We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l'accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez nous contacter.

Ontario

SUPERIOR
COPPER CORPORATION
SPC.V

Fall 2015 Diamond Drill Exploration Assessment Report

The Superior Project

Ryan and Kincaid Townships

NTS Map Sheets 041N01, 041N02, 041K15, and 041K16

November 6, 2017

Superior Copper Corporation
141 Adelaide Street West, Suite 301
Toronto, Ontario
M5H 3L5

INTRODUCTION

The Mamainse Point area, Ontario has a long history of copper exploration and mining including two past producing deposits: the Coppercorp Mine (1965-1972) and the Tribag Mine (1965-1973). Following closure of the mines, the original properties were closed to staking and exploration for 30 years becoming available again in 2002. The area was recognized in the early 2000's for its potential to host Iron-Oxide-Copper-Gold type ("IOCG-type") deposits (Mackie, 2003), but limited exploration has been focused on exploring for this deposit type. The economic model was based on the Olympic Dam Deposit in South Australia that was discovered more than 300 metres below surface. Prior to Superior Copper's 2014 Regional Drill Program, no drilling had been carried out below 225 metres.

Between November 15, 2015 and December 19, 2015 Superior Copper Corporation completed a total of 1,634 metres in 3 diamond drill holes on the Superior Project as a continuation of regional exploration drilling initiated in June 2014. The exploration program was managed and supervised by Morgan Quinn, P.Geo and quality assurance and Tracy Armstrong, P.Geo, independently audited quality control.

LOCATION

The Superior Project is located at approximately 47° 01" North latitude and 84° 45" West at Mamainse Point which is 85 kilometres north-west of Sault Ste. Marie, and approximately 160 kilometres south of Wawa, Ontario. The property consists of 132 unpatented mining claims 100% held by Superior Copper covering approximately 17,026 hectares in Ryan and Kincaid townships.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The property is easily accessed via Trans-Canada Highway route 17 North, which crosses the westernmost portion of the property. A network of logging roads, including numerous bush roads and overgrown skidder trails, provides additional access throughout the property. The main access routes for the western portion of the property are the historical Coppercorp Mine Road and a major logging road 2.5 km to the northeast. The eastern portion of the property is accessible by a network of logging roads that extend from the Carp River Rd.

Climatic conditions are typical of north central Ontario. Average daily temperatures range from a high of 17.9 °C in July to a low of –14.8 °C in January. Recorded temperatures have ranged from a maximum temperature of 36.8 °C in July 1988 to a minimum temperature of –38.9 °C in January 1948. Mean total precipitation for Sault Ste. Marie is 897.7 millimetres including 651.3 mm of rainfall and 320.7 cm of snowfall. Higher levels of rainfall typically occur in September (average 101.8 mm) while the highest level of snowfall (average 85.0 cm) usually occurs in the month of December.

Figure 1: Location of the Superior Project.

REGIONAL GEOLOGY

The Superior Project is situated on the eastern edge of the Late Proterozoic (1050-1115 Ma) Midcontinent Rift ("MCR"), most of which now lies beneath Lake Superior. An assumed mantle plume likely produced the large volumes, up to 40 kilometres, of mafic volcanic and sedimentary rocks that formed during this period. The rift is bound by normal and reverse faults and can be traced by its geophysical signature for over 2000 km making it one of the largest intracratonic rifts in the world.

Numerous base-metal deposits have been discovered and mined around Lake Superior associated with the MCR, including the prolific native copper deposits of the Keweenawan Peninsula, Michigan. More recent discoveries include Copper-Nickel-PGE deposits such as the Twin Metals, Marathon PGM, Thunder Bay North and Eagle deposits (Figure 2). Refer to Miller and Nicholson (2013) for more information regarding geology and deposits of the Mid Continent Rift.

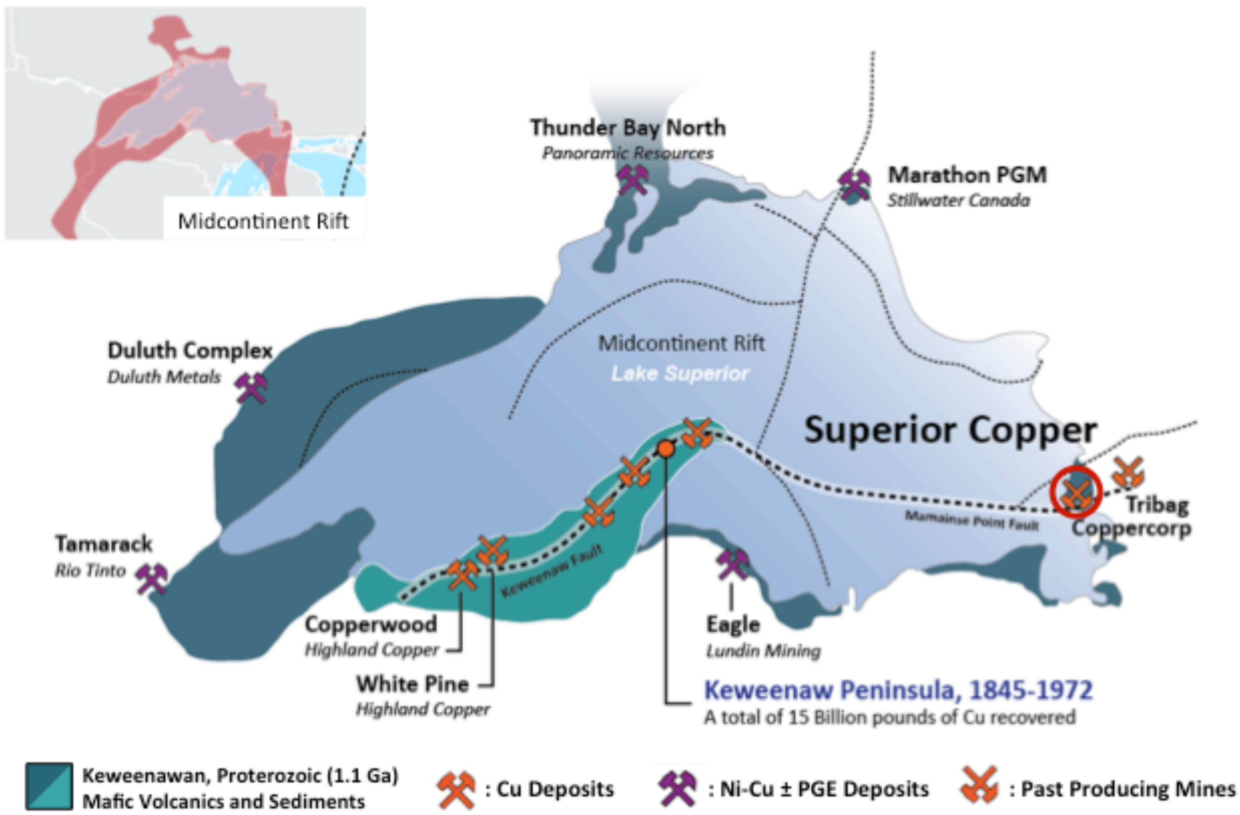


Figure 2: Deposits of the Mid Continental Rift**.**

LOCAL GEOLOGY

The Superior Project is situated within the Mamainse Point Formation of the Keewenawan Group that is part of the Proterozoic Southern Province. The property straddles the NNW trending unconformity between the Mamainse Point Formation and rocks of the Batchawana Greenstone Belt of the Archean Superior Province.

The following is a summary of the geology at Mamainse Point by Coates and Brett (2011):

ARCHEAN BASEMENT ROCKS

The rocks of the Batchawana Greenstone Belt on the Coppercorp property consist of mafic to intermediate metavolcanics containing minor felsic metavolcanic units. The Pancake Lake Iron Formation which trends roughly east-west occurs just east of the northeastern most end of the property and consists of Algoma-type iron formation. The Archean rocks have been deformed and metamorphosed up to amphibolite rank resulting in northeast trending isoclinal folds and a penetrative fabric with steep dips.

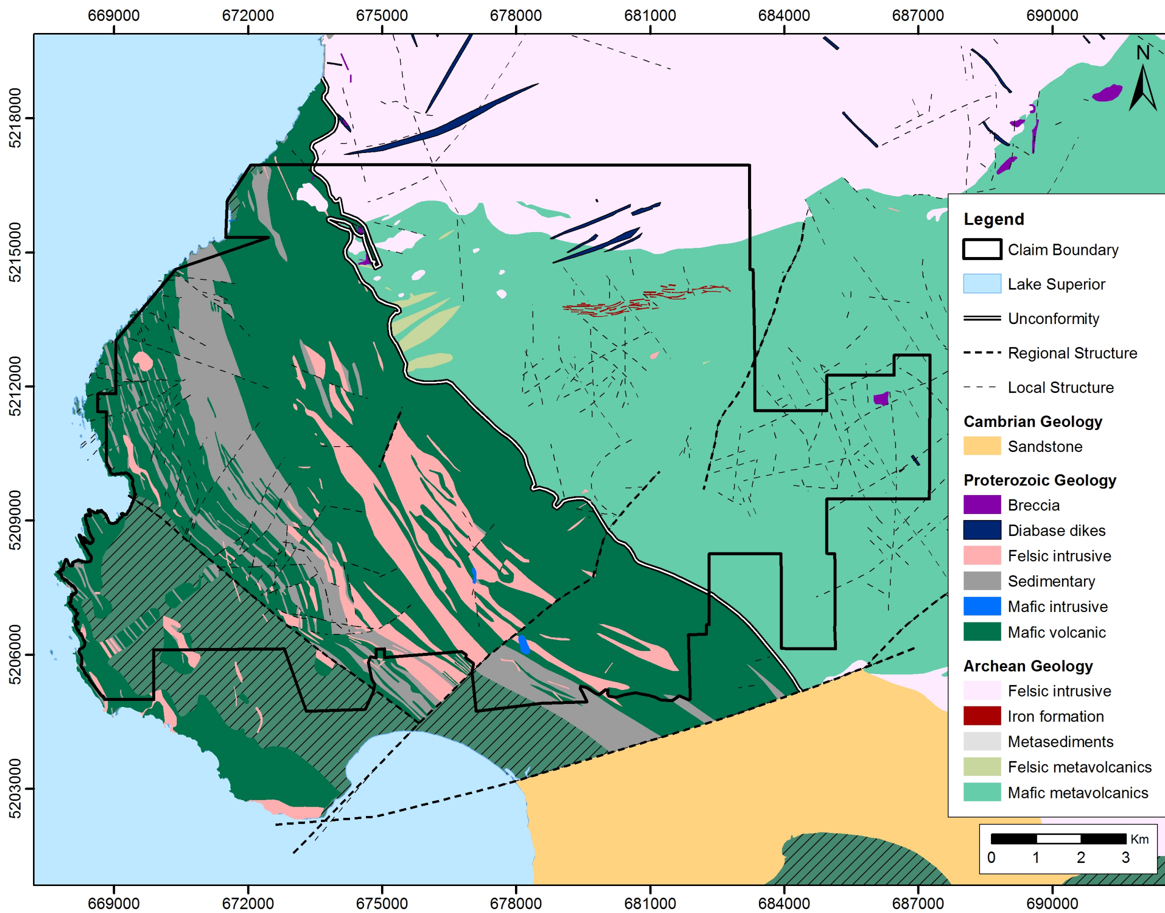


Figure 3: Geologic Map of Mamainse Point, Ontario. After Giblin (1969).

The rocks have been intruded by felsic dikes, felsic porphyry, and felsic breccias considered to be Keweenwan in age and related to the Keweenawan felsic volcanic and intrusive rocks occurring more extensively within the Mamainse Point Formation to the west. A Keweenawan- age felsic intrusion, the Jogran Porphyry, intrudes the mafic metavolcanics about 1 kilometre east of the eastern edge of the property. The Jogran Porphyry is notable for having several Cu- Mo prospects associated with it.

PROTEROZOIC KEWEENAWAN ROCKS

The Mamainse Point Formation consists of a 6 kilometre thick sequence of subaerial flood basalts intercalated with conglomerates and felsic volcanic and sub-volcanic units. The sequence generally trends to the northwest with a homoclinal dip of 30-40° to the southwest.

To the north, the Mamainse Point Formation is unconformably overlain by the Mica Bay Formation, considered to be the equivalent of the Freda Formation on the south side of Lake Superior. (Hamblin, 1961; Annells, 1973, Giblin, 1969). To the south, the Mamainse Point Formation is in fault contact with red sandstone of the Jacobsville Formation. Both the Jacobsville Formation and the Mica Bay Formation

(Freda Formation) are considered to be late Keweenawan in age based on paleomagnetic age estimates (Halls and Pesonen, 1982).

Basalt volcanic flows generally range from 1.5 to 30 metres in thickness, with upper vesicular zones and topped by ropy pahoehoe or scoriaceous flow tops, depending on the rock composition (Annells, 1973). In some cases, clastic material occurs as dike like structures in joints and fissures in the basalt, which are thought to indicate the occurrence of minor earth movements contemporaneous with the accumulation of the lava pile. The clastic sediment in these structures is often highly altered, suggesting that the fissures acted as channel ways for hydrothermal fluids (Richards, 1985).

The clastic sediments within the Mamainse Point Formation consist primarily of poorly sorted, clast-supported polymictic conglomerate containing minor lenses and sheets of cross-bedded, coarse sandstone. Conglomerate clasts are rounded, ranging from pebbles to boulders in size, and are derived predominantly from mafic volcanic (Keweenawan) and granitic (Archean) source areas. The polymictic conglomerate has been interpreted as forming within an alluvial fan depositional environment in a rifted crustal setting. The conglomerate most likely originated as fault scarp deposits resulting from normal faulting occurring at the edge of the rift. Syn- to slightly post-tectonic sediment transport occurred from the craton towards the down-dropped blocks within the rift (Smith, 1995).

Hypabyssal felsic rocks occur throughout the stratigraphic succession and have been identified as being predominantly intrusive and sub-volcanic in nature. The three main rock types found are: quartz porphyry, felsite, and flow-banded rhyolite (Giblin, 1969c; Annells, 1973). Although many of the felsic rocks have intrusive contact relationships with the mafic volcanics and conglomerates, the presence of agglomerates and felsic tuffs in the sequence indicate that felsic intrusive activity extended to surface and was contemporaneous with the eruption of basaltic lavas (Annells, 1973; Giblin 1969b; Richards, 1985).

In the upper part of the volcanic pile, near the Lake Superior shore, flow-banded felsic units are strongly hematized. The hematite alteration is irregularly overprinted by a white, bleaching alteration (kaolinitization).

STRUCTURAL GEOLOGY (after Coates and Brett, 2011)

The main structural features of the Coppercorp property are the great unconformity between the Archean and Proterozoic tectonic provinces and more localized faults that offset or truncate the various stratigraphic units: the Mamainse Point Fault, the Mamainse Lake Fault, and the Hibbard Bay Fault.

The Mamainse Point Fault trends east-northeast and juxtaposes rocks of the Mamainse Point Formation with the red sandstones of the Jacobsville Formation. The Mamainse Lake Fault trends northeast and displays a variable, left-hand strike displacement of the volcanic and sedimentary units. The fault appears to converge with the Mamainse Point Fault under Pancake Bay. The Hibbard Bay Fault is a northwest trending fault that truncates the stratigraphy at an acute angle. The fault is oriented sub-parallel to the rift axis under what is now Lake Superior.

Many of the northeast trending crustal-scale faults along the Lake Superior shore have been interpreted as having late reverse movement based on geophysical analysis (gravity, magnetic, and paleomagnetic data). Manson and Halls (1993) attribute the reverse movement to the compressional effects of deformation from the southeast related to the Grenville orogenesis in late Keweenawan time.

In addition to the large crustal scale structures in the area, stratigraphic units of the Mamainse Point Formation have been offset by a series of radially distributed faults with a focal point located in the central part of the Amerigo Property. The radial distribution of faults coincides with a regional convex upwarping of the Mamainse strata towards the west. An area of high magnetic intensity dominates the focal area, and many of the faults radiate westward from a large body of felsite about 4 kilometres east of the Coppercorp Mine. These same radially distributed faults form some of the mineralized zones in the Coppercorp Mine.

This regional warping of the Mamainse Point Formation with possible concurrent radial faulting appears to be a late stage feature that may be significant to the mineralization process in the Coppercorp area and elsewhere on the property.

REGIONAL MAGNETIC ANOMALY

A prominent 5 kilometre by 5 kilometre high magnetic anomaly (the “Regional Mag-High”) exists within the Project area (Figure 4) that has been the subject of much interest and speculation. The source of the anomaly is poorly understood, but is the key feature of the IOCG hypothesis. The anomaly most likely represents increased concentrations of secondary magnetite at this location, which may act as a chemical trap for sulphide mineralization and/or be due to primary magnetite mineralization, which is an indicator of IOCG-type deposits. Minor occurrences of magnetite veins in outcrop and magnetite vein breccia in drill core have been discovered in this area, but not in high enough concentrations to explain the regional anomaly.

PREVIOUS WORK

The Mamainse Point area has a long history of prospecting, exploration and mining activity dating to the mid-1800. Most of the previous efforts focused on discreet prospects within the current property by competing operators. The Superior Project represents an aggregate of the majority of those prospects including the Montreal Mining Sand Bay Location, Baseline Prospect, Pall Mall, Kincaid Breccia, Jogran Porphyry and Richards Breccia, and Glenrock prospects. The work from the drill program in 2014 was carried out on the portion of the property west of the unconformity that includes the Montreal Mining Sand Bay Location, Baseline, and Pall Mall prospects. The following is a summary of work carried out at these locations. For more detailed descriptions of historical work, please refer to the AFRI files provided with each individual prospect.

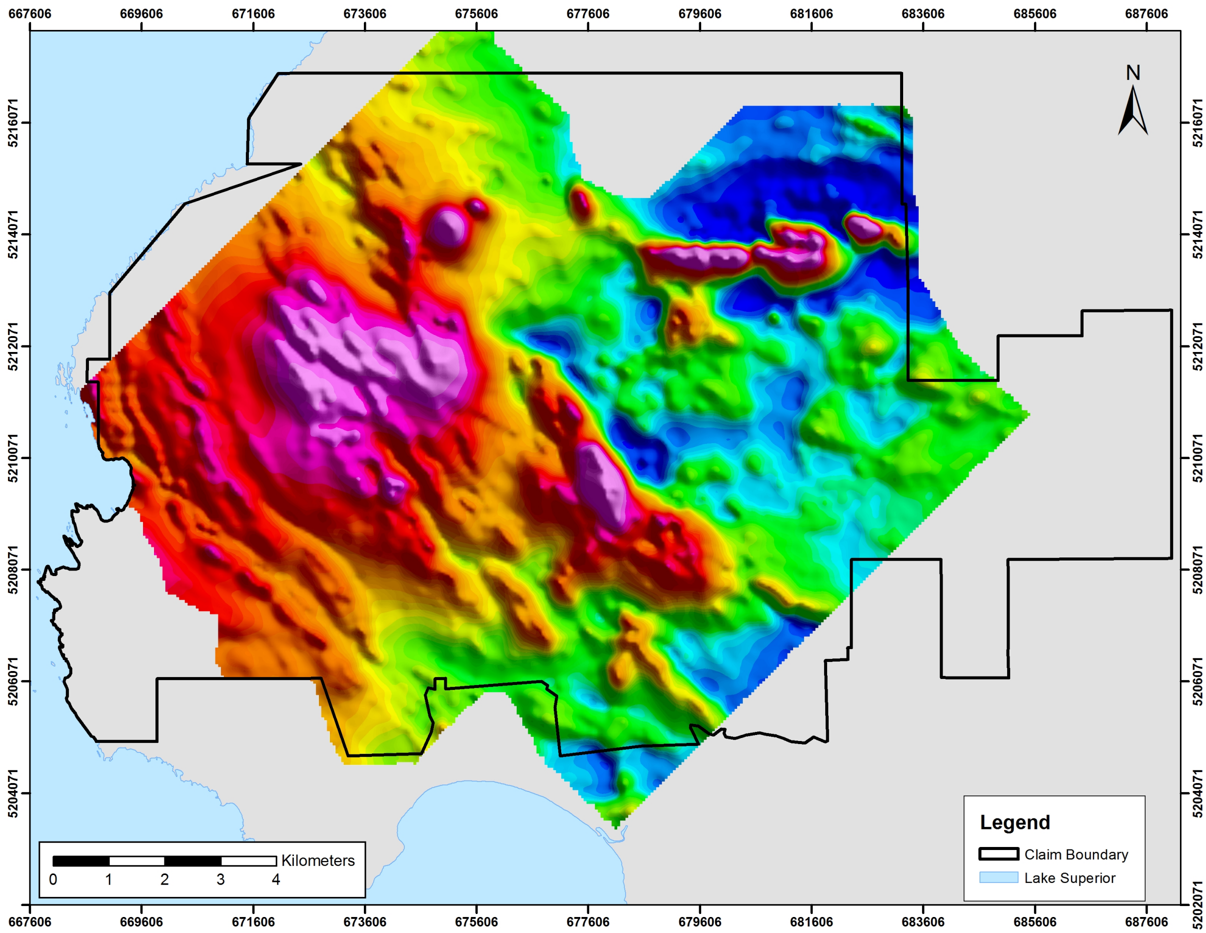


Figure 4: Regional Mag-High. Displayed as total magnetic intensity (Pink: strong magnetic intensity, Max = 62697nT; Blue = weak magnetic intensity, Min = 55371nT) after Geotech Ltd., (2014)

MONTREAL MINING SAND BAY LOCATION

1856-1857	*The Montreal Mining Company* owned the property; the location became known as the Montreal Mining Sand Bay Location. Historical records unavailable.
1871	*Ontario Mineral Lands Co.* held ownership. Historical records unavailable.
1882-1884	*Silver Islet Consolidated Mining and Lands Co.* held ownership. Historical records unavailable.
1890	*Canada Lands Purchase Syndicate* held ownership. Historical records unavailable.
1892	*Nipigon Mining Co.* held ownership. Historical records unavailable.
1906-1908	*Calumet and Hecla Co.* held ownership. Historical records unavailable.
1948-1949	*Macassa Mines* examined and drilled of old copper showings; optioned the property to C. C. Huston

	and Associates
1949-1952	*C. C. Huston and Associates* completed 33,400 feet of diamond drilling; outlined copper mineralization in the area of the Coppercorp Mine, including the C, D, SB, and Silver Creek Zones.
1954-1957	*Coppercorp Ltd.* sunk a shaft to 550 feet; developed 14,000 feet of drifts; 60,000 tons of ore was stockpiled on surface (due to falling copper prices).
1962-1964	*Vauze Mines Ltd.* completed surface exploration comprised of geology, geophysics and geochemical sampling as well as additional diamond drilling.
1965	*Vauze Mines Ltd.* dewatered workings, re-opened mine, deepened shaft to 629 feet; Production rate of 500 tons of copper concentrate per day with over 90% recovery. Pre-production ore reserve estimate of 1.54 million tons @ 2.1% copper (historical, non 43-101 compliant).
1965-1972	*Vauze Mines Ltd.* produced over 1,000,000 tons of milled ore for almost 24 million pounds of copper, 238,000 ounces of silver and 1,964 ounces of gold from the Coppercorp Mine.
1972-2002	Mine shut down; Property remained closed to staking.
1991-1992	*J.F. Paquette* carried out a self-potential survey, prospecting/sampling at the Lutz Vein and L Zone.
1993	*Cominco Ltd.* completed mapping, soil and humus geochemistry, electromagnetic (UTEM) and magnetic surveys at the Lutz Vein and L Zone.
2002	*Terry Nicholson and William Gibbs* staked the original Coppercorp property and optioned the claim group to Amerigo Resources Ltd.
2003	*Amerigo Resources Ltd.* completed an airborne magnetic survey; mapping and sampling on select areas; detailed mapping on 16 line-kilometre grid over Silver Creek area.
2004-2007	*Nikos Explorations Ltd.* completed detailed mapping, sampling, and geophysics over the Beaver Pond grid and over the Regional Mag High grid; 3,733m of diamond drilling in 23 holes along strike southeast of the Coppercorp Mine.
2009	*First Minerals Explorations Ltd.* optioned property; Sampling at the B Zone returned an assay of 51.8% copper.
2010	*Superior Copper Corp. (formerly Cenit Corporation)* optioned a 50% interest in the property; completed mechanized stripping/trenching over select areas; prospecting, mapping, and sampling.
2011	*Superior Copper* completed 887.5 meters of diamond drilling in 13 holes at the B zone; mapping and sampling on claim 3015689.
2012	*Superior Copper* carried out prospecting, stripping, mapping and sampling over select areas of the property; Ground magnetics, gravity, IP, and MMI soil geochemistry on 41 line-kilometre grid over Regional Magnetic High.
2013	*Superior Copper* completed 1,319 metres of diamond drilling in 6 holes on the historical SB Zone, the B-Zone and C-Zones.
2014	*Superior Copper* completed airborne ZTEM survey covering 769 line-kilometres; Ground magnetics, HLEM, and IP on 40 line-kilometre grid over 3M Zone; 12,516m of diamond drilling in 20 holes testing regional geophysical anomalies.

2015	*Superior Copper* completed 3,820 metres of diamond drilling in 6 holes testing regional geophysical anomalies.

BASELINE PROSPECT

1952	*C.C. Huston and Associates* discover Baseline Prospect.
1962	*Coppercorp Ltd.* conducted diamond drilling. Historical records unavailable.
2003-2004	*D. Tortosa* conducted detailed geologic mapping, prospecting and sampling.
2011	*Superior Copper* acquired property.

KINCAID AREA

1952	*C.C. Huston and Associates* discover Kincaid Breccia.
1962	*Coppercorp Ltd.* conducted diamond drilling. Historical records unavailable.
1999	*A. Gasparetto and R. Fenlon* completed geological mapping, VLF-EM and ground magnetic surveys.
2002-2003	*Intrepid Minerals Corporation* completed mapping, regional gravity survey, prospecting and sampling, and diamond drilling.
2011	*Cenit Corporation (now Superior Copper Corporation)* completed a reconnaissance geological and sampling survey.

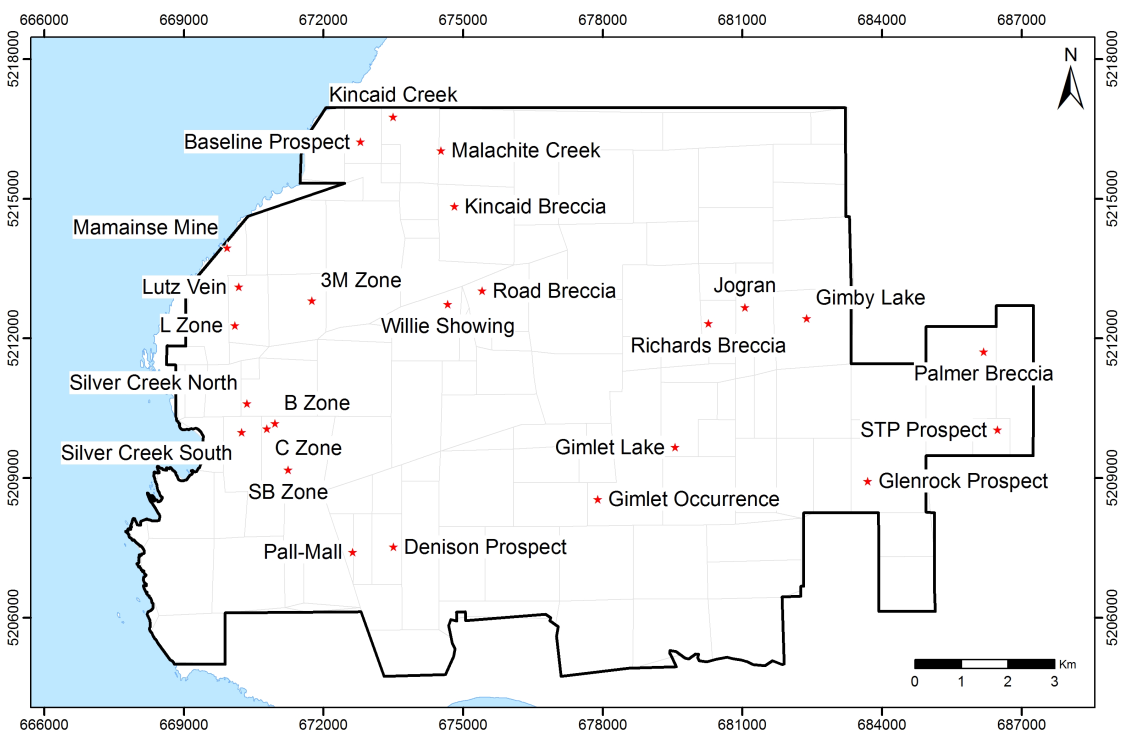


Figure 5: Significant prospects with in the Superior Project.

DIAMOND DRILLING

Between November 15, 2015 and December 19, 2015 Superior Copper Corporation completed a total of 1,634 metres in 3 diamond drill holes on the Superior Project as a part of the regional exploration drill program initiated in 2014. All 3 drill holes were carried out to test targets defined by structure, alteration, and mineralization patterns identified in the field in August 2015.

Orbit Garant Inc. of Val d'Or was the drilling contractor. Morgan Quinn, P.Geo managed and supervised the program in addition to acting as the Qualified Person.

Summary data for all 3 drill holes can be found in Table 1. Figure 6 shows the collar locations and drill hole traces projected to surface in plan view. A large scale (1:5000) map can be found in Appendix B.

Table 1 – Diamond drill hole information

Hole ID	Date Started	Date Completed	Easting	Northing	Azimuth	Dip	Length
SPC-15-07	11/22/15	11/30/15	673671	5210001	220	-45	520
SPC-15-08	12/01/15	12/06/15	673503	5209725	238	-45	489
SPC-15-09	12/07/15	02/15/15	672548	5209216	250	-45	627
						Total	1,634

Figure 6: Collar locations and drill hole traces projected to surface.

RESULTS

Diamond drill logs for all holes can be found in Appendix C.

Hole	From	To	Interval	Cu (%)	Ag (gpt)
SPC-15-07	298.30	302.50	3.41	0.19	0.89
	455.90	460.00	4.10	0.25	0.57
	490.78	495.81	5.03	0.23	0.06
SPC-15-08	No significant assays returned.				
SPC-15-09	No significant assays returned.				

SPC-15-07

Drill hole SPC-15-07 was set to follow up on results from SPC-15-01. The target is a cylindrical resistivity anomaly identified from the 2014 ZTEM survey with a radius of approximately 1.2 kilometres and extends from surface to a depth of 700m where it adjoins with a larger resistivity body (Fig.6). This anomaly was proposed to represent an intrusive apotheosis, a rhyolite plug, or a porphyry stock. Mineralized monzonite porphyry of Proterozoic Age, known as the Jogran Porphyry, occurs in the Archean Batchawana Greenstone Belt and a spatial relationship exists between mineralized fissure veins and felsite intrusions (Tortosa, 2013) in the Coppercorp Mine area (Fig. 5).

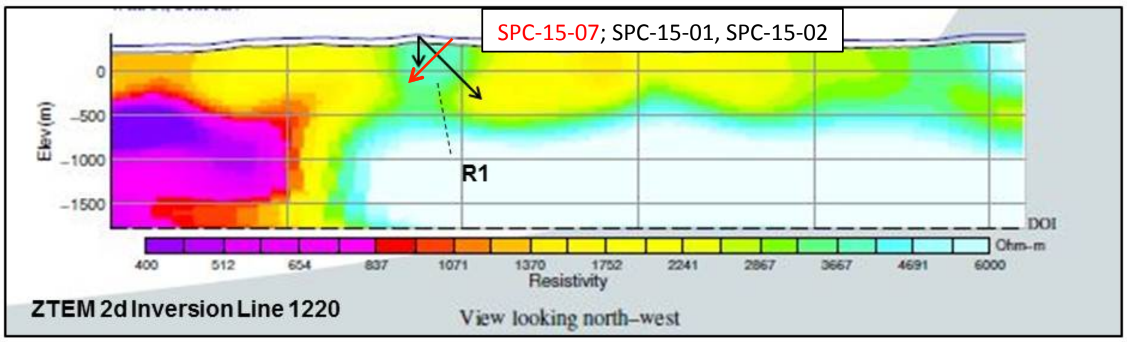


Figure 7: The Geotech R1 anomaly in section with drill holes SPC-15-01 (black, inclined), SPC-15-02 (black, vertical), and SPC-15-07 (Red).

Drill hole SPC-15-01 was drill at an azimuth of 045, inclined at -45. It intersected a broad zone of intermittent mineralization in a sequence dominated by basalt from surface down to 288 metres. Mineralization consists of chalcopyrite +/- pyrite, chalcocite, bornite occurring commonly with specular hematite and magnetite hosted in veins, vein breccia, and as amygdules. Structures hosting mineralization were at a preferred orientation between 0-30° to the core axis and contained gangue of quartz-carbonate +/- epidote, chlorite. The mineralized zone terminates at a unit described as strongly deformed and altered occurring over 10 meters from 288.13 to 298.84 metres. Beyond the strongly deformed and altered unit, the rock type changes dramatically to a sequence dominated by rhyolite, porphyry, and basalt-clast conglomerate.

Drill hole SPC-15-07 was drilled approximately 330m to the northeast at an azimuth of 225°, inclined at -45°. This location and orientation was set to mirror drill hole SPC-15-01, a technique commonly referred to as a “scissor” drill hole. This was carried out in order to test the width and zonation of the mineralized vein system discovered in SPC-15-01 where veins were at a low angle to the core axis indicating the hole was being drilled down the plunge of the system.

The stratigraphic sequence encountered in SPC-15-07 roughly agrees with the top of hole SPC-15-01 comprised of basalt flows and interflow sedimentary rocks. These units are cut by younger mafic intrusions and sub-volcanic felsic intrusions. Most interestingly, hole SPC-15-07 ended in a rhyolitic unit occurring over a minimum of 100 metres in drill core (not true width), with an additional 34-metre deformation/alteration halo. It is unknown whether this unit is a flow (strataform), a sill (stratabound), or a plug (crosscuts stratigraphy). The interpretation shown in section is that this felsic unit is a plug or a sill given strong deformation and alteration occurring at shallower depths in the drill hole. This relationship suggests a later emplacement if the alteration is assumed to be related to the rhyolitic unit.

Intermittent chalcocite, bornite, chalcopyrite, and pyrite mineralization in veins, fracture controlled, and filling amygdules throughout hole SPC-15-07. Three intervals of anomalous Cu +/- Au, Ag, and Mo were intersected in 3 to 5-metre zones spaced 40 to 150 metres apart. A summary of these intersections can be found in table X.X. Mineralization is commonly associated with epidote alteration, which. Epidote appears to have developed during an early mineralizing event as it occurs more often with chalcopyrite, and appears overprinted and is often occurs with chlorite where chalcocite is present. The exception to this alteration-mineralization association is two 1.0 to 1.5 metre intervals of 3% chalcocite mineralization within the rhyolitic unit discovered at the bottom of the hole.

SPC-15-08

Drill hole SPC-15-08 was set to test a coincident copper-silver anomaly returned from the 2012 Mobile Metal Ions™ (MMI) soil geochemistry survey (Fig.8). Although the anomaly is weak, malachite stain (Fig. 9a) and druzy quartz veins hosting very fine native copper mineralization (Fig. 9b) were found outcropping in the area.

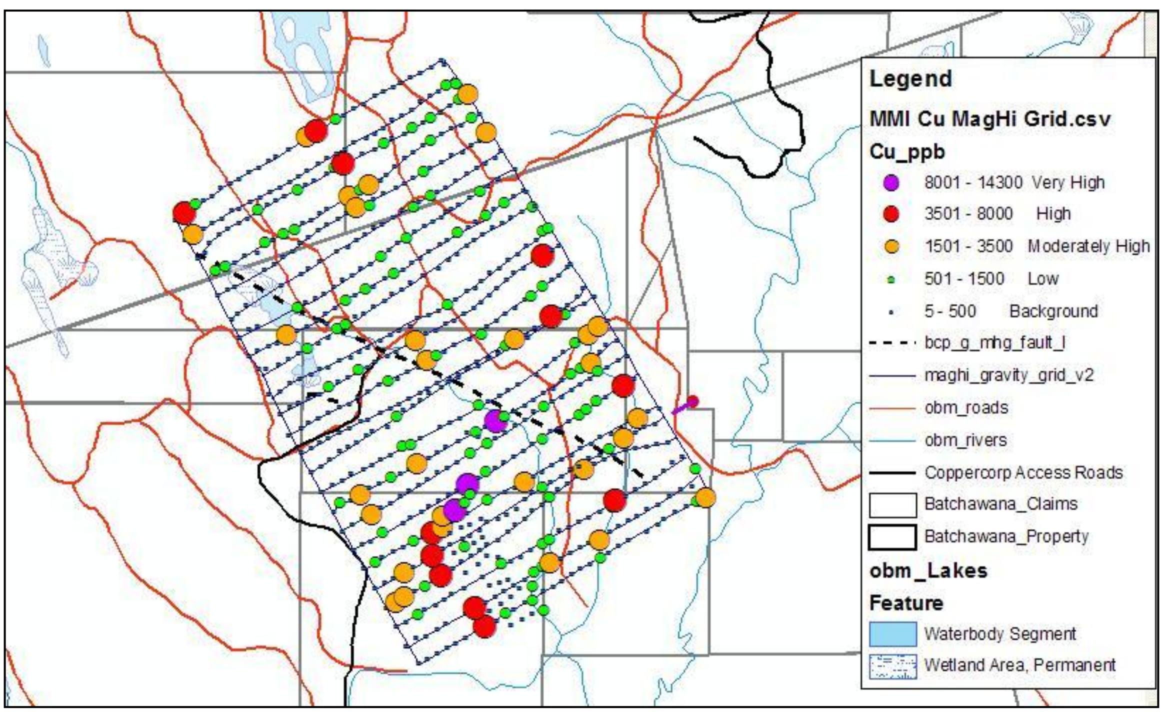


Figure 8: Copper results from the 2012 MMI™ survey. The linear NW-trend set of anomalies define the target drilled by hole SPC-15-08.

Figure 9a: Malachite stained rock from an outcrop in the area of SPC-15-08.

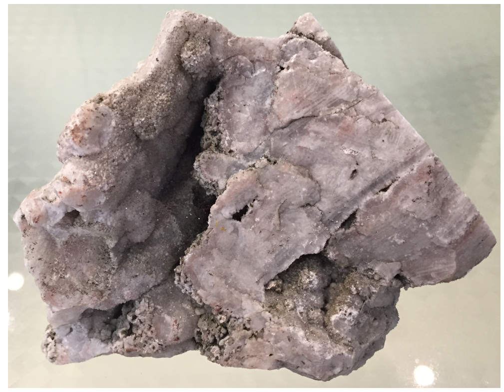


Figure 9b: A quartz boulder with colloidal textures and druzy quartz lined voids**.**

A thick unit of polymictic conglomerate was intersected from surface down to 136.5 metres. The top of this interval exhibited moderate hematite alteration overprinting the clasts that transitioned to a strong epidote overprint of the matrix with fresh looking clasts toward the bottom of the unit.

The conglomerate unit terminates in a felsic unit occurring over an interval greater than 120 metres. The unit is described as chaotic and interpreted as either the altered and brecciated contact to a felsic intrusive, and/or a rhyolite flow breccia. It is believe this unit is intrusive based on steep contacts relative to the core axis, however, confidence in this interpretation is low and more work is needed to determine the true nature of this unit.

Three dominant vein types, defined by gangue composition, were intersected including carbonate, quartz-carbonate, and epidote with multiple sub-types present for carbonate species. Individual veins range from 1 millimetre to 1 meter in true width and commonly occur in zones up to 20 metres in core length. Quartz-carbonate veins with druzy quartz-lined voids were intersected, similar to veins observed in outcrop, but contained no mineralization (Fig. 10). The drill core was not oriented, so it is not possible to determine strike and true dip of each vein.

Figure 10: Quartz vein with druzy quartz-lined voids cut/brecciated by later manganese-carbonate vein. Intersected in hole SPC-15-08 at 52.68 metres.

Strong cataclastic deformation starts at 269.33 metres and occurs intermittently to 485 metres down hole. Angular pebbles of mixed rock type are cemented in a blood red rock flour matrix. A strong fabric at 20° to the core axis is present. The hole encountered 5 faults over intervals ranging 1.45 to 37.81 metres each, separated first by units of felsic composition and then by intervals of conglomerate and sandstone. Finally, the hole ended in a basalt flow that followed a narrow (1.45 metre) interval of cataclastite.

Trace chalcocite mineralization was encountered from 358 to 375 metres in a zone of quartz-carbonate veins. Veins range in thickness from less than 1 millimetre to 10 centimetres. Roughly half of the samples taken from the 15.49 metre wide vein zone returned elevated (>100ppm) copper values with the best assay returning 0.15% copper over 0.48m.

SPC-15-09

Drill hole SPC-15-09 was set to test a strongly altered section of the Great Conglomerate cut by fine-grained felsic intrusive units. The hole was dominated by conglomerate with a series of narrow felsic intrusions occurring from surface down to 165.55 metres. In addition to the felsic intrusions, mafic dykes were intersected intermittently throughout the holes as well.

Numerous veins of various types were intersected in drill hole SPC-15-09. At least six groups can be defined based on dominant gangue constituents including carbonate, quartz, quartz-carbonate, epidote, chlorite, and sulphide species. Sub-species exist within each group, commonly containing gangue of another group (i.e. quartz-epidote) and occasionally having unique mineralogy (i.e. Mn-carbonate). Individual veins range from 1 millimetre to 2 metres in true width, and commonly occur in zones that range from 1 metre to 63.5 metres in core length. The drill core was not oriented, so it is not possible to determine strike and true dip of each vein.

Trace pyrite mineralization was encountered over significant widths in two zones at 481 to 505 metres and at 582 to 592 metres. These zones are spatially associated with two of the thickest mafic dykes intersected in the hole. Additionally, a narrow zone of pyrite mineralization and a minor occurrence of malachite are spatially associated with two narrow mafic dykes.

Elevated to anomalous copper values were returned from 489.58 metres down to 559.83 metres. However, sampling was selective and inconsistent and does not allow for a representative weighted average to be calculated.

DISCUSSION

Despite a lack of economic results, several geologically significant features were encountered during the Fall 2015 drill program. The significance of these features adds to the general understanding of the Mamainse Point area and continues to support the existence of a large magmatic-hydrothermal system. Given many associations between magmatic processes and mineralization at Mamainse Point, the existence of a large magmatic-hydrothermal system is considered key to the prospectivity of the Superior Project.

The presence of sub-volcanic intrusive, and perhaps rhyolite plugs/domes, throughout the Mamainse Point area is the most apparent evidence of a large, magmatic system. The common association with mineralization, as seen at the Jogran Porphyry, Richards Breccia, and the Tribag Breccias make these features of particular interest. One of the most significant results from the Fall 2015 drill program came from drill hole SPC-15-07 that intersected a rhyolitic unit hosting disseminated chalcocite mineralization in moderate concentrations. Of additional interest, chalcocite and chalcopyrite mineralization occur marginal to the same rhyolitic unit. Of additional interest, drill hole SPC-15-08 also intersected an interval of strongly altered felsic intrusive (?) rock, within a zone of strong deformation, which contained mineralized veins hosting chalcocite.

The variation and frequency of veining are another geologically significant phenomena encountered during the Fall 2015 drill program. Most notably, numerous quartz-carbonate veins with bladed textures, often occurring with voids lined by druzy quartz (Fig XX). This vein type is commonly found in the Coppercorp Mine area and can be associated with chalcocite mineralization such as at the B Zone (Fig. 11), and the SB Zone (Fig. 12). Epidote veins, vein breccia, and alteration were intersected hosting chalcopyrite mineralization. Epidote alteration is also found in the Coppercorp Mine area and in other areas with mineralized showings, but has traditionally thought to be associated with a later event than chalcopyrite (Fig. 13). Manganese carbonate, likely rhodochrosite, veins (Fig. 10) were frequently intersected in holes SPC-15-08 and SCP-15-09. Veins containing manganese “wad” outcrop at the SB Zone and possibly represent oxidized rhodochrosite veins. Finally, carbonate breccia zone with strong hematite altered wall rock were intersected in hole SPC-15-07, a feature common to the 3M Zone. The four vein types mentioned above represent dominant vein-type populations, although several other vein types were also encountered. In a general sense, this frequency and variation indicate a system that was active over a significant period, with multiple stages of hydrothermal activity, and very large when the distribution of similar features and characteristics of other prospects in the Mamainse Point area.

Figure 11: Chalcocite vein breccia from a B Zone trench. Note druzy quartz-lined voids.

Figure 12: Chalcocite vein breccia from SB Zone drill hole BCP-19-11. Note druzy quartz-lined voids

Finally, cataclastic fault zones over significant widths were intersected in hole SPC-15-08. Although the orientation of these particular faults is unknown, evidence from drilling at the 3M Zone (Fig. 14), in conjunction with a new interpretation of magnetic (Fig. 15) and ZTEM data (Fig. 16), suggests a previously unrecognized fault system trending roughly north-south is offsetting the stratigraphy at Mamainse Point. Movement along this fault must be significant, as it has truncated lava flows at the eastern contact of the Great Conglomerate. Such offsets could have a profound impact on future exploration and possibly the geological context of eastern Lake Superior. For instance, the veins that comprise the Coppercorp Mine are thought to taper where they intersect the Great Conglomerate (Tortosa, 2011), alternatively, the down dip extension may have been displaced along one of these faults. On a larger scale, a set of parallel faults appears to continue underneath Lake Superior (Fig. 17). Given a reasonably regular spacing of 10-15 kilometres, it is possible that the next major offset to the east of the fault intersected by hole SPC-15-08 occurs at the Archean-Proterozoic unconformity (Fig. 18). If this is the case, then the geological boundary between the Proterozoic and Archean rocks is not a true unconformity, but rather a fault contact and implies a significant dip-slip component to movement along these structures. In this scenario, relative uplift of the regional geology would increase to the east.

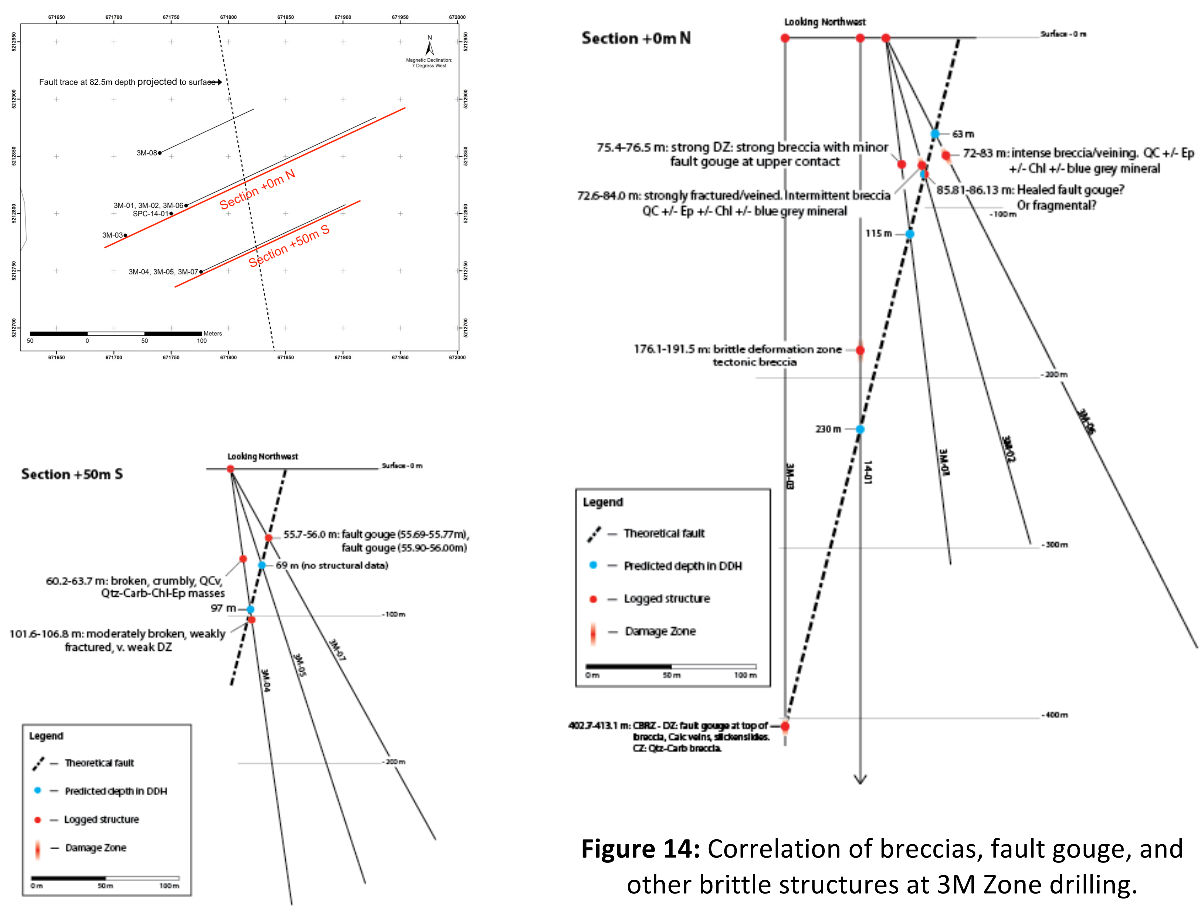
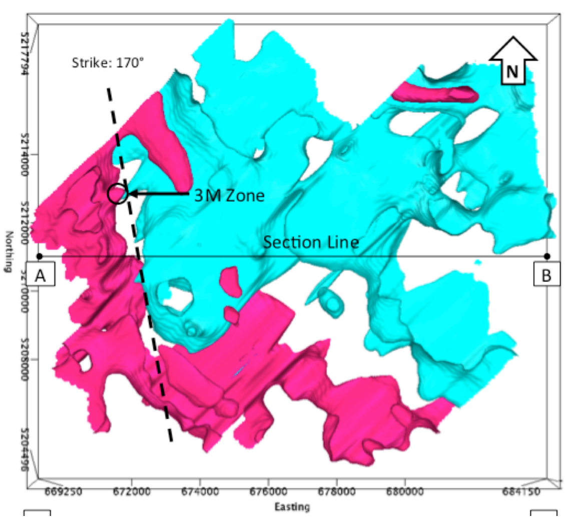


Figure 14: Correlation of breccias, fault gouge, and other brittle structures at 3M Zone drilling.



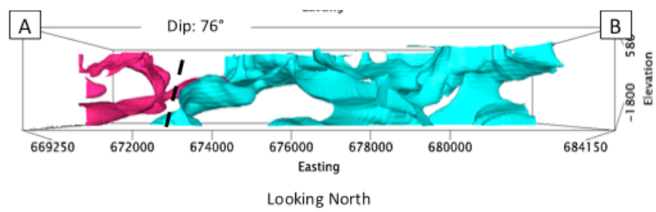


Figure 15: Prominent linear defined by negative space in ZTEM resistivity shell model. Pink = Low resistivity (relative). Blue = High resistivity (relative).

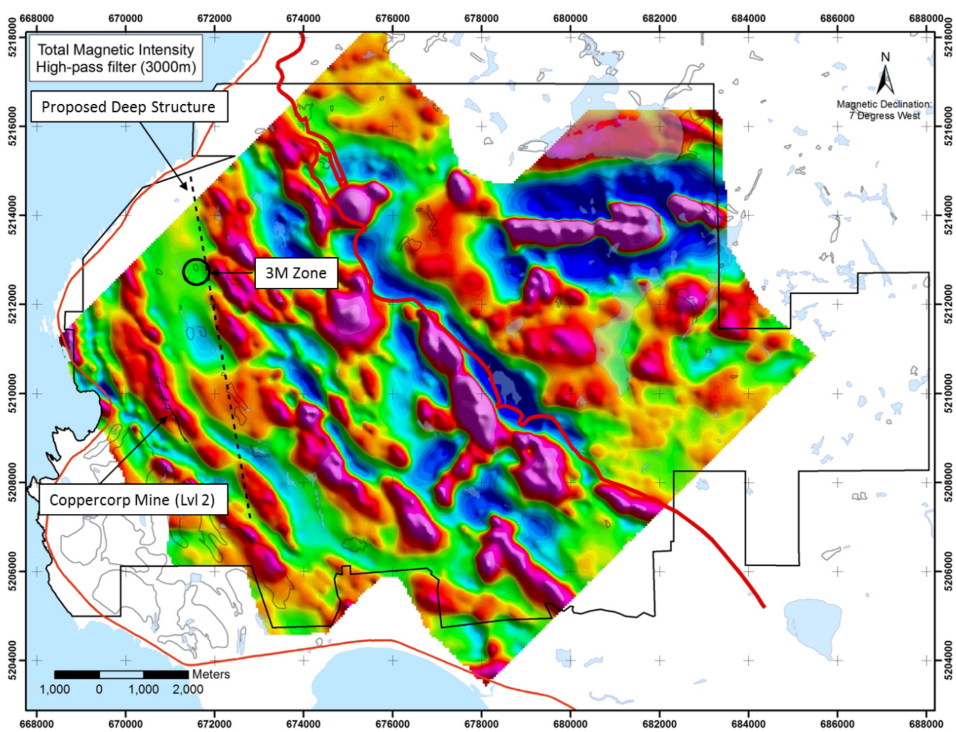


Figure 16: Linear feature defined in ZTEM and diamond drilling at the 3M Zone truncates magnetic fabric that is reflective of the stratigraphy.

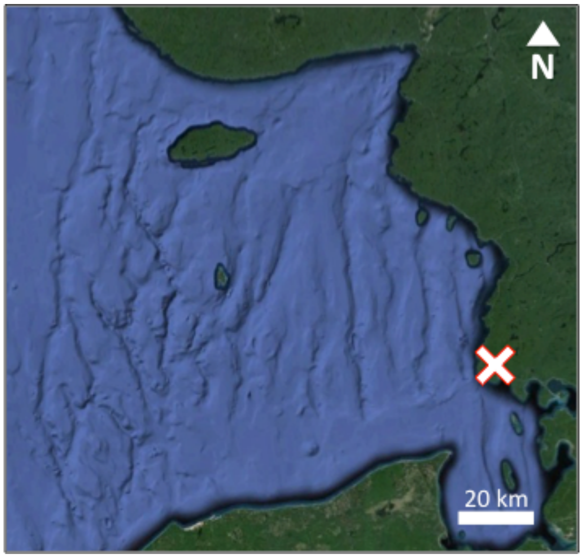


Figure 17: North-south trending ridges as seen in Lake Superior bathymetry (Google, 2015). Trough to crest height is roughly 300 metres (National Oceanic and Atmospheric Administration, 2015).

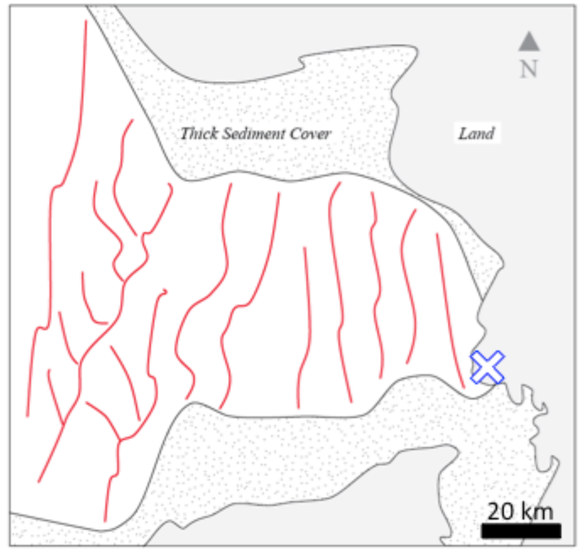


Figure 18: Traces of north-south trending ridges. Spacing towards the east side of Lake Superior is 10-15 kilometres on average. The next structure inferred by these features approximately coincides with the Proterozoic-Archean unconformity.

The areas drilled as part of the Fall 2015 drill program returned geologically interesting and significant findings, however, failed to deliver economically interesting results. Many features were encountered that are associated with mineralized zones at the Coppercorp Mine site and other showings in the Mamainse Point area. This suggests that the vein systems targeted as part of the Fall 2015 drill program are not the dominant control on mineralization, although are perhaps important in ground preparation for Stage 4 mineralizing fluids (Fig. 19). More importantly, a major fault system was discovered in hole SPC-15-08. The timing and orientation of this fault is has yet to be confirmed, but evidence to date infers it to be a roughly north-south trending, steeply west dipping normal fault. The impact of this fault and other potential parallel structures could significantly offset mineralized zones as well as bring deeper parts of the system closer to surface. These structures can also be utilized for exploration as they provide pathways for ground and meteoric waters to bring dissolved metals to surface from buried deposits.

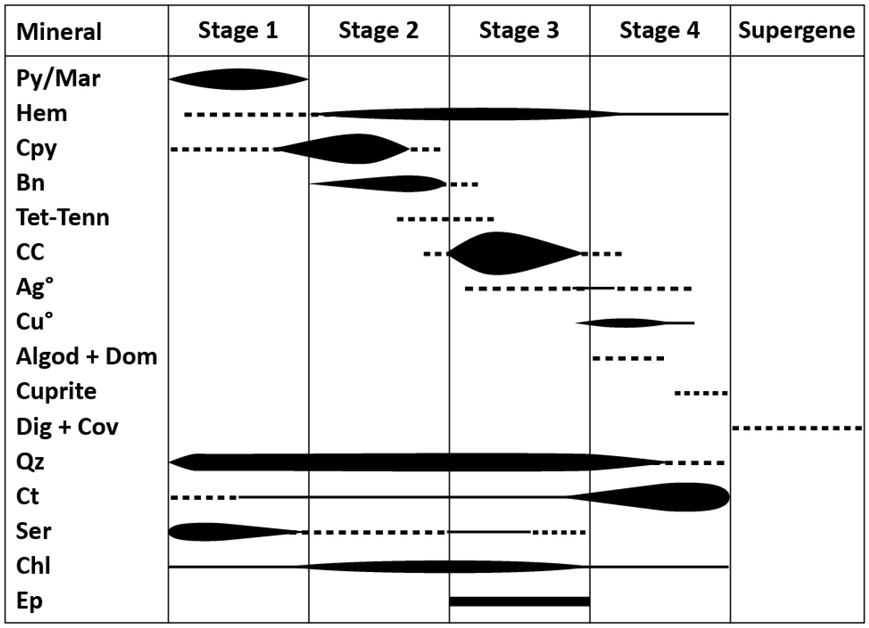


Figure 19: Paragenetic sequence of metallic and secondary minerals recorded within the Mamainse Point Volcanic Group at Mamainse Point, Ontario (modified after Richards and Spooner, 1989).

RECOMMENDATIONS

The following is recommended for future exploration programs:

1) Further investigate north-south fault system. If confirmed to exist, carry out baseline soil geochemistry across structures. Soil geochemistry surveys carried out in 2005 at the Baseline prospect and in 2012 at the B Zone showed that the Multiple Metal Ion™ method works well at Mamainse Point, Ontario. An excellent target to test the fault system is the 3M Zone, as the location of a fault is identified in ZTEM and magnetic data, supported in drill data, and there is known mineralization at depth.

2) Compile all available data on structure and alteration. Epidote, hematite, magnetite, sericite, and kaolinite alteration is distributed throughout the property and be used to vector towards a magmatic center. Permeable units, such as conglomerates, sandstones, amygdaloidal basalts, breccias, and faults will control the dispersion of the various alteration types and regional patterns may be offset by the postulated north-south trending faults. An excellent area to initiate an alteration mapping program is within the Great Conglomerate, which is an extensive permeable horizon.

3) A detailed structural study focused on locating and evaluating first, second, and third order structures. Key objectives should include constraining temporal relationships with various alteration suites and mineralization. Kinematics of each related tectonic event are also critical in understanding the post-mineralization offsets.

REFERENCES

Abitibi Geophysics (2014) HLEM and GPS-Positioned Magnetic Field Surveys, Superior Project, Mamainse Point, Ontario, Canada. *Retrieved from GeologyOntario database.*

Abitibi Geophysics (2015) Resistivity/Induced Polarization Survey: IPower3D Configuration, Superior Project, Mamainse Point, Ontario, Canada. *Retrieved from GeologyOntario database.*

Annells, R.N. (1973). Proterozoic flood basalts of eastern Lake Superior: the Keweenawan volcanic rocks of the Mamainse Point area, Ontario. *Geologic Survey of Canada*, Paper *71 -10*, *51*.

Coates, H. and Brett, J. (2011) Technical Report on the Coppercorp Property, Sault Ste. Marie Mining Division, Ontario, Canada for Cenit Corporation. *Retrieved from SEDAR database.*

Thomson, J.E., Bonkoff, E.J. and Goettler, G.W. (1953). Mamainse Point copper area, District of Algoma, Ontario. *Ontario Department of Mines, Map 1953-01, 1:12 000.*

Edgar, B. A. (2011) Report on the Mapping and Sampling Program on Claim 3015689, Kincaid Township, for Cenit Corporation. *Retrieved from GeologyOntario database.*

Edgar, Bruce, A. (2010) Report on the Property Investigation, Geological Mapping and Sampling on Claim 3015686, Ryan Township, Ontario for First Minerals Exploration Ltd. *Retrieved from GeologyOntario database.*

National Oceanic and Atmospheric Administration (2015) Great Lakes Bathymetry. National Centers for Environmental Information. *Retrieved from https://www.ngdc.noaa.gov/mgg/greatlakes/greatlakes.html accessed on June 17, 2015.*

Gasparetto A. (1999) Report on Work Performed on Mining Claims 1221636 and 1235191, Kincaid Township, District of Algoma, Ontario; Sault Ste. Marie District Assessment Files. *Retrieved from GeologyOntario database.*

Geotech Ltd. (2014) Report on a Helicopter-borne Z-axis Tipper Electromagnetic (ZTEM) and Aeromagnetic Geophysical Survey, Superior Project, Sault Ste. Marie, Ontario. *Retrieved from GeologyOntario database.*

Geotech Ltd. (2015) Report on a Helicopter-borne Versatile Time Domain Electromagnetic (VTEM) and Horizontal Magnetic Gradiometer Geophysical Survey, Pancake Lake Block, Sault Ste. Marie, Ontario, Canada. *Retrieved from GeologyOntario database.*

Giblin, P.E. (1973). Batchewana Area. Ontario Department of Mines. Geological Map 2251. *Retrieved from GeologyOntario database.*

Google Earth, V 7.1.4.1529. (April 24, 2015). Lake Superior, Canada. 47°43'23.1132''N, 86°56'26.5920''W. *Retreived from http://www.earth.google.com [June 16, 2015]*

Kilbourne, M. (2015) 2014-2015 Exploration. *Superior Copper Corporation, Unpublished internal document.*

Lilly, R., Hannan, K., Wang, M. (2014) Geochemical Trials in Weathered Overburden: Defining exploration parameters for Mount Isa-Style and IOCG mineralization in NW Queensland, Australia. *Lecture presentation at the meeting of the Australasian Institute of Mining and Metallurgy.*

Mackie, B.W. (2003) Intrepid Minerals Corporation, Report of Work, Ryan Township Properties, Circum Superior Joint Venture. *Retrieved from GeologyOntario database.*

McMurchy, R.C. (1962) Report on the Diamond Drilling Program of the property of Coppercorp Ltd., Mamainse Point Area, Ontario; Sault Ste. Marie District Office Assessment Files. *Retrieved from GeologyOntario database.*

Miller, J. and Nicholson, S. (2013). Geology and mineral deposits of the 1.1Ga Midcontinent Rift in the Lake Superior region – an overview, *in* Miller, J.D. (Ed.), *Field Guide to the Copper–Nickel–Platinum Group Element Deposits of the Lake Superior Region 13-01, Precambrian Research Center Guidebook, 1–50.*

Moss, R. and Tortosa, D. (2004) Geology and Exploration of the Coppercorp Property, Sault Ste. Marie Mining Division, Ontario. *Retrieved from GeologyOntario database.*

Moss, R. and Peshkepia, A. (2005) Report of First Phase Drilling Program, Coppercorp Property, Sault Ste. Marie Mining Division, Ontario. *Retrieved from GeologyOntario database.*

Moss, R. and Peshkepia, A. (2007) Report of Second Phase Drilling Program, Coppercorp Property, Sault Ste. Marie Mining Division, Ontario. *Retrieved from GeologyOntario database.*

Ontario Geological Survey (1991) Bedrock Geology of Ontario, East-Central Sheet, Ontario Geological Survey, Map 2543, Scale 1:1,000,000. *Retrieved from GeologyOntario database.*

Richards, J.P. (1985) A fluid inclusion and stable isotope study of Keweenawan fissure-vein hosted copper sulphide mineralization, Mamainse Point, Ontario. *Unpublished M.Sc. Thesis, Department of Geology, University of Toronto, 290p.*

Richards, J.P. (1989) Evidence for Cu-(Ag) Mineralization by Magmatic-Meteoric Fluid Mixing in Keweenawan Fissure Veins, Mamainse Point, Ontario. *Economic Geology, Volume 84, pp 360-385.*

Rupert, R.J. (1991) Summary Report, Mamainse Mine Property, McDonell Mining Location, Batchawana, Ontario. *Retrieved from GeologyOntario database.*

Rupert, R.J. (1993) Report on Self Potential Survey, Mamainse Mine Property, McDonell Mining Location, Batchawana, Ontario. *Retrieved from GeologyOntario database.*

Tortosa, D. (2003) Technical Report on the Baseline Cu-Ag-Au Property, Mamainse Point Area, Ontario; Sault Ste. Marie District Assessment Files. *Retrieved from GeologyOntario database.*

Tortosa, D. (2005) MMI Geochemical Survey Report on the South Baseline Property, Mamainse Point Area, Ontario; Sault Ste. Marie District Assessment Files. *Retrieved from GeologyOntario database.*

Tortosa, D. (2012) MagHi Geochemical Exploration Program: MMI Orientation Survey on the B-Zone Copper-Silver Prospect. *Retrieved from GeologyOntario database.*

AUTHOR QUALIFICATIONS

D. Morgan Quinn
114 Mason Blvd.,
Toronto, Ontario M5M 3E3
Tel: (416) 320-1466
Email: mquinn.geo@gmail.com

I, Donald Morgan Quinn do hereby certify that:

1) I am a graduate of Dalhousie University, Halifax, Nova Scotia, Canada, with an Honours B. Sc. (2009) in Geology.

2) I have more than 5 years of relevant work experience.

3) I am a Professional Geoscientist registered with the Association of Professional Geoscientists of Ontario, registration number 2423.

4) I have had prior involvement with the property that is the subject of this Report, having visited the property on numerous occasions over the past five years.

5) I acted as the Qualified Person overseeing this Diamond Drill Program initiated on November 15, 2015 and completed on December 19, 2015.

PROFESSIONAL GEOSCIENTIST
DONALD QUINN
PRACTISING MEMBER
2423
ONTARIO

D. Morgan Quinn (Honours BSc., P. Geo.)
Consulting Geologist

11/6/17
Date

APPENDIX A

TENURE AND EXPENDITURES

APPENDIX A.1

LIST OF UNPATENTED MINING CLAIMS

Ryan Township

1098722	3002616	4253381	4277763
1192281	3002697	4253382	4277766
1192284	3002698	4257040	4277782
1192287	3015684	4257047	
1192312	3015686	4257224	
1192314	3015687	4257225	
1192315	4243491	4260336	
1199911	4249505	4260337	
1199912	4249521	4260340	
1199984	4249522	4260341	
1234880	4249526	4260356	
1235019	4249530	4266890	
3000666	4249550	4267177	
3000714	4249946	4268677	
3000715	4250352	4269377	
3000716	4250356	4269378	
3000717	4250380	4269379	
3000718	4250381	4271684	
3000720	4250449	4271685	
3002310	4253370	4271686	
3002319	4253371	4271687	
3002320	4253372	4274737	
3002341	4253373	4277753	
3002342	4253374	4277755	
3002392	4253375	4277756	
3002398	4253376	4277757	
3002570	4253377	4277758	
3002571	4253378	4277761	
3002577	4253380	4277762	

Kincaid Township

1219611
3015689
3019475
3019477
3019478
3019479
3019480
3019481
3019482
4250353
4250354
4250355
4250417
4250418
4250419
4250420
4260334
4277411
4277414
4277415

Nicolet Township

4249520
4250358
4277412
4277413

Palmer Township

1192316
4219698
4219783
4219784
4219798
4242596
4249511
4249513
4249517
4249518
4250368
4250375
4250376
4250444
4250450
4267178
4267563
4267564

APPENDIX A.2

EXPLORATION PERMITS

Ontario Ministry of Northern Development and Mines
Ministère du Développement du Nord et des Mines

Exploration Permit/Permis d'exploration

Number/Numero : PR-13-10038

This permit is issued under the authority of section 78.3 of the *Mining Act* and the Exploration Plans and Exploration Permits Regulation (O. Reg. 308/12). It is subject to the provisions of the Act and regulation as well as the terms and conditions included in this permit.

Ce permis est emis conformement aux dispositions de section 78.3 de la *Loi sur les mines* et des reglements et est sujet aux restrictions et dispositions de ce lois et reglements ainsi qu'aux conditions ci-enoncees

Note: The issuance of this permit does not relieve the applicant from the responsibility of acquiring any other agency, board, government, etc. approval as may be required nor does it relieve the permittee from the requirements of any other legislation or guarantee access to the land.

Remarque: La deliverance d'un permis n'exonere pas le demandeur de l'obligation d'obtenir l'autorisation de tout autre organisme, commission, gouvernement, etc. qui pourrait etre exigée, non plus qu'elle exempte le detenteur des dispositions des lois et elle ne garantit pas l'accès à la terre.

Project Details/ Détails sur le projet

Project Name/ Titre du projet
Batchawana Copper Project

Qualified Supervisor/Superviseur qualifié
Judy Baker

This Permit is issued to: Ce Permis est delivré a:

Name of Permittee/Nom du detenteur:
Superior Copper Corporation

Mailing Address/Addresse postale:
130 King St. W., Toronto, M5X 1A6

To conduct an early exploration activities from/ Pour effectuer des activitées d'exploration du (yyyy/mm/dd): April 1, 2013 to: March 31, 2016
On claim/lease/licence of occupation number(s)/Sur le numéro(s) du claim/bail/permis d'occupation: Claims
4260356 3002698 3000714 4250418 3002392 1235019 4260334 3015686 3019477 3002570 4260341 4250356 4249530 4250417 4266890 3015689 3002342 3019478 3002571 3000715 4250420 1192284 4260342 3002616 3019475 3002320 4249526 4260337 3019482 4268677 1192287 3015687 3000717 1199984 3019481 1192281 3019479 1098722 4260340 3002697 3002310 3000666 3002319 4257225 3002577 3002398 1199911 3000716 3015684 3019480 3000718 3000720 1199912 3002341 4260336 4250450 4219798 4250380 4250368 4249511 4219698 4249518 4250375 4250374 4250372 4250371 4250376 4250370 4249517 1192316 4243491 4249513 4267563 4250444 4242596
as per your exploration permit application date/conformement a la demande de permis d'exploration en date du: January 14, 2013
OR
as per your *amended* exploration permit application date/conformement a la demande de permis d'exploration *modifier* en date du:
for the purpose of:

- ☒ Mechanized Drilling (assembled weight >150kg)/ Forage mécanisé (poids assemblé >150 kg)
- ☒ Mechanized Stripping (>100m^2 in 200m radius)/ Décapage mécanisé (> 100 m^2 dans un rayon de 200 m)
- ☒ Pitting and Trenching (>3m^3 in 200m radius)/ Creusement de fosses et de tranchées (>3 m^3 dans un rayon de 200 m)
- ☐ Line Cutting (>1.5m width)/ Découpage des quadrillages (<1,5 m de largeur)
- ☐ Other (Early exploration activities for which Director has required a permit)/Autre (Activités d'exploration préliminaires pour laquelle le Directeur a demandé un permis):

Subject to the following conditions:/Et sous les conditions suivanted:

1. The Permittee shall keep this permit or a true copy thereof on the permit area./Le detenteur conserver ace permis ou une copie conforme sur les lierux des travaux.
2. The person in charge of the operation conducted under this permit shall produce and show this permit or the true copy kept on the exploration permit area to any inspector whenever requested by the officer./Le responsible des travaux couverts par ce permis doit produire le permis ou sa copie conforme si un inspecteur lui demande.
3. The requirements outlined in Schedule 1 of Ontario Regulation 308/2012 and applicable Provincial Standards for Early Exploration/ Les exigences générales identifier à l'annexe 1 du Règlement de l'Ontario 308/2012 et les normes provinciale relatives a l'exploration preliminaire.
4. Other terms and conditions as listed on this permit./Autres termes et conditions enoncees sur ce permis.

Place of Issue/Emis a:
SUDBURY

Issued by/Emis par:
Stephen DeVos, Director of Exploration

Date of Issue/Date émis (yyyy/mm/dd, aaaa/mm/jj):
2013-03-18

Signature of Director/Signature du directeur:
per

© Queen's Printer for Ontario, 2012

APPENDIX A.3

SUMMARY OF EXPENDITURES

Summary of Expenditures

Drill Hole	Claim No.	Permit	Start	Completed	Days	Meters	Drilling Cost	Geology [1]	Camp [1]	Travel [1]	# of Assays	Calculated Assay Cost [2]	Total Cost
SPC-15-07	1199911	PR-13-11038	22-Nov-15	30-Nov-15	8	390	$36,803.55	$3,731.91	$1,770.83	$937.02	55	$3,735.82	$46,979.12
	3000716	PR-13-11038				130	$12,267.85	$1,243.97	$590.28	$312.34	18	$1,222.63	$15,637.07
SPC-15-08	1098722	PR-13-11038	1-Dec-15	6-Dec-15	5	202	$14,866.66	$1,284.67	$609.59	$322.56	64	$4,347.13	$21,430.61
	1199911	PR-13-11038				287	$21,122.43	$1,825.25	$866.10	$458.29	79	$5,365.99	$29,638.07
SPC-15-09	3000716	PR-13-10349	7-Dec-15	17-Dec-15	10	627	$46,145.53	$6,219.85	$2,951.38	$1,561.70	156	$14,160.09	$71,038.55
					23	1,636	$131,206.02	$14,305.65	$6,788.18	$3,591.91	372	$28,831.66	$184,723.42

1) Distribution of costs weighted by number of days first, then by percentage of meters drilled per claim.

2) Distribution of combined sample analysis and shipments costs weighted by the number of samples taken.

APPENDIX B

1 : 15,000 SCALE DRILL HOLE LOCATION MAP

Superior Copper Corporation
SUPERIOR
COPPER CORPORATION
Superior Project
Ontario, Canada
Fall 2015 Diamond Drill Program
Drill Hole Traces
Date: 11/06/17
Scale: 1:15,000
NTS Sheets: 041N02; 041K15
Datum: NAD83 Zone 17N
Prepared by D. Morgan Quinn, P.Geo
Drill hole collar
Drill hole trace
Unpatented claim
Lake Superior
N
SPC-15-08
SPC-15-07
SPC-15-09
Superior
668000
670000
672000
674000
676000
678000
5214000
5212000
5210000
5208000
5206000
0
500
1,000
m

APPENDIX C.1

LITHOLOGY LEGEND & ABBREVIATIONS

Lithology Legend

CODE	LEGEND
8	**MAFIC INTRUSIVES**
8a	Mafic (diabase?)sill/dyke; highly magnetic
8b	Pyroxenite-gabbro - highly magnetic, chiled margins
8i	**Porphyritic mafic intrusion with plagioclase laths. (a.k.a. Daisystone)**
7	**FELSIC INTRUSIVES**
7a	Feldspar Porphyry
7b	Quartz Feldspar Porphyry
7c	Felsite- no qtz phenos; minor ferromagnesians (< 10%)
7d	Massive, aphanitic, siliceous.
7e	Felsic intrusive, fine-medium grained, abundant muscovite.
6a	**Mixed Sediments & Volcanics Contact Zone = Flow Top ?**
6b	**Mixed sedimentary - altered volcanic contact zone = sub volcanic intrusive damage zone.**
6c	Breccia, Undivided.
5	**CLASTIC SEDIMENTS - undivided**
5a	Chert
5b	Siltstone
5c	Sandstone
5d	Interbanded Siltstone & Sandstone
5e	Pebble Sandstone
5f	Conglomerate - Polymictic
5g	Conglomerate - Basalt clasts

Structural Legend

Cnt	Contact
CBrZ	Carbonate Breccia Zone
EpBx	Epidote Breccia
TecBx	Tectonic Breccia
QCV	Quartz-Carbonate
Ep	Epidote
EpQ	Epidote-Quartz
EpChl	Epidote Chlorite
QHV	Silica-Hematite
Rep	Replacement
CbF	Carbonate-Fluorite
Bd	Bedding
PnS	Pinch and swell
Lat	Lattice Qtz+/-Carb
Dru	Druzy Qtz
CnS	Crack and Seal
Mss	Massive
Frag	Fragment
Cx	Crystalline
Rel	Relict
Vz	Vein Zone
Bz	Breccia Zone
Cz	Core Zone

4	**FELSIC VOLCANICS - undivided**
3	**INTERMEDIATE VOLCANICS - undivided**
2	**MAFIC VOLCANICS - undivided**
2a	amygdaloidal
2b	sparsely amygdaloidal
2c	chlorite flecked/amygdaloidal
2d	massive, aphanitic to fine grained
2e	ophitic - Ca-plagioclase dominant, fg-mg
2f	ophitic- patchy (<5%) pegmatoidal
2g	gabbroic; mg-cg massive flow
2h	hybrid unit at contact; "volcanic fragmental"; volc clasts & matrix = flow top breccia/ fragmental amygdaloid
2p	porphyritic flow
1	**ULTRAMAFIC VOLCANICS - undivided**
1a	massive, cummulate
9	Major Structural Zones
9a	Cataclastite, undivided
9b	Shear, undivided
9c	Late fault. Unconsolidated rubble, gouge, etc.

Dz	Damage Zone
Fz	Fault Zone
Frz	Fracture Zone

Alteration Legend

1	Weak
2	Moderate
3	Strong
4	Intense
5	Massive

APPENDIX C.2

DIAMOND DRILL HOLE LOGS

PROJECT	HOLE NO.	TARGET NAME	DRILLING COMPANY	LOGGED BY
Superior Project	SPC-15-07	South +1	Orbit Garant Inc.	M.Quinn
CLAIM NO.		START DATE	END DATE	TOTAL METERAGE
1199911; 3000716		November 22, 2015	November 30, 2015	520
TOWNSHIP		DISTRICT		
Ryan		Sault Ste. Marie		
DATUM/ZONE	UTM ZONE	NORTHING	EASTING	ELEVATION
NAD 83	16T	5210001	673671	
		DEPTH	DIP	AZIMUTH
		COLLAR	-45	220
		100	-44	235.9
		200	No test	No test
		300	-44.7	225.5
		400	-45	232.2
		520	-45	233.2
COMMENTS				

From	To	Rock Code	Modifier	Description
0	3	OVB		Rubble
3	32.51	6	a	Mixed sedimentary/mafic volcanic (?). Strong Ep-Hem-Silica Alt.
32.51	35.88	2	c	Amyg basalt with chl flecks.
35.88	42.8	2	c	Basalt with chl flecks. Small, round chl flecks.
42.8	44.04	2	d	Massive basalt.
44.04	67.57	2	g	Basalt-Gabbro. Cg-Mg plagioclase.
67.57	76.05	7	b	Quartz Feldspar Porphyry. Pink-buff rims around quartz. Red-Pink-Buff. Green in strongly altered core. Phenos to hem.
76.05	87.55	2	a	Amyg basalt. Amyg fill Ep-Chl-Silca-Spec.
87.55	111.72	2	d	Massive basalt. Moderately magnetic, except where structure/alteration present.
111.72	119.73	2	b	Sparsely amyg basalt. Amyg fill Ep-Qtz-Spec
119.73	120	5	c	Buff colour. Chert. Small grey flecks. Qtz nodule with abundant spec in rim.
120	123	2	b	Sparsely amyg basalt. Amyg fill Ep-Qtz-Spec
123	166	6	a	Mixed sedimentary/mafic volcanic (?). Strong Ep-Hem Alt grades to argillic downhole. Seds commonly cherty.
166	170.65	2	b	Sparsely amyg basalt. Amyg fill Ep-Chl.
170.65	179.62	6	a	Mixed sedimentary/mafic volcanic (?). Strong argillic alt.
179.62	188.1	2	g	Basalt-Gabbro. Mg plagioclase.
188.1	194.72	2	b	Sparsely amyg basalt. Amyg fill Ep-Chl-Mt +/-silica
194.72	201.26	2	d	Massive basalt. Moderately magnetic, except where structure/alteration present.
201.26	228	2	b	Sparsely amyg basalt. Amyg fill Ep-Chl+/- CC. Minor intervals of mixed sed-volc. Bx, with brown matrix.
228	238.9	6	a	Mixed sedimentary/mafic volcanic (?). Brown, massive (no bedding) matrix. Sparsely amyg basalt. Amyg fill Ep-Ch +/- CC.
238.9	265.9	2	d	Massive basalt. Magnetic.
265.9	269.9	2	g	Massive basalt with gabbroic texture.

269.9	271	8	a	Mafic dyke? Weakly brecciated contacts, upper at ~90, lower at ~20 TCA.
271	276	2	b	Sparsely amyg basalt. Amyg fill Qtz-Ep-Chl-Mt
276	282.45	2	d	Massive basalt. Weakly magnetic.
282.45	286.51	2	b	Sparsely amyg basalt. Amyg fill Qtz-Ep-Chl-Mt
286.51	294.23	2	d	Massive basalt. Weakly magnetic.
294.23	297.76	2	b	Sparsely amyg basalt. Amyg fill Ep-Chl-Hem (or Pk-silica).
297.76	305.95	8	a	Mafic dyke? Weakly brecciated upper contact at 30 TCA, lower (not bx'd) at ~20 TCA.
305.95	308.9	2	b	Sparsely amyg basalt. Amyg fill Ep-Chl-Hem (or Pk-silica).
308.9	322	8	a	This interval is very broken/blocky. A 1cm Qtz-Ep vein is sub-parallel TCA and occurs over most of the interval. Host rock is a mafic dyke with minor pink porphyroblasts.
322	329.76	2	a	Amyg basalt.
329.76	335.7	8	a	Mafic dyke? Black, aphanitic, contacts at 20 TCA. Dyke is brecciated at lower contact, wall rock looks undisturbed. Pink porphyroblasts, commonly associated with cpy.
335	376.63	2	d	Mafic volcanics with minor variations in texture, dominantly massive. Possibly multiple flows. Contacts and textures obscured by structure, dominantly CBrZ.
376.63	381.5	5	c	Sandstone, bedding at 25 TCA. Contains basalt clasts, but habit is distinctly different from unit 6.
381.5	415.5	6	b	Chaotic unit. Matrix a mixture of sandstone and aphanitic felsic rock. Possibly silicified sediments (chert). Basalt clasts have altered to a waxy brown-red-purple-green. Some amygdaloidal textures still recognizable.
415.5	449.5	4		Banded rhyolite. Bands swirl.
449.5	518	4		Chaotic, siliceous, intensely altered unit. Breccia?

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		8.85	QCV	0.010	90	Mss					
		11.67	QCV	0.020	90	Mss					
		12.82	Ep	0.005	10	CnS			Chl		2nd vein at location: Qtz, 0.005 m wide, 10 TCA, CnS
		16.4	QCV	0.010	70	Mss					
		17.13	CHV	0.010	35	Mss			Hem		
		22.67	QCV	0.015	70	Lat	Bx				
23.54	23.82	23.68	QCV	0.160	40	Lat	Dru	CnS			2nd vein at location: Qtz, 0.005 m wide, 40 TCA, Dru
		23.83	QCV	0.010	40	Mss					
		25.36	QCV	0.020	30	TecBx	Lat	Dru			
		25.75	CHV	0.010	40	Mss			Hem		
		31.17	QCV	0.015	40	Mss	Bx	CnS			2nd vein at location: Arg, 0.005 m wide, 40 TCA, CnS
		31.38	Cb	0.140	40	Mss					2nd vein at location: QCV, 0.002 m wide, 40 TCA, Lat
31.87	32.65	Cz	-	-	-	-	-	-	-	-	-
|	|	31.87	QCV	0.070	50	Bx	Lat	Dru		Mal	
|	|	32.03	QCV	0.010	50	Bx					
|	|	32.11	QCV	0.040	50	Dru	Lat	CnS			
|	|	32.24	Cb	0.030	50	Mss	CnS				2nd vein at location: Pk-Cal, 0.01 m wide, 50 TCA,
|	|	32.5	Cb	0.020	50	Mss	Cns				
V	V	32.63	Cb	0.010	50	TecBx	Mass	CnS			
-	-	-	-	-	-	-	-	-	-	-	-
		35.67	CHV	0.005	80	CnS			Hem		2nd vein at location: Pk-Cal, 0.003 m wide, 80 TCA, CnS
		35.75	Cb	0.005	25	CnS	Bx	Mss			

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
37.00	38.77	Dz	QCV	0.002	45						Multiple vein generations. QCV with epithermal textures, massive ep, and massive carb-hem vns. Average vein width is a 1-3 mm, spaced 2-10 cm apart.
			Ep	0.002	45						Blocky, low Recovery.
			Cb	0.010	25						
38.77	41.5	Cz	QCV	-	-	Bx	Lat	Dru			0.30m wide QCV with pronounced Lat-Dru-Bx textures. Low recovery, cannot determine angle TCA, true width, or exact end of zone.
41.5	42.26	Dz	CHV	0.002	45	CnS	TecBx		Hem		
		42.08	Cnt		20						Undulating contact, average 20 TCA. Upper chill margin.
43.5	44.38	Dz									Occurs in middle of 3m run. Point location not precise (absolute), but accurate (relative).
|	|	43.54	CHV	0.002	55	CnS			Hem		
|	|	43.61	CHV	0.015	55	CnS	Bx		Hem		
|	|	43.65	CHV	0.003	55	CnS	Bx		Hem		
|	|	43.69	CHV	0.002	55	CnS			Hem		
|	|	43.71	CHV	0.001	55	TecBx			Hem		
|	|	43.77	CHV	0.002	55	CnS	Bx		Hem		
|	|	43.8	CHV	0.002	55	TecBx			Hem		
|	|	43.84	CHV	0.003	55	TecBx	CnS		Hem		
|	|	43.93	CHV	0.010	50	Mss	Bx		Hem		
|	|	44.06	CHV	0.004	55	Frag	TecBx		Hem		
|	|	44.15	CHV	0.003	55	Cns	Bx	TecBx	Hem		
|	|	44.18	CHV	0.004	55	Cns	Bx	TecBx	Hem		
|	|	44.25	CHV	0.001	55	CnS			Hem		

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
V	V	44.38	CHV	0.002	50	CnS			Hem		
		44.2	Cnt		20						Basalt (2c)-Gabbro (2g). Undulating contact, average 20 TCA. Upper chill margin.
43.08	44.8	Cz									Occurs in middle of 3m run. Point location not precise (absolute), but accurate (relative).
|	|	43.09	Ep	0.030	70	Mss					
|	|	43.4	Ep	0.060	50	Mss	Bx			Spec	
|	|	43.77	Ep	0.010	75	Mss					
|	|	43.87	Ep	0.010	90	Mss					
|	|	44	Ep	0.030	50	Mss	Bx			Spec	
|	|	44.2	Ep	0.050	50	Mss	Bx			Spec	
|	|	44.55	EpQ	0.005	75	CnS	Mss			Spec	
|	|	44.66	Ep	0.001	80	Mss					
V	V	44.78	Ep	0.001	80	Frag					
47.9	50	Fz							Hem		2nd vein at location: Pk-Cal, 0.003 m wide, 80 TCA, CnS. Blocky core. Strong hem alt marginal to CBrZ veins.
51.47	51.58	Vz									
|	|	51.47	EpChl	0.002	70	CnS	Mss				
|	|	51.5	EpChl	0.003	70	CnS	Mss				
|	|	51.52	EpChl	0.010	70	CnS	Bx			Py	
V	V	51.56	EpChl	0.005	70	CnS	Mss				
		51.85	Cnt		20						Basalt (2c)-Gabbro (2g). Undulating contact, average 20 TCA. Upper chill margin.

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		52.57	Cnt		20						Basalt (2c)-Gabbro (2g). Undulating contact, average 20 TCA. Upper chill margin.
		53.48	Cnt		20						Basalt (2c)-Gabbro (2g). Undulating contact, average 20 TCA. Upper chill margin.
		54.23	Cb	0.030	80	Mss	CnS		Hem		CBrZ?
		58.4	EpChl	0.010	30	CnS			Chl		2nd vein at location: Silica, 0.005 m wide, 30 TCA, . Vein material blends in with WR.
65	67.14	Fz							Hem		2nd vein at location: CBrZ, 0.01 m wide, 80 TCA, Bx. Blocky Core. Minor CBrZ vein bx.
67.57	76.05	Frz							Hem		Porphyry is moderately fractured. Altered fracture margins common.
76.05	78.2	Fz							Hem		Blocky core.
78.3	85.65	Bz	Ep			Bx	Mss		Ep		Possibly a mixed sedimentary-volcanic unit with epidotized matrix.
86	86.75	Fz									Blocky core.
88.4	88.8	CBrZ			50						
|	|	88.5	CHV	0.010	40	CnS					
|	|	88.59	CHV	0.010	50	CnS					
|	|	88.7	CHV	0.005	50	CnS					Carbonate vein crosscuts CBrZ vein in opposite direction.
V	V	88.76	CHV	0.050	45	Bx	Lat				
		88.7	Cb	0.003	60				Hem		
		90.52	EpChl	0.002	80	Rel					
		91.31	Chl	0.003	85	CnS	Bx				2nd vein at location: QHV, 0.004 m wide, 85 TCA,
		91.5	QV	0.002	55	Dru					
		92.95	QHV	0.003	55	Rel	CnS	Bx			

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		93.2	EpQ	0.002	70	Bx	CnS			CC	Rock is weakly brecciated marginal to vein
		93.25	QHV	0.002	25	CnS					Opposite dip to last.
		93.57	QHV	0.002	80	CnS					
		93.77	EpChl	0.003	85	Rel					
		94.13	QV	0.001	30	TecBx					
		94.18	QV	0.002	30	Rel					
		94.33	QV	0.002	40	Dru					
		94.42	QV	0.002	70	Dru					
		94.52	Ep	0.005		Bx					
		94.65	QV	0.003	40	Dru					
		94.93	EpQ	0.001	70					CC	2nd vein at location: EpChl, 0.002 m wide, 70 TCA, Rel
		94.96	EpChl	0.002	70						
95.4	96.86	Fz	CBrZ						Hem		Blocky Core. Minor CBrZ vein bx.
		96.81	EpQ	0.002	70						2nd vein at location: QHV, 0.002 m wide, 70 TCA,
		98.69	EpChl	0.001	90						2nd vein at location: EpQ
		98.76	EpChl	0.003	80						2nd vein at location: EpQ
		99.57	EpQ	0.002	30						
		99.6	EpQ	0.001	40						
		99.68	EpQ	0.008	80						
101.4	102.5	Fz	CBrZ						Hem		
		106.69	EpChl	0.010	70	Rel	CnS			CC	2nd vein at location: QHV, 0.005 m wide, 70 TCA, Rel
109.2	114.5	Dz	CBrZ						Hem		Abundant, wispy 0.5cm carbonate veins in all orientations.
111.72	114.5	Cz	Ep		90	Bx	Mss			Spec	Intense epidote alteration in breccia structure (roadside trench occurrence?). Abundant, coarse grained spec-hem.

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		118.89	Cb	0.010	50	Mss					Clean.
		120.9	Bd		20						
121.13	181.8	Vz			50						Consists of abundant epidote veinlets (0.1-1.0cm) spaced 1-10cm. Varying orientation, dominant at 40-60 TCA.
122.89	127.43	|	EpBx			Bx	Mss				Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
130.9	132	|	EpBx			Bx	Mss				Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt with red-pink-salmon rim around white-grey clasts.
133.03	133.96	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
136.82	138.71	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt. Increasing arg alt of clasts.
143.57	145.05	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
146.86	149.86	|	ChlBx			Bx	Mss		Chl		?. Overall texture similar to other breccia, but matrix in a dark chloritic green and wall-rock/matrix contrast is washed out.
151.06	151.82	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
152.04	153	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt, ep is a darker green.
153.89	159.1	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt. Increasing arg alt of clasts. Some clasts have pink-red rims as previous.

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
161	165.75	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt. Increasing arg alt of clasts.
|	|	167.73	Ep	0.007	60	Rel	Mss				Wall rock is very hard, core polished by drill.
|	|	168.28	EpQ	0.010	85	Rel	Mss				Wall rock is very hard, core polished by drill.
|	|	169.16	Ep	0.007	40	Rel	Mss				Wall rock is very hard, core polished by drill.
169.7	170.1	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
170.66	171.39	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
172.18	173.4	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt. Very strong arg alt.
174.8	175.5	|	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
177.57	179.51	V	EpBx			Bx	Mss		Arg		Mixed sedimentary-volcanic flow top breccia? Unclear. Strong ep alt.
		184.37	QChl	0.005	5						Quartz vein with abundant black chlorite contained, sub parallel TCA.
188.1	194.8	Dz	EpChl			Bx					Clast supported. No dominate orientation. Strong ep-chl alt.
193.45	194.73	Cz	QCV	0.500	70	Bx	CnS	Dru	Hem		LSEV (?). Multiple pulses, from outside-core: Hem-Ep-LSEV-Carb. LSEV material is 0.25cm total.
		195.15	QCV	0.030	80	CnS			Hem		
198.01	198.25	Dz	CBrZ		50	Bx			Hem		

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
198.45	198.85	Vz	CBrZ	0.060	70	Bx					
		199.68	QChl	0.010	70	CnS					
201.25	237.25	Bz									Consists of frequent intervals of possible flow top breccia, as well as other structures with the same matrix (mudcracks? Or fine-grained breccia fill?) Similar to 121-181m, but lacks frequent epidote veins. Matrix is less frequently ep alt, commonly brown.
204.61	204.88	|	Bx			Bx					Mixed sedimentary-volcanic flow top breccia? Appears unaltered. Unclear.
205.45	206.54	|	Bx			Bx					Mixed sedimentary-volcanic flow top breccia? Appears unaltered. Unclear.
211.05	211.83	|	Bx			Bx					Mixed sedimentary-volcanic flow top breccia? Appears unaltered. Unclear.
214.15	215.48	|	Bx			Bx					Mixed sedimentary-volcanic flow top breccia? Appears unaltered. Unclear.
214.8	215.19	|	CBrZ		45	Bx			Hem		
218.06	218.35	|	CBrZ		45	Bx			Hem		
|	|	218.8	CBrZ	0.010	45	CnS			Hem		
|	|	221.64	Ep	0.002	70	Mss					
|	|	225.91	EpQ	0.005	65	Mss					
228	231.12	|	Bx						Mt		Mixed sedimentary-volcanic flow top breccia? Clasts strongly magnetic. Alt unclear.
232.87	233.97	|	Bx						Mt		Mixed sedimentary-volcanic flow top breccia? Clasts strongly magnetic. Alt unclear.
236.43	237.2	V	Bx								Mixed sedimentary-volcanic flow top breccia? Appears unaltered. Unclear.

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
237.2	238.07		CBrZ		55	Mss	Lat		Hem		
		239.72	EpChl	0.003	20	Rel	PnS		Ep		Ep alt margins, Chl core
		240.07	EpChl	0.002	20	Rel	PnS		Ep		Ep alt margins, Chl core
		241.44	EpChl	0.003	65	Rel	PnS		Ep		Ep alt margins, Chl core
		243.56	EpChl	0.010	45	Rel	PnS		Ep		Two 0.5cm veins. Ep alt margins, Chl core
		243.72	EpChl	0.010	45	Rel			Ep		Splay at 90 degrees to trunk. Ep alt margins, Chl core
245.1	245.41		CBrZ		60	Bx			Hem		
		247.35	CBrZ	0.003	50				Hem		
		248.1	QCV	0.001	50						Clean.
		249.55	EpQ	0.002	15	FF					Appears to follow joint.
		250.35	CBrZ	0.015	60	Bx	Lat		Mss		Rectilinear. Cuts EpChl.
		250.35	EpChl	0.005	25	Rel	PnS				Cut by CBrZ.
		251.35	EpChl	0.010	20	Rel	PnS				
		251.71	QCV	0.001	40						Clean.
		252.25	QCV	0.001	55						Clean.
		252.8	EpChl	0.010	30	Rel				CC	
		253.36	QCV	0.001	50	FF			Hem		Hem margins.
		255.35	QCV	0.005	45						Undulating contacts. Splay at 20.
		257.07	QCV	0.003	65						Undulating contacts.
		260.57	QCV	0.007	0	FF					Follows contact
262.9	265.5		CBrZ		10				Hem		
		266.28	Ep	0.001	60						
		266.41	Ep	0.006	60						
268.7	335.7		Dz		10	TecBx	Bx				Dominant fracture orientation at 10 TCA.
|	|	269.7	Cz	0.030		TecBx	Bx				
|	|	268.8	Cz	0.030	30	TecBx					
270.65	271.35	|	Cz		10	TecBx	Bx				
|	|	273.22	QV	0.010	45	Frag	Mss	Bx			Contains WR inclusions.

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
|	|	277.59	CBrZ	0.003	45	CnS			Hem		
|	|	277.9	CBrz	0.001	50	CnS			Hem		
|	|	277.94	Ep	0.001	50						
|	|	278.4	Ep	0.003	60						
281.92	282.07	Cz	Ep		50	TecBx					Increased tectonic brecciation.
		291.85	EpChl	0.003	45	Rel			Hem	Cpy-Bn	Bn rims Cpy
		291.92	EpChl	0.002	60	Rel			Hem	Cpy-Bn	Bn rims Cpy
		292.55	QHV	0.003	60	FF					Not like other QHV, matrix is pink silica.
		292.59	QHV	0.005	70	FF					Not like other QHV, matrix is pink silica.
		293.41	Ep	0.004	25	TecBx					
		294.08	Chl	0.005	35	FF	Rel				
		297.76	Flt	0.010	35	Bx					
		298.18	QHV	0.001	60	FF			Hem	CC	
		299.05	Ep	0.001	15	TecBx					
299.27	299.52	FrZ	EpQ			FF					
		300.51	QHV	0.001	75	FF			Hem	CC	
		300.95	QHV	0.002	40	FF			Hem	CC	
		301.4	QHV	0.002	60	FF			Hem	CC	
		301.57	QHV	0.002	35	FF			Hem	CC	
		302.22	QHV	0.001	70	FF			Hem	CC	
		302.53	QHV	0.001	60	FF			Hem	CC	
302.57	303.66	Vn	Cb	0.020	10	Bx					
		303.68	QHV	0.001	85	FF			Hem	CC	
		304.1	QHV	0.001	60	FF			Hem	CC	
304.1	304.44	Vn	QHV	0.001	15	FF			Hem	CC	
305	306	Vn	Cb	0.005	5	Bx			Hem		CBrZ?
307.83	308.45	Vn	EpQ	0.005	5	CnS				CC	
		309.55	QV	0.015	30	CnS				Bn	
		312.5	Cnt		15						

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
312.5	322.5	Fz			5						Rock is very broken. ~1.0cm EpQ vn in core of zone, sub parallel TCA. Structures similar to 281-302m, no measurements taken due to chaotic core.
322.5	335.7	Fz			20	TecBx					Rock more competent. Tectonic breccia/fracturing still present. Fractures narrow and mineralized with Cpy+/-Bn.
		324.51	EpChl	0.004	70	Rel			Chl	Cpy	Chl margin looks like it is after Ep. Cpy contained in structure.
		326.2	Ep	0.001	20	TecBx					
		326.54	EpChl	0.050	50	Rel			K		Wall roack alt looks like that marginal to magnetite veins seen in outcrop and in 15-05. Non-magnetic.
		327.24	EpChl	0.030	80	Rel			K		As previous.
		328.5	Cpy-Bn	0.002	20	TecBx	Mss			Cpy-Bn	
		329.76	Cnt		20	Bx					Minor disturbance of upper unit. Straight contact.
335.23	335.7	Bz	Chl		20	TecBx	Bx			Cpy-Bn	
		335.7	Cnt		20	Bx					Upper unit moderately brecciated over 47cm. Fracture roughly 90 degrees to contact.
		336.33	EpChl	0.003	40	Rel	PnS				
		336.71	Cpy-Bn	0.004	40	FF	Mss				
		337.93	Chl	0.008	55	Rel					
		338.27	EpChl	0.003	50	Rel					4 minor bands over 10cm.
		339.7	QCV	0.003	20	FF	Mss				
		340.38	QCV	0.002	40	FF	Mss				
		341.1	QCV	0.001	40	FF	Mss				
		341.17	QCV	0.001	50	FF	Mss				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		341.25	QCV	0.001	40	FF	Mss				
		341.63	QCV	0.001	50	FF	Mss				
		341.81	QCV	0.002	30	FF	Mss				
		342.5	QCV	0.001	20	FF	Mss				
		343.17	QCV	0.001	25	FF	Mss				
		343.86	Chl	0.020	60	Rel	Mss				
		345.71	Chl	0.010	50	Rel	Bx				2nd vein at location: QHV. Chl structure conatins fragments of pink-white siliceous material.
		346.95	Ep	0.010	70	Bx	PnS				
347.46	375.5	Dz									
348.13	348.67	Cz	CBrZ	0.180	50	Bx	CnS		Hem		Appears to display multiple breccia events. Interval incl. 18cm breccia structure, and 5-10 breccia with different vein material, different pulse.
349.35	349.55	Cz	CBrZ	0.120	50	Bx	CnS		Hem		
348.85	349.02	Cz	CBrZ	0.120	50	Bx	CnS		Hem		
		352.56	EpChl	0.005	80	Rel	PnS				
		352.64	EpChl	0.003	30	Rel	TecBx				Splay at 90 to recorded structure, at 80 TCA..
		352.77	CBrZ	0.015	80	Bx			Hem		
		353.1	EpChl	0.005	80	Rel	PnS				
		353.32	Chl	0.002	80	Rel	PnS				
		353.64	Chl	0.004	40	Bx	CnS				
354.88	355.18	Cz	CBrZ		55	Bx	CnS		Hem		
		355.9	CBrZ	0.020	50	Bx	CnS		Hem		
		356.59	QHV	0.003	70	Bx					Blood red, narrow VnBx
		356.88	QCV	0.020	55						Hosts emerald green wisps.
		357.53	CBrZ	0.020	50	Bx	Cns		Hem		

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		357.89	EpChl	0.003	60	Rel	PnS				
		358.09	EpQ	0.015	60	CnS					
		358.22	Ep	0.005	45	TecBx				CC	
358.39	359.04	Fz	Ep						Hem	CC	Strongly fractured contact between mafic volcanic and mafic dike. No dominant orientation.
359.38	359.55	Cz	CBrZ		60				Hem		
359.75	359.93	Cz	CBrZ		60				Hem		
361.76	365.04	Vn	Cb		5	Bx	TecBx	CnS		CC	Clean, white carbonate vein breccia sub paralelle TCA. Cannot determine true width, but it is at least 3cm wide. Hosts trace CC mineralization.
		368.5	Ep	0.010	30	Rel	Mss				Minor offsets by later movement.
		369	QHV	0.010	35	Rel	Mss				Siliceous white vein with slightly pink spots.
		369.06	QCV	0.004	65	CnS					LSEV (?). Unclear.
		369.23	CBrZ	0.010	75	CnS	Bx		Hem		Pink.
		369.94	CBrZ	0.010	45	CnS	Mss		Hem		Pink-white
		370.1	CBrZ	0.010	60	CnS	Bx		Hem		
370.25	370.35	Flt	Flt								Very block interval.
		370.4	CBrZ	0.030	60	CnS	Bx	Mss	Hem		
369.69	372	Cz	CBrZ						Hem		Brecciated throughout interval. Points marked with in interval indicate dominantly CBrZ vein material.
		369.71	CBrZ	0.020	50	Bx			Hem		
		369.9	CBrZ	0.070	45	Bx			Hem		
		371.58	CBrZ	0.020		CnS			Hem		Vein bend around clast. Angle TCA could be misleading, but roughly 45.
		371.71	CBrZ	0.060	60	CnS	Bx		Hem		
		371.95	CBrZ	0.030	55	CnS	Mss		Hem		

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		373.32	8a	0.030	15						Mafic dyke? Magnetic, black, aphanitic. Contains pink porphyroblasts. Two additional enclaves of 8a material at 372.84 and 373.05.
373.1	373.45	Fz	EpQ		20	TecBx					Fractures are 1-2mm. Dominant angle is 20 TCA.
373.95	374.66	Cz	CBrZ						Hem		Brecciated throughout interval. Points marked with in interval indicate dominantly CBrZ vein material.
		373.97	Ep	0.010	35	Rel	Mss				Cut by CBrZ material. Dip direction is the same as dominant dip to CBrZ.
		374.12	CBrZ	0.030	60	Bx			Hem		
		374.36	CBrZ	0.050	65	Bx			Hem		
		374.54	CBrZ	0.025	70	Bx			Hem		
		374.63	CBrZ	0.040	65	Bx			Hem		
		375.08	CBrZ	0.030	65	Cns	Bx		Hem		
		375.15	CBrZ	0.005	70	Mss			Hem		
378	380	Sed	Bd		25						Sandstone bedding.
		381.5	Flt								Rubble over 20cm. Cannot determine true width or exact location.
		382.25	Flt								Rubble over 20cm. Cannot determine true width or exact location.
415.5	518	Fz									
		386.52	Cb	0.010	60	Pns					Clean white.
390.85	391.27	Vn	CbF	0.004	5	FF	PnS	TecBx		F	May contain fluorite.
391.85	392.32	Vn	CbF	0.003	5	FF	PnS	TecBx		F	May contain fluorite.
		393.19	Flt	0.050							Semi-gouge. Angle uncertain, but best guess is 60 TCA.
		393.55	Cb	0.001	45	FF					Chalky white.

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		393.65	Cb	0.001	60	FF					Reacts weakly to acid, may be clay rich.
		393.75	CbF	0.003	45	FF	TecBx			F	May Contain fluorite
		393.85	Cb	0.002	50	FF	PnS	TecBx			Chalky white.
		393.95	Cb	0.003	75	FF	PnS	Bx			Chalky white.
398.17	398.98	DZ	Cb		45	FF					Increased fracturing. Fractures are upto 1mm. Dominant orientation 45 TCA.
		398.32	Flt								Semi-gouge. Angle uncertain, but best guess is 70 TCA.
		398.91	Cb	0.002	30	FF	TecBx				Chalky white.
		399.12	CbF	0.002	20	Mss				CC	
		401.9	Cb	0.003	75	Mss					
		402.21	CbF	0.003	30	FF				F	Hosts flourite.
		402.74	Cb	0.001	30	FF					
		403.34	Cb	0.001	30	FF	TecBx				
		403.61	Cb	0.004	25	FF	TecBx				
		404.61	Cb	0.007	55	CnS	Mss				
		404.68	Cb	0.002	55						
		404.75	Cb	0.001	55						
404.93	404.08	Fz	Cb	0.002	30	TecBx	FF				Dominant orientation 30 TCA. Conjugate (?) fractures at 60 TCA.
		405.24	QCV	0.040	60	Bx	Lat				LSEV (?). Lattice texture, but no open spaces or cavities.
		405.68	Cb	0.001	45	FF	TecBx				
		405.72	Cb	0.001	45	FF	TecBx				
		406	Cb	0.001	55	FF	TecBx				
		406.47	Cb	0.001	30	FF					
		406.55	Cb	0.001	60	FF					
		406.67	Cb	0.001	60	FF					
		406.71	QCV	0.001	30	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		407.13	Cb	0.001	60	FF					
		407.37	Cb	0.001	20	FF					
		408.7	QCV	0.001	50	FF					
		410.27	QCV	0.002	60	FF					
		410.72	Cb	0.001	45	FF					
412.06	412.1	Fz	QCV	0.002		TecBx	FF				Narrow fracture zone. Fractures up to 2mm.
		412.53	Cb	0.015	45	CnS	Mss				
412.81	413.81	Fz	QCV	0.002	50	TecBx	FF				Dominant fracture orientation is 50 TCA.
		415.77	Cb	0.002	40	FF					
		415.97	Cb	0.001	70	FF					
		416.1	QCV	0.002	40	FF	PnS				
		418.59	QCV	0.010	20	FF	Bx				Offset by late movement at 60 TCA.
		418.71	QCV	0.004	20	FF					
		418.77	Cb	0.005	65	Bx	FF				Offset by carb vein at 65 TCA.
		418.8	Cb	0.003	65	FF					
		419.26	Cb	0.002	50	FF					
		419.89	Cb	0.005	70	FF	Bx				
		420.62	QCV	0.001	45	FF					
		420.86	Cb	0.001	70	FF					
		421.47	QCV	0.002	70	FF	TecBx				
		421.48	QCV	0.003	25	FF	TecBx				
		422.18	QCV	0.002	50	Lat					
		423.17	Cb	0.001	50	FF					
		423.71	QCV	0.005	25	Lat	FF				
		424.19	Cb	0.001	50	FF					
		424.35	QCV	0.002	45	Lat	FF				
		424.53	QCV	0.003	60	Lat	FF	Frag			
		424.71	QCV	0.001	60	Dru	FF				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		425	QCV	0.004	60	Dru	FF	TecBx			
		425.13	Cb	0.004	65	FF	Frag				
		425.48	QCV	0.002		FF	Frag				
		425.6	QCV	0.005	80	Lat	Frag				Three 0.5cm vein fragments. Kaolinite in vein (?)
		425.88	Cb	0.001	40	FF					
		426.13	QCV	0.001	70	FF	Frag				
		427.05	QCV	0.004	40	Lat	FF	PnS			
		427.41	QCV	0.003	40	FF					
		429.19	QCV	0.001	75	FF	PnS				
		429.32	QCV	0.001	35	Dru					
		432.87	Cb	0.001	50	FF					
		433.62	QCV	0.002	40	Lat	FF				
		434.43	QCV	0.004	50	CnS	FF				
		434.96	QCV	0.002	50	Dru	FF	TecBx		Kao	Kaolin in vein margins (?)
		435.22	Cb	0.001	70	FF					
		435.32	Cb	0.001	70	FF					
		436.76	Cb	0.010	70	FF	Frag				Contains fragment of QCV (?)
		439.12	Cb	0.003	45	FF	Frag				
		439.69	QCV	0.003	55	Dru					
		440.41	Cb	0.004	35	FF	TecBx				
		440.46	Cb	0.004	30	FF	TecBx	PnS			
		440.57	Cb	0.002	55	FF	Frag	PnS			
		440.6	Cb	0.004	55	FF	Frag	PnS			
		440.8	Cb	0.002	70	FF	TecBx				
		440.85	Cb	0.030	65	FF					
		440.9	Cb	0.001	65	FF	Frag				
		441.04	Cb	0.001	50	FF	Frag				
		441.06	Cb	0.002	80	FF	Bx				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		441.08	Cb	0.010	80	FF	Frag	PnS			
		441.15	Cb	0.010	80	FF	TecBx				
		441.24	Cb	0.005	60	FF	TecBx				
		441.25	Cb	0.003	60	FF	TecBx				
		441.26	QCV	0.005	40	Dru					Cut by carbonate vein.
		441.28	Cb	0.007	60	FF	Frag	PnS			
		442.25	Cb	0.003	70	FF	TecBx	PnS			
		442.86	Cb	0.004	40	FF	TecBx	PnS			
		443.1	Cb	0.002	30	Lat					
		443.44	QCV	0.010	45	Dru	Lat				
		443.53	QCV	0.007	55	Dru	Lat	TecBx			
		443.57	QCV	0.005	30	Dru	PnS				
		443.63	Cb	0.003	50	FF	TecBx				
		443.8	Cb	0.001	40	FF	TecBx				
		443.84	Cb	0.003	40	FF	TecBx				
		444.48	Cb	0.005	80	FF	Frag			Kao	Kaolin at vein margins.
		444.53	Cb	0.004	60	FF	Frag				
		444.81	Cb	0.001	35	FF	Frag				
		444.82	Cb	0.001	35	FF	TecBx				
		444.96	Cb	0.001	45	FF	TecBx				
		444.97	Cb	0.001	45	FF	TecBx				
		445.09	Cb	0.001	70	FF					
		445.22	Cb	0.001	35	FF	TecBx				
		445.32	Cb	0.001	85	FF	TecBx				
		445.86	Cb	0.003	40	FF					
		446.06	Cb	0.010	65	FF	Mss	PnS			
		446.07	Cb	0.002	65	FF	Mss				
		446.12	Cb	0.003	40	FF	Pns			Kao	Kaolin at vein margins (?)
		446.27	Cb	0.010	45	FF	Mss	PnS			

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		446.52	CHV	0.005	60	CnS	Bx				
447.41	447.41	Vn	CHV	0.010	10	TecBx	PnS	Mss			
		447.88	CHV	0.003	60	CnS	FF				
		448.22	Cb	0.001	45	FF					
		449.36	Cb	0.001	30	FF					
		449.61	Cb	0.001	45	FF					
		449.7	CHV	0.003	65	FF					
		449.81	Cb	0.003	65	FF					
		449.79	CHV	0.002	70	FF					
		449.88	Cb	0.001	70	FF					
		450.04	CHV	0.002	70	FF					
		450.11	CHV	0.005	60	FF					
		450.22	Cb	0.004	65	FF				Kao	Kaolin at margins (?)
		450.28	CHV	0.004	60	FF					
		450.33	Cb	0.002	60	FF					
		450.35	Cb	0.001	60	FF					
		450.36	Cb	0.001	60	FF					
		451.63	CHV	0.004	20	FF					
451.75	452.2	Flt	Clay		20	Bx					Rubble weakly cemented by pale green clay. CHV veins at margins.
		453.13	Clay	0.001	35	FF					
		453.23	Clay	0.001	35	FF					
		453.28	Clay	0.001	45	FF					
		454.52	Cb	0.005	20	FF	TecBx				
		456.22	Ep	0.005	20	TecBx	FF				
456.57	457.8	Fz	QS			FF				CC	
		458.58	Cb	0.003	20	FF	TecBx				
		459.21	Cb			TecBx				Kao	
		460.55	CHV	0.004	55	CnS					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		461.14	Cb	0.001	60	FF					
		461.24	Clay	0.003	45	FF					
		462.1	CHV	0.004	55	CnS					
		463.57	Ep	0.003	10	FF	TecBx				
		463.85	Ep	0.030		TecBx					
		465.2	Cb	0.002	50	FF					
		465.23	Cb	0.001	50	FF					
		465.27	Cb	0.002	50	FF					
		465.29	Cb	0.001	50	FF					
		465.41	Cb	0.003	80	FF					
		465.65	QCV	0.010	55	Dru	Lat			Kao	Kaolin
		465.73	QCV	0.003	80	Dru	FF	Frag		Kao	Kaolin
		465.75	QCV	0.003	80	Dru	FF	Frag		Kao	Kaolin
		465.81	Cb	0.010	80	FF	TecBx	Frag			
		465.93	Cb	0.003	50	FF					
		466.49	Cb	0.003	55	FF				Kao	
		466.51	Cb	0.002	70	FF	TecBx			Kao	
		466.57	Cb	0.001	70	FF					
		466.65	Cb	0.001	75	FF					
		466.9	Cb	0.001	50	FF					
		467.15	CHV	0.001	60	FF					
		467.16	CHV	0.002	60	FF					
		467.18	CHV	0.002	60	FF					
		467.2	CHV	0.003	60	FF					
		467.22	Cb	0.004	60	FF	PnS			Kao	
		467.33	Cb	0.002	60	FF	PnS			Kao	
		467.74	Cb	0.005	70	FF	PnS			Kao	
		468.18	Cb	0.001	50	FF					
		468.64	Cb	0.001	50	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		468.9	Cb	0.001	70	FF					
		468.92	Cb	0.001	80	FF					
		469.45	Cb	0.003	70	FF					
		470.25	Cb	0.003	70	FF					
		472.85	QCV	0.030	75	Bx	Mss	Lat			
		473.13	QCV	0.002	75	FF					
		473.76	QCV	0.002	75	Dru	FF				
		474.11	QCV	0.003	40	Dru					
		474.53	QCV	0.002	70	FF					
		474.74	QCV	0.003	50	FF					
		475.36	QCV	0.003	50	Dru				Kao	
		475.82	QCV	0.001	60	Dru				Kao	
		475.85	QCV	0.003	60	FF					
		476.07	QCV	0.002	50	FF	TecBx				
		476.12	QCV	0.002	60	FF	CnS				
		477.93	Cb	0.002	65	FF	TecBx				
		477.95	Cb	0.002	65	FF	TecBx				
		477.99	QCV	0.002	85	FF	TecBx				
		478.2	QCV	0.003	10	FF					
		481.56	Cb	0.001	50	FF					
		482.08	Cb	0.001	60	FF					
		482.49	Cb	0.003		Frag	FF				
		482.77	Cb	0.002	60	FF					
		483.21	Cb	0.001	70	FF					
		483.35	Cb	0.001	60	FF				Kao	
		483.42	Cb	0.001	60	FF					
		484.37	Cb	0.001	70	FF					
		485.09	Cb	0.001	85	FF					
		487.23	QCV	0.005	30	Dru	FF			Kao	

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		487.26	QCV	0.006	30	Dru	TecBx	FF		Kao	
		487.43	QCV	0.002	45	Dru	FF	PnS		Kao	
		487.47	QCV	0.005	45	Dru	FF			Kao	
		488.56	QCV	0.004	60	Dru	FF			Kao	
		489.41	Cb	0.001	15	FF	TecBx				
		489.46	Cb	0.001	15	FF	TecBx				
		490.28	Cb	0.010	50	FF					
		493.92	Cb	0.001	40	FF					
		496.79	Cb	0.001	30	FF					
497.45	497.88	Vn	Cb	0.010	20	TecBx	FF				
		501.23	Cb	0.001	60	FF					
		501.26	Cb	0.001	60	FF					
		501.55	Cb	0.002	20	FF					
		503.84	Cb	0.002	40	FF					
		505.11	Cb	0.001	60	FF					
		505.16	Cb	0.001	45	FF					
		505.43	Cb	0.005	45	CnS				Kao	
		505.63	Cb	0.003	40	TecBx					
		505.76	Cb	0.004	40	FF					
		505.96	Ep	0.045	40	Rel					Waxy, emerald green material
		506.25	Cb	0.001	45	FF					
		506.29	Cb	0.001	60	FF					
		506.47	Cb	0.001	60	FF					
		507.02	Cb	0.004	25	FF	PnS				
		507.12	Cb	0.003	70	FF	TecBx				
		507.19	Cb	0.002	70	FF	TecBx				
		507.41	Cb	0.003	45	FF	TecBx				
		507.57	Cb	0.001	45	FF	TecBx				
		507.68	Cb	0.004	45	FF	TecBx				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		507.94	Cb	0.003	5	FF	TecBx				
		508.32	Cb	0.002	50	FF					
		508.51	Cb	0.002	70	FF	TecBx				
		508.54	Cb	0.002	50	FF	TecBx				
		508.56	Cb	0.001	60	FF	TecBx				
		508.6	Cb	0.005	25	FF	TecBx				
		508.7	Cb	0.001	60	FF					
		508.78	Cb	0.001	45	FF	TecBx				
		508.95	CHV	0.003	55	CnS	FF				
		509.25	Cb	0.003	50	FF	TecBx				
		509.77	Cb	0.001	60	FF					
		510	Cb	0.004	30	FF	TecBx				
		510.4	Cb	0.001	35	FF					
		510.64	Cb	0.001	55	FF					
		510.74	Cb	0.002	60	FF	Frag				
		511.14	Cb	0.002	55	FF	TecBx				
		511.22	Cb	0.002	55	FF					
		511.42	Cb	0.001	50	FF					
		511.66	Cb	0.001	40	FF					
		511.91	Cb	0.001	40	FF					
		512.38	Cb	0.001	40	FF					
		512.68	Cb	0.001	50	FF					
		512.91	Cb	0.001	50	FF					
		513.03	Cb	0.001	55	FF					
		513.85	QCV	0.003	40	Dru	TecBx				
		513.9	QCV	0.003	40	Dru	TecBx				
		514.02	QCV	0.002	70	FF	Frag	TecBx			
		514.17	Cb	0.001	40	FF					
		514.45	Cb	0.002	35	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		514.63	Cb	0.002	90	FF	TecBx				
		514.88	Cb	0.004	20	FF	TecBx				
		515.28	Cb	0.004	50	Lat	FF	TecBx			
		515.39	Cb	0.005	60	Lat	FF	TecBx			
		515.54	QCV	0.004	40	Lat	FF	TecBx			
		515.64	QCV	0.005	40	Lat	FF	TecBx			
		515.75	QCV	0.007	30	Lat	FF	TecBx			
		515.78	QCV	0.005	30	Lat	FF	TecBx			
		515.81	QCV	0.005	30	Lat	FF	TecBx			
		515.84	QCV	0.005	30	Lat	FF	TecBx			
		515.94	QCV	0.002	30	FF	TecBx				
		515.98	QCV	0.001	30	FF	TecBx				
		516.1	Cb	0.002	70	FF	TecBx				
516.6	516.84	Bz	Hem	0.004	30	TecBx					
		517.76	CBrZ	0.015	40	Bx	CnS				
		517.84	CBrZ	0.030	40	Bx	CnS				
		518.15	CBrZ	0.025	45	Bx	CnS				

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
0	5	5	1	0	1	2	1	0	0	0	0		
5	32.5	27.5	3	0	3	4	0	1	0	0	0		
32.5	35.88	3.38	0	0	2	2	0	0	2	0	0		
35.88	42.26	6.38	5	0	2	1	0	0	0	0	0		Druzy-lattice quartz vein
42.26	44.8	2.54	1	0	1	5	1	0	0	0	0		Ep veins.
52.15	52.35	0.2	0	0	0	0	0	0	0	1	0	Ksp	Feldspar porphyroblasts (?)
44.8	67.57	22.77	0	2	1	0	0	0	1	0	0		Mag likely primary.
67.57	69.55	1.98	3	0	2	0	0	1	0	0	1		Albite rims?
69.55	75	5.45	3	0	1	2	0	2	0	0	2		Albite rims?
75	76.05	1.05	3	0	2	1	0	1	0	0	2		Albite rims?
76	87.55	11.55	2	0	1	2	1	0	2	0	0		
87.55	109.6	22.05	0	2	1	0	1	0	1	0	0		
109.6	111.72	2.12	0	0	4	0	0	0	0	0	0		
111.72	115	3.28	1	0	3	5	4	0	0	0	0		
115	125.4	10.4	1	0	0	3	2	0	1	0	0		
125.4	127.5	2.1	1	0	3	3	0	1	0	0	0		
127.5	131	3.5	0	0	2	2	0	0	1	0	0		
131	131.8	0.8	2	0	2	4	0	1	0	0	1	Albite (?), Ksp (?)	
131.8	133	1.2	0	0	1	2	0	1	0	0	0		
133	134	1	0	0	3	4	0	2	0	0	0		
134	136.85	2.85	0	0	0	3	0	0	0	0	0		
136.85	139	2.15	2	0	1	4	0	2	0	0	0		
139	142.25	3.25	0	0	0	2	0	0	0	0	0		
142.25	145	2.75	0	0	1	3	0	3	0	0	0		
145	150.8	5.8	2	0	2	1	0	0	2	0	0		
150.8	153	2.2	0	0	1	3	0	2	0	0	0		
153	153.9	0.9	0	0	2	1	0	0	2	0	0		
153.9	165.8	11.9	0	0	1	4	0	3	0	0	0		

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
165.8	169.6	3.8	1	1	0	1	0	0	1	0	0		Very hard, core polished by drill. Hardened?
169.6	179.62	10.02	0	0	2	4	0	3	2	0	0		
179.62	188.1	8.48	1	1	1	1	0	0	1	0	0		Alt contained in veins. Introduction of brown-red (hem?) stockwork (?), possilby mudcracks.
188.1	190.8	2.7	1	2	2	1	0	0	2	0	0		Blood red hem blebs
190.8	193.45	2.65	2	2	3	3	0	0	2	0	0		Blood red hem blebs and rims around clasts.
193.45	198.63	5.18	5	0	4	2	0	0	0	0	0		Alteration marginal to 30cm quartz-carbonate vein. Multiple pulses, CnS, quartz is pink-orange, sometimes druzy. Carbonate has bladed texture.
198.63	201.1	2.47	1	1	1	0	0	0	0	0	0		Weak-nil alteration, except marginal to structure.
201.1	237.1	36	1	2	1	2	1	0	2	0	0		Alteration mostly contained to amygdules and structure. Clasts in narrow intervals of Unit 6 are more magnetic than wall rock.
237.1	238.2	1.1	1	0	3	1	0	2	0	0	0		
238.2	246.5	8.3	1	1	2	3	0	1	2	0	0		Epidote washes out rock texture, most intense at top of interval.
246.5	254.9	8.4	1	3	1	1	0	0	0	0	0		
254.9	261.9	7	1	2	0	1	0	0	0	0	0		
261.9	266.75	4.85	1	0	4	2	0	0	0	0	0		Alteration marginal to carbonate vein. CBrZ (?)
266.75	269.9	3.15	1	1	2	2	0	0	0	0	0		
269.9	272.1	2.2	1	0	2	3	0	0	0	0	0		
272.1	274.75	2.65	1	0	3	1	0	0	0	0	0		Rock matrix a deep red.
274.75	276	1.25	2	1	1	1	0	0	1	0	0		Amyg fill.
276	281.9	5.9	0	1	1	1	0	0	0	0	0		Alt contained to fracture/veins
281.9	286.5	4.6	2	0	0	2	0	0	1	0	0		Amyg fill and fracture/veins

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
286.5	294.4	7.9	0	0	1	1	0	0	0	0	0		
294.4	297.76	3.36	0	0	3	2	0	1	2	0	0		Pink-red , pale green, and chlorite amyg fill. Groundmass is red.
297.79	305.95	8.16	1	2	1	1	0	0	0	1	0		Pink porphyroblasts (?).
305.95	308.9	2.95	0	0	3	2	0	1	2	0	0		Pink-red , pale green, and chlorite amyg fill. Groundmass is red.
308.9	322	13.1	1	2	1	1	0	0	0	1	0		Pink porphyroblasts (?).
322	329.76	7.76	0	1	1	1	0	0	2	1	0		K-alt refers to pink margins (upto 1cm on either side) to 1.5cm chlorite vein. Possible hem, but pink mineral is hard with a white streak. Hem-rich silica?
329.76	335.7	5.94	0	3	1	1	0	0	0	1	0		K-alt refers to pink porphyroblasts (upto 1.0cm) commonly assocaited with cpy. Could be hem-rich silica. There are also grungy, brown-pink halos marginal (1mm) to fractures at brecciated lower contact.
335.7	339	3.3	0	2	1	2	0	0	2	1	0		Ep in vns/FF, overprinted by Chl (?). Minor pink mineral assocaited with alteration.
339	347.46	8.46	1	1	0	0	0	0	1	0	0		A few QCV veins, and relict chl veins.
347.46	353	5.54	1	0	4	0	0	0	0	0	0		Alteration marginal to arbonate breccia. CBrZ.
353	376.25	23.25	1	2	4	1	1	0	1	1	0		Intermittently magnetic, non-magnetic in hem alt'd zones. Silica = Opal/chalcedony. K = Pink porphyroblasts. Hem most associated with CBrZ. Ep in relict structures that are dominantly Chl now.
376.25	381.5	5.25	0	0	2	2	2	0	0	0	0		Red-Green sediments with coarse spec hem at top of interval.
381.5	407.3	25.8	0	0	3	3	1	2	0	0	0		Chaotic unit. Red-brown-green-purple.

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
407.3	415.5	8.2	4	0	2	2	0	0	0	0	0		Very hard, polished rock. Textures are mostly destroyed.
415.5	453	37.5	3	0	1	1	0	2	0	0	0		Overall yellow-beige colour. Intercalated bands of siliceous material and clay-like material.
453													

From	To	Point	Mal	CC	Bn	Cpy	Py	Mt	Spec	Text 1	Text 2	Association	Notes
		31.87	tr										
43.40	44.55								tr				
46.00	67.60						tr			Dss	FF	EpChl	
		51.52					tr						
		93.20		tr									
		94.30		tr									
		106.69		tr									
111.72	114.50								10.0%				
201.50	236.00			tr				tr	tr	AF	Blb	EpChl	CC +/- Spec or Mt in amygdules with ep +/- Chl. Mt more common to Chl rich amyg.
271.00	276.00							tr		AF			In amyg with ep-chl.
289.50	322.00			tr	tr	tr							EpQ veins and amyg fill. CC also in fractures with alt'd margins.
322.00	337.70				tr	tr				FF	SMss		Cpy +/- Bn in tectonic breccia structures at 20 TCA. Also seen in relict EpChl veins.
		353.64		tr									In relict EpChl vein at 40 TCA.
		358.22		tr									In relict EpChl vein at 45 TCA.
358.39	359.04			tr						FF	TecBx		Trace CC blebs in small TecBx zone.
361.76	365.04			tr						Vn	Bx		CC blebs in VnBx that is sub-parallel TCA. Cannot determine true width.
		366.69		tr									CC bleb in amyg with Ep.
		367.17				tr							1mm Cpy bleb.

`

From	To	Point	Mal	CC	Bn	Cpy	Py	Mt	Spec	Text 1	Text 2	Association	Notes
		367.35				tr							Cpy in amyg with Ep.
376.60	376.90								2.0%				Coarse spec hem in strong Ep alt'd rock.
		399.76							Tr				1cm aggregate of coarse Spec Hem
456.57	458.00			3.00%									
492.00	493.00			3.00%									
493.45	494.40			3.00%									

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203251A	23.5	23.87	0.37	<5	0.09	30.3	0.64
Q203251B				<5	0.1	28.7	0.57
Q203252	25.24	25.56	0.32	<5	0.04	16	0.57
Q203253	30.93	31.23	0.30	<5	0.1	34.1	0.5
Q203254	31.23	31.53	0.30	<5	0.08	19	0.41
Q203255	31.83	32.13	0.30	<5	0.34	112	0.66
Q203256	32.44	32.74	0.30	<5	0.43	541	0.76
Q203257	36.93	37.95	1.02	<5	0.11	155	0.84
Q203258	Blank	Blank	Blank	<5	0.04	12.4	0.22
Q203259	37.95	38.77	0.82	<5	0.1	109.5	1.21
Q203260	38.77	39.3	0.53	<5	0.05	91.1	0.81
Q203261	39.3	39.8	0.50	<5	0.01	28.3	1.19
Q203262	43.75	43.95	0.20	<5	6.17	475	0.7
Q203263	51.36	51.77	0.41	<5	0.04	142	0.27
Q203264	93	93.3	0.30	17	0.06	216	0.53
Q203265	94.8	95.1	0.30	8	0.03	235	0.47
Q203266	OREAS 111	OREAS 111	OREAS 111	435	10.15	>10000	31
Q203267	96.6	96.9	0.30	15	0.16	230	0.36
Q203268	112.95	113.95	1.00	<5	0.04	26.5	1.66
Q203269	113.95	114.5	0.55	<5	0.02	12	2.79
Q203270	131	131.57	0.57	<5	0.01	4.1	0.62
Q203271	136.82	137.6	0.78	<5	<0.01	2	0.52

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203272	152.04	153	0.96	<5	<0.01	1.7	0.27
Q203273	192	192.6	0.60	40	0.01	17.1	0.43
Q203274	193.45	194.6	1.15	<5	0.1	65.2	0.38
Q203275	195	195.3	0.30	<5	0.05	248	0.28
Q203276	OREAS 111	OREAS 111	OREAS 111	431	10.5	>10000	31.4
Q203277	201.72	202.72	1.00	<5	0.1	208	0.32
Q203278	208	209	1.00	<5	0.05	98.8	0.39
Q203279	210.42	210.77	0.35	24	0.47	1305	0.3
Q203280	217.61	217.91	0.30	59	0.12	2070	0.21
Q203281	231.58	232.58	1.00	19	0.11	328	0.46
Q203282	293	293.3	0.30	<5	0.11	779	0.38
Q203283	298.3	299.25	0.95	<5	0.13	730	2.2
Q203284	299.25	299.71	0.46	<5	0.43	2760	4.37
Q203285	1/4 Dup	1/4 Dup	1/4 Dup	<5	0.36	2820	5.47
Q203286A	300.5	301.5	1.00	<5	0.66	3380	5.66
Q203286B				<5	0.62	3350	4.78
Q203287	301.5	302.5	1.00	<5	2.07	1065	0.84
Q203288	307.83	308.45	0.62	<5	0.83	430	0.63
Q203289	309.4	309.7	0.30	<5	1.09	3790	5.04
Q203290	309.7	310	0.30	<5	0.41	1775	1.48
Q203291	324.44	325.28	0.84	<5	0.08	1170	0.4
Q203292	328.33	328.85	0.52	<5	0.26	1920	0.63

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203293	Blank	Blank	Blank	<5	0.05	14.5	0.17
Q203294	334.64	335.23	0.59	8	0.1	1860	3.38
Q203295	335.23	335.7	0.47	13	0.16	2020	46.2
Q203296	336.2	336.8	0.60	<5	0.04	410	1.21
Q203297	348	348.67	0.67	<5	0.11	193.5	0.85
Q203298	358	358.4	0.40	<5	0.03	57.9	2.6
Q203299	358.4	359.09	0.69	<5	0.09	390	33.4
Q203300	361.76	362.53	0.77	6	0.73	4800	0.32
Q203301	OREAS 111	OREAS 111	OREAS 111	440	9.76	>10000	31.8
Q203302	371.6	372	0.40	<5	0.05	91.5	0.76
Q203303	374.1	374.7	0.60	<5	0.03	37	0.41
Q203304	390.97	391.27	0.30	<5	<0.01	5.7	0.73
Q203305	399.4	399.9	0.50	<5	0.02	10.7	0.79
Q203306	402.05	402.35	0.30	<5	0.01	6.1	0.58
Q203307	405.11	405.41	0.30	<5	0.07	16.7	0.55
Q203308	405.41	406	0.59	<5	0.05	14.3	1.05
Q203309	406	406.61	0.61	<5	0.05	7.9	0.71
Q203310	406.61	407.15	0.54	<5	0.02	9.9	0.76
Q203311	OREAS 111	OREAS 111	OREAS 111	424	9.95	>10000	31.5
Q203312	407.15	407.83	0.68	<5	0.13	32.1	0.95
Q203313	408	409	1.00	<5	0.05	12.5	0.77
Q203314	409	410	1.00	<5	0.04	9.9	0.91

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203315	410	411	1.00	<5	0.03	15.9	0.83
Q203316	411	412	1.00	<5	0.03	14.4	1.14
Q203317	412	412.44	0.44	<5	0.05	10.6	0.74
Q203318	412.44	412.74	0.30	<5	0.07	13.6	0.83
Q203319	412.74	413.82	1.08	<5	0.11	15.1	0.96
Q203320	1/4 Dup	1/4 Dup	1/4 Dup	<5	0.08	13.8	0.74
Q203321	413.82	415	1.18	<5	0.03	6.4	0.22
				<5	0.03	6.2	0.21
Q203322	423.23	424.3	1.07	<5	0.03	12.6	0.42
Q203323	424.3	425.28	0.98	<5	0.03	11.4	0.39
Q203324	425.28	426.28	1.00	<5	0.02	9.7	0.32
Q203325	426.28	427	0.72	<5	0.02	9.8	0.31
Q203326	427	427.45	0.45	<5	0.02	11.9	0.29
Q203327	433.5	433.8	0.30	<5	0.02	9.2	0.22
Q203328	Blank	Blank	Blank	<5	0.03	12.7	0.24
Q203329	434.23	434.52	0.29	<5	0.02	8.8	0.36
Q203330	434.9	435.2	0.30	<5	0.01	6.1	0.3
Q203331	439	429.32	-9.68	<5	0.04	15.8	0.26
Q203332	439.32	439.86	0.54	<5	0.04	16	0.41
Q203333	439.86	440.36	0.50	<5	0.09	14.1	0.29
Q203334	440.36	440.87	0.51	<5	0.05	14.7	0.27
Q203335	440.87	441.38	0.51	<5	0.05	19	0.22

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203336	OREAS 111	OREAS 111	OREAS 111	438	10.3	>10000	30.4
Q203337	443.43	443.73	0.30	<5	0.04	123.5	0.57
Q203338	444.45	445.4	0.95	<5	0.04	16.2	0.19
Q203339	445.83	446.38	0.55	<5	0.06	13	0.19
Q203340	446.38	446.68	0.30	<5	0.06	11	0.25
Q203341	446.68	447	0.32	<5	0.07	12.9	0.2
Q203342	447	447.4	0.40	<5	0.07	16	0.15
Q203343	447.4	447.9	0.50	<5	0.07	12.1	0.15
Q203344	447.9	448.4	0.50	<5	0.04	11.5	0.18
Q203345	449.55	450	0.45	<5	0.14	27.8	0.23
Q203346	OREAS 111	OREAS 111	OREAS 111	416	11.05	>10000	32.4
Q203347	450	450.4	0.40	<5	0.12	33.1	0.31
Q203348	450.4	451	0.60	<5	0.09	30.7	0.23
Q203349	451.5	452.2	0.70	<5	0.15	43.6	0.18
Q203350	452.2	453.9	1.70	<5	0.29	262	0.25
Q203351	453.9	454.9	1.00	<5	0.73	980	0.12
Q203352	454.9	455.9	1.00	<5	1	881	1.11
Q203353	455.9	456.57	0.67	<5	1.61	2480	0.84
Q203354	456.57	457.09	0.52	<5	0.91	7640	9.58
Q203355	1/4 Dup	1/4 Dup	1/4 Dup	<5	0.62	7930	10.55
Q203356A	457.09	457.54	0.45	<5	0.67	3100	7.59
Q203356B				<5	0.64	3040	7.38

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203357	457.54	458	0.46	<5	0.23	1905	5.97
Q203358	458	459	1.00	<5	0.2	1055	3.38
Q203359	459	460	1.00	<5	0.17	1100	1.83
Q203360	460	461	1.00	<5	0.07	37.3	1.22
Q203361	461	462	1.00	<5	0.1	262	1.31
Q203362	462	463	1.00	<5	0.17	533	1.67
Q203363	Blank	Blank	Blank	<5	0.03	13.1	0.17
Q203364	463	464	1.00	<5	0.18	821	4.29
Q203365	464	464.6	0.60	<5	0.07	374	1.48
Q203366	464.6	465.18	0.58	<5	0.02	23.4	1.25
Q203367	465.18	466.02	0.84	<5	0.03	43	1.32
Q203368	466.02	466.35	0.33	<5	0.03	26.5	0.96
Q203369	466.35	467.1	0.75	<5	0.04	28.7	0.94
Q203370	467.1	467.45	0.35	<5	0.07	67.4	0.93
Q203371	OREAS 111	OREAS 111	OREAS 111	437	9.36	>10000	27.7
Q203372	467.45	468.23	0.78	<5	0.15	122	1.12
Q203373	468.23	469	0.77	<5	0.06	16.8	1.34
Q203374	469	470	1.00	<5	0.03	19.8	1.21
Q203375	470	471	1.00	<5	0.03	15.8	1.03
Q203376	471	472	1.00	<5	0.01	6.4	1.09
Q203377	472	473	1.00	<5	0.04	15.9	1.02
Q203378	473	474	1.00	<5	0.07	26	1.05

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203379	474	475	1.00	<5	0.02	12.1	0.94
Q203380	475	475.67	0.67	<5	0.02	14.5	1.04
Q203381	OREAS 111	OREAS 111	OREAS 111	430	10.55	>10000	30.8
Q203382	475.67	475.97	0.30	<5	0.04	22.9	1.07
Q203383	475.97	476.93	0.96	<5	0.03	11.1	1.45
Q203384	476.93	477.81	0.88	<5	0.01	10.9	1.37
Q203385	477.8	478.1	0.30	<5	0.02	17.8	1.58
Q203386	478.1	478.41	0.31	<5	0.02	12	1.19
Q203387	478.41	479	0.59	<5	0.03	8.4	1.11
Q203388	479	480	1.00	<5	0.02	10.6	1.34
Q203389	480	481	1.00	<5	0.02	10.6	1.15
Q203390	1/4 Dup	1/4 Dup	1/4 Dup	<5	0.02	10.6	1.27
Q203391	481	481.3	0.30	<5	0.01	31.1	1.98
				<5	0.04	27.7	1.67
Q203392	481.3	482	0.70	<5	<0.01	22.2	1.76
Q203393	482	483	1.00	<5	<0.01	19.9	1.38
Q203394	483	484	1.00	<5	0.01	13.6	1.07
Q203395	484	485	1.00	<5	0.01	7.9	1.04
Q203396	485	486	1.00	<5	<0.01	8.1	0.71
Q203397	486	486.57	0.57	<5	0.02	8.2	0.59
Q203398	Blank	Blank	Blank	<5	0.03	11.4	0.17
Q203399	486.57	487.15	0.58	<5	0.04	15.5	0.81

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203400	487.15	487.49	0.34	<5	0.02	35.9	0.91
Q203401	487.49	488	0.51	<5	0.03	38.8	0.81
Q203402	488	489	1.00	<5	0.04	33.9	0.65
Q203403	489	490	1.00	<5	0.05	17.5	1.03
Q203404	490	490.78	0.78	<5	0.03	21.8	0.69
Q203405	490.78	491.86	1.08	<5	0.08	327	0.61
Q203406	OREAS 111	OREAS 111	OREAS 111	417	10.7	>10000	31
Q203407	491.86	492.54	0.68	<5	0.13	5340	1.32
Q203408	492.54	493.08	0.54	<5	0.03	2260	0.82
Q203409	493.08	493.98	0.90	<5	0.06	1790	1.01
Q203410	493.98	494.63	0.65	<5	0.06	3800	1.44
Q203411	494.63	495.81	1.18	<5	0.01	93.2	0.82
Q203412	495.81	496.75	0.94	<5	0.02	7.9	1
Q203413	496.75	497.45	0.70	<5	<0.01	8.6	1.13
Q203414	497.45	498	0.55	<5	0.09	13.3	0.9
Q203415	498	499	1.00	<5	0.02	10.3	0.78
Q203416	OREAS 111	OREAS 111	OREAS 111	402	10.7	>10000	31.1
Q203417	499	500	1.00	<5	0.01	16.8	1.02
Q203418	500	501	1.00	<5	<0.01	9.7	0.9
Q203419	501	502	1.00	<5	0.02	8.6	1.31
Q203420	502	502.5	0.50	<5	<0.01	8.5	1.06
Q203421	502.5	503	0.50	<5	<0.01	6.6	1.12

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203422	503	504	1.00	<5	0.01	5.5	1.33
Q203423	504	505	1.00	<5	0.02	9.9	0.93
Q203424	505	505.82	0.82	<5	0.05	33.6	0.59
Q203425	1/4 Dup	1/4 Dup	1/4 Dup	<5	0.07	37.5	1.52
Q203426A	505.82	506.12	0.30	<5	0.05	47.2	0.77
Q203426B				<5	0.05	47.3	0.78
Q203427	506.12	506.45	0.33	<5	0.14	92.3	0.94
Q203428	506.45	507	0.55	<5	0.08	66.3	0.57
Q203429	507	508	1.00	<5	0.05	48.2	0.51
Q203430	508	509	1.00	<5	0.07	46.3	0.74
Q203431	509	509.41	0.41	<5	0.08	65.6	0.57
Q203432	509.41	509.70	0.29	<5	0.07	35.2	0.86
Q203433	Blank	Blank	Blank	<5	0.03	12.6	0.18
Q203434	509.7	510	0.30	<5	0.04	24.3	1.26
Q203435	510	511	1.00	<5	0.05	30.1	1.25
Q203436	511	512	1.00	<5	0.02	18.8	1.33
Q203437	512	512.7	0.70	<5	0.01	9.7	1.18
Q203438	512.7	513	0.30	<5	0.01	6.5	1.34
Q203439	513	513.7	0.70	<5	<0.01	5.7	1.3
Q203440	513.7	514	0.30	<5	<0.01	15.6	1.29
Q203441	OREAS 111	OREAS 111	OREAS 111	426	10.4	>10000	31.2
Q203442	514	515	1.00	<5	0.05	44.5	0.8

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203443	515	515.98	0.98	<5	0.04	26.8	1.04

SUPERIOR COPPER CORPORATION SPC.V

PROJECT	HOLE NO.	TARGET NAME	DRILLING COMPANY	LOGGED BY
Superior Project	SPC-15-08	1407-SE	Orbit Garant Inc.	M.Quinn
CLAIM NO.		START DATE	END DATE	TOTAL METERAGE
		December 1, 2015	December 6, 2015	489
TOWNSHIP		DISTRICT		
Ryan		Sault Ste. Marie		
DATUM/ZONE	UTM ZONE	NORTHING	EASTING	ELEVATION
NAD 83	16T	5211631	674288	280
		DEPTH	DIP	AZIMUTH
		COLLAR	-45.0	238.0
		100	45.4	238.2
		200	45.9	238.7
		300	46.0	241.0
		400	47.1	242.4
COMMENTS				

From	To	Rock Code	Modifier	Description
0	2.85	OVB		Overburden
2.85	19.24	5	f	Polymictic conglomerate. Pebbly sandstone supported, clasts upto 10cm, carbonate matrix with occasional pinkish hue (Mn? Rhodochrosite?)
19.24	26.93	5	e	Pebbly sandstone. Bedding at 20 TCA.
26.93	48.77	5	f	Polymictic conglomerate. Pebbly sandstone supported, clasts upto 10cm, carbonate matrix with occasional pinkish hue (Mn? Rhodochrosite?)
48.77	51.29	5	d	Intercalated sandstone-siltstone. Sand rich zone dominantly epidote altered, whereas silt-rich zone are orange-red (hem?) and cherty
51.29	52.69	8	a	Black, aphanitic, non-magnetic. Moderately-strongly fractured, fracture fill is Mn-carbonate (?).
52.69	133.4	5	f	Polymictic conglomerate. Pebbly sandstone supported, narrow beds of pebbly sandstone throughout. Clasts upto 10cm, carbonate matrix with occasional pinkish hue (Mn? Rhodochrosite?)
133.4	136.49	5	e	Pebbly sandstone. Bedding at 20 TCA.
136.49	137.08	6	a	Breccia. Clasts of 5e (?) in a red-brown aphanitic matrix. Fossil mud cracks?
137.08	146.63	6	b	Mixed sedimentary-sub-volcanic intrusive contact zone. Chaotic.
146.63	197.21	7	c	Ignimbrite (?). Some flow banding recognizable, but mostly chaotic.
197.21	209.58	7	c	More massive, and no flow banding. Fine grained. Upper contact is an estimate +/- 1m.
209.58	269.33	7	c	Ignimbrite (?). Well developed flow banding to 243m, short intervals of flow banding recognizable from 243m on, but mostly chaotic.
269.33	288.5	9	a	Massive, fine-medium grained, felsic unit. Texture and composition obscured by structure and alteration. Strongly fractured, sub-cataclastite. Moderately abundant MnCb.
288.5	296	9	b	Fault Zone, sheared to roughly 296m, cataclastitic to 303m. Distinct alteration from 291.3-294: brick red nodules (1cm) in burgundy red, fine grained matrix. A 1-3cm core of nodules, oriented at 20 TCA. are composed Qtz-Cb with brick red rims.
296	303	9	a	Strongly fractured. Sub-cataclastite. Abundant MnCb.

From	To	Rock Code	Modifier	Description
303	335.72	5	g	Basalt clast conglomerate.
335.72	337.16	9	a	Cataclastite, burgundy red.
337.16	348.72	7	c	Moderate-strongly fractured/veined. Patchy green-red alteration, green dominates in areas of increased fracturing/veining.
348.72	358.6	9	a	Cataclastite, burgundy red.
358.6	374.09	7	c	Felsite with KSpar phenocrysts/porphyroblasts. Green alteration (Ep) dominant, commonly strong red (hem) alteration marginal to pre-QCV structures. Trace CC.
374.09	378.6	5	g	Basalt clast conglomerate with strong epidote alteration in the matrix.
378.6	416.41	9	a	Cataclastite, burgundy red.
416.41	421.54	7	c	Brown-red, fine grained, no phenocrysts.
421.54	424.5	5	g	Basalt clast conglomerate with strong epidote alteration in the matrix.
424.5	429.35	7	c	Brown-red, fine grained, no phenocrysts. Fine hematite has been weathered out.
429.35	455.52	5	e	Pebbly sandstone. Pebbles of both magic and felsic, dominantly mafic. Dominantly medium grained, with some larger boulders > 30cm.
455.52	483.55	5	c	Sandstone with subordinate, thin pebble beds. Bedding at 15 TCA.
483.55	485	9	a	Very fine grained, lithified fault gouge. Burgundy red, hosts small angular clasts.
485	489	2	a	Amygdaloidal basalt (?).

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
3.11	20.25	Fz									Numerous hairline fractures in all orientations. Average spacing ~30cm.
		3.11	Cb	0.002	60						
		3.27	Cb	0.002	30						
		4.04	Cb	0.002	60						
		4.83	Cb	0.007	50	CnS	FF	Mss			
		5.11	Cb	0.003	55	FF					
		5.31	MnCb	0.004	60	FF	Mss				
		6.4	Cb	0.01	40	FF	Mss				
		6.42	MnCb	0.005	60	FF	TecBx				MnCb cuts Cb. MnCb has 1-2mm of silica at the vein margins.
		6.5	MnCb	0.003	60	FF	TecBx				
		6.84	Cb	0.003	40	FF	Mss				
		8.02	Cb	0.001	15	FF	TecBx				
		8.05	QCV	0.006	50	FF					QCV cuts carbonate vein.
		8.51	MnCb	0.008	60	CnS	FF				
		8.98	Cb	0.015	45	Mss	CnS	Bx			
		9.3	QCV	0.004	30	Dru	CnS	FF			LSEV (?) Undulating QCV vein, Carbonate at margins.
		9.68	QCV	0.15	50	Dru	Cns	Bx			LSEV (?). Vein mostly rotted out. Possible aduaria.
		9.85	Cb	0.002	40	FF	Mss				
		9.94	Cb	0.002	50	FF	Mss				
		10.21	QCV	0.009	35	Lat	Cns	Bx			LSEV (?).
		10.35	Cb	0.004	40	FF	Mss				
		10.87	Cb	0.02	20	Bx	Mss				
		10.89	QCV	0.01	20	Lat	Dru				LSEV (?). Possible adularia.

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		11.11	Cb	0.002	30	FF	TecBx				
		13.64	Cb	0.003	40	CnS	Lat	FF			
		13.89	Cb	0.002	30	FF	Mss				
		14.29	Cb	0.003	30	FF	TecBx				Undulating contacts with minor splays.
		14.37	Cb	0.003	25	FF	TecBx	Pns			
		14.56	MnCb	0.005	50	CnS	FF				Weak ginguro texture?
		14.65	MnCb	0.015	35	CnS	Lat				Weak ginguro texture?
		15.06	Cb	0.002	40	FF	Mss				
		15.13	MnCb	0.008	40	CnS	Lat				
		15.34	Cb	0.003	30	FF	CnS	TecBx			
		15.78	QCV	0.015	45	Dru	Lat	CnS			
		15.99	Cb	0.005	45	FF					
		16.42	Cb	0.008	50	CnS	Mss				Minor MnCb.
		17.03	Cb	0.004	45	FF					
		17.51	MnCb	0.004	50	FF	TecBx	CnS			Weak ginguro texture?
		17.6	MnCb	0.01	55	FF	CnS	Mss			
		18.38	Cb	0.002	25	FF					
		18.54	MnCb	0.005	65	FF					
		19.87	Cb	0.004	45	FF					
		27.36	CHV	0.015	60	CnS	Rel				(?). QCV? Unclear.
		28.74	Cb	0.004	40	CnS	FF				
		29.43	Cb	0.002	40	FF					
		30.93	Cb	0.003	45	FF	TecBx				
		31.3	MnCb	0.003	45	FF	TecBx				
		31.6	Cb	0.002	50	FF					
		31.66	MnCb	0.006	45	CnS	FF				
		31.84	MnCb	0.01	65	FF	TecBx				

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		32.35	Cb	0.001	35	FF					
		33.14	Cb	0.002	55	FF					
		33.23	MnCb	0.003	45	FF					
		34.36	MnCb	0.01	45	FF	TecBx				
		34.48	MnCb	0.008	50	FF	TecBx	CnS			Silica at margins.
		34.63	MnCb	0.005	40	TecBx	FF	Bx			
		34.75	MnCb	0.01	30	TecBx	FF	Bx			
		37.74	Cb	0.003	50	FF					
40.5	40.78	Vn	MnCb								Dominantly MnCb flooding conglomerate matrix.
		42	Cb	0.004	60	FF	Bx				
		42.27	Cb	0.004	40	FF					
		43.03	Cb	0.002	50	FF					
		43.89	Cb	0.004	40	Cns					
		44.04	Cb	0.004	55	FF					
		45.09	Cb	0.002	60	CnS					
		45.51	Cb	0.005	70	CnS	TecBx				
		46.1	Cb	0.002	55	FF					
		46.52	MnCb	0.004	55	FF					
46.75	47.13	Vn	MnCb			MF					Dominantly MnCb flooding conglomerate matrix.
47.65	47.89	Vn	MnCb			MF					Dominantly MnCb flooding conglomerate matrix.
		48	Cb	0.007	70	CnS					
		48.05	Cb	0.005	55	FF					
		48.64	QCV	0.003	55	CnS	Dru				
		48.68	Cb	0.03	55	Bx					

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		48.79	Cnt		20	Bx					
48.77	51.29	Bd	Bd		50						Sandstone/Siltstone bedding.
		49.23	Cb	0.002	50	FF	TecBx				
		50.36	QCV	0.005	40	CnS	FF				
		51.23	Cb	0.006	55	FF	TecBx				
50.29	52.83	Fz	MnCb		40						Conjugate fractures at 40/40 in opposite directions.
		52.07	MnCb	0.07	50	Bx					Lower margin has healed gouge.
		52.2	MnCb	0.02	50	Bx	CnS				
		52.25	MnCb	0.04	50	Bx	CnS				
		52.3	MnCb	0.01	50	FF					
		52.65	MnCb	0.04	45	Bx					
		52.68	QCV	0.03		Dru	Lat	Frag			Ginguro texture (?). Brown colouration. Fragments in MnCb vein, width is a minimum.
		52.74	Cb	0.05	45	Bx					
		52.81	Cb	0.003	60	FF					
		53	Ep	0.004	60	CnS				Spec	Margins to Cb vein.
		53	Cb	0.004	60	FF					Core of Ep vein.
		55.28	Cb	0.006	45	TecBx	FF				
		56.15	Cb	0.003	55	FF					
		57.91	MnCb	0.007	70	CnS	FF				
		58.54	Cb	0.005	60	TecBx	FF	CnS			
		59.66	Cb	0.005	55	TecBx	FF				
		60.52	Cb	0.01	70	TecBx	FF				
		60.67	Cb	0.002	55	TecBx	FF				
		61.25	QCV	0.008	60	CnS	Lat	FF			

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		61.38	QCV	0.003	60	FF	TecBx	CnS			
		61.43	QCV	0.003	20	FF	TecBx				Splay off previous.
		62.1	QCV	0.011	65	CnS	Bx				Ginguro texture (?). Brown coloured silica.
		63.44	Ep	0.01	40	Bx	TecBx			Spec	
		63.63	Cb	0.07	40	Bx	Mss				
		64.16	MnCb	0.002	65	FF					
64.85	65.17	Vn	Cb			MF					Dominantly Cb flooding conglomerate matrix. Minor MnCb
		67.15	MnCb	0.002	40	FF	TecBx				
		68.6	Cb	0.002	45	FF	TecBx				
68.69	69.26	Bz	QCV	0.1	45	Bx	Dru	Lat	Hem		LSEV (?). Vein is brecciated. True width and recovery unclear, but at least 10cm of total vein material measured.
		70.3	MnCb	0.005	80	Bx	TecBx	Frag			Fragment in narrow healed-gouge zone
		70.31	Ep	0.003	80	FF	TecBx			Spec	Not like other veins. Soft, slightly green mineral. Sericite (?). Connected by FF vein to structure at 70.37m.
		70.37	Ep	0.003	80	FF	TecBx			Spec	Not like other veins. Soft, slightly green mineral. Sericite (?). Connected by FF vein to structure at 70.31m.
		70.93	QCV	0.006	45	CnS	Bx				Ginguro texture (?). Brown coloured silica.
71.9	72.71	Vn	MnCb			MF					
73.1	73.83	Vn	MnCb			MF					
74.4	74.85	Vn	MnCb			MF					
79.45	79.92	Vn	Cb	0.002	5	FF					Carbonate flooding matrix marginal to vein. Given vein angle TCA, zone is likely much narrower.

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
79.93	80.35	Vn	Cb	0.002	5	FF					Carbonate flooding matrix marginal to vein. Given vein angle TCA, zone is likely much narrower.
81.5	82.5	Vn	Cb			MF					
		82.66	Cb	0.004	80	FF					
82.95	83.45	Vn	Cb			MF					
		92.66	Cb	0.02	60	Mss	Bx				
		95.53	Cb	0.02	80	Bx					
95.96	96.55	Vn	Cb			MF					
99.4	94.6	Vn	MnCb			MF					
108.78	119.39	Dz	Cb								Numerous narrow veins, and vein fragments. Mostly Cb, with minor MnCb. Average spacing difficult ot estimate, 10-20cm in the core.
		108.84	MnCb	0.03	55	Lat	FF	TecBx		Ser	1.0cm splay at 15 TCA
		108.89	MnCb	0.01	50	Lat	FF	TecBx		Ser	Connects via splay to previous.
		109.19	Cb	0.003	30	FF	CnS	TecBx			
		109.27	MnCb	0.002	50	FF					
		109.37	MnCb	0.005	50	FF					
		109.53	MnCb	0.005	50	FF					Oblique to last.
109.96	111.34	Cz	Cb			TecBx	Bx				Rock is chaotic, with more anglular clasts. Increased gouge. Numerous FF veins or vein fragments.
		111.15	Cb	0.004	20						
		112.05	Cb	0.005	65	CnS	TecBx	FF			
		112.19	Cb	0.004	65	CnS	TecBx	FF			
		112.24	Cb	0.006	65	TecBx	Frag				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		113.72	MnCb	0.007	80	Bx	Frag	FF			
		113.77	QCV	0.05	80	Dru	Lat			Ser	
		114.95	MnCb	0.015	70	CnS	FF				
		115.25	MnCb	0.01	40	FF	TecBx				
		115.31	MnCb	0.01	40	FF					
		115.86	MnCb	0.003	50	FF					
116.91	117.3	Bz	MnCb		80						Numerous interconnected FF veins with MnCb, spaced 1cm.
	Cz	117.16	MnCb	0.05	80						Core of Bz.
		119.23	QCV	0.007	60	CnS	FF			Spec	Semi massive, fine grained spec hem.
136.76	139.86	Bz	Sediment			Bx				Hem	Brown-orange-red matrix. Unclear as to whether paleo-mud cracks or intrusive related.
146.63	282	?	?								Chaotic sub-volcanic intrusive unit. Only noteworthy structures are recorded. Difficulty determining minor structures from primary rock texture.
		155.5	QCV	0.009	50	Lat	Dru	PnS			
		155.95	MnCb	0.007	60	FF					
		156.32	MnCb	0.002	75	FF					
172.42	172.64	Fz	Cb			TecBx	FF				
		116.05	QCV	0.005		FF					
		186.33	Cb	0.005	30	FF					Slight green hues within.
		187.6	MnCb	0.005	60	FF					
		189.86	MnCb	0.01		TecBx					
		189.88	Ep	0.003	25	Rel	CnS	FF			Ep vein with clean Cb in the core and MnCb at the margins.

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		190.3	MnCb	0.001	30	FF				K	Potassic altered margins?
		190.9	Cb	0.003	70	FF					Clean Cb vein. Late?
		190.94	Cb	0.001	70	FF	TecBx				
		191.57	Cb	0.002	60	FF	CnS				
191.74	193	Fz	MnCb								Conjugate fractures at 30/60 TCA. Numerous hairline fractures with pink margins. Pink may be due to potassic alt,.
		193.04	QCV	0.03	85	FF					
		193.65	QCV	0.004	70	FF					
		194.77	QCV	0.005	70	FF	TecBx				
196.36	199.23	Bz	Sediment			Bx					Brown, fine grained matrix. Wall rock clasts.
196.61	196.98	Cz	Sediment			Bx					Brown, fine grained matrix. Wall rock clasts.
202.5	202.71	Bz	Ep			TecBx	Bx				Uncertain about composition of matrix material.
		212.41	MnCb	0.005	80	FF					Not like other MnCb veins. Hosts bright pink (
		214.78	Cb	0.003	50	FF	TecBx				
222	222.72	Bz	Sediment	0.01	5	Bx					Red-Brown fine grain material, as previous, and a narrow breccia structure that is sub-parallel TCA. Possibly a paleo-mud crack, but seems unlikely.
		233.81	Cb	0.005	60	FF	TecBx				
		234.46	Cb	0.002	65	FF					
		234.9	Cb	0.001	65	FF					
		235.59	Cb	0.002	65	FF					
237	237.6	Bz	Cb			TecBx	FF				

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		238	Cb	0.005	45	Frag	FF				
		239.69	Cb	0.001	65	FF					
		239.83	Cb	0.001	85	FF					
		243.59	Cb	0.001	70	FF					
		244.83	QCV	0.002	70	TecBx	FF				
		245.07	Cb	0.002	50	FF					
		245.42	Cb	0.09	60	TecBx	Rel				
246.69	253.35	Bz	Sediment			Bx				Hem	
		246.84	Cb	0.001	75	FF					
		246.87	QCV	0.001	75	Dru					
		246.9	Cb	0.002	75	FF					
		246.92	QCV	0.004	75	Lat					
		247.58	Cb	0.004	60	TecBx	FF				
		247.88	Cb	0.002	40	FF					
		248.84	Cb	0.004	60	TecBx	FF				
249.06	249.14	Bz	MnCb	0.06		TecBx	FF				
		249.94									
250.86	251.26	Fz	QCV	0.02	70	TecBx	FF				Largest vein is 2cm wide, interval includes 2-3 additional 0.5cm veins and numerous hairline fractures. Dominant orientation is 70 TCA.
251.92	252.82	Vz	QCV		50						Numerous QCV veins spaced 5cm on average. Orientation vary from 40-60 TCA.
		251.93	QCV	0.003		Frag					
		251.97	QCV	0.01	60	TecBx	FF				2 connected splays that make up a total of 1.0cm vein material
		252.02	QCV	0.002	60	FF					

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		252.08	QCV	0.004	60	FF					
		252.1	QCV	0.002	60	FF					
		252.15	QCV	0.001	60	FF					
		252.17	QCV	0.002	60	FF					
		252.22	QCV	0.005	40	FF					
		252.31	QCV	0.001	60	FF					
		252.41	QCV	0.001	55	FF					
		252.43	QCV	0.004	55	TecBx	FF				
		252.46	QCV	0.003	45	TecBx	FF				Splay off previous. Opposite dip direction
		252.59	MnCb	0.01	40	Rel					?. Grungy looking vein.
		252.76	QCV	0.004	50	Lat					upper contact at 50 TCA. lower contact at 70 TCA.
		254.06	Cb	0.001	50	FF					
		254.15	Cb	0.001	60	FF					
		254.26	QCV	0.003	75	FF					
		254.78	QCV	0.003	50	Dru	FF				
		255.13	QCV	0.004	50	FF					
		255.34	Cb	0.002	50	FF					
		255.62	Cb	0.001	70	FF					
		255.89	Cb	0.001	60	FF					
		256.06	QCV	0.003	45	TecBx	Rel				
		256.31	Cb	0.001	85	FF					
		256.54	Cb	0.002	85	FF					
		256.71	Cb	0.002	50	FF					
		256.93	Cb	0.003	70	FF					
		257.07	QCV	0.003	65	CnS	FF				
		257.19	QCV	0.004	55	Bx	TecBx	FF			

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		257.25	QCV	0.05	55	Lat	Dru	TecBx			
		257.34	QCV	0.002	75	Dru	FF				
		257.38	QCV	0.002	75	FF					
		257.43	QCV	0.008	70	Lat	TecBx	FF			
		257.6	Cb	0.001	50	FF					
		257.69	Cb	0.001	75	FF					
		257.78	Cb	0.001	45	FF					
		257.9	Cb	0.001	80	FF					
		257.99	Cb	0.002	50	FF					
		258.07	Cb	0.001	70	FF					
		258.32	Cb	0.001	70	FF					
		258.6	Cb	0.001	60	FF					
		265.54	MnCb	0.01	50	TecBx	FF		MnCb		
		267.04	Cb	0.002	40	FF					
		268.33	Cb	0.001	80	Frag	FF				
		268.71	Cb	0.003	60	Frag	FF				
		268.77	Cb	0.002	85	Frag	FF				
		271.03	Cb	0.002	25	FF	TecBx				
		271.98	Cb	0.002	35	FF					
		272	Cb	0.002	35	FF					
		272.58	Cb	0.002	50	FF					
		272.93	Cb	0.001	60	FF					At an acute angle to next. Same dip direction.
		272.95	Cb	0.001	20	FF					At an acute angle to previous. Same dip direction.
273.57	275.64	Flt			20	Shr			Hem		
276.22	276.82	Vn	Cb	0.002	10	FF			MnCb		

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		277.12	Cb	0.003	50	FF			MnCb		
278.79	279.28	Vn	Cb	0.002	5	FF			MnCb		
280	283.5	Fz	Cb			Frag	FF		MnCb		Numerous vein fragments with Cb and Kao fill.
282.2	296	Flt			20	Shr					Sheared fault zone. Contains blocks that are less sheared. Lower boundary is an estimate.
296	303	Flt	Cat			Cat					Cataclastic fault.
		307.08	Cb	0.002	70	FF					
		307.29	Cb	0.001	50	FF					
		308.44	Cb	0.002	60	FF					
		308.69	Cb	0.002	60	FF					
		310.27	Cb	0.002	40	FF					
		317.46	Cb	0.004	75	FF					
		318.14	Cb	0.005	90	FF	CnS				
		325.04	Cb	0.01	45	FF	Mss				
		327.23	Cb	0.002	20	FF			Ep		
		329.03	Cb	0.003	45	FF			Ep		
		330.26	Cb	0.003	70	FF					
		330.47	Cb	0.003	60	FF					
		331.31	Cb	0.003	65	FF					
		331.87	QCV	0.004	90	FF	Cns				-355.0876356
		333.15	Cb	0.008	55	FF					
		333.41	Cb	0.002	45	FF					
		335.65	Cb	0.007	65	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
337.16	352.1	Vz	QCV		50	FF	CnS				Numerous Hairline-1.0cm fractures/veins. ~122 QCV veins >0.5mm, ~20 QCV >2mm, maximum vein width is 1.0cm. Orientation at 30-50 TCA.
348.72	358.6	Flt	Cat		20	Cat	Shr				
358.6	374.09	Vz	QCV		40	FF	Lat	CnS	Ep	CC	Numerous Hairline-10.0cm fractures/veins. ~126 QCV veins >0.5mm, ~39 QCV >2mm, ~22 QCV >0.5cm, maximum vein width is 10.0cm. Orientation at 30-50 TCA.
374.09	378.6	Fz	Cb								Numerous vein fragments with Cb fill.
378.6	416.41	Flt	Cat			Cat					Cataclastic fault.
		417.36	Cb	0.005	10	TecBx	FF	PnS			
426.75	427.11	Vn	Cb	0.004	10	TecBx	FF	PnS			
		431.87	Cb	0.002	80	FF					
		432.91	Cb	0.001	70	FF					
		435.3	Cb	0.003	20	FF					
		436.84	Cb	0.003	50	FF					
		437.27	Cb	0.002	40	FF					
		437.61	Cb	0.006	90	FF					
		437.95	Cb	0.002	70	FF					
		438.57	Cb	0.002	30	FF					
		438.75	Cb	0.001	50	FF					
		439.07	Cb	0.002	60	FF					
		440	Cb	0.004	30	FF					
		440.04	Cb	0.001	50	FF					
		440.06	Cb	0.003	50	FF					
		440.89	Cb	0.001	30	FF					

`

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		441.48	Ep	0.001	50	FF					
		442.64	Ep	0.002	30	FF					
442.85	445.42	Fz	Ep		30	TecBx	FF				Numerous, anastasmosing, epidote filled fractures, dominant orientation at 30 TCA.
445	445.42	Vn	Spec		30	FF					Abundant spec hem in epidote-carbonate structure. Appears that Cb was later than Ep.
445.64	445.84	Fz	Cb		70	FF					8 parallel carb veins over interval. Veins <1mm.
445.84	446.46	Vn	Cb	0.003	5	FF					Carbonate vein sub-parallel TCA.
447.27	448.24	Fz	Cb		60	FF					Carbonate filled fractures at 60 and sub-parallel TCA.
		449.3	Cb	0.005	70	FF					
		449.74	Cb	0.004	45	FF					
		451.15	Cb	0.005	60						
		453.53	Cb	0.002	30						
		454.85	Cb	0.04	30						Larger carbonate vein, truncated by slip at 70 TCA.
		455.83	Cb	0.002	60						
		456.05	Cb	0.005	60						
		471.2	Shr		70						Abrupt change in rock type, slickenslides on the joint surface. Likely more late displacing structures that have not been noted and should be re-logged if warranted. weak alteration and damage makes them subtle.
471.46	473	Flt	Gg								Burgundy red fault gouge.

`

SPC-15-08: Alteration

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
2.85	47	44.15	1	0	3	0	1	0	0	0	0		Silica conatined to QCV structures.
47	48.77	1.77	1	0	0	0	0	0	0	0	0	Mn-carbonate (?)	Matrix is dominantly pink carbonate (Mn? Rhodochrosite?). Silica conatined to QCV structures.
48.77	51.29	2.52	2	0	2	2	0	0	0	0	0		Sand rich zone dominantly epidote altered, whereas silt-rich zone are orange-red (hem?) and cherty
51.29	52.69	1.4	0	0	0	0	0	0	0	0	0	Mn-carbonate (?)	Black, aphanitic, non-magnetic. Moderately-strongly fractured, fracture fill is Mn-carbonate (?).
52.69	55.28	2.59	0	0	0	1	0	0	0	0	0		Minor intervals with diffuse epidote alteration.
55.28	86.62	31.34	1	0	2	1	1	0	0	0	0	Mn-carbonate (?)	
86.62	131.52	44.9	0	0	0	3	1	0	0	0	0		Strong epidote in matrix.
131.52	137.08	5.56	0	0	3	0	0	0	0	0	0	0	Matrix and mafic clasts are brown-red.
137.08	302	164.92	1	0	1	1	0	1	0	0	0	Mn-carbonate	Sub-volcanic intrusive, felsite, banded rhyolite. Unit is mostly chaotic and unclear what is alteration and what is primary.
302	335.72	33.72	0	0	1	3	2	0	0	0	0		Strong moderate-strong epidote alteration of the matrix.
335.72	337.16	1.44	0	0	3	0	0	0	0	0	0		Burgundy red cataclastite.
337.16	348.72	11.56	2	0	2	3	0	1	0	1		Mn-carbonate	Moderate-strong fracture/veining. Veins generally have silica margins and MnCb-Clay cores. Epidote (green) is dominant in zones of increased fracture/veining.
348.72	358.6	9.88	0	0	3	1	0	0	0	0	0		Burgundy red cataclastite.
358.6	374.09	15.49	3	0	2	3	0	0	0	1	0		Pink phenocrysts/porphyroblasts
374.09	378.6	4.51	0	0	0	3	1	0	0	0	0		Strong epidote in matrix.
378.6	416.41	37.81	0	0	3	0	0	0	0	0	0		

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
416.41	421.54	5.13	0	0	2	0	0	0	0	0	0		Felsite, red-brown colour.
421.54	424.50	2.96	1	0	1	3	0	0	1	0	0		
424.5	429.35	4.85	0	0	2	1	0	1	0	0	0		Felsite with hematite grained weathered out. Cut by structure with associated epitote and argillic alteration
429.35	483.55	54.20	0	0	0	2	2	0	0	0	0		Epidote altered sandstone.
483.5	485	1.50	0	0	4	0	0	0	0	0	0		Burgundy red cataclastite.
485	489	4.00	0	0	0	3	0	0	0	0	0		

From	To	Point	Mal	CC	Bn	Cpy	Py	Mt	Spec	Text 1	Text 2	Association	Notes
		53							Tr				
		63.44							10.00%				
		119.23							50.00%				
302	335.72								Tr				
362.5	364.25				Tr								

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203444	4.62	4.92	0.3	<5	0.02	12.1	0.42
Q203445	6.27	6.57	0.3	<5	0.16	554	0.45
Q203446	7.88	8.18	0.3	<5	0.01	11.7	0.39
Q203447	9.17	9.47	0.3	<5	0.02	22.1	0.42
Q203448	9.47	9.77	0.3	<5	0.01	30.5	0.37
Q203449	10.05	10.35	0.3	<5	0.02	21.6	0.47
Q203450	10.77	11.07	0.3	<5	0.01	29.4	0.31
Q203451	OREAS 111	OREAS 111	OREAS 111	415	10.9	>10000	33.1
Q203452	14.42	14.72	0.3	<5	0.02	44.5	0.47
Q203453	15.68	16.02	0.34	<5	0.04	40.4	0.46
Q203454	17.45	17.75	0.3	<5	0.02	22.7	0.4
Q203455	31.57	31.87	0.3	<5	0.01	17.5	0.52
Q203456	34.32	34.92	0.6	14	0.07	74.7	0.63
Q203457	40.49	40.84	0.35	<5	0.02	6.6	0.32
Q203458	43.79	44.09	0.3	<5	0.02	14.1	0.83
Q203459	46.74	48.04	1.3	<5	<0.01	6.2	0.54
Q203460	1/4 Dup	1/4 Dup	1/4 Dup	12	0.02	9.7	0.51
Q203461A	47.63	47.93	0.3	<5	0.02	14.8	1.09
Q203461B				<5	0.03	15.1	1.09
Q203462	47.93	48.23	0.3	<5	0.02	20.7	0.78
Q203463	48.98	49.5	0.52	<5	0.29	98.4	1.5
Q203464	52	52.35	0.35	50	0.61	822	0.54

`

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203465	52.53	52.83	0.3	19	0.11	92.3	0.72
Q203466	57.66	57.96	0.3	<5	0.03	39.8	0.59
Q203467	61.17	61.47	0.3	<5	0.02	21.9	0.41
Q203468	Blank	Blank	Blank	<5	0.05	14.9	0.26
Q203469	61.95	62.25	0.3	<5	0.02	31.3	0.46
Q203470	68.63	69.3	0.67	<5	0.06	86.5	1.01
Q203471	70.79	71.1	0.31	<5	0.03	16.1	0.71
Q203472	71.9	72.38	0.48	<5	0.02	7.7	0.51
Q203473	72.38	72.68	0.3	<5	0.02	7.1	0.42
Q203474	73.28	73.85	0.57	8	0.05	5.9	0.51
Q203475	99.34	99.64	0.3	<5	0.03	15	0.8
Q203476	OREAS 111	OREAS 111		440	9.79	>10000	32.3
Q203477	108.82	109.12	0.3	<5	0.03	27.5	0.56
Q203478	109.12	109.57	0.45	26	0.02	14.9	0.74
Q203479	113.6	113.9	0.3	<5	0.02	24.7	0.93
Q203480	114.51	115.01	0.5	8	0.03	46.1	0.86
Q203481	115.01	115.36	0.35	<5	0.03	72.6	1.25
Q203482	116.9	117.32	0.42	<5	0.04	80.9	0.9
Q203483	119.05	119.35	0.3	<5	0.03	3.9	1.08
Q203484	136.93	137.43	0.5	<5	0.02	10.9	1.39
Q203485	137.43	137.73	0.3	<5	0.03	10	0.9
Q203486	OREAS 111	OREAS 111		441	9.7	>10000	32.5

`

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
Q203487	138.79	139.24	0.45	<5	0.02	23.6	0.78
Q203488	145.38	146.32	0.94	<5	0.01	9	0.93
Q203489	155.8	156.1	0.3	<5	<0.01	16.9	1.31
Q203490	156.1	156.6	0.5	<5	0.01	6.1	0.92
Q203491	156.6	157.14	0.54	<5	0.01	5.2	1.06
Q203492	165	165.75	0.75	<5	0.02	4.4	1.2
Q203493	166.08	166.51	0.43	<5	<0.01	2.8	0.93
Q203494	184.49	185.16	0.67	<5	0.03	4.3	0.71
Q203495	1/4 Dup	1/4 Dup		<5	<0.01	4.1	0.8
Q203496A	189.71	190.04	0.33	<5	0.01	9.6	1.32
Q203496B				<5	0.01	3.9	1.42
Q203497	190.04	190.41	0.37	<5	0.01	4.9	1.29
Q203498	190.76	191.06	0.3	<5	0.01	4	1.09
Q203499	191.06	191.85	0.79	<5	0.01	5.1	1.23
Q203500	191.85	192.15	0.3	<5	0.01	6.8	1.18
S122001	192.15	192.6	0.45	<5	<0.01	21.5	1.13
S122002	192.6	193.13	0.53	<5	0.03	19.5	0.92
S122003	Blank	Blank		<5	0.03	11.5	0.2
S122004	196.61	196.99	0.38	<5	0.01	10.9	0.97
S122005	202.5	202.8	0.3	<5	0.03	4.8	1.52
S122006	244.61	244.99	0.38	<5	<0.01	19.5	1.82
S122007	245.3	245.6	0.3	<5	0.01	43.7	2.35

`

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122008	246.76	247.06	0.3	<5	0.01	14.9	1.59
S122009	247.06	248.06	1	<5	0.01	23.6	1.25
S122010	249	249.3	0.3	<5	<0.01	28	1.54
S122011	OREAS 111	OREAS 111		422	10.3	>10000	31.5
S122012	250.84	251.25	0.41	<5	0.11	421	1.14
S122013	251.92	252.82	0.9	<5	0.03	73.5	1.5
S122014	254.67	254.97	0.3	<5	0.01	16.6	1.2
S122015	255.09	255.49	0.4	<5	0.01	19.3	1.38
S122016	256.03	256.33	0.3	<5	0.01	18.4	1.81
S122017	256.33	257.03	0.7	<5	0.02	16	1.62
S122018	257.03	257.48	0.45	<5	0.03	27.3	1.28
S122019	261.72	262.3	0.58	<5	0.01	18	1.23
S122020	265.4	265.7	0.3	<5	0.01	41	1.73
S122021	OREAS 111	OREAS 111		425	9.63	>10000	29.8
S122022	276	277	1	<5	0.04	64.1	0.99
S122023	292	293	1	<5	0.05	11.2	1.05
S122024	300.6	301.45	0.85	<5	0.01	138	0.81
S122025	301.45	302.23	0.78	<5	0.21	24.9	0.62
S122026	337.17	337.77	0.6	<5	0.14	31	0.78
S122027	337.77	338	0.23	<5	0.17	63.6	0.61
S122028	339	340.08	1.08	<5	0.13	45.4	1.08
S122029	340.08	340.38	0.3	<5	0.05	55.5	0.54

`

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122030	1/4 Dup	1/4 Dup		<5	0.05	57.7	0.52
S122031A	340.38	340.68	0.3	<5	0.05	68.2	1.31
S122031B				<5	0.03	66.6	0.94
S122032	340.68	341.02	0.34	<5	0.04	52.6	0.69
S122033	341.02	341.45	0.43	<5	0.07	65.3	0.58
S122034	341.45	342.22	0.77	<5	0.5	78.1	0.41
S122035	342.22	342.52	0.3	<5	2.21	30.5	0.45
S122036	342.52	343.21	0.69	<5	0.11	48.1	0.38
S122037	343.21	343.63	0.42	<5	0.38	56.2	0.38
S122038	343.63	344.28	0.65	<5	0.1	35.8	0.4
S122039	Blank	Blank		<5	0.03	11.9	0.2
S122040	344.28	344.6	0.32	<5	0.21	39.1	0.68
S122041	344.6	346.2	1.6	<5	0.12	35.3	0.69
S122042	346.2	346.68	0.48	<5	0.16	57.7	0.7
S122043	346.68	347	0.32	<5	0.1	60.6	0.6
S122044	347	348	1	<5	0.04	52.1	0.43
S122045	348	348.7	0.7	<5	0.08	65.5	0.43
S122046	358	358.86	0.86	<5	0.08	239	0.48
S122047	OREAS 111	OREAS 111		426	10.65	>10000	32.3
S122048	358.86	359.16	0.3	<5	0.4	82.3	1.06
S122049	359.16	359.46	0.3	<5	0.31	123.5	0.78
S122050	359.46	359.76	0.3	5	0.21	147.5	0.73

`

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122051	359.76	360.32	0.56	<5	0.23	72.5	0.55
S122052	360.32	360.67	0.35	<5	0.14	80.9	0.6
S122053	360.67	361.23	0.56	<5	0.9	193.5	0.67
S122054	361.23	361.63	0.4	<5	1.51	115	0.77
S122055	361.63	362.54	0.91	<5	0.29	55.4	0.66
S122056	362.54	363.05	0.51	<5	0.36	46.9	0.7
S122057	OREAS 111	OREAS 111		NSS	0.62	1650	15.7
S122058	363.05	363.53	0.48	5	0.25	74.2	0.82
S122059	363.53	363.92	0.39	<5	0.22	33.3	0.81
S122060	363.92	364.58	0.66	7	0.34	718	2.06
S122061	364.58	364.93	0.35	<5	0.2	43.9	0.77
S122062	364.93	365.58	0.65	<5	0.19	54.6	0.67
S122063	365.58	365.88	0.3	5	0.16	154	1.16
S122064	365.88	366.5	0.62	<5	0.11	92.6	0.85
S122065	1/4 Dup	1/4 Dup		<5	0.12	87.3	0.85
S122066A	366.5	366.9	0.4	<5	0.06	123.5	1.52
S122066B				<5	0.09	118.5	1.07
S122067	366.9	367.9	1	<5	0.17	136	0.62
S122068	367.9	368.7	0.8	<5	0.18	136.5	0.64
S122069	368.7	369	0.3	<5	0.16	139	0.65
S122070	369	369.9	0.9	<5	0.15	146.5	0.98
S122071	369.9	370.27	0.37	<5	0.15	192.5	0.65

`

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122072	370.27	370.6	0.33	<5	0.12	121.5	0.66
S122073	370.6	371.47	0.87	<5	0.19	141.5	0.47
S122074	Blank	Blank		<5	0.03	12.1	0.18
S122075	371.47	372.16	0.69	<5	0.31	147.5	0.45
S122076	372.16	372.5	0.34	<5	0.64	1500	0.59
S122077	372.5	373	0.5	<5	0.28	60.4	0.44
S122078	373	374	1	<5	0.87	52.7	0.8
S122079	374	375	1	<5	0.03	106.5	0.41
S122080	375	377	2	<5	0.01	4.7	0.45
S122081	377	378.43	1.43	<5	0.01	5.7	0.41
S122082	OREAS 111	OREAS 111		442	10.2	>10000	31

`

SUPERIOR
COPPER CORPORATION
SPC.V

PROJECT	HOLE NO.	TARGET NAME	DRILLING COMPANY	LOGGED BY
Superior Project	SPC-15-09	E.Central	Orbit Garant Inc.	M.Quinn
CLAIM NO.		START DATE	END DATE	TOTAL METERAGE
3000716		December 7, 2015	December 17, 2015	627
TOWNSHIP		DISTRICT		
Ryan		Sault Ste. Marie		
DATUM/ZONE	UTM ZONE	NORTHING	EASTING	ELEVATION
NAD 83	16T	5209216	672548	
		DEPTH	DIP	AZIMUTH
		COLLAR	-45	250
		102	-46	256.9
		201	-45.9	254.1
		300	-46.4	257.1
		402	-46.4	259.5
COMMENTS				

From	To	Interval	Rock Code	Modifier	Description
0.00	4.50	4.50	OVB		Casing
4.50	68.00	63.50	6	b	Sub-volcanic intrusive with abundant xenoliths (?) or is brecciated and strongly altered (?). Very chaotic, siliceous, pink-red ground mass, some flow banding recognizable.
68.00	88.82	20.82	5	g	Basalt clast conglomerate. Strong alteration (amphibolite-pyroxene hornfels facies?) has turned the rock to a dark grey with green and red patches. Original rock texture (i.e. matrix/clast contrast) is washed out.
88.82	104.76	15.94	7	e	Felsic intrusive, fine-medium grained. Red-pink at margins, green in core. Abundant (10-20%) muscovite. Green patches developed around structure in dominantly red margins.
104.76	105.42	0.66	8	a	Mafic dyke. Moderately magnetic. Contact at 60 TCA.
105.42	107.40	1.98	5	g	Strongly altered basalt clast conglomerate.
107.40	108.27	0.87	7	b	Weak flow fabric. Kspar replacing feldspars.
108.27	108.96	0.69	5	g	Strongly altered basalt clast conglomerate.
108.96	116.17	7.21	7	b	Quartz Feldspar Porphyry. KSpar phenocrysts up to 3mm, Qtz phenocrysts up to 3mm.
116.17	140.90	24.73	5	g	Strongly altered basalt clast conglomerate.
140.90	141.75	0.85	8	a	Mafic Dyke. Black, aphanitic, moderately magnetic.
141.75	148.80	7.05	5	g	Strongly altered basalt clast conglomerate.
148.80	151.00	2.20	8	a	Mafic Dyke. Black, aphanitic, moderately magnetic. Lower contact blocky.
151.00	162.00	11.00	5	g	Strongly altered conglomerate.
162.00	165.55	3.55	7	b	Quartz Feldspar Porphyry. Feldspar phenocrysts up to 5mm, Qtz phenocrysts up to 3mm. Overall green colour.
165.55	222.00	56.45	5	g	Strongly altered conglomerate. Dark, original texture assimilating. Amphibolite facies?
222.00	223.62	1.62	8	a	Mafic Dyke. Black, aphanitic, moderately magnetic.
223.62	232.82	9.20	5	g	Strongly altered conglomerate.
232.82	234.30	1.48	8	a	Mafic Dyke. Black, aphanitic, moderately magnetic.

From	To	Interval	Rock Code	Modifier	Description
234.30	241.91	7.61	5	g	Strongly altered conglomerate. Dark, original texture assimilating. Amphibolite facies?
241.91	243.00	1.09	6	c	Sub-angular clasts of 8a in a dark grey (chl?) matrix.
243.00	243.70	0.70	9	c	Rock fragments and rock chips of mafic volcanic over interval.
243.70	246.05	2.35	5	g	Strongly altered conglomerate.
246.05	247.65	1.60	8	i	Sub-porphyritic texture. Plag laths up to 5mm.
247.65	321.00	73.35	5	g	Strongly altered conglomerate.
321.00	321.35	0.35	8	a	Mafic Dyke. Black, aphanitic, moderately magnetic.
321.50	477.22	155.72	5	e	Strongly altered basalt clast conglomerate. Ep-Hem-Arg.
477.22	523.14	45.92	2	g	Mg-Cg mafic unit with gabbroic texture. Moderately magnetic.
523.14	531.59	8.45	8	a	Black, aphanitic to fine grain. Moderately magnetic.
531.59	566.95	35.36	2	g	Mg-Cg mafic unit with gabbroic texture. Moderately magnetic.
566.95	568.95	2.00	8	a	Black, aphanitic to fine grain. Moderately magnetic.
568.95	582.00	13.05	5	e	Strongly altered basalt clast conglomerate. Ep.
582.00	592.54	10.54	8	a	Aphanitic to fine grained mafic unit. Dense, moderately magnetic.
592.54	627.00	34.46	5	e	Strongly altered basalt clast conglomerate. Dark grey alteration (amphibolite facies?), moderately magnetic.
EOH	EOH	EOH	EOH	EOH	EOH

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
4.5	68	Bz	EpChl								Very chaotic felsite with patches, nodules, and bands of light-dark green alteration.
		70.79	Qtz	0.002	45	FF	Mss				Wormy
		72.88	QHV	0.002		CnS					
		73.08	QCV	0.005	65	Bx					
		74.21	Qtz	0.003	30				Hem		Wormy
		74.25	Qtz	0.003	45						
		80.31	Ep	0.003	70						
		81.32	Qtz	0.002	40						
		81.54	Qtz	0.002	55						
87.45	88.63	Vz	QCV		65	Lat	CnS	TecBx	Hem		White, pink, and green phases.
87.66	88.63	Cz	QCV								Core to Vz.
		87.7	QCV	0.020	60	Bx	FF				White, pink, and green phases.
		87.75	MnCb	0.005	90	Mss	FF				Pink Carbonate
		87.96	Cb	0.010	45	TecBx	FF				
		88.12	QCV	0.050	65	Lat	CnS	Bx			White, pink, and green phases.
		88.21	QCV	0.01	65	Lat	CnS				White, pink, and green phases.
		88.41	Cb	0.005		TecBx	Rel	Frag			Fragments of Cb
		88.56	Cb	0.010	60	CnS	Rel				
		88.62	Cnt								Fault contact
		88.62	Gg	0.010	60						Gritty fault gouge. Grey. Drill hole cave in?
101.43	101.58	Fz	Cb	0.001	70	FF					8 narrow (<1mm) carbonate filled fractures.
		104.76	Cnt		40						Fault contact
		104.76	Cb	0.005	40	FF	TecBx	Bx			
		107.39	Cnt		30						Intrusive contact
		108.25	Cnt		45						Intrusive contact

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		108.27	Cb	0.002	35	FF					
		108.35	Cb	0.002	45	FF					
		108.96	Cnt		40						Intrusive contact
110.15	122.6	Vz	QCV		60	TecBx	FF		K		Numerous QCV veins. 0-5cm true widths, Most frequently 0.5-2mm. Varying orientations, dominant 60 TCA. Potassic altered margins (pink vein margins). Only veins >2mm are recorded.
110.15	116.17	Cz	QCV		60	TecBx	FF				Core zone to Vz.
		111.37	QCV	0.05	60	CnS	Lat	Dru			
		111.59	QCV	0.02	60	CnS	Mss				
		112.05	QCV	0.004	65	Dru	FF				
		112.09	QCV	0.003	55	Dru	FF				
		116.79	Cb	0.002	45	CnS	FF				Orange-red banding
117.27	117.4	Fz	QCV		60	TecBx	FF				1-4mm fractures. Primary orientation 60 TCA, splays at 60 in the opposite direction.
		117.54	Cb	0.003	50	CnS	FF				Orange-red banding
		117.84	Cb	0.003	45	FF					
		118.21	Cb	0.003	45	FF					
		118.4	QCV	0.015	70	CnS	Lat				Orange-red banding
		119.5	Cb	0.003	40	PnS	FF				
119.70	122.6	Cz	QCV						hem		
		119.72	Cb	0.004	40	CnS	FF	Bx			Orange-red banding
		119.8	Cb	0.001	40	FF					Orange-red banding
		119.91	Cb	0.050	40	TecBx	CnS	FF			Orange-red banding
		120.2	QCV	0.1	70	Dru	CnS				Hosts soft, blue, fine-grained aggregate. Brucite (?)

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		120.63	Cb	0.02	50	CnS					
		120.78	Cb	0.004	85	FF					
		120.94	Cb	0.002	40	TecBx	FF				Connected to next, same dip direction.
		120.95	Cb	0.002	25	TecBx	FF				Connected to previous, same dip direction.
		121.06	Cb	0.010	55	TecBx	FF				
		121.07	Cb	0.002	50	TecBx	FF				
		121.13	Cb	0.005	65	TecBx	FF				
		121.26	Cb	0.002	75	TecBx	FF				
		121.28	Cb	0.003	35	TecBx	FF				
		121.3	Cb	0.002	60	TecBx	FF				
		121.35	Cb	0.003	55	TecBx	FF				
		121.37	Cb	0.002	50	TecBx	FF				
		121.41	Cb	0.002	85	TecBx	FF				
		121.47	Cb	0.006		Frag	FF				
		121.58	Cb	0.010	60	Frag	FF				
		121.86	Cb	0.001	50	FF					
		121.9	Cb	0.002	50	FF					Displaced by late movement.
122.09	122.6	Cz	Cb		40	TecBx	FF	Frag			Abundant vein fragments, truncated, deformed.
125.32	127.45	Fz	Ep		55	TecBx	Rel	FF			1-5mm fractures/veins in various orientations, dominant 55 TCA. Conglomerate matrix dominantly altered to epidote.
		128.17	Cb	0.004	25	FF	PnS				
		128.42	Cb	0.01	20	FF	Mss				
		128.59	QCV	0.005	20	CnS	TecBx	FF			
		129.38	Cb	0.01	30	TecBx	Rel	FF			

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
129.46	133.54	Fz	Ep			TecBx	Rel	FF			1-5mm fractures/veins in various orientations. Conglomerate matrix dominantly altered to epidote.
		129.47	QCV	0.005	25	CnS	FF				Quartz concentrated at margins
		130.45	Cb	0.02	40	CnS	FF	Frag			
137.52	138	Vn	Cb	0.030	5	Bx	Mss			Mal	
		142.19	Ep	0.001	35	FF					
		143.81	Ep	0.001	50	FF					
		143.86	Ep	0.001	50	FF					
		144.04	Cb	0.001	25	FF					
		144.32	Cb	0.001	35	FF					
		144.59	Ep	0.001	35	FF					
		144.94	Ep	0.001	45	FF					
		145.02	Cb	0.003	55	FF					
		145.86	Ep	0.002	45	FF					
		147.14	Ep	0.003	20	FF					
		148.8	Cnt		35						
151	152	Flt			10						Blocky lower contact to 8a. Weak slickenslide development on joint surfaces.
		153.47	Ep	0.001	45	FF					
		153.8	Cb	0.003	40	FF					
		154.24	Cb	0.004	40	FF					
154.5	155.67	Vn	Cb	0.010	5	CnS	TecBx				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
159	162.26	Vz	Cb		30	TecBx	FF	Frag	Hem		0.1-1.0cm fracture filling veins (TecBx), only veins >1.0cm recorded. Varying orientations, dominant orientation 30 TCA. Abundant veins and vein fragments over interval.
		159.28	QCV		65	Dru	FF				
		159.52	Cb		30	CnS	Bx				
		159.85	Cb		45	TecBx	FF				
		160.37	Cb			TecBx	FF				
		160.83	Cb		30	TecBx	FF				
		163.46	Cb		45	TecBx	Bx				
		164.12	Cb		30	TecBx	Bx				
		164.8	Cb		30	Frag					
165.55	170.3	Vz	Cb			TecBx	FF		Hem		0.1-4.0cm fracture filling veins (TecBx), only veins >1.0cm recorded. Varying orientations, dominant orientation 30 TCA. Abundant veins and vein fragments over interval.
		172.6	Cb	0.002	25	FF					Dip direction rotated ~90 degrees to next
		172.79	Cb	0.001	75	FF					Dip direction rotated ~90 degrees to last
176	176.18	Vn	EpChl	0.15	50	FF			Hem		Bright orange and green alteration
		177.9	Ep	0.01	40	FF					
		178.65	Ep	0.001	20	FF					
		180.25	Cb	0.002	25	FF					
		180.58	Qv	0.002	60	FF			Hem		
		182.86	Qv	0.001	65	FF			Hem		
		186.6	Ep	0.002	20	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		189.12	Cb	0.003	40	FF					
		190.35	QCV	0.003	60	FF	Cns				
		192.57	Cb	0.003	25	FF					
		192.67	Cb	0.002	20	FF					
		192.78	Cb	0.001	20	FF					
		193.1	EpChl	0.02	60	Rel					
		193.3	Cb	0.002	30	FF					
193.5	194.86	Vn	EpChl		5	Rel					
195.2	196.2	Vn	Cb	0.002	5	FF					
		195.36	QHV	0.010	70	Rel					
		195.4	QHV	0.010	85	Rel					
		196.94	QHV	0.01	65	Rel					
		197.4	Cb	0.002	20	FF					
		199.75	QHV	0.02	50	Rel					
		200.32	Qv	0.002	30	FF					
		201.11	Cb	0.001	20	FF					
		201.31	Cb	0.002	40	FF					
		202.12	Cb	0.001	15	FF					
		202.44	Cb	0.003	20	FF					
		203.57	MnCb	0.002	30	TecBx	FF				
		204.1	Cb	0.001	10	FF					
		208.82	Cb	0.002	25	FF	PnS				
		209.79	Ep	0.001	65	FF					
		213.64	Ep	0.004	60	FF					
		215.09	Qv	0.001	50	FF			Hem		
220.87	221.2	Vn	EpChl	0.01	20	CnS	FF				Intense Ep-Hem-Chl alteration.
221.60	222.04	VnBx	Chl		30	Bx			Hem		

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		222.49	Qv	0.01	20	FF			Hem		
223.04	223.97	VnBx	EpChl			Bx			Hem		
		223.04	Cnt		40						Mafic dyke (8a).
		225.28	Cb	0.015	45	FF					
		226.62	Cb	0.006	30	FF					
		228.11	EpChl	0.010	80	Rep					
		228.54	EpChl	0.01	45	Rep					
		230.37	Cb	0.005	65	FF					
		230.48	Ep	0.004	20	FF					
		232.27	EpChl			Rep					
		232.89	Cnt		40						Mafic dyke (8a).
		234.05	Ep	0.001	50	FF					
		234.13	Ep	0.003	40	FF					
		234.19	Ep	0.002	40	FF					
		234.22	Py	0.001	40	FF					
		234.3	Cb	0.002	45	FF					
		234.32	Py	0.003	35	FF					3x 1mm fracture fillings
234.36	234.57	Vn	EpQ		40	FF					
		235.24	Qv	0.001	60	FF					
		239.04	Qv	0.004	70	FF					
		234.52	EpChl	0.002	60	Rep					
		234.61	QHV	0.003	60	Rep					
		234.81	Qv	0.002	45	FF					
		240.13	QHV	0.004	60	Rep					
		240.15	QHV	0.010	60	Rep					
		240.2	QHV	0.005	70	Rep					
		240.22	QHV	0.002	70	Rep					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		240.23	QHV	0.004	70	Rep					
		240.29	EpChl	0.005	70	Rep					
		241.17	EpChl	0.005	70	Rep					
		241.24	EpChl	0.005	80	Rep					
		241.55	EpChl	0.005	50	Rep					
		241.56	EpChl	0.005	60	Rep					
		241.62	EpChl	0.005	60	Rep					
241.91	242.76	Bx									Sub-angular clasts of 8a in a dark grey matrix.
		242.09	EpChl	0.006	60	Rep					
		242.96	Cb	0.040	90	FF					
243	243.7	Flt									
		246.05	Cnt		40						
		246.32	EpChl	0.005	25	Rep					
		248.34	EpQ	0.010	10	FF					
		249.56	QHV	0.01	45	Rep					
		249.68	EpChl	0.010	60	Rep					
		250.36	QHV	0.002	50	Rep					
		251.27	EpChl	0.010	30	Rep					
		251.73	Cb	0.002	35	FF					
		251.99	EpQ	0.008	70	Rep					
		252.4	EpChl	0.020	20	Rep					
		252.73	EpQ	0.002	20	FF					
		253.21	EpQ	0.040	60	FF					
		253.25	Cb	0.010	60	FF					
		253.51	EpQ	0.002	20	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
254.54	255.56	Vz	Cb		40	TecBx	FF				~23 carbonate veins >0.5cm. Orientation at 40 TCA.
		257.02	Cb	0.007	50	FF					
		257.77	EpQ	0.001	60	FF					
		260.47	Qv	0.001	15	FF					
		263.32	MnCb	0.002	60	FF					
		263.98	MnCb	0.003	55	FF					
		265.92	MnCb	0.005	60	FF					
		268.33	Cb	0.001	15	FF					
		272.26	MnCb	0.030	50	FF	CnS				
		283.73	MnCb	0.020	60	FF	CnS				
		287.53	Cb	0.001	20	FF					
		287.86	Cb	0.001	25	FF					
293.09	293.57	Vn	Cb	0.005	5	FF	Mss				
		296.6	Cb	0.001	30	Ff					
		300.09	MnCb	0.003	60	FF					
		300.32	Cb	0.005	20	FF	PnS		Arg		
300.77	301.15	Bx	MnCb	0.010		TecBx	FF				Intersecting veins at 15 and 30 TCA.
		304.8	QHV	0.010	50	Rep	Rel				
		306.79	Cb	0.001	30	FF					
		308.58	MnCb	0.002	25	FF					
		308.73	Cb	0.001	20	FF					
		309.25	Cb	0.003	20	FF					
		309.55	Cb	0.002	30	FF					
		309.69	Cb	0.005	20	TecBx	FF				
		310.08	Cb	0.002	20	FF					
		310.89	Cb	0.002	20	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		313.7	?	0.004	10	CnS					Dark brown-grey, banding. Composition undetermined. Unique.
		321	Cnt		35						
		321.35	Cnt		40						
		328.16	Cb	0.001	40	FF					
335.45	335.71	VnBx	QCV	0.080	20	Bx					
		336.1	Cb	0.007	20	FF	CnS				
		339	QCV	0.030	60	CnS	FF				Carbonate at margins, silica in core.
		341.34	Cb	0.002	20	FF					
		343.97	Cb	0.004	30	FF	TecBx				Dip orientation opposite and rotated ~90 to next.
		344.16	Cb	0.003	25	FF	TecBx				Dip direction opposite and rotated ~90 degrees to last.
		351.08	Cb	0.006	15	CnS	TecBx	FF			
		351.4	Cb	0.006	20	CnS	TecBx	FF			
		351.86	Cb	0.030	20	CnS	TecBx	FF			
		354.35	Cb	0.001	15	FF					
		354.56	MnCb	0.005	20	FF					
		357.87	MnCb	2.000	45	FF					
		358.15	MnCb	0.015	40	FF					
		364.72	Cb	0.001	30	FF					
369.86	370.28	Vn	Cb	0.002	15	FF					
		370.15	QCV	0.017	55	FF					
		370.47	MnCb	0.020	30	FF					
		371.92	Cb	0.002	20	FF					
		372.8	Cb	0.001	30	FF					
		372.82	Cb	0.001	30	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		372.85	Cb	0.001	30	FF					
		373.06	Cb	0.001	30	FF					
		373.09	Cb	0.001	30	FF					
		374.29	QCV	0.001	40	FF					
		374.6	Cb	0.001	30	FF					
		376.27	MnCb	0.004	30						
376.8	377.15	Vz				Dru					Several curved MnCb vein fragments, forming around clasts?
		379.95	MnCb	0.003	25	FF					
		380.82	Cb	0.01	40	FF					
		383.92	Qv	0.003	40	FF					
		383.99	Qv	0.003	55	FF			Ep		
		384.1	Qv	0.004	55	FF			Ep		Opposite dip direction to next.
		384.41	MnCb	0.002	30	FF					Opposite dip direction to last.
		385.42	Qv	0.004	30	FF			Ep		
385.57	387.92	CBrZ	Cb		30	TecBx	FF		Hem		Classic CBrZ. Strong hematite alteration of wall rock. Brittle fracturing throughout, carbonate fill.
		386.57	Qv			Frag			Ep		Qtz (EpQ) vein fragments in core of CBrZ.
		390.28	Kao								Vein broken.
		391.1	QCV	0.003	55	FF					
		391.98	Kao								Vein broken.
		396.29	Cb	0.002	40	FF					
		399.17	Cb	0.001	40	FF					
		399.22	Cb	0.001	40	FF					
		400.22	Cb	0.003	35	FF					
		403.79	Cb	0.002	25	FF					

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		403.88	Cb	0.002	25	FF					
		403.93	Cb	0.004	25	FF					
		404.48	Ep	0.003	65	Rel	FF		Arg		Moderate-strong argillic alteration up to 10 cm marginal. 3mm carbonate veins in core.
		405.88	Cb	0.003	55	FF			Arg		
		408.4	Cb	0.002	40	FF					
410	410.82	Flt									Very blocky core.
		411.55	MnCb	0.003	75	FF					
		416.1	EpChl	0.004	40	Rel					
		423.45	Cb	0.005	30	CnS	FF		Hem		CBrZ?
		429.92	Cb	0.001	30	FF					
431.03	476.74	Vz	QCV								Numerous carbonate with subordinate druzy quartz veins. Multiple core zones, but relatively abundant veining in-between core zones. Only veins >1.0cm, outside of core zones, are recorded. 2 dominant vein orientations, 30 and 70 TCA, same dip direction.
431.88	432.45	Cz	Cb		70						
		437.02	Cb	0.04	70	CnS	FF		Hem		
		438.02	QCV	0.05	70	Dru	CnS				
441.5	443.32	Cz	Cb		60	Bx	FF			CC, Ser	Silvery, metallic mineralization hosted by VnBx in core of zone. Massive sericite in some veins.
445.16	447	Cz	QCV		70	Bx	Dru				
		450.17	Cb	0.030	70	FF	Bx				
		450.37	Cb	0.030	70	FF	Bx				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
452.62	455.76	Cz	QCV		50	Bx	CnS	FF			
		456.85	Cb	0.010	40	FF	Bx				
		457.69	Cb	0.010	30	FF	Bx				
		458.72	Cb	0.010	30	FF	Bx				
		460.52	Cb	0.010	45	FF					
464.89	467.2	Cz	MnCb		70	Bx	FF				Very broken in sections.
470.35	472	Cz	MnCb		70	Bx	FF				
477.22	498.8	Vz	QCV		50				Hem		QCV veinlets (1-10mm, average ~3mm), widely spaced (15cm to >1m) outside of core zone. Most veinlets at 45-50 TCA.
		493.78	QCV								
496.28	498.8	Cz	QCV		45	TecBx	FF				Fracture zone, main veins at 45 TCA.
		515.43	Cb	0.003	30	FF			Hem		Orange, ankerite?
		515.49	Cb	0.002	30	FF			Hem		Orange, ankerite?
		518.99	Cb	0.003	30	FF					Orange, ankerite?
		521.63	Cb	0.012	70	TecBx	CnS	FF	Hem		
		522	Cb	0.01	15	CnS	FF				
		522.46	Cb	0.010	15	CnS	FF				
		523.14	Cnt		50						
		523.76	Qv	0.002	60	FF					
529.69	530.75	Vz	Cb			TecBx	FF				One 1-2cm vein at 10 TCA, followed by 2-3 fracture fill veins (5mm) at 60 and 10 TCA (stepwise at 10+60), and ending in very blocky core with fragments of 5mm vein fragments.
529.69	529.98	Vn	QCV	0.015	10	TecBx	FF		Qtz		Silicified wall rock.
		531.59	Cnt								Irregular, filling original fracture surface?

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		534.2	Cb	0.030	30	CnS	TecBx	FF	Hem		
		534.53	Cb	0.005	40	CnS	TecBx	FF	Hem		
		534.58	Cb	0.004	40	CnS	TecBx	FF	Hem		
		535.28	Cb	0.004	45	CnS	FF		Hem		
		535.38	Cb	0.007	45	CnS	TecBx	FF	Hem		
		537.59	Cb	0.008	40	CnS	TecBx	FF	Hem		Orange, ankerite?
		538.46	Cb			Frag					
		553.77	Cb	0.001	30	FF	TecBx				
		553.91	Qv	0.002	40	FF					
		554.16	Cb	0.002	85	CnS	FF				
		554.2	Cb	0.003	60	CnS	FF				
557.66	569.1	Flt									Blocky interval.
		557.66	Cb	0.030	55	CnS	TecBx	FF			
		558.05	MnCb	0.015		Frag					
559.52	559.82	Vn	QCV	0.200	45	Dru	Lat	Bx		CC	Crustiform. Appears out of place by up to 2m. In a blocky section and may be two separate veins at ~8cm each, spaced roughly 1-2m apart.
		563.5	MnCb			Frag					
		565.15	Cb			Frag					
		567.1	EpQ			Frag					
		570.33	MnCb			Frag					
		570.87	Cb			Frag					
		578.09	Cb	0.004	60	FF	Mss				
		582.31	Ep	0.002	30	FF			Ep	Py	
		582.52	Cb	0.005	40	CnS	TecBx		Hem		
		583.08	Cb	0.009	40	FF	Mss		Hem		

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		584.6	QCV	0.004	45	CnS	FF				Very clean looks QCV, not like others.
		587.44	Chl	0.003	30	Rel	FF			Py	
		587.94	EpQ	0.003	65	Rel	FF			Py	
		591.32	Chl	0.003	30	Rel	FF			Py	
		591.8	Chl	0.005	30	Rel	TecBx	FF		Py	
		592.57	Cb	0.040	60	Bx	CnS	FF	Hem		
		593.37	Cb	0.001	40	FF	TecBx		Ep		
		594.7	QHV	0.004	20	FF	TecBx				
		594.91	QHV	0.005	20	FF	TecBx				
		595.14	Cb			Frag					
		595.56	MnCb	0.02	55	CnS	FF	TecBx	Hem		
		596.03	MnCb	0.010	45	CnS	FF	TecBx	Hem		
		596.07	MnCb	0.150	40	CnS	FF	TecBx	Hem		
		598.01	Cb	0.001	40	FF	TecBx				
		599.75	MnCb	0.003	40	FF					
		602.58	Cb	0.002	20	FF					
		603.05	QHV	0.001	35	FF					
		603.32	QHV	0.002	35	FF					
		604.59	QHV	0.002	30	FF					
		608.64	QCV	0.005	20	CnS	FF				
		609.19	Cb	0.012	60	CnS	FF				
		610.85	QHV	0.003	30	FF	TecBx				
		615.41	QCV	0.003	45	FF					
		615.43	Cb	0.003	45	FF					
		621.02	MnCb	0.004	45	FF					
		622.72	Cb	0.004	45	FF					
		623.04	Cb	0.010	45	CnS	FF				

From	To	Point	Matrix	True Width	TCA	Text 1	Text 2	Text 3	WR Alt	Mx	Note
		625.25	MnCb	0.003	45	FF					
		626.37	Cb	0.002	45	FF					

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
4.50	68.00	63.50	0	0	2	2	0	1	2	0	0		Very chaotic felsite with patches, nodules, and bands of light-dark green alteration.
68.00	87.45	19.45	1	2	1	1	0	0	2	0	0		Silica resitricted to rare quartz veins. Unit is magnetic, reduce magnetics in green/red altered intervals.
87.45	88.63	1.18	2	0	2	0	0	1	0	0	0		Alteration marginal to Crack and Seal epithermal veins.
88.63	92.10	3.47	0	0	2	2	0	0	0	2	0		Margin of 7e intrusive. More fine grained (chill margin). Less abundant muscovite.
92.10	98.50	6.40	0	0	1	3	0	1	0	3	0		Core of 7e intrusive. Green, abundant muscovite.
98.50	104.76	6.26	0	0	2	2	0	0	0	2	0		Margin of 7e intrusive. More fine grained (chill margin). Less abundant muscovite.
104.76	105.42	0.66	0	2	0	0	0	0	0	0	0		Mafic Dyke (8a)
105.42	107.40	1.98	0	0	2	3	0	1	2	1	0		Raft of country rock (Basalt clast conglomerate)
107.40	108.27	0.87	0	0	1	0	0	0	2	3	0		QFP with weak flow fabric. Potassic (pink) overgrowths.
108.27	108.96	0.69	0	0	2	3	0	1	2	0	0		Raft of country rock (Basalt clast conglomerate)
108.96	116.17	7.21	2	0	2	3	0	0	0	3	0		Potassic (pink) replacements of feldspars, some feldspars altered to hematite (red). Potassic (pink) alteration up to 3mm marginal to QCV.
116.17	124.00	7.83	2	0	2	1	1	1	0	0	0		Hem appears to overprint epidote (?).
124.00	138.00	14.00	1	0	2	2	1	0	1	0	0		Epidote more dominant.
138.00	140.90	2.90	0	0	3	2	1	0	0	0	0		Strongly altered conglomerate
140.90	141.75	0.85	0	2	0	0	0	0	0	0	0		Mafic Dyke (8a)
141.75	148.80	7.05	0	0	3	2	1	0	0	0	0		Strongly altered conglomerate

From	To	Interval	Silica	Mag	Hem	Ep	Spec	Arg	Chl	K	Alb	Other	Notes
148.80	151.00	2.20	0	2	0	0	0	0	0	0	0		Mafic Dyke (8a)
151.00	162.00	11.00	2	0	3	2	1	0	0	0	0		Strongly altered conglomerate
162.00	165.55	3.55	0	0	1	3	0	1	0	1	0		Green QFP with feldspars breaking down to sericite (?).
165.55	170.50	4.95	0	0	3	1	0	1	0	0	0		
170.50	309.00	138.50	1	0	2	2	0	0	3	0	0		Amphibolite facies? Dark, texture destroying alteration. Very hard, polished core. Original rock conglomerate, but clasts and matrix becoming assimilated. Intermittently magnetic, possibly due to a nearby mafic dyke, difficult to determine as rock is dominantly a dark grey. Zones of bright red and green occur near structure.
309.00	378.00	69.00	1	0	1	3	2	1	0	0	0		
378.00	388.80	10.80	0	0	3	2	1	3	0	0	0		
388.80	427.50	38.70	0	0	3	3	2	2	0	0	0		Strongly altered conglomerate, mostly green (ep) matrix, some areas are red (hem)
427.50	476.74	49.24	2	0	3	3	0	2	0	0	0		
476.74	570.30	93.56	0	2	2	1	0	0	0	0	0		Dense, mafic unit, not strongly altered except around veins and veinlets. Hematite marginal to Cb vein zones.
570.30	582.00	11.70	1	0	0	3	0	2	0	0	0		
582.00	627.00	45.00	0	2	0	1	0	0	2	0	0		Hornsfel-Amphibolite facies alteration?

From	To	Point	Mal	CC	Bn	Cpy	Py	Mt	Spec	Text 1	Text 2	Association	Notes
		138.8	Tr										
		230.48					Tr						Ep-Cb vein at 20 TCA.
234.05	234.57						Tr						Pyrite fracture filling and in EpQ vein at 40 TCA.
481	505					Tr	Tr						Very trace. Mostly occurring as fracture fill and in relict EpChl and EpQ veins. occasional clot in gabbros.
582	592						Tr						Replacing Fe-Mgs or Mt (?). Associated with Ep, EpQ, EpChl, and Chl veins. Suspect there are more veinlets than recorded. Width and color make them difficult to see.

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122083	10.45	11.44	0.99	<5	0.03	32.3	0.77
S122084	28	28.82	0.82	<5	0.02	11	1.39
S122085	30.8	31.96	1.16	<5	0.05	12.5	0.81
S122086	64	65	1	<5	0.02	4.8	0.61
S122087	65	66	1	<5	0.02	5.1	0.65
S122088	66	67	1	<5	0.01	3.8	1.03
S122089	67	68	1	<5	0.01	3.7	0.59
S122090	80.27	81	0.73	<5	0.01	4.7	0.37
S122091	87.66	88	0.34	<5	0.06	179	0.47
S122092	OREAS 111	OREAS 111		446	10	>10000	30.4
S122093	88	88.35	0.35	<5	0.08	377	0.54
S122094	88.35	88.71	0.36	<5	0.13	496	0.44
S122095	90	91	1	<5	0.08	58.8	0.4
S122096	94	95	1	<5	0.05	15.1	0.57
S122097	101.4	101.7	0.3	<5	0.02	13.4	0.56
S122098	105.43	107	1.57	<5	<0.01	3.2	0.23
S122099	107	107.38	0.38	<5	<0.01	4.6	0.37
S122100	107.38	108.25	0.87	<5	0.22	4.7	0.88
S122101	1/4 Dup	1/4 Dup		<5	0.2	4.1	0.86
S122102A	108.25	109	0.75	<5	0.01	4	0.48
S122102B				<5	0.01	4.1	0.46
S122103	109	110	1	<5	0.01	2.7	1.09

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122104	110	111.34	1.34	<5	<0.01	3.8	1.66
S122105	111.34	111.64	0.3	<5	0.06	16.2	0.98
S122106	111.64	112.19	0.55	<5	0.06	11.6	1.66
S122107	112.19	113	0.81	<5	0.03	3.9	0.94
S122108	113	114	1	<5	0.01	3.5	1.13
S122109	Blank	Blank		<5	0.04	9.6	0.17
S122110	114	115	1	<5	0.01	4.2	0.87
S122111	115	116	1	<5	<0.01	3	0.78
S122112	116	116.3	0.3	<5	0.01	2.3	0.69
S122113	116.3	117	0.7	<5	0.01	1.9	0.36
S122114	117.27	117.57	0.3	<5	<0.01	3.2	0.29
S122115	118.15	118.45	0.3	<5	0.01	1.8	0.25
S122116	119.7	120	0.3	<5	0.01	10.8	0.37
S122117	OREAS 111	OREAS 111		415	9.99	>10000	29.6
S122118	120	120.3	0.3	<5	0.02	26.1	0.46
S122119	120.57	121.6	1.03	<5	0.03	6.7	0.34
S122120	126	127	1	<5	0.01	1.7	0.36
S122121	129.25	129.55	0.3	<5	0.02	7.9	0.35
S122122	130	130.5	0.5	<5	0.02	2.9	0.52
S122123	137.45	138	0.55	<5	0.01	3.6	0.16
S122124	153	153.6	0.6	<5	0.01	2.2	0.34
S122125	154.86	155.66	0.8	<5	0.01	7.7	0.3

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122126	159.23	159.67	0.44	<5	0.01	42.5	0.24
S122127	OREAS 111	OREAS 111		402	9.95	>10000	29.5
S122128	159.67	160.64	0.97	<5	0.02	45.4	0.29
S122129	160.64	161.04	0.4	<5	0.01	39.9	0.27
S122130	161.04	162	0.96	<5	0.05	209	0.54
S122131	162	163	1	<5	0.07	34.3	0.57
S122132	163	164	1	<5	0.06	34.7	0.6
S122133	164	165	1	<5	0.07	27.5	0.76
S122134	165	165.4	0.4	<5	0.07	30.4	0.74
S122135	165.4	165.7	0.3	<5	0.08	97.9	0.82
S122136	1/4 Dup	1/4 Dup		<5	0.08	94.5	0.69
S122137A	165.7	166.6	0.9	<5	0.1	250	0.66
S122137B				<5	0.1	249	0.65
S122138	166.6	167.6	1	<5	0.21	361	0.46
S122139	167.6	168	0.4	5	0.08	78.2	0.19
S122140	168	169	1	24	0.07	10.7	0.29
S122141	175.69	176.2	0.51	7	0.01	2	0.43
S122142	177.7	178.06	0.36	<5	0.01	2.4	0.25
S122143	178.4	178.8	0.4	<5	0.01	1.7	0.31
S122144	Blank	Blank		<5	0.03	13	0.22
S122145	183.74	184.1	0.36	<5	0.01	2	0.48
S122146	185	186	1	<5	0.01	1.2	0.31

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122147	195.3	195.6	0.3	<5	0.01	1.4	0.42
S122148	199.58	199.88	0.3	<5	0.01	1.1	0.31
S122149	220.87	221.2	0.33	<5	<0.01	1.7	0.49
S122150	221.6	222.04	0.44	<5	0.01	9.2	0.42
S122151	222.37	223	0.63	<5	<0.01	3.7	1.08
S122152	OREAS 111	OREAS 111		438	10.15	>10000	30.3
S122153	223	223.39	0.39	<5	0.02	13	1.1
S122154	226.06	225.58	-0.48	<5	0.04	5.2	0.31
S122155	232	232.45	0.45	<5	0.01	3.4	0.44
S122156	234	234.35	0.35	<5	0.43	58	1.08
S122157	234.35	234.65	0.3	<5	0.07	6	0.48
S122158	254.54	255.54	1	<5	0.01	15.5	0.31
S122159	272.12	272.42	0.3	<5	0.01	12.1	0.34
S122160	283.58	283.88	0.3	<5	0.01	4.4	0.21
S122161	293.1	293.59	0.49	<5	0.01	3.1	0.36
S122162	OREAS 111	OREAS 111		409	9.58	>10000	29.1
S122163	300.75	301.16	0.41	<5	0.01	9.7	0.25
S122164	309.18	309.82	0.64	<5	0.01	4.7	0.4
S122165	335.45	335.75	0.3	<5	0.01	8.1	0.3
S122166	335.93	336.23	0.3	<5	0.01	7.1	0.43
S122167	338.86	339.16	0.3	13	<0.01	4.1	0.45
S122168	343.9	344.2	0.3	<5	0.01	1.8	0.3

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122169	350.96	351.96	1	<5	0.01	6.2	0.41
S122170	354.42	354.72	0.3	<5	0.01	5.3	0.35
S122171	1/4 Dup	1/4 Dup		<5	0.01	2.3	0.41
S122172A	369.86	370.29	0.43	<5	0.01	4.5	0.52
S122172B				<5	0.01	3.9	0.7
S122173	370.29	370.65	0.36	<5	0.01	1.9	0.38
S122174	385.55	386.48	0.93	<5	0.01	36.6	0.52
S122175	386.48	386.78	0.3	<5	0.02	30.6	0.63
S122176	386.78	387.92	1.14	<5	0.08	9.6	0.71
S122177	387.92	388.78	0.86	<5	<0.01	2	0.39
S122178	431.88	432.45	0.57	<5	0.01	6.3	0.2
S122179	Blank	Blank		<5	0.03	17.5	0.18
S122180	434.85	435.67	0.82	<5	0.01	9.3	0.33
S122181	436.85	437.15	0.3	<5	0.02	4.3	0.28
S122182	437.15	437.85	0.7	<5	0.01	2.9	0.24
S122183	437.85	438.15	0.3	<5	0.02	15.5	0.35
S122184	438.15	439	0.85	<5	0.01	2.5	0.32
S122185	441.47	442.16	0.69	<5	0.04	79.6	0.39
S122186	442.16	443	0.84	<5	0.01	20	0.31
S122187	OREAS 111	OREAS 111		424	10.5	>10000	31.5
S122188	443	443.71	0.71	<5	<0.01	8.7	0.36
S122189	443.71	444.46	0.75	<5	<0.01	7.2	0.37

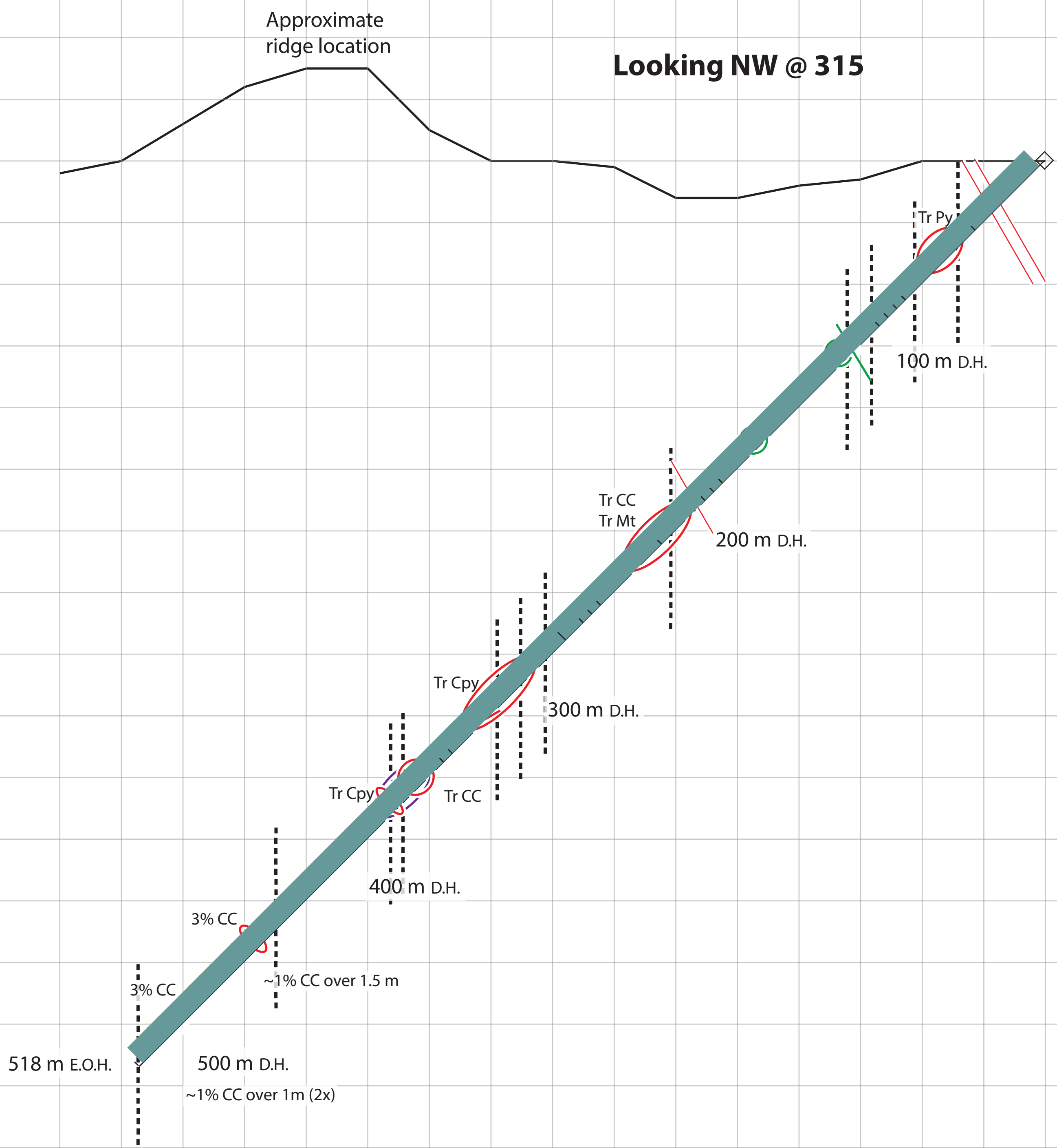
Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122190	444.46	445.15	0.69	<5	<0.01	7.1	0.35
S122191	445.15	445.46	0.31	<5	0.01	16.4	0.16
S122192	445.46	446.09	0.63	<5	0.04	34.2	0.34
S122193	446.09	446.5	0.41	<5	0.01	21.5	0.37
S122194	446.5	446.8	0.3	<5	0.01	18.7	0.29
S122195	446.8	447.49	0.69	<5	0.01	23	0.33
S122196	447.49	448.19	0.7	<5	0.01	23.9	0.31
S122197	OREAS 111	OREAS 111		434	9.9	>10000	31.5
S122198	448.19	449	0.81	<5	0.01	19.2	0.42
S122199	449	449.8	0.8	<5	0.01	3.9	0.35
S122200	450.1	450.45	0.35	<5	<0.01	8.5	0.3
S122201	450.45	451	0.55	<5	<0.01	4.1	0.39
S122202	451	452	1	<5	<0.01	4.9	0.31
S122203	452	452.62	0.62	<5	<0.01	5.2	0.37
S122204	452.62	453.44	0.82	<5	0.01	14.3	0.34
S122205	453.44	454.3	0.86	<5	0.01	5.4	0.31
S122206	1/4 Dup	1/4 Dup		<5	<0.01	15.5	0.33
S122207A	454.3	454.87	0.57	<5	<0.01	5.4	0.69
S122207B				<5	0.01	4.9	0.55
S122208	454.87	456	1.13	<5	0.01	10	0.4
S122209	456	456.78	0.78	<5	0.01	2.4	0.37
S122210	456.78	457.27	0.49	<5	0.01	5.2	0.28

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122211	457.27	457.59	0.32	<5	0.01	2	0.29
S122212	457.59	457.9	0.31	<5	<0.01	2.2	0.31
S122213	457.9	458.83	0.93	<5	0.01	5.3	0.29
S122214	Blank	Blank		424	9.91	>10000	29.2
S122215	458.83	459.7	0.87	<5	0.01	3.8	0.32
S122216	464.86	465.26	0.4	<5	0.01	2.8	0.25
S122217	465.26	466.09	0.83	<5	0.02	3.4	0.24
S122218	446.09	446.39	0.3	<5	0.02	2.6	0.2
S122219	466.39	467.2	0.81	<5	0.01	2.3	0.26
S122220	468.66	469.05	0.39	<5	0.01	3.7	0.12
S122221	470.36	470.66	0.3	<5	0.01	6	0.19
S122222	OREAS 111	OREAS 111		431	10.35	>10000	30.1
S122223	470.66	471.24	0.58	<5	0.01	15.6	0.58
S122224	471.24	472	0.76	<5	0.02	6.7	0.4
S122225	489.58	489.88	0.3	<5	0.03	393	0.56
S122226	492.84	493.14	0.3	5	0.07	943	8.25
S122227	493.7	494	0.3	<5	0.19	68	0.21
S122228	496.26	497.07	0.81	<5	0.17	81.9	0.17
S122229	498.07	498.7	0.63	<5	0.16	112	0.14
S122230	529.58	529.98	0.4	<5	0.44	525	0.42
S122231	534.05	534.61	0.56	28	0.1	97.5	0.16
S122232	OREAS 111	OREAS 111		440	10.35	>10000	30.3

Sample	From	To	Interval	Au ppb	Ag ppm	Cu ppm	Mo ppm
S122233	559.5	559.83	0.33	<5	0.32	1070	0.31
S122234				<5	0.08	301	0.39

APPENDIX D

DIAMOND DRILL HOLE SECTIONS



SPC-15-07	220	- 45
Hole	Az	Dip

UTM 16T 673671mE, 5210001mN

Location

Grid **= 25 m x 25 m** **1 : 2500**

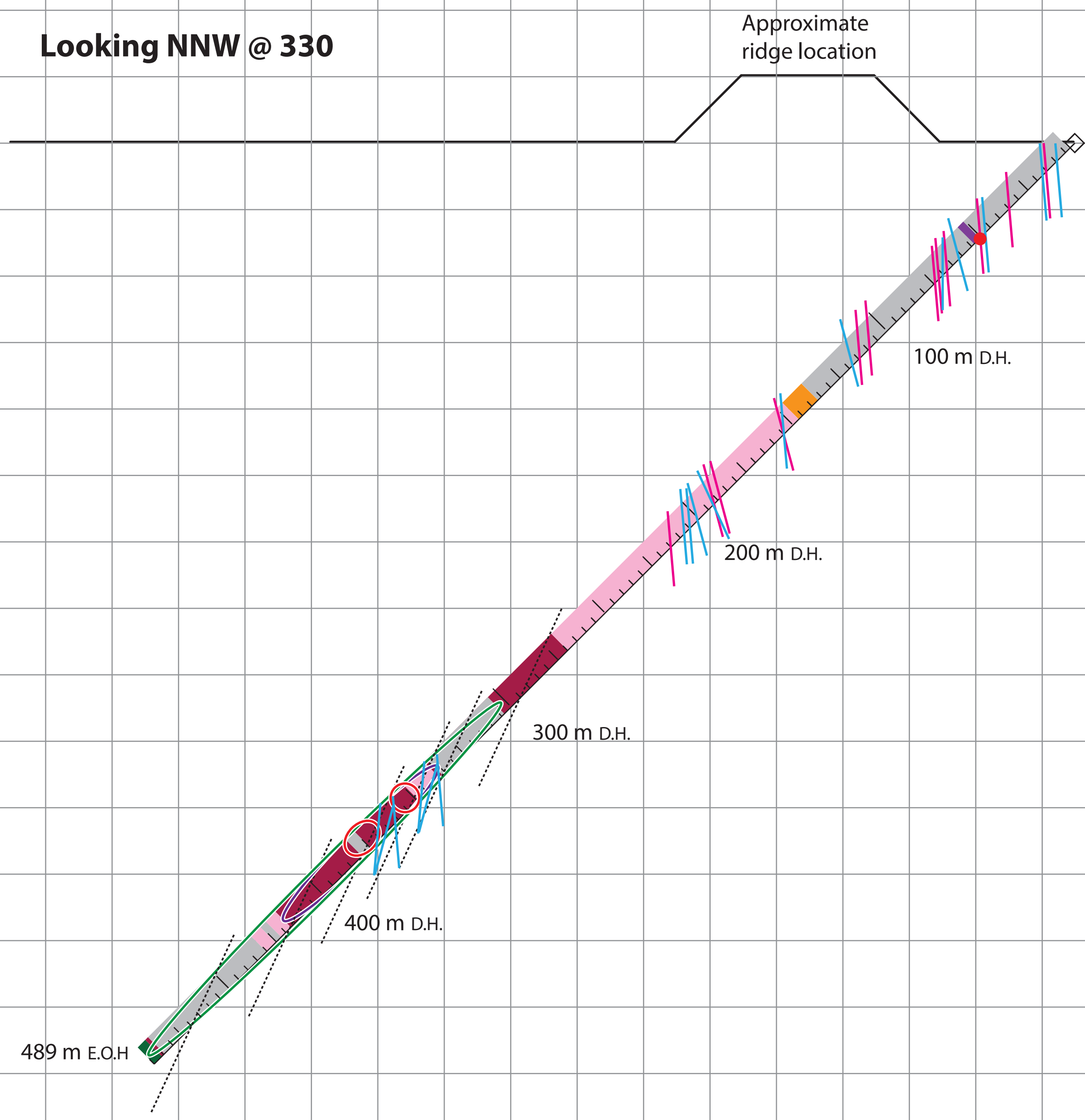
Legend

- Mafic Dyke (?)
- Felsic SVI
- Mafic volcanics
- Flow top bx
- Vein Zone
- Structural Zone
- Mineralization
- Strong hemitite
- Strong epidote
- Epithermal QCV
- Epidote bx

SVI = Sub-Volcanic Intusive

SUPERIOR COPPER CORPORATION SPC.V

Prepared by:
D.M. Quinn, P.Geo
10/18/17



SPC-15-08	240	- 45
Hole	*Az*	*Dip*
UTM 16T	674288mE,	5211631mN

Location

Grid = 25 m x 25 m 1 : 2500

- Felsic SVI
- Mafic dyke (?)
- Sedimentary
- Flow top bx
- Mafic volcanics
- Vein zone

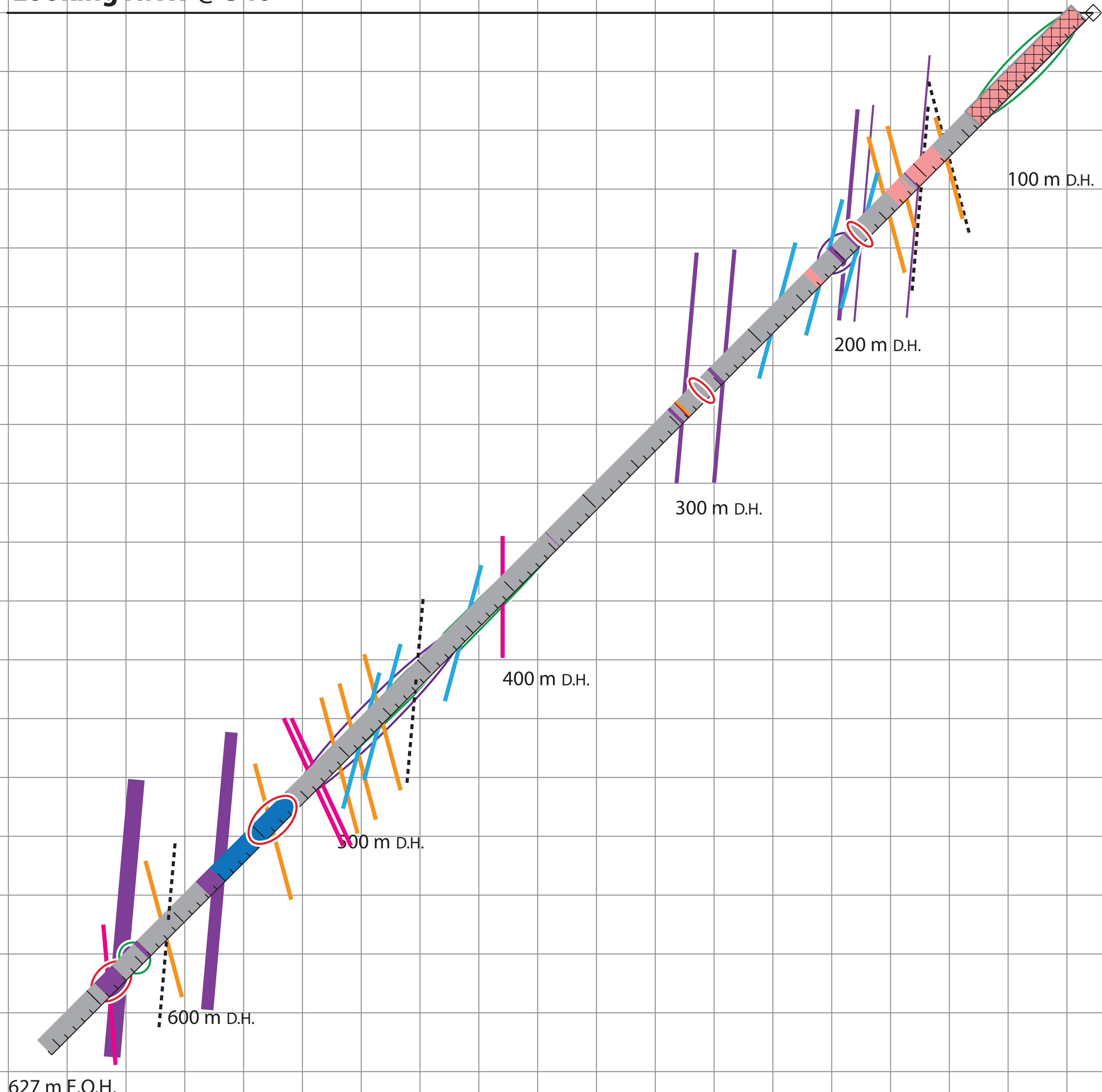
SVI = Sub-Volcanic Intusive

- Structural zone
- Mineralization
- Hematite alteration
- Epidote alteration
- Druzy/bladed QCV
- Mn-carbonate

SUPERIOR COPPER CORPORATION SPC.V

Prepared by:
D.M. Quinn, P.Geo
10/18/17

Looking NNW @ 340



SPC-15-09	250	- 45
Hole	*Az*	*Dip*
UTM 16T	672548mE,	5209216mN
	Location	

Grid = 25 m x 25 m   1 : 2500

SUPERIOR COPPER CORPORATION SPC.V

Prepared by:
D.M. Quinn, P.Geo
10/18/17

Felsic SVI
Mafic dyke (?)
Sedimentary
Gabbro
EpChl Vein zone
Structural zone

SVI = Sub-Volcanic Intusive

Mineralization
Hematite alteration
Epidote alteration
Druzy/bladed QCV
Carbonate
Mn-carbonate