation. The overprinting of brittle deformation with ductile deformation is characteristic of the brittle-ductile transition in the crust.

Many gold exploration camps and mines in Northern Ontario have ore zones that have undergone long-lived deformation histories throughout amphibolite to greenschist facies metamorphism. The ore zones at Hemlo and Musselwhite Mines show evidence of gold mineralization during ductile to brittle-ductile deformation during amphibolite facies (Pan and Fleet, 1990; Stinson, 2010). The Red Lake area mines similarly have evidence for gold mineralization during ductile to brittle-ductile deformation in greenschist facies metamorphism (Andrews and Wallce, 1983). Another mineralized biotite-hornblende schist with similar structure and microstructures has been described by the author in and around Caramat, Ontario (Stinson and Hill, 2011). However the samples collected from Caramat have not undergone as significant retrograde greenschist facies metamorphism as the samples in this petrographic study.

The potential host lithology for the schistose amphibolite samples may be located along a major regional dextral shear zones, well within the amphibolite facies that has retrograded to greenschist facies. An example of such an area could be within amphibolite lithologies near Chapleau and Wawa, Ontario.

6-REFERENCES

Andrews, A.J. and Wallace, H., 1983. Alteration, metamorphism and structural patterns associated with Archean gold deposits- preliminary observations in the Red Lake area, in Colvine, A.C., ed. The Geology of Gold in Ontario, Ontario Geological Survey, Miscellaneous Paper, 110, p. 111-122.

Coutinho, J.M.V., Kräutner, H.G., Sassi, F.P., Schmid, R., and Sen, S. A systematic nomenclature for metamorphic rocks: 8. Amphibolite and granulite. Recommendations by the IUGS Subcommission on the Systematics of Metamorphic Rocks. Recommendations, web version of 01.02.2007.

Pan, Y. and Fleet, M.E. 1990. Metamorphic petrology and alteration assemblages of the Hemlo gold district. Ontario Geological Survey, Miscellaneous Papers, 156, 176-198.

Passchier, C.W., Trouw, R.A.J. 2005. Micostructures (2nd edition), Springer, 366 p.

Stinson, V.R. 2010. Metamorphism of Musselwhite Mine, [Honours thesis], p. 50.

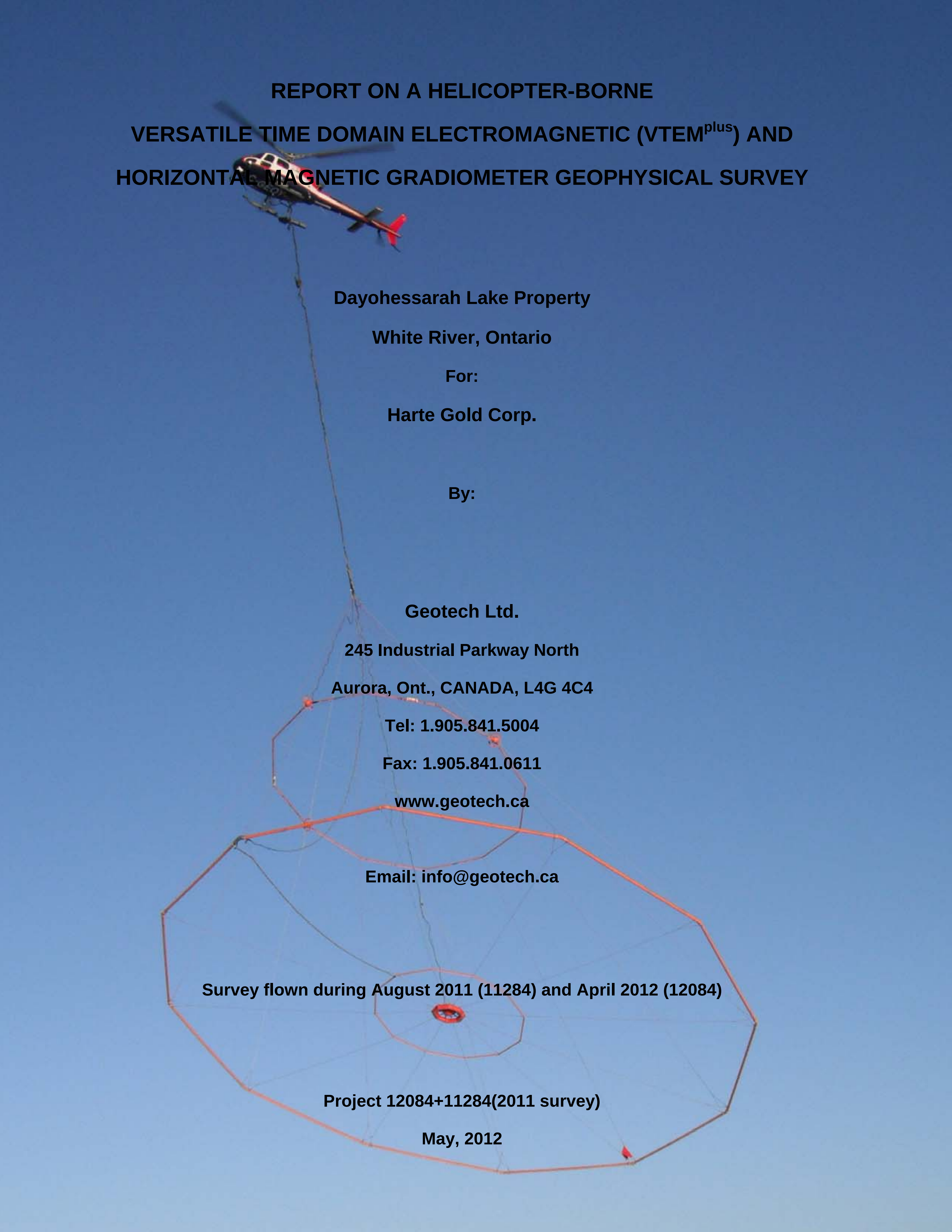
Stinson, V.R. and Hill, M.L. 2011. Microstructural control on gold mineralization in greenschist to amphibolite facies metamorphism in Greenstone, Ontario[abstract]: Institute on Lake Superior Geology Proceedings, 57th Annual Meeting, Ashland, WI, v. 57, part 1, p. 77.

Trouw, R.A.J., Passchier, C.W., Wiersma, D. J. 2009. Atlas of Mylonites and related structures (1st edition), Springer, 322 p.

Tullis, J. 2002. Deformation of Granitic Rocks: Experimental Studies and Natural Examples, Reviews in mineralogy and geochemistry, v. 51, part 1, p. 51-95.

Vernon, R.H., and Clarke, G.L., 2008. Principles of Metamorphic Petrology, Cambridge University Press, 343 p.

Winter, J.D., 2010. Principles of Igneous and Metamorphic Petrology (2nd edition), Prentice Hall Inc., 693 p.



REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM^{plus}) AND HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

Dayohessarah Lake Property

White River, Ontario

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Survey flown during August 2011 (11284) and April 2012 (12084)

Project 12084+11284(2011 survey)

May, 2012

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REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM^{plus}) and HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

Dayohessarah Lake Property
White River, Ontario

EXECUTIVE SUMMARY

During August 29th – September 1st 2011 (11284) & April 4th – 12th, 2012 (12084) Geotech Ltd. carried out a helicopter-borne geophysical survey over the Dayohessarah Lake Property situated approximately 24 km northeast of White River, Ontario, Canada.

Principal geophysical sensors for the 12084 survey included a versatile time domain electromagnetic (VTEM^{plus}) system, and horizontal magnetic gradiometer. Principal geophysical sensors for the 11284 survey included a versatile time domain electromagnetic (VTEM^{plus}) system, and caesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. As per client's request, the 12084 final data was merged with 11284 survey, flown in August 2011. A total of 1455 line-kilometres of geophysical data were acquired during these surveys.

In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

The processed survey results are presented as the following maps:

- Electromagnetic stacked profiles of the B-field Z Component,
- Electromagnetic stacked profiles of dB/dt Z Components,
- B-Field Z Component Channel grid
- Total Magnetic Intensity (TMI),
- dB/dt X Component Fraser Filter grid,
- Magnetic Total Horizontal Gradient (only available for 12084 survey)
- Magnetic Tilt-Angle Derivative (only available for 12084 survey)
- Calculated Time Constant (Tau) with contours of anomaly areas of the Calculated Vertical Derivative of TMI
- RDI sections are presented.

Please note: The horizontal magnetic gradiometer system was only used during the 12084 survey. Therefore the horizontal gradiometer final products such as, Magnetic Total Horizontal Gradient and Tilt Angle Derivative and Gradients are provided only for the 12084 survey. These unmerged maps will not feature the anomaly picking available on the merged maps.

The survey report describes the procedures for data acquisition, processing, final image presentation and the specifications for the digital data set.

1. INTRODUCTION

1.1 General Considerations

Geotech Ltd. performed a helicopter-borne geophysical survey over the Dayohessarah Lake Property located approximately 24 km northeast of White River, Ontario (Figure 1 & 2).

Steve Balch represented Harte Gold Corp. during the data acquisition and data processing phases of this project.

For 12084 the geophysical surveys consisted of helicopter borne EM using the versatile time-domain electromagnetic (VTEM^{plus}) system with Z and X component measurements and horizontal magnetic gradiometer using two cesium magnetometers. For 11284 the geophysical surveys consisted of helicopter borne EM using the versatile time-domain electrometric (VTEM plus) system with Z and X component measures and aeromagnetics using a caesium magnetometer. As per client's request, the 12084 final data was merged with 11284 survey, flown in August 2011. A total of 1455 line-kilometres of geophysical data were acquired during these surveys.

The crew was based out of White River (Figure 2) in Ontario for the acquisition phase of the survey. The 11284 Survey flying started on August 29th and was completed on Septebmer 1st 2011. The 12084 Survey flying started on April 4th and was completed on April 12th, 2012.

Data quality control and quality assurance, and preliminary data processing were carried out on a daily basis during the acquisition phase of the project. Final data processing followed immediately after the end of the survey. Final reporting, data presentation and archiving were completed from the Aurora office of Geotech Ltd. in May, 2012.

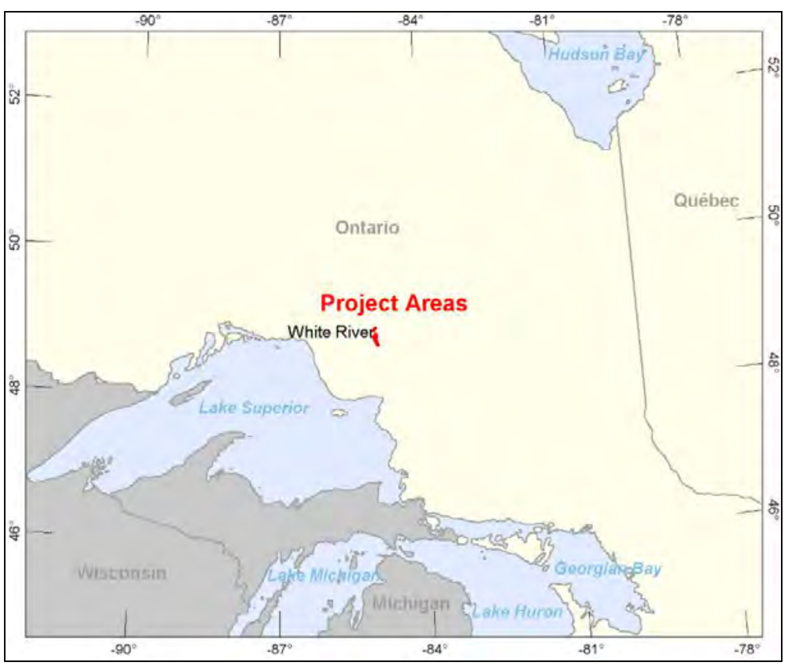

Figure 1: Property Location

1.2 Survey and System Specifications

The entire survey area is located approximately 24 kilometres northeast of White River, Ontario (Figure 2).

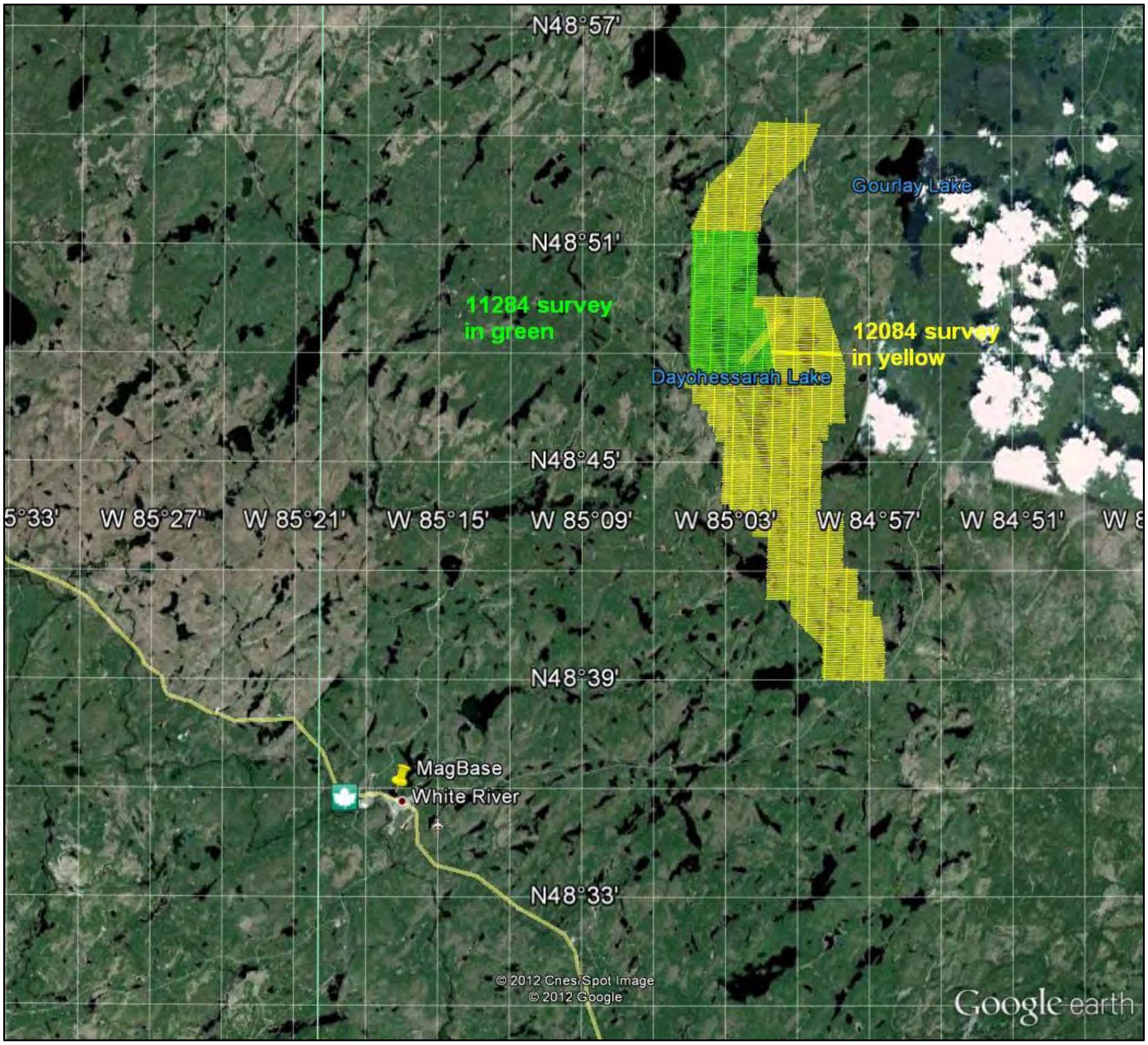

Figure 2: Survey area location on Google Earth

The block was flown in a east to west (N 90° E azimuth) direction with with 5 infill lines flown in a southwest to northeast (N 45° E azimuth) traverse line spacing of 100 metres as depicted in Figure 3. Tie lines were flown perpendicular to the traverse lines at a spacing of 1000 metres respectively. For more detailed information on the flight spacing and direction see Table 1.

1.3 Topographic Relief and Cultural Features

Topographically, the block exhibits a shallow relief with an elevation ranging from 344 to 507 metres above mean sea level over an area of 133 square kilometres (Figure 3).

There are various rivers and streams running through the survey area which connect various lakes and wetlands. The most notable is Dayofessarah Lake which runs along the north western side of the southern portion of the block. There are visible signs of culture such as roads which run throughout the centre of the survey area.

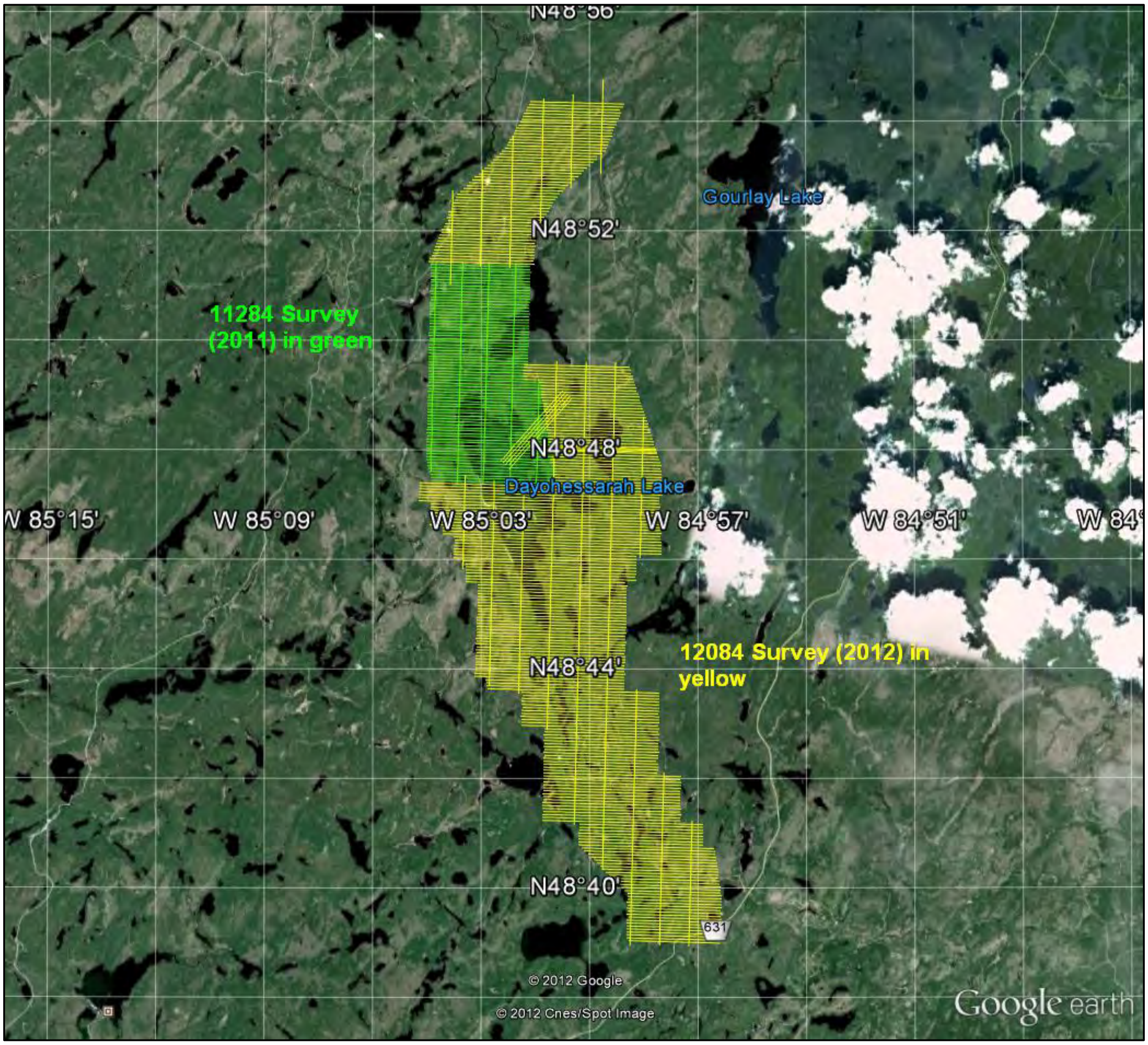

Figure 3: Flight path over a Google Earth Image.

The survey area is covered by numerous mining claims, which are shown in Appendix A, and are plotted on all maps. The survey area is covered by NTS (National Topographic Survey) of Canada sheets 042C10, 041C11, 041C14 & 042C15.

2. DATA ACQUISITION

2.1 Survey Area

The survey block (see Figure 3 and Appendix A) and general flight specifications are as follows:

Table 1: Survey Specifications

Survey block	Traverse Line spacing (m)	Area (Km^2)	Planned[1] Line-km	Actual Line-km	Flight direction	Line numbers
12084 Survey	Traverse: 100	107	1153	1121.5	N 90° E / N 270° E	L1000-L5040
	Tie: N/A			107.9	N 0° E / N 180° E	T1800-T4080
11284 Survey	Traverse: 100	26	302	278.9	N 90° E / N 270° E	L111000-L111730
	Tie: 900			33.3	N 0° E / N 180° E	T111900-T111940
TOTAL		**133**	**1455**	**1541.6**		

Survey block boundaries co-ordinates are provided in Appendix B.

2.2 Survey Operations

Survey operations were based out of White River in Ontario from April 4th to April 12th, 2012 (12084) and August 29th – September 1st 2011 (11284). The following tables show the timing of the flying.

Table 2: Survey schedule

Date	Flight #	Flow km	Block	Crew location	Comments
4-Apr-2012				WhiteRiver,ON	Crew arrived & system set up
5-Apr-2012	1,2,3	265		WhiteRiver,ON	265km flown
6-Apr-2012	4,5,6	256		WhiteRiver,ON	256km flown
7-Apr-2012	7,8,9	282		WhiteRiver,ON	282km flown
8-Apr-2012	10	20		WhiteRiver,ON	20km flown Limited production due to weather
9-Apr-2012	11,12	13		WhiteRiver,ON	13km flown Limited production due to weather
10-Apr-2012				WhiteRiver,ON	No production due to weather
11-Apr-2012	13,14	256		WhiteRiver,ON	256km flown
12-Apr-2012	15			WhiteRiver,ON	Remaining kms were flown – flying complete

Table 3 - 11284 Survey schedule (2011 Data)

Date	Flight #	Flown km	Crew location	Comments
8-29-11			White River, ON	Crew Arrived
8-30-11	1,2	139	White River, ON	139km flown limited production due to weather
8-31-11	3,4	140	White River, ON	140km flown
9-1-11	5	24	White River, ON	Remaining kms were flown – flying is complete

[1] *Note: Actual Line kilometres represent the total line kilometres in the final database. These line-km normally exceed the planned line-km, as indicated in the survey NAV files.*

2.3 Flight Specifications

During the survey the helicopter was maintained at a mean altitude of 82 metres above the ground with an average survey speed of 80 km/hour. This allowed for an actual average EM bird terrain clearance of 47 metres and a magnetic sensor clearance of 58 metres.

The on board operator was responsible for monitoring the system integrity. He also maintained a detailed flight log during the survey, tracking the times of the flight as well as any unusual geophysical or topographic features.

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer. The data were then uploaded via ftp to the Geotech office in Aurora for daily quality assurance and quality control by qualified personnel.

2.4 Aircraft and Equipment

2.4.1 Survey Aircraft

The survey was flown using a Eurocopter Aerospatiale (Astar) 350 B3 helicopter, registration C-GEOJ (12084) & C-FVTM (11284). The helicopter is owned and operated by Geotech Aviation. Installation of the geophysical and ancillary equipment was carried out by a Geotech Ltd crew.

2.4.2 Electromagnetic System

The electromagnetic system was a Geotech Time Domain EM (VTEM^{plus}) system. VTEM with the Serial number 7 had been used for the survey. The configuration is as indicated in Figure 5.

The VTEM Receiver and transmitter coils were in concentric-coplanar and Z-direction oriented configuration. The receiver system for the project also included a coincident-coaxial X-direction coil to measure the in-line dB/dt and calculate B-Field responses. The EM bird was towed at a mean distance of 35 metres below the aircraft as shown in Figure 5. The receiver decay recording scheme is shown diagrammatically in Figure 4.

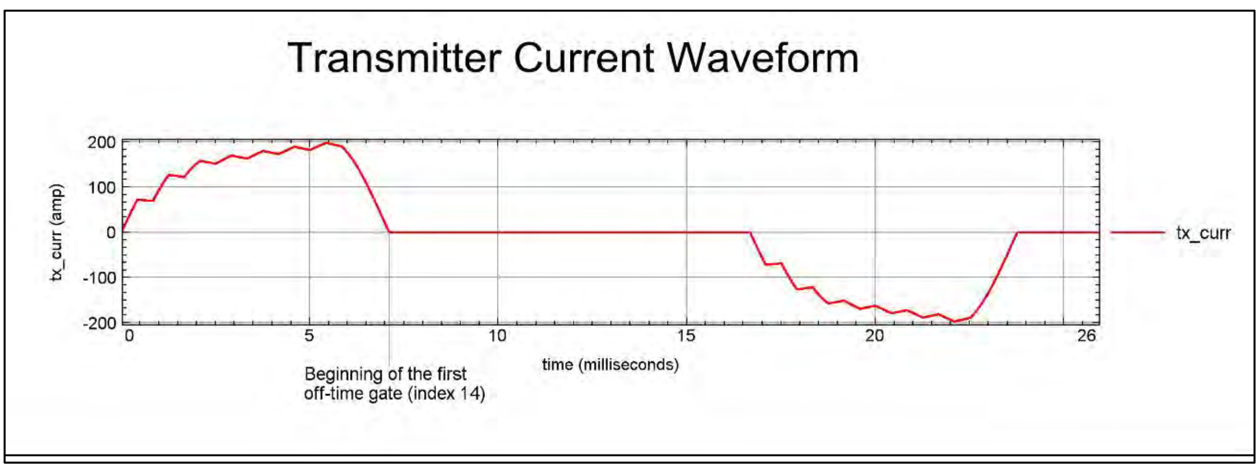

Figure 4: VTEM Waveform & Sample Times

The VTEM decay sampling scheme is shown in Table 4 below. Thirty-two time measurement gates were used for the final data processing in the range from 96 to 7036 μ sec.

Table 4**:** Off-Time Decay Sampling Scheme

VTEM Decay Sampling Scheme			
Index	**Middle**	**Start**	**End**
Milliseconds			
14	0.096	0.090	0.103
15	0.110	0.103	0.118
16	0.126	0.118	0.136
17	0.145	0.136	0.156
18	0.167	0.156	0.179
19	0.192	0.179	0.206
20	0.220	0.206	0.236
21	0.253	0.236	0.271
22	0.290	0.271	0.312
23	0.333	0.312	0.358
24	0.383	0.358	0.411
25	0.440	0.411	0.472
26	0.505	0.472	0.543
27	0.580	0.543	0.623
28	0.667	0.623	0.716
29	0.766	0.716	0.823
30	0.880	0.823	0.945
31	1.010	0.945	1.086
32	1.161	1.086	1.247
33	1.333	1.247	1.432
34	1.531	1.432	1.646
35	1.760	1.646	1.891
36	2.021	1.891	2.172
37	2.323	2.172	2.495
38	2.667	2.495	2.865
39	3.063	2.865	3.292
40	3.521	3.292	3.781
41	4.042	3.781	4.341
42	4.641	4.341	4.987
43	5.333	4.987	5.729
44	6.125	5.729	6.581
45	7.036	6.581	7.560

Z Component: 14-45 time gates
X Component: 20-45 time gates.

VTEM system specifications:

<u>Transmitter</u>

- Transmitter coil diameter: 26 m
- Number of turns: 4
- Effective Transmitter coil area: 2123 m^2
- Transmitter base frequency: 30 Hz
- Peak current: 197 A
- Pulse width: 7.11 ms
- Wave form shape: Bi-polar trapezoid
- Peak dipole moment: 418,372 nIA
- Actual average EM Bird terrain clearance: 58 metres above the ground

<u>Receiver</u>

- X Coil diameter: 0.32 m
- Number of turns: 245
- Effective coil area: 19.69 m^2
- Z-Coil coil diameter: 1.2 m
- Number of turns: 100
- Effective coil area: 113.04 m^2

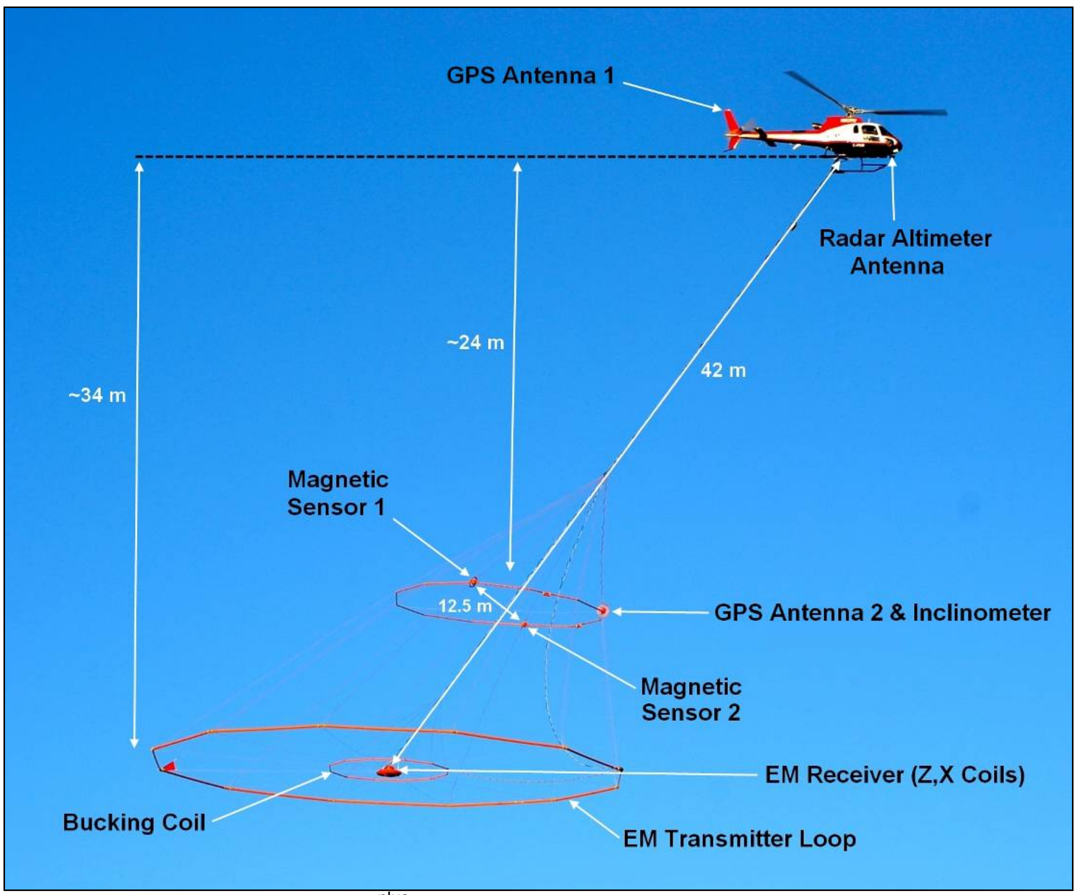

Figure 5: VTEM^{plus} System Configuration (for 12084 survey)

2.4.1 Airborne magnetometer (11284)

The magnetic sensor utilized for the survey was Geometrics optically pumped caesium vapour magnetic field sensor mounted 13 metres below the helicopter, as shown in **Error! Reference source not found.**. The sensitivity of the magnetic sensor is 0.02 nanoTesla (nT) at a sampling interval of 0.1 seconds.

2.4.2 Horizontal Magnetic Gradiometer (12084 only)

The horizontal magnetic gradiometer consists of two Geometrics split-beam field magnetic sensors with a sampling interval of 0.1 seconds. These sensors are mounted 12.5 metres apart on a separate loop, 10 metres above the EM bird. A GPS antenna and Gyro Inclinometer is installed on the separate loop to accurately record the tilt and position of the magnetic gradiomag bird.

2.4.3 Radar Altimeter

A Terra TRA 3000/TRI 40 radar altimeter was used to record terrain clearance. The antenna was mounted beneath the bubble of the helicopter cockpit (Figure 5).

2.4.4 GPS Navigation System

The navigation system used was a Geotech PC104 based navigation system utilizing a NovAtel's WAAS (Wide Area Augmentation System) enabled GPS receiver, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and an NovAtel GPS antenna mounted on the helicopter tail (Figure 5). As many as 11 GPS and two WAAS satellites may be monitored at any one time. The positional accuracy or circular error probability (CEP) is 1.8 m, with WAAS active, it is 1.0 m. The co-ordinates of the block were set-up prior to the survey and the information was fed into the airborne navigation system. The second GPS antenna is installed on the additional magnetic loop together with Gyro Inclinometer.

2.4.5 Digital Acquisition System

A Geotech data acquisition system recorded the digital survey data on an internal compact flash card. Data is displayed on an LCD screen as traces to allow the operator to monitor the integrity of the system. The data type and sampling interval as provided in Table 5.

Table 5: Acquisition Sampling Rates

Data Type	Sampling
TDEM	0.1 sec
Magnetometer	0.1 sec
GPS Position	0.2 sec
Radar Altimeter	0.2 sec
Inclinometer	0.1 sec

2.5 Base Station

A combined magnetometer/GPS base station was utilized on this project. A Geometrics Cesium vapour magnetometer was used as a magnetic sensor with a sensitivity of 0.001 nT. The base station was recording the magnetic field together with the GPS time at 1 Hz on a base station computer.

The base station magnetometer sensor was installed in a brush lot 150 metres south of hotel (48º35'6632"N, 85º16'5778"W); away from electric transmission lines and moving ferrous objects such as motor vehicles. The base station data were backed-up to the data processing computer at the end of each survey day.

3. PERSONNEL

The following Geotech Ltd. personnel were involved in the project.

Field:

Project Manager:	Scott Trew (Office)
Data QC:	Nick Venter (Office)
Crew chief:	Brian Youngs
Operator:	Juan Carlos Florez John West-Fiset

The survey pilot and the mechanical engineer were employed directly by the helicopter operator – Geotech Aviation.

Pilot:	Steven McAvoy
Mechanical Engineer:	n/a

Office:

Preliminary Data Processing:	Nick Venter
Final Data Processing:	Karl Kwan
Final Data QA/QC:	Francis Tong/Alexander Prikhodko
Reporting/Mapping:	Corrie Laver

Data acquisition phase was carried out under the supervision of Andrei Bagrianski, P. Geo, Chief Operating Officer. Processing and Interpretation phases were carried out under the supervision of Alexander Prikhodko, P. Geo, Senior Geophysicist, VTEM Interpretation Supervisor. The customer relations were looked after by Mandy Long.

4. DATA PROCESSING AND PRESENTATION

Data compilation and processing were carried out by the application of Geosoft OASIS Montaj and programs proprietary to Geotech Ltd.

4.1 Flight Path

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the NAD83 Datum, UTM Zone 16 North coordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x, y positions from the navigation system. Positions are updated every second and expressed as UTM easting's (x) and UTM northing's (y).

4.2 Electromagnetic Data

A three stage digital filtering process was used to reject major sferic events and to reduce noise levels. Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 1 second or 15 metres. This filter is a symmetrical 1 sec linear filter.

The results are presented as stacked profiles of EM voltages for the time gates, in linear - logarithmic scale for the B-field Z component and dB/dt responses in the Z and X components. B-field Z component time channel recorded at 1.161 milliseconds after the termination of the impulse is also presented as a colour image. Fraser Filter X component is also presented as a colour image. Calculated Time Constant (TAU) with anomaly contours of Calculated Vertical Derivative of TMI is presented in Appendix C and E. Resistivity Depth Image (RDI) is also presented in Appendix E and F.

VTEM has two receiver coil orientations. Z-axis coil is oriented parallel to the transmitter coil axis and both are horizontal to the ground. The X-axis coil is oriented parallel to the ground and along the line-of-flight. This combined two coil configuration provides information on the position, depth, dip and thickness of a conductor. Generalized modeling results of VTEM data, are shown in Appendix D.

In general X-component data produce cross-over type anomalies: from "+ to – "in flight direction of flight for "thin" sub vertical targets and from "- to +" in direction of flight for "thick" targets. Z component data produce double peak type anomalies for "thin" sub vertical targets and single peak for "thick" targets.

The limits and change-over of "thin-thick" depends on dimensions of a TEM system (Appendix D, Figure D-16).

Because of X component polarity is under line-of-flight, convolution Fraser Filter (Figure 6) is applied to X component data to represent axes of conductors in the form of grid map. In this case positive FF anomalies always correspond to “plus-to-minus” X data crossovers independent of the flight direction.

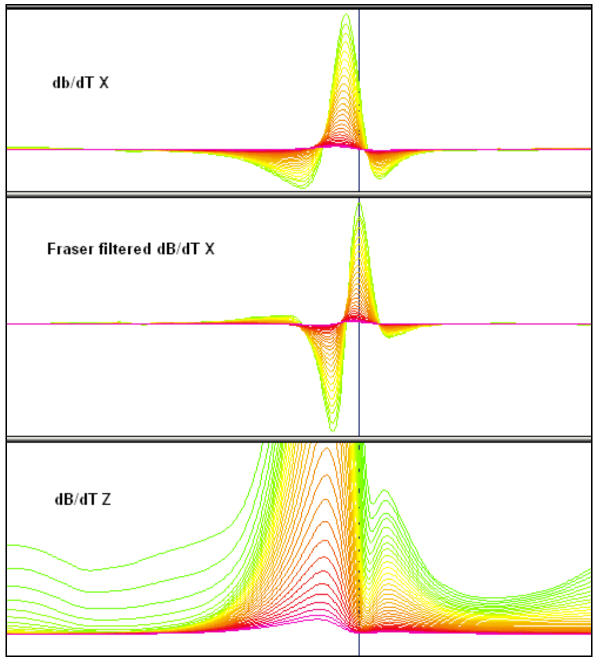

Figure 6: Z, X and Fraser filtered X (FFx) components for “thin” target

4.3 Horizontal Magnetic Gradiometer Data (12084 only)

The horizontal gradients data from the VTEM^{plus} are measured by two magnetometers 12.5 m apart on an independent bird mounted10m above the VTEM loop. A GPS and a Gyro Inclinometer help to determine the positions and orientations of the magnetometers. The data from the two magnetometers are corrected for position and orientation variations, as well as for the diurnal variations using the base station data.

The position of the centre of the horizontal magnetic gradiometer bird is calculated form the GPS utilizing in-house processing tool in Geosoft. Following that total magnetic intensity is calculated at the center of the bird by calculating the mean values from both sensors. In addition to the total intensity advanced processing is done to calculate the in-line and cross-line (or lateral) horizontal gradient which enhance the understanding of magnetic targets. The in-line (longitudinal) horizontal gradient is calculated from the difference of two consecutive total magnetic field readings divided by the distance along the flight line direction, while the cross-line (lateral) horizontal magnetic gradient is calculated from the difference in the magnetic readings from both magnetic sensors divided by their horizontal separation.

Two advanced magnetic derivative products, the total horizontal derivative (THDR), and tilt angle derivative and are also created. The total horizontal derivative or gradient is also called the analytic signal, is defined as:

THDR = sqrt(Hx*Hx+Hy*Hy), where Hx and Hy are cross-line and in-line horizontal gradients.

The tilt angle derivative (TDR) is defined as:

TDR = arctan(Vz/THDR), where THDR is the total horizontal derivative, and Vz is the vertical derivative.

Measured cross-line gradients can help to enhance cross-line linear features during gridding.

5. DELIVERABLES

5.1 Survey Report

The survey report describes the data acquisition, processing, and final presentation of the survey results. The survey report is provided in two paper copies and digitally in PDF format.

5.2 Maps

Final maps were produced at scale of 1:20,000 for best representation of the survey size and line spacing. The coordinate/projection system used was NAD83 Datum, UTM Zone 16 North. All maps show the mining claims, flight path trace and topographic data; latitude and longitude are also noted on maps.

The preliminary and final results of the survey are presented as EM profiles, a late-time gate gridded EM channel, and a colour magnetic TMI contour map. The following maps are presented on paper;

- VTEM dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
- VTEM B-Field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
- VTEM B-field late time Z Component colour image.
- VTEM dB/dt Calculated Time Constant (TAU) with contours of anomaly areas of the Calculated Vertical Derivative of TMI
- Fraser Filtered dB/dt X Component
- Total magnetic intensity (TMI) colour image and contours.
- Magnetic Total Horizontal Gradient (only available for 12084 survey)
- Magnetic Tilt-Angle Derivative (only available for 12084 survey)

5.3 Digital Data

Two copies of the data and maps on DVD were prepared to accompany the report. Each DVD contains a digital file of the line data in GDB Geosoft Montaj format as well as the maps in Geosoft Montaj Map and PDF format.

- DVD structure.

Data contains databases, grids and maps, as described below.
Report contains a copy of the report and appendices in PDF format.

Databases in Geosoft GDB format, containing the channels listed in Table 6.

Table 6: Geosoft GDB Data Format

Channel name	Units	Description
X:	metres	UTM Easting NAD83 Zone 16 North
Y:	metres	UTM Northing NAD83 Zone 16 North
Longitude:	Decimal Degrees	WGS 84 Longitude data
Latitude:	Decimal Degrees	WGS 84 Latitude data
Z:	metres	GPS antenna elevation (above Geoid)
Radar:	metres	helicopter terrain clearance from radar altimeter
Radarb:	metres	Calculated EM bird terrain clearance from radar altimeter
DEM:	metres	Digital Elevation Model
Gtime:	Seconds of the day	GPS time
Mag1L:	nT	Measured Total Magnetic field data (left sensor)
Mag1R:	nT	Measured Total Magnetic field data (right sensor)
Basemag:	nT	Magnetic diurnal variation data
Mag2LZ	nT	Z corrected (w.r.t. loop center) and diurnal corrected magnetic field left mag
Mag2RZ	nT	Z corrected (w.r.t. loop center) and diurnal corrected magnetic field right mag
TMI2	nT	Calculated from diurnal corrected total magnetic field intensity of the centre of the loop
TMI3	nT	Microleveled total magnetic field intensity of the centre of the loop
Hgcxline		measured cross-line gradient
Hginline		Calculated in-line gradient
CVG	nT/m	Calculated Magnetic Vertical Gradient
SFz[14]:	$pV/(A*m^4)$	Z dB/dt 0.096 millisecond time channel
SFz[15]:	$pV/(A*m^4)$	Z dB/dt 0.110 millisecond time channel
SFz[16]:	$pV/(A*m^4)$	Z dB/dt 0.126 millisecond time channel
SFz[17]:	$pV/(A*m^4)$	Z dB/dt 0.145 millisecond time channel
SFz[18]:	$pV/(A*m^4)$	Z dB/dt 0.167 millisecond time channel
SFz[19]:	$pV/(A*m^4)$	Z dB/dt 0.192 millisecond time channel
SFz[20]:	$pV/(A*m^4)$	Z dB/dt 0.220 millisecond time channel
SFz[21]:	$pV/(A*m^4)$	Z dB/dt 0.253 millisecond time channel
SFz[22]:	$pV/(A*m^4)$	Z dB/dt 0.290 millisecond time channel
SFz[23]:	$pV/(A*m^4)$	Z dB/dt 0.333 millisecond time channel
SFz[24]:	$pV/(A*m^4)$	Z dB/dt 0.383 millisecond time channel
SFz[25]:	$pV/(A*m^4)$	Z dB/dt 0.440 millisecond time channel
SFz[26]:	$pV/(A*m^4)$	Z dB/dt 0.505 millisecond time channel
SFz[27]:	$pV/(A*m^4)$	Z dB/dt 0.580 millisecond time channel
SFz[28]:	$pV/(A*m^4)$	Z dB/dt 0.667 millisecond time channel
SFz[29]:	$pV/(A*m^4)$	Z dB/dt 0.766 millisecond time channel
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SFz[33]:	$pV/(A*m^4)$	Z dB/dt 1.333 millisecond time channel
SFz[34]:	$pV/(A*m^4)$	Z dB/dt 1.531 millisecond time channel
SFz[35]:	$pV/(A*m^4)$	Z dB/dt 1.760 millisecond time channel
SFz[36]:	$pV/(A*m^4)$	Z dB/dt 2.021 millisecond time channel
SFz[37]:	$pV/(A*m^4)$	Z dB/dt 2.323 millisecond time channel
SFz[38]:	$pV/(A*m^4)$	Z dB/dt 2.667 millisecond time channel
SFz[39]:	$pV/(A*m^4)$	Z dB/dt 3.063 millisecond time channel
SFz[40]:	$pV/(A*m^4)$	Z dB/dt 3.521 millisecond time channel
SFz[41]:	$pV/(A*m^4)$	Z dB/dt 4.042 millisecond time channel

Channel name	Units	Description
SFz[42]:	pV/(A*m^4)	Z dB/dt 4.641 millisecond time channel
SFz[43]:	pV/(A*m^4)	Z dB/dt 5.333 millisecond time channel
SFz[44]:	pV/(A*m^4)	Z dB/dt 6.125 millisecond time channel
SFz[45]:	pV/(A*m^4)	Z dB/dt 7.036 millisecond time channel
SFx[20]:	pV/(A*m^4)	X dB/dt 0.220 millisecond time channel
SFx[21]:	pV/(A*m^4)	X dB/dt 0.253 millisecond time channel
SFx[22]:	pV/(A*m^4)	X dB/dt 0.290 millisecond time channel
SFx[23]:	pV/(A*m^4)	X dB/dt 0.333 millisecond time channel
SFx[24]:	pV/(A*m^4)	X dB/dt 0.383 millisecond time channel
SFx[25]:	pV/(A*m^4)	X dB/dt 0.440 millisecond time channel
SFx[26]:	pV/(A*m^4)	X dB/dt 0.505 millisecond time channel
SFx[27]:	pV/(A*m^4)	X dB/dt 0.580 millisecond time channel
SFx[28]:	pV/(A*m^4)	X dB/dt 0.667 millisecond time channel
SFx[29]:	pV/(A*m^4)	X dB/dt 0.766 millisecond time channel
SFx[30]:	pV/(A*m^4)	X dB/dt 0.880 millisecond time channel
SFx[31]:	pV/(A*m^4)	X dB/dt 1.010 millisecond time channel
SFx[32]:	pV/(A*m^4)	X dB/dt 1.161 millisecond time channel
SFx[33]:	pV/(A*m^4)	X dB/dt 1.333 millisecond time channel
SFx[34]:	pV/(A*m^4)	X dB/dt 1.531 millisecond time channel
SFx[35]:	pV/(A*m^4)	X dB/dt 1.760 millisecond time channel
SFx[36]:	pV/(A*m^4)	X dB/dt 2.021 millisecond time channel
SFx[37]:	pV/(A*m^4)	X dB/dt 2.323 millisecond time channel
SFx[38]:	pV/(A*m^4)	X dB/dt 2.667 millisecond time channel
SFx[39]:	pV/(A*m^4)	X dB/dt 3.063 millisecond time channel
SFx[40]:	pV/(A*m^4)	X dB/dt 3.521 millisecond time channel
SFx[41]:	pV/(A*m^4)	X dB/dt 4.042 millisecond time channel
SFx[42]:	pV/(A*m^4)	X dB/dt 4.641 millisecond time channel
SFx[43]:	pV/(A*m^4)	X dB/dt 5.333 millisecond time channel
SFx[44]:	pV/(A*m^4)	X dB/dt 6.125 millisecond time channel
SFx[45]:	pV/(A*m^4)	X dB/dt 7.036 millisecond time channel
BFz	(pV*ms)/(A*m^4)	Z B-Field data for time channels 14 to 45
BFx	(pV*ms)/(A*m^4)	X B-Field data for time channels 20 to 45
SFxFF	pV/(A*m^4)	Fraser Filtered X dB/dt
Nchan_BF		Latest time channels of TAU calculation
Nchan_SF		Latest time channels of TAU calculation
Tau_BF	ms	Time constant B-Field
Tau_SF	ms	Time constant dB/dt
PLM:		60 Hz power line monitor

- Databases of selected anomalies in Geosoft GDB format, contains the channels described in Table 6.

Table 7 - Geosoft database for selected EM anomalies

Channel name	Units	Description
Line		Line number
Anom_ID:		Letter indicating the Anomaly ID
Anom_Labels:		Anomaly type (K: thick, N: thin)
X:	metres	NAD83 / UTM zone 16 north
Y:	metres	NAD83 / UTM zone 16 north
AnConSF:	Siemens	Estimated conductance calculated from dB/dt Z component data
AnConBF:	Siemens	Estimated conductance calculated from BFz data
AnTauSF:	milliseconds	Time constant (Tau), calculated from dB/dt Z component data

AnTauBF:	milliseconds	Time constant (Tau), calculated from B-field data
AnBF32m	$(pV*ms)/(A*m^4)$	B-Field Z Component response for time channel 32
Grade		Anomaly classification (1=weak; 6=strong).

Electromagnetic B-field and dB/dt Z component data is found in array channel format between indexes 14 – 45, and X component data from 20 – 45, as described above.

- Database of the VTEM Waveform “12084_waveform_final.gdb” in Geosoft GDB format, containing the following channels:

Time:	Sampling rate interval, 5.2083 milliseconds
Rx_Volt:	Output voltage of the receiver coil (Volt)
Tx_Current:	Output current of the transmitter (Amp)

- Grids in Geosoft GRD format, as follows:

BFz32:	B-Field Z Component Channel 32 (Time Gate 1.161 ms)
CVG:	Calculated Magnetic Vertical Gradient (nT/m)
DEM:	Digital Elevation Model (metres)
PLM:	Power Line Monitor
Hgcxline:	Measured Cross-Line Gradient (nT/m)
Hginline:	Measured In-Line Gradient (nT/m)
SFxFF30:	Fraser Filtered dB/dt X Component Channel 30 (Time Gate 0.880 ms)
TauBF:	B-Field Z Component, Calculated Time Constant (ms)
TauSF:	dB/dt Z Component, Calculated Time Constant (ms)
TMI:	Total Magnetic Intensity (nT)
TotalHGrad:	Magnetic Total Horizontal Gradient (nT/m) (12084 only)
Tiltdrv:	Magnetic Tilt derivative (radians) (12084 only)
Hginline:	In-line magnetic Gradient (in case of gradiometer with 2 mag sensors) – 12084
Hgcxline:	Cross-line magnetic Gradient (in case of gradiometer with 2 mag sensors) - 12084
SFz:	VTEM dB/dT for three selected time gates (early 20, middle 32, late 44); - merged

A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information. A grid cell size of 25 metres was used.

- Maps at 1:20,000 in Geosoft MAP format, as follows:

12084+11284_20k_dBdt:	dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
12084+11284_20k_Bfield:	B-field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
12084+11284_20k_BFz32:	B-field late time Z Component Channel 32, Time Gate 1.161 ms colour image.
12084+11284_20k_TMI:	Total magnetic intensity (TMI) colour image and contours.
12084+11284_20k_TauSF:	dB/dt Calculated Time Constant (Tau) with contours of anomaly areas of the Calculated Vertical Derivative of TMI

12084+11284_20k_SFxFF30: Fraser Filtered X Component dB/dt, Channel 30, Time Gate 0.880 ms.
12084_20k_TotalHGrad: Magnetic Total Horizontal Gradient colour image. (12084 only, unmerged, without anomalies)
12084_20k_TiltDrv: Magnetic Tilt-Angle Derivative colour image. (12084 only, unmerged, without anomalies)

Maps are also presented in PDF format.

- 1:50,000 topographic vectors were taken from the NRCAN Geogratis database at; http://geogratis.gc.ca/geogratis/en/index.html.

- A Google Earth file 12084+11284_*HarteGold.kml* showing the flight path of the block is included. Free versions of Google Earth software from: http://earth.google.com/download-earth.html

6. CONCLUSIONS AND RECOMMENDATIONS

A helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey has been completed over the Dayohessarah Lake property, White River, Ontario, Canada, for Harte Gold Corp.

The total area coverage is 133 km^2. Total survey line coverage is 1541.6 line kilometres. The principal sensors included a Time Domain EM system and a magnetic gradiometer (horizontal gradient) system. Results have been presented as stacked profiles, and contour color images at a scale of 1:20,000. No formal interpretation has been requested.

The client requested that a VTEM survey with a single magnetometer (#11284, 302 line-kilometers flown in 2011) to be merged with the current survey.

Upon requests from Harte Gold Corp., the following additional products were prepared by Geotech LTD for Dayohessarah Lake property:

- EM anomaly picks for 1541.6 line kilometers of VTEM data, as symbol overlays on all maps, and in Geosoft GDB and XYZ formats;
- Calculated time-constant (Tau) analysis of dB/dt, with CVG (Calculated Vertical Gradient) contours overlay;

Time Constant TAU and Calculated Vertical Gradient CVG

The processed VTEM survey data are presented as a calculated dB/dt time constant (Tau), which is an indicator electrical conductance of geological units.

An explanation of the EM time constant calculation is provided in Appendix F. The TAU maps are presented in Appendix D. The maps are overlain with the contours of the calculated vertical gradient of TMI profiles (CVG) for tracing possible EM-MAG anomaly correlations.
The CVG contours are the responses of the smaller and shallower magnetic sources in comparison with the TMI. CVG is designed to highlight the structures and lithological units that might not otherwise be seen on the TMI due to the nearby presence of stronger magnetic responses with higher resolution.

As can be seen from the combined TAU-CVG contours map shown below, the most highly conductive targets (with high TAU values) are normally correlated with relatively strong magnetic anomalies.

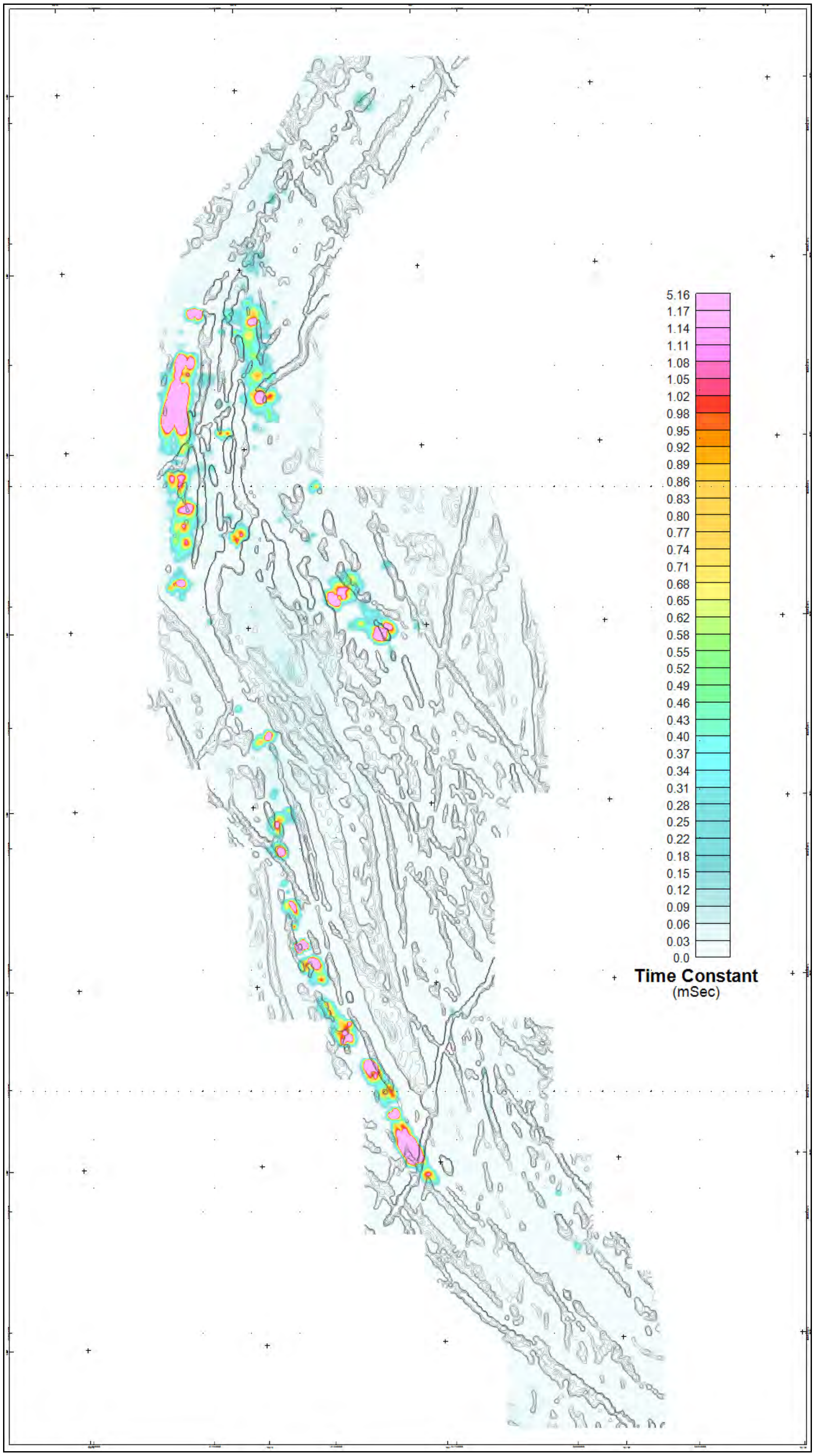

Figure 7 - Time constant TAU (dB/dt) overlain with CVG contours.

EM Anomaly Picks

The EM data are screened by an anomaly recognition process that uses all time domain dB/dt, B-field, Tau and Power Line Monitor (PLM) profiles. The resulting EM anomaly picks are presented as overlays on the final EM anomaly map. The locations of the picks correspond approximately to the target's centre projected onto the surface.

Each individual anomaly pick is represented by an anomaly symbol classified according to calculated conductance[2]. Only local and discrete basement anomalies are selected. Identified anomalies were classified into one of the six categories, as shown in the figure below, according to their conductance values. An anomaly symbol is accompanied by the calculated dB/dt and B-field conductance's, the anomaly thickness (N or K) defined by its EM response[3], anomaly ID, an identification letter unique to each anomaly along a flight line, and B-field channel 32.

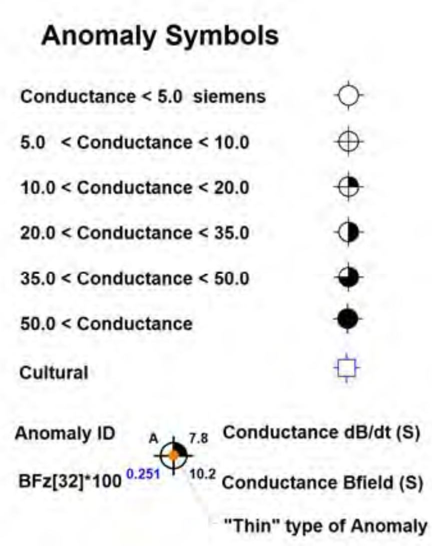

Figure 8 - EM anomaly legend.

The anomalous EM responses have been picked, reviewed and edited by an interpreter on a line by line basis. The anomaly picks favor mostly the bedrock conductors. The anomaly picks are provided as a Geosoft GDB binary database and a Geosoft XYZ ASCII file. The table below shows the conductance and TAU ranges for the picked anomalies.

No of anomalies picked	Conductance (S) dB/dT (min-max)	Conductance (S) B-field (min-max)	TAU dB/dT (msec), min-max	TAU B-field, (msec), min-max
376	0.0-93.44	0.0-142.54	0.0-5.02	0.0-7.66

The EM anomalies picked are displayed below.

2 Conductance values were obtained from the dB/dt and B-Field EM time constants (Tau) whose relationships to Tau were calculated using the oblate spheroid model of McNeill (1980, TN-7, "Applications of Transient EM Techniques").
[3] Anomalies with double-peak responses are classified as Thin (N), while wider single-peak responses as Thick (K).

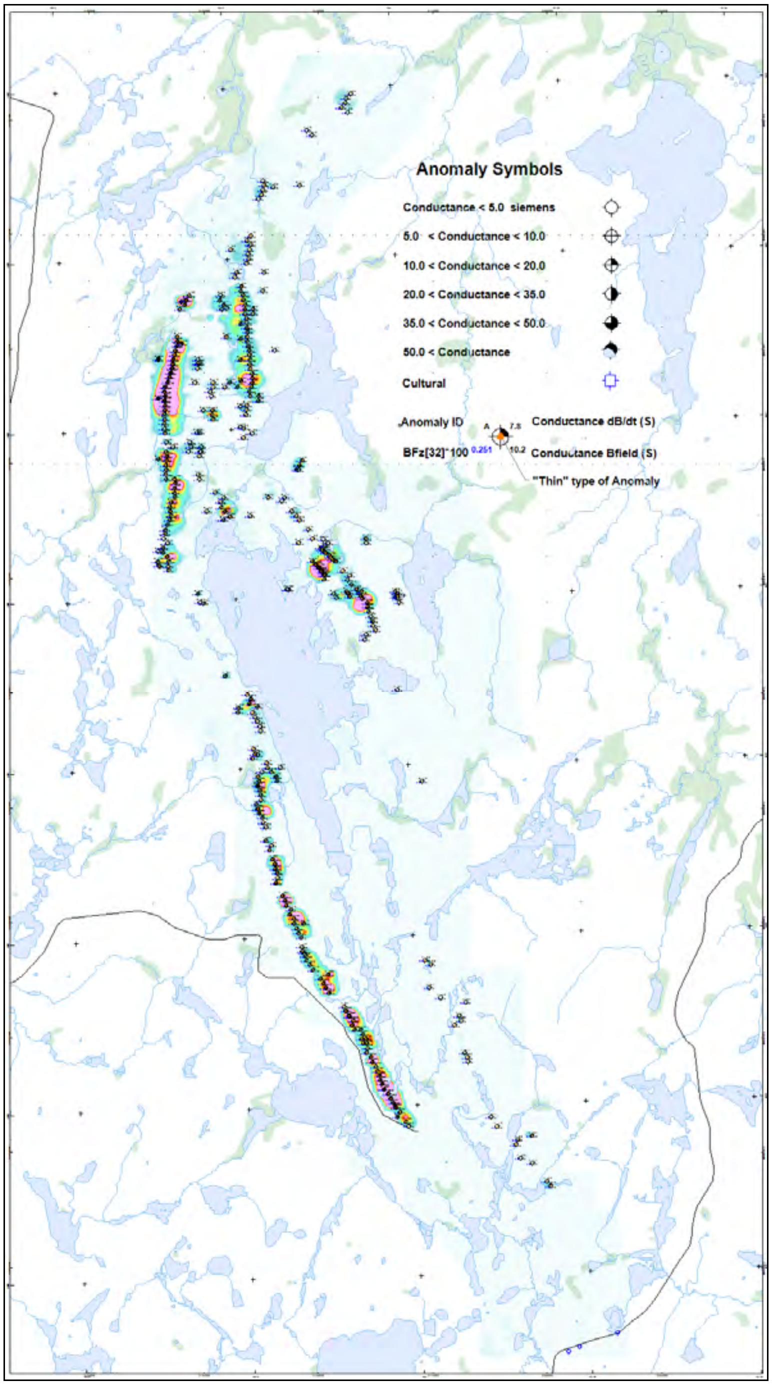

Figure 9 - EM anomalies picked

Time constant TAU with CVG contours and EM anomaly maps indicate that the Dayohessarah Lake property is dominated by four near NS or NNE trending conductive zones, Z1 to Z4, Figure 10 below.

Five Resistivity Depth Imaging (RDI) sections from Lines 1140 and 1180 (survey #11284, 2011), 3360, 3390 and 5020 (current survey) were created to show the 2D resistivity structures underneath the selected lines.

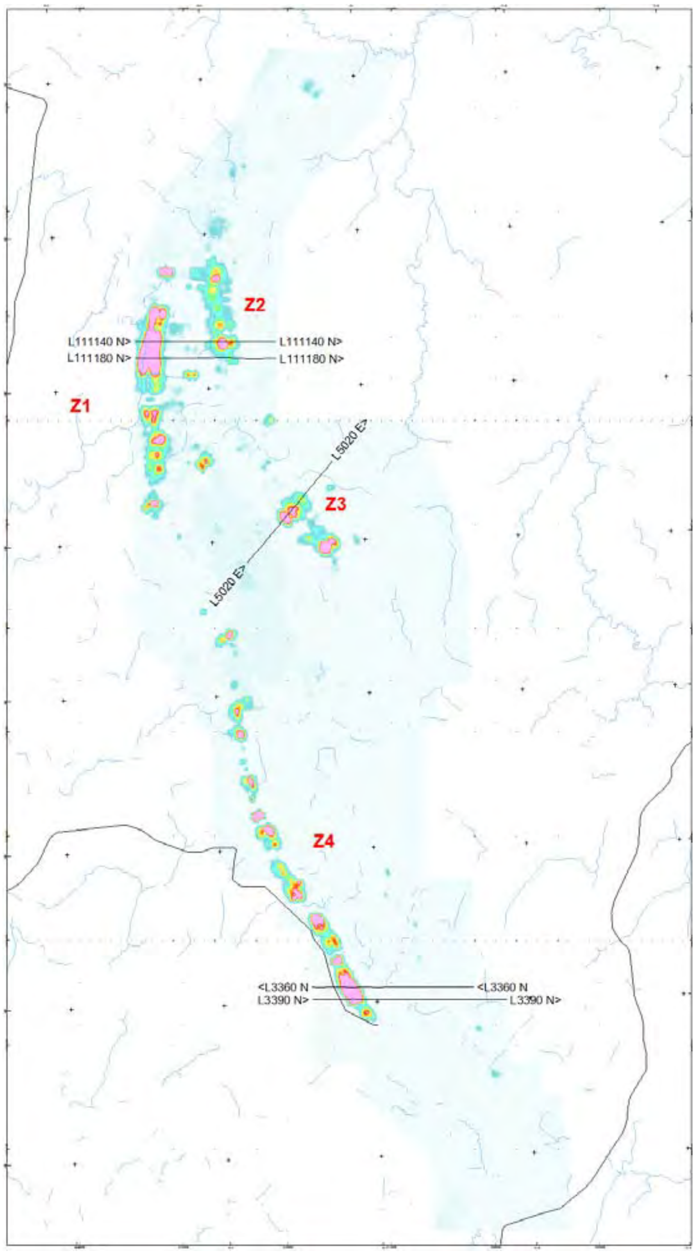

Figure 10 - Conductive zones and RDI lines.

In figure 11 shown below, L1140 traverses over Z1 and Z2. The conductors are near vertical to sub-vertical and thin. The depth to the top of the conductors is approximately 100m.

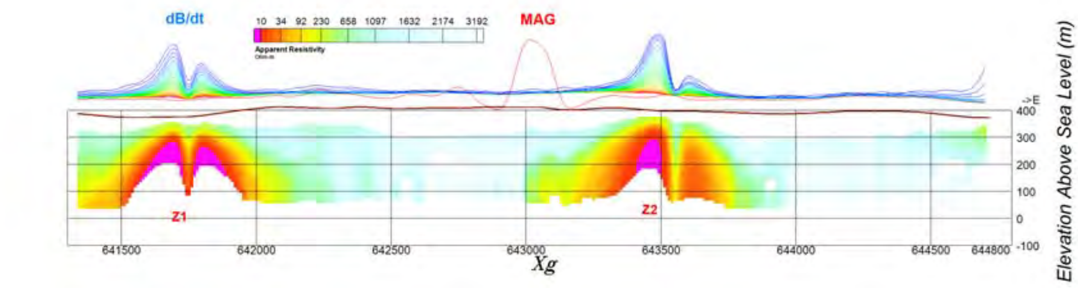

Figure 11 - Resistivity Depth Imaging (RDI) section of L1140

L5020 runs over Z3. There are two near vertical and thin conductors of shallow depth, figure 12.

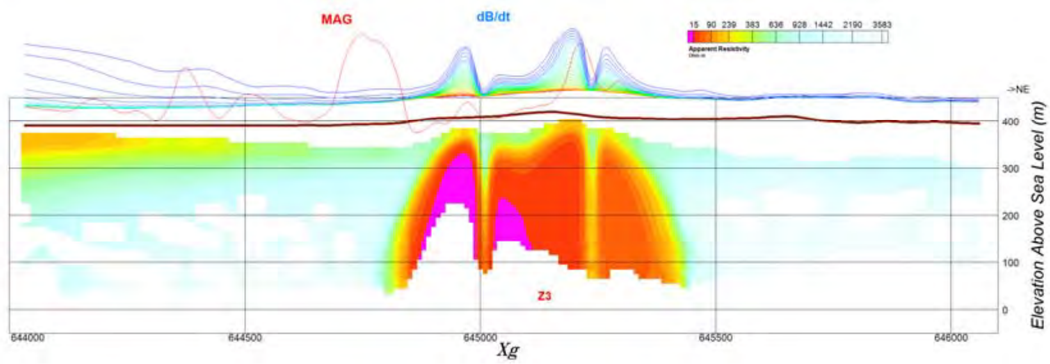

Figure 12 - Resistivity Depth Imaging (RDI) section of L5020.

L3360 RDI is selected to show conductor Z4, which is sub-vertical and fairly shallow.

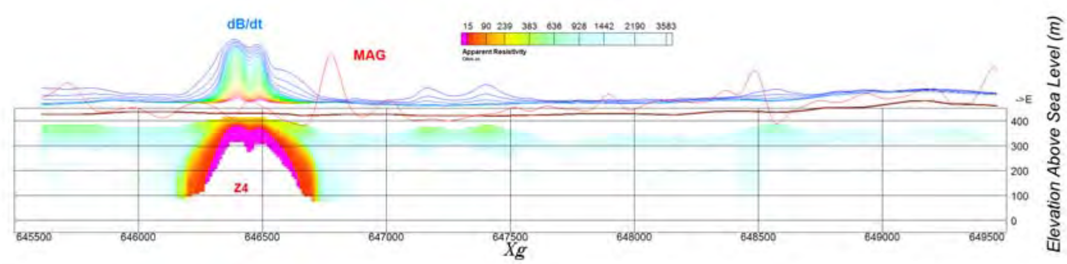

Figure 13 - Resistivity Depth Imaging (RDI) section of L3360.

We recommend detailed interpretations of the VTEM and magnetic data, in conjunction with local geochemistry and geology data if available, prior to any ground follow-up or test drilling. The interpretations should include detailed Resistivity Depth Imaging (RDI) sections for selected traverse lines over the conductive zones and Maxwell 2.5D plate modeling for some of the strong, discrete, thin and sub-vertical conductors.

Respectfully submitted[6],

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ONTARIO

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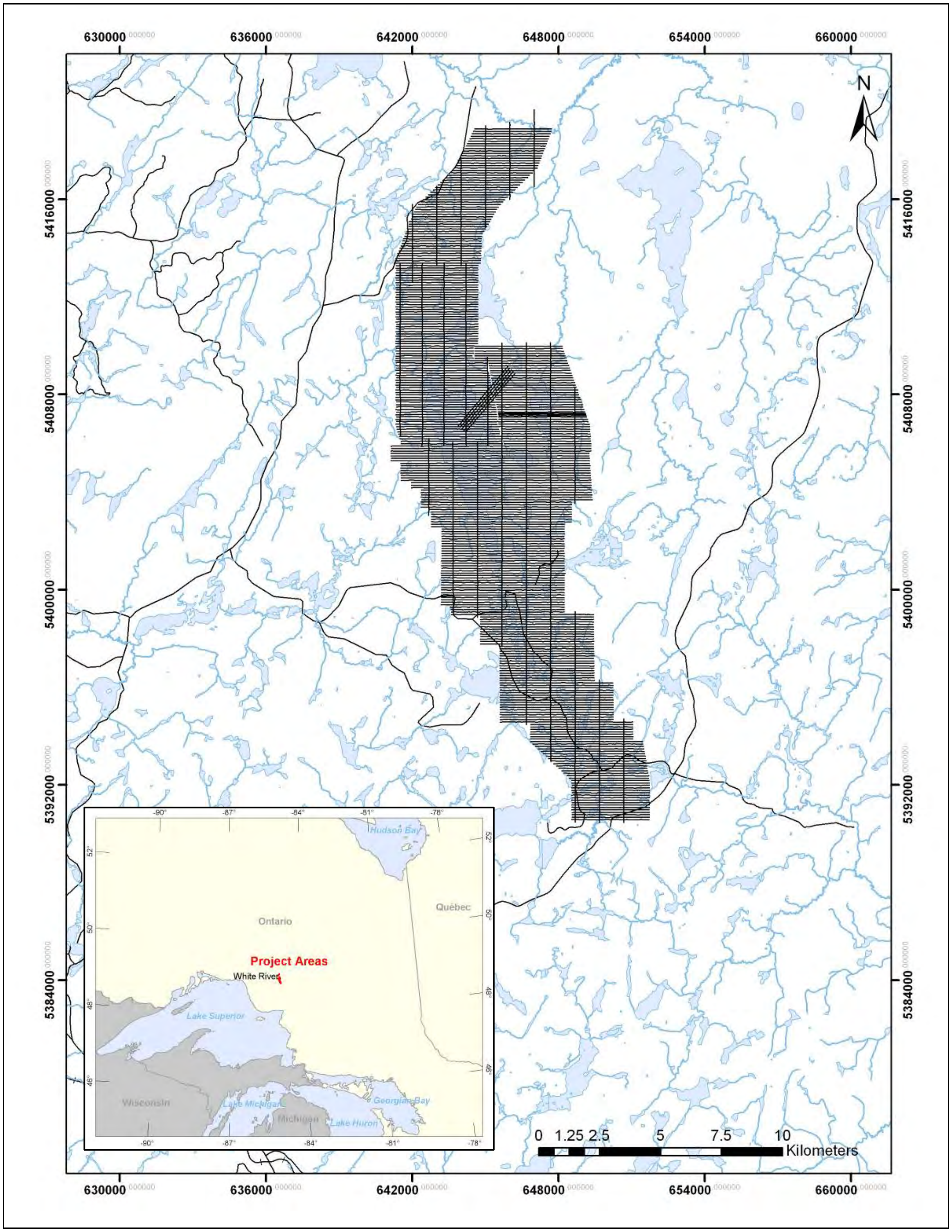
May, 2012

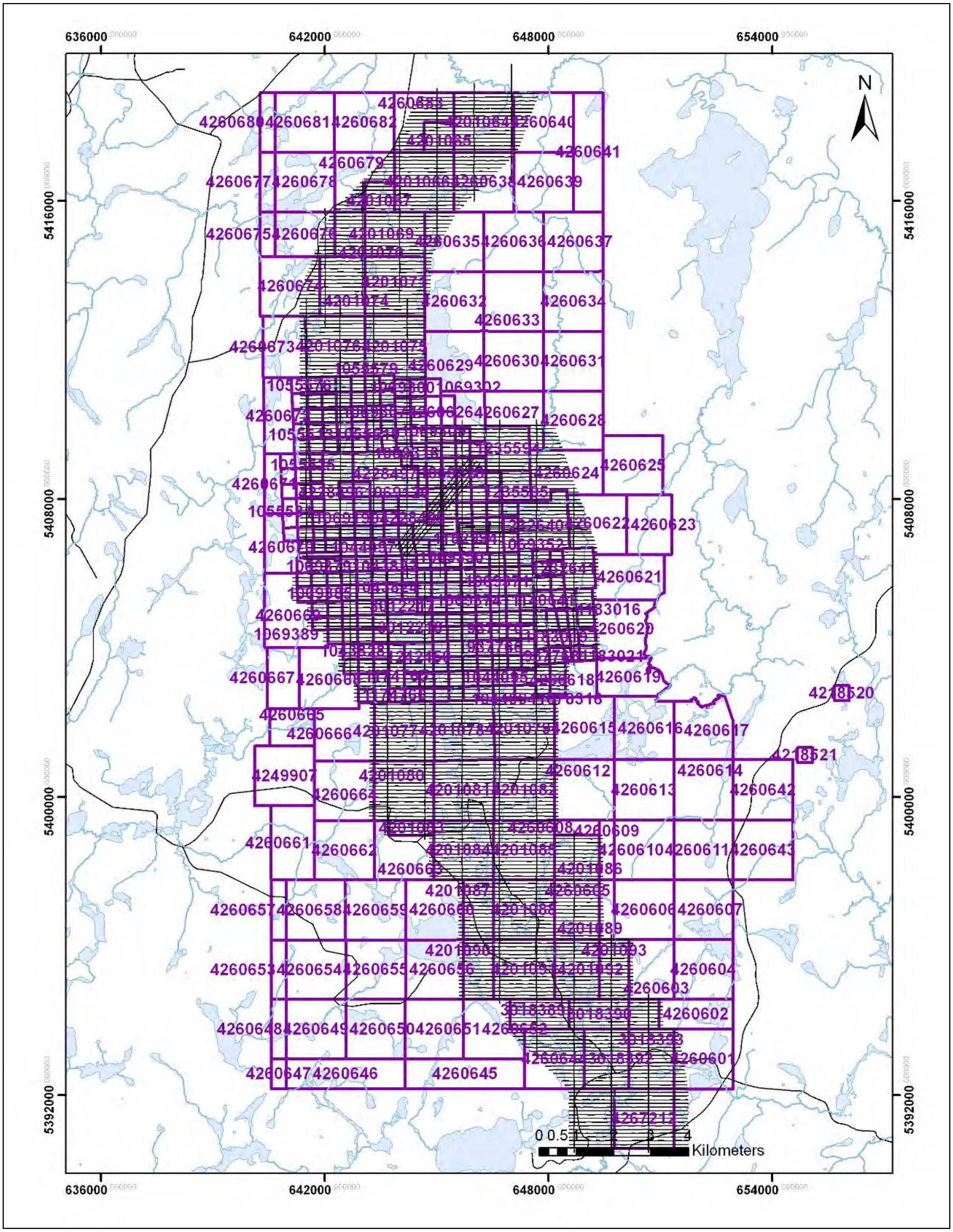
[6]Final data processing of the EM and magnetic data were carried out by Nick Venter and Karl Kwan, from the office of Geotech Ltd. in Aurora, Ontario, under the supervision of Alexander Prikhodko, P.Geo., PhD, Senior Geophysicist, VTEM Interpretation Supervisor.

APPENDIX A

SURVEY BLOCK LOCATION MAP



Survey Overview of the Survey Area



Mining Claims for the survey

APPENDIX B

SURVEY BLOCK COORDINATES
(WGS 84, UTM Zone 16 North)

12084 Property

North	
X	Y
647658	5418903
645000	5418900
644653	5418900
643856	5417302
642261	5415700
641335	5413370
644720	5413370
644769	5414500
645459	5415700
647060	5417300
647658	5418903

Infills	
X	Y
644286	5407197
644587	5406933
645820	5408398
645507	5408651

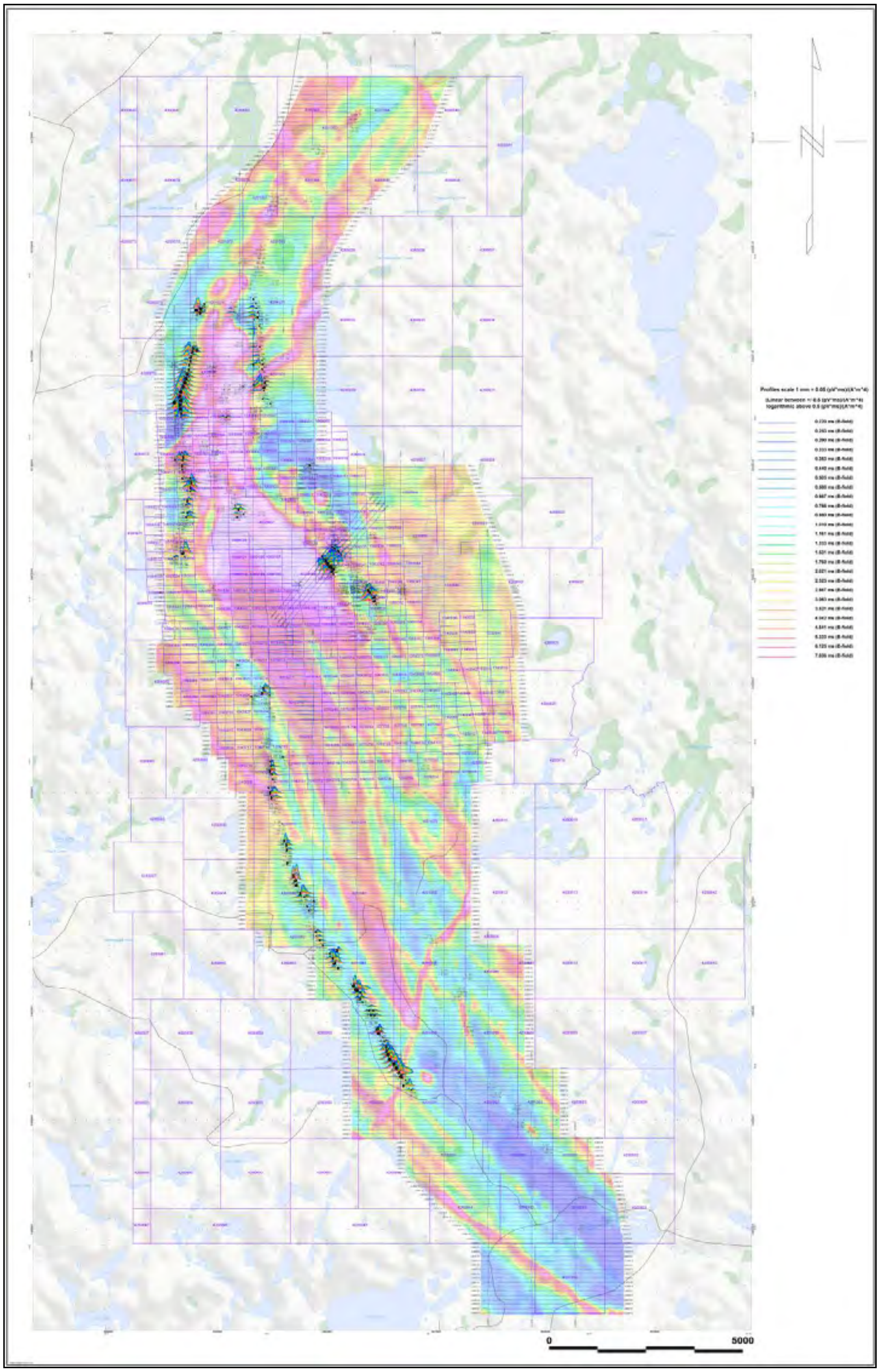
South	
X	Y
648061.6	5410000
647650	5410000
644650	5410000
644650	5409448
645192.8	5409448
645852	5405950
641217.7	5405950
641217.7	5405207
641611.9	5405229
641623.1	5404475
642051	5404475
642050	5404100
642445.2	5404092
642467.7	5403292
642873.1	5403281
642873.1	5402515
643300.8	5402553
643274	5399372
643663.2	5399372
643690.1	5398956
644884.7	5398956
644884.7	5397761
645676.7	5397761
645690.1	5394580
646938.4	5394580
646938.4	5393774
648650	5392173
648650	5390553
651650	5390553
651650	5392164
651367.3	5393815
650978.6	5393801
650965.2	5394620
650173.2	5394607
650159.8	5396204
649381.3	5396217
649354.5	5399009
648159.8	5399009
648159.8	5402687
648458.4	5402684
648458.4	5403596
649303	5403664
649179.1	5405590
649269.2	5405601
649207	5406700
648061.6	5409970

11284 Property

X	Y
641388.4	5413283.4
641388.4	5406781.1
641610.2	5405944.9
645791.5	5405944.9
645177.1	5409460.5
644648.0	5409460.5
644648.0	5413283.4

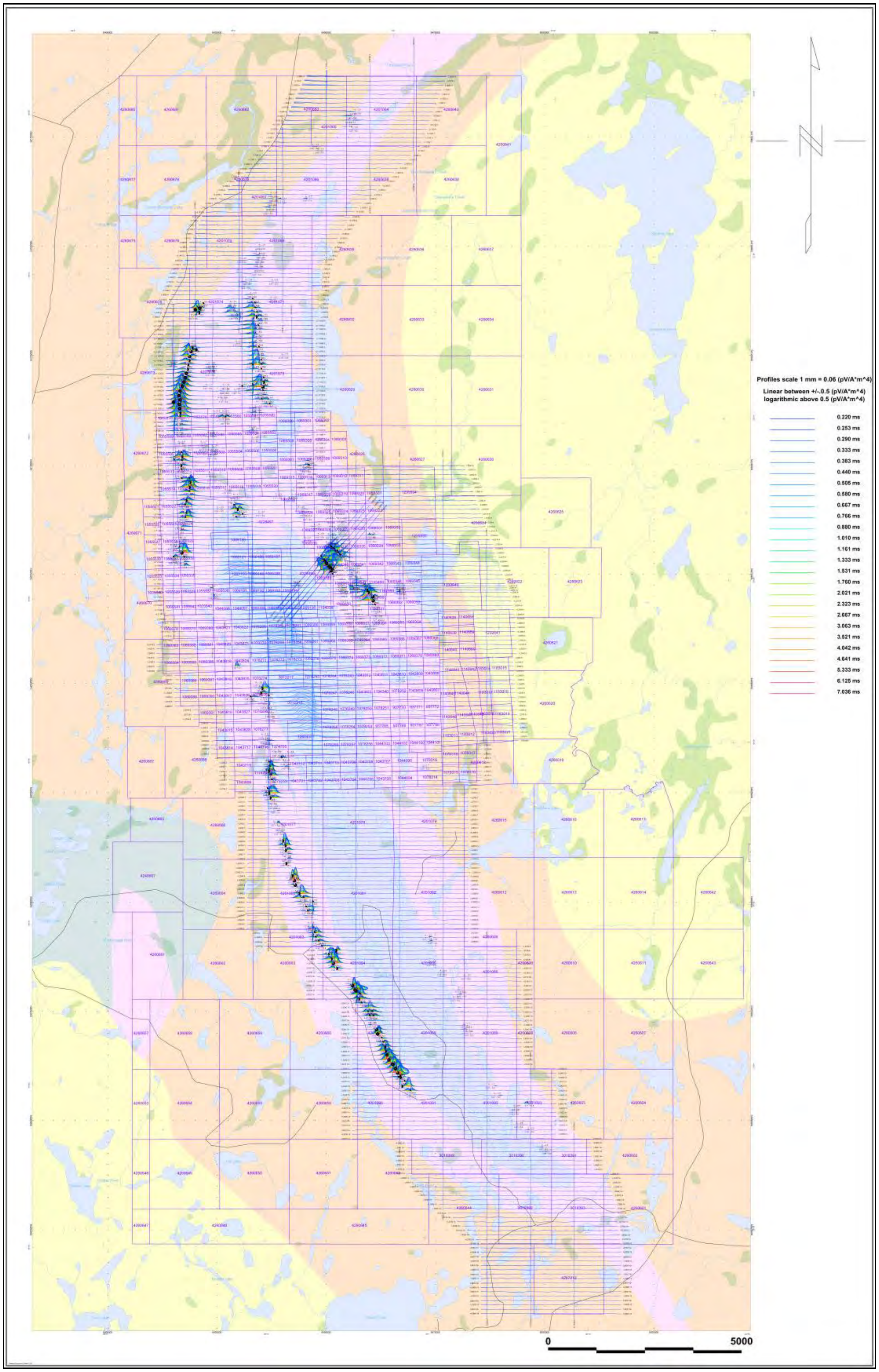
APPENDIX C

GEOPHYSICAL MAPS[1]

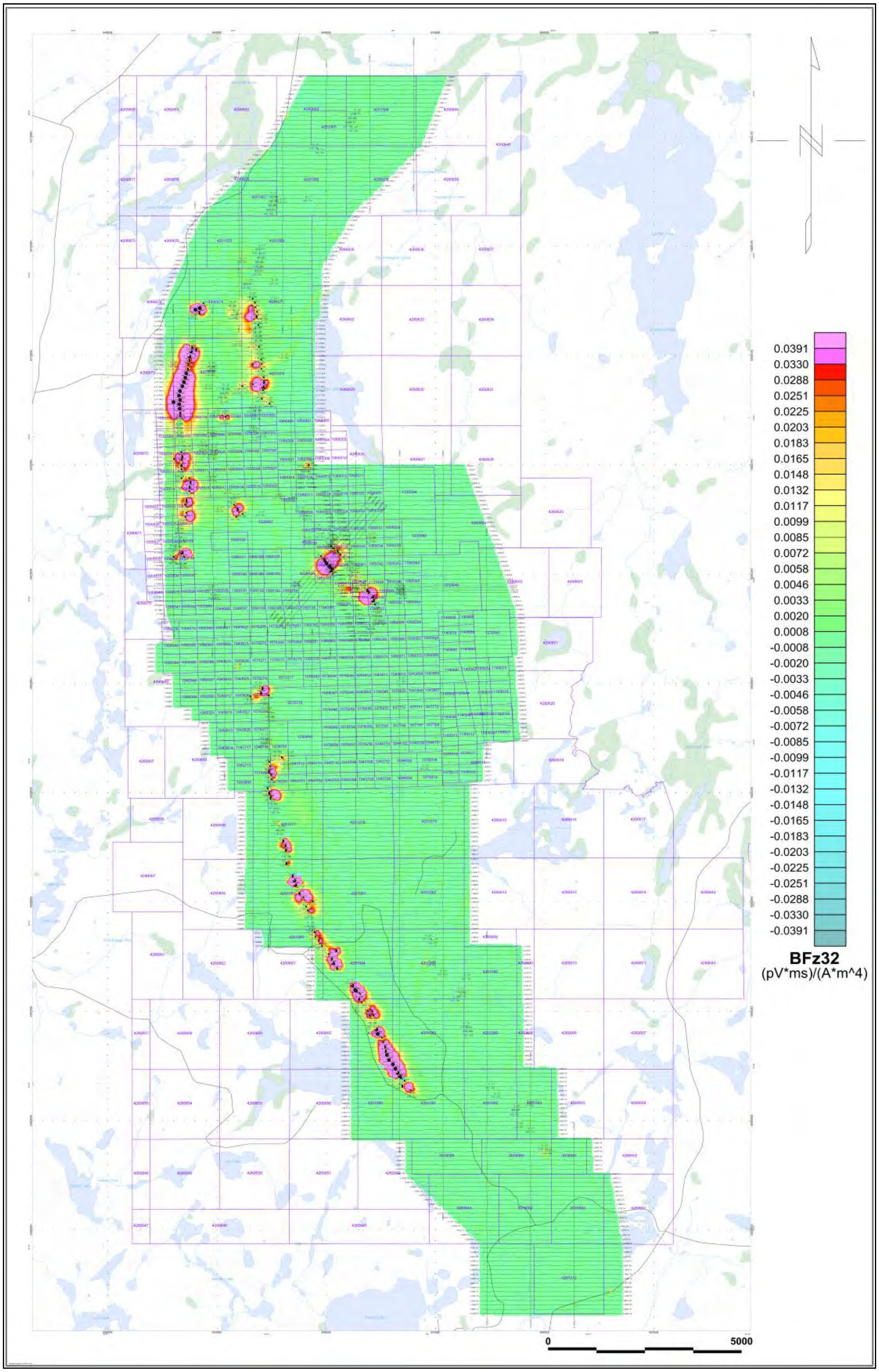


VTEM B-Field Z Component Profiles, Time Gates 0.220 to 7.036 ms

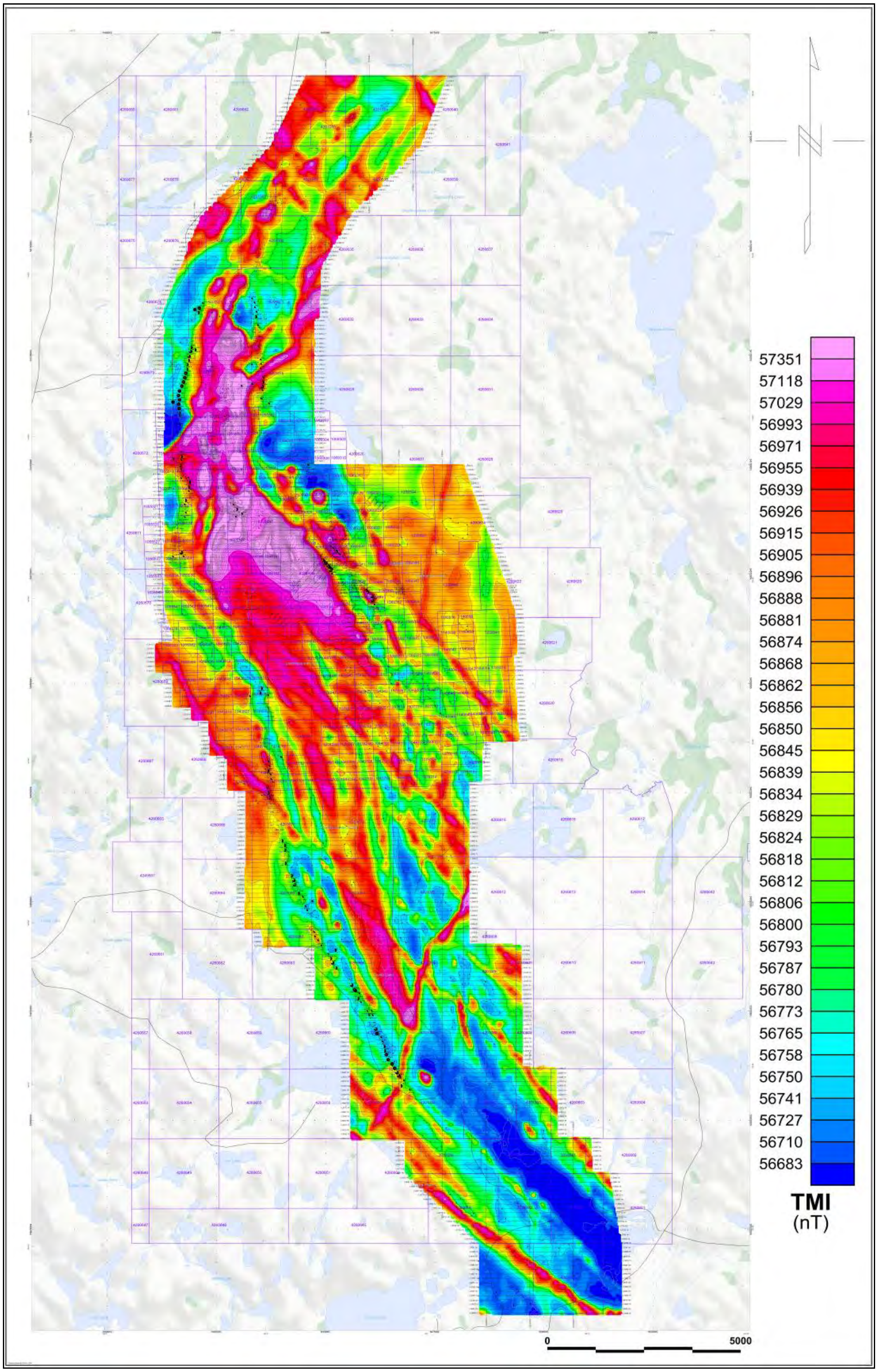
[1] *Full size geophysical maps are also available in PDF format on the final DVD*



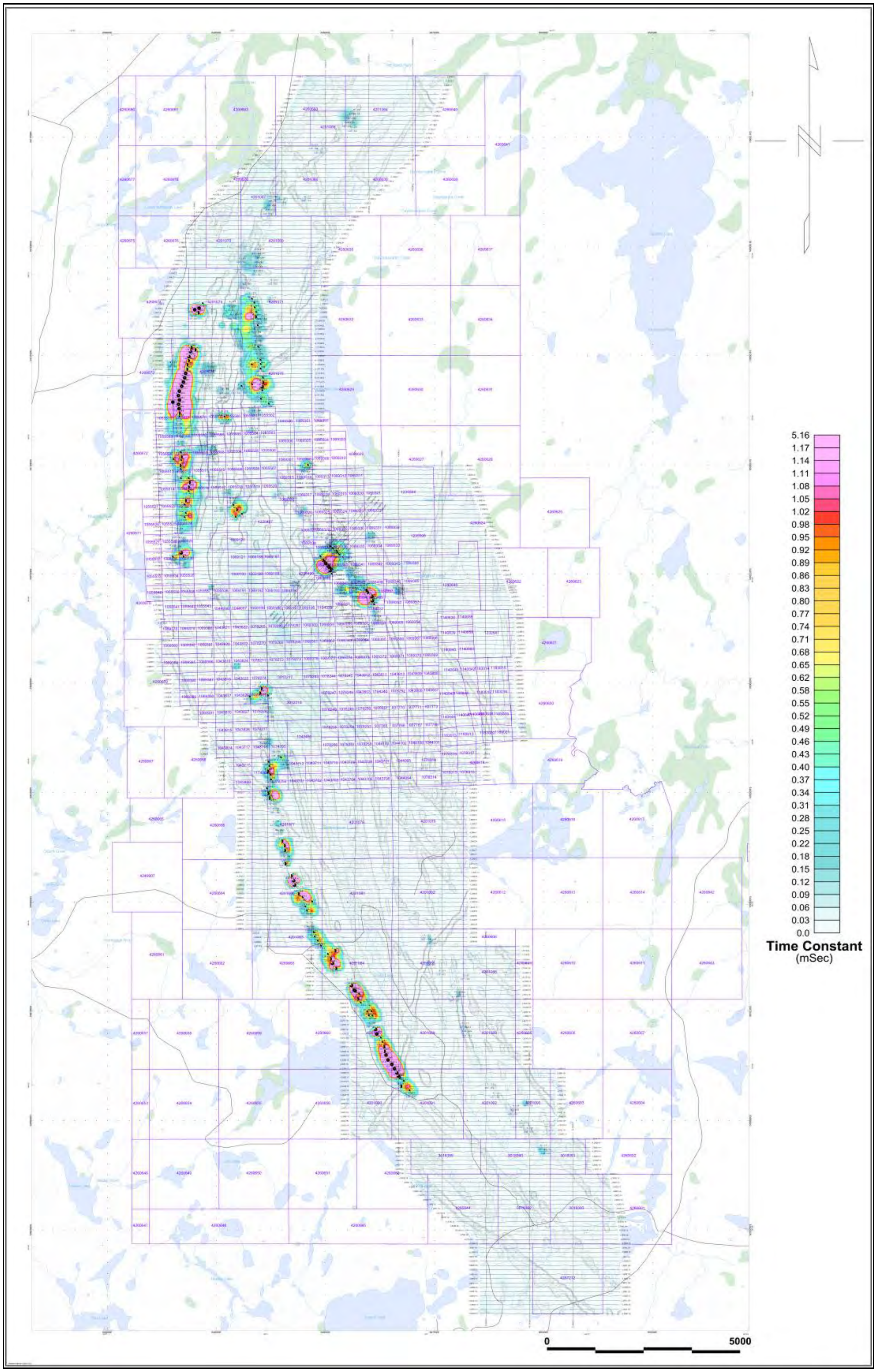
VTEM dB/dt Z Component Profiles, Time Gates 0.220 to 7.036 ms



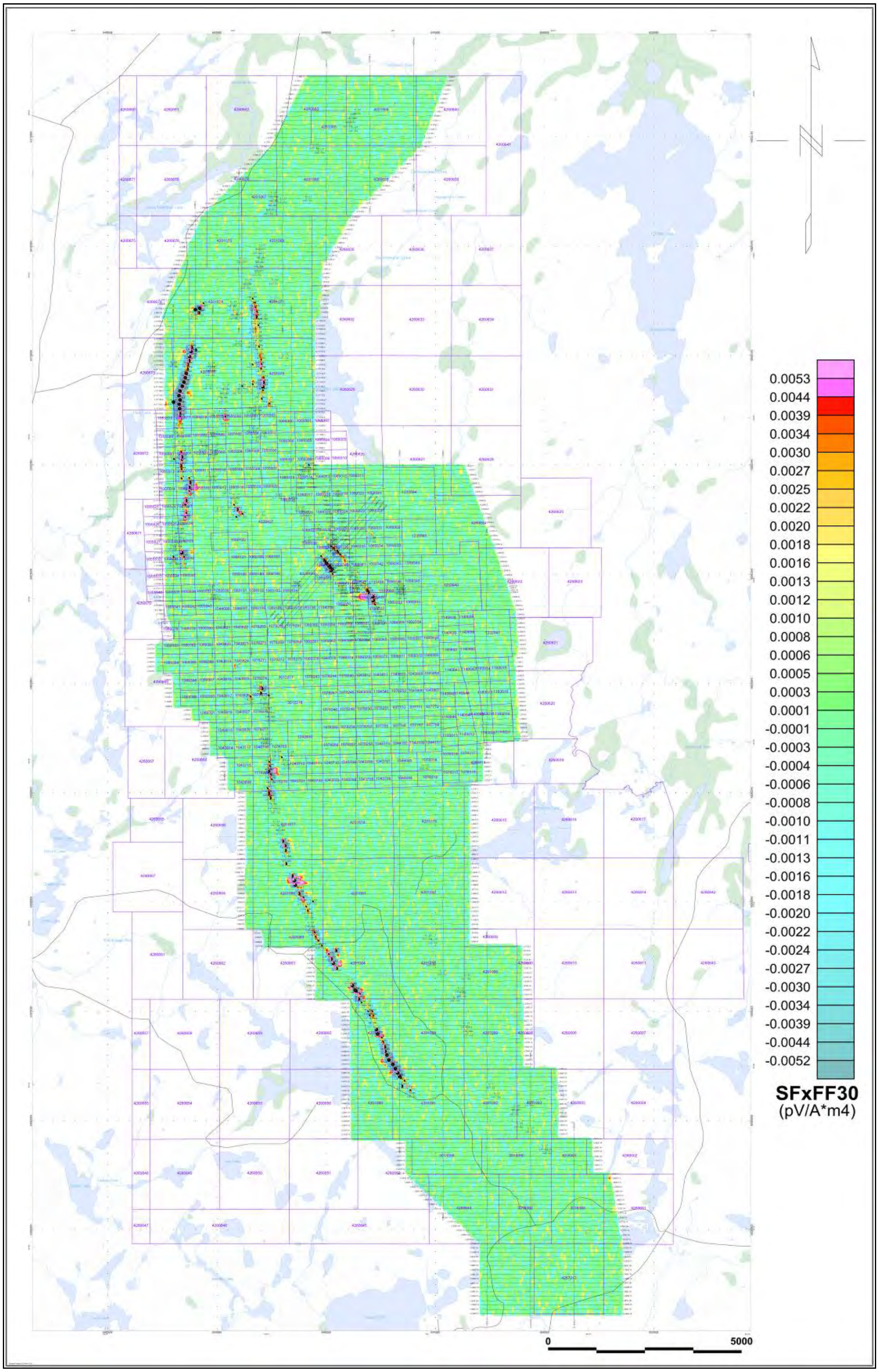
VTEM B-Field Z Component Channel 32, Time Gate 1.161 ms



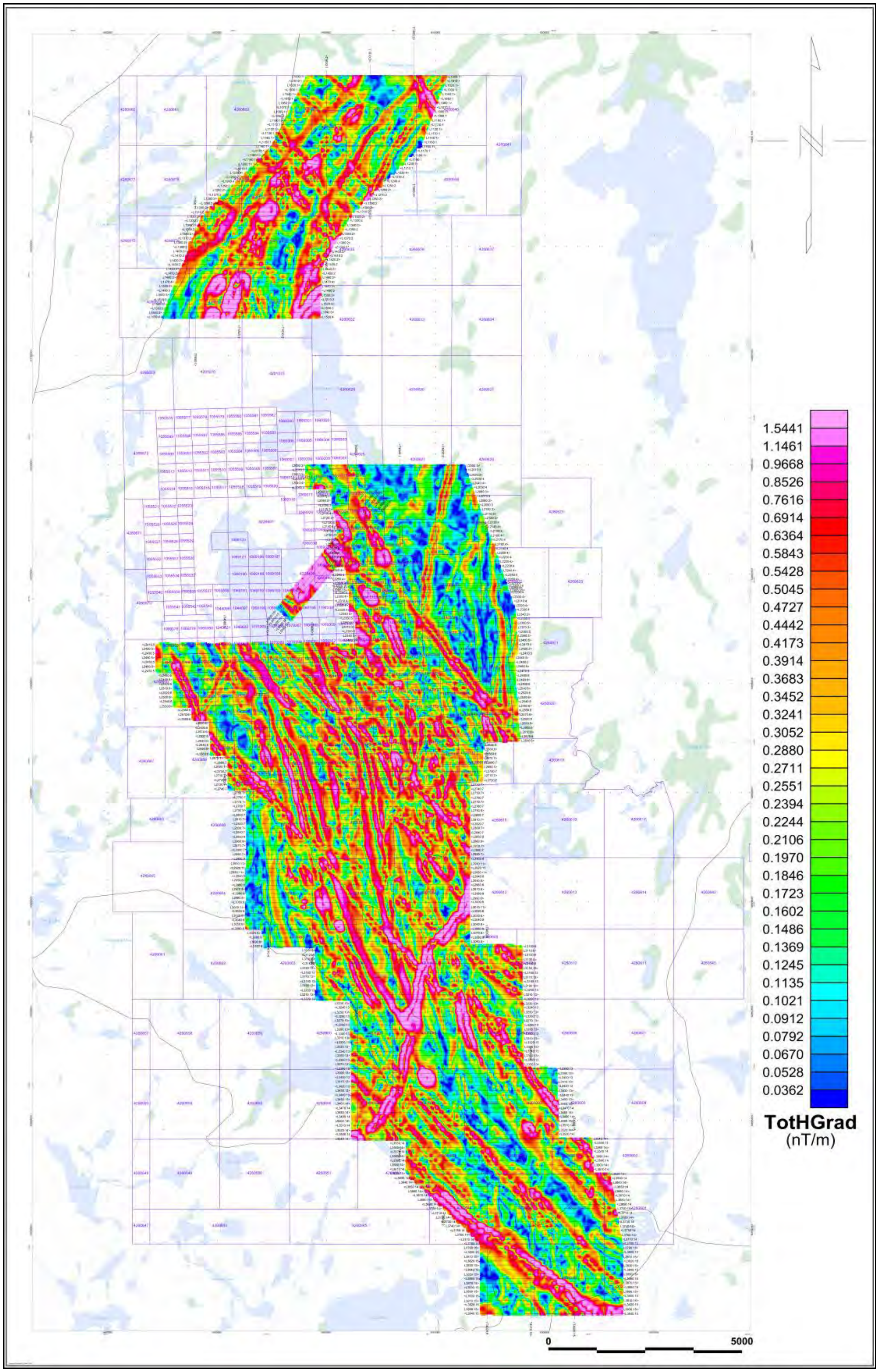
Total Magnetic Intensity (TMI)



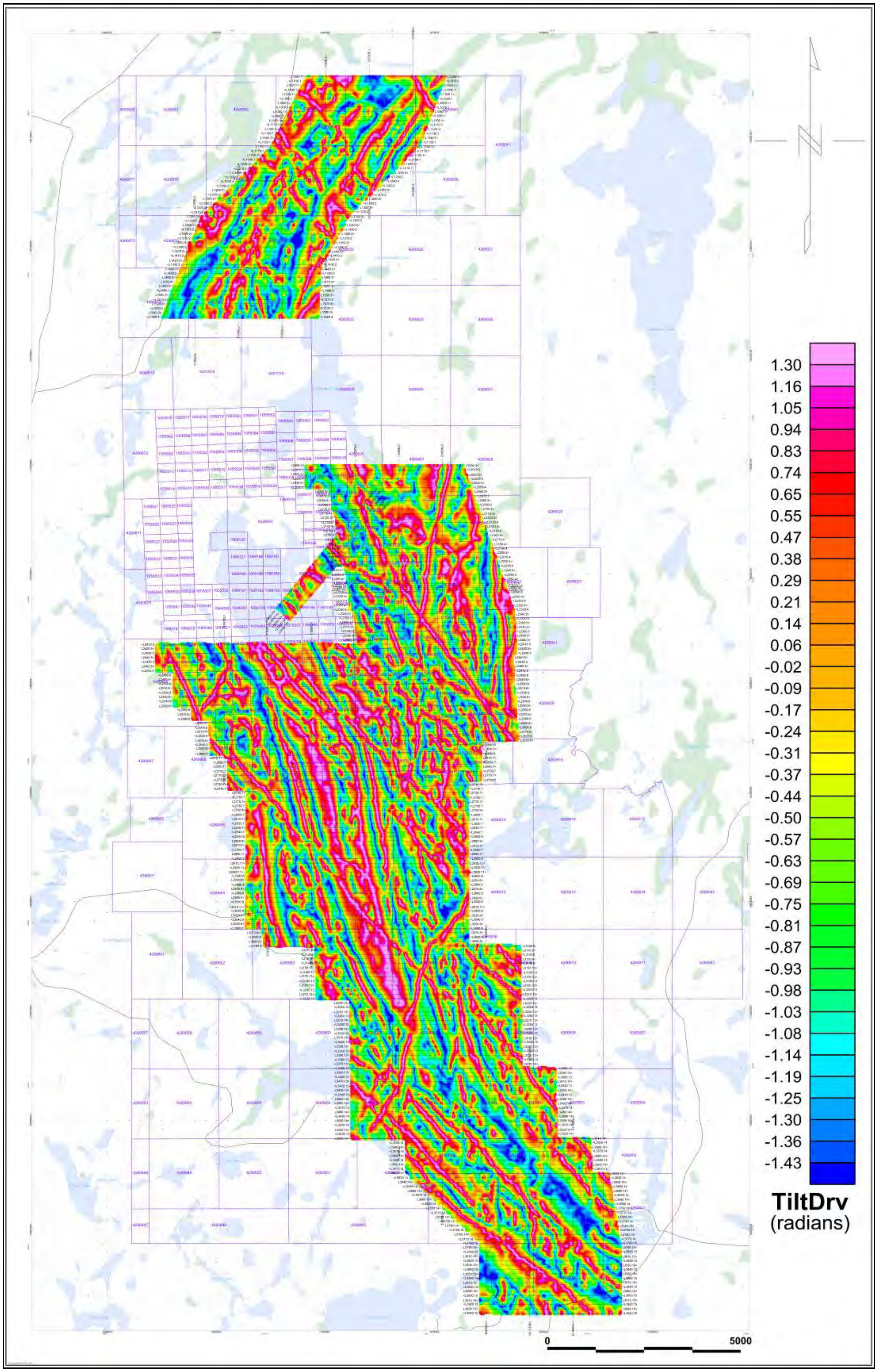
dB/dt Calculated Time Constant (Tau) with contours of anomaly areas of the Calculated



Fraser Filtered dB/dt X Component 30, Time Gate 0.880ms



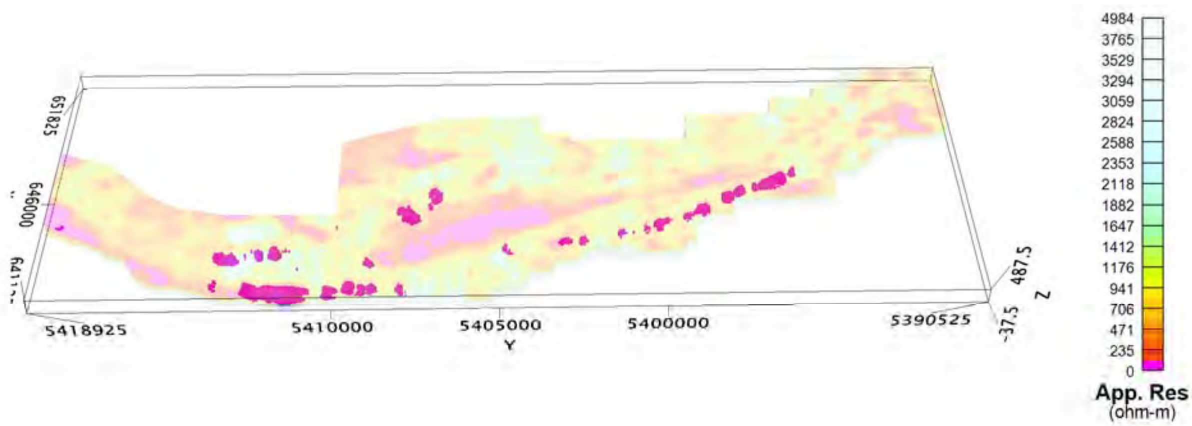
Magnetic Total Horizontal Gradient (12084 only)



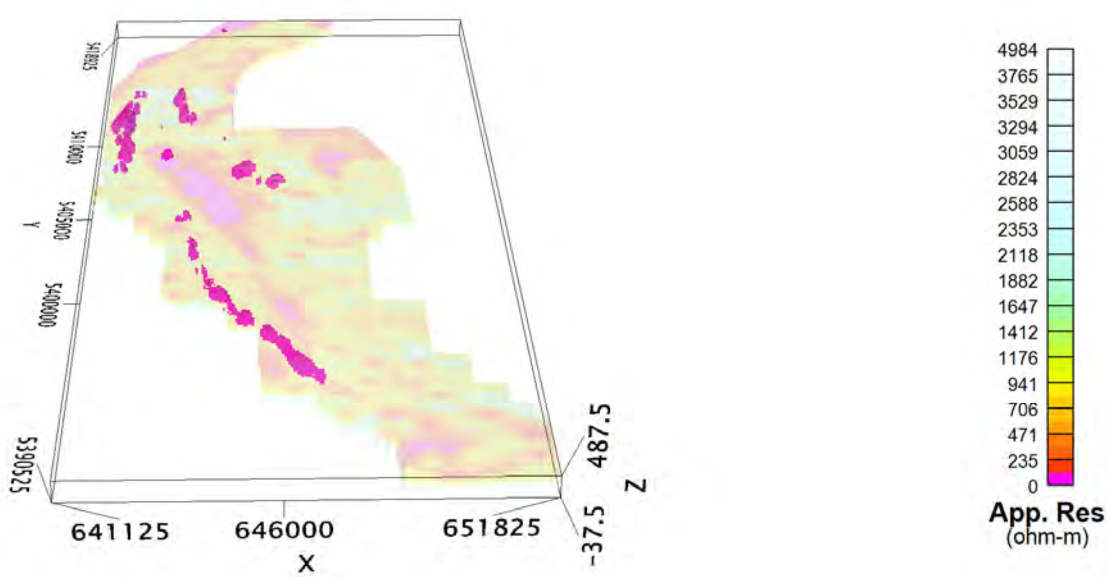
Magnetic Tilt – Angle Derivative (12084 only)

RESISTIVITY DEPTH IMAGE (RDI) MAPS

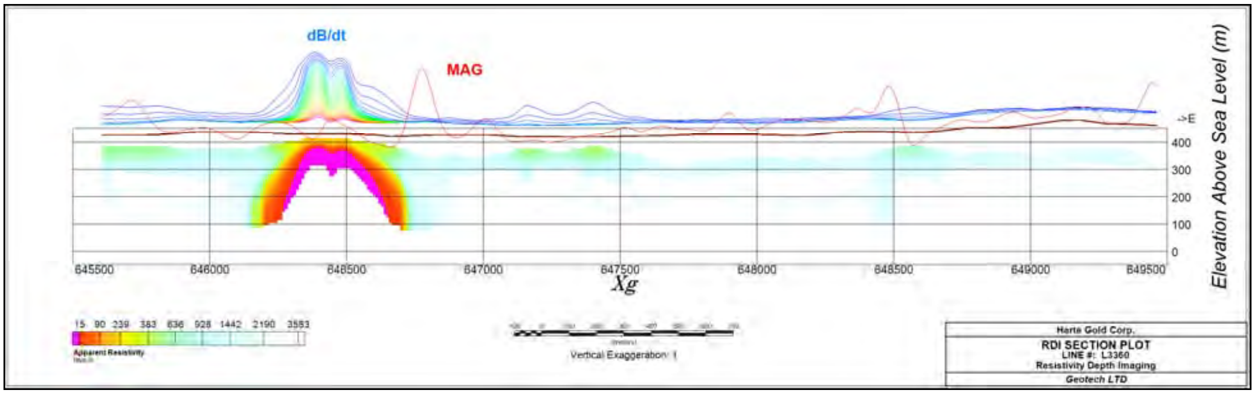
3D Resistivity-Depth Image (RDI)



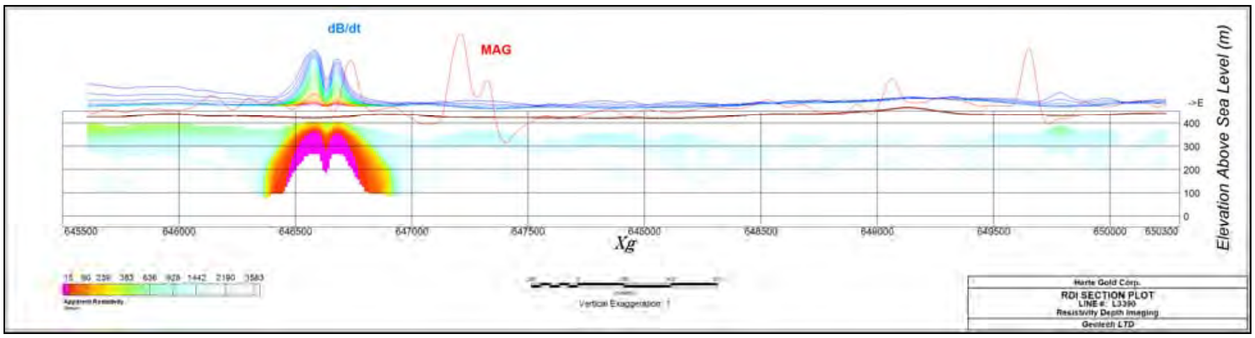
Looking East



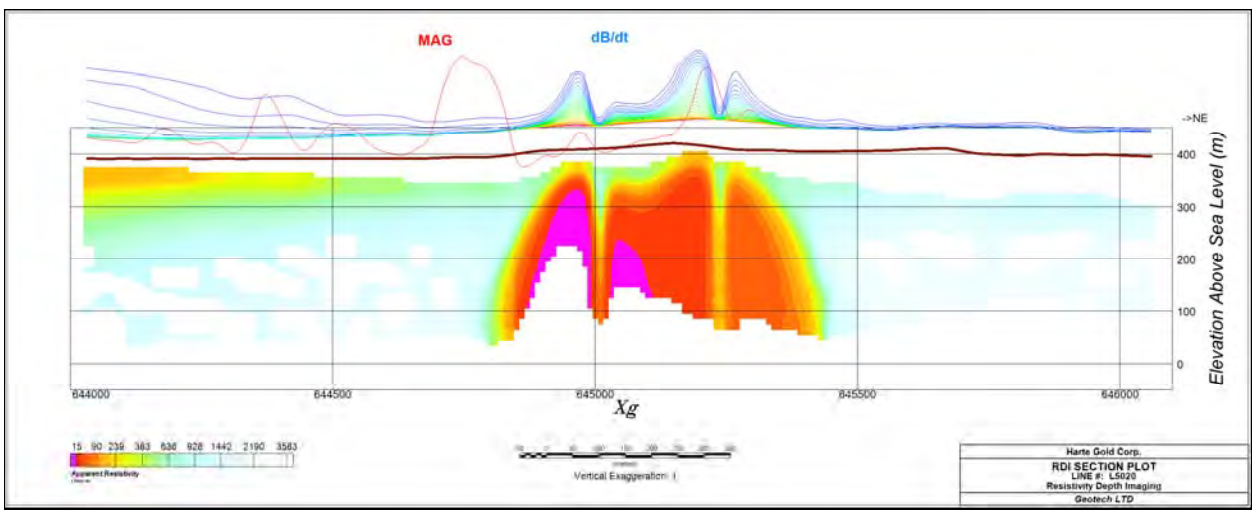
Looking North



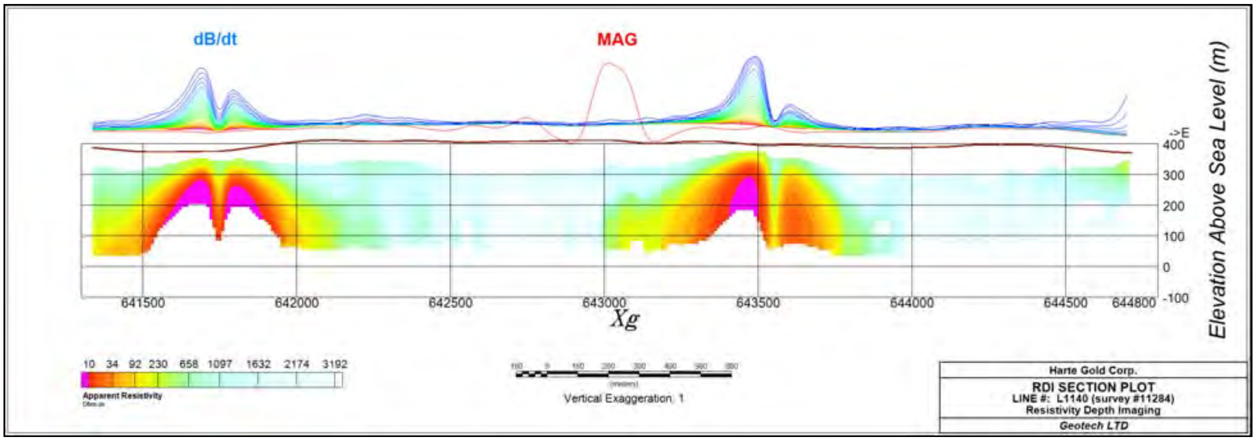
Line 3360



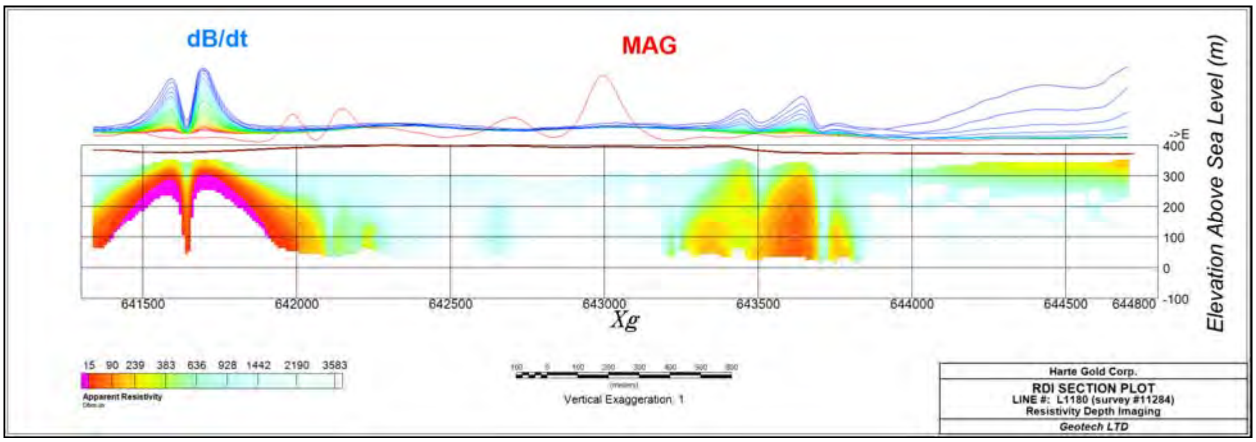
Line 3390



Line 5020



Line 111140



Line 111180

APPENDIX D

GENERALIZED MODELING RESULTS OF THE VTEM SYSTEM

Introduction

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a transmitter loop that produces a primary field. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end.

During turn-on and turn-off, a time varying field is produced (dB/dt) and an electro-motive force (emf) is created as a finite impulse response. A current ring around the transmitter loop moves outward and downward as time progresses. When conductive rocks and mineralization are encountered, a secondary field is created by mutual induction and measured by the receiver at the centre of the transmitter loop.

Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

A set of models has been produced for the Geotech VTEM® system dB/dT Z and X components (see models D1 to D15). The Maxwell TM modeling program (EMIT Technology Pty. Ltd. Midland, WA, AU) used to generate the following responses assumes a resistive half-space. The reader is encouraged to review these models, so as to get a general understanding of the responses as they apply to survey results. While these models do not begin to cover all possibilities, they give a general perspective on the simple and most commonly encountered anomalies.

As the plate dips and departs from the vertical position, the peaks become asymmetrical.

As the dip increases, the aspect ratio (Min/Max) decreases and this aspect ratio can be used as an empirical guide to dip angles from near 90º to about 30º. The method is not sensitive enough where dips are less than about 30º.

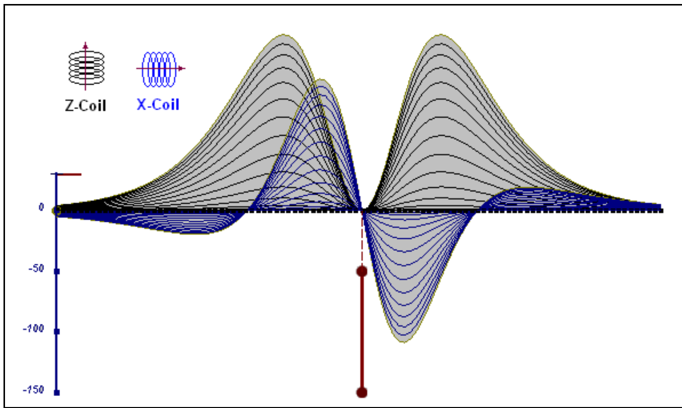


Figure D-1: vertical thin plate

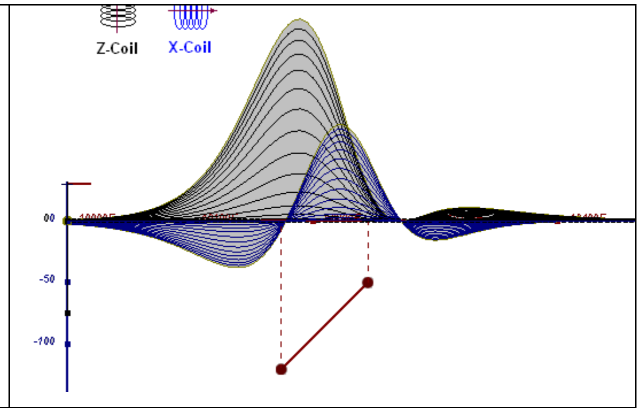


Figure D-2: inclined thin plate

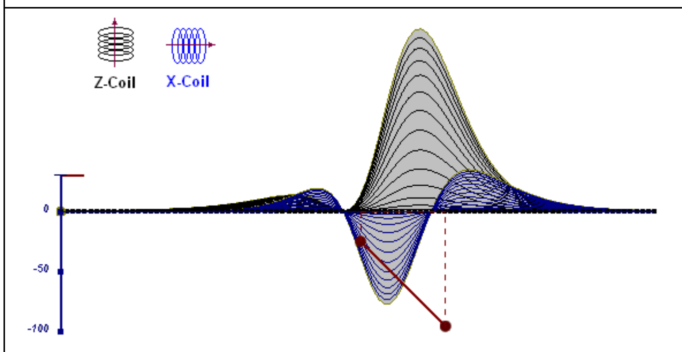


Figure D-3: inclined thin plate

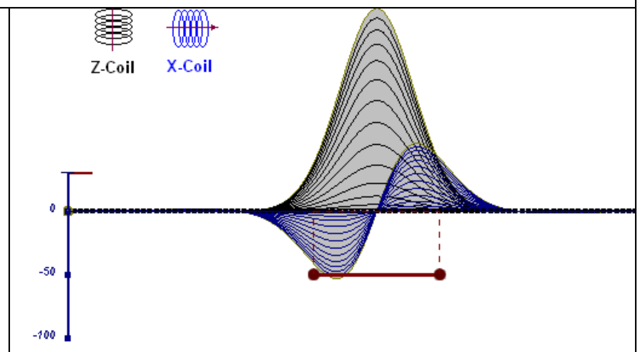


Figure D-4: horizontal thin plate

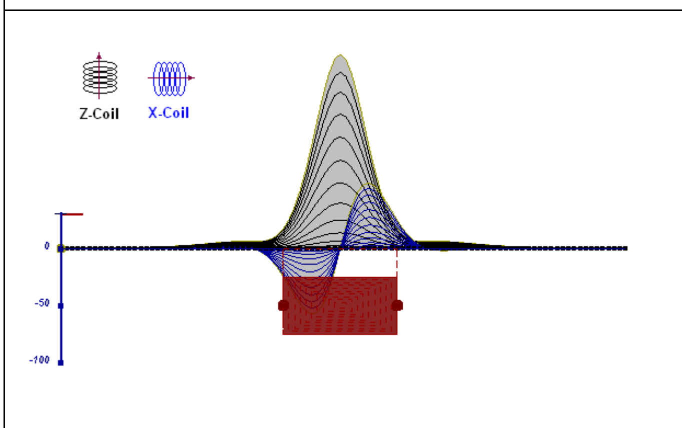


Figure D-5: horizontal thick plate (linear scale of the response)

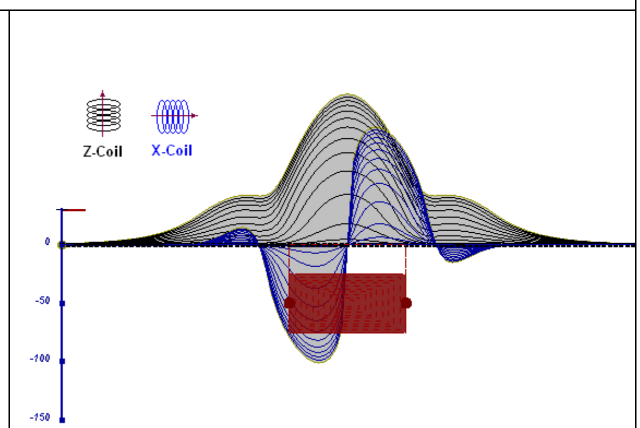


Figure D-6: horizontal thick plate (log scale of the response)

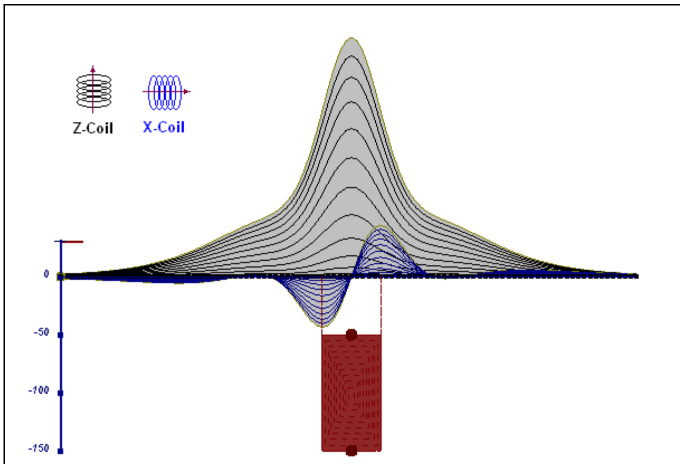


Figure D-7: vertical thick plate (linear scale of the response). 50 m depth

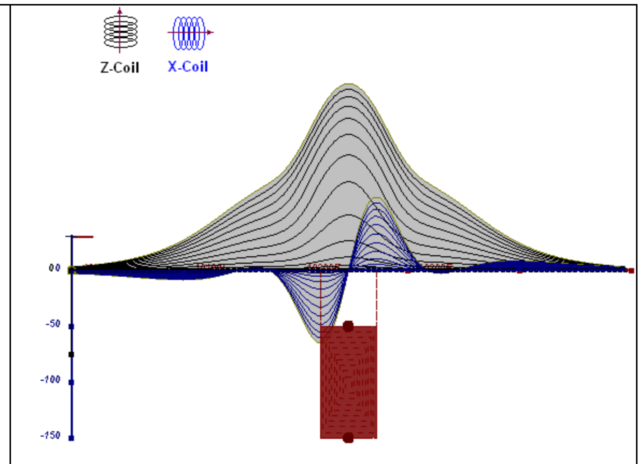


Figure D-8: vertical thick plate (log scale of the response). 50 m depth

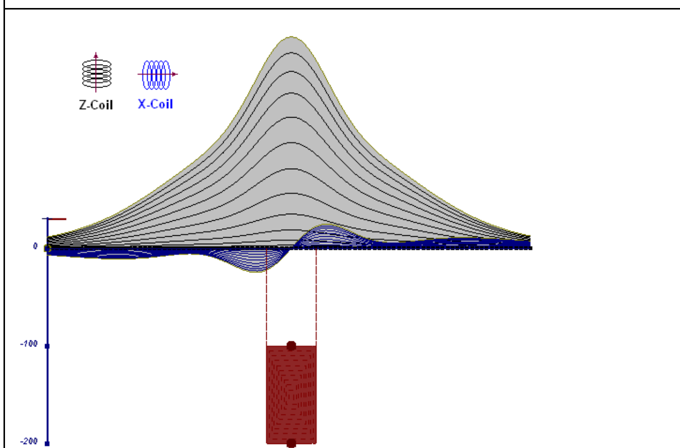


Figure D-9: vertical thick plate (linear scale of the response). 100 m depth

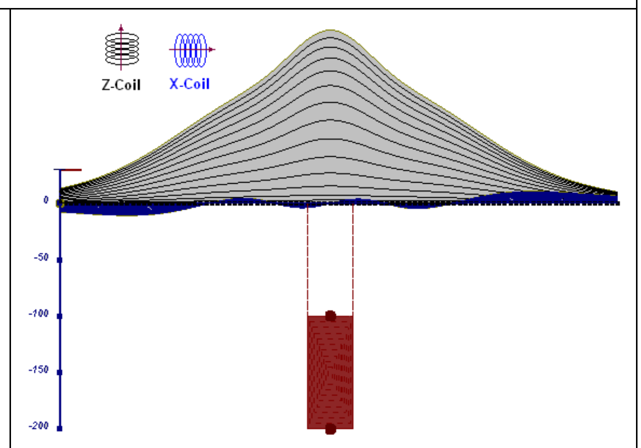


Figure D-10: vertical thick plate (linear scale of the response). Depth/hor.thickness=2.5

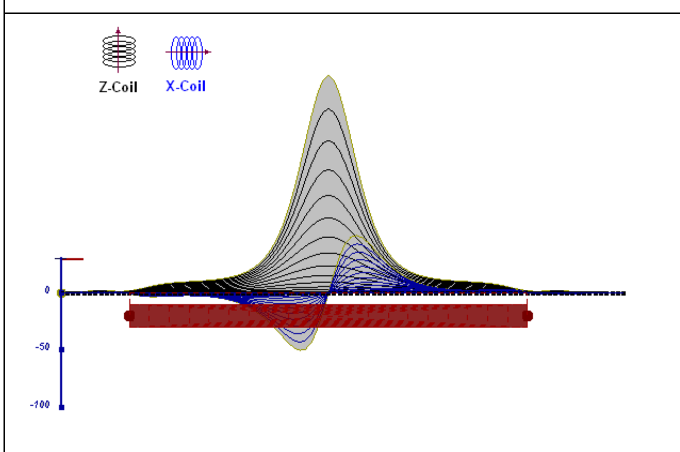


Figure D-10: horizontal thick plate (linear scale of the response)

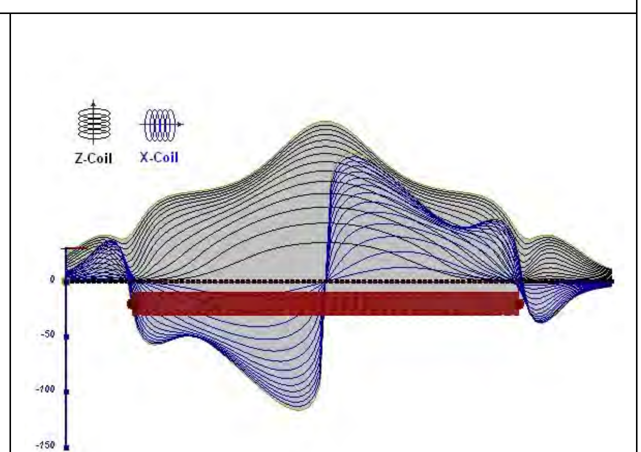


Figure D-11: horizontal thick plate (log scale of the response)

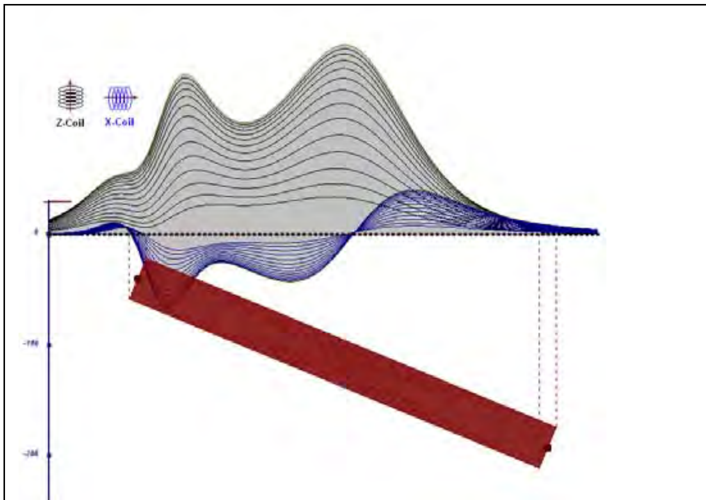


Figure D-12: inclined long thick plate

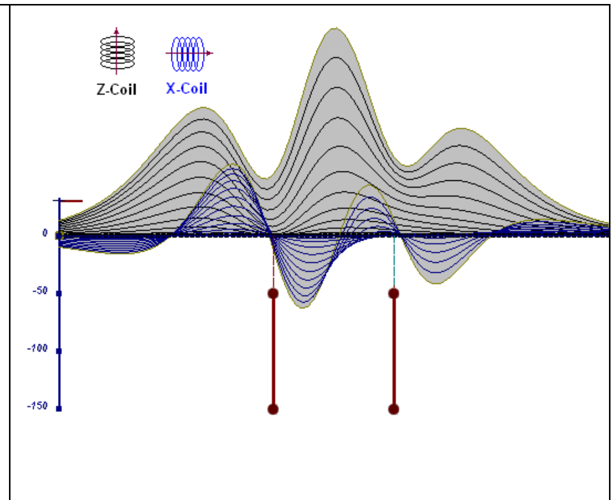


Figure D-13: two vertical thin plates

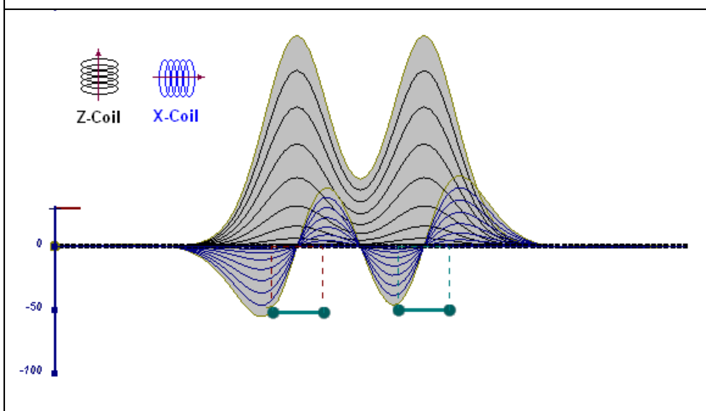


Figure D-14: two horizontal thin plates

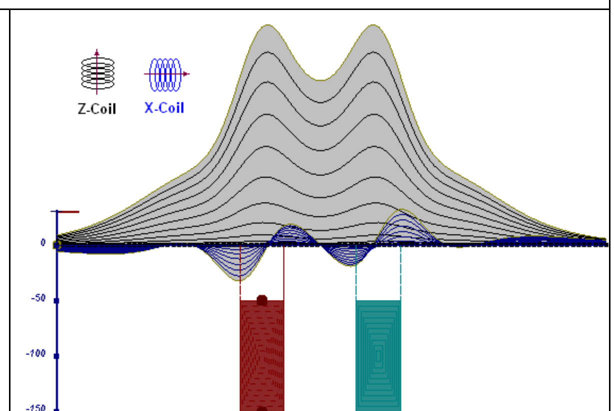


Figure D-15: two vertical thick plates

The same type of target but with different thickness, for example, creates different form of the response:

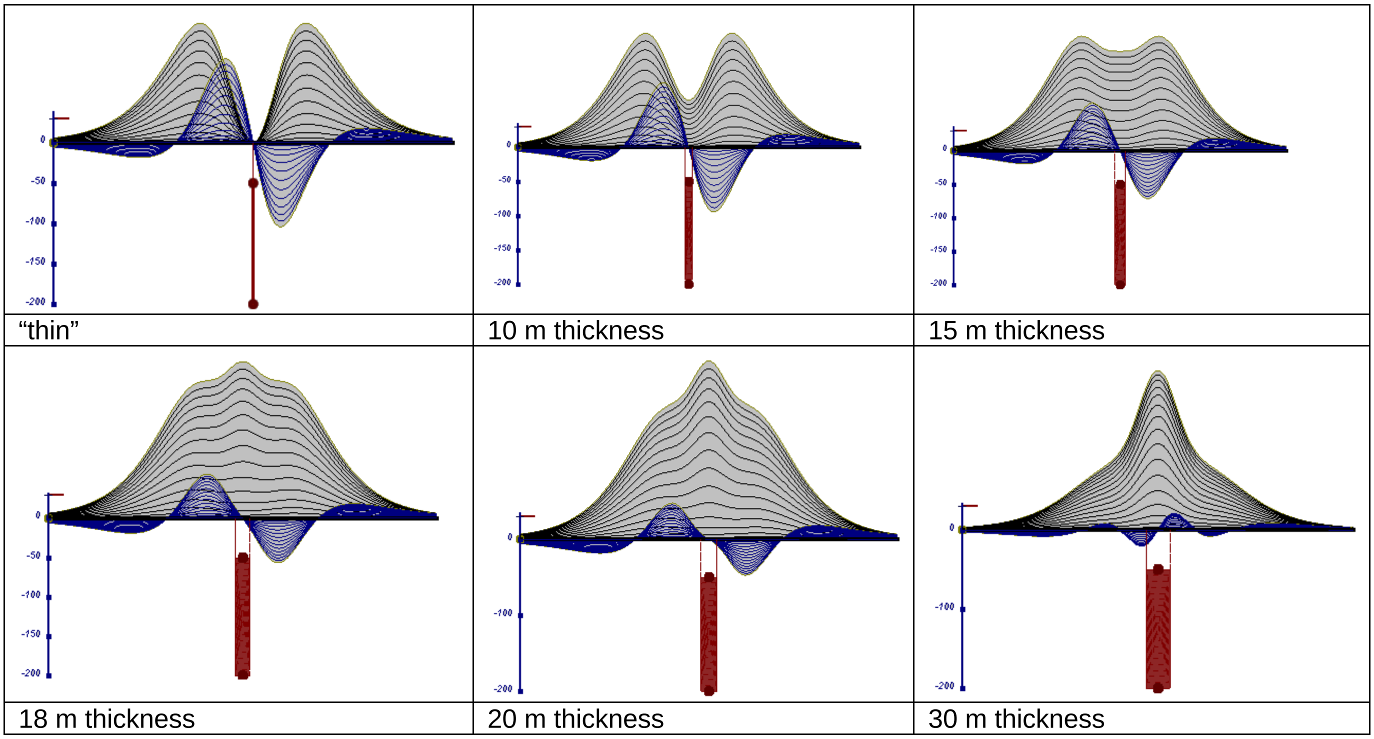


Figure D-16: Conductive vertical plate, depth 50 m, strike length 200 m, depth extends 150 m.

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September 2010

APPENDIX E

EM TIME CONSTANT (TAU) ANALYSIS

Estimation of time constant parameter[1] in transient electromagnetic method is one of the steps toward the extraction of the information about conductances beneath the surface from TEM measurements.

The most reliable method to discriminate or rank conductors from overburden, background or one and other is by calculating the EM field decay time constant (TAU parameter), which directly depends on conductance despite their depth and accordingly amplitude of the response.

Theory

As established in electromagnetic theory, the magnitude of the electro-motive force (emf) induced is proportional to the time rate of change of primary magnetic field at the conductor. This emf causes eddy currents to flow in the conductor with a characteristic transient decay, whose Time Constant (Tau) is a function of the conductance of the survey target or conductivity and geometry (including dimensions) of the target. The decaying currents generate a proportional secondary magnetic field, the time rate of change of which is measured by the receiver coil as induced voltage during the Off time.

The receiver coil output voltage (**e_0**) is proportional to the time rate of change of the secondary magnetic field and has the form,

$$e_0 \, \alpha \, (1 / \tau) \, e^{-(t/\tau)}$$

Where,
τ = L/R is the characteristic time constant of the target (TAU)
R = resistance
L = inductance

From the expression, conductive targets that have small value of resistance and hence large value of τ yield signals with small initial amplitude that decays relatively slowly with progress of time. Conversely, signals from poorly conducting targets that have large resistance value and smallτ, have high initial amplitude but decay rapidly with time[1] (Fig. E1).

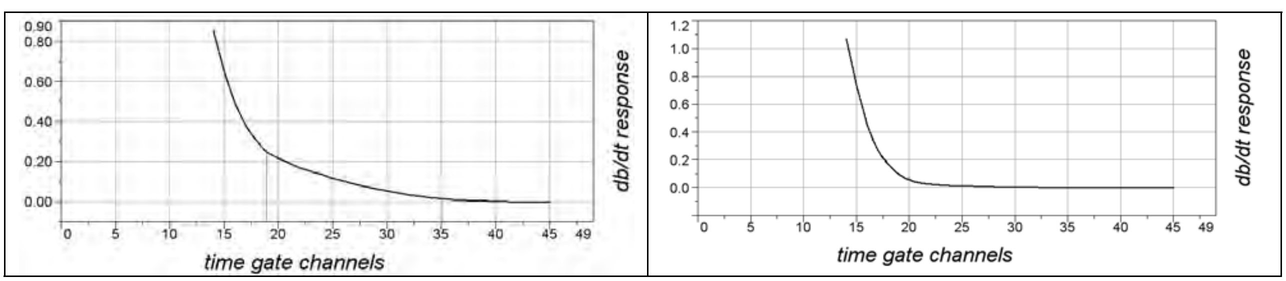

Figure E-1: Left – presence of good conductor, right – poor conductor.

[1] *McNeill, JD, 1980, "Applications of Transient Electromagnetic Techniques", Technical Note TN-7 page 5, Geonics Limited, Mississauga, Ontario.*

EM Time Constant (Tau) Calculation

The EM Time-Constant (TAU) is a general measure of the speed of decay of the electromagnetic response and indicates the presence of eddy currents in conductive sources as well as reflecting the "conductance quality" of a source. Although TAU can be calculated using either the measured dB/dt decay or the calculated B-field decay, dB/dt is commonly preferred due to better stability (S/N) relating to signal noise. Generally, TAU calculated on base of early time response reflects both near surface overburden and poor conductors whereas, in the late ranges of time, deep and more conductive sources, respectively. For example early time TAU distribution in an area that indicates conductive overburden is shown in Figure 2.

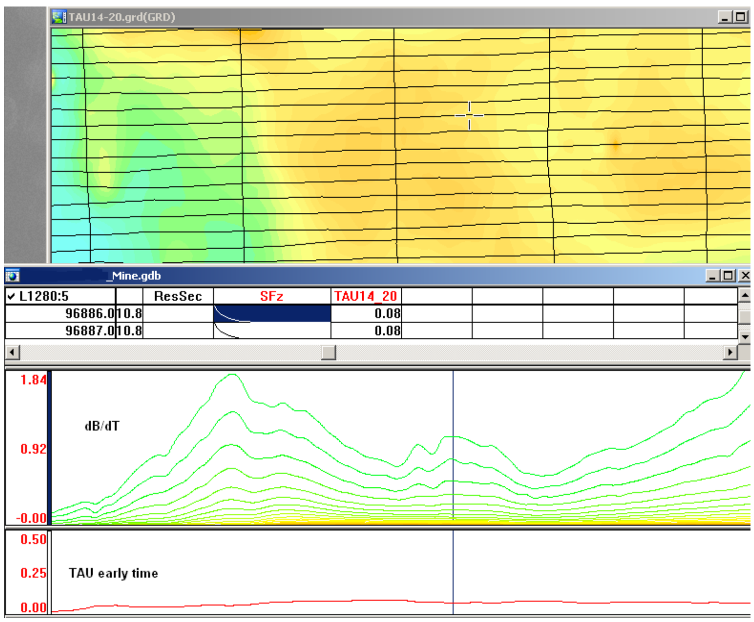

Figure E-2: **Map of early time TAU. Area with overburden conductive layer and local sources.**

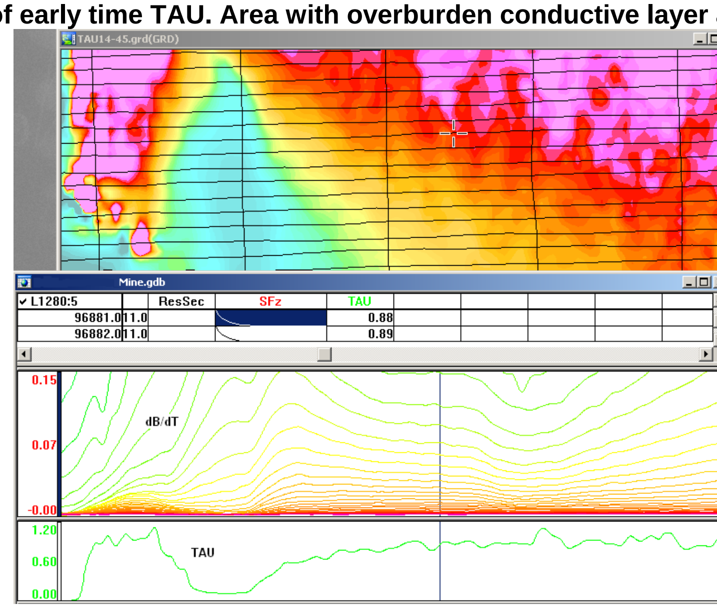

Figure E-3: **Map of full time range TAU with EM anomaly due to deep highly conductive target.**

There are many advantages of TAU maps:

- TAU depends only on one parameter (conductance) in contrast to response magnitude;
- TAU is integral parameter, which covers time range and all conductive zones and targets are displayed independently of their depth and conductivity on a single map.
- Very good differential resolution in complex conductive places with many sources with different conductivity.
- Signs of the presence of good conductive targets are amplified and emphasized independently of their depth and level of response accordingly.

In the example shown in Figure 4 and 5, three local targets are defined, each of them with a different depth of burial, as indicated on the resistivity depth image (RDI). All are very good conductors but the deeper target (number 2) has a relatively weak dB/dt signal yet also features the strongest total TAU (Figure 4). This example highlights the benefit of TAU analysis in terms of an additional target discrimination tool.

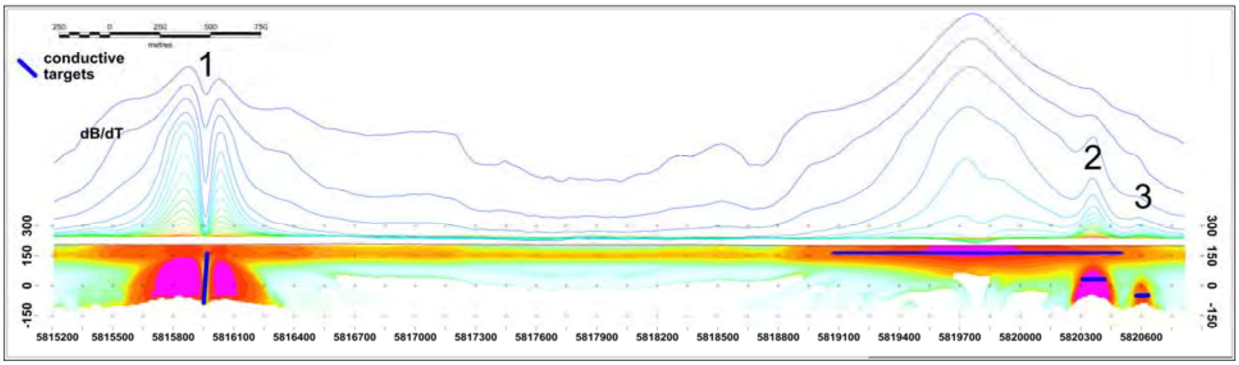

Figure E-4: **dB/dt profile and RDI with different depths of targets.**

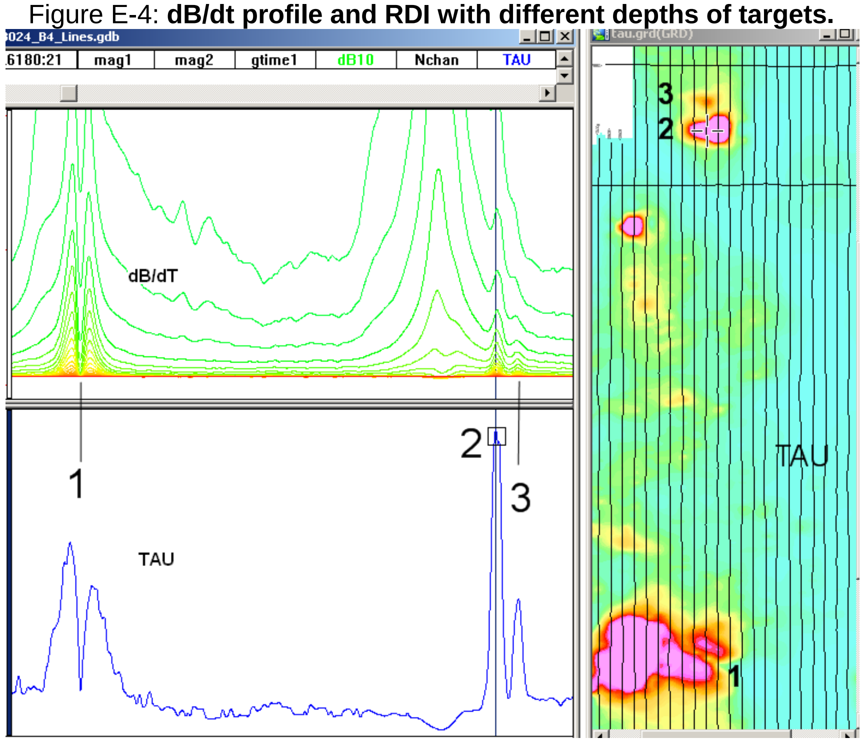

Figure E-5: Map of total TAU and dB/dt profile.

The EM Time Constants for dB/dt and B-field were calculated using the "sliding Tau" in-house program developed at Geotech2. The principle of the calculation is based on using of time window (4 time channels) which is sliding along the curve decay and looking for latest time channels which have a response above the level of noise and decay. The EM decays are obtained from all available decay channels, starting at the latest channel. Time constants are taken from a least square fit of a straight-line (log/linear space) over the last 4 gates above a pre-set signal threshold level (Figure F6). Threshold settings are pointed in the "label" property of TAU database channels. The sliding Tau method determines that, as the amplitudes increase, the time-constant is taken at progressively later times in the EM decay. Conversely, as the amplitudes decrease, Tau is taken at progressively earlier times in the decay. If the maximum signal amplitude falls below the threshold, or becomes negative for any of the 4 time gates, then Tau is not calculated and is assigned a value of "dummy" by default.

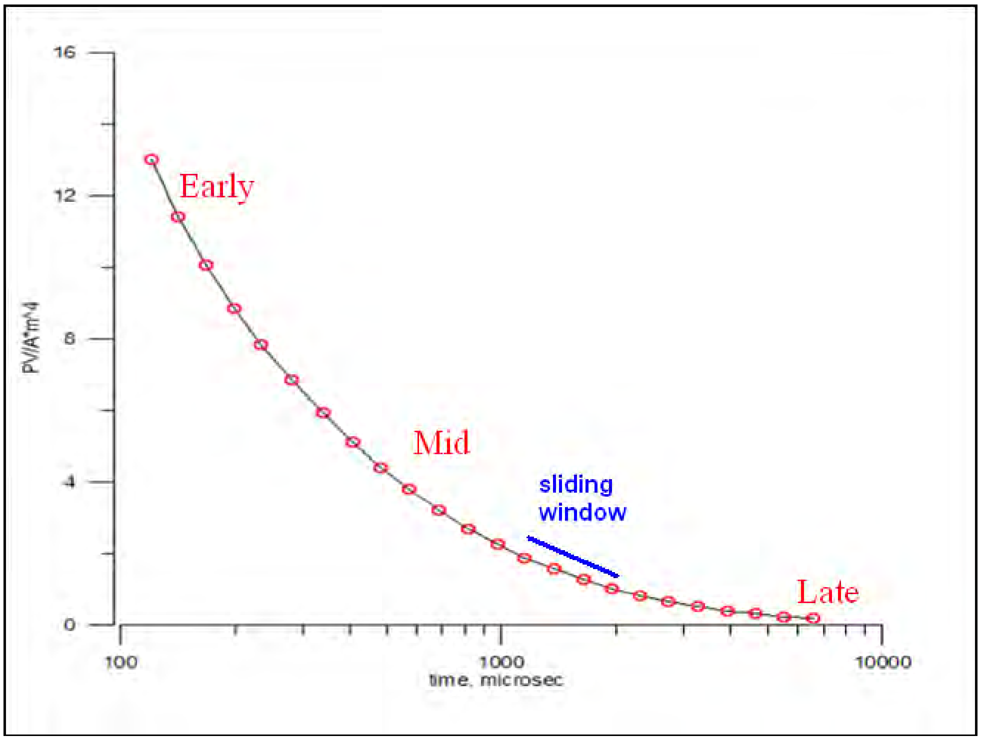

Figure E-6: **Typical dB/dt decays of Vtem data**

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September 2010

[2] *by A.Prikhodko*

APPENDIX F

TEM RESISTIVITY DEPTH IMAGING (RDI)

Resistivity depth imaging (RDI) is technique used to rapidly convert EM profile decay data into an equivalent resistivity versus depth cross-section, by deconvolving the measured TEM data.
The used RDI algorithm of Resistivity-Depth transformation is based on scheme of the apparent resistivity transform of Maxwell A.Meju (1998)[1] and TEM response from conductive half-space. The program is developed by Alexander Prikhodko and depth calibrated based on forward plate modeling for VTEM system configuration (Fig. 1-10).

RDIs provide reasonable indications of conductor relative depth and vertical extent, as well as accurate 1D layered-earth apparent conductivity/resistivity structure across VTEM flight lines. Approximate depth of investigation of a TEM system, image of secondary field distribution in half space, effective resistivity, initial geometry and position of conductive targets is the information obtained on base of the RDIs.

Maxwell forward modeling with RDI sections from the synthetic responses (VTEM system)

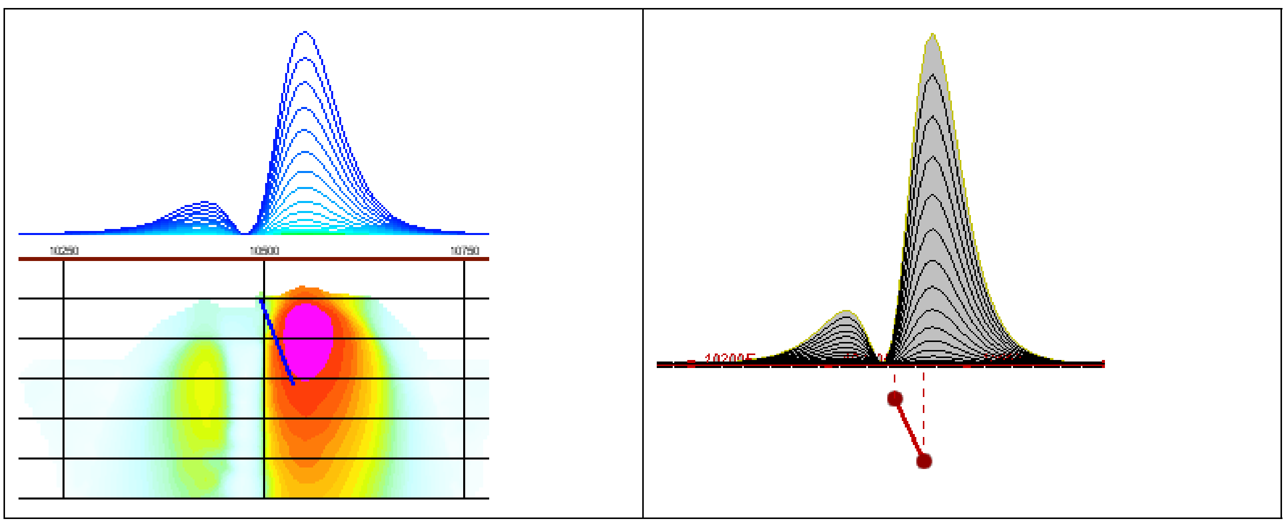


Figure F-1: Maxwell plate model and RDI from the calculated response for conductive “thin” plate (depth 50 m, dip 65 degree, depth extend 100 m).

[1] *Maxwell A.Meju, 1998, Short Note: A simple method of transient electromagnetic data analysis, Geophysics,* ***63****, 405–410.*

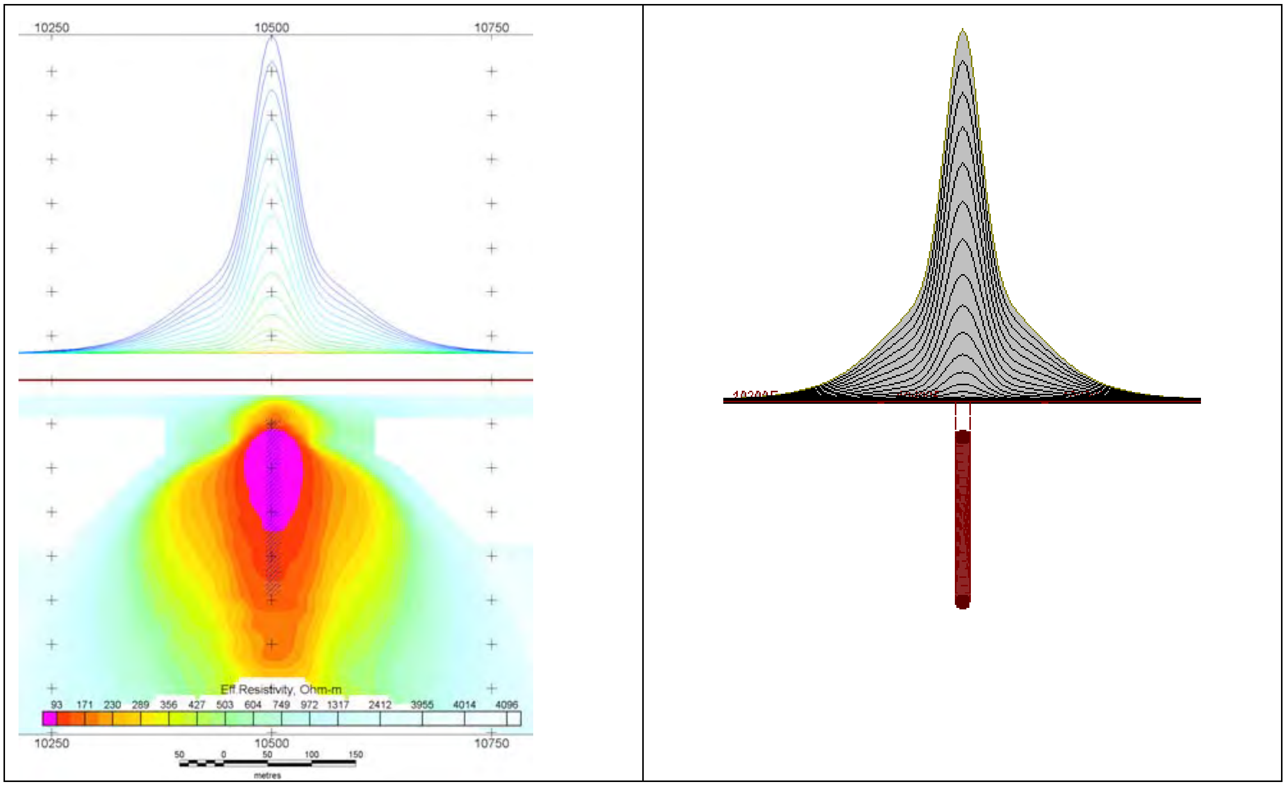


Figure F-2: Maxwell plate model and RDI from the calculated response for "thick" plate 18 m thickness, depth 50 m, depth extend 200 m).

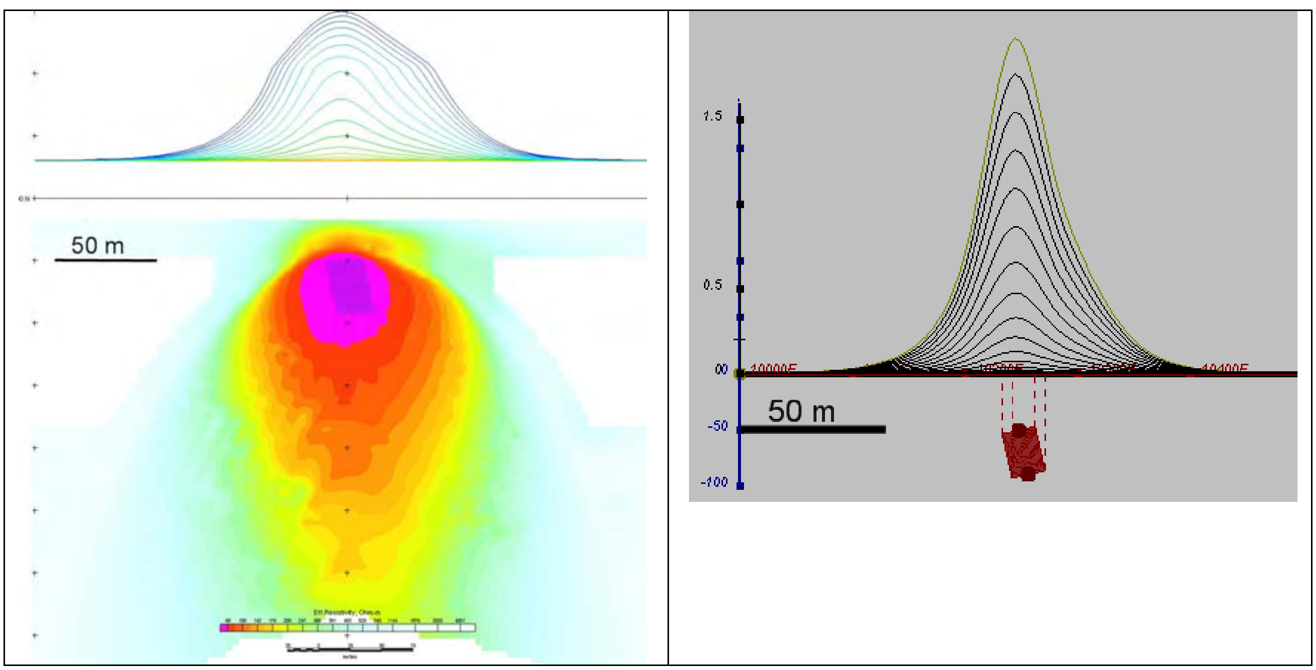


Figure F-3: Maxwell plate model and RDI from the calculated response for bulk ("thick") 100 m length, 40 m depth extend, 30 m thickness

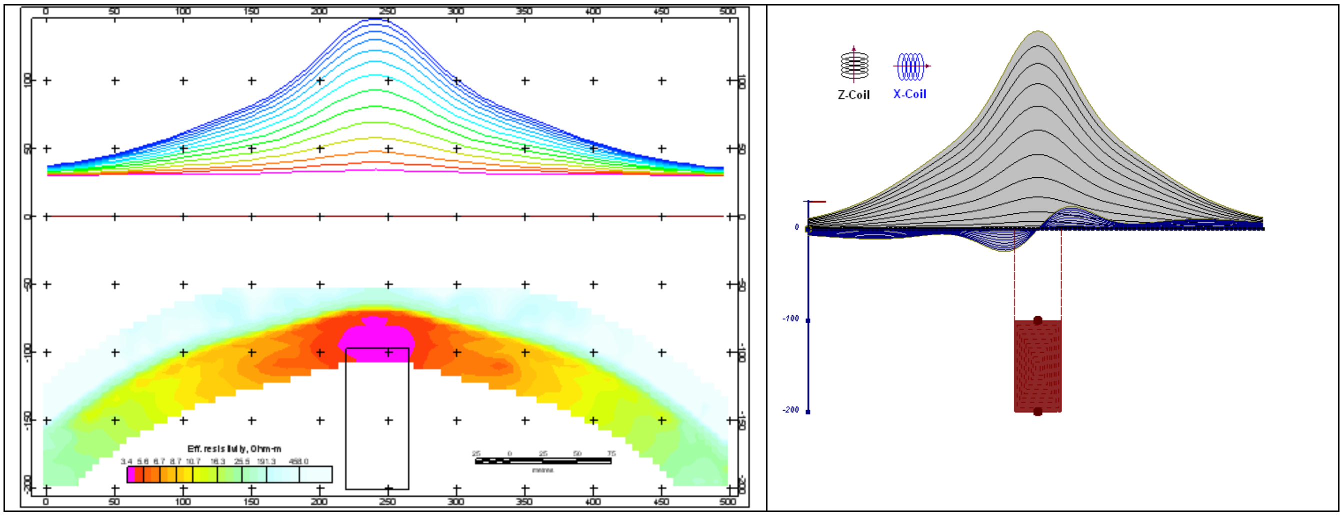


Figure F-4: Maxwell plate model and RDI from the calculated response for “thick” vertical target (depth 100 m, depth extend 100 m). 19-44 chan.

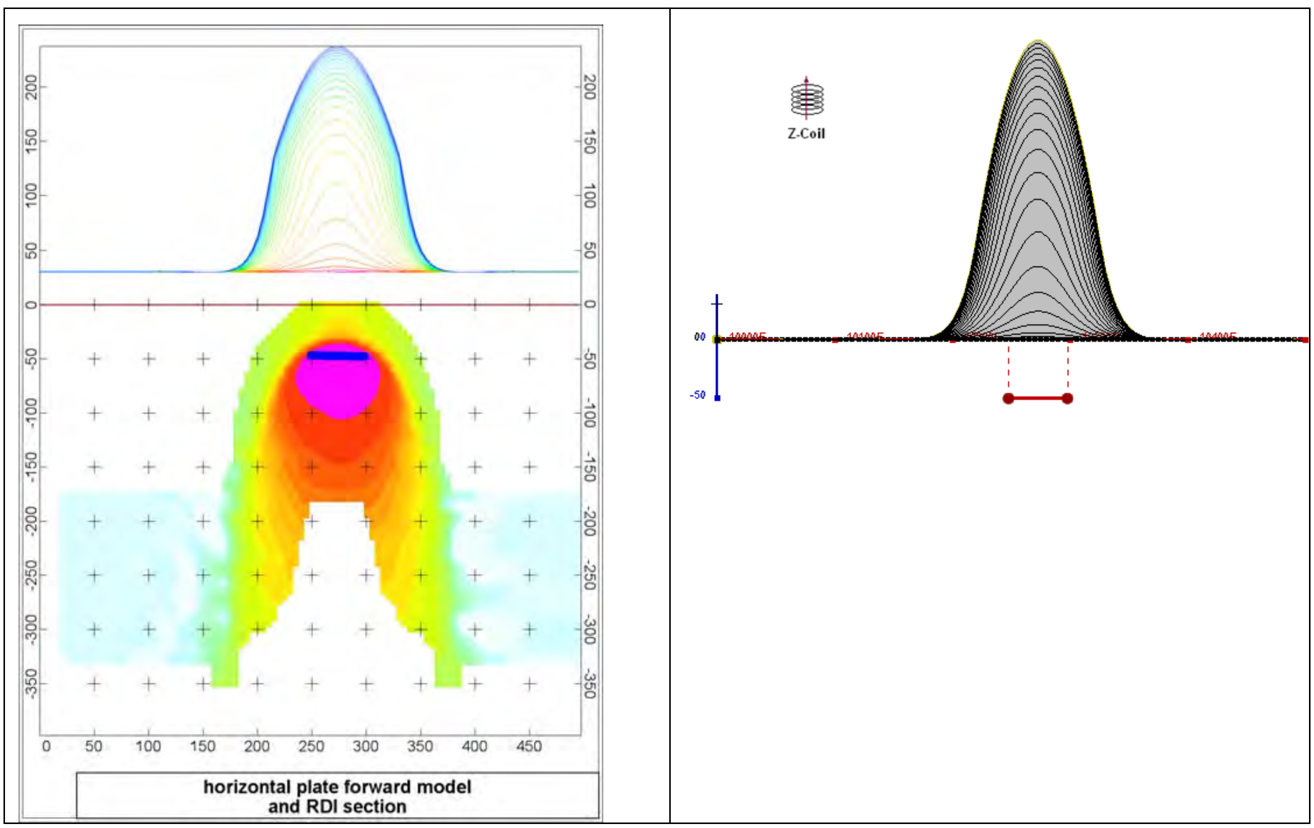


Figure F-5: Maxwell plate model and RDI from the calculated response for horizontal thin plate (depth 50 m, dim 50x100 m). 15-44 chan.

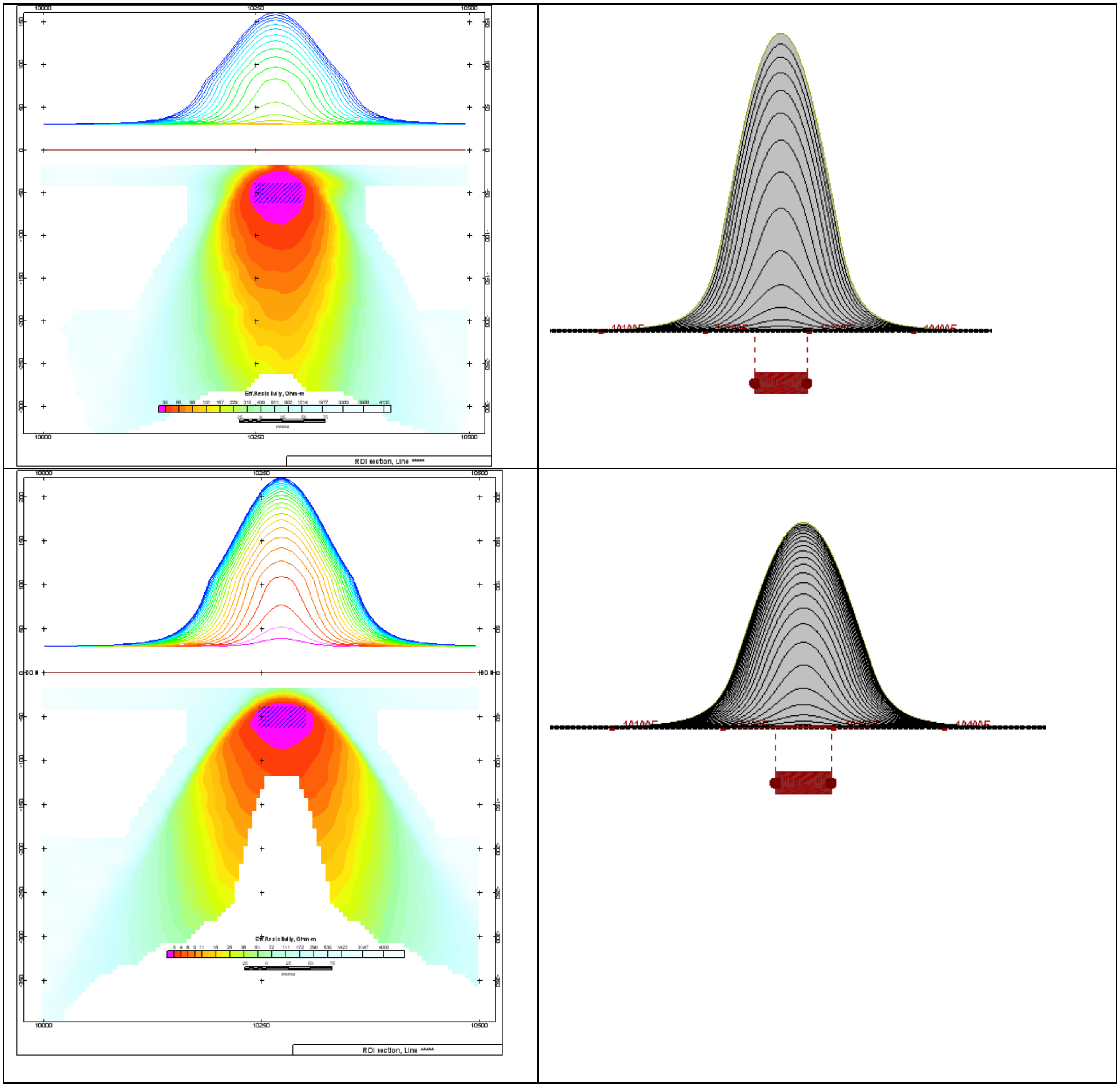


Figure F-6: Maxwell plate model and RDI from the calculated response for horizontal thick (20m) plate – less conductive (on the top), more conductive (below)

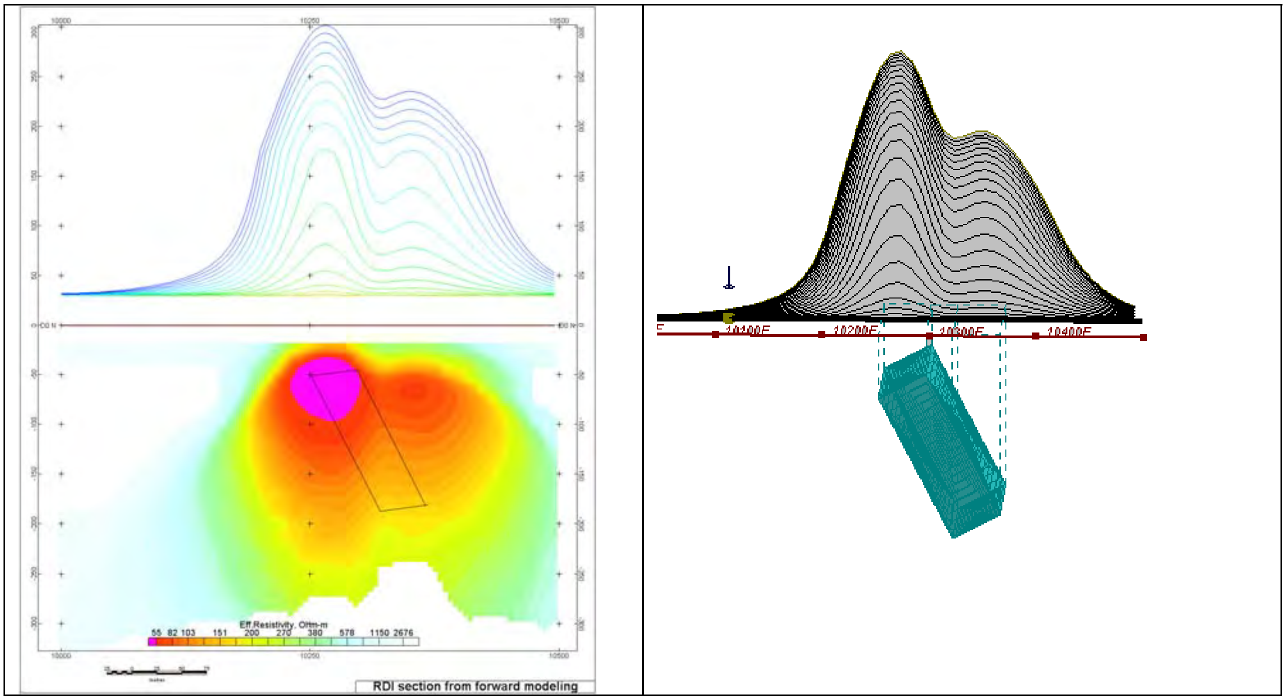


Figure F-7: Maxwell plate model and RDI from the calculated response for inclined thick (50m) plate. Depth extends 150 m, depth to the target 50 m.

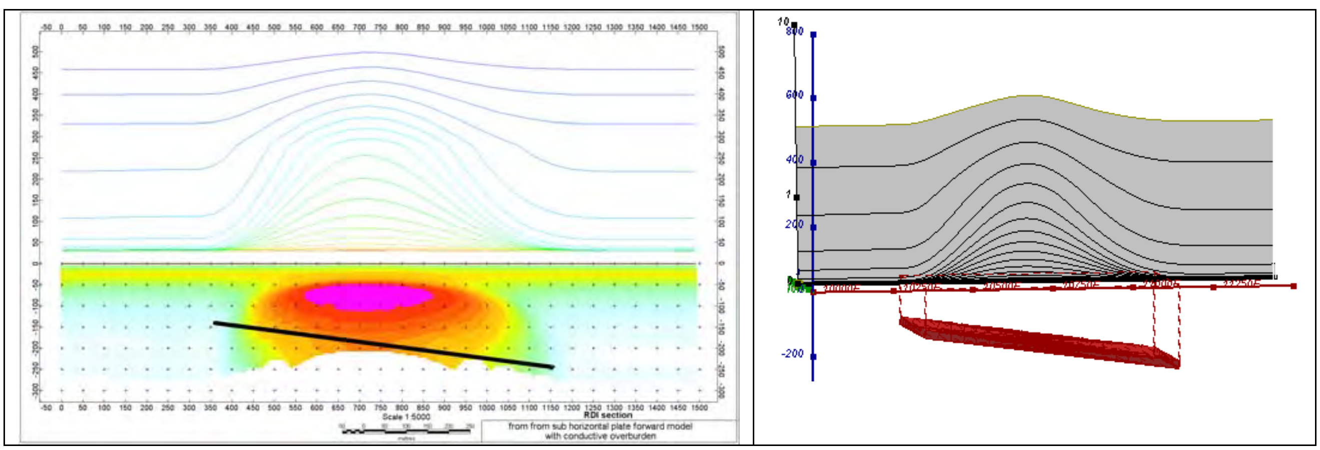


Figure F-8: Maxwell plate model and RDI from the calculated response for the long, wide and deep subhorizontal plate (depth 140 m, dim 25x500x800 m) with conductive overburden.

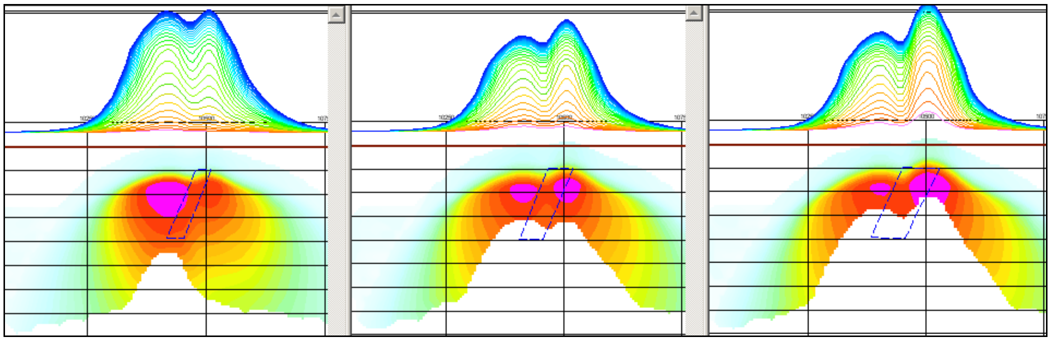


Figure F-9: Maxwell plate models and RDIs from the calculated response for “thick” dipping plates (35, 50, 75 m thickness), depth 50 m, conductivity 2.5 S/m.

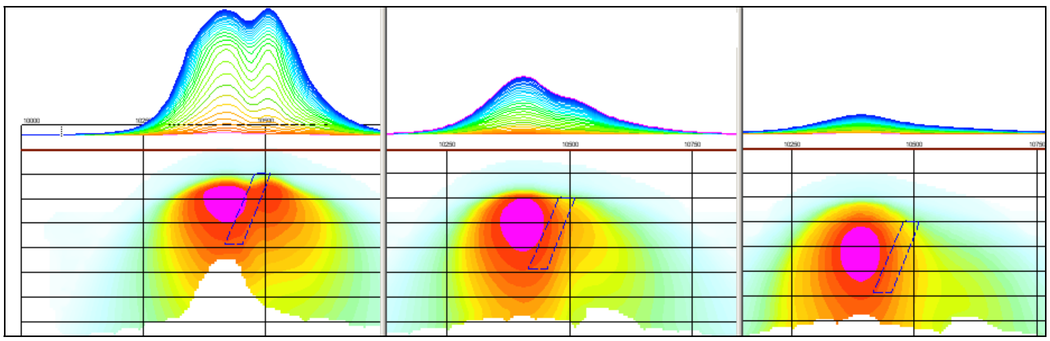


Figure F-10: Maxwell plate models and RDIs from the calculated response for “thick” (35 m thickness) dipping plate on different depth (50, 100, 150 m), conductivity 2.5 S/m.

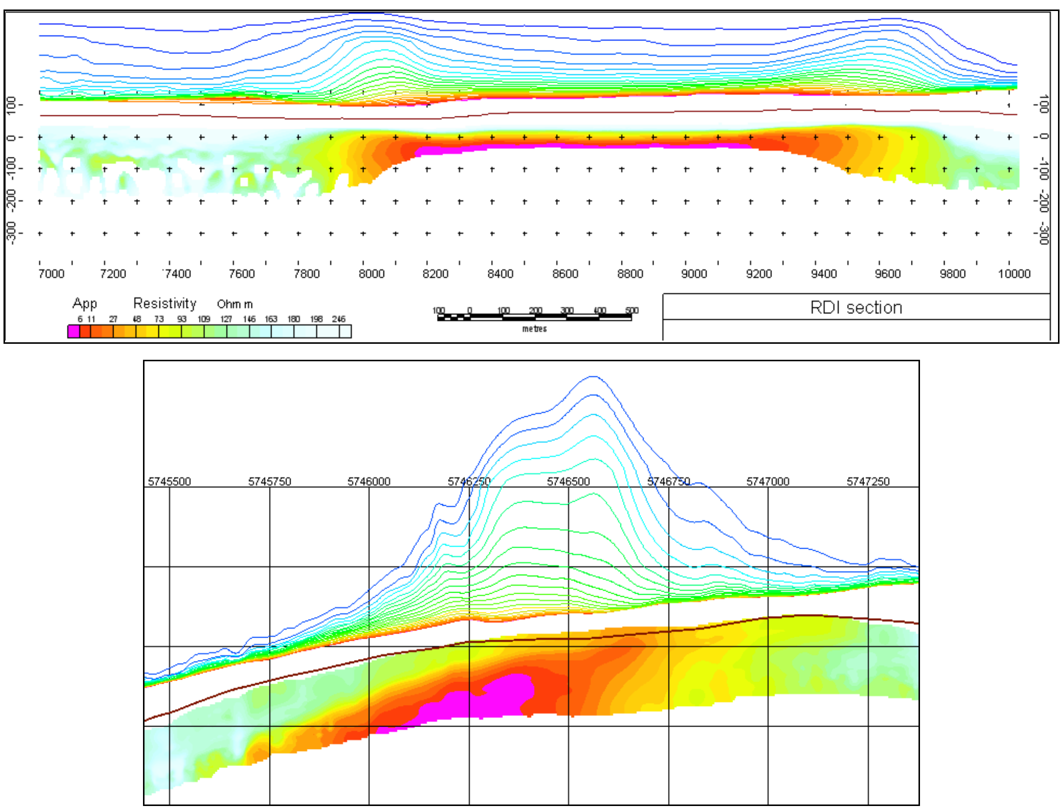
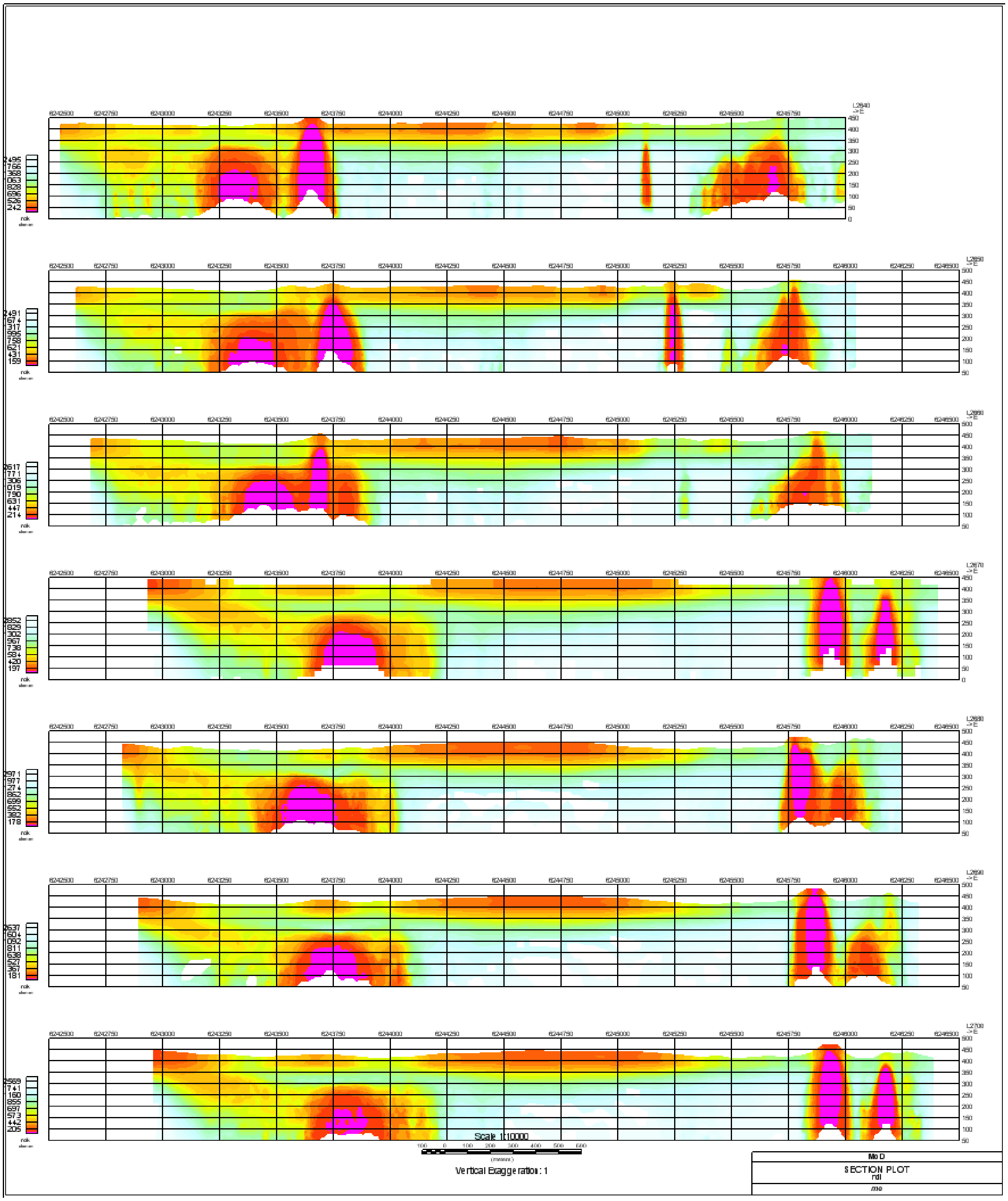


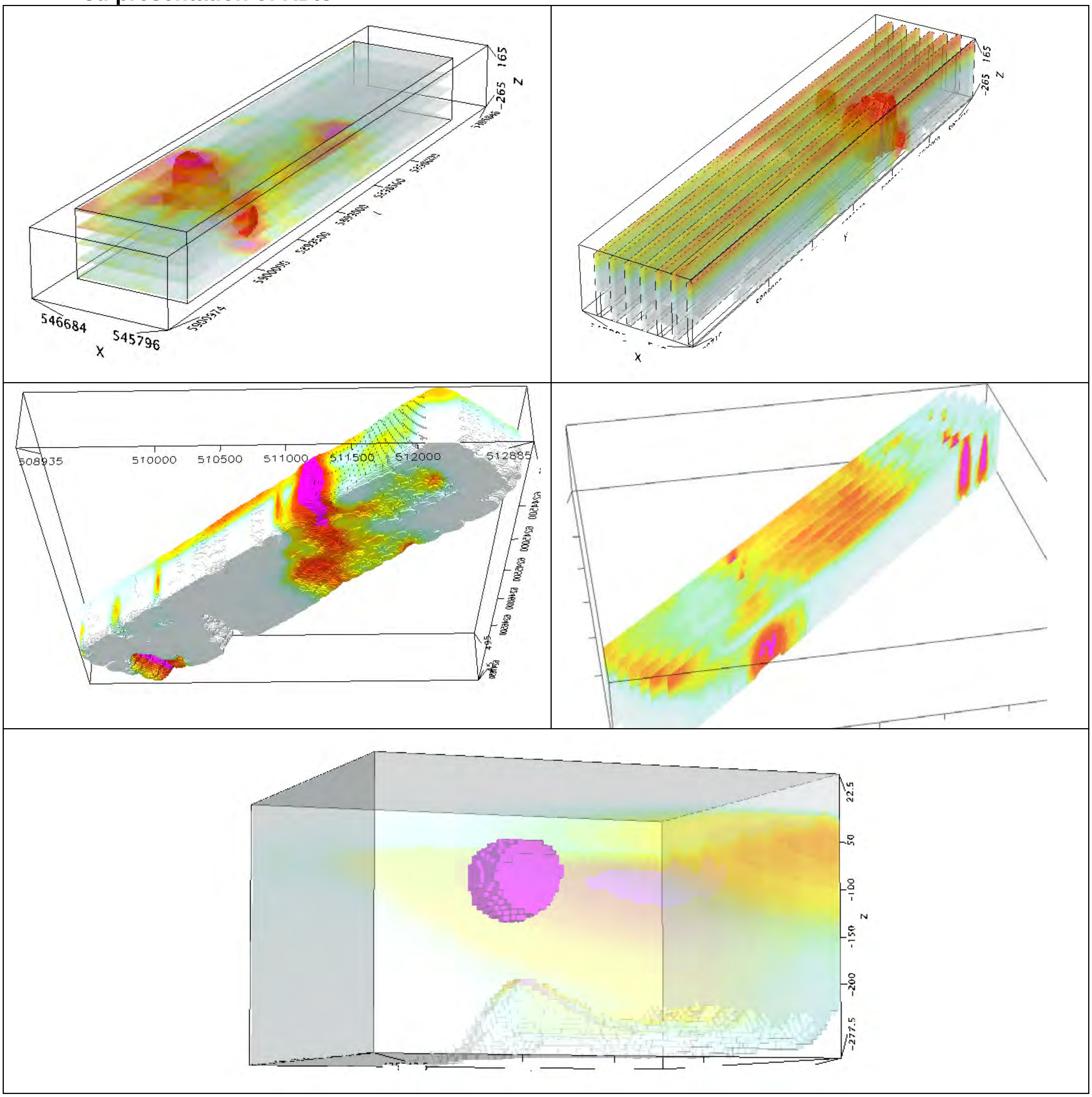
Figure F-11: RDI section for the real horizontal and slightly dipping conductive layers

FORMS OF RDI PRESENTATION

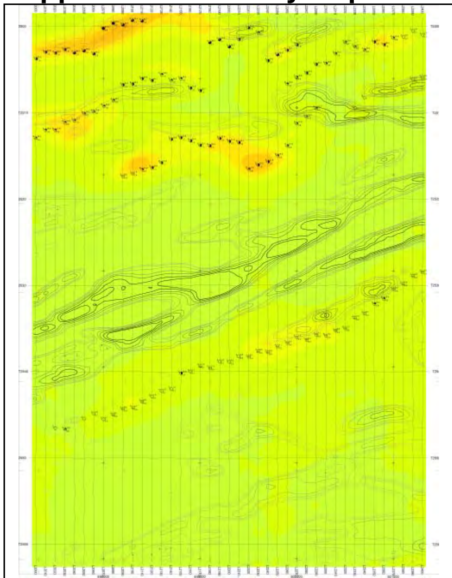
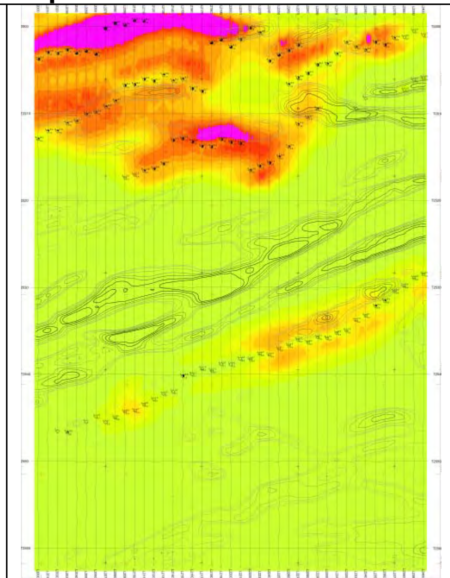
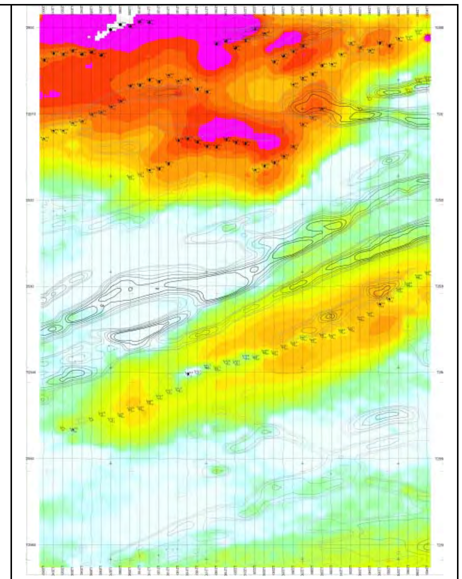
Presentation of series of lines



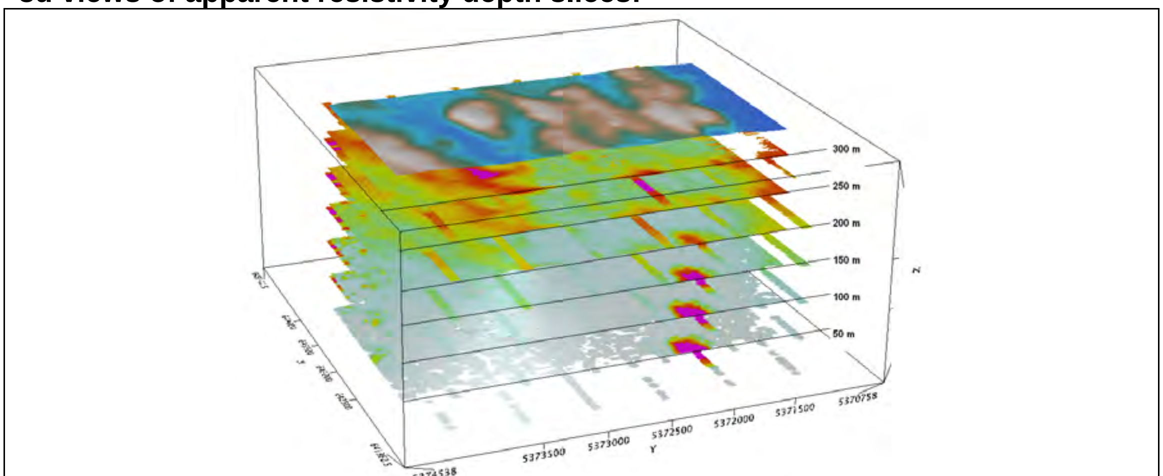
3d presentation of RDIs

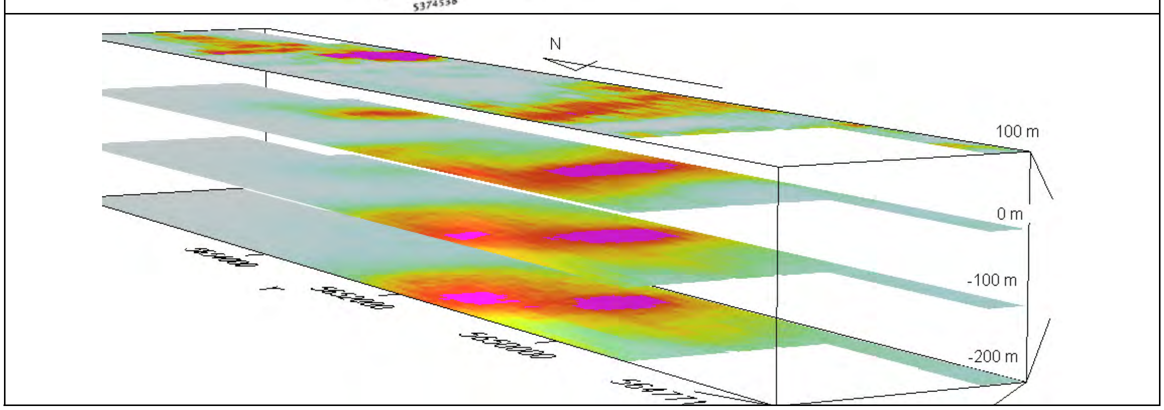


Apparent Resistivity Depth Slices plans:

		
0 m (surface)	-100 m	-200 m

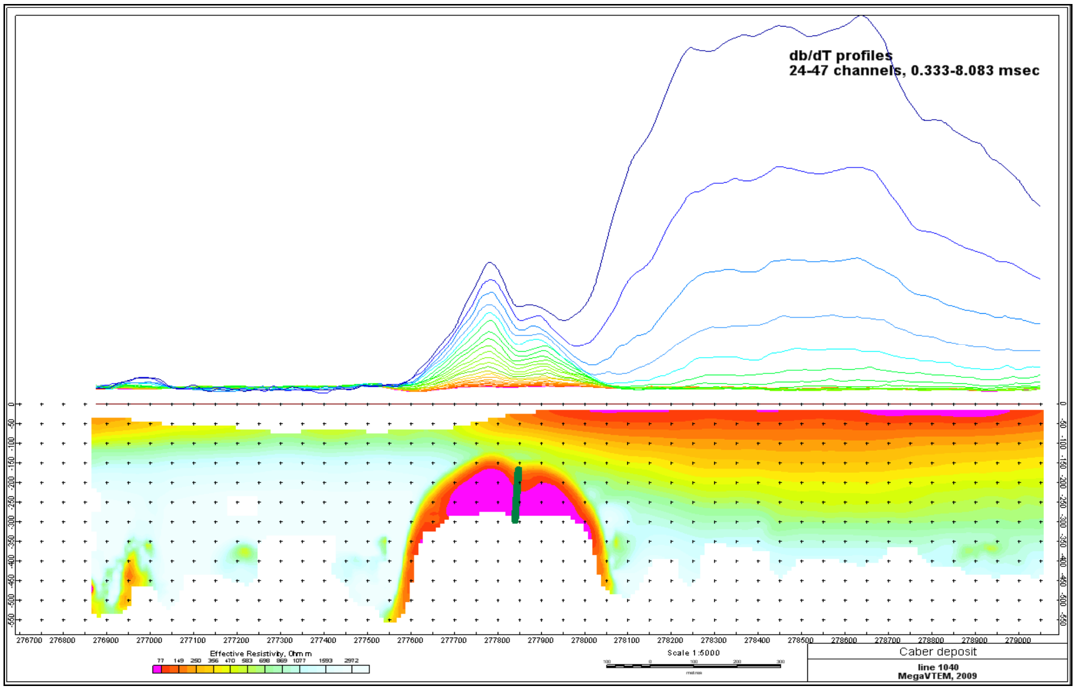
3d views of apparent resistivity depth slices:



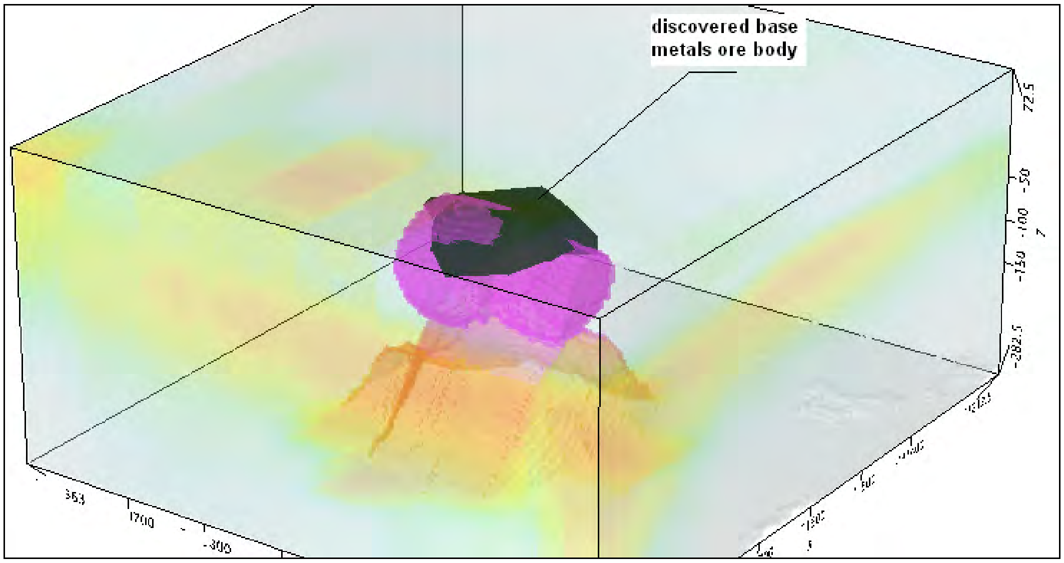


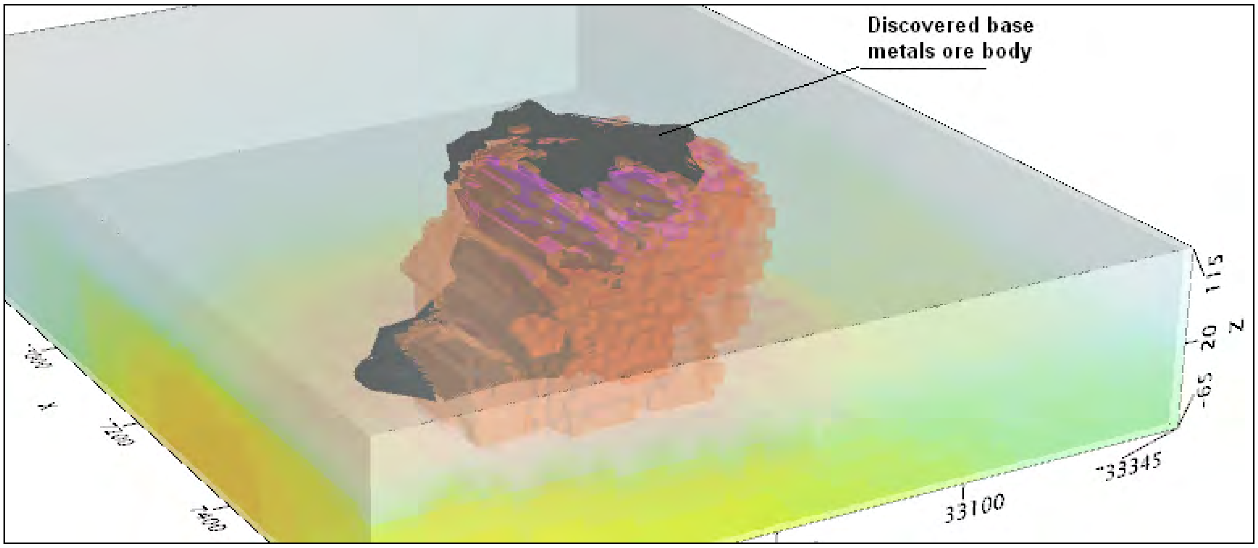
Real base metal targets in comparison with RDIs:

RDI section of the line over Caber deposit (“thin” subvertical plate target and conductive overburden.



3d RDI voxels with base metals ore bodies (Middle East):





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April 2011

APPENDIX G

ELECTROMAGNETIC ANOMALY LISTING

Line	x	y	ConSF	ConBF	TAUSF	TAUBF	An_ID	Labels	Grade	Anom	Culture	BFZ32
1080	645703.29	5418076.10	2.59	0.00	0.14	0.00	N	A	1.00	2	*	0.03
1090	645606.94	5417974.18	2.85	0.00	0.15	0.00	N	A	1.00	2	*	-0.07
1100	645585.15	5417879.25	2.43	0.00	0.13	0.00	N	A	1.00	2	*	-0.00
1110	645499.64	5417780.33	2.76	0.00	0.15	0.00	N	A	1.00	2	*	-0.03
1120	645634.97	5417677.84	0.87	0.00	0.05	0.00	K	A	1.00	1	*	0.08
1160	644741.35	5417279.87	1.02	0.00	0.05	0.00	K	A	1.00	1	*	-0.00
1170	644855.38	5417179.92	1.00	0.00	0.05	0.00	K	A	1.00	1	*	0.08
1270	643784.93	5416178.28	1.39	0.00	0.07	0.00	N	A	1.00	2	*	-0.03
1280	643811.51	5416081.91	3.83	0.00	0.21	0.00	N	A	1.00	2	*	-0.04
1280	644582.40	5416083.71	1.66	0.00	0.09	0.00	N	B	1.00	2	*	-0.00
1290	643780.91	5415981.92	3.46	0.00	0.19	0.00	N	A	1.00	2	*	0.04
1300	643750.90	5415878.78	4.52	0.00	0.24	0.00	N	A	1.00	2	*	0.06
1310	643687.74	5415784.94	0.96	0.00	0.05	0.00	N	A	1.00	2	*	-0.05
1390	643513.43	5414980.88	1.04	0.00	0.06	0.00	N	A	1.00	2	*	0.02
1400	643436.44	5414877.79	0.91	0.00	0.05	0.00	N	A	1.00	2	*	-0.05
1410	643517.01	5414786.55	3.02	0.00	0.16	0.00	N	A	1.00	2	*	0.09
1420	643081.11	5414678.83	1.97	0.00	0.11	0.00	N	A	1.00	2	*	0.33
1420	643490.24	5414680.32	2.66	0.00	0.14	0.00	N	B	1.00	2	*	0.05
1430	643457.49	5414583.03	2.83	0.00	0.15	0.00	N	A	1.00	2	*	0.06
1440	643472.02	5414479.81	2.36	0.00	0.13	0.00	N	A	1.00	2	*	0.10
1450	643423.07	5414386.37	3.75	0.00	0.20	0.00	N	A	1.00	2	*	0.07
1470	643210.25	5414184.05	1.94	0.00	0.10	0.00	N	A	1.00	2	*	0.32
1470	643809.25	5414181.07	0.75	0.00	0.04	0.00	N	B	1.00	2	*	0.02
1480	643171.82	5414083.78	1.94	0.00	0.10	0.00	N	A	1.00	2	*	-0.04
1500	643313.91	5413884.49	5.56	0.00	0.30	0.00	N	A	2.00	2	*	0.03

1510	643782.49	5413782.49	3.19	0.00	0.17	0.00	N	A	1.00	2	*	0.01
1510	643296.96	5413783.18	11.07	0.00	0.59	0.00	N	B	3.00	2	*	0.17
1520	642171.65	5413678.86	10.75	64.81	0.58	3.48	N	A	3.00	2	*	0.20
1520	642858.51	5413684.15	2.31	0.00	0.12	0.00	N	B	1.00	2	*	0.18
1520	643352.30	5413690.71	10.40	10.37	0.56	0.56	N	C	3.00	2	*	0.06
1530	643360.63	5413584.77	14.86	15.54	0.80	0.84	N	A	3.00	2	*	1.22
1530	642839.91	5413572.98	8.20	7.08	0.44	0.38	N	B	2.00	2	*	0.34
1530	642104.44	5413581.27	61.64	95.61	3.31	5.14	N	C	6.00	2	*	6.56
1540	642076.54	5413476.58	26.35	54.45	1.42	2.93	N	A	4.00	2	*	0.72
1540	642929.09	5413480.97	7.66	6.06	0.41	0.33	N	B	2.00	2	*	0.24
1540	643399.41	5413480.45	19.20	22.08	1.03	1.19	N	C	3.00	2	*	0.45
1550	643566.11	5413385.26	5.54	5.35	0.30	0.29	N	A	2.00	2	*	0.39
1550	643390.15	5413384.11	28.01	35.55	1.51	1.91	N	B	4.00	2	*	0.89
1550	642890.38	5413381.42	4.64	2.64	0.25	0.14	N	C	1.00	2	*	0.50
1550	641964.82	5413382.64	5.56	0.00	0.30	0.00	N	D	2.00	2	*	0.18
2000	644582.86	5409981.43	14.81	16.44	0.80	0.88	K	A	3.00	1	*	2.56
2010	644559.90	5409884.22	0.90	0.00	0.05	0.00	K	A	1.00	1	*	0.32
2160	646035.15	5408387.67	7.36	4.01	0.40	0.22	N	A	2.00	2	*	0.11
2170	646044.98	5408281.97	1.96	0.00	0.11	0.00	N	A	1.00	2	*	0.14
2230	645526.00	5407682.16	1.50	0.00	0.08	0.00	N	A	1.00	2	*	0.26
2240	645677.66	5407580.03	3.43	0.00	0.18	0.00	N	A	1.00	2	*	0.27
2250	645632.22	5407482.07	4.37	0.00	0.24	0.00	N	A	1.00	2	*	0.58
2260	645715.12	5407380.62	7.18	0.00	0.39	0.00	N	A	2.00	2	*	0.73
2270	645827.05	5407280.84	6.02	0.00	0.32	0.00	N	A	2.00	2	*	0.40
2275	646673.98	5407232.06	1.95	0.00	0.10	0.00	N	A	1.00	2	*	0.05
2275	645937.19	5407236.55	6.38	4.89	0.34	0.26	N	B	2.00	2	*	1.20
2275	645610.75	5407234.54	7.17	7.43	0.39	0.40	N	C	2.00	2	*	0.44
2280	645651.19	5407189.40	9.51	14.29	0.51	0.77	N	A	2.00	2	*	0.37
2280	645860.69	5407192.69	7.13	7.53	0.38	0.41	N	B	2.00	2	*	1.08
2280	646712.32	5407187.05	2.24	0.00	0.12	0.00	N	C	1.00	2	*	-0.01

2285	645674.77	5407130.73	7.40	8.14	0.40	0.44	N	A	2.00	2	*	0.40
2285	645923.56	5407127.64	27.28	36.13	1.47	1.94	N	B	4.00	2	*	0.92
2285	646730.70	5407130.80	5.20	0.00	0.28	0.00	N	C	2.00	2	*	-0.03
2290	646724.31	5407088.54	4.98	0.00	0.27	0.00	N	A	1.00	2	*	0.20
2290	645958.16	5407082.41	27.19	37.19	1.46	2.00	N	B	4.00	2	*	0.70
2300	646063.80	5406981.93	40.27	45.31	2.17	2.44	N	A	5.00	2	*	0.72
2300	646759.06	5406987.35	0.74	0.00	0.04	0.00	N	B	1.00	2	*	0.05
2310	646073.51	5406891.65	35.84	46.34	1.93	2.49	N	A	5.00	2	*	0.61
2320	646098.44	5406789.04	12.04	13.96	0.65	0.75	N	A	3.00	2	*	0.22
2330	646144.68	5406683.40	2.55	0.00	0.14	0.00	N	A	1.00	2	*	0.15
2340	646183.27	5406586.90	5.02	0.00	0.27	0.00	N	A	2.00	2	*	0.05
2350	646189.90	5406484.13	1.29	0.00	0.07	0.00	N	A	1.00	2	*	0.07
2360	646245.43	5406391.21	1.63	0.00	0.09	0.00	N	A	1.00	2	*	0.09
2370	646039.30	5406292.65	0.80	0.00	0.04	0.00	K	A	1.00	1	*	-0.01
2380	646008.59	5406188.55	1.25	0.00	0.07	0.00	K	A	1.00	1	*	0.12
2460	642968.50	5405392.73	8.42	7.68	0.45	0.41	K	A	2.00	1	*	1.36
2490	646719.27	5405085.29	0.73	0.00	0.04	0.00	K	A	1.00	1	*	0.11
2500	643440.21	5404977.76	2.90	0.00	0.16	0.00	N	A	1.00	2	*	-0.07
2510	643521.82	5404883.56	31.85	50.72	1.71	2.73	N	A	4.00	2	*	0.95
2520	643488.57	5404775.07	30.76	57.05	1.65	3.07	N	A	4.00	2	*	1.07
2530	643249.65	5404683.66	14.82	22.07	0.80	1.19	N	A	3.00	2	*	0.17
2540	643555.17	5404579.48	3.67	0.00	0.20	0.00	N	A	1.00	2	*	0.15
2540	643239.20	5404583.22	5.20	0.00	0.28	0.00	N	B	2.00	2	*	0.07
2550	643615.95	5404479.50	1.38	0.00	0.07	0.00	N	A	1.00	2	*	0.20
2560	643664.58	5404388.76	2.80	0.00	0.15	0.00	N	A	1.00	2	*	0.16
2570	643720.61	5404280.11	0.90	0.00	0.05	0.00	N	A	1.00	2	*	0.08
2580	643732.44	5404183.36	0.93	0.00	0.05	0.00	N	A	1.00	2	*	0.12
2620	643576.80	5403788.73	1.19	0.00	0.06	0.00	N	A	1.00	2	*	-0.03
2630	643610.30	5403680.67	5.22	0.00	0.28	0.00	N	A	2.00	2	*	0.02
2640	643559.99	5403588.75	5.23	0.00	0.28	0.00	N	A	2.00	2	*	0.01

2650	643865.26	5403486.26	1.25	0.00	0.07	0.00	N	A	1.00	2	*	0.02
2660	644165.84	5403386.36	0.89	0.00	0.05	0.00	K	A	1.00	1	*	0.24
2660	643885.69	5403382.95	1.15	0.00	0.06	0.00	N	B	1.00	2	*	0.36
2670	643763.71	5403292.96	1.27	0.00	0.07	0.00	K	A	1.00	1	*	0.34
2670	643962.77	5403292.55	11.61	13.37	0.62	0.72	N	B	3.00	2	*	1.58
2680	644071.18	5403190.14	5.34	0.00	0.29	0.00	K	A	2.00	1	*	0.33
2680	643678.43	5403189.16	10.58	10.34	0.57	0.56	N	B	3.00	2	*	0.31
2690	643696.64	5403091.06	14.81	15.94	0.80	0.86	N	A	3.00	2	*	1.34
2690	644092.01	5403089.75	5.58	0.00	0.30	0.00	K	B	2.00	1	*	0.40
2690	647260.21	5403086.98	0.98	0.00	0.05	0.00	N	C	1.00	2	*	0.05
2700	643670.15	5402989.30	25.42	26.42	1.37	1.42	N	A	4.00	2	*	0.02
2710	643720.35	5402892.20	16.93	17.91	0.91	0.96	N	A	3.00	2	*	0.82
2720	643736.96	5402786.23	10.32	8.45	0.55	0.45	N	A	3.00	2	*	0.36
2730	643742.77	5402680.73	2.92	0.00	0.16	0.00	N	A	1.00	2	*	0.09
2740	643640.17	5402583.46	11.70	12.60	0.63	0.68	N	A	3.00	2	*	0.13
2750	643676.83	5402484.70	25.49	33.29	1.37	1.79	N	A	4.00	2	*	0.69
2760	643706.82	5402380.46	28.02	40.46	1.51	2.18	N	A	4.00	2	*	0.26
2770	643774.11	5402293.15	5.12	0.00	0.28	0.00	N	A	2.00	2	*	0.16
2780	643791.98	5402185.55	1.18	0.00	0.06	0.00	N	A	1.00	2	*	-0.02
2790	643853.63	5402087.71	2.79	0.00	0.15	0.00	N	A	1.00	2	*	-0.09
2820	643848.39	5401796.17	8.83	8.67	0.47	0.47	N	A	2.00	2	*	0.07
2830	643967.03	5401686.49	0.46	0.00	0.02	0.00	N	A	1.00	2	*	-0.05
2840	643927.32	5401591.77	5.43	0.00	0.29	0.00	N	A	2.00	2	*	0.16
2860	643996.03	5401392.48	25.74	30.00	1.38	1.61	N	A	4.00	2	*	1.03
2870	644050.72	5401285.64	27.87	31.07	1.50	1.67	N	A	4.00	2	*	2.82
2880	644058.65	5401181.40	20.18	27.67	1.08	1.49	N	A	4.00	2	*	0.28
2890	644100.19	5401095.41	8.26	2.81	0.44	0.15	N	A	2.00	2	*	0.22
2900	644103.36	5400985.76	2.86	0.00	0.15	0.00	N	A	1.00	2	*	0.15
2910	644068.09	5400875.98	22.22	39.59	1.19	2.13	N	A	4.00	2	*	0.66
2940	644212.02	5400593.97	29.05	39.80	1.56	2.14	N	A	4.00	2	*	0.14

2950	644271.18	5400487.64	45.63	53.31	2.45	2.87	N	A	5.00	2	*	87.07
2960	644290.43	5400386.07	35.35	60.09	1.90	3.23	N	A	5.00	2	*	1.09
2970	644399.18	5400298.10	7.04	0.00	0.38	0.00	N	A	2.00	2	*	0.39
2980	644369.06	5400189.89	31.37	93.25	1.69	5.01	N	A	4.00	2	*	1.52
2990	644461.16	5400089.60	19.15	45.12	1.03	2.43	N	A	3.00	2	*	2.74
3000	644463.12	5399992.30	9.76	19.03	0.52	1.02	N	A	2.00	2	*	0.75
3010	644522.30	5399879.40	11.69	18.87	0.63	1.01	N	A	3.00	2	*	0.54
3020	644561.06	5399783.53	16.70	34.27	0.90	1.84	N	A	3.00	2	*	0.50
3030	644621.59	5399686.27	5.32	0.00	0.29	0.00	N	A	2.00	2	*	0.23
3050	644634.46	5399479.57	1.77	0.00	0.10	0.00	N	A	1.00	2	*	-0.14
3060	644651.74	5399388.57	2.95	0.00	0.16	0.00	N	A	1.00	2	*	0.08
3070	644720.23	5399290.34	15.40	15.71	0.83	0.84	N	A	3.00	2	*	0.63
3080	647323.79	5399190.62	3.49	0.00	0.19	0.00	N	A	1.00	2	*	-0.01
3080	644738.01	5399187.31	11.56	15.79	0.62	0.85	N	B	3.00	2	*	0.34
3090	644808.47	5399095.35	16.97	26.09	0.91	1.40	N	A	3.00	2	*	1.12
3090	647452.86	5399100.44	3.84	0.00	0.21	0.00	N	B	1.00	2	*	0.03
3100	644881.41	5398983.62	11.29	17.61	0.61	0.95	N	A	3.00	2	*	0.25
3110	645211.35	5398884.84	26.23	35.20	1.41	1.89	N	A	4.00	2	*	2.41
3120	645042.49	5398790.91	18.66	22.65	1.00	1.22	N	A	3.00	2	*	0.29
3130	645109.81	5398695.47	23.86	28.39	1.28	1.53	N	A	4.00	2	*	2.15
3140	647419.41	5398597.18	3.40	0.00	0.18	0.00	N	A	1.00	2	*	-0.09
3140	645160.02	5398595.56	41.00	50.52	2.20	2.72	N	B	5.00	2	*	-0.18
3150	645230.92	5398480.21	24.88	30.98	1.34	1.67	N	A	4.00	2	*	0.59
3160	647664.69	5398380.20	0.94	0.00	0.05	0.00	K	A	1.00	1	*	0.10
3170	648217.33	5398280.74	0.70	0.00	0.04	0.00	K	A	1.00	1	*	-0.01
3180	645555.86	5398182.79	0.68	0.00	0.04	0.00	N	A	1.00	2	*	0.22
3190	645597.34	5398088.71	49.02	68.88	2.64	3.70	N	A	5.00	2	*	6.52
3200	648075.39	5397986.55	1.08	0.00	0.06	0.00	N	A	1.00	2	*	-0.01
3200	645661.03	5397982.23	56.03	82.24	3.01	4.42	N	B	6.00	2	*	3.25
3210	645754.24	5397882.77	19.50	25.30	1.05	1.36	N	A	3.00	2	*	2.45

3210	648117.44	5397883.56	3.62	0.00	0.19	0.00	N	B	1.00	2	*	0.02
3220	647966.36	5397782.26	0.73	0.00	0.04	0.00	N	A	1.00	2	*	-0.01
3220	645735.75	5397779.32	23.88	33.67	1.28	1.81	N	B	4.00	2	*	2.34
3230	645790.49	5397680.21	11.55	15.20	0.62	0.82	N	A	3.00	2	*	1.19
3230	645925.78	5397680.57	7.91	5.94	0.43	0.32	N	B	2.00	2	*	0.76
3240	645968.53	5397582.83	9.45	11.72	0.51	0.63	N	A	2.00	2	*	1.04
3250	645940.60	5397480.40	16.62	28.82	0.89	1.55	N	A	3.00	2	*	3.98
3250	646037.39	5397483.23	16.62	28.82	0.89	1.55	N	B	3.00	2	*	1.85
3260	646060.12	5397382.79	10.46	13.95	0.56	0.75	N	A	3.00	2	*	1.10
3260	645977.71	5397384.52	10.46	13.95	0.56	0.75	N	B	3.00	2	*	3.82
3270	646069.64	5397279.73	4.86	0.00	0.26	0.00	N	A	1.00	2	*	0.86
3280	648194.15	5397180.79	1.38	0.00	0.07	0.00	N	A	1.00	2	*	0.04
3280	646051.79	5397183.68	5.83	0.00	0.31	0.00	N	B	2.00	2	*	0.56
3290	646147.55	5397083.84	42.34	76.49	2.28	4.11	N	A	5.00	2	*	1.70
3290	648250.92	5397086.85	1.89	0.00	0.10	0.00	N	B	1.00	2	*	-0.05
3300	648267.56	5396987.12	1.39	0.00	0.07	0.00	N	A	1.00	2	*	-0.01
3300	646175.57	5396980.22	53.62	89.69	2.88	4.82	N	B	6.00	2	*	21.40
3310	646254.22	5396879.41	10.13	11.47	0.54	0.62	N	A	3.00	2	*	0.57
3320	646287.94	5396782.66	19.16	54.65	1.03	2.94	N	A	3.00	2	*	2.06
3330	646331.75	5396682.46	23.05	46.82	1.24	2.52	N	A	4.00	2	*	1.86
3340	646344.92	5396583.20	30.49	83.89	1.64	4.51	N	A	4.00	2	*	7.84
3350	646388.85	5396497.66	57.65	101.52	3.10	5.46	N	A	6.00	2	*	14.34
3360	646433.35	5396384.85	68.09	112.93	3.66	6.07	N	A	6.00	2	*	58.43
3370	646522.67	5396285.70	57.90	115.08	3.11	6.19	N	A	6.00	2	*	33.31
3380	646581.08	5396186.34	52.04	87.44	2.80	4.70	N	A	6.00	2	*	10.46
3390	646632.99	5396089.32	48.06	76.80	2.58	4.13	N	A	5.00	2	*	12.31
3400	646690.49	5395986.31	23.25	45.98	1.25	2.47	N	A	4.00	2	*	0.61
3410	646778.51	5395890.07	10.91	11.49	0.59	0.62	N	A	3.00	2	*	0.33
3420	648772.36	5395787.70	1.68	0.00	0.09	0.00	N	A	1.00	2	*	0.01
3420	646723.14	5395784.07	20.14	27.35	1.08	1.47	N	B	4.00	2	*	0.69

3430	646910.07	5395676.46	13.25	18.58	0.71	1.00	N	A	3.00	2	*	2.12
3440	648899.02	5395577.08	1.21	0.00	0.06	0.00	N	A	1.00	2	*	0.01
3440	646965.98	5395585.67	4.21	0.00	0.23	0.00	N	B	1.00	2	*	0.06
3460	649662.61	5395383.76	6.14	3.88	0.33	0.21	N	A	2.00	2	*	0.11
3470	649352.04	5395292.57	0.60	0.00	0.03	0.00	N	A	1.00	2	*	-0.08
3480	649313.40	5395187.72	0.89	0.00	0.05	0.00	N	A	1.00	2	*	-0.03
3510	649414.96	5394890.45	0.82	0.00	0.04	0.00	N	A	1.00	2	*	0.02
3520	649671.34	5394781.36	1.36	0.00	0.07	0.00	N	A	1.00	2	*	0.06
3560	649989.74	5394387.01	2.21	0.00	0.12	0.00	N	A	1.00	2	*	0.08
3570	650068.99	5394286.99	6.98	0.00	0.38	0.00	N	A	2.00	2	*	0.26
3890	651530.02	5391083.59	*	*	*	*	""	""	*	*	1	*	
3920	650708.45	5390788.21	*	*	*	*	""	""	*	*	1	*	
3930	650462.24	5390679.08	*	*	*	*	""	""	*	*	1	*	
5000	644341.42	5407272.71	1.25	0.00	0.07	0.00	K	A	1.00	1	*	-0.03
5000	644866.68	5407893.98	13.08	19.45	0.70	1.05	N	B	3.00	2	*	0.42
5000	645068.65	5408140.17	5.74	2.78	0.31	0.15	N	C	2.00	2	*	0.23
5000	645147.63	5408228.97	3.08	0.00	0.17	0.00	N	D	1.00	2	*	0.32
5010	645157.31	5408072.64	7.90	8.30	0.42	0.45	N	A	2.00	2	*	0.64
5010	644936.68	5407817.36	28.92	37.57	1.55	2.02	N	B	4.00	2	*	2.21
5020	645006.00	5407743.70	43.32	80.88	2.33	4.35	N	A	5.00	2	*	0.93
5020	645239.54	5408018.67	13.36	16.73	0.72	0.90	N	B	3.00	2	*	0.60
5030	645301.64	5407931.17	14.12	17.84	0.76	0.96	N	A	3.00	2	*	0.70
5030	645063.52	5407654.15	33.24	70.37	1.79	3.78	N	B	4.00	2	*	1.08
5040	645140.21	5407595.75	16.91	35.96	0.91	1.93	N	A	3.00	2	*	0.81
5040	645377.28	5407883.38	8.23	8.48	0.44	0.46	N	B	2.00	2	*	0.38
111000	643396.35	5413277.97	4.97	0.00	0.27	0.00	N	A	1.00	2	*	0.16
111000	643567.16	5413286.73	4.97	0.00	0.27	0.00	N	B	1.00	2	*	0.34
111010	643429.88	5413175.36	11.54	13.71	0.62	0.74	N	A	3.00	2	*	0.12
111020	643427.18	5413093.06	4.57	3.60	0.25	0.19	N	A	1.00	2	*	0.15
111030	643433.15	5412978.41	5.86	3.68	0.31	0.20	N	A	2.00	2	*	0.01

111040	643452.07	5412887.54	6.15	0.04	0.33	0.00	N	A	2.00	2	*	0.31
111050	643437.75	5412784.32	5.44	0.00	0.29	0.00	N	A	2.00	2	*	0.18
111050	642983.67	5412780.49	5.44	0.00	0.29	0.00	N	B	2.00	2	*	0.39
111050	641910.79	5412779.78	6.61	0.00	0.36	0.00	N	C	2.00	2	*	0.10
111060	641912.11	5412683.52	28.59	47.61	1.54	2.56	N	A	4.00	2	*	0.17
111060	643440.97	5412685.44	11.42	11.09	0.61	0.60	N	B	3.00	2	*	0.36
111070	643468.39	5412586.70	7.07	5.50	0.38	0.30	N	A	2.00	2	*	0.17
111070	641903.58	5412590.04	49.30	89.30	2.65	4.80	N	B	5.00	2	*	1.93
111080	641869.14	5412477.36	44.29	93.43	2.38	5.02	N	A	5.00	2	*	0.44
111080	643483.44	5412487.50	6.86	6.00	0.37	0.32	N	B	2.00	2	*	0.15
111080	644040.20	5412487.80	1.45	0.00	0.08	0.00	K	C	1.00	1	*	0.45
111090	643493.39	5412386.82	10.90	9.61	0.59	0.52	N	A	3.00	2	*	0.14
111090	641852.73	5412383.39	24.72	48.24	1.33	2.59	N	B	4.00	2	*	0.78
111100	641500.30	5412286.70	8.47	6.62	0.46	0.36	K	A	2.00	1	*	1.35
111100	641823.08	5412288.47	29.11	43.37	1.56	2.33	N	B	4.00	2	*	0.37
111100	642364.66	5412285.23	3.87	0.00	0.21	0.00	N	C	1.00	2	*	0.07
111100	643502.29	5412288.44	15.36	15.85	0.83	0.85	N	D	3.00	2	*	0.37
111110	643494.70	5412183.22	11.87	13.07	0.64	0.70	N	A	3.00	2	*	0.26
111110	642358.89	5412197.16	5.37	0.00	0.29	0.00	N	B	2.00	2	*	0.19
111110	641815.09	5412186.59	28.21	81.45	1.52	4.38	N	C	4.00	2	*	0.28
111120	641795.17	5412092.12	70.77	121.51	3.81	6.53	N	A	6.00	2	*	0.89
111120	642354.19	5412089.94	2.42	0.00	0.13	0.00	N	B	1.00	2	*	0.18
111120	643506.96	5412085.08	5.41	0.00	0.29	0.00	N	C	2.00	2	*	0.30
111130	643549.74	5411980.52	16.75	22.50	0.90	1.21	N	A	3.00	2	*	0.35
111130	641772.60	5411991.68	56.03	99.59	3.01	5.35	N	B	6.00	2	*	0.92
111140	641742.98	5411893.02	53.62	97.49	2.88	5.24	N	A	6.00	2	*	4.59
111140	643555.95	5411885.64	31.25	42.50	1.68	2.28	N	B	4.00	2	*	0.85
111150	643548.65	5411781.88	39.62	57.11	2.13	3.07	N	A	5.00	2	*	1.04
111150	643060.54	5411786.02	12.20	0.00	0.66	0.00	K	B	3.00	1	*	1.15
111150	642695.71	5411782.12	1.75	0.00	0.09	0.00	N	C	1.00	2	*	0.06

111150	642297.94	5411784.06	1.09	0.00	0.06	0.00	N	D	1.00	2	*	0.09
111150	641705.74	5411797.45	76.86	142.54	4.13	7.66	N	E	6.00	2	*	11.03
111160	641650.26	5411686.62	59.08	105.15	3.18	5.65	N	A	6.00	2	*	10.80
111160	642693.59	5411681.55	2.39	0.00	0.13	0.00	N	B	1.00	2	*	0.05
111160	642953.19	5411681.88	0.73	0.00	0.04	0.00	N	C	1.00	2	*	0.38
111160	643227.01	5411689.77	6.19	5.02	0.33	0.27	K	D	2.00	1	*	1.07
111160	643534.28	5411690.20	16.37	28.19	0.88	1.52	N	E	3.00	2	*	0.58
111170	643488.02	5411586.10	9.34	6.49	0.50	0.35	N	A	2.00	2	*	0.67
111170	642636.35	5411585.44	1.49	0.00	0.08	0.00	N	B	1.00	2	*	-0.03
111170	641629.40	5411582.53	73.71	116.17	3.96	6.25	N	C	6.00	2	*	1.46
111180	641653.45	5411483.36	93.44	122.51	5.02	6.59	N	A	6.00	2	*	8.71
111180	642659.21	5411481.11	0.13	0.00	0.01	0.00	K	B	1.00	1	*	0.72
111180	643505.44	5411494.13	10.19	9.71	0.55	0.52	N	C	3.00	2	*	0.41
111180	643688.65	5411488.39	9.52	9.65	0.51	0.52	N	D	2.00	2	*	0.41
111190	643685.64	5411383.68	10.03	8.92	0.54	0.48	N	A	3.00	2	*	0.09
111190	641634.31	5411384.16	61.83	92.99	3.32	5.00	N	B	6.00	2	*	1.29
111200	641643.99	5411283.34	54.80	70.61	2.95	3.80	N	A	6.00	2	*	0.53
111200	643431.74	5411290.25	2.17	0.00	0.12	0.00	N	B	1.00	2	*	0.06
111210	643422.93	5411191.94	2.79	0.00	0.15	0.00	N	A	1.00	2	*	-0.16
111210	642681.35	5411182.38	5.96	0.00	0.32	0.00	N	B	2.00	2	*	0.01
111210	642483.46	5411180.66	1.83	0.00	0.10	0.00	K	C	1.00	1	*	0.07
111210	641641.95	5411180.50	23.94	44.53	1.29	2.39	N	D	4.00	2	*	0.78
111220	641637.14	5411094.21	17.04	29.75	0.92	1.60	N	A	3.00	2	*	0.08
111220	642673.43	5411085.74	18.37	21.76	0.99	1.17	N	B	3.00	2	*	0.17
111220	643410.82	5411088.31	1.42	0.00	0.08	0.00	N	C	1.00	2	*	-0.08
111230	642697.89	5410982.47	7.34	0.00	0.39	0.00	N	A	2.00	2	*	0.07
111230	641639.22	5410976.04	9.11	8.85	0.49	0.48	N	B	2.00	2	*	-0.07
111240	641629.65	5410892.17	8.60	7.57	0.46	0.41	N	A	2.00	2	*	-0.06
111251	641636.45	5410776.05	3.67	2.17	0.20	0.12	N	A	1.00	2	*	0.04
111251	643363.44	5410784.83	2.56	0.00	0.14	0.00	N	B	1.00	2	*	-0.03

111260	641644.11	5410683.33	8.51	0.00	0.46	0.00	N	A	2.00	2	*	0.13
111260	642348.01	5410692.40	2.93	0.00	0.16	0.00	N	B	1.00	2	*	0.11
111260	643547.92	5410680.85	0.77	0.00	0.04	0.00	K	C	1.00	1	*	0.12
111270	643359.60	5410580.77	0.00	0.00	0.00	0.00	N	A	1.00	2	*	-0.01
111280	641677.06	5410482.06	4.82	0.00	0.26	0.00	N	A	1.00	2	*	0.37
111280	642187.50	5410482.80	1.73	0.00	0.09	0.00	K	B	1.00	1	*	0.15
111290	642437.03	5410387.40	4.07	0.00	0.22	0.00	K	A	1.00	1	*	0.30
111290	642215.04	5410384.98	2.88	0.00	0.16	0.00	K	B	1.00	1	*	0.15
111290	641818.92	5410380.33	0.63	0.00	0.03	0.00	K	C	1.00	1	*	0.50
111300	641666.97	5410276.50	12.57	13.68	0.68	0.74	N	A	3.00	2	*	0.14
111300	642155.67	5410283.58	2.18	0.00	0.12	0.00	K	B	1.00	1	*	0.33
111300	642429.81	5410285.85	1.74	0.00	0.09	0.00	K	C	1.00	1	*	0.36
111310	642393.72	5410182.63	2.14	0.00	0.12	0.00	N	A	1.00	2	*	0.17
111310	641686.78	5410179.18	21.91	24.05	1.18	1.29	N	B	4.00	2	*	0.34
111320	644641.98	5410085.05	6.96	0.00	0.37	0.00	N	A	2.00	2	*	-0.01
111320	641675.61	5410089.75	18.72	25.27	1.01	1.36	N	B	3.00	2	*	0.97
111330	*	5409990.81	13.50	14.42	0.73	0.78	K	A	3.00	1	*	1.89
111330	641663.02	5409980.82	20.53	42.33	1.10	2.28	N	B	4.00	2	*	0.58
111340	641668.58	5409885.99	15.28	29.75	0.82	1.60	N	A	3.00	2	*	0.44
111340	644521.01	5409897.63	6.79	0.00	0.37	0.00	K	B	2.00	1	*	0.35
111350	642367.29	5409780.18	1.12	0.00	0.06	0.00	N	A	1.00	2	*	0.14
111350	641656.57	5409784.45	9.16	0.00	0.49	0.00	N	B	2.00	2	*	-0.00
111360	641669.93	5409676.17	10.30	10.24	0.55	0.55	N	A	3.00	2	*	0.47
111360	641846.65	5409680.81	14.87	20.15	0.80	1.08	N	B	3.00	2	*	1.27
111360	642397.06	5409675.53	1.55	0.00	0.08	0.00	K	C	1.00	1	*	0.17
111370	641873.89	5409594.29	24.35	41.20	1.31	2.21	N	A	4.00	2	*	5.64
111380	641854.49	5409485.66	26.49	36.52	1.42	1.96	N	A	4.00	2	*	13.82
111390	642741.46	5409392.65	4.20	0.00	0.23	0.00	N	A	1.00	2	*	0.20
111390	641847.41	5409381.24	13.80	15.36	0.74	0.83	N	B	3.00	2	*	0.73
111400	641861.65	5409296.64	8.33	6.72	0.45	0.36	N	A	2.00	2	*	0.40

111400	642928.32	5409275.10	1.68	0.00	0.09	0.00	N	B	1.00	2	*	0.09
111400	643897.25	5409281.51	2.53	0.00	0.14	0.00	N	C	1.00	2	*	0.11
111400	644257.73	5409276.18	1.36	0.00	0.07	0.00	K	D	1.00	1	*	0.00
111410	642860.79	5409185.62	3.65	0.00	0.20	0.00	N	A	1.00	2	*	0.10
111410	641783.04	5409181.29	23.53	34.02	1.26	1.83	N	B	4.00	2	*	1.39
111420	641752.15	5409076.97	17.32	23.04	0.93	1.24	N	A	3.00	2	*	0.90
111420	642872.41	5409068.85	16.40	25.19	0.88	1.35	N	B	3.00	2	*	0.37
111430	644411.75	5408985.62	3.46	0.00	0.19	0.00	N	A	1.00	2	*	-0.07
111430	642955.38	5408976.52	20.62	29.21	1.11	1.57	N	B	4.00	2	*	1.25
111430	642559.22	5408982.16	3.27	0.00	0.18	0.00	N	C	1.00	2	*	0.26
111430	641760.87	5408979.58	6.89	4.69	0.37	0.25	N	D	2.00	2	*	0.82
111440	641780.40	5408881.67	17.91	46.19	0.96	2.48	N	A	3.00	2	*	0.52
111440	643066.30	5408861.12	19.99	29.48	1.07	1.59	N	B	3.00	2	*	0.04
111440	643506.45	5408878.75	0.75	0.00	0.04	0.00	K	C	1.00	1	*	0.01
111440	644515.44	5408879.26	3.03	0.00	0.16	0.00	N	D	1.00	2	*	-0.05
111450	644580.36	5408784.57	1.92	0.00	0.10	0.00	N	A	1.00	2	*	0.02
111450	642922.61	5408793.01	12.88	0.00	0.69	0.00	K	B	3.00	1	*	0.95
111450	641753.81	5408786.27	17.53	48.73	0.94	2.62	N	C	3.00	2	*	0.55
111460	641703.89	5408684.75	9.38	10.13	0.50	0.54	N	A	2.00	2	*	0.50
111470	644775.88	5408582.90	1.85	0.00	0.10	0.00	N	A	1.00	2	*	0.04
111470	641653.63	5408577.44	8.42	8.63	0.45	0.46	N	B	2.00	2	*	0.16
111480	641651.62	5408494.52	5.14	0.00	0.28	0.00	N	A	2.00	2	*	0.27
111490	644863.31	5408378.59	0.82	0.00	0.04	0.00	N	A	1.00	2	*	0.05
111490	641613.68	5408379.54	0.97	0.00	0.05	0.00	N	B	1.00	2	*	-0.02
111500	641701.93	5408280.36	4.16	0.00	0.22	0.00	N	A	1.00	2	*	0.03
111500	644563.47	5408290.71	0.66	0.00	0.04	0.00	N	B	1.00	2	*	-0.05
111500	645204.36	5408283.65	2.36	0.00	0.13	0.00	K	C	1.00	1	*	0.38
111510	645052.09	5408177.01	7.45	6.79	0.40	0.37	N	A	2.00	2	*	-0.06
111510	641603.99	5408179.52	5.22	0.00	0.28	0.00	N	B	2.00	2	*	0.02
111521	645148.44	5408077.72	12.11	12.93	0.65	0.70	N	A	3.00	2	*	0.46

111521	641603.02	5408082.73	6.58	7.39	0.35	0.40	N	B	2.00	2	*	0.31
111531	641693.66	5407986.56	43.46	47.88	2.34	2.57	N	A	5.00	2	*	0.81
111531	645253.27	5407985.93	10.34	12.24	0.56	0.66	N	B	3.00	2	*	0.58
111541	*	5407878.23	20.31	27.80	1.09	1.49	N	A	4.00	2	*	0.57
111541	641729.01	5407881.25	12.09	12.20	0.65	0.66	N	B	3.00	2	*	0.36
111541	641484.74	5407882.18	16.77	17.14	0.90	0.92	N	C	3.00	2	*	0.09
111550	*	5407782.08	8.38	8.85	0.45	0.48	N	A	2.00	2	*	0.19
111550	644962.66	5407786.56	22.31	30.35	1.20	1.63	N	B	4.00	2	*	1.19
111550	641712.26	5407774.29	4.67	0.00	0.25	0.00	N	C	1.00	2	*	0.09
111550	641528.27	5407773.10	6.03	0.00	0.32	0.00	N	D	2.00	2	*	0.11
111560	641726.42	5407694.70	6.54	4.81	0.35	0.26	N	A	2.00	2	*	0.18
111560	645058.36	5407683.30	35.64	76.05	1.92	4.09	N	B	5.00	2	*	1.37
111571	645111.15	5407582.42	35.34	89.80	1.90	4.83	N	A	5.00	2	*	0.35
111580	645125.13	5407489.90	14.89	44.72	0.80	2.40	N	A	3.00	2	*	0.42
111601	644312.08	5407280.34	1.87	0.00	0.10	0.00	K	A	1.00	1	*	0.04
111611	*	5407185.80	10.14	40.06	0.54	2.15	K	A	3.00	1	*	2.79
111611	645332.17	5407183.86	2.74	0.01	0.15	0.00	N	B	1.00	2	*	0.94
111611	642365.23	5407179.24	6.88	4.11	0.37	0.22	K	C	2.00	1	*	0.21
111620	645391.18	5407093.09	4.10	0.00	0.22	0.00	N	A	1.00	2	*	1.18
111620	*	5407091.68	7.62	1.31	0.41	0.07	K	B	2.00	1	*	1.33
111630	642489.35	5406972.70	1.27	0.00	0.07	0.00	K	A	1.00	1	*	0.15
1830	644002.83	5416044.08	0.75	0.00	0.04	0.00	K	A	1.00	1	*	0.10
1840	642997.43	5413405.17	3.64	1.44	0.20	0.08	K	A	1.00	1	*	0.65
1850	642002.86	5413547.66	51.89	99.93	2.79	5.37	K	A	6.00	1	*	40.03
1850	642002.86	5412627.94	24.01	48.04	1.29	2.58	K	B	4.00	1	*	9.83
4040	646675.43	5396014.55	49.38	96.28	2.65	5.18	N	A	5.00	2	*	1.72
4040	646676.04	5407107.39	5.03	0.00	0.27	0.00	K	B	2.00	1	*	0.08
4050	645674.32	5407122.90	6.49	0.00	0.35	0.00	N	A	2.00	2	*	0.36
4050	645679.89	5397968.72	43.24	63.96	2.32	3.44	N	B	5.00	2	*	3.00
4060	644676.96	5399343.47	9.67	9.98	0.52	0.54	N	A	2.00	2	*	0.21

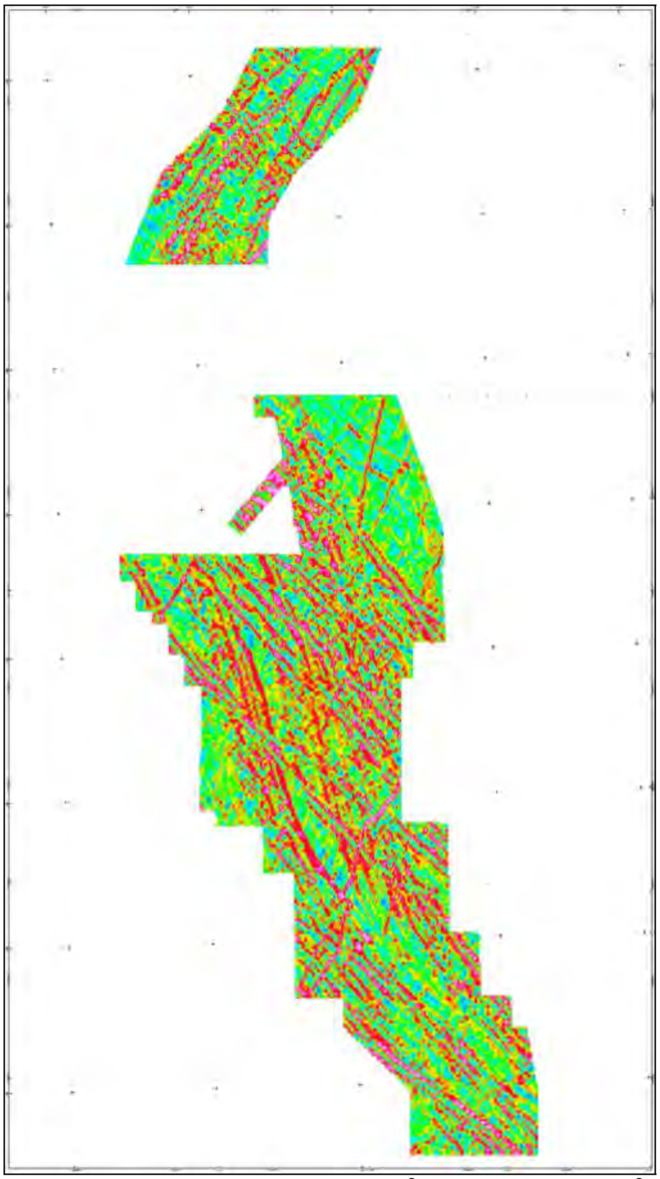
4060	644678.86	5399995.80	14.36	25.25	0.77	1.36	N	B	3.00	2	*	1.96
4070	643670.35	5402478.37	4.14	0.00	0.22	0.00	N	A	1.00	2	*	0.49
4070	643670.07	5402978.16	6.47	6.58	0.35	0.35	K	B	2.00	1	*	1.31
4070	643670.04	5403661.41	3.58	0.00	0.19	0.00	K	C	1.00	1	*	0.30
4070	643667.61	5404708.13	14.44	29.43	0.78	1.58	N	D	3.00	2	*	0.22
111900	641504.33	5407801.67	8.12	0.00	0.44	0.00	N	A	2.00	2	*	0.08
111900	641492.54	5408112.95	3.52	0.00	0.19	0.00	K	B	1.00	1	*	0.07
111900	641498.64	5410115.49	12.91	0.00	0.69	0.00	K	C	3.00	1	*	1.14
111900	641501.79	5411433.99	62.38	117.07	3.35	6.29	K	D	6.00	1	*	21.57
111900	641501.14	5412300.41	7.31	3.10	0.39	0.17	K	E	2.00	1	*	1.24
111910	642399.81	5412203.38	3.30	0.00	0.18	0.00	N	A	1.00	2	*	-0.03
111910	642401.68	5410687.09	2.09	0.00	0.11	0.00	K	B	1.00	1	*	0.11
111910	642403.86	5410275.17	1.54	0.00	0.08	0.00	N	C	1.00	2	*	0.13
111910	642415.55	5406988.94	2.15	0.00	0.12	0.00	K	D	1.00	1	*	-0.24
111920	643293.82	5410815.14	2.20	0.00	0.12	0.00	K	A	1.00	1	*	-0.09
111920	643298.91	5411262.89	2.14	0.00	0.12	0.00	K	B	1.00	1	*	0.05
111920	643302.72	5411826.03	15.33	26.02	0.82	1.40	K	C	3.00	1	*	3.45
111920	643296.79	5412277.76	13.96	15.37	0.75	0.83	K	D	3.00	1	*	2.33
111920	643297.54	5412735.22	9.67	9.02	0.52	0.48	K	E	2.00	1	*	1.25
111920	643300.45	5413063.17	9.56	9.32	0.51	0.50	K	F	2.00	1	*	1.49
111930	644196.53	5409204.35	4.49	0.00	0.24	0.00	K	A	1.00	1	*	-0.01
111940	645099.40	5407640.17	22.23	50.40	1.19	2.71	N	A	4.00	2	*	0.33
111940	645100.33	5408120.10	13.47	14.67	0.72	0.79	N	B	3.00	2	*	0.13
111940	645103.00	5408368.31	0.52	0.00	0.03	0.00	K	C	1.00	1	*	0.06

APPENDIX H

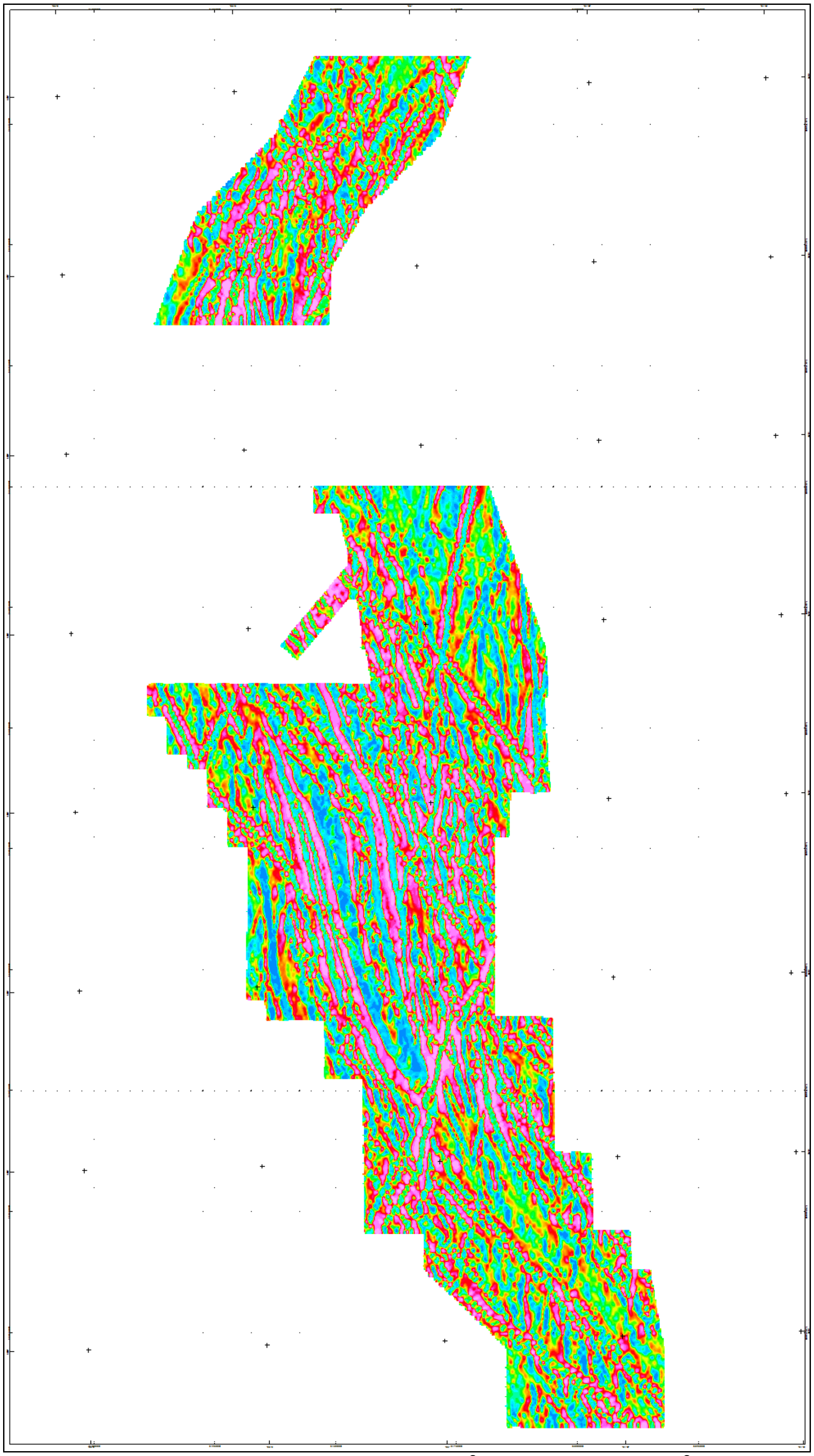
MEASURED HORIZONTAL GRADIENTS AND ADVANCED DERIVATIVES (12084 only)

Measured Horizontal Gradient grids are best displayed with color shading, which will show more details, as compared with equal area coloring method without shading.
In the following, measured horizontal gradient grids displayed using different declination angles are presented.

In-line horizontal gradient Hginline

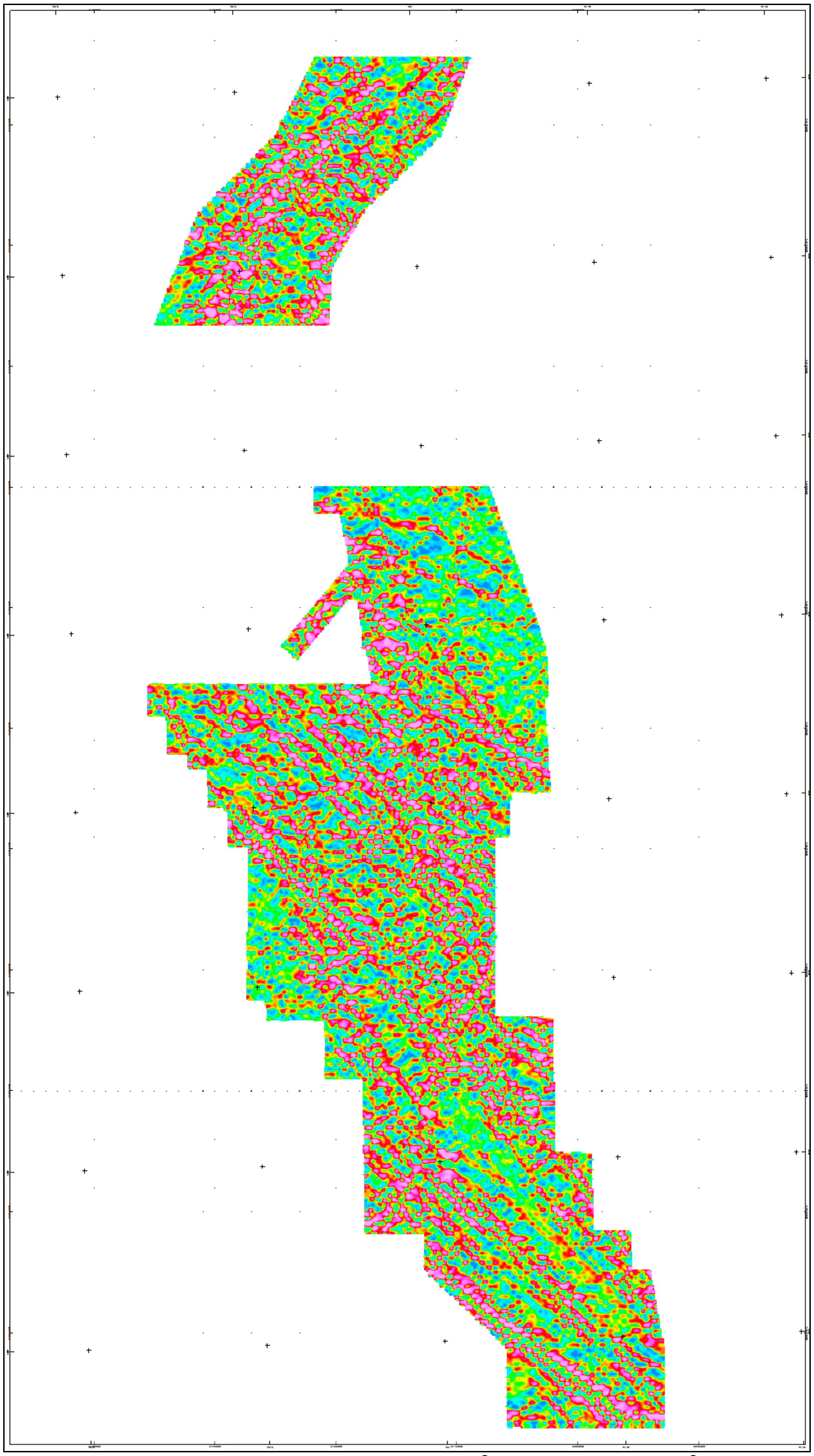


Hginline shaded at Inclination=45^{o} and Declination=0^{o}

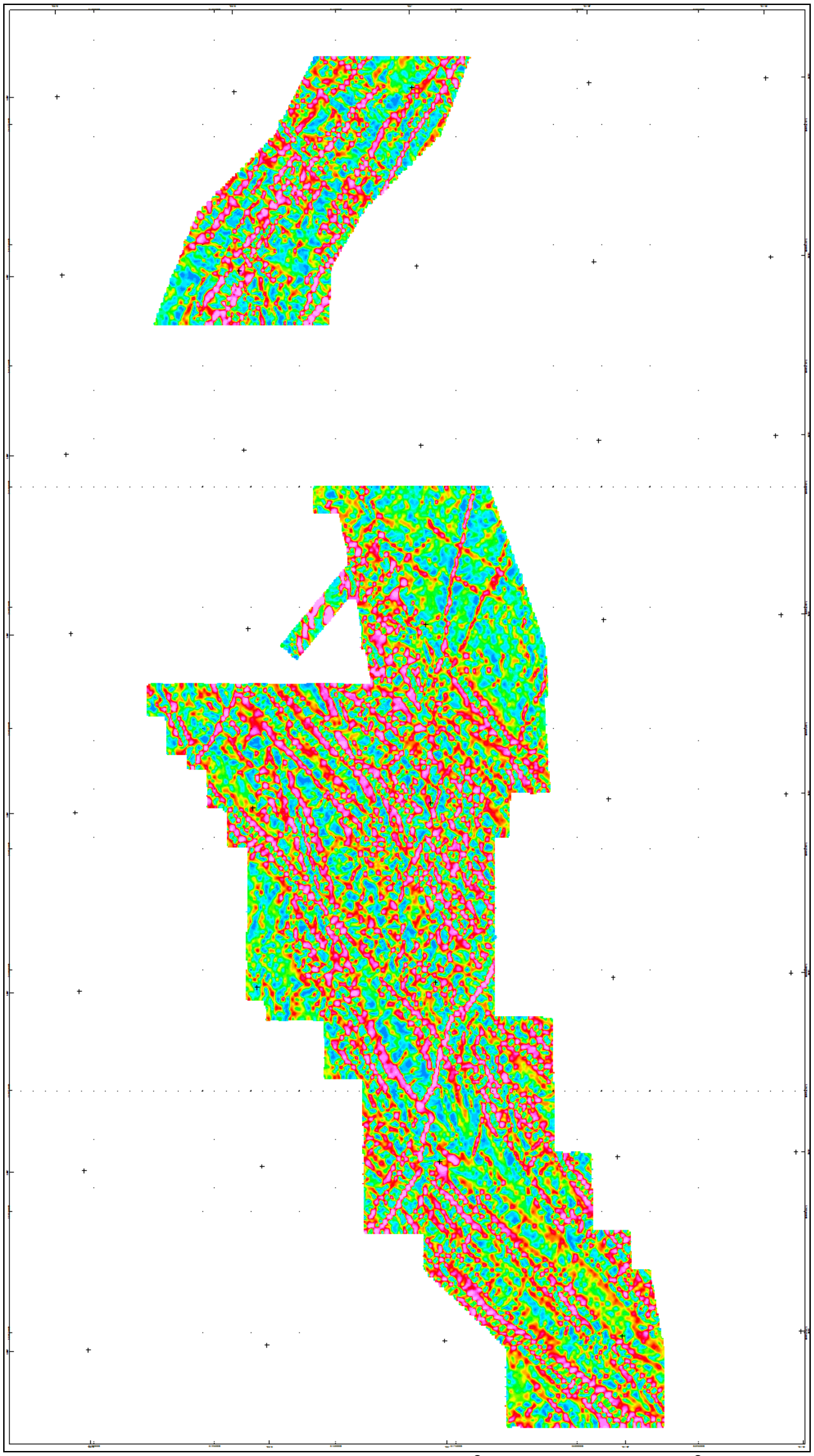


Hginline shaded at Inclination=45° and Declination=90°

Cross-line horizontal gradient Hgcxline

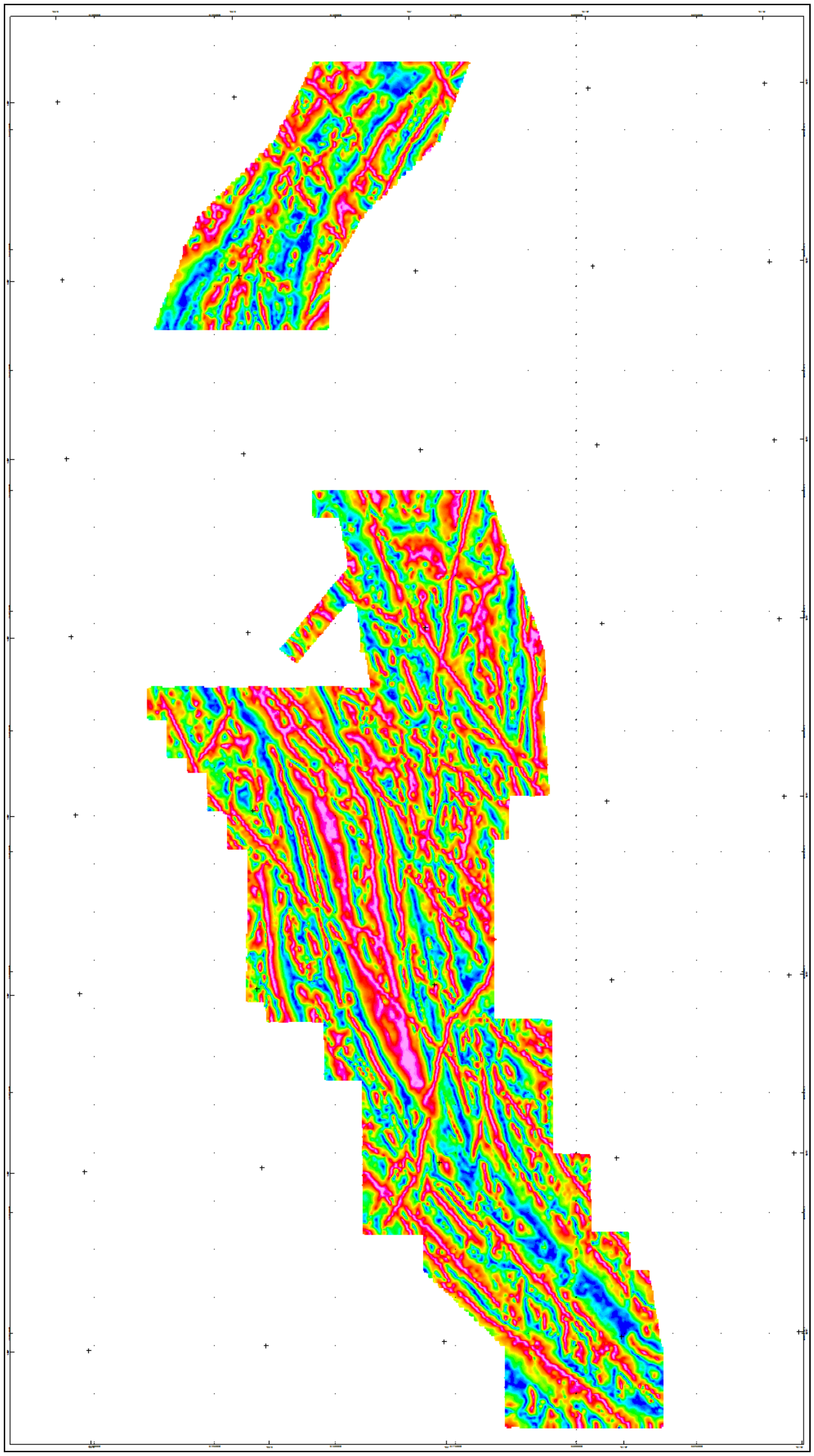


Hgcxline shaded at Inclination=45° and Declination=0°

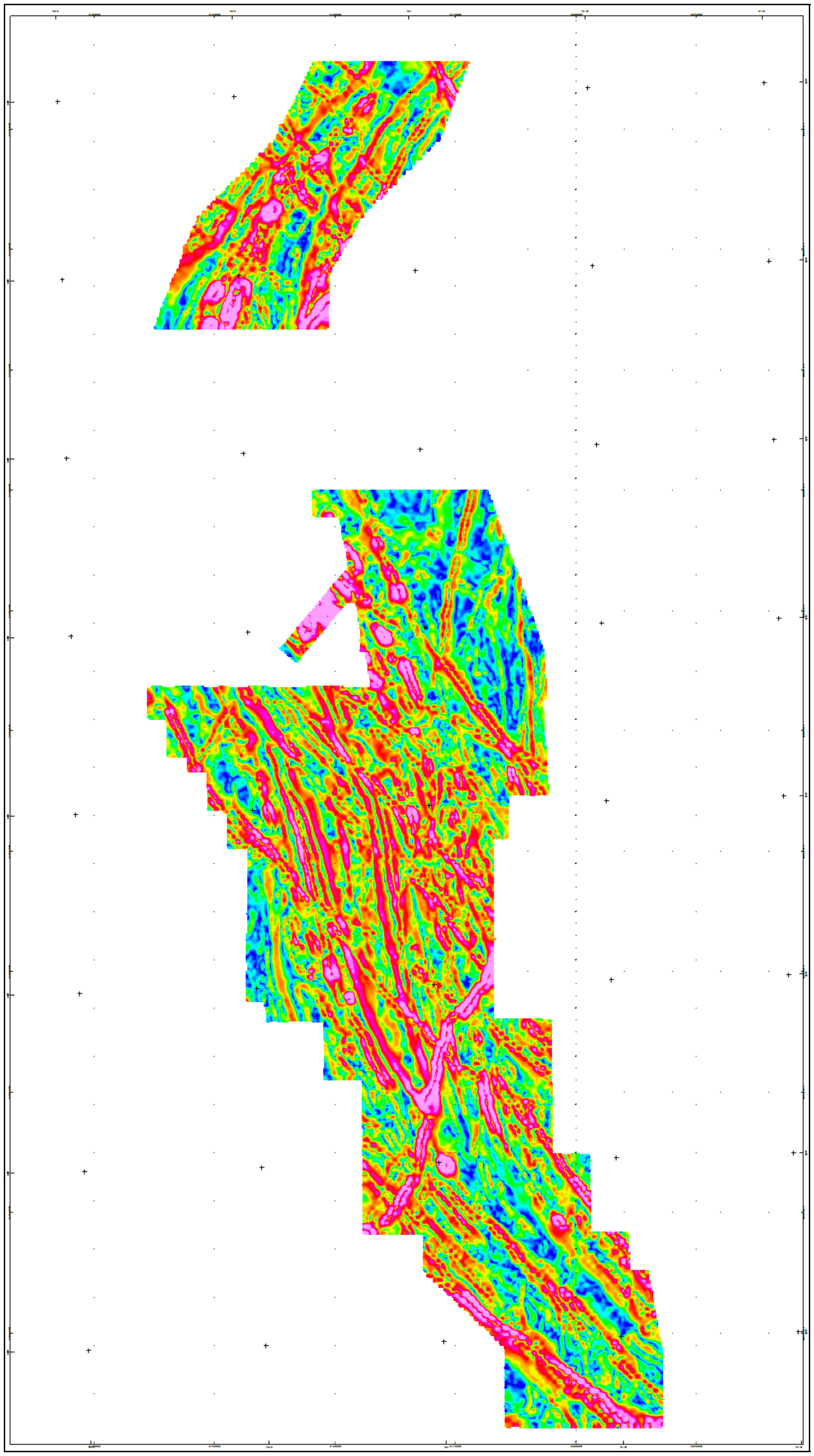


Hgcxline shaded at Inclination=45^{o} and Declination=90^{o}

Tilt-angle Derivative



Total Horizontal Gradient



SGS Minerals Services

STANDARD BOND ABRASION TEST

Project No.:	12455-002	Date (mm/dd/yy):	20-Feb-13
Sample:	Comminution Comp		

Purpose: To determine the Abrasion Index of the sample

Procedure: The equipment and procedure duplicate the Bond method for determining an abrasion index.

Feed: 1,600 grams minus 3/4 inch plus 1/2 inch fraction

Results:	Original paddle weight, grams:	94.4704
	Final paddle weight, grams:	93.8542
	Abrasion Index, Ai:	**0.616**

Predicted Wear Rates:

		lb/kwh	kg/kwh
Wet rod mill, rods:	0.35*(Ai-0.020)^0.20	0.32	0.14
Wet rod mill, liners:	0.035*(Ai-0.015)^0.30	0.030	0.014
Ball Mill (overflow and grate discharge types)			
Wet ball mill, balls:	0.35*(Ai-0.015)^0.33	0.30	0.134
Wet ball mill, liners:	0.026*(Ai-0.015)^0.30	0.022	0.0101
Ball Mill (grate discharge type)			
Dry ball mill, balls:	0.05*(Ai)^0.5	0.039	0.018
Dry ball mill, liners:	0.005*(Ai)^0.5	0.0039	0.0018
Crushers (gyratory, jaw, cone)			
Crusher, liners:	(Ai+0.22)/11	0.076	0.034
Roll crusher, shells:	(Ai/10)^0.67	0.155	0.070

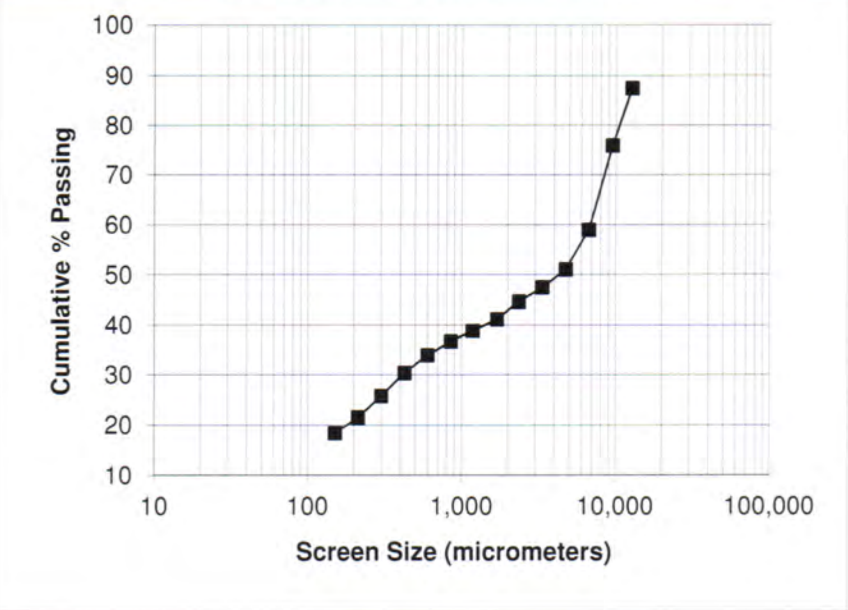
SGS Minerals Services

STANDARD BOND ABRASION TEST

Project No.: 12455-002 Date: 20-Feb-13
Sample: Comminution Comp

Product Particle Size Analysis

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
1/2 in	12,700	101.6	12.5	12.5	87.5
3/8 in	9,500	94.6	11.6	24.1	75.9
3	6,700	137.6	16.9	41.0	59.0
4	4,750	64.5	7.93	48.9	51.1
6	3,350	28.9	3.55	52.5	47.5
8	2,360	23.1	2.84	55.3	44.7
10	1,700	28.3	3.48	58.8	41.2
14	1,180	18.7	2.30	61.1	38.9
20	850	17.5	2.15	63.3	36.7
28	600	22.8	2.80	66.1	33.9
35	425	29.1	3.58	69.6	30.4
48	300	37.6	4.62	74.3	25.7
65	212	34.7	4.26	78.5	21.5
100	150	24.6	3.02	81.5	18.5
-100	-150	150.2	18.5	100.0	-
	Total	813.8	100.0	**K80**	**10,577**



SGS Minerals Services

Standard Bond Ball Mill Grindability Test

Project No.:	12455-002	Date:	20-Feb-13
Sample:	Comminution Comp		

Purpose: To determine the ball mill grindability of the sample in terms of a Bond work index number.

Procedure: The equipment and procedure duplicate the Bond method for determining ball mill work indices.

Test Conditions:

Feed 100% Passing	6	mesh
Mesh of grind:	150	mesh
Test feed weight (700 mL):	1,246	grams
Equivalent to : 1,779	kg/m³	at Minus 6 mesh
Weight % of the undersize material in the ball mill feed:	6.2%	
Weight of undersize product for 250% circulating load:	356 grams	

Results: Gram per Rev Average for the Last Three Stages = **1.29 g**
Circulation load = **246%**

CALCULATION OF A BOND WORK INDEX

$$\boxed{BWI = \frac{44.5}{P1^{0.23} \times Grp^{0.82} \times \left\{ \frac{10}{\sqrt{P}} - \frac{10}{\sqrt{F}} \right\}}}$$

P1 = 100% passing size of the product	106	microns
Grp = Grams per revolution	1.29	grams
P_{80} = 80% passing size of product	91	microns
F_{80} = 80% passing size of the feed	2,480	microns

BWI = **14.6** kWh/t (imperial)

BWI = **16.1** kWh/t (metric)

Comments:

Stage No.	# of Revs	New Feed (grams)	Product in Feed (grams)	Material to Be Ground (grams)	Material Passing 150 mesh in Product (grams)	Net Ground Material (grams)	Material Ground Per Mill Rev (grams)
1	150	1,246	77	279	215	138	0.92
2	373	215	13	343	408	394	1.06
3	313	408	25	331	410	384	1.23
4	269	410	25	331	361	335	1.25
5	268	361	22	334	375	352	1.31
6	253	375	23	333	348	324	1.28
7	261	348	21	334	357	335	1.28
		Average for Last Three Stages =			360 g		1.29 g

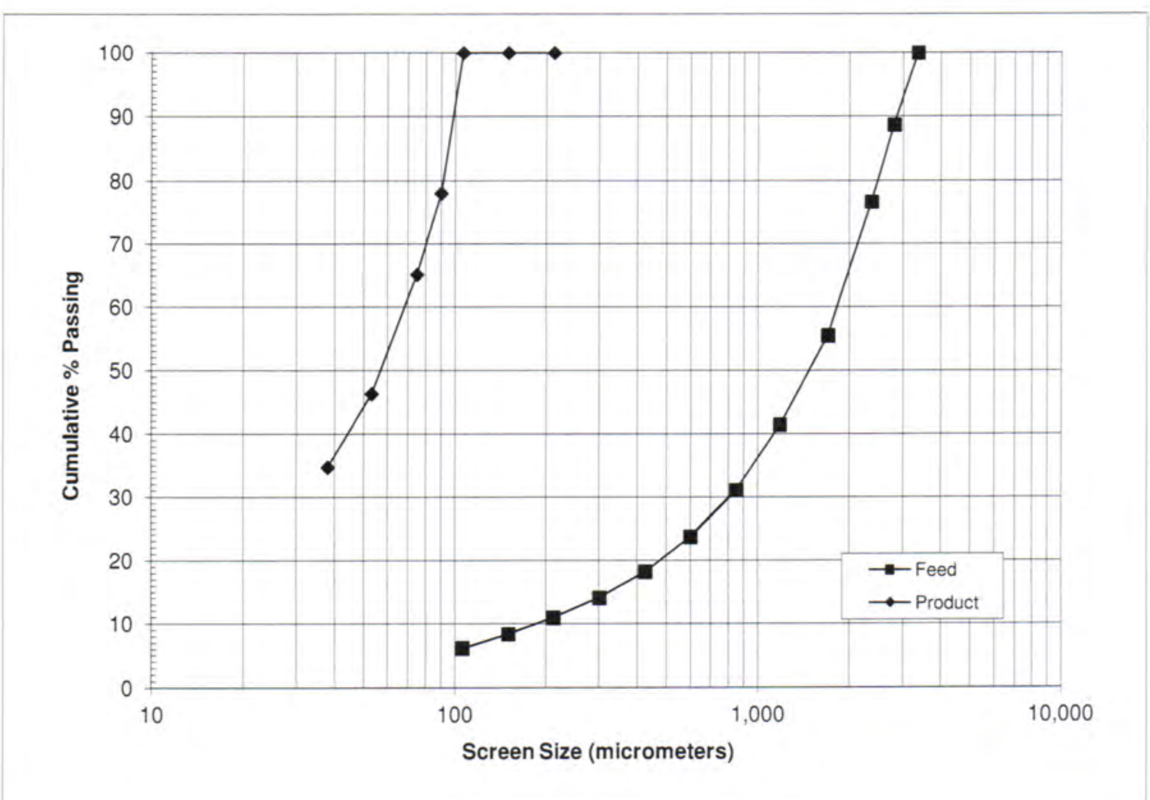
SGS Minerals Services

Standard Bond Ball Mill Grindability Test

Project No.: 12455-002 | Date: 20-Feb-13

Sample: Comminution Comp

Size		Feed Particle Size Analysis				Product Particle Size Analysis			
		Weight	% Retained		% Passing	Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative	grams	Individual	Cumulative	Cumulative
6	3,360	0.00	0.00	0.00	100.0				
7	2,800	76.0	11.3	11.3	88.7				
8	2,360	80.9	12.0	23.3	76.7				
10	1,700	142.8	21.2	44.5	55.5				
14	1,180	94.5	14.0	58.6	41.4				
20	850	69.5	10.3	68.9	31.1				
28	600	49.8	7.40	76.3	23.7				
35	425	37.0	5.50	81.8	18.2				
48	300	27.6	4.10	85.9	14.1				
65	212	21.3	3.16	89.0	11.0	0.00	0.00	0.00	100.0
100	150	17.4	2.58	91.6	8.38	0.00	0.00	0.00	100.0
150	106	14.8	2.20	93.8	6.18	0.00	0.00	0.00	100.0
170	90					34.6	21.9	21.9	78.1
200	75					20.3	12.9	34.8	65.2
270	53					29.7	18.8	53.6	46.4
400	38					18.4	11.7	65.3	34.7
Pan	-	41.6	6.2	100.0	-	54.8	34.7	100.0	-
Total	**-**	**673.2**	**100.0**	**F_{80}:**	**2,480**	**157.8**	**100.0**	**P_{80}:**	**91**



12455-002 Harte Gold Samples

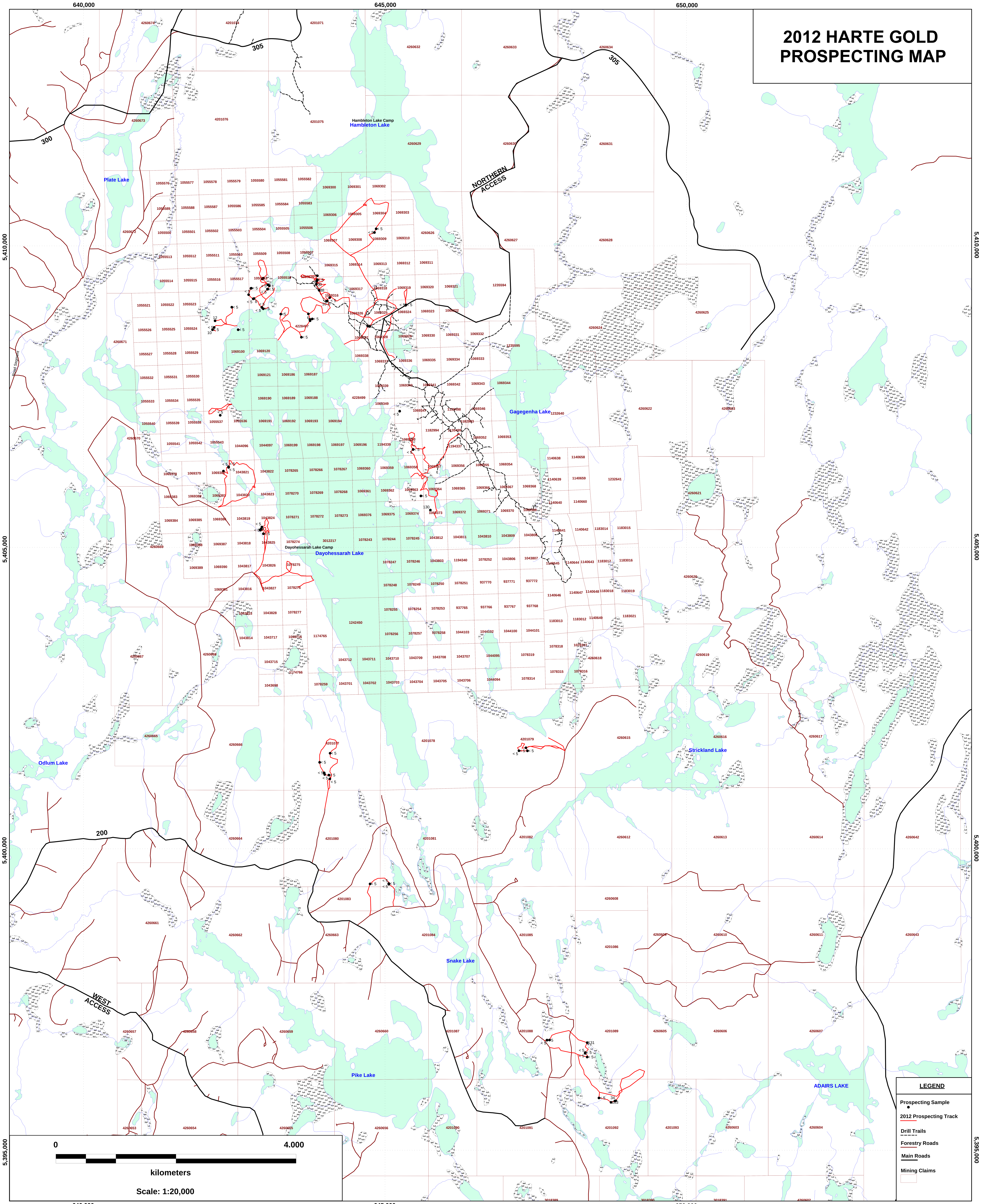
Head Analysis

Element		QSTW/QV	QU	QSTW	Unknown	SW	QV #1	QV 11A #1	Unknown	QV #2
		Trench 2	Trench 4	Trench 2	1	Trench 5	Trench 4	Trench 5	2	Trench 4
Au	g/t	56.9	18.7	53.5	10.2	0.34	12.1	0.48	9.69	16.6
S	%	0.95	0.89	0.87	1.13	1.51	1.20	1.48	1.33	0.94
$S^{=}$	%	0.81	0.78	0.66	1.07	1.47	1.05	1.41	1.26	0.81
SO_4	%	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
S°	%	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
$C_{(t)}$	%	0.11	0.40	0.07	0.23	0.07	0.12	0.09	0.29	0.43
$C_{(g)}$	%	0.02	0.01	0.02	<0.01	0.01	<0.01	0.02	0.01	0.01
TOC	%	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CO_3	%	0.33	1.57	0.18	0.79	0.13	0.26	0.22	1.29	1.87
Ag	g/t	14	<10	13	<10	<10	<10	<10	<10	<10
ICP-Scan										
Al	g/t	15300	26200	18400	24600	40800	9560	43600	37100	26000
As	g/t	<30	<30	<30	<30	<30	<30	<30	<30	<30
Ba	g/t	101	206	108	221	280	83.2	293	275	211
Be	g/t	0.38	0.78	0.40	0.78	1.54	0.32	1.46	1.00	0.72
Bi	g/t	<20	<20	<20	<20	<20	<20	<20	<20	<20
Ca	g/t	14000	25000	16400	21500	68300	5820	62400	45800	24200
Cd	g/t	6.0	19	4.0	17	18	25	10	9.0	19
Co	g/t	<30	<30	<30	<30	<30	<30	<30	<30	<30
Cr	g/t	89	90	79	53	61	62	70	60	48
Cu	g/t	120	183	103	192	193	229	169	193	186
Fe	g/t	24900	21100	26000	27500	62700	22600	60100	44000	21100
K	g/t	4690	14500	4990	14800	13400	6940	14500	16500	14900
Li	g/t	<20	<20	<20	<20	<20	<20	<20	<20	<20
Mg	g/t	3710	4160	4820	5530	17700	1610	17100	12100	3640
Mn	g/t	275	315	358	311	1060	139	1000	681	306
Mo	g/t	<20	<20	<20	<20	<20	<20	<20	<20	<20
Na	g/t	2450	5870	2830	4910	3470	2440	4370	5080	5650
Ni	g/t	<50	<50	<50	<50	<50	<50	<50	<50	<50
P	g/t	80	236	98	171	256	51	253	217	209
Pb	g/t	593	790	591	562	219	918	217	663	1380
Sb	g/t	<10	<10	<10	<10	<10	<10	<10	<10	<10
Se	g/t	<30	<30	<30	<30	<30	<30	<30	<30	<30
Sn	g/t	<20	<20	<20	<20	<20	<20	<20	<20	<20
Sr	g/t	44.8	120	56.7	90.2	104	26.9	120	129	114
Ti	g/t	1050	1020	1170	1700	2850	929	3060	2390	1200
Tl	g/t	<30	<30	<30	<30	<30	<30	<30	<30	<30
U	g/t	<20	<20	<20	<20	<20	<20	<20	<20	<20
V	g/t	61	48	62	92	171	47	186	140	58
Y	g/t	3.8	3.2	4.4	5.2	11.6	2.6	11.1	8.7	3.8
Zn	g/t	623	1520	447	1220	1380	1750	830	831	1500

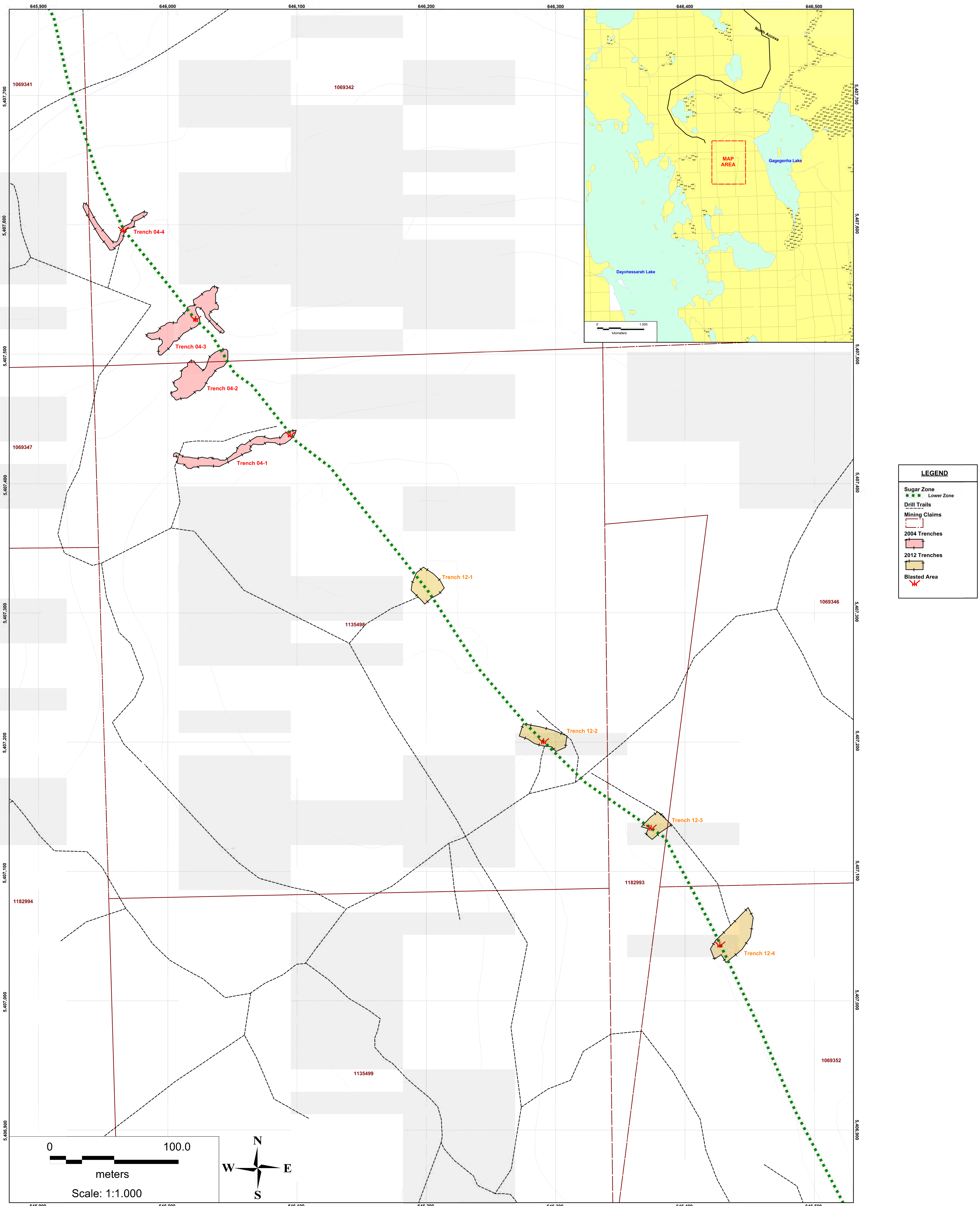
12455-002 Harte Gold Samples

Head Analysis

Element		QV	QV 11A #2	QTSW	QV/QSTW	Unknown	Extra QV	Unknown	Unknown
		Trench 5	Trench 5	Trench 4	Trench 2	3	Trench 2	4	5
Au	g/t	2.33	1.97	11.3	40.7	43.2	62.2	4.98	10.4
S	%	1.42	1.60	1.16	0.72	0.68	0.79	1.43	0.96
$S^{=}$	%	1.33	1.49	0.98	0.60	0.57	0.67	1.31	0.83
SO_4	%	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
S°	%	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
$C_{(t)}$	%	0.10	0.08	0.42	0.05	0.03	0.07	0.26	0.28
$C_{(g)}$	%	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02
TOC	%	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CO_3	%	0.23	0.16	1.77	<0.05	<0.05	<0.05	1.05	1.01
Ag	g/t	<10	<10	<10	<10	13.0	16.7	<10	<10
ICP-Scan									
Al	g/t	39400	42400	31100	21100	10300	10900	29000	33800
As	g/t	<30	<30	<30	<30	<30	<30	<30	<30
Ba	g/t	307	307	217	131	68.6	69.1	178	228
Be	g/t	1.06	1.00	0.78	0.58	0.22	0.30	0.80	0.96
Bi	g/t	<20	<20	<20	<20	<20	<20	<20	<20
Ca	g/t	44900	42400	31000	7880	8830	11000	30500	43900
Cd	g/t	17	18	15	10	5.0	6.0	14	10
Co	g/t	<30	<30	<30	<30	<30	<30	<30	<30
Cr	g/t	69.0	76	72	102	86	63	59	53
Cu	g/t	193	235	199	93.5	87.0	105	165	137
Fe	g/t	48800	50300	30200	19000	19500	21200	36400	36900
K	g/t	17200	15200	15600	11400	3191	3220	11900	12300
Li	g/t	<20	<20	<20	<20	<20	<20	<20	<20
Mg	g/t	13600	15100	6500	3040	2870	3200	6820	10900
Mn	g/t	736	721	467	213	223	249	499	641
Mo	g/t	<20	<20	<20	<20	<20	<20	<20	<20
Na	g/t	5440	3780	5360	3420	1410	1590	4440	4640
Ni	g/t	<50	<50	<50	<50	<50	<50	<50	<50
P	g/t	207	144	222	101	46	54	170	225
Pb	g/t	347	373	956	718	617	731	448	569
Sb	g/t	<10	<10	<10	<10	<10	<10	<10	<10
Se	g/t	<30	<30	<30	<30	<30	<30	<30	<30
Sn	g/t	<20	<20	<20	<20	<20	<20	<20	<20
Sr	g/t	105	147	129	39.1	35.2	35.8	106	121
Ti	g/t	2830	3080	1760	1100	804	905	1750	2150
Tl	g/t	<30	<30	<30	<30	<30	<30	<30	<30
U	g/t	<20	<20	<20	<20	<20	<20	<20	<20
V	g/t	166	177	81	47	37	43	87	109
Y	g/t	9.7	9.5	5.2	2.8	2.4	2.8	5.5	6.9
Zn	g/t	1450	1270	1050	929	480	513	944	779



2012 HARTE GOLD PROSPECTING MAP
640,000
645,000
650,000
5,410,000
5,405,000
5,400,000
5,395,000
Hambleton Lake Camp
Hambleton Lake
Plate Lake
NORTHERN ACCESS
Gagegenha Lake
Dayohessarah Lake Camp
Dayohessarah Lake
Odlum Lake
Strickland Lake
Snake Lake
Pike Lake
ADAIRS LAKE
WEST ACCESS
305
300
200
LEGEND
Prospecting Sample
2012 Prospecting Track
Drill Trails
Forestry Roads
Main Roads
Mining Claims
0
4.000
kilometers
Scale: 1:20,000



Date: 06/12/2012

Author: GM

Office: WRO

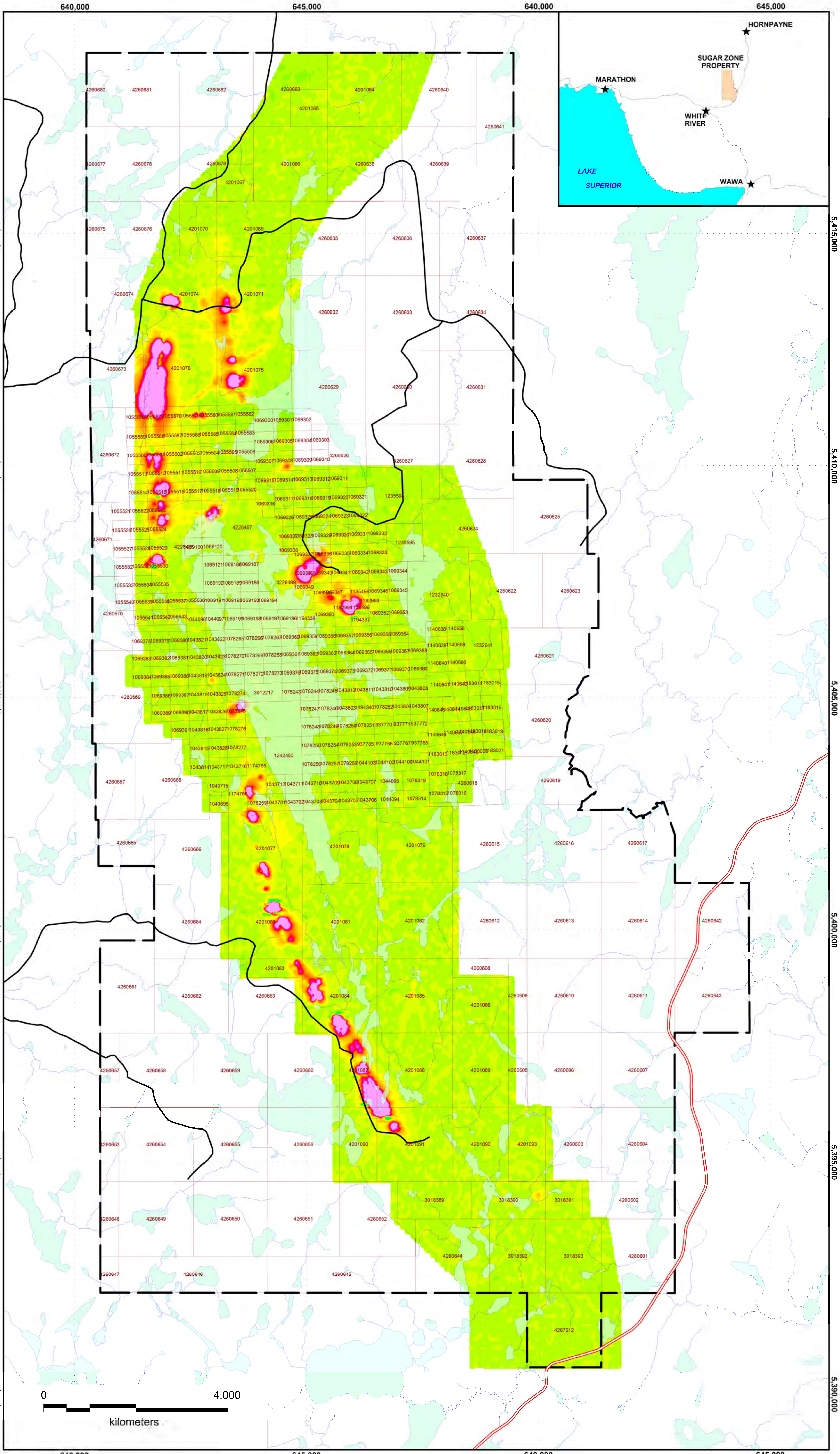
Drawing:

SUGAR ZONE PROJECT

Trench and Blasting Map

Dayhohessarah Lake and
Gagagenha Lake, Ontario

GOLD CORP



HARTE GOLD CORP

0.00341374
-0.00021556
-0.00021556
-0.00021556
-0.00021556
-0.00021556
-0.00021556
-0.00021556
-0.00021556
-0.00021556
-0.00021556
-0.00203021
-0.00203021
-0.00203021
-0.00203021
-0.00203021
-0.00203021
-0.0346939

(pV*ms)/(Am^4)

LEGEND

Main Dirt Roads

HWY 631

Property Outline

SUGAR ZONE PROJECT

VTEM Survey

Dayhohessarah Lake and Gagagenha Lake, Ontario

Date: 16/01/2013

Author: GM

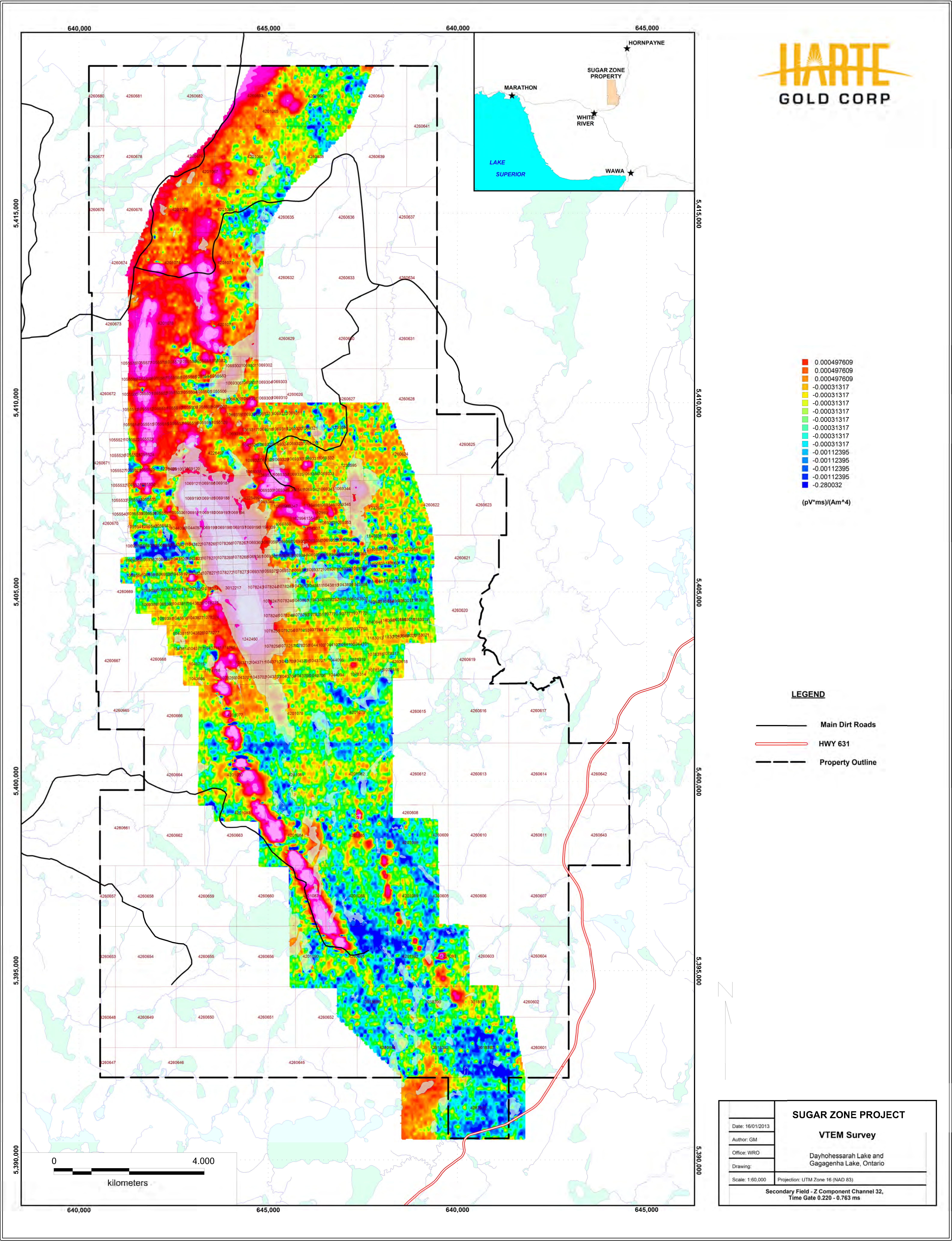
Office: WRO

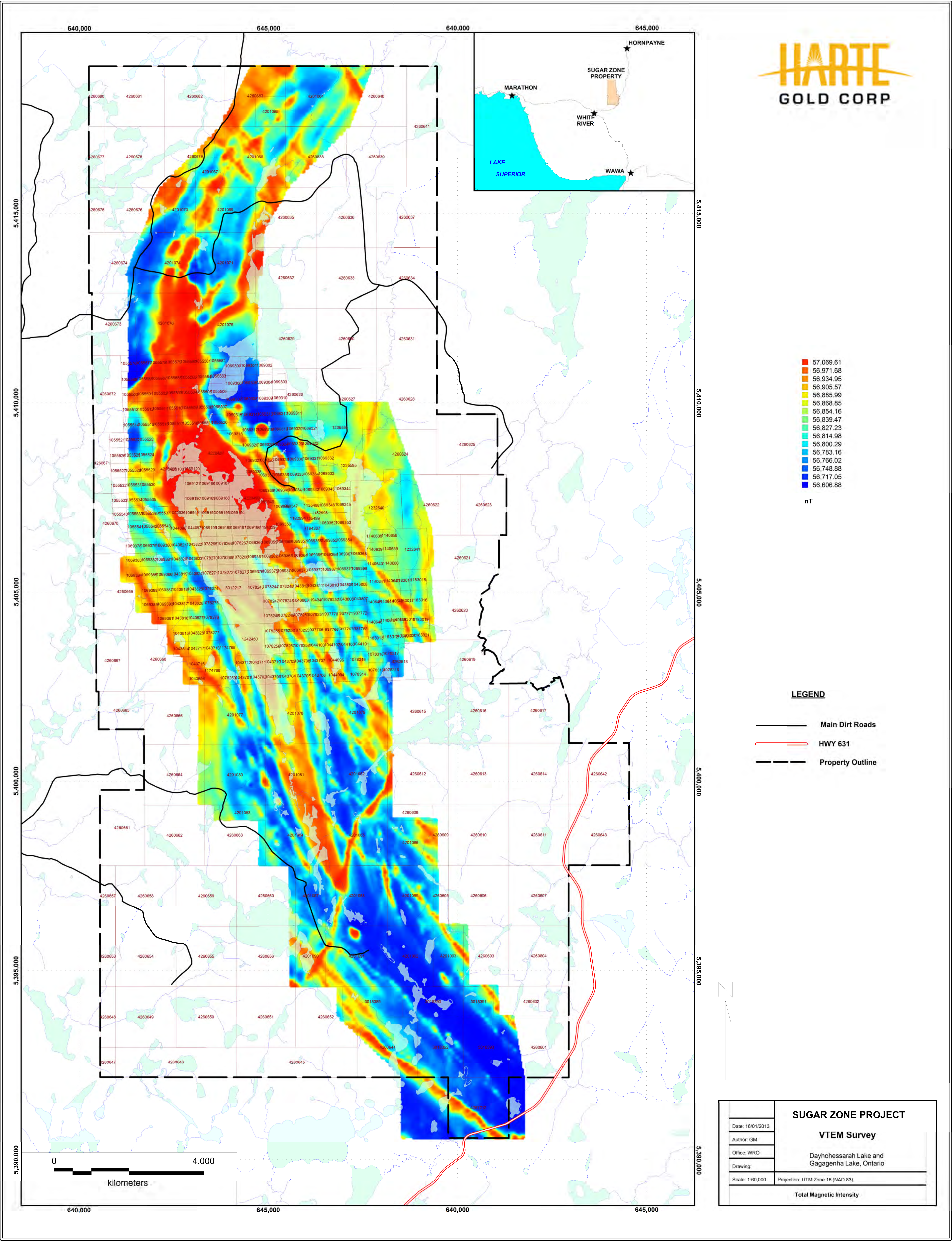
Drawing:

Scale: 1:60,000

Projection: UTM Zone 16 (NAD 83)

B Field - Z Component Channel 32, Time Gate 1.161 ms


HARTE GOLD CORP
HORNPAYNE
SUGAR ZONE PROPERTY
MARATHON
WHITE RIVER
LAKE SUPERIOR
WAWA
0.000497609
0.000497609
0.000497609
-0.00031317
-0.00031317
-0.00031317
-0.00031317
-0.00031317
-0.00031317
-0.00031317
-0.00031317
-0.00112395
-0.00112395
-0.00112395
-0.00112395
-0.280032
(pV*ms)/(Am^4)
LEGEND
Main Dirt Roads
HWY 631
Property Outline
0
4.000
kilometers
SUGAR ZONE PROJECT
VTEM Survey
Dayhohessarah Lake and Gagagenha Lake, Ontario
Date: 16/01/2013
Author: GM
Office: WRO
Drawing:
Scale: 1:60,000
Projection: UTM Zone 16 (NAD 83)
Secondary Field - Z Component Channel 32, Time Gate 0.220 - 0.763 ms


HARTE GOLD CORP
SUGAR ZONE PROJECT
VTEM Survey
Dayhohessarah Lake and Gagagenha Lake, Ontario
Date: 16/01/2013
Author: GM
Office: WRO
Drawing:
Scale: 1:60,000
Projection: UTM Zone 16 (NAD 83)
Total Magnetic Intensity
HORNPAYNE
SUGAR ZONE PROPERTY
MARATHON
WHITE RIVER
LAKE SUPERIOR
WAWA
57,069.61
56,971.68
56,934.95
56,905.57
56,885.99
56,868.85
56,854.16
56,839.47
56,827.23
56,814.98
56,800.29
56,783.16
56,766.02
56,748.88
56,717.05
56,606.88
nT
LEGEND
Main Dirt Roads
HWY 631
Property Outline
0
4.000
kilometers
640,000
645,000
5,415,000
5,410,000
5,405,000
5,400,000
5,395,000
5,390,000