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Historical Drill Core and Petrographic Review, Geological Modeling and Diamond Drilling Report on the Gowganda Gold and Cobalt, Haultain Prospect, Haultain Township, Larder Lake Mining Division, Northeastern Ontario, Canada.

Battery Mineral Resources Corp. and Transition Metals Corp. Joint Venture

May 11, 2020

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1. OVERVIEW

1.1 PROJECT NAME

This project is known as the **Gowganda Gold and Cobalt Project, Haultain Gold Prospect (HGP)**.

1.2 SUMMARY

Battery Mineral Resources Corp. conducted a diamond drill program at the Gowganda Gold and Cobalt Project, Haultain Gold Prospect (HGP), a joint venture project between Battery Mineral Resources Corp. and Transition Metals Corp., between March 3rd and March 17th, 2020. The Gowganda Gold and Cobalt Property consists of 286 unpatented mining claims covering approximately 6221.5 Ha located in parts of Van Hise, Haultain, Milner, Nicol and Lawson Townships within the Larder Lake Mining Division in Northeastern Ontario. The property is centrally located about Highway 560 adjacent to the unorganized municipality of Gowganda, Ontario and approximately 100 kilometers east of the city of Timiskaming Shores, Ontario.

Prior to drilling, Battery Mineral Resources Corp. undertook a re-logging program, between October and December 2019, to better constrain the controls and geometry of gold mineralization at the Haultain Gold Project. Fifteen (15) historical drill-holes were either completely or partially relogged and an additional 4 holes were logged by core-photo to provide more complete coverage across the prospect. Based on the lithological re-classification of historical drill core, a 3D geological model was produced using LeapfrogGeo. In addition, in January 2020, Vancouver Petrographics Ltd. completed detailed petrography descriptions on four (4) thin-sections to characterize alteration associated with mineralization and host-rock lithology.

The re-logging and geological modeling were successful in highlighting the lithological continuity between drill holes and characterizing the auriferous and alteration zones at the Haultain Gold Prospect thus providing possible drill targets for future programs.

The 2020 diamond drill program, consisting of four (4) drill holes, totalling 978 m of NQ sized core, was designed to test for the continuity and depth of the east- west striking, north dipping mineralized package, as well as, possible northwest trending shear structures and veins. The three holes drilled to the west were intended to test for possible western extensions of the main mineralised zone and for a NW trending shear vein. The final drill hole in the east targeted mineralization at depth below the main showing in Trench 3.

Drilling was conducted by Forage G4 drilling (G4) of Val d'Or, Quebec and support services were provided by Canadian Exploration Services Limited (CXS) of Larder Lake, Ontario. Project supervision was provided by Frank Ploeger (P. Geo.) and Peter Doyle (FAusIMM). Logging and geotech work were completed by CXS/BMR geologists.

The object of the drilling at the Gowganda Gold and Cobalt Property, Haultain Gold Prospect was to test the lateral and depth continuity of gold values within the east- west trending mineralized package, as well as, the possible northwest trending shear structures and veining. The three holes drilled in the west (GTMH20032 – GTMH20034) were designed to test for the western extent(s) of the main showing, and northwest trends of mineralization, and, the hole in the east (GTMH20035), to test for

the vertical continuity of mineralization below Trench 3. All four holes returned anomalous values in gold associated with carbonate- quartz veins, zones of disseminated pyrite and altered dikes. The highest single value of 4.39 g/t Au over 1m was obtained at the contact of a narrow black dike with pyrite cutting the ultramafics at 137.79m in hole GTMH20034. A value of 1.51 g/t Au over 3m was intersected in hole GTMH20035 from 158 to 161m in an orange altered monzodiorite dike with no accompanying veining or mineralization.

Overall, although anomalous gold values were encountered in all drill holes, there were no indications of the presence of a gold bearing northwest trending shear or vein structure, nor any significant alteration, veining or mineralization, either along strike of the Trench 3 area showing, or at depth below it. Therefore, no additional drilling on the gold showing is recommended at this time.

All co-ordinates presented in this report are in datum: UTM NAD83, Zone 17N.

1.3 ACTIVITIES UNDERTAKEN

A timetable and summary of work performed at the Gowganda Gold and Cobalt Property, Haultain Gold Prospect (HGP) during the winter, 2020 Drill Program is provided in Table 1.

Work Performed	Dates	Details	Performed By
Core Retrieval	Spring 2019	Historic core palletized and collected from Gowganda, ON and shipped to Larder Lake, ON	Canadian Exploration Services Ltd.
Re-logging of Historic Drill Core	October to December, 2019	- 13 holes completely re-logged - 2 holes re-logged by core and re-interpreted by core photo - 4 hole re-interpreted by core photo	Canadian Exploration Services Ltd., Contract Geologists
Geological Modeling	December 11th - 15th, 2019 December 18th - 19th, 2019	- 3D Geological Model, LeapfrogGeo	Canadian Exploration Services Ltd., Contract Geologists
Petrographic Report	January 2020	- 8 thin-sections cut, - 4 petrographic characterizations	Vancouver Petrographics Ltd.
Diamond Drilling	March 3rd to March 17th, 2020	- Four (4) diamond drill-holes - 978 m drilled	Forage G4 Drilling
Core Logging	March 7th to March 19th, 2020	- 257 drill-core samples - 32 QA/QC samples - 13 standards - 13 duplicates - 6 blanks	Canadian Exploration Services Ltd., Contract Geologists
Support Services	March 3rd to March 19, 2020	- field logistics - geotech - core-cutting	Canadian Exploration Services Ltd.
Assaying	March - April 2020	- 289 samples	ALS Minerals

Table 1. Summary of work performed on the HGP during the winter 2019/ 2020.

2. PROPERTY LOCATION AND GEOLOGY

2.1 PROPERTY & LOCATION

The Gowganda Gold and Cobalt Property, Haultain Gold Prospect is registered to Transition Metals Corp. with the property subject to an option and joint venture agreement between Transition Metals Corp. and Battery Mineral Resource Ltd. dated March 2nd, 2019.

The project area consists of 286 unpatented mining claims covering approximately 6221.5 Ha, located in parts of Van Hise, Haultain, Milner, Nicol and Lawson Townships, within the Larder Lake mining Division, and centrally located about highway 560 close to the unorganized municipality of Gowganda, Ontario (Figure 1).

The Project is nested amongst the major mining centres of: Kirkland Lake, 115 kilometers to the North; Timmins, 235 kilometers to the northwest; and Sudbury, 250 kilometers to the southwest. The closest major centre to Gowganda is the city of Timiskaming Shores located 100 kilometers to the east.

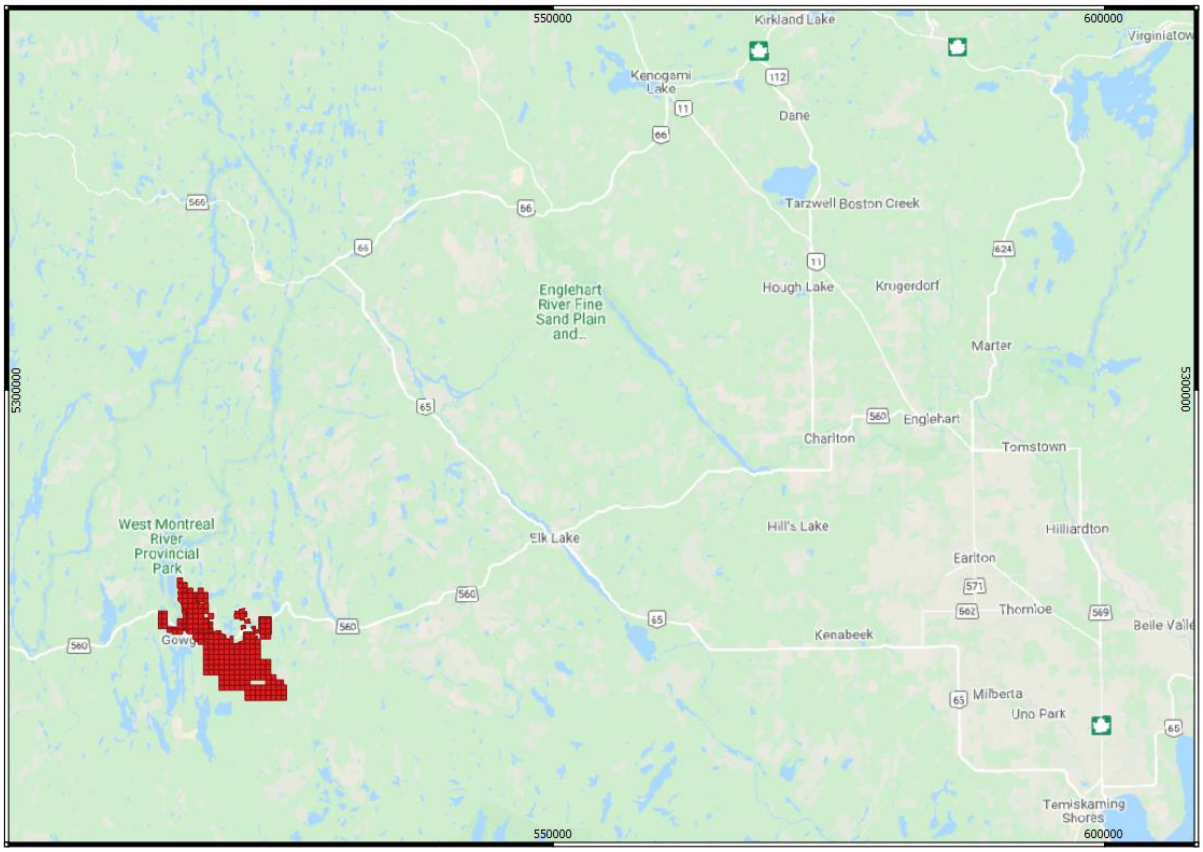

Figure 1. Location of the HGP of Gowganda Gold and Cobalt Property (red cell claims).

2.2 Access

The Haultain Gold Prospect is easily accessed by 4 wheel-drive truck or ATV/ Snowmobile via a bush-road off highway 560, north from the village of Gowganda, Ontario. An access road, located immediately west of the former school, runs northwards for approximately 1.8 km to a T- junction, and then eastwards or westwards for 750 or 500m, respectively, to the 2020 drill sites.

2.3 Ownership and Mining Claims

The Gowganda Gold and Cobalt Property, a joint venture between Battery Mineral Resources Corp. and Transition Metals Corp, is comprised of 286 unpatented mining claims (Figure 2) covering approximately 6221.5 Ha, located in Van Hise, Haultain, Milner, Nicol and Lawson Townships, within the Larder Lake Mining Division. A complete list of claims is provided in Appendix 1.

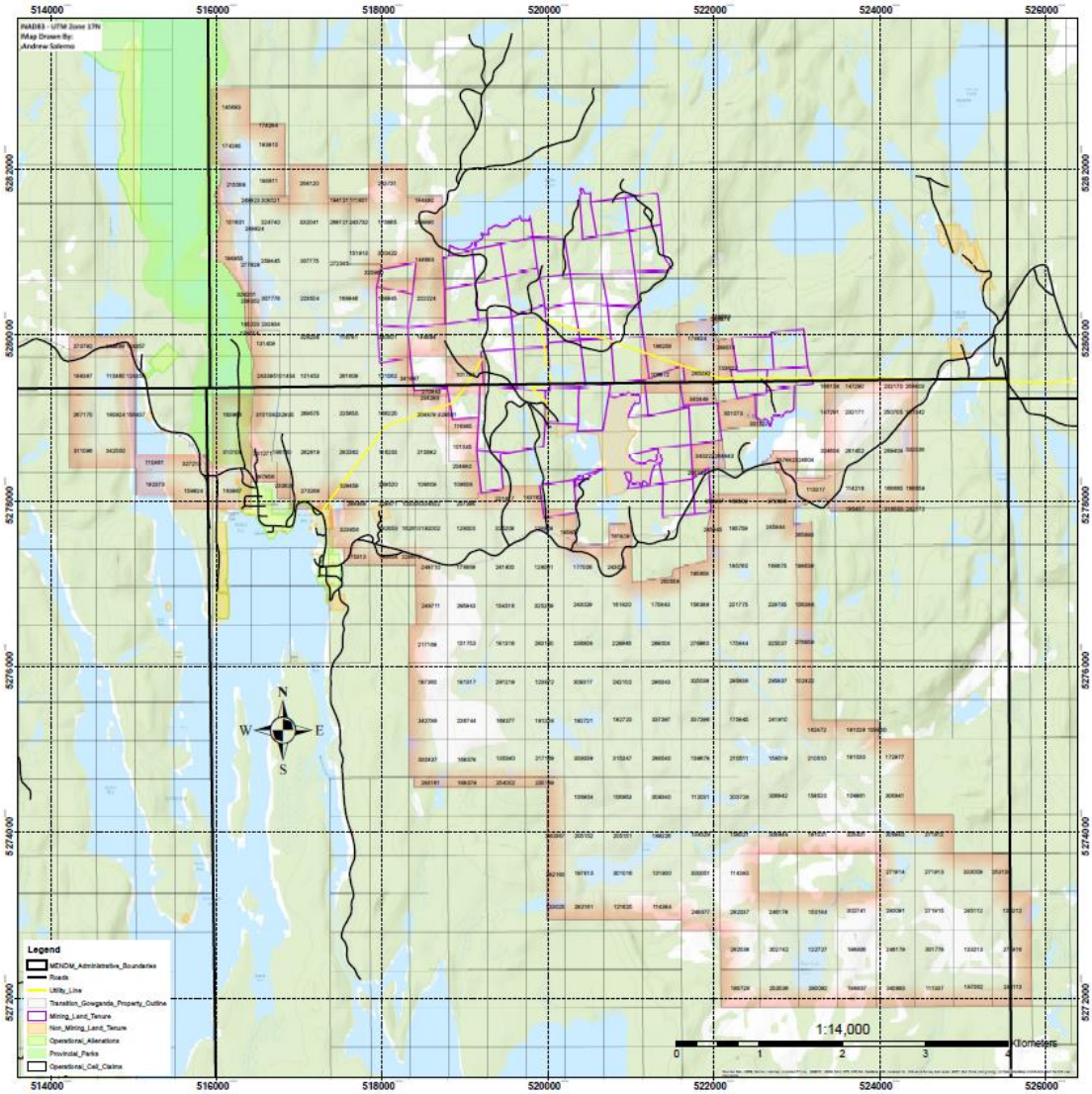

Figure 2. Claim Map showing the HGP of the BMR/ Transition JV Gowganda Gold and Cobalt Property.

2.4 PROPERTY & EXPLORATION HISTORY

The early history of the region is summarized in a report prepared for the Ontario Geological Survey by McIlwaine (1978), however, there are numerous additional undocumented pits, trenches and shafts on the property. This is supplemented by data updated from the MNDM assessment files and programs conducted on the property by Transition Metals.

The following is a summary of work completed on, or adjacent to, the Gowganda Gold and Cobalt Property

1920's:
The original HGP claims were patented, however, there is little historical work recorded on these claims.

By 1926 property ownership was held by a number of parties; however, by 1929 an amalgamation of Capitol Silver Mines, Trethewey Silver and Cobalt Mines Limited resulted in the formation of a consolidated silver company called Castle Trethewey Mines Ltd. Production activities of the mine ceased around 1931 and were not renewed until 1948.

Starting in 1925, surface exploration and stripping at the former Hylands-Johnson-Gardiner property, located near the upper contact of the Nipissing Diabase in the Miller Lake Basin, resulted in the sinking of a 30.5 m shaft. In 1926, operations were taken over by Planta Mines Limited, a subsidiary of Noranda Mines Ltd., and the shaft was deepened to 87 m with an addition of 850 m of workings prior to the mine closure in April 1927. In 1952, the property was optioned to Gardiner-Johnson Property Syndicate, who dewatered the shaft, continued sampling and diamond drilling before the work was suspended.

1947 – 1950: Quebec Yellowknife Gold Mines Ltd.
Completed geological mapping, trenching and three (3) diamond drill holes. Mapping and trenching delineated several vein-systems and one sample returned 8.41 oz Ag/t and 14.29% copper. Other mineralization noted on the property in the assessment files include cobaltite, bismuthinite and chalcopyrite.

1951 – 1953: Indore Gold Mines Limited
Two diamond drill holes were completed in 1951 and an additional three (3) holes in 1953. One hole intersected an 18 cm interval containing 30% chalcopyrite that retuned 10.25% copper and 0.68 oz/t silver. Several pits are located in the area south of Highway 560 with associated rubble piles containing carbonate-quartz vein material with bornite, chalcopyrite and pyrite.

1955: Ontario Geological Survey
Moore (1955) mapped Haultain and northern Nicol townships covering the area of the claims at a scale of 1:31, 680. Map 1955-03; AR64 part 5.

1959: McIntyre Porcupine Mines
The Castle Trethewey property was taken over by McIntyre Porcupine Mines and silver mining activities in the area continued until 1966.

1961: Caesar Minerals Ltd.

Completed seven (7) diamond drill holes, totalling 214 m, near the historical Big Four Showing, also referred to as the Banker Bay Occurrence, historically held by Tego Silver-Cobalt Mines Ltd. The showing includes a series of trenches and pits and a 25 ft (7.6 m) deep shaft located on the north side of radio tower hill north of Highway 560. In the main area of the shaft and a main pit, there is a 12.7 – 15.2 cm carbonate-quartz vein containing arsenopyrite, cobaltite, pyrite and galena cross-cutting Archean iron-formation. A pyritic/ sulphide iron formation with an Archean quartz porphyry footwall is located east of the shaft and an approximately 2 m wide sulphide iron formation becomes leaner, grading into siliceous iron formation to the north. A drilling program was conducted east of the trenching and pitting in an attempt to trace the iron formation under the Huronian Sediments (Thoday 1961). Field assay results by R. McDougall in 1968 returned: 40.6% sulphur and up to 10.8 oz Ag/t (336 g Ag).

1967 - 1972: Siscoe Mines

The Castle Trethewey property was optioned to United Siscoe Mines and mining was resumed in the vicinity of the Capital workings. United Siscoe Mine conducted a soil sampling program covering a large portion of the current property, then referred to as the Roy Ten Claim Group (Benjelloun, 1968). Samples were collected on a sampling density of approximately one sample of the B- soil horizon every 100 x 200 ft (30.5 x 61.0 m) and analysed for silver, mercury and cobalt. Several silver anomalies were identified close to the known silver workings, but no follow up work was proposed.

1971: Raylloyd Mines

In 1971, Raylloyd Mines acquired a group of past producing silver claims once a part of McIntyre Porcupine Mines referred to by Siscoe as the Roy Ten Group from P. Mclean. They completed three (3) drillholes into a magnetic and IP target believed to be prospective for hosting nickel. This work was successful in confirming the presence of a large ultramafic (peridotite/ dunite) body in which no nickel mineralization was noted.

1972: Siscoe Mines

The mine in the Gowganda Area ceased production and the property was returned to McIntyre Porcupine Mines

1973

The Teme-Augama Anishnabai first nation, exercised a land caution against development on Crown land covering approximately 10 000 square kilometres, mostly within the Temagami area, but extending northwards into the Gowganda area. The Attorney General of Ontario pursued legal action against the Band for this caution and the area was re- opened for exploration in 1998. (Ministry of Aboriginal Affairs, Ontario 2011).

1978: Ontario Geological Survey

McIlwaine mapped the Haultain and Nicol Township areas at a scale of 1:31,680 between 1966-1968, producing GR 175 with Map 2349 and preliminary maps P0374 and P0518.

1979: Agnico Eagle Mines Ltd.

The remaining portion of the Castle Trethewey Mines Ltd. Property was optioned to Agnico Eagle Mines Ltd, and some ore was extracted from the area of the Castle No. 3 shaft. Between 1979 and

1989 a total of 101,024 tonnes were milled in the Cobalt mill producing 91,421,294 grams silver (2.67 million ounces of silver), 34,597 kilograms cobalt and 10,180 kg copper (Kirkland Lake Resident Geologists Office).

1997: Ontario Geological Survey

Conducted a high-density lake sediment and water geochemical survey focusing on the Gowganda area. 1336 lake water samples and 1172 lake sediments were taken. Anomalous metal values including Ag, As, Co, Cu, Pb and Zn were noted within the area.

1997: Lake Superior Resources

Flew a Terraquest airborne VLF-EM, radiometric, and magnetic survey, with 100 m line-spacing at a 100 m altitude (Terraquest, 1997).

2006: Temex Resources

Completed the purchase of the Miller Lake O'Brien Silver Property, and related assets and facilities from the Sandy K Mines, which included the former past producing Miller Lake O'Brien Mine (historical production of 40.7 million ounces of silver at an average grade of 22 ounces of silver per ton, Averill et al., 2012). Temex performed a preliminary assessment investigating revenue potential from processing the tailings for silver.

2008: Gold Bullion Development Corp.

Castle Tretheway Mines Ltd. Property was acquired by Gold Bullion Development Corp. who completed preliminary metallurgical testing on composite sample of silver tailings material extracted from the tailings pond.

1999 - 2008: Sherry Swain Prospecting

In 1999, Sherry Swain, a Gowganda based prospector, staked the property. In 2006, Swain identified anomalous gold values associated with altered and deformed Archean greenstones located west of the historical silver workings. Between 2006 and 2008, small scale stripping of the altered volcanics and intrusives resulted in the identification of several additional zones of anomalous gold mineralization including a piece of glacial float that returned 15.6 g/t Au (Swain, 2009).

2008: Norcanex Resources Ltd.

Briefly optioned the property and undertook a high resolution airborne magnetic survey covering the property, however, the property was returned to the owner without completing any physical work.

2010 - 2018: Transition Metals Corp.

In 2010, Transition Metals Corp. optioned claims from S. Swain and staked additional claims peripheral to these. The company completed four (4) trenches in 2019; Trench 3, dubbed Annie's Ladder Showing, outlined an east-west trending zone of mineralization approximately 100 X 60 m (Collins, 2010 and Collins and Hart 2011). Gold mineralization was associated with zones of increased pyrite content, occurring as fine specks within, or along, the margins of quartz/ Fe-carbonate veinlets. The veins and gold are hosted in a package of medium to coarse-grained, massive to weakly foliated syenite (potassic/ hematite altered) dikes and adjacent highly deformed meta-volcanic rocks. Grab sample results yielded gold values as high as 19.5 g/t while channel samples returned gold values >3

g/t across several metres of stripped outcrop in places.

In addition, two (2) shallow diamond drill-holes totalling 165 meters were completed in the vicinity of Trench 3, to assess vertical continuity of the gold mineralization. Both holes encountered elevated gold values down-dip from mineralization exposed at surface including a section containing visible gold near the bottom of hole TMH-10-02, which yielded a weighted composite gold average of 1.57 g/t Au over 11.69 meters between 40.31 to 52.00 meters including 4.72 g/t Au over 3.07 meters (Collins and Hart 2011).

In 2011, Transition Metals Corp. continued with the trenching grogram, stripping, washing and mapping and channel sampling six (6) more trenches; as well as, completing a property scale mapping program. Trenches 5 and 6, returned the best values in a fragmental syenite of 25 g/t Au over 0.41 m and 97.6 g/t over 0.4 m, respectively. Nineteen (19) NQ-sized diamond drill holes totalling 2085 m were drilled, with 18 of the 19 holes drilled returning anomalous gold values (Kuuskman and Hart 2012).

In addition, a Soil Gas Hydrocarbon test survey was completed from which six anomalous areas were recommended for follow-up investigation. Two lines of pole-dipole IP survey were completed over 1.3 line kilometres and an additional 10.4 kilometres of gradient array IP was completed in an attempt to characterize the geophysical signature of the mineralization (Hart and Burden, 2018).

Throughout 2013, 2014 and 2015, Transition Metals Corp. continued their reconnaissance work, geological and structural mapping, and sampling, including an MMI soil sampling program. Increased access, as a result of logging activities in the area, resulted in the discovery of a previously unidentified syenite dike. Additional research included mineralogical and geochemical studies and classification of the various syenite phases present on the property.

In 2016, two additional trenches (Trench 11 and 12) were excavated. Ultimately, Trench 12 was abandoned while Trench 11, measuring approximately 20 m X 25 m, uncovered a northwest trending shear zone and several zones of shear- parallel quartz veining. Nineteen (19) grab samples were collected, with the best assay returning 519 ppm from a quartz vein, within monzonite. In addition, 30 chip samples were taken from Trench 7, along 5 shear veins (Flank, 2017). In November 2016, Transition Metals executed an Option and Joint Venture Agreement with Aldershot Resources Ltd.

2017: Aldershot Resources Ltd.

Between January and June 2017, Aldershot Resources Ltd. cut approximately 14.75 kilometers of grid line to accommodate both a walking magnetic survey and pole-dipole induced polarization survey which identified 2 resistivity features. Aldershot completed eleven (11) diamond Drill holes focusing on the strike extents of four of the known gold occurrences. Research included a structural review investigating the controls on gold mineralized quartz veins at the main showing around Trench 3. With an increase in the price of cobalt, a short program of prospecting and sampling was conducted to assess the property for cobalt potential. Following an evaluation of their exploration program, Aldershot Resources Ltd returned the property to Transition Metals in the fall of 2017 (Hart and Burden, 2018).

2018: Battery Mineral Resources Corp.

Battery Mineral Resources Corp. entered a joint venture option with Transition Metals Corp. on the Gowganda Gold and Cobalt Project.

2019: Battery Mineral Resources Corp.
A short regional field season focused on prospecting of the northern portion of the property, particularly the 'Big Four Showing' (formally known as the Banker Bay Occurrence) and the Haultain Gold Prospect.

2.5 Regional & Local Geology

2.5.1 Regional Geology:

Archean age basement rocks of the Superior Craton are composed of a series of granite terranes, variably covered by greenstone belts and sedimentary basins which are thought to represent the accretion of microcontinents during the Archean; these can further be sub-divided into sub-provinces. Much of the Archean Craton is unconformably overlain by Paleoproterozoic to Paleozoic siliciclastic sediments, forming irregular paleo-basins.

In the vicinity of the Gowganda Gold and Cobalt (HGP) Property, Paleoproterozoic sedimentary rocks of the Huronian Supergroup unconformably overly older Archean granites, meta-volcanics and meta-sedimentary rocks of the Abitibi and/ or Pontiac Sub-province of the Superior Craton. Nipissing Diabase, which is Middle Precambrian in age (McIlwaine, 1978), intrudes all lithologies in the region with the exception of the younger mafic/ diabase dikes and sills.

2.5.2 Local Geology:

The local geology of the HGP is excerpted from a report by Collins (2010), Figure 3:

"An inlier of Archean rocks located in the northwestern portion of the Property, centered in western Haultain Township, consists of predominately of ultramafic, mafic, and intermediate to felsic volcaniclastic metavolcanic rocks interbedded chemical chert-magnetite oxide facies iron formation and clastic metasedimentary rocks (Figure 5) (Collins 2010). A series of syn-tectonic gabbro, lamprophyre, and syenite dikes cross cut the metavolcanic and appear to be restricted to the area of the Jacobs Lake Fault. An intermediate to felsic body intrudes the southern portion of the inlier, and intermediate to felsic plutonic rocks of the Round Lake Batholith intrude the metavolcanic rocks along the north edge of the Property. North to northwest-trending Matachewan diabase dike swarm cut all younger units, and several northeast-trending Abitibi diabase dikes cross the Property. The Archean rocks are variably deformed and folded and cut by the northwest-trending Jacobs Lake fault.

Regional metamorphism reached lower to middle greenschist facies.

In the southeastern portion of the Property, mainly in Nicol Township, the Archean rocks are overlain by Proterozoic age Huronian Supergroup intruded by sills of Nipissing Gabbro (Collins 2010). The Cobalt Formation of the Huronian Supergroup consists of feldspathic arenite, feldspathic greywacke, and paraconglomerate of the Gowganda Formation and feldspathic and micaceous sandstones of

the Lorrain Formation. Nipissing Gabbro sills are mainly composed of pyroxene gabbro with limited subophitic textures and occasional granophyric phases in the upper portions."

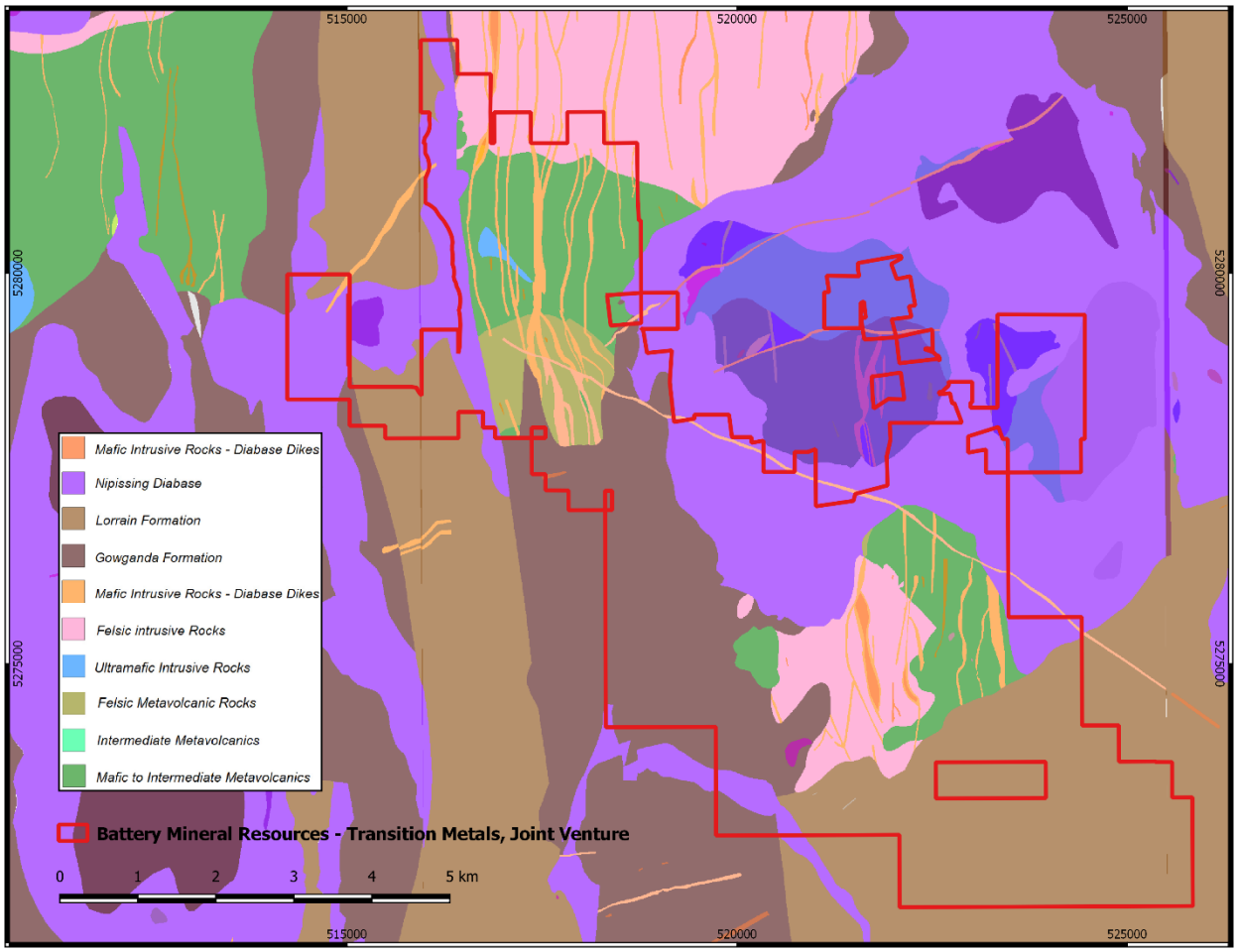

Figure 3. Regional Geology surrounding the Gowganda Gold and Cobalt Property, after McIlwaine (1978).

2.5.3 Haultain Gold Prospect Geology

The Haultain Gold Prospect is associated with an inlier of Archean rocks located in the northern portion of the Gowganda Gold and Cobalt Property. The prospect consists predominantly of ultramafic and mafic meta-volcanics cut by east-west trending intrusive, intermediate to mafic, massive to fragmental dikes. Locally, syn-tectonic Archean gabbro, lamprophyre and rare syenite dikes cross-cut the meta-volcanic and intrusive package. Matachewan Diabase Dikes are common and generally trend north- south, thereby dissecting the volcanic package into segments of limited strike length. In the stripped area of Trench 3, the Archean rocks are variably altered (+/- silicified, +/- sericitized, +/- albitized, +/- carbonatized, +/- pyritized), deformed and folded; and cut by the late stage Jacobs Lake Fault.

Trench 3 uncovered an approximate 60 metre- wide zone of gold mineralization associated with a swarm of medium to coarse-grained, massive to weakly foliated, syenite dikes that intrude highly altered and deformed metavolcanic rocks within the Jacobs Lake fault zone (Collins 2010). The light pinkish green to reddish brown colouration of the "syenite" dikes hosting the veins are now interpreted as reflecting potassic and/or iron enrichment, possibly hematization or iron carbonate alteration, rather then a primary lithological composition. The ultramafic to mafic metavolcanic rocks that host the "syenite" dikes include massive and spinifex textured flows, heterolithic volcaniclastic flows, and strongly sheared, talc-carbonate altered, variably quartz veined units with no recognizable primary textures.

2.6 Mineralization

Mineralization at the Haultain Gold Prospect is characterized by anomalous gold values associated with quartz-carbonate veining, disseminated sulphides, and, commonly, albite alteration hosted in intermediate to mafic intrusive dikes.

A description of the mineralization in Trench 3 is provided by Hart (2011) as follows: "Mineralization is observed associated with dikes trending west to northwest, dipping steeply north, that are overprinted by a series of north to northeast-trending, steeply east dipping quartz-carbonate tension veins and rare very shallowly north dipping veins. In addition to the tension filling veins, elevated gold values were obtained from deformed quartz/carbonate veining developed along dike contacts and in deformed metavolcanics near syenite dike contacts."

Locally, elevated gold values are associated with zones of disseminated pyrite within the ultramafic volcanics and in dikes cutting the ultramafics.

3. HISTORICAL DRILL CORE RE-LOGGING AND GEOLOGICAL MODELING

3.1 RELOGGING OF HISTORICAL DRILL-CORE

Historical drill-core from Transition Metals, Haultain Gold Project was relogged on a recommendation by Dr. Lebrun, structural geologist consultant with SRK, to better understand and constrain lithologies and possible structural controls at the property. Re-logging was focused on categorizing lithological variations, defining alteration styles, and, identifying shear zones and veining associated with mineralization. Re-logs provided in Appendix 2 were also used to refine the geological model.

Drill-core from 31 holes drilled into the gold target was palletized and transported from the Transition Metals Corp. core storage yard located in Gowganda, to the Canadian Exploration Service, long term core-storage yard in Larder Lake, Ontario in the spring of 2019.

Re-logging was conducted intermittently between the end of October and early December 2019. Fifteen holes were re-logged from physical core, including 2 holes in which, core photos were used to fill in gaps where holes were incomplete. Four holes were relogged, in part or fully, using only core photos in place of physical core to provide better constrains for further modeling. Twelve holes outside of the immediate areas of interest were not relogged, however core photos were used to obtain structural data, such as faulted zones. Table 2 summarizes the method in which core was re-logged while Figure 4 shows the location of the holes; Table 3, indicates the mining claims on which the the relogging of core was conducted.

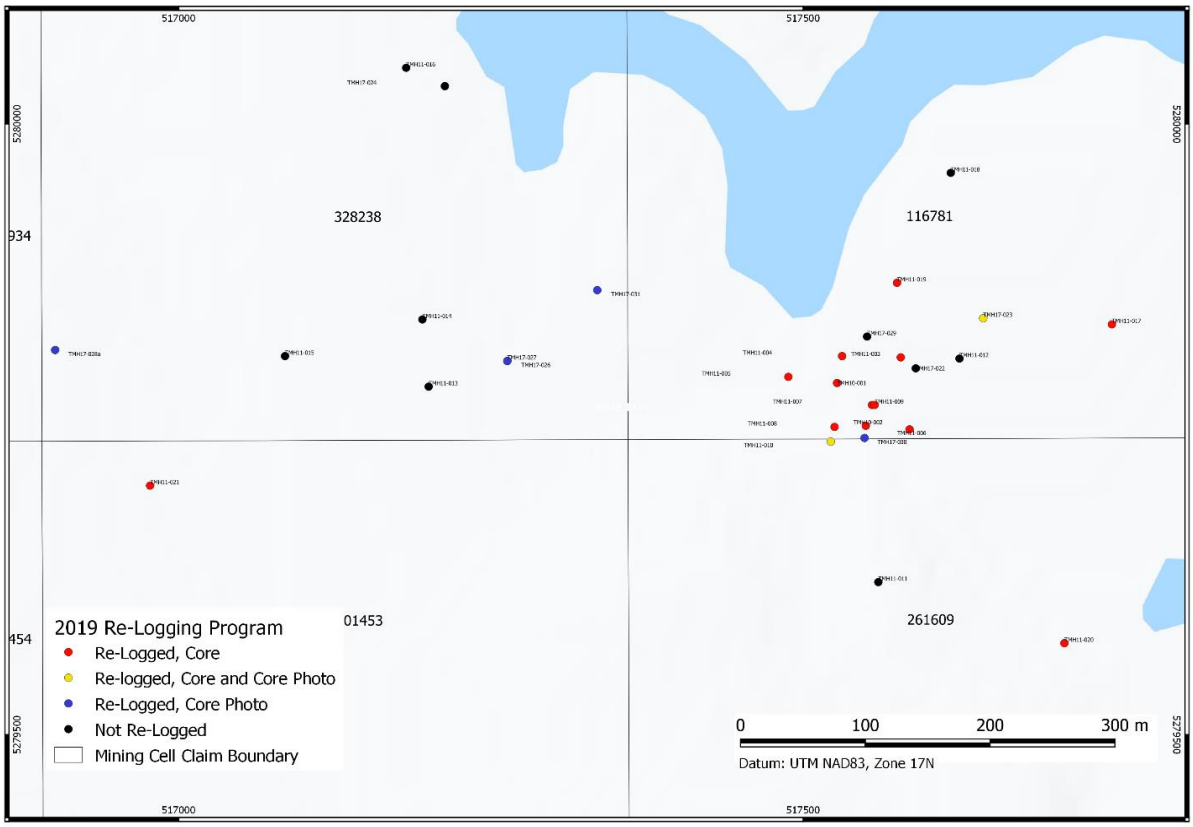

Figure 4. Location plan of re- logged, partially re- logged and non re- logged drill holes.

Core	Core and Photo	Photo	Not Relogged
TMH10-001	TMH11-010	TMH17-026	TMH11-011
TMH10-002	TMH17-023	TMH17-028a	TMH11-012
TMH11-003		TMH17-030	TMH11-013
TMH11-004		TMH17-031	TMH11-014
TMH11-005			TMH11-015
TMH11-006			TMH11-016
TMH11-007			TMH11-018
TMH11-008			TMH17-022
TMH11-009			TMH17-024
TMH11-017			TMH17-025
TMH11-019			TMH17-027
TMH11-020			TMH17-029
TMH11-021			

Table 2. Table of Re-logged Historical core from the Haultain Gold Prospect

Hole ID	Township	Cell ID Number (Provincial Grid)	Mining Cell Claim	Record Holder
TMH10-001	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH10-002	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-003	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-004	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-005	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-006	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-007	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-008	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-009	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-010	Haultain	41P10K398	261609	(100) Transition Metals Corp.
TMH11-017	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-019	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH11-020	Haultain	41P10K398	261609	(100) Transition Metals Corp.
TMH11-021	Haultain	41P10K398	101453	(100) Transition Metals Corp.
TMH17-023	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH17-026	Haultain	41P10K377	328238	(100) Transition Metals Corp.
TMH17-028a	Haultain	41P10K377	328238	(100) Transition Metals Corp.
TMH17-030	Haultain	41P10K378	116781	(100) Transition Metals Corp.
TMH17-031	Haultain	41P10K377	328238	(100) Transition Metals Corp.

Table 3. Mining land on which re-logged core was originally drilled.

3.2 RESULTS & INTERPRETATIONS

Historic logging lacked significant resolution to define continuity between drill holes, distribution of lithologies, definition of mineralized zones and possible brittle vs ductile deformation zones; mineralized zones in albite altered intermediate to mafic rocks were logged together with barren zones of mafic to ultramafic rocks.

Re-classification and simplification of lithologies during the winter 2019 re-logging initiative resulted in the consolidation of units into the following categories:

Ultramafic to Mafic Metavolcanic Rocks *(vum)*
Massive flows (locally spinifex textured) to volcaniclastic breccia, medium to dark grey-black to medium blue-grey, bright green when altered, very fine- to fine-grained, massive, weakly to moderately foliated, locally becoming moderately to highly foliated. Generally weakly to moderately, locally strongly, carbonatized (dolomitic/iron-carbonate) and weakly, locally moderately to strongly, talc altered; locally moderately to very strongly fuchsite altered. Variably magnetic.

Intermediate to Mafic Metavolcanics
Mafic metavolcanics
Massive to brecciated to pillowed flows. Dark grey black to brown, aphanitic to very fine-grained, massive.

Intermediate metavolcanics
Massive to brecciated (locally cataclastic), aphanitic to very fine-grained, massive, light grey to light grey green, locally highly altered to pink.

Gabbro
Fine- to medium-grained, dark green to grey-green, massive, equigranular. Weakly to moderately altered, predominantly chlorite alteration, contains approximately 1% fine-grained disseminated pyrite. Archean.

Mafic volcanic general (*mvu*)
Very fine to fine-grained, medium to dark orange brown to dark red brown, massive. Weakly to strongly altered, albitized, silicified and/or chloritized. Pyrite concentrations vary depending on the degree in in which it has been altered by quartz-carbonate veining, generally trace, up to 7% in densely veined intervals, pyrite is very-fine to fine grained, disseminated.

[Seems to be closely associated with fragmental units, commonly intruded by monzodiorite dikes, when these monzodiorite dikes are very fine- to fine-grained and altered it can be difficult to distinguish between the two units]

Fragmental Metavolcanic Rocks
Fragmental felsic to intermediate metavolcanics (ffi)
Massive to fragmental volcanoclastic, very fine- to fine/medium-grained, generally massive and very rarely weakly foliated, light to medium grey to grey-fawn. Variably fragmental with clasts consisting

of quartz, feldspar and highly chlorite-altered mafic grains; generally sub-rounded to rounded, ranging in size from granule to pebble.

Fragmental intermediate to mafic volcanic (fim) and,
Fragmental intermediate to mafic, altered (fima)
Massive to fragmental volcanoclastic, very fine- to medium-grained, generally massive, range from dark grey-black to medium to dark red to rusty brown-red/orange. Fragments are generally mafic, when 'fresh' are predominately of biotite, when altered are chlorite; very rare felsic-granitic clasts, clasts are generally sub-angular to sub-rounded, ranging in sized from granule to pebble, very rarely cobble size. Beds can be magnetic.

Clastic Metasedimentary Rocks
Consists of interbedded mudstone and argillites, siltstone and fine- to medium sand. Mudstones, argillites and siltstones are very thinly laminated to thinly bedded, and graphitic; while fine- to medium sandy beds are massive, centimeter- to approximately meter-scale beds, and commonly calcareous.

Dikes
Monzodiorite Dikes (gmd)
Seemingly range in composition from monzonite to diorite, +/- minor quartz. Range from medium to dark reddy-brown, to dark green, to dark purple; fine- to medium-grained, massive, equigranular. Trace, up to 2%, disseminated very fine- to fine-grained, pyrite. Variably altered, weak to moderate chlorite alteration; albite alteration in the vicinity of quartz-carbonate veins; and variable hematite/silica alteration. Intrude all metavolcanics and fragmental volcaniclastics

Chlorite-Fuchsite Dike (cfd)
Buff to pale green-grey, commonly with aphanitic to very-fine grained edges (chill margins) with a 'core' of chlorite and fuchsite- altered phenocrysts, fine to medium-grained, subhedral, locally appear banded. Cross-cut and truncate (overprint) mineralization.

Lamprophyre Dikes (lam)
Dark brown to black, fine- to medium-grained, biotite-rich dikes, with rounded, felsic-granitic to ultramafic clasts. Cross-cut all intrusive and metavolcanics rocks, sharp contacts.

Feldspar Porphyry Dike (ggp)
Light beige to pink, very fine-grained to fine-grained groundmass with rounded, medium-grained, feldspar phenocrysts.

Mafic Dike Sets
Matachewan [Diabase] Mafic Dike (mmd)
Dark green to green black, fine to medium grained, with aphanitic chill margins, massive, equigranular. North to northwest trending, sub-vertical dipping, bifurcated, magnetic.

Sudbury Mafic Dike (smd)
Dark green-black to black, massive, olivine diabase, locally porphyritic, groundmass, fine to medium

grained with plagioclase phenocrysts, course to very-coarse-grained. North-west trending (~70 degrees), subvertical dip.

Re-logging and modeling of Haultain Gold Prospect has shown that the 'auriferous mineralized zones' (anomalous gold values, > 0.1 ppm) are associated with mafic volcanic general (*mvu*), fragmental units (*ffi*, *fim* and *fima*), and monzodiorite dikes (*gmd*). For the purposes of simplifying the geological model only the Auriferous Zone, Matachewan Diabase Dikes, and Ultramafic Volcanics were modeled in detail. Everything else is currently included in the 'Archean Suite'.

Overall, the stratigraphic sequence, auriferous zone and shear zones trend east- west and dip moderately to steeply to the north to north-northwest. Matachewan diabase dikes, which trend north-south and dip steeply to the east, commonly dissect this package. Currently there is a lack of information of the continuity of the mineralized zone across the western portions of the property due mainly to lack of drilling.

3.3 PETROGRAPHIC REPORT

In January 2020, eight (8) samples (half drill core) were selected to be made into thin sections, of these four (4) were sent to Vancouver Petrographic for detailed description. Full petrographic descriptions and associated photomicrographs are attached in Appendix 3. The objective of the petrographic descriptions was to identify the alteration associated with mineralized veins and further classify lithological units, typically associated with mineralization.

The four samples sent for petrographic evaluation were described by Vancouver Petrographic as:

> "represent[ing] a more or less consanguineous suite of fine to medium grained, locally porphyritic (plagioclase-biotite?-rarely quartz-phryric), felsic hypabyssal intrusive rock (several phases, possibly originally about diorite to quartz diorite, or dacite in composition?) but now strongly altered to secondary albite (variably hematite-stained, leading to the pink/red colour in three of the four samples), carbonate (dolomite and ankerite?), white mica (sericite/muscovite), minor chlorite, quartz, pyrite (?) and rutile (?), locally associated with veins to 1.3 cm thick of carbonate +/-quartz-sericite-chlorite-pyrite?-rutile?-trace possible barite".

Descriptions of each individual sample follow:
Thin-section TMH17-26 41.25 consists of hematite-stained albite dolomitic carbonate-sericite/muscovite-chlorite-minor quartz-pyrite-rutile altered, probably felsic hypabyssal intrusive rock, cut by thin quartz +/-carbonate-chlorite-sericite-pyrite veinlets.

Thin-section TMH17-026 43.75a consists of strongly hematite-stained albite-dolomitic/ankerite carbonate-sericite/muscovite-chlorite-minor quartz-pyrite-apatite-rutile altered, probably felsic intrusive (2 phases, one hypabyssal), cut by carbonate +/-quartz-chlorite-sericite-rutile veins.

Thin-section TMH17-026 43.75b consists of strongly hematite-stained albite-dolomitic/ankeritic carbonate-minor sericite/muscovite-chlorite-apatite-rutile-rare pyrite altered, probably felsic intrusive

(2 phase, one hypabyssal), cut by a major vein of carbonate-chlorite +/-quartz-sericite-rutile- trace barite?.

Thin-section TMH10-03 59.60 consists of finely plagioclase-biotite?-quartz phyric hypabyssal intrusive, so strongly altered to carbonate (dolomite/ankerite?)-albite-muscovite/sericite-minor chlorite-rutile that the original composition is hard to define.

Historical logging by Transition Metals identified the samples from hole TMH17-026 (TMH17-026 41.25, 43.75a and 43.75b) as 'inclusion bearing syenite' and the sample from hole TMH10-03 (TMH10-03 59.60) as ultramafic schist. Re-logging of this core conducted by Battery Mineral Resource geologists classified all samples as 'fragmental felsic to intermediate volcanic". According to the petrographic report, the samples are essentially interpreted as felsic intrusives that are hematite stained +/- albite-dolomitic/ankeritic carbonate-minor sericite/muscovite-chlorite-apatite-rutile-rare pyrite altered.

3.4 Geological Modeling

Battery Mineral Resources contract geologists developed a geological model which integrated a preliminary 3D model produced by SRK consulting geologist Dr. Lebrun from original outcrop and trench mapping, and diamond drilling. It also utilized the lithological re-classification of the re-logged core to better understand the spatial correlation between the host Archean assemblage, cross-cutting dikes, alteration and associated gold mineralization.

The 3D geological model was produced using LeapfrogGeo (Figure 5). Similar rock types were grouped together into major lithological units to simplify the stratigraphy for the model, then mineralized and non mineralized structures, alteration and vein zones were added based on surface structural data and newly measured alpha angles from veins and shear zones from the re- logged core.

The 3D-model better defined the spatial correlation between mineralized structures/ veins/ alteration zones and the host ultramafic flow sequence which includes interbedded mafic volcanic units and minor intermediate and sedimentary lenses, and, various gabbro and other intermediate to mafic intrusives, as well as massive to fragmental dikes. It was determined that most of these early intrusives are injected sub- parallel with the host Archean assemblage except for the swarms of late stage Matachewan diabase dikes and very minor younger Sudbury Diabase Dikes which cross- cut the stratigraphy and structural/ alteration/ mineralized corridors. Thin-section work and the detailed petrographic descriptions indicate that alteration associated with mineralized quartz +/-carbonate extensional veining at the Haultain Gold Prospect tends to be moderate to intense albitization, silicification and sericitization. Some of the less extensive lithologies and minor structures/ features were not included in the model.

The 3D- model was used in designing holes of the gold- oriented drill program to intersect the on-strike and depth extensions of the number 3 Trench vein zone between clusters of cross- cutting Matachewan diabase dikes.

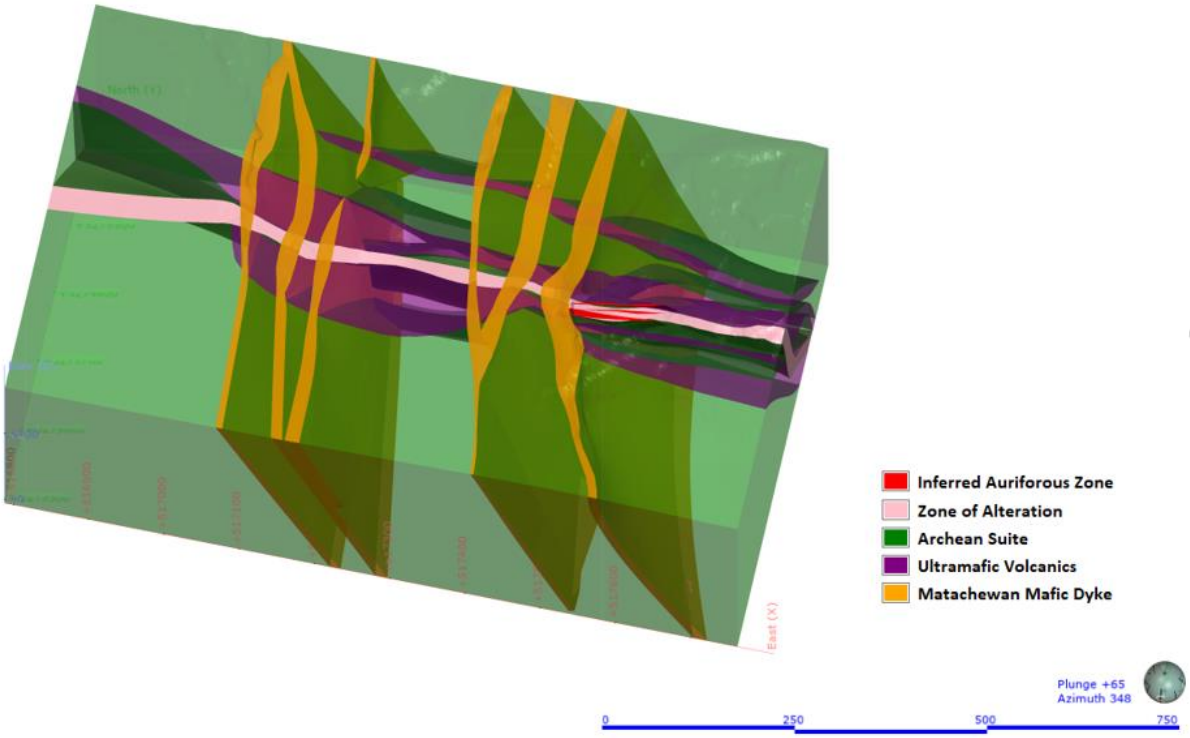

Figure 5. 3D Geological Model of the Haultain Gold Prospect

BMR plans to update and expand the 3D geological model by using newly logged and re- logged core data, existing and new geophysical data, and adding larger scale regional structures/ features interpreted from LiDAR data and Ontario Geological Survey reports. These large-scale structures and potential splays would be useful in identifying possible offsets in stratigraphy and mineralization. The model can be utilized for follow- up field verification and correlation of mineralized shear zones observed in core with structures historically mapped in outcrop such as those observed in TMH11-016, TMH11-024, MH17-025 and Trench 7.

4. DRILLING

4.1 PERMITS

The exploration permit issued for diamond drilling at the Gowganda Gold and Cobalt Property, Haultain Project is permit number: PR-19-00272 filed on behalf of, and permitted to, Transition Metals Corp.

4.2 DRILLING

The object of the drilling campaign at the Gowganda Gold and Cobalt Property, Haultain Gold Prospect was to test the lateral and depth continuity of gold values within the east- west trending mineralized package, as well as, the possible northwest trending shear structures and veining. The three holes drilled in the west (GTMH20032 – GTMH20034) were designed to test the western continuity of the main showing, and for possible gold- bearing northwest trending shears and veining; the hole in the east (GTMH20035), to test for the vertical continuity of mineralization below Trench 3.

Exploration diamond drilling conducted at the HGP by Battery Mineral Resources Corp. in March 2020 was located in Haultain Township on single cell mining claims 328238 and 116781 (Table 4, Figure 6). The diamond drill program consisted of four (4) diamond drill holes, GTMH20032 - GTMH20035, totalling 978 m of NQ core drilled between March 3rd and March 17th, 2020. A total of 298 samples were submitted for assay, 258 half-core samples and an additional 32 QA/QC samples; details are provided in Table 5.

Access and drill-pads were cleared and leveled by CXS. Sumps were made to capture tailings from each drill-hole and backfilled after drilling by G4. Core was packaged and transported to Gowganda Lake Lodge, Gowganda, Ontario by G4 and quick-logged by CXS contract geologists before transported to CXS main offices in Larder Lake, Ontario for final processing, geo-teching, logging/sampling and core cutting. Cut core samples were then shipped to ALS labs in Sudbury, Ontario of assay by bonded transport or carried directly by BMR personal.

Detailed drill hole meta-data and drill hole logs are presented in Appendix 4 and Appendix 5, respectively. Drill hole cross-sections are provided in Appendix 6.

Hole ID	Township	Cell ID Number (Provincial Grid)	Mining Cell Claim	Record Holder
GTMH20032	Haultain	41P10K377	328238	(100) Transition Metals Corp.
GTMH20033	Haultain	41P10K377	328238	(100) Transition Metals Corp.
GTMH20034	Haultain	41P10K377	328238	(100) Transition Metals Corp.
GTMH20035	Haultain	41P10K378	116781	(100) Transition Metals Corp.

Table 4. Mining lands on which work was preformed during the HGP March 2020 diamond drill program.

Hole ID	mEasting	nNorthing	Elevation (m)	Azimuth	Dip	Length (m)	Drill Core Samples	QA/QC Samples	Total Samples Assayed
	Datum: UTM NAD 83, Zone 17N								
GTMH20032	517133	5280089	353	223	-50	228	25	3	28
GTMH20033	517315	5279936	345	200	-49	204	61	7	68
GTMH20034	517289	5279827	345	200	-49	219	85	10	95
GTMH20035	517661	5279880	354	227	-50	327	86	12	98
					TOTAL	**978**	**257**	**32**	**289**

Table 5. Summary of Collar and Sampling Data, HGP March 2020 Diamond Drill Program.

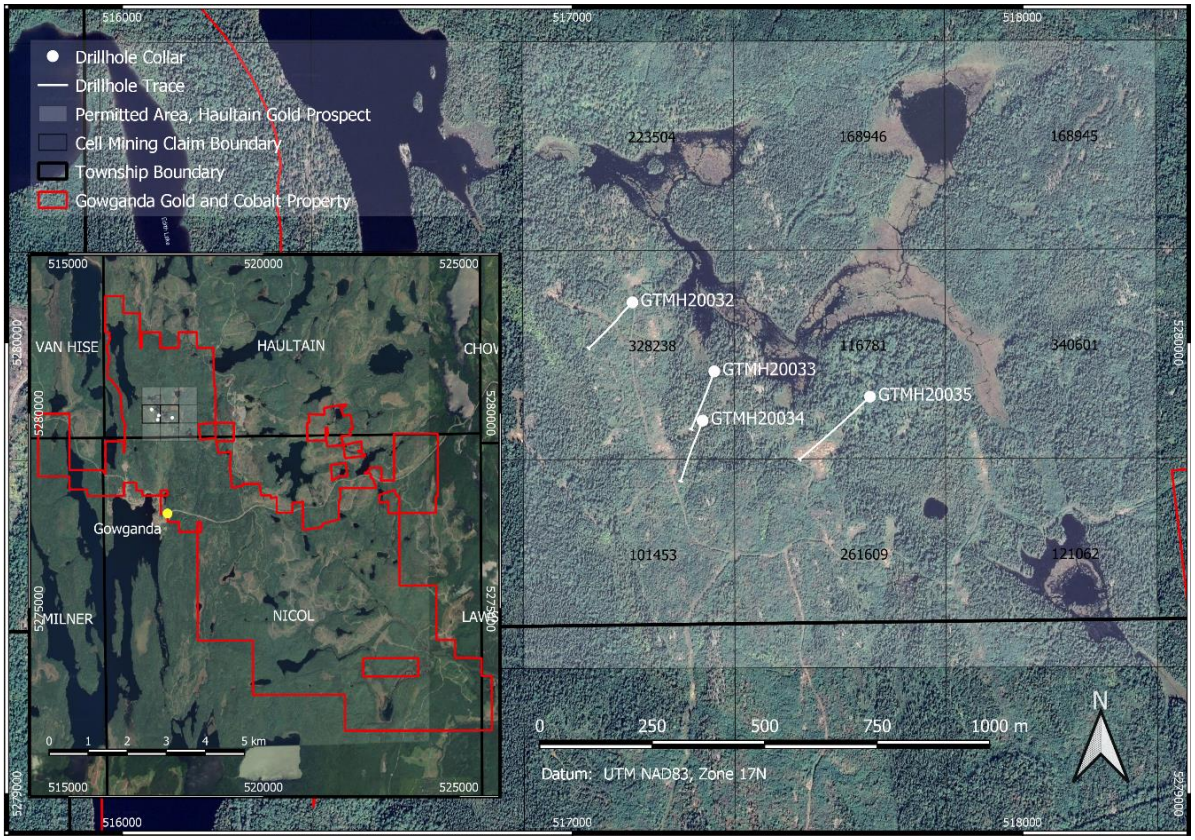

Figure 6. Mining lands on which the March 2020 **drilling was conducted**. (Red boundary represents Gowganda Gold and Cobalt Property, translucent white squares represent cell mining claims on which work was completed and white dots represent March 2020 drill holes, township boundaries on satellite imagery for reference.)

4.3 Results and Interpretation

The object of the drilling at the Gowganda Gold and Cobalt Property, Haultain Gold Prospect was to test the lateral and depth continuity of gold values within the east- west trending mineralized package, as well as, the possible northwest trending shear structures and veining.

From the mapping of trenches and outcrop areas, it was determined that the host ultramafic and

mafic meta-volcanics and intrusive intermediate to mafic massive to fragmental dikes trend east-west and strike moderately to the north. Shear zones and shear veins in the area of Trench 3 are also oriented east-west and dip moderately to steeply to the north; extensional veins are oriented north south and moderately dip to the east. The interpreted plunge of mineralization, the intersection of shear zones/veins and extensional veins, is approximately 50/ 055^{O} (plunge/trend). The entire volcanic and dike package is "chopped" into segments by swarms of north- south trending Matachewan diabase dikes.

To test the geometry of shear zones/ veins and the mineralized extensional quartz-carbonate veins and to assess the continuity of mineralization, diamond drill holes were drilled approximately southwest (200 to 227 degrees). This orientation also mitigated the possibility of collaring, and drilling entirely within, north striking Matachewan Diabase dikes. Table 6 presents the significant gold values intersected in the diamond drill holes. Assay results for sample intervals and assay certificates are provided in Appendix 7 and Appendix 8, respectively.

Hole ID	From	To	Width	Assay
GTMH20032	108.00	109.00	1.00	0.47
GTMH20033	185.00	186.00	1.00	0.98
	189.00	192.00	3.00	0.31
GTMH20034	93.00	94.00	1.00	1.45
	99.00	100.00	1.00	2.51
	102.00	103.00	1.00	0.39
	109.00	110.00	1.00	0.71
	137.00	139.00	2.00	2.54
GTMH20035	41.00	46.20	5.20	0.27
	69.00	70.00	1.00	2.52
	144.00	145.08	1.08	3.36
	158.00	161.00	3.00	1.51

Table 6. Significant Gold Values in HGP drilling

Drill Hole GTMH20032 was designed to intersect the westerly extension of a northwest trending shear and quartz vein zone uncovered in Trench 7. The shear zone is interpreted as a splay from the Jacob's Lake Fault that had been partially infilled with quartz vein material and in which visible gold was found. The hole intersected a sequence of ultramafic and mafic volcanics with intervals of intrusive gabbro (massive flows?), monzodiorite, and porphyry as well as slivers of Matachewan diabase. A value of 0.47 g/t Au appears to be associated with a 2cm quartz stringer in a monzodiorite dike cutting the host @ 48 degrees. No mineralization was noted in the vein.

Holes GTMH20033 and GTMH20034 form a fence that was intended to test the extension and stratigraphy to the west of Trench 3 between two swarms of Matachewan diabase dikes. The northerly hole (GTMH20033) intersected a thick package of mafic and ultramafic flows cut by numerous narrow felsic, intermediate and monzodiorite dikes. It was also intended to intersect the interpreted sheared splay of the Jacob's Lake Fault zone between Trench 7 and 3. An anomalous gold intersection (0.31 g/t Au over 3m) in a fine grained, intermediate dike with 1- 2% disseminated pyrite at

189.5- 193.75m, is associated with 20cm healed breccia and zone broken core that may reflect the splay.

The southerly hole in the fence, GTMH20034, was collared in a mixed zone of narrow slivers of mafic/ ultramafic flows, intruded by gabbro, monzodiorite, syenite and fragmental intermediate dikes to 84m followed by a thick sequence of ultramafic flows to the end of the hole at 219m. All of the significant assays are located within the ultramafics which are described as talcose with 15% patchy carbonate- quartz veining and about 1% scattered pyrite. As indicated in Table 4, the best values are 2.51 g/t Au and 4.39 g/t Au over 1m at 99m and 137m, respectively, the latter within a narrow black mafic dike containing coarse pyrite crystals.

The drilling beneath the altered and mineralized system of Trench 3 confirmed that the zone extends to depth but appears to be more weakly developed. The stratigraphy in hole GTMH20035 can be divided into three main components as follow: 4.5 to 103.0m, sequence of mafic and ultramafic flows with local fuchsite altered zones with gabbro lenses; 103.0- 246.0m, dominated by ultramafic flows intruded by numerous monzodiorite and intermediate dikes; and, 246.0- 327.0m (EOH), change to sedimentary package interbedded with ultramafic flows. The hole was intended to intersect the Jacob's Lake Fault and the south shear/ splay near the start. The log indicates a fault gouge at the start (6.4m) which may represent the Jacob's Lake Fault and a second fault and shear at 130.4m and 192.65m may indicate the splay.

The best values in hole 35 were returned from the upper two units: within a weakly anomalous zone (0.27 g/t Au over 5.2m from 41.0- 46.2m) in a fuchsitic ultramafic- silicified volcanic- intermediate dike zone; a value of 2.52 g/t Au over 1.0m at 69m in a quartz- carbonate vein in a gabbro host; 3.36g/t Au over 1.1m at 144.0m within a carbonate- quartz vein zone in the ultramafic rocks; and, a 3m wide zone grading 1.51g/t Au hosted by orange altered monzodiorite with only trace very fine grained pyrite and negligible veining between 158.0 to 161.0m.

4.4 SUMMARY AND RECOMMENDATIONS

4.4.1 Summary

The object of the drilling at the Gowganda Gold and Cobalt Property, Haultain Gold Prospect was to test the lateral and depth continuity of gold values within the east- west trending mineralized package, as well as, the possible northwest trending shear structures and veining. The three holes drilled in the west (GTMH20032 – GTMH20034) were designed to test for the western extent(s) of the main showing, and northwest trends of mineralization, and, the hole in the east (GTMH20035), to test for the vertical continuity of mineralization below Trench 3.

Exploration diamond drilling conducted at the HGP by Battery Mineral Resources Corp. in March 2020 consisted of four (4) diamond drill holes, GTMH20032 - GTMH20035, totalling 978 m of NQ core drilled between March 3rd and March 17th, 2020. A total of 298 samples were submitted for assay, 258 half-core samples and an additional 32 QA/QC samples.

The holes intersected sequences of ultramafic and mafic volcanics with intervals of intrusive gabbro,

monzodiorite, intermediate and porphyry dikes as well as slivers of Matachewan diabase. In the current program, anomalous gold values were mainly associated with narrow carbonate- quartz veins in most host lithologies, weakly fuchsitic ultramafics and silicified volcanics, and weakly pyritic ultramafics. The best values were encountered in hole GTMH20034 which returned at 4.39 g/t Au over 1m at 137m within a narrow black mafic dike containing coarse pyrite crystals and 3.36g/t Au over 1.1m at 144.0m within a carbonate- quartz vein zone in the ultramafic rocks in hole GTMH20035. There was also a 3m wide zone grading 1.51g/t Au hosted by orange altered monzodiorite with only trace very fine grained pyrite and negligible veining between 158.0 to 161.0m in hole 35.

4.4.2 Recommendations

Four holes drilled at the Gowganda Gold and Cobalt Property, Haultain Gold Prospect were designed to test the lateral and depth continuity of gold values within the east- west trending mineralized package, as well as, the possible northwest trending shear structures and veining. The drill holes returned anomalous gold values over narrow widths in all of the holes, however, there were no high grade values, no wide zones of alteration, and no extensive vein systems intersected in the drilling. This implies that there is no extensive mineralized hydrothermal system associated with the vein zone exposed in Trench 3.

Based on the diamond drill program the following are recommended:

- The drill holes be integrated into the HGP 3-D model;
- Structural measurements obtained from the March 2020 oriented drill core be incorporated into SRK structural database;
- Re- assessment of the anomalous values to determine their relationship to known mineralization;
- Integration and re- evaluation of all the existing geophysical data to generate possible new gold (or other) targets;
- No additional drilling is recommended in the vicinity of the current stripped areas.

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6. CERTIFICATE OF QUALIFICATIONS

CERTIFICATE OF QUALIFICATION AND CONSENT

I, Frank Rainer Ploeger of the town of Virginiatown, Province of Ontario, do hereby certify:

1) That I am a Consulting Geologist and reside at 21 Waite Avenue, Virginiatown, Ontario, P0K 1X0.

2) That I graduated from Queen's University at Kingston, Ontario with a Bachelor of Applied Science degree in 1973; and, that I completed 2 years of an MSc program at McMaster University in Hamilton, Ontario (1980-1982).

3) That I am a **member in good standing of the Association of Geoscientists of Ontario (#479), the Association of Professional Engineers and Geoscientists of Saskatchewan (#10852, non- practicing), the Geological Association of Canada, the Prospectors and Developers Association, and the Northern Prospectors Association**. I have received a temporary permit (#2153) to practice in Quebec from the Ordre des geologues du Quebec pending acceptance by the Office quebequois de la langue francaise (OQLF).

4) That I have practiced my profession as a mineral exploration and mine geologist for a period of about 45 years.

5) This document is based on information various public documents and my personal observations during several visits to the property.

Although the information supplied to me is believed to be accurate and all reasonable care has been taken in the completion of this report, I hereby disclaim any and all liability arising out of its use and circulation. While I stand behind my interpretations, I cannot guarantee the accuracy of the source information and the use of this report or any part thereof shall be at the user's sole risk.

6) I have no interest, either directly or indirectly, in the subject property or client company.

7) *My written permission is required for the release of any summary or excerpt.*

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Frank R. Ploeger Virginiatown, Ontario, May 11, 2020

CERTIFICATE OF QUALIFICATION AND CONSENT

I, Peter James Doyle of the city of Richmond Hill, Province of Ontario, do hereby certify:

1) That I am an Exploration Geologist and reside at 79 Naughton Drive, Richmond Hill Ontario, L4C8B2.

2) That I graduated from Laurentian University at Sudbury, Ontario with an Honours Bachelor of Science degree in 1980.

3) That I am a **Fellow in good standing of the Australian Institute of Mining & Metallurgy (AUSIMM # 208850) as well as a member in good standing of Geological Association of Canada (GAC F0146); Canadian Institute of Mining & Metallurgy (CIMM # 91602); Prospectors & Developers Association of Canada (PDAC # 707); Society for Geology Applied to Mineral Deposits (SGA# 1333-08) and Society of Economic Geologists (SEG # 216720).**

4) That I have practiced my profession in various roles as a Mineral Exploration Geologist, Exploration Manager and Vice President of Exploration for a period of about 39 years principally within Canada & Australia as well as globally in United States of America, Mexico, Indonesia, China, Mongolia, Brazil, Argentina and Guyana.

5) This document is based on information various public documents and my personal observations during visits to the property during the exploration program.
Although the information supplied to me is believed to be accurate and all reasonable care has been taken in the completion of this report, I hereby disclaim any and all liability arising out of its use and circulation. While I stand behind my interpretations, I cannot guarantee the accuracy of the source information and the use of this report or any part thereof shall be at the user's sole risk.

6) I am currently employed full time as Exploration Manager – Canada for Battery Mineral Resources Limited and was directly involved in the planning and execution of the exploration program documented in this report.

7) *My written permission is required for the release of any summary or excerpt.*

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Peter J. Doyle Richmond Hill, Ontario, May 11, 2020

7. APPENDIX

Appendix 1. List of Claims
Appendix 2. Historic Drill Core Relogs
Appendix 3. Petrographic Report
Appendix 4. Drill Hole Meta-Data
Appendix 5. Drill Hole Test Logs
Appendix 6. Drill Hole Sections
Appendix 7. Assay Results
Appendix 8. Assay Certificates

Tenure ID	Cell ID	Township	Type of Tenure	Status	Recorded Holder	Area (Ha)	Anniversary Date	Work Requirements ($)
101453	41P10K397	HAULTAIN,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 23, 2022	400
101454	41P10K396	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 23, 2022	200
101545	41P10G021	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
101601	41P10K315	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	July 13, 2020	200
101795	41P10J381	HAULTAIN,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
102422	41P10G150	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2020	200
105006	41P10F060	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
106953	41P10G205	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
106954	41P10G204	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
108608	41P10G041	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	200
108609	41P10F060	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	200
108672	41P10J386	HAULTAIN,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	November 15, 2020	200
109960	41P10G172	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2020	200
109961	41P10G211	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2020	400
110460	41P10K392	MILNER,VAN HISE	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	400
110461	41P10F033	MILNER	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
111337	41P10G313	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2020	400
111801	41P10K298	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2020	200
112031	41P10G207	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
113317	41P10G050	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2021	200
114216	41P10G051	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2020	400
114383	41P10G248	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2020	400
114384	41P10G266	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2020	200
116203	41P10F039	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	400
116781	41P10K378	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
116865	41P10G001	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
121062	41P10K399	HAULTAIN,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 29, 2023	200
121625	41P10G265	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2020	200
122727	41P10G290	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2020	400
123872	41P10G143	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
124357	41P10K373	VAN HISE	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	February 18, 2020	200
124358	41P10K393	MILNER,VAN HISE	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
128000	41P10G061	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
128001	41P10G083	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
131409	41P10K376	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 22, 2019	200
131900	41P10G246	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2020	400
133025	41P10G263	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2020	200
133212	41P10G275	LAWSON,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
133213	41P10G294	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
133622	41P10J388	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	November 15, 2020	200
134529	41P10G227	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	April 10, 2020	400
135340	41P10G182	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
139679	41P10G187	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400

139969	41P10G063	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
143162	41P10G043	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
144693	41P10K340	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
144694	41P10K380	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
145223	41P10K375	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
145693	41P10K255	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.73	December 15, 2019	400
147290	41P10J391	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
147291	41P10G010	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
150184	41P10G270	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
150502	41P10G048	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
151753	41P10G121	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
151913	41P10K338	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
154516	41P10G102	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
156388	41P10G110	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	200
156389	41P10G107	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
156437	41P10F013	MILNER	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
158519	41P10G189	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
158520	41P10G210	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
158521	41P10G228	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	April 10, 2020	400
159824	41P10F054	MILNER,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	400
161342	41P10G013	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
161819	41P10G065	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
161820	41P10G105	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
162472	41P10G170	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	200
162610	41P10F080	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
163966	41P10F015	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2019	200
163967	41P10F055	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2019	200
166158	41P10J390	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
166225	41P10F019	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 29, 2023	400
166659	41P10G053	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
166660	41P10G052	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	400
168377	41P10G162	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
168378	41P10G181	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
168379	41P10G201	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	200
168675	41P10G089	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
168945	41P10K359	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 23, 2020	200
168946	41P10K358	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
172977	41P10G192	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
174284	41P10K256	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.73	December 15, 2019	200
174285	41P10K275	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.73	December 15, 2019	200
174668	41P10G081	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
175313	41P10F098	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
175665	41P10K319	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	400
175843	41P10G106	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
175844	41P10G128	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400

175845	41P10G168	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
177006	41P10G084	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
178834	41P10J367	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	November 15, 2020	200
179014	41P10K375	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	November 15, 2019	200
180924	41P10F012	MILNER	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	400
181316	41P10G122	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
181317	41P10G141	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
181318	41P10G163	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
184492	41P10K300	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
185759	41P10G068	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
185760	41P10G088	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
186256	41P10J366	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	November 15, 2020	200
186729	41P10G308	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
187062	41P10G314	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
187360	41P10F160	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
188387	41P10K391	MILNER,VAN HISE	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
191029	41P10G171	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	200
191030	41P10G191	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
191031	41P10G230	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
192002	41P10F080	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
192373	41P10F053	MILNER	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
192653	41P10F079	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
192654	41P10F099	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
192720	41P10G165	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
192721	41P10G164	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
193810	41P10K276	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.73	December 15, 2019	200
193811	41P10K296	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
194131	41P10K298	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
194955	41P10K335	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	November 15, 2019	200
195457	41P10G071	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
195857	41P10G064	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
195858	41P10G087	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
196160	41P10F036	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
197813	41P10G244	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
198639	41P10G090	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
198936	41P10G291	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
198937	41P10G311	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
199226	41P10G226	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	April 10, 2020	400
203728	41P10G208	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
204879	41P10F020	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 29, 2023	200
204880	41P10G021	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	200
205151	41P10G225	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	April 10, 2020	400
205152	41P10G224	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
206247	41P10G047	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	November 15, 2020	200
210510	41P10G190	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400

210511	41P10G188	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
215068	41P10K295	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	July 13, 2020	200
215682	41P10F040	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	400
217168	41P10F140	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
217169	41P10G183	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
221417	41P10G042	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
221775	41P10G108	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
222224	41P10K360	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
223504	41P10K357	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
224740	41P10K316	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
225655	41P10F018	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 23, 2022	400
229735	41P10G109	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
229871	41P10F059	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
229872	41P10F100	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
229946	41P10G125	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
231271	41P10F036	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2019	200
232170	41P10J392	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
232171	41P10G011	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	400
232172	41P10G073	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
232934	41P10K376	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
232935	41P10F016	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 23, 2022	200
233620	41P10F056	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
234293	41P10F020	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
235189	41P10G203	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	200
236744	41P10G161	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
237882	41P10G029	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
239252	41P10K355	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
241400	41P10G082	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
241910	41P10G169	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
242102	41P10G145	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
243028	41P10G085	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
243029	41P10G104	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
243395	41P10K396	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2019	200
243731	41P10K299	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	400
243732	41P10K318	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
245112	41P10G274	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
245113	41P10G315	LAWSON,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
245844	41P10G069	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
245845	41P10G067	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
246178	41P10G269	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
246179	41P10G292	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
248710	41P10F100	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
248711	41P10F120	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	200
249377	41P10G267	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
249923	41P10K295	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200

249924	41P10K315	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
250558	41P10G086	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
250705	41P10G012	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	400
253139	41P10G255	LAWSON,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	200
253536	41P10G309	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
254002	41P10G202	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	200
255689	41P10K372	VAN HISE	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	February 18, 2020	200
257396	41P10G041	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
259445	41P10K336	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
261452	41P10G031	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	400
261609	41P10K398	HAULTAIN,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 23, 2022	400
262819	41P10F037	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	400
264843	41P10G028	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	November 15, 2020	200
265092	41P10J387	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	November 15, 2020	200
265893	41P10G070	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
267170	41P10F011	MILNER	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
268120	41P10K297	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
268121	41P10K318	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
269403	41P10J393	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
269404	41P10G032	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	400
269575	41P10F017	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 23, 2022	400
269990	41P10K320	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
270268	41P10F057	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
270943	41P10K400	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
271912	41P10G233	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
271913	41P10G253	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
271914	41P10G252	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
271915	41P10G273	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
271916	41P10G295	LAWSON,NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
272345	41P10K338	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
272635	41P10G049	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
273792	41P10K371	VAN HISE	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	February 18, 2020	200
276959	41P10G130	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	200
276960	41P10G127	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
277929	41P10K335	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
282037	41P10G268	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
282038	41P10G288	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
282160	41P10G243	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	200
282161	41P10G264	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	200
282362	41P10F038	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	400
283160	41P10G123	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
283161	41P10F220	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	200
288468	41P10F058	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
288540	41P10G186	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
289004	41P10G126	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400

289520	41P10F059	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	200
289574	41P10J368	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	November 15, 2020	200
290091	41P10G272	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
290092	41P10G310	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
291219	41P10G142	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
295837	41P10G149	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
295838	41P10G148	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
295943	41P10G101	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
296343	41P10G146	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
297956	41P10F056	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2019	200
300422	41P10K339	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	December 15, 2019	200
301016	41P10G245	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
301073	41P10G008	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 6, 2020	200
301778	41P10G293	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
302741	41P10G271	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
302742	41P10G289	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
306941	41P10G212	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
306942	41P10G209	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
306943	41P10G232	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
306944	41P10G229	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
307775	41P10K337	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
307776	41P10K356	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
308521	41P10K296	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	200
309317	41P10G144	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
309339	41P10G184	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
309340	41P10G206	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
310108	41P10F016	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2019	200
310109	41P10F035	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2019	200
311096	41P10F031	MILNER	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
315347	41P10G185	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
316553	41P10G072	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
319568	41P10J348	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	November 15, 2020	200
320960	41P10K339	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 23, 2020	200
323856	41P10F078	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 4, 2020	200
324604	41P10G030	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
325037	41P10G129	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
325038	41P10G147	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
325208	41P10G062	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	400
325209	41P10G103	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
326431	41P10G231	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
327215	41P10F034	MILNER,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
328201	41P10K355	HAULTAIN	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	November 15, 2019	200
328238	41P10K377	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
329459	41P10F058	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	October 22, 2023	200
329561	41P10G001	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200

330051	41P10G247	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
330437	41P10F200	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
331122	41P10G009	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 6, 2020	200
332041	41P10K317	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 8, 2023	400
332336	41P10G033	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	December 15, 2019	200
333009	41P10G254	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
334602	41P10F060	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	July 13, 2020	200
336908	41P10G124	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	July 13, 2020	400
337396	41P10G167	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
337397	41P10G166	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	April 10, 2020	400
340367	41P10G223	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	200
340449	41P10G007	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 6, 2020	200
340601	41P10K379	HAULTAIN	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.74	October 23, 2022	200
340983	41P10G312	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.77	December 15, 2019	400
341987	41P10K400	HAULTAIN,NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	June 29, 2023	200
342550	41P10F032	MILNER	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	February 18, 2020	200
342798	41P10F180	NICOL	Single Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.76	December 15, 2019	400
343322	41P10G027	NICOL	Boundary Cell Mining Claim	Active	(100) TRANSITION METALS CORP.	21.75	November 15, 2020	200

DataSet	Hole_ID	mFrom	mTo	Interval_Length (m)	Lith1	Lith1 Description	Lith1_Int	Hue	Colour	Lith1_Grainsize	Lith1_Texture	Lithology, Colour, Grain size, Texture, Structure, Alteration, Mineralization, Veining, Lower contact.	Lith1_Structure	Alteration 1 : not very veakly red 2 : weakly altered 3 : moderately alred 4 : strongly altered 5 : kaolinit	Deformation 1 : not very veakly red 2 : weakly altered 3 : moderately alred 4 : strongly altered 5 : kaolinit	Alt1	Alt1_Int	Alt2	Alt2_Int	Alt3	Alt3_Int	Min1_Int	Vein1	Vein1_Prt	Vein2	Vein2_Prt
Gowganda - Transition Metals	TMH10-001	0	1	1.00	oou	Oou overburden general																				
Gowganda - Transition Metals	TMH10-001	1	2.45	1.45	img	microgabbro		D	grey black	fmg	massive	weakly altered intrusive mafic rock; medium to dark grey-black with dark rusty red hue, fine- to medium- grained, massive, equigranular. Albite alteration, weak, pervasive. Quartz veining, thin, fracture fill. Lower contact is rubbly				albite alteration	wk						vqz	0.1		
Gowganda - Transition Metals	TMH10-001	2.45	2.87	0.42	vvm	Vvm mafic volcanic		D	red brown	vfgfg	massive	intensely altered mafic (likely mafic volvanic), Dark rusty red brown, very fine- to fine-grained, massive. Albite alteration, moderate to intense and pervasive. Lecuoxene alteration, yellowish mica-looking grains, weak to moderate and through interval. Stringers, black fracture fill.				albite alteration	str	leucoxene alteration	wk mod				vst	0.5		
Gowganda - Transition Metals	TMH10-001	2.87	2.96	0.09	mvu	Mvu metavolcanic general		L	grey white	vfgfg	schistose	Sheared quartz(?) (albite?) vein with aboundatn mafics (black chlorite?).	sheared													
Gowganda - Transition Metals	TMH10-001	2.96	3.1	0.14	img	microgabbro		D	grey black	fmg	weakly foliated	Altered mafic intrusive (?). Weakly foliated with weak mottled texture. Bleached, patchy, weak; Chlorite alteration, weak; Albite alteration, localized, weak, grain boundaries to small irregular patches. Quartz vein, thin < 1 mm, fracture fill, moderate angle to core axis. Lower contact is rubble				bleached/bleaching	wk	chlorite alteration	wk	albite alteration	wk		vqz	0.1		
Gowganda - Transition Metals	TMH10-001	3.1	4.32	1.22	gdr	Gdr diorite		L	red grey	fg	massive	Monzodiorite, fine- to medium grained (grains ~1 mm), equigranular massive. Albite alteration, slight red hue, weak, pervasive (might be oxidization and staining from box); Chlortie alteration, pervasive, weak to moderate. Quartz (minor Fe-carboante), 7 mm, ~45 degress to core axis. Lower contact sharp.				albite alteration	wk	chlorite alteration	wk mod				vqz	1		
Gowganda - Transition Metals	TMH10-001	4.32	5.5	1.18	mvu	Mvu metavolcanic general		D	orange red	vfgfg	massive	Protolith dificult to determin, likely mafic intrusive(?). Dark orange brown,very fine- to fine-graines, massive, equigranular. Albite alteration, rusty orange-brown, strong, pervasive; leucoxene alteration, off whtie to yellow mica. Faint bands to small pateches of dark grey relic protolith. Quartz veinlets, rare, 1 to 2 mm. Lower contact in broken bit.				albite alteration	str	leucoxene alteration					vqz	0.1		
Gowganda - Transition Metals	TMH10-001	5.5	5.78	0.28	mvu	Mvu metavolcanic general		M	orange red	vfgfg	massive	Unidentifable protolith. Medium rusty orange-red, veryfine grained massive. Interval has more massive apperance, cross cut by fractue fill chlorite stringers , givng it a cracked/broken apperance. Albite alteration, rusty orange red, moderate to strong, pervasive; Silica alteration, moderate to strong, pervasive. Quartz 'vein' (with chlorite stringers) and chunks of host rock (breccia) at bottom of interval, ~45 degress to core axis. Quartz-carboante vein, one, 5 mm, ~45 degress to core axis. Lower contact broken.				albite alteration	mod str	silica alteration	mod str				vqz	0.5	vqz	5
Gowganda - Transition Metals	TMH10-001	5.78	6.13	0.35	mvu	Mvu metavolcanic general		M				Protolith dificult to determin, maybe mafic volcanic(?). Dark orange brown,very fine- to fine-graines, massive, equigranular. Albite alteration, rusty orange-brown, moderate to strong, pervasive; leucoxene alteration, off whtie to yellow elongate mica, weak to moderate. Lower contact sharp				albite alteration	wk mod	leucoxene alteration	wk mod							
Gowganda - Transition Metals	TMH10-001	6.13	6.53	0.40	gdr	Gdr diorite		M	grey	fg	massive	Monzodiorite, fine- to medium grained (grains ~1 mm), equigranular massive. Albite alteration, very slight red hue, very weak, pervasive (might be oxidization and staining from box); Chlortie alteration, pervasive, weak to moderate. Quartz (minor Fe-carboante), rare, 3 to 7 mm, ~45 and ~90 degress to core axis. Lower contact sharp.				chlorite alteration	wk	albite alteration	v wk				vqz	2.5		
Gowganda - Transition Metals	TMH10-001	6.53	8.24	1.71	mvu	Mvu metavolcanic general		M	orange fawn	vfgfg	massive	Protolith very difficult to determine (maybe highly altered mafic intrusive). Similar to 5.5 to 5.78 m. Silica alteration, moderate to strong, pervasive; Albite alteration, slight orange apperance, weak to mdoerate (?) and pervasive. Abundant fine to medium graind dissemianted pyrite, pyritization (?). Chlorite stringers, black, common near top of interval. Quartz-carboante vein, 1.5 cm, perellel to core axis, over about half a meter. Lower contact sharp.				silica alteration	str	albite alteration	wk				vqz	15	vst	0.5
Gowganda - Transition Metals	TMH10-001	8.24	8.42	0.18	gdl	Gdl dolerite		D	brown red	fmg	mottled texture	Dyke, likely mafic dyke, mottled texture, sub-cm black chill margins. Albite alteration, strong pervasive; chlorite alteration, weak pervsive				albite alteration	str	chlorite alteration	wk							
Gowganda - Transition Metals	TMH10-001	8.42	9.5	1.08	vvm	Vvm mafic volcanic		D	red brown	vfgfg	massive	Strongly altered mafic volcanic. Albite alteration, rusty red-brown, strong, pervasive. Lecuoxene alteration, yellowish mich-ligе elongate tabular grains, pervasive. Quartz- minor carboante veins, 3 to 10 mm, high angle to core axis (60 to 80 degrees). Lower contact rubbly.				albite alteration	str	leucoxene alteration	wk mod				vqc	3		
Gowganda - Transition Metals	TMH10-001	9.5	10.93	1.43	img	microgabbro		D	grey	fg	massive	Altered mafic intrusive. Medium grey with a orange hue, fine-grained, massive, equigranular. Bleached, buff to grey hue, moderate, pervasive. Albite alteration, orange hue, weak, pervasive; Chlorite alteration, weak to moderate and pervasive. Quartz-carboane veins, 4 to 7 mm, moderate angle to core axis (45 to 60 degrees). Quartz veinlets, 1 to 2 mm. moderarte angel to core axis (45 to 60 degrees). Lower contact sharp				bleached/bleaching	mod str	albite alteration	wk	chlorite alteration	wk mod		vqc	1	vqz	0.3
Gowganda - Transition Metals	TMH10-001	10.93	11.3	0.38	vum	Vum ultramafic volcanic		D	grey black	vfgfg	schistose					talc alteration	mod str									
Gowganda - Transition Metals	TMH10-001	11.3	11.44	0.14	gdl	Gdl dolerite		L	brown fawn	fmg	mottled texture	Gabbro dyke				bleached/bleaching	wk mod	chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH10-001	11.44	12.31	0.88	vum	Vum ultramafic volcanic		D	grey brown	vfgfg	schistose					talc alteration	mod str									
Gowganda - Transition Metals	TMH10-001	12.31	12.33	0.02	vin	Vein		I	cream	vfg	schistose	small shear quartz vein	sheared													
Gowganda - Transition Metals	TMH10-001	12.33	12.42	0.09	gdl			D	green black	fmg	massive	Gabbro dyke				chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	12.42	13.21	0.80	vum	Vum ultramafic volcanic		D	grey black	vfg	schistose					talc alteration	mod str						vqc	2.5		
Gowganda - Transition Metals	TMH10-001	13.21	13.29	0.08	gdl	Gdl dolerite		D	green black	fg	massive	Gabbro dyke				chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	13.29	13.4	0.12	vum	Vum ultramafic volcanic		D	grey black	vfg	schistose					talc alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	13.4	13.46	0.07	gdl	Gdl dolerite		D	purple black	fmg	massive	Gabbro dyke				chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	13.46	13.61	0.15	vum	Vum ultramafic volcanic		D	grey black	vfg	schistose					talc alteration	mod									
Gowganda - Transition Metals	TMH10-001	13.61	13.76	0.15	gdl	Gdl dolerite		D	purple black	fmg	massive	Gabbro dyke				chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	13.76	13.8	0.05	vin	Vein		L	cream	vfg	schistose	small shear quartz vein	sheared			chlorite alteration	wk									
Gowganda - Transition Metals	TMH10-001	13.8	14.2	0.40	gdr	Gdr diorite		M	grey	fg	massive	wealy altered fine-grained intrusive (intermediate to mafic intrusive)				chlorite alteration	mod	albite alteration	wk				vqz	0.75		
Gowganda - Transition Metals	TMH10-001	14.2	16.46	2.26	img	microgabbro		D	red brown	fg	massive	ultramafic schist				albite alteration	str	chlorite alteration	wk				vst	0.5		
Gowganda - Transition Metals	TMH10-001	16.46	17.1	0.65	vum	Vum ultramafic volcanic		D	grey black	vfg	schistose	diabase dyke				talc alteration	wk mod						vqc	3		
Gowganda - Transition Metals	TMH10-001	17.1	17.22	0.12	gdl	Gdl dolerite		D	green black	fg	massive	ultramafic schist				chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	17.22	17.3	0.09	vum	Vum ultramafic volcanic		D	grey black	vfg	schistose	Gabbo dyke				talc alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	17.1	17.6	0.50	gdl	Gdl dolerite		D	red purple	fg	massive					chlorite alteration	wk mod	albite alteration	v wk							
Gowganda - Transition Metals	TMH10-001	17.6	18.04	0.44	img	microgabbro		M	brown red	fg	massive					albite alteration	wk mod						vqc	1		
Gowganda - Transition Metals	TMH10-001	18.04	18.11	0.08	vum	Vum ultramafic volcanic		M	green	vfg	schistose		sheared			fuchsite alteration	wk mod									
Gowganda - Transition Metals	TMH10-001	18.11	20.65	2.54	img	microgabbro		M	orange red	fg	massive					albite alteration	str						vqc	2		
Gowganda - Transition Metals	TMH10-001	20.65	22	1.35	img	microgabbro		M	grey red	fg	massive					albite alteration	mod						vqz	0.1		

Gowganda - Transition											weakly	highly altered chlorite-fuchsite dyke ???		albite		chlorite												
Metals	TMH10-001	22	22.13	0.13	gdl	Gdl dolerite	M	green red	fmg	foliated		alteration	wk mod	alteration	wk mod													
Gowganda - Transition												protolith difficult to determine, likely mafic intrusive (img)		albite														
Metals	TMH10-001	22.13	22.35	0.23	mvu	Mvu metavolcanic general	D	brown red	fg	massive		alteration	mod															
Gowganda - Transition												may potentially be chlorite-fuchsite dyke or monzodiorite dyke(?)		bleached/blea														
Metals	TMH10-001	22.35	22.42	0.08	gdl	Gdl dolerite	M	grey	fmg	massive		ching	mod str															
Gowganda - Transition												massive to weakly foliated		albite		chlorite												
Metals	TMH10-001	22.42	23.39	0.97	img	microgabbro	D	brown fawn	fg	massive		alteration	mod	alteration	wk													
Gowganda - Transition												ultramafic schist																
Metals	TMH10-001	23.39	23.95	0.56	vum	Vum ultramafic volcanic	M	grey black	vfg	schistose		talc alteration	wk mod															
Gowganda - Transition												dyke(?)		bleached/blea		albite		chlorite										
Metals	TMH10-001	23.95	24.27	0.32	img	microgabbro	M	fawn grey	fg	mottled texture		ching	mod	alteration	wk	alteration	wk											
Gowganda - Transition																												
Metals	TMH10-001	24.27	24.3	0.04	vvm	Vum ultramafic volcanic	D	grey black	vfg	massive		talc alteration	mod													vqc	20	
Gowganda - Transition												difficut to tell if it is altered mafic intrusive or altered volcanclastic		albite		chlorite												
Metals	TMH10-001	24.3	24.8	0.50	mvu	Mvu metavolcanic general	M	red fawn	fmg	massive		alteration	wk	alteration	wk mod											vqc	0.75	
Gowganda - Transition														bleached/blea		albite		chlorite										
Metals	TMH10-001	24.8	25.2	0.40	mvu	Mvu metavolcanic general	M	pink red	fg	massive		ching	mod	alteration	wk mod	alteration	wk									vqc	1	
Gowganda - Transition														albite		chlorite												
Metals	TMH10-001	25.2	26.4	1.20	vvs	Vvs volcanosedimentary	M	grey	fg	clastic or as clasts		alteration	mod	alteration	mod str											vqc	3	
Gowganda - Transition														albite		chlorite												
Metals	TMH10-001	25.2	26.58	1.38	vvs	Vvs volcanosedimentary	D	brown red	fg	clastic or as clasts		alteration	mod	alteration	mod str											vqc	5	
Gowganda - Transition												likely chlorite-fuchsite dyke																
Metals	TMH10-001	26.58	26.69	0.12	dyk	dyke	M	green fawn	fmg	massive		alteration	wk mod															
Gowganda - Transition												alteration halo?																
Metals	TMH10-001	26.69	26.85	0.16	mvu	Mvu metavolcanic general	D	grey	fg	massive				bleached/blea ching	mod													
Gowganda - Transition														albite		chlorite												
Metals	TMH10-001	26.85	27.57	0.72	vvs	Vvs volcanosedimentary	D	brown red	fg	clastic or as clasts		alteration	str	alteration	mod													
Gowganda - Transition												unknow protolith		albite		leucoxene												
Metals	TMH10-001	27.57	28	0.43	mvu	Mvu metavolcanic general	M	orange red	fg	massive		alteration	mod str	alteration	mod													
Gowganda - Transition												altered volcanosedimetary or micro-gabbro		bleached/blea		chlorite												
Metals	TMH10-001	28	28.28	0.29	mvu	Mvu metavolcanic general	L	fawn	fg	clastic or as clasts		ching	mod str	alteration	wk mod													
Gowganda - Transition												ultramafic schist																
Metals	TMH10-001	28.28	28.46	0.18	vum	Vum ultramafic volcanic	D	green black	vfg	schistose		alteration	mod str	talc alteration	mod str													
Gowganda - Transition												likley altered micro-gabbro																
Metals	TMH10-001	28.46	30.28	1.82	mvu	Mvu metavolcanic general	M	red orange	fmg	massive				albite alteration	mod	biotite alteration	mod											
Gowganda - Transition												gabbro dyke																
Metals	TMH10-001	30.28	30.65	0.37	gdl	Gdl dolerite	M	red black	fmg	massive		alteration	mod	chlorite alteration	mod	carbonate alteration	wk mod									vqz	1	
Gowganda - Transition												gabbro dyke																
Metals	TMH10-001	30.65	31.2	0.56	gdl	Gdl dolerite	M	brown green	fmg	massive				albite alteration	mod	chlorite alteration	mod str									vqc	0.5	
Gowganda - Transition														albite														
Metals	TMH10-001	31.2	31.45	0.25	img	microgabbro	D	brown red	fg	massive		alteration	mod str															
Gowganda - Transition												gabbro dyke																
Metals	TMH10-001	31.45	31.6	0.16	gdl	Gdl dolerite	D	brown green	fmg	massive		alteration	str	chlorite alteration	mod													
Gowganda - Transition												quartz iron-carbonate vein																
Metals	TMH10-001	31.6	31.72	0.12	vin	Vein	L	white	vfg	massive		chlorite alteration	wk mod													vqz	45	
Gowganda - Transition												maybe chlorite-fuchsite dyke(?)																
Metals	TMH10-001	31.72	32.12	0.40	gdl	Gdl dolerite	D	red green	fmg	massive		albite alteration	wk	chlorite alteration	mod											vqc	1	
Gowganda - Transition																												
Metals	TMH10-001	32.12	32.45	0.34	vum	Vum ultramafic volcanic	D	red black	vfg	schistose		talc alteration	mod str															
Gowganda - Transition												gabbro dyke																
Metals	TMH10-001	32.45	33.95	1.50	gdl	Gdl dolerite	D	red green	fmg	massive		chlorite alteration	mod	albite alteration	mod											vqz	1	
Gowganda - Transition														albite		chlorite												
Metals	TMH10-001	33.95	34.91	0.96	vvs	Vvs volcanosedimentary	D	brown red	fg	clastic or as clasts		alteration	mod str	alteration	mod											vqc	0.5	
Gowganda - Transition														carbonate														
Metals	TMH10-001	34.91	35	0.10	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		talc alteration	mod	alteration	mod													
Gowganda - Transition																												
Metals	TMH10-001	35	35.08	0.08	img	microgabbro	D	grey black	vfgfg	massive																vqc	0.5	
Gowganda - Transition														carbonate														
Metals	TMH10-001	35.08	36.03	0.96	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		talc alteration	mod	alteration	mod													
Gowganda - Transition												relatively unaltered																
Metals	TMH10-001	36.03	36.8	0.77	gdl	Gdl dolerite	D	green black	fmg	massive		chlorite alteration	wk mod	albite alteration	wk											vqc	0.25	
Gowganda - Transition														carbonate														
Metals	TMH10-001	36.8	38.1	1.30	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		talc alteration	mod	alteration	mod											vqc	20	
Gowganda - Transition																												
Metals	TMH10-001	38.1	38.45	0.36	vum	Vum ultramafic volcanic	D	grey black	vfg	massive		talc alteration	mod															
Gowganda - Transition												contains multiple 1.5 to 2 cm, quartz carboante veins.																
Metals	TMH10-001	38.45	39.13	0.68	mvu	Mvu metavolcanic general	M	fawn	vfg	massive		bleached/blea ching	str	albite alteration	mod											vqc	10	
Gowganda - Transition																												
Metals	TMH10-001	39.13	39.3	0.17	vum	Vum ultramafic volcanic	D	grey black	vfg	massive		talc alteration	mod													vqc	0.1	
Gowganda - Transition																												
Metals	TMH10-001	39.3	39.85	0.56	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		talc alteration	mod															
Gowganda - Transition												gabbro dyke (?)																
Metals	TMH10-001	39.85	40.33	0.48	gdl	Gdl dolerite	D	green	fmg	massive		chlorite alteration	wk mod															
Gowganda - Transition												contains multiple 1 to 2.5 cm, quartz carboante veins near top of interval																
Metals	TMH10-001	40.33	45.11	4.78	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		talc alteration	mod	carbonate alteration	mod											vqc	5	
Gowganda - Transition												diabase dyke (?)																
Metals	TMH10-001	45.11	45.19	0.08	gdl	Gdl dolerite	D	grey black	vfg	massive																		
Gowganda - Transition																												
Metals	TMH10-001	45.19	47.2	2.02	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		talc alteration	mod	carbonate alteration	mod str											vqc	1	
Gowganda - Transition											weakly																	
Metals	TMH10-001	47.2	48.3	1.10	vum	Vum ultramafic volcanic	D	grey black	vfg	foliated		talc alteration	mod	carbonate alteration	mod str											vqc	1	
Gowganda - Transition														fuchsite														
Metals	TMH10-001	48.3	48.97	0.68	vum	Vum ultramafic volcanic	M	green	vfg	schistose		alteration	mod str													vqc	5	
Gowganda - Transition											mottled			fuchsite														
Metals	TMH10-001	48.97	49.3	0.33	vum	Vum ultramafic volcanic	M	green	vfg	texture		alteration	mod str													vqc	1	
Gowganda - Transition														fuchsite														
Metals	TMH10-001	49.3	50.67	1.37	vum	Vum ultramafic volcanic	M	green	vfg	massive		alteration	mod str													vqc	3	
Gowganda - Transition														fuchsite														
Metals	TMH10-001	50.67	50.7	0.04	vum	Vum ultramafic volcanic	D	green	vfg	schistose		alteration	mod str															
Gowganda - Transition												notable 2 to 5 cm orange-red alteration halos around veinlets	sheared															
Metals	TMH10-001	50.7	51.68	0.98	vvs	Vvs volcanosedimentary	L	brown fawn	fg	clastic or as clasts		albite alteration	mod str	bleached/blea ching	wk mod	chlorite alteration	mod									vqc	2.5	
Gowganda - Transition														bleached/blea														
Metals	TMH10-001	51.68	51.76	0.08	vum	Vum ultramafic volcanic	D	grey	vfg	schistose		ching	wk mod															
Gowganda - Transition														fuchsite														
Metals	TMH10-001	51.76	51.82	0.07	vum	Vum ultramafic volcanic	M	green	vfg	schistose		alteration	mod													vqc	30	
Gowganda - Transition														silica		albite												
Metals	TMH10-001	51.82	52.17	0.36	mvu	Mvu metavolcanic general	L	fawn	fmg	schistose		alteration	str	alteration	mod str											vqz	3	
Gowganda - Transition														chlorite														
Metals	TMH10-001	52.17	52.26	0.09	mvu	Mvu metavolcanic general	D	white black	vfg	schistose		alteration	str													vqc	70	
Gowganda - Transition																chlorite		silica										
Metals	TMH10-001	52.26	52.28	0.03	vum	Vum ultramafic volcanic	M	grey black	vfg	schistose		talc alteration	wk mod	alteration	wk	alteration	wk									vqc	1	
Gowganda - Transition														silica		albite												
Metals	TMH10-001	52.28	55.56	3.28	vum	Vum ultramafic volcanic	L	fawn grey	vfg	schistose		alteration	mod	alteration	wk mod	talc alteration	wk									vqc	1	
Gowganda - Transition												sheared intrusive?																
Metals	TMH10-001	55.56	55.75	0.19	mvu	Mvu metavolcanic general	M	grey	vfg	schistose				silica alteration	mod str													
Gowganda - Transition														silica		albite												
Metals	TMH10-001	55.75	56.17	0.43	mvu	Mvu metavolcanic general	M	fawn grey	vfg	schistose		alteration	mod str	alteration	wk mod	talc alteration	wk									vqz	20	

Gowganda - Transition Metals	TMH10-001	56.17	56.3	0.13	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			talc alteration																
Gowganda - Transition Metals	TMH10-001	56.3	56.5	0.21	vum	Vum ultramafic volcanic	m	green brown	vfg	schistose		brecciated	fuchsite alteration	wk	silica alteration	wk													
Gowganda - Transition Metals	TMH10-001	56.5	56.75	0.25	vvm	Vvm mafic volcanic	M	grey black	vfg	brecciated																	vqc	40	
Gowganda - Transition Metals	TMH10-001	56.75	56.95	0.21	mvu	Mvu metavolcanic general	d	fawn	vfg	schistose			silica alteration	mod	albite alteration	mod													
Gowganda - Transition Metals	TMH10-001	56.95	57.76	0.81	vvm	Vvm mafic volcanic	D	brown	vfg	foliated			chlorite alteration	wk													vqc	15	
Gowganda - Transition Metals	TMH10-001	57.76	57.98	0.22	vin	Vein	L	white	vfg	schistose		sheared	chlorite alteration	wk													vqc	95	
Gowganda - Transition Metals	TMH10-001	57.98	58.22	0.25	vvm	Vvm mafic volcanic	D	brown	vfg	foliated			chlorite alteration	wk													vqc	15	
Gowganda - Transition Metals	TMH10-001	58.22	59.2	0.99	mvu	Mvu metavolcanic general	L	cream fawn	vfg	schistose			silica alteration	str															
Gowganda - Transition Metals	TMH10-001	59.2	59.6	0.40	mvu	Mvu metavolcanic general	l	fawn grey	vfg	schistose			silica alteration	str	albite alteration	wk mod											vqc	3	
Gowganda - Transition Metals	TMH10-001	59.6	59.77	0.18	vum	Vum ultramafic volcanic	M	grey brown	vfg	massive			talc alteration	mod															
Gowganda - Transition Metals	TMH10-001	59.77	60.3	0.53	vum	Vum ultramafic volcanic	L	fawn white	vfg	schistose		sheared	fuchsite alteration	wk	silica alteration	wk mod	talc alteration	wk mod									vqc	10	
Gowganda - Transition Metals	TMH10-001	60.3	60.45	0.16	vvm	Vvm mafic volcanic	M	green brown	vfg	massive			chlorite alteration	mod													vqc	1	
Gowganda - Transition Metals	TMH10-001	60.45	60.48	0.03	vum	Vum ultramafic volcanic	M	green	vfg	schistose	can wither be: vvs or img, difficut to tell		fuchsite alteration	mod	talc alteration	mod str													
Gowganda - Transition Metals	TMH10-001	60.48	61.44	0.97	vvs	Vvs volcanosedimentary	M	green	vfg	weakly foliated	gabbro dyke?		chlorite alteration	mod	bleached/bleaching	wk mod											vqc	0.5	
Gowganda - Transition Metals	TMH10-001	61.44	64.3	2.86	gdl	Gdl dolerite	M	fawn green	mg	massive	likely chill margin		chlorite alteration	wk mod	bleached/bleaching	wk											vqc	0.5	
Gowganda - Transition Metals	TMH10-001	64.3	64.6	0.30	gdl	Gdl dolerite	D	grey black	vfgfg	massive			chlorite alteration	wk mod													vqc	1	
Gowganda - Transition Metals	TMH10-001	64.6	65.9	1.31	mvu	Mvu metavolcanic general	M	fawn grey	vfg	schistose		broken	silica alteration	str	bleached/bleaching	mod													
Gowganda - Transition Metals	TMH10-001	65.9	66	0.10	vum	Vum ultramafic volcanic	D	grey black	vfg	massive		broken	talc alteration	mod															
Gowganda - Transition Metals	TMH10-001	66	66.2	0.21	mvu	Mvu metavolcanic general	M	cream black	vfg	mottled texture		broken	silica alteration	mod str															
Gowganda - Transition Metals	TMH10-001	66.2	66.7	0.50	vvm	Vvm mafic volcanic	D	grey black	vfg	massive		broken	chlorite alteration	wk mod															
Gowganda - Transition Metals	TMH10-001	66.7	67.76	1.06	mvu	Mvu metavolcanic general	D	fawn black	vfg	mottled texture		broken	bleached/bleaching	mod str	talc alteration	wk mod													
Gowganda - Transition Metals	TMH10-001	67.76	68	0.24	mvu	Mvu metavolcanic general	M	fawn grey	vfg	schistose			silica alteration	mod str	albite alteration	wk mod											vqc	3	
Gowganda - Transition Metals	TMH10-001	68	69.2	1.20	mvu	Mvu metavolcanic general	L	grey fawn	vfg	schistose			silica alteration	wk mod	bleached/bleaching	wk mod	talc alteration	wk											
Gowganda - Transition Metals	TMH10-001	69.2	69.85	0.65	vum	Vum ultramafic volcanic	D	grey black	vfg	massive			talc alteration	mod str	silica alteration	tr													
Gowganda - Transition Metals	TMH10-001	69.85	71.65	1.81	vum	Vum ultramafic volcanic	L	grey	vfg	massive			silica alteration	wk	bleached/bleaching	wk mod	talc alteration	wk											
Gowganda - Transition Metals	TMH10-001	71.65	72.56	0.91	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	either vvm or very fine- to fine-grained intrusive rock (img)		talc alteration	mod															
Gowganda - Transition Metals	TMH10-001	72.56	77.45	4.89	img	microgabbro	D	grey black	fg	massive	volcanic breccia(?)		chlorite alteration	wk	carbonate alteration	wk													
Gowganda - Transition Metals	TMH10-001	77.45	82.55	5.10	vvi	Vvi intermediate volcanic	D	grey black	vfg	healed breccia			silica alteration	wk															
Gowganda - Transition Metals	TMH10-001	82.55	83.55	1.00	vvm	Vvm mafic volcanic	D	grey black	vfg	massive	gabbro dyke? Or img		chlorite alteration	wk mod															
Gowganda - Transition Metals	TMH10-001	83.55	85.7	2.16	gdl	Gdl dolerite	D	grey black	fg	massive	quartx vein		chlorite alteration	wk															
Gowganda - Transition Metals	TMH10-001	85.7	85.75	0.05	vin	Vein	L	grey	vfg	massive																			
Gowganda - Transition Metals	TMH10-001	85.75	91.66	5.91	miu	mafic-intermediate (undifferenti	D	grey	vfg				chlorite alteration	wk mod	carbonate alteration	wk											vcb	0.25	vst
Gowganda - Transition Metals	TMH10-001	91.66	91.67	0.02	vin	Vein	L	white	vfg	foliated	flow or volcanic breccia?																			
Gowganda - Transition Metals	TMH10-001	91.67	92.34	0.68	miu	mafic-intermediate (undifferenti	D	grey	vfg		quartz carbonate veins, chlorite stringers/laminations		chlorite alteration	wk mod	carbonate alteration	wk											vcb	0.25	vst
Gowganda - Transition Metals	TMH10-001	92.34	92.38	0.04	vin	Vein	L	white	vfg	foliated																			
Gowganda - Transition Metals	TMH10-001	92.38	93.62	1.25	miu	mafic-intermediate (undifferenti	D	grey	vfg				chlorite alteration	wk mod	carbonate alteration	wk											vcb	0.25	vst
Gowganda - Transition Metals	TMH10-001	93.62	93.66	0.04	vin	Vein	L	white	vfg	foliated																			
Gowganda - Transition Metals	TMH10-001	93.66	97.3	3.64	miu	mafic-intermediate (undifferenti	D	grey	vfg				chlorite alteration	wk mod	carbonate alteration	wk											vcb	0.25	vst
Gowganda - Transition Metals	TMH10-001	97.3	97.34	0.05	vin	Vein	L	white	vfg	foliated																			
Gowganda - Transition Metals	TMH10-001	97.34	97.42	0.08	miu	mafic-intermediate (undifferenti	D	grey	vfg				chlorite alteration	wk mod	carbonate alteration	wk											vcb	0.25	vst
Gowganda - Transition Metals	TMH10-001	97.42	97.48	0.07	vin	Vein	L	white	vfg	foliated																			
Gowganda - Transition Metals	TMH10-001	97.48	99.99	2.51	vvm	Vvm mafic volcanic	D	grey black	vfg	massive			sericite alteration	wk mod	chlorite alteration	wk											vcb	1	
Gowganda - Transition Metals	TMH10-001	99.99	101	1.02	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	casing and broken, rubblie.		talc alteration	wk mod															
Gowganda - Transition Metals	TMH10-002	0	2	2.00	oou	Oou overburden general																							
Gowganda - Transition Metals	TMH10-002	2	10.26	8.26	vvs	Vvs volcanosedimentary	M	red brown	fg	clastic or as clasts			albite alteration	mod str	chlorite alteration	wk mod											vqc	5	
Gowganda - Transition Metals	TMH10-002	10.26	10.55	0.30	vvs	Vvs volcanosedimentary	M	grey fawn	fg	clastic or as clasts		broken																	
Gowganda - Transition Metals	TMH10-002	10.55	17.38	6.83	vvs	Vvs volcanosedimentary	M	grey fawn	fg	clastic or as clasts	potential chlorite-fuchsite dyke (?), minor chlortie grains in dyke		bleached/bleaching	wk mod													vqc	1	
Gowganda - Transition Metals	TMH10-002	17.38	17.39	0.02	cfd	chlorite fuchsite dyke	M	pink	vfg	massive																			
Gowganda - Transition Metals	TMH10-002	17.39	21.01	3.62	vvs	Vvs volcanosedimentary	M	fawn grey	fg	clastic or as clasts	pink stained quartz vein		bleached/bleaching	wk mod													vqc	1	
Gowganda - Transition Metals	TMH10-002	21.01	21.02	0.01	qv	quartz vein	M	pink	vfg	massive																			
Gowganda - Transition Metals	TMH10-002	21.02	23.22	2.20	vvs	Vvs volcanosedimentary	M	fawn grey	fg	clastic or as clasts			bleached/bleaching	wk mod	albite alteration	wk											vqc	1	
Gowganda - Transition Metals	TMH10-002	23.22	23.54	0.32	vvs	Vvs volcanosedimentary	D	red brown	fg	clastic or as clasts	gabbro dyke (?), lower contact perpendicular to core axis		albite alteration	mod str	leucoxene alteration	wk mod	chlorite alteration	wk mod									vqc	1	vqac 1
Gowganda - Transition Metals	TMH10-002	23.54	23.95	0.41	gdl	Gdl dolerite	M	green grey	fmg	massive			chlorite alteration	wk mod	bleached/bleaching	wk											vqc	1	
Gowganda - Transition Metals	TMH10-002	23.95	30.74	6.79	vvs	Vvs volcanosedimentary	D	red brown	fg	clastic or as clasts			albite alteration	mod str	chlorite alteration	wk											vqc	5	

Gowganda - Transition Metals	TMH10-002	30.74	30.95	0.22	vvs	Vvs volcanosedimentary	M	grey	fg	clastic or as clasts		broken															
Gowganda - Transition Metals	TMH10-002	30.95	34.5	3.55	vvs	Vvs volcanosedimentary	M	fawn grey	fg	clastic or as clasts	gabbro dyke, running parellel to core axis in vvs		bleached/bleaching	mod	chlorite alteration	wk							vqc	7.5		
Gowganda - Transition Metals	TMH10-002	34.5	36	1.50	gdl	Gdl dolerite	D	brown red	fmg	clastic or as clasts	gabbro dyke		albite alteration	wk mod	chlorite alteration	wk mod							vqc	0.5		
Gowganda - Transition Metals	TMH10-002	36	36.64	0.65	gdl	Gdl dolerite	M	orange red	fmg	massive	chlorite-fuchsite dykedifficult to determine boundaries		albite alteration	wk mod	chlorite alteration	wk mod										
Gowganda - Transition Metals	TMH10-002	36.64	37	0.36	dyk	dyke	M	khaki grey	fmg	massive	difficult to determine boundaries	broken	fuchsite alteration	wk	chlorite alteration	wk										
Gowganda - Transition Metals	TMH10-002	37	37.2	0.21	mvu	Mvu metavolcanic general	D	fawn black	vfg	schistose	diffucut to determine protolith	broken	chlorite alteration	mod str												
Gowganda - Transition Metals	TMH10-002	37.2	38.4	1.20	img	microgabbro	D	grey red	fg	mottled texture	likely img (much is similar to unit above.		albite alteration	mod str	chlorite alteration	wk										
Gowganda - Transition Metals	TMH10-002	38.4	38.8	0.40	mvu	Mvu metavolcanic general	D	red black	fg	massive	chlorite-fuchsite alteration	broken	albite alteration	wk mod	bleached/bleaching	wk	chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH10-002	38.8	38.82	0.03	dyk	dyke	M	khaki grey	fmg	massive	protolith difficult to determine img or vvs, rare chlorite clasts -> vvs(?), lower contact arbitary															
Gowganda - Transition Metals	TMH10-002	38.82	40.25	1.43	mvu	Mvu metavolcanic general	D	brown red	fg	massive	protolith difficult to determine (rare chalorite clasts, or very strong alteration?). Moderate to strong and pervasive chlorite alteration. Very strong alteration halos (halos 0.5 to 2 cm) around quartz chlorite +/- carbonate veins (veins 0.5 to 2 cm).		albite alteration	mod	chlorite alteration	wk							vqc	2.5		
Gowganda - Transition Metals	TMH10-002	40.25	44.68	4.43	mvu	Mvu metavolcanic general	D	red green	fmg	massive	chlorite-fuchsite dyke		chlorite alteration	mod str	albite alteration	mod str							vqcl	5	vqc	2
Gowganda - Transition Metals	TMH10-002	44.68	44.98	0.30	dyk	dyke	M	green fawn	fmg	weakly foliated	img or vvs? Rare chlorite clasts -> vvs		chlorite alteration	wk	fuchsite alteration	wk							vqc	7		
Gowganda - Transition Metals	TMH10-002	44.98	45.95	0.98	mvu	Mvu metavolcanic general	M	red brown	fmg	massive	chlorite-fuchsite dyke		albite alteration	mod str	chlorite alteration	wk							vqc	5		
Gowganda - Transition Metals	TMH10-002	45.95	46.05	0.10	dyk	dyke	D	grey green	fmg	massive	img or vvs? Rare chlorite clasts -> vvs		chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH10-002	46.05	47.3	1.25	mvu	Mvu metavolcanic general	M	red brown	fmg	massive	vein(s) irregular, host rick in interval.		albite alteration	mod str	chlorite alteration	wk mod							vqc	2		
Gowganda - Transition Metals	TMH10-002	47.3	47.7	0.41	dyk	dyke	M	green red	fmg	massive	img or vvs? Rare chlorite clasts -> vvs		chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH10-002	47.7	47.94	0.24	mvu	Mvu metavolcanic general	M	grey red	fg	massive	protolith difficult to determine		albite alteration	mod	chlorite alteration	wk mod							vqc	1		
Gowganda - Transition Metals	TMH10-002	47.94	48.76	0.82	vvm	Vvm mafic volcanic	D	black red	fg	healed breccia			albite alteration	mod	chlorite alteration	mod							vqc	1		
Gowganda - Transition Metals	TMH10-002	48.76	52	3.24	vvs	Vvs volcanosedimentary	D	brown red	fg	clastic or as clasts	chlorite-fuchsite dyke		albite alteration	str	leucoxene alteration	mod	chlorite alteration	v wk					vqc	5		
Gowganda - Transition Metals	TMH10-002	52	52.43	0.43	dyk	dyke	M	orange green	fmg	massive			chlorite alteration	wk mod	bleached/bleaching	wk										
Gowganda - Transition Metals	TMH10-002	52.43	53	0.57	vvs	Vvs volcanosedimentary	D	orange red	fg	clastic or as clasts	chlorite-fuchsite dyke		albite alteration	str	leucoxene alteration	wk mod							vqc	2.5		
Gowganda - Transition Metals	TMH10-002	53	53.06	0.07	dyk	dyke	M	olive fawn	fmg	massive			fuchsite alteration	wk mod												
Gowganda - Transition Metals	TMH10-002	53.06	53.34	0.29	mvu	Mvu metavolcanic general	D	red brown	fg	massive	series of chlorite-fuchsite dykes		albite alteration	mod	leucoxene alteration	wk mod										
Gowganda - Transition Metals	TMH10-002	53.34	53.48	0.14	DYK	dyke	D	red brown	fmg	massive			albite alteration	mod str	chlorite alteration	wk mod										
Gowganda - Transition Metals	TMH10-002	53.48	55.15	1.67	mvu	Mvu metavolcanic general	M	red brown	fg	massive			albite alteration	wk mod	leucoxene alteration	wk							vqc	5		
Gowganda - Transition Metals	TMH10-002	55.15	55.48	0.33	vum	Vum ultramafic volcanic	M	green black	vfg	schistose	vum at perpemdicular to core axis in altered mvu		fuchsite alteration	wk mod												
Gowganda - Transition Metals	TMH10-002	55.48	56.1	0.63	vum	Vum ultramafic volcanic	M	red green	vfgfg	schistose			albite alteration	mod	fuchsite alteration	wk mod	talc alteration	wk								
Gowganda - Transition Metals	TMH10-002	56.1	57.58	1.48	vvs	Vvs volcanosedimentary	D	red brown	fg	massive			albite alteration	str	leucoxene alteration	mod							vqc	3		
Gowganda - Transition Metals	TMH10-002	57.58	58.45	0.88	vvm	Vvm mafic volcanic	M	grey black	fg	healed breccia	gabbro dyke (?)		chlorite alteration	wk												
Gowganda - Transition Metals	TMH10-002	58.45	59	0.55	gdl	Gdl dolerite	D	grey green	fmg	massive			chlorite alteration	wk												
Gowganda - Transition Metals	TMH10-002	59	59.37	0.37	vvm	Vvm mafic volcanic	M	grey black	fg	healed breccia	gabbro dyke (?)		chlorite alteration	wk									vqc	1		
Gowganda - Transition Metals	TMH10-002	59.37	59.57	0.21	gdl	Gdl dolerite	D	grey green	fmg	massive	sheared quartz veins, mafics and minor fuchsite		chlorite alteration	wk												
Gowganda - Transition Metals	TMH10-002	59.57	59.65	0.08	vvm	Vvm mafic volcanic	L	cream white	vfg	schistose		sheared	fuchsite alteration	wk mod									vqz	45		
Gowganda - Transition Metals	TMH10-002	59.65	63.23	3.58	vvm	Vvm mafic volcanic	M	grey black	fg	healed breccia	sheared quartz veins, mafics and minor fuchsite		chlorite alteration	wk												
Gowganda - Transition Metals	TMH10-002	63.23	63.25	0.03	vvm	Vvm mafic volcanic	M	white black	vfg	schistose	likely chlorite-fuchsite dyke	sheared	fuchsite alteration	wk	chlorite alteration	wk mod										
Gowganda - Transition Metals	TMH10-002	63.25	64.1	0.85	dyk	dyke	D	green grey	fmg	weakly foliated	breccaite mafic volcanic?		chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH10-002	64.1	65	0.91	vvm	Vvm mafic volcanic	M	grey black	fg	healed breccia			chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-003	0	12.42	12.42	oou	Oou overburden general					may potentiall be diabase dike															
Gowganda - Transition Metals	TMH11-003	12.42	12.73	0.31	img	microgabbro	D	brown black	fmg	massive			chlorite alteration	mod str	albite alteration	wk mod										
Gowganda - Transition Metals	TMH11-003	12.73	13.99	1.26	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	small shear quartz vein with chlorite stringers		talc alteration	mod												
Gowganda - Transition Metals	TMH11-003	13.99	14	0.01	vin	Vein	L	cream	vfg	schistose		sheared	chlorite alteration	mod												
Gowganda - Transition Metals	TMH11-003	14	14.41	0.41	img	microgabbro	D	brown black	fmg	massive			chlorite alteration	mod str	albite alteration	wk mod										
Gowganda - Transition Metals	TMH11-003	14.41	14.47	0.07	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	monzodiorite dyke		talc alteration	wk mod												
Gowganda - Transition Metals	TMH11-003	14.47	14.54	0.07	gdr	Gdr diorite	M	grey black	fmg	massive	small quartz vein		chlorite alteration	mod												
Gowganda - Transition Metals	TMH11-003	14.54	14.55	0.02	vin	Vein	L	white	vfg	massive	protolith diffucut to determine																
Gowganda - Transition Metals	TMH11-003	14.55	15.05	0.50	mvu	Mvu metavolcanic general	M	pink fawn	fmg	massive	dyke?		bleached/bleaching	mod str	albite alteration	wk mod	chlorite alteration	mod					vqc	1	vqz	0.5
Gowganda - Transition Metals	TMH11-003	15.05	15.74	0.69	gdr	Gdr diorite	M	grey black	fg	massive	dyke		chlorite alteration	mod	albite alteration	wk										
Gowganda - Transition Metals	TMH11-003	15.74	16.07	0.33	gdl	Gdl dolerite	D	green brown	fmg	massive	dyke?, relationship unknown, contact broken/rubly		chlorite alteration	mod									vqc	2		
Gowganda - Transition Metals	TMH11-003	16.07	16.17	0.11	gdr	Gdr diorite	M	pink grey	fg	massive			chlorite alteration	mod	albite alteration	v wk										
Gowganda - Transition Metals	TMH11-003	16.17	17.71	1.54	img	microgabbro	D	red black	fg	massive			chlorite alteration	mod	albite alteration	v wk										
Gowganda - Transition Metals	TMH11-003	17.71	17.81	0.10	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			talc alteration	mod												
Gowganda - Transition Metals	TMH11-003	17.81	18.06	0.25	gdl	Gdl dolerite	D	red	fmg	massive			hematite alteration	str												
Gowganda - Transition Metals	TMH11-003	18.06	18.1	0.05	gdl	Gdl dolerite	D	green	fmg	massive			chlorite alteration	wk mod												

Gowganda - Transition Metals	TMH11-003	18.1	19.67	1.57	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			talc alteration	mod									vqc	0.5
Gowganda - Transition Metals	TMH11-003	19.67	19.99	0.32	gdl	Gdl dolerite	D	red brown	fmg	mottled texture			hematite alteration	mod str	chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH11-003	19.99	26.63	6.64	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			talc alteration	mod str										
Gowganda - Transition Metals	TMH11-003	26.63	27.4	0.77	img	microgabbro	M	orange brown	fg	massive		broken	albite alteration	mod str									vqc	0.25
Gowganda - Transition Metals	TMH11-003	27.4	27.7	0.31	vum	Vum ultramafic volcanic	L	green grey	vfg	schistose	not much core ledt to make much of	sheared	silica alteration	mod	fuchsite alteration	wk mod							vqz	7
Gowganda - Transition Metals	TMH11-003	27.7	27.82	0.13	img	microgabbro	M	orange brown	fg	massive		broken	albite alteration	wk mod										
Gowganda - Transition Metals	TMH11-003	27.82	28.12	0.31	img	microgabbro	M	orange brown	fg	massive			albite alteration	mod str	leucoxene alteration	mod								
Gowganda - Transition Metals	TMH11-003	28.12	28.24	0.12	img	microgabbro	M	orange brown	vfg	massive	relci protolith noticable		albite alteration	mod str										
Gowganda - Transition Metals	TMH11-003	28.24	28.85	0.62	img	microgabbro	M	orange brown	fmg	massive			albite alteration	mod	chlorite alteration	wk mod							vqz	0.25
Gowganda - Transition Metals	TMH11-003	28.85	29.82	0.97	img	microgabbro	M	orange brown	fg	massive			albite alteration	mod str									vqz	1.5
Gowganda - Transition Metals	TMH11-003	29.82	31.8	1.98	img	microgabbro	M	orange grey	fg	massive			albite alteration	wk mod	chlorite alteration	mod							vqc	0.5
Gowganda - Transition Metals	TMH11-003	31.8	34	2.20	img	microgabbro	M	orange brown	fg	massive	chlorite-fuchsite dyke		albite alteration	mod str	leucoxene alteration	mod							vqc	4
Gowganda - Transition Metals	TMH11-003	34	34.06	0.07	dyk	dyke	M	orange brown	fmg	massive		dyke												
Gowganda - Transition Metals	TMH11-003	34.06	34.35	0.29	img	microgabbro	M	orange brown	fg	massive	relic protolith		albite alteration	mod str	leucoxene alteration	mod								
Gowganda - Transition Metals	TMH11-003	34.35	34.57	0.22	img	microgabbro	M	orange brown	fg	massive			albite alteration	wk mod	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-003	34.57	34.61	0.04	img	microgabbro	M	orange brown	vfg	massive			albite alteration	mod	silica alteration	mod							vqc	25
Gowganda - Transition Metals	TMH11-003	34.61	34.64	0.04	img	microgabbro	M	grey black	fg	massive			chlorite alteration	wk mod									vqz	1
Gowganda - Transition Metals	TMH11-003	34.64	34.85	0.22	vum	Vum ultramafic volcanic	M	green	vfg	schistose		sheared	fuchsite alteration	mod str										
Gowganda - Transition Metals	TMH11-003	34.85	34.89	0.04	img	microgabbro	D	black red	fg	massive			leucoxene alteration	wk mod										
Gowganda - Transition Metals	TMH11-003	34.89	35.11	0.22	img	microgabbro	M	red brown	fg	massive	chlorite-fuchsite dyke		albite alteration	mod str	leucoxene alteration	mod								
Gowganda - Transition Metals	TMH11-003	35.11	35.53	0.43	dyk	dyke	M	orange brown	fmg	weakly foliated			albite alteration	mod str										
Gowganda - Transition Metals	TMH11-003	35.53	35.78	0.25	vvs	Vvs volcanosedimentary	M	brown red	fmg	clastic or as clasts	quartz vein and fuchsite shear		albite alteration	str	leucoxene alteration	mod str								
Gowganda - Transition Metals	TMH11-003	35.78	35.79	0.01	vum	Vum ultramafic volcanic	M	black green	vfg	schistose	altered gabbro dyke	sheared												
Gowganda - Transition Metals	TMH11-003	35.79	35.97	0.18	gdl	Gdl dolerite	M	orange fawn	fmg	massive			bleached/bleaching	wk mod	albite alteration	wk	chlorite alteration	v wk						
Gowganda - Transition Metals	TMH11-003	35.97	36.9	0.93	vvs	Vvs volcanosedimentary	D	orange fawn	fmg	clastic or as clasts	chlorite-fuchsite dyke		bleached/bleaching	mod	albite alteration	mod str	chlorite alteration	wk mod						
Gowganda - Transition Metals	TMH11-003	36.9	37.03	0.14	dyk	dyke	M	orange fawn	fmg	massive														
Gowganda - Transition Metals	TMH11-003	37.03	38.26	1.23	vvs	Vvs volcanosedimentary	M	orange brown	fmg	clastic or as clasts			bleached/bleaching	wk mod	albite alteration	mod str	chlorite alteration	wk					vqc	2
Gowganda - Transition Metals	TMH11-003	38.26	39.92	1.66	vvs	Vvs volcanosedimentary	M	orange grey	fmg	clastic or as clasts			albite alteration	wk mod	chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH11-003	39.92	40.1	0.18	mvu	Mvu metavolcanic general	M	grey black	vfg	schistose		sheared												
Gowganda - Transition Metals	TMH11-003	40.1	40.22	0.12	gdl	Gdl dolerite	L	fawn grey	fmg	weakly foliated			bleached/bleaching	mod										
Gowganda - Transition Metals	TMH11-003	40.22	40.37	0.15	gdl	Gdl dolerite	M	grey fawn	fg	massive	possible shear		bleached/bleaching	wk mod	chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH11-003	40.37	40.43	0.07	mvu	Mvu metavolcanic general	M	grey black	vfgfg	schistose		sheared	chlorite alteration	mod									vqz	0.25
Gowganda - Transition Metals	TMH11-003	40.43	40.5	0.08	img	microgabbro	M	grey fawn	fg	massive	chlorite-fuchsite dyke		chlorite alteration	mod	bleached/bleaching	wk mod								
Gowganda - Transition Metals	TMH11-003	40.5	40.53	0.04	dyk	dyke	M	green fawn	fmg	massive		dyke	chlorite alteration	wk mod										
Gowganda - Transition Metals	TMH11-003	40.53	41.08	0.55	img	microgabbro	D	red brown	fmg	massive	chlorite-fuchsite dyke		albite alteration	str									vqc	2.5
Gowganda - Transition Metals	TMH11-003	41.08	41.18	0.11	dyk	dyke	D	red brown	fmg	weakly foliated			albite alteration	mod str										
Gowganda - Transition Metals	TMH11-003	41.18	41.99	0.82	img	microgabbro	M	orange grey	fg	massive			bleached/bleaching	wk	albite alteration	wk							vqc	2.5
Gowganda - Transition Metals	TMH11-003	41.99	42.33	0.34	img	microgabbro	D	red brown	fg	massive	chlorite-fuchsite dyke		albite alteration	mod str	chlorite alteration	wk							vqc	1
Gowganda - Transition Metals	TMH11-003	42.33	42.46	0.14	dyk	dyke	M	red brown	fmg	massive			albite alteration											
Gowganda - Transition Metals	TMH11-003	42.46	42.68	0.22	mvu	Mvu metavolcanic general	M	red brown	fg	mottled texture		broken	albite alteration	mod str	chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH11-003	42.68	43.53	0.86	img	microgabbro	M	red brown	fg	massive	dyke or mafic intrusive (img). 1.5 to cm quartz-carbonate, chloritw veins near bottom		albite alteration	mod str	chlorite alteration	wk							vqc	2
Gowganda - Transition Metals	TMH11-003	43.53	45.7	2.17	gdl	Gdl dolerite	D	red grey	fmg	massive			albite alteration	wk mod	chlorite alteration	wk mod							vqc	3
Gowganda - Transition Metals	TMH11-003	45.7	45.84	0.15	img	microgabbro	D	red brown	fg	massive			albite alteration	wk mod									vqc	5
Gowganda - Transition Metals	TMH11-003	45.84	45.95	0.11	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			talc alteration	mod str									vqc	3
Gowganda - Transition Metals	TMH11-003	45.95	46.25	0.30	img	microgabbro	D	brown red	fg	massive	possible monzodiorite dyke		albite alteration	mod	chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH11-003	46.25	46.65	0.40	gdr	Gdr diorite	L	grey black	fg	massive	possible shear		chlorite alteration	wk mod										
Gowganda - Transition Metals	TMH11-003	46.54	46.65	0.11	vum	Vum ultramafic volcanic	D	green black	vfg	foliated		sheared	fuchsite alteration	wk mod	talc alteration	wk								
Gowganda - Transition Metals	TMH11-003	46.65	46.9	0.25	gdr	Gdr diorite	M	red brown	fmg	massive	shear with quartz vein		albite alteration	mod	chlorite alteration	wk							vqc	10
Gowganda - Transition Metals	TMH11-003	46.9	47	0.11	vum	Vum ultramafic volcanic	D	grey	vfg	schistose		sheared	talc alteration	wk									vqc	25
Gowganda - Transition Metals	TMH11-003	47	47.59	0.60	img	microgabbro	M	orange brown	fg	massive			bleached/bleaching	wk mod	albite alteration	mod	chlorite alteration	v wk					vqc	1
Gowganda - Transition Metals	TMH11-003	47.59	48.4	0.81	vum	Vum ultramafic volcanic	M	green black	vfg	schistose	dyke		fuchsite alteration	wk mod	talc alteration	mod							vqc	7
Gowganda - Transition Metals	TMH11-003	48.4	48.63	0.24	Gdl	Gdl dolerite	L	green grey	fmg	massive			bleached/bleaching	wk	chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH11-003	48.63	51.16	2.53	vum	Vum ultramafic volcanic	M	black green	vfg	schistose			talc alteration	mod	fuchsite alteration	wk							vqc	1
Gowganda - Transition Metals	TMH11-003	51.16	51.45	0.30	vum	Vum ultramafic volcanic	L	green black	vfg	schistose			fuchsite alteration	mod	talc alteration	mod								

Gowganda - Transition Metals	TMH11-003	51.45	52.7	1.25	vum	Vum ultramafic volcanic	M	black green	vfg	schistose							talc alteration	mod	fuchsite alteration	wk mod							vqc	3		
Gowganda - Transition Metals	TMH11-003	52.7	53.85	1.15	vum	Vum ultramafic volcanic	M	green	vfg	schistose	quartz						fuchsite alteration	mod	talc alteration	mod							vqc	3		
Gowganda - Transition Metals	TMH11-003	53.85	53.96	0.11	vin	Vein	L	white	vfg	schistose		sheared															vqc	100		
Gowganda - Transition Metals	TMH11-003	53.96	54.06	0.11	vum	Vum ultramafic volcanic	M	green	vfg	schistose							fuchsite alteration	mod	talc alteration	wk mod										
Gowganda - Transition Metals	TMH11-003	54.06	54.33	0.27	vum	Vum ultramafic volcanic	M	green	vfg	schistose							fuchsite alteration	mod	talc alteration	wk							vqc	1		
Gowganda - Transition Metals	TMH11-003	54.33	56.37	2.04	vum	Vum ultramafic volcanic	M	black	vfg	schistose							talc alteration	mod	fuchsite alteration	v wk							vqc	1		
Gowganda - Transition Metals	TMH11-003	56.37	56.7	0.34	vum	Vum ultramafic volcanic	M	green black	vfg	schistose							talc alteration	wk	fuchsite alteration	wk mod							vqc	1		
Gowganda - Transition Metals	TMH11-003	56.7	56.78	0.08	vin	Vein	L	white	vfg	schistose		sheared															vqc	100		
Gowganda - Transition Metals	TMH11-003	56.78	58	1.22	vum	Vum ultramafic volcanic	M	green	vfg	schistose							fuchsite alteration	mod	talc alteration	wk							vqc	1		
Gowganda - Transition Metals	TMH11-003	58	58.54	0.54	vin	Vein	L	white	vfg	schistose		sheared					fuchsite alteration	v wk									vqc	100		
Gowganda - Transition Metals	TMH11-003	58.54	58.73	0.19	vum	Vum ultramafic volcanic	M	green	vfg	schistose	first block						fuchsite alteration	mod	talc alteration	wk										
Gowganda - Transition Metals	TMH11-004	0	5	5.00	oou	Oou overburden general					massive to weakly foliated																			
Gowganda - Transition Metals	TMH11-004	5	7.75	2.75	vum	Vum ultramafic volcanic	D	grey black	vfgfg	weakly foliated							talc alteration	str									vqc	1		
Gowganda - Transition Metals	TMH11-004	7.75	7.87	0.12	gdl	Gdl dolerite	D	fawn	fmg	massive	massive to spinfex						chlorite alteration	wk	bleached/bleaching	mod str										
Gowganda - Transition Metals	TMH11-004	7.87	10.1	2.23	vum	Vum ultramafic volcanic	D	grey black	fmg	spinifex textured	bleached, weakly silica altered ultramafic (?)						talc alteration	str												
Gowganda - Transition Metals	TMH11-004	10.1	10.2	0.10	gdl	Gdl dolerite	M	grey fawn	fmg	massive							bleached/bleaching	mod str	chlorite alteration	wk							vqc	1		
Gowganda - Transition Metals	TMH11-004	10.2	11.05	0.86	vum	Vum ultramafic volcanic	D	blue black	fmg	massive	sheared vein in ultramafic (?)						talc alteration	str									vqc	1		
Gowganda - Transition Metals	TMH11-004	11.05	11.1	0.05	vin	Vein	D	white black	vfgfg	schistose	dyke?	sheared					talc alteration	str	chlorite alteration	wk										
Gowganda - Transition Metals	TMH11-004	11.1	11.18	0.09	gdl	Gdl dolerite	D	fawn brown	fmg	massive							bleached/bleaching	wk mod	chlorite alteration	wk										
Gowganda - Transition Metals	TMH11-004	11.18	11.25	0.08	vum	Vum ultramafic volcanic	D	black	vfgfg	massive	dyke?						talc alteration	str												
Gowganda - Transition Metals	TMH11-004	11.25	11.44	0.19	gdl	Gdl dolerite	D	brown fawn	fmg	massive							bleached/bleaching	wk mod	chlorite alteration	wk										
Gowganda - Transition Metals	TMH11-004	11.44	11.64	0.21	vum	Vum ultramafic volcanic	D	blue grey	fg	weakly foliated							talc alteration	mod str	chlorite alteration	wk							vqc	1		
Gowganda - Transition Metals	TMH11-004	11.64	11.86	0.22	gdl	Gdl dolerite	D	brown	fmg	massive							bleached/bleaching	wk	chlorite alteration	wk										
Gowganda - Transition Metals	TMH11-004	11.86	14.65	2.79	vum	Vum ultramafic volcanic	D	grey black	fmg	massive	sheared vein in ultramafic, Fe-carbonate >> quartz						talc alteration	str									vqc	1		
Gowganda - Transition Metals	TMH11-004	14.65	14.75	0.10	vin	Vein	L	fawn white	vfg	schistose		sheared					chlorite alteration	wk mod									vqc	95		
Gowganda - Transition Metals	TMH11-004	14.75	15.3	0.56	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	sheared vein in ultramafics, Quartz ~= Fe-carbonate						talc alteration	str												
Gowganda - Transition Metals	TMH11-004	15.3	15.37	0.07	vin	Vein	L	white fawn	vfg	schistose	massive to weakly foliated, spinfex texture, aboundant non-mineralized cross cutting quarz (minor carboante) veins.	sheared					chlorite alteration	wk									vqc	95		
Gowganda - Transition Metals	TMH11-004	15.37	22.4	7.03	vum	Vum ultramafic volcanic	D	grey black	vfg	spinifex textured	three, 2 to 2.5 quartz Fe-carboante veins in ultramafic						talc alteration										vqc	10		
Gowganda - Transition Metals	TMH11-004	22.4	22.54	0.15	vin	Vein	L	white fawn	vfg	heterogeneous							talc alteration	mod str									vqc	70		
Gowganda - Transition Metals	TMH11-004	22.54	22.92	0.39	vvs	Vvs volcanosedimentary	D	red brown	vfgfg	clastic or as clasts	dyke?						albite alteration	mod str	chlorite alteration	v wk							vqc	5		
Gowganda - Transition Metals	TMH11-004	22.92	23.32	0.40	gdl	Gdl dolerite	M	purple green	fmg	massive							chlorite alteration	wk mod	bleached/bleaching	wk mod										
Gowganda - Transition Metals	TMH11-004	23.32	24.15	0.83	mvu	Mvu metavolcanic general	D	red brown	fg	massive	quartz- fe-carboante vein						albite alteration	str	leucoxene alteration	wk mod	silica alteration	wk								
Gowganda - Transition Metals	TMH11-004	24.15	24.2	0.06	vin	Vein	L	white fawn	vfg	massive							chlorite alteration	wk									vqc	95		
Gowganda - Transition Metals	TMH11-004	24.2	24.29	0.09	mvu	Mvu metavolcanic general	M	grey fawn	fg	massive	dyke?						albite alteration	wk mod	bleached/bleaching	wk mod	chlorite alteration	v wk					vqc	0.5		
Gowganda - Transition Metals	TMH11-004	24.29	24.59	0.31	mvu	Mvu metavolcanic general	D	fawn black	fmg	massive	(one quartz clast -vvs ?)						chlorite alteration	mod	bleached/bleaching	wk										
Gowganda - Transition Metals	TMH11-004	24.59	25.45	0.86	mvu	Mvu metavolcanic general	D	red brown	fg	massive	chlorite-fuchsite dyke?						albite alteration	mod str	hematite alteration	wk	leucoxene alteration	wk								
Gowganda - Transition Metals	TMH11-004	25.45	26.5	1.05	dyk	dyke	D	brown green	fmg	massive	(same as/similar to 24.59 to 25.45 m)						hematite alteration	wk mod	chlorite alteration	wk mod							vqz	0.3		
Gowganda - Transition Metals	TMH11-004	26.5	26.75	0.25	mvu	Mvu metavolcanic general	D	brown red	fg	massive	quartz- fe-carboante vein						albite alteration	mod str	hematite alteration	wk							vqz	0.3		
Gowganda - Transition Metals	TMH11-004	26.75	26.78	0.04	vin	Vein	L	white fawn	vfg	massive	dyke?						chlorite alteration	wk									vqc	90		
Gowganda - Transition Metals	TMH11-004	26.78	27	0.22	mvu	Mvu metavolcanic general	D	brown green	fmg	massive	quartz- fe-carboante vein						chlorite alteration	wk mod	bleached/bleaching	wk										
Gowganda - Transition Metals	TMH11-004	27	27.06	0.06	vin	Vein	L	white fawn	vfg	massive							chlorite alteration	wk mod									vqc	90		
Gowganda - Transition Metals	TMH11-004	27.06	28	0.95	vvs	Vvs volcanosedimentary	M	fawn	fg	clastic or as clasts							bleached/bleaching	mod	chlorite alteration	wk							vqc	0.3	vst	0.5
Gowganda - Transition Metals	TMH11-004	28	28.85	0.86	mvu	Mvu metavolcanic general	D	brown black	vfgfg	massive							chlorite alteration	mod	bleached/bleaching	mod str										
Gowganda - Transition Metals	TMH11-004	28.85	29.3	0.45	mvu	Mvu metavolcanic general	D	brown red	fg	massive							albite alteration	str	chlorite alteration	wk mod	leucoxene alteration	mod str								
Gowganda - Transition Metals	TMH11-004	29.3	29.65	0.35	gdl	Gdl dolerite	D	brown black	fmg	massive							hematite alteration	mod str	chlorite alteration	mod str										
Gowganda - Transition Metals	TMH11-004	29.65	30.73	1.08	mvu	Mvu metavolcanic general	D	black brown	vfgfg	massive	might be a dyke or at the bottom of the interval but difficult to tell with broken core in box						albite alteration	str	chlorite alteration	wk mod	leucoxene alteration	wk					vqc	2		
Gowganda - Transition Metals	TMH11-004	30.73	32.59	1.86	mvu	Mvu metavolcanic general	M	fawn	fg	massive	shear (?)						bleached/bleaching	mod str	albite alteration	wk mod	chlorite alteration	wk					vqz	0.5		
Gowganda - Transition Metals	TMH11-004	32.59	33.29	0.70	vum	Vum ultramafic volcanic	D	green black	vfg	schistose		sheared					fuchsite alteration	wk												
Gowganda - Transition Metals	TMH11-004	33.29	33.65	0.36	mvu	Mvu metavolcanic general	D	red brown	fg	massive							albite alteration	str	leucoxene alteration	mod	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-004	33.65	34.55	0.90	img	microgabbro	M	grey	fg	massive							bleached/bleaching	wk	sericite alteration	wk										
Gowganda - Transition Metals	TMH11-004	34.55	34.85	0.31	mvu	Mvu metavolcanic general	D	red brown	fg	massive							hematite alteration	wk mod									vqc	1		
Gowganda - Transition Metals	TMH11-004	34.85	36.13	1.28	img	microgabbro	M	grey	fg	massive							bleached/bleaching	wk	chlorite alteration	wk							vqc	2.5		
Gowganda - Transition Metals	TMH11-004	36.13	36.47	0.34	gdl	Gdl dolerite	D	brown green	fmg	massive							hematite alteration	wk	chlorite alteration	mod							vqc	1		
Gowganda - Transition Metals	TMH11-004	36.47	36.53	0.07	vin	Vein	D	orange black	vfg	schistose		sheared					chlorite alteration	mod str									vqc	30		

Gowganda - Transition Metals	TMH11-004	36.53	39.65	3.12	mvu	Mvu metavolcanic general	D	red brown	fg	massive	likely fine-grained intrusive		hematite alteration	mod	chlorite alteration	mod				vqc	4
Gowganda - Transition Metals	TMH11-004	39.65	39.7	0.06	mvu	Mvu metavolcanic general	D	green grey	fg	schistose	dyke?		chlorite alteration	mod						vqc	15
Gowganda - Transition Metals	TMH11-004	39.7	40.12	0.42	gdl	Gdl dolerite	D	brown green	fmg	massive			hematite alteration	mod	chlorite alteration	mod				vqz	1
Gowganda - Transition Metals	TMH11-004	40.12	40.14	0.03	vin	Vein	L	white fawn	vfg	massive	likely vvm		chlorite alteration	v wk						vqc	98
Gowganda - Transition Metals	TMH11-004	40.14	40.38	0.25	mvu	Mvu metavolcanic general	D	red brown	fg	weakly foliated			hematite alteration	mod	chlorite alteration	wk				vqc	4
Gowganda - Transition Metals	TMH11-004	40.38	40.48	0.10	vin	Vein	M	white fawn	vfg	schistose	massive becoming weakly foliated becoming schistose	sheared	albite alteration	wk	chlorite alteration	wk				vqc	50
Gowganda - Transition Metals	TMH11-004	40.48	41.8	1.32	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	towards dyke contact dyke?		talc alteration	mod						vqc	1
Gowganda - Transition Metals	TMH11-004	41.8	42.18	0.39	gdl	Gdl dolerite	D	grey black	fmg	massive			silica alteration	wk mod	chlorite alteration	wk					
Gowganda - Transition Metals	TMH11-004	42.18	42.8	0.62	vum	Vum ultramafic volcanic	D	grey black	vfg	foliated	dyke?	sheared	talc alteration	mod							
Gowganda - Transition Metals	TMH11-004	42.8	42.91	0.11	gdl	Gdl dolerite	D	grey black	fmg	massive			silica alteration	wk mod	chlorite alteration	wk mod					
Gowganda - Transition Metals	TMH11-004	42.91	43.22	0.32	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		sheared	talc alteration	mod							
Gowganda - Transition Metals	TMH11-004	43.22	44.74	1.52	mvu	Mvu metavolcanic general	D	red brown	vfgfg	massive	chlorite fuchsite dyke		albite alteration	mod str	chlorite alteration	wk	leucoxene alteration	wk		vqc	2
Gowganda - Transition Metals	TMH11-004	44.74	44.76	0.02	dyk	dyke	M	green fawn	fmg	massive	poss. lmg?		chlorite alteration	wk mod	bleached/blea ching	wk mod					
Gowganda - Transition Metals	TMH11-004	44.76	46.42	1.66	mvu	Mvu metavolcanic general	D	green brown	fg	massive			albite alteration	mod str	chlorite alteration	wk	silica alteration	wk		vqc	3
Gowganda - Transition Metals	TMH11-004	46.42	46.75	0.33	dyk	dyke	M	green fawn	fmg	massive			bleached/blea ching	mod	chlorite alteration	wk mod				vqc	0.25
Gowganda - Transition Metals	TMH11-004	46.75	47.07	0.32	mvu	Mvu metavolcanic general	M	green brown	vfgfg	mottled texture			chlorite alteration	wk mod	albite alteration	mod				vqc	5
Gowganda - Transition Metals	TMH11-004	47.07	47.16	0.09	dyk	dyke	M	green brown	fmg	massive			chlorite alteration	wk mod	albite alteration	mod					
Gowganda - Transition Metals	TMH11-004	47.16	47.39	0.24	mvu	Mvu metavolcanic general	D	red brown	fg	massive			albite alteration	mod str	leucoxene alteration	mod	chlorite alteration	wk		vqc	5
Gowganda - Transition Metals	TMH11-004	47.39	47.6	0.22	dyk	dyke	D	green brown	fmg	massive			albite alteration	mod	chlorite alteration	wk mod				vqc	10
Gowganda - Transition Metals	TMH11-004	47.6	47.75	0.15	mvu	Mvu metavolcanic general	D	red brown	fg	massive			albite alteration	str	leucoxene alteration	wk mod	chlorite alteration	wk		vqc	1
Gowganda - Transition Metals	TMH11-004	47.75	48.5	0.75	mvu	Mvu metavolcanic general	D	orange brown	vfgfg	massive	intrusive ?		albite alteration	mod str	leucoxene alteration	v wk	chlorite alteration	v wk		vqc	2
Gowganda - Transition Metals	TMH11-004	48.5	48.9	0.40	mvu	Mvu metavolcanic general	D	grey red	vfgfg	massive	same as 49.05 to 49.15 and 49.6 to 50 m		albite alteration	mod str	chlorite alteration	wk mod				vqz	0.5
Gowganda - Transition Metals	TMH11-004	48.9	49.05	0.15	mvu	Mvu metavolcanic general	M	grey fawn	vfgfg	weakly foliated	weird dyke?		albite alteration	wk	chlorite alteration	wk					
Gowganda - Transition Metals	TMH11-004	49.05	49.15	0.11	mvu	Mvu metavolcanic general	M	brown red	vfgfg	massive			albite alteration	mod str	leucoxene alteration	wk mod	chlorite alteration	wk			
Gowganda - Transition Metals	TMH11-004	49.15	49.3	0.15	mvu	Mvu metavolcanic general	M	grey fawn	vfgfg	weakly foliated	massive to weakly foliated chlorite-fuchsite dyke		albite alteration	wk	chlorite alteration	wk				vqc	0.5
Gowganda - Transition Metals	TMH11-004	49.3	49.6	0.31	dyk	dyke	M	green grey	fmg	weakly foliated			chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-004	49.6	50	0.40	mvu	Mvu metavolcanic general	M	grey fawn	vfgfg	massive	some clasts may be vvs, same as 49.05 to 49.15 and 49.15 to 49.3 m		albite alteration	wk	chlorite alteration	wk				vqc	10
Gowganda - Transition Metals	TMH11-004	50	50.1	0.11	vum	Vum ultramafic volcanic	M	black	vfg	schistose	likely mafic intrusive (img)		talc alteration	str							
Gowganda - Transition Metals	TMH11-004	50.1	50.55	0.45	mvu	Mvu metavolcanic general	M	orange red	fg	massive	like monzogabbro		albite alteration	mod	chlorite alteration	wk	leucoxene alteration	wk		vqc	1
Gowganda - Transition Metals	TMH11-004	50.55	50.78	0.24	mvu	Mvu metavolcanic general	M	grey orange	fg	massive			bleached/blea ching	wk mod	chlorite alteration	wk mod					
Gowganda - Transition Metals	TMH11-004	50.78	51.1	0.32	mvu	Mvu metavolcanic general	M	orange red	vfgfg	massive			albite alteration	mod str	leucoxene alteration	mod	chlorite alteration	wk		vqc	10
Gowganda - Transition Metals	TMH11-004	51.1	51.35	0.25	vum	Vum ultramafic volcanic	M	black	vfg	schistose			talc alteration	mod							
Gowganda - Transition Metals	TMH11-004	51.35	51.39	0.04	mvu	Mvu metavolcanic general	M	orange brown	fg	massive	likely chlortie fuchsite dyke		albite alteration	mod	chlorite alteration	wk					
Gowganda - Transition Metals	TMH11-004	51.39	51.5	0.11	dyk	dyke	M	orange grey	fmg	massive			chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-004	51.5	51.61	0.11	mvu	Mvu metavolcanic general	M	orange brown	fg	weakly foliated	likely intrusive mafic volcanic		albite alteration	mod str	chlorite alteration	wk					
Gowganda - Transition Metals	TMH11-004	51.1	52	0.90	mvu	Mvu metavolcanic general	M	fawn green	fg	massive	likely intrusive mafic volcanic, likely an addition interval or two but to broken		chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-004	52	52.35	0.36	mvu	Mvu metavolcanic general	M	red brown	fg	massive			albite alteration	mod	chlorite alteration	wk					
Gowganda - Transition Metals	TMH11-004	52.35	52.5	0.15	mvu	Mvu metavolcanic general	M	orange brown	fg	massive	chlorite-fuchsite dyke		albite alteration	mod str	chlorite alteration	wk	leucoxene alteration	wk		vqc	3
Gowganda - Transition Metals	TMH11-006	52.5	52.68	0.18	dyk	dyke	M	fawn green	fmg	massive			chlorite alteration	wk mod						vqc	7.5
Gowganda - Transition Metals	TMH11-005	52.68	53.63	0.96	vvs	Vvs volcanosedimentary	M	grey	fg	clastic or as clasts			albite alteration	wk mod	chlorite alteration	wk				vqc	1
Gowganda - Transition Metals	TMH11-004	53.63	53.75	0.12	mvu	Mvu metavolcanic general	M	fawn grey	fg	massive			albite alteration	mod str	chlorite alteration	wk mod					
Gowganda - Transition Metals	TMH11-003	53.75	54.45	0.71	mvu	Mvu metavolcanic general	D	orange brown	fmg	massive	mafic intrusive or mafic dyke maybe some cfdyke		albite alteration	mod	chlorite alteration	mod				vqc	2
Gowganda - Transition Metals	TMH11-002	54.45	56	1.55	mvu	Mvu metavolcanic general	D	red brown	fmg	massive			hematite alteration	mod str	chlorite alteration	wk mod				vqc	3
Gowganda - Transition Metals	TMH11-001	56	56.12	0.12	mvu	Mvu metavolcanic general	D	red brown	fg	massive	likely intrusive mafic volcanic		hematite alteration	mod str							
Gowganda - Transition Metals	TMH11-000	56.12	56.2	0.09	mvu	Mvu metavolcanic general	D	red black	fmg	massive			hematite alteration	wk	chlorite alteration	mod					
Gowganda - Transition Metals	TMH11-001	56.2	56.4	0.20	mvu	Mvu metavolcanic general	D	red brown	fg	massive	chlorite-fuchsite dyke		hematite alteration	wk mod	chlorite alteration	wk mod					
Gowganda - Transition Metals	TMH11-002	56.4	56.53	0.14	dyk	dyke	D	brown green	fmg	massive			hematite alteration	mod	chlorite alteration	mod					
Gowganda - Transition Metals	TMH11-003	56.53	56.6	0.08	vin	Vein	L	fawn white	vfg	schistose			chlorite alteration	wk						vqc	95
Gowganda - Transition Metals	TMH11-004	56.6	65.08	8.48	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			talc alteration	mod str						vqc	2.5
Gowganda - Transition Metals	TMH11-004	65.08	65.17	0.10	mvu	Mvu metavolcanic general	D	red brown	fg	massive			hematite alteration	mod str	leucoxene alteration	wk mod					
Gowganda - Transition Metals	TMH11-004	65.17	66.12	0.96	vvs	Vvs volcanosedimentary	M	brown grey	fg	clastic or as clasts			albite alteration	wk	chlorite alteration	wk mod	fuchsite alteration	wk		vqc	6
Gowganda - Transition Metals	TMH11-004	66.12	77.95	11.83	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			talc alteration	str						vqc	0.5
Gowganda - Transition Metals	TMH11-004	77.95	80.82	2.87	vum	Vum ultramafic volcanic	M	fawn grey	vfg	schistose		sheared	silica alteration	v str	bleached/blea ching	wk mod	talc alteration	wk		vqc	5
Gowganda - Transition Metals	TMH11-004	80.82	81.22	0.41	vum	Vum ultramafic volcanic	D	black	vfg	massive			talc alteration	str							

Gowganda - Transition Metals	TMH11-004	81.22	82.5	1.28	vum	Vum ultramafic volcanic	M	grey fawn	fmg	massive							silica alteration	str	chlorite alteration	wk mod				vqc	3						
Gowganda - Transition Metals	TMH11-004	82.5	82.67	0.18	vum	Vum ultramafic volcanic	D	brown black	vfg	massive							talc alteration	str	bleached/bleaching	wk mod											
Gowganda - Transition Metals	TMH11-004	82.67	82.77	0.10	vum	Vum ultramafic volcanic	M	fawn	vfg	massive							silica alteration	str	bleached/bleaching	mod str				vqc	10						
Gowganda - Transition Metals	TMH11-004	82.77	82.84	0.08	vum	Vum ultramafic volcanic	D	black	vfg	massive							talc alteration	str													
Gowganda - Transition Metals	TMH11-004	82.84	83	0.16	vum	Vum ultramafic volcanic	D	fawn	vfg	massive							silica alteration	str	bleached/bleaching	mod str											
Gowganda - Transition Metals	TMH11-004	83	83.07	0.07	vum	Vum ultramafic volcanic	D	black	vfg	massive							talc alteration	str													
Gowganda - Transition Metals	TMH11-004	83.07	83.24	0.18	vin	Vein	L	fawn white	vfg	schistose							chlorite alteration	wk						vqc	95						
Gowganda - Transition Metals	TMH11-004	83.24	83.5	0.27	vum	Vum ultramafic volcanic	M	fawn	vfg	massive							silica alteration	str	bleached/bleaching	mod											
Gowganda - Transition Metals	TMH11-004	83.5	83.8	0.30	vin	Vein	L	white	vfg	massive														vqz	98						
Gowganda - Transition Metals	TMH11-004	83.8	84.85	1.05	vum	Vum ultramafic volcanic	D	fawn black	vfg	schistose		sheared					talc alteration	mod	silica alteration	wk mod				vqc	70						
Gowganda - Transition Metals	TMH11-004	84.85	86.75	1.91	vum	Vum ultramafic volcanic	D	black	vfg	massive							silica alteration	v str													
Gowganda - Transition Metals	TMH11-006	0	3.15	3.15	oou	Oou overburden general																									
Gowganda - Transition Metals	TMH11-006	3.15	3.85	0.70	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	img to gdl, fine grained, massive, equigarnaular, alteration makes it appear fine- to medium-grained		12	23	talc alteration	wk	chlorite alteration	wk mod													
Gowganda - Transition Metals	TMH11-006	3.85	6.35	2.50	img	microgabbro	D	red brown	fg	massive	massive to weakly foliated		2	12	hematite alteration	mod str	chlorite alteration	wk mod				vqc	2								
Gowganda - Transition Metals	TMH11-006	6.35	10.2	3.85	vum	Vum ultramafic volcanic	D	grey black	vfg	massive			12	13	talc alteration	wk	chlorite alteration	wk mod				vqc	0.5								
Gowganda - Transition Metals	TMH11-006	10.2	14.65	4.45	vvm	Vvm mafic volcanic	D	red brown	fg	clastic or as clasts	likley cf-dyke, hematite stained difficult to tell for sure		34	12	hematite alteration	str	chlorite alteration	wk mod	biotite alteration	mod		vqc	7								
Gowganda - Transition Metals	TMH11-006	14.65	14.9	0.25	cfd	chlorite-fuchsite dyke	D	green brown	fmg	massive	alteration halo(?)		23	12	chlorite alteration	wk mod	hematite alteration	wk mod													
Gowganda - Transition Metals	TMH11-006	14.9	15.15	0.25	vvm	Vvm mafic volcanic	D	red brown	fmg	mottled texture	some kind of dyke?, broken and rubble diffucut to determine what it is		23	12	hematite alteration	str	chlorite alteration	wk mod													
Gowganda - Transition Metals	TMH11-006	15.15	15.57	0.42	gdl	Gdl dolerite	D	green brown	fmg	massive	alteration halo(?), smilar to 14.9 to 15.15 m		23	12	chlorite alteration	str	hematite alteration	wk mod													
Gowganda - Transition Metals	TMH11-006	15.57	15.64	0.08	vvm	Vvm mafic volcanic	D	red brown	fmg	mottled texture	dark rusty red, with angular 1 to 5 mm biotite grains, as well as, 1cm-scale chlorite altered (elongate) 'clasts', locally weakly magentic		23	12	hematite alteration	str	chlorite alteration	wk mod													
Gowganda - Transition Metals	TMH11-006	15.65	21.19	5.54	vvm	Vvm mafic volcanic	D	red brown	fmg	clastic or as clasts	likely cf-dyke		34	12	hematite alteration	str	chlorite alteration	wk mod	biotite alteration	mod		vqc	7								
Gowganda - Transition Metals	TMH11-006	21.19	21.23	0.04	cfd	chlorite-fuchsite dyke	D	green brown	fmg	massive	same as 15.65 to 21.19 m		23	12	chlorite alteration	wk mod															
Gowganda - Transition Metals	TMH11-006	21.23	21.43	0.20	vvm	Vvm mafic volcanic	D	red brown	fmg	clastic or as clasts			34	12	hematite alteration	str	chlorite alteration	wk mod	biotite alteration	mod		vqc	1								
Gowganda - Transition Metals	TMH11-006	21.43	22.4	0.97	img	microgabbro	D	red brown	fg	massive	likely cf-dyke but difficut to tell for sure..		34	12	hematite alteration	str	chlorite alteration	wk mod	sericite alteration	wk mod		vqc	0.5								
Gowganda - Transition Metals	TMH11-006	22.4	23.19	0.80	cfd	chlorite-fuchsite dyke	D	green brown	fmg	massive	same as 15.65 to 21.19 m		34	12	hematite alteration	str	chlorite alteration	mod				vst	1								
Gowganda - Transition Metals	TMH11-006	23.19	23.34	0.15	vvm	Vvm mafic volcanic	D	red brown	fmg	massive	similar to 15.65 to 21.19 and 21.23 to 21.43		34	12	hematite alteration	str	chlorite alteration	wk	biotite alteration	mod		vqc	1.5								
Gowganda - Transition Metals	TMH11-006	23.34	24.95	1.61	vvm	Vvm mafic volcanic	D	red brown	fmg	clastic or as clasts	mafic to ultramafic, difficult to know for sure. very weakly foliated-ish maybe...		34	12	hematite alteration	str	chlorite alteration	wk mod				vqc	1.5								
Gowganda - Transition Metals	TMH11-006	24.95	25.6	0.66	vum	Vum ultramafic volcanic	M	grey black	vfg	massive			2	2	chlorite alteration	wk mod	talc alteration	wk mod													
Gowganda - Transition Metals	TMH11-006	25.6	26	0.40	img	microgabbro	D	green brown	vfgfg	massive	similar to 15.65 to 21.19 but lacking the biotite grains and with very rare clasts; moderatly magnetic		23	1	chlorite alteration	mod str	hematite alteration	mod str													
Gowganda - Transition Metals	TMH11-006	26	28.7	2.70	vvm	Vvm mafic volcanic	D	red brown	vfgfg	massive			34	1	hematite alteration	str	chlorite alteration	wk	biotite alteration	wk		vqc	1.5								
Gowganda - Transition Metals	TMH11-006	28.7	30.8	2.10	vum	Vum ultramafic volcanic	D	green black	vfg	schistose	minor relic protolith		23	34	chlorite alteration	mod	talc alteration	v wk													
Gowganda - Transition Metals	TMH11-006	30.8	33.25	2.45	mvu	Mvu metavolcanic general	M	red fawn	vfgfg	massive	lower 15 cm, near contact is mottled		3	12	hematite alteration	mod str	chlorite alteration	wk mod				vqc	5								
Gowganda - Transition Metals	TMH11-006	33.25	33.95	0.71	mvu	Mvu metavolcanic general	M	fawn	vfgfg	massive	grade green to black		3	12	hematite alteration	wk mod	chlorite alteration	wk mod													
Gowganda - Transition Metals	TMH11-006	33.95	34.05	0.10	vum	Vum ultramafic volcanic	D	green black	vfg	schistose	I think it's the same unit as between 33.25 and 33.95	sheared	3	3	fuchsite alteration	mod	chlorite alteration	wk				vqz	3								
Gowganda - Transition Metals	TMH11-006	34.05	34.47	0.43	mvu	Mvu metavolcanic general	M	fawn	vfgfg	massive	cf-dyke, with quartz-carb extensional vein running down centre and alteration rims on the sides of the dyke		3	12	bleached/bleaching	mod str						vqc	5								
Gowganda - Transition Metals	TMH11-006	34.47	34.59	0.13	cfd	chlorite-fuchsite dyke	D	fawn	fmg	massive	I think it's the same unit as between 33.25 and 33.95 aand 34.05 and 34.47 m		12	12	chlorite alteration	wk mod	fuchsite alteration	wk				vqc	15								
Gowganda - Transition Metals	TMH11-006	34.59	34.8	0.21	mvu	Mvu metavolcanic general	M	fawn	vfgfg	massive	likley img...		3	12	bleached/bleaching	wk mod	chlorite alteration	wk				vqc	3.5								
Gowganda - Transition Metals	TMH11-006	34.8	36.3	1.50	mvu	Mvu metavolcanic general	M	red brown	vfgfg	massive			23	12	hematite alteration	mod str	chlorite alteration	wk mod				vqc	2								
Gowganda - Transition Metals	TMH11-006	36.3	38	1.70	mvu	Mvu metavolcanic general	L	orange fawn	vfgfg	massive			3	12	bleached/bleaching	mod str	chlorite alteration	wk				vqc	3	vqcc	4						
Gowganda - Transition Metals	TMH11-006	38	38.6	0.61	mvu	Mvu metavolcanic general	M	purple black	fmg	massive			23	12	chlorite alteration	wk mod	hematite alteration	wk mod				vqc	0.5								
Gowganda - Transition Metals	TMH11-006	38.6	39.52	0.93	mvu	Mvu metavolcanic general	M	orange fawn	fg	massive			3	12	bleached/bleaching	mod str	hematite alteration	wk mod	chlorite alteration	wk		vqc	4								
Gowganda - Transition Metals	TMH11-006	39.52	39.92	0.40	mvu	Mvu metavolcanic general	M	khaki fawn	fg	massive	very rare quartz 'eyes'		34	12	bleached/bleaching	mod str	fuchsite alteration	wk	chlorite alteration	wk		vqz	0.5								
Gowganda - Transition Metals	TMH11-006	39.92	42.15	2.23	mvu	Mvu metavolcanic general	L	orange purple	fg	massive			3	12	hematite alteration	wk mod	chlorite alteration	wk				vqc	3	vst	1						
Gowganda - Transition Metals	TMH11-006	42.15	44	1.85	mvu	Mvu metavolcanic general	M	green purple	fg	massive			23	12	hematite alteration	wk	chlorite alteration	wk mod				vqc	1	vst	1.5						
Gowganda - Transition Metals	TMH11-006	44	45.15	1.15	mvu	Mvu metavolcanic general	M	green fawn	fg	massive	rare granual sized cholrite altered grains and trace quartz eyes		3	12	bleached/bleaching	mod str	chlorite alteration	wk mod	hematite alteration	wk		vqc	1	vst	1.5						
Gowganda - Transition Metals	TMH11-006	45.15	49.72	4.57	mvu	Mvu metavolcanic general	D	red purple	vfgfg	massive	mafic granual to pebblic, angular to sub-rounded chlorite altered grains and rounded granual felsic, feldspar and quartz grains.		3	12	hematite alteration	mod str	chlorite alteration	wk mod				vqc	0.5	vst	1.5						
Gowganda - Transition Metals	TMH11-006	49.72	60.1	10.38	vvs	Vvs volcanosedimentary	M	fawn grey	fg	clastic or as clasts	mica-rich; sericite or is it leucoxene? what TM called		12	12	bleached/bleaching	mod str	chlorite alteration	wk mod	hematite alteration	wk		vqc	2.5	vst	1						
Gowganda - Transition Metals	TMH11-006	60.1	64.8	4.70	vvm	fawn	M	fawn	fg	micaceous	micacious syenite (?)		4	12	sericite alteration	v str						vqc	2								
Gowganda - Transition Metals	TMH11-006	64.8	65	0.21	cfd	chlorite-fuchsite dyke	M	green fawn	fmg	massive	weakly to moderately altered fine-grained intrusive (microgabbro, monzodiorite...), micacious		12	12	chlorite alteration	wk mod	fuchsite alteration	wk													
Gowganda - Transition Metals	TMH11-006	65	68.5	3.50	img	microgabbro	M	green fawn	fg	micaceous			234	12	leucoxene alteration	wk mod	chlorite alteration	wk mod	hematite alteration	wk mod		vqc	3								
Gowganda - Transition Metals	TMH11-006	68.5	68.85	0.35	img	microgabbro	M	fawn green	fg	massive			23	12	chlorite alteration	mod	hematite alteration	wk	sericite alteration	wk											
Gowganda - Transition Metals	TMH11-006	68.85	68.89	0.05	cfd	chlorite-fuchsite dyke	D	green	fmg	massive	weakly to moderately micacious		12	12	chlorite alteration	wk mod	fuchsite alteration	v wk													
Gowganda - Transition Metals	TMH11-006	68.89	71	2.11	img	microgabbro	M	pink green	fg	massive			2	12	chlorite alteration	wk mod	hematite alteration	wk mod	leucoxene alteration	wk mod		vqc	1								
Gowganda - Transition Metals	TMH11-006	71	73	2.00	img	microgabbro	M	khaki yellow	fg	micaceous			23	12	leucoxene alteration	mod str	chlorite alteration	wk mod	hematite alteration	v wk		vqc	1	vqz	1						

Gowganda - Transition Metals	TMH11-006	73	74.5	1.50	img	microgabbro	D	red green	vfgfg	massive	sharp lower contact	23	12	chlorite alteration	mod	hematite alteration	wk mod	sericite alteration	v wk	vst	0.5										
Gowganda - Transition Metals	TMH11-006	74.5	77	2.50	img	microgabbro	D	fawn green	vfgfg	massive	sharp lower contact	12	12	bleached/bleaching	wk	chlorite alteration	mod	hematite alteration	wk	vqc	0.75										
Gowganda - Transition Metals	TMH11-006	77	78.2	1.20	img	microgabbro	M	pink red	vfgfg	massive		3	12	hematite alteration	mod str	chlorite alteration	wk mod			vqc	1.5	vst	0.5								
Gowganda - Transition Metals	TMH11-006	78.2	78.5	0.30	img	microgabbro	D	fawn green	fg	massive	sharp lower contact	3	12	bleached/bleaching	wk	chlorite alteration	mod			vst	0.25										
Gowganda - Transition Metals	TMH11-006	78.5	79	0.50	img	microgabbro	D	purple black	vfgfg	mottled texture		23	12	chlorite alteration	mod	hematite alteration	wk			vst	0.25										
Gowganda - Transition Metals	TMH11-006	79	79.95	0.96	img	microgabbro	M	brown red	fg	massive		3	12	chlorite alteration	mod	hematite alteration	mod str														
Gowganda - Transition Metals	TMH11-006	79.95	81.3	1.35	img	microgabbro	D	fawn green	fg	massive		23	12	bleached/bleaching	wk	chlorite alteration	mod	hematite alteration	wk mod	vst	0.5										
Gowganda - Transition Metals	TMH11-006	81.3	82.6	1.30	img	microgabbro	D	red brown	fg	mottled texture		34	12	hematite alteration	str	chlorite alteration	wk mod			vqc	1										
Gowganda - Transition Metals	TMH11-006	82.6	82.8	0.21	img	microgabbro	M	orange fawn	vfgfg	massive	same as clastic intervals at top, just with chlorite altered	3	12	bleached/bleaching	mod	hematite alteration	wk	chlorite alteration	wk mod	vqc	2.5										
Gowganda - Transition Metals	TMH11-006	82.8	83.8	1.00	img	microgabbro	M	purple black	fg	clastic or as clasts	grians over biotite	23	12	chlorite alteration	mod	chlorite alteration	wk mod			vqc	4										
Gowganda - Transition Metals	TMH11-006	83.8	84.1	0.30	mvu	Mvu metavolcanic general	M	red	vfg	massive		34	12	silica alteration	wk	hematite alteration	wk mod			vqc	3										
Gowganda - Transition Metals	TMH11-006	84.1	88.2	4.11	img	microgabbro	D	red purple	fg	clastic or as clasts	same as 82.8 to 83.8 m, chlorite altered, elongate granual to pebble-sized grains	23	12	chlorite alteration	mod	hematite alteration	mod			vqc	4										
Gowganda - Transition Metals	TMH11-006	88.2	89.95	1.75	mvu	Mvu metavolcanic general	D	green red	fg	massive	weakly mottled texture, rare chlorite altered grains	2	12	chlorite alteration	mod str	hematite alteration	wk mod			vqc	4										
Gowganda - Transition Metals	TMH11-006	89.95	91.8	1.85	mvu	Mvu metavolcanic general	D	brown red	vfg	massive	rare chlorite altered granual sized angular grains and trace rounded quartz grains	3	1	albite alteration	str	chlorite alteration	wk mod	leucoxene alteration	mod str	vqc	2.5										
Gowganda - Transition Metals	TMH11-006	91.8	94.5	2.70	mvu	Mvu metavolcanic general	M	fawn	vfgfg	massive	abundant flecks of tabular chlorite and fuschite micas	2	2	fuchsite alteration	wk mod	chlorite alteration	wk mod	bleached/bleaching	wk mod	vqc	1										
Gowganda - Transition Metals	TMH11-006	94.5	96.5	2.00	mvu	Mvu metavolcanic general	M	orange red	vfgfg	massive	rare, granular sized chlorite altered grains	3	1	albite alteration	mod str	leucoxene alteration	wk	chlorite alteration	wk	vqc	2.5										
Gowganda - Transition Metals	TMH11-006	96.5	96.8	0.30	vum	Vum ultramafic volcanic	M	green	vfg	massive		3	2	fuchsite alteration	mod str					vqz	45										
Gowganda - Transition Metals	TMH11-006	96.8	97.1	0.30	vum	Vum ultramafic volcanic	L	green fawn	fg	massive	slighly more chlorite rich then interval below tuff(?)	23	12	chlorite alteration	mod str	fuchsite alteration	mod			vqz	1										
Gowganda - Transition Metals	TMH11-006	97.1	97.9	0.81	vum	Vum ultramafic volcanic	L	fawn	vfgfg	massive		23	12	bleached/bleaching	mod	chlorite alteration	wk	leucoxene alteration	wk	vqz	1.5										
Gowganda - Transition Metals	TMH11-006	97.9	99	1.10	mvu	Mvu metavolcanic general	M	fawn	vfgfg	mottled texture		23	1	albite alteration	wk mod	chlorite alteration	wk mod			vqc	1										
Gowganda - Transition Metals	TMH11-006	99	99.35	0.35	vum	Vum ultramafic volcanic	M	green	vfg	massive	clasts: granual- to pebble-sized, chlorite altered, rare rounded quartz grains/clasts. Weakly magnetic	3	2	fuchsite alteration	mod str																
Gowganda - Transition Metals	TMH11-006	99.35	107.5	8.16	img	microgabbro	D	red brown	fg	clastic or as clasts		3	12	hematite alteration	mod str	chlorite alteration	wk mod	leucoxene alteration	wk mod	vqc	3										
Gowganda - Transition Metals	TMH11-006	107.5	107.65	0.16	vum	Vum ultramafic volcanic	M	green	vfg	massive	slightly more chlorite alteration than unit below, a bit more chlorite stringers and quartz veinlets	34	2	fuchsite alteration	mod str																
Gowganda - Transition Metals	TMH11-006	107.65	108.1	0.45	mvu	Mvu metavolcanic general	M	fawn grey	vfg	massive	kinda looks like sandstone on end	23	23	bleached/bleaching	wk mod	chlorite alteration	mod														
Gowganda - Transition Metals	TMH11-006	108.1	112.2	4.11	mvu	Mvu metavolcanic general	M	fawn	vfgfg	massive	very high angle to core axis	234	12	bleached/bleaching	mod	chlorite alteration	wk			vqc	1										
Gowganda - Transition Metals	TMH11-006	112.2	112.21	0.01	mvu	Mvu metavolcanic general	M	fawn green	vfg	schistose	increased bleached alteration towards end of intervals; fawn on the ends and red-green in the centre. weakly magnetic, particulary in the middle, in the less, altered/bleached areas, granular to sub-granular chlorite altered clasts. Leucoxene alteration near ends in bleached areas and chlorite in the	12	23	fuchsite alteration	wk mod					vqc	1										
Gowganda - Transition Metals	TMH11-006	112.21	115.02	2.81	fima	mafic tuff	M	red fawn	vfgfg	clastic or as clasts	middle non blrached area	23	1	chlorite alteration	mod	leucoxene alteration	wk mod			vqc	2.5										
Gowganda - Transition Metals	TMH11-006	115.02	116.49	1.47	vum	Vum ultramafic volcanic	D	green	vfg	massive	weakly schistose	34	23	fuchsite alteration	mod str																
Gowganda - Transition Metals	TMH11-006	116.49	117.4	0.92	mvu	Mvu metavolcanic general	M	fawn	vfgfg	massive	looks like sandstone on end, felsic to intermediate tuff?	12	12	bleached/bleaching	mod	chlorite alteration	wk	sericite alteration	wk mod	vqc	1										
Gowganda - Transition Metals	TMH11-006	117.4	118.42	1.02	vum	Vum ultramafic volcanic	D	green	vfg	schistose	intermediate to felsic something, crystaline, equigranular	34	23	fuchsite alteration	mod str					vqz	0.5										
Gowganda - Transition Metals	TMH11-006	118.42	119.45	1.03	mvu	Mvu metavolcanic general	D	fawn	vfgfg	massive	something, rare chlorite altered clasts	23	12	bleached/bleaching	wk mod	chlorite alteration	wk	sericite alteration	v wk	vqc	2	vqz	0.5								
Gowganda - Transition Metals	TMH11-006	119.45	120.3	0.85	vum	Vum ultramafic volcanic	M	green black	vfg	schistose		23	23	chlorite alteration	wk mod	chlorite alteration	wk														
Gowganda - Transition Metals	TMH11-006	120.3	120.8	0.50	mvu	Mvu metavolcanic general	M	grey fawn	vfgfg	massive	weakly schistose	23	12	bleached/bleaching	wk mod	chlorite alteration	wk	sericite alteration	wk	vqc	1	vqz	0.5								
Gowganda - Transition Metals	TMH11-006	120.8	122.35	1.55	vum	Vum ultramafic volcanic	L	green black	vfg	massive	altered basalt	23	23	fuchsite alteration	wk mod	chlorite alteration	wk														
Gowganda - Transition Metals	TMH11-006	122.35	123.5	1.16	vvm	Vvm mafic volcanic	M	khaki grey	vfgfg	massive		23	12	chlorite alteration	mod str			bleached/bleaching	wk												
Gowganda - Transition Metals	TMH11-006	123.5	124.35	0.85	vum	Vum ultramafic volcanic	M	green	vfg	massive		23	12	fuchsite alteration	mod	chlorite alteration	mod			vqc	0.25										
Gowganda - Transition Metals	TMH11-006	124.35	125.18	0.84	vvm	Vvm mafic volcanic	D	khaki grey	vfgfg	massive		23	12	chlorite alteration	mod					vqc	2.5										
Gowganda - Transition Metals	TMH11-006	125.18	125.94	0.76	vum	Vum ultramafic volcanic	M	green	vfgfg	massive	pinkish-grey insitu breccia with fracture fill chlortie	23	23	fuchsite alteration	mod str	chlorite alteration	wk mod			vqc	4										
Gowganda - Transition Metals	TMH11-006	125.94	126.64	0.71	iva	intermediate volcanic, altered	M	grey pink	vfgfg	healed breccia		45	23	silica alteration	mod str	chlorite alteration	mod			vqc	3										
Gowganda - Transition Metals	TMH11-006	126.64	128.75	2.11	vmu	mafic - ultramafic undifferinated	M	grey black	vfg	massive	pinkish insitu breccia with fracture fill chlorite	23	12	chlorite alteration	mod str	talc alteration	wk														
Gowganda - Transition Metals	TMH11-006	128.75	129.35	0.60	iva	intermediate volcanic, altered	M	pink	vfgfg	healed breccia		45	23	silica alteration	mod str	chlorite alteration	mod														
Gowganda - Transition Metals	TMH11-006	129.35	129.95	0.60	vvm	Vvm mafic volcanic	D	grey black	fg	massive		12	12	chlorite alteration	mod str																
Gowganda - Transition Metals	TMH11-006	129.95	130.2	0.25	vum	Vum ultramafic volcanic	M	green black	vfg	schistose		2	23	chlorite alteration	mod	talc alteration	wk			vqz	0.25										
Gowganda - Transition Metals	TMH11-006	130.2	131.6	1.41	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	likely vvm (basalt?	12	12	chlorite alteration	wk mod	talc alteration	wk														
Gowganda - Transition Metals	TMH11-006	131.6	132.5	0.91	vvm	Vvm mafic volcanic	D	green black	vfg	massive		12	12	chlorite alteration	mod	leucoxene alteration	wk mod			vst	0.25										
Gowganda - Transition Metals	TMH11-006	132.5	133.72	1.22	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	vvm (basalt) mafic tuff? No clasts	12	12	chlorite alteration	wk mod	talc alteration	wk														
Gowganda - Transition Metals	TMH11-006	133.72	134.14	0.42	mvu	Mvu metavolcanic general	D	brown black	vfgfg	massive	weakly foliate to weakly schistose	12	12	chlorite alteration	mod	leucoxene alteration	wk mod														
Gowganda - Transition Metals	TMH11-006	134.14	134.65	0.52	mvu	Mvu metavolcanic general	D	green	vfgfg	schistose	Mafic tuffrare, black chlorite altered clats, granular-ish-sized, sub angular to sub-rounded	23	23	chlorite alteration	mod	carbonate alteration	wk mod														
Gowganda - Transition Metals	TMH11-006	134.65	136.22	1.57	ttm	Ttm mafic tuff	D	brown purple	vfgfg	clastic or as clasts		12	12	chlorite alteration	wk mod	sericite alteration	wk	carbonate alteration	wk mod	vcb	0.75										
Gowganda - Transition Metals	TMH11-006	136.22	138.2	1.98	vvm	Vvm mafic volcanic	D	green black	vfgfg	massive		12	12	chlorite alteration	mod str																
Gowganda - Transition Metals	TMH11-006	138.2	138.95	0.75	vum	Vum ultramafic volcanic	D	grey black	vfg	massive		12	12	chlorite alteration	wk mod	talc alteration	wk	carbonate alteration	wk mod	vcb	2.5										
Gowganda - Transition Metals	TMH11-006	138.95	142.25	3.31	vvm	Vvm mafic volcanic	D	grey black	vfgfg	massive		12	12	chlorite alteration	wk mod					vcb	2										

Gowganda - Transition Metals	TMH11-006	142.25	147.13	4.88	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				12	12	chlorite alteration		talc alteration	wk							
Gowganda - Transition Metals	TMH11-006	147.13	162.8	15.67	mmd	Matachewan Mafic Dyke	D	grey black	fmg	massive				12	12	chlorite alteration										
Gowganda - Transition Metals	TMH11-006	162.8	165	2.20	sdu	Sdu sediment general (undiffere	D	grey black	vfgfg	massive	rare granitic and lesser intermediate/mafic clasts in aphanetic o very fine/fine-grained black groundmass, upper contact sharp and lower contact not seen.			12	12											
Gowganda - Transition Metals	TMH11-006	165	185	20.00	mmd	Matachewan Mafic Dyke	D	grey black	fmg	massive				12	12	chlorite alteration										
Gowganda - Transition Metals	TMH11-007	0	2	2.00	oou	Oou overburden general					cant make heads or tails of firs 25 cm, to altered with no context															
Gowganda - Transition Metals	TMH11-007	2	4.65	2.65	img	microgabbro	D	black	vfgfg	massive	felsic bolder at top of interval			12	12	chlorite alteration	wk	hematite alteration	wk					vcb	0.5	
Gowganda - Transition Metals	TMH11-007	4.65	8.91	4.26	vum	Vum ultramafic volcanic	M	grey black	vfg	massive	dykw(?)			12	12	talc alteration	wk	chlorite alteration	wk					vqc	1	
Gowganda - Transition Metals	TMH11-007	8.91	9.2	0.29	gdl	Gdl dolerite	D	green fawn	fg	massive				34	12	bleached/blea ching	wk mod	chlorite alteration	wk							
Gowganda - Transition Metals	TMH11-007	9.2	9.45	0.25	vum	Vum ultramafic volcanic	D	black white	vfg	schistose		sheared		2	3	chlorite alteration	wk mod	talc alteration	wk	fuchsite alteration	v wk			vqc	20	
Gowganda - Transition Metals	TMH11-007	9.45	9.5	0.06	dyk	dyke	M	green fawn	fmg	massive				23	1	chlorite alteration	wk	carbonate alteration	wk mod							
Gowganda - Transition Metals	TMH11-007	9.5	9.6	0.10	mvu	Mvu metavolcanic general	M	fawn	vfg	massive				23	2	silica alteration	str	carbonate alteration	wk mod	chlorite alteration	wk			vqz	80	
Gowganda - Transition Metals	TMH11-007	9.6	10.93	1.33	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive	chlorite fuchsite dyke			3	1	albite alteration	str	chlorite alteration	wk					vqc	2.5	
Gowganda - Transition Metals	TMH11-007	10.93	11	0.08	dyk	dyke	M	green grey	fmg	massive				2	1	chlorite alteration	wk	fuchsite alteration	wk mod							
Gowganda - Transition Metals	TMH11-007	11	11.8	0.81	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive	chlorite fuchsite dyke			3	1	albite alteration	str	chlorite alteration	wk					vqc	2	
Gowganda - Transition Metals	TMH11-007	11.8	11.95	0.15	dyk	dyke	M	green fawn	fmg	massive	possible shear or alteration halo			23	1	chlorite alteration	wk mod	fuchsite alteration	wk							
Gowganda - Transition Metals	TMH11-007	11.95	11.98	0.04	vum	Vum ultramafic volcanic	M	green	fmg	foliated				23	23	fuchsite alteration	mod									
Gowganda - Transition Metals	TMH11-007	11.98	16.33	4.35	mvu	Mvu metavolcanic general	D	red brown	fg	massive	host rock			3	1	albite alteration	str	chlorite alteration	wk mod	hematite alteration	wk mod			vcb	3	
Gowganda - Transition Metals	TMH11-007	16.33	16.47	0.15	vvm	Vvm mafic volcanic	D	grey green	vfg	massive	possible dyke(?)			23	23	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-007	16.47	16.57	0.11	mvu	Mvu metavolcanic general	D	green red	fmg	massive				23	12	hematite alteration	mod str	chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-007	16.57	18.05	1.48	vvs	Vvs volcanosedimentary	L	grey fawn	fg	clastic or as clasts	rare, granual sized angular black chlorite altered clasts			12	1	chlorite alteration	wk mod							vqc	0.25	
Gowganda - Transition Metals	TMH11-007	18.05	20.55	2.50	mvu	Mvu metavolcanic general	D	brown red	fg	massive	dyke(?)			3	1	albite alteration	str	chlorite alteration	wk mod					vqc	3	
Gowganda - Transition Metals	TMH11-007	20.55	20.74	0.19	gdl	Gdl dolerite	D	green fawn	fmg	massive	granual to pebble sized angular black chlorite altered clasts,			12	1	chlorite alteration	mod	albite alteration	wk mod					vqc	0.5	
Gowganda - Transition Metals	TMH11-007	20.74	21.9	1.16	vvm	Vvm mafic volcanic	D	brown red	fg	clastic or as clasts	castic vvm(?) granual to pebble sized angular black chlorite altered clasts,			3	1	albite alteration	str	chlorite alteration	wk mod					vqc	5	
Gowganda - Transition Metals	TMH11-007	21.9	22.95	1.05	vvs	Vvs volcanosedimentary	M	fawn	fg	clastic or as clasts	castic vvm(?) massive intermediate, no clasts (very similar to above, just no clasts			1	1	chlorite alteration	wk mod	fuchsite alteration	v wk					vqc	5	
Gowganda - Transition Metals	TMH11-007	22.95	23.3	0.36	mvu	Mvu metavolcanic general	M	fawn	fg	massive				1	1	chlorite alteration	v wk	albite alteration	v wk					vqc	3	
Gowganda - Transition Metals	TMH11-007	23.3	24.45	1.15	mvu	Mvu metavolcanic general	M	red brown	fg	clastic or as clasts	granual to pebble sized angular black chlorite altered clasts,			23	1	albite alteration	mod str	chlorite alteration	wk mod					vqc	7.5	
Gowganda - Transition Metals	TMH11-007	24.45	24.75	0.31	mvu	Mvu metavolcanic general	M	grey	fg	clastic or as clasts	castic vvm(?) chlorite fuchsite alteraion			1	1	chlorite alteration	wk mod	albite alteration	wk mod					vqc	0.5	
Gowganda - Transition Metals	TMH11-007	24.75	24.84	0.09	dyk	dyke	M	green grey	fmg	massive	granual with rare pebble sized angular black chlorite altered			12	1	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-007	24.84	25.54	0.70	mvu	Mvu metavolcanic general	M	fawn	fg	clastic or as clasts	clasts, castic vvm(?) dyke(?)			12	1	chlorite alteration	wk							vqc	2	
Gowganda - Transition Metals	TMH11-007	25.54	25.68	0.15	gdl	Gdl dolerite	D	green	fg	mottled texture				23	1	chlorite alteration	mod									
Gowganda - Transition Metals	TMH11-007	25.68	25.9	0.22	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	dyke set(?)	sheared		12	23	talc alteration	wk	chlorite alteration	wk mod	silica alteration	wk			vqc	5	
Gowganda - Transition Metals	TMH11-007	25.9	26.65	0.75	gdl	Gdl dolerite	D	red green	fmg	massive	dyke set(?)			3	12	chlorite alteration	mod	hematite alteration	str					vqc	0.5	
Gowganda - Transition Metals	TMH11-007	26.65	27.45	0.81	gdl	Gdl dolerite	D	green red	fmg	mottled texture	host in dyke set(?)			3	12	hematite alteration	str	chlorite alteration	mod					vqc	0.5	
Gowganda - Transition Metals	TMH11-007	27.45	27.8	0.36	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive	dyke set(?)			34	1	hematite alteration	str	chlorite alteration	wk					vqc	0.5	
Gowganda - Transition Metals	TMH11-007	27.8	28.6	0.81	gdl	Gdl dolerite	D	grey green	fmg	massive	dyke set(?)			23	1	chlorite alteration	mod str	hematite alteration	wk mod					vqc	0.5	
Gowganda - Transition Metals	TMH11-007	28.6	29.4	0.80	gdl	Gdl dolerite	D	red brown	fmg	massive	dyke set(?)			3	1	hematite alteration	str	chlorite alteration	wk mod					vcb	0.5	
Gowganda - Transition Metals	TMH11-007	29.4	30.05	0.66	gdl	Gdl dolerite	D	brown green	fmg	massive				3	1	chlorite alteration	str	hematite alteration	mod							
Gowganda - Transition Metals	TMH11-007	30.05	30.85	0.81	mvu	Mvu metavolcanic general	D	white black	vfg	schistose	alterartion halo(?)	sheared		12	34	chlorite alteration	wk mod	talc alteration	wk					vqc	0.5	
Gowganda - Transition Metals	TMH11-007	30.85	30.95	0.10	mvu	Mvu metavolcanic general	D	green fawn	fg	mottled texture				23	1	bleached/blea ching	wk mod	chlorite alteration	wk mod	hematite alteration	wk					
Gowganda - Transition Metals	TMH11-007	30.95	31.2	0.25	img	microgabbro	D	brown red	fg	massive	granual sized angular black chlorite altered clasts			12	12	hematite alteration	mod	chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-007	31.2	32.05	0.85	vvm	Vvm mafic volcanic	M	red fawn	fg	clastic or as clasts	to broken to make head or tails of it, looks like and intrusive but what else idont know			3	12	albite alteration	mod	chlorite alteration	wk					vqc	1	
Gowganda - Transition Metals	TMH11-007	32.05	32.58	0.54	mvu	Mvu metavolcanic general	M	red green	fmg	massive	possible shear			12	12	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-007	32.58	33.08	0.50	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	likely mafic intrusive			12	23	talc alteration	wk	chlorite alteration	wk							
Gowganda - Transition Metals	TMH11-007	33.08	33.4	0.32	img	microgabbro	M	green black	vfgfg	massive				12	1	chlorite alteration	mod	hematite alteration	wk							
Gowganda - Transition Metals	TMH11-007	33.4	39.25	5.85	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				12	12	talc alteration	wk	chlorite alteration	wk					vqc	2.5	
Gowganda - Transition Metals	TMH11-007	39.25	39.32	0.08	gdl	Gdl dolerite	D	grey black	fmg	massive				12	1	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-007	39.32	39.4	0.08	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				12	12	talc alteration	wk	chlorite alteration	wk							
Gowganda - Transition Metals	TMH11-007	39.4	39.8	0.40	gdl	Gdl dolerite	D	grey black	fmg	massive				12	1	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-007	39.8	50	10.20	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				12	12	talc alteration	wk	chlorite alteration	wk					vqc	3	
Gowganda - Transition Metals	TMH11-007	50	51.9	1.90	vum	Vum ultramafic volcanic	M	green fawn	vfg	mottled texture	brecciated(healed)?			34	12	carbonate alteration	v str	chlorite alteration	wk	silica alteration	wk mod	vqc	5	
Gowganda - Transition Metals	TMH11-007	51.9	52.6	0.71	vum	Vum ultramafic volcanic	M	fawn	vfg	massive	brecciated(healed)?			34	12	carbonate alteration	v str	silica alteration	mod str			vqc	1	
Gowganda - Transition Metals	TMH11-007	52.6	53.2	0.61	vum	Vum ultramafic volcanic	M	green black	vfg	massive				23	12	talc alteration	wk	chlorite alteration	wk	silica alteration	wk	vqc	0.5	
Gowganda - Transition Metals	TMH11-007	53.2	56	2.80	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				12	12	talc alteration	wk	chlorite alteration	wk	silica alteration	wk	vqc	1	
Gowganda - Transition Metals	TMH11-008	0	2.77	2.77	oou	Oou overburden general																				

Gowganda - Transition Metals	TMH11-008	2.77	3.58	0.81	gdl	Gdl dolerite	D	red black	fmg	massive	altered dyke?	3	12	albite alteration	mod	chlorite alteration	wk mod						vqc	1
Gowganda - Transition Metals	TMH11-008	3.58	6.5	2.92	mvu	Mvu metavolcanic general	D	brown red	fg	clastic or as clasts	likely highly altered vvm due to presence of angular, granular sized, chlorite altered grains/clasts	34	12	albite alteration	str	chlorite alteration	wk mod						vqc	12.5
Gowganda - Transition Metals	TMH11-008	6	7.57	1.57	mvu	Mvu metavolcanic general	D	grey brown	vfg	mottled texture	alteration halo(?)	3	12	albite alteration	wk mod	chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-008	7.57	14.63	7.06	vum	Vum ultramafic volcanic	M	grey black	vfg	massive	massive to weakly foliated ultramafics	12	12	chlorite alteration	wk	talc alteration	v wk							
Gowganda - Transition Metals	TMH11-008	14.63	18.9	4.27	gmd	#N/A	M	red green	fg	massive	monzonite/monzodiorite(monzogabbro), with patchy, irregular hematite staining	12	12	hematite alteration	mod str	chlorite alteration	wk							
Gowganda - Transition Metals	TMH11-008	18.9	19.35	0.46	gdl	Gdl dolerite	D	green fawn	fmg	massive	Dyke?	23	1	chlorite alteration	mod	bleached/bleaching	wk							
Gowganda - Transition Metals	TMH11-008	19.35	21.8	2.45	gmd	#N/A	M	red	fmg	massive	one or more intrusives, monzodiorite to diorite(?) plus alteration (?), altered host rock(?)	3	12	hematite alteration	mod str	chlorite alteration	mod							
Gowganda - Transition Metals	TMH11-008	21.8	22.6	0.81	mvu	Mvu metavolcanic general	M	brown red	vfgfg	massive	alteration halo(?)	34	1	hematite alteration	mod str								vqc	1.5
Gowganda - Transition Metals	TMH11-008	22.6	23	0.40	gdl	Gdl dolerite	M	green fawn	fmg	massive	dyke?	3	1	chlorite alteration	mod str	bleached/bleaching	wk							
Gowganda - Transition Metals	TMH11-008	23	23.4	0.40	vvs	Vvs volcanosedimentary				clastic or as clasts	mafic and felsic, sub rounded clasts	12	1	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-008	23.4	24	0.61	gmd	#N/A	M	fawn grey	fg	massive	monzonite dyke (?)	2	1	hematite alteration	wk									
Gowganda - Transition Metals	TMH11-008	24	24.65	0.65	vvm	Vvm mafic volcanic	D	grey	fg	clastic or as clasts	granual sized angular black chlorite altered clasts	2	1	chlorite alteration	wk mod								vcb	1.5
Gowganda - Transition Metals	TMH11-008	24.65	25.1	0.46	gmd	#N/A	M	grey red	fg	massive	monzonite dyke (?)	2	1	hematite alteration	wk mod								vcb	0.5
Gowganda - Transition Metals	TMH11-008	25.1	25.25	0.15	mvu	Mvu metavolcanic general	M	fawn grey	fmg	massive	might be a continuation of the above dyke, but it looks slightly more like host (?)... maybe	12	1	chlorite alteration	wk mod	hematite alteration	wk							
Gowganda - Transition Metals	TMH11-008	25.25	25.6	0.36	mvu	Mvu metavolcanic general	M	brown red	vfg	massive	granual sized angular black chlorite altered clasts	23	1	albite alteration	mod	chlorite alteration	wk	silica alteration	wk				vcb	2
Gowganda - Transition Metals	TMH11-008	25.6	28.2	2.60	vvm	Vvm mafic volcanic	M	grey	fg	clastic or as clasts		12	1	chlorite alteration	wk mod								vqc	2
Gowganda - Transition Metals	TMH11-008	28.2	31	2.80	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive	granual sized angular black chlorite altered clasts	3	1	albite alteration	str	chlorite alteration	wk						vqc	2.5
Gowganda - Transition Metals	TMH11-008	31	37.06	6.06	vvm	Vvm mafic volcanic	M	fawn grey	fg	clastic or as clasts	medium grained dykes (?) cutting atboth high angle to core axis and perpendicular to core axis, in a fine-grained host rock	2	1	chlorite alteration	mod	albite alteration	wk mod						vqc	6
Gowganda - Transition Metals	TMH11-008	37.06	37.88	0.82	mvu	Mvu metavolcanic general	D	green grey	fmg	massive		2	1	chlorite alteration	mod	albite alteration	mod						vqc	1
Gowganda - Transition Metals	TMH11-008	37.88	38.06	0.18	mvu	Mvu metavolcanic general	D	grey	fg	massive	dyke?	12	1	chlorite alteration	wk mod	albite alteration	v wk						vqc	5
Gowganda - Transition Metals	TMH11-008	38.06	38.16	0.10	vvm	Vvm mafic volcanic	M	fawn grey	fmg	massive	granual sized angular black chlorite altered clasts	3	1	bleached/bleaching	mod	chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-008	38.16	38.64	0.49	vvm	Vvm mafic volcanic	D	fawn grey	fg	clastic or as clasts		2	1	chlorite alteration	wk mod								vqc	5
Gowganda - Transition Metals	TMH11-008	38.64	39.9	1.26	mvu	Mvu metavolcanic general	D	brown red	fg	massive		34	12	albite alteration	str	chlorite alteration	wk	sericite alteration	v wk				vqc	1
Gowganda - Transition Metals	TMH11-008	39.9	40.4	0.50	vvm	Vvm mafic volcanic	M	orange fawn	fg	weakly foliated	granuals to pebble, andgular black chlorite altered clasts	23	23	albite alteration	mod	chlorite alteration	mod						vqc	5
Gowganda - Transition Metals	TMH11-008	40.4	45.4	5.00	vvm	Vvm mafic volcanic	M	fawn grey	fg	clastic or as clasts		2	1	albite alteration	wk	chlorite alteration	wk						vqc	5
Gowganda - Transition Metals	TMH11-008	45.4	45.6	0.21	vum	Vum ultramafic volcanic	M	grey black	vfg	schistose		2	23	chlorite alteration	wk mod	silica alteration	wk	fuchsite alteration	v wk					
Gowganda - Transition Metals	TMH11-008	45.6	45.85	0.25	vvm	Vvm mafic volcanic	D	grey black	vfgfg	massive		12	1	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-008	45.85	46	0.15	mvu	Mvu metavolcanic general	M	grey green	fg	mottled texture		3	12	bleached/bleaching	wk mod	chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-008	46	47.35	1.35	mvu	Mvu metavolcanic general	M	red brown	fg	massive		23	12	albite alteration	mod str	chlorite alteration	wk	sericite alteration	wk mod				vqc	5
Gowganda - Transition Metals	TMH11-008	47.35	48.95	1.60	mvu	Mvu metavolcanic general	M	grey black	vfg	massive		2	2	talc alteration	wk	chlorite alteration	wk						vqc	2
Gowganda - Transition Metals	TMH11-008	48.95	49.4	0.45	mvu	Mvu metavolcanic general	M	orange red	fg	massive		23	12	albite alteration	mod str	chlorite alteration	wk						vqc	3
Gowganda - Transition Metals	TMH11-008	49.4	50.4	1.00	vvm	Vvm mafic volcanic	D	grey	fg	massive		2	12	chlorite alteration	wk mod								vqc	2
Gowganda - Transition Metals	TMH11-008	50.4	52.5	2.10	mvu	Mvu metavolcanic general	D	orange red	fg	massive	clasts: granuals to pebble, andgular black chlorite altered clasts.	3	12	albite alteration	mod str	chlorite alteration	wk	hematite alteration	wk				vqc	7
Gowganda - Transition Metals	TMH11-008	52.5	57.25	4.75	vvm	Vvm mafic volcanic	D	orange brown	fg	clastic or as clasts		3	1	albite alteration	mod str	chlorite alteration	wk	hematite alteration	wk				vqc	5
Gowganda - Transition Metals	TMH11-008	57.25	57.32	0.08	vum	Vum ultramafic volcanic	D	grey black	vfg	massive		12	12	chlorite alteration	wk mod	talc alteration	wk						vqc	1
Gowganda - Transition Metals	TMH11-008	57.32	61.5	4.18	mvu	Mvu metavolcanic general	M	orange brown	vfgfg	massive	dyke?	3	1	albite alteration	mod str	chlorite alteration	wk	hematite alteration	wk				vqc	2.5
Gowganda - Transition Metals	TMH11-008	61.5	62	0.50	img	microgabbro	D	grey green	fmg	massive	img or vvm, im not sure. Very fine- to fine-grained crystaline mafic volcanic	2	1	chlorite alteration	mod	hematite alteration	wk						vcb	0.5
Gowganda - Transition Metals	TMH11-008	62	63.96	1.96	img	microgabbro	D	red brown	vfgfg	massive	img or vvm, im not sure. Very fine- to fine-grained crystaline mafic volcanic	3	1	hematite alteration	str	chlorite alteration	wk						vqc	2
Gowganda - Transition Metals	TMH11-008	62.96	65.5	2.54	img	microgabbro	M	green black	vfgfg	massive		12	1	chlorite alteration	mod	sericite alteration	wk	hematite alteration	v wk				vcb	1
Gowganda - Transition Metals	TMH11-008	65.5	65.68	0.19	vvm	Vvm mafic volcanic	D	brown black	fg	massive		12	1	hematite alteration	mod	chlorite alteration	wk mod						vcb	0.25
Gowganda - Transition Metals	TMH11-008	65.68	70.4	4.72	vvm	Vvm mafic volcanic	M	green black	fmg	massive	depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	mod	hematite alteration	tr	sericite alteration	wk				vcb	1
Gowganda - Transition Metals	TMH11-008	70.4	72.55	2.15	vvm	Vvm mafic volcanic	D	red black	fmg	massive	clasts: granuals to pebble, andgular black chlorite altered clasts. depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	mod	hematite alteration	wk							
Gowganda - Transition Metals	TMH11-008	72.55	73.1	0.55	vvm	Vvm mafic volcanic	D	brown black	fg	clastic or as clasts	possible intrusive(?) no contact relationships really visable. depths are approximate, interval are broken to rubble and rare contacts are oserved	2	1	hematite alteration	wk mod	chlorite alteration	wk							
Gowganda - Transition Metals	TMH11-008	73.1	74.15	1.06	vvm	Vvm mafic volcanic	D	green black	fmg	massive	clasts: granuals to pebble, andgular black chlorite altered clasts. depths are approximate, interval are broken to rubble and rare contacts are oserved	2	1	chlorite alteration	mod									
Gowganda - Transition Metals	TMH11-008	74.15	74.35	0.20	vvm	Vvm mafic volcanic	D	brown black	fg	clastic or as clasts	depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	wk mod	hematite alteration	wk							
Gowganda - Transition Metals	TMH11-008	74.35	74.65	0.31	vvm	Vvm mafic volcanic	D	green black	fmg	massive	depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-008	74.65	74.8	0.15	vvm	Vvm mafic volcanic	D	brown black		clastic or as clasts	depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	wk mod	hematite alteration	wk							
Gowganda - Transition Metals	TMH11-008	74.8	75	0.21	img	microgabbro	D	red black	fmg	massive	depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	wk mod	hematite alteration	wk mod							
Gowganda - Transition Metals	TMH11-008	75	75.25	0.25	vvm	Vvm mafic volcanic	D	brown black		clastic or as clasts	depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	wk mod	hematite alteration	wk							
Gowganda - Transition Metals	TMH11-008	75.25	76.1	0.85	mvu	Mvu metavolcanic general	D	fawn black	fmg	massive	rubble and mish mash of vvm types (may include intrusive but its difficult to make heads or tails. depths are approximate, interval are broken to rubble and rare contacts are oserved	12	1	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-008	76.1	76.78	0.69	vvm	Vvm mafic volcanic	D	green grey	fmg	massive	depths are approximate, interval are broken to rubble and rare contacts are oserved	2	1	chlorite alteration	mod	hematite alteration	wk mod							
Gowganda - Transition Metals	TMH11-008	76.78	77	0.22	vvm	Vvm mafic volcanic	D	brown black	fg	clastic or as clasts	granuals to pebble, andgular black chlorite altered clasts	2	1	chlorite alteration	mod str	chlorite alteration	wk mod							
Gowganda - Transition Metals	TMH11-008	77	79.05	2.05	vvm	Vvm mafic volcanic	D	grey black	fmg	massive	sligh variation in grain size, aphenitic to fine/medium grained (result of alteration?) no internal contects foend but interval is broken	12	1	chlorite alteration	mod	hematite alteration	v wk							

Gowganda - Transition											vvm or img, cant really tell, might have chill margins but interval is to broken to tell for sure																	
Metals	TMH11-008	79.05	79.97	0.93	mvu	Mvu metavolcanic general	D	red black	fg	massive				23		1	hematite alteration	wk mod	chlorite alteration	wk mod								
Gowganda - Transition																												
Metals	TMH11-008	79.97	80.85	0.88	vvm	Vvm mafic volcanic	D	grey black	fmg	massive				12		1	chlorite alteration	mod	hematite alteration	v wk								
Gowganda - Transition																												
Metals	TMH11-008	80.85	81.45	0.61	vvm	Vvm mafic volcanic	D	brown black	fg	massive				2		1	hematite alteration	mod	chlorite alteration	wk mod								
Gowganda - Transition											Matachewan Dyke, potentially faulted(?), broken but no gouge or poor recovery																	
Metals	TMH11-008	81.45	104	22.55	mmd	Matachawan Mafic Dyke	D	black	fmg	massive				12		1	chlorite alteration	wk mod		wk mod								
Gowganda - Transition											NOTE, core boxes have been ransacked, lots of missing core in first 15 m, logged from remaining core, core photos and historical log.																	
Metals	TMH11-009	0	2	2.00	cas	Casing																						
Gowganda - Transition											interval is highly broken, one 2ish cm quartz carbonate vein																	
Metals	TMH11-009	2	2.4	0.40	mvu	Mvu metavolcanic general	D	red brown	fg	massive			3,4			1	albite alteration	str	chlorite alteration	wk mod							vqc	25
Gowganda - Transition											variable texture from weakly foliated to massive with pyrite porphyroblasts to fine- to medium-grained. To broken to break out many intervals, tell contact relationships.																	
Metals	TMH11-009	2.4	7.7	5.30	vum	Vum ultramafic volcanic	D	grey black	vfgfg	massive				12		12	talc alteration	wk	chlorite alteration	wk								
Gowganda - Transition											chlorite-fuchsite dyke																	
Metals	TMH11-009	7.7	7.75	0.05	dyk	dyke	D	grey green	fmg	massive				1		1	chlorite alteration	wk										
Gowganda - Transition																												
Metals	TMH11-009	7.75	8.02	0.27	vum	Vum ultramafic volcanic	D	grey black	vfgfg	massive				12		12	talc alteration	wk	chlorite alteration	wk								
Gowganda - Transition											logged from mostly core phots coreis wrong inbox																	
Metals	TMH11-009	8.02	8.42	0.40	mvu	Mvu metavolcanic general	D	orange red	fg	massive				34		2	albite alteration	mod str	chlorite alteration	wk	sericite alteration	v wk					vqc	5
Gowganda - Transition											logged from core photos core is wrong inbox																	
Metals	TMH11-009	8.42	8.45	0.03	vum	Vum ultramafic volcanic	D	black	fg	schistose			sheared	2		3												
Gowganda - Transition											logged from core photos and what I can identify as approperate core in box																	
Metals	TMH11-009	8.45	9.02	0.57	mvu	Mvu metavolcanic general	D	orange red	fg	massive				34		2	albite alteration	mod str	chlorite alteration	wk	sericite alteration	v wk					vqc	10
Gowganda - Transition											quartz vein, logged from core photos and what I can identify as approperate core in box																	
Metals	TMH11-009	9.02	9.43	0.41	vin	Vein	L	white	vfg	massive				12		12											vqc	90
Gowganda - Transition											logged from core photos and what I can identify as approperate core in box. white quartz-carbonate vein with green mafic volcanics (?) at high and irregular angle to core axis, these mafic volcanics are fine to medium grained and																	
Metals	TMH11-009	9.43	9.97	0.55	vin	Vein	L	white	fg	massive	fuchsite and chlorite altered			34		12	fuchsite alteration	str	chlorite alteration	mod							vqc	85
Gowganda - Transition											logged from core photos and what I can identify as approperate core in box																	
Metals	TMH11-009	9.97	11.45	1.48	mvu	Mvu metavolcanic general	D	red brown	fg	massive				34		12	albite alteration	mod str	chlorite alteration	wk mod							vqc	40
Gowganda - Transition											chlorite fuchsite dyke																	
Metals	TMH11-009	11.45	11.48	0.04	dyk	dyke	L	green fawn	fmg	massive				2		1	chlorite alteration	wk	fuchsite alteration	wk								
Gowganda - Transition											logged from core photos and what I can identify as approperate core in box																	
Metals	TMH11-009	11.48	12.67	1.19	mvu	Mvu metavolcanic general	D	brown red	fg	massive				34		12	albite alteration	mod str	chlorite alteration	wk mod							vqc	7.5
Gowganda - Transition											dyke(?)																	
Metals	TMH11-009	12.67	12.73	0.07	vvm	Vvm mafic volcanic	D	green	vfg	massive				12		12	chlorite alteration	wk mod										
Gowganda - Transition											logged based on core photos, chlorite +/- fuchsite altered clasts, cant see any quartz clasts, not confortable calling it vvs. Massive to weakly foliated with foliations define by micas, with fabric parellel to quartz growth in extensional veins (perpendicular to the veinits self)																	
Metals	TMH11-009	12.73	13.26	0.53	mvu	Mvu metavolcanic general	L	grey fawn	fg	clastic or as clasts				34		12	chlorite alteration	mod									vqc	2.5
Gowganda - Transition											logged from core photos, cant really tell what it is, some chlorite clats but cant call it vvs for sure, no lower contact observed in photos																	
Metals	TMH11-009	13.26	14.67	1.41	mvu	Mvu metavolcanic general	D	red brown	fg	massive				12		3	albite alteration	mod str	chlorite alteration	wk							vqc	25
Gowganda - Transition											same as unit above, just more/larger quartz-carb veinglogged from core photos, cant really tell what it is, some chlorite clats but cant call it vvs for sure, no lower contact observed in																	
Metals	TMH11-009	14.65	15.7	1.05	mvu	Mvu metavolcanic general	D	red brown	fg	massive	photos			12		3	albite alteration	mod str	chlorite alteration	wk mod							vqc	1
Gowganda - Transition																												
Metals	TMH11-009	15.7	16.4	0.70	vvs	Vvs volcanosedimentary	D	brown red	fg	clastic or as clasts				34		1	albite alteration	str	chlorite alteration	wk mod								
Gowganda - Transition											no observed upper contact may be continuation of above inerval with slight variation in alteration																	
Metals	TMH11-009	16.4	16.55	0.16	mvu	Mvu metavolcanic general	D	orange brown	fg	massive				34		1	albite alteration	str	chlorite alteration	wk	sericite alteration	wk					vqz	2.5
Gowganda - Transition																												
Metals	TMH11-009	16.55	16.8	0.25	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive				34		1	albite alteration	str	chlorite alteration	wk	sericite alteration	v wk						
Gowganda - Transition											very weak fabric defined by sericite alteration																	
Metals	TMH11-009	16.8	17.42	0.63	mvu	Mvu metavolcanic general	D	orange brown	fg	massive				34		1	albite alteration	mod str	chlorite alteration	wk mod	sericite alteration	wk mod					vqc	1
Gowganda - Transition											potentially altered vvm(?), with 1 to 5 mm, angular to sub-sounded chlorite grains, these clasts seem to be elongated in the same direction and define a weak fabric. Lower contact																	
Metals	TMH11-009	17.42	18.2	0.78	mvu	Mvu metavolcanic general	D	grey brown	fmg	massive	sharp with vvs			34		1	albite alteration	str	chlorite alteration	mod								
Gowganda - Transition																												
Metals	TMH11-009	18.2	19.15	0.95	vvs	Vvs volcanosedimentary	D	red brown	fg	clastic or as clasts				34		1	albite alteration	str	chlorite alteration	mod							vqc	1
Gowganda - Transition											chlorite-fuchsite dyke set																	
Metals	TMH11-009	19.15	19.52	0.38	dyk	dyke	D	green brown	fmg	massive				34		1	albite alteration	Str	chlorite alteration	mod							vcb	0.5
Gowganda - Transition											likley vvm, possibe dykes in interval, bur dificult to tell																	
Metals	TMH11-009	19.52	20.32	0.81	mvu	Mvu metavolcanic general	D	red brown	fmg	massive				34		1	albite alteration	str	chlorite alteration	wk mod							vcb	0.5
Gowganda - Transition											chlorite-fuchsite dyke																	
Metals	TMH11-009	20.32	20.41	0.09	dyk	dyke	D	green brown	fmg	massive				34		1	chlorite alteration	wk mod	albite alteration	wk mod								
Gowganda - Transition											same as 19.52 to 20.31 m																	
Metals	TMH11-009	20.41	20.61	0.20	mvu	Mvu metavolcanic general	D	red brown	fmg	massive				34		1	albite alteration	mod str	chlorite alteration	wk								
Gowganda - Transition																												
Metals	TMH11-009	20.61	20.68	0.08	vum	Vum ultramafic volcanic	D	black white	vfg	schistose			sheared	23		34	chlorite alteration	mod str										
Gowganda - Transition											similar to 19.52 - 20.31 m ad 20.41 - 20.61 m																	
Metals	TMH11-009	20.68	21.31	0.63	mvu	Mvu metavolcanic general	D	green brown	fmg	massive				34		1	albite alteration	str	chlorite alteration	wk							vcb	0.5
Gowganda - Transition																												
Metals	TMH11-009	21.31	21.43	0.13	vum	Vum ultramafic volcanic	D	black white	vfg	schistose			sheared	23		34	chlorite alteration	mod str										
Gowganda - Transition																												
Metals	TMH11-009	21.43	23.09	1.66	img	microgabbro	D	brown red	fg	massive				34		1	albite alteration	str	chlorite alteration	wk mod	carbonate alteration	wk					vcb	0.75
Gowganda - Transition											possible vvm with 0.5to 3 mm, tabular chlorite altered grains/clast, these clasts deined a very weak fabric																	
Metals	TMH11-009	23.09	23.69	0.61	mvu	Mvu metavolcanic general	D	brown red	fmg	massive				34		1	albite alteration	str	chlorite alteration	wk mod							vqc	0.5
Gowganda - Transition																												
Metals	TMH11-009	23.69	23.93	0.24	gdl	Gdl dolerite	D	green fawn	fg	massive				23		1	chlorite alteration	mod	bleached/bleaching	wk mod								
Gowganda - Transition																												
Metals	TMH11-009	23.93	24.3	0.38	vum	Vum ultramafic volcanic	M	green grey	vfg	schistose			sheared	23		34	talc alteration	v wk	chlorite alteration	v wk							vcb	20
Gowganda - Transition											very fine- to fine-graineg intrusive ormafic flow																	
Metals	TMH11-009	24.3	24.65	0.35	mvu	Mvu metavolcanic general	D	grey	vfgfg	massive				2		1	chlorite alteration	wk mod										
Gowganda - Transition																												
Metals	TMH11-009	24.65	24.9	0.25	vum	Vum ultramafic volcanic	D	black	vfg	weakly foliated				2		2	talc alteration	wk	chlorite alteration	wk								
Gowganda - Transition											similar to 24.3 -24.65 m																	
Metals	TMH11-009	24.9	25.15	0.25	mvu	Mvu metavolcanic general	M	green grey	fg	massive				23		1	chlorite alteration	wk mod									vqc	0.75
Gowganda - Transition											shear(?)																	
Metals	TMH11-009	25.15	28	2.85	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose				23		3	talc alteration	v wk	chlorite alteration	wk							vqc	1
Gowganda - Transition											silicified shear zone																	
Metals	TMH11-009	28	29.76	1.76	vum	Vum ultramafic volcanic	M	grey fawn	vfg	schistose				45		34	silica alteration	v str									vqc	2.5
Gowganda - Transition																												
Metals	TMH11-009	29.76	29.98	0.22	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				2		12	talc alteration	wk	chlorite alteration	wk								
Gowganda - Transition											silicified shear zone																	
Metals	TMH11-009	29.98	30.4	0.42	vum	Vum ultramafic volcanic	M	grey	vfg	massive				34		2	silica alteration	str									vqz	5
Gowganda - Transition											silicified shear zone																	
Metals	TMH11-009	30.4	31.3	0.91	vum	Vum ultramafic volcanic	M	fawn grey	vfg	massive				34		2	silica alteration	str	chlorite alteration	wk mod							vqz	5
Gowganda - Transition											silicified shear zone																	
Metals	TMH11-009	31.3	31.75	0.45	vum	Vum ultramafic volcanic	M	green fawn	vfg	weakly foliated				3		3	fuchsite alteration	wk mod	chlorite alteration	wk mod							vqc	20
Gowganda - Transition											quartz-carbonate vein runs roughly parellel to core axis, weakly silicified part ofsilicified shearzone																	
Metals	TMH11-009	31.75	32.95	1.20	vum	Vum ultramafic volcanic	L	white grey	vfgfg	massive				34		23	silica alteration	mod str	chlorite alteration	wk	bleached/bleaching	wk					vqc	30
Gowganda - Transition											weakly silicified part of silicified shear zone																	
Metals	TMH11-009	32.95	33.15	0.20	vum	Vum ultramafic volcanic	L	grey	vfgfg	massive				4		23	silica alteration	mod str									vqc	30
Gowganda - Transition																												
Metals	TMH11-009	33.15	33.25	0.11	vum	Vum ultramafic volcanic	M	grey black	vfgfg	weakly foliated				23		2	fuchsite alteration	v wk	chlorite alteration	wk	silica alteration	wk					vqc	5
Gowganda - Transition											mafic or ultramafic(?) more inclined to go with mafic but?																	
Metals	TMH11-009	33.25	33.37	0.12	vum	Vum ultramafic volcanic	M	fawn black	fmg	massive				2		12	chlorite alteration	wk mod	bleached/bleaching	wk mod	silica alteration	wk						

Gowganda - Transition Metals	TMH11-009	33.37	34.5	1.13	vum	Vum ultramafic volcanic	M	fawn green	fmg	massive	fuchsite altered mafic/ultramafic volcanic (?), lowercontact is quartz-carbonatevein		4	12	fuchsite alteration	v str	bleached/bleaching	wk mod	silica alteration	wk		vqc	2.5							
Gowganda - Transition Metals	TMH11-009	34.5	35	0.50	vvs	Vvs volcanosedimentary	M	fawn	vfgfg	clastic or as clasts	fuchsite alteration of grains/clasts		2	1	fuchsite alteration	wk						vqc	1							
Gowganda - Transition Metals	TMH11-10	0	1.5	1.50	oou	Oou overburden general																									
Gowganda - Transition Metals	TMH11-10	1.5	2	0.50	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated			2	23	chlorite alteration	wk	talc alteration	wk													
Gowganda - Transition Metals	TMH11-10	2	2.11	0.11	gdl	Gdl dolerite	D	grey black	fg	massive			12	1	chlorite alteration	wk mod															
Gowganda - Transition Metals	TMH11-10	2.11	2.55	0.44	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated			2	2	chlorite alteration	wk	talc alteration	wk													
Gowganda - Transition Metals	TMH11-10	2.55	3.67	1.12	mvu	Mvu metavolcanic general	D	brown	fg	massive			34	12	hematite alteration	str	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-10	3.67	4.8	1.13	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated			23	2	chlorite alteration	wk	talc alteration	wk													
Gowganda - Transition Metals	TMH11-10	4.8	6.1	1.30	vum	Vum ultramafic volcanic	L	grey	vfg	schistose		sheared	34	34	silica alteration	wk	talc alteration	wk	chlorite alteration	wk		vcb	2							
Gowganda - Transition Metals	TMH11-10	6.1	8	1.90	vum	Vum ultramafic volcanic	L	grey	fg	weakly foliated	possible shear		34	23	silica alteration	mod	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-10	8	8.17	0.17	vum	Vum ultramafic volcanic	L	green fawn	vfg	schistose		sheared	4	23	silica alteration	mod str	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-10	8.17	8.87	0.70	vum	Vum ultramafic volcanic	D	grey black	vfg	massive			12	12	talc alteration	wk	chlorite alteration	wk				vcb	2.5							
Gowganda - Transition Metals	TMH11-10	8.87	9.57	0.71	vum	Vum ultramafic volcanic	L	fawn	vfg	massive			4	12	silica alteration	str			bleached/bleaching	wk mod											
Gowganda - Transition Metals	TMH11-10	9.57	9.83	0.26	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	slighly schistose towards bottom of interval		12	2	talc alteration	wk	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-10	9.83	10.12	0.29	vum	Vum ultramafic volcanic	L	fawn grey	vfg	weakly foliated			34	23	silica alteration	mod str	chlorite alteration	wk				vcb	3							
Gowganda - Transition Metals	TMH11-10	10.12	10.26	0.15	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	possible shear		12	12	talc alteration	wk	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-10	10.26	10.36	0.10	vum	Vum ultramafic volcanic	L	fawn grey	vfg	weakly foliated	possible shear		2	2	silica alteration	mod str	talc alteration	wk	chlorite alteration	wk											
Gowganda - Transition Metals	TMH11-10	10.36	14.1	3.74	vum	Vum ultramafic volcanic	L	grey	vfg	weakly foliated			2	2	silica alteration	wk	talc alteration	wk	chlorite alteration	wk											
Gowganda - Transition Metals	TMH11-10	14.1	14.54	0.44	vum	Vum ultramafic volcanic	L	fawn	vfg	weakly foliated	shear vein(?)		34	2	silica alteration	mod str	chlorite alteration	wk				vqc	1							
Gowganda - Transition Metals	TMH11-10	14.54	14.73	0.20	vin	Vein	L	white	vfg	massive		sheared	12	12	chlorite alteration	v wk						vqz	99							
Gowganda - Transition Metals	TMH11-10	14.73	14.9	0.17	vum	Vum ultramafic volcanic	L	fawn	vfg	weakly foliated			12	2	silica alteration	mod str	chlorite alteration	wk				vqc	1							
Gowganda - Transition Metals	TMH11-010	14.9	16.47	1.57	vvs	Vvs volcanosedimentary	L	grey	vfg	clastic or as clasts	silica flooded shear zone		2	2	chlorite alteration	wk						vqc	2.5							
Gowganda - Transition Metals	TMH11-010	16.47	22.85	6.38	vum	Vum ultramafic volcanic	M	grey	vfg	schistose	shear vein, quart, minor carboante and chlorite		45	3	silica alteration	v str	chlorite alteration	wk				vqc	5							
Gowganda - Transition Metals	TMH11-010	22.85	23.05	0.20	vin	Vein	L	white	vfg	schistose	silica flooded shear zone	sheared	34	2	chlorite alteration	wk						vqc	90							
Gowganda - Transition Metals	TMH11-010	23.05	24.85	1.80	vum	Vum ultramafic volcanic	M	grey	vfg	schistose	shear vein, quart, minor carboante and chlorite		45	23	silica alteration	str	chlorite alteration	wk	fuchsite alteration	wk		vqc	2.5							
Gowganda - Transition Metals	TMH11-010	24.85	25.37	0.52	vin	Vein	L	white	vfg	schistose		sheared	34	2	chlorite alteration	wk						vqc	95							
Gowganda - Transition Metals	TMH11-010	25.37	25.41	0.04	vum	Vum ultramafic volcanic	D	black	vfg	massive	shear vein/zone		2	1	talc alteration	wk	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-010	25.41	25.8	0.40	vum	Vum ultramafic volcanic	L	white black	vfg	schistose		sheared	1	3	chlorite alteration	mod						vqc	70							
Gowganda - Transition Metals	TMH11-010	25.8	26	0.20	vum	Vum ultramafic volcanic	D	black	vfg	massive	shear vein, quart, minor carboante and chlorite		2	23	chlorite alteration	wk mod	talc alteration	wk													
Gowganda - Transition Metals	TMH11-010	26	26.4	0.40	vin	Vein	L	white	vfg	schistose	shear zone	sheared	12	34	chlorite alteration	mod	talc alteration	wk	fuchsite alteration	wk		vqc	70							
Gowganda - Transition Metals	TMH11-010	26.4	27.15	0.75	vum	Vum ultramafic volcanic	M	black white	vfg	schistose		sheared	3	34	talc alteration	mod	chlorite alteration	wk mod				vqc	20							
Gowganda - Transition Metals	TMH11-010	27.15	28.9	1.75	vum	Vum ultramafic volcanic	D	black	vfg	schistose	talc schits	faulted/fault	23	34	chlorite alteration	mod	talc alteration	wk													
Gowganda - Transition Metals	TMH11-010	28.9	30.7	1.80	vum	Vum ultramafic volcanic	M	grey black	vfg	schistose	massive to wealy foliated, with foliation defined by bands of slightly more course graind (still fine-graind, just not aphanitic		34	2	talc alteration	mod str	chlorite alteration	wk mod				vqc	1							
					vum	Vum ultramafic volcanic	D	grey black	fmg		ultramafic (?)																				
Gowganda - Transition Metals	TMH11-017	0	2	2.00	oou	Oou overburden general																									
Gowganda - Transition Metals	TMH11-017	2	13.6	11.60	vum	Vum ultramafic volcanic	D	grey	vfg	weakly foliated	dark brown red dyke				talc alteration	mod str	chlorite alteration	wk				vcb	0.5							
Gowganda - Transition Metals	TMH11-017	13.6	15.85	2.25	gdl	Gdl dolerite	D	brown	fg	massive					hematite alteration	mod	chlorite alteration	v wk													
Gowganda - Transition Metals	TMH11-017	15.85	17.75	1.90	vum	Vum ultramafic volcanic	D	grey	vfg	weakly foliated					talc alteration	mod str	chlorite alteration	wk				vcb	0.5							
Gowganda - Transition Metals	TMH11-017	17.75	19.52	1.77	gdl	Gdl dolerite	D	brown	fg	massive					hematite alteration	mod	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-017	19.52	21.77	2.25	vum	Vum ultramafic volcanic	D	grey	vfg	weakly foliated					talc alteration	mod str	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-017	21.77	21.87	0.11	gdl	Gdl dolerite	D	brown	fg	massive					hematite alteration	mod str	chlorite alteration	wk													
Gowganda - Transition Metals	TMH11-017	21.87	36.4	14.53	vum	Vum ultramafic volcanic	D	grey	vfg	weakly foliated	minor shear zone (?)				talc alteration	mod str	chlorite alteration	wk				vcb	0.75							
Gowganda - Transition Metals	TMH11-017	36.4	36.42	0.03	vum	Vum ultramafic volcanic	D	grey	vfg	schistose					talc alteration	mod str	chlorite alteration	wk				vcb	20							
Gowganda - Transition Metals	TMH11-017	36.42	37.02	0.61	vum	Vum ultramafic volcanic	D	grey	vfg	weakly foliated					talc alteration	mod str	chlorite alteration	wk				vcb	0.25							
Gowganda - Transition Metals	TMH11-017	37.02	43.4	6.38	vum	Vum ultramafic volcanic	D	grey	vfg	weakly foliated	feldspare porphyry				talc alteration	mod str	chlorite alteration	wk				vcb	1							
Gowganda - Transition Metals	TMH11-017	43.4	43.75	0.36	gpp	Gpp porphyry	M	fawn grey	fmg	massive					silica alteration	wk mod						vqc	5							
Gowganda - Transition Metals	TMH11-017	43.75	44.18	0.43	vvm	Vvm mafic volcanic	D	grey	fg	massive					chlorite alteration	mod	carbonate alteration	mod													
Gowganda - Transition Metals	TMH11-017	44.18	44.22	0.04	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	massive to weakly foliated				talc alteration	mod	carbonate alteration	wk				vcb	25							
Gowganda - Transition Metals	TMH11-017	44.22	44.54	0.32	gdl	Gdl dolerite	D	grey green	fmg	massive	I don't know what this is				chlorite alteration	wk mod	carbonate alteration	wk				vqc	0.5							
Gowganda - Transition Metals	TMH11-017	44.54	44.6	0.07	vvm	Vvm mafic volcanic	D	green black	vfg	massive	shear zone?				chlorite alteration	wk mod						vqz	2							
Gowganda - Transition Metals	TMH11-017	44.6	44.9	0.30	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	weakly foliated to weakly schistose				talc alteration	mod str	chlorite alteration	wk	carbonate alteration	v wk		vcb	15							
Gowganda - Transition Metals	TMH11-017	44.9	50	5.10	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	diabase dyke(?)				talc alteration	mod str	carbonate alteration	wk mod				vqc	4	vqz	0.5					
Gowganda - Transition Metals	TMH11-017	50	51.05	1.05	gdl	Gdl dolerite	D	green fawn	fmg	massive	deformed. weakly foliated to weakly schistose				chlorite alteration	mod	carbonate alteration	wk				vqc	1							
Gowganda - Transition Metals	TMH11-017	51.05	52.75	1.70	vum	Vum ultramafic volcanic	D	grey black	fg	weakly foliated					talc alteration	mod str	carbonate alteration	wk													

Gowganda - Transition Metals	TMH11-017	52.75	53.28	0.54	vvs	Vvs volcanosedimentary	M	fawn	fg	clastic or as clasts				carbonate alteration	wk	chlorite alteration	wk				vst	0.5								
Gowganda - Transition Metals	TMH11-017	53.28	53.88	0.61	gdl	Gdl dolerite	D	fawn green	fmg	massive	diabase dyke(?)			chlorite alteration	mod	carbonate alteration	wk				vqc	4	vqz	1						
Gowganda - Transition Metals	TMH11-017	53.88	55.45	1.57	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	weakly deformed (schistose?)			talc alteration	mod str	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-017	55.45	55.9	0.45	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	weakly deformed (schistose?)			talc alteration	mod str	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-017	55.9	58.06	2.16	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated				talc alteration	mod str	chlorite alteration	wk	carbonate alteration	wk										
Gowganda - Transition Metals	TMH11-017	58.06	58.55	0.49	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	diabase dyke(?)			talc alteration	mod str	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-017	58.55	58.85	0.31	gdl	Gdl dolerite	D	purple green	fmg	massive	looks like a mafic volcanic or a mafic dyke except for two granitic clasts			hematite alteration	mod	chlorite alteration	mod	carbonate alteration	wk										
Gowganda - Transition Metals	TMH11-017	58.85	61.78	2.93	vvs	Vvs volcanosedimentary	D	purple green	fmg	clastic or as clasts				chlorite alteration	mod str	carbonate alteration	wk				vcb	1							
Gowganda - Transition Metals	TMH11-017	61.78	63.1	1.32	vum	Vum ultramafic volcanic	M	black	vfg	weakly foliated				talc alteration	str	chlorite alteration	wk mod	carbonate alteration	wk mod		vcb	1							
Gowganda - Transition Metals	TMH11-017	63.1	63.18	0.08	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose	diabase dyke(?)			talc alteration	mod str	chlorite alteration	wk				vcb	25							
Gowganda - Transition Metals	TMH11-017	63.18	63.7	0.53	gdl	Gdl dolerite	D	green purple	fmg	massive				chlorite alteration	mod	carbonate alteration	wk mod				vcb	0.5							
Gowganda - Transition Metals	TMH11-017	63.7	63.74	0.04	vum	Vum ultramafic volcanic	D	green	vfg	schistose				talc alteration	mod	chlorite alteration	wk mod				vcb	20							
Gowganda - Transition Metals	TMH11-017	63.74	65.17	1.43	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	diabase dyke(?)			talc alteration	mod str	chlorite alteration	wk	carbonate alteration	wk mod		vqc	0.5							
Gowganda - Transition Metals	TMH11-017	65.17	65.2	0.04	gdl	Gdl dolerite	D	purple green	fmg	massive				chlorite alteration	mod														
Gowganda - Transition Metals	TMH11-017	65.2	65.43	0.24	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				talc alteration	mod str	chlorite alteration	wk	carbonate alteration	wk mod		vcb	1							
Gowganda - Transition Metals	TMH11-017	65.43	65.82	0.39	gdl	Gdl dolerite	D	green purple	fmg	massive				chlorite alteration	mod	carbonate alteration	wk												
Gowganda - Transition Metals	TMH11-017	65.82	65.85	0.04	vum	Vum ultramafic volcanic	D	white black	vfg	schistose				talc alteration	mod	chlorite alteration	wk				vcb	40							
Gowganda - Transition Metals	TMH11-017	65.85	67.2	1.36	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	heamatite stained ultramafic/mafic, contact relationds difficult to determine due to broken nature			talc alteration	mod str	chlorite alteration	wk	carbonate alteration	wk		vcb	0.5							
Gowganda - Transition Metals	TMH11-017	67.2	69.5	2.30	vum	Vum ultramafic volcanic	D	red black	fg	foliated				hematite alteration	mod str	talc alteration	wk mod	carbonate alteration	wk		vqc	2							
Gowganda - Transition Metals	TMH11-017	69.5	70.5	1.00	vvm	Vvm mafic volcanic	D	grey black	vfg	weakly foliated	likely feldspar porphyry dyke, rubble			talc alteration	mod str	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-017	70.5	71.5	1.00	gpp	Gpp porphyry	L	pink fawn	fmg	massive		broken																	
Gowganda - Transition Metals	TMH11-017	71.5	83.94	12.44	vum	Vum ultramafic volcanic	D	grey	vfg	weakly foliated				talc alteration	mod str	chlorite alteration	wk	carbonate alteration	wk		vcb	3	vqc	1					
Gowganda - Transition Metals	TMH11-017	83.94	84.24	0.30	vum	Vum ultramafic volcanic	D	grey	vfg	schistose				talc alteration	mod str	chlorite alteration	wk	carbonate alteration	v wk		vcb	1							
Gowganda - Transition Metals	TMH11-017	84.24	86.41	2.17	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated				talc alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk										
Gowganda - Transition Metals	TMH11-017	86.41	89	2.59	vum	Vum ultramafic volcanic	D	grey	vfg	schistose				talc alteration	mod str	chlorite alteration	wk	carbonate alteration	v wk		vcb	1							
Gowganda - Transition Metals	TMH11-017	89	91.45	2.45	vum	Vum ultramafic volcanic	D	brown black	fg	foliated				hematite alteration	mod	chlorite alteration	mod	carbonate alteration	wk										
Gowganda - Transition Metals	TMH11-017	91.45	92.65	1.20	vum	Vum ultramafic volcanic	D	grey	vfg	schistose	likely mafic dyke	broken		talc alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk mod										
Gowganda - Transition Metals	TMH11-017	92.65	93.5	0.85	img	microgabbro	D	purple grey	fg	massive	likely mafic dyke			chlorite alteration	mod						vqc	2							
Gowganda - Transition Metals	TMH11-017	93.5	94.7	1.20	img	microgabbro	D	brown grey	fg	massive				chlorite alteration	mod	hematite alteration	wk				vqc	2							
Gowganda - Transition Metals	TMH11-017	94.7	94.8	0.10	mvu	Mvu metavolcanic general	D	grey	fg	massive		broken																	
Gowganda - Transition Metals	TMH11-017	94.8	95.75	0.96	mvu	Mvu metavolcanic general	D	red brown	fg	massive				hematite alteration	str	chlorite alteration	wk				vqc	1	vcb	0.5					
Gowganda - Transition Metals	TMH11-017	95.75	98.3	2.55	img	microgabbro	D	red black	fg	massive	massive, to weakly foliated to mottled texture			albite alteration	wk mod	chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH11-017	98.3	100	1.70	muv	Mvu metavolcanic general	M	pink red	fg	massive				albite alteration	mod	chlorite alteration	wk mod				vqc	1							
Gowganda - Transition Metals	TMH11-017	100	101.2	1.20	mvu	Mvu metavolcanic general	M	pink red	fg	mottled texture				albite alteration	mod	chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH11-017	101.2	101.8	0.60	mvu	Mvu metavolcanic general	M	pink red	fg	massive				albite alteration	mod str	chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH11-017	101.8	102.05	0.25	mvu	Mvu metavolcanic general	M	green black	vfg	schistose				fuchsite alteration	wk														
Gowganda - Transition Metals	TMH11-017	102	103.15	1.16	mvu	Mvu metavolcanic general	M	red brown	fg	massive				albite alteration	mod	chlorite alteration	wk	leucoxene alteration	wk mod										
Gowganda - Transition Metals	TMH11-017	103.15	103.5	0.35	vum	Vum ultramafic volcanic	D	green black	vfg	schistose	alteration halo(?), mottled tecture			fuchsite alteration	mod str	silica alteration	wk mod				vqz	1							
Gowganda - Transition Metals	TMH11-017	103.5	103.8	0.30	mvu	Mvu metavolcanic general	M	red green	vfg	foliated				albite alteration	mod str	chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH11-017	103.8	104.7	0.91	vvs	Vvs volcanosedimentary	M	red fawn	fg	clastic or as clasts				bleached/bleaching	wk mod	albite alteration	wk mod	chlorite alteration	wk		vqc	0.5							
Gowganda - Transition Metals	TMH11-017	104.7	104.94	0.24	mvu	Mvu metavolcanic general	D	red brown	fg	massive				albite alteration	mod str	leucoxene alteration	wk				vqc	0.75							
Gowganda - Transition Metals	TMH11-017	104.7	105.46	0.76	img	microgabbro	D	fawn grey	fg	massive				chlorite alteration	wk mod	albite alteration	wk				vqc	0.75							
Gowganda - Transition Metals	TMH11-017	104.94	107	2.06	mvu	Mvu metavolcanic general	D	red brown	fg	massive				albite alteration	str	leucoxene alteration	wk mod	chlorite alteration	v wk		vqc	1.5							
Gowganda - Transition Metals	TMH11-017	107	108.18	1.19	mvu	Mvu metavolcanic general	D	orange red	fg	massive	intrusive(?) img(?)			albite alteration	mod str	leucoxene alteration	mod	chlorite alteration	wk		vqc	0.5							
Gowganda - Transition Metals	TMH11-017	108.18	109.39	1.21	mvu	Mvu metavolcanic general	M	green red	fg	massive	intrusive(?) img(?)			chlorite alteration							vqc	1.5							
Gowganda - Transition Metals	TMH11-017	109.39	110	0.61	mvu	Mvu metavolcanic general	M	green grey	fg	weakly foliated	intrusive(?) img(?)			fuchsite alteration	wk mod	chlorite alteration	wk				vqc	0.5							
Gowganda - Transition Metals	TMH11-017	110	110.65	0.66	mvu	Mvu metavolcanic general	M	purple grey	fg	massive	intrusive(?) img(?)			chlorite alteration	mod						vqc	4							
Gowganda - Transition Metals	TMH11-017	110.65	111	0.35	mvu	Mvu metavolcanic general	L	green grey	fg	massive				fuchsite alteration	mod	chlorite alteration	wk				vqc	0.25							
Gowganda - Transition Metals	TMH11-017	111	113.7	2.70	vvs	Vvs volcanosedimentary	M	orange red	fg	clastic or as clasts	monzogabbro dyke?			albite alteration	mod str	chlorite alteration	wk mod	leucoxene alteration	wk mod		vqc	1.5							
Gowganda - Transition Metals	TMH11-017	113.7	114.2	0.50	gdr	Gdr diorite	M	grey pink	fg	massive	massive to weakly foliated with mottled texture			albite alteration	wk mod	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-017	114.2	114.8	0.60	mvu	Mvu metavolcanic general	M	red fawn	vfgfg	massive				albite alteration	mod	chlorite alteration	wk	leucoxene alteration	wk mod										
Gowganda - Transition Metals	TMH11-017	114.8	115.1	0.30	vum	Vum ultramafic volcanic	D	green black	vfg	schistose				fuchsite alteration	v wk						vcb	1.5							
Gowganda - Transition Metals	TMH11-017	115.1	117.45	2.36	vvs	Vvs volcanosedimentary	M	orange brown	fg	clastic or as clasts				albite alteration	mod	chlorite alteration	wk mod	leucoxene alteration	wk mod		vqc	3							
Gowganda - Transition Metals	TMH11-017	117.45	119.02	1.57	vvs	Vvs volcanosedimentary	D	brown red	fg	clastic or as clasts				albite alteration	wk mod	chlorite alteration	wk mod	leucoxene alteration	wk										

Gowganda - Transition Metals	TMH11-017	119.02	119.08	0.07	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			sheared					chlorite alteration	v str								vcb	0.5	vqc	0.5
Gowganda - Transition Metals	TMH11-017	119.08	119.29	0.22	gdl	Gdl dolerite	D	brown green	fmg	massive								chlorite alteration	mod str											
Gowganda - Transition Metals	TMH11-017	119.29	119.47	0.18	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose			sheared					talc alteration	v str	carbonate alteration	v wk									
Gowganda - Transition Metals	TMH11-017	119.47	120.25	0.79	gdl	Gdl dolerite	D	brown black	fmg	massive		mafic or ultramafic schist ?						chlorite alteration	mod str											
Gowganda - Transition Metals	TMH11-017	120.25	128	7.75	vum	Vum ultramafic volcanic	M	fawn black	vfgfg	schistose		massive to pillowed mafic volcanics						chlorite alteration	wk mod	carbonate alteration	v wk						vcb	0.5	vqc	0.5
Gowganda - Transition Metals	TMH11-017	128	146.75	18.75	vvm	Vvm mafic volcanic	M	brown black	vfgfg	pillowed		mafic or ultramafic schist ?						chlorite alteration	mod str	chlorite alteration	wk mod	sericite alteration	wk				vcb	1	vqc	0.25
Gowganda - Transition Metals	TMH11-017	146.75	147.15	0.41	vvm	Vvm mafic volcanic	D	grey black	vfg	schistose		mafic or ultramafic schist(?). Possible shear						chlorite alteration	mod	talc alteration	mod	carbonate alteration	wk				vcb	5	vqc	1
Gowganda - Transition Metals	TMH11-017	147.15	147.63	0.48	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose		mafic or ultramafic schist (?)	sheared					chlorite alteration	mod str	talc alteration	mod str	carbonate alteration	v wk							
Gowganda - Transition Metals	TMH11-017	147.63	153.4	5.78	vum	Vum ultramafic volcanic	D	grey black	vfg	schistose								talc alteration	mod str	chlorite alteration	mod	carbonate alteration	v wk				vcb	0.5	vqc	0.5
Gowganda - Transition Metals	TMH11-017	153.4	153.6	0.20	vum	Vum ultramafic volcanic	L	grey	vfg	friable/loose			gouge					talc alteration	v str											
Gowganda - Transition Metals	TMH11-017	153.6	154.4	0.81	vum	Vum ultramafic volcanic	I	grey black	fmg	schistose		mafic or ultramafic schist (?)	sheared					talc alteration	v str	chlorite alteration	wk	bleached/bleaching	wk				vqz	15		
Gowganda - Transition Metals	TMH11-017	154.4	157.15	2.75	vum	Vum ultramafic volcanic	M	grey	fmg	schistose			sheared					talc alteration	v str	chlorite alteration	wk mod	bleached/bleaching	wk				vqc	3		
Gowganda - Transition Metals	TMH11-017	157.15	159.4	2.25	vvm	Vvm mafic volcanic	D	grey black	vfg	massive								chlorite alteration	mod str	carbonate alteration	wk						vcb	1		
Gowganda - Transition Metals	TMH11-017	159.4	159.45	0.05	vvm	Vvm mafic volcanic	M	white black	vfg	schistose			sheared					chlorite alteration	str								vcb	50		
Gowganda - Transition Metals	TMH11-017	159.45	163.1	3.66	vvm	Vvm mafic volcanic	D	grey black	vfg	massive								chlorite alteration	mod str	carbonate alteration	wk						vcb	1		
Gowganda - Transition Metals	TMH11-017	163.1	174.15	11.05	vvm	Vvm mafic volcanic	D	grey black	vfg	massive			broken					chlorite alteration	mod str	carbonate alteration	wk						vcb	1		
Gowganda - Transition Metals	TMH11-017	174.15	174.3	0.16	sct	Sct chert	M	grey purple	vfg	massive								silica alteration	str											
Gowganda - Transition Metals	TMH11-017	174.3	183	8.70	vvm	Vvm mafic volcanic	D	grey black	vfg	massive			broken					chlorite alteration	mod str	carbonate alteration	wk						vcb	1		
Gowganda - Transition Metals	TMH11-019	73.85	74.02	0.18	gdl	Gdl dolerite	M	fawn green	fmg	massive				23	12			chlorite alteration	mod	hematite alteration	wk									
Gowganda - Transition Metals	TMH11-019	74.02	74.03	0.02	vum	Vum ultramafic volcanic	D	black	vfg	massive				12	12			chlorite alteration	wk	talc alteration	wk									
Gowganda - Transition Metals	TMH11-019	74.03	76.12	2.09	img	microgabbro	D	brown red	vfgfg	massive				12	12			hematite alteration	wk mod	chlorite alteration	wk mod									
Gowganda - Transition Metals	TMH11-019	76.12	76.25	0.13	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated				12	2	talc alteration	wk	chlorite alteration	wk											
Gowganda - Transition Metals	TMH11-019	76.25	76.49	0.24	gdl	Gdl dolerite	M	red fawn	fg	massive				12	23	bleached/bleaching	wk	chlorite alteration	wk mod	hematite alteration	wk									
Gowganda - Transition Metals	TMH11-019	76.49	77.16	0.68	gdl	Gdl dolerite	D	red green	fmg	massive		micro-gabbro to gabbro(diablase)		2	1	chlorite alteration	mod str	hematite alteration	wk mod											
Gowganda - Transition Metals	TMH11-019	77.16	79	1.84	img	microgabbro	M	grey	fg	massive				23	1	chlorite alteration	mod	bleached/bleaching	wk mod	hematite alteration	v wk						vqc	2.5		
Gowganda - Transition Metals	TMH11-019	79	79.2	0.21	vvm	Vvm mafic volcanic	D	grey black	vfg	weakly foliated				12	2	talc alteration	wk	chlorite alteration	wk											
Gowganda - Transition Metals	TMH11-019	79.2	79.51	0.32	img	microgabbro	D	fawn black	vfgfg	massive		dyke (?)		12	12	chlorite alteration	wk mod	hematite alteration	wk											
Gowganda - Transition Metals	TMH11-019	79.51	79.56	0.05	gdl	Gdl dolerite	M	fawn green	fmg	massive		micro-gabbro to gabbro(diablase)		12	1	chlorite alteration	wk mod													
Gowganda - Transition Metals	TMH11-019	79.56	79.69	0.13	img	microgabbro	M	pink green	fg	massive				12	1	chlorite alteration	mod	hematite alteration	v wk											
Gowganda - Transition Metals	TMH11-019	79.69	81.15	1.47	vvm	Vvm mafic volcanic	D	grey black	vfg	schistose		altered clastic interval, mafic and felsic clasts		12	23	chlorite alteration	wk mod	talc alteration	wk								vqc	1.5		
Gowganda - Transition Metals	TMH11-019	81.15	83.13	1.98	fima	intermediate tuff, altered (fawn?	L	fawn	vfgfg	clastic or as clasts		alteration halo (?)		34	12	bleached/bleaching	str	chlorite alteration	wk	fuchsite alteration	wk						vqz	1	vqc	0.5
Gowganda - Transition Metals	TMH11-019	83.13	83.55	0.43	img	microgabbro	M	fawn black	vfgfg	massive		vein, pink carbonate with, minor quartz and rusty red altered band		3	12	bleached/bleaching	wk	chlorite alteration	wk mod											
Gowganda - Transition Metals	TMH11-019	85.05	85.12	0.08	vin	Vein	L	pink	vfg	massive				12	12												vcb	20	vqz	15
Gowganda - Transition Metals	TMH11-019	85.12	86	0.88	img	microgabbro	D	black	vfgfg	massive		with pink granitc rounded clasts		12	12	chlorite alteration	wk										vst	0.5		
Gowganda - Transition Metals	TMH11-019	86	86.85	0.85	img	microgabbro	D	black	vfgfg	massive				12	12	chlorite alteration	wk										vst	0.5		
Gowganda - Transition Metals	TMH11-019	86.85	87.2	0.36	img	microgabbro	D	black	vfgfg	massive				12	12	chlorite alteration	wk										vst	0.5		
Gowganda - Transition Metals	TMH11-019	87.2	89.4	2.20	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				12	12	talc alteration	wk	chlorite alteration	wk	sericite alteration	wk									
Gowganda - Transition Metals	TMH11-019	89.4	89.47	0.07	gdl	Gdl dolerite	D	red brown	fmg	massive				2	12	hematite alteration	wk mod	chlorite alteration	wk											
Gowganda - Transition Metals	TMH11-019	89.47	100.2	10.73	vum	Vum ultramafic volcanic	D	grey black	vfg	massive				12	12	talc alteration	wk	chlorite alteration	wk								vqc	1		
Gowganda - Transition Metals	TMH11-019	100.2	100.7	0.50	mvu	Mvu metavolcanic general	D	brown red	vfg	massive				34	12	albite alteration	v str	chlorite alteration	wk								vqc	3		
Gowganda - Transition Metals	TMH11-019	100.7	100.85	0.15	vum	Vum ultramafic volcanic	D	grey black	vfg	massive		with cavity		12	12	talc alteration	wk	chlorite alteration	wk											
Gowganda - Transition Metals	TMH11-019	100.85	101.15	0.31	mvu	Mvu metavolcanic general	L	grey fawn	vfg	massive				4	23	bleached/bleaching	mod str										vcb	0.5		
Gowganda - Transition Metals	TMH11-019	101.15	101.35	0.20	cfd	chlorite-fuchsite dyke	M	green fawn	fmg	massive				34	12	bleached/bleaching	wk	chlorite alteration	mod	fuchsite alteration	v wk						vqz	0.5		
Gowganda - Transition Metals	TMH11-019	101.35	102.25	0.91	mvu	Mvu metavolcanic general	M	fawn	fg	massive				34	12	bleached/bleaching	str										vqz	0.5		
Gowganda - Transition Metals	TMH11-019	102.25	103.22	0.97	mvu	Mvu metavolcanic general	M	fawn grey	fg	massive				3	12	bleached/bleaching	mod str	chlorite alteration	wk mod								vqc	3		
Gowganda - Transition Metals	TMH11-019	103.22	103.42	0.21	mvu	Mvu metavolcanic general	M	fawn grey	fg	schistose		rare granular sized clasts, angular, chlorite altered		3	23	bleached/bleaching	mod	chlorite alteration	wk								vqz	25		
Gowganda - Transition Metals	TMH11-019	103.42	105.1	1.68	vvm	Vvm mafic volcanic	D	grey red	fg	massive				3	1	hematite alteration	mod	chlorite alteration	wk mod								vst	0.5		
Gowganda - Transition Metals	TMH11-019	105.1	105.15	0.06	mvu	Mvu metavolcanic general	D	white black	vfg	schistose				12	23	chlorite alteration	wk mod										vqc	3		
Gowganda - Transition Metals	TMH11-019	105.15	105.3	0.15	mvu	Mvu metavolcanic general	D	fawn grey	fg	massive				3	2	bleached/bleaching	wk	chlorite alteration	wk	hematite alteration	v wk									
Gowganda - Transition Metals	TMH11-019	105.3	105.42	0.13	vum	Vum ultramafic volcanic	D	green black	vfg	schistose			sheared	3	3	fuchsite alteration	mod str	chlorite alteration	wk	talc alteration	wk						vqc	20		
Gowganda - Transition Metals	TMH11-019	105.42	106.17	0.75	vum	Vum ultramafic volcanic	D	green	vfg	massive				3	12	fuchsite alteration	mod	chlorite alteration	wk	talc alteration	v wk									
Gowganda - Transition Metals	TMH11-019	106.17	106.52	0.35	vvm	Vvm mafic volcanic	D	fawn black	vfg	weakly foliated				3	3	bleached/bleaching	mod	chlorite alteration	wk mod								vqc	1		
Gowganda - Transition Metals	TMH11-019	106.52	107.35	0.83	vvm	Vvm mafic volcanic	D	red black	vfg	massive				3	12	albite alteration	str	chlorite alteration	wk mod								vqc	15		
Gowganda - Transition Metals	TMH11-019	107.35	107.8	0.46	vvm	Vvm mafic volcanic	D	brown red	vfg	massive				34	1	albite alteration	mod str	leucoxene alteration	wk mod											

Gowganda - Transition Metals	TMH11-019	107.8	107.9	0.11	vum	Vum ultramafic volcanic	D	green black	vfg	schistose	likely vvm... but there are rare felsic/quartz clasts	sheared	23	34	fuchsite alteration	wk	chlorite alteration	wk	talc alteration	wk						
Gowganda - Transition Metals	TMH11-019	107.9	108.65	0.75	mvu	Mvu metavolcanic general	M	grey fawn	fg	massive	continuation of above unit different alteration, rare mafic clasts...		23	12	bleached/bleaching	wk mod										
Gowganda - Transition Metals	TMH11-019	108.65	109.18	0.54	mvu	Mvu metavolcanic general	M	grey red	fg	massive	alteration boundary? Weird looking		23	12	bleached/bleaching	wk mod	hematite alteration	wk mod	chlorite alteration	wk			vqz	1		
Gowganda - Transition Metals	TMH11-019	109.18	109.38	0.20	mvu	Mvu metavolcanic general	M	grey fawn	fmg	weakly foliated	possible shear		34	2	bleached/bleaching	wk mod	silica alteration	wk	chlorite alteration	wk			vqz	0.5		
Gowganda - Transition Metals	TMH11-019	109.38	109.4	0.03	vum	Vum ultramafic volcanic	D	black	vfg	foliated	rare granularto pebble sized clasts, angular, chlorite altered		12	23	chlorite alteration	wk mod	talc alteration	wk								
Gowganda - Transition Metals	TMH11-019	109.4	111	1.60	vvm	Vvm mafic volcanic	D	red brown	fg	clastic or as clasts	likely mafic volcanic		23	12	albite alteration	wk mod	chlorite alteration	mod str					vqc	1		
Gowganda - Transition Metals	TMH11-019	111	113.08	2.08	mvu	Mvu metavolcanic general	D	red brown	fg	massive			23	12	albite alteration	str	leucoxene alteration	mod	chlorite alteration	wk						
Gowganda - Transition Metals	TMH11-019	113.08	114.75	1.67	mvu	Mvu metavolcanic general	D	red	vfg	massive			34	12	albite alteration	str	chlorite alteration	wk					vqc	3		
Gowganda - Transition Metals	TMH11-019	114.75	114.9	0.16	mvu	Mvu metavolcanic general	D	black fawn	fg	mottled texture			23	12	chlorite alteration	wk mod	albite alteration	wk								
Gowganda - Transition Metals	TMH11-019	114.9	115.8	0.90	mvu	Mvu metavolcanic general	D	grey red	fg	weakly foliated	possible shear		23	12	albite alteration	mod str	chlorite alteration	wk mod					vqz	1		
Gowganda - Transition Metals	TMH11-019	115.8	116.3	0.50	vum	Vum ultramafic volcanic	D	green	vfg	schistose	likely micro-gabbro	sheared	3	3	fuchsite alteration	mod	chlorite alteration	wk					vqc	5		
Gowganda - Transition Metals	TMH11-019	116.3	117.05	0.75	vum	Vum ultramafic volcanic	D	red green	fg	massive	fawn to light rusty red. clasts: granuals, subangular to angular		23	12	albite alteration	wk mod	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-019	117.05	118.57	1.52	fima	intermediate tuff, altered (grey t	M	grey fawn	fg	clastic or as clasts	chlorite altered mafic		23	12	bleached/bleaching	mod	albite alteration	wk mod	chlorite alteration	wk			vqc	3		
Gowganda - Transition Metals	TMH11-019	118.57	119.17	0.61	cfd	chlorite-fuchsite dyke	M	green fawn	fmg	massive	chlorite-fuchsite alteration dyke set		23	12	albite alteration	mod	fuchsite alteration	wk	chlorite alteration	wk			vqc	1		
Gowganda - Transition Metals	TMH11-019	119.17	119.56	0.40	mvu	Mvu metavolcanic general	D	brown red	fg	massive	dyke (?)		34	12	albite alteration	str	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-019	119.56	119.65	0.10	gdl	Gdl dolerite	D	green brown	fmg	massive			34	12	albite alteration	mod	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-019	119.65	120.5	0.85	mvu	Mvu metavolcanic general	D	brown red	fg	massive			34	12	albite alteration	mod str	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-019	120.5	120.6	0.10	gdl	Gdl dolerite	D	green black	fmg	massive			23	12	chlorite alteration	mod str							vqz	2.5		
Gowganda - Transition Metals	TMH11-019	120.6	121.8	1.20	mvu	Mvu metavolcanic general	M	red	vfgfg	massive	clasts: granual to pebble, sub angular to angular chlorite		4	12	albite alteration	str	chlorite alteration	wk mod					vqz	7.5		
Gowganda - Transition Metals	TMH11-019	121.8	122.93	1.14	fima	intermediate tuff, altered (fawn)	M	fawn	fg	clastic or as clasts	altered mafic		34	12	bleached/bleaching	mod str	chlorite alteration	wk	albite alteration	wk mod			vqc	0.5		
Gowganda - Transition Metals	TMH11-019	122.93	122.95	0.02	vum	Vum ultramafic volcanic	M	green	vfg	schistose		sheared	23	23	fuchsite alteration	mod str							vqc	15		
Gowganda - Transition Metals	TMH11-019	122.95	123.2	0.25	mvu	Mvu metavolcanic general	M	pink fawn	fmg	weakly foliated	cant be sure but maybe gdl dyke		34	12	bleached/bleaching	wk mod	chlorite alteration	wk	fuchsite alteration	wk						
Gowganda - Transition Metals	TMH11-019	123.2	123.6	0.40	mvu	Mvu metavolcanic general	D	orange red	fmg	massive	might be one cf-dyke and a microgabbro/gdl dyke? (two dykes?)		4	1	albite alteration	str	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-019	123.6	124.17	0.58	cfd	chlorite-fuchsite dyke	M	green fawn	fmg	massive	clasts: granual to pebble, sub angular to angular chlorite		2	12	bleached/bleaching	wk mod	chlorite alteration	wk mod	fuchsite alteration	wk			vqc	3		
Gowganda - Transition Metals	TMH11-019	124.17	125.54	1.37	fima	fragmetnal intermediate to mafi	M	red		clastic or as clasts	altered mafic		34	12	albite alteration	mod str	chlorite alteration	wk mod	leucoxene alteration	wk mod			vqc	3		
Gowganda - Transition Metals	TMH11-019	125.54	126.8	1.26	gdl	Gdl dolerite	M	red fawn	fmg	massive	dyke?		34	12	bleached/bleaching	mod str	chlorite alteration	wk mod	albite alteration	wk			vqc	3		
Gowganda - Transition Metals	TMH11-019	126.8	128.5	1.70	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	likely altered vvm		12	12	talc alteration	wk	chlorite alteration	wk					vqc	1		
Gowganda - Transition Metals	TMH11-019	128.5	129.08	0.59	mvu	Mvu metavolcanic general	D	brown red	fg	massive			3	12	albite alteration	wk mod	chlorite alteration	wk mod					vqc	2		
Gowganda - Transition Metals	TMH11-019	129.08	129.38	0.30	gdl	Gdl dolerite	D	green black	fmg	weakly foliated			2	2	chlorite alteration	mod							vqc	2		
Gowganda - Transition Metals	TMH11-019	129.38	129.4	0.03	cfd	chlorite-fuchsite dyke	M	green fawn	fmg	massive			2	12	fuchsite alteration	wk mod										
Gowganda - Transition Metals	TMH11-019	129.4	131	1.60	vum	Vum ultramafic volcanic	M	green	vfg	weakly foliated			23	12	fuchsite alteration	wk mod	chlorite alteration	wk mod	talc alteration	wk			vqc	5		
Gowganda - Transition Metals	TMH11-019	131	137.25	6.25	vum	Vum ultramafic volcanic	M	grey black	vfg	massive	altered dyke?		23	12	talc alteration	wk	chlorite alteration	wk					vqc	2		
Gowganda - Transition Metals	TMH11-019	138.1	138.55	0.46	vum	Vum ultramafic volcanic	L	fawn	vfgfg	massive			34	12	bleached/bleaching	mod str	fuchsite alteration	wk mod					vqc	2		
Gowganda - Transition Metals	TMH11-019	138.55	139.04	0.49	vum	Vum ultramafic volcanic	M	fawn green	vfgfg	weakly foliated	fish scale texture		34	23	bleached/bleaching	mod str	fuchsite alteration	mod	silica alteration	wk mod			vqc	3		
Gowganda - Transition Metals	TMH11-019	139.04	143.6	4.56	vum	Vum ultramafic volcanic	M	green fawn	vfg	mottled texture			34	3	fuchsite alteration	mod str	bleached/bleaching	mod					vqc	5		
Gowganda - Transition Metals	TMH11-019	143.6	145.2	1.60	vum	Vum ultramafic volcanic	M	fawn green	vfgfg	weakly foliated	shear vein		34	23	bleached/bleaching	mod str	fuchsite alteration	wk mod					vqc	10		
Gowganda - Transition Metals	TMH11-019	145.2	145.53	0.34	vin	Vein	L	fawn white	vfg	schistose		sheared	12	3									vqc	75		
Gowganda - Transition Metals	TMH11-019	145.53	146.3	0.78	vum	Vum ultramafic volcanic	M	fawn green	vfg	foliated			34	23	bleached/bleaching	wk mod	fuchsite alteration	mod								
Gowganda - Transition Metals	TMH11-019	146.3	146.72	0.42	fima	intermediate tuff, altered (fawn)	M	fawn	fg	massive			34	12	bleached/bleaching	mod str	fuchsite alteration	wk mod	chlorite alteration	wk						
Gowganda - Transition Metals	TMH11-019	146.72	147.2	0.48	vum	Vum ultramafic volcanic	M	green	vfg	massive	massive to weakly schistose		3	12	fuchsite alteration	mod	bleached/bleaching	wk	chlorite alteration	wk			vcb	2.5		
Gowganda - Transition Metals	TMH11-019	147.2	151.7	4.50	vum	Vum ultramafic volcanic	D	grey black	vfg	massive			12	12	talc alteration	wk mod	chlorite alteration	wk					vcb	2.5		
Gowganda - Transition Metals	TMH11-019	151.7	152.1	0.41	gdl	Gdl dolerite	D	purple green	fmg	massive			23	12	chlorite alteration	wk mod	hematite alteration	v wk								
Gowganda - Transition Metals	TMH11-019	152.1	153.65	1.56	vum	Vum ultramafic volcanic	D	grey black	fmg	weakly foliated	dyke, alteration makes it difficut to distinguish		12	12	talc alteration	wk	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-019	153.65	153.81	0.16	gdl	Gdl dolerite	D	fawn black	fmg	massive			23	12	chlorite alteration	wk mod	bleached/bleaching	wk mod								
Gowganda - Transition Metals	TMH11-019	153.81	154.11	0.31	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	likley mafic volcanic, weakly to moderatly folliated, round pink-red hematite(?) alteration occcuring as roundish 3 to 5 mm		12	12	talc alteration	wk	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-019	154.11	157.7	3.59	vvm	Vvm mafic volcanic	D	grey black	fmg	weakly foliated	pods		2	23	chlorite alteration	mod	bleached/bleaching	wk	hematite alteration	wk			vcb	7		
Gowganda - Transition Metals	TMH11-019	157.7	160.7	3.00	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	shear vein		12	12	talc alteration	wk	chlorite alteration						vcb	5		
Gowganda - Transition Metals	TMH11-019	160.7	160.8	0.11	vin	Vein	L	white	vfg	schistose		sheared	1	12	chlorite alteration	wk							vcb	95		
Gowganda - Transition Metals	TMH11-019	160.8	167	6.20	vum	Vum ultramafic volcanic	D	grey black	vfg	massive			12	12	talc alteration	wk	chlorite alteration	wk					vcb	1		
Gowganda - Transition Metals	TMH11-020	0	6	6.00	oou	Oou overburden general																				
Gowganda - Transition Metals	TMH11-020	6	9.2	3.20	vum	Vum ultramafic volcanic	D	grey black	vfg	massive			12	1	chlorite alteration	wk mod	talc alteration	wk	carbonate alteration	v wk						
Gowganda - Transition Metals	TMH11-020	9.2	10.2	1.00	lam	lamprophyre	D	brown	vfgfg	massive			12	1												
Gowganda - Transition Metals	TMH11-020	10.2	16.4	6.20	vum	Vum ultramafic volcanic	D	grey	vfg	massive	missing half of interval. Cataclastic, intermediate to mafic		12	12	talc alteration	wk	chlorite alteration	wk								
Gowganda - Transition Metals	TMH11-020	16.4	19.5	3.10	ivb	intermediate volcanic brecciated	M	grey	vfg	brecciated	volcanic(?), however locally looks like there are sand size grains, or lareger pebble size clasts.	cataclastic	4	4	silica alteration	mod str							vqz	0.25		

Gowganda - Transition Metals	TMH11-020	19.5	30.9	11.40	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	massive to locally foliated. Quartz blow-out between 26.5 and 26.9 m.		12		12	talc alteration	wk	chlorite alteration	wk				vqz	7.5					
Gowganda - Transition Metals	TMH11-020	30.9	31.85	0.96		lamprophyre	D	brown black	vfgfg	massive	intrusive (?) very fine grained to fine-grained, massive equigranular, relatively fresh		12		1	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-020	31.85	34.6	2.75	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	fine grained intrusive altered and variably silica flooded		12		12	talc alteration	wk	chlorite alteration	wk											
Gowganda - Transition Metals	TMH11-020	34.6	37.5	2.90	gdl	Gdl dolerite	M	grey green	fmg	massive	protolith almost obliterated, minor light grey protolith is visable		34		12	silica alteration	mod str	chlorite alteration	wk mod				vqc	2.5					
Gowganda - Transition Metals	TMH11-020	37.5	44	6.50	iva	intermediate volcanic altered	L	pink	vfgfg	massive	protolith essentially oblierated		45		12	silica alteration	v str						vqc	7.5	vqz	1			
Gowganda - Transition Metals	TMH11-020	44	44.8	0.80	iva	intermediate volcanic altered	M	olive green	vfg	weakly foliated	similar to 37.5 to 44 m, slighly more light grey protolith		34		12	silica alteration	mod str			chlorite alteration	wk mod								
Gowganda - Transition Metals	TMH11-020	44	49.3	5.30	iva	intermediate volcanic altered	L	grey pink	vfg	massive	realy or alteration halo		34		12								vqc	3.5					
Gowganda - Transition Metals	TMH11-020	49.3	49.38	0.09	vum	Vum ultramafic volcanic	D	black	vfg	massive	protolith essentially oblierated		12		12	silica alteration	str												
Gowganda - Transition Metals	TMH11-020	49.38	50.46	1.08	iva	intermediate volcanic altered	M	olive green	vfg	massive	realy or alteration halo		4		12	silica alteration	mod str	chlorite alteration	wk mod				vqc	0.5					
Gowganda - Transition Metals	TMH11-020	50.36	50.4	0.04	vum	Vum ultramafic volcanic	D	black	vfg	massive	protolith essentially oblierated		12		12	chlorite alteration	mod												
Gowganda - Transition Metals	TMH11-020	50.4	51.3	0.90	iva	intermediate volcanic altered	M	grey pink	vfg	massive	protolith essentially oblierated		4		12	silica alteration	str						vqc	5					
Gowganda - Transition Metals	TMH11-020	51.3	54.27	2.98	iva	intermediate volcanic altered	M	olive green	fg	massive			34		12	bleached/bleaching	mod str	sericite alteration	wk mod										
Gowganda - Transition Metals	TMH11-020	54.27	60.55	6.28	pyx	pyroxenite/lamprophyre	D	grey black	fg	massive			12		12	chlorite alteration	wk mod	sericite alteration	mod	chlorite alteration	mod		vcb	1.5					
Gowganda - Transition Metals	TMH11-020	60.55	60.75	0.21	iva	intermediate volcanic altered	L	green grey	fg	massive																			
Gowganda - Transition Metals	TMH11-020	60.45	63.15	2.70	iva	intermediate volcanic altered	L	pink	fg	massive																			
Gowganda - Transition Metals	TMH11-020	63.15	65.22	2.07	iva	intermediate volcanic altered	M	fawn green	fg	massive																			
Gowganda - Transition Metals	TMH11-020	65.22	65.53	0.32	iva	intermediate volcanic altered	D	black olive	fg	massive																			
Gowganda - Transition Metals	TMH11-020	65.53	69.8	4.27	ivb	intermeidate volcanic, brecciated	M	fawn orange	fmg	clastic or as clasts		cataclastic	45		45	silica alteration	v str	carbonate alteration	mod										
Gowganda - Transition Metals	TMH11-020	69.8	72.8	3.00	ivb	intermeidate volcanic, brecciated	M	grey black	fmg	clastic or as clasts	rounded clasts of intermediate to mafic in mafic volcanic	cataclastic	45		45	silica alteration	v str	carbonate alteration	wk mod										
Gowganda - Transition Metals	TMH11-020	72.8	73.18	0.39	vvm	Vvm mafic volcanic	M	grey black	fmg	healed breccia porphyritic or as phenocrysts	massive to weakly foliated																		
Gowganda - Transition Metals	TMH11-020	73.18	73.63	0.45	vvm	Vvm mafic volcanic	M	grey black	fmg																				
Gowganda - Transition Metals	TMH11-020	73.63	73.7	0.08	vvm	Vvm mafic volcanic	D	grey black	vfg	massive																			
Gowganda - Transition Metals	TMH11-020	73.7	73.9	0.21	vvm	Vvm mafic volcanic	D	grey black	vfg	healed breccia																			
Gowganda - Transition Metals	TMH11-020	73.9	74.35	0.45	vvm	Vvm mafic volcanic	D	grey black	vfg	weakly foliated																			
Gowganda - Transition Metals	TMH11-020	74.35	74.8	0.46	vvm	Vvm mafic volcanic	D	grey black	vfg	healed breccia porphyritic or as phenocrysts																			
Gowganda - Transition Metals	TMH11-020	74.8	75.05	0.25	vvm	Vvm mafic volcanic	D	grey black	vfg	massive	intermediate volcanic breccia																		
Gowganda - Transition Metals	TMH11-020	75.05	80.7	5.66	vvi	Vvi intermediate volcanic	D	grey black	vfg	massive	laminated mud and silt, graphitic, argillitic																		
Gowganda - Transition Metals	TMH11-020	80.7	88	7.30	sag	Sag argillite	D	grey black	vfg	massive	dyke (?)		12		12								vcb	1					
Gowganda - Transition Metals	TMH11-020	88	89.27	1.27	sag	Sag argillite	D	grey black	vfg	massive	laminated to bedded mud and silt, minor medium sand, locally graphitic, locally argillitic												vcb	0.5					
Gowganda - Transition Metals	TMH11-020	89.27	99.25	9.98	sag	Sag argillite	D	grey black	vfg	massive	calcarious fine-grained seds												vcb	3	vcb	2			
Gowganda - Transition Metals	TMH11-020	99.25	99.55	0.30	sag	Sag argillite	D	grey black	vfg	massive	laminated to bedded mud and silt, minor medium sand, locally insitu breccia												vcb	0.5					
Gowganda - Transition Metals	TMH11-020	99.55	102.1	2.55	sag	Sag argillite	D	grey black	vfg	massive	sand												vqc	5					
Gowganda - Transition Metals	TMH11-020	102.1	102.47	0.38	sag	Sag argillite	D	grey black	vfg	massive	laminated to bedded silt and mud, minor sand, minor local insity breccia												vcb	0.5					
Gowganda - Transition Metals	TMH11-020	102.47	107.55	5.08	sag	Sag argillite	D	grey black	vfg	massive	calcarious fine-grained seds												vcb	1	vqc	0.25			
Gowganda - Transition Metals	TMH11-020	107.55	107.75	0.21	sag	Sag argillite	D	grey black	vfg	massive	laminate to bedded silt and mud with sandy beds												vcb	1	vcb	0.25			
Gowganda - Transition Metals	TMH11-020	107.75	110.5	2.75	sag	Sag argillite	D	grey black	vfg	massive	calcarious fine-grained seds												vqc	2.5	vcb	0.25			
Gowganda - Transition Metals	TMH11-020	110.5	110.9	0.41	sag	Sag argillite	D	grey black	vfg	massive	laminate to bedded silt and mud with sandy beds, in-situ breccia, locally with sandy fill between breccia												vcb	0.5					
Gowganda - Transition Metals	TMH11-020	110.9	120.5	9.60	sag	Sag argillite	D	grey black	vfg	massive	healed sedimentary breccia with silt/mud infill and quartz infill												vcb	2					
Gowganda - Transition Metals	TMH11-020	120.05	120.9	0.86	sag	Sag argillite	D	grey black	vfg	massive	bedded to laminated silt and mud												vqc	10					
Gowganda - Transition Metals	TMH11-020	120.9	125	4.10	sag	Sag argillite	D	grey black	vfg	massive													vcb	1	vqc	0.5			
Gowganda - Transition Metals	TMH11-021	0	5	5.00	oou	Oou overburden general																							
Gowganda - Transition Metals	TMH11-021	5	11.86	6.86	vum	Vum ultramafic volcanic	D	grey black	vfg	weakly foliated	rounded felsic/granitic clasts		12		12	carbonate alteration	wk	talc alteration	wk	carbonate alteration	wk mod		vcb	3.5					
Gowganda - Transition Metals	TMH11-021	11.86	13.15	1.29	lam	lamporphyre	D	brown	vfg	massive	mafic tuff? rare, granular-sized irregualar, sub-angular to sub-rounded balck chlorite altered grains, particularlly near the top of the interval.		1		1	carbonate alteration	wk mod	chlorite alteration	wk mod				vcb	0.5					
Gowganda - Transition Metals	TMH11-021	13.15	16.2	3.05	mvu	Mvu metavolcanic general	D	red brown	vfgfg	massive	some kind of intrusive... quartz monzodiorite, feldspars all stained pink		23		12	hematite alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk		vcb	1					
Gowganda - Transition Metals	TMH11-021	16.2	17.14	0.95	mvu	Mvu metavolcanic general	D	red brown	vfgfg	massive	small (sheared) quartz vein		23		12	hematite alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk		vcb	0.5					
Gowganda - Transition Metals	TMH11-021	17.14	17.18	0.04	vin	Vein	L	white	vfg	massive	not to sure what it is, one pebble sized chlorite alter clast		12		12	carbonate alteration	wk	hematite alteration	v wk				vqz	97.5					
Gowganda - Transition Metals	TMH11-021	17.18	18.03	0.86	mvu	Mvu metavolcanic general	D	red brown	vfgfg	massive			3		12	hematite alteration	mod str	chlorite alteration	mod	carbonate alteration	wk		vcb	1					
Gowganda - Transition Metals	TMH11-021	18.03	20	1.97	ttm	Ttm mafic tuff	D	red	fmg	clastic or as clasts			23		12	hematite alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk		vqc	0.5					
Gowganda - Transition Metals	TMH11-021	20	20.2	0.20	gdl	Gdl dolerite	D	green red	fmg	massive	same as 18.03 to 20 m		2		12	chlorite alteration	mod str	hematite alteration	mod	carbonate alteration	wk		vcb	0.25					
Gowganda - Transition Metals	TMH11-021	20.2	20.95	0.75	ttm	Ttm mafic tuff	D	red brown	fmg	massive	dyke zone		3		12	hematite alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk		vcb	0.5					
Gowganda - Transition Metals	TMH11-021	20.95	21.55	0.61	gdl	Gdl dolerite	D	red green	fmg	massive	same as 18.03 to 20 m, 20.2 to 20.95 m with larger chlorite alterd clasts (cobble sized). Moderately magnetic		3		12	chlorite alteration	mod str	hematite alteration	mod str	carbonate alteration	wk		vcb	5					
Gowganda - Transition Metals	TMH11-021	21.55	25.15	3.60	ttm	Ttm mafic tuff	D	red brown	fmg	clastic or as clasts			3		12	hematite alteration	mod str	chlorite alteration	mod	carbonate alteration	wk		vcb	0.5	vqc	0.5			
Gowganda - Transition Metals	TMH11-021	25.15	26.45	1.30	img	microgabbro	D	brown red	fmg	massive	smally, sub-mm carboante 'grains'		3		12	hematite alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk		vcb	0.5					
Gowganda - Transition Metals	TMH11-021	26.45	27.25	0.81	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive			3		12	hematite alteration	mod str	chlorite alteration	wk mod	carbonate alteration	wk								

Gowganda - Transition Metals	TMH11-021	27.25	27.65	0.40	img	microgabbro	D	green red	fmg	massive			3	12	chlorite alteration	mod str	hematite alteration	str				vcb	0.1							
Gowganda - Transition Metals	TMH11-021	27.65	29.9	2.25	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive	possiblie ttm (mafic tuff) rare black chlorite altered grains, more prevelent near the bottom of the interval		3	12	hematite alteration	str	chlorite alteration	mod str	carbonate alteration	wk		vcb	0.25							
Gowganda - Transition Metals	TMH11-021	29.9	31	1.10	img	microgabbro	D	red green	fmg	massive			3	12	hematite alteration	mod str	chlorite alteration	mod str				vcb	0.25							
Gowganda - Transition Metals	TMH11-021	31	31.35	0.36	img	microgabbro	D	green red	fmg	massive			3	12	chlorite alteration	mod str	hematite alteration	mod str	carbonate alteration	v wk		vcb	0.25							
Gowganda - Transition Metals	TMH11-021	31.35	31.5	0.15	mvu	Mvu metavolcanic general	D	red	vfg	massive	alteration halo?		34	12	hematite alteration	str	chlorite alteration	wk	carbonate alteration	v wk										
Gowganda - Transition Metals	TMH11-021	31.5	32	0.50	img	microgabbro	D	green red	fmg	massive			3	12	hematite alteration	str	chlorite alteration	mod str	carbonate alteration	v wk										
Gowganda - Transition Metals	TMH11-021	32	34.63	2.63	mvu	Mvu metavolcanic general	D	brown red	vfgfg	massive	possiblie ttm (mafic tuff) rare black chlorite altered grains, fine-grained plagioclase grains but I don't know anyore. Moderatly magnetic		23	12	hematite alteration	mod	chlorite alteration	wk mod	carbonate alteration	wk		vcb	0.25							
Gowganda - Transition Metals	TMH11-021	34.63	35	0.37	mvu	Mvu metavolcanic general	D	green brown	fg	massive	idfk, dyke(?)		23	12	chlorite alteration	mod	hematite alteration	wk mod	carbonate alteration	wk		vcb	1							
Gowganda - Transition Metals	TMH11-021	35	35.5	0.50	mvu	Mvu metavolcanic general	D	brown red	fg	massive	weakly to moderately magnetic, step off sets in carbonate veins		23	34	hematite alteration	mod str	chlorite alteration	wk mod	carbonate alteration	v wk		vcb	5							
Gowganda - Transition Metals	TMH11-021	35.5	35.6	0.11	vum	Vum ultramafic volcanic	D	black	vfg	schistose			23	23	chlorite alteration	wk mod	carbonate alteration	wk				vcb	25							
Gowganda - Transition Metals	TMH11-021	35.6	35.88	0.29	mvu	Mvu metavolcanic general	M	red brown	vfgfg	massive			23	12	hematite alteration	mod	carbonate alteration	wk mod												
Gowganda - Transition Metals	TMH11-021	35.88	36.38	0.50	vum	Vum ultramafic volcanic	D	black	vfgfg	massive	weakly to moderatly magnetic, likely img.. but I don't know any more		23	12	chlorite alteration	mod str	carbonate alteration	wk mod				vcb	1							
Gowganda - Transition Metals	TMH11-021	36.38	37.65	1.27	mvu	Mvu metavolcanic general	D	green brown	fg	massive	very fine- to fine-grained massive, roughtly equigranular, moderatly magenetic (mafic tuff(?), img(?))		23	12	chlorite alteration	mod	hematite alteration	mod				vqz	0.25	vcb	0.25					
Gowganda - Transition Metals	TMH11-021	37.65	39.03	1.38	mvu	Mvu metavolcanic general	M	orange red	vfgfg	massive			23	12	hematite alteration	wk mod						vst	0.25	vqz	0.25					
Gowganda - Transition Metals	TMH11-021	39.03	39.4	0.37	vum	Vum ultramafic volcanic	D	grey black	vfgfg	schistose	very fine- to fine-grained massive, roughtly equigranular, moderatly magenetic (mafic tuff(?), img(?))		23	23	chlorite alteration	mod	talc alteration	wk	carbonate alteration	v wk										
Gowganda - Transition Metals	TMH11-021	39.4	45.69	6.29	mvu	Mvu metavolcanic general	D	red brown	vfgfg	massive			23	12	hematite alteration	wk mod	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-021	45.69	46.08	0.40	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	img or ttm, weakly to moderately magnetic		23	34	chlorite alteration	mod														
Gowganda - Transition Metals	TMH11-021	46.08	46.7	0.63	mvu	Mvu metavolcanic general	M	brown red	fg	massive	do idea, patchy ,bleaching'		12	12	hematite alteration	wk														
Gowganda - Transition Metals	TMH11-021	46.7	46.9	0.20	mvu	Mvu metavolcanic general	M	grey	vfgfg	massive	similar to 46.08-46.7 m with larger black chlorite altered clats		12	23	chlorite alteration	wk mod														
Gowganda - Transition Metals	TMH11-021	46.9	48.3	1.40	mvu	Mvu metavolcanic general	M	red brown	vfgfg	clastic or as clasts	near the bottom, weakly magnetic		12	12	hematite alteration	wk	chlorite alteration	wk												
Gowganda - Transition Metals	TMH11-021	48.3	48.5	0.21	vum	Vum ultramafic volcanic	M	blue grey	vfg	massive	possible img dyke, magnetic		12	12	chlorite alteration	wk														
Gowganda - Transition Metals	TMH11-021	48.5	49.4	0.90	vum	Vum ultramafic volcanic	D	brown red	vfgfg	massive			12	12	hematite alteration	wk	chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH11-021	49.4	52.17	2.77	vum	Vum ultramafic volcanic	D	blue black	vfg	schistose	chlorititized pyroxene laths.	sheared	23	234	chlorite alteration	wk mod	talc alteration	wk												
Gowganda - Transition Metals	TMH11-021	52.17	55.8	3.63	img	microgabbro	M	orange red	vfgfg	massive	likley some kind of mafic intrusive, alteration gives it a medium grained appearnce		23	12	hematite alteration	mod str	chlorite alteration	wk mod				vst	0.25							
Gowganda - Transition Metals	TMH11-021	55.8	56.86	1.06	mvu	Mvu metavolcanic general	D	green black	vfgfg	weakly foliated	likely fine-grained intrusive (img) very fine-grained		2	12	chlorite alteration	mod str	hematite alteration	wk												
Gowganda - Transition Metals	TMH11-021	56.86	60	3.14	mvu	Mvu metavolcanic general	M	green red	vfgfg	massive	looks like sandstone with black fine to granular sized clasts. Pyroclastic, possible faulted		23	12	hematite alteration	mod str	chlorite alteration	wk mod												
Gowganda - Transition Metals	TMH11-021	60	61.07	1.07	fima	fragmental intermediate mafic,	L	fawn	vfgfg	clastic or as clasts	very fine-grainf, aphenatic, with large square plagioclase grains, moderatly to strongly magnetic	broken	12	12	chlorite alteration	wk mod														
Gowganda - Transition Metals	TMH11-021	61.07	63.71	2.64	smd	Sudbury Mafic Dyke - chill margi	D	black	vfg	massive			12	12																
Gowganda - Transition Metals	TMH11-021	63.71	111.08	47.37	smd	Sudbury Mafic Dyke	D	green black	mcg	massive	pseudo brecciated		12	12																
Gowganda - Transition Metals	TMH11-021	111.08	113.85	2.77	vum	Vum ultramafic volcanic	D	grey black	vfg	massive	chilled finger of Sudbury Mafic Dyke, square to slightly tabular plagioclase grains, very hard		12	12	chlorite alteration	wk														
Gowganda - Transition Metals	TMH11-021	113.85	114.35	0.50	smd	Subury Mafic Dyke	D	black	vfg	massive	spin-fx to massive to speudo brecciated.pillowed look		12	12																
Gowganda - Transition Metals	TMH11-021	114.35	123.95	9.61	vum	Vum ultramafic volcanic	D	blue black	vfg	spinifex textured	0.5 to cm scale banding		12	12	chlorite alteration	wk mod	silica alteration	wk												
Gowganda - Transition Metals	TMH11-021	123.85	125.3	1.45	vum	Vum ultramafic volcanic	D	black	vfg	foliated	pseudo-brecciated apperance		23	34	chlorite alteration	wk	silica alteration	wk	carbonate alteration	wk										
Gowganda - Transition Metals	TMH11-021	125.3	128.07	2.77	vum	Vum ultramafic volcanic	D	blue black	vfg	massive			12	12	chlorite alteration	wk	silica alteration	v wk												
Gowganda - Transition Metals	TMH11-021	128.07	128.7	0.63	vum	Vum ultramafic volcanic	D	black	vfg	massive			12	12	silica alteration															
Gowganda - Transition Metals	TMH11-021	128.7	129	0.31	vum	Vum ultramafic volcanic	M	white black	vfg	weakly foliated	consits of 2 'veins'. One 5 cm, light grey blue, weakly foliated, one 3 cm massive white carbonate (minor quartz) with pyrite vein. flow banded (?)		12	3	chlorite alteration	wk	silica alteration	wk				vcb	40							
Gowganda - Transition Metals	TMH11-021	129	134	5.00	vum	Vum ultramafic volcanic	D	black	vfg	massive			12	12	silica alteration	mod														

PETROGRAPHIC REPORT ON 4 SAMPLES

Report for: Mercedes Rich — Invoice 200019
Battery Mineral Resources, c/o Canadian Exploration Services Ltd.
P.O. Box 219, 14579 Government Road
Larder Lake, ON P0K 1L0 (807) 355-6364 — Jan. 29, 2020.

SUMMARY: These four samples appear to represent a more or less consanguineous suite of fine- to medium grained, locally porphyritic (plagioclase-biotite?-rarely quartz phyric), felsic hypabyssal intrusive rocks (several phases, possibly originally about diorite to quartz diorite, or dacite, in composition?) but now strongly altered to secondary albite (variably hematite-stained, leading to the pink/red rock colour in three of the four samples), carbonate (dolomite and ankerite?), white mica (sericite/muscovite), minor chlorite, quartz, pyrite (?) and rutile (?), locally associated with veins to 1.3 cm thick of carbonate ±quartz-sericite-chlorite-pyrite?-rutile?-trace possible barite?

Capsule descriptions are as follows:

TMH17-026 41.25: hematite-stained albite-dolomitic carbonate-sericite/muscovite-chlorite-minor quartz-pyrite-rutile altered, probably felsic hypabyssal intrusive rock, cut by thin quartz ±carbonate-chlorite-sericite-pyrite veinlets.

TMH17-026 43.75a: strongly hematite-stained albite-dolomitic/ankeritic carbonate-sericite/muscovite-chlorite-minor quartz-pyrite-apatite-rutile altered, probably felsic intrusive (2 phases, one hypabyssal), cut by carbonate ±quartz-chlorite-sericite-rutile veins.

TMH17-026 43.75b: strongly hematite-stained albite-dolomitic/ankeritic carbonate-minor sericite/muscovite-chlorite-apatite-rutile-rare pyrite altered, probably felsic intrusive (2 phases, one hypabyssal), cut by a major vein of carbonate-chlorite ±quartz-sericite-rutile-trace barite?

TMH10-03 59.60: finely plagioclase-biotite?-quartz phyric hypabyssal intrusive, so strongly altered to carbonate (dolomite/ankerite?)-albite-muscovite/sericite-minor chlorite-rutile that the original composition is hard to define.

Detailed petrographic descriptions and photomicrographs are appended (by email attachment). If you have any questions regarding the petrography, please do not hesitate to contact me.

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TMH17-026 41.25: HEMATITE-STAINED ALBITE-DOLOMITIC CARBONATE-SERICITE/MUSCOVITE-CHLORITE-MINOR QUARTZ-PYRITE-RUTILE ALTERED, PROBABLY FELSIC HYPABYSSAL INTRUSIVE ROCK, CUT BY THIN QUARTZ ±CARBONATE-CHLORITE-SERICITE-PYRITE VEINLETS

No background information or hand specimen supplied; etched offcut labeled AD-2 shows fine-grained, medium/dark reddish/pinkish-grey, possibly felsic hypabyssal intrusive rock cut by hairline veinlets of grey quartz?-dark green chlorite, and with traces of cubic pyrite. The rock is locally slightly magnetic, shows slow pervasive reaction to cold dilute HCl (where scratched, with difficulty, by steel), and no stain for K-feldspar in the etched offcut (but extensive white etch for plagioclase?). Modal mineralogy (regular thin section only) is approximately:

Alkali feldspar (albite, likely secondary, altered to carbonate-sericite)	45%
Carbonate (mainly dolomite?)	25%
White mica (sericite/muscovite, after albite/mafic sites)	15%
Chlorite (intimately mixed with sericite/muscovite)	5%
Quartz (secondary, veinlets only)	2-3%
Opaque (mainly pyrite?)	1-2%
Apatite (accessory in relict mafic sites)	<1%
Rutile (accessory in relict mafic sites)	<1%

This sample consists mainly of interlocking crystals of alkali feldspar (likely mainly secondary, hematite-stained albite) and lesser relict mafic sites, altered to carbonate-sericite-minor chlorite-opaque-accessory apatite-rutile, cut by thin quartz ±carbonate, local chlorite-sericite veinlets.

Alkali feldspar forms randomly oriented, tightly interlocked, mainly subhedral tabular crystals <1 mm in size, with negative relief compared to local secondary quartz veinlets, and extinction Y^010 ~ 15º, suggestive of albite An_{0-5} (likely mainly secondary, to judge by the accompanying alteration of the feldspar to carbonate as ragged sub/anhedra mainly <0.4 mm, possibly mainly dolomite to judge by the slow reaction in etched offcut?) and minor sericite (ragged patches <0.25 mm of randomly oriented, matted subhedral flakes mainly <50 μm).

Relict mafic sites display subhedral to locally euhedral outlines up to about 2 mm in diameter, with random orientations, suggestive of former biotite (?) crystals. They are characterized by a prominent relict cleavage mimicked/exploited by the main replacement mineral, white mica as subhedral flakes mostly <0.15 mm (sericite) or up to almost 2 mm (muscovite), plus minor carbonate (as above, likely dolomite?), chlorite (intimately intermixed with sericite as subhedral flakes mostly <0.2 mm with pale to locally bright green pleochroism but near-zero birefringence, suggestive of Fe:Fe+Mg, or F:M, ratio near 0.5?) and accessory quartz (subhedra <0.2 mm), opaque (probably mainly pyrite; cubic euhedra <0.6 mm), apatite (likely relict primary accessory, euhedral stubby prisms to 0.25 mm) and traces of very fine rutile (pale brownish acicular euhedra mostly <15 μm).

Veinlets with random orientations are mainly sub-planar, <0.5 mm thick, and filled by quartz (interlocking sub/anhedra mainly <0.35 mm, with strain indicated by undulose extinction, minor sub-grain development, and rare suturing of grain boundaries), minor carbonate (subhedra <0.25 mm) and local chlorite (subhedral flakes as described above) and/or sericite (subhedral flakes mainly <0.1 mm). Pyrite (as described above) is only rarely included within the veins, but may be concentrated in the poorly defined envelopes for up to 0.5 cm either side of the thicker veinlets.

In summary, this is hematite-stained albite-dolomitic carbonate-sericite/muscovite-chlorite-minor quartz-pyrite-rutile altered, probably felsic hypabyssal intrusive rock, cut by thin quartz ±carbonate-chlorite-sericite-pyrite veinlets.

TMH17-026 43.75a: STRONGLY HEMATITE-STAINED ALBITE-DOLOMITIC/ANKERITIC CARBONATE-SERICITE/MUSCOVITE-CHLORITE-MINOR QUARTZ-PYRITE-APATITE-RUTILE ALTERED, PROBABLY FELSIC HYPABYSSAL INTRUSIVE (2 PHASES), CUT BY CARBONATE ±QUARTZ-CHLORITE-SERICITE-RUTILE VEINS.

Etched offcut labeled AD-3 shows fine- to medium-grained, medium/dark reddish to pinkish or minor greenish grey (vein), partly relict phyric (?), felsic hypabyssal intrusive rock cut by hairline veinlets of carbonate-quartz?-dark green chlorite, and with traces of cubic pyrite. The rock is not magnetic, shows slow pervasive reaction to cold dilute HCl (where scratched, with difficulty, by steel), and no stain for K-feldspar in the etched offcut (but extensive white etch for plagioclase?). Modal mineralogy (regular thin section only) is approximately:

Alkali feldspar (secondary albite, part altered to carbonate ±sericite)	65%
Carbonate (mainly dolomite, minor ankerite?)	20%
White mica (sericite/muscovite, after albite/mafic sites)	5%
Chlorite (intimately mixed with carbonate)	3%
Quartz (secondary, veinlets only)	1-2%
Opaque (mainly pyrite?)	1-2%
Apatite (part of alteration assemblage?)	1-2%
Rutile (relict mafic sites, vein, veinlets; part of alteration assemblage)	1-2%

Part of this sample is very fine-grained, and part coarser-grained and vaguely porphyritic; suggestive of two intrusive phases. Both consist of interlocking alkali feldspar (mainly secondary, hematite-stained albite) and vague probable relict mafic sites, altered to carbonate-sericite-minor chlorite-opaque-accessory apatite-rutile, cut by local carbonate ± quartz, chlorite-sericite-rutile veinlets.

In the coarse-grained portion, alkali feldspar forms randomly oriented, tightly interlocked, mainly subhedral tabular crystals to 2.2 mm long, with well-developed "chequerboard" or vague twinning and extinction Y^010 ~ 16º, suggestive of albite near An_0 (likely mainly secondary, to judge by the accompanying alteration of the feldspar to carbonate as ragged sub/anhedra mainly <0.4 mm, possibly mainly dolomite to judge by the slow reaction in etched offcut?) and very minor sericite (randomly oriented, matted subhedral flakes mainly <50 µm). Relict mafic sites show poorly defined, highly irregular outlines mostly <2 mm of no obvious type replaced by carbonate (subhedra to 0.8 mm, with relatively clear cores, likely dolomite/local dark brownish rims, possibly ankerite?), locally intimately intermixed with chlorite as subhedral flakes mostly <25 µm. see below) and accessory quartz? (subhedra <0.2 mm), white mica as subhedral flakes mostly <35 µm (sericite) or up to 0.7 mm (muscovite), plus minor opaque (probably mainly pyrite; sieve-textured cubic euhedra <1 mm), significant apatite (probably part of the alteration assemblage, subhedral stubby prisms to 0.45 mm) and significant fine rutile (dark brown acicular euhedra mostly <55 µm but up to 0.15 mm).

In the fine-grained portion, alkali feldspar forms randomly oriented, closely packed, highly ragged to irregular or skeletal, sub- to anhedral crystals mainly <0.5 mm (but with a suggestion of former phenocrysts to ~1.5 mm, set in groundmass commonly <50 µm). Very poorly defined, ragged irregular patches of carbonate (subhedra to 0.75 mm, dolomite?) and accessory rutile, quartz, sericite, traces of apatite and chlorite, rare pyrite could represent highly altered former mafic sites (?).

Veinlets with random orientations are mainly poorly defined, sub-planar, <0.1 mm thick, but up to 0.5 cm at one corner of the section, filled by carbonate (interlocking randomly oriented sub- to anhedra <1 mm, dolomite?), minor quartz (sub/anhedra mainly <0.2 mm, with strain indicated by undulose extinction, minor sub-grain development, and rare suturing of grain boundaries), and local chlorite (subhedral flakes to 0.2 mm with pale green pleochroism but near-zero/weakly length-fast birefringence, suggestive of Fe:Fe+Mg, or F:M, ratio near 0.5?) and/or sericite (subhedral flakes mainly <0.1 mm), plus local dark brown rutile to 0.6 mm. Pyrite is not found within the veins, but occurs elsewhere as sieve-like euhedra up to ~3 mm across.

In summary, this is strongly hematite-stained albite-dolomitic/ankeritic carbonate-sericite/muscovite-chlorite-minor quartz-pyrite-apatite-rutile altered, probably felsic intrusive (2 phases, one hypabyssal), cut by carbonate ±quartz-chlorite-sericite-rutile veins.

TMH17-026 43.75b: STRONGLY HEMATITE-STAINED ALBITE-DOLOMITIC/ANKERITIC CARBONATE-MINOR SERICITE/MUSCOVITE-CHLORITE-APATITE-RUTILE-RARE PYRITE ALTERED, PROBABLY FELSIC INTRUSIVE (PART HYPABYSSAL), CUT BY A MAJOR VEIN OF CARBONATE-CHLORITE ±QUARTZ-SERICITE-RUTILE-TRACE BARITE?

Etched offcut labeled AD-4 shows fine- to medium-grained, pale pinkish-buff, partly relict phyric (?), felsic hypabyssal intrusive rock cut by major vein of white carbonate-quartz?-dark green chlorite; there is no obvious cubic pyrite. The rock is not magnetic, shows slow pervasive reaction to cold dilute HCl (mainly only in the vein, where scratched, with difficulty, by steel), and no stain for K-feldspar in the etched offcut (but extensive white etch for plagioclase?). Modal mineralogy (regular thin section only) is approximately:

Alkali feldspar (secondary albite, part altered to carbonate ±sericite)	50%
Carbonate (mainly dolomite in vein, wallrock ankerite?)	30%
Chlorite (mainly in vein, with carbonate)	8%
White mica (sericite/muscovite, after albite/mafic sites)	7%
Quartz (secondary, vein only)	1-2%
Opaque (local pyrite; rutile is part of alteration assemblage?)	1-2%
Apatite (part of alteration assemblage)	1-2%
Barite (?), very minor, in vein only	<1%

Part of this sample is very fine-grained, and part much coarser-grained, suggestive of two intrusive phases. Both consist of interlocking alkali feldspar (mainly secondary, hematite-stained albite) and vague probable relict mafic sites, altered to carbonate-sericite-accessory apatite-rutile-opaque, cut by a major vein of carbonate-chlorite ±quartz-sericite-minor rutile-local barite?

In the coarse-grained portion, alkali feldspar forms randomly oriented, tightly interlocking, corroded/skeletal subhedral tabular crystals to 5 mm long, with well-developed "chequerboard" or vague twinning and extinction Y^010 ~ 16º, suggestive of albite near An_0 (likely mainly secondary, to judge by the accompanying alteration of the feldspar to carbonate as ragged sub/anhedra mainly <0.5 mm, possibly mainly ankerite to judge by the lack of reaction in etched offcut?) and very minor sericite (randomly oriented, scattered euhedral flakes <0.25 mm). Relict mafic sites show poorly defined, highly irregular outlines mostly <2 mm replaced by carbonate (subhedra to 0.8 mm, with brownish colour, possibly ankerite?), locally mixed with white mica as subhedral flakes up to 0.3 mm (muscovite), plus significant apatite (probably part of the alteration assemblage, stubby subhedra to 0.4 mm) and significant rutile (dark brown acicular euhedra mostly <55 µm but up to 0.15 mm) plus rare opaque (probably mainly pyrite as cubic euhedra <2 mm).

In the fine-grained portion, alkali feldspar forms randomly oriented, closely packed, highly ragged to irregular or skeletal, sub- to anhedral crystals mainly <0.25 mm (commonly <50 µm, but with significant apatite as stubby subhedra <0.2 mm). Very poorly defined, ragged irregular patches of carbonate (subhedra to 0.5 mm, ankerite?) and accessory rutile, quartz, sericite, rare pyrite and traces of apatite and chlorite, could represent highly altered former mafic sites (?).

The major vein sub-planar, up to 1.3 cm thick, composed of poorly defined zones of coarse carbonate (interlocking, randomly oriented sub/anhedra to 2.5 mm, dolomite?) with rare possible barite (subhedra to 1 mm) or finer-grained, brownish carbonate (ankerite?) and chlorite (subhedral flakes to 0.2 mm with pale green pleochroism but near-zero/weakly length-fast birefringence, suggestive of Fe:Fe+Mg, or F:M, ratio near 0.5?) or local sericite (subhedral flakes mainly <0.1 mm), separated by minor quartz (sub/anhedra mainly <0.2 mm, with strain indicated by undulose extinction, minor sub-grain development, and rare suturing of grain boundaries), plus prominent aggregates to ~3 mm of dark brown rutile as euhedra to 0.12 mm; pyrite is not found within the vein.

In summary, this is strongly hematite-stained albite-dolomitic/ankeritic carbonate-minor sericite/muscovite-chlorite-apatite-rutile-rare pyrite altered, probably felsic intrusive (2 phases, one hypabyssal), cut by a major vein of carbonate-chlorite ±quartz-sericite-rutile-trace barite?

TMH10-03 59.60: FINELY PLAGIOCLASE-BIOTITE?-QUARTZ PHYRIC HYPABYSSAL INTRUSIVE, SO STRONGLY ALTERED TO CARBONATE (DOLOMITE/ANKERITE?)-ALBITE-MUSCOVITE/SERICITE-MINOR CHLORITE-RUTILE THAT THE ORIGINAL COMPOSITION IS HARD TO DEFINE

Etched offcut labeled AD-6 shows fine-grained, pale buff/greenish, finely porphyritic possibly felsic hypabyssal intrusive rock with small green micaceous-looking mafic relics. The rock is not magnetic, shows slow pervasive reaction to cold dilute HCl (only where scratched, with difficulty, by steel), and no stain for K-feldspar in the etched offcut (but pervasive minor white etch for plagioclase?). Modal mineralogy (regular thin section only) is approximately:

Carbonate (dolomite, ankerite?)	40%
Alkali feldspar (albite, likely secondary, altered to carbonate-sericite)	30%
White mica (sericite/muscovite, after albite and mafic sites)	20%
Chlorite (mafic relics, intimately mixed with mica and carbonate)	5%
Quartz (mainly primary, small phenocrysts)	3-5%
Opaque (likely mainly rutile, accessory with mafic relics)	~1%
Apatite (primary accessory, in mafic sites)	<1%

This sample is obscured by strong pervasive carbonate-white mica-minor chlorite-rutile alteration but appears similar to the first three in being originally mostly composed of fine-grained alkali feldspar; it differs by its finely feldspar-mafic ±quartz phyric nature (possibly originally 20% plagioclase, 15% mafics, and <5%small quartz phenocrysts in a fine-grained matrix of alkali feldspar-relict mafics.

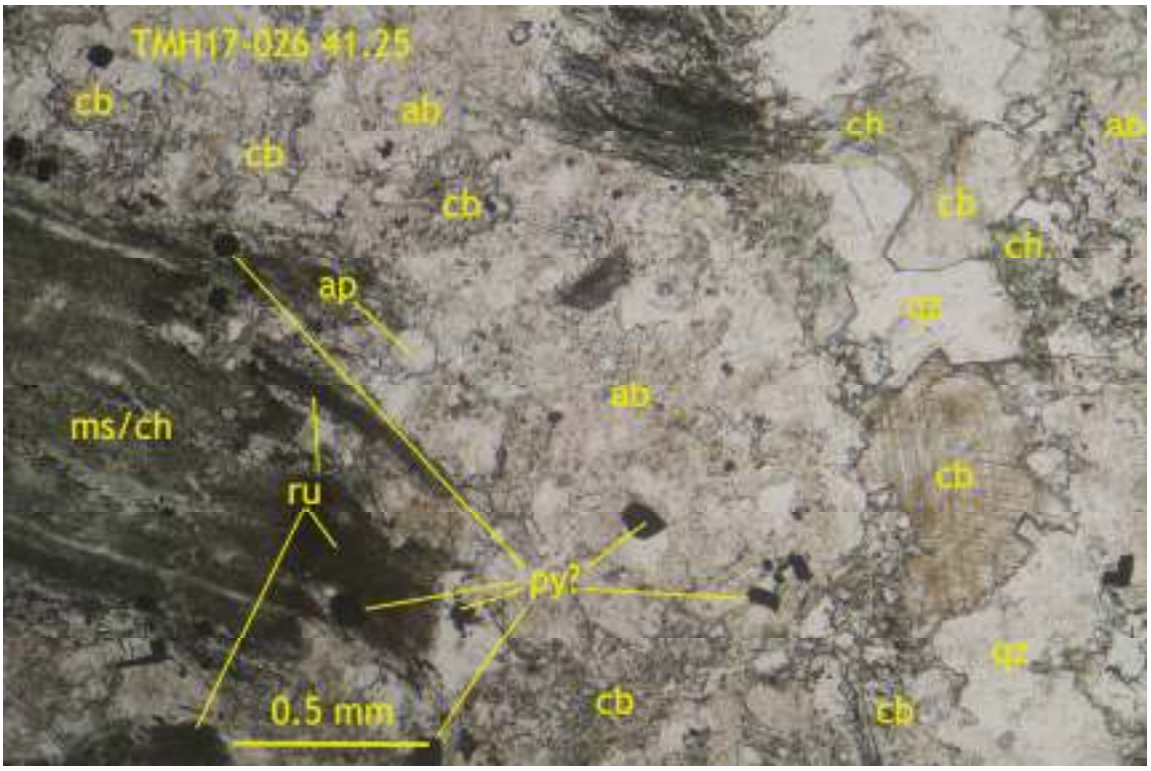
Relict feldspar phenocryst sites have poorly defined, rounded/irregular outlines mostly <1.2 mm in maximum dimension, typically recrystallized to fibrous subhedral secondary albite crystals mostly <0.5 mm long with semi-radiating habit, and attacked at margins by carbonate (sub/anhedral crystals mainly <0.3 mm, likely dolomite?) and minor sericite (matted subhedral flakes mostly <50 µm). The feldspar crystals are generally too small to obtain reliable interference figures from, and they do not tend to be in contact with the minor quartz to compare refractive indices with, but the vague or locally semi-chequerboard twinning is typical of secondary albite, and this is supported by the extensive alteration to carbonate and sericite.

Relict mafic crystals typically show distinctly euhedral outlines up to about 2 mm long, with random orientations (most display prominent relict cleavage mimicked by the replacing muscovite-lesser chlorite-minor carbonate-accessory opaque-trace rutile, strongly suggestive of former biotite?). The white mica forms sub- to euhedral flakes up to ~1 mm diameter, intimately mixed with chlorite as mainly finer-grained flakes seldom distinguishable enough to determine the optic properties (but apparently very pale green pleochroism, near-zero birefringence, small negative 2V, suggestive of F:M ~0.5?) and local carbonate as elongated ribbons <0.5 mm long aligned with cleavage of fine crystals <50 µm, associated with much of the very fine opaque (rutile?) also as very fine crystals <25 µm with very dark brown colour. In places, the rutile (?) also occurs in small aggregates to 0.2 mm suggestive of former microphenocrysts of ilmenite or ilmeno-magnetite (?), and there are traces of apatite as stubby to broken prisms <0.2 mm long at the boundary between mafic and feldspar sites.

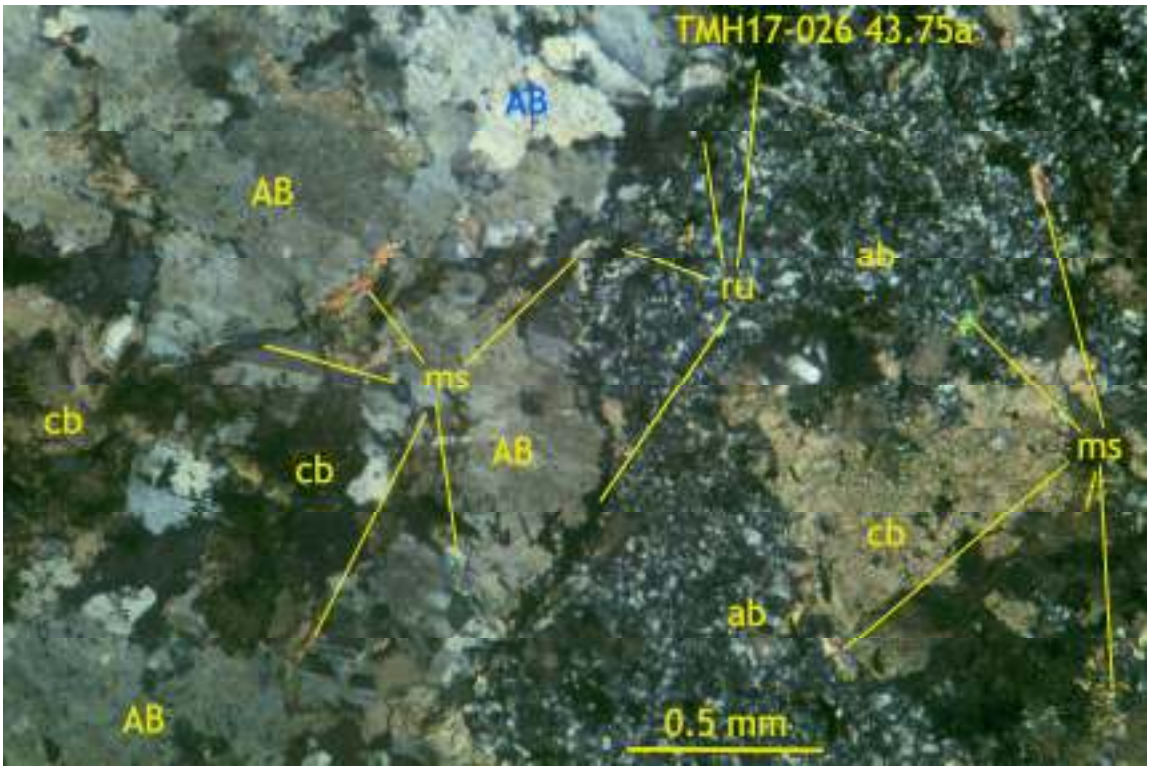
Quartz phenocrysts are mostly <0.75 mm in size, single or aggregate crystals with rounded to subhedral outlines, partly attacked at margins by sericite. The crystals are relatively unstrained.

Groundmass is poorly defined due to extensive alteration to carbonate-sericite ±chlorite-rutile, but appears to consist of small, randomly oriented, relict plagioclase and mafic, rare quartz crystals similar to those in the phenocrysts but <0.2 mm, <0.3 mm and <0.1 mm respectively. Overprinting carbonate forms a mosaic of interlocking sub/anhedra mainly <0.5 mm (dolomite and ankerite?), and semi-opaque/dark brown rutile <0.1 mm is mostly associated with the small mafic relic sites.

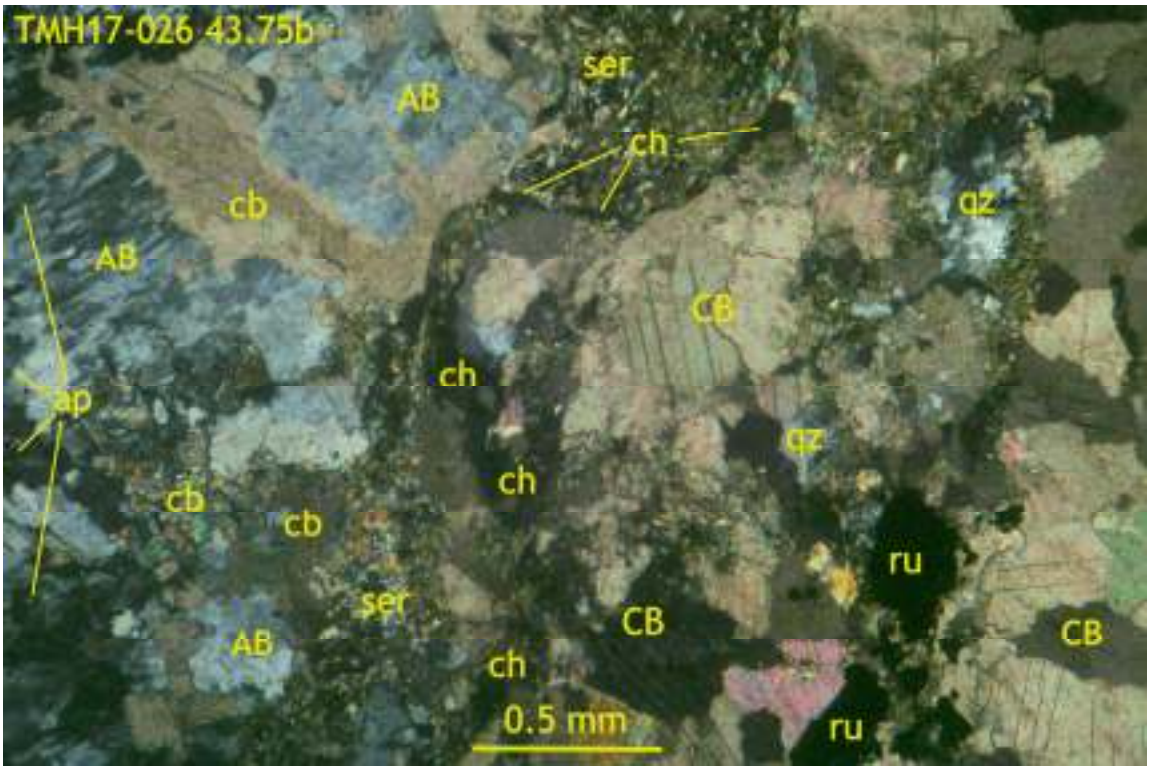
In summary, this is finely plagioclase-biotite?-quartz phyric hypabyssal intrusive, so strongly altered to carbonate (dolomite/ankerite?)-albite-muscovite/sericite-minor chlorite-rutile that the original composition is hard to be sure of.



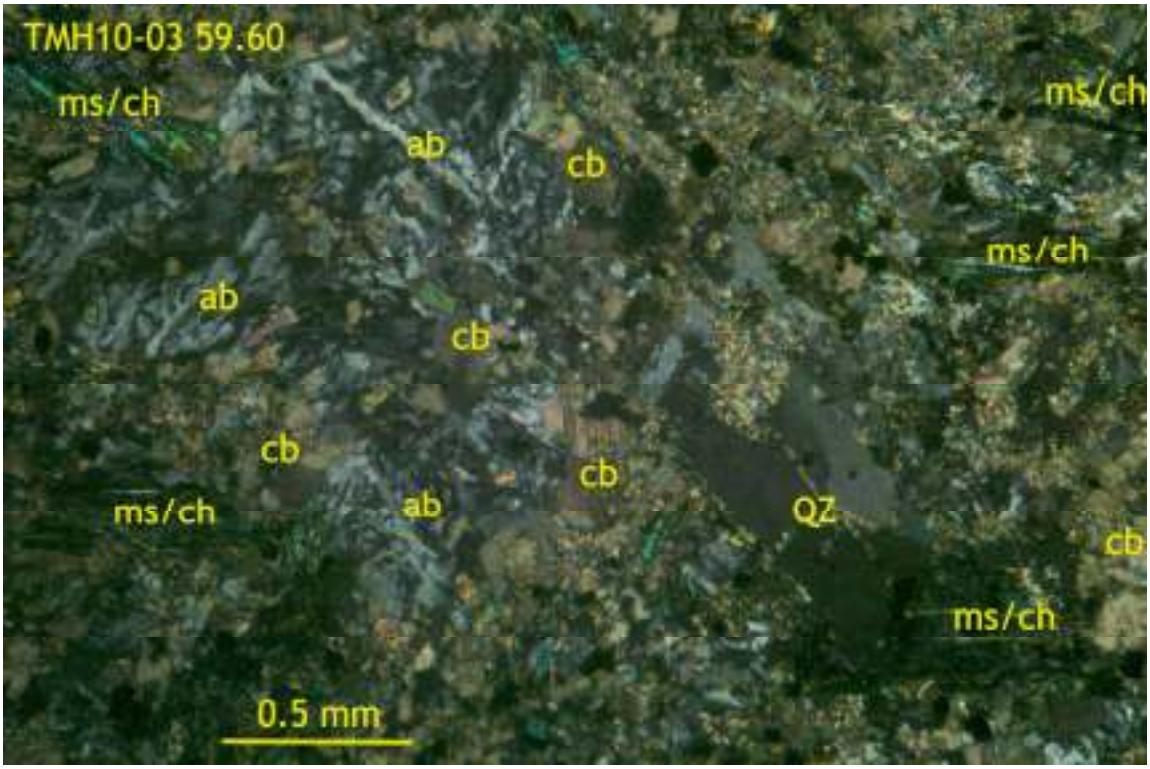
TMH17-026 41.25: felsic hypabyssal intrusive altered to hematite-stained albite (ab), carbonate and sericite, with relict mafics (biotite?) altered to muscovite(ms)-chlorite(ch)-minor pyrite (cubic opaques)-trace rutile (dark brown, ru)-apatite (ap), cut by thin veinlet of quartz (qz)-carbonate (cb)-trace pale green chlorite (ch). Transmitted plane light, field of view ~3 mm wide.



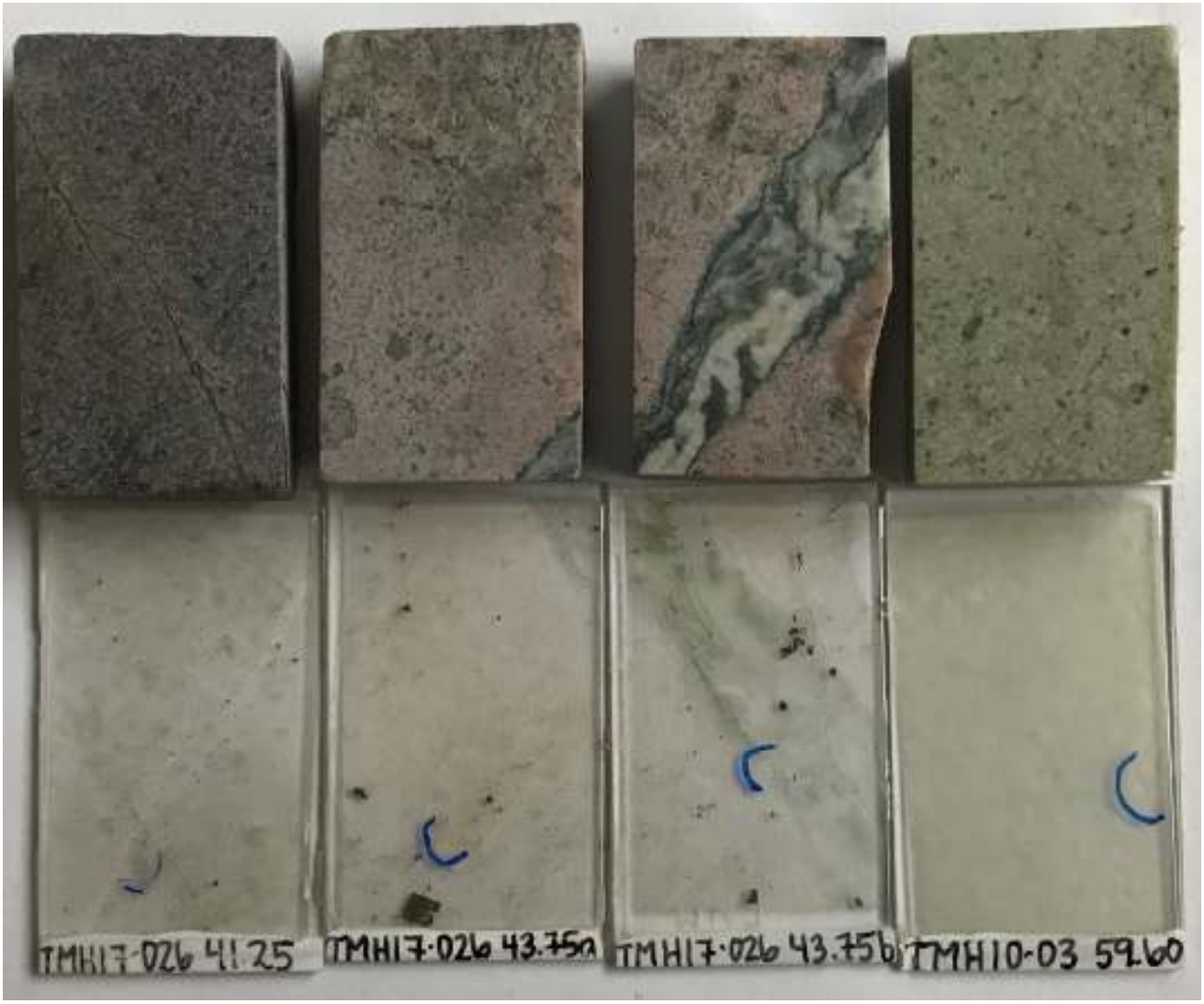
TMH17-026 43.75a: irregular contact, marked by irregular line of rutile (opaque, ru), between fine-grained and (on left) coarse-grained porphyritic phases of hypabyssal intrusive rock, both composed of strongly hematite-stained albite (AB, ab), possible relict mafic sites (mainly carbonate, cb; local muscovite, ms). Transmitted light, crossed polars, field of view 3 mm wide.



TMH17-026 43.75b: margin of major carbonate (CB)-minor quartz (qz)-rutile (opaque, ru) vein with thin chlorite (ch)-sericite (ser) selvage, cutting coarse-grained intrusive composed mainly of chequerboard twinned secondary albite (AB) and carbonate (cb; may include dolomite and ankerite?), accessory apatite (ap). Transmitted light, crossed polars, ~3 mm wide.



TMH10-03 59.60: relict plagioclase (now semi-radiating albite crystals, attacked at margins by carbonate-sericite), mafic (now replaced by muscovite-carbonate-chlorite-accessory opaque rutile) and rare quartz (QZ) phenocryst sites in felsic hypabyssal intrusive strongly altered to carbonate-sericite-chlorite-rutile. Transmitted light, crossed polars, field of view 3 mm.



Overview of thin sections and offcuts (blue semi-circles mark photomicrograph locations).

Hole ID	mEasting	nNorthing	Elevation (m)	Azimuth	Dip	Depth (m)	Drill Core Diameter	Cell Number (Provincial Grid)	Mining Claim Number	Drilling Start Date	Drilling End Date	Drilling Contractor	Storage	Overburnden Thickness (m)	Casing	Cap Method	Abondoned	Artesion Conditions	Log Start Date	Log Completion Date	Log Author
	Datum: UTM NAD 83, Zone 17N																				
GTMH20032	517133	5280089	353	223	-50	228	NQ	41P10K377	328238	03/04/2020	03/06/2020	Forage G4 Drilling	Canadian Exploration Services Ltd. 14579 Government Road Larder Lake, Ontario, Canada P0K 1L0	3	Left in Place	Metal Collar Cap	No	No	03/07/2020	03/09/2020	Sean Hicks
GTMH20033	517315	5279936	345	200	-49	204	NQ	41P10K377	328238	03/06/2020	03/08/2020	Forage G4 Drilling	Canadian Exploration Services Ltd. 14579 Government Road Larder Lake, Ontario, Canada P0K 1L1	4.5	Left in Place	Metal Collar Cap	No	No	03/10/2020	03/12/2020	Sean Hicks
GTMH20034	517289	5279827	345	200	-49	219	NQ	41P10K377	328238	03/08/2020	03/11/2020	Forage G4 Drilling	Canadian Exploration Services Ltd. 14579 Government Road Larder Lake, Ontario, Canada P0K 1L2	10.5	Left in Place	Metal Collar Cap	No	No	03/12/2020	03/15/2020	Sean Hicks
GTMH20035	517661	5279880	354	227	-50	327	NQ	41P10K378	116781	03/12/2020	03/17/2020	Forage G4 Drilling	Canadian Exploration Services Ltd. 14579 Government Road Larder Lake, Ontario, Canada P0K 1L3	4.5	Left in Place	Metal Collar Cap	No	No	03/16/2020	03/19/2020	Isaac Riddle

l - light
m - medium
d - dark

vfg - very fine-grained
fg - fine grained
fmg - fine to medium-grained
mg - medium grained
mcg - medium to course grained
cg - course grained

CA - Core Axis
DTCA - Degrees to Core Axis
E.O.H. - End of Hole

v wk - very weak
wk - weak
wk mod - weak to moderate
mod - moderate
mod st - moderate to strong
str - strong
v st - very strong

Hole ID	From (m)	To (m)	Interval Length (m)	Lithology Code (main)	Main Lithology	Lithology Code (secondary)	Secondary Lithology	Secondary Lithology (%)	Hue	Colour	Grain Size	Texture	Description: Lithology, Colour, Grain size, Texture, Structure, Alteration, Mineralization, Veining, Lower contact.	Structure	Alteration 1	Alteration 1 Intensity	Alteration 2	Alteration 2 Intensity	Alteration 3	Alteration 3 Intensity	Mineral 1	Mineral 1 (%)	Mineral 2	Mineral 2 (%)	Vein 1 (type)	Vein 1 (%)	Vein 2 (type)	Vein 2 (%)
GTMH20032	0	3	3.00	Oou	Oou overburden general								Casing block 3 m, overburden not in box.															
GTMH20032	3	39.05	36.05	Mmd	Mmd Matachewan Mafic Dyke				m	green grey	mg	massive	Matachewan Dyke: medium to dark green grey, medium grained, massive, equigranular and moderately magnetic Matachewan Dyke. Unit is hard but consistently broken and rubbly, especially towards top of hole (possible fault?). Weak to moderate pervasive chlorite alteration, localized weak red pink staining of feldspars (Fe/K?) and localized epidote alteration as stringers/veinlets. Trace fine-grained disseminated pyrite and one epidote quartz-carb vein with chalcopyrite @ 1876 m. Minor veining as mm-scale epidotized carbonate veins. Lower contact is defined by 15 cm feldspar porphyry dyke and is sharp @ 60 DTCA.	massive	chlorite alteration	wk mod					pyrite	0.1			carbonate vein	0.1		
GTMH20032	39.05	52.55	13.50	Vvm	Vvm mafic volcanic				d	green	fg	interbedded	Mafic to intermediate Flows: unit displays several flows which range from medium to dark green and coarsen downhole from fine to medium grained before repeating due to separate flow. Unit is massive and variably weakly magnetic. Upper contact is heavily altered (chlorite) and resembles small shear or perhaps a pillow salvage and adjacent unit has concentric vareoles. Unit is very broken/rubbly from @ 41.6 m to 44.38 m, possibly fault? A 50 cm feldspar porphyry dyke cuts the unit @ 45.08 m, a couple ultramafic pulses (up to 50 cm) towards lower contact appear weakly foliated. Moderate pervasive chlorite alteration, strong pervasive biotite alteration of one flow @ 48 to 50 m and localized potassic alteration seen as deep red staining of mafic flows towards upper contact. Trace very fine-grained disseminated pyrite. Minor mm- to cm-scale carbonate veins with one cm-scale carbonate breccia vein at contact of ultramafic pulse @ 50 m. Lower contact is sharp @ 30 DTCA	massive	chlorite alteration	mod	biotite alteration	str	potassic alteration	wk mod	pyrite	0.1			carbonate vein	0.1		
GTMH20032	52.55	67.05	14.50	Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: dark green black, very fine grained and massive to weakly foliated, moderate to strongly magnetic ultramafics. Unit is competent but soft due to intense pervasive talc (talc/carb) alteration of ultramafics and veins, moderate to strong pervasive chlorite alteration. Locally but sporadic, minor fine to coarse grained, disseminated, sub- to euhedral pyrite. Minor mm- to cm-scale carbonate and occasional quartz veining. Lower contact is sharp but broken/rubbly (faulted?) @ 60 DTCA.	weakly foliated	talc alteration	str	chlorite alteration	mod str			pyrite	1			carbonate vein	5	quartz vein	1
GTMH20032	67.05	97.2	30.15	Ggb	Ggb gabbro				l	green	fg	massive	Gabbro (Archean?): light to medium green becoming darker downhole, fine grained, massive to weakly foliated and locally weakly magnetic gabbro. Unit is hard and competent with only a few broken sections. Moderate to strong pervasive chlorite alteration, local minor sericite alteration and Fe-carb alteration of carbonate veins. Trace fine grained disseminated or fracture/vein related pyrite. Significant mm- to cm-scale carbonate/Fe-carbonate veining and minor mm-scale quartz veining. Lower contact is sharp @ 60 DTCA.	weakly foliated	chlorite alteration	mod str	sericite alteration	wk			pyrite	1			carbonate vein	7	quartz vein	1
GTMH20032	97.2	98.28	1.08	Gpp	Gpp porphyry				m	green orange	fg	porphyritic or as phenocrysts	Feldspar Porphyry Dyke: dark green black with slight pink orange hued overprint (alteration), very fine grained matrix of feldspar porphyry dyke with medium grained anhedral feldspar phenocrysts. Unit is hard and competent, very weakly foliated with minor pervasive chlorite alteration and pink orange (Fe/K?) alteration. Trace fine grained disseminated pyrite. Minor mm-scale carbonate and quartz veining. Lower contact is sharp @ 60 DTCA.	weakly foliated	chlorite alteration	wk mod	potassic alteration	wk mod	hematite alteration	wk mod	pyrite	0.1			carbonate vein	0.1	quartz vein	0.1
GTMH20032	98.28	99.51	1.23	Guu	Guu igneous rock (undifferentiated)				m	green pink	mg	equigranular	Intermediate Dyke (Quartz Diorite/Granodiorite): light to medium grey pink, medium grained, massive and equigranular quartz-diorite to granodioritic dyke. Minor weak pervasive chlorite alteration and pinkish alteration to feldspars (Fe/K?). Very trace, very fine grained disseminated pyrite. Several mm-scale carbonate veins. Lower contact is sharp @ 60 DTCA.	massive	chlorite alteration	v wk	potassic alteration	v wk	hematite alteration	v wk	pyrite	0.01			carbonate vein	0.1		
GTMH20032	99.51	104.31	4.80	Ggb	Ggb gabbro				m	green	fmg	equigranular	Gabbro (Archean?): dark green black, fine to medium grained, equigranular and moderately foliated gabbro (possible coarse grained flow). Unit is hard and competent, locally weakly magnetic with moderate pervasive chlorite and minor sericite alteration. 20 cm red altered monzodiorite dyke @103.46 m. Trace fine grained disseminated pyrite. Several cm-scale green to pink altered quartz veins and a couple mm-scale carbonate veins. Lower contact is sharp @50 DTCA.	foliated	chlorite alteration	mod str	sericite alteration	wk			pyrite	0.1			quartz vein	1	carbonate vein	0.1
GTMH20032	104.31	105.67	1.36	Gmd	Gmd monzodiorite				m	red	fg	massive	Monzodiorite Dyke (Altered Gabbro?): deep red (altered), fine grained, massive and weak to moderately magnetic mozodiorite to diorite dyke. Unit is hard is competent with few natural fractures. Minor pervasive chlorite alteration and strong pervasive Fe/K alteration turning dyke deep red. Trace very fine grained disseminated pyrite and minor mm-scale carbonate veinlets. Lower contact is sharp @	massive	hematite alteration	mod str	potassic alteration	mod	chlorite alteration	wk mod	pyrite	0.1			carbonate vein	0.1		
GTMH20032	105.67	107.59	1.92	Ggb	Ggb gabbro				d	green black	fg	foliated	Gabbro (Archean?): same as previous @ 99.51 m to 104.31 m but unit is consistently moderately magnetic with no cross-cutting mozodiorite dyke. Altered with sub- to euhedral pyrite and very well foliated zone 12 cm before lower contact which is sharp @ 65 DTCA.	foliated	chlorite alteration	mod str	sericite alteration	wk			pyrite	1			carbonate vein	1	quartz vein	0.1
GTMH20032	107.59	108.7	1.11	Gmd	Gmd monzodiorite				m	red green	fmg	massive	Monzodiorite Dyke (Altered Gabbro?): same as previous but with weaker alteration (not as red). Lower contact is demarked by 2 cm quartz vein followed by 10 cm dark green, well foliated gabbro/mafics with medium grained subhedral pyrite. Lower contact is sharp @ 60 DTCA.	massive	hematite alteration	mod str	potassic alteration	mod	chlorite alteration	wk mod	pyrite	1			quartz vein	1	carbonate vein	0.1
GTMH20032	108.7	110	1.30	Guu	Guu igneous rock (undifferentiated)				m	pink brown	fmg	massive	Intermediate Dyke: medium pink brown, fine to medium grained, massive and cryptic equigranular texture due to Fe/K alteration overprint with medium to coarse grained chlorite spots/altered fragments. Unit is hard and competent with trace fine grained disseminated pyrite throughout but abundant medium grained subhedral pyrite in well foliated 10 cm mafic section at lower contact. Minor mm-scale carbonate veins, a couple displaying dilational jogs and lower contact delineated by 2.5cm quartz vein. Lower contact is sharp.	massive	hematite alteration	mod	potassic alteration	mod	chlorite alteration	wk mod	pyrite	0.1			carbonate vein	0.1		
GTMH20032	110	115.61	5.61	Ggb	Ggb gabbro				m	green	fmg	massive	Gabbro (Dyke?): dark green with local deep red (Fe/K) alteration, fine to medium grained, massive and equigranular gabbro (dyke?). Unit is hard, competent and locally magnetic (weakly). Sub-meter red altered, massive, moderately magnetic intermediate dyke (monzodiorite/quartz-diorite) from 110.89 m to 111.63 m. Weak to moderate pervasive chlorite alteration with minor localized deep red Fe/K alteration and several cm-scale (up to 10 cm) very fine grained and well foliated chloritic bands with medium grained pyrite, otherwise unit has trace very fine grained disseminated pyrite. Minor mm-scale carbonate veins. Lower contact sharp @ 70 DTCA.	massive	chlorite alteration	mod	hematite alteration	wk	potassic alteration	wk mod	pyrite	0.1			carbonate vein	0.1		
GTMH20032	115.61	119.42	3.81	Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: same as previous @ 52.55 m to 67.05 m but less talc alteration. Lower contact is broken.	massive	talc alteration	wk	chlorite alteration	wk mod			pyrite	0.1			carbonate vein	2		
GTMH20032	119.42	123.86	4.44	Ggb	Ggb gabbro				m	green orange	fg	massive	Gabbro Dyke: medium to dark orange green (alteration), fine grained and massive, non-magnetic gabbro dyke. Unit is hard and competent with weak to moderate pervasive chlorite alteration and locally moderate orange Fe/K alteration. Trace very fine grained disseminated pyrite and mm-scale carbonate veining. Lower contact is sharp @ 60 DTCA.	massive	chlorite alteration	wk mod	hematite alteration	wk mod	potassic alteration	wk mod	pyrite	0.01			carbonate vein	2		
GTMH20032	123.86	125.73	1.87	Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: same as previous with more intense carbonate veining. Lower contact is sharp @ 60 DTCA.	massive	talc alteration	wk	chlorite alteration	mod			pyrite	0.1			carbonate vein	20		
GTMH20032	125.73	151.49	25.76	Mmd	Mmd Matachewan Mafic Dyke				m	green grey	mcg	massive	Matachewan Dyke: dark green grey, medium to coarse grained, massive and equigranular, moderately magnetic Matachewan Dyke with fine grained, grey chill margins. Unit is hard and competent with moderate pervasive chlorite alteration and minor localized (quartz veins) epidote alteration where there is also minor orange pink staining (Fe/K?). Very trace fine disseminated pyrite. Minor mm-scale quartz-carb veins and several cm-scale quartz-veins with significant epidote alteration. Lower contact is broken but sharp @ 50 DTCA.	massive	chlorite alteration	wk mod	potassic alteration	v wk	hematite alteration	v wk	pyrite	0.01			quartz vein	1	carbonate vein	0.1
GTMH20032	151.49	163.13	11.64	Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: same as previous @ 115.61 m to 119.42 m. Dilatational jogs observed in low angle (10 DTCA) carbonate vein @ 160.5 m. Lower contact is sharp @ 50 DTCA.	massive	talc alteration	v wk	chlorite alteration	wk			pyrite	0.01			carbonate vein	1		
GTMH20032	163.13	164.43	1.31	Gmd	Gmd monzodiorite				m	red	fg	massive	Monzodiorite Dyke (Altered Gabbro?): deep red, fine to medium grained, massive and non-magnetic monzodiorite (qz-diorite?) dyke. Unit is hard and competent with moderate to strong pervasive deep red Fe alteration. Trace disseminated fine grained sub- to euhedral pyrite which can is locally clustered and a couple mm-scale quartz-carb veins. Lower contact is sharp @ 60 DTCA.	massive	hematite alteration	mod str	chlorite alteration	wk			pyrite	0.1			quartz-carbonate vein	0.1		
GTMH20032	164.43	188.94	24.51	Ggb	Ggb gabbro				l	grey	fg	massive	Gabbro (Archean?): light to medium grey, very fine to fine grained, massive and equigranular gabbro which is locally very weakly magnetic. Unit is hard and competent with minor epidote alteration of quartz and quartz-carb veins. Very trace fine grained disseminated pyrite with a section of coarse grained pyrite from166 m to 167.5 m. Significant mm- to cm-scale quartz and quartz-carb veining with minor mm-scale carbonate veining. Lower contact is sharp @ 60 DTCA.	massive								pyrite	0.1			quartz-carbonate vein	4	quartz vein	2
GTMH20032	188.94	211.37	22.43	Mmd	Mmd Matachewan Mafic Dyke				d	green grey	mcg	massive	Matachewan Dyke: same as previous but with m-scale dark grey black, fine grained chill margins and much stronger epidote alteration. Significant broken/rubbly zone from 189.5 m to 198.6 m, possible fault? Lower contact is broken/rubbly.	massive								pyrite	0.1			quartz-carbonate vein	1		
GTMH20032	211.37	220.29	8.92	Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: same as previous but unit is broken/rubbly at upper contact, @ 213 m and from 219 m to 219.75 m with gouge @ 218.9 m. Lower contact is sharp @ 50 DTCA.	massive	talc alteration	v wk	chlorite alteration	wk			pyrite	0.01			quartz-carbonate vein	2	carbonate vein	1

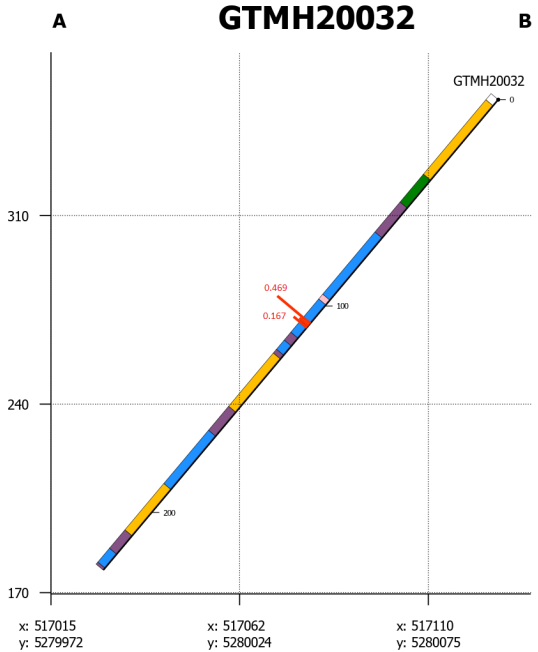
GTMH20032	220.29	227	6.72		Ggb	Ggb gabbro				m	grey	fmg	massive	Gabbro (Archean?): same as previous but unit has unique alteration texture with cryptic grain boundaries resembling xenoliths (possible healed fault breccia). Lower contact is sharp @ 45 DTCA.	massive	chlorite alteration	wk							pyrite	0.1			quartz-carbonate vein	1	carbonate vein	0.1
GTMH20032	227	228	1.00		Vum	Vum ultramafic volcanic				m	green black	vfg	massive	Ultramafics: same as previous. EoH	massive	talc alteration	wk	chlorite alteration	wk							carbonate vein	0.1		
GTMH20033	0	4.5	4.50		Oou	Oou overburden general								Casing block @ 4.5 m, overburden not in box.																	
GTMH20033	4.5	14.17	9.67		Vvm	Vvm mafic volcanic				d	green grey	vfgfg	massive	Mafic Volcanics: medium to dark grey, very fine to fine grained and massive to weakly foliated mafic volcanics. Unit is broken and blocky with a couple rubbly sections. Minor to moderate pervasive chlorite alteration and significant patchy, light grey/green grey alteration which is harder than host rock (feldspar?). Trace fine grained disseminated pyrite sporadically medium grained euhedral pyrite. No significant veining. Lower contact is sharp @ 60 DTCA.	weakly foliated	chlorite alteration	wk mod							pyrite	1						
GTMH20033	14.17	16.34	2.17		Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: dark green black, very fine grained, massive to weakly foliated and weakly magnetic. Unit is soft and blocky with a 30 cm aphanitic, dark grey, intermediate to mafic dyke at lower contact. Weak pervasive chlorite, talc and carbonate alteration. Localized medium to coarse grained, sub- to euhedral pyrite and minor mm-scale carbonate veins. Lower contact (dyke) is undulating but sharp @ 20 DTCA.	weakly foliated	talc alteration	wk	chlorite alteration	wk mod	carbonate alteration	wk		pyrite	2			carbonate vein	0.1		
GTMH20033	16.34	20.85	4.51		Vvm	Vvm mafic volcanic				d	grey green	fg	massive	Mafic Volcanics: medium to dark grey green, fine grained and massive mafics: Unit is hard and competent with weak to moderate pervasive chlorite alteration. Trace fine grained disseminated pyrite near upper contact and associated with a couple quartz-carb veins. Minor mm-scale quartz-carb veins predominantly barren. Lower contact is sharp @ 25 DTCA.	massive	chlorite alteration	wk mod							pyrite	0.1			quartz-carbonate vein	1		
GTMH20033	20.85	24	3.15		Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: same as previous but moderately magnetic with an increase in carbonate veins, some of which are completely chloritized and localized very coarse grained sub- to euhedral pyrite. Lower contact is delineated by a 20 cm feldspar porphyry dyke cuts the underlying mafics @ 65 DTCA.	weakly foliated	talc alteration	wk	chlorite alteration	mod	carbonate alteration	wk		pyrite	1			carbonate vein	2		
GTMH20033	24	29.73	5.73		Vvm	Vvm mafic volcanic				d	green	fg	foliated	Mafic Volcanics: medium to dark grey green, fine grained and weak to moderately foliated with good evidence for shearing (very well foliated and shear indicator) from 28.24 m to28.54 m. Unit is hard and competent with weak to moderate pervasive chlorite alteration and patchy light grey green, hard alteration (feldspar?) and becomes weakly magnetic toward lower contact. Minor disseminated fine to medium grained, sub- to euhedral pyrite. Minor mm-scale quartz-carb veining. Lower contact is sharp @ 60 DTCA.	massive	chlorite alteration	wk mod							pyrite	2			carbonate vein	0.1		
GTMH20033	29.73	31.37	1.64		Gmd	Gmd monzodiorite				d	red	mg	massive	Monzodiorite Dyke (Altered Gabbro): medium to dark rusty red, fine grained, moderately magnetic and massive with cryptic equigranular texture. Unit is hard and competent with strong pervasive Fe/K (red) alteration and possible weak pervasive biotite alteration. Trace fine grained disseminated pyrite and minor mm-scale quartz-carb veining. Lower contact is broken.	massive	hematite alteration	str	potassic alteration	str	biotite alteration	wk		pyrite	0.1			quartz-carbonate vein	0.1		
GTMH20033	31.37	44.95	13.58		Vvm	Vvm mafic volcanic				d	green	vfgfg	foliated	Mafic Volcanics: same as previous but unit is consistently moderately magnetic. Two possible sub-m-scale ultramafic components in first meter of unit and @ 42 m, these sections are darker and soft (possibly due to pervasive carbonate alteration). Two 10 cm monzodiorite dykes (altered gabbro) cross-cut unit @ 33.08 m and 38.56 m. 20 cm quartz-carb vein @ 43.53 m with interesting brecciated texture, blebby pyrite +/- po and significant chlorite. After this vein unit displays weak pervasive sericite alteration (leucoxene?). Lower contact is sharp @ 70 DTCA.	foliated	chlorite alteration	str	carbonate alteration	mod	sericite alteration	wk mod		pyrite	1			quartz-carbonate vein	5	carbonate vein	1
GTMH20033	44.95	46.24	1.29		Gmd	Gmd monzodiorite				m	grey fawn	fg	massive	Monzodiorite Dyke (Altered Gabbro): light to medium fawn grey with minor red green hue (Fe alteration?), fine grained, massive and equigranular and non-magnetic. Unit is hard and competent with minor but sporadic disseminated pyrite and a couple mm-scale quartz and quartz-carb veins. Lower contact is sharp @ 60 DTCA.	massive	hematite alteration	wk	chlorite alteration	wk mod				pyrite	1			quartz-carbonate vein	0.1	quartz vein	0.1
GTMH20033	46.24	49.9	3.66		Vvm	Vvm mafic volcanic				d	green	vfgfg	foliated	Mafic Volcanics: dark green, very fine to fine grained, very weakly foliated becoming well foliated towards lower contact (shearing due to dyke) and weak to moderately magnetic in upper half of unit. Unit is hard and competent with moderate to strong pervasive chlorite alteration and weak pervasive sericite (leucoxene?) until unit becomes well foliated and localized pervasive carbonate alteration. Trace fine grained disseminated pyrite, locally medium grained sub- to euhedral pyrite. Minor mm-scale quartz-carb and carbonate veining. Lower contact is sharp @ 60 DTCA.	foliated	chlorite alteration	str	sericite alteration	wk	carbonate alteration	wk		pyrite	0.1			quartz-carbonate vein	1	carbonate vein	1
GTMH20033	49.9	51.09	1.19		Gpp	Gpp porphyry				l	grey khaki	fg	porphyritic or as phenocrysts	Quartz-Feldspar Porphyry Dyke (Altered): light to medium buff grey, fine grained porphyritic but massive felsic dyke with medium grained subrounded phenocrysts, texture is cryptic due to alteration. Unit is hard and competent and heavily altered (silica flooding?) and minor chlorite stringers. Trace to minor disseminated fine grained and euhedral pyrite. Lower contact is sharp @ 65 DTCA.	massive	silica alteration	str						pyrite	0.1						
GTMH20033	51.09	57.41	6.32		Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramafics: same as previous @ 20.85 m to 24 m. Upper contact is a sub-m-scale mafic volcanic section with cm-scale brecciated quartz-carbonate veins. Lower contact is demarcated by 2 small monzodiorite (altered gabbro) dykes (10 and 20 cm) @ 65 DTCA.	weakly foliated	talc alteration	wk	chlorite alteration	mod	carbonate alteration	wk		pyrite	0.1			carbonate vein	3		
GTMH20033	57.41	66.97	9.56		Vvm	Vvm mafic volcanic				d	green	vfgfg	foliated	Mafic Volcanics: same as previous but with no sericite alteration and an increase in chlorite altered bands/stringers, carbonate veins/stringers and minor pink staining of quartz-carb veins. 13 cm pink altered (Fe) quartz-feldspar porphyry dyke @ 61.4 m and a 36 cm deep red monzodiorite (altered gabbro) dyke @ 63.68 m. Lower contact is sharp @ 60 DTCA.	foliated	chlorite alteration	str	carbonate alteration	wk mod	hematite alteration	wk		pyrite	0.1			quartz-carbonate vein	5	carbonate vein	1
GTMH20033	66.97	69.65	2.69		Gmd	Gmd monzodiorite	Vvm	Vvm mafic volcanic		d	red	fg	massive	Monzodiorite Dyke (Altered Gabbro): same as previous @ 29.73 m to 31.37 m but unit consists of two dykes with a meter interval of mafic volcanics which are significantly altered red (Fe/K) in first 50 cm. Volcanic unit is also moderately magnetic with cm-scale discontinuous quartz-carb vein. Mafics are from 67.44 m to 68.40 m with contacts @ 60 and 55 DTCA respectively. The second monzodiorite dyke (altered gabbro) is slightly less altered. A second 40 cm section of mafic volcanics runs from 69.24 m to 69.65 m and is significantly altered by pale chlorite. Lower contact is sharp @ 60 DTCA.	massive	hematite alteration	str	potassic alteration	wk	biotite alteration	wk		pyrite	0.1			carbonate vein	0.1	quartz-carbonate vein	1
GTMH20033	69.65	71.95	2.30		Gpp	Gpp porphyry				l	grey khaki	fg	porphyritic or as phenocrysts	Quartz-Feldspar Porphyry Dyke: same as previous but unit is two dykes with sub-m-scale red green altered mafic volcanics @ 70.2 m which is delineated by 2 cm quartz vein. Lower contact is sharp @ 70 DTCA.	massive	silica alteration	str						pyrite	0.1			quartz vein	0.1	quartz-carbonate vein	0.1
GTMH20033	71.95	115.95	44.00		Vvm	Vvm mafic volcanic				m	grey green	vfgfg	foliated	Mafic Volcanics: medium grey becoming more green grey downhole, very fine grained to fine grained, weak to moderately foliated with sections that are very well foliated/sheared i.e. 74.83m to 75.56 m. Unit is hard and competent with only a few broken/blocky sections and is non-magnetic. Very weak pervasive chlorite alteration and localized pink to rusty red Fe/K alteration of veins and near fractures. A couple small (10-20 cm) monzodiorite (altered gabbro) dykes i.e. @ 104.18 m. Trace fine grained disseminated pyrite with local clusters of fine to medium grained euhedral pyrite. Numerous cm-scale quartz veins with pink K-alteration and minor chlorite, some with disseminated pyrite i.e. @ 107.32 m and minor mm- to cm-scale quartz-carb veins. Lower contact is sharp @ 40 DTCA.	foliated	chlorite alteration	wk	potassic alteration	mod	hematite alteration	wk mod		pyrite	0.1			quartz vein	5	quartz-carbonate vein	2
GTMH20033	115.95	117	1.05		Gmd	Gmd monzodiorite				d	red green	fmg	massive	Monzodiorite (Altered Gabbro): dark red green, fine to medium grained, massive, equigranular and non-magnetic monzodiorite to quartz-monzodiorite (altered gabbro). Weak to moderate red alteration (Fe/K) and minor pervasive biotite alteration. Very trace, very fine grained disseminated pyrite and minor quartz-carb veining. Lower contact is sharp @ 55 DTCA.	massive	hematite alteration	wk mod	potassic alteration	wk mod	biotite alteration	wk		pyrite	0.01			quartz-carbonate vein	0.1		
GTMH20033	117	121.41	4.41		VVm	Vvm mafic volcanic				d	green	vfgfg	foliated	Mafic Volcanics: same as previous but entire unit is grey green and there are no cross-cutting dykes. Lower contact is sharp @ 75 DTCA.	foliated	chlorite alteration	mod	hematite alteration	wk	potassic alteration	wk		pyrite	0.1			quartz-carbonate vein	0.1		
GTMH20033	121.41	124.54	3.14		Gfu	Gfu felsic rock (undifferentiated)				m	pink red	mg	massive	Felsic Dyke: red pink, fine to medium grained matrix in a granitic (monzogranitic), felsic dyke with medium grained feldspar phenocrysts. Unit is massive, non-magnetic and competent with a sub-m-scale monzodiorite (altered gabbro) dyke with coarse grained chlorite from 122.9 m to 123.51 m @ 80 DTCA at both contacts. No observed mineralization in the felsic dyke and trace disseminated pyrite in the mafic dyke. Minor mm-scale quartz-carb veining in both dykes and minor felsic segregations/veins (k-spar?) within felsic dyke. Lower contact is sharp @ 60 DTCA.	massive	potassic alteration	wk mod	hematite alteration	wk mod	chlorite alteration	wk		pyrite	0.01			quartz-carbonate vein	0.1		
GTMH20033	124.54	128.14	3.60		Vvm	Vvm mafic volcanic				d	grey green	vfgfg	foliated	Mafic Volcanics: same as previous but with patchy grey alteration (feldspar/leucoxene?) and red pink altered quartz veins. Unit becomes very well foliated/sheared with medium grained euhedral pyrite at lower contact with dyke. Lower contact is sharp @ 60 DTCA.	weakly foliated	chlorite alteration	wk mod	hematite alteration	wk	potassic alteration	wk		pyrite	0.1			quartz-carbonate vein	5	quartz vein	0.1
GTMH20033	128.14	129	0.87		Gfu	Gfu felsic rock (undifferentiated)				m	pink red	fmg	massive	Felsic Dyke: same as previous but slightly finer grained and slightly less altered. Lower contact @ 129 m.	massive	potassic alteration	wk	hematite alteration	wk								quartz-carbonate vein	1		
GTMH20033	129	134.54	5.54		Vvm	Vvm mafic volcanic				d	grey black	vfg	foliated	Mafic Volcanics: dark grey black, very fine grained, weakly foliated and weak to moderately magnetic mafics. Unit is hard and competent with a 20 cm feldspar porphyry dyke @ 129.64 m, upper contact @ 90 DTCA and lower contact @ 20 DTCA with significant shearing of mafics at both contacts. Another small (6 cm) monzodiorite (altered gabbro) @ 130.53 m. Weak localized pink red stained (Fe/K) silica alteration (albite?) and medium grained disseminated eu- to anhedral pyrite throughout unit. Several cm-scale quartz veins and mm-scale quartz-carb and carbonate veins. Lower contact is sharp @ 50 DTCA.	foliated	chlorite alteration	v wk	silica alteration	wk	albite alteration	v wk		pyrite	2			quartz vein	1	quartz-carbonate vein	1
GTMH20033	134.54	136.72	2.19		Gfu	Gfu felsic rock (undifferentiated)				m	pink red	fmg	massive	Felsic Dyke: same as previous @128.14 m to 129 m but with trace fine grained disseminated pyrite. Lower contact is sharp @ 60 DTCA.	massive	potassic alteration	wk	hematite alteration	wk						pyrite	0.1			quartz-carbonate vein	0.1		
GTMH20033	136.72	140.16	3.44		Vum	Vum ultramafic volcanic				d	green black	vfg	foliated	Ultramafics: same as previous but well foliated and stronger pervasive carbonate alteration. Lower contact is sharp @ 70 DTCA delineated by 3 cm quartz vein.	foliated	carbonate alteration	mod	chlorite alteration	mod	talc alteration	v wk		pyrite	0.01			carbonate vein	1	quartz vein	0.1

GTMH20033	140.16	142.25	2.09	Gmd	Gmd monzodiorite	d	red green	fmg	massive	Monzodiorite Dyke (Altered Gabbro): same as previous @ 115.95 m to 117 m. Lower contact is sharp @ 55 DTCA.	massive	hematite alteration	mod	potassic alteration	mod	biotite alteration	wk	pyrite	0.1	carbonate vein	0.1					
GTMH20033	142.25	145.42	3.17	Giu	Giu intermediate rock (unclassified)	m	pink fawn	vfgfg	massive	Intermediate Fragmental Dyke: medium pink buff, very fine grained intermediate dyke with coarse chloritized mafic wall rock fragments. Unit is hard and competent, weakly magnetic and weakly foliated with weak to moderate Fe/K and weak chlorite alteration. Trace fine grained disseminated pyrite and several mm-scale quartz-carb and carbonate veins. Unit has two half-meter-scale red altered mafic volcanic portions. Lower contact is sharp @ 70 DTCA.	weakly foliated	hematite alteration	wk mod	potassic alteration	wk mod	chlorite alteration	wk	pyrite	0.1	quartz-carbonate vein	0.1					
GTMH20033	145.42	148.08	2.67	Vvm	Vvm mafic volcanic	d	green black	vfg	foliated	Mafic Volcanics: same as previous but well foliated with pervasive green (carbonate/feldspar?) alteration. Top 75 cm of unit is a monzodiorite (altered gabbro) dyke and a heavily fractured (healed) feldspar porphyry dyke from 147.13 m to 147.59 m with contacts @ 80 DTCa and @ 40 DTCA. Lower contact of mafics is sharp @ 45 DTCA.	foliated	chlorite alteration	wk mod					pyrite	0.1	quartz-carbonate vein	0.1					
GTMH20033	148.08	176.41	28.33	Mmd	Mmd Matachewan Mafic Dyke	d	grey black	fmg	massive	Matachewan Dyke: dark grey black, fine to medium grained with very fine grained chill margins, massive and moderately magnetic. Unit is hard and competent but has several blocky and broken/rubbly zones. i.e. @ 173.68 m and 174.27 m (possible faults?). Minor pervasive chlorite alteration and localized epidote stringers. Trace fine grained disseminated pyrite and overall very little veining, only a couple mm-scale quartz-veins and one 10 cm cluster of mm-scale veins @ 174 m. Lower contact is sharp @ 70 DTCA.	massive	chlorite alteration	wk	epidote alteration	wk			pyrite	0.01	quartz vein	0.1					
GTMH20033	176.41	184.01	7.60	Vum	Vum ultramafic volcanic	d	green black	vfg	massive	Ultramafics: same as previous but with less talc and carbonate alteration making rock slightly harder and no observed pyrite. Unit is massive but foliated at upper contact and has minor mm-scale carbonate veining. Lower contact is vague @ 35 DTCA.	weakly foliated	talc alteration	v wk	carbonate alteration	v wk	chlorite alteration	wk mod			carbonate vein	1					
GTMH20033	184.01	185.78	1.78	Gmd	Gmd monzodiorite	d	red grey	fmg	massive	Monzodiorite Dyke (Altered Gabbro): same as previous but less altered making rock more grey and fine to medium grained euhedral pyrite. Lower contact is sharp @ 50 DTCA.	massive	hematite alteration	wk	potassic alteration	wk	chlorite alteration	wk	pyrite	0.1	quartz vein	0.1					
GTMH20033	185.78	188	2.22	Vum	Vum ultramafic volcanic	d	green black	vfg	massive	Ultramafics: same as previous @ 176.41 m to 184.01 m. Lower contact is sharp @ 50 DTCA.	weakly foliated	talc alteration	v wk	carbonate alteration	wk	chlorite alteration	wk mod	pyrite	0.1	quartz-carbonate vein	0.1					
GTMH20033	188	189.5	1.50	Gmd	Gmd monzodiorite	d	red green	fg	massive	Monzodiorite Dyke (Altered Gabbro): same as previous but significantly stronger deep red (Fe/K) alteration. Bottom 50 cm of unit are blocky and broken right down to lower contact.	massive	hematite alteration	mod str	potassic alteration	mod str			pyrite	0.1	quartz vein	0.1					
GTMH20033	189.5	193.75	4.25	Giu	Giu intermediate rock (unclassified)	l	fawn grey	fg	massive	Intermediate Fragmental Dyke: fawn (buff) grey, fine grained massive intermediate dyke. Unit may be two separate intermediate dykes as chloritized mafic wall rock fragments do not appear until after cryptic contact @ 192.49 m. Top of unit is blocky and broken (possible fault) and there is a 20 cm healed breccia followed by 2 cm pink quartz vein @ 191.3 m. Significant very fine grained disseminated pyrite (1-2%) throughout unit and minor mm- to cm-scale quartz veins. Lower contact is sharp @70 DTCA.	massive	chlorite alteration	wk					pyrite	1	quartz vein	0.1	quartz-carbonate vein	0.1		
GTMH20033	193.75	204	10.25	Vum	Vum ultramafic volcanic	l	white green	vfg	massive	Ultramafics: light white green, very fine grained, massive and weakly magnetic. Unit is soft and competent with three small (20 to 50 cm) monzodiorite (altered gabbro) dykes. Unit is broken and rubbly from 196.75 m to 197.4 m with 10 cm of white carbonaceous fault gouge with fine grained disseminated pyrite on either side of fault and a 4 cm quartz vein just before it. Unit is very strongly carbonate altered with trace disseminated fine to medium grained euhedral pyrite. Eoh.	massive	carbonate alteration	v str	chlorite alteration	wk mod	talc alteration	wk	pyrite	0.1	carbonate vein	15	quartz vein	5		
GTMH20034	0	10.86	10.86	Oou	Oou overburden general					Casing block in box @10.5 with 36 cm of overburden box.																
GTMH20034	10.86	14.51	3.65	Ggb	Ggb gabbro	d	grey	fg	massive	Gabbro (Archean): medium to dark grey, fine grained massive to very weakly foliated and weakly magnetic gabbro (possible mafic volcanics). Unit is hard and competent and minor pervasive sericite alteration. Very trace very fine grained disseminated pyrite. Minor mm-scale quartz-carb veining and cm-scale quartz veining with pinkish white dolomite/ankerite migrating into vein from margins. Lower contact is sharp but undulating @ 55 DTCA.	weakly foliated	sericite alteration	wk					pyrite	0.01	quartz-carbonate vein	1					
GTMH20034	14.51	15.49	0.98	Gmd	Gmd monzodiorite	m	pink grey	fg	massive	Monzodiorite Dyke (Altered Gabbro): light to medium pink grey, fine grained, massive and equigranular dyke. Unit is hard and competent and non-magnetic. Weak pervasive pink (Fe/K) alteration and minor pervasive chlorite alteration. Trace very fine grained disseminated pyrite. A couple cm-scale quartz veins with dolomite/ankerite replacing quartz. Lower contact is sharp @ 33 DTCA.	massive	chlorite alteration	wk					pyrite	0.1	quartz-carbonate vein	1					
GTMH20034	15.49	20.38	4.89	Ggb	Ggb gabbro	d	grey green	fg	massive	Gabbro (Archean): same as previous but with a 3 cm pink altered quartz vein and strong pervasive carbonate alteration in last 1.2 m of unit and minor pink (Fe/K) alteration. Slight increase in disseminated pyrite. Lower contact is sharp @ 60 DTCA.	weakly foliated	carbonate alteration	mod str	chlorite alteration	wk			pyrite	0.1	quartz-carbonate vein	1	quartz vein	0.1		
GTMH20034	20.38	21.81	1.43	Ffiv	Fragmental felsic to intermediate volcanic	l	grey fawn	vfg	fragmental or as fragments	Fragmental Felsic/Intermediate Volcanic: light to medium grey fawn, very fine grained with numerous 1-5 mm angular to subrounded chloritized clasts and subrounded to rounded quartz fragments (up to 7 mm). Unit is massive and non-magnetic, hard and competent with minor chlorite alteration. Very fine to medium grained disseminated sub- to euhedral pyrite. A couple cm-scale quartz veins and minor mm-scale quartz-carb veining. Lower contact is sharp @ 60 DTCA.	massive	chlorite alteration	v wk					pyrite	1	quartz vein	1	quartz-carbonate vein	0.1		
GTMH20034	21.81	24.76	2.95	Vvm	Vvm mafic volcanic	d	grey green	vfgfg	foliated	Mafic Volcanics: dark green grey to black, very fine grained to fine grained and very well foliated to sheared and appears striped due to abundance of mm-scale quartz-carb (dolomitic) veins. Moderate to strong pervasive sericite, chlorite and carbonate alteration with minor fuchsite at upper contact. First 40 cm of unit is a monzodiorite (altered gabbro) dyke and there is a 20 cm brecciated quartz-carb @ 24.56 m. Trace very fine grained disseminated pyrite and intense quartz-carb veining through unit. Lower contact is sharp @ 60 DTCA.	sheared	carbonate alteration	str	chlorite alteration	str	sericite alteration	mod str	pyrite	0.01	quartz-carbonate vein	15					
GTMH20034	24.76	27.06	2.30	Gmd	Gmd monzodiorite	d	green pink	fmg	massive	Monzodiorite Dyke (Altered Gabbro): dark green pink, fine to medium grained, massive, equigranular and weakly magnetic. Unit is hard and competent with minor pervasive chlorite and carbonate alteration and no observable pyrite. Minor mm-scale pinkish quartz-carb (dolomite/ankerite) veining. Lower contact is sharp but broken.	massive	carbonate alteration	wk	chlorite alteration	wk					quartz-carbonate vein	0.1					
GTMH20034	27.06	30.97	3.91	Gsy	Gsy syenite	m	pink	fmg	massive	Syenite Dyke: light to medium pink, fine to medium grained, massive and non-magnetic syenite dyke. Unit is hard and competent with weak to moderate leucoxene alteration and minor K alteration and possible 10 cm chlorite fuchsite dyke @ 30.24 m contacts @ 75 DTCA. Trace very fine to fine grained disseminated euhedral pyrite. Minor mm-scale quartz veins and quartz-carb veins, one set very low angle (10 DTCA). Lower contact is sharp @ 65 DTCA.	massive	leucoxene alteration	wk mod	chlorite alteration	v wk	potassic alteration	wk	pyrite	0.1	quartz-carbonate vein	0.1	quartz vein	0.1		
GTMH20034	30.97	32.38	1.41	Vvm	Vvm mafic volcanic	d	grey green	vfgfg	foliated	Mafic Volcanics: dark grey green, very fine grained, weakly foliated and weakly magnetic. Weak pervasive carbonate and sericite alteration with moderate pervasive chlorite alteration. Minimal mm-scale quartz-carb veining. Lower contact is sharp but undulating @ 50 DTCA.	foliated	chlorite alteration	mod str	carbonate alteration	wk mod	sericite alteration	wk mod			quartz-carbonate vein	0.1					
GTMH20034	32.38	33.16	0.78	Ffiv	Fragmental felsic to intermediate volcanic	l	grey fawn	vfg	foliated	Fragmental Felsic/Intermediate Volcanic: same as previous but with fewer clasts and a cm-scale quartz vein. Lower contact is sharp @ 60 DTCA.	foliated	chlorite alteration	v wk					pyrite	1	quartz vein	0.1					
GTMH20034	33.16	34.48	1.32	Gmd	Gmd monzodiorite	d	green pink	mg	massive	Monzodiorite Dyke (Altered Gabbro): same as previous but slightly coarser grained with patchy pink (Fe/K) alteration and coarse chlorite spots. Lower contact is broken.	massive	chlorite alteration	mod	hematite alteration	wk	potassic alteration	wk	pyrite	0.1	quartz-carbonate vein	0.1					
GTMH20034	34.48	35.06	0.59	Ffiv	Fragmental felsic to intermediate volcanic	l	grey fawn	vfg	foliated	Fragmental Felsic/Intermediate Volcanic: same as previous @32.38 m to 33.16 m. Lower contact is shar @ 65 DTCA.	foliated	chlorite alteration	v wk					pyrite	1							
GTMH20034	35.06	37.44	2.38	Vum	Vum ultramafic volcanic	d	green black	vfg	foliated	Ultramafics: dark green black, very fine grained, foliated. Unit is soft but competent and is cut by two monzodiorite (altered gabbro) dykes, first is 55 cm @ 35.28 m (80 DTCA.) and 15 cm @ 36.38 m (70 DTCA). Weak to moderate carbonate and talc alteration with moderate pervasive chlorite alteration. Very trace very fine grained disseminated pyrite. Lower contact is delineated by a 3 cm crack and seal quartz-carb vein @ 60 DTCA.	foliated	chlorite alteration	mod str	carbonate alteration	wk mod	talc alteration	wk	pyrite	0.01	quartz-carbonate vein	5					
GTMH20034	37.44	43.13	5.69	Gmd	Gmd monzodiorite	m	green pink	mg	massive	Monzodiorite Dyke (Altered Gabbro): same as previous but chlorite spotting is not as coarse as units alteration appears more homogeneous and weak to moderately magnetic. Lower contact is sharp @ 60 DTCA.	massive	chlorite alteration	mod	hematite alteration	wk	potassic alteration	wk	pyrite	0.1	quartz-carbonate vein	1					
GTMH20034	43.13	47.23	4.10	Vum	Vum ultramafic volcanic	d	green black	vfg	foliated	Ultramafics: dark green black, very fine grained, foliated and weak to moderately magnetic. Unit is soft but competent becoming blocky towards lower contact. Minor pervasive carbonate alteration (+/- talc) and moderate to strong pervasive chlorite alteration. Sporadic trace very fine grained disseminated pyrite. Significant mm-scale carb to quartz-carb veining. Lower contact is faulted and broken.	weakly foliated	chlorite alteration	mod str	carbonate alteration	wk mod			pyrite	0.1	quartz-carbonate vein	5					
GTMH20034	47.23	48.86	1.63	Gmd	Gmd monzodiorite	m	grey pink	fmg	massive	Monzodiorite Dyke (Altered Gabbro): same as previous @ 37.44 m to 43.13 m but unit is blocky and broken/rubbly at upper contact (faulted). Lower contact is sharp @ 65 DTCA.	faulted/fault	chlorite alteration	mod	hematite alteration	wk	potassic alteration	wk	pyrite	0.1	quartz-carbonate vein	0.1					
GTMH20034	48.86	58.06	9.20	Vum	Vum ultramafic volcanic	d	black	vfg	massive	Ultramafics: same as previous but less veining and associated alteration making unit darker and more black then green black. Unit is also blocky Lower contacts is sharp @ 50 DTCA.	weakly foliated	carbonate alteration	v wk	chlorite alteration	wk					quartz-carbonate vein	3					
GTMH20034	58.06	78.23	20.17	Mmd	Mmd Matachewan Mafic Dyke	d	grey black	vfgfg	massive	Matachewan Dyke: dark grey black, very fine to fine grained, massive and moderately magnetic. Unit has m-scale aphanitic chill margins at both contacts and is broken to rubbly (faulted) from upper contact to ~ 67 m which could be the result of a significant fault. Possible micro-slips/faults below that as mm-scale healed fractures appear to have chlorite and carbonate gouge. Very trace very fine grained disseminated pyrite. Minor mm-scale quartz-carb veins with associated epidote. Lower contact is broken but sharp @ 60 DtCA.	faulted/fault	epidote alteration	wk					pyrite	0.01	quartz-carbonate vein	0.1					

GTMH20034	78.23	82.01	3.78	Vum	Vum ultramafic volcanic				d	green black	vfg	massive	Ultramaficc: same as previous @ 43.13 m to 47.23 m but upper contact is broken and rubbly with numerous cm-scale quartz-carb veins and 4 cm fault gouge @ 78.95 m. Lower contact is sharp @ 70 DTCA.	weakly foliated	carbonate alteration	wk mod	chlorite alteration	mod str				pyrite	0.01			quartz-carbonate vein	5			
GTMH20034	82.01	84	1.99	Mmd	Mmd Matachewan Mafic Dyke				d	grey black	fg	massive	Matachewan Dyke: same as previous but unit is broken and rubbly with minor red (Fe/K) alteration. Couple mm-scale quartz veins with blebby pyrite. Lower contact is sharp @ 40 DTCA.	massive	hematite alteration	wk	potassic alteration	wk				pyrite	0.1			quartz vein	0.1	quartz-carbonate vein	0.1	
GTMH20034	84	219	135.00	Vum	Vum ultramafic volcanic				m	white green	vfg	foliated	Ultramaficc: dark green black to white green where unit is completely carbonatized, very fine grained and well foliated defined by intense quartz-carb veining. Overall unit is very weakly magnetic but sporadically highly magnetic due to disseminated euhedral magnetite. Unit is soft but competent with only a couple broken and blocky sections. Upper contact is sheared and faulted with 4 cm fault gouge @ 78.95 m, a 20 cm fault with gouge at 94.25 m and several smaller cm-scale faults also with gouge through out the unit i.e. @ 97.75 m and 108.48 m. Moderate pervasive chlorite alteration becoming strong when intense quartz-carb veining dissipates ~ 190 m, weak to strong pervasive talc alteration and moderate to intense carbonate alteration where rock has become entirely white. Mafic to ultramafic mat black dyke with coarse grained euhedral to blebby pyrite @137.79 m. Localized disseminated euhedral to anhedral pyrite. Intense quartz-carb veining, predominantly as mm-scale foliation parallel veins which also have a stockwork-esque style associated with them, several cm-scale foliation parallel quartz-carb veins and a 50 cm quartz-carb vein (sheeted veins) with a small dyke @ 207.18 m. 40 cm brown altered brecciated section @ 216.85 m. Eoh	foliated	talc alteration	mod str	carbonate alteration	str	chlorite alteration	str		pyrite	1			quartz-carbonate vein	15			
GTMH20035	0	4.5	4.50	Oou	Oou overburden general								Casing block in box @10.5 with 36 cm of overburden box.																				
GTMH20035	4.5	6.66	2.16	Flt	Fault	vvm	Vvm mafic volcanic	100	d	black green	fg	foliated	Faulted mafic volcanics. Scm lens of fault gauge from 6.4-6.5 metres surrounded by broken rubble cataclasite. Mafic volcanics are dark green and variably medium grained to very fine grained, high angle foliated, chlorite altered and appear conformable with possible gabbroic portions. Trace blebs of subhedral pyrite and fine subhedral disseminated pyrite. Patchy weak magnetism from likely disseminated magnetite. Unit is cut by small foliation parallel carbonate veins, some with red iron staining. Lower contact is rubble but fault is oriented 80 dtca.	faulted/fault	chlorite alteration	mod	hematite alteration	wk mod				pyrite	0.5	magnetite	0.2	carbonate vein	2			
GTMH20035	6.66	7.5	0.84	vvm	Vvm mafic volcanic				d	black green	fg	foliated	Mafic volcanics. Dark green and variably medium grained to very fine grained, high angle foliated, chlorite altered and appear conformable with possible gabbroic portions. Trace blebs of subhedral pyrite and fine subhedral disseminated pyrite. Patchy weak magnetism from likely disseminated magnetite. Unit is cut by small foliation parallel carbonate veins, some with red iron staining. Sharp lower contact at 70 dtca.	foliated/foliation	chlorite alteration	mod	hematite alteration	wk mod				pyrite	0.5	magnetite	0.2	carbonate vein	2			
GTMH20035	7.5	8.3	0.81	ggb	Ggb gabbro				d	brown black	mg	massive	Gabbro dyke. Red to brown hued dominantly dark and black. Massive with mm scale grains of light lag and dark chlorite in a lath of possible pyroxene. Broken throughout middle and competent on outer margins. Chlorite and possible weak iron alteration. Trace disseminated pyrite, weak patchy magnetism from disseminated magnetite. Cut by small sub cm scale carbonate veinlets. Sharp contacts, upper at 70 lower at 60 dtca.	massive	chlorite alteration	wk mod	hematite alteration	wk				pyrite	0.1	magnetite	0.2	carbonate vein	1			
GTMH20035	8.3	39.3	31.00	vvm	Vvm mafic volcanic				d	grey green	vfgfg	foliated	Mafic volcanics. Dark grey green, variably aphanitic with fine grained localities that be conformable gabbroic portions. Metre scale variability is well foliated to weakly foliated, often high angle and uniform. Mostly competent with few deci-metre localities of oxidized rubble. Few gouge slips towards to of hole. Pervasive chlorite alteration is weak to strong, often moderate. pyrite is disseminated throughout at less then 1%. pyrite is variably very fine grained to course and often euhedral. Few undulatory and foliation parallel altered quartz veins with a possible white albite component and common later calcite. Common low angle calcite and iron stained veins. Lower contact between 38.58-39.3 metres has increase chlorite alteration between what may be rounded flow to breccia clasts. Irregular conformable lower contact to more hydrothermally altered mafics.	foliated/foliation	chlorite alteration	mod	hematite alteration	wk	sericite alteration	wk	pyrite	0.5			carbonate vein	2	quartz vein	1	
GTMH20035	39.3	40.79	1.49	vvm	Vvm mafic volcanic				m	black brown	cg	irregular (but not bedding: see "bdr")	Altered mafic volcainics. Possible healed and altered breccia zone. Dark to medium grey black and tan. Irregular alteration fluid inflow surrounds decimetre irregular clasts of vfg foliated mafic volcanics and fine grained possible clasts of gabbroic mafics. The fluid inflow has tan hued rounded blebs that may be sericite altered in a black matrix composed mostly of chlorite. Minor disseminated sub and euhedral pyrite increasing to 3-5% immediately before lower contact. Unit is cut by trace quartz carbonate veinlets. Sharp lower contact to bleached mafics at 50 dtca.	brecciated	sericite alteration	mod	chlorite alteration	mod				pyrite	1.5			quartz-carbonate vein	0.1			
GTMH20035	40.79	41	0.22	vvm	Vvm mafic volcanic				l	brown khaki	cg	blebs	Beached Mafics. Tan brown irregular cg blebby altered mafic volcanics. Rounded sericite blebby texture surrounded in minor black chloritic fluid. Similar to overall fluid matrix that surrounded previous unit but with more sericite and less chlorite. Abundant disseminated fg subhedral pyrite at 5 %. Trace mm scale quartz carbonate veinlets. Sharp undulatory contacts.	unfoliated	sericite alteration	str	chlorite alteration	wk				pyrite	5			quartz-carbonate vein	0.1			
GTMH20035	41	42	1.00	vum	Vum ultramafic volcanic				l	green	mg	irregular (but not bedding: see "bdr")	Fuchsite and sericite altered ultramafics. Light green to tan. Variably very fine grained to medium grained dependent on alteration intensity. Possible ultramafic lens mixing with mafics. Irregular fluid alteration of fuchsite. Minor subhedral pyrite disseminated in groundmass. Unit is cut by 5-10% quartz and minor dolomite. Sharp lower contact to dyke.		fuchsite alteration	mod str	sericite alteration	mod str				pyrite	1			quartz-carbonate vein	5			
GTMH20035	42	43.95	1.95	gmd	Gmd monzodiorite				m	red	mg	massive	Intermediate dyke. Red iron altered with patches of off brown. Red hued feldspar matrix with small specs of possible leucoxene. Decimetre localities of fuchsite altered ultramafics bound between dyke, may be rock that is out of place! Minor ~1-2% disseminated pyrite that is fg and euhedral. Unit is cut by few small carbonate veinlets and few small quartz veins. Sharp lower contact at 40 dtca.	massive	hematite alteration	str	leucoxene alteration	mod				pyrite	1			carbonate vein	1	quartz-carbonate vein	0.5	
GTMH20035	43.95	46.2	2.25	vvm	Vvm mafic volcanic				m	fawn	mg	irregular (but not bedding: see "bdr")	Silicified mafics. Light tan siliceous unit may be silicified mafic volcanics or possible silicified gabbroic unit. Silicification can be seen extending out of veins extending heavily into groundmass of nearly entire unit. Irregular mottled look with few remanent fg mafic looking sections that are grey black brown remaining. Minor blebby subhedral pyrite. Cut by quartz veins with minor carbonate. Sharp lower contact at 30 dtca.		silica alteration	v str	sericite alteration	wk mod				pyrite	1			quartz-carbonate vein	2	carbonate vein	0.5	
GTMH20035	46.2	47.2	1.00	vum	Vum ultramafic volcanic	vvm	Vvm mafic volcanic	40	d	green grey	fg	foliated	Fuchsite altered ultramafics mixed with mafic volcanics or possible conformable gabbroic unit. Dark grey with dark green chlorite altered localities with a light green fuchsite alteration in folation parallel altrite? Weak foliation trend is nearly high angle. Minor dull subhedral disseminated pyrite. Foliation parallel quartz veins at upper contact in ultramafic lens then irregular blotchy fuchsite altered albite vein in lower margin. Conformable lower contact.	foliated/foliation	fuchsite alteration	wk	chlorite alteration	wk mod				pyrite	1			quartz vein	0.5	carbonate vein	0.1	
GTMH20035	47.2	70.75	23.55	ggb	Ggb gabbro	vum	Vum ultramafic volcanic	5	d	grey green	fg	weakly foliated	Gabbro or course grained mafic flow. Medium grey-green, very fine-grained to fine-grained, massive to weakly foliated, locally moderately/strongly foliated, locally weakly magnetic. Increasing albitization is weak but increases downhole. Unit is locally hematite stained adjacent to calcite veins. hematite and albite alteration is moderate before lower contact to dyke for ~3 metres. Trace to minor, very fine-grained disseminated pyrite. Carbonate veinlets, mm-scale common in the upper half of the intervals. Increase in quartz veins/augens in more strongly foliated intervals. Quartz rhodochrosite veins common beyond 64 m before dyke contact. Lower contact is sharp at 45 dtca.	foliated/foliation	chlorite alteration	wk mod	hematite alteration	wk	albite alteration	wk	pyrite	0.1	magnetite	0.5	quartz-carbonate vein	1	carbonate vein	0.5	
GTMH20035	70.75	72.43	1.69	gmd	Gmd monzodiorite				m	red	mg	massive	Intermediate dyke. Red iron altered with patches of off brown. Red hued feldspar matrix with small specs of possible leucoxene and black chlorite. Minor ~1-2% disseminated pyrite that is fg and euhedral. Unit is cut by few small carbonate veinlets and few small quartz veins, both with heightened iron alteration extending from them. Sharp lower contact at 50 dtca.	massive	hematite alteration	str	leucoxene alteration	mod				pyrite	1			carbonate vein	1	quartz-carbonate vein	0.5	
GTMH20035	72.43	98.5	26.07	ggb	Ggb gabbro	gmd	Gmd monzodiorite	2	m	grey green	mg	foliated	Gabbro or course grained flow. Possible lapilli tuff. Dark green and mafic composition until 75.2 then becomes albitized? Becoming lighter grey and more intermediate in composition until 88.13m then becoming darker and more mafic. Medium grained. Weak to moderate foliation. Aphanitic matrix is green and grains are rounded and often elongate feldspars at the sub cm scale. Few localized zones that are massive. Unit could have moderate albite alteration, weak chlorite, and patchy weak iron staining increasing beyond 90m where small dyklets of intermediate iron stained dyke can be found. Unit is cut by 1% sporadic cm to mm scale quartz carbonate veins and veinlets. Vague lower contact appears conformable to mafic flow.	foliated/foliation	albite alteration	mod	chlorite alteration	wk	hematite alteration	wk	pyrite	0.1			quartz-carbonate vein	1			
GTMH20035	98.5	103.13	4.63	vvm	Vvm mafic volcanic				d	grey green	fg	foliated	Mafic Volcanics. Soft and near ultramafic. Dark Grey green. Fine grained to very fine grained. Mostly well foliated with some cryptic localities. Irregular grains and blebs found mostly foliation parallel of light plagioclase to albite. Broken sections throughout due to soft nature of unit from moderate to strong chlorite alteration. Patchy sections with abundant disseminated pyrite u to 2%, 1% overall. Few carbonate rich quartz carb veins, one with rhodochrosite, one with fuchsite alteration. All veins have heightened sulphides in groundmass adjacent to them. Sharp lower contact at 50 dtca.	foliated/foliation	chlorite alteration	mod str	fuchsite alteration	v wk				pyrite	1			quartz-carbonate vein	0.5	carbonate vein	0.5	
GTMH20035	103.13	106	2.87	gfu	Gfu felsic rock (undifferentiated)				l	fawn	mg	massive	Felsic intrusive. Light orange pink to fawn. Patchy sections which are more orange. Very siliceous and hard. Broken throughout, often along small chlorite veinlets. Localities where a course grained section can be seen, most other sections it is cryptic. Disseminated very fine grained pyrite throughout is often subhedral. Small blebs of pyrite are also common. Unit is cut by 2% quartz veins with minor calcite. Sharp lower contact at 50 dtca.	massive	hematite alteration	wk	chlorite alteration	wk				pyrite	3			quartz-carbonate vein	2			

GTMH20035	106	125.7	19.70	vum	Vum ultramafic volcanic				m	grey green	fg	massive	Talc and chlorite altered ultramafics. Medium dark grey green. Mostly massive with few foliated sections. Grain size is variable with alteration related course grained sections with light talcous specs throughout. Chlorite alteration, weak to moderate and pervasive, clay alteration of olivine, moderate to strong and pervasive. Common quartz +/-carbonate +/- chlorite veins and stringers, few types, cm-scale low angle to core axis and cm-scale at high angle to core axis and mm-scale veins generally at moderate to high angles to core axis. Possible shear vein between 113.56 and 113.62 m. Rubbly zone between 116.40 and 116.82 m with possible gouge (might just be drill return). Highly altered interval between approximate 121.25 - 121.53 m, possible healed fault(?). Trace fine-grained disseminated pyrite, locally course-grained euhedral pyrite. Upper and lower contacts are increasingly foliated and weakly (to moderately(?)) silicified then heavily chlorite altered immediately adjacent to lower dyke contact. Sharp lower contact is obscured by broken rock.	massive	chlorite alteration	v str	talc alteration	mod str			pyrite	0.1	quartz-carbonate vein	7
GTMH20035	125.7	130.03	4.33	gfu	Gfu felsic rock (undifferentiated)				l	fawn	mg	massive	Felsic intrusive. Light orange pink to fawn. Patchy sections which are more orange. Very siliceous and hard. Broken throughout, often along small chlorite veinlets. Localities where a course grained section can be seen, most other sections it is cryptic. Disseminated very fine grained pyrite throughout is often subhedral. Small blebs of pyrite are also common. Unit is cut by 2% quartz veins with minor calcite. Sharp lower contact at 50 dtca.	massive	hematite alteration	wk	chlorite alteration	wk			pyrite	3	quartz-carbonate vein	2
GTMH20035	130.03	141.66	11.63	flt	Fault	vum	Vum ultramafic volcanic	100	l	grey blue	fg	foliated	Faulted talc altered ultramafics with few felsic dyklets. Light grey blue to medium grey green. Fine grained to very fine grained. Well foliated with often foliation parallel fault gouge lenses throughout. Silicified at upper contact along contact to dyke. Decimetre section that are dark grey green contain heightened chlorite alteration. Light grey more massive talc altered sections with small black specs of chlorite or chromite. Localities with course sub to euhedral pyrite. sporadic quart carbonate veins throughout that are foliation parallel and foliation cutting.	foliated/foliation	talc alteration	str	chlorite alteration	str			pyrite	0.5	quartz-carbonate vein	5
GTMH20035	141.66	144.36	2.71	Fim	Fim fragmental intermediate - mafic volcanic				M	orange pink	fg	massive	Fragmental intermediate volcanics. Orange-pink, fine grained, massive, moderately soft and competent, weakly magnetic. Mm scale chlorite altered clasts throughout unit with minor cm scale felsic clasts. Matrix of unit exhibits minor iron/potassium alteration. Minor cm scale epithermal style quartz carbonate veining, with anhedral milky white carbonate growth along walls and clear white quartz infill. Trace mm scale euhedral pyrite throughout unit. Lower contact is sharp and irregular.		chlorite alteration	wk	potassic alteration	wk	hematite alteration	wk	pyrite	0.1	quartz-carbonate vein	3
GTMH20035	144.36	147.42	3.06	vum	Vum ultramafic volcanic	gmd	Gmd monzodiorite	10	D	green	fg	massive	Ultramafic volcanics. Dark green to black, fine grained, very soft and competent. Moderate chlorite alteration throughout, Trace fuchsite alteration within epithermal style cm scale quartz carbonate veins, Veins are up to 10cm true width with anhedral milky white carbonate growth along walls and clear white quartz infill. Veins host very trace fine grained anhedral pyrite. Trace fine grained sub-hedral pyrite throughout ultramafics. 40cm fine grained monzodiorite dyke from 146.63-147m with sharp irregular contacts. Lower contact is sharp and irregular.		chlorite alteration	mod	fuchsite alteration	tr			pyrite	0.1	quartz-carbonate vein	10
GTMH20035	147.42	151.7	4.28	gmd	Gmd monzodiorite	vum	Vum ultramafic volcanic	10	M	orange	fg	massive	Several metre scale monzodiorite dikes with one weakly brecciated ultramafic lenses from 148.27-148.83m (same as above). Monzodiorite is medium orange, fine grained, moderately soft and competent. Minor chlorite altered clasts confined to several localities. Minor to moderate pervasive fine grained white mica throughout unit. Very trace fine grained subhedral pyrite throughout, no significant veining. Lower contact is weakly brecciated at ~85dtca.		potassic alteration	wk					pyrite	0.1		
GTMH20035	151.7	152.4	0.71	Cfd	Cfd chlorite-fuchsite dyke				L	brown green	fg	massive	Chlorite-fuchsite dyke. Beige to light green, fine grained, massive, soft and competent. Hosts cm scale sub-angular clasts of monzodiorite. Minor fine grained pervasive fuchsite throughout with minor aphanitic chlorite infill. Trace fine grained disseminated sub-hedral pyrite. Lower contact is sharp at 50dtca.		fuchsite alteration	wk mod	chlorite alteration	wk			pyrite	0.5		
GTMH20035	152.4	153.8	1.41	gmd	Gmd monzodiorite				M	orange	fg	massive	Monzodiorite. Medium orange, fine grained, moderately soft and competent. Minor to moderate pervasive fine grained white mica throughout unit. Very trace fine grained subhedral pyrite throughout, no significant veining.		potassic alteration	wk					pyrite	0.1		
GTMH20035	153.8	154.15	0.35	cfd	Cfd chlorite-fuchsite dyke				L	brown green	fg	massive	Chlorite-fuchsite dyke. Beige to light green, fine grained, massive, soft and competent. Hosts cm scale sub-angular clasts of monzodiorite. Minor fine grained pervasive fuchsite throughout with minor aphanitic chlorite infill. Trace fine grained disseminated sub-hedral pyrite. Lower contact is sharp at 50dtca.		fuchsite alteration	wk mod	chlorite alteration	wk			pyrite	0.5		
GTMH20035	154.15	156.33	2.19	gmd	Gmd monzodiorite				M	orange	fg	massive	Monzodiorite. Medium orange, fine grained, moderately soft and competent. Minor to moderate pervasive fine grained white mica throughout unit. Very trace fine grained subhedral pyrite throughout, no significant veining. Lower contact is rubbly		potassic alteration	wk					pyrite	0.1		
GTMH20035	156.33	156.83	0.50	quartz vein	#N/A					white	fg	massive	Quartz vein. Fine grained, massive, moderately fractured. Vein hosts moderate chlorite forming in seams along with very minor fuchsite. Trace blebby pyrite. Lower contact is shear at 35dtca.										
GTMH20035	156.83	161	4.17	gmd	Gmd monzodiorite				M	orange	fg	massive	Monzodiorite. Medium orange, fine grained, moderately soft and competent. Minor to moderate pervasive fine grained white mica throughout unit. Very trace fine grained subhedral pyrite throughout, no significant veining. Lower contact is sharp at 65dtca.		potassic alteration	wk					pyrite	0.1		
GTMH20035	161	167.75	6.75	fim	Fim fragmental intermediate - mafic volcanic	gmd	Gmd monzodiorite	25	L	grey	fg	massive	Fragmental intermediate - mafic volcanics. Matrix is light to medium grey, fine grained, moderately hard and competent. Minor cm scale chlorite altered clasts, along with trace cm scale rounded felsic pebbles. No significant mineralization. Several monzodiorite dikes, ranging from 20cm to 1m in size. 80cm of ultramafics at lower contact. Lower contact with vum is 50 dtca, vum contact with gmd is 75 dtca.		chlorite alteration	wk								
GTMH20035	167.75	168.55	0.81	gmd	Gmd monzodiorite				M	orange	fg	massive	Monzodiorite. Medium orange, fine grained, moderately soft and competent. Minor to moderate pervasive fine grained white mica throughout unit. Very trace fine grained subhedral pyrite throughout, no significant veining. Lower contact is sharp and irregular at ~80dtca.		potassic alteration	wk					pyrite	0.1		
GTMH20035	168.55	179.1	10.55	vum	Vum ultramafic volcanic				D	grey green	vfg	massive	Ultramafic volcanics. Dark grey to black, aphanitic, massive, soft and competent. Moderate to significant carbonate and chlorite alteration throughout. Minor fine grained disseminated pyrite. Several cm scale epithermal style quartz carbonate veinlets with milky white anhedral carbonate on wall and clear white quartz infill. Lower contact is sharp at 50dtca.		chlorite alteration	mod	carbonate alteration	mod			pyrite	0.5	quartz-carbonate vein	0.1
GTMH20035	179.1	182.15	3.06	vum	Vum ultramafic volcanic				L	green	vfg	massive	Ultramafic volcanics. Light green, aphanitic, massive soft and competent. Moderate to significant fuchsite with minor chlorite. Trace to minor blebby pyrite. Minor cm scale epithermal style quartz carbonate veinlets with milky white anhedral carbonate on wall and clear white quartz infill hosting trace fine grained blebby pyrite. Lower contact is sharp at 50 dtca.		chlorite alteration	mod	carbonate alteration	mod			pyrite	0.5	quartz-carbonate vein	1
GTMH20035	182.15	185.2	3.05	giu	Giu intermediate rock (unclassified)				L	brown	fg	massive	Intermediate to mafic dike. Light brown, fine grained, massive, moderately soft and competent. Trace fine grained rounded quartz phenocrysts. Minor to moderate fine grained leucoxene throughout. Minor cm scale epithermal style quartz carbonate veining hosting minor fuchsite and trace blebby fine grained pyrite. One fuchsite vein at 182.8m intruding along core axis. Lower contact is sharp at 30dtca.		leucoxene alteration	wk mod	fuchsite alteration	tr			pyrite	0.1	quartz-carbonate vein	8
GTMH20035	185.2	186	0.81	quartz-carbonate	#N/A				L	green	fg	massive	Quartz carbonate vein. Light green and white, massive, hard and competent. Significant fuchsite with trace chlorite. Trace fine grained blebby pyrite. Cm scale late stage epithermal style quartz carbonate vein intruding larger fuchsite altered vein. lower contact 40dtca. Lower contact is with fragmental felsic - intermediate volcanics although there is only one small piece of grounded core then it returns to fuchsite altered ultra mafics.		fuchsite alteration	mod str	chlorite alteration	wk			pyrite	0.1	quartz vein	3
GTMH20035	186	194.6	8.60	vum	Vum ultramafic volcanic				L	green	fg	massive	Ultramafic volcanics. Light green, aphanitic, massive soft and competent. Moderate fuchsite at upper contact that diminishes moving downhole with minor chlorite throughout. Trace disseminated pyrite. Minor cm scale epithermal style quartz carbonate veinlets with milky white anhedral carbonate on wall and clear white quartz infill. Lower contact is gradational.		fuchsite alteration	mod	chlorite alteration	wk			pyrite	0.1	quartz vein	1
GTMH20035	194.6	198.95	4.35	gfu	Gfu felsic rock (undifferentiated)				L	pink	mcg	massive	Intermediate intrusive. Light pink, medium to course grained, massive, hard and competant. Composed of predominantly pink feldspars with trace to minor quartz. Entire unit appears to be brecciated and infilled with amphibole and white mica that host minor fine grained blebby pyrite. Minor epithermal style quartz carbonate veins. Lower contact is brecciated.								pyrite	0.5	quartz vein	2
GTMH20035	198.95	217.95	19.00	vum	Vum ultramafic volcanic	Vvi	Vvi intermediate volcanic	20	D	grey green	fg	massive	Ultramafic volcanics. Dark grey to black, fine grained, massive, soft and competent. Several metre scale intercalations of intermediate volcanics. Trace to minor fuchsite and white mica from 198.95 to 202.5m, rest of unit is variably chlorite and talc altered (moderate chlorite, minor talc). Minor medium to coarse grained euhedral disseminated pyrite. Minor cm scale epithermal style quartz carbonate veins throughout. Lower contact is sharp at 20dtca.		fuchsite alteration	wk	chlorite alteration	mod	talc alteration	wk	pyrite	0.5	quartz vein	3
GTMH20035	217.95	219	1.06	quartz-carbonate	#N/A					white	fg	massive	Quartz carbonate vein. White, massive, hard and competent. Minor to moderate fine grained chlorite knots throughout. No significant mineralization. Several cm scale epithermal style quartz carbonate veins intruding larger quartz carbonate. Lower contact is sharp at 50dtca.		chlorite alteration	wk mod							quartz vein	5
GTMH20035	219	246.05	27.05	vum	Vum ultramafic volcanic				D	grey green	fg	massive	Ultramafic volcanics. Dark grey to black, fine grained, massive, soft and competent. Unit exhibits minor chlorite and talc with localities of moderate talc and carbonate. Minor medium to coarse grained euhedral disseminated pyrite. Minor carbonate stringers throughout. 1.5m bed of more mafic composition flow at 240m, hosting several cm scale rounded quartz pebbles along with minor increase in pyrite. Lower contact is gradational to sediments.		talc alteration	wk	chlorite alteration	wk			pyrite	0.5	carbonate vein	1

GTMH20035	246.05	255.35	9.30	Scg	Scg conglomerate	Vvi	Vvi intermediate volcanic	40	M	grey	fg	massive	Conglomerate with intercalated beds of intermediate volcanics. Medium grey/beige, fine grained matrix with rounded pebbles ranging from 5mm to 3cm diameter, overall seems to be matrix supported and poorly sorted. Several pebbles are partially replaced with pyrite. Intermediate volcanic beds are light to medium grey ranging from fine to medium grained, massive and relatively hard. Vvi hosts trace fine grained disseminated pyrite. One 40cm mafic dike at 251.9m, No significant veining. Lower contact is sharp at 40dtca.	chlorite alteration	wk					pyrite	1	carbonate vein	0.1
GTMH20035	255.35	271.33	15.98	vum	Vum ultramafic volcanic				M	brown grey	fg	spinifex textured	Ultramafic volcanics. Several successional flows, exhibiting light brown flow tops with randomly oriented acicular olivine crystals (spinifex) up to 3cm in length. Flow tops exhibit erosional characteristics (broken/fractured). Beds grade down hole into dark grey, fine grained, massive flows with 2-3cm anhedral pyrite grains at the bottom. Beds/flow packages range from 3m to 5m. No significant mineralization. Minor epithermal style quartz carbonate veins.	chlorite alteration	wk	talc alteration	tr			quartz-carbonate vein	1
GTMH20035	271.33	272.12	0.80	sdu	Sdu sediment general (undifferentiated)				M	grey	vfg	foliated	Metasediments? Medium grey, aphanitic, weakly foliated, hard with minor fracturing. Possibly silicified. Minor medium to coarse grained subhedral pyrite that increases downhole towards lamprophyre dike. No veining. Lower contact is sharp at 65dtca.	silica alteration	wk mod					pyrite	3		
GTMH20035	272.12	278.13	6.01	glm	Glm lamprophyre				D	grey black	fmg	massive	Lamprophyre. Dark grey to black, fine to medium grained, massive soft and competent. Composed of primarily biotite and hornblende with trace feldspar and minor to moderate carbonatization throughout. Trace disseminated fine grained subhedral pyrite. No significant veining. Lower contact is sharp and irregular at ~35dtca.	carbonate alteration	wk mod					pyrite	0.3	carbonate vein	0.5
GTMH20035	278.13	280.28	2.15	sdu	Sdu sediment general (undifferentiated)				M	grey	vfg	foliated	Metasediments? Medium grey, aphanitic, weakly foliated, hard and competent. Possibly silicified. Minor medium to coarse grained subhedral stratiform pyrite. No significant veining. Lower contact is sharp at 65dtca.										
GTMH20035	280.28	283.85	3.58	vum	Vum ultramafic volcanic				D	grey green	vfg	pillowed	Ultramafic volcanics. Dark grey green, with significant white carbonate veins, possibly salvages? Fine grained, pillowed? Soft and competent. Minor chlorite throughout. Trace disseminated fine grained subhedral pyrite. Lower contact is sharp at 40dtca.	chlorite alteration	wk					pyrite	0.1	carbonate vein	40
GTMH20035	283.85	287.05	3.20	sdu	Sdu sediment general (undifferentiated)				M	brown	vfg	foliated	Metasediments? Medium grey brown, aphanitic, massive, hard and competent. Minor disseminated fine to medium grained subhedral pyrite. No significant veining. Lower contact is sharp at 65dtca.							pyrite	0.5	quartz vein	0.5
GTMH20035	287.05	290.1	3.06	vum	Vum ultramafic volcanic				D	grey green	fg	massive	Ultramafic volcanics. Dark grey green, fine grained, massive, soft with minor fracturing. Moderate chlorite and minor carbonate. Trace blebby fine grained pyrite. No significant veining. Lower contact is sharp at 35dtca.							pyrite	0.1	carbonate vein	0.1
GTMH20035	290.1	317	26.90	mmd	Mmd Matachewan Mafic Dyke				D	grey green	mg	massive	Matachewan mafic dike. Dark green grey, medium grained, massive, moderately hard and competent with several 20-30cm section of low competency. Moderately magnetic. Composed primarily of feldspar and pyroxenes with rare cm scale bleds of olive green epidote. Minor chlorite alteration throughout. Trace disseminated fine grained pyrite. No significant veining. Lower contact is rubbly.	chlorite alteration	wk	epidote alteration	tr			pyrite	0.1		
GTMH20035	317	320.8	3.81	vvm	Vvm mafic volcanic				M	grey	fg	massive	Mafic volcanics Light to medium grey, fine grained, massive, moderately hard, with low competency in the first 2m, the unit is overall competent thereafter. Very minor chlorite. Trace disseminated fine grained pyrite. Trace carbonate veining. Lower contact is irregular and sub-parallel to core axis.	chlorite alteration	wk					pyrite	0.1	carbonate vein	0.5
GTMH20035	320.8	324.65	3.85	giu	Giu intermediate rock (unclassified)				L	grey	mg	massive	Intermediate dike. Light grey to white, medium grained, massive, hard and competent. Composed primarily of feldspar with minor pyrite, rare cm scale anhedral feldspar phenocrysts? ~1m chill margins on either both sides. Minor chlorite throughout. Trace disseminated fine grained pyrite. No significant veining.	chlorite alteration	wk					pyrite	0.1	carbonate vein	0.5
GTMH20035	324.65	327	2.36	vum	Vum ultramafic volcanic				D	grey green	fg	massive	Ultramafic volcanics. Dark grey green, fine grained, massive, soft with minor fracturing. Minor chlorite. One fault healed with carbonate offsetting two carbonate veins by ~3cm. Trace disseminated fine grained pyrite. No significant veining. END OF HOLE 327m.										



Legend

Lithology

Flt	Mmd	Vum
Gfu	Oou	Vvm
Ggb	Sdu	

Lithology Codes

Oou: Overburden
Flt: Fault
Sdu: Sedimentary Rocks (Undifferentiated)
Vvm: Mafic Volcanics
Vum: Ultramafics
Gfu: Granitic Intrusive (Felsic, Undifferentiated)
Ggb: Intermediate to Mafic Intrusive
Mmd: Matachewan Dyke

Assay

Au ppm

Location

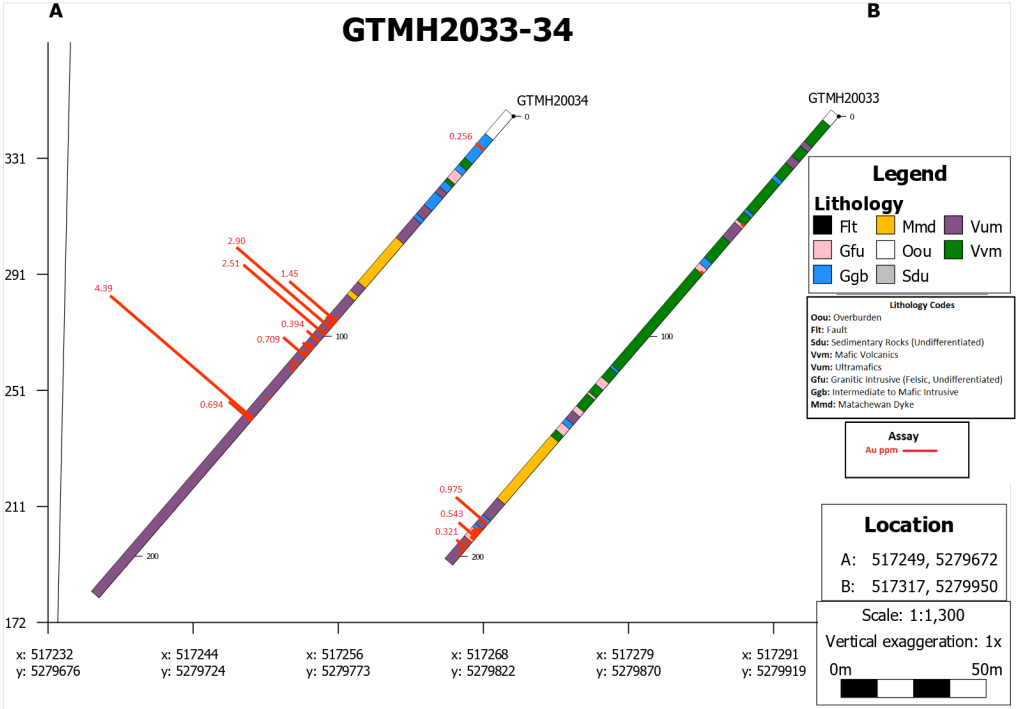
A: 517015, 5279972

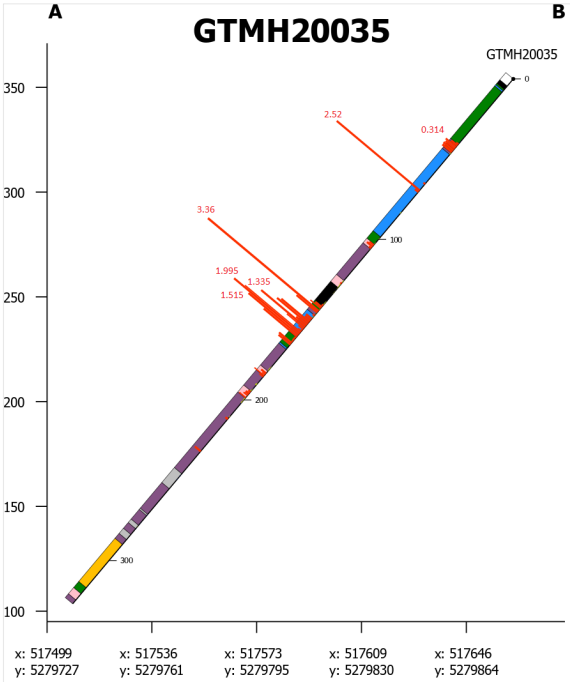
B: 517136, 5280103

Scale: 1:1,400

Vertical exaggeration: 1x

0m 80m


A
B
GTMH2033-34
GTMH20034
GTMH20033
0
100
200
0.256
2.90
2.51
1.45
4.39
0.394
0.709
0.694
0.975
0.543
0.321
331
291
251
211
172
x: 517232
y: 5279676
x: 517244
y: 5279724
x: 517256
y: 5279773
x: 517268
y: 5279822
x: 517279
y: 5279870
x: 517291
y: 5279919
Legend
Lithology
Flt
Mmd
Vum
Gfu
Oou
Vvm
Ggb
Sdu
Lithology Codes
Oou: Overburden
Flt: Fault
Sdu: Sedimentary Rocks (Undifferentiated)
Vvm: Mafic Volcanics
Vum: Ultramafics
Gfu: Granitic Intrusive (Felsic, Undifferentiated)
Ggb: Intermediate to Mafic Intrusive
Mmd: Matachewan Dyke
Assay
Au ppm
Location
A: 517249, 5279672
B: 517317, 5279950
Scale: 1:1,300
Vertical exaggeration: 1x
0m
50m



Legend

Lithology

Flt	Mmd	Vum
Gfu	Oou	Vvm
Ggb	Sdu	

Lithology Codes

Oou: Overburden
Flt: Fault
Sdu: Sedimentary Rocks (Undifferentiated)
Vvm: Mafic Volcanics
Vum: Ultramafics
Gfu: Granitic Intrusive (Felsic, Undifferentiated)
Ggb: Intermediate to Mafic Intrusive
Mmd: Matachewan Dyke

Assay

Au ppm

Location

A: 517499, 5279727
B: 517680, 5279896

Scale: 1:1,800
Vertical exaggeration: 1x
0m 50m

Hole ID	From (m)	To (m)	Length (m)	ALS Sample	QA/QC Identification	Sample Identification	Au (ppm)
GTMH20032	39	40	1	13506		13506	<0.001
GTMH20032	45	46	1	13507		13507	<0.001
GTMH20032	50	51	1	13508		13508	<0.001
GTMH20032	56	57	1	13509		13509	0.038
GTMH20032	60	61	1	13510		13510	<0.001
GTMH20032	66	67	1	13511		13511	<0.001
GTMH20032	74	75	1	13512		13512	0.001
GTMH20032	97	98	1	13513		13513	0.007
GTMH20032	98	99	1	13514		13514	0.005
GTMH20032	103	104	1	13515		13515	0.003
GTMH20032	104	105	1	13516		13516	0.036
GTMH20032	105	106	1	13517		13517	0.002
GTMH20032	106	107	1	13518		13518	0.001
GTMH20032	107	108	1	13519		13519	0.016
GTMH20032				13520	Duplicate	13520	0.048
GTMH20032				13521	OREAS 217	13521	0.337
GTMH20032	108	109	1	13522		13522	0.469
GTMH20032	109	110	1	13523		13523	0.113
GTMH20032	110	111	1	13524		13524	0.167
GTMH20032				13525	Blank	13525	0.001
GTMH20032	155	156	1	13526		13526	<0.001
GTMH20032	156	157	1	13527		13527	0.003
GTMH20032	163	164	1	13528		13528	0.007
GTMH20032	164	165	1	13529		13529	<0.001
GTMH20032	166	167	1	13530		13530	0.001
GTMH20032	182.5	183.5	1	13531		13531	0.002
GTMH20032	183.5	184.5	1	13532		13532	<0.001
GTMH20032	218.5	219.5	1	13533		13533	0.001
GTMH20033	14.5	15.5	1	13534		13534	<0.001
GTMH20033	15.5	16.5	1	13535		13535	0.002
GTMH20033	22	23	1	13536		13536	<0.001
GTMH20033	23	24	1	13537		13537	<0.001
GTMH20033	28	29	1	13538		13538	<0.001
GTMH20033	29	30	1	13539		13539	<0.001
GTMH20033				13540	Duplicate	13540	<0.001
GTMH20033				13541	CDN-ME-1208	13541	0.266
GTMH20033	43	44	1	13542		13542	0.002
GTMH20033	49.5	50.5	1	13543		13543	0.087
GTMH20033	50.5	51.5	1	13544		13544	0.013
GTMH20033	66	67	1	13545		13545	0.001
GTMH20033	67	68	1	13546		13546	0.003
GTMH20033	68	69	1	13547		13547	0.026
GTMH20033	69	70	1	13548		13548	0.004
GTMH20033	70	71	1	13549		13549	0.011

GTMH20033	71	72	1	13550		13550	0.087
GTMH20033	75	76	1	13551		13551	0.002
GTMH20033	78	79	1	13552		13552	0.003
GTMH20033	79	80	1	13553		13553	0.004
GTMH20033	83	84	1	13554		13554	<0.001
GTMH20033	85	86	1	13555		13555	0.002
GTMH20033	86	87	1	13556		13556	0.001
GTMH20033	87	88	1	13557		13557	0.012
GTMH20033	100	101	1	13558		13558	<0.001
GTMH20033	101	102	1	13559		13559	<0.001
GTMH20033				13560	Duplicate	13560	<0.001
GTMH20033				13561	OREAS-217	13561	0.329
GTMH20033	102	103	1	5964		5964	0.013
GTMH20033	104	105	1	13562		13562	0.017
GTMH20033	105	106	1	13563		13563	0.003
GTMH20033	106	107	1	13564		13564	0.001
GTMH20033	107	108	1	13565		13565	<0.001
GTMH20033	110.5	111.5	1	13566		13566	0.01
GTMH20033	118	119	1	13567		13567	0.002
GTMH20033	119	120	1	13568		13568	0.003
GTMH20033	124.5	125.5	1	13569		13569	0.003
GTMH20033	127.5	128.5	1	13570		13570	0.009
GTMH20033	128.5	129.5	1	13571		13571	0.016
GTMH20033	129.5	130.5	1	13572		13572	0.018
GTMH20033	130.5	131.5	1	13573		13573	0.01
GTMH20033	131.5	132.5	1	13574		13574	0.016
GTMH20033				13575	Blank	13575	<0.001
GTMH20033	132.5	133.5	1	13576		13576	0.01
GTMH20033	133.5	134.5	1	13577		13577	0.021
GTMH20033	146	147	1	13578		13578	0.013
GTMH20033	147	148	1	13579		13579	0.055
GTMH20033				13580	Duplicate	13580	0.044
GTMH20033				13581	CDN-ME-1208	13581	0.254
GTMH20033	185	186	1	13582		13582	0.975
GTMH20033	186	187	1	13583		13583	0.059
GTMH20033	187	188	1	13584		13584	0.022
GTMH20033	188	189	1	13585		13585	0.109
GTMH20033	189	190	1	13586		13586	0.183
GTMH20033	190	191	1	13587		13587	0.197
GTMH20033	191	192	1	13588		13588	0.543
GTMH20033	192	193	1	13589		13589	0.121
GTMH20033	193	194	1	13590		13590	0.019
GTMH20033	194	195	1	13591		13591	0.175
GTMH20033	195	196	1	13592		13592	0.059
GTMH20033	196	197	1	13593		13593	0.321
GTMH20033	197	198	1	13594		13594	0.149
GTMH20033	198	199	1	13595		13595	0.003

GTMH20033	199	200	1	13596		13596	0.102
GTMH20033	200	201	1	13597		13597	0.058
GTMH20033	201	202	1	13598		13598	0.009
GTMH20033	202	203	1	13599		13599	0.006
GTMH20033	203	204	1	13600		13600	0.011
GTMH20034	14	15	1	13601		13601	0.035
GTMH20034	15	16	1	13602		13602	0.256
GTMH20034	16	17	1	13603		13603	0.022
GTMH20034	17	18	1	13604		13604	0.01
GTMH20034	18	19	1	13605		13605	0.055
GTMH20034	19	20	1	13606		13606	0.012
GTMH20034	20	21	1	13607		13607	0.072
GTMH20034	21	22	1	13608		13608	0.043
GTMH20034	22	23	1	13609		13609	0.003
GTMH20034	23	24	1	13610		13610	0.002
GTMH20034	24	25	1	13611		13611	0.008
GTMH20034	30.5	31.5	1	13612		13612	0.025
GTMH20034	34.5	35.5	1	13613		13613	0.002
GTMH20034	37	38	1	13614		13614	0.043
GTMH20034	78	79	1	13615		13615	0.001
GTMH20034	79	80	1	13616		13616	0.001
GTMH20034	80	81	1	13617		13617	<0.001
GTMH20034	81	82	1	13618		13618	0.004
GTMH20034	82	83	1	13619		13619	0.013
GTMH20034				13620	Duplicate	13620	0.047
GTMH20034				13621	OREAS-217	13621	0.332
GTMH20034	83	84	1	13622		13622	0.005
GTMH20034	84	85	1	13623		13623	<0.001
GTMH20034	85	86	1	13624		13624	<0.001
GTMH20034				13625	Blank	13625	0.003
GTMH20034	86	87	1	13626		13626	0.001
GTMH20034	87	88	1	13627		13627	0.001
GTMH20034	88	89	1	13628		13628	<0.001
GTMH20034	89	90	1	13629		13629	<0.001
GTMH20034	90	91	1	13630		13630	<0.001
GTMH20034	91	92	1	13631		13631	<0.001
GTMH20034	92	93	1	13632		13632	0.081
GTMH20034	93	94	1	13633		13633	1.45
GTMH20034	94	95	1	13634		13634	0.262
GTMH20034	95	96	1	13635		13635	0.121
GTMH20034	96	97	1	13636		13636	2.9
GTMH20034	97	98	1	13637		13637	0.01
GTMH20034	98	99	1	13638		13638	0.12
GTMH20034	99	100	1	13639		13639	2.51
GTMH20034				13640	Duplicate	13640	2.44
GTMH20034				13641	OREAS-217	13641	0.33
GTMH20034	100	101	1	13642		13642	0.013

GTMH20034	101	102	1	13643		13643	0.009
GTMH20034	102	103	1	13644		13644	0.394
GTMH20034	103	104	1	13645		13645	0.004
GTMH20034	104	105	1	13646		13646	0.005
GTMH20034	105	106	1	13647		13647	0.169
GTMH20034	106	107	1	13648		13648	0.282
GTMH20034	107	108	1	13649		13649	0.034
GTMH20034	108	109	1	13650		13650	0.141
GTMH20034	109	110	1	13651		13651	0.709
GTMH20034	110	111	1	13652		13652	0.064
GTMH20034	111	112	1	13653		13653	0.011
GTMH20034	112	113	1	13654		13654	0.034
GTMH20034	113	114	1	13655		13655	0.203
GTMH20034	114	115	1	13656		13656	0.046
GTMH20034	115	116	1	13657		13657	0.165
GTMH20034	116	117	1	13658		13658	0.007
GTMH20034	117	118	1	13659		13659	0.005
GTMH20034				13660	Duplicate	13660	0.026
GTMH20034				13661	OREAS-217	13661	0.337
GTMH20034	118	119	1	13662		13662	0.004
GTMH20034	119	120	1	13663		13663	0.005
GTMH20034	120	121	1	13664		13664	0.003
GTMH20034	121	122	1	13665		13665	0.004
GTMH20034	122	123	1	13666		13666	0.002
GTMH20034	123	124	1	13667		13667	0.002
GTMH20034	124	125	1	13668		13668	0.001
GTMH20034	125	126	1	13669		13669	0.002
GTMH20034	126	127	1	13670		13670	<0.001
GTMH20034	127	128	1	13671		13671	<0.001
GTMH20034	128	129	1	13672		13672	0.004
GTMH20034	129	130	1	13673		13673	0.107
GTMH20034	130	131	1	13674		13674	0.002
GTMH20034				13675	Blank	13675	<0.001
GTMH20034	131	132	1	13676		13676	<0.001
GTMH20034	132	133	1	13677		13677	0.001
GTMH20034	133	134	1	13678		13678	<0.001
GTMH20034	134	135	1	13679		13679	<0.001
GTMH20034				13680	Duplicate	13680	<0.001
GTMH20034				13681	OREAS-217	13681	0.328
GTMH20034	135	136	1	13682		13682	0.001
GTMH20034	136	137	1	13683		13683	<0.001
GTMH20034	137	138	1	13684		13684	4.39
GTMH20034	138	139	1	13685		13685	0.694
GTMH20034	139	140	1	13686		13686	0.003
GTMH20034	143.5	144.5	1	13687		13687	<0.001
GTMH20034	155	156	1	13688		13688	0.004
GTMH20034	156	157	1	13689		13689	0.002

GTMH20034	187	188	1	13690		13690	0.011
GTMH20034	188	189	1	13691		13691	0.016
GTMH20034	205	206	1	13692		13692	<0.001
GTMH20034	206	207	1	13693		13693	0.014
GTMH20034	207	208	1	13694		13694	0.003
GTMH20034	215.5	216.5	1	13695		13695	0.002
GTMH20035	6	7	1	13696		13696	<0.001
GTMH20035	7	8	1	13697		13697	0.001
GTMH20035	22.5	24	1.5	13698		13698	0.003
GTMH20035	38.3	39.3	1	13699		13699	0.002
GTMH20035				13700	Duplicate	13700	0.004
GTMH20035				13701	OREAS 217	13701	0.336
GTMH20035	39.3	40.3	1	13702		13702	0.002
GTMH20035	40.3	41	0.7	13703		13703	0.067
GTMH20035	41	42	1	13704		13704	0.184
GTMH20035	42	42.95	0.95	13705		13705	0.314
GTMH20035	42.95	43.95	1	13706		13706	0.279
GTMH20035	43.95	45	1.05	13707		13707	0.298
GTMH20035	45	46.2	1.2	13708		13708	0.285
GTMH20035	46.2	47.2	1	13709		13709	0.018
GTMH20035	52.7	53.7	1	13710		13710	<0.001
GTMH20035	56	57	1	13711		13711	<0.001
GTMH20035	65	66	1	13712		13712	0.05
GTMH20035	69	70	1	13713		13713	2.52
GTMH20035	70	71	1	13714		13714	0.104
GTMH20035	83	84	1	13715		13715	0.017
GTMH20035	94.5	96	1.5	13716		13716	0.001
GTMH20035	99	100	1	13717		13717	0.009
GTMH20035	102	103.13	1.13	13718		13718	0.011
GTMH20035	103.13	104	0.87	13719		13719	0.129
GTMH20035				13720	Duplicate	13720	0.245
GTMH20035				13721	OREAS 605	13721	NSS
GTMH20035	104	105	1	13722		13722	0.169
GTMH20035	105	106	1	13723		13723	0.069
GTMH20035	106	107	1	13724		13724	0.004
GTMH20035				13725	Blank	13725	0.001
GTMH20035	111	112	1	13726		13726	<0.001
GTMH20035	112	113	1	13727		13727	<0.001
GTMH20035	113	114	1	13728		13728	0.001
GTMH20035	124.7	125.7	3	13729		13729	0.001
GTMH20035	125.7	127	1.3	13730		13730	0.018
GTMH20035	127	128	1	13731		13731	0.038
GTMH20035	128	129	1	13732		13732	0.025
GTMH20035	129	130.03	1.03	13733		13733	0.017
GTMH20035	130.03	131	0.97	13734		13734	0.008
GTMH20035	131	132	1	13735		13735	0.001
GTMH20035	132	133	1	13736		13736	0.005

GTMH20035	133	134	1	13737		13737	0.005
GTMH20035	136.5	137.5	1	13738		13738	0.002
GTMH20035	137.5	138.7	1.2	13739		13739	<0.001
GTMH20035				13740	Duplicate	13740	0.001
GTMH20035				13741	OREAS 217	13741	0.333
GTMH20035	144	145.08	1.08	13742		13742	3.36
GTMH20035	158	159	1	5965		5965	1.995
GTMH20035	159	160	1	5966		5966	1.515
GTMH20035	160	161	1	5967		5967	1.015
GTMH20035	156.34	156.83	0.49	13743		13743	0.037
GTMH20035	179.1	180	0.9	13744		13744	0.007
GTMH20035	180	181	1	13745		13745	0.021
GTMH20035	181	181.65	0.65	13746		13746	0.021
GTMH20035	181.65	182.15	0.5	13747		13747	0.013
GTMH20035	182.15	183	0.85	13748		13748	<0.001
GTMH20035	183	184	1	13749		13749	0.148
GTMH20035	184	184.6	0.6	13750		13750	0.087
GTMH20035	184.6	185.2	0.6	13751		13751	0.296
GTMH20035	185.2	186	0.8	13752		13752	0.115
GTMH20035	186	187	1	13753		13753	0.002
GTMH20035	187	188	1	13754		13754	0.002
GTMH20035	188	189	1	13755		13755	0.003
GTMH20035	189	190	1	13756		13756	0.005
GTMH20035	190	191	1	13757		13757	0.034
GTMH20035	191	192	1	13758		13758	<0.001
GTMH20035	192	193	1	13759		13759	0.003
GTMH20035				13760	Duplicate	13760	0.006
GTMH20035				13761	OREAS 217	13761	0.337
GTMH20035	193	194	1	13762		13762	0.01
GTMH20035	194	194.6	0.6	13763		13763	0.033
GTMH20035	194.6	195.6	1	13764		13764	0.067
GTMH20035	195.6	196.9	1.3	13765		13765	0.101
GTMH20035	196.9	197.6	0.7	13766		13766	0.121
GTMH20035	197.6	198.24	0.64	13767		13767	0.005
GTMH20035	198.24	198.95	0.71	13768		13768	0.196
GTMH20035	198.95	199.95	1	13769		13769	0.023
GTMH20035	199.95	200.95	1	13770		13770	0.013
GTMH20035	200.95	201.95	1	13771		13771	0.021
GTMH20035	201.95	202.95	1	13772		13772	0.002
GTMH20035	210	210.9	0.9	13773		13773	0.016
GTMH20035	211.4	212.46	1.06	13774		13774	0.071
GTMH20035				13775	Blank	13775	0.003
GTMH20035	231.5	232.5	1	13776		13776	0.178
GTMH20035	246.05	247	0.95	13777		13777	0.001
GTMH20035	247	248	1	13778		13778	0.003
GTMH20035	248	249	1	13779		13779	0.001
GTMH20035				13780	Duplicate	13780	0.001

GTMH20035				13781	OREAS 217	13781	0.332
GTMH20035	249	250	1	13782		13782	0.003
GTMH20035	250	251	1	13783		13783	<0.001
GTMH20035	251	252	1	13784		13784	<0.001
GTMH20035	271.33	272.33	1	13785		13785	0.003
GTMH20035	272.33	273.33	1	13786		13786	<0.001
GTMH20035	273.33	274.33	1	13787		13787	<0.001
GTMH20035	277.5	278.5	1	13788		13788	0.001
GTMH20035	278.5	279.5	1	13789		13789	0.006
GTMH20035	279.5	280.3	0.8	13790		13790	0.002

GTMH20035	138.7	139.7	5968
GTMH20035	139.7	140.7	5969
GTMH20035	140.7	141.7	5970
GTMH20035	141.7	142.7	5971
GTMH20035	142.7	143.35	5972
GTMH20035	143.35	144	5973
GTMH20035	145.08	146	5974
GTMH20035	146	147	5975
GTMH20035	147	148	5976
GTMH20035	148	149	5977
GTMH20035	149	150	5978
GTMH20035	150	151	5979
GTMH20035	151	152	5980
GTMH20035	152	153	5981
GTMH20035	153	154	5982
GTMH20035	154	155	5983
GTMH20035	155	155.65	5984
GTMH20035	155.65	156.34	5985
GTMH20035	156.83	157.4	5986
GTMH20035	157.4	158	5987
GTMH20035	161	162	5988
GTMH20035	162	163	5989
GTMH20035	163	164	5990
GTMH20035	164	165	5991
GTMH20035	165	166	5992

ALS Canada Ltd.

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
This copy reported on 10-APR-2020
Account: BMRPLLBW

CERTIFICATE SD20059053

Project: Gowganda - Transition

This report is for 28 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 12-MAR-2020.

The following have access to data associated with this certificate:

PETER DOYLE	JON EDWARDS	MIKE HENDRICKSON
SEAN HICKS	FRANK PLOEGER	MERCEDES RICH
ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

ALS Canada Ltd.
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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20059053

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13506		2.25	<0.001	73.8	98.3
13507		2.17	<0.001		99.1
13508		2.32	<0.001		
13509		2.06	0.038		
13510		2.29	<0.001		
13511		2.27	<0.001		
13512		2.56	0.001		
13513		2.24	0.007		
13514		2.38	0.005		
13515		2.16	0.003		
13516		2.17	0.036		
13517		2.22	0.002		
13518		2.34	0.001		
13519		0.92	0.016		
13520		0.97	0.048		
13521		0.07	0.337		
13522		2.27	0.469		
13523		2.13	0.113		
13524		2.31	0.167		86.7
13525		0.51	0.001		88.9
13526		1.97	<0.001		
13527		2.21	0.003		
13528		2.17	0.007		
13529		2.22	<0.001		
13530		2.47	0.001		
13531		2.27	0.002		
13532		2.31	<0.001		
13533		1.95	0.001		

***** See Appendix Page for comments regarding this certificate *****

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20059053

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-22	LOG-24
	PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	Au-ICP21

ALS Canada Ltd.

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
This copy reported on
10-APR-2020
Account: BMRPLLBW

QC CERTIFICATE SD20059053

Project: Gowganda - Transition

This report is for 28 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 12-MAR-2020.

The following have access to data associated with this certificate:

PETER DOYLE	JON EDWARDS	MIKE HENDRICKSON
SEAN HICKS	FRANK PLOEGER	MERCEDES RICH
ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

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To: **BATTERY MINERAL RESOURCES CORP.**
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VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20059053

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		STANDARDS
G313-5		7.15
G313-5		7.14
Target Range - Lower Bound		6.64
Upper Bound		7.50
GPP-14		0.917
Target Range - Lower Bound		0.853
Upper Bound		0.965
KIP-19		2.44
Target Range - Lower Bound		2.28
Upper Bound		2.58
OREAS 219		0.745
Target Range - Lower Bound		0.713
Upper Bound		0.807
OREAS 682		0.078
OREAS 682		0.075
Target Range - Lower Bound		
Upper Bound		
OREAS 684		0.246
Target Range - Lower Bound		
Upper Bound		
PK03		5.15
PK03		5.20
Target Range - Lower Bound		4.73
Upper Bound		5.34
PMP-18		0.306
PMP-18		0.294
Target Range - Lower Bound		0.289
Upper Bound		0.327

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SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20059053

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		BLANKS
BLANK		0.001
BLANK		0.002
BLANK		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
		DUPLICATES
ORIGINAL		0.257
DUP		0.275
Target Range - Lower Bound		0.252
Upper Bound		0.280
ORIGINAL		0.229
DUP		0.183
Target Range - Lower Bound		0.195
Upper Bound		0.217
ORIGINAL		0.199
DUP		0.186
Target Range - Lower Bound		0.182
Upper Bound		0.203
ORIGINAL		0.023
DUP		0.023
Target Range - Lower Bound		0.021
Upper Bound		0.025
ORIGINAL		<0.001
DUP		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
ORIGINAL		<0.001
DUP		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002

***** See Appendix Page for comments regarding this certificate *****

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20059053

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		DUPLICATES
ORIGINAL		<0.001
DUP		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
ORIGINAL		0.036
DUP		0.035
Target Range - Lower Bound		0.033
Upper Bound		0.038
ORIGINAL		0.018
DUP		0.018
Target Range - Lower Bound		0.016
Upper Bound		0.020

***** See Appendix Page for comments regarding this certificate *****

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 4-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20059053

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:			
CRU-31	CRU-QC	LOG-22	LOG-24
PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
Au-ICP21	

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 16-APR-2020
Account: BMRPLLBW

CERTIFICATE SD20067505

Project: Gowganda - Transition

This report is for 68 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 20-MAR-2020.

The following have access to data associated with this certificate:

PETER DOYLE	JON EDWARDS	MIKE HENDRICKSON
SEAN HICKS	FRANK PLOEGER	MERCEDES RICH
ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 16-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20067505

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13534		2.04	<0.001	79.7	96.4
13535		1.97	0.002		92.0
13536		2.39	<0.001		
13537		2.28	<0.001		
13538		2.40	<0.001		
13539		1.01	<0.001		
13540		0.98	<0.001		
13541		0.12	0.266		
13542		2.25	0.002		
13543		2.13	0.087		
13544		2.12	0.013		
13545		2.16	0.001		
13546		2.22	0.003		
13547		2.44	0.026		
13548		2.35	0.004		
13549		1.99	0.011		
13550		1.43	0.087		
13551		2.31	0.002		
13552		2.35	0.003		
13553		2.37	0.004		
13554		2.38	<0.001		
13555		2.38	0.002		
13556		2.55	0.001		
13557		2.24	0.012		
13558		2.15	<0.001		
13559		1.28	<0.001		
13560		1.19	<0.001		
13561		0.07	0.329		
5964		2.22	0.013		
13562		1.76	0.017		
13563		2.48	0.003		
13564		2.37	0.001		
13565		2.47	<0.001		
13566		2.21	0.010		
13567		2.33	0.002		
13568		2.38	0.003		
13569		2.17	0.003		
13570		2.20	0.009		
13571		2.27	0.016		
13572		1.66	0.018	78.1	97.9

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Finalized Date: 16-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20067505

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13573		2.15	0.010		90.7
13574		1.92	0.016		
13575		0.49	<0.001		
13576		2.10	0.010		
13577		2.31	0.021		
13578		2.34	0.013		
13579		1.10	0.055		
13580		1.11	0.044		
13581		0.12	0.254		
13582		2.17	0.975		
13583		2.09	0.059		
13584		2.23	0.022		
13585		2.15	0.109		
13586		1.92	0.183		
13587		1.94	0.197		
13588		2.24	0.543		
13589		2.24	0.121		
13590		2.11	0.019		
13591		2.29	0.175		
13592		2.36	0.059		
13593		1.66	0.321		
13594		2.04	0.149		
13595		2.34	0.003		
13596		2.29	0.102		
13597		2.17	0.058		
13598		2.46	0.009		
13599		2.33	0.006		
13600		2.45	0.011		

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Finalized Date: 16-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20067505

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-22	LOG-23
	PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	Au-ICP21

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VANCOUVER BC V6C 1A5

Finalized Date: 16-APR-2020
Account: BMRPLLBW

QC CERTIFICATE SD20067505

Project: Gowganda - Transition

This report is for 68 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 20-MAR-2020.

The following have access to data associated with this certificate:

PETER DOYLE	JON EDWARDS	MIKE HENDRICKSON
SEAN HICKS	FRANK PLOEGER	MERCEDES RICH
ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

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Finalized Date: 16-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20067505

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		STANDARDS
G313-5		7.24
Target Range - Lower Bound		6.64
Upper Bound		7.50
GPP-14		0.900
GPP-14		0.916
Target Range - Lower Bound		0.853
Upper Bound		0.965
KIP-19		2.41
KIP-19		2.45
Target Range - Lower Bound		2.28
Upper Bound		2.58
OREAS 682		0.077
Target Range - Lower Bound		
Upper Bound		
OREAS 684		0.255
OREAS 684		0.259
Target Range - Lower Bound		
Upper Bound		
OREAS 905		0.385
OREAS 905		0.393
Target Range - Lower Bound		0.367
Upper Bound		0.415
PK03		5.17
Target Range - Lower Bound		4.73
Upper Bound		5.34
PMP-18		0.306
Target Range - Lower Bound		0.289
Upper Bound		0.327

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VANCOUVER BC V6C 1A5

Finalized Date: 16-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20067505

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		BLANKS
BLANK		<0.001
BLANK		0.005
BLANK		0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
		DUPLICATES
13573		0.010
DUP		0.012
Target Range - Lower Bound		0.009
Upper Bound		0.013
ORIGINAL		0.001
DUP		0.002
Target Range - Lower Bound		<0.001
Upper Bound		0.002
ORIGINAL		0.122
DUP		0.123
Target Range - Lower Bound		0.115
Upper Bound		0.130
		PREP DUPLICATES
13587		0.197
13587 PREP DUP		0.182

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VANCOUVER BC V6C 1A5

Finalized Date: 16-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20067505

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-22	LOG-23
	PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	Au-ICP21

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 19-APR-2020
This copy reported on
1-MAY-2020
Account: BMRPLLBW

CERTIFICATE SD20067506

Project: Gowganda - Transition

This report is for 95 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 20-MAR-2020.

The following have access to data associated with this certificate:

PETER DOYLE	JON EDWARDS	MIKE HENDRICKSON
SEAN HICKS	FRANK PLOEGER	MERCEDES RICH
ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

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VANCOUVER BC V6C 1A5

Finalized Date: 19-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20067506

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13601		2.08	0.035	79.3	98.6
13602		2.23	0.256		94.9
13603		2.16	0.022		
13604		2.36	0.010		
13605		2.12	0.055		
13606		2.08	0.012		
13607		2.12	0.072		
13608		1.97	0.043		
13609		2.24	0.003		
13610		2.27	0.002		
13611		2.31	0.008		
13612		2.21	0.025		
13613		2.20	0.002		
13614		2.22	0.043		
13615		1.89	0.001		
13616		2.19	0.001		
13617		2.05	<0.001		
13618		2.11	0.004	82.8	
13619		0.91	0.013		
13620		1.05	0.047		
13621		0.06	0.332		
13622		1.88	0.005		
13623		2.34	<0.001		
13624		2.12	<0.001		
13625		0.59	0.003		
13626		2.27	0.001		
13627		2.19	0.001		
13628		2.25	<0.001		
13629		2.30	<0.001		
13630		2.47	<0.001		
13631		2.21	<0.001		
13632		2.28	0.081		
13633		1.74	1.450		
13634		2.19	0.262		
13635		2.11	0.121		
13636		2.29	2.90		
13637		2.31	0.010		
13638		2.24	0.120		
13639		1.00	2.51		94.3
13640		1.06	2.44	79.8	93.4

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Finalized Date: 19-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20067506

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13641		0.07	0.330		
13642		2.27	0.013		
13643		2.32	0.009		
13644		2.35	0.394		
13645		2.40	0.004		
13646		2.24	0.005		
13647		2.29	0.169		
13648		2.35	0.282		
13649		2.37	0.034		
13650		2.22	0.141		
13651		2.30	0.709		
13652		2.29	0.064		
13653		2.12	0.011		
13654		2.27	0.034		
13655		2.21	0.203		
13656		2.34	0.046		
13657		2.32	0.165		
13658		2.33	0.007		
13659		1.09	0.005		
13660		1.11	0.026		
13661		0.07	0.337		
13662		2.36	0.004		
13663		2.45	0.005		
13664		2.29	0.003		
13665		2.24	0.004		
13666		2.25	0.002		
13667		2.25	0.002		
13668		2.21	0.001		
13669		2.25	0.002		
13670		2.27	<0.001		
13671		2.32	<0.001		
13672		2.19	0.004		
13673		2.23	0.107		
13674		2.27	0.002		94.2
13675		0.45	<0.001		
13676		2.27	<0.001		
13677		2.31	0.001		
13678		2.30	<0.001		
13679		1.02	<0.001		96.7
13680		1.09	<0.001	84.5	94.7

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Finalized Date: 19-APR-2020
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Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20067506

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13681		0.07	0.328		
13682		2.36	0.001		
13683		2.32	<0.001		
13684		2.39	4.39		
13685		2.25	0.694		
13686		2.20	0.003		
13687		2.30	<0.001		
13688		2.21	0.004		
13689		2.31	0.002		
13690		2.14	0.011		
13691		2.17	0.016		
13692		2.13	<0.001		
13693		1.85	0.014		
13694		2.17	0.003		
13695		2.13	0.002		

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VANCOUVER BC V6C 1A5

Finalized Date: 19-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20067506

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-22	LOG-24
	PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	Au-ICP21

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Finalized Date: 19-APR-2020
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QC CERTIFICATE SD20067506

Project: Gowganda - Transition

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ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

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Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20067506

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		STANDARDS
G313-5		7.24
Target Range - Lower Bound		6.64
Upper Bound		7.50
GPP-14		0.896
GPP-14		0.883
Target Range - Lower Bound		0.853
Upper Bound		0.965
KIP-19		2.41
KIP-19		2.44
KIP-19		2.46
Target Range - Lower Bound		2.28
Upper Bound		2.58
OREAS 682		0.077
Target Range - Lower Bound		
Upper Bound		
OREAS 684		0.248
OREAS 684		0.255
Target Range - Lower Bound		
Upper Bound		
OREAS 905		0.399
OREAS 905		0.381
OREAS 905		0.389
Target Range - Lower Bound		0.367
Upper Bound		0.415
PK03		5.17
Target Range - Lower Bound		4.73
Upper Bound		5.34
PMP-18		0.306
Target Range - Lower Bound		0.289
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Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20067506

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		BLANKS
BLANK		0.005
BLANK		0.003
BLANK		0.001
BLANK		0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
		DUPLICATES
13684		4.39
DUP		4.09
Target Range - Lower Bound		4.03
Upper Bound		4.45
ORIGINAL		0.089
DUP		0.090
Target Range - Lower Bound		0.084
Upper Bound		0.095
ORIGINAL		0.005
DUP		0.004
Target Range - Lower Bound		0.003
Upper Bound		0.006
ORIGINAL		0.007
DUP		0.007
Target Range - Lower Bound		0.006
Upper Bound		0.008
ORIGINAL		0.027
DUP		0.030
Target Range - Lower Bound		0.026
Upper Bound		0.031
ORIGINAL		0.053
DUP		0.049
Target Range - Lower Bound		0.047
Upper Bound		0.055

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SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 19-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20067506

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		PREP DUPLICATES
13654		0.034
13654 PREP DUP		0.016

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 19-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20067506

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-22	LOG-24
	PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	Au-ICP21

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Finalized Date: 23-APR-2020
This copy reported on 24-APR-2020
Account: BMRPLLBW

CERTIFICATE SD20070121

Project: Gowganda - Transition

This report is for 98 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 25-MAR-2020.

The following have access to data associated with this certificate:

PETER DOYLE	JON EDWARDS	MIKE HENDRICKSON
SEAN HICKS	FRANK PLOEGER	MERCEDES RICH
ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

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VANCOUVER BC V6C 1A5

Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20070121

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13696		1.45	<0.001	79.8	89.4
13697		1.67	0.001		87.9
13698		2.33	0.003		
13699		0.82	0.002		
13700		0.88	0.004		
13701		0.07	0.336		
13702		2.14	0.002		
13703		1.47	0.067		
13704		2.30	0.184		
13705		1.85	0.314		
13706		1.67	0.279		
13707		1.81	0.298		
13708		2.24	0.285		
13709		2.21	0.018		
13710		2.10	<0.001		
13711		2.20	<0.001		
13712		1.93	0.050		
13713		2.24	2.52		
13714		2.14	0.104		
13715		2.08	0.017		
13716		3.11	0.001		
13717		2.06	0.009		
13718		1.65	0.011		
13719		0.55	0.129		
13720		0.54	0.245		
13721		0.07	NSS		
13722		1.32	0.169		
13723		1.31	0.069		
13724		2.00	0.004		
13725		0.53	0.001		
13726		2.21	<0.001		
13727		2.12	<0.001		
13728		2.04	0.001		
13729		2.09	0.001		
13730		2.88	0.018		
13731		2.09	0.038		
13732		2.04	0.025		
13733		2.07	0.017		
13734		1.80	0.008		94.8
13735		1.71	0.001	84.8	90.9

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Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20070121

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13736		1.50	0.005		
13737		1.94	0.005		
13738		1.40	0.002		
13739		1.00	<0.001		
13740		1.01	0.001		
13741		0.07	0.333		
13742		2.19	3.36		
5965		2.03	1.995		
5966		2.54	1.515		
5967		2.23	1.015		
13743		1.04	0.037		
13744		2.14	0.007		
13745		2.29	0.021		
13746		1.48	0.021		
13747		1.47	0.013		
13748		2.11	<0.001		
13749		2.24	0.148		
13750		1.42	0.087		
13751		1.47	0.296		
13752		1.74	0.115		
13753		2.29	0.002		95.0
13754		2.26	0.002		96.9
13755		2.24	0.003		
13756		1.63	0.005		
13757		2.05	0.034		
13758		2.02	<0.001		
13759		1.07	0.003		
13760		0.98	0.006		
13761		0.07	0.337		
13762		2.25	0.010		
13763		1.29	0.033		
13764		2.22	0.067		
13765		2.11	0.101		
13766		2.11	0.121		
13767		1.67	0.005		
13768		1.50	0.196		
13769		2.14	0.023		
13770		2.26	0.013		
13771		2.25	0.021		98.1
13772		2.30	0.002	73.8	97.1

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Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20070121

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
13773		1.99	0.016		
13774		2.24	0.071		
13775		0.55	0.003		
13776		2.32	0.178		
13777		2.11	0.001		
13778		2.15	0.003		
13779		1.03	0.001		
13780		1.20	0.001		
13781		0.07	0.332		
13782		2.24	0.003		
13783		2.06	<0.001		
13784		2.08	<0.001		
13785		1.87	0.003		
13786		2.17	<0.001		
13787		2.13	<0.001		
13788		2.15	0.001		
13789		2.03	0.006		
13790		1.74	0.002		

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VANCOUVER BC V6C 1A5

Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

CERTIFICATE OF ANALYSIS SD20070121

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

NSS is non-sufficient sample.

Applies to Method: ALL METHODS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:

CRU-31	CRU-QC	LOG-22	LOG-23
PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method: Au-ICP21

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 6-JUL-2020
Account: BMRPLLBW

CERTIFICATE SD20129714

Project: Gowganda-Transition

This report is for 25 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 19-JUN-2020.

The following have access to data associated with this certificate:

PETER DOYLE FRANK PLOEGER	MIKE HENDRICKSON MERCEDES RICH	SEAN HICKS ANDREW SALERNO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

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***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
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VANCOUVER BC V6C 1A5

Finalized Date: 6-JUL-2020
Account: BMRPLLBW

Project: Gowganda-Transition

CERTIFICATE OF ANALYSIS SD20129714

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	CRU-QC Pass2mm % 0.01	PUL-QC Pass75um % 0.01
5968		1.44	0.014	84.1	88.1
5969		1.74	0.018		89.8
5970		1.93	0.041		
5971		2.09	0.195	78.0	
5972		1.61	0.311		
5973		1.49	0.012		
5974		2.15	0.629		
5975		2.10	0.008		
5976		2.01	0.056		
5977		2.47	0.014		
5978		2.24	0.176		
5979		2.24	0.168		
5980		2.46	0.847		
5981		2.30	0.936		
5982		2.32	0.313		
5983		2.16	1.335		
5984		1.35	0.521		
5985		1.36	0.144		
5986		1.25	0.107		
5987		1.39	1.695		
5988		2.31	0.046		
5989		2.07	0.047		
5990		2.15	0.037		
5991		2.03	0.383		
5992		2.31	0.357		

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VANCOUVER BC V6C 1A5

Finalized Date: 6-JUL-2020
Account: BMRPLLBW

Project: Gowganda-Transition

CERTIFICATE OF ANALYSIS SD20129714

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:				
	CRU-31	CRU-QC	LOG-22	PUL-31
	PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
	Au-ICP21

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To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 23-APR-2020
This copy reported on 24-APR-2020
Account: BMRPLLBW

QC CERTIFICATE SD20070121

Project: Gowganda - Transition

This report is for 98 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 25-MAR-2020.

The following have access to data associated with this certificate:

PETER DOYLE	JON EDWARDS	MIKE HENDRICKSON
SEAN HICKS	FRANK PLOEGER	MERCEDES RICH
ISAAC RIDDLE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

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Signature:

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VANCOUVER BC V6C 1A5

Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20070121

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		STANDARDS
G313-5		7.09
G313-5		7.09
Target Range - Lower Bound		6.64
Upper Bound		7.50
GPP-14		0.928
Target Range - Lower Bound		0.853
Upper Bound		0.965
KIP-19		2.45
Target Range - Lower Bound		2.28
Upper Bound		2.58
OREAS 682		0.077
OREAS 682		0.077
Target Range - Lower Bound		
Upper Bound		
OREAS 684		0.254
Target Range - Lower Bound		
Upper Bound		
OREAS 905		0.391
Target Range - Lower Bound		0.367
Upper Bound		0.415
PK03		4.98
PK03		5.12
Target Range - Lower Bound		4.73
Upper Bound		5.34
PMP-18		0.300
PMP-18		0.304
Target Range - Lower Bound		0.289
Upper Bound		0.327

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Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20070121

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		BLANKS
BLANK		<0.001
BLANK		<0.001
BLANK		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
		DUPLICATES
13707		0.298
DUP		0.317
Target Range - Lower Bound		0.291
Upper Bound		0.324
13727		<0.001
DUP		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
13760		0.006
DUP		0.009
Target Range - Lower Bound		0.006
Upper Bound		0.009
13780		0.001
DUP		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002
ORIGINAL		0.090
DUP		0.043
Target Range - Lower Bound		0.062
Upper Bound		0.071
ORIGINAL		0.005
DUP		0.004
Target Range - Lower Bound		0.003
Upper Bound		0.006

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Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20070121

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
DUPLICATES		
ORIGINAL		0.010
DUP		0.009
Target Range - Lower Bound		0.008
Upper Bound		0.011
PREP DUPLICATES		
13749		0.148
13749 PREP DUP		0.078

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 23-APR-2020
Account: BMRPLLBW

Project: Gowganda - Transition

QC CERTIFICATE OF ANALYSIS SD20070121

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

NSS is non-sufficient sample.

Applies to Method: ALL METHODS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:

CRU-31	CRU-QC	LOG-22	LOG-23
PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method: Au-ICP21

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Finalized Date: 6-JUL-2020
Account: BMRPLLBW

QC CERTIFICATE SD20129714

Project: Gowganda-Transition

This report is for 25 Drill Core samples submitted to our lab in Sudbury, ON, Canada on 19-JUN-2020.

The following have access to data associated with this certificate:

PETER DOYLE FRANK PLOEGER	MIKE HENDRICKSON MERCEDES RICH	SEAN HICKS ANDREW SALERNO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

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Signature:

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Finalized Date: 6-JUL-2020
Account: BMRPLLBW

Project: Gowganda-Transition

QC CERTIFICATE OF ANALYSIS SD20129714

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
		STANDARDS
G313-5		7.22
G313-5		7.27
G313-5		7.02
Target Range - Lower Bound		6.64
Upper Bound		7.50
OREAS 682		0.076
OREAS 682		0.077
OREAS 682		0.072
Target Range - Lower Bound		
Upper Bound		
PK03		5.07
PK03		5.21
PK03		5.06
Target Range - Lower Bound		4.73
Upper Bound		5.34
PMP-18		0.301
PMP-18		0.308
PMP-18		0.296
Target Range - Lower Bound		0.289
Upper Bound		0.327
		BLANKS
BLANK		<0.001
BLANK		0.001
BLANK		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002

***** See Appendix Page for comments regarding this certificate *****

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THE PACIFIC BUILDING
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VANCOUVER BC V6C 1A5

Finalized Date: 6-JUL-2020
Account: BMRPLLBW

Project: Gowganda-Transition

QC CERTIFICATE OF ANALYSIS SD20129714

Sample Description / Method / Analyte / Units / LOD	Au-ICP21 Au ppm 0.001
DUPLICATES	
5981	0.936
DUP	0.865
Target Range - Lower Bound	0.854
Upper Bound	0.947
5990	0.037
DUP	0.027
Target Range - Lower Bound	0.029
Upper Bound	0.035
ORIGINAL	0.020
DUP	<0.001
Target Range - Lower Bound	0.009
Upper Bound	0.012
ORIGINAL	0.009
DUP	0.008
Target Range - Lower Bound	0.007
Upper Bound	0.010
ORIGINAL	0.006
DUP	0.008
Target Range - Lower Bound	0.006
Upper Bound	0.008
ORIGINAL	0.020
DUP	0.019
Target Range - Lower Bound	0.018
Upper Bound	0.021
ORIGINAL	0.015
DUP	0.017
Target Range - Lower Bound	0.014
Upper Bound	0.018
ORIGINAL	<0.001
DUP	<0.001
Target Range - Lower Bound	<0.001
Upper Bound	0.002

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: **BATTERY MINERAL RESOURCES CORP.**
THE PACIFIC BUILDING
SUITE 400, 744 WEST HASTINGS STREET
VANCOUVER BC V6C 1A5

Finalized Date: 6-JUL-2020
Account: BMRPLLBW

Project: Gowganda-Transition

QC CERTIFICATE OF ANALYSIS SD20129714

Sample Description	Method Analyte Units LOD	Au-ICP21 Au ppm 0.001
DUPLICATES		
ORIGINAL		<0.001
DUP		<0.001
Target Range - Lower Bound		<0.001
Upper Bound		0.002

***** See Appendix Page for comments regarding this certificate *****

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QC CERTIFICATE OF ANALYSIS SD20129714

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Sudbury located at 1351-B Kelly Lake Road, Unit #1, Sudbury, ON, Canada.

Applies to Method:			
CRU-31	CRU-QC	LOG-22	PUL-31
PUL-QC	SPL-21	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	
Au-ICP21	