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REPORT ON A DIAMOND DRILLING PROGRAM
AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)

EBY TOWNSHIP

LARDER LAKE MINING DIVISION, ONTARIO

NTS Sheet 042A01

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Contents

Tables 2
Figures 3
Summary 4
Property Location, Description, and Access 5
Permits 5
Previous Work 10
Regional Geology 12
Property Geology 14
October-November 2022 Core Drilling Program 16
Drilling Parameters 16
Geoteching and Logging Parameters 20
Drill Hole Targets, Observations, and Results 20
Holes EO-22-001 and EO-22-001B 21
Hole EO-22-002 22
Hole EO-22-003 24
Recommendations 27
Certificate of Qualifications 28
References 30
Program Expenses Incurred 31
Expense Allocations 35

Tables

Table 1. Details of claims included in Option Agreement. The claims highlighted in yellow are those claims on which core drilling work was completed for this report. 8
Table 2. Summary of government agency maps and reports across the Tinney claim group. 11
Table 3. Summary of drill hole details. 18
Table 4. Summary of meterage breakdown per claim. 19
Table 5. Summary of meterage breakdown per claim. 19
Table 6. Summary Log of hole EO-22-001B. 22
Table 7. Summary Log of hole EO-22-002. 23
Table 8. Summary Log of hole EO-22-003. 25
Table 9. Summary of program expenses. 31
Table 10. Expense allocations per claim. 35
Table 11. Expense allocations by claim holder. 35

Figures

Figure 1. Regional property location map. Blue outline bounds the Tinney option agreement. Township boundaries in red. 6
Figure 2. Tinney option agreement claims, with area work was performed (Highway 66 claims). Boundary cell claims are clipped to extents of legacy claim boundaries..... 7
Figure 3. Map of property geology in the area of drilling showing drill collar locations, drill access trail, and claim boundaries. Embedded geology map from Lovell (1972)..... 15
Figure 4. Location map of the drill hole collars and drill traces on the Highway 66 claims, with site access trail and claim fabric. 17

Appendices

Appendix A. Plan map of Highway 66 claims drill hole locations and targets.

Appendix B. Sections of Highway 66 claims drill holes.

Appendix C. Drill hole logs.

Appendix D. IQ Logger oriented structural measurement data.

Appendix E. Proof of expenses incurred (invoices).

Summary

A core drilling program was undertaken at the Highway 66 claims between October 24 and November 8, 2022. Laframboise Drilling Inc. of Earlton, ON, was contracted to perform the drilling at the request of Canada Silver Cobalt Works (CSCW, “the Company”). Diversified Forestry Inc. of Timmins, ON, was contracted in advance of the drilling program to cut access trails into the drill sites.

Four holes (including one re-collar) were drilled over a total of 16 days of drilling. All core was oriented using the Reflex ACT III and holes were surveyed to track deviation using a Reflex Gyro. All work was performed in UTM NAD 83 Zone 17 coordinates. Quick logs were performed upon receiving the core at the Company’s core shack (generally the day after drilling), and full logs were completed between October 25 and December 7, 2022.

The purpose of this program was to test several structural and geophysical targets identified as having the potential for Cadillac-Larder Lake Deformation Zone associated vein-hosted gold mineralization, as well as test for base metal / critical metal potential with elements such as Ni, Cu, Co, and other elements in the various mafic to ultramafic units.

Hole EO-22-001B (re-collared after abandoning hole EO-22-001 due to excessive deviation upon collaring) was drilled to a depth of 531 m in order to test two Max-Min EM responses (one associated with a magnetic high) in a historic geophysical survey, as well as two mapped topographic depressions interpreted as possible faults. Weak alteration and mineralization (pyrite and quartz veining) was encountered near to both target areas. Assay results are pending from the lab at the time of writing.

Hole EO-22-002 was drilled to a depth of 450 m in order to test a carbonate alteration zoned mapped within the Eby-Otto fault and a Max-Min EM response in a historic geophysical survey. The Eby-Otto fault (and associated albite-carbonate alteration) was intersected, and a weak shear with pyrite and quartz veining was encountered near to the second target. Assay results are pending from the lab at the time of writing.

Hole EO-22-003 was drilled to a depth of 636 m in order to test two Max-Min EM responses in a historic geophysical survey, as well as a projected eastern extension of a red porphyry hosting reported gold mineralization encountered in the 1944 Lemu Investments shaft (Lovell, 1972), reported in the Abandoned Mine Inventory as identifier 08207 (https://www.geologyontario.mndm.gov.on.ca/mndmfiles/amis/data/records/08207.html). Weak alteration and mineralization (pyrite and quartz veining) was encountered near to both Max-min targets, but no mineralized porphyry was intersected. Assay results are pending from the lab at the time of writing.

While some alteration and mineralization was observed in the core, no significant mineralized veining was intersected in the holes drilled in this program. Some mafic / ultramafic intrusions contained elevated sulphides. Until assay results are returned from the lab, the authors cannot recommend further drilling or follow-up drill holes at this time.

Property Location, Description, and Access

The Highway 66 claim group is part of the larger Tinney option agreement and Eby-Otto property consolidated by Canada Silver Cobalt Works (CSCW, "the Company") through several option agreements, as reported in a news release announced on February 14, 2022 (https://www.canadasilvercobaltworks.com/news/gold-property-consolidated-near-agnico-eagles-macassa-mine/).

The Tinney option agreement is comprised of 63 single and boundary cell claims optioned from three separate claim holders. The claims and leases listed in Table 1 are currently held by Canada Silver Cobalt Works under an option agreement with prospectors Eric Marion, James Tinney, and Louis Despres executed on August 15, 2021. The location of the claim group is shown in Figures 1 and 2, and the details of the claims are listed in Table 1. The agreement allows for Canada Silver Cobalt Works to acquire a 100% interest over a five year period through a combination of share issuances, cash payments, and work expenditures. The work described in this report fulfills the first year of work expenditure requirements.

The Highway 66 claims lie between 2 and 6 km southeast of the community of Kenogami Lake and approximately 14 km southwest of the Town of Kirkland Lake in northeastern Eby Township (and partly in Otto Township) in Northeastern Ontario. Access to the property is via Highway 11 to Highway 66 West, and then along several logging trails. The property is crossed by a natural gas pipeline and a hydroelectric powerline.

The reported drilling program was centred in Eby Township on Lot 4 Concession 4 and Lot 4 Concession 5, 400 to 500 m east of Highway 66 West, at approximately 560800 mE, 5324800 mN (UTM NAD 83, Zone 17). The holes were all collared on claim 566666 (provincial cell 42A01B051) and drilled across claims 566665 (provincial cell 42A01B031), 247030 (provincial cell 42A01B052), and 305709 (provincial cell 42A01B072). These claims make up the Highway 66 claim group and are highlighted in yellow in Table 1. The claims correspond to Legacy Claim L4286813. The drill site was accessed from Highway 66 West from an old logging road entrance approximately 2.4 km south of the intersection with Highway 11.

Permits

The permits applicable for this program of mechanized diamond drilling (assembled weight >150 kg) is permit number PR-20-000234 and PR-20-000231.

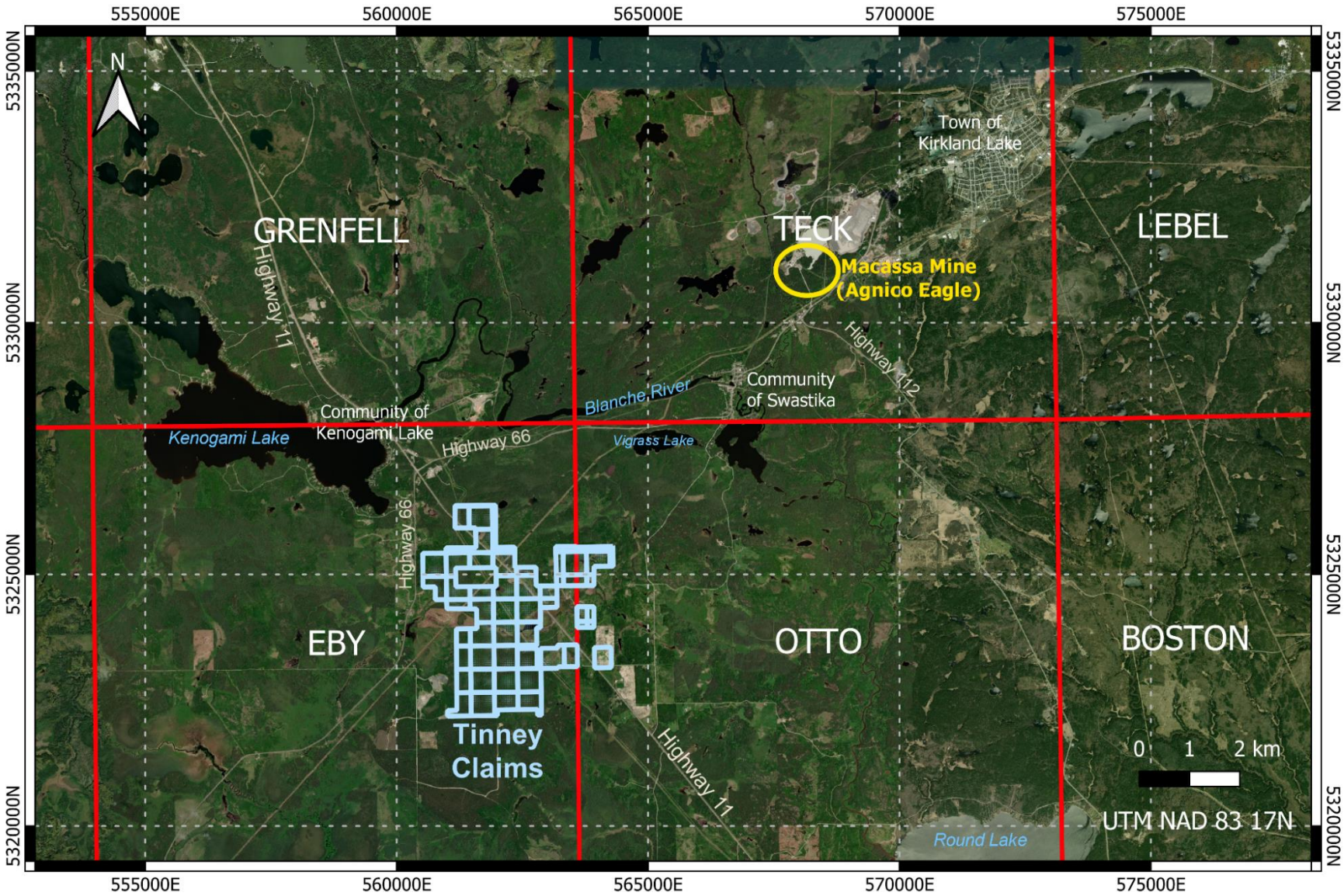


Figure 1. Regional property location map. Blue outline bounds the Tinney option agreement. Township boundaries in red.

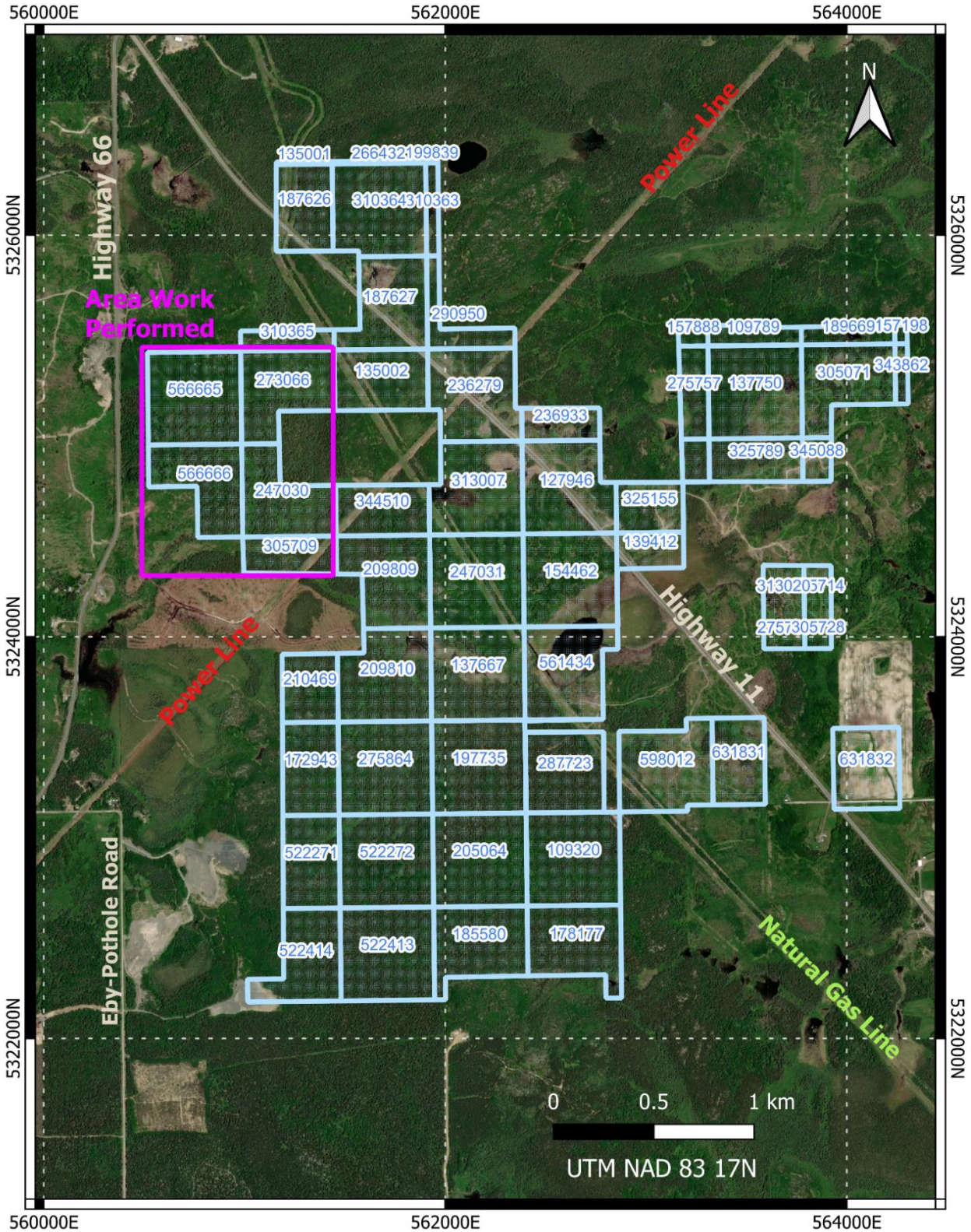


Figure 2. Tinney option agreement claims, with area work was performed (Highway 66 claims). Boundary cell claims are clipped to extents of legacy claim boundaries.

Table 1. Details of claims included in Option Agreement. The claims highlighted in yellow are those claims on which core drilling work was completed for this report.

Claim Number	Township	Claim Title Type	Anniversary Date	Claim Holder, the Optionor (percentage held)
566665	Eby	Single Cell Mining Claim	12/15/2024	ERIC J. MARION (100%)
566666	Eby	Single Cell Mining Claim	12/15/2024	LOUIS J. DESPRES (100%)
247030	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
305709	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
109320	Eby	Single Cell Mining Claim	7/16/2024	JAMES K. TINNEY (100%)
109789	Eby-Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
127946	Eby	Single Cell Mining Claim	7/21/2024	ERIC J. MARION (100%)
135001	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
135002	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
137667	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
137750	Eby-Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
139412	Eby	Boundary Cell Mining Claim	7/12/2024	ERIC J. MARION (100%)
154462	Eby	Single Cell Mining Claim	7/12/2024	ERIC J. MARION (100%)
157198	Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
157888	Eby	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
172256	Eby	Boundary Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
172943	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
178176	Eby	Boundary Cell Mining Claim	7/16/2024	JAMES K. TINNEY (100%)
178177	Eby	Single Cell Mining Claim	7/16/2024	JAMES K. TINNEY (100%)
185580	Eby	Single Cell Mining Claim	7/16/2024	JAMES K. TINNEY (100%)
187626	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
187627	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
189669	Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
197735	Eby	Boundary Cell Mining Claim	7/16/2024	JAMES K. TINNEY (100%)
199839	Eby	Boundary Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
205064	Eby	Single Cell Mining Claim	7/16/2024	JAMES K. TINNEY (100%)
209809	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
209810	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
210469	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
236279	Eby	Single Cell Mining Claim	7/21/2024	ERIC J. MARION (100%)
236933	Eby	Single Cell Mining Claim	7/21/2024	ERIC J. MARION (100%)

Claim Number	Township	Claim Title Type	Anniversary Date	Claim Holder, the Optionor (percentage held)
242862	Eby	Boundary Cell Mining Claim	7/21/2024	ERIC J. MARION (100%)
247031	Eby	Boundary Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
266432	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
273066	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
275714	Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
275715	Otto	Boundary Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
275757	Eby	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
275758	Eby	Boundary Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
275864	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
287723	Eby	Boundary Cell Mining Claim	2/12/2024	LOUIS J. DESPRES (100%)
290950	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
305071	Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
305728	Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
310363	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
310364	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
310365	Eby	Single Cell Mining Claim	7/18/2024	ERIC J. MARION (100%)
313007	Eby	Boundary Cell Mining	3/28/2024	LOUIS J. DESPRES (100%)
313020	Otto	Boundary Cell Mining	12/15/2024	JAMES K. TINNEY (100%)
325155	Eby	Boundary Cell Mining Claim	7/12/2024	ERIC J. MARION (100%)
325789	Eby-Otto	Boundary Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
337822	Eby	Boundary Cell Mining Claim	2/18/2025	ERIC J. MARION (100%)
343862	Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
344510	Eby	Single Cell Mining Claim	3/28/2024	LOUIS J. DESPRES (100%)
345088	Otto	Single Cell Mining Claim	12/15/2024	JAMES K. TINNEY (100%)
522271	Eby	Single Cell Mining Claim	5/31/2024	LOUIS J. DESPRES (100%)
522272	Eby	Single Cell Mining Claim	5/31/2024	LOUIS J. DESPRES (100%)
522413	Eby	Single Cell Mining Claim	6/1/2025	JAMES K. TINNEY (100%)
522414	Eby	Single Cell Mining Claim	6/1/2025	JAMES K. TINNEY (100%)
561434	Eby	Single Cell Mining Claim	10/9/2024	LOUIS J. DESPRES (100%)
598012	Eby	Single Cell Mining Claim	7/5/2024	JAMES K. TINNEY (100%)
631831	Eby	Single Cell Mining Claim	1/22/2025	JAMES K. TINNEY (100%)
631832	Otto	Single Cell Mining Claim	1/22/2025	JAMES K. TINNEY (100%)

Previous Work

Much of the previous work completed on the greater Tinney option agreement claims has been described by Halliday et al. (2021) and Marion (2016). This report will focus on work completed only across the Highway 66 claims (566666, 566665, 247030, and 305709) tested by this drilling program.

Various Ontario government geological agencies have performed geological mapping and geophysical surveying of the Highway 66 claims area since the first mapping survey of Eby Township in 1914. Generally these surveys of the Highway 66 claims area are included as an extension of the Kirkland Lake, Matachewan, or Kenogami Lake areas, and have only occasionally focused on Eby Township. A summary of maps and reports produced by government agencies is presented in Table 2.

Table 2. Summary of government agency maps and reports across the Tinney claim group.

Title	Map Number	Authors	Year	Map Scale	Government Agency
Townships of Maisonville, Grenfell and Eby, District of Timiskaming	ARM 23B	R.M. Smith, R.W. Young, P.E. Hopkins & A.G. Burrows	1914	1:47,520	Ontario Department of Lands, Forests, and Mines
Matachewan-Kenogami area, District of Timiskaming, Ontario	ARM 44B	W.S. Dyer and G.H. Charlewood	1935	1:63,360	Province of Ontario Department of Mines
Eby Township, District of Timiskaming	P0448	H.L. Lovell	1968	1:15,840	Province of Ontario Department of Mines
Eby-Otto area, Timiskaming District	M2239	H.L. Lovell	1972	1:31,680	Department of Mines and Northern Affairs
Geology of the Eby and Otto Area, District of Timiskaming	GR 99	H.L. Lovell	1972	NA	Department of Mines and Northern Affairs
Airborne Electromagnetic and Total Intensity Maqnetic Survey, Kirkland Lake Area, Eby Township, District of Timiskaming	P2268	Questor Surveys Ltd	1979	1:20,000	Ontario Geological Survey
Ontario Airborne Geophysical Surveys, Magnetic and Electromagnetic Data, Grid and Profile Data, ASCII and Geosoft Formats, Kirkland Lake Area	GDS1022	Ontario Geological Survey	2003	NA	Ontario Geological Survey
Precambrian Geology of Otto and Eby Townships	P3534	L. Pigeon and B.R. Berger	2004	1:20,000	Ontario Geological Survey
Precambrian Geology, Highway 66 Area, Swastika to Matachewan	2677	B.R. Berger, L. Pigeon, & G. Leblanc	2006	1:50,000	Ontario Geological Survey
Geological Synthesis Along Highway 66 from Matachewan to Swastika	OFR 6177	B.R. Berger	2006		Ontario Geological Survey

The earliest mineral exploration work reported in the Highway 66 claims is the sinking of a shaft in 1944 to the northwest of the present drilling program (Lovell, 1972). Lovell's report describes the Lemu Investments shaft which was sunk to a depth of 40 feet on a red porphyry dyke. Assays from a pink quartz vein at the bottom of the shaft "contained $5.00 worth of gold (gold at about $35 U.S. per ounce) over the whole width of the shaft" (Lovell, 1972). This value equates to approximately 4.5 g/t of Au.

Reported assessment work on file for the claims is limited, but includes the following:

- 1985: geological mapping performed on the "Eby 66" property for A.H. Perron. The author reports old trenches found on the claims but does not describe the trenches in any detail. Mapping identifies only mafic volcanic rocks ("magnesium tholeiite") in outcrop.
- 1986 & 1987: a survey grid was established and VLF-EM and magnetic surveys were performed for A.H. Perron. The author identified two anomalous VLF-EM conductors which crossed multiple survey lines, and recommended overburden stripping to follow up.
- 1998: outcrop stripping, prospecting, mapping and sampling performed on the "Chartre-Dufresne" property by Denis Chartre and Roger Dufresne. The authors reported no significant gold values in altered diorite and felsic breccia proximal to altered fault zones, as well as unaltered mafic volcanic rocks.
- 2016: moss stripping, mapping, and sampling was done on the southwest area of claim L1239348 looking to identify east-west oriented faulting and to check for quartz carbonate veining or pyrite-mineralization-related gold potential as the area is roughly on-strike from the structural zone previously commented on by Guindon (1999) and (2005). Most of the rock observed was fine- to medium-grained, medium to dark green, variably chloritized mafic volcanics. Although platy shearing was observed at one location, no definite lineaments or foliations were noted. Some carbonatization as mild bleaching was noted but no strong coincident pyrite mineralization was identified. In all, 4 samples were submitted for gold analysis. No significant values were shown.
- 2021: prospecting and sampling of claims 566665 and 566666 by Canada Silver Cobalt Works (assessment file number 20000019949). No significant values were reported in samples collected and assayed for Au and Ag.

Regional Geology

The Neoarchean Abitibi Greenstone Belt is composed of a series of stacked assemblages (or sub-terranes) comprised predominantly of supracrustal volcanic, associated intrusive, and related interflow sedimentary rocks in the south-central region of the Superior Province, spanning across Ontario and Quebec. The assemblages are stitched together by major structural deformation zones, such as the Cadillac-Larder Lake Deformation Zone (CLLDZ) and the Porcupine Deformation Zone (PDZ), which parallel each other west to east across the belt, and record a history of orogenesis. Granitoid plutons associated with orogenesis intrude every lithology (Monecke et al., 2017).

The trend stretching from Matachewan, ON, to Val-d'Or, QC, known as the Kirkland Lake-Larder Lake Gold Belt, is marked by its association with the Cadillac-Larder Lake Deformation Zone (CLLDZ), a steeply dipping zone of deformation marked by intense and multiply-reactivated structures and hydrothermal carbonate alteration which hints at a long and complex structural history. Several major gold deposits occur along or proximal to the CLLDZ (or second order splays of the CLLDZ), including the Young-Davidson deposit (Matachewan, ON; currently operated by Alamos Gold), the Kirkland Lake deposit (Kirkland Lake, ON; the Macassa Mine is the only remaining operating mine of the Kirkland Lake Deposit, and is currently operated by Agnico Eagle Mines), the Kerr-Addison deposit (Virginiatown, ON; not currently operating), and the Canadian Malartic deposit (Val-d'Or, QC; operated by Agnico Eagle Mines and Yamana Gold Mines).

In the Kirkland Lake area, the Kirkland Lake-Larder Lake Gold Belt can be divided into three east-west bands of rocks, or assemblages: northern, central, and southern (Ispolatov et al., 2008). The northern assemblage is predominantly composed of Archean submarine volcanic, mafic intrusive, and related interflow sedimentary rocks of the Blake River Assemblage (2704-2696 Ma). The northern assemblage is separated from the central assemblage by a conformable contact. The central assemblage is comprised of sub-marine to sub-aerial volcanic rocks such as trachytes and tuffs, related syenitic intrusions, and associated orogenic and fluvial greywackes and conglomerates of the Temiskaming Assemblage (2676-2670 Ma). The central assemblage is separated from the southern assemblage by the CLLDZ, and is footwall to the southern assemblage. The southern assemblage is comprised of sub-marine mafic to ultramafic volcanic and related intrusive rocks and interflow sedimentary rocks of the Tisdale Assemblage (A.K.A. Larder Lake Group; 2710-2707 Ma) (Ispolatov et al., 2008). Several east-west to northeast-southwest faults occur within the southern assemblage and are possibly hanging wall splays of the CLLDZ. The most significant of these faults to the Tinney claims (and Eby-Otto property in general) is the Eby-Otto fault, which strikes approximately 070 and dips south (Lovell, 1972).

The Round Lake Batholith and smaller Otto stock are large Archean-aged granitic to dioritic intrusive bodies, occurring to the east and south-east of the property. Several major north-northwest striking late faults related to the Temiskaming Rift Valley cut across and offset these assemblages and well as the CLLDZ, the Main Break, the '04 Break, and the Amalgamated Break. The most significant of these faults is the Amikougami Creek Fault to the west of the Macassa Mine in the community of Swastika, which offsets the breaks several hundred meters in the sinistral direction (west side south).

The Kirkland Lake deposit and related South Mine Complex (in operation at the Macassa Mine in Kirkland Lake) are entirely hosted within rocks of the Temiskaming assemblage. The Kirkland Lake deposit itself is hosted along the near-vertical to steeply south-dipping Kirkland Lake Main Break and the '04 Break (and related structures and splays) to the north, while the South Mine Complex is bound between the Main and '04 Breaks and the near-vertical north-dipping Amalgamated Break to the south (Ispolatov et al., 2008).

The Vigrass Lake gold occurrence (property held by Agnico Eagle), located approximately 5.2 km to the northeast of the claims drilled in this report, is the closest known gold occurrence in the Eby-Otto township area, structurally and stratigraphically. The

Vigrass Lake occurrence is hosted within mafic to ultramafic volcanic rocks with interbedded graphitic and pyritic interflow sedimentary rocks intruded by syenite porphyry and lamprophyre dykes (Benham, 1994). Mineralization occurs as finely disseminated sulphides and stockworks of quartz veins within a series of subparallel faults and strongly altered (carbonated and silicified) shear zones. These structures mark the contacts between the predominantly komatiitic and basaltic assemblages. A complex zone of shearing and alteration located south of and along the south shore of Vigrass Lake is known as the Vigrass Lake Fault (Benham, 1994).

CSCW has planned this drill program with the intent of targeting similar vein-hosted and breccia-hosted gold mineralization associated with second order structures similar to that of the Vigrass Lake occurrence.

Property Geology

The Highway 66 claims are underlain predominantly by mafic volcanic rocks (pillowed basalts, variolitic basalts, volcanic breccias and tuffs) and related gabbroic intrusive rocks of the Tisdale Assemblage (A.K.A. Larder Lake Group)(Berger and Pigeon, 2004; Lovell, 1972). A few syenite porphyry and feldspar porphyry dykes occur across the Tinney claims, including an east-northeast striking syenite porphyry dyke which is mapped (Lovell, 1972) at the north end of the Tinney claims (claims 566665, 273066, 310365, and 187627). This syenite porphyry is interpreted to intrude along or proximal to the east-northeast striking Eby-Otto fault zone, which is projected to continue across the claim package through the claims worked in this drilling program.

In the area of the claims drilled in this program, outcrop exposure is minimal (<2% outcrop exposure) and the majority of the property is covered by tamarack, cedar, and tag alder swamp. Overburden is a thick black, organic-rich mud that is up to 20 m deep in places.

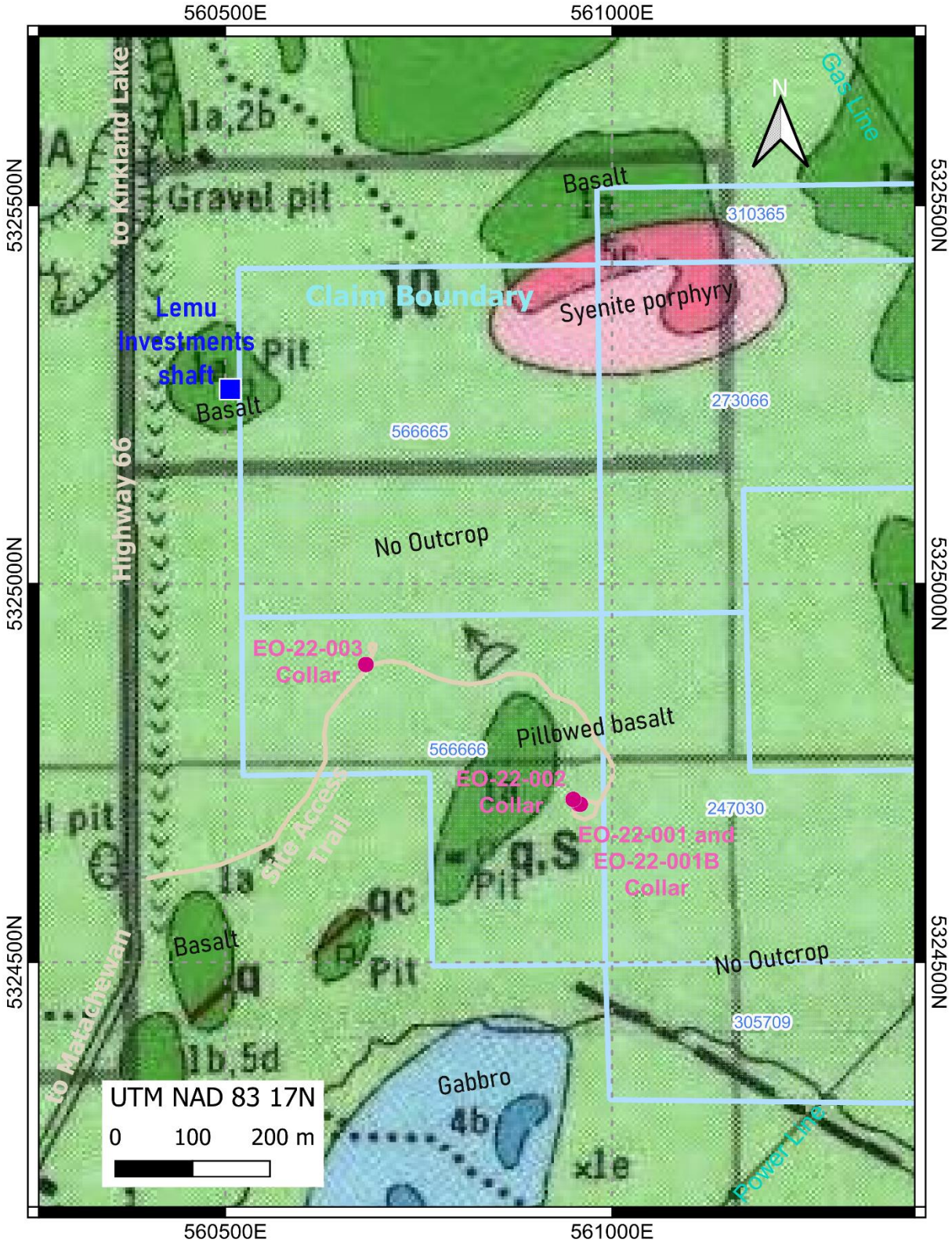


Figure 3. Map of property geology in the area of drilling showing drill collar locations, drill access trail, and claim boundaries. Embedded geology map from Lovell (1972).

October-November 2022 Core Drilling Program

A core drilling program was undertaken at the Highway 66 claims between October 24 and November 8, 2022. All work was planned and performed in UTM NAD 83 Zone 17 coordinates. The holes in the program were planned, tracked, and digitized using Leapfrog Geo 3D modelling software, including preparing the plan map and drillhole sections (Appendix).

Laframboise Drilling Inc. of Earlton, ON, was contracted to perform the drilling at the request of Canada Silver Cobalt Works (CSCW, "the Company"). Diversified Forestry Inc. of Timmins, ON, was contracted in advance of the drilling program to cut access trails into the drill sites.

The purpose of this program was to test several structural and geophysical targets identified as having the potential for vein-hosted and breccia-hosted gold mineralization associated with second order structures related to the Cadillac-Larder Lake Deformation Zone. It was also intended to test for base metal / critical metal potential with elements such as Ni, Cu, Co, and other elements in the various mafic to ultramafic units, to determine the potential for these important elements on the property.

The total meterage of the holes outlined in this assessment report is 1,725m. The percentage of drilling, based on the overall meterage, that was performed on the claims owned by LOUIS J. DESPRES is 57.74%, with the remaining 42.26% being located on claims owned by ERIC J. MARION. This calculated using the collar, surveys, and 3D modelling software to determine how much of each hole is located on their respective claims. The cost breakdown applied to the respective claims will be calculated according to the meterage per claim, and will be provided after the table showing expenses incurred.

Drilling Parameters

Four holes (including one re-collared hole) were drilled over the course of 16 days, for a total of 1,725 m. The drill hole location and bearing were spotted in the field by the Company's senior geologist and the planned location of each hole was marked using a hand-held GPS (Garmin 64sx) and picket. The drill was moved to the picketed location and lined up on azimuth and dip using a Reflex TN-14 (oriented relative to true north). Core was drilled using NQ rods. Core was transported to the core shack in standard wooden core boxes. All core was oriented at the drill by the drillers using the Reflex ACT III orientation tool and holes were surveyed during drilling to track hole deviation using a Reflex Sprint Gyro in single shot mode. A continuous survey was completed for all holes at the completion of drilling (end of hole) using the Reflex Sprint Gyro in continuous mode. Upon completion of surveying, drill rods were removed but casing was left in. The drill was then moved off the casing and drill pad so that a casing cap and casing flag could be installed. A hand-held GPS (Garmin 64sx) was used to record the location of the drill hole collar using waypoint averaging (minimum 5 points). All GPS coordinates were recorded and are reported in UTM NAD83 Zone 17. See figure 4 for a map of the drill site locations within the Highway 66 claims and Table 3 for a summary of the holes drilled in the program.

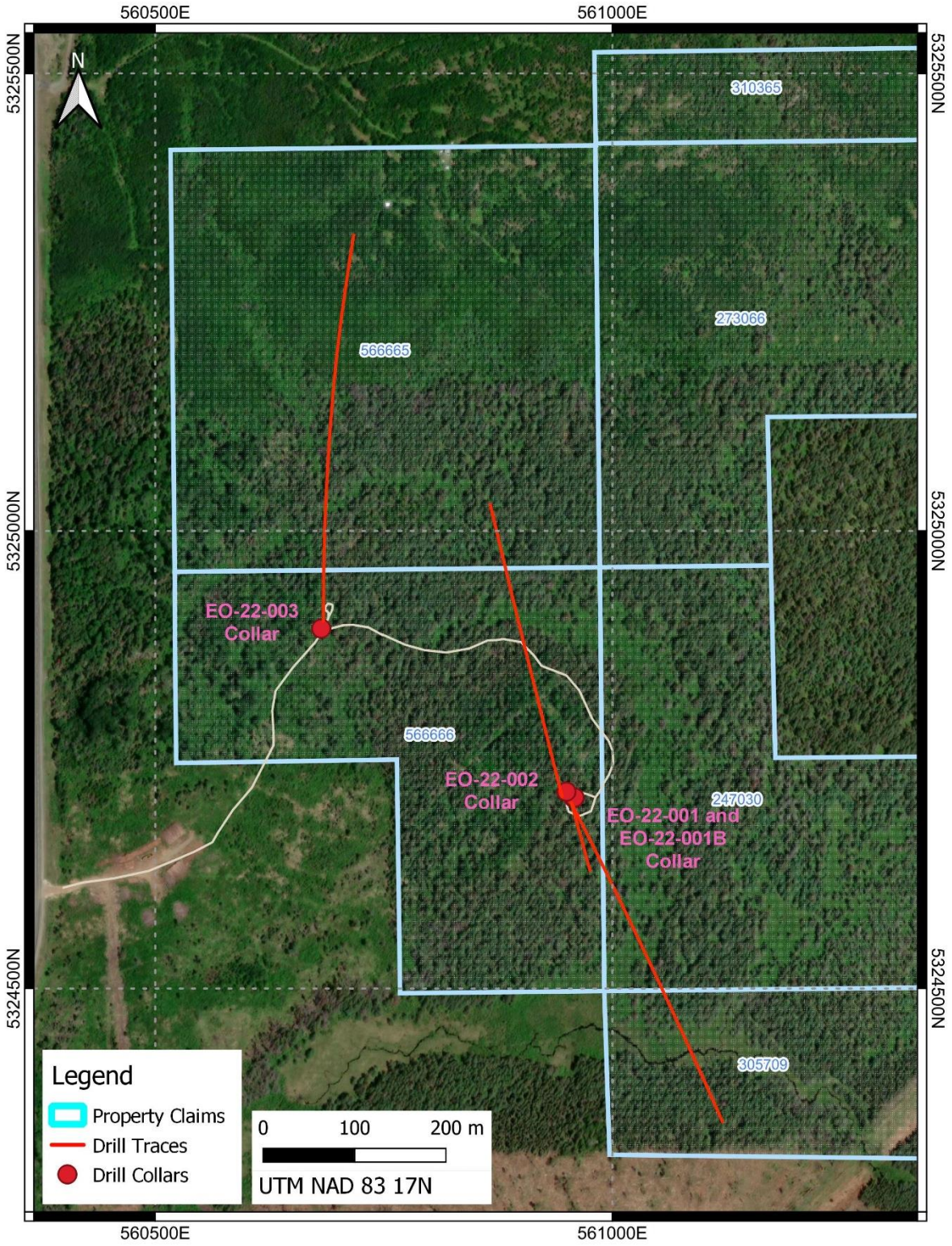


Figure 4. Location map of the drill hole collars and drill traces on the Highway 66 claims, with site access trail and claim fabric.

Table 3. Summary of drill hole details.

Hole Number	Claim Number (Collar)	Collar Location (UTM NAD83 Zone 17)			TN-14 Azimuth	TN-14 Dip	Length Drilled (m)	Comment	Drilling Started	Drilling Complete	Geotech Complete	Logging Complete
		Easting	Northing	Elevation (m a.s.l.)								
EO-22-001	566666	560957.6	5324707.8	322.8	157.6	-45.3	108	Abandoned @ 108 m, hole is projected to approach too close to the claim boundary due to deviation in azimuth. Chance of crossing into the neighbouring claim. Casing removed.	10/24/2022	10/25/2022	10/26/2022	10/26/2022
EO-22-001B	566666, 566665	560958.6	5324708.8	322.8	152.0	-45.0	531	Recollar of EO-22-001. Casing left in and marked with labelled cap and flag.	10/25/2022	10/30/2022	11/2/2022	11/2/2022
EO-22-002	566666, 247030, 305709	560949.7	5324715.2	325.9	345.0	-46.0	450	Casing left in and marked with labelled cap and flag.	10/30/2022	11/3/2022	11/7/2022	11/14/2022
EO-22-003	566666, 566665	560681.6	5324893.4	320.5	359.9	-49.1	636	Casing left in and marked with labelled cap and flag.	11/3/2022	11/8/2022	11/16/2022	12/6/2022

Table 4. Summary of meterage breakdown per claim.

HOLE ID	AMOUNT OF EACH HOLE DRILLED PER CLAIM								
	HOLE LENGTH (m)	CLAIM 566666		CLAIM 247030		CLAIM 305709		CLAIM 566665	
		METERS	PERCENT	METERS	PERCENT	METERS	PERCENT	METERS	PERCENT
EO-22-001	108	108.0	*100%*	0.0	*0%*	0.0	*0%*	0.0	*0%*
EO-22-001B	531	354.0	*67%*	0.0	*0%*	0.0	*0%*	177.0	*33%*
EO-22-002	450	108.0	*24%*	209.4	*47%*	132.6	*29%*	0.0	*0%*
EO-22-003	636	84.0	*13%*	0.0	*0%*	0.0	*0%*	552.0	*87%*
TOTAL METERAGE	**1,725**	654	*38%*	209.4	*12%*	132.6	*8%*	729	*42%*

Table 5. Summary of meterage breakdown per claim.

CLAIM OWNER	METERS	DRILLING METERAGE %
LOUIS J. DESPRES	996.0	57.74%
ERIC J. MARION	729.0	42.26%

Geoteching and Logging Parameters

Quick logs of the core were performed upon receiving the core at the Company's core shack in Coleman, ON (generally the day after drilling), and full description logs were completed between October 25 and December 7, 2022.

Each hole was geo-teched so that meter marks, rock quality designation (RQD), total core recovery (TCR), magnetic susceptibility, and specific gravity measurements were recorded directly on the core and in the drill hole log datasheets (see Appendices). Orientation lines were drawn from the orientation marks made by the drillers, recording the run-over-run consistency (RORC) to maintain quality and control (QA-QC). Only orientation lines with a RORC within +/- 10° were drawn so that geological structures in the core could be measured using the Reflex IQLogger.

Each hole was logged by a junior geologist with the Company, under the supervision of a professional geologist (PGeo.). Descriptions and depths of the lithology, alteration, veins, sulphide content, and structures were recorded in Geotic Log. Where orientation lines could be drawn, oriented structural measurements were recorded using the Reflex IQ Logger. See appendices for drill core logs and IQ Logger oriented structural measurement logs.

Samples were chosen, marked out, and recorded by the logging geologist in consultation with the senior geologist and VP Exploration. A total of 739 samples were taken. Additionally, certified reference material (CRM, "standards") pulp samples and blank samples (marble gravel) were inserted into the sample sequence for quality assurance and quality control checks. Core samples were cut using a pneumatic core saw, bagged (bags were sealed with a zip tie), and sent by Manitoulin Transport to Activation Laboratories in Timmins, ON, for analysis (ICP-MS atomic absorption for multi-element including battery metals such as Ni, Co, Cu, and other critical metals such as As, Bi, Sb, Zn, and fire assay for gold); results are pending at the time of writing.

Drill logs and IQ Logger measured structures were digitized and imported to Leapfrog Geo for 3D modelling, geological interpretation, and generating plan maps and section views.

All core drilled in this program is stored in racks in a secure facility at the Company's core shack and field office in Coleman, ON.

Drill Hole Targets, Observations, and Results

The drilling program at the Highway 66 claims was carried out in order to test several historic geophysical survey targets identified in Max-Min and walking magnetometer surveys

performed in 1994, 1995, and 1996 by Douglas Robinson on what was then known as the Eby Southwest and Eby West grids (Robinson, 1997). Prospecting programs, including additional geological mapping, hand stripping, and sampling (some unpublished), identified an east-west zone of widespread carbonate alteration and quartz veining at least 600 meters long by up to 200 meters wide (Marion, 2013). Several drill targets were identified during previous work and from geological interpretation, but no drilling was conducted at that time.

Holes EO-22-001 and EO-22-001B

Hole EO-22-001 was planned to drill test two targets:

(1) a max-min conductor identified on 1994 grid lines 12+00E to 14+00E at stations 1+50S, 1+50S, and 0+50S associated with a topographic depression interpreted as a fault. It was anticipated that the hole would intersect this target at 60 to 120 m in the hole.

(2) a max-min conductor identified on 1994 grid lines 12+00E to 15+00E at 2+75S, 2+75S, and 2+50S, associated with a topographic depression interpreted as a fault. It was anticipated that the hole would intersect this target at 380 to 430 m in the hole.

Hole EO-22-001 was collared on claim 566666 at UTM NAD83 Zone 17 coordinates 560957.6 mE, 5324707.8 mN. The hole was collared and drilled 5.31 m of overburden and set casing in mafic intrusive gabbro. Reflex Gyro single shot surveys were taken at 30 m, 60 m, and 90 m in the hole. The hole was abandoned at 108 m due to deviation from the planned azimuth (planned azimuth of 158°, planned dip of -45°) upon setting casing after overburden (hole deviated to 164.03° azimuth). The large deviation risked the hole approaching or exiting the property boundary if it was allowed to continue, and so it was abandoned at 108 m.

The only lithology encountered in hole EO-22-001 to 108 m was mafic intrusive (gabbro). Minor patches of weak epidote and sausseritization with trace veining and pyrite mineralization were recorded. The hole could not sufficiently test either planned target due to its short length, and so the hole was re-collared as EO-22-001B.

Hole EO-22-001B was collared on claim 566666 at UTM NAD83 Zone 17 coordinates 560958.6 mE, 5324708.8 mN. The azimuth was adjusted to planned azimuth of 152° (planned dip -45°) to accommodate potential deviation and avoid any risk of approaching the property boundary. The hole was collared and drilled 5.0 m of overburden and set casing in mafic intrusive (gabbro). Reflex Gyro single shot surveys were taken at 30 m depth and then every 30m after in the hole. Upon completion of drilling, the hole was surveyed with the Reflex Gyro in Continuous Sprint mode.

A summary of lithologies and major features is as follows:

Table 6. Summary Log of hole EO-22-001B.

Meterage FROM	TO	Lithology	Significant Intercepts and Target Intercepts
0	5	Casing	
5	190.84	Mafic Intrusion	78 - 123 m: set of weakly mineralized (pyrite) quartz+/- carbonate veins and pyritic shears hosted in weakly bleached mafic intrusion (gabbro)
190.84	207.35	Mafic Volcanic	
207.35	273.26	Tuff	
273.26	415	Mafic Volcanic	
415.05	456.67	Mafic Intrusion	446 - 458 m: weak to moderate narrow zone of shearing (at 446.0-446.5m) in bleached weakly altered (feldspar +/- carbonate) mafic intrusion (gabbro) in contact with mafic volcanics, hosting 2-3% quartz veins up to 15 cm true with, some hosting pyrite. 15 cm wide vein at 448.1-448.6 m hosts minor fine euhedral pyrite.
456.67	464.45	Diorite	464 - 466.5 m: strong pervasive saussuritization with 1-2% quartz-carbonate stringers with 2% pyrite.
464.45	480.17	Mafic Intrusion	
480.17	531	Mafic Volcanic	End of hole @ 531 m.

The intercepts at 78 – 123 m and 446 – 458 m likely explain the max-min conductors identified in the 1994 survey conducted by Robinson. No major structures were intersected.

A total of 305 samples were selected and cut for assay (gold and silver) and multi-element geochemistry. Assays are pending at the time of writing.

Hole EO-22-002

Hole EO-22-002 was planned to drill test two targets:

(1) a topographic depression interpreted as the Eby-Otto Fault. Outcrops within the depression are iron carbonate altered and sheared. It was

anticipated that the hole would intersect this target at 60 to 100 m in the hole.

(2) an east-northeast to northeast trending max-min conductor identified on 1994 grid lines 9+00E to 14+00E. It was anticipated that the hole would intersect this target at 300 to 400 m in the hole.

Hole EO-22-002 was collared on claim 566666 at 560949.7 mE, 5324715.2 mN (UTM NAD83 Zone 17 coordinates). The planned azimuth was 345° (planned dip -46°). The hole was collared and drilled 4.56 m of overburden and set casing in mafic intrusive (gabbro). Reflex Gyro single shot surveys were taken at 12 m depth and then every 30m after in the hole. Upon completion of drilling, the hole was surveyed with the Reflex Gyro in Continuous Sprint mode.

A summary of lithologies and major features is as follows:

Table 7. Summary Log of hole EO-22-002.

Meterage		Lithology	Significant Intercepts
FROM	TO		
0	4.56	Casing	
4.56	21.52	Mafic Intrusion	
21.52	24.86	Tuff	
24.86	34.09	Mafic Volcanic	
34.09	53.15	Mafic Intrusion	
53.15	60.32	Mafic Intrusion	Lower contact is the Eby-Otto Fault, identified by bleaching with carbonate-albite-chlorite alteration, shearing and rubbly core. Mineralization is very weak, as fine grained pyrite in minor narrow stringers. Assays pending.
60.32	69.58	Mafic Volcanic	Approximately 10-20% quartz-carbonate stringers and vein breccia, with trace pyrite and weak to moderate bleaching of host rock.
69.58	142.72	Mafic Volcanic	
142.72	194.91	Mafic Volcanic	
194.91	306.82	Mafic Volcanic	222.1 - 222.5 m: quartz-carbonate breccia vein with trace fine grained pyrite and specularite
306.82	308.17	Lamprophyre	

Meterage FROM	TO	Lithology	Significant Intercepts
308.17	366.76	Mafic Volcanic	351 - 360 m: 10-20% quartz-carbonate veins and stringers with trace pyrite
366.76	388.61	Archean Gabbro	
388.61	404.61	Mafic Volcanic	
404.61	444.09	Archean Gabbro	
444.09	450	Mafic Volcanic	End of hole @ 450 m.

The fault intercepted at 59.1 – 60.3 m is the strongest structural feature in the core, and is interpreted here at the Eby-Otto Fault. Only very weak pyrite mineralization is associated with the bleaching (albite-carbonate-chlorite) alteration and quartz-carbonate veining.

No significant mineralization or structure was identified in the core sufficient to explain the max-min response expected for the second target. A weak epidote-chlorite altered shear with pyrite and quartz veining was encountered at 318.0 – 318.6 m, which could explain the max-min response. Weak veining and mineralization were also observed throughout the hole, with the strongest quartz veining occurring between 351 and 360 m.

A total of 244 samples were selected and cut for assay (gold and silver) and multi-element geochemistry. Assays are pending at the time of writing.

Hole EO-22-003

Hole EO-22-003 was planned to drill test two targets:

(1) a northeast trending max-min conductor identified on 1994 grid lines 9+00E to 14+00E. It was anticipated that the hole would intersect this target at 250 to 350 m in the hole.

(2) the extension of an east-northeast trending red syenite porphyry, reported to be the host of a gold-bearing quartz-carbonate vein in the Lemu Investments shaft (Lovell, 1972). A syenite porphyry is also mapped to the east of the Lemu Investments shaft (Lovell 1972), and it is interpreted these occurrences are the same porphyry dyke. It was anticipated that the hole would intersect the porphyry at 500 to 600 m in the hole.

Hole EO-22-003 was collared on claim 566666 at 560681.6 mE, 5324893.4 mN (UTM NAD83 Zone 17 coordinates). The planned azimuth was 360° (planned dip -49°). The hole was collared and drilled 20.48 m of overburden and set casing in mafic volcanic (basalt). Reflex Gyro single shot surveys were taken at 21 m depth and then every 30m after in the hole. Upon completion of drilling, the hole was surveyed with the Reflex Gyro in Continuous Sprint mode.

A summary of lithologies and major features is as follows:

Table 8. Summary Log of hole EO-22-003.

Meterage		Lithology	Significant Intercepts
FROM	TO		
0	20	Casing	
20	20.48	Overburden	
20.48	63.61	Mafic Volcanic	49.9 - 77 m: Moderately strong shearing at a shallow angle to core axis, hosting moderate quartz-carbonate veining and trace pyrite. Oriented structural measurements indicate the shear is steeply to near vertically dipping (to the southwest) and striking southeast, perpendicular to the predominant structural trend of the area.
63.61	95.48	Mafic Volcanic	
95.48	97.55	Lamprophyre	
97.55	105.79	Mafic Volcanic	
105.79	107.22	Mafic Volcanic	
107.22	120.07	Mafic Volcanic	
120.07	124.9	Mafic Volcanic	
124.9	157.35	Mafic Volcanic	
157.35	159.27	Lamprophyre	
159.27	180.56	Mafic Volcanic	
180.56	213.47	Archean Gabbro	
213.47	217.78	Mafic Volcanic	
217.78	245.78	Archean Gabbro	

Meterage FROM	TO	Lithology	Significant Intercepts
245.78	319.55	Mafic Volcanic	251.9 - 254.3 m: sheared and rubbly fault zone with minor clayey fault gouge and trace graphite. The zone hosts trace fine-grained pyrite. 263 - 296 m: weak to locally moderate shearing associated with moderate quartz-carbonate veining which locally hosts trace pyrite. Oriented structural measurements indicate the shear is steep to near vertical dipping (to the southwest) and striking southeast, similar to the shear zone at 49.9 - 77 m.
319.55	326.05	Lamprophyre	
326.05	366.8	Mafic Volcanic	
366.8	374.75	Mafic Intrusive	366.8 - 379.1 m: weakly brecciated and bleached (albite-carbonate alteration) hosting disseminated trace fine pyrite in a gabbro sandwiched between basalt flows.
374.75	385.63	Mafic Volcanic	
385.63	387.01	Lamprophyre	
387.01	389.57	Mafic Volcanic	
389.57	423.27	Mafic Volcanic	
423.27	452.7	Mafic Volcanic	449.2 - 452.7 m: quartz vein flooding with trace fine pyrite.
452.7	454.08	Lamprophyre	
454.08	517.13	Mafic Volcanic	
517.13	526.35	Mafic Volcanic	
526.35	528.1	Mafic Intrusive	
528.1	636	Mafic Volcanic	616.5 - 617.2 m: grey calcite-quartz breccia vein hosting trace fine grained specularite and pyrite. End of hole @ 636 m.

The shear zones at 251.9 – 254.3 and 366.8 – 379.1 m likely explain the max-min conductor identified in the 1994 survey conducted by Robinson. These intervals contain trace fine disseminated pyrite as well as several narrow brittle faults (the most significant at 251.9 – 254.3 m) with gouge which would be sufficient to elicit a max-min response.

Unfortunately, the red porphyry observed at the Lemu Investments shaft and in Lovell's 1972 mapping was not intersected in this hole. It is possible the porphyry dyke dips

to the north so that a north-bearing hole would have drilled underneath it. It may also be that the porphyry may pinch and swell or is off-set by an unmapped structure.

A total of 170 samples were selected and cut for assay (gold and silver) and multi-element geochemistry. Assays are pending at the time of writing.

Recommendations

At this time, assay results are pending, therefore no recommendations can be made regarding follow up work. For gold potential, recommendations on which alteration and/or structural zones worth follow-up are dependent on the results of the assays and whether there is anomalous gold mineralization or proxies such as geochemical evidence of hydrothermal fluids. For critical metal potential, the indicators can be more subtle; which geological units have elevated critical metals or related elements that can be used as proxies, are entirely determined by the multi-element geochemistry and are therefore also dependent on the results of the assays. The authors recommend that until assay results are returned from the lab, no further drilling or other work is required to test the targets for both gold or critical metals at the time of filing this report.

Certificate of Qualifications

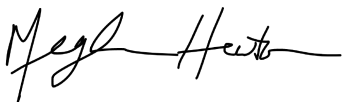
I, Meghan Hewton of Temiskaming Shores, ON, hereby certify that:

1. I am employed by Canada Silver Cobalt Works as Senior Geologist.
2. I am the Qualified Person for this report entitled "Report on a Diamond Drilling Program at the Highway 66 Claims (Tinney Option Agreement)."
3. I hold the following academic qualifications: BSc. (Hons.) Environmental Geosciences (2010), University of Western Ontario (London, ON); and MSc. Geology (2012), Simon Fraser University (Burnaby, BC).
4. I am a registered member of the Association of Professional Geoscientists of Ontario (Registration # 3576) and received my PGeo designation in February 2022.
5. I have practiced as an exploration geologist (GIT or PGeo.) in Ontario, Yukon, Northwest Territories, and Alaska, USA, continually since 2012.
6. I have worked on mineral exploration projects in the Abitibi Greenstone Belt since 2015, and am familiar with the host rock lithologies, alteration and mineralization styles, and deposit models typical of the Abitibi Greenstone Belt.
7. I supervised the drilling and logging work reported in this assessment report.
8. I authored this report.
9. As of the date of this certificate, to the best of my knowledge, information, and belief, this report contains all scientific and technical information that is required to be disclosed to make this report not misleading.

Dated:

December 13, 2022

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Meghan Hewton, MSc., PGeo (Registration #3576)

Senior Geologist, Canada Silver Cobalt Works

I, Gerhard Kiessling of Wasaga Beach, ON, hereby certify that:

1. I am employed by Canada Silver Cobalt Works as Vice President Exploration.
2. I am the Qualified Person for this report entitled “Report on a Diamond Drilling Program at the Highway 66 Claims (Tinney Option Agreement).”
3. I hold the following academic qualifications: BSc. (Hons.) Earth Sciences, Geology Specialization, University of Waterloo (Waterloo, ON)
4. I am a registered member of the Association of Professional Geoscientists of Ontario (Registration # 3670) and received my PGeo designation in July 2022.
5. I have practiced as an exploration geologist (GIT or PGeo.) in Ontario, Alberta, and Nunavut since 2013.
6. I have worked on mineral exploration projects in the Abitibi Greenstone Belt since 2017, and am familiar with the host rock lithologies, alteration and mineralization styles, and deposit models typical of the Abitibi Greenstone Belt.
7. I supervised the drilling and logging work reported in this assessment report.
8. I co-authored this report.
9. As of the date of this certificate, to the best of my knowledge, information, and belief, this report contains all scientific and technical information that is required to be disclosed to make this report not misleading.

Dated:

December 13 2022

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Gerhard Kiessling, BSc., PGeo (Registration #3670)

Vice President Exploration, Canada Silver Cobalt Works



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Program Expenses Incurred

Table 9. Summary of program expenses.

Item	Date From	Date To	Subitem	Rate	/	Unit	# Units	Cost
Trail cutting/mulching	28-Sep-22	4-Oct-22	Diversified Forestry Inc.	$ 400.00	/	hour	16	$ 6,400.00
Drill trail cutting/mulching float	28-Sep-22	4-Oct-22	Mid-North Recycling (for Diversified Forestry Inc)	$ 150.00	/	hour	5.5	$ 825.00
Float Drill	23-Oct-22	23-Oct-22	Laframboise Drilling Inc.	$ 1,750.88	/	day	1	$ 1,750.88
Drilling (casing)	24-Oct-22	8-Nov-22	Laframboise Drilling Inc.	$ 330.00	/	meters	15	$ 4,895.00
Drilling (core)	24-Oct-22	8-Nov-22	Laframboise Drilling Inc.	$ 110.51	/	meters	1725	$ 190,625.00
Drilling Materials (casing shoes)	24-Oct-22	8-Nov-22	Laframboise Drilling Inc.	$ 325.00	/	shoe	4	$ 1,300.00
Drilling (moving drill)	24-Oct-22	8-Nov-22	Laframboise Drilling Inc.	$ 195.00	/	hour	28	$ 5,460.00
Drillers travelling	24-Oct-22	8-Nov-22	Laframboise Drilling Inc.	$ 200.00	/	hour	30	$ 6,000.00
Drill Fuel	24-Oct-22	8-Nov-22	Laframboise Drilling Inc.	$ 2.06	/	litre	8396.4	$ 17,266.87
Cut drill pads	22-Oct-22	22-Oct-22	Laframboise Drilling Inc.	$ 195.00	/	hour	14	$ 2,730.00
Casing Caps	24-Oct-22	8-Nov-22	Laframboise Drilling Inc.	$ 85.00	/	cap	4	$ 340.00

Item	Date From	Date To	Subitem	Rate	/	Unit	# Units	Cost
Casing Flags	24-Oct-22	8-Nov-22	B&G	$ 105.00	/	flag	3	$ 315.00
Core Boxes	24-Oct-22	8-Nov-22	Garden Lake Timber	$ 14.00	/	box	397	$ 5,558.00
Survey Tool rental: Reflex Gyro	24-Oct-22	8-Nov-22	Imdex Ltd.	$ 266.67	/	day	16	$ 4,266.67
Survey Tool rental: Reflex TN-14	24-Oct-22	8-Nov-22	Imdex Ltd.	$ 133.33	/	day	16	$ 2,133.33
Orientation Tool Rental: Reflex ACT III	24-Oct-22	8-Nov-22	Imdex Ltd.	$ 98.91	/	day	16	$ 1,582.56
Orientation Logging Tool Rental: Reflex IQLogger	26-Oct-22	7-Dec-22	Imdex Ltd.	$ 35.00	/	day	20	$ 700.00
Leapfrog Geo 3D modelling software - 2 licenses	15-Oct-22	9-Dec-22	Seequent Ltd. ($27,790.00 USD to 35,779.63 CAD) Drilling + partial logging time	$ 98.02	/	day	26	$ 2,548.52
Geotic Logging software - 2 licenses	26-Oct-22	7-Dec-22	Geotic (2 of 3 licenses)	$ 2.63	/	day	20	$ 52.60
Exploration Geologist	24-Oct-22	7-Dec-22	LOGGING	$ 500.00	/	day	20	$ 10,000.00
Geotechnician	24-Oct-22	7-Dec-22	GEOTECHING	$ 462.50	/	day	20	$ 9,250.00
Senior Geologist QP	24-Oct-22	7-Dec-22	ADMINISTRATIVE	$ 67.50	/	hour	2.5	$ 168.75
Junior Geologist	24-Oct-22	7-Dec-22	DRILL MANAGEMENT	$ 46.25	/	hour	4	$ 185.00

Item	Date From	Date To	Subitem	Rate	/	Unit	# Units	Cost
Senior Geologist	24-Oct-22	7-Dec-22	DRILL MANAGEMENT	$ 57.50	/	hour	32.5	$ 1,868.75
Senior Geologist	24-Oct-22	7-Dec-22	DRILLING PREPARATION	$ 57.50	/	hour	3	$ 172.50
Junior Geologist	24-Oct-22	7-Dec-22	DRILLING PREPARATION	$ 46.25	/	hour	4.5	$ 208.13
Senior Geologist QP	24-Oct-22	7-Dec-22	DRILLING PREPARATION	$ 67.50	/	hour	17	$ 1,147.50
Senior Labourer	24-Oct-22	7-Dec-22	LABOUR	$ 46.25	/	hour	38	$ 1,757.50
Senior Geotech	24-Oct-22	7-Dec-22	LABOUR	$ 46.25	/	hour	15.5	$ 716.88
Geotech	24-Oct-22	7-Dec-22	LABOUR	$ 40.00	/	hour	3	$ 120.00
Senior Geotech	24-Oct-22	7-Dec-22	OFFICE	$ 46.25	/	hour	20	$ 925.00
Project Geologist	24-Oct-22	7-Dec-22	OFFICE	$ 52.50	/	hour	12	$ 630.00
Senior Geologist	24-Oct-22	7-Dec-22	TRAVEL & MOB/DE-MOB	$ 57.50	/	hour	6.5	$ 373.75
Senior Geologist	24-Oct-22	7-Dec-22	Report Writing	$ 57.50	/	hour	40	$ 2,300.00
Pickup Trucks	24-Oct-22	8-Nov-22	Vehicle for hauling core and visiting drills	$ 100.00	/	day	15	$ 1,500.00

Item	Date From	Date To	Subitem	Rate	/	Unit	# Units	Cost
Vehicle Mileage - core pickup & site visits	24-Oct-22	8-Nov-22	Charge for gas and mileage	$ 0.50	/	km	4985	$ 2,492.50
Core Shack and office	24-Oct-22	9-Dec-22	Charge for costs incurred with coreshack building	$ 100.00	/	day	47	$ 4,700.00
				TOTAL EXPENDITURES				**$ 293,265.68**

Expense Allocations

Table 10. Expense allocations per claim.

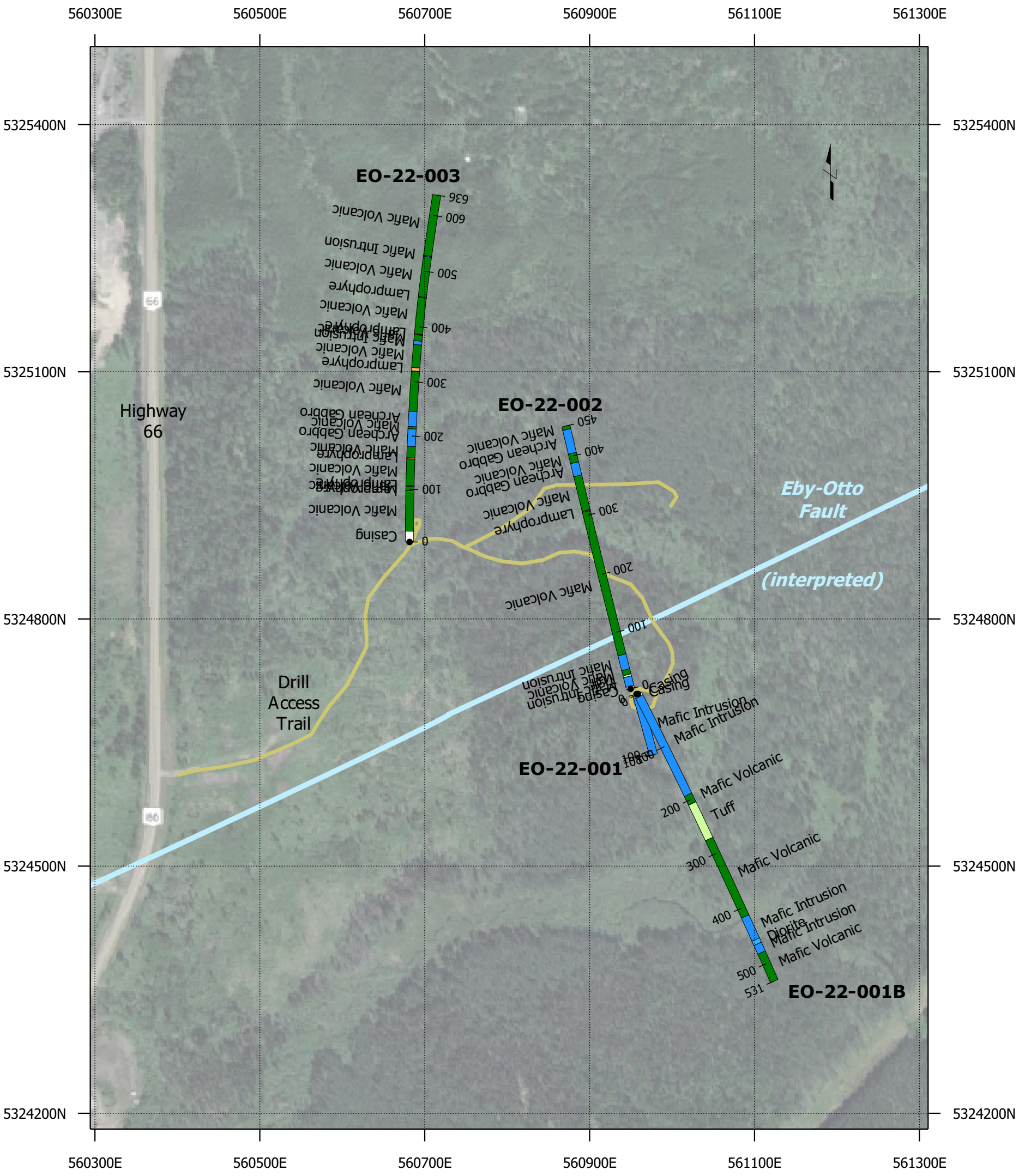
HOLE ID	AMOUNT OF EACH HOLE DRILLED PER CLAIM								
	HOLE LENGTH (m)	CLAIM 566666		CLAIM 247030		CLAIM 305709		CLAIM 566665	
		METERS	PERCENT	METERS	PERCENT	METERS	PERCENT	METERS	PERCENT
EO-22-001	108	108	*100%*	0	*0%*	0	*0%*	0	*0%*
EO-22-001B	531	354	*67%*	0	*0%*	0	*0%*	177	*33%*
EO-22-002	450	108	*24%*	209.4	*47%*	132.6	*29%*	0	*0%*
EO-22-003	636	84	*13%*	0	*0%*	0	*0%*	552	*87%*
TOTAL METERAGE	**1,725**	654	*38%*	209.4	*12%*	132.6	*8%*	729	*42%*
TOTAL PROGRAM EXPENDITURES	**$ 293,265.68**	**AMOUNT APPLIED TO CLAIM 566666**	**$ 111,185.94**	**AMOUNT APPLIED TO CLAIM 247030**	**$ 35,599.90**	**AMOUNT APPLIED TO CLAIM 305709**	**$ 22,543.21**	**AMOUNT APPLIED TO CLAIM 566665**	**$ 123,936.63**

Table 11. Expense allocations by claim holder.

CLAIMS OWNER	METERS	DRILLING METERAGE %	EXPENDITURES APPLIED
LOUIS J. DESPRES Claims 566666, 247030, 305709	996	57.74%	$ 169,329.05
ERIC J. MARION Claim 566665	729	42.26%	$ 123,936.63

Highway 66 Drill Program Plan View

Satellite imagery draped with drill lithology log projected to surface



Scale: 1:5,000

0m 400m

Legend

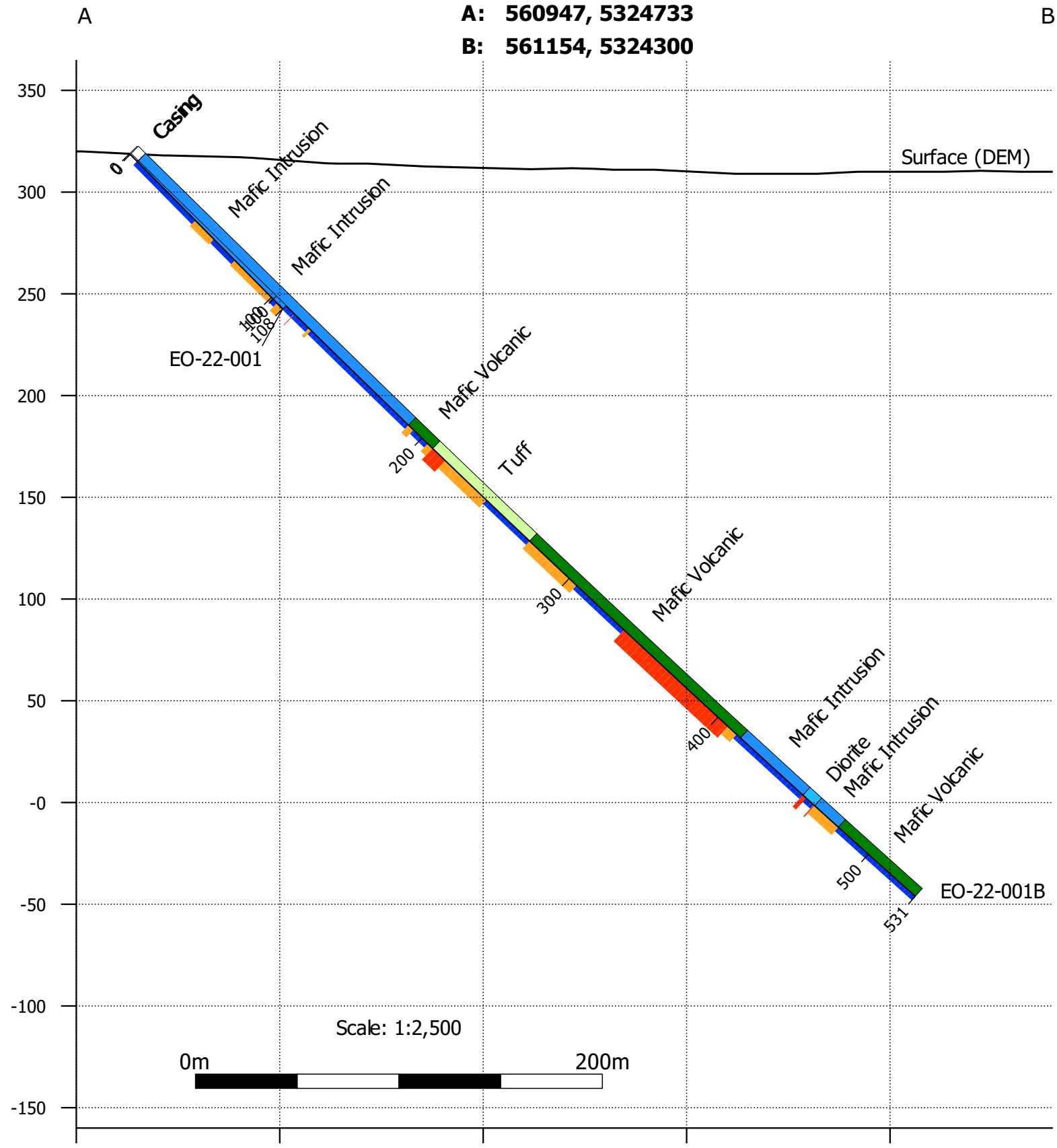
Lithology

- Casing
- Lamprophyre
- Tuff
- Mafic Volcanic
- Diorite
- Mafic Intrusion
- Archean Gabbro

EO-22-001 & EO-22-001B Lithology Section (Looking azimuth 080)

Section Location
UTM NAD83 Zone 17

A: 560947, 5324733
B: 561154, 5324300



x: 560947
y: 5324733

x: 560990
y: 5324643

x: 561033
y: 5324553

x: 561077
y: 5324462

x: 561120
y: 5324372

Legend

Lithology

- Casing
- Lamprophyre
- Tuff
- Mafic Volcanic
- Diorite
- Mafic Intrusion
- Archean Gabbro

Sulphide Percent

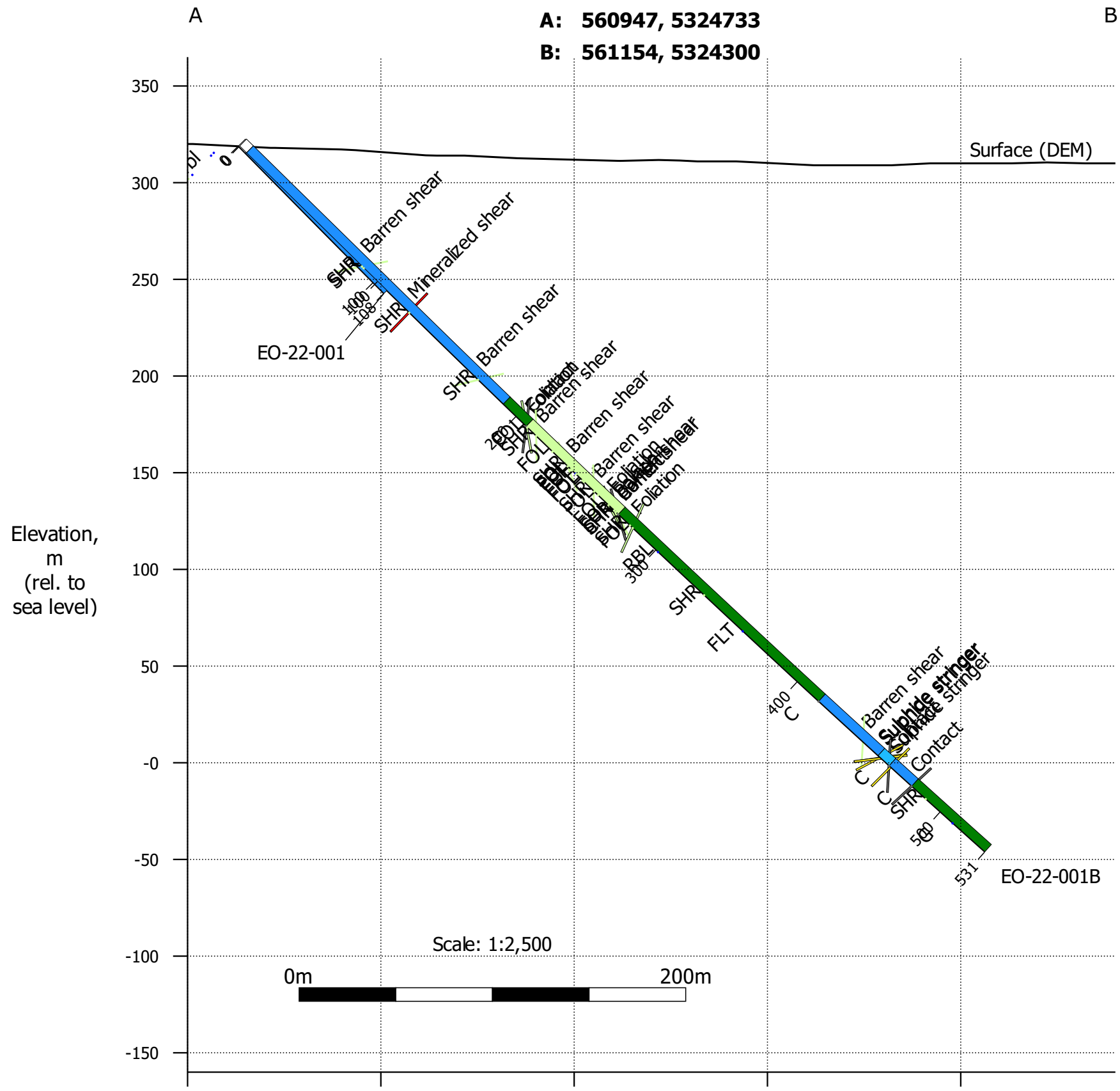
pyrite +/- chalcopyrite

1 1.5 2 2.5 3

EO-22-001 and EO-22-001B
Structure Log Section
(Looking azimuth 080)

Section Location
UTM NAD83 Zone 17

A: 560947, 5324733
B: 561154, 5324300



x: 560947	x: 560990	x: 561033	x: 561077	x: 561120
y: 5324733	y: 5324643	y: 5324553	y: 5324462	y: 5324372

Legend

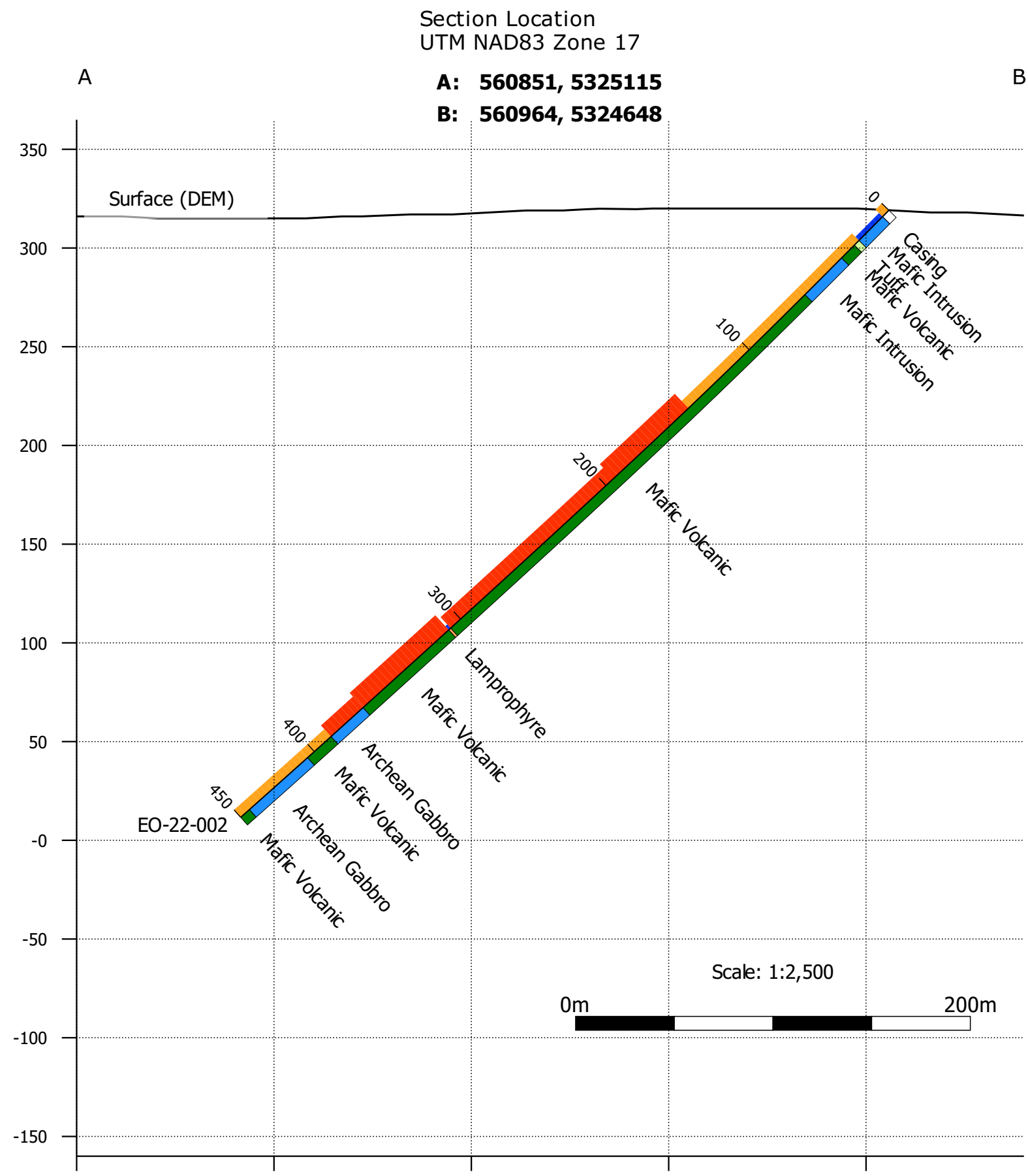
IQLogger Oriented Structures

- EO_to_TINNEY_IQLogger_Structures
- EO_to_TINNEY_IQLogger_Structures (overturned)
- Mineralized shear
- Fault with gouge
- Barren shear
- Flt plane - no gouge
- Sulphide stringer
- Foliation
- Contact

Non-Oriented Structures

- EO_to_TINNEY_Interval_Structure
- flt
- shr
- c
- rbl
- fol
- FLTZ
- g
- jntst

EO-22-002 Lithology Section
(Looking azimuth 080)



x: 560851	x: 560875	x: 560899	x: 560922	x: 560946
y: 5325115	y: 5325018	y: 5324920	y: 5324823	y: 5324726

Legend

Lithology

- Casing
- Lamprophyre
- Tuff
- Mafic Volcanic
- Diorite
- Mafic Intrusion
- Archean Gabbro

Sulphide Percent

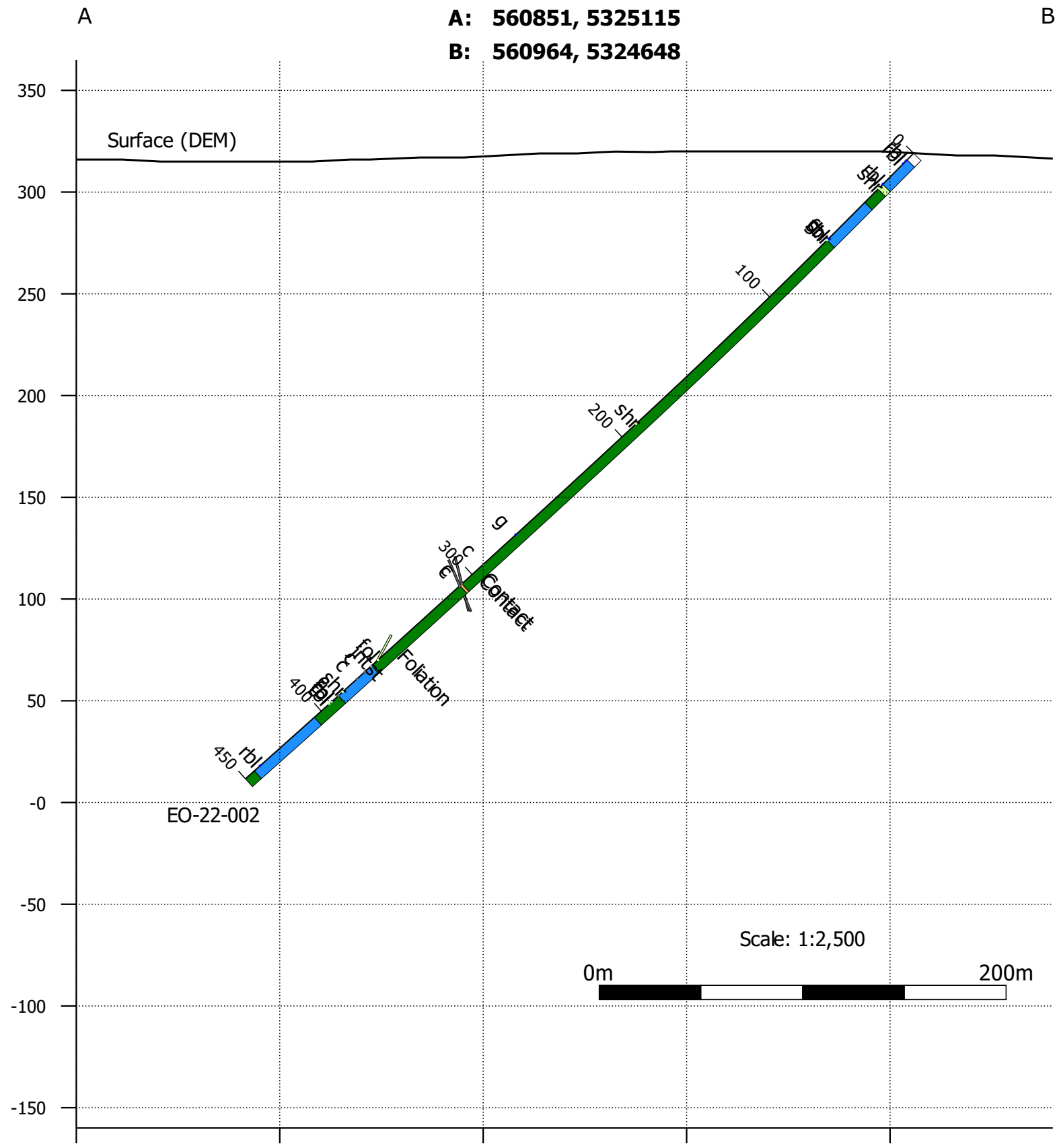
pyrite +/- chalcopyrite

1 1.5 2 2.5 3

EO-22-002
Structure Log Section
(Looking azimuth 080)

Section Location
UTM NAD83 Zone 17

A: 560851, 5325115
B: 560964, 5324648



x: 560851	x: 560875	x: 560899	x: 560922	x: 560946
y: 5325115	y: 5325018	y: 5324920	y: 5324823	y: 5324726

Legend

IQLogger Oriented Structures

- EO_to_TINNEY_IQLogger_Structures
- EO_to_TINNEY_IQLogger_Structures (overturned)
- Mineralized shear
- Fault with gouge
- Barren shear
- Flt plane - no gouge
- Sulphide stringer
- Foliation
- Contact

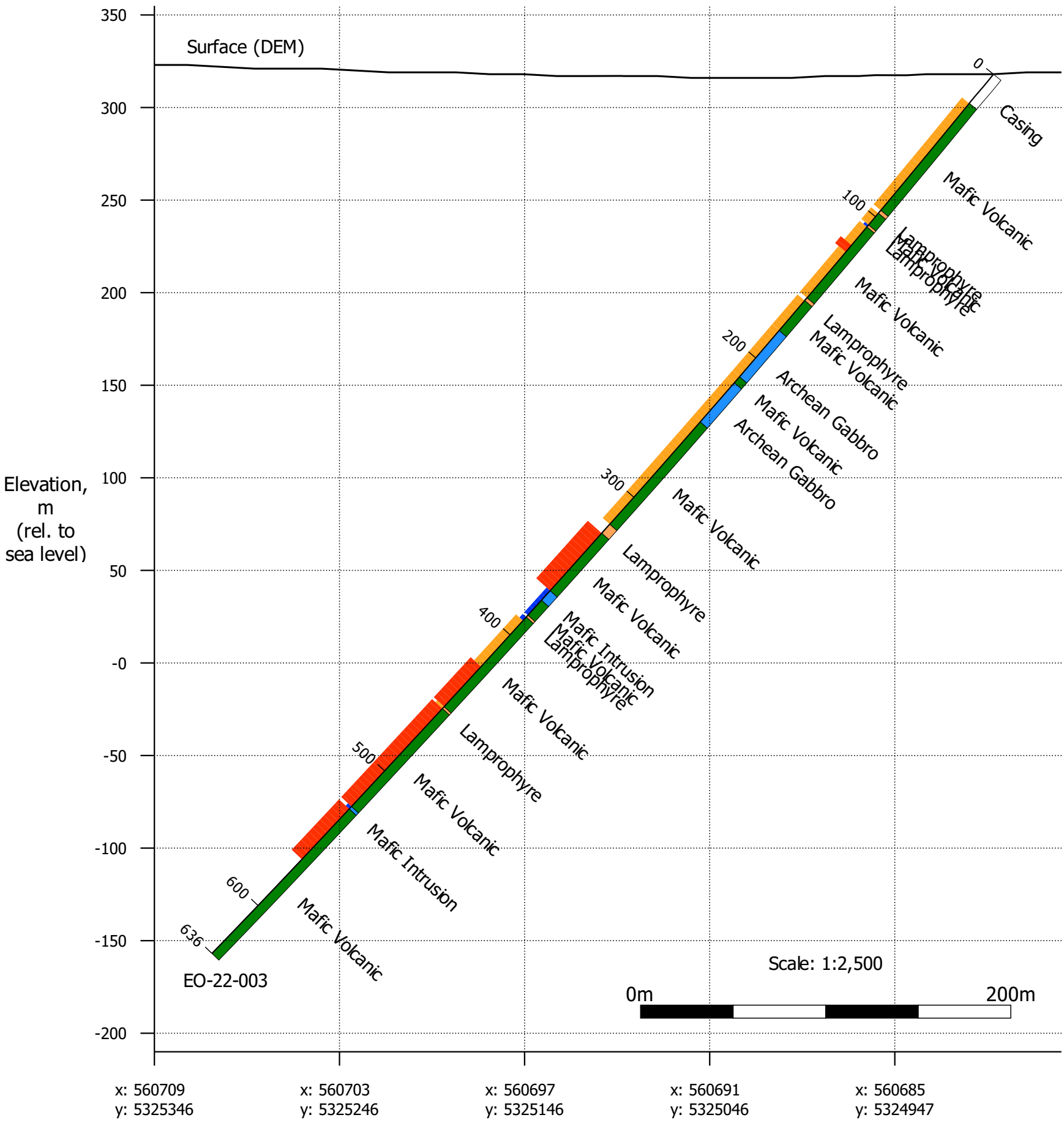
Non-Oriented Structures

- EO_to_TINNEY_Interval_Structure
- flt
- shr
- c
- rbl
- fol
- FLTZ
- g
- jntst

EO-22-003 Lithology Section (looking East)

Section Location
UTM NAD83 Zone 17

A: 560709, 5325346
B: 560679, 5324857



Legend

Lithology

- Casing
- Lamprophyre
- Tuff
- Mafic Volcanic
- Diorite
- Mafic Intrusion
- Archean Gabbro

Sulphide Percent

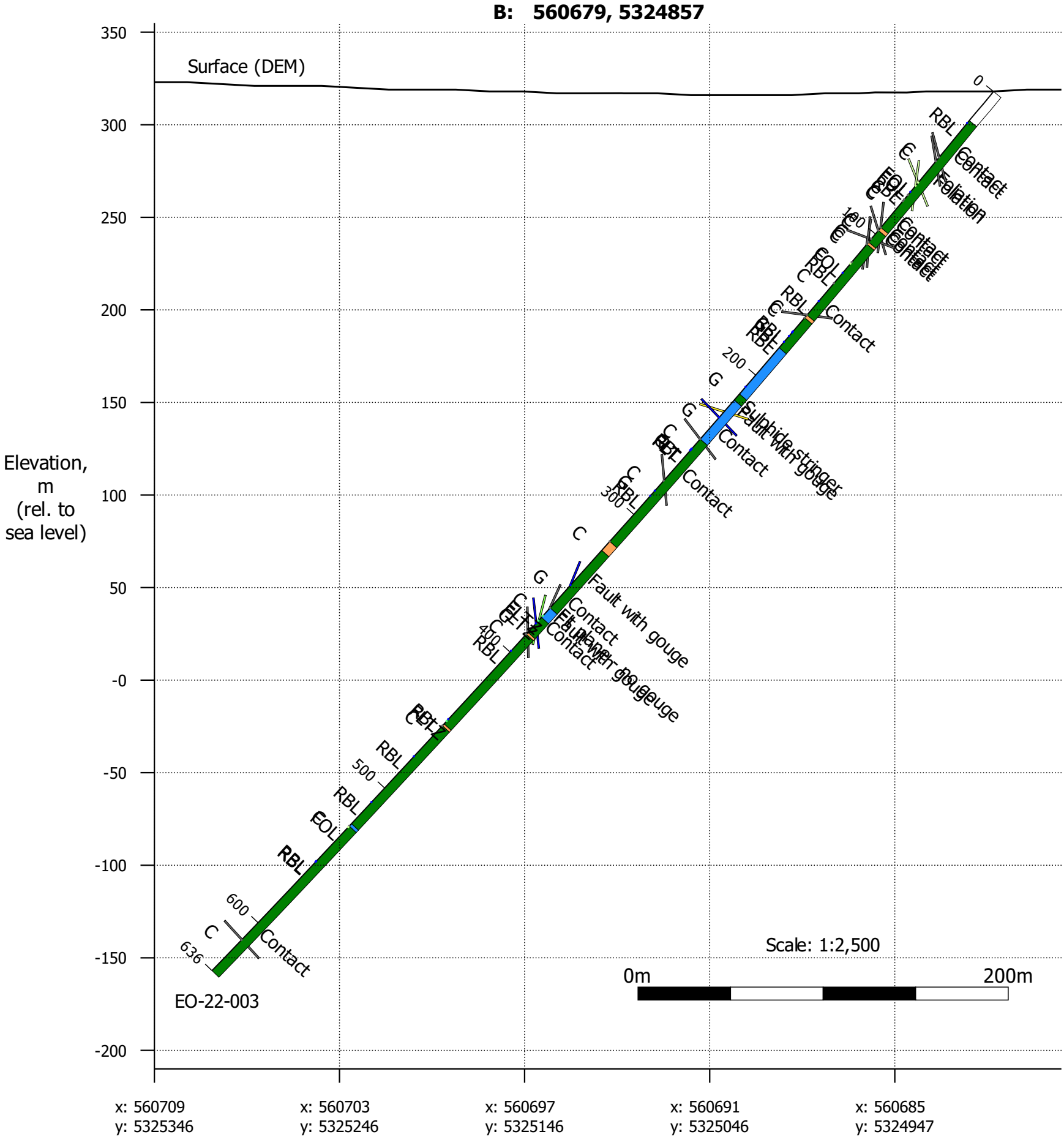
pyrite +/- chalcopyrite

1 1.5 2 2.5 3

EO-22-003
Structure Log Section
(Looking East)

Section Location
UTM NAD83 Zone 17

A: 560709, 5325346
B: 560679, 5324857



Legend

IQLogger Oriented Structures

EO_to_TINNEY_IQLogger_Structures

EO_to_TINNEY_IQLogger_Structures (overturned)

Mineralized shear | Fault with gouge | Barren shear | Flt plane - no gouge

Sulphide stringer | Foliation | Contact

Non-Oriented Structures

EO_to_TINNEY_Interval_Structure

flt | shr | c

rbl | fol | FLTZ

g | jntst

CANADA SILVER COBALT

Drillhole Number: **EO-22-001** Project Location: **Ebby-Otto, Kirkland Lake Ontario**

Drill Hole Log

Collar

Easting	560955.0000
Northing	5324703.0000
Elevation	318.0000
Azimuth	157.60°
Dip	-45.30°
Length	108.00

Drill Hole

Core Type	DDH
Core Size	NQ
Hole Test	Gyro
Cemented	No

Location

Township	Eby
Cell Claim No.	566666

Operation

Contractor	Laframboise
Hole Start Date	2022-10-24
Hole End Date	2022-10-25
Project Operator	CSCW
Logged By	Martin Levasseur
Logging Complete	2022-10-26

Collar Survey	Yes	**Survey Equipment**	REFLEX GYRO SPRINT-IQ
Datum	UTM NAD83 z17	**Unit Measurement**	Meters
Survey Complete Date	2022-10-25		

[redacted]

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	30.00	164.03°	-45.01°	No	No	
Gyro	60.00	164.82°	-44.86°	No	No	
Gyro	90.00	164.82°	-44.77°	No	No	

Detailed Drill Hole Log

From	To	Title	Description
0.00	5.31	Casing	Casing
5.31	108.00	Mafic Intrusive	Grey to dark grey, generally medium-grained, equigranular, hommogeneous, massive, mafic intrusive. Zones of slightly coarser graine-sized mafics (possible coarse-grained zones that have been remelted/recrystallized), from 12-29m and 63.5-66m and unit becomes fine-grained from 103-EOH. A few 5-10cm patches from 26.90-52.20m of weak epidotization/saussuritization associated with epi stringers. About 1% epi fracture fills and 2-3% qtz/carb stringers and frature fills throughout with varying angles, where the latter is commonly associated with hem alt (typically as haloes) and Py. Weak hematite can also be found along fractures throughout. Three 5-10cm qtz veins at alpha angles>50 with hem haloes + py. Trace to 1% Py as disseminated and/or euhedral medium-grained associated with qtz/carb stringers. - increases to 1-2% within fine-grained mafic zone from 103-EOH. No lower contact, unit spands entire hole.

Alteration

From	To	Overall St...	Description
5.31	26.90	Weak	Weak to moderate hematite can be found along many fracture surfaces and also alterating qtz/carb stringers and veins + thin sub-mm haloes
26.90	52.20	Weak	Multiple 5-20cm patches of weak-mod. Epi/chl, relating to some sub-cm wide stringers at 30-40 dtCA of similar composition. Weak-mod. hematite found along many fracture surfaces and also alterating qtz/carb stringers and veins + thin sub-mm haloes
52.20	108.00	Weak	Weak to moderate hematite can be found along many fracture surfaces and also alterating qtz/carb stringers and veins + thin sub-mm haloes

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
5.31	108.00	Epi	40.00°		0.30	About 1% EP/ch fracture fills throughout, no apparent pattern - varying dTCA throughout from 15-90 dTCA, commonly seen as 25-45dTCA. Widths can range between 0.2-0.5cm. Not seen associated with min. A few 5-10cm patches of weak EP/chl alt can be seen from 26.90-52.20m, associated with stringers of similar composition.
5.31	108.00	Qt-carb	50.00°		0.50	About 2-3% Qtz/carb stringers ans fracture fills throughout, no apparent pattern - varying dTCA throighout from 15-70 dTCA. Widths can range between 0.2-1cm but commonly about 0.5cm. Typically seen with hem alt (often as thin haloes) and with trace to multiple % fine- to medium-grained Py. Generally spaced out between each stringer but where they are more clustered, there is slightly stronger hematite alteration.
15.17	15.33	Qtz	55.00°	320.00°	7.00	A 7-8cm wide Milky qtz vein at 55alpha angle and 320beta angle. Hairline fractures and edges infilled by chl. 0.5cm UC and 2cm LC are hematized haloes of the vein, with the latter containing crosscutting carb fracture infills and trace to 1% blebby Py.
58.93	59.02	Qtz	69.30°	281.50°	5.00	5cm wide milky qtz vein, barren of mineralization, 0.2-0.3cm of very weak hem as haloes
93.90	94.02	Qtz	40.00°		5.00	About 5cm wide milky qtz vein at 40 dTCA. Contains moderate fracture infill hem within the vein and as moderate to weak gradational haloe on either side of vein for 3-4cm along UC and 15-17cm along LC. Beta angle could not be measured confidently. Trace disseminated Py can be found within haloe and surrounding Unit.

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description

Magnetic Susceptibility

Depth	MagSus	Comments
6.00	31.00	
9.00	1.13	
12.00	1.88	
15.00	18.90	
18.00	8.94	
21.00	3.67	
24.00	5.23	
27.00	2.32	
30.00	2.16	
33.00	3.29	
36.00	2.39	
39.00	1.58	
42.00	1.11	
45.00	1.15	
48.00	11.60	
51.00	28.60	
54.00	6.18	
57.00	4.90	
60.00	6.20	
63.00	7.01	
66.00	1.43	
69.00	13.00	
72.00	1.45	
75.00	1.78	
78.00	1.53	
81.00	27.30	
84.00	1.91	
87.00	3.35	
90.00	3.13	
93.00	8.74	
96.00	1.87	
99.00	1.15	

Magnetic Susceptibility

Depth	MagSus	Comments
102.00	1.97	
105.00	2.50	
108.00	3.61	EOH

Specific Gravity

From	To	Length (m)	Weight Ai...	Weight ...	Delta	SG	Litho Code	Standard ID	Comments	
0.10	0.11	0.01	281.33	175.46	105.87	2.66		STD2		
19.24	19.40	0.16	788.56	531.03	257.53	3.06	MI		Trace Py	
32.23	32.36	0.13	705.44	472.50	232.94	3.03	MI		Trace Py	
53.32	53.43	0.11	565.55	379.50	186.05	3.04	MI		Trace Py	
67.67	67.86	0.19	692.51	464.64	227.87	3.04	MI		Trace Py	
90.68	90.83	0.15	774.43	519.40	255.03	3.04	MI			
103.19	103.37	0.18	1013.03	679.47	333.56	3.04	MI		Trace Py	

CANADA SILVER COBALT

Drillhole Number: **EO-22-001b** Project Location: **Ebby-Otto, Kirkland Lake Ontario**

Drill Hole Log

Collar

Easting	560958.6000
Northing	5324708.7700
Elevation	322.8000
Azimuth	152.00°
Dip	-45.00°
Length	531.00

Drill Hole

Core Type	DDH
Core Size	NQ
Hole Test	Gyro
Cemented	No

Location

Township	Eby
Cell Claim No.	566665 & 566666

Operation

Contractor	Laframboise
Hole Start Date	2022-10-25
Hole End Date	2022-10-30
Project Operator	CSCW
Logged By	Martin Levasseur
Logging Complete	2022-11-02

Collar Survey	Yes
Datum	UTM NAD83 z17
Survey Complete Date	2022-10-30

Survey Equipment	REFLEX GYRO SPRINT-IQ
Unit Measurement	Meters

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	3.00	152.77°	-44.49°	No	No	
Gyro	6.00	152.82°	-44.49°	No	No	
Gyro	9.00	152.90°	-44.49°	No	No	
Gyro	12.00	152.86°	-44.48°	No	No	
Gyro	15.00	152.98°	-44.46°	No	No	
Gyro	18.00	152.95°	-44.47°	No	No	
Gyro	21.00	153.05°	-44.48°	No	No	
Gyro	24.00	152.98°	-44.46°	No	No	
Gyro	27.00	153.09°	-44.46°	No	No	
Gyro	30.00	153.07°	-44.47°	No	No	
Gyro	30.00	152.36°	-44.39°	Yes	Yes	
Gyro	33.00	153.13°	-44.47°	No	No	
Gyro	36.00	153.12°	-44.45°	No	No	
Gyro	39.00	153.19°	-44.42°	No	No	
Gyro	42.00	153.19°	-44.41°	No	No	
Gyro	45.00	153.22°	-44.42°	No	No	
Gyro	48.00	153.25°	-44.41°	No	No	
Gyro	51.00	153.26°	-44.41°	No	No	
Gyro	54.00	153.30°	-44.40°	No	No	
Gyro	57.00	153.30°	-44.41°	No	No	
Gyro	60.00	153.35°	-44.39°	No	No	
Gyro	60.00	153.22°	-44.39°	Yes	Yes	
Gyro	63.00	153.39°	-44.40°	No	No	
Gyro	66.00	153.37°	-44.39°	No	No	
Gyro	69.00	153.40°	-44.42°	No	No	
Gyro	72.00	153.46°	-44.42°	No	No	
Gyro	75.00	153.48°	-44.41°	No	No	
Gyro	78.00	153.50°	-44.44°	No	No	
Gyro	81.00	153.53°	-44.42°	No	No	
Gyro	84.00	153.53°	-44.40°	No	No	
Gyro	87.00	153.54°	-44.43°	No	No	
Gyro	90.00	153.60°	-44.41°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	90.00	153.73°	-44.34°	Yes	Yes	
Gyro	93.00	153.60°	-44.41°	No	No	
Gyro	96.00	153.62°	-44.41°	No	No	
Gyro	99.00	153.60°	-44.38°	No	No	
Gyro	102.00	153.66°	-44.40°	No	No	
Gyro	105.00	153.66°	-44.40°	No	No	
Gyro	108.00	153.68°	-44.39°	No	No	
Gyro	111.00	153.72°	-44.37°	No	No	
Gyro	114.00	153.74°	-44.36°	No	No	
Gyro	117.00	153.73°	-44.36°	No	No	
Gyro	120.00	153.78°	-44.33°	No	No	
Gyro	120.00	152.72°	-44.35°	Yes	Yes	
Gyro	123.00	153.79°	-44.32°	No	No	
Gyro	126.00	153.82°	-44.31°	No	No	
Gyro	129.00	153.80°	-44.38°	No	No	
Gyro	132.00	153.87°	-44.31°	No	No	
Gyro	135.00	153.89°	-44.30°	No	No	
Gyro	138.00	153.86°	-44.31°	No	No	
Gyro	141.00	153.87°	-44.29°	No	No	
Gyro	144.00	153.88°	-44.29°	No	No	
Gyro	147.00	153.94°	-44.31°	No	No	
Gyro	150.00	153.94°	-44.24°	No	No	
Gyro	150.00	152.80°	-44.26°	Yes	Yes	
Gyro	153.00	153.96°	-44.23°	No	No	
Gyro	156.00	153.97°	-44.23°	No	No	
Gyro	159.00	154.02°	-44.19°	No	No	
Gyro	162.00	154.05°	-44.19°	No	No	
Gyro	165.00	154.04°	-44.17°	No	No	
Gyro	168.00	154.07°	-44.17°	No	No	
Gyro	171.00	154.09°	-44.13°	No	No	
Gyro	174.00	154.13°	-44.13°	No	No	
Gyro	177.00	154.18°	-44.13°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	180.00	154.17°	-44.09°	No	No	
Gyro	180.00	154.23°	-44.12°	Yes	Yes	
Gyro	183.00	154.17°	-44.08°	No	No	
Gyro	186.00	154.23°	-44.08°	No	No	
Gyro	189.00	154.17°	-44.06°	No	No	
Gyro	192.00	154.22°	-44.04°	No	No	
Gyro	195.00	154.26°	-44.03°	No	No	
Gyro	198.00	154.22°	-44.03°	No	No	
Gyro	201.00	154.28°	-44.01°	No	No	
Gyro	204.00	154.33°	-44.03°	No	No	
Gyro	207.00	154.38°	-43.97°	No	No	
Gyro	210.00	154.34°	-43.97°	No	No	
Gyro	210.00	153.96°	-43.95°	Yes	Yes	
Gyro	213.00	154.39°	-43.93°	No	No	
Gyro	216.00	154.39°	-43.89°	No	No	
Gyro	219.00	154.44°	-43.84°	No	No	
Gyro	222.00	154.46°	-43.84°	No	No	
Gyro	225.00	154.43°	-43.83°	No	No	
Gyro	228.00	154.45°	-43.81°	No	No	
Gyro	231.00	154.47°	-43.79°	No	No	
Gyro	234.00	154.46°	-43.77°	No	No	
Gyro	237.00	154.51°	-43.77°	No	No	
Gyro	240.00	154.56°	-43.69°	No	No	
Gyro	240.00	154.29°	-43.78°	Yes	Yes	
Gyro	243.00	154.49°	-43.66°	No	No	
Gyro	246.00	154.57°	-43.64°	No	No	
Gyro	249.00	154.56°	-43.61°	No	No	
Gyro	252.00	154.52°	-43.57°	No	No	
Gyro	255.00	154.58°	-43.54°	No	No	
Gyro	258.00	154.58°	-43.50°	No	No	
Gyro	261.00	154.55°	-43.47°	No	No	
Gyro	264.00	154.61°	-43.45°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	267.00	154.64°	-43.43°	No	No	
Gyro	270.00	154.65°	-43.40°	No	No	
Gyro	270.00	154.66°	-43.47°	Yes	Yes	
Gyro	273.00	154.72°	-43.44°	No	No	
Gyro	276.00	154.66°	-43.47°	No	No	
Gyro	279.00	154.81°	-43.44°	No	No	
Gyro	282.00	154.77°	-43.39°	No	No	
Gyro	285.00	154.81°	-43.39°	No	No	
Gyro	288.00	154.78°	-43.39°	No	No	
Gyro	291.00	154.81°	-43.35°	No	No	
Gyro	294.00	154.80°	-43.32°	No	No	
Gyro	297.00	154.83°	-43.32°	No	No	
Gyro	300.00	154.83°	-43.28°	No	No	
Gyro	300.00	154.39°	-43.33°	Yes	Yes	
Gyro	303.00	154.88°	-43.27°	No	No	
Gyro	306.00	154.84°	-43.24°	No	No	
Gyro	309.00	154.88°	-43.21°	No	No	
Gyro	312.00	154.85°	-43.20°	No	No	
Gyro	315.00	154.92°	-43.19°	No	No	
Gyro	318.00	154.93°	-43.16°	No	No	
Gyro	321.00	154.91°	-43.14°	No	No	
Gyro	324.00	155.00°	-43.09°	No	No	
Gyro	327.00	154.84°	-43.13°	No	No	
Gyro	330.00	155.01°	-43.03°	No	No	
Gyro	330.00	153.98°	-43.27°	Yes	Yes	
Gyro	333.00	154.92°	-43.08°	No	No	
Gyro	336.00	155.01°	-43.05°	No	No	
Gyro	339.00	155.02°	-43.04°	No	No	
Gyro	342.00	155.08°	-43.04°	No	No	
Gyro	345.00	155.09°	-43.02°	No	No	
Gyro	348.00	155.10°	-42.99°	No	No	
Gyro	351.00	155.08°	-42.97°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	354.00	155.11°	-42.92°	No	No	
Gyro	357.00	155.17°	-42.92°	No	No	
Gyro	360.00	155.22°	-42.97°	No	No	
Gyro	360.00	155.05°	-42.97°	Yes	Yes	
Gyro	363.00	155.24°	-42.95°	No	No	
Gyro	366.00	155.23°	-42.94°	No	No	
Gyro	369.00	155.26°	-42.92°	No	No	
Gyro	372.00	155.27°	-42.88°	No	No	
Gyro	375.00	155.31°	-42.87°	No	No	
Gyro	378.00	155.31°	-42.89°	No	No	
Gyro	381.00	155.37°	-42.81°	No	No	
Gyro	384.00	155.26°	-42.85°	No	No	
Gyro	387.00	155.35°	-42.77°	No	No	
Gyro	390.00	155.31°	-42.81°	No	No	
Gyro	390.00	154.59°	-42.87°	Yes	Yes	
Gyro	393.00	155.40°	-42.76°	No	No	
Gyro	396.00	155.39°	-42.74°	No	No	
Gyro	399.00	155.42°	-42.71°	No	No	
Gyro	402.00	155.42°	-42.68°	No	No	
Gyro	405.00	155.39°	-42.68°	No	No	
Gyro	408.00	155.42°	-42.66°	No	No	
Gyro	411.00	155.43°	-42.62°	No	No	
Gyro	414.00	155.38°	-42.55°	No	No	
Gyro	417.00	155.40°	-42.52°	No	No	
Gyro	420.00	155.42°	-42.51°	No	No	
Gyro	420.00	154.70°	-42.56°	Yes	Yes	
Gyro	423.00	155.41°	-42.50°	No	No	
Gyro	426.00	155.47°	-42.48°	No	No	
Gyro	429.00	155.44°	-42.47°	No	No	
Gyro	432.00	155.48°	-42.47°	No	No	
Gyro	435.00	155.46°	-42.46°	No	No	
Gyro	438.00	155.50°	-42.47°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	441.00	155.53°	-42.43°	No	No	
Gyro	444.00	155.56°	-42.41°	No	No	
Gyro	447.00	155.55°	-42.40°	No	No	
Gyro	450.00	155.57°	-42.37°	No	No	
Gyro	450.00	153.64°	-42.55°	Yes	Yes	
Gyro	453.00	155.63°	-42.34°	No	No	
Gyro	456.00	155.63°	-42.31°	No	No	
Gyro	459.00	155.61°	-42.30°	No	No	
Gyro	462.00	155.68°	-42.25°	No	No	
Gyro	465.00	155.70°	-42.21°	No	No	
Gyro	468.00	155.72°	-42.19°	No	No	
Gyro	471.00	155.74°	-42.17°	No	No	
Gyro	474.00	155.81°	-42.14°	No	No	
Gyro	477.00	155.79°	-42.12°	No	No	
Gyro	480.00	155.79°	-42.09°	No	No	
Gyro	480.00	154.65°	-42.08°	Yes	Yes	
Gyro	483.00	155.84°	-42.05°	No	No	
Gyro	486.00	155.87°	-42.05°	No	No	
Gyro	489.00	155.86°	-42.04°	No	No	
Gyro	492.00	155.92°	-42.00°	No	No	
Gyro	495.00	155.95°	-41.96°	No	No	
Gyro	498.00	155.98°	-41.95°	No	No	
Gyro	501.00	155.99°	-41.92°	No	No	
Gyro	504.00	156.01°	-41.89°	No	No	
Gyro	507.00	156.04°	-41.90°	No	No	
Gyro	510.00	156.03°	-41.90°	No	No	
Gyro	510.00	155.48°	-41.91°	Yes	Yes	
Gyro	513.00	156.05°	-41.91°	No	No	
Gyro	516.00	156.06°	-41.89°	No	No	
Gyro	519.00	156.09°	-41.86°	No	No	
Gyro	522.00	155.93°	-41.79°	No	No	
Gyro	525.00	156.14°	-41.80°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	528.00	156.14°	-41.80°	No	No	
Gyro	531.00	156.14°	-41.79°	No	No	
Gyro	531.33	156.14°	-41.79°	No	No	

Detailed Drill Hole Log

From	To	Title	Description
0.00	5.00	Casing	Casing
5.00	190.84	Mafic Intrusion	Grey to dark grey, fine- to medium-grained, equigranular, homogeneous, massive, mafic intrusive. Unit is subjectively very weakly patchy Chl altered, but more weakly pervasive after 143m. About 1% epi +/- chl fracture fills/stringers, 1-2% qtz/carb stringers, and 1-2% milky quartz veins (the two latter commonly at 40-50dTCA. The veins can be up to 10cm but are usually 1-2cm wide and they may appear weakly to moderately brecciated with Chl infill. Qtz/carb stringers and veins are commonly associated with hem vein alt/alt haloes and incoporating trace to multiple % Py. Weak hematite can also be found along fractures throughout. Possible weak ductile EP+CHL shear from 87.50-90.15m. Small zone of vuggy core (possible healed fractures) with drusy qtz from 123.97-124.04m. Trace to 2% Py as disseminated fine-to medium-grained and/or euhedral cubic fine- to coarse-grained associated with qtz/carb stringers. Sharp lower contat at 55 dTCA.
190.84	207.35	Mafic Volcanic	Grey to dark grey, fine-grained, equigranular, massive, homogeneous mafic volcanics. From 190.84-193.80m, gradational interfingerings of MV+MI. Very weak to weak CHL pervasive alteration. Presence of 1-2% sub-mm varioles infilled with chl after 204m. Unit becomes finer-grained from 205-207.35m, where the last 40cm is aphanatic and darker (chilled margin?). 3-4% Quartz/carb stringers and veins from 190.84- 194.25m, containing 0-3% Py and commonly seen at 40-60 dTCA and with weak hem alt. 2-3% stringers and fracture fills until 207.35m rarely associated with Py and seen at 20-40 dTCA. 1-2%, fine-to medium-grained Py disseminated and associated with qtz/carb veins/stringers until 194.25m, and trace to 2% disseminated Py until 207.35m. Sharp UC at 55 dTCA and LC at 51dTCA + 25 beta angle.
207.35	273.26	Tuff	Grey to dark grey tuffaceous intermediate (until 239m) to mafic (until 273.26m) volcanic rock. The inter. zone consists of more distinct phenocrystic qtz/plag and mafic minerals that are all <0.5cm wide in an ashy matrix, whereas in the mafic zone there is less qtz/plag and the minerals are less distinct - more foliated? Varying itensities of foliation and/or mineral alignment, however typically weakly to moderately foliated throughout (elongated/flattened minerals) at relatively low angles to parallel to core axis. Patchy chl alt. There are several 50-70cm zones of albite/epidote/chl ductile shearing +/-weak to moderate hem alt at relatively low angles to core axis, and multiple 1-4cm wide vein-like structures at higher angles, similar to those shear zones. Hematized RBL/G/FLT from 242.52-242.86m. 1-2% qtz/carb stringers and veins, Trace CHL fracture fills. 1-2% Py as

Detailed Drill Hole Log

From	To	Title	Description
			disseminated and higher conc. near SHR zones, decreasing to trace after 244m. UC contact is sharp at 51dTCA with 1.5m of gradually weakening strong foliation, LC sharp at 17dTCA crosscutting a perpendicular shear.
273.26	415.00	Mafic Volcanic	Grey to dark grey, fine-grained to aphanitic, variably textured but fractured-coherentin appearance, mafic volcanics. First 6m is clastically sheared with mod. to strong hem alt along most fracture fills/surfaces gradually weakening by 294m. 1-2% spherical milky qtz amydgules (<0.7cm wide) dying down to trace/absent after 396m. Weak to mod. patchy CHL alt, but weak to moderate pervasive from 367-396m. Occasional stronger 10-15cm CHL patches are possible albitized/silcified ductile shear zones? Larger patches (up to 1m) from 382-384.5m appear slightly pinkish/purpleish(?) with higher conc. of py. Contains abundant qtz/carb (about 5-6%) stringers/fracture fills throughout at variable angles (weakly hematized in shear zones) + occasional quartz veins. Trace to 3% Py, as disseminated/blebby (highest in altered zones) with two significant Py stringers from 405.70-406.70m. Lower contact is subjective - a nearly indistinct ductile shear?
415.05	456.67	Mafic Intrusion	Grey to dark grey, fine- to medium-grained, equigranular, homogeneous, massive, mafic intrusive.Unit is gradationally begins wit fine-grained and gradationally increases in size. Unit weak to mod. patches of saussuritization from 429.30m . About 1-3% qtz/carb stringers at 20-30 or 60-70 dTCA and be surrounded or incorporating up to 2% Py. Presence of a few milky qtz vein. Weak hematite can also be found along fractures throughout. Strong ser/chl/hem ductile shear from 445.95-446.40m. Beginning with trace, increasing to 1% Py as disseminated fine-grained and associated with qtz/carb stringers Lower contact is altered and angle is difficult to differentiate.
456.67	464.45	Diorite	Grey to light-grey medium-grained hornblende Monzodiorite, weakly magnetic. Unit consists of less than 10% Qtz, consists hornblende (no pyroxene or olivine), with about 60/40 felsic/mafic. Only kspar observed except for weak to moderate pervasive kspar alteration from 456.7-458.90m that is moderately magnetic. Presence of 3-5% Py + Magnetite, stringers and fracture fills. Couple of weak to moderate patches of saussuritization within fresh (non-kspar-altered) zone. 1-2% qtz/carb stringers/fracture fills. Lower contact is subjective, from 464.20-467, unit is strongly pervasive EP/CHL wich makes grain size difficult to see - may be gradational change? - contact put a shear before altered zone.
464.45	480.17	Mafic Intrusion	Grey to dark grey, fine- to medium-grained, generally homogeneous, massive, mafic

Detailed Drill Hole Log

From	To	Title	Description
480.17	531.00	Mafic Volcanic	intrusive. First 7m is gradationally getting smaller in grain-size, with small irregular patchy zones of coarser plag. Unit has mod. to stronger pervasive saussuritization from 464.45-467.20m . About 1-2% qtz/carb stringers and fracture fills typically at 40 or 60-80dTCA and be surrounded or incorporating up to 2% Py +/- weak to mod. hem. Occasional epi/chl stringers. Once again, lower contact is subjective, but may be long some saussuritized 0.5-1cm chilled margin(?) at 42 dTCA. Grey to dark grey, fine-grained to aphanitic, variably textured but fractured-coherentin appearance, mafic volcanics. Mod. to strong patchy chl alteration, commonly associated with albitized/sericitized stringers or ductile shear zones(?) that are weakly brecciated. The latter stringers can also be seen sporadic without mod. patchy chl alt. However very weak pervasive Chl alt throughout. Occasional (trace) milky qtz amygdules throughout , usually <0.5cm in size. Contains 2-3% crosscutting qtz/carb stringers/fracture fills throughout at variable angles, sometimes with very weak to weak hem. Weak hem seen along very low-angled fractures from 512.5-514.73m. Some gouge material within poor rqd at 508.60-508.90m. Trace Py, with some disseminated sections but mostly seen as 1-2% with qtz/carb stringers.

Alteration

From	To	Overall St...	Description
5.00	143.00	Moderate	Very weakly patchy Chl altered. Weak-mod. hem alt of qtz/carb stringers+qtz veins, as vein alteration and/or pervasive haloes. Stronger in clusters and with veins. Weak-mod. hem also found along the majority of fracture surfaces
143.00	190.84	Weak	Very weakly pervasive Chl altered. Weak-mod. hem alt of qtz/carb stringers and qtz veins throughout as vein alteration and/or pervasive haloes +/- silficified Chl haloes. Weak to moderate hem can also be found along the majority of fracture surfaces.
190.84	193.00	Weak	Weak pervasive Chl alteration and weak hem vein alt and hem haloes associated with qtz/carb stringers and veins +/- silicifed Chl haloes.
193.00	207.35	Weak	Weak pervasive Chl alteration.
207.35	216.20	Strong	Weak patchy chl alt throughout unit. Weak to moderate chl/hem/Ep/alb/sil alteration within the major shear zones and veins - see structures tab for specific shear locations
216.20	231.50	Very Weak	Weak patchy chl alt
231.50	242.00	Strong	Weak patchy chl alt throughout unit. Weak to moderate chl/hem/Ep/alb/sil alteration within the major shear zones and veins - see structures tab for specific shear locations. And moderate hem of gouge/flt zone from 242.52-242.86m.
242.00	255.20	Very Weak	Weak patchy chl alt + moderate hem within fault zone from 242.52-242.86m
255.20	273.26	Strong	Weak patchy chl alt throughout unit. Weak to moderate chl/hem/Ep/alb/sil alteration within the major shear zones and veins - see structures tab for specific shear locations
273.26	297.00	Moderate	Weak to moderate patchy chl and weak to moderate hem alteration of the qtz/carb stringers through. Alteration is strongest within the first 4cm of brecciated shearing and gradually decreases in intensity.
319.90	367.00	Moderate	Weak to moderate Patchy CHL alteration associated with occasoinal 10-15cm zone of ductile to brecciated albitized/silicified shearing?
367.00	382.20	Weak	Very weak to weak pervasive chl alteration
382.20	403.00	Moderate	Multiple patches (Up to 1m wide) that are weakly to moderately (larger ones may be chloritized/albitized, silicifed +/- sericitized). First two patches from 382.2-384.5 appear slightly pinkish/purplish altered. With very weak pervasive chl alt throughout
403.00	415.05	Weak	Weak to moderate 10-20cm wide patchy zones of Chl alt. some qtz/carb stringers may be weakly hematized
415.05	429.30	Weak	Weak hem found along some of the fracture throughout
429.30	456.67	Weak	Weak patchy CHL/EP alteration. Two patches from 443-443.7 are moderate in alt, and are associated with 0.5-1cm wide EP/CHL stringers at 53 DTCA. Patches become more prominent/wider within last 3-4m.
456.70	458.90	Moderate	Weak to moderate pervasive K-spar alteration.
461.60	464.45	Weak	Weak to moderate patchy saussurtization. The second patch is likely vein-like with angle of 20-30 dTCA

Alteration

From	To	Overall St...	Description
464.45	467.20	Moderate	Moderate to strong pervasive saussuritization. Vein/stringer-like in some spots. Probaly some degree of ductile shearing, but cannot be too certain. + weak to moderate hem alteration of some qtz/carb stringers
467.20	480.17	Weak	Weak to mod. Hem alt of some of the qtz/carb stringers
480.17	531.00	Moderate	Weak pervasive chl alt and patchy mod.-strong saussuritization. Latter often associated with alb/ser/chl altered stringers or shear zones. Qtz/carb stringers may have weak hem alt. Weak hem found along some fracture surfaces from 512.5-514.73m

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
5.00	73.00	Qtz-carb	50.00°		0.50	1-2% Qtz/carb stringers and fracture fils (that are more composed of qtz), ranging from 0.3-2cm in width. They typiccally vary from 40-60 dTCA. These may be weakly to moderately vein hem altered and/or as pervasive gradational haloes. Stronger alt where it is more clustered, for instance from 55.85-56.60m. 0 to 5% of vein and immediate surrounding may contain fine- to medium-grained euhedral Py.
49.45	49.88	Qtz-carb	49.00°	343.00°	5.00	2 irregular/varying sized (3-7cm) milky quartz veins due to possible breciation then infilling, as oppposed to fraturing like stringers. Both are related where the middle may be one large irrgular clast. Contacts of brecciated qurtz/mafics are weakly hematized.Hairline fractures infilled with CHL. 5-10cm of silicified chl pervasive haloes. Presence of 2-3% Very coarse euhedral Py.
51.50	87.50	Epi	80.00°		1.00	About 1% EP +/- chl stringers, ranging from 0.5-1cm wide. Usually seen at 75-85 dTCA or 15-40 dTCA.
73.00	122.50	Qtz-carb	50.00°		2.00	2-3% Qtz/carb stringers and qtz veins (predominantly the latter) ranging from 0.3-2cm but up to 10cm in width. They are typically 40-60 dTCA. These may be weakly to moderately vein hem altered and/or as pervasive gradational haloes. +/- silcified CHL 2-5cm haloes as well. Larger veins may appear weakly brecciated and infilled with CHL. Usually 2-5% (but up to 10%) of veins and immediate surrounding may contain fine- to medium-grained euhedral Py. Signifiant veins are isolated in Veins tab.
87.50	90.10	Epi	41.00°	127.00°	0.20	Series of EP+Chl fracture fills within possibly very weakly ductilly sheared zone every 0.5-1cm. Usuallu about 0.2cm wide and at 40-50 dTCA
90.10	190.84	Epi	60.00°		0.20	Trace to 1% EP +/- chl stringers, ranging from 0.2-1cm wide. Usually seen at 60-75 dTA.
98.73	99.05	Qtz-carb	50.00°		10.00	8cm wide milky qtz vein, that is slightly brecciated with chl infills as well as carb that also appears as tension gashes. Vein has been weakly to moderately hematized (stronger along contacts/haloes). 2-3% Medium-grained euhedral Py
112.55	112.72	Qtz-carb	52.00°	239.00°	4.00	Two 0.5cm wide qtz/carb stringers spaced 5cm apart with 4cm wide

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						extensional vein in between. Weak hematization throughout. Includes about 10% medium- to coarse-grained Py within immediate surrounding + very coarse (up to 1cm) Py within vein.
122.50	142.00	Qtz-carb	40.00°		0.50	2-3% Qtz/carb stringers and fracture fills, ranging from 0.3-1cm in width. They typiccally vary from 25-55 dTCA. These may be weakly vein hem altered and/or as thin haloes along contacts. 0 to 5% of vein and immediate surrounding may contain fine- to medium-grained euhedral Py.
122.85	123.20	Qtz-carb	41.00°	271.00°	10.00	Appears to be 10cm possible clastically sheared vein section of host rock+qtz+carb and chl infill + 2% medium to ccoarse-grained euhedral Py. Weakly pervaively hem altered.
123.97	124.05	Qtz-carb	65.00°		2.00	A 2cm wide zone consisting of two <0.5cm wide quartz/carb stringers with minor hem+py seen + healed fractures containing drusy quartz.
142.00	190.84	Qtz-carb	50.00°		1.00	2-3% Qtz/carb stringers and qtz veins (predominantly the latter) ranging from 0.3-2cm..They are typically 40-60 dTCA but may vary between 25-75dTCA. Some of the larger veins can appear weakly brecciated. These may be weakly to moderately vein hem altered and/or as pervasive gradational haloes. +/- silcified CHL 0.5-5cm haloes as well. Usually 2-5% of veins and immediate surrounding may contain fine- to medium-grained euhedral Py.
190.84	194.25	Qtz-carb	50.00°		1.00	3-4% Qtz/carb stringers and veins, typically seen at 40-60 dTCA, ranging on average form 0.3-1.5cm. 0-3 % of some of the qtz/carb stringers/veins + its immediate surrounding consists of fine- to medium-grained euhedral Py. Larger veins/stringers have weak hem thin haloes along their contacts +/- up to 0.5cm wide silicifed Chl haloes.
194.25	207.35	Qtz-carb	30.00°		0.50	2-3% qtz/carb stringers, typically seen at 20-40 dTCA, rangin from 1cm wide.
207.35	240.00	Qtz-carb	30.00°		0.30	1-2% Qtz/carb stringers and fracture fills, ranging from 0.2-1cm in width. Predominantly at 20-40 dTCA. These may be weakly hem altered when near major shear zones. May contain up to 2% of stringers + immediate surrounding of fine-grained Py.
214.35	214.75	Qtz-carb	23.00°	65.00°	15.00	35cm wide ductile shearing with what appears interlayered Chl and

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						heavily albitized/saussuritized possibly qtz/carb? Has been moderatly hematized, predominantly where crosscutting qtz/carb stringers appear. 15cm of the middle part appears brecciated/somewhat cataclastic due to qtz/carb stringers. Zone does not seem to contain min but followed by 3-4% bebby and stringer Py within 50cm after shear.
214.75	218.70	Qtz-carb	40.00°		2.00	About 4 vein-like ductile-shr structures (almost seems layered-foliated?), similar in composition to major shear zones (see following structures) - albitized/saussuritized, and weakly hematized (and silicified? - hard to scratch). Potentially originally qtz/carb pre-alteration? These are about 1-3cm wide and at 30-40 dTCA.
232.15	234.00	Carb			1.00	A few stringer-like ductile-shr structures similar in composition to following major shear zone - appears saussuritized, and moderately hematized. Potentially originally qtz/carb pre-alteration? These are about 1m wide and at 30-40 dTCA. Associated with 1-2% Fine-grained Py. First one is undulating and not measurable.
236.80	237.60	Chl	15.00°	56.00°	10.00	50cm wide ductile shearing with what appear to be mostly layered/foliated CHL and qtz and lesser heavily albitized/saussuritized possibly qtz/carb(?) along lower contact. Has been weakly to moderately hematized, associated with low-angle crosscutting chloritized qtz/carb stringer. About 2% fine-grained - Py, mostly associated with crosscutting hematized stringer.
240.00	273.46	Qtz-carb	60.00°		0.30	1-2% Qtz/carb stringers and fracture fills, ranging from 0.2-1cm in width. Predominantly at 50-70 dTCA. These may be weakly hem altered when near major shear zones. May contain up to 2% of stringers + immediate surrounding of fine-grained Py.
255.50	256.60	Qtz-carb	17.00°	73.00°		Ductile shearing with what appears interlayered Chl and heavily albitized/saussuritized possibly qtz/carb? Has been moderatly hematized, predominantly where crosscutting qtz/carb stringers. Silicified? - hard to scratch. Appears weakly brecciated/somewhat cataclastic due to qtz/carb stringers. Contains about 1% Py, medium-to coarse-grained Py, associated with crosscutting qtz/carb stringer. True width not measureable

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
255.60	271.30	Qtz-carb	40.00°		2.00	7-8 vein-like ductile-shr structures (almost seems layered- foliated?), similar in composition to major shear zones (see following structures) - albitized/saussuritized, and weakly hematized (and silicified? - hard to scratch). Potentially originally qtz/carb pre-alteration? These are about 1-3cm wide and at 30-40 dTCA.
256.70	263.00	Qtz-carb	30.00°		0.10	1-2% CHL Fracture fills (0.1cm wide), with up to 0.3cm wide of weakly bleached haloes on either side. Ranging from 30-60 dTCA
270.35	214.35	Qtz-carb	40.00°		2.00	7-8 vein-like ductile-shr structures (almost seems layered- foliated?), similar in composition to major shear zones (see following structures) - albitized/saussuritized, and weakly hematized (and silicified? - hard to scratch). Potentially originally qtz/carb pre-alteration? These are about 1-3cm wide and at 30-40 dTCA.
271.30	271.65	Qtz-carb	17.00°	17.00°	15.00	Ductile shearing with what appears interlayered Chl and heavily albitized/saussuritized possibly qtz/carb? Has been moderatly hematized, predominantly where crosscutting qtz/carb stringers and 3cm quartz vein at the beginning . Silicified? - hard to scratch. Contains about 1% Py, medium-grained Py, assocaited with quartz vein.
272.95	273.26	Chl	16.00°	40.00°	15.00	Ductile shearing with what appear to be mostly layered CHL, foliating around 5%rounded quartz phenocrysts (<0.5cm wide). A few crosscutting qtz/carb stringers with about 1% fine-grained Py and very weakly hematized. Crosscut by following Volcanic unit.
273.26	280.10	Qtz-carb	13.00°	341.00°	2.00	1-3cm wide low-angled milky-qtz veins, commonly, seen with hem rims and 2-5% medium- to very-coarse Py. A couple of veins near the beginning and one at the end.
273.26	294.00	Qtz-carb	50.00°		0.20	About 2-3% qtz/carb stringers and fracture fills, typically 0.1-0.5cm in width with angles varying from 30-80 dTCA. Stringers and weakly to moderately hematized, especially in first 6m. May contain up to 2% Py.
289.84	289.98	Qtz-carb	50.00°		10.00	Small cluster of milky qtz/carb stringers and and vuggy healed fractures with drusy coarse-grained qtz along fracturea
294.00	328.50	Qtz-carb	50.00°		0.30	2-3% Qtz/carb stringers and fracture fills, ranging from 0.1-0.7cm in width, with varying angles ranging from 20-80 dTCA. Occasoinally

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						weakly chloritized as rims/haloes. May contain up to 2% Py.
305.90	314.20	Qtz	30.00°		2.00	A few 2-3cm wide qtz veins with weak chl +/- very weak hem rims. Unmineralized.
315.85	395.00	Qtz	60.00°		1.00	Occasional 0.5-1.5cm qtz vein, typically at higher and angles but one or two seen at 20-25dTCA. +/- thin chl rims. Typically barren
319.85	348.70	Qtz-carb			10.00	Occasoinal Patchy/vein-like(?) ductile to brecciated shearing(?) with weak to moderate albitized/silicified and chl alteration. Usually 5-15cm with a generalt trend of 60-80 dTCA. With up to 5% blebby/stringy Py.
328.50	342.00	Qtz-carb	50.00°		0.30	3-5% Qtz/carb stringers and fracture fills, often clustered together, tpyically at 35-60 dTCA and about 0.2-0.5cm wide. May have weak CHL haloes up to 0.3cm wide.
342.00	378.00	Qtz-carb	30.00°		0.30	2-3% Qtz/carb stringers and fracture fills, ranging from 0.1-0.7cm in width, with varying angles ranging from 20-80 dTCA. Occasoinally weakly chloritized as thhin rims/haloes. May contain up to 2% Py.
378.00	413.00	Qtz-carb	40.00°		0.30	3-5% Qtz/carb stringers and fracture fills, often clustered together, tpyically at 35-60 dTCA and about 0.2-0.5cm wide. May have weak CHL haloes up to 0.3cm wide. Rarely contains up to 2% Py.
415.05	456.67	Qtz-carb			0.50	1-3% Qtz/carb stringers and fracture fills throughout, usually 0.2-0.7cm wide with occasional 1cm wide. Two trends, often seen at 20-30 dTCA or 60-70 dTCA. Often seen with 2% Py within stringer or surrounding stringer
431.30	431.70	Qtz			2.00	2cm wide Milky qtz vein, +/- thin chl or hem and/or Carb along edges of vein + presence of 1% medium-grained Py along edges
443.00	443.70	Epi	53.00°	216.00°	0.50	Two 0.5-1cm wide EP/CHL stringers with surrounding CHL/EP Patchy haloes
445.95	446.60	Chl	322.00°		25.00	Up to 25cm wide strong ductile shear/foliated zone, consisting of predominantly ser+Chl alt, with lesser hem along lower contact + trace to 1% fine-grained Py and 1% specular hematite
447.60	447.72	Qtz	48.00°	257.00°	2.50	2.5cm wide Milky qtz vein, about 1cm of weak chl haloe one each side. 1-2% fine-grained py, seen along the contact of th vein
448.12	448.57	Qtz	19.00°	282.00°	15.00	15-20cm wide milky qtz vein. 10-15% of vein consists of Chloritic infill/stringers . 1-3cm wide silcified/chloritic haloes. 2-3% fine- to medium-grained euhedral or blebby Py, more ore less within haloes or

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						within the chloritic infills.
456.67	458.90	Carb	40.00°		0.50	4-5% of k-spar altered zone contains mulltiple whispy stringers and fracture fills, less than about 0.2-0.7cm wide, containing about 70% Py and 30% Magnetite and sometimes seen with minor carb. Typically between 30-50 dTCA
456.67	464.45	Qtz-carb	40.00°		0.30	about 1-2% qtz/carb stringers and fracture fills ranging form 0.2-1cm in size. Typically ranging from 30-60 dTCA. +/- weak hem rims and somestimes associated with 2-3% fine-grained Py
462.40	462.70	Epi			1.50	Epi/chl vein, About 1-2cm wide at an angle of 20-30 dTCA. Contains weak to mod. patchy saussuritization.
464.45	480.17	Qtz-carb	40.00°		0.50	1-2% qtz/carb stringers and fracture fills throughout. Can contain moderate hem haloes within the EP alt zone but occasionally has weak hem alt for the rest of the unit. Typically at 40 or 60-80dTCA, and about 0.2-1cm wide. May be surrounded or incoportating up to 2% fine-grained Py. About 20-30% of 1cm wide qtz/carb stringer from 466.87-466.93m.
478.80	478.95	Epi	18.00°	266.00°	2.00	Possible qtz/carb Vein that has been saussurtized(?) 1-3cm wide with irregular contacts. Appears to be pretty silicifed. Barren of sulphides.
480.17	531.00	Qtz-carb	30.00°		0.50	2-3% qtz/carb stringers and fracture fills throughout at variable angles (20-70dTCA), but commonly seen at 30dTCa. Sometimes having very weak to weak hem alteration and possibly up to 1-2% fine-grained Py within and/or surrounding it. Ranging from 0.2-1cm in width.
483.00	531.00	Qtz-carb	40.00°		1.00	2-3% Sporadic stringers that are albiltized/sericitized (beigish) and/or chloritized. Could be qtz/carb in original composition? Can be seen infilling brecciated zones from 485-495m - irregular shapes (no angle can be measured). Can range from 0.5-1.5cm in width. Larger/stronger alterated ones are commonly associated with weak to mod. patchy chl. Typically seen at 30-40 dTCA.

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description
87.50	90.15	SHR	40.00°			Possible very weak ductile shear zone? With EP+CHL hairline fracture fills every 0.5-1cm running at 40-50 dTCA. Very weak to weak pervasive EP+CHL alteration.
89.84	90.30	SHR	50.00°			4cm brecciated hem altered vein (almost looks like porphyry) at 50 dTCA, followed by weakly brecciated zone infilled by Chl+carb
122.85	123.20	SHR	41.00°	271.00°		Appears to be 10cm possible clastically sheared vein section of host rock+qtz+carb and chl infill + 2% medium to ccoarse-grained euhedral Py. Weakly pervaively hem altered.
172.66	172.80	SHR	53.00°	213.00°		4cm wide weak ductile shr zone with sharp contacts, which appears to be later infilled or overlapped by 1-2cm wide EP stringer + lesser qtz/carb
207.34	207.35	C	51.00°	25.00°		Sharp lower contact of MV with tuff?
207.35	209.10	FOL	27.00°	44.00°		Weakly chloritized, gradually weakening strong foliation after UC.
214.35	214.75	SHR	23.00°	65.00°		35cm wide ductile/cataclastic shearing. Interlayered Chl and heavily albitized/saussuritized possibly qtz/carb? Moderatly hematized, predominantly where crosscutting and brecciating qtz/carb stringers appear.
226.23	226.24	FOL	30.00°			Weak foliation of intermediate Tuff
228.79	288.80	FOL	25.00°			Weak foliation of intermediate Tuff
236.80	237.60	SHR	15.00°	56.00°		50cm wide ductile shearing. Layered/foliated CHL and qtz and lesser heavily albitized/saussuritized possibly qtz/carb(?) along lower contact. Weak to mod. hem associated with low-angle crosscutting chloritized qtz/carb stringer (containing 2% Py).
239.43	239.44	FOL	25.00°			Moderate to strong foliation of mafic Tuff
240.22	240.23	FOL	15.00°			Moderate to strong foliation of mafic Tuff
242.52	242.86	FLT	35.00°			Rubbled core with gouge material. Last 20 is moderate hematized. Angle is subjective, measured from fracture at the end
243.16	243.17	FOL	30.00°			Moderate to strong foliation of mafic Tuff
247.74	247.75	FOL	20.00°			Moderate to strong foliation of mafic Tuff
248.74	248.75	FOL	35.00°			Moderate to strong foliation of mafic Tuff
255.50	256.60	SHR	17.00°	73.00°		Ductile/clastic shearing with what appears interlayered Chl and heavily albitized/saussuritized possibly qtz/carb? Mod. hematized where crosscutting qtz/carb stringers, with 1% Py, medium-to

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description
						coarse-grained Py. Silicified?
266.31	266.32	FOL	13.00°	43.00°		Moderate to strong foliation of mafic Tuff
270.38	270.39	FOL	18.00°	39.00°		Moderate to strong foliation of mafic Tuff
271.30	271.65	SHR	17.00°	17.00°		Ductile shearing with what appears interlayered Chl and heavily albitized/saussuritized possibly qtz/carb? Moderatly hematized, associated with crosscutting qtz/carb stringers and quartz vein (with 1% Py). Silicified?
272.95	273.26	SHR	16.00°	40.00°		Ductile shearing with what appear to be mostly layered CHL, foliating around 5% rounded quartz phenocrysts (<0.5cm wide). 1-2% crosscutting qtz/carb stringers with 1% fine-grained Py and very weak hem. Crosscut by following Volcanic unit.
273.25	273.26	C	17.00°	302.00°		Sharp lower contact at 17 dTCA, which is seen to crosscutting a a nearly perpendicular CHL shear within the tuff
273.26	290.00	SHR				Appears to have CHL zones of clastically sheared MV with abundant infilling hematized qtz/carb stringers. Prominent within 6m, but occasional weaker zones occasional found until 290 with debatabled small zones of very weak foliation.
283.55	283.56	FOL	18.00°	83.00°		Very weak foliation
301.40	301.84	RBL				Blocky and Rubbled/redrilled-core
319.85	348.70	SHR	60.00°			Occasoinal Patchy/vein-like(?) ductile to brecciated shearing(?) with weak to moderate albitized/silicified and chl alteration. Usually 5-15cm with a generalt trend of 60-80 dTCA.
361.30	361.90	FLT	35.00°			Apears to be a really well healed-gouge/fault zone
415.00	415.05	C	35.00°			A nearly indistinct CHL ductile shear? Could be 5cm of possible chilled margin. - somewhat undulating. Best guess for a lower contact, might not be.
464.42	464.45	C	9.00°	277.00°		3cm wide qtz weak mix between ductile shear that has been weakly brecciated, with later carb infills + and very weak spots of hem. 3-4% disseminated Py within and for 20cm before SHR
480.16	480.17	C	42.00°	264.00°		1cm possible weakly saussuritized chilled margin(?) of MI with MV.
485.00	495.00	SHR				A few 20-50 cm zones brecciated zones, almost jigsaw-fit large angular MV clasts that has been later infillled by this Ser/alb/Chl stringers.

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description
508.60	508.90	G	15.00°			Some minor gouge seen along poor rqd

Magnetic Susceptibility

Depth	MagSus	Comments
6.00	92.80	
9.00	1.83	
12.00	4.68	
15.00	1.78	
18.00	1.29	
21.00	47.20	
24.00	1.09	
27.00	1.99	
30.00	1.38	
33.00	1.15	
36.00	1.13	
39.00	0.97	
42.00	1.11	
45.00	1.13	
48.00	3.34	
51.00	3.66	
54.00	3.80	
57.00	2.65	
60.00	3.27	
63.00	1.36	
66.00	1.25	
69.00	1.16	
72.00	1.38	
75.00	14.20	
78.00	2.63	
81.00	134.00	
84.00	1.02	
87.00	1.23	
90.00	77.10	
93.00	12.50	
96.00	1.76	
99.00	25.90	

Magnetic Susceptibility

Depth	MagSus	Comments
102.00	7.97	
105.00	3.54	
108.00	1.23	
111.00	1.69	
114.00	3.36	
117.00	5.10	
120.00	1.13	
123.00	232.00	
126.00	29.30	
129.00	2.75	
132.00	64.30	
135.00	19.70	
138.00	1.48	
141.00	2.46	
144.00	5.60	
147.00	4.59	
150.00	1.57	
153.00	1.53	
156.00	4.14	
159.00	2.26	
162.00	5.68	
165.00	2.39	
168.00	9.02	
171.00	32.90	
174.00	2.23	
177.00	28.50	
180.00	2.90	
183.00	1.34	
186.00	4.72	
189.00	11.30	
192.00	12.10	
195.00	9.79	

Magnetic Susceptibility

Depth	MagSus	Comments
198.00	54.50	
201.00	1.31	
204.00	1.01	
207.00	2.19	
210.00	0.52	
213.00	1.04	
216.00	43.30	
219.00	0.96	
222.00	0.68	
225.00	1.43	
228.00	0.71	
231.00	1.10	
234.00	3.11	
237.00	24.90	
240.00	5.33	
243.00	3.08	
246.00	0.69	
249.00	1.39	
252.00	0.81	
255.00	1.40	
258.00	1.00	
261.00	0.97	
264.00	2.33	
267.00	0.60	
270.00	0.74	
273.00	1.95	
276.00	52.50	
279.00	7.25	
282.00	2.02	
285.00	5.32	
288.00	343.30	
291.00	34.20	

Magnetic Susceptibility

Depth	MagSus	Comments
294.00	4.90	
297.00	3.76	
300.00	10.40	
303.00	35.20	
306.00	2.31	
309.00	3.36	
312.00	18.00	
315.00	2.94	
318.00	9.66	
321.00	2.47	
324.00	1.06	
327.00	1.20	
330.00	11.90	
333.00	1.95	
336.00	2.95	
339.00	4.22	
342.00	2.02	
345.00	1.00	
348.00	13.10	
351.00	3.34	
354.00	6.81	
357.00	0.82	
360.00	0.91	
363.00	0.52	
366.00	4.09	
369.00	0.90	
372.00	1.89	
375.00	1.84	
378.00	0.93	
381.00	0.60	
384.00	0.54	
387.00	0.83	

Magnetic Susceptibility

Depth	MagSus	Comments
390.00	11.10	
393.00	3.71	
396.00	0.84	
399.00	0.92	
402.00	1.70	
405.00	4.51	
408.00	11.50	
411.00	58.40	
414.00	12.10	
417.00	156.00	
420.00	9.66	
423.00	26.80	
426.00	46.90	
429.00	42.70	
432.00	217.00	
435.00	207.00	
438.00	132.00	
441.00	19.40	
444.00	25.30	
447.00	100.00	
450.00	44.10	
453.00	19.10	
456.00	138.00	
459.00	68.40	
462.00	15.30	
465.00	94.80	
468.00	63.00	
471.00	33.60	
474.00	45.90	
477.00	28.60	
480.00	8.24	
483.00	11.20	

Magnetic Susceptibility

Depth	MagSus	Comments
486.00	1.25	
489.00	0.59	
492.00	0.50	
495.00	0.59	
498.00	1.02	
501.00	0.46	
504.00	0.46	
507.00	0.69	
510.00	10.10	
513.00	0.70	
516.00	1.24	
519.00	1.96	
522.00	1.35	
525.00	10.90	
528.00	0.93	
531.00	1.73	EOH

Specific Gravity

From	To	Length (m)	Weight Ai...	Weight ...	Delta	SG	Litho Code	Standard ID	Comments	
1.00	1.01	0.01	281.17	175.25	105.92	2.65		STD2		
16.04	16.19	0.15	810.56	548.89	261.67	3.10	MI			
34.03	34.19	0.16	829.14	560.23	268.91	3.08	MI		Trace py	
47.54	47.71	0.17	939.65	634.79	304.86	3.08	MI		Trace py	
62.62	62.79	0.17	874.21	586.66	287.55	3.04	MI		Trace py	
78.34	78.48	0.14	771.00	518.88	252.12	3.06	MI		Trace py	
96.57	96.73	0.16	817.59	548.82	268.77	3.04	MI		Trace py	
114.80	114.94	0.14	709.36	477.99	231.37	3.07	MI		Trace py	
130.35	130.49	0.14	664.35	445.72	218.63	3.04	MI			
131.00	131.01	0.01	281.42	175.32	106.10	2.65		STD2		
150.85	150.93	0.08	701.16	470.94	230.22	3.05	MI		Trace py	
166.60	166.75	0.15	785.56	529.99	255.57	3.07	MI		Trace py	
183.00	183.16	0.16	882.66	595.78	286.88	3.08	MI			
201.70	201.86	0.16	843.71	564.84	278.87	3.03	MV		Trace py	
216.75	216.89	0.14	613.09	393.32	219.77	2.79	TUF		Trace py	
230.71	230.86	0.15	666.87	429.28	237.59	2.81	TUF			
254.57	254.69	0.12	669.97	433.12	236.85	2.83	TUF			
269.38	269.52	0.14	593.20	382.09	211.11	2.81	TUF			
270.00	270.01	0.01	281.30	175.29	106.01	2.65		STD2		
287.30	287.45	0.15	808.23	519.64	288.59	2.80	MV			
305.04	305.19	0.15	699.48	450.96	248.52	2.81	MV		Trace py	
324.70	324.83	0.13	681.70	439.00	242.70	2.81	MV		Trace py	
344.03	344.18	0.15	836.03	536.22	299.81	2.79	MV		1% py	
355.65	355.81	0.16	724.08	466.75	257.33	2.81	MV		1% py	
368.73	368.86	0.13	648.77	414.97	233.80	2.77	MV		2% py	
381.43	381.56	0.13	583.64	372.97	210.67	2.77	MV		Trace py	
399.76	399.92	0.16	929.73	598.53	331.20	2.81	MV		2% py	
400.00	400.01	0.01	281.36	175.25	106.11	2.65		STD2		
417.40	417.56	0.16	821.91	554.86	267.05	3.08	MI			
436.04	436.16	0.12	709.03	479.05	229.98	3.08	MI			
451.50	451.67	0.17	844.14	552.88	291.26	2.90	MI			
474.61	474.77	0.16	1007.53	680.87	326.66	3.08	MI			
496.04	496.18	0.14	692.98	453.56	239.42	2.89	MV			

Specific Gravity

From	To	Length (m)	Weight Ai...	Weight ...	Delta	SG	Litho Code	Standard ID	Comments	
577.02	577.20	0.18	870.45	561.02	309.43	2.81	MV			

CANADA SILVER COBALT

Drillhole Number: **EO-22-002** Project Location: **Ebby-Otto, Kirkland Lake Ontario**

Drill Hole Log

Collar

Easting	560949.7000
Northing	5324715.2300
Elevation	325.9000
Azimuth	345.00°
Dip	-46.00°
Length	450.00

Drill Hole

Core Type	DDH
Core Size	NQ
Hole Test	Gyro
Cemented	No

Location

Township	Eby
Cell Claim No.	566666, 247030 & 305709

Operation

Contractor	Laframboise
Hole Start Date	2022-10-30
Hole End Date	2022-11-03
Project Operator	CSCW
Logged By	Peter Wray
Logging Complete	2022-11-14

Collar Survey	Yes	**Survey Equipment**	REFLEX GYRO SPRINT-IQ
Datum	UTM NAD83 z17	**Unit Measurement**	Meters
Survey Complete Date	2022-11-03		

[redacted]

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	3.00	345.54°	-45.30°	No	No	
Gyro	6.00	345.55°	-45.25°	No	No	
Gyro	9.00	345.57°	-45.27°	No	No	
Gyro	12.00	345.59°	-45.22°	No	No	
Gyro	12.00	345.77°	-45.27°	Yes	Yes	
Gyro	15.00	345.58°	-45.22°	No	No	
Gyro	18.00	345.63°	-45.23°	No	No	
Gyro	21.00	345.68°	-45.15°	No	No	
Gyro	24.00	345.67°	-45.12°	No	No	
Gyro	27.00	345.63°	-45.10°	No	No	
Gyro	30.00	345.77°	-45.11°	No	No	
Gyro	33.00	345.65°	-45.08°	No	No	
Gyro	36.00	345.76°	-45.11°	No	No	
Gyro	39.00	345.79°	-45.11°	No	No	
Gyro	42.00	345.75°	-45.10°	No	No	
Gyro	42.00	346.38°	-45.03°	Yes	Yes	
Gyro	45.00	345.77°	-45.08°	No	No	
Gyro	48.00	345.87°	-45.05°	No	No	
Gyro	51.00	345.86°	-45.02°	No	No	
Gyro	54.00	345.86°	-44.95°	No	No	
Gyro	57.00	345.95°	-44.90°	No	No	
Gyro	60.00	345.92°	-44.89°	No	No	
Gyro	63.00	345.94°	-44.80°	No	No	
Gyro	66.00	345.98°	-44.81°	No	No	
Gyro	69.00	345.97°	-44.78°	No	No	
Gyro	72.00	345.98°	-44.76°	No	No	
Gyro	72.00	346.36°	-44.76°	Yes	Yes	
Gyro	75.00	346.02°	-44.74°	No	No	
Gyro	78.00	346.00°	-44.69°	No	No	
Gyro	81.00	346.07°	-44.63°	No	No	
Gyro	84.00	346.10°	-44.57°	No	No	
Gyro	87.00	346.09°	-44.53°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	90.00	346.09°	-44.48°	No	No	
Gyro	93.00	346.06°	-44.46°	No	No	
Gyro	96.00	346.07°	-44.39°	No	No	
Gyro	99.00	346.14°	-44.32°	No	No	
Gyro	102.00	346.20°	-44.26°	No	No	
Gyro	102.00	344.93°	-44.40°	Yes	Yes	
Gyro	105.00	346.16°	-44.22°	No	No	
Gyro	108.00	346.26°	-44.16°	No	No	
Gyro	111.00	346.16°	-44.12°	No	No	
Gyro	114.00	346.23°	-44.05°	No	No	
Gyro	117.00	346.27°	-43.96°	No	No	
Gyro	120.00	346.22°	-43.96°	No	No	
Gyro	123.00	346.27°	-43.90°	No	No	
Gyro	126.00	346.22°	-43.84°	No	No	
Gyro	129.00	346.19°	-43.79°	No	No	
Gyro	132.00	346.13°	-43.78°	No	No	
Gyro	132.00	345.79°	-43.84°	Yes	Yes	
Gyro	135.00	346.20°	-43.74°	No	No	
Gyro	138.00	346.16°	-43.74°	No	No	
Gyro	141.00	346.15°	-43.65°	No	No	
Gyro	144.00	346.05°	-43.61°	No	No	
Gyro	147.00	346.06°	-43.53°	No	No	
Gyro	150.00	346.02°	-43.44°	No	No	
Gyro	153.00	345.97°	-43.37°	No	No	
Gyro	156.00	345.98°	-43.34°	No	No	
Gyro	159.00	345.94°	-43.29°	No	No	
Gyro	162.00	345.93°	-43.22°	No	No	
Gyro	162.00	346.39°	-43.27°	Yes	Yes	
Gyro	165.00	345.88°	-43.20°	No	No	
Gyro	168.00	345.89°	-43.15°	No	No	
Gyro	171.00	345.89°	-43.13°	No	No	
Gyro	174.00	345.88°	-43.07°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	177.00	345.85°	-43.07°	No	No	
Gyro	180.00	345.87°	-43.01°	No	No	
Gyro	183.00	345.85°	-42.96°	No	No	
Gyro	186.00	345.84°	-42.98°	No	No	
Gyro	189.00	345.86°	-42.93°	No	No	
Gyro	192.00	345.90°	-42.88°	No	No	
Gyro	192.00	346.06°	-42.81°	Yes	Yes	
Gyro	195.00	345.86°	-42.85°	No	No	
Gyro	198.00	345.99°	-42.84°	No	No	
Gyro	201.00	345.93°	-42.84°	No	No	
Gyro	204.00	345.99°	-42.83°	No	No	
Gyro	207.00	345.96°	-42.83°	No	No	
Gyro	210.00	345.97°	-42.82°	No	No	
Gyro	213.00	345.96°	-42.80°	No	No	
Gyro	216.00	346.01°	-42.75°	No	No	
Gyro	219.00	346.01°	-42.74°	No	No	
Gyro	222.00	346.01°	-42.76°	No	No	
Gyro	222.00	345.54°	-42.70°	Yes	Yes	
Gyro	225.00	346.05°	-42.72°	No	No	
Gyro	228.00	345.99°	-42.67°	No	No	
Gyro	231.00	346.01°	-42.63°	No	No	
Gyro	234.00	346.06°	-42.58°	No	No	
Gyro	237.00	346.01°	-42.58°	No	No	
Gyro	240.00	346.06°	-42.56°	No	No	
Gyro	243.00	346.07°	-42.54°	No	No	
Gyro	246.00	346.12°	-42.52°	No	No	
Gyro	249.00	346.06°	-42.52°	No	No	
Gyro	252.00	346.13°	-42.51°	No	No	
Gyro	252.00	346.84°	-42.45°	Yes	Yes	
Gyro	255.00	346.10°	-42.49°	No	No	
Gyro	258.00	346.13°	-42.49°	No	No	
Gyro	261.00	346.16°	-42.48°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	264.00	346.15°	-42.46°	No	No	
Gyro	267.00	346.15°	-42.45°	No	No	
Gyro	270.00	346.24°	-42.42°	No	No	
Gyro	273.00	346.17°	-42.37°	No	No	
Gyro	276.00	346.30°	-42.43°	No	No	
Gyro	279.00	346.26°	-42.35°	No	No	
Gyro	282.00	346.29°	-42.36°	No	No	
Gyro	282.00	345.88°	-42.32°	Yes	Yes	
Gyro	285.00	346.33°	-42.36°	No	No	
Gyro	288.00	346.31°	-42.32°	No	No	
Gyro	291.00	346.31°	-42.34°	No	No	
Gyro	294.00	346.28°	-42.36°	No	No	
Gyro	297.00	346.31°	-42.35°	No	No	
Gyro	300.00	346.25°	-42.34°	No	No	
Gyro	303.00	346.25°	-42.35°	No	No	
Gyro	306.00	346.32°	-42.34°	No	No	
Gyro	309.00	346.33°	-42.32°	No	No	
Gyro	312.00	346.27°	-42.33°	No	No	
Gyro	312.00	347.23°	-42.27°	Yes	Yes	
Gyro	315.00	346.37°	-42.32°	No	No	
Gyro	318.00	346.30°	-42.28°	No	No	
Gyro	321.00	346.34°	-42.27°	No	No	
Gyro	324.00	346.33°	-42.23°	No	No	
Gyro	327.00	346.37°	-42.22°	No	No	
Gyro	330.00	346.37°	-42.21°	No	No	
Gyro	333.00	346.41°	-42.17°	No	No	
Gyro	336.00	346.37°	-42.17°	No	No	
Gyro	339.00	346.39°	-42.19°	No	No	
Gyro	342.00	346.40°	-42.16°	No	No	
Gyro	342.00	346.13°	-42.13°	Yes	Yes	
Gyro	345.00	346.44°	-42.15°	No	No	
Gyro	348.00	346.43°	-42.14°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	351.00	346.51°	-42.13°	No	No	
Gyro	354.00	346.47°	-42.12°	No	No	
Gyro	357.00	346.50°	-42.12°	No	No	
Gyro	360.00	346.46°	-42.12°	No	No	
Gyro	363.00	346.44°	-42.15°	No	No	
Gyro	366.00	346.42°	-42.15°	No	No	
Gyro	369.00	346.44°	-42.14°	No	No	
Gyro	372.00	346.49°	-42.12°	No	No	
Gyro	372.00	346.08°	-42.09°	Yes	Yes	
Gyro	375.00	346.44°	-42.13°	No	No	
Gyro	378.00	346.51°	-42.10°	No	No	
Gyro	381.00	346.45°	-42.10°	No	No	
Gyro	384.00	346.45°	-42.08°	No	No	
Gyro	387.00	346.49°	-42.05°	No	No	
Gyro	390.00	346.54°	-42.03°	No	No	
Gyro	393.00	346.52°	-42.00°	No	No	
Gyro	396.00	346.58°	-41.96°	No	No	
Gyro	399.00	346.59°	-41.94°	No	No	
Gyro	402.00	346.67°	-41.89°	No	No	
Gyro	402.00	347.02°	-41.85°	Yes	Yes	
Gyro	405.00	346.59°	-41.85°	No	No	
Gyro	408.00	346.61°	-41.83°	No	No	
Gyro	411.00	346.66°	-41.80°	No	No	
Gyro	414.00	346.65°	-41.78°	No	No	
Gyro	417.00	346.61°	-41.80°	No	No	
Gyro	420.00	346.68°	-41.75°	No	No	
Gyro	423.00	346.68°	-41.74°	No	No	
Gyro	426.00	346.65°	-41.74°	No	No	
Gyro	429.00	346.69°	-41.69°	No	No	
Gyro	432.00	346.72°	-41.69°	No	No	
Gyro	432.00	346.16°	-41.70°	Yes	Yes	
Gyro	435.00	346.79°	-41.66°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	438.00	346.74°	-41.68°	No	No	
Gyro	441.00	346.81°	-41.66°	No	No	
Gyro	444.00	346.76°	-41.60°	No	No	
Gyro	447.00	346.74°	-41.68°	No	No	
Gyro	450.00	346.77°	-41.63°	No	No	
Gyro	451.67	346.77°	-41.62°	No	No	

Detailed Drill Hole Log

From	To	Title	Description
0.00	4.56	Casing	casing
4.56	21.52	Mafic Intrusion	grey and green, medium grained, mostly equigranular, with a relatively homogenous massive texture, MI with 2% qtz and cal stringers and veinlets. There are two intervals of rubbling near surface and one at the end of the unit that are tracked in the structures tab. Alteration is weak disseminated chl spotting, trace vein-controlled Alb+Ser bleaching in 5 or so veinlets, trace hem alt as rims on some stringers, and trace disseminated epi alt in two distinct locations. At the end of the unit, in the rubbled zone there is small alteration zone the is a moderate in total combination of Alb, Hem and Epi. Mineralization is weak disseminated and vein controlled py min seen as medium grained anhedral py grains when disseminated and as fine grained inclusions and halos when vein controlled
21.52	24.86	Tuff	Green, medium grained matrix with white weakly bedded medium to large grained tephra, TUF. 3-4% qtz cal and carb stringers and veinlets. Veining is barely deformed and mostly quite intact. One shear zone at 24.18m to 24.37m that has locally moderate ser alt with some weak chl and trace epi. Alteration overall is weak with weak disseminated and vein controlled (as halos) spotting throughout. Some trace vein controlled py min that is fine grained clusters.
24.86	34.09	Mafic Volcanic	Grey with slight green hue, fine to medium grained, with trace 'fractured' texture infilled by chl, a few pillow selvages, and criss crossing stringers, MV. 2% qtz, cal and carb stringers with 2 veinlets. Alteration is weak over all with weak disseminated, fracture fill chl, weak selvage and vein controlled ser alt, and trace vein controlled kspar. Mineralization is weak vein and selvage controlled py min.
34.09	53.15	Mafic Intrusion	grey with green to yellow flecking, fine to medium grained, massive, MI. 2-3% qtz and cal stringer with one bigger qtz vein and several smaller cal veinlets. Alteration is weak overall but moderate in some short intervals. Weak disseminated ser alt that show as small yellow flecks throughout more massive sections. Tis weak ser sometimes has trace epi mixed in as well. There is trace vein controlled hem and chl alt as well. Mineralization is weak vein controlled py min that can be seen as medium sized clusters of fine grains, or even as large partially formed euhedral grains. This unit ends at significant alteration zone with the same lithology
53.15	60.32	Mafic Intrusion	Light grey to beige-grey, medium grained, altered, variably textured MI with 4-5% cal and carb veining. Unit end in a rubbled section that has a short 20cm intact fault gauge, and then ends in a strong short 20cm shear zone at 60.25m indicating the entire rubbled

Detailed Drill Hole Log

From	To	Title	Description
			section from 59.28m to end of litho is a fault. Alteration is moderate overall with locally strong 20cm intervals. Alteration is moderate disseminated and fault controlled ser, with vein-controlled alt being a moderate mix of alb with ser. Trace epidote colouring disseminated ser and trace stringer controlled hem alt. Mineralization is weak vein controlled medium sized clusters of fine grained py.
60.32	69.58	Mafic Volcanic	Strongly altered, beige and green, fine grained, with heterogenous fractured texture, that alternates back in forth between beige and green, with 6-8% cross cutting stringer that may be fracture fill and 1-2% carb and qtz veinlets. Alteration is strong overall with strong albite seen as swathes and as vein replacement/fracture fill, often mixing with k-spar to gain a slight reddish hue. In the more deformed rock near the fault at the top of the unit there is weak ser alt that is trace overall. Alteration gives the rock a bleached texture. Mineralization is trace medium grained cpy seen in the vein material and as trace halos around in a few select veins in the bottom half of this interval.
69.58	142.72	Mafic Volcanic	grey to grey green with lots of beige carb veining, fine grained, with a 'fracture and heal' texture, that can be more massive at times MV. Veining is intense until 85.50m where it becomes less frequent. From 69.58m to 85.50m there is approximately 25% Beige carb veins, veinlets, and jagged fracture fill and or stringer sets. These carb veins may be weakly alb altered and are often brecciated with small, jagged wall rock fragments in the vein material. After 85.50m there is 5-6% cal, carb and qtz stringers, veinlets, and vein segments. Here veining is often less continuous and for some multi meter intervals may only be vein segments. All the rock here is well healed, and although the veins are all very brecciated the rock itself is quite competent. There are a few intermittent pillow selvages. Alteration is weak overall with the heavy carb veining introducing some locally moderate alb alt and weak k-spar alt. K-spar alt continues to be present in veining throughout litho unit. Trace disseminated ser and epi alt in a select few locations. Mineralization is weak vein controlled medium to fine grained patchy py min. Mineralization is more focussed from ~73-86m but is present throughout.
142.72	194.91	Mafic Volcanic	dark grey to dark grey with slight green hue, fine to medium fine grained, MV with 10-12% cal veining. Veining is even distributed throughout with and equal split between stringers, veinlets and cataclastic veins. Unit stands out from other MV units because of higher % of veining. Rock is very competent with a weak lightly sheared deformation zone from 190.22 to 191.74m that has consistent foliation, and weak ser alt. Unit has vesicles in it

Detailed Drill Hole Log

From	To	Title	Description
			with most concentrated from 142.72m to 172.00m. Afterwards vesicles are trace and patchy. Alteration is weak vein controlled chl alt seen as fracture fill and rimming, weak patchy disseminated ser alt in a few discrete intervals, trace vein-controlled k-spar alt in a few select veins, and trace patchy disseminated epi alt in a few intervals. Mineralization is weak to moderate patchy vein controlled py min seen as fine to medium grained anhedral halos and in vein material. Trace cpy min in some select vein and at the center of larger py clusters
194.91	306.82	Mafic Volcanic	Dark green to medium green, mostly fine to medium-fine, massive, with heterogeneous basaltic texture that is consistent across the interval. 1% qtz and cal veining. Veining is an even split of stringers, veinlets, and veins. There is one 15cm fault gauge at 271m. One small fine grained black, almost UMV but likley MI window from 292.58m to 292.79m. Alteration is moderate to weak patchy vein controlled and disseminated epi, weak disseminated and vein controlled chl alt, weak vein-controlled k-spar alt and trace vein-controlled hem alt seen as trace rimming on select veining. weak to moderate disseminated and vein controlled py min seen patchy clusters in host rock and as very fine grained halos. py is in form of small anhedral grains. Possible trace cpy. Trace spec hem in some vuggy cal stringers
306.82	308.17	Lamprophyre	reddish brown with black flecks, medium grained, massive, equigranular LAMP with diagnostic biotite phenocrysts. No significant veining. Cool margin and sharp contacts at the upper and lower contacts. Alteration is moderate disseminated hem that may have some portion of k-spar alteration mixed in. Trace fine grained disseminated py min as weak halos around the up-hole contact that dries out with depth.
308.17	366.76	Mafic Volcanic	Dark green to medium green, mostly fine to medium-fine, massive, with heterogeneous basaltic textures (fractured and heal, pillow selvage, patchy alteration) that are consistent across the interval. 2-3% qtz and cal veining. Cal is often as stringers and veinlets, that tend to be sheared, vuggy and minorly brecciated, qtz is larger veins that are more massive. Increased veining from 351-367m at around 5-10%. Moderate qtz vein at 358.5m. Unit becomes less altered and darker grey towards the 367.27m. One small interval of weak foliation towards end of unit that does not persist for more than 20cm. Alteration is patchy and weak overall although it is moderate in shorter intervals. moderate to weak, patchy vein (and pillow selvage?) controlled and disseminated epi, weak disseminated and vein controlled chl alt, weak vein-controlled k-spar alt and trace

Detailed Drill Hole Log

From	To	Title	Description
			vein-controlled hem alt seen as trace rimming on select veining. Moderate disseminated and vein controlled py min spread throughout the unit. py is in form of small anhedral grains and can be found throughout the unit but can also be concentrated around veining. Possible trace cpy. Unit ends near brown fine-grained intrusion where rock is fractured.
366.76	388.61	Archean Gabbro	dark green and black medium to coarse grained, camo-textured, with patchy alteration, several small grey fine-grained windows, AGAB with 1-2% sheared and unsheared, cal and qtz veinlets and stringers. Unit starts with a brown-grey fine grained massive textured unit with some k-spar altered qtz veins that have the same alpha as the joint set that runs through this fractured window. Possibly a fractured chill margin that facilitated alteration. Brown window ends at 367.27m. A few other sub meter windows that are fine-medium grained massive grey rock with slight green hue and clean wall rock contacts with AGAB. Likely partially chilled MV windows. There is one uneven window with a similar texture at 375.75m that never occupies the entire core width but has very uneven jagged wall rock contact, almost resembling a selvage. Alteration is weak to moderate overall with locally moderate vein-controlled epi alt that are usually 2-3cm halos on either side of select veinlets. Weak vein controlled chl alt, as fracture fill on some sheared veins, very weak hem and k-spar alteration as rimming on select veins, and weak to very weak disseminated cal alt on darker AGAB intervals where the wall rock lightly effervesces with HCl. Weak to moderate, fine to large grained py, that is both vein-controlled (large grained py as haloes), and disseminated (medium grained patchy). The end of the unit is slightly vague as MV is variably textures, so contact is mostly based off grain size.
388.61	404.61	Mafic Volcanic	green to grey green, fine to medium-fine grained, heterogeneously textured with mosaic textured selvages, fracture and heal texture and some intervals of foliation, MV with 1-2% cal and qtz veinlets and veins. There is a lack of camo texture and smaller grain size in this unit distinguishing it from AGAB. One interval of rubbling with fault gauge at 392.62m to 392.89m. Foliated intervals from 392.89m to 393.55 and 394.50m to 395.66m. Alteration is weak overall with patchy weak epi alt that has some very weak associated ser alt when structure controlled. very weak hem and k-spar alt of select veins as well as chl alt. Weak patchy fine grained py min that is moderate over some intervals. Vein controlled and only disseminated around specific structures and in zones of increased vein density
404.61	444.09	Archean Gabbro	dark green and black medium grained, camo textured, AGAB with 1%, cal and qtz

Detailed Drill Hole Log

From	To	Title	Description
			veinlets and stringers. One stand out brecciated qtz vein at 419m that appears to be sil altered over the entire vein (including wall rock frags). Upper contact of litho unit is a little gradational as grain size increases over a 40cm interval. Grain size gets a little coarse from 421.00 to 421.50m, but otherwise is structurally uninteresting. Alteration is weak to very weak overall with locally weak vein-controlled epi alt that are usually 2-3cm halos on either side of select veinlets. Very weak vein controlled chl alt, as fracture fill on some sheared veins, very weak hem and k-spar alteration as rimming on select veins, very weak sil alt over one brecciated qtz vein. Weak, medium grained py min that is disseminated and patchy throughout and maybe twice as concentrated around select veins.
444.09	450.00	Mafic Volcanic	green to grey green, fine grained, with patchy alteration, leaning towards massively textured over most of the interval, MV with 1% cal stringers. There is a lack of camo texture and smaller grain size in this unit distinguishing it from AGAB. Alteration is weak overall with patchy weak epi alt and very weak hem alt of select veins. Weak disseminated patchy medium grained py min that is moderate over some intervals where it appears to have fully replaced some heavily sheared stringer segments.

Alteration

From	To	Overall St...	Description
0.00	4.56	barren	casing
4.56	21.52	weak	weak diss chl spotting, trace vein-controlled Alb+Ser bleaching in 5 or so veinlets, trace hem alt as rims on some stringers, and trace diss epi alt in two distinct locations. rubbled zone at with small alt zone of mod Alb, Hem and Epi combination
21.52	24.86	weak	overall is weak with weak disseminated and vein controlled (as halos) chl spotting throughout. One shear zone at 24.18m to 24.37m that has locally moderate ser alt with some weak chl and trace epi.
24.86	34.09	weak	weak over all with weak disseminated, fracture fill chl, weak selvage and vein controlled ser alt, and trace vein controlled kspar.
34.09	53.20	weak	weak overall but moderate in some short intervals. Weak disseminated ser alt that show as small yellow flecks throughout more massive sections. This weak ser sometimes has trace epi mixed in as well. There is trace vein controlled hem and chl alt as well.
53.20	60.32	moderate	mod overall with locally strong 20cm intervals. Altd is mod diss and fault controlled ser, with vein-controlled alt being a moderate mix of alb with ser. Trace epidote colouring disseminated ser and trace stringer-controlled hem alt.
60.32	69.58	strong	str overall with str albite seen as swathes/vn replacement/fracture fill, often mixing with k-spar to as slight reddish hue. near fault at the top of the unit there is weak ser alt that is trace overall. Alt gives the rock bleached texture
69.58	140.37	weak	weak overall with the heavy carb veining introducing some locally moderate alb alt and weak k-spar alt. K-spar alt continues to be present in veining throughout litho unit. Trace disseminated ser and epi alt in a select few locations.
140.37	142.72	weak	weak vein controlled chl alt seen as fracture fill and rimming, weak patchy disseminated ser alt in a few discrete intervals, trace vein-controlled k-spar alt in a few select veins, and trace patchy disseminated epi alt in a few intervals
142.72	194.91	weak	moderate to weak patchy vein controlled and disseminated epi, weak disseminated and vein controlled chl alt, weak vein-controlled k-spar alt and trace vein-controlled hem alt seen as trace rimming on select veining
194.91	306.82	weak	Alteration is moderate to weak patchy vein controlled and disseminated epi, weak disseminated and vein controlled chl alt, weak vein-controlled k-spar alt and trace vein-controlled hem alt seen as trace rimming on select veining.
306.82	308.17	moderate	Alteration is moderate disseminated hem that may have some portion of k-spar alteration mixed in.
308.17	366.76	weak	patchy and weak overall, mod in shorter intervals, mod to weak, patchy vein (and pillow selvage?) controlled and diss, weak diss and vein controlled chl alt, weak vein-cont k-spar alt and trace vein-cont hem alt seen as trace rimming on select veining

Alteration

From	To	Overall St...	Description
366.76	388.61	moderate	weak to mod overall with locally mod vn-cont epi alt as 2-3cm halos on select veins. Weak vein cont chl alt, as fracture fill on sheared veins, very weak hem and k-spar as rimming on select veins, and weak to very weak diss cal alt on darker intervals
388.61	404.61	weak	weak overall with patchy weak epi alt that has some very weak associated ser alt when structure controlled. very weak hem and k-spar alt of select veins as well as chl alt.
404.61	444.09	weak	weak to very weak overall with locally weak vn-cont epi alt that are usually 2-3cm. Very weak vn cont chl alt, as fracture fill on some sheared veins, very weak hem and k-spar alt as rimming on select veins, very weak sil alt over one brecciated qtz vein
444.09	450.00	weak	weak overall with patchy weak epi alt and very weak hem alt of select veins

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
7.03	7.04	qtz	85.00°		0.50	one of two lightly sheared qtz-carb veins that is heavily ser altered with elongated bleebs of qtz included
9.56	9.67	qtz-cal	30.00°		0.75	thin vein with uniform wall rock contacts. Interior continuous layer of qtz that can move to touch wall rock contacts outside of hole apexes. Some trace chl min associated with qtz
9.73	9.77	qtz	55.00°		0.50	sheared discontinuous vein with some opaque carb and or alb+ser overprinting. Trace k-spar alt.
10.62	10.64	qtz-carb	70.00°		0.50	thin uniform veinlet/stringer that is a well mixed two phase qtz-carb vein with distinct 1mm hem rims and weak fine grained py halo
12.66	12.68	qtz-cal	55.00°		0.75	uniform 2 phase well mixed qtz-cal vein with some elongated chl bleebs in the vein matrix
20.69	20.72	cal	75.00°		0.50	lightly sheared cal veinlet with a small cal stringer off shooting. Patchy fine grained py min throughout seen as clusters
21.06	21.13	qtz-carb	60.00°		1.00	vuggy partially rubbled/drill damaged qtz-carb vein. Some ser and alb alt halos in the vein area and a few small black, pointy minerals on broken face, possibly tourmaline.
22.58	22.68	qtz	25.00°		0.50	truncated uniform qtz vein with 2mm cal rims
22.80	22.95	qtz	20.00°		0.50	truncated uniform qtz vein with 2mm cal rims
23.80	23.82	cal	80.00°		0.50	thin, vuggy al vein with some cross cutting stringers. On medium zied cluster of fine grained py with some chl haloing within the vein material
26.87	27.11	cal				brecciated and sheared cal vein that has 20% wall rock fragments. Up hole apex is a long shoot of py mineralized stringers rimmed by chl.
27.20	27.54	cal	10.00°		0.75	dirty, messy cal veinlet/ stringer set that has many off shoots that reconnect. Possibly brecciated depending on your perspective. Vein has a good amount of fine grained py min, as well as moderate k-spar, chl, and trace ser throughout.
29.76	29.91	cal-carb	15.00°		1.00	layered cal carb vein that clearly becomes two phases at down hole apex. Thin chl rim separated the two layers. Moderate py min throughout, mostly associated with chl layer. Trace K-spar and ser alt
34.56	34.69	qtz	40.00°		5.00	layered lightly sheared qtz vein with large semi formed py grains some trace k-spar alt and chl inclusions.
37.36	37.42	cal	45.00°		0.50	dirty, dark grey, fine grained cal veinlet with good py min clusters that have some trace cpy in their centers. Weak k-spar alt scattered

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						throughout and some trace chl in fill hither and thither.
37.45	37.52	cal	45.00°		0.50	dirty, dark grey, fine grained cal veinlet with good py min clusters that have some trace cpy in their centers. Weak k-spar alt scattered throughout and some trace chl in fill hither and thither.
38.19	38.22	cal	75.00°		2.00	messy cal vein with many medium sized euhedral py grains, chl rimming and 3cm ser halo on either end
45.79	45.90	qtz	18.00°	340.00°	1.00	fine grained, dirty wtz vein with discontinuous thin cal and hem rims.
50.50	50.53	cal	76.50°	269.30°	1.50	medium grained, near perpendicular cal vein that hosts a moderate amount of fine to medium grained py min. layer of chl runs through the vein splitting it into 2/3 and 1/3. vein is slightly faulted and shifted near it up hole apex
53.30	53.36	carb	44.00°	330.00°	0.50	Messy, sheared, beige and pale green altered carb vein that does not have a downhole apex. Carb is moderately ser and trace epi altered. With some very faint py halo and nearby ser min
53.59	53.65	carb	44.00°	325.00°	2.00	beige, altered, with slight green hue, carb vein that pull apart into a stringer network on its up hole apex, making the wall rock contact difficult to gleam
53.77	53.81	carb	44.00°	330.00°	1.50	sheared and brecciated, less altered carb vein with fracture fill. Fractures are filled by epi and chl
54.31	54.53	qtz	60.00°	335.00°	2.00	brecciated qtz vein that is ~50% large wall rock fragments. Qtz is 2 phase, medium grained and fine grained dirty. Medium grained qts hosts large, rounded clusters of fine grained py. There is purplish k-spar alt in filing between medium grained qtz matrix material. some chl doing the same
56.62	56.74	cal	17.40°	354.00°	0.50	small homogenous cal vein
59.23	59.29	qtz-cal	50.00°		2.50	two phase, immiscible medium grained qtz-cal vein that is very white and unaltered. Some chl fracture fill on down hole apex
60.23	60.36	qtz-carb	35.00°		2.50	sheared white, mostly carb, qtz-carb vein on the butt end of a shear zone following a fault of interest. Vein is in three distinct pieces. Fissile. Chl and ser makes its way into some vein material as fracture fill
66.56	66.68	cal	25.00°		0.50	thin sheared cal vein in heavy alb alteration zone that hosts some trace cpy min. weak chl rims

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
66.93	66.94	carb			1.50	chl rich vein area with a whole mess of small angular wall rock fragments, located in area of heavy alb alteration. There is some discontinuous truncated thin carb veining through this section. More than 50% wall rock fragments.
68.27	68.37	cal	25.00°		0.50	light sheared, relatively homogenous cal vein with some weak, medium sized clusters of fine grained cpy.
69.00	69.08	cal	25.00°		0.50	homogenous cal vein with moderate, patchy medium grained cpy min
69.76	69.98	carb	50.00°		0.50	Set of interconnected Beige carb veins that have their main sections in the same dip direction with similar alphas but the stringers between them create a web like network. Some k-spar alteration throughout with chl fracture filling. Beige colour may be from ser alteration. trace fine grained cpy min
70.05	70.33	carb	35.00°		0.50	brecciated and sheard, discontinuous on one side beige carb vein. Brecciated with 10-15% small angular wall rock fragments. Some k-spar and chl alt rimming vein material throughout. Some trace py halos.
70.34	70.53	carb	65.00°		0.50	brecciated vein that has a later generation vein set with similar alphas cutting through. Brecciated carb vein is beige with 25-30% small angular, k-spar and chl altered wall rock fragments.
70.70	71.82	carb	35.00°		0.50	Vein set starting with brecciated beige carb vein with some stringer off shoots and parallel homogenous veinlets. Rock is broken at vein apex with orange weathering. 20-30% wall rock fragments. Afterwards vein set is small homogenous veinlets with similar alphas that are bridges by jagged web of carb stringers.
73.00	73.24	qtz-carb	25.00°		12.00	brecciated, mosaic looking, sheared qtz-carb vein that is a combination of angular vein material that are differently altered, with some wall rock fragments and chl infill. There is beige carb, chl altered carb with black chl spotting, purple hued, k-spar altered qtz, and shear zone reminiscent alternating thin layers of chl and ser. Could be a result of healed faulting
74.26	74.32	carb	50.00°		2.00	Beige cataclastic carb vein where wall rock fragments are angular and designated to the middle 60% of the vein, creating a clear cataclastic texture.

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
76.13	76.22	carb	50.00°		4.00	cataclastic, poorly layered beige carb vein with discontinuous layers of wall fragments and chl alt
77.10	77.27	carb	30.00°		6.50	lop sided, oddly sheared beige and browny pink, ser and k-spar altered carb vein with some small amounts of qtz at the downhole apex. Trace patchy py in the vein material and moderate py halo on the up hole apex
77.85	77.90	carb	50.00°		2.00	layered beige carb vein with a cataclastic and non-cataclastic layer separated by thin 1mm chl layer
78.20	78.45	qtz	15.00°		1.50	undulating but otherwise homogenous pink qtz vein
83.63	83.75	carb	30.00°		1.50	brecciated, conglomerate looking cataclastic carb vein that is chl rich
85.08	85.12	qtz-cal	60.00°		0.50	fairly uniform pink qtz vein with significant pink cal rims on either side and patchy clusters of py min scattered throughout
85.12	85.25	qtz-cal	30.00°		5.00	multigenerational, multiphase, messy, layered, and sheared qtz-cal vein where fine grained qtz vein is sheared and discontinuous and epi altered cal vein cuts over and is not sheared. Patchy-kspar throughout,
86.83	86.86	cal	50.00°		1.00	fairly uniform, slightly undulating, cal vein with trace py min, cross cut by a number of small stringers
86.87	86.95	cal	35.00°		1.50	fairly uniform, slightly undulating, cal vein with trace py min, cross cut by a number of small stringers
90.25	90.66	qtz	20.00°		2.00	truncated homogenous qtz vein.
94.10	94.33	qtz-cal	25.00°		11.00	messy two phase qtz cal vein where cal is large to medium grained and qtz is very dark and fine grained. Messiness is confined to the inside of the wall rock contacts which are even. Trace py min, weak k-spar alt of cal
97.01	97.17	cal	50.00°		9.00	cataclastic cal vein that is 40% elongated wall rock fragments. Trace hem alt on some wall rock fragments
103.38	103.45	cal	60.00°		5.00	brecciated cal vein with 30% mostly one wall rock fragment. Weak very fine grained sparkly py and cpy min in one spot of vein
107.07	107.13	qtz	60.00°		3.00	k-spar altered, sheared, pink fine grained qtz vein with some discontinuous cal rims, small bleebs of hem or spec hem. Trace py in cal rims.
108.86	108.99	cal	30.00°		1.00	sheared fine grained cal vein with a down hole halo of strong very fine

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						grained py min.
109.85	109.89	qtz	65.00°		0.75	homogenous qtz vein with discontinuous cal rims and trace py min
110.30	110.34	cal	50.00°		0.75	cataclastic and then brecciated cal vein with over 50% elongate wall rock fragments
114.25	114.32	cal	45.00°		1.00	heavily hem altered, layered cal vein where up hole layer is almost pure brick red hem and up hole layer has visible vein material grains
116.34	116.40	cal	50.00°		1.50	brecciated cal vein where medium sized cal veins are separated from one another and in filled with green chl. There are 2:1 elongated small spec hem grains as well as weak py min
118.66	118.74	cal	60.00°		1.00	well sheared, otherwise uniform off white cal veinlet
120.15	120.20	cal-carb	80.00°		4.00	brecciated, chl rich cal-carb vein where rims of vein are mostly continuous and cal followed by the green chl rich section of the vein that holds large clasts of beige carb, and dirty looking fine grained grey cal.
123.13	123.26	cal	25.00°		1.00	multi-generational heavily k-spar altered cal vein that got overprinted and crosscut by two later generations of cal veinlets. Where cal veinlet over prints there is an almost stylolite like chl rimming.
124.38	124.46	cal	35.00°		0.50	lightly cataclastic thin cal veinlet/stringer with a single medium sized grain of cpy
125.83	125.94	qtz	35.00°		3.00	fine grained, dirty, dark grey qtz vein, with discontinuous layers and in interior chl rich layer housing wall rock fragments. Will say brecciated over cataclastic. Weak very fine grained py min disseminated throughout the vein.
126.91	126.94	qtz-cal	60.00°		1.00	5 layered qtz cal vein. Outer layers are cal then a dark black chl layer than the interior layer of medium grained qtz
128.82	128.94	qtz-cal	25.00°		1.00	slightly pink layered qtz-cal vein where two outside layers are cal and interior layer is medium grained qtz. Trace k-spar alt throughout
134.41	134.62	cal	20.00°		0.25	weakly sheared cal vein
136.60	136.76	qtz-cal	20.00°		1.00	two parallel cataclastic qtz-cal veins where cal is firm as the wall rock bearing portion of the vein but then gradationally transitions (fades) into a one phase fine grained qtz-cal mix before being dark and dirty fine grained qtz.
139.00	139.33	qtz				larg qtz vein segment that is truncated at its 'up hole apex'. Veinn is a

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						little dirty with chl inclusions and k-spar and cal alt sprinkled throughout.
142.10	142.12	qtz	46.00°	357.00°	0.50	medium grained relatively uniform qtz vein with a moderate amount of medium grained euhedral py min
143.09	143.13	cal	30.00°	356.00°	0.75	sheared cataclastic cal veinlet/stringer that is an offset of a larger cal stringer network
143.28	143.31	cal	46.00°	348.00°	0.25	thin cal stringer with faint chl rims that has a strong very fine grained 4mm py halo
146.26	146.33	cal	50.00°	329.00°	3.00	large-grained cal vein with thin dirty look cal halo on the up hole apex. Trace fine grained py min in the fine-grained cal as well as some weak chl
146.54	146.64	cal	57.00°	308.00°	2.00	large grained, sheared, cal vein with thin dirty look cal discontinuous cal rims. Vein suddenly thins to 0.75cm on the flank. Trace fine grained py min in the fine-grained cal as well as some weak chl
151.14	151.38	cal	51.00°	342.00°	1.25	Set of parallel weakly sheared al veinlets and stringers with one section that looks shear. A modest amount of medium grained py grains between veins and a good amount of chl fracture fill
153.77	154.04	cal	27.00°	309.00°	18.00	calcite breccia that is chl rich with a distinct mosaic texture. Over 50% wall rock fragments. Calcite is fine grained and purplish black in colour. Chl is soft and green. Moderate fine grained py min with some trace cpy grains in at least on py cluster
156.44	156.54	qtz	38.00°	341.00°	1.50	relatively uniform, slightly undulating with uneven wall rock contacts qtz vein with trace chl specs throughout the vein material
157.11	157.18	cal	22.00°	340.00°	0.50	cataclastic very vuggy cal vein with moderate medium grained euhedral py min
158.34	158.50	cal	15.00°	337.00°	2.00	layered, cataclastic, vuggy cal vein, with some trace medium grained cpy min. interior layer is cataclastic with outer layers being fine grained cal rims
163.15	163.37	cal	13.00°	280.00°		sheared, discontinuous cal vein with some trace dog tooth texture, trace disseminated patchy hem alt, trace disseminated fine grained py min
163.65	163.82	qtz-cal	34.00°	356.00°	6.00	layered cal vein with two main distinct layers. Layer one is a mix of fine grained 'dirty' looking cal and larger grained off-white cal. The

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						layers are separated by a thin line if hem alt. the next layer is dark green, chl rich with disseminated cal throughout and strong py min that is medium and fine grained as well as weak ser and k-spar alt.
164.62	164.75	qtz	30.00°	118.00°	1.00	little messy medium to large grained qtz vein with many stringer cross cutting/stemming from the vein. Would be layered but layers of chl within are discontinuous and pinch out
168.36	168.55	cal	49.00°	1.00°	15.00	layered, cataclastic cal vein that is chl rich. First layer is 80% of the vein that is cataclastic cal with over 50% medium sized angular wall rock fragments. End of vein is buttressed by a homogenous uniform pink cal. Some trace py min in wall rock frags.
172.92	173.10	qtz	30.00°	154.00°	1.00	relatively homogenous, slightly offset by a micro fault, qtz vein with weak discontinuous rims of k-spar alt
177.64	177.69	cal	39.00°	0.00°	1.00	pinkish cal vein that is slightly fractured and has been healed by fine grained dirtier looking cal. On the down hole side there is a halo of alternating ser and chl with moderate fine grained py min
184.24	184.41	cal	46.00°	52.00°	1.25	lightly sheared dark grey cal vein with some moderate patchy py min
184.91	185.00	qtz-cal	27.00°	20.00°	2.00	mostly cal, qtz call vein that is either sheared or truncated. Some weak chl fracture fil
185.28	185.35	cal	16.00°	323.00°	1.00	sheared and weakly brecciated small cal veinlet with weak py min and possible trace cpy
187.75	187.84	cal	38.00°	283.00°	2.00	chl rich cal vein that is quite messy with long undulating sections of chl and green hued cal interfingering without breaking the wall rock contacts in a big way. Some trace py min
188.13	188.26	cal	38.00°	27.00°	9.00	large, brecciated cal vein with several angular, slivers of wall rock inclusions throughout. Some purplish alteration that is likely trace k-spar as well as trace chl rimming around wall rock frags.
191.83	191.98	cal	38.00°	293.00°	1.50	weakly brecciated, slightly pink cal vein that is homogenous near the up hole wall rock contact but become more green and chl altered with brecciated wall rock fragments. Notable chl halo with py min
192.96	193.05	cal	51.00°	337.00°	7.00	messy, discontinuously layered cal vein with a layer of cal and chl mixed up in discontinuous pinching slivers and then a layer of ser altered rock with weak disseminated and diffusive py min
194.48	194.63	cal	40.00°	322.00°	8.00	homogenous brecciated pink call vein with less than 15% wall rock

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						fragments
198.18	198.28	cal	35.00°		4.00	lightly sheared, very vuggy cal vein with some trace chl alt
200.68	200.74	cal	70.00°		3.50	dog toothed, breccia with less than 30% large wall rock fragments. Dog teeth are made of slightly purple fine grained cal. Inner vein material is whit large grained cal.
202.96	203.02	cal	55.00°		3.00	weakly dog toothed, heterogenous, medium grained cal vein where dog teeth have some weak hem alt. 1mm cal rims
203.10	203.15	cal	35.00°		0.10	small vuggy cal stringer with grey metallic mineralized fine grains that sparkle and have clear cleavage planes. Likely a stringer filled with red streaking spec hem
206.85	206.91	cal	60.00°		4.00	brecciated pink cal vein with aroun30% small and medium wall rock fragments. Some weak chl bleebs in clusters
212.53	212.57	qtz	52.00°	332.00°	1.00	thin lightly sheared qtz vein with an epi+ser squiggly alteration band over printing about 25% of the vein material
215.28	215.33	cal	37.00°	13.00°	0.50	section of sheared veinlet with strong py min and py halo
215.53	215.62	cal	23.00°	10.00°	0.25	cal stringer with moderate fine grained cpy min
216.91	216.97	cal	47.00°	335.00°	2.00	cal vein with thin discontinuous chl layer running through the middle and some discontinuous dirty cal rims.
218.84	218.96	cal	30.00°	345.00°	1.50	fairly homogenous pink cal vein
221.49	221.58	qtz-cal	60.00°		5.00	two phase qtz-cal vein with qtz and cal section being 1-2cm radius bleebs. Some sheared pink cal stringers cross cutting. Trace k-spar alt
221.59	221.93	cal	25.00°		23.00	large brecciated and cataclastic medium to fine grained cal vein with weak patchy k-spar alt throughout. About 50% small cataclastic and large brecciated wall rock fragments that host trace py min
222.06	222.46	cal	50.00°		31.00	large brecciated and cataclastic cal vein that is patchy purplish in hue, possibly from hem and k-spar alt. 30% unaltered, angular wall fragments.
222.85	223.07	cal	20.00°		1.50	fine and medium grained cal vein with trace ser rims and moderate medium grained py min
225.99	226.03	qtz	85.00°		3.00	large grained, clean and white qtz vein with some extensional internal fractures that have been filled with chl squigglies. Ser+epi alteration coming in from the rims hither and thither
227.57	227.65	qtz	45.00°		2.50	layered qtz vein with an up hole layer of dirty fine grained cal, next

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						layer of relatively homogenous qtz with some chl fracture fill, next layer dirty fine grained cal again and then a final squiggly layer of ser+epi alt
233.19	233.39	qtz-cal	25.00°		3.50	one of two possibly conjugate cal veins that are either weakly brecciated or sheared, with around 10% wall rock fragments near the vein apexes. Weak soft green chl squiggles layers, sometime with some hem alt. Weak very fine grained py halo for less than 1cm
233.46	233.57	qtz-cal	35.00°		2.50	one of two possibly conjugate cal veins that are either weakly brecciated or sheared, with around 10% wall rock fragments near the vein apexes. Some fine grained dirty cal rimming
239.32	239.45	cal	42.00°	345.00°	8.00	set of layered parallel veining where first vein is alternating layers of fine grained cal and chl, then there is a break with a layer of wall rock and then the second vein that is slightly brecciated with 10% wall fragments and medium grained off white cal vein material. Weak fine grained py min in first layered vein
245.64	245.70	qtz-cal	60.00°		1.50	strongly k-spar altered (pastel orange) qtz-cal vein with pinching out discontinuous layers. Distinct cal and qtz zones with chl separating the two.
248.02	248.13	qtz-cal	30.00°		2.50	similar to above vein but quite a deal messier and unable to say layered
254.50	254.61	cal	37.00°	57.00°	0.50	small chl rimmed cal stringer that has weak spec hem mineralization
254.69	254.84	cal	32.00°	22.00°	3.00	brecciated, medium to fine grained cal vein with 30% wall rock fragments. And moderate stringy hem alt squiggling through the vein
265.65	265.72	cal	60.00°		3.00	finely layered, chl rich fine grained cal vein that is alternating layers of cal and chl. There is a 1cm very fine grained py halo on the downhole side
277.90	278.08	cal	20.00°	190.00°	2.50	weakly brecciated and sheared fine grained, 'dirty' with impurities cal vein with 50% wall rock fragments, moderate py min on the wall rock frags, moderate but discontinuous hem alt and patchy trace k-spar alt throughout vein material
282.62	282.73	qtz-cal	30.00°	201.00°	1.00	mostly cal, qtz cal vein that is two phase. Trace hem rims
288.65	288.68	cal	49.00°	28.00°	0.25	cal stringer with moderate very fine grained py min and halos as well as 1mm hem rims

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
288.77	288.80	cal	53.00°	23.00°	0.25	cal stringer with moderate very fine grained py min and halos as well as 1mm hem rims
289.66	289.95	chl-rich	15.00°	209.00°	1.00	chl rich cal vein with reasonably even wall rock contacts. Chl rich portion is preferential to the down hole side of the vein. On the up hole apex there is a moderate rim of spec hem mixed with fine grained py
290.67	290.71	cal	60.00°	25.00°	1.00	uniform medium grained cal vein with 2mm rims of fine-grained cal, k-spar and trace chl
291.46	291.60	cal	33.00°	217.00°	0.25	lightly sheared cal vein with discontinuous faint hem rims
292.77	292.85	cal	54.00°	355.00°	2.00	foliated fine grained, chl rich cal vein with some medium grained qtz grains. Vein exists at end of small UMV inclusion so possibly has some asbestiform components
297.10	297.14	cal	61.00°	51.00°	0.50	small cal stringer with moderate very fine grained py min and strong hem rims/halos that comprise most of the vein
299.29	299.35	qtz	58.00°	348.00°	2.00	homogenous, massive qtz vein with no min
299.65	299.69	qtz	51.00°	353.00°	0.50	small qtz stringer/veinlet with moderate very fine grained py min and moderate, but discontinuous hem rims that comprise most of the vein at the downhole apex. Faint epi halo around the vein. Faint cal grains hither and thither
301.12	301.26	cal	25.00°		0.50	vuggy, hem rimmed cal veinlet with trace spec hem around vugs.
303.67	303.74	qtz-cal	47.00°	134.00°	1.50	strongly k-spar altered (pastel orange) qtz-cal vein where both vein material are medium grained and preferential to one side of the vein. Some weak py min and chl rims
306.76	306.82	qtz	56.00°	0.00°	4.00	layered vuggy qtz vein, that HAD some cal inclusions that have turned to vugs. Both layers are qtz, separated at 1/3 into the vein by a thin k-spar layer. Discontinues thin chl layers and cal spotting through out. Some weak py min
309.11	309.15	cal	50.00°	14.00°	0.75	messy fine grained cal veinlet/stringer with undulating layers of hem running through, weak fine grained py min and a uphole 2mm halo of epi
309.97	310.03	cal	36.00°	6.00°	1.75	cal vein with moderate disseminated py min and some small thin chl rimming between vein grains
310.66	310.91	cal	65.00°	61.00°	17.00	large brecciated cal vein that is over 50% sub angular wall rock fragments. Some chl bleebs throughout and trace qtz grains. Py min

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						only in wall rock fragments
311.33	311.37	cal	50.00°	3.00°	0.50	kspar and hem rimmed cal stringer with some weak py min
312.25	312.29	qtz-cal	47.00°	359.00°	1.00	mostly cal, qtz-cal vein with fine grained cal and medium grained qtz. Vein is weakly layered with qtz in the middle and cal on either side. Weak fine grained py min throughout. Trace patchy k-spar alt
312.66	312.73	qtz	52.00°	161.00°	7.00	large mostly white qzt vein with some thin stylolite esque chl squigglies, patchy k-spar alt and some weak medium sized clusters of fine grained py patchy throughout
314.12	314.19	cal	27.00°	203.00°	0.25	set of three cal stringers with dark red hem rims and and weak py min
314.66	314.74	cal	44.00°	359.00°	4.00	chl rich, two phase cal (fine and medium grained) that is comprised of many very thin layers/ is foliated and sheared. Weak py min and trace k-spar alt in medium grained cal
315.21	315.25	cal-carb	50.00°	16.00°	2.00	lightly sheared cal-carb vein where cal is fine grained with impurities and carb is pinkish to orange with k-spar alt. some thin discontinuous chl layer on up hole apex. No min
315.97	316.01	cal	55.00°	9.00°	0.25	set of conjugate cal stringers with strong 5mm py halos with some trace ser alt.
318.67	318.74	qtz	37.00°	347.00°	4.00	qtz vein that is heavily sheared or in fact is shear. Vein exists at the end of a small alteration zone that is mostly epi with some trace ser and k-spar. Much of the vein material is overprinted. Trace fine grained py min but no more than is typical background amounts for this section of the unit
319.22	319.26	qtz	40.00°	342.00°	0.10	small qtz stringer with some py min but not more than the background amount for this area. Weak overall
320.72	320.77	cal	29.00°	6.00°	0.50	cal veinlet that is cross cutting with a shallower alpha cal veinlet. Where they intersect there is some orphaned vein segments with moderate fine grained py min. trace patchy k-spar alt and very faint hem rims
321.01	321.08	cal	26.00°	9.00°	0.50	cal veinlet with strong very fine grained py halo
321.60	321.66	cal	26.00°	359.00°	0.50	sheared cal veinlets/stringers that have slightly different alphas but are likely conjugate. Moderate disseminated hem halo around stringers that host moderate fine grained py min.
325.71	325.82	cal	26.00°	183.00°	1.00	fine grained dirty cal vein with chl, hem and py inclusions throughout.

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						Weak hem rims
330.43	330.52	cal	37.00°		0.25	thin cal stringer with trace discontinuous hem and chl rims with trace py halos
334.43	334.55	qtz	60.00°		10.00	massive qtz vein with a few 2mm diameter cal inclusions that host cpy. Trace k-spar alt in qtz
336.59	336.66	cal	40.00°		1.00	cal vein with some weak medium grained qtz inclusions. Diffusive k-spar alt throughout
340.12	340.34	cal	30.00°		3.00	sheared, homogenous cal vein with the downhole apex being over 75% of the vein, which thins dramatically towards the downhole apex
344.69	344.75	qtz-cal	50.00°		0.75	mostly qtz, qtz-cal vein with cal infilling fractures and forming semi present rims. apex has strong very fine grained py min halo. trace k-spar alt throughout qtz. Single thin chl layer running through middle of vein
349.26	349.28	cal	87.00°		0.50	fine grained, chl rich, sheared cal stringer/veinlet that is attached to a brecciated cal vein segment and other chl rich stringers. Part of a messy vein set with moderate py min throughout.
351.05	351.33	cal	14.00°	267.00°	1.00	jagged, sheared, shallow alpha cal vein with 20% wall rock fragments and some large fractures filled with soft black chl. No py min in vein material
354.43	354.50	qtz-cal	48.00°	172.00°	1.00	sheared/truncated qtz-cal vein where cal is fine grained off white and qtz is large grained homogenous. Some sections of chl infill and lots of large grained py min
356.76	357.09	cal	16.00°	339.00°	9.00	multiphase cal vein where downhole side is large grained off-white cal but then the uphole portion degrades into a medium then fine grained matrix of dark cal and what could possibly be small wall rock fragments and uneven/vague upper wall rock contact. sheared and brecciated with some qtz, chl and weak py.
357.88	357.95	cal	31.00°	346.00°	0.25	two intersecting cal stringers meeting at their uphole and downhole apexes creating an 'S' shape. At intersection there is some chl and py
358.57	359.07	qtz	36.00°	53.00°	40.00	large sheared and fracture filled qtz vein with two distinct lobes near both apexes. Vein is heavily fractured and filled with chl and py
359.24	359.27	carb	131.00°	46.00°	0.25	slightly discontinuous k-spar altered carb stringer
362.53	362.60	cal	15.00°	345.00°	0.50	discontinuously layered cal and chl vein

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
362.92	363.13	qtz-cal	37.00°	198.00°	13.00	qtz vein with cal rims and fracture fill as well as weak k-spar alt, some chl rimming and chl fracture fill. Structure of vein seems to have rotational elements
365.63	365.74	qtz-cal			4.00	sheared qtz vein with modest k-spar+cal rims. More sheared parts of vein have cal fracture fill with chl and large py grains. Large py grains also occur within the vein material
367.18	367.28	qtz-cal	50.00°		3.00	mostly qtz, qtz-cal vein in fractured brown fine-grained intrusion between two litho units. Moderate k-spar alt, some discon chl layers and cal sections are vuggy, weak py halo
369.00	369.08	qtz-cal	55.00°		3.00	discon layered two phase qtz-cal vein where medium grained qtz and cal are not separated into layers. Thin discon chl separates layers, although not fully layered. Dry
371.52	371.64	qtz	70.00°		3.00	pinkish white qtz vein with discon pink cal rims. At uphole apex vein has a bit of a mushroom head type lobe. The inside of the mushroom head where the vein should be is infilled with chl. Vein has a strong red-brown hem halo with strong fine grained py min for 1cm on either side
376.72	376.88	cal	85.00°		0.75	fine grained pinkish with chl bleebs throughout, cal veinlet. Downhole apex has strong, euhedral large grained py clusters
385.87	385.95	qtz-cal	50.00°		4.00	layered qtz cal vein at the end of a small shear zone in AGAB. Layers are separated by thin chl rims. Layers themselves are heterogenous with the downhole layer being extensional qtz being infilled with dirty fine-grained cal, chl, and spotty very weak k-spar. uphole layers are less continuous with alternating qtz and cal. The thin chl layer separating bottom discon layers from top heterogenous layer has ser mineralization through it
389.41	389.50	qtz	40.00°		1.00	uniform large grained qtz vein overprinted with epi, hem and cal alt. thin chl rims
391.45	391.47	cal	60.00°		0.25	thin sheared chl stinger with hem rim
393.28	393.41	qtz	60.00°		5.00	sheared qtz vein in zone of foliation. Evidence of being thickened and thinned but vein is still intact. Chl and cal have infilled fractures along vein and shear cal material contacts up hole apex where there is strong very fine grained py min

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
394.74	394.91	qtz-cal	55.00°		10.00	shear qtz cal vein made of many thin discontinuous layers in zone of foliation. Some k-spar alt, some fine grained py min and chl rimming/ layers mixed in with wall rock.
398.08	398.13	cal	28.00°	332.00°	0.50	heavily py mineralized cal stringer crosscutting other cal stringers
399.07	399.18	cal	30.00°	43.00°	0.25	heavily py mineralized cal stringer crosscutting other cal stringers
399.84	399.98	qtz	19.00°	68.00°	0.75	qtz vein with cal rims. Unmineralized in a zone with strong py min.
400.05	400.19	cal	25.00°	354.00°	0.50	set of cross cutting cal and qtz-cal stringers at the end of a zone of strong py min in agab as well as running through area of epi alt
402.29	402.37	qtz	48.00°	89.00°	1.00	massive, large grained qtz vein with longitudinal epi alt tension gashes appearing (not actually though) in the vein material. Weak cal rims
404.34	404.40	qtz-cal	56.00°	11.00°	3.00	mostly cal, qtz cal vein where qtz is relegated to a layer at the downhole wall rock contact that makes 1/3 of the vein. The rest is fine grained cal and cal fracture fill with weak vuggy texture. Near the up hole wall rock contact the fine grained cal has strong very fine grained disseminated (in the vein material) py min
409.46	409.50	cal	53.00°	29.00°	0.50	cal stringer with hem rim and very weak medium grained py halo
413.66	413.74	cal	54.00°	337.00°	1.00	layered qtz-cal vein with thin interior layer of qtz and outer layers of cal. Trace k-spar rims and trace spar alt throughout. Moderate to strong 0.75cm halo of very fine grained py on the up hole wall rock contact
418.25	418.30	qtz	37.00°	359.00°	0.50	sheared qtz vein with an orphan vein apex adjacent to the vin apex that looks to be of the same vein (material alteration etc). Strong but discon hem rims and trace patchy k-spar alt of vein material. Some weak fine grained py. Vein has moderate 0.5cm epi halo
419.02	419.24	qtz	26.00°	18.00°	18.00	weakly sil altered qtz breccia with about 50% wall rock frags. Whole vein has a dull glassy texture to it. Brecciated wall rock fragments are large but the qtz vein material also hosts many small and angular wall frags, so also cataclastic. Wall rock frags host some off-white fine-grained flecking (possibly alb or ser) as well as very weak py min. Wall rock contacts have some fine grained 0.5cm thick discon cal rims
426.78	426.88	cal	46.00°	298.00°	6.00	brecciated, moderately, but patchy hem altered with weak k-spar alt, some notable vugs and 2 medium sized grains of cpy. 50% wall rock frags.

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
427.85	427.96	qtz-cal	36.00°	214.00°	3.00	heavily sheared, discon, mostly cal, qtz-cal vein with moderate discon hem rimming and moderate medium to fine grained py min
430.81	430.91	cal	40.00°	74.00°	2.00	chl rich cal vein that is almost layered but interior py bearing chl layer is discon. Cal is fine grained, some weak hem rims
438.16	438.43	cal	30.00°		3.00	sheared fine grained cal vein that becomes more like a set of stingers at its up hole apex where it busts apart into many 'strands'. Very weak py min, very weak k-spar alt
446.35	446.41	qtz-cal	60.00°		2.00	two phase qtz cal vein that is not layered. Vein is crosscut by two stingers where the intersections have increased py min. weak py min overall with some moderate but discontinuous very fine grained py halos

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description
5.18	5.36	rbl				rounded medium sized rubbling (possibly drill damage or overburden, near surface
7.12	7.48	rbl				small subrounded rubbling in mv
21.08	21.58	rbl				small to medium sized rounded rubbling in altered zone at contact between MI and Tuf
24.18	24.37	shr	35.00°			shr zone that is just as likely a pill selvage. Has nice parallel contacts. In MV
59.28	60.32	rbl				zone of intermittent rubbling that hosts a variety of structures. Rubbling is large to small angular, shard like rubble at contact between MI and MV
59.37	59.53	g				fault gauge in contact rubble zone between MI and MV. Competant
60.00	60.19	flt				evidene of gauge and rubble contigous with shear zone at the tail end of intermittent rubble interval. Less competant and more crumbly
60.19	60.32	shr	35.00°			shear zone as contact between MI and MV at the end of intermittent rubbling zone
190.22	190.74	shr	55.00°	312.00°		moderate shr zone that has observable consistent foliation and locally moderate-weak ser alt
270.86	271.00	g	40.00°	349.00°		fault gouge that is slightly rubbly and slightly competant. Semi healed.
292.58	292.79	c	54.00°	355.00°		umv window in mv
306.81	306.82	c	60.00°	17.00°		mv to lamp
308.16	308.17	c	71.00°	7.00°		lamp to mv
362.48	362.52	fol	18.00°	340.00°		foliation in MV
366.85	367.28	jntst	50.00°			jointset in small intrusion between MV and AGAB
371.15	371.22	c	70.00°			small window of mv in agab
376.72	376.28	c	55.00°			small window of mv in agab
385.77	385.94	shr	55.00°			shear zone in agab where rock discs slightly and veining is composed of thin discon layers
388.61	388.64	c	55.00°			agab to mv
392.62	392.89	rbl				medium to small angular disc/shard like rubbling with one interval of semi crumbly fault gauge
392.76	392.89	g				unmineralized, semi consolidated fault gauge in mv

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description
393.22	393.23	fol	60.00°			foliation in mv
394.71	394.72	fol	35.00°			foliation in mv
438.85	441.80	rbl				drill damaged and rounded core

Magnetic Susceptibility

Depth	MagSus	Comments
6.00	14.50	
9.00	7.34	
12.00	10.80	
15.00	44.50	
18.00	12.80	
21.00	69.20	
24.00	0.90	
27.00	14.80	
30.00	10.20	
33.00	4.28	
36.00	16.30	
39.00	8.95	
42.00	1.94	
45.00	0.85	
48.00	0.75	
51.00	0.82	
54.00	1.02	
57.00	1.00	
60.00	0.66	
63.00	0.86	
66.00	0.46	
69.00	0.55	
72.00	1.00	
75.00	0.95	
78.00	0.87	
81.00	0.89	
84.00	1.00	
87.00	13.50	
90.00	6.25	
93.00	2.25	
96.00	1.19	
99.00	1.74	

Magnetic Susceptibility

Depth	MagSus	Comments
102.00	0.89	
105.00	22.10	
108.00	54.30	
111.00	3.73	
114.00	1.93	
117.00	11.40	
120.00	2.86	
123.00	45.50	
126.00	2.93	
129.00	39.80	
132.00	1.34	
135.00	45.20	
138.00	129.00	
141.00	5.70	
144.00	2.41	
147.00	2.48	
150.00	1.57	
153.00	2.59	
156.00	10.40	
159.00	50.70	
162.00	1.37	
165.00	9.55	
168.00	38.50	
171.00	7.58	
174.00	142.00	
177.00	43.00	
180.00	3.42	
183.00	2.23	
186.00	13.00	
189.00	2.17	
192.00	1.25	
195.00	0.97	

Magnetic Susceptibility

Depth	MagSus	Comments
198.00	5.21	
201.00	3.63	
204.00	5.40	
207.00	4.04	
210.00	15.10	
213.00	47.20	
216.00	4.62	
219.00	8.45	
222.00	56.80	
225.00	7.11	
228.00	56.70	
231.00	10.20	
234.00	5.59	
237.00	7.90	
240.00	11.00	
243.00	15.20	
246.00	7.43	
249.00	47.80	
252.00	21.00	
255.00	12.10	
258.00	3.44	
261.00	10.80	
264.00	9.47	
267.00	46.20	
270.00	41.40	
273.00	13.40	
276.00	2.18	
279.00	23.60	
282.00	2.19	
285.00	19.20	
288.00	25.60	
291.00	36.40	

Magnetic Susceptibility

Depth	MagSus	Comments
294.00	6.41	
297.00	1.95	
300.00	25.10	
303.00	24.80	
306.00	25.70	
309.00	12.00	
312.00	14.50	
315.00	0.90	
318.00	4.48	
321.00	52.80	
324.00	1.56	
327.00	1.74	
330.00	52.90	
333.00	15.60	
336.00	97.70	
339.00	75.00	
342.00	51.80	
345.00	3.03	
348.00	4.06	
351.00	27.90	
354.00	45.90	
357.00	49.40	
360.00	80.00	
363.00	11.90	
366.00	144.00	
369.00	7.00	
372.00	36.20	
375.00	12.20	
378.00	21.80	
381.00	5.87	
384.00	48.20	
387.00	5.25	

Magnetic Susceptibility

Depth	MagSus	Comments
390.00	18.50	
393.00	6.54	
396.00	43.80	
399.00	17.00	
402.00	11.70	
405.00	9.78	
408.00	11.00	
411.00	7.99	
414.00	9.33	
417.00	40.40	
420.00	43.50	
423.00	19.20	
426.00	18.10	
429.00	7.06	
432.00	3.24	
435.00	25.40	
438.00	31.00	
441.00	11.10	
444.00	52.50	
447.00	22.80	
450.00	73.20	EOH

Specific Gravity

From	To	Length (m)	Weight Ai...	Weight ...	Delta	SG	Litho Code	Standard ID	Comments	
6.68	6.78	0.10	281.31	175.18	106.13	2.65		STD2		
6.78	6.93	0.15	732.73	489.86	242.87	3.02	MI			
21.81	21.95	0.14	764.44	502.51	261.93	2.92	TUF			
40.27	40.40	0.13	722.23	477.30	244.93	2.95	MI (with stringers			
55.83	56.00	0.17	834.51	544.03	290.48	2.87	MV			
73.45	73.61	0.16	854.60	557.54	297.06	2.88	MV			
93.80	93.95	0.15	733.43	470.15	263.28	2.79	MV			
110.74	110.88	0.14	731.61	474.10	257.51	2.84	MV (with stringers)			
123.97	124.11	0.14	742.98	483.71	259.27	2.87	MV			
139.35	139.45	0.10	281.33	175.05	106.28	2.65		STD2		
139.45	139.65	0.20	998.75	654.29	344.46	2.90	MV			
155.57	155.73	0.16	878.65	586.50	292.15	3.01	MV		stringer	
173.68	173.80	0.12	576.74	379.31	197.43	2.92	MV			
194.30	194.40	0.10	627.61	408.11	219.50	2.86	MV			
208.00	208.11	0.11	629.71	410.64	219.07	2.87	MV			
223.98	224.11	0.13	625.05	414.63	210.42	2.97	MV			
241.42	241.58	0.16	762.74	511.34	251.40	3.03	MV			
263.52	263.65	0.13	734.78	497.61	237.17	3.10	MV			
278.58	278.68	0.10	281.31	175.45	105.86	2.66		STD2		
278.68	278.86	0.18	887.54	592.63	294.91	3.01	MV			
293.84	294.00	0.16	804.77	538.40	266.37	3.02	MV			
309.30	309.50	0.20	1059.18	709.75	349.43	3.03	MV		STRINGER	
328.42	328.58	0.16	826.20	548.20	278.00	2.97	MV			
348.14	348.24	0.10	281.30	175.12	106.18	2.65		STD2		
348.24	348.43	0.19	687.15	444.10	243.05	2.83	MV			
365.22	365.39	0.17	760.18	493.25	266.93	2.85	MV			
379.06	379.19	0.13	491.74	317.84	173.90	2.83	AGAB		STRINGER	
401.87	402.00	0.13	707.03	471.33	235.70	3.00	MV		STRINGERS	
417.56	417.67	0.11	526.16	349.13	177.03	2.97	AGAB		DIS PY	
432.34	432.54	0.20	932.10	623.00	309.10	3.02	AGAB		STRINGER	
448.26	448.39	0.13	678.04	450.14	227.90	2.98	MV		STRINGER	

Drill Hole Log

Collar

Easting	560681.6000
Northing	5324893.4000
Elevation	320.5000
Azimuth	359.90°
Dip	-49.10°
Length	636.00

Drill Hole

Core Type	DDH
Core Size	NQ
Hole Test	Gyro
Cemented	No

Location

Township	Eby
Cell Claim No.	566665 & 566666

Operation

Contractor	Laframboise
Hole Start Date	2022-11-03
Hole End Date	2022-11-08
Project Operator	CSCW
Logged By	Peter Wray
Logging Complete	2022-12-06

Collar Survey	Yes
Datum	UTM NAD83 z17
Survey Complete Date	2022-11-08

Survey Equipment	REFLEX GYRO SPRINT-IQ
Unit Measurement	Meters

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	3.00	359.77°	-50.96°	No	No	
Gyro	6.00	359.75°	-50.36°	No	No	
Gyro	9.00	359.90°	-49.78°	No	No	
Gyro	12.00	359.95°	-48.71°	No	No	
Gyro	15.00	0.14°	-49.49°	No	No	
Gyro	18.00	0.20°	-50.46°	No	No	
Gyro	21.00	0.09°	-50.79°	No	No	
Gyro	21.00	0.35°	-49.92°	Yes	Yes	
Gyro	24.00	0.11°	-50.77°	No	No	
Gyro	27.00	0.14°	-50.69°	No	No	
Gyro	30.00	0.13°	-50.66°	No	No	
Gyro	33.00	0.22°	-50.62°	No	No	
Gyro	36.00	0.19°	-50.58°	No	No	
Gyro	39.00	0.26°	-50.53°	No	No	
Gyro	42.00	0.34°	-50.48°	No	No	
Gyro	45.00	0.36°	-50.46°	No	No	
Gyro	48.00	0.47°	-50.41°	No	No	
Gyro	51.00	0.43°	-50.40°	No	No	
Gyro	54.00	0.55°	-50.39°	No	No	
Gyro	54.00	0.87°	-50.49°	Yes	Yes	
Gyro	57.00	0.52°	-50.36°	No	No	
Gyro	60.00	0.55°	-50.30°	No	No	
Gyro	63.00	0.54°	-50.32°	No	No	
Gyro	66.00	0.55°	-50.28°	No	No	
Gyro	69.00	0.64°	-50.27°	No	No	
Gyro	72.00	0.61°	-50.29°	No	No	
Gyro	75.00	0.67°	-50.22°	No	No	
Gyro	78.00	0.74°	-50.18°	No	No	
Gyro	81.00	0.78°	-50.17°	No	No	
Gyro	84.00	0.81°	-50.13°	No	No	
Gyro	84.00	0.83°	-50.24°	Yes	Yes	
Gyro	87.00	0.87°	-50.15°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	90.00	0.87°	-50.10°	No	No	
Gyro	93.00	0.97°	-50.10°	No	No	
Gyro	96.00	1.05°	-50.07°	No	No	
Gyro	99.00	1.12°	-50.04°	No	No	
Gyro	102.00	1.19°	-50.01°	No	No	
Gyro	105.00	1.17°	-50.00°	No	No	
Gyro	108.00	1.24°	-49.98°	No	No	
Gyro	111.00	1.31°	-49.96°	No	No	
Gyro	114.00	1.37°	-49.96°	No	No	
Gyro	114.00	1.48°	-50.02°	Yes	Yes	
Gyro	117.00	1.41°	-49.93°	No	No	
Gyro	120.00	1.47°	-49.90°	No	No	
Gyro	123.00	1.53°	-49.89°	No	No	
Gyro	126.00	1.61°	-49.82°	No	No	
Gyro	129.00	1.63°	-49.82°	No	No	
Gyro	132.00	1.69°	-49.78°	No	No	
Gyro	135.00	1.71°	-49.73°	No	No	
Gyro	138.00	1.72°	-49.71°	No	No	
Gyro	141.00	1.78°	-49.71°	No	No	
Gyro	144.00	1.82°	-49.68°	No	No	
Gyro	144.00	2.22°	-49.80°	Yes	Yes	
Gyro	147.00	1.85°	-49.66°	No	No	
Gyro	150.00	1.90°	-49.70°	No	No	
Gyro	153.00	1.92°	-49.64°	No	No	
Gyro	156.00	1.96°	-49.62°	No	No	
Gyro	159.00	2.01°	-49.62°	No	No	
Gyro	162.00	2.06°	-49.60°	No	No	
Gyro	165.00	2.10°	-49.53°	No	No	
Gyro	168.00	2.19°	-49.53°	No	No	
Gyro	171.00	2.18°	-49.52°	No	No	
Gyro	174.00	2.25°	-49.50°	No	No	
Gyro	174.00	0.54°	-49.59°	Yes	Yes	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	177.00	2.31°	-49.47°	No	No	
Gyro	180.00	2.37°	-49.47°	No	No	
Gyro	183.00	2.43°	-49.51°	No	No	
Gyro	186.00	2.49°	-49.44°	No	No	
Gyro	189.00	2.56°	-49.41°	No	No	
Gyro	192.00	2.64°	-49.42°	No	No	
Gyro	195.00	2.68°	-49.41°	No	No	
Gyro	198.00	2.68°	-49.39°	No	No	
Gyro	201.00	2.72°	-49.36°	No	No	
Gyro	204.00	2.70°	-49.42°	No	No	
Gyro	204.00	1.67°	-49.52°	Yes	Yes	
Gyro	207.00	2.72°	-49.42°	No	No	
Gyro	210.00	2.68°	-49.36°	No	No	
Gyro	213.00	2.70°	-49.20°	No	No	
Gyro	216.00	2.74°	-49.10°	No	No	
Gyro	219.00	2.79°	-49.03°	No	No	
Gyro	222.00	2.87°	-49.00°	No	No	
Gyro	225.00	2.89°	-48.92°	No	No	
Gyro	228.00	2.89°	-48.89°	No	No	
Gyro	231.00	2.91°	-48.88°	No	No	
Gyro	234.00	2.97°	-48.88°	No	No	
Gyro	234.00	1.79°	-49.01°	Yes	Yes	
Gyro	237.00	2.97°	-48.90°	No	No	
Gyro	240.00	3.03°	-48.88°	No	No	
Gyro	243.00	3.01°	-48.87°	No	No	
Gyro	246.00	3.11°	-48.89°	No	No	
Gyro	249.00	3.12°	-48.87°	No	No	
Gyro	252.00	3.16°	-48.86°	No	No	
Gyro	255.00	3.23°	-48.82°	No	No	
Gyro	258.00	3.26°	-48.80°	No	No	
Gyro	261.00	3.31°	-48.75°	No	No	
Gyro	264.00	3.39°	-48.73°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	264.00	3.65°	-48.88°	Yes	Yes	
Gyro	267.00	3.41°	-48.71°	No	No	
Gyro	270.00	3.47°	-48.67°	No	No	
Gyro	273.00	3.49°	-48.66°	No	No	
Gyro	276.00	3.56°	-48.59°	No	No	
Gyro	276.00	2.22°	-48.78°	Yes	Yes	
Gyro	279.00	3.57°	-48.56°	No	No	
Gyro	282.00	3.63°	-48.52°	No	No	
Gyro	285.00	3.64°	-48.49°	No	No	
Gyro	288.00	3.74°	-48.45°	No	No	
Gyro	291.00	3.72°	-48.41°	No	No	
Gyro	294.00	3.79°	-48.38°	No	No	
Gyro	294.00	4.13°	-48.54°	Yes	Yes	
Gyro	297.00	3.84°	-48.35°	No	No	
Gyro	300.00	3.91°	-48.31°	No	No	
Gyro	303.00	3.97°	-48.25°	No	No	
Gyro	306.00	3.98°	-48.25°	No	No	
Gyro	309.00	3.97°	-48.23°	No	No	
Gyro	312.00	4.06°	-48.18°	No	No	
Gyro	315.00	4.08°	-48.15°	No	No	
Gyro	318.00	4.15°	-48.13°	No	No	
Gyro	321.00	4.18°	-48.12°	No	No	
Gyro	324.00	4.24°	-48.12°	No	No	
Gyro	327.00	4.28°	-48.22°	No	No	
Gyro	330.00	4.29°	-48.22°	No	No	
Gyro	333.00	4.35°	-48.20°	No	No	
Gyro	336.00	4.38°	-48.15°	No	No	
Gyro	339.00	4.45°	-48.15°	No	No	
Gyro	342.00	4.50°	-48.13°	No	No	
Gyro	345.00	4.53°	-48.10°	No	No	
Gyro	348.00	4.63°	-48.10°	No	No	
Gyro	351.00	4.69°	-48.09°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	354.00	4.62°	-48.09°	No	No	
Gyro	354.00	4.67°	-48.09°	Yes	Yes	
Gyro	357.00	4.75°	-48.05°	No	No	
Gyro	360.00	4.78°	-48.02°	No	No	
Gyro	363.00	4.68°	-48.01°	No	No	
Gyro	366.00	4.78°	-47.92°	No	No	
Gyro	369.00	4.90°	-47.87°	No	No	
Gyro	372.00	4.98°	-47.85°	No	No	
Gyro	375.00	4.93°	-47.79°	No	No	
Gyro	378.00	5.07°	-47.78°	No	No	
Gyro	381.00	5.02°	-47.80°	No	No	
Gyro	384.00	5.08°	-47.75°	No	No	
Gyro	384.00	4.75°	-47.76°	Yes	Yes	
Gyro	387.00	5.06°	-47.74°	No	No	
Gyro	390.00	5.18°	-47.68°	No	No	
Gyro	393.00	5.19°	-47.68°	No	No	
Gyro	396.00	5.32°	-47.68°	No	No	
Gyro	399.00	5.34°	-47.66°	No	No	
Gyro	402.00	5.42°	-47.63°	No	No	
Gyro	405.00	5.50°	-47.61°	No	No	
Gyro	408.00	5.55°	-47.65°	No	No	
Gyro	411.00	5.62°	-47.60°	No	No	
Gyro	414.00	5.71°	-47.56°	No	No	
Gyro	414.00	4.88°	-47.60°	Yes	Yes	
Gyro	417.00	5.74°	-47.51°	No	No	
Gyro	420.00	5.84°	-47.48°	No	No	
Gyro	423.00	5.88°	-47.45°	No	No	
Gyro	426.00	5.95°	-47.39°	No	No	
Gyro	429.00	6.01°	-47.36°	No	No	
Gyro	432.00	6.10°	-47.33°	No	No	
Gyro	435.00	6.17°	-47.30°	No	No	
Gyro	438.00	6.13°	-47.27°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	441.00	6.30°	-47.22°	No	No	
Gyro	444.00	6.36°	-47.26°	No	No	
Gyro	444.00	6.28°	-47.25°	Yes	Yes	
Gyro	447.00	6.46°	-47.27°	No	No	
Gyro	450.00	6.55°	-47.27°	No	No	
Gyro	453.00	6.58°	-47.25°	No	No	
Gyro	456.00	6.66°	-47.19°	No	No	
Gyro	459.00	6.65°	-47.19°	No	No	
Gyro	462.00	6.77°	-47.15°	No	No	
Gyro	465.00	6.75°	-47.16°	No	No	
Gyro	468.00	6.94°	-47.13°	No	No	
Gyro	471.00	6.97°	-47.11°	No	No	
Gyro	474.00	7.01°	-47.11°	No	No	
Gyro	474.00	6.39°	-47.11°	Yes	Yes	
Gyro	477.00	7.04°	-47.12°	No	No	
Gyro	480.00	7.08°	-47.10°	No	No	
Gyro	483.00	7.08°	-47.10°	No	No	
Gyro	486.00	7.23°	-47.07°	No	No	
Gyro	489.00	7.14°	-47.08°	No	No	
Gyro	492.00	7.28°	-47.05°	No	No	
Gyro	495.00	7.35°	-47.06°	No	No	
Gyro	498.00	7.36°	-47.07°	No	No	
Gyro	501.00	7.43°	-47.02°	No	No	
Gyro	504.00	7.46°	-47.06°	No	No	
Gyro	504.00	6.06°	-47.03°	Yes	Yes	
Gyro	507.00	7.53°	-47.06°	No	No	
Gyro	510.00	7.61°	-47.04°	No	No	
Gyro	513.00	7.71°	-47.01°	No	No	
Gyro	516.00	7.77°	-46.99°	No	No	
Gyro	519.00	7.79°	-46.94°	No	No	
Gyro	522.00	7.89°	-46.92°	No	No	
Gyro	525.00	7.89°	-46.89°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	528.00	7.95°	-46.85°	No	No	
Gyro	531.00	7.94°	-46.81°	No	No	
Gyro	534.00	8.00°	-46.79°	No	No	
Gyro	534.00	8.52°	-46.84°	Yes	Yes	
Gyro	537.00	8.06°	-46.76°	No	No	
Gyro	540.00	8.14°	-46.77°	No	No	
Gyro	543.00	8.22°	-46.73°	No	No	
Gyro	546.00	8.21°	-46.70°	No	No	
Gyro	549.00	8.26°	-46.67°	No	No	
Gyro	552.00	8.28°	-46.63°	No	No	
Gyro	555.00	8.39°	-46.65°	No	No	
Gyro	558.00	8.42°	-46.60°	No	No	
Gyro	561.00	8.41°	-46.58°	No	No	
Gyro	564.00	8.52°	-46.58°	No	No	
Gyro	564.00	6.81°	-46.56°	Yes	Yes	
Gyro	567.00	8.50°	-46.57°	No	No	
Gyro	570.00	8.54°	-46.56°	No	No	
Gyro	573.00	8.54°	-46.52°	No	No	
Gyro	576.00	8.47°	-46.50°	No	No	
Gyro	579.00	8.55°	-46.45°	No	No	
Gyro	582.00	8.65°	-46.40°	No	No	
Gyro	585.00	8.62°	-46.37°	No	No	
Gyro	588.00	8.70°	-46.34°	No	No	
Gyro	591.00	8.70°	-46.30°	No	No	
Gyro	594.00	8.75°	-46.22°	No	No	
Gyro	594.00	7.89°	-46.35°	Yes	Yes	
Gyro	597.00	8.74°	-46.19°	No	No	
Gyro	600.00	8.77°	-46.16°	No	No	
Gyro	603.00	8.75°	-46.14°	No	No	
Gyro	606.00	8.78°	-46.10°	No	No	
Gyro	609.00	8.85°	-46.05°	No	No	
Gyro	612.00	8.84°	-46.04°	No	No	

Down Hole Survey

Type	Depth	Azimuth	Dip	Invalid...	Invalid...	
Gyro	615.00	8.88°	-45.99°	No	No	
Gyro	618.00	8.91°	-46.00°	No	No	
Gyro	621.00	8.92°	-45.96°	No	No	
Gyro	624.00	8.96°	-45.93°	No	No	
Gyro	624.00	8.16°	-45.97°	Yes	Yes	
Gyro	627.00	9.00°	-45.88°	No	No	
Gyro	630.00	9.06°	-45.76°	No	No	
Gyro	633.00	9.12°	-45.86°	No	No	
Gyro	636.00	9.12°	-45.85°	No	No	
Gyro	637.17	9.12°	-45.85°	No	No	

Detailed Drill Hole Log

From	To	Title	Description
0.00	20.00	Casing	Casing
20.00	20.48	Overburden	overburden
20.48	63.61	Mafic Volcanic	light grey green, fine to medium-fine grained, heterogeneously textured with trace foliation, weak fracture fill, some pillow like flow textures and selvages, MV. Around 1 %, mostly cal, qtz and and cal stringers and veinlets with two greater than 2cm tw qtz veins. Alteration is strong vein and selvage controlled chl, weak texture controlled (selvage+ heterogenous flow texture) albite, with similarly texture controlled trace epi alt and trace vein-controlled hem alt as vein rimming. Weak very fine grained py min seen as diffuse fine-grained halos around select stringers.
63.61	95.48	Mafic Volcanic	light grey green, fine to medium-fine grained, heterogeneously textured with weak patchy intervals of foliation, trace pillow like flow textures and selvages, MV. Different from above unit due to more massive like intervals as well as the presence of several small sub meter intervals of LAMP (tracked in structures). 1-2 %, mostly cal, qtz, carb and cal stringers and veinlets with one greater than 1cm tw carb vein. Alteration is moderate vein and fracture heal controlled chl, trace foliation controlled ser alt, with vein controlled weak epi alt and trace vein-controlled hem alt as vein rimming. Weak very fine grained py min seen as diffuse fine-grained halos around select stringers. Weak to moderate diffuse/vein controlled (hard to tell with so many stringers) fine to medium anhedral py min.
95.48	97.55	Lamprophyre	medium grained, equigranular, brown grey to grey, with black biotite phenocrysts and some intrusive crystalized texture towards center of unit, LAMP. Contacts with MV is messy and weakly cataclastic. Less than 1% pinkish qtz veins. Trace k-spar and chl alt that is disseminated, and vein controlled. No sig min.
97.55	105.79	Mafic Volcanic	grey to green, fine to medium fine, consistently textured with trace fracture fill and foliation scattered throughout an extrusive heterogeneous basaltic texture, MV. Unit starts and ends grey and get green towards the middle of the interval. 1-2% cal stringers evenly spaced throughout. Moderate disseminated epu alt that is likely the cause of the green color waxing and waning, weak vein-controlled hem rimming. One sub meter lamp window. Weak disseminated medium sized anhedral clusters of py min patchy distribution throughout the interval
105.79	107.22	Mafic Volcanic	medium grained, equigranular, brown grey to red grey, with ~30% black biotite phenocrysts LAMP. Less than 1% cal stringers. Moderate disseminated hem alt and Trace k-spar alt. Trace fine grained anhedral py min as halo around one cal stringer.

Detailed Drill Hole Log

From	To	Title	Description
107.22	120.07	Mafic Volcanic	dark to medium grey with some trace green hues, mostly massive to locally fractured and healed, to trace foliated MV. One sub meter interval of unremarkable lamp at the very end of this interval. 2% qtz and cal veining as stringers, veinlets veins and one section of heavily fractured and filled vein network. from 112.66 to 113.25 there is the section that is heavily fractured and filled on either side of what would be a fault gouge if not for the veining that controls the texture here. Fracture filling is qtz and cal with alb rimming. Alteration is weak overall with very weak vein-controlled epi, hem and chl and very weak fracture fill controlled alb. Min is weak vein controlled py, seen mostly as halos.
120.07	124.90	Mafic Volcanic	green, grey, moderately foliated with moderate vesicles in the middle of the interval MV. Including vesicles there is 10-15% cal veining/vein material. Moderate disseminated fine grained euhedral py min. trace chl and k-spar alt in select veins
124.90	157.35	Mafic Volcanic	fine grained, dark grey to green-grey, massive to fractured and filled heterogenous in some discrete intervals, MV. 1% qtz and cal veining that is even split between stringers, veinlets, and veins. Veins and veinlets can be sheared and segmented or massive. One lamp window, and several discrete intervals of medium-fine grained altered, fractured and filled, heterogeneously textured sections that may be selvages. Alteration is weak and patchy overall with most of the alteration being relegated to these selvages. Very weak selvage and occasionally disseminated epi, very weak peachy orange patches of possibly albite+ank. weak vein-controlled hem and weak chl. Min is weak to moderate py min haloing select stringers and veinlets as fine grains
157.35	159.27	Lamprophyre	grey brown to red brown equigranular, medium grained, with black phenocrysts LAMP. Massive with less than 1% cal stringers. Alteration is weak disseminated hem. No sig min.
159.27	180.56	Mafic Volcanic	grey to green-grey, fine to medium fine, heavily fractured and healed with almost no intervals of massive texture, MV with several intervals of rubbling and some fault gouge. 2% qtz and cal veining as stringers and veins and jagged fracture fill. From 168.24 to 169.84 there is an interval of rubbling with a fault gouge at the tail end, that is mineralized with weak py. Other intervals of rubbling tracked in structures tab. Alteration is weak overall with weak patchy disseminated epi alt, weak to moderate structure controlled and disseminated chl alt, and some trace vein-controlled k-spar alt in select veins. Mineralization is weak disseminated and vein controlled (but mostly disseminated) medium-fine anhedral to medium euhedral py.
180.56	213.47	Archean Gabbro	medium to coarse grained, heterogeneously textured, with pervasive 'camo' like green

Detailed Drill Hole Log

From	To	Title	Description
			and black spotting messy agab with patchy swaths of epi alt. One meter+ long section of healed fault gouge from 207.72m to 208.92m. Unit ends in a long chill margin with MV. Alteration is moderate and patchy with moderate-weak patchy disseminated and vein-controlled epi alt, weak vein controlled hem alt seen as rimming, and very weak vein controlled chl alt. Mineralization is weak to very weak disseminated medium grained euhedral py min that trends towards weak due to slight increased concentration near end of unit.
213.47	217.78	Mafic Volcanic	short unit of fine grained, cherty at times, grey to browny-orangey-grey MV with sone chl fracture filling. 2% qtz veining that is moderately altered. Alteration is moderate overall with mod sil, giving the cherty texture, although this dissipates with depth. The rest is very weak vein-controlled epi, alb, k-spar and hem, often mixed together around the same veins. Weak py min that is disseminated and then fracture fill controlled towards the bottom of the interval where there is a swath of large grained euhedral grains.
217.78	245.78	Archean Gabbro	medium to coarse grained, heterogeneously textured, with pervasive 'camo' like green and black spotting messy agab with patchy swaths of epi alt. One section of vein-controlled albite+hem+k-spar alt near end of the unit, but not associated with any min. Alteration is weak overall and patchy with weak patchy disseminated and vvein-controlled epi alt, very weak vein controlled hem, k-spar and alb alt seen as rimming and halos, and very weak vein controlled chl alt. Mineralization is weak disseminated medium grained anhedral py.
245.78	319.55	Mafic Volcanic	Grey to grey green with intervals of grey-brown, fine to medium-fine grained MV with weak consistent foliation and more homogenous than heterogenous texture (very few selvages or fractured and filled sections). 7-10% pink and white ca/carb veining seen as stringers, veinlets and vein that range from weakly to moderately sheared. Veining increases from 2-3% to 8-10% after 291m. There is on long interval of rubbling/faulting from 251.95m to 254.26m that includes two definitive faulting zones and one healed gouge. There is weak to moderate py min throughout this rubbled section. One addition gouge at 282.77 that is well healed with no min. Alteration increases with depth, as carb veins become pinker, peaking at around 282m. Alt is weak overall with weak vein-controlled k-spar alt, and weak patchy beigey orange swaths of what is likely ank+alb and weak vein controlled and disseminated swaths of chl. Mineralization is weak overall although some intervals are closer to moderate, medium grained disseminated

Detailed Drill Hole Log

From	To	Title	Description
			and vein controlled anhedral py min.
319.55	326.05	Lamprophyre	reddish hued, grey medium grained, equigranular, massive with black phenocrysts, lamp. Less than 1% cal stringers. Alteration is weak disseminated patchy k-spar. No sig min
326.05	367.80	Mafic Volcanic	grey to green-grey, fine to medium fine grained, massive up to 343.50m and then splotchy and heterogenous volcanic textures, weakly foliated at times, MV. % Veining ranges from 5% to 10%, increasing with depth. Vein are a mix of off white and pinkish cal and qtz stringers/veinlets that are at time sheared and at time uniform, and qtz veins that are quite uniform. The end of the unit, from 365.93m t0 367.80m, becomes strongly altered and discolored as it becomes closer to a litho contact that is mostly a strong alteration and healed zone of faulting. Alteration is Moderate over all with the first massive interval being very weak, the middle section with increased veining being weak and the final few meters being strong. There is moderate disseminated and contact controlled sil alt that is seen mostly as consistent splotches of lighter coloured and harder mv matrix that increases with depth, weak to very weak alb and ser alt that might be working in concert with sil to produce bleaching at bottom of unit, and very weak vein-controlled k-spar and chl alt. Mineralization is weak overall with three ~40-50cm intervals with locally strong medium grained disseminated anhedral py min. Toward the end of the unit, in the altered zone there is also weak spec hem min seen as fine grains in the middle of veinlets or as stringers.
367.80	374.75	Mafic Intrusive	Heavily altered, and brecciated, and healed interval that makes lithological interpretation challenging. Medium, dark brown/beige to light beige with black grains/ chl spotting(?) and higher iron content qtz veining that has a purple hue. 2-3% veining, most of which is altered stringers or brecciated vein segments with loose semi-consistent alphas. Main brecciated (and well healed) interval is from 372.50m to 374.75m. This is either a fault zone or a heavily altered flow breccia. Contact with next unit is interpreted here based on grain size, vein habit, and alteration package. Alteration is intense over all and likely a mix of many alterations. There is strong disseminated brownish yellow fine grained sericite flecks throughout, strong disseminated and vein-controlled albite possibly alongside weak sil alt, bleaching most of the unit, and strong chl spotting throughout. Purplish hue seen in qtz stringers and veining is moderate-weak hem alt. Bleaching is strongest in the fault zone. Mineralization is difficult to see with ser alt but is either weak or very weak vein controlled py seen as medium sized clusters of fine grained py and very fine grained

Detailed Drill Hole Log

From	To	Title	Description
			disseminated py in healed fault zone.
374.75	385.63	Mafic Volcanic	heavily altered, with one large brecciated healed fault zone and gouge litho unit that may be difficult to interpret (especially contacts). Light grey to grey green with beigy yellow to yellow (ser) swaths, foliations, and splotches, fine to medium fine, heavily fractured and healed, weakly foliated, heterogeneously textured, to massive in one short 70cm interval, MV. 8-10% sheared and brecciated, stringers, veinlets and vein segments that are off pink carb, to alb altered, to sil flooded qtz cal and carb veining. One major healed fault zone from 376.56m to 377.78m where the host rock is heavily brecciated with chl fracture fill and disseminated ser alt and alb bleaching. One fault gouge from 378.97 to 397.37m. Alteration is strong to intense and variable, changing with depth/distance from the above unit. There is strong disseminated, vein-controlled and foliation/structure controlled beigey yellow to bright yellow, stringy to fine grained flecks ser alt. Moderate fault zone and vein controlled albite alteration that 'bleaches' much of top half of this unit as well as weak sil alt especially from 379.70m to 380.30m. Moderate chl alt that is fracture, vein and shearing controlled, as well as very weak vein controlled k-spar alt. Mineralization is harder to glean due to yellow disseminated and vein controlled ser alt. Mineralization is very weak disseminated medium grained py min.
385.63	387.01	Lamprophyre	grey, medium grained, equigranular, with black phenocrysts lamp. 1% cal and qtz veining. Alteration is moderate, with residual alteration package from the above units. There are yellow ser swaths and strings with vein-controlled brownish beige albite halos, and some bleached sil halos around qtz stringers. No sig min
387.01	389.57	Mafic Volcanic	Small MV unit following Lamp intrusion that is texturally like the end of the previous MV unit. This unit ends at a gradational but short interval where alteration, veining and texture quickly changes. heavily altered, Light grey to grey green with beigy yellow to yellow (ser) swaths, foliations, and splotches, fine to medium fine, heavily fractured and healed, weakly foliated, heterogeneously textured MV. 8-10% sheared and brecciated, stringers, veinlets and vein segments that are off pink carb, to alb altered, to sil flooded qtz cal and carb veining. Alteration is strong with strong disseminated, vein-controlled and foliation/structure controlled beigey yellow to bright yellow, stringy to fine grained flecks ser alt. Moderate vein controlled albite alteration that 'bleaches' halos around veins along with weak sil alt. Weak chl alt that is veining and shearing controlled, as well as very weak vein controlled k-spar alt. Mineralization is harder to glean due to yellow disseminated

Detailed Drill Hole Log

From	To	Title	Description
			and vein controlled ser alt. Mineralization is very weak disseminated medium grained py min.
389.57	423.27	Mafic Volcanic	grey to brownish grey, fine grained, massive to heterogeneously textured with fracture and heal (brecciated) to basaltic pillow textured MV. Veining is as high as 50% in some shorter intervals but closer to 10% overall with most being white to pink-white stringer networks with some alb and sil altered sheared veins and vein segments. One notable qtz breccia immediately preceding a zone of rubbling. Intermittent Rbl from 397.37 to 401.00m that is mostly medium to small angular blocky rubble without sanding or any evidence of gouge. Alteration is weak to moderate overall with a variable brown disseminated colouration to the rock as well as similar colouration in rimming and halos around veins. Likely moderate to weak albite and weak k-spar that is seen in veining. There is moderate disseminated ser alt seen as brown to yellow brown very fine-grained flecks in most intervals. Weak vein-controlled hem alt seen as rims and as purple hue to qtz veining. very weak chl alt that is vein controlled. Min is weak py that is seen as locally strong swaths of fine and medium grained clusters and then patchily disseminated throughout the rest of the unit and occasionally in some select veining. Unit ends when MV consistently returns to grey green colour.
423.27	452.70	Mafic Volcanic	green to green grey to dark grey, fine grained, heterogeneously, basaltic textured with a lack of foliation or consistent habit MV. Unit is dominated by ~15% pink carb, purple or pink hued qtz, and cal stringer networks, sheared veinlets, vein segments, and on massive Cal vein. Many of the stringers, and stringer networks run near parallel to the core axis causing some veins to persist for over 3m in the core. unit ends in a large brecciated and sil altered/flooded qtz vein that is ~70cm long and then immediately followed by a fault zone with locally strong ser alt, and weak alb+sil bleaching as wel as some purple and pink k-spar+hem alt. Lithology of the fault zone/flow breccia is difficult to glean so it is being lumped in with this unit. Alteration overall is weak with most of the unit being relatively unaltered except for very weak k-spar, hem and chl vein-controlled. At the end of the unit there is purple qtz, the qtz, brecciated vein and then the fault/breccia zone which will be called weak ser, alb, and sil that is structure controlled. Min is moderate vein-controlled (because there are veins everywhere) py that can be glitter like smattering of very fine grains, or as patchy large clumps of anhedral py around purple qtz.
452.70	454.08	Lamprophyre	grey, medium to coarse grained, equigranular with black phenocrysts lamp. Less than 1%

Detailed Drill Hole Log

From	To	Title	Description
			qtz stringers that are purple in hue. There is one window of MV(?) from 453.44m to 453.87m that's contact runs parallel to the core axis, never fully occupying 100% of the core before ending abruptly. alteration is very weak vein-controlled hem/k-spar alt. weak fine grained disseminated py min along and within MV window.
454.08	517.13	Mafic Volcanic	fine to medium-fine grained, dark grey to light grey with green hue, heterogeneously textured with subtle changes with depth, MV. Unit was quick logged as UMV but mag susc is consistently low and while it is darker than typical MV for this project, its texture vein habit and hardness is consistent with other MV units over many intervals alternating between massive and brecciated flow textures. The core is often striped from the drill indicating that over half this unit is softer in parts. Veining in ~5% cal, carb and qtz, mostly stringers, stringer segments and stringer networks with some sheared veinlets and sheared vein segments. some intervals of rubbling tracked in structures with the biggest one from 509.80m to 511.00m. Alteration is weak overall with pervasive vein-controlled k-spar, hem and chl alt as rims and fracture fill. Chl also present as spotting in some intervals. There is one brecciated interval from 467.70m to 473.00m where there is increased py min as well as locally moderate disseminated and vein controlled ser alt alongside weak alb and weak vein-controlled hem seen as purple hued qtz. Weak to moderate ser spotting (or flecks) increase with depth and are present from 501.00m to end of the unit. Mineralization is moderate py with several intervals of locally strong disseminated fine to medium grained py and occasionally vein controlled in vein material and as halos.
517.13	526.35	Mafic Volcanic	green-grey, fine grained, weakly foliated with some intervals of heterogenous textures, MV. 5% off pink-white to white qtz and cal veining that is mostly stringers and sheared veinlets/ vein segments. Alteration is very weak with some very weak disseminated ser flecks and very weak ser rimming. Very weak vein-controlled k-spar alt and chl alt as well. Moderate very fine grained py min that is consistent throughout.
526.35	528.10	Mafic Intrusive	small unit of mi that is medium grained, grey and black with moderate chl spotting and very weak disseminated ser flecking, 10% veining that is mostly one qtz-cal breccia, and very weak disseminated fine grained clusters of py.
528.10	636.00	Mafic Volcanic	fine grained, green to grey green, heterogeneously textured, never massive nor foliated for more than 30cm, MV. 10-12% veining. Veins are mostly cal and an even split of stringers, sheared veinlets, larger more uniform veins, as well as vein segments and

Detailed Drill Hole Log

From	To	Title	Description
			zones of sheared vein material. one partially competent fault gouge at 554m. One sub-meter MI window from 612.69m to 613.04m. Alteration is weak with some locally moderate intervals of disseminated green chl swaths, and weak vein controlled ser rimming, hem rimming, and very weak vein controlled alb rimming/halos. There is one interval that is weakly bleached from 553.40m to 556.84m indicating some very weak sil alt as well. Moderate fine grained patchy disseminated/vein controlled py min and trace cpy in some py halos around select stringers

Alteration

From	To	Overall St...	Description
0.00	20.48	No Major/Notable	casing and ovb
20.48	63.61	Moderate	Alteration is strong vein and selvage controlled chl, weak texture controlled (selvage+ heterogenous flow texture) albite, with similarly texture controlled trace epi alt and trace vein-controlled hem alt as vein rimming.
63.61	95.48	Moderate	Alteration is moderate vein and fracture heal controlled chl, trace foliation controlled ser alt, with vein controlled weak epi alt and trace vein-controlled hem alt as vein rimming.
95.48	97.55	Very Weak	Trace k-spar and chl alt that is disseminated, and vein controlled.
97.55	105.79	Moderate	Moderate disseminated epi alt that is likely the cause of the green color waxing and waning, weak vein-controlled hem rimming.
105.79	107.22	Moderate	Moderate disseminated hem alt and Trace k-spar alt.
107.22	120.07	Weak	Alteration is weak overall with very weak vein-controlled epi, hem and chl and very weak fracture fill controlled alb
120.07	124.90	Very Weak	trace chl and k-spar alt in select veins
124.90	157.35	Moderate	Alteration is weak and patchy overall with most of the alteration being relegated to these selvages. Very weak selvage and occasionally disseminated epi, very weak peachy orange patches of possibly albite+ank. weak vein-controlled hem and weak chl.
157.35	159.27	Weak	. Alteration is weak disseminated hem.
159.27	180.56	Weak	Alteration is weak overall with weak patchy disseminated epi alt, weak to moderate structure controlled and disseminated chl alt, and some trace vein-controlled k-spar alt in select veins.
180.56	213.47	Moderate	Alteration is moderate and patchy with moderate-weak patchy disseminated and vein-controlled epi alt, weak vein controlled hem alt seen as rimming, and very weak vein controlled chl alt.
213.47	217.78	Moderate	Alteration is moderate overall with mod sil, giving the cherty texture, although this dissipates with depth. The rest is very weak vein-controlled epi, alb, k-spar and hem, often mixed together around the same veins.
217.78	245.78	Weak	Alteration is weak overall and patchy with weak patchy disseminated and vvein-controlled epi alt, very weak vein controlled hem, k-spar and alb alt seen as rimming and halos, and very weak vein controlled chl alt.
245.78	319.55	Moderate	Alt is moderate overall with moderate vein-controlled k-spar alt, and weak patchy beigey orange swaths of what is likely ank+alb and very weak vein controlled chl.
319.55	326.05	Weak	Alteration is weak disseminated patchy k-spar.
326.05	367.80	Moderate	Alteration is Moderate over all with the first massive interval being very weak, the middle section with increased veining being weak and the final few meters being strong. There is moderate disseminated and contact controlled sil alt that is seen mostly
367.80	374.75	Intense	Alteration is intense over all and likely a mix of many alterations. There is strong disseminated brownish yellow

Alteration

From	To	Overall St...	Description
			fine grained sericite flecks throughout, strong disseminated and vein-controlled albite possibly alongside weak sil alt, bleaching most of th
374.75	385.63	Strong	Alteration is strong to intense and variable, changing with depth/distance from the above unit. There is strong disseminated, vein-controlled and foliation/structure controlled beigey yellow to bright yellow, stringy to fine grained flecks ser alt. Moder
385.63	387.01	Moderate	Alteration is moderate, with residual alteration package from the above units. There are yellow ser swaths and strings with vein-controlled brownish beige albite halos, and some bleached sil halos around qtz stringers.
387.01	389.57	Strong	Alteration is strong with strong disseminated, vein-controlled and foliation/structure controlled beigey yellow to bright yellow, stringy to fine grained flecks ser alt. Moderate vein controlled albite alteration that 'bleaches' halos around veins along
389.57	423.27	Weak	Alteration is weak to moderate overall with a variable brown disseminated colouration to the rock as well as similar colouration in rimming and halos around veins. Likely moderate to weak albite and weak k-spar that is seen in veining. There is moderate d
423.27	452.70	Weak	Alteration overall is weak with most of the unit being relatively unaltered except for very weak k-spar, hem and chl vein-controlled. At the end of the unit there is purple qtz, the qtz, brecciated vein and then the fault/breccia zone which will be called
452.70	454.08	Very Weak	alteration is very weak vein-controlled hem/k-spar alt.
454.08	517.13	Weak	Alteration is weak overall with pervasive vein-controlled k-spar, hem and chl alt as rims and fracture fill. Chl also present as spotting in some intervals. There is one brecciated interval from 467.70m to 473.00m where there is increased py min as well a
517.13	526.35	Very Weak	Alteration is very weak with some very weak disseminated ser flecks and very weak ser rimming. Very weak vein-controlled k-spar alt and chl alt as well.
526.35	528.10	Moderate	moderate chl spotting and very weak disseminated ser flecking
528.10	565.52	Weak	Alteration is weak with some locally moderate intervals of disseminated green chl swaths, and weak vein controlled ser rimming, hem rimming, and very weak vein controlled alb rimming/halos. There is one interval that is weakly bleached from 553.40m to 55

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
26.50	26.52	Cal	50.00°		0.10	small uniform cal stringer with trace chl rims
27.70	28.04	Qtz-Cal	10.00°		0.20	cal stringer that cross cuts/ truncates a epi alt carb vein. moderate fin grainedd py min in rims and as diffuse halos`
28.41	28.56	Qtz-Cal	50.00°		9.00	weakly dog toothed altered qtz vein with locally concentratedd k-spar alt as well as moderate amounts of elongate tourmaline min. large discontinous cal rim at top of the vein. looks messy
32.42	32.47	Cal	40.00°	18.00°	0.10	truncated cal stringer with strong very fine grainedd py halos. vein is a series of non-contigous stringer segments. weak hem rims
34.97	35.03	Cal	36.00°	338.00°	1.00	messy fine graine cal veinlet with some kspar alt grains and tourmaline grains. wall rock contacts are uneven
35.27	35.33	Qtz-Cal	42.00°	302.00°	2.00	weakly dog toothed qtz and cal vein where qtz is medium grained in the middle of the vein surrouned by black chl and cal, with cal rims that create the dog tooth texture coming into the middle of the vein. trace fine grained py min
38.30	38.34	Cal	48.00°	3.00°	0.75	cal stringer with moderate hem rims and strong very fine grained py min and py halos
38.51	38.87	Cal	31.00°	192.00°	0.50	cal stringer with moderate hem rims and strong very fine grained py min and py halos
40.14	40.18	Cal	41.00°	0.00°	0.25	cal stringer with an intense py halo mixedd with possible ser alt
46.38	46.42	Cal	43.00°	351.00°	1.00	cal stringer with moderate to strong very fine grained py halo
48.41	48.54	Cal	49.00°	49.00°	10.00	two cal stringers seperated by 10cm. with weak hem alt and trace py min
49.31	49.39	Cal	24.00°	29.00°	0.10	cal stringer with weak hem rims and weak py min+halo
50.53	50.62	Cal	26.00°	325.00°	0.50	cal stringer in altered zone, that cross cuts alteration with weak hem rims and trace py halo
52.61	52.84	Qtz	27.00°	48.00°	7.00	intensley altered qtz vein that is mostly albirte, with strings of k-spar and some later generation qtz and cal stringers that cross cut.weakly sheared
53.82	53.92	Cal	15.00°	346.00°	0.10	small sheared cal vein that has moderate hem rims that grow in quite a bit into the vein and intense py min/py halo
55.17	55.22	Cal	47.00°	31.00°	0.25	small cal stringer with tracee hem rim and moderae py min +halo
60.08	60.43	Qtz-Cal	12.00°	178.00°	3.00	qtz cal vein where interior of vein is homogenous qtz with 0.5cm rims

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						of fine grained dirty cal and k-spar with chl.
64.21	64.36	Qtz-Cal	43.00°	62.00°	4.00	sheared, mostly qtz, qtz-cal vein where qtz segements are discontinous and filled in with much chl where shearing has broken vein. cal as rimming/ frosting throughout
70.32	70.37	Cal	50.00°		1.50	extensional cal vein that has pulled the vein into mostly contigous elongated tabular grains that are evenly altered with k-spar, chl, and epi
73.48	73.55	Cal	35.00°		0.25	cal stringer with strong fine grained py min+halo
75.30	75.42	Carbonate	20.00°		2.50	pink carb vein that is lightly sheared, with a few small vugs, and trace chl spotting
75.67	75.76	Qtz	25.00°		0.25	sheared cal veinlet segment, just the uphole apex that has strong euhedral py min on the down-hole apex.
79.23	79.26	Qtz-Cal	43.00°	325.00°	0.25	qtz veinlet with moderate cal rims. trace patchy k-spar alt. on down hole wall rock contact there is a halo of brown with strong very fine grained py min. py min throughought as well
79.33	79.38	Cal	53.00°	29.00°	0.25	lightly sheared cal stringer with moderate very fine py min
80.54	80.63	Cal	43.00°	42.00°	1.50	layered qtz-cal vein where cal is very vuggy. some chl alt and layereing between qtz and cal. moderate very fine grained py min spread throuhgout the vein material
80.97	81.00	Cal	43.00°	359.00°	1.00	pink, vuggy cal vein with very fine grained cal rims and one medium sized cluster of fine grained py
86.42	86.47	Qtz-Cal	37.00°	345.00°	0.25	qtz-cal stringer where qtz is middle but mostly over printed by fine fgrained cal rims that touch in several sections. very weak py min
88.44	88.97	Qtz-Cal	5.00°	16.00°	0.50	qtz-cal vein where qtz was original but fine grained cal rims have overprinted much of the vein. there is patchy but pervasive epi spotting and k-spar strings to a lesser degree throughout. vein is lightly sheared
90.05	90.17	Qtz	31.00°	334.00°	8.00	layered qtz vein with some cal rimming. layeres are divded by chl and even very thin yellow ser in one instance.
97.13	97.20	Qtz	56.00°	352.00°	2.00	relatively uniform qtz vein with some very weaak cal alt
100.52	100.58	Qtz-Cal	55.00°	350.00°	0.50	qtz-cal stringer with moderate hem rims
112.75	112.99	Qtz-Cal	24.00°	15.00°	1.50	series of weakly vugg, cal veinlets with some qtz, over an interval of core that is likely healed fault gouge that was fractured and then filled

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						with albite and cal. as such veins are quite messy and discontinous. Trace ank and ser weathering along veins, as well as moderate to strong clusters of large grained py
114.65	114.76	Qtz-Carb	31.00°	1.00°	1.00	mostly qtz, qtz-carb vein with pink carb. qtz grains are large with pink carb isolating and surrounding them. pink carb is weakly vuggy. very weak chl and hem alt
117.33	117.38	Qtz	60.00°		1.00	qtz vein with very narrow epi+ser halos as wll as patchy very weak ank and hem alt
126.63	126.68	Cal	40.00°		0.50	cal stringer with moderate hem rims and moderate py min+halo
127.63	127.83	Qtz-Cal				heavily sheared, mostly qtz, qtz-cal vein where qtz is rimmed by fine grained cal mixed with hem and bleebs of chl. apexes are very elongated
128.44	128.75	Cal	15.00°		0.25	very shallow alpha, sheared cal stringer with strong hem rims and weak py min, that transects other stringers and makes a network
131.28	131.40	Cal	30.00°		1.00	sheared and brecciated fine grained cal vein that may be a series of departing and returning stringers. about 30% wall rock. moderate hem rims. and weak py min
134.26	134.30	Qtz-Cal	60.00°		2.00	qtz vein that is rimmed and frosted over in parts by fine grained cal. outer part of rims is 1mm thick epi. some very weak patchy k-spar throughout
142.95	143.05	Cal	35.00°		1.00	messy fine grained cal vein, that spereates and rejoins around a wall rock inclusion. trace kspar
146.28	146.41	Cal	65.00°		9.00	dog toothed calcite breccia, thats 50% wall rock fragements and ranges from very large pink cal grains to very small white grains surrounded by wall rock frags. dog teeth have yellow brown weathereing on them suggesting water movement or ankerite weathering. weak chl between dog teeth
151.93	152.03	Cal	45.00°	347.00°	1.00	two parallel cal veins that conjoin on their flanks. up hole vein/stringer has thick 0.1 cm pastel orange k-spar rim. downhole vein has rims where other vein is conjoined but also has a discnotnus layer of chl running through its middle. There is strong very fine grained py min on the uphole apex
154.32	154.36	Cal	61.00°	190.00°	1.50	qtz vein with strong k-spar alt and rims that are mixed with cal. weak

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						py min throughout
157.74	157.81	Cal	38.00°	220.00°	1.50	brecciated qtz-cal vein that is a mix of contgous qtz and then a mix of cal, chl, wall rock and hem alt.
163.44	163.57	Cal	20.00°		1.00	brecciated, thin cal vein with an even mix of fine grained cal, fine griained, k-spar altered cal, chl fracture in fill and wall rock frags. moderate medium grained py
164.92	165.09	Qtz-Cal	20.00°		7.00	sheared and altered qtz-ca vein where qtz is large grained and cal is fine grained and dirty towards the rims. moderate k-spar and epi alt patchy throughout, some chl fracture fill and weak py min
167.41	167.52	Qtz	40.00°		1.00	sheared qtz vein with cal fracture fill and patchy localized k-spar alt throughout that resemble tension gashes. significant py halos
171.30	171.50	Qtz	30.00°		3.00	faded brecciated qtz vein with pastel orange k-spar alt, maybe 40% wall rock frags and heavy chl alt
172.15	172.19	Qtz-Cal	80.00°		1.50	qtz cal vein where qtz is in the middle of the vein as medium grains, surrounded by very fine grained, whit cal. wall rock contacts uneven with a conjoining stringer of cal and hem alt
173.24	173.26	Cal	60.00°		0.25	two cross cutting cal stringers oone wwith weak hem rims and py min, the other without
177.45	177.60	Cal	30.00°		0.10	sheared, truncated large grainned cal stringer with significant pinky orange k-sapr rims
177.84	177.95	Qtz	65.00°		8.00	brecciated qtz vein that is about 30% wall rock frags. some chl rimming internally. otherwise qtz grains are homogenous
180.98	181.07	Qtz-Carb	45.00°		1.00	weakly vuggy, pink cabr vein with some qtz grains orphaned in the middle of the vein. some disconitnous hem+cal+chl+py rimming and halos
184.05	184.08	Cal	65.00°		0.25	cal stringer with moderate hem rims and moderate py min
186.22	186.33	Qtz	55.00°		7.00	qtz vein with moderate pastel orange k-spar alt. some weak clusters of py and some cal fracture fill
188.83	188.98	Qtz-Cal	30.00°		1.50	mostly qtz, qtz-cal vein with the primary vein material being qtz, but from weak shearing there is both cal rims and cal in fill. weak py min in qtz, weak hem and weak kspar rimming
196.42	196.57	Carbonate	21.00°	239.00°	1.00	dirty, off white, sheared carb vein with some chl bleebs throughout

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
196.98	197.06	Qtz-Cal	47.00°	140.00°	2.00	two layered, qtz cal vein where qtz is fairly homogenous, and cal layer is a fine grained mix of cal, k-sapr and chl.
198.65	198.70	Cal	36.00°	344.00°	0.50	cal vein with strong hem rim and halo, as well as strong py min in red halo
199.55	199.59	Cal	58.00°	327.00°	0.50	cal stringer with string hem rim and strong py halo that cross cuts and truncates a qtz vein with strong k-spar alt
201.76	201.89	Qtz-Cal	28.00°	283.00°	19.00	layered sheared, qtz-cal vein where continous layers are thick qtz with pinching layers of finegrained cal and chl. between layers there are lensese of ser, py, and k-spar with k-spar spotting throughout. Epi halo on downhole apex.
207.36	207.44	Cal	40.00°		0.10	stringer network, that is mostly hem and k-spar rims and alt with moderate to strong very fine grained py min
211.35	211.45	Cal	57.00°	322.00°	7.00	heavily altered and mineralized cal vein where around 50% of vein matrix has been replaced by mostly hem and some k-spar as well as by intense fine grained py min.
213.44	213.61	Cal	26.00°	304.00°	0.50	stringer network at start of silicified and orangey MV unit. cal stingers that are medium grained, trace pink carb and qtz throughout
214.22	214.37	Carbonate	47.00°	11.00°	7.00	epi and k-spar then silicified carb vein (hard but efferevesces) with elongated qtz inlcusion in the vein matrix
214.82	214.93	Cal	30.00°	36.00°	0.10	epi altered cal vein with trace py
215.40	215.50	Qtz	42.00°	61.00°	3.00	layered qtz vein with some black chl dividing the three layers. vein is heavily overprinted with elongated epi alt
224.37	224.46	Cal	37.00°	313.00°	1.00	cal stringer truncating a cal vein with moderate small chl bleebs and py
225.95	226.02	Cal	60.00°	125.00°	1.00	homogenous, massive cal vein
226.12	226.20	Cal	31.00°	225.00°	1.00	chl rich cal vein that is intensely, fine grained py mineralized
226.41	226.51	Cal	29.00°	313.00°	5.00	messy discontinously layered cal vein where chl layers fracture fill and create the layer textrue. some trace hem and py min
231.25	231.30	Cal	36.00°	352.00°	1.00	homogenous, massive cal vein
238.31	238.42	Qtz-Cal	27.00°	328.00°	4.00	pinkish qtz vein with large cal rims that create a layered texture. spotty k-spar and carb throughout and some weak hem and py mins
245.12	245.22	Qtz	24.00°	147.00°	4.00	sheared altered qtz vein with a very strong halo of epi and k-spar. some fine grained cal overprinting.

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
245.24	245.26	Cal	43.00°	336.00°	14.00	seires of qtz and cal stringers with very large alteration halos and strong k-spar rims. alteration is combo if epi and alb likely. trace py min in some orphaned stringers.
256.21	256.25	Qtz-Cal	51.00°	18.00°	1.00	uniform qtz vein with fine grained frosty cal overprinting
257.46	257.53	Qtz-Cal	37.00°	331.00°	2.00	sheared qtz-cal vein that may have been layered. some division of qtz from cal with thin chl sections. k-sapr rimming elongated apexes. moderate py halos with some py min in vein
263.64	263.75	Cal	35.00°	289.00°	0.25	cal stringer, that branches into other stringer on up hole apex with some py and one cpy grain in the vein matrix
264.92	265.00	Qtz-Cal	29.00°	63.00°	2.00	qtz vein with some moderate cal rims and some cal fracture fill/alt throughout. py min is weak and fine grained throughout vein with even a little cpy. Chl rimming is inconsitstent but present
265.56	265.69	Qtz	18.00°	337.00°	3.00	homogenous, massive qtz vein with a downhol rim of browny-yello ser with weak py min
271.71	271.98	Carbonate	20.00°	33.00°	1.00	pink, sheared, very vuggy vein, with cal.
276.71	276.88	Qtz-Cal	34.00°	328.00°	3.00	two parallel weakly layered qtz-cal layers with distinct qtz and callaeyrs that are both slightly pink. weak potassic alteration throughout and some chl between layers
277.64	277.83	Cal	26.00°	52.00°	0.50	sheared, medium grained pink cal vein vein with fine grained white cal overprinting. some chl strings infilling where dheareing has pulled vein apart a little
280.47	280.62	Cal	62.00°	238.00°	1.00	two parallel, similar pink cal veins that are homogenous and massive
291.86	292.04	Cal	23.00°	321.00°	2.00	sheared pink cal vein with a lot of fine grained cal overprinting. potassic alteration throughout and some chl strings where shearing is strong
298.65	298.76	Cal	23.00°	348.00°	4.00	layered cal vein with chl seperating layers. top layer is thin fine grained cal. lower layer is three times as thick with coarse and fine grained cal
306.15	306.21	Cal	45.00°	52.00°	2.00	homogenous cal vein with uneven cal rimand and even epi rims on the outside
308.61	308.71	Cal	51.00°	271.00°	4.00	sheareds, messy cal vein with fine grained, hem alted cal and some trace epi
308.76	309.51	Cal	0.00°	160.00°	0.75	long, parallel to axis cal stringer

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
315.12	315.26	Cal	18.00°	328.00°	5.00	sheared pinkish cal vein that was maybe once layered before getting pulled apaprt. some evidence of pink cal being later generation and fracture filling. some chl fracture fill
329.50	329.58	Cal	26.00°	321.00°	0.25	small cal stringer with weak py halo
339.23	339.31	Qtz	39.00°	41.00°	2.00	off white, pinkish qtz vein with weak cal rims. otherwise homogenous and massive
351.84	351.90	Cal	34.00°	0.00°	1.00	small, weakly sheared cal veinlet that may have been layered with thin chl layers running between cal. There is strong medium grained py min in the host rock around the vein.
359.22	361.70	Cal	0.00°	112.00°	0.50	very long cal stringer that runs near parallel to core axis and intersects several other stringers that have similar comp. moderate to strong spec hme min through the middle of the stringer
359.60	359.74	Cal	10.00°	325.00°	0.50	small instensley mineralized stringer that obliquely intersects above vein. the vein is intensely spec hem min and where it intersects there is strong very fine grained py min
364.70	364.81	Cal	10.00°	0.00°	1.00	partially lost, half off a vein that is very vuggy cal with some hem alt and spec hem
366.79	366.88	Qtz-Carb	65.00°	322.00°	3.50	brecaited, altered carb-qtz vein that has some chl fracture fill and weak smattering of medium to fine grained py min. looks like it may have been layered but then got britally brecciated. there is alos strings of spec hem throughout and a blanket of likely albite+k-spar alt
367.02	367.06	Cal	53.00°	264.00°	0.50	cal stringer with heavy spec hem min.
367.27	367.31	Cal	65.00°	67.00°	0.25	cal stringer that is mostly spec hem
370.59	370.72	Qtz	59.00°	357.00°	4.00	purple qtz vein that is weakly sheared with lines of ser running throuhg nearer the downhole wall rock contact. dozens of medium sized sepc hem grains in the veiin matrix
371.41	371.49	Carbonate	18.00°	49.00°	5.00	brecciated carb-qtz vein where qtz is purple-red hued, carb is browny beige and there is a mosiac of k-spar, chl and ser alt throughout. little stringer (layer?) running through the vein that has spec hem
372.83	373.32	Carbonate	13.00°	134.00°	0.50	rigidly brecciated beige carb vein that is likely albite and k-spar altered. Vein is a series of stick like segments. some chl and qtz fracture fill and ser alt

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
374.63	374.75	Qtz-Carb	20.00°	13.00°	0.50	qtz-carb breccia with small rounded pink carb frags in a brecciated qtz matric. moderate chl fracture fill and trace hem rims. some carb clasts are vuggy
374.89	374.94	Qtz	44.00°	86.00°	0.25	series of contigous sheared and brecciated qtz stringer segments that are rimmed in ser and py
377.18	377.28	Cal	30.00°	67.00°	0.25	cherty, blood red hem stringer
377.94	378.38	Cal	16.00°	1.00°	20.00	very shallow, fine grained, pinkish, brecciated (around 30% wall rock frags at least) cal vein. trace py scattered around some wall rock frags and weak to moderate k-spar alt of the cal.
379.96	380.08	Qtz	24.00°	255.00°	1.00	sil altered qtz vein in an interval of qtz flooding.
384.35	384.50	Cal	23.00°	149.00°	0.25	small cal stringer that runs through a section of locally intense ser altered host rock
389.13	389.24	Carbonate	50.00°	7.00°	0.50	grey carb breccia, that is slightly sheared and multi gen as whit cal stringers cross cut through. 50% wall rock frags and weak ser alt
389.57	389.66	Cal	35.00°	66.00°	0.50	cal stringer with carb+alb with likely some k-spar alt rims. the rims are a light brown colour
390.32	390.46	Carbonate	23.00°	107.00°	0.75	sheared pink carb vein in the presence of some locally patchy but strong sil alt that eats into the vein. tracy vuggyness
391.29	391.40	Carbonate	33.00°	74.00°	0.75	sheared carb stringer in the presence of some locally stron alb and ser alt. sheared
394.40	394.50	Carbonate	40.00°		3.00	sheared multi gen carb cal vein in the presence of some sil alt. vein is messy and branches and part of a network of pinkish carb veins. trace vuggy
397.41	397.86	Qtz	25.00°		32.00	brecciated, cataclastic qtz vein with two pinkm carb stringers running through. about 50% wall rock frags that are rounded and well graded. end of vein enters a zone of rubble.
401.79	401.84	Cal	60.00°		0.50	cal stringer with alb+k-spar halo and moderate very fine grained py min
406.03	406.20	Cal	19.00°	212.00°	4.00	sheared, fine grained purple hued cal vein with some weak hem rims. vein is cross cut by sevveral white cal veins. purple hue likely hem
408.29	408.37	Cal	20.00°	19.00°	1.00	sheared white cal vein with moderate cpy min. vein cross cuts a ser latered vein and is in turn cross cut by thin white cal stringers that have weak cpy min. network

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
408.40	408.60	Cal	19.00°	7.00°	3.00	brecciated and sheared cal vein that is altered with ser, k-spar and hem with fine grained qtz infilling fractures. some trace py min
410.88	410.92	Cal	72.00°	74.00°	0.50	heavily mineralized and moderatley altered cal stringer. py min k-spar alt
412.46	412.62	Cal	13.00°	61.00°	1.00	sheared, multi gen, network of cal stringers. newer gen is white, older gen in pinkish. trace cpy min.
413.53	415.96	Cal	12.00°	348.00°	27.00	qtz-cal breccia that is 60% wall rock frags. qtz and cal are both medium to fine grained and well mixed. up hole wall rock contact has more homogenous cal and some ser rimming. chl bleeebs throughout and fine grained py min in wall rock frags
416.52	416.61	Cal	26.00°	29.00°	3.00	weakly sheared relatively homgenous fine grained off whiite cal vein with some discontinous chl strings throughout
424.82	425.05	Qtz-Carb	20.00°	72.00°	4.00	messy, brecciated qtz-carb vein that looks weakly layered but layers are discontinous and interupted by wall rock frags. about 15% tabular wall rock frags. chl strings and chl alt of qtz. trace ser rimming, and trace vuggy texture in pink carb
427.52	429.32	Cal	0.00°	268.00°	1.00	very thinly layered, cal stringer with an alpha that runs parallel to the core axis. layers are cal, alb and ser altered cal that are easiest to see at vein apexes.
430.06	432.00	Cal	0.00°	83.00°	1.00	very thinly layered, cal stringer with an alpha that runs parallel to the core axis. layers are cal, alb and ser altered cal that are easiest to see at vein apexes.
437.00	437.55	Cal	22.00°	351.00°	50.00	massive cal vein of large grained blades. some chl bleebs throughout. no min
449.31	450.02	Qtz	25.00°		68.00	glassy, sil altered qtz breccia above a altered and healed fault zone. 30% sil altered, angular wall rock frags with very weak ser alt. no visible min. some trace cal rimming.
450.85	450.91	Qtz-Cal	80.00°		1.00	sheared and brecciated, but still intact, qtz-cal veinlet in brecciated/healed fault zone. Vein has moderate patchy hem alt in qtz and rim of carb that has one big vug
451.20	451.80	Qtz	5.00°		55.00	shallow to core axis, qtz breccia between two intervals of altered/healed fault/breccia. vein is over 50% wall rock frags that are a little glassy and hard indicating sil alt. weak ser and carb alt in

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						patches. weak py min
468.77	469.05	Qtz	25.00°		24.00	weakly sil altered, weakly sheared qtz breccia with ~50% elongated wall rock frags. weak cal alt and moderate ser flecks and strings.
472.86	472.90	Cal	80.00°		0.75	weakily sheared cal stringer that is strongly, fine grained, py min. also strong fine grained py halo.
475.55	475.68	Cal	12.00°	330.00°	0.75	series of near parallel with strong py min cal stringer that are cross cut by other less mineralized stringers.
486.86	487.05	Qtz-Cal	31.00°	115.00°	1.00	sheared qtz cal vein where vein was ooriginally qtz but alt and shearing introduced a lot of cal between veins. chl bleebs throughout. some grains are k-spar altered salmon pink. clusters of py throughout with some trace cpy
501.00	501.11	Qtz	48.00°	162.00°	6.00	qtz vein with large grains that are rimmed by chl. some carb rimming and growwths that are orangey with k-spar alt. one cal stringer corss cuts
506.56	506.67	Cal	33.00°	56.00°	1.00	cataclastic cal veinlet that has about 5% wall rock frags suspended in the vein materail
508.87	509.12	Cal	25.00°	77.00°	0.75	chorite rich cal stringers, running parallel and connected by similar crosscutting stringers. halos of dark redish brown alb+hem. halos also contain py min
513.46	513.61	Cal	22.00°	343.00°	2.00	sheared, fin grained, dark purplish calcite breccia. colouration is likely mix of chl and hem diss alt. abnout 20% wall rock frags on one flank. up hole apex is a sereis of segments from shearing.
524.70	524.81	Cal	25.00°	340.00°	1.00	2 phase calcite stringer with fine and large grained portions on different flanks. continous 2mm rim of fine grained py
527.32	527.54	Cal	38.00°	41.00°	19.00	calcite breccia that is 50% wall rock frags. frags are focused in the downhole apex. some trace py in frags. calcite is fairly homogenous
531.49	531.54	Cal	47.00°	320.00°	0.50	small, dark cal stringer that has strong py with trace cpy rims. weakly sheared
531.52	531.76	Cal	29.00°	53.00°	5.00	sheared pinky hued cal vein segment. only downhole apex is visible.
532.12	532.17	Cal	49.00°	317.00°	1.50	dark, sheared cal veinlet with strong py (with trace cpy) rims/halos
537.91	538.01	Qtz-Cal	41.00°	329.00°	3.00	medium grained, pink qtz vein with modest cal rims that are chl altered and trace py halo

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
551.20	551.55	Cal	47.00°	292.00°	31.00	calcite breccia that is semi-layered and messy on its uphole contact and then becomes more conitgous and less brecciated near its downhole contact. Vuggy at the start. Chl fracture fill and weak patchy k-spar alt. no sig min. 20% wall rock frag
557.21	557.34	Cal	31.00°	247.00°	0.25	set of parallel and crosscutting stringers that have weak py min/halos and grey/brown 'bleaching' halos that are possibly alb or sil.
559.97	560.27	Cal	9.00°	53.00°	0.25	stringer network similar to baove description but with a clear k-spar influence on alt halos and increased but more sporadic and chaotic py min as halos
563.30	563.38	Cal	49.00°	53.00°	2.50	brecciated cal vein with a discontinous up hole contact rim of dull brown ser hosting py. 30% small angular wall rock frags. patchy k-spar alt of cal, alongside trace chl bleebs.
567.67	567.71	Cal	58.00°	5.00°	1.50	lightly sheared medium grained cal vein with cal rims and some patchy k-spar alt
583.79	583.94	Cal	37.00°	27.00°	12.00	massive homogenous cal vein. very white and pure
594.75	594.83	Cal	45.00°	273.00°	0.75	fine grained cal stringer, parallel to other cal stringers and intersecting with other stringers at acute angles. moderate fine grained py min as halos.
601.23	601.31	Qtz-Cal	49.00°	269.00°	1.25	qtz veinlet with cal fracture fill from very weak shearing (vein undaltes but is semi consistent thickness). very fine chl bleebs.
605.38	605.46	Cal	50.00°	4.00°	5.00	swirly cal vein that seperates and rrejoing around 2 large wall rock frags giving the impresion of being a few different conjoining veins. cal is two phase, a very fine grained dark and dirty cal and a larger grained pinkish qtz. there is weeak py min in some of the fine grained sections. moderate chl as fracture fill and very weak k-spar
616.50	617.06	Cal	16.00°	308.00°	42.00	very altered cal breccia that looks like lichen growth. Cal is either distinct pink small-medium grained cal clasts or dark purple/black fine grained cal. 2cm florets of green chl growths 'blossom' in the middle of the vein. 15% wall rock frags. dark purple colour is likely hem alt of fine grains
622.70	622.84	Cal	64.00°	51.00°	0.50	two parallel cal stringers that have weak py mineralization
622.70	622.84	Cal	20.00°	184.00°	3.00	sheared pinkish cal vein that is discontinous on its flanks. overprinted

Veins

From	To	Vein Type 1	Alpha	Beta	True Widt...	Description
						with fine grained cal and distinct but thin chl rims as well as chl halos with weak py min.

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description
21.05	23.32	RBL				drill damaged and missing core near the top of the hole
46.12	46.27	C	46.00°	318.00°		small lamp window in mv
48.82	49.08	C	48.00°	344.00°		small lamp window in mv
63.88	63.89	FOL	27.00°	75.00°		foliation in mv
66.06	66.07	FOL	27.00°	32.00°		foliation in mv
70.38	70.49	RBL				small shard like to large blocky ruvvling in mv
72.13	73.02	C	45.00°			lamp window in MV
75.54	75.87	C	60.00°			lamp window in mv
76.84	76.94	C	50.00°			lamp window in mv
95.48	95.49	C	31.00°	23.00°		mv to lamp
97.54	97.55	C	30.00°	293.00°		lamp to mv
103.47	103.67	C	32.00°	260.00°		window of lamp in mv
105.79	105.80	C	30.00°	319.00°		mv to lamp
107.22	107.23	C	79.00°	358.00°		lamp to mv
119.69	120.07	C	20.00°			lamp window in mv
121.02	121.03	FOL	20.00°			foliation in mv
127.40	127.46	RBL				short interval of medium shard like and blocky rubling in MV
134.66	135.01	C	70.00°			lamp window in mv
147.30	147.64	RBL				medium to medium-small blocky rubbling in mv
157.35	157.36	C	55.00°	206.00°		mv to lamp
159.27	159.28	C	45.00°	72.00°		lamp to mv
168.24	169.84	RBL				interval of intermittent rubbling and fault in MV with some healed gouge. rubble is mostly medium blocky and shard like
169.58	169.84	G				mostly healed fault gauge at the end of an interval of rubbling. no sig min
172.20	172.31	RBL				mediium to small angular shard like rubbling in mv
176.01	176.75	RBL				large to medium blocky like rubbling
207.72	208.92	G				long interval of healed fault gauge with moderate very fine grained py min and some broken pink carb veins
230.22	230.25	G	55.00°	277.00°		small partially healed fault gouge
245.78	245.79	C	59.00°	70.00°		agab to mv
251.95	254.26	RBL				long interval of intermiitent rubbling and faulting, and gouge.
252.48	252.91	G				healed gouge with weak py min

Structures

From	To	Structure Type 1	Alpha	Beta	Gamma	Description
253.22	253.65	FLT				fault with crumbly snady bits as well some larger rounded blocks. moderat py min
253.89	253.96	FLT				fault with crumbly sand and larger rounded blocky bits
275.18	276.09	C	23.00°	294.00°		lamp window in mv
282.77	282.96	G				healed gouge in mv with no sig min
286.49	286.53	RBL				small interval of medium to small rounded pebbly like rubbling
319.55	319.56	C				mv to lamp
351.16	351.28	G				borderline gouge in mv. very competant with some evidence of fault and heal
367.80	367.81	C	16.00°	27.00°		mv to mi in altered zone
372.50	374.75	FLTZ	20.00°	13.00°		altered fault zone between altered mi and mv units. possibly a intrusive breccia. intense alt combo of ser, ald and lesser amount sil with chl fracture fill
376.56	377.78	FLTZ	26.00°	341.00°		altered fault zone in MV. possibly a intrusive breccia. intense alt combo of ser, ald and lesser amount sil with chl fracture fil
378.97	379.37	G	44.00°	331.00°		healed, mostly competant fault gouge in mv
378.97	379.37	C				mv to lamp
387.01	387.02	C				lamp to mv
397.33	401.00	RBL				intermittent, medium blocky, and angular rubbling in mv
449.28	449.30	RBL				small interval of shard like medium sized rubbling between mv and long qtz breccia
450.02	451.15	FLTZ	30.00°			brecciated, healed fault zone that is possibly also a flow breccia. heavily ser altered with weak py min between two sil altered qtz breccia veins
454.08	454.09	C	25.00°			lamp to mv
476.67	476.69	RBL				small shard like rubble in mv
509.80	511.00	RBL				medium to small sub angular blocky rubbling in mv with 25% small pebbly like rubble
528.10	528.11	C	60.00°	346.00°		mi to mv
528.85	528.90	FOL	55.00°	325.00°		foliation in mv
553.88	554.43	RBL				rubbly, powdery, semi-commpetant gouge with weak py min
554.66	554.70	RBL				small to very small angular blocky rubbling in mv
612.69	613.04	C	77.00°	284.00°		mi window in mv unit

Magnetic Susceptibility

Depth	MagSus	Comments
21.00	3.61	
24.00	11.90	
27.00	8.24	
30.00	1.10	
33.00	1.38	
36.00	1.34	
39.00	1.19	
42.00	1.36	
45.00	1.20	
48.00	3.36	
51.00	5.34	
54.00	1.81	
57.00	2.35	
60.00	20.10	
63.00	2.12	
66.00	34.80	
69.00	9.92	
72.00	2.35	
75.00	8.26	
78.00	27.80	
81.00	127.00	
84.00	85.40	
87.00	68.10	
90.00	1.80	
93.00	75.10	
96.00	1.02	
99.00	92.70	
102.00	46.30	
105.00	52.30	
108.00	38.50	
111.00	27.20	
114.00	1.43	

Magnetic Susceptibility

Depth	MagSus	Comments
117.00	1.31	
120.00	20.10	
123.00	1.28	
126.00	1.71	
129.00	2.37	
132.00	8.14	
135.00	5.82	
138.00	1.36	
141.00	2.78	
144.00	7.83	
147.00	54.90	
150.00	120.00	
153.00	66.40	
156.00	165.00	
159.00	1.48	
162.00	44.70	
165.00	20.30	
168.00	71.90	
171.00	13.20	
174.00	14.10	
177.00	33.80	
180.00	14.10	
183.00	60.50	
186.00	43.10	
189.00	56.20	
192.00	7.46	
195.00	12.20	
198.00	31.70	
201.00	37.80	
204.00	19.00	
207.00	16.70	
210.00	15.90	

Magnetic Susceptibility

Depth	MagSus	Comments
213.00	39.90	
216.00	21.40	
219.00	43.90	
222.00	15.50	
225.00	103.00	
228.00	30.60	
231.00	23.20	
234.00	4.48	
237.00	8.53	
240.00	40.70	
243.00	11.30	
246.00	81.30	
249.00	79.80	
252.00	40.30	
255.00	74.60	
258.00	64.30	
261.00	50.10	
264.00	41.70	
267.00	5.39	
270.00	166.00	
273.00	33.50	
276.00	109.00	
279.00	59.00	
282.00	58.50	
285.00	0.96	
288.00	0.63	
291.00	3.49	
294.00	78.60	
297.00	52.80	
300.00	39.40	
303.00	64.10	
306.00	25.10	

Magnetic Susceptibility

Depth	MagSus	Comments
309.00	43.50	
312.00	29.70	
315.00	19.70	
318.00	24.00	
321.00	0.55	
324.00	0.57	
327.00	7.35	
330.00	5.75	
333.00	12.10	
336.00	17.30	
339.00	1.88	
342.00	0.95	
345.00	1.48	
348.00	3.11	
351.00	3.64	
354.00	5.10	
357.00	1.66	
360.00	15.10	
363.00	0.49	
366.00	1.52	
369.00	2.19	
372.00	1.38	
375.00	0.58	
378.00	1.03	
381.00	0.81	
384.00	0.81	
387.00	0.32	
390.00	0.26	
393.00	2.36	
396.00	2.30	
399.00	0.57	
402.00	27.20	

Magnetic Susceptibility

Depth	MagSus	Comments
405.00	2.17	
408.00	9.17	
411.00	4.43	
414.00	0.68	
417.00	0.49	
420.00	0.87	
423.00	0.27	
426.00	0.66	
429.00	1.24	
432.00	0.64	
435.00	0.69	
438.00	0.74	
441.00	1.24	
444.00	7.81	
447.00	0.88	
450.00	0.29	
453.00	0.57	
456.00	0.82	
459.00	0.83	
462.00	0.90	
465.00	0.57	
468.00	3.02	
471.00	5.44	
474.00	27.60	
477.00	8.31	
480.00	6.36	
483.00	21.50	
486.00	2.70	
489.00	1.22	
492.00	6.89	
495.00	1.23	
498.00	1.07	

Magnetic Susceptibility

Depth	MagSus	Comments
501.00	0.30	
504.00	1.47	
507.00	2.91	
510.00	0.65	
513.00	20.80	
516.00	7.26	
519.00	1.13	
522.00	0.95	
525.00	14.10	
528.00	3.69	
531.00	1.70	
534.00	2.99	
537.00	10.80	
540.00	12.50	
543.00	22.50	
546.00	88.00	
549.00	56.90	
552.00	1.26	
555.00	1.70	
558.00	18.30	
561.00	0.29	
564.00	1.92	
567.00	6.87	
570.00	7.87	
573.00	7.08	
576.00	1.08	
579.00	18.10	
582.00	1.70	
585.00	0.87	
588.00	1.77	
591.00	9.05	
594.00	1.57	

Magnetic Susceptibility

Depth	MagSus	Comments
597.00	18.60	
600.00	1.48	
603.00	0.88	
606.00	19.40	
609.00	7.20	
612.00	3.12	
615.00	1.16	
618.00	7.81	
621.00	1.60	
624.00	4.30	
627.00	6.91	
630.00	1.66	
633.00	5.82	
636.00	11.00	

Specific Gravity

From	To	Length (m)	Weight Ai...	Weight ...	Delta	SG	Litho Code	Standard ID	Comments	
1.00	1.01	0.01	281.28	175.14	106.14	2.65		STD2		
27.25	27.40	0.15	702.48	464.54	237.94	2.95	MV			
43.28	43.42	0.14	789.88	523.95	265.93	2.97	MV		W/ Vein segments	
59.80	59.93	0.13	724.17	485.63	238.54	3.04	MV		W/ Vein segments	
79.54	79.70	0.16	822.09	531.28	290.81	2.83	MV		W/ Stringers	
90.94	91.06	0.12	693.28	456.69	236.59	2.93	MV			
107.87	108.00	0.13	651.72	431.76	219.96	2.96	MV			
126.03	126.18	0.15	762.26	506.87	255.39	2.98	MV			
144.44	144.56	0.12	687.46	459.23	228.23	3.01	MV			
158.58	158.73	0.15	783.50	502.20	281.30	2.79	LAMP			
176.49	176.63	0.14	838.16	550.77	287.39	2.92	MV			
180.00	180.10	0.10	281.58	175.17	106.41	2.65		STD2		
193.65	193.79	0.14	757.62	506.46	251.16	3.02	AGAB			
211.78	211.98	0.20	1038.05	684.61	353.44	2.94	AGAB			
227.64	227.79	0.15	795.69	528.74	266.95	2.98	AGAB			
242.23	242.40	0.17	899.83	597.45	302.38	2.98	AGAB			
259.51	259.63	0.12	574.36	370.66	203.70	2.82	MV			
278.75	278.91	0.16	833.64	542.71	290.93	2.87	MV			
293.16	293.36	0.20	1084.67	716.70	367.97	2.95	MV			
313.12	313.28	0.16	747.80	484.85	262.95	2.84	MV			
329.02	329.15	0.13	529.55	340.72	188.83	2.80	MV			
335.00	335.10	0.10	281.32	175.19	106.13	2.65		STD2		
345.74	345.91	0.17	880.00	569.79	310.21	2.84	MV		Stringers	
363.74	363.88	0.14	727.18	467.20	259.98	2.80	MV			
369.08	369.21	0.13	645.35	421.88	223.47	2.89	MI		Altered	
385.74	385.89	0.15	747.93	475.21	272.72	2.74	LAMP		Stringers	
401.15	401.30	0.15	678.20	431.32	246.88	2.75	MV		Stringers	
419.56	419.71	0.15	888.68	574.93	313.75	2.83	MV		Stringers	
435.65	435.82	0.17	791.84	511.62	280.22	2.83	MV		Stringers	
455.16	455.33	0.17	849.66	546.66	303.00	2.80	MV			
471.82	471.95	0.13	688.22	446.36	241.86	2.85	mv		Stringers	
475.00	475.10	0.10	281.30	175.23	106.07	2.65		STD2		
480.61	480.76	0.15	784.66	508.52	276.14	2.84	MV		Stringers	

Specific Gravity

From	To	Length (m)	Weight Ai...	Weight ...	Delta	SG	Litho Code	Standard ID	Comments	
500.04	500.19	0.15	803.13	519.41	283.72	2.83	MV			
515.02	515.17	0.15	811.25	522.68	288.57	2.81	MV		Stringers	
532.75	532.88	0.13	652.69	424.07	228.62	2.85	MV			
548.87	549.00	0.13	702.85	466.19	236.66	2.97	MV		Stringers	

Appendix D

REPORT ON A DIAMOND DRILLING PROGRAM AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)
IQ Logger Oriented Structure Measurements

Drillhole	Depth (m)	Structure Description	Structure Code	Comments	Alpha	Beta	Gamma	Dip	Dip Direction (TN)	Easting (TN)	Northing (TN)	Elevation (TN)	Hole Path	Hole Dip	Hole Azimuth	Logger Name
EO-22-001	15.26	Vein 2		QTZ-carb + Py + hem	51.04	312.31		75.5	312.4	560957.2	5324703.4	308.4	EZ-GYRO	-45.05	161.07	Martin Levasseur
EO-22-001	58.97	Barren quartz vein	QzV	Qtz vein	69.3	281.46		52.4	318.9	560965.8	5324673.7	277.5	EZ-GYRO	-44.87	164.79	Martin Levasseur
EO-22-001B	49.62	Mineralized qz vein	QzV+MNZ	Brecciated qtzcarb vein	48.47	342.81		85.9	321.9	560971.1	5324671.4	283.2	SPRINT-IQ	-44.41	153.26	Martin Levasseur
EO-22-001B	73.97	Barren quartz vein	QzV		57.38	160.52		17.7	9.6	560978.9	5324655.9	266.2	SPRINT-IQ	-44.41	153.47	Martin Levasseur
EO-22-001B	77.56	Mineralized qz vein	QzV+MNZ		35.42	89.28		66.5	36.2	560980.0	5324653.6	263.7	SPRINT-IQ	-44.44	153.5	Martin Levasseur
EO-22-001B	81.22	Mineralized qz vein	QzV+MNZ		48.85	272.27		59.4	283.8	560981.2	5324651.3	261.1	SPRINT-IQ	-44.42	153.53	Martin Levasseur
EO-22-001B	88.76	Barren shear	SHR	Very weak Ductile shear	41.02	127.34		38.2	49.7	560983.6	5324646.4	255.9	SPRINT-IQ	-44.42	153.58	Martin Levasseur
EO-22-001B	90.01	Mineralized qz vein	QzV+MNZ		44.78	333.16		87.7	314.9	560984.0	5324645.6	255.0	SPRINT-IQ	-44.41	153.6	Martin Levasseur
EO-22-001B	104.77	Mineralized qz vein	QzV+MNZ		39.09	330.83		87.5	131.4	560988.7	5324636.2	244.7	SPRINT-IQ	-44.4	153.66	Martin Levasseur
EO-22-001B	112.57	Mineralized qz vein	QzV+MNZ	Two stringers with bridging extensional vein	51.64	238.45		38.7	276.0	560991.1	5324631.2	239.2	SPRINT-IQ	-44.36	153.73	Martin Levasseur
EO-22-001B	117.6	Barren quartz vein	QzV		42.84	119.16		43.1	43.5	560992.7	5324628.0	235.7	SPRINT-IQ	-44.35	153.74	Martin Levasseur
EO-22-001B	122.81	Mineralized shear	SHR+MNZ	Clastically sheared qtzcarb vein	41.35	270.85		63.0	276.4	560994.4	5324624.6	232.0	SPRINT-IQ	-44.32	153.79	Martin Levasseur
EO-22-001B	172.74	Barren shear	SHR		53.13	213.38		23.6	278.4	561010.1	5324592.5	197.2	SPRINT-IQ	-44.13	154.11	Martin Levasseur
EO-22-001B	174.18	Mineralized QzCrbV	QzCrbV+MNZ		14.9	188.17		30.1	170.1	561010.5	5324591.6	196.2	SPRINT-IQ	-44.13	154.13	Martin Levasseur
EO-22-001B	174.57	Mineralized QzCrbV	QzCrbV+MNZ		46.49	313.08		80.4	303.5	561010.7	5324591.3	195.9	SPRINT-IQ	-44.13	154.14	Martin Levasseur
EO-22-001B	174.72	barren qz-carb vein	QzCrbV		46.49	120.65		40.8	39.1	561010.7	5324591.2	195.8	SPRINT-IQ	-44.13	154.14	Martin Levasseur
EO-22-001B	175.73	Mineralized QzCrbV	QzCrbV+MNZ		16.04	197.02		31.6	186.7	561011.0	5324590.6	195.1	SPRINT-IQ	-44.13	154.16	Martin Levasseur
EO-22-001B	176.88	Mineralized QzCrbV	QzCrbV+MNZ		33.03	317.33		86.4	119.5	561011.4	5324589.8	194.3	SPRINT-IQ	-44.13	154.18	Martin Levasseur
EO-22-001B	178.52	Mineralized QzCrbV	QzCrbV+MNZ		45.34	217.03		26.1	260.0	561011.9	5324588.8	193.2	SPRINT-IQ	-44.11	154.17	Martin Levasseur
EO-22-001B	207.36	Contact	CONTACT		50.84	24.69		82.8	349.8	561020.9	5324570.1	173.1	SPRINT-IQ	-43.97	154.38	Martin Levasseur
EO-22-001B	207.73	Foliation	FOL		27.09	43.89		81.6	193.0	561021.0	5324569.9	172.9	SPRINT-IQ	-43.97	154.37	Martin Levasseur
EO-22-001B	207.88	barren qz-carb vein	QzCrbV		19.38	42.58		74.4	195.9	561021.1	5324569.8	172.8	SPRINT-IQ	-43.97	154.37	Martin Levasseur
EO-22-001B	208.37	barren qz-carb vein	QzCrbV		33.48	20.32		79.6	171.5	561021.2	5324569.4	172.4	SPRINT-IQ	-43.97	154.36	Martin Levasseur
EO-22-001B	208.64	barren qz-carb vein	QzCrbV		36.06	335.3		83.1	134.5	561021.3	5324569.3	172.2	SPRINT-IQ	-43.97	154.36	Martin Levasseur
EO-22-001B	210.44	Mineralized QzCrbV	QzCrbV+MNZ		26.99	341.32		73.0	137.0	561021.9	5324568.1	171.0	SPRINT-IQ	-43.96	154.35	Martin Levasseur
EO-22-001B	212.68	barren qz-carb vein	QzCrbV		15.8	311.26		74.5	105.7	561022.6	5324566.6	169.4	SPRINT-IQ	-43.93	154.38	Martin Levasseur
EO-22-001B	213.06	barren qz-carb vein	QzCrbV		34.36	71.32		78.4	27.4	561022.7	5324566.4	169.2	SPRINT-IQ	-43.93	154.39	Martin Levasseur
EO-22-001B	214.63	Barren shear	SHR		23.22	64.63		89.4	210.5	561023.2	5324565.4	168.1	SPRINT-IQ	-43.91	154.39	Martin Levasseur
EO-22-001B	215.14	barren qz-carb vein	QzCrbV		22.66	52.61		82.2	202.1	561023.3	5324565.0	167.7	SPRINT-IQ	-43.9	154.39	Martin Levasseur
EO-22-001B	215.44	barren qz-carb vein	QzCrbV		29.7	61.09		87.7	23.9	561023.4	5324564.9	167.5	SPRINT-IQ	-43.9	154.39	Martin Levasseur
EO-22-001B	233.43	Mnrlzd Carbonate vn	CrbV+MNZ		20.21	198.95		28.4	194.3	561029.0	5324553.1	155.1	SPRINT-IQ	-43.77	154.46	Martin Levasseur
EO-22-001B	233.97	barren qz-carb vein	QzCrbV		21.41	132.7		44.9	78.7	561029.2	5324552.8	154.7	SPRINT-IQ	-43.77	154.46	Martin Levasseur
EO-22-001B	237.23	Barren shear	SHR		14.74	56.09		77.7	209.8	561030.2	5324550.7	152.4	SPRINT-IQ	-43.76	154.51	Martin Levasseur
EO-22-001B	255.75	Barren shear	SHR		16.9	72.67		89.6	220.6	561036.0	5324538.6	139.6	SPRINT-IQ	-43.53	154.58	Martin Levasseur
EO-22-001B	258.43	barren qz-carb vein	QzCrbV		18.37	138.41		43.0	87.0	561036.8	5324536.8	137.8	SPRINT-IQ	-43.5	154.58	Martin Levasseur
EO-22-001B	258.75	barren qz-carb vein	QzCrbV		32.21	111.5		53.7	52.2	561036.9	5324536.6	137.6	SPRINT-IQ	-43.49	154.57	Martin Levasseur
EO-22-001B	260.32	barren qz-carb vein	QzCrbV		25.92	119.49		51.5	63.6	561037.4	5324535.6	136.5	SPRINT-IQ	-43.48	154.56	Martin Levasseur
EO-22-001B	263.9	barren qz-carb vein	QzCrbV		35.28	128.16		40.2	58.2	561038.5	5324533.2	134.0	SPRINT-IQ	-43.45	154.61	Martin Levasseur
EO-22-001B	265.93	barren qz-carb vein	QzCrbV		18.03	64.28		85.0	213.9	561039.1	5324531.9	132.6	SPRINT-IQ	-43.44	154.63	Martin Levasseur
EO-22-001B	266.28	Foliation	FOL		13.11	43.02		68.8	200.1	561039.2	5324531.7	132.4	SPRINT-IQ	-43.43	154.63	Martin Levasseur
EO-22-001B	267.31	barren qz-carb vein	QzCrbV		19.84	64.81		86.7	213.1	561039.6	5324531.0	131.7	SPRINT-IQ	-43.43	154.64	Martin Levasseur
EO-22-001B	270.25	barren qz-carb vein	QzCrbV		13.21	64.68		81.6	217.5	561040.5	5324529.1	129.7	SPRINT-IQ	-43.4	154.66	Martin Levasseur
EO-22-001B	270.38	Foliation	FOL		18.18	38.47		71.0	193.4	561040.5	5324529.0	129.6	SPRINT-IQ	-43.41	154.66	Martin Levasseur
EO-22-001B	271.49	Barren shear	SHR		17.14	16.74		62.5	172.8	561040.9	5324528.2	128.8	SPRINT-IQ	-43.42	154.68	Martin Levasseur
EO-22-001B	273.16	Barren shear	SHR		16.38	40.24		70.3	195.9	561041.4	5324527.1	127.7	SPRINT-IQ	-43.44	154.72	Martin Levasseur

Core Alignment: Bottom of Core
REFLEX IQ-LOGGER - 3481F40142B4

Coordinates: UTM Nad83 Zone 17

REPORT ON A DIAMOND DRILLING PROGRAM AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)

IQ Logger Oriented Structure Measurements

Drillhole	Depth (m)	Structure Description	Structure Code	Comments	Alpha	Beta	Gamma	Dip	Dip Direction (TN)	Easting (TN)	Northing (TN)	Elevation (TN)	Hole Path	Hole Dip	Hole Azimuth	Logger Name
EO-22-001B	273.28	Contact	CONTACT		17.22	302.01		80.6	99.5	561041.4	5324527.1	127.6	SPRINT-IQ	-43.44	154.71	Martin Levasseur
EO-22-001B	275.07	Mineralized qz vein	QzV+MNZ		11.09	339.76		57.6	131.0	561042.0	5324525.9	126.4	SPRINT-IQ	-43.46	154.68	Martin Levasseur
EO-22-001B	277.32	Mineralized qz vein	QzV+MNZ		13.33	340.72		59.5	132.8	561042.7	5324524.4	124.8	SPRINT-IQ	-43.46	154.73	Martin Levasseur
EO-22-001B	283.47	Foliation	FOL		18.27	83.33		82.2	47.0	561044.6	5324520.4	120.6	SPRINT-IQ	-43.39	154.79	Martin Levasseur
EO-22-001B	289	Mineralized qz vein	QzV+MNZ		17.65	7.03		61.4	162.4	561046.3	5324516.7	116.8	SPRINT-IQ	-43.38	154.79	Martin Levasseur
EO-22-001B	340.45	Barren quartz vein	QzV	Trace Py	56.92	309.77		71.5	308.8	561062.2	5324482.8	81.6	SPRINT-IQ	-43.04	155.05	Martin Levasseur
EO-22-001B	343.11	Mineralized QzCrbV	QzCrbV+MNZ	Patchy/vein-like(?) ductile to brecciated shearing(?) with weak to moderate albitized/silicified	61.94	7.39		74.9	338.7	561063.0	5324481.0	79.8	SPRINT-IQ	-43.03	155.08	Martin Levasseur
EO-22-001B	345.02	Mineralized QzCrbV	QzCrbV+MNZ	Patchy/vein-like(?) ductile to brecciated shearing(?) with weak to moderate albitized/silicified	62.63	231.23		35.3	296.7	561063.6	5324479.7	78.5	SPRINT-IQ	-43.02	155.09	Martin Levasseur
EO-22-001B	348.46	Mineralized QzCrbV	QzCrbV+MNZ	Patchy/vein-like(?) ductile to brecciated shearing(?) with weak to moderate albitized/silicified	57.33	175.9		14.6	343.9	561064.7	5324477.5	76.1	SPRINT-IQ	-42.99	155.1	Martin Levasseur
EO-22-001B	349.6	Barren quartz vein	QzV		25.92	173.51		17.9	135.7	561065.0	5324476.7	75.3	SPRINT-IQ	-42.98	155.09	Martin Levasseur
EO-22-001B	365.17	Barren quartz vein	QzV		69.68	255.04		45.2	307.0	561069.8	5324466.4	64.7	SPRINT-IQ	-42.94	155.23	Martin Levasseur
EO-22-001B	368.23	Barren quartz vein	QzV		57.5	267.31		53.6	293.5	561070.7	5324464.3	62.6	SPRINT-IQ	-42.93	155.25	Martin Levasseur
EO-22-001B	394.96	Barren quartz vein	QzV		76.69	292.6		53.5	320.1	561078.9	5324446.5	44.5	SPRINT-IQ	-42.75	155.39	Martin Levasseur
EO-22-001B	431.45	Mineralized qz vein	QzV+MNZ		23.65	225.27		41.7	233.4	561090.1	5324422.1	19.8	SPRINT-IQ	-42.47	155.47	Martin Levasseur
EO-22-001B	443.17	Epidote vein	EpV		53.27	216.33		26.3	282.5	561093.7	5324414.2	11.9	SPRINT-IQ	-42.42	155.55	Martin Levasseur
EO-22-001B	443.51	Epidote vein	EpV		53.1	211.59		23.5	283.5	561093.8	5324414.0	11.6	SPRINT-IQ	-42.41	155.56	Martin Levasseur
EO-22-001B	446.18	Barren shear	SHR		44.35	321.75		86.8	309.2	561094.6	5324412.2	9.8	SPRINT-IQ	-42.4	155.55	Martin Levasseur
EO-22-001B	447.68	Mineralized qz vein	QzV+MNZ		47.61	257.1		52.5	279.6	561095.1	5324411.2	8.8	SPRINT-IQ	-42.39	155.55	Martin Levasseur
EO-22-001B	448.44	Mineralized qz vein	QzV+MNZ		19.83	282.4		85.4	268.4	561095.3	5324410.7	8.3	SPRINT-IQ	-42.39	155.56	Martin Levasseur
EO-22-001B	457.91	Sulphide stringer	SULPH STG		63.5	223.79		32.8	300.9	561098.2	5324404.3	1.9	SPRINT-IQ	-42.3	155.62	Martin Levasseur
EO-22-001B	458.34	Sulphide stringer	SULPH STG		33.61	235.28		43.7	253.1	561098.3	5324404.0	1.6	SPRINT-IQ	-42.3	155.61	Martin Levasseur
EO-22-001B	458.65	Sulphide stringer	SULPH STG		40.52	220.37		30.0	256.1	561098.4	5324403.8	1.4	SPRINT-IQ	-42.3	155.61	Martin Levasseur
EO-22-001B	462.55	Epidote vein	EpV		22.46	172.54		20.7	135.9	561099.6	5324401.2	-1.2	SPRINT-IQ	-42.24	155.68	Martin Levasseur
EO-22-001B	463.17	Mineralized qz vein	QzV+MNZ		52.24	126.15		37.0	31.0	561099.8	5324400.7	-1.6	SPRINT-IQ	-42.23	155.69	Martin Levasseur
EO-22-001B	464.39	Contact	CONTACT		9.22	277.42		89.2	257.5	561100.2	5324399.9	-2.4	SPRINT-IQ	-42.22	155.7	Martin Levasseur
EO-22-001B	465.44	Sulphide stringer	SULPH STG		42.38	266.67		61.0	278.2	561100.5	5324399.2	-3.1	SPRINT-IQ	-42.21	155.7	Martin Levasseur
EO-22-001B	478.86	Epidote vein	EpV		19.13	266.17		74.5	257.8	561104.6	5324390.1	-12.1	SPRINT-IQ	-42.1	155.79	Martin Levasseur
EO-22-001B	480.17	Contact	CONTACT		41.45	264.43		60.2	276.5	561105.0	5324389.3	-13.0	SPRINT-IQ	-42.09	155.79	Martin Levasseur
EO-22-001B	486.39	Mineralized QzCrbV	QzCrbV+MNZ		20.11	41.34		73.0	196.3	561106.9	5324385.0	-17.2	SPRINT-IQ	-42.05	155.87	Martin Levasseur
EO-22-002	45.95	Carbonate only vein	CrbV		15.1	340.34		62.8	324.4	560937.0	5324741.4	285.4	SPRINT-IQ	-45.07	345.8	Peter Wray
EO-22-002	50.55	Mineralized QzCrbV	QzCrbV+MNZ		76.45	269.3		46.4	147.0	560936.2	5324744.5	282.2	SPRINT-IQ	-45.02	345.86	Peter Wray
EO-22-002	53.35	Carbonate only vein	CrbV		44.39	338.48		88.6	150.7	560935.7	5324746.5	280.2	SPRINT-IQ	-44.97	345.86	Peter Wray
EO-22-002	53.67	Carbonate only vein	CrbV		44.08	325.56		85.9	141.8	560935.6	5324746.7	279.9	SPRINT-IQ	-44.96	345.86	Peter Wray
EO-22-002	53.82	Carbonate only vein	CrbV		44.52	330.17		86.7	145.1	560935.6	5324746.8	279.8	SPRINT-IQ	-44.95	345.86	Peter Wray
EO-22-002	54.6	Mineralized QzCrbV	QzCrbV+MNZ		41.73	339.09		88.7	330.4	560935.5	5324747.3	279.3	SPRINT-IQ	-44.94	345.88	Peter Wray
EO-22-002	56.6	Carbonate only vein	CrbV		8.21	351.12		53.7	335.0	560935.1	5324748.7	277.9	SPRINT-IQ	-44.91	345.94	Peter Wray
EO-22-002	142.1	Barren quartz vein	QzV		45.76	357.54		89.4	344.4	560920.5	5324808.1	218.2	SPRINT-IQ	-43.64	346.11	Peter Wray
EO-22-002	143.09	Carbonate only vein	CrbV		37.44	356.21		81.1	343.0	560920.3	5324808.8	217.5	SPRINT-IQ	-43.62	346.08	Peter Wray

Core Alignment: Bottom of Core
REFLEX IQ-LOGGER - 3481F40142B4

Coordinates: UTM Nad83 Zone 17

REPORT ON A DIAMOND DRILLING PROGRAM AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)
IQ Logger Oriented Structure Measurements

Drillhole	Depth (m)	Structure Description	Structure Code	Comments	Alpha	Beta	Gamma	Dip	Dip Direction (TN)	Easting (TN)	Northing (TN)	Elevation (TN)	Hole Path	Hole Dip	Hole Azimuth	Logger Name
EO-22-002	143.31	Carbonate only vein	CrbV		46.79	348.17		89.0	158.0	560920.2	5324808.9	217.3	SPRINT-IQ	-43.62	346.07	Peter Wray
EO-22-002	146.26	Carbonate only vein	CrbV		50.16	329.14		82.5	146.7	560919.7	5324811.0	215.3	SPRINT-IQ	-43.55	346.06	Peter Wray
EO-22-002	146.55	Carbonate only vein	CrbV		57.13	308.56		70.5	139.3	560919.7	5324811.2	215.1	SPRINT-IQ	-43.54	346.06	Peter Wray
EO-22-002	151.2	Carbonate only vein	CrbV		51.39	342.31		84.0	155.0	560918.9	5324814.5	211.9	SPRINT-IQ	-43.41	346	Peter Wray
EO-22-002	154.04	Carbonate only vein	CrbV		27.16	304.92		86.7	299.0	560918.4	5324816.5	209.9	SPRINT-IQ	-43.36	345.97	Peter Wray
EO-22-002	155.54	Barren quartz vein	QzV		38.2	341.16		83.3	331.2	560918.1	5324817.5	208.9	SPRINT-IQ	-43.34	345.98	Peter Wray
EO-22-002	156.09	Mnrlzd Carbonate vn	CrbV+MNZ		22.55	339.95		68.4	326.1	560918.0	5324817.9	208.5	SPRINT-IQ	-43.34	345.98	Peter Wray
EO-22-002	158.5	Carbonate only vein	CrbV		15.07	337.11		62.0	320.8	560917.6	5324819.6	206.9	SPRINT-IQ	-43.3	345.95	Peter Wray
EO-22-002	163.37	Carbonate only vein	CrbV		13.22	280.59		88.5	92.7	560916.7	5324823.1	203.5	SPRINT-IQ	-43.21	345.91	Peter Wray
EO-22-002	163.81	barren qz-carb vein	QzCrbV		34.12	355.79		77.4	342.3	560916.6	5324823.4	203.2	SPRINT-IQ	-43.21	345.9	Peter Wray
EO-22-002	164.63	Barren quartz vein	QzV		30.51	118.18		49.9	249.0	560916.5	5324824.0	202.7	SPRINT-IQ	-43.2	345.89	Peter Wray
EO-22-002	168.55	Carbonate only vein	CrbV		49.18	0.29		87.7	166.1	560915.8	5324826.7	200.0	SPRINT-IQ	-43.15	345.89	Peter Wray
EO-22-002	173.92	Barren quartz vein	QzV		30.43	154.57		23.8	279.5	560914.8	5324830.5	196.3	SPRINT-IQ	-43.07	345.88	Peter Wray
EO-22-002	177.69	Carbonate only vein	CrbV		39.09	0		82.2	345.9	560914.2	5324833.2	193.8	SPRINT-IQ	-43.06	345.85	Peter Wray
EO-22-002	184.41	Mnrlzd Carbonate vn	CrbV+MNZ		45.97	52.62		79.6	200.0	560913.0	5324838.0	189.2	SPRINT-IQ	-42.97	345.85	Peter Wray
EO-22-002	184.95	Carbonate only vein	CrbV		27.9	20.27		73.3	4.5	560912.9	5324838.4	188.8	SPRINT-IQ	-42.97	345.84	Peter Wray
EO-22-002	185.34	Mnrlzd Carbonate vn	CrbV+MNZ		16.23	323.84		67.9	308.1	560912.8	5324838.6	188.5	SPRINT-IQ	-42.98	345.84	Peter Wray
EO-22-002	187.84	Carbonate only vein	CrbV		38.17	282.83		73.0	112.6	560912.3	5324840.4	186.8	SPRINT-IQ	-42.95	345.85	Peter Wray
EO-22-002	188.28	Carbonate only vein	CrbV		38.06	26.61		84.5	6.6	560912.3	5324840.7	186.5	SPRINT-IQ	-42.94	345.86	Peter Wray
EO-22-002	191.98	Carbonate only vein	CrbV		38.11	292.72		78.6	118.1	560911.6	5324843.4	184.0	SPRINT-IQ	-42.88	345.9	Peter Wray
EO-22-002	193.05	Carbonate only vein	CrbV		51.69	337.87		83.5	152.3	560911.4	5324844.1	183.3	SPRINT-IQ	-42.87	345.89	Peter Wray
EO-22-002	194.65	Carbonate only vein	CrbV		40.01	321.95		89.7	317.7	560911.1	5324845.3	182.2	SPRINT-IQ	-42.85	345.86	Peter Wray
EO-22-002	212.53	Barren quartz vein	QzV		51.93	331.58		82.1	148.7	560907.9	5324858.0	170.0	SPRINT-IQ	-42.8	345.96	Peter Wray
EO-22-002	215.32	Carbonate only vein	CrbV		36.58	12.96		80.2	356.5	560907.5	5324860.0	168.2	SPRINT-IQ	-42.76	346	Peter Wray
EO-22-002	215.62	Mnrlzd Carbonate vn	CrbV+MNZ		22.92	9.7		66.3	355.8	560907.4	5324860.2	167.9	SPRINT-IQ	-42.76	346	Peter Wray
EO-22-002	216.97	Carbonate only vein	CrbV		46.93	334.93		87.6	149.2	560907.2	5324861.1	167.0	SPRINT-IQ	-42.75	346.01	Peter Wray
EO-22-002	218.96	Carbonate only vein	CrbV		30.2	345.28		74.2	332.8	560906.8	5324862.6	165.7	SPRINT-IQ	-42.74	346.01	Peter Wray
EO-22-002	239.45	Carbonate only vein	CrbV		42.43	345.63		86.0	335.5	560903.2	5324877.2	151.8	SPRINT-IQ	-42.56	346.05	Peter Wray
EO-22-002	254.62	Mnrlzd Carbonate vn	CrbV+MNZ		37.23	57.29		84.8	208.4	560900.5	5324888.0	141.5	SPRINT-IQ	-42.49	346.1	Peter Wray
EO-22-002	254.84	Carbonate only vein	CrbV		31.97	21.93		77.1	5.1	560900.4	5324888.2	141.4	SPRINT-IQ	-42.49	346.1	Peter Wray
EO-22-002	277.9	Mnrlzd Carbonate vn	CrbV+MNZ		20.31	190.53		23.8	11.4	560896.4	5324904.7	125.8	SPRINT-IQ	-42.38	346.27	Peter Wray
EO-22-002	282.62	Carbonate only vein	CrbV		30.31	201.42		21.0	48.2	560895.5	5324908.1	122.7	SPRINT-IQ	-42.36	346.3	Peter Wray
EO-22-002	282.78	Mnrlzd Carbonate vn	CrbV+MNZ		53.36	23.29		82.2	180.1	560895.5	5324908.2	122.5	SPRINT-IQ	-42.36	346.3	Peter Wray
EO-22-002	283.71	Carbonate only vein	CrbV		14.79	208.68		37.0	36.8	560895.4	5324908.9	121.9	SPRINT-IQ	-42.36	346.31	Peter Wray
EO-22-002	284.71	Carbonate only vein	CrbV		60.64	24.68		75.0	178.6	560895.2	5324909.6	121.2	SPRINT-IQ	-42.36	346.33	Peter Wray
EO-22-002	285.46	Carbonate only vein	CrbV		33.28	216.58		30.0	71.0	560895.1	5324910.1	120.7	SPRINT-IQ	-42.35	346.33	Peter Wray
EO-22-002	292.83	Carbonate only vein	CrbV		53.65	355.38		83.9	163.5	560893.8	5324915.4	115.8	SPRINT-IQ	-42.35	346.29	Peter Wray
EO-22-002	297.1	Mnrlzd Carbonate vn	CrbV+MNZ		61.38	50.62		68.5	189.8	560893.0	5324918.5	112.9	SPRINT-IQ	-42.35	346.31	Peter Wray
EO-22-002	299.3	Barren quartz vein	QzV		57.9	348.04		79.3	159.8	560892.6	5324920.1	111.4	SPRINT-IQ	-42.34	346.26	Peter Wray
EO-22-002	299.67	Mnrlzd Carbonate vn	CrbV+MNZ		50.55	353.37		86.9	162.0	560892.6	5324920.3	111.2	SPRINT-IQ	-42.34	346.26	Peter Wray
EO-22-002	303.67	Mnrlzd Carbonate vn	CrbV+MNZ		47.32	134.14		32.4	231.4	560891.9	5324923.2	108.5	SPRINT-IQ	-42.35	346.27	Peter Wray
EO-22-002	306.76	Barren quartz vein	QzV		55.74	334.53		79.6	152.1	560891.3	5324925.4	106.4	SPRINT-IQ	-42.33	346.32	Peter Wray
EO-22-002	306.81	Contact	CONTACT		60.67	17.18		76.0	174.9	560891.3	5324925.5	106.4	SPRINT-IQ	-42.33	346.32	Peter Wray
EO-22-002	308.18	Contact	CONTACT		70.83	6.72		66.7	168.7	560891.1	5324926.5	105.4	SPRINT-IQ	-42.33	346.33	Peter Wray
EO-22-002	309.15	Mnrlzd Carbonate vn	CrbV+MNZ		36.27	5.9		78.8	351.2	560890.9	5324927.1	104.8	SPRINT-IQ	-42.32	346.33	Peter Wray
EO-22-002	310.9	Mnrlzd Carbonate vn	CrbV+MNZ		65.07	61.03		62.6	190.8	560890.6	5324928.4	103.6	SPRINT-IQ	-42.33	346.29	Peter Wray
EO-22-002	311.36	Mnrlzd Carbonate vn	CrbV+MNZ		49.62	3.54		88.0	168.6	560890.5	5324928.7	103.3	SPRINT-IQ	-42.33	346.28	Peter Wray

Core Alignment: Bottom of Core
REFLEX IQ-LOGGER - 3481F40142B4

Coordinates: UTM Nad83 Zone 17

Appendix D

REPORT ON A DIAMOND DRILLING PROGRAM AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)
IQ Logger Oriented Structure Measurements

Drillhole	Depth (m)	Structure Description	Structure Code	Comments	Alpha	Beta	Gamma	Dip	Dip Direction (TN)	Easting (TN)	Northing (TN)	Elevation (TN)	Hole Path	Hole Dip	Hole Azimuth	Logger Name
EO-22-002	312.29	Mnrlzd Carbonate vn	CrbV+MNZ		46.8	359.11		89.1	345.7	560890.4	5324929.4	102.7	SPRINT-IQ	-42.33	346.28	Peter Wray
EO-22-002	312.72	Carbonate only vein	CrbV		27.09	202.9		24.1	44.4	560890.3	5324929.7	102.4	SPRINT-IQ	-42.33	346.29	Peter Wray
EO-22-002	312.73	Barren quartz vein	QzV		52.24	161.76		15.8	211.1	560890.3	5324929.7	102.4	SPRINT-IQ	-42.33	346.29	Peter Wray
EO-22-002	313.32	Carbonate only vein	CrbV		43.6	359.27		85.9	345.8	560890.2	5324930.1	102.0	SPRINT-IQ	-42.33	346.31	Peter Wray
EO-22-002	315.25	barren qz-carb vein	QzCrbV		50.39	16.34		86.2	176.7	560889.8	5324931.5	100.7	SPRINT-IQ	-42.32	346.36	Peter Wray
EO-22-002	316.01	Mnrlzd Carbonate vn	CrbV+MNZ		54.94	9.41		82.4	171.8	560889.7	5324932.1	100.2	SPRINT-IQ	-42.31	346.35	Peter Wray
EO-22-002	318.74	Barren quartz vein	QzV		36.79	346.56		80.0	335.4	560889.2	5324934.0	98.3	SPRINT-IQ	-42.28	346.31	Peter Wray
EO-22-002	319.26	Mnrlzd qz stringers	QzS+MNZ		40.46	342.15		84.3	332.8	560889.1	5324934.4	98.0	SPRINT-IQ	-42.28	346.32	Peter Wray
EO-22-002	320.77	Mnrlzd Carbonate vn	CrbV+MNZ		29.42	6.48		71.9	352.3	560888.9	5324935.5	97.0	SPRINT-IQ	-42.27	346.34	Peter Wray
EO-22-002	321.08	Mnrlzd Carbonate vn	CrbV+MNZ		26.48	8.73		69.2	354.7	560888.8	5324935.7	96.8	SPRINT-IQ	-42.27	346.34	Peter Wray
EO-22-002	321.65	Carbonate only vein	CrbV		25.92	359.54		68.2	345.9	560888.7	5324936.1	96.4	SPRINT-IQ	-42.26	346.34	Peter Wray
EO-22-002	325.72	Carbonate only vein	CrbV		25.55	183.43		16.9	357.1	560888.0	5324939.1	93.6	SPRINT-IQ	-42.22	346.35	Peter Wray
EO-22-002	351.33	Carbonate only vein	CrbV		14.3	267.65		78.8	85.7	560883.5	5324957.5	76.4	SPRINT-IQ	-42.13	346.51	Peter Wray
EO-22-002	354.5	Mnrlzd Carbonate vn	CrbV+MNZ		15.88	339.85		60.9	324.2	560883.0	5324959.8	74.3	SPRINT-IQ	-42.12	346.47	Peter Wray
EO-22-002	354.5	Mnrlzd Carbonate vn	CrbV+MNZ		48.23	171.66		8.5	207.5	560883.0	5324959.8	74.3	SPRINT-IQ	-42.12	346.47	Peter Wray
EO-22-002	357.96	Mnrlzd Carbonate vn	CrbV+MNZ		31.36	345.8		74.6	333.9	560882.4	5324962.3	72.0	SPRINT-IQ	-42.12	346.49	Peter Wray
EO-22-002	358.64	Mineralized qz vein	QzV+MNZ		36.07	52.8		88.2	206.6	560882.3	5324962.8	71.5	SPRINT-IQ	-42.12	346.48	Peter Wray
EO-22-002	359.29	Quartz stringers	QzS		46.26	131.05		34.8	232.5	560882.2	5324963.2	71.1	SPRINT-IQ	-42.12	346.47	Peter Wray
EO-22-002	362.52	Foliation	FOL		18.31	339.7		63.3	324.8	560881.6	5324965.6	68.9	SPRINT-IQ	-42.15	346.44	Peter Wray
EO-22-002	362.6	Carbonate only vein	CrbV		15.38	345.27		59.1	329.8	560881.6	5324965.6	68.9	SPRINT-IQ	-42.15	346.44	Peter Wray
EO-22-002	362.88	Mineralized QzCrbV	QzCrbV+MNZ		37.47	198.49		14.9	64.3	560881.5	5324965.8	68.7	SPRINT-IQ	-42.15	346.44	Peter Wray
EO-22-002	398.16	Mnrlzd Carbonate vn	CrbV+MNZ		27.89	331.13		74.8	320.3	560875.4	5324991.3	45.0	SPRINT-IQ	-41.95	346.59	Peter Wray
EO-22-002	399.19	Mnrlzd Carbonate vn	CrbV+MNZ		30.73	93.4		67.7	234.6	560875.2	5324992.0	44.4	SPRINT-IQ	-41.94	346.6	Peter Wray
EO-22-002	399.97	Barren quartz vein	QzV		19.48	68.1		87.8	47.7	560875.1	5324992.6	43.8	SPRINT-IQ	-41.92	346.62	Peter Wray
EO-22-002	400.17	Mnrlzd Carbonate vn	CrbV+MNZ		24.26	354.39		66.4	341.0	560875.1	5324992.8	43.7	SPRINT-IQ	-41.92	346.62	Peter Wray
EO-22-002	402.38	Barren quartz vein	QzV		48.41	88.74		60.8	216.2	560874.7	5324994.4	42.2	SPRINT-IQ	-41.88	346.66	Peter Wray
EO-22-002	404.41	Carbonate only vein	CrbV		56.54	10.85		81.2	172.6	560874.3	5324995.8	40.9	SPRINT-IQ	-41.86	346.61	Peter Wray
EO-22-002	409.5	Mnrlzd Carbonate vn	CrbV+MNZ		52.9	29.33		82.0	184.0	560873.5	5324999.5	37.5	SPRINT-IQ	-41.82	346.64	Peter Wray
EO-22-002	413.74	Mnrlzd Carbonate vn	CrbV+MNZ		53.73	337.38		82.5	153.4	560872.7	5325002.6	34.7	SPRINT-IQ	-41.78	346.65	Peter Wray
EO-22-002	418.3	Barren quartz vein	QzV		38.63	359.29		80.4	346.1	560872.0	5325005.9	31.6	SPRINT-IQ	-41.78	346.64	Peter Wray
EO-22-002	419.23	Barren quartz vein	QzV		26.11	18.35		70.0	4.2	560871.8	5325006.6	31.0	SPRINT-IQ	-41.76	346.66	Peter Wray
EO-22-002	426.88	Mnrlzd Carbonate vn	CrbV+MNZ		46.92	297.66		75.6	128.0	560870.5	5325012.1	25.9	SPRINT-IQ	-41.73	346.66	Peter Wray
EO-22-002	427.95	Mnrlzd Carbonate vn	CrbV+MNZ		35.68	213.94		27.0	75.1	560870.3	5325012.9	25.2	SPRINT-IQ	-41.71	346.68	Peter Wray
EO-22-002	430.92	Carbonate only vein	CrbV		39.49	74.18		74.6	217.1	560869.8	5325015.1	23.2	SPRINT-IQ	-41.69	346.71	Peter Wray
EO-22-003	32.42	Mnrlzd Carbonate vn	CrbV+MNZ		39.79	18.49		88.1	194.3	560684.0	5324922.7	293.1	SPRINT-IQ	-50.63	0.2	Peter Wray
EO-22-003	35.03	Carbonate only vein	CrbV		35.75	339		88.3	343.3	560684.0	5324924.4	291.0	SPRINT-IQ	-50.59	0.2	Peter Wray
EO-22-003	35.33	Carbonate only vein	CrbV		41.8	301.72		74.6	139.1	560684.0	5324924.5	290.8	SPRINT-IQ	-50.59	0.2	Peter Wray
EO-22-003	36.12	Mnrlzd Carbonate vn	CrbV+MNZ		46.87	29.83		79.2	200.5	560684.0	5324925.0	290.2	SPRINT-IQ	-50.58	0.19	Peter Wray
EO-22-003	38.34	Mnrlzd Carbonate vn	CrbV+MNZ		47.61	3.11		81.8	182.4	560684.0	5324926.5	288.5	SPRINT-IQ	-50.54	0.24	Peter Wray
EO-22-003	38.53	Mnrlzd Carbonate vn	CrbV+MNZ		31.15	191.62		21.2	28.7	560684.0	5324926.6	288.3	SPRINT-IQ	-50.54	0.25	Peter Wray
EO-22-003	40.17	Mnrlzd Carbonate vn	CrbV+MNZ		40.93	0.8		88.6	180.9	560684.0	5324927.6	287.1	SPRINT-IQ	-50.51	0.29	Peter Wray
EO-22-003	46.12	Contact	CONTACT		46	318.38		77.1	152.1	560684.0	5324931.4	282.5	SPRINT-IQ	-50.44	0.4	Peter Wray
EO-22-003	46.37	Mineralized qz vein	QzV+MNZ		43.5	351.42		85.8	174.2	560684.0	5324931.6	282.3	SPRINT-IQ	-50.44	0.41	Peter Wray
EO-22-003	48.54	Mineralized QzCrbV	QzCrbV+MNZ		49.41	48.89		71.8	211.5	560684.1	5324932.9	280.6	SPRINT-IQ	-50.41	0.46	Peter Wray
EO-22-003	48.81	Contact	CONTACT		47.88	343.94		80.8	169.6	560684.1	5324933.1	280.4	SPRINT-IQ	-50.41	0.46	Peter Wray
EO-22-003	49.39	Mnrlzd Carbonate vn	CrbV+MNZ		24.09	29.25		78.9	27.5	560684.1	5324933.5	280.0	SPRINT-IQ	-50.41	0.45	Peter Wray
EO-22-003	50.65	Carbonate only vein	CrbV		25.97	324.95		82.4	329.1	560684.1	5324934.3	279.0	SPRINT-IQ	-50.4	0.43	Peter Wray

Core Alignment: Bottom of Core
REFLEX IQ-LOGGER - 3481F40142B4

Coordinates: UTM Nad83 Zone 17

Appendix D

REPORT ON A DIAMOND DRILLING PROGRAM AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)
IQ Logger Oriented Structure Measurements

Drillhole	Depth (m)	Structure Description	Structure Code	Comments	Alpha	Beta	Gamma	Dip	Dip Direction (TN)	Easting (TN)	Northing (TN)	Elevation (TN)	Hole Path	Hole Dip	Hole Azimuth	Logger Name
EO-22-003	52.84	barren qz-carb vein	QzCrbV		26.81	48.07		88.1	42.1	560684.1	5324935.7	277.3	SPRINT-IQ	-50.39	0.5	Peter Wray
EO-22-003	53.92	Mnrlzd Carbonate vn	CrbV+MNZ		15.41	346.11		66.9	346.0	560684.1	5324936.4	276.5	SPRINT-IQ	-50.39	0.55	Peter Wray
EO-22-003	55.22	Mnrlzd Carbonate vn	CrbV+MNZ		47.32	31.19		78.7	201.5	560684.1	5324937.2	275.5	SPRINT-IQ	-50.38	0.54	Peter Wray
EO-22-003	60.43	barren qz-carb vein	QzCrbV		12.29	178.15		38.0	357.6	560684.1	5324940.5	271.5	SPRINT-IQ	-50.3	0.55	Peter Wray
EO-22-003	63.89	Foliation	FOL		26.76	75.37		78.3	242.5	560684.1	5324942.7	268.8	SPRINT-IQ	-50.31	0.54	Peter Wray
EO-22-003	64.4	barren qz-carb vein	QzCrbV		42.74	62.03		72.4	223.4	560684.1	5324943.1	268.4	SPRINT-IQ	-50.3	0.54	Peter Wray
EO-22-003	66.11	Foliation	FOL		27.5	32.45		82.9	29.2	560684.2	5324944.2	267.1	SPRINT-IQ	-50.28	0.55	Peter Wray
EO-22-003	79.26	Mnrlzd Carbonate vn	CrbV+MNZ		43.45	325.03		81.5	155.9	560684.3	5324952.6	257.0	SPRINT-IQ	-50.18	0.76	Peter Wray
EO-22-003	79.37	Mnrlzd Carbonate vn	CrbV+MNZ		52.62	29.17		74.3	198.7	560684.3	5324952.6	256.9	SPRINT-IQ	-50.18	0.76	Peter Wray
EO-22-003	80.63	Mnrlzd Carbonate vn	CrbV+MNZ		43.04	41.85		79.9	210.5	560684.3	5324953.4	255.9	SPRINT-IQ	-50.17	0.78	Peter Wray
EO-22-003	80.98	Mnrlzd Carbonate vn	CrbV+MNZ		43.23	359.08		86.6	180.1	560684.3	5324953.7	255.7	SPRINT-IQ	-50.17	0.78	Peter Wray
EO-22-003	86.47	Mnrlzd Carbonate vn	CrbV+MNZ		37.38	345.51		88.5	349.4	560684.3	5324957.2	251.4	SPRINT-IQ	-50.15	0.86	Peter Wray
EO-22-003	88.97	Carbonate only vein	CrbV		5.44	15.77		57.2	19.6	560684.3	5324958.8	249.5	SPRINT-IQ	-50.12	0.87	Peter Wray
EO-22-003	90.17	Mineralized QzCrbV	QzCrbV+MNZ		31.11	334.52		84.3	339.2	560684.4	5324959.6	248.6	SPRINT-IQ	-50.1	0.88	Peter Wray
EO-22-003	95.5	Contact	CONTACT		31.28	22.75		83.8	20.5	560684.4	5324963.0	244.5	SPRINT-IQ	-50.08	1.04	Peter Wray
EO-22-003	97.13	barren qz-carb vein	QzCrbV		50.01	352.57		79.7	176.2	560684.4	5324964.0	243.3	SPRINT-IQ	-50.06	1.08	Peter Wray
EO-22-003	97.54	Contact	CONTACT		30.52	293.28		80.2	127.7	560684.4	5324964.3	242.9	SPRINT-IQ	-50.05	1.09	Peter Wray
EO-22-003	100.52	Carbonate only vein	CrbV		54.77	350.51		74.9	175.5	560684.5	5324966.2	240.7	SPRINT-IQ	-50.02	1.16	Peter Wray
EO-22-003	103.68	Contact	CONTACT		31.58	259.91		60.2	106.0	560684.5	5324968.2	238.2	SPRINT-IQ	-50	1.18	Peter Wray
EO-22-003	105.79	Contact	CONTACT		29.56	319.34		87.4	326.6	560684.5	5324969.6	236.6	SPRINT-IQ	-49.99	1.19	Peter Wray
EO-22-003	107.22	Contact	CONTACT		30.41	358.03		80.4	359.5	560684.6	5324970.5	235.5	SPRINT-IQ	-49.99	1.22	Peter Wray
EO-22-003	112.99	Mineralized QzCrbV	QzCrbV+MNZ		23.73	15.29		74.9	15.8	560684.6	5324974.2	231.1	SPRINT-IQ	-49.96	1.35	Peter Wray
EO-22-003	114.66	Carbonate only vein	CrbV		31.35	91.19		65.8	250.8	560684.7	5324975.3	229.8	SPRINT-IQ	-49.95	1.38	Peter Wray
EO-22-003	152.02	Mineralized QzCrbV	QzCrbV+MNZ		45.34	346.8		84.3	172.6	560685.4	5324999.4	201.3	SPRINT-IQ	-49.66	1.91	Peter Wray
EO-22-003	154.36	Barren quartz vein	QzV		60.71	189.86		12.4	159.0	560685.4	5325000.9	199.5	SPRINT-IQ	-49.63	1.94	Peter Wray
EO-22-003	157.35	Contact	CONTACT		54.67	206.11		16.7	119.6	560685.5	5325002.9	197.2	SPRINT-IQ	-49.62	1.98	Peter Wray
EO-22-003	157.88	Carbonate only vein	CrbV		38.07	219.92		30.6	85.2	560685.5	5325003.2	196.8	SPRINT-IQ	-49.62	1.99	Peter Wray
EO-22-003	196.41	Barren quartz vein	QzV		20.76	239.45		54.7	83.5	560686.5	5325028.2	167.5	SPRINT-IQ	-49.4	2.68	Peter Wray
EO-22-003	196.97	Mineralized qz vein	QzV+MNZ		46.84	138.85		27.3	262.1	560686.5	5325028.6	167.1	SPRINT-IQ	-49.4	2.68	Peter Wray
EO-22-003	198.7	Mineralized qz vein	QzV+MNZ		36.15	343.72		86.7	349.6	560686.6	5325029.7	165.8	SPRINT-IQ	-49.38	2.69	Peter Wray
EO-22-003	199.62	Mnrlzd Carbonate vn	CrbV+MNZ		57.7	326.97		69.5	164.6	560686.6	5325030.3	165.1	SPRINT-IQ	-49.37	2.7	Peter Wray
EO-22-003	201.76	Barren quartz vein	QzV		27.58	283.19		77.3	120.5	560686.7	5325031.7	163.5	SPRINT-IQ	-49.38	2.71	Peter Wray
EO-22-003	211.45	Mineralized QzCrbV	QzCrbV+MNZ		57.43	322.25		68.8	162.0	560687.0	5325038.0	156.1	SPRINT-IQ	-49.28	2.69	Peter Wray
EO-22-003	213.6	Mnrlzd Carbonate vn	CrbV+MNZ		26.35	304.2		89.6	134.9	560687.1	5325039.4	154.5	SPRINT-IQ	-49.18	2.71	Peter Wray
EO-22-003	214.36	Barren quartz vein	QzV		45.71	11.5		84.6	190.8	560687.1	5325039.9	153.9	SPRINT-IQ	-49.15	2.72	Peter Wray
EO-22-003	214.93	Mnrlzd Carbonate vn	CrbV+MNZ		29.73	36.44		85.3	33.9	560687.1	5325040.3	153.5	SPRINT-IQ	-49.14	2.73	Peter Wray
EO-22-003	215.5	Mineralized qz vein	QzV+MNZ		41.89	60.98		74.4	225.3	560687.1	5325040.6	153.1	SPRINT-IQ	-49.12	2.73	Peter Wray
EO-22-003	224.45	Carbonate only vein	CrbV		37.35	313.45		84.4	147.4	560687.4	5325046.5	146.3	SPRINT-IQ	-48.93	2.89	Peter Wray
EO-22-003	225.94	Carbonate only vein	CrbV		59.25	124.72		33.0	233.5	560687.4	5325047.5	145.2	SPRINT-IQ	-48.91	2.89	Peter Wray
EO-22-003	226.12	Sulphide stringer	SULPH STG		30.78	255.44		58.2	104.7	560687.5	5325047.6	145.0	SPRINT-IQ	-48.91	2.89	Peter Wray
EO-22-003	226.51	Carbonate only vein	CrbV		39.16	312.77		82.5	147.9	560687.5	5325047.8	144.8	SPRINT-IQ	-48.9	2.89	Peter Wray
EO-22-003	226.51	Carbonate only vein	CrbV		39.88	313.1		82.0	148.4	560687.5	5325047.8	144.8	SPRINT-IQ	-48.9	2.89	Peter Wray
EO-22-003	228.59	Mnrlzd Carbonate vn	CrbV+MNZ		30.44	343.05		80.8	348.1	560687.5	5325049.2	143.2	SPRINT-IQ	-48.89	2.89	Peter Wray
EO-22-003	229.05	Mnrlzd Carbonate vn	CrbV+MNZ		49.32	178.56		1.0	247.7	560687.6	5325049.5	142.8	SPRINT-IQ	-48.89	2.9	Peter Wray
EO-22-003	230.22	Fault with gouge	FLT+gg		55.13	277.75		55.4	139.4	560687.6	5325050.3	142.0	SPRINT-IQ	-48.88	2.9	Peter Wray
EO-22-003	231.3	Mineralized QzCrbV	QzCrbV+MNZ		27.4	328.12		81.4	334.6	560687.6	5325051.0	141.1	SPRINT-IQ	-48.88	2.92	Peter Wray
EO-22-003	231.3	Carbonate only vein	CrbV		36.11	351.7		85.3	356.2	560687.6	5325051.0	141.1	SPRINT-IQ	-48.88	2.92	Peter Wray

Core Alignment: Bottom of Core
REFLEX IQ-LOGGER - 3481F40142B4

Coordinates: UTM Nad83 Zone 17

REPORT ON A DIAMOND DRILLING PROGRAM AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)
IQ Logger Oriented Structure Measurements

Drillhole	Depth (m)	Structure Description	Structure Code	Comments	Alpha	Beta	Gamma	Dip	Dip Direction (TN)	Easting (TN)	Northing (TN)	Elevation (TN)	Hole Path	Hole Dip	Hole Azimuth	Logger Name
EO-22-003	245.12	Barren quartz vein	QzV		24.27	146.56		35.9	304.2	560688.1	5325060.1	130.7	SPRINT-IQ	-48.88	3.08	Peter Wray
EO-22-003	245.24	Barren quartz vein	QzV		42.8	336.44		86.0	166.0	560688.1	5325060.1	130.6	SPRINT-IQ	-48.88	3.08	Peter Wray
EO-22-003	245.78	Contact	CONTACT		58.85	70.71		57.8	218.3	560688.1	5325060.5	130.2	SPRINT-IQ	-48.89	3.1	Peter Wray
EO-22-003	256.25	Carbonate only vein	CrbV		51.16	17.87		78.9	194.6	560688.5	5325067.4	122.3	SPRINT-IQ	-48.81	3.24	Peter Wray
EO-22-003	257.53	Carbonate only vein	CrbV		37.32	330.57		90.0	340.3	560688.6	5325068.2	121.4	SPRINT-IQ	-48.8	3.26	Peter Wray
EO-22-003	257.85	Carbonate only vein	CrbV		19.11	194.18		31.8	29.3	560688.6	5325068.4	121.1	SPRINT-IQ	-48.8	3.26	Peter Wray
EO-22-003	263.75	Mnrlzd Carbonate vn	CrbV+MNZ		34.77	328.63		88.1	338.1	560688.8	5325072.3	116.7	SPRINT-IQ	-48.73	3.38	Peter Wray
EO-22-003	265	Mnrlzd Carbonate vn	CrbV+MNZ		29.36	62.83		83.9	234.6	560688.8	5325073.1	115.8	SPRINT-IQ	-48.72	3.4	Peter Wray
EO-22-003	265.67	Barren quartz vein	QzV		17.65	336.71		69.5	339.7	560688.9	5325073.6	115.3	SPRINT-IQ	-48.72	3.4	Peter Wray
EO-22-003	275.18	Contact	CONTACT		23.28	293.9		87.1	126.3	560689.2	5325079.8	108.1	SPRINT-IQ	-48.61	3.54	Peter Wray
EO-22-003	276.71	Mineralized QzCrbV	QzCrbV+MNZ		27.86	305.83		89.5	137.8	560689.3	5325080.9	107.0	SPRINT-IQ	-48.58	3.56	Peter Wray
EO-22-003	276.98	Mineralized QzCrbV	QzCrbV+MNZ		33.73	328.28		87.0	337.6	560689.3	5325081.0	106.8	SPRINT-IQ	-48.58	3.56	Peter Wray
EO-22-003	277.78	Mineralized QzCrbV	QzCrbV+MNZ		26.09	52.77		88.3	49.2	560689.4	5325081.6	106.2	SPRINT-IQ	-48.57	3.57	Peter Wray
EO-22-003	280.47	Carbonate only vein	CrbV		62.04	238.55		34.5	138.7	560689.5	5325083.3	104.2	SPRINT-IQ	-48.54	3.6	Peter Wray
EO-22-003	292.05	Carbonate only vein	CrbV		23.03	320.77		79.6	327.5	560690.0	5325091.0	95.5	SPRINT-IQ	-48.4	3.74	Peter Wray
EO-22-003	298.65	Carbonate only vein	CrbV		23.34	348.56		72.4	352.9	560690.2	5325095.4	90.6	SPRINT-IQ	-48.33	3.88	Peter Wray
EO-22-003	306.15	Carbonate only vein	CrbV		45.07	52.09		76.2	219.0	560690.6	5325100.4	85.0	SPRINT-IQ	-48.25	3.98	Peter Wray
EO-22-003	308.61	Carbonate only vein	CrbV		51.83	271.73		55.0	135.0	560690.7	5325102.0	83.1	SPRINT-IQ	-48.23	3.97	Peter Wray
EO-22-003	309.52	Carbonate only vein	CrbV		20.29	358.18		68.5	2.2	560690.7	5325102.6	82.4	SPRINT-IQ	-48.22	3.99	Peter Wray
EO-22-003	315.12	Carbonate only vein	CrbV		18.35	328.38		72.3	332.6	560691.0	5325106.3	78.3	SPRINT-IQ	-48.15	4.08	Peter Wray
EO-22-003	329.5	Mnrlzd Carbonate vn	CrbV+MNZ		26.52	321.39		82.4	330.0	560691.7	5325115.9	67.6	SPRINT-IQ	-48.22	4.29	Peter Wray
EO-22-003	339.31	Barren quartz vein	QzV		39.33	40.71		85.4	214.9	560692.2	5325122.4	60.2	SPRINT-IQ	-48.15	4.46	Peter Wray
EO-22-003	351.28	Fault with gouge	FLT+gg		19.26	13.67		68.5	18.6	560692.8	5325130.4	51.3	SPRINT-IQ	-48.09	4.68	Peter Wray
EO-22-003	359.23	Mnrlzd Carbonate vn	CrbV+MNZ		15.24	111.98		64.1	280.7	560693.3	5325135.7	45.4	SPRINT-IQ	-48.03	4.77	Peter Wray
EO-22-003	359.74	Mnrlzd Carbonate vn	CrbV+MNZ		9.74	324.75		65.6	326.1	560693.3	5325136.0	45.0	SPRINT-IQ	-48.02	4.78	Peter Wray
EO-22-003	366.79	Barren quartz vein	QzV		64.76	321.64		63.4	167.6	560693.7	5325140.7	39.8	SPRINT-IQ	-47.91	4.81	Peter Wray
EO-22-003	366.95	Mnrlzd Carbonate vn	CrbV+MNZ		54.2	262.69		49.3	134.9	560693.7	5325140.8	39.7	SPRINT-IQ	-47.9	4.82	Peter Wray
EO-22-003	367.26	Mnrlzd Carbonate vn	CrbV+MNZ		65.27	68.61		55.1	213.2	560693.7	5325141.0	39.5	SPRINT-IQ	-47.9	4.83	Peter Wray
EO-22-003	367.81	Contact	CONTACT		16.33	26.64		68.5	32.4	560693.8	5325141.4	39.0	SPRINT-IQ	-47.89	4.85	Peter Wray
EO-22-003	370.72	Barren quartz vein	QzV		19.46	356.45		67.4	1.3	560693.9	5325143.3	36.9	SPRINT-IQ	-47.86	4.95	Peter Wray
EO-22-003	371.49	Carbonate only vein	CrbV		17.63	49.24		78.9	52.3	560694.0	5325143.9	36.3	SPRINT-IQ	-47.85	4.97	Peter Wray
EO-22-003	372.87	Mnrlzd Carbonate vn	CrbV+MNZ		13.5	133.72		51.4	300.9	560694.0	5325144.8	35.3	SPRINT-IQ	-47.83	4.97	Peter Wray
EO-22-003	374.63	barren qz-carb vein	QzCrbV		20.03	12.64		68.8	17.7	560694.2	5325146.0	34.0	SPRINT-IQ	-47.8	4.94	Peter Wray
EO-22-003	374.91	barren qz-carb vein	QzCrbV		44.49	86.27		60.8	239.6	560694.2	5325146.1	33.8	SPRINT-IQ	-47.79	4.93	Peter Wray
EO-22-003	376.47	Carbonate only vein	CrbV		40.65	331.88		88.1	164.0	560694.3	5325147.2	32.6	SPRINT-IQ	-47.79	5	Peter Wray
EO-22-003	376.56	Flt plane - no gouge	FLT		26.41	341		76.1	347.5	560694.3	5325147.2	32.6	SPRINT-IQ	-47.78	5	Peter Wray
EO-22-003	377.19	Carbonate only vein	CrbV		30.08	68.78		80.8	239.9	560694.3	5325147.7	32.1	SPRINT-IQ	-47.78	5.03	Peter Wray
EO-22-003	378.97	Fault with gouge	FLT+gg		44.47	330.57		84.2	164.4	560694.4	5325148.9	30.8	SPRINT-IQ	-47.79	5.05	Peter Wray
EO-22-003	379.96	Barren quartz vein	QzV		24.01	254.57		62.3	101.1	560694.5	5325149.5	30.0	SPRINT-IQ	-47.79	5.04	Peter Wray
EO-22-003	384.34	Carbonate only vein	CrbV		22.81	143.97		38.0	303.3	560694.7	5325152.5	26.8	SPRINT-IQ	-47.75	5.08	Peter Wray
EO-22-003	385.63	Contact	CONTACT		38.88	328.43		88.9	161.0	560694.8	5325153.3	25.8	SPRINT-IQ	-47.74	5.07	Peter Wray
EO-22-003	389.13	Carbonate only vein	CrbV		50.41	7.74		81.7	190.1	560695.0	5325155.7	23.3	SPRINT-IQ	-47.7	5.15	Peter Wray
EO-22-003	389.65	Carbonate only vein	CrbV		34.99	65.98		78.5	235.0	560695.0	5325156.0	22.9	SPRINT-IQ	-47.69	5.17	Peter Wray
EO-22-003	390.35	Carbonate only vein	CrbV		23.5	107.1		61.6	270.7	560695.1	5325156.5	22.4	SPRINT-IQ	-47.68	5.18	Peter Wray
EO-22-003	391.4	Carbonate only vein	CrbV		33.39	73.72		75.6	241.0	560695.1	5325157.2	21.6	SPRINT-IQ	-47.68	5.18	Peter Wray
EO-22-003	406.02	Carbonate only vein	CrbV		19.13	212.43		38.8	59.5	560696.1	5325167.0	10.8	SPRINT-IQ	-47.62	5.52	Peter Wray
EO-22-003	408.29	Carbonate only vein	CrbV		20.08	18.61		69.8	24.2	560696.2	5325168.5	9.1	SPRINT-IQ	-47.65	5.56	Peter Wray

Core Alignment: Bottom of Core
REFLEX IQ-LOGGER - 3481F40142B4

Coordinates: UTM Nad83 Zone 17

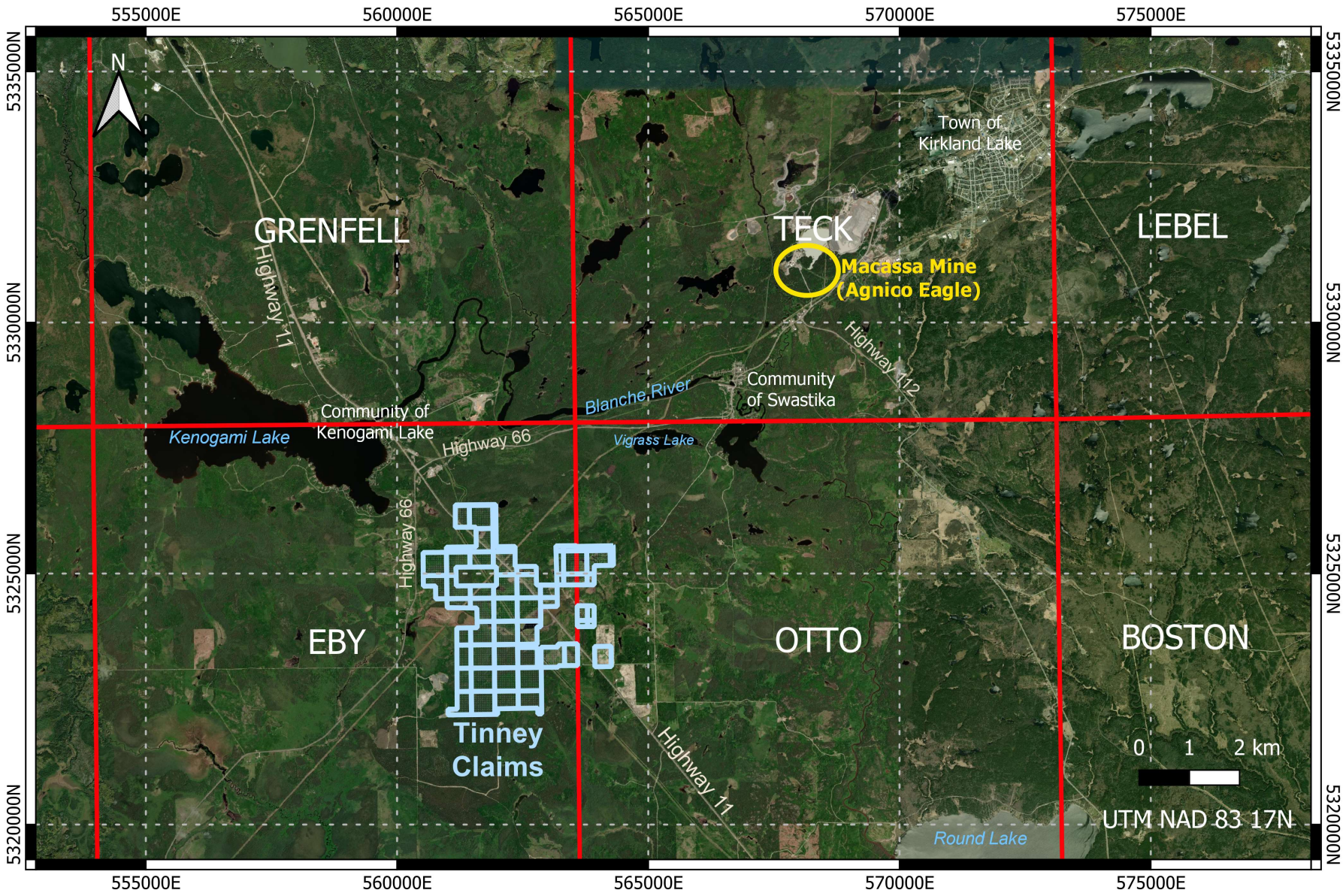
REPORT ON A DIAMOND DRILLING PROGRAM AT THE HIGHWAY 66 CLAIMS (TINNEY OPTION AGREEMENT)

IQ Logger Oriented Structure Measurements

Drillhole	Depth (m)	Structure Description	Structure Code	Comments	Alpha	Beta	Gamma	Dip	Dip Direction (TN)	Easting (TN)	Northing (TN)	Elevation (TN)	Hole Path	Hole Dip	Hole Azimuth	Logger Name
EO-22-003	408.6	Carbonate only vein	CrbV		18.66	7.07		66.6	12.9	560696.2	5325168.7	8.9	SPRINT-IQ	-47.64	5.56	Peter Wray
EO-22-003	410.94	Carbonate only vein	CrbV		72.46	74.34		49.5	208.1	560696.4	5325170.3	7.1	SPRINT-IQ	-47.6	5.62	Peter Wray
EO-22-003	412.62	Carbonate only vein	CrbV		13.05	61.04		81.3	65.2	560696.5	5325171.4	5.9	SPRINT-IQ	-47.58	5.67	Peter Wray
EO-22-003	413.67	Carbonate only vein	CrbV		12.45	348.19		60.9	352.5	560696.6	5325172.1	5.1	SPRINT-IQ	-47.56	5.7	Peter Wray
EO-22-003	416.52	Carbonate only vein	CrbV		24.35	29.18		76.5	32.9	560696.8	5325174.0	3.0	SPRINT-IQ	-47.52	5.74	Peter Wray
EO-22-003	425.05	Barren quartz vein	QzV		19.77	71.55		87.3	249.3	560697.3	5325179.8	-3.3	SPRINT-IQ	-47.41	5.93	Peter Wray
EO-22-003	429.32	Carbonate only vein	CrbV		9.91	268.37		81.6	101.6	560697.6	5325182.6	-6.4	SPRINT-IQ	-47.36	6.02	Peter Wray
EO-22-003	430.08	Carbonate only vein	CrbV		22.43	350.67		70.3	356.9	560697.7	5325183.2	-7.0	SPRINT-IQ	-47.35	6.04	Peter Wray
EO-22-003	475.68	Mnrlzd Carbonate vn	CrbV+MNZ		12.35	330.21		65.2	334.7	560701.2	5325213.9	-40.4	SPRINT-IQ	-47.12	7.03	Peter Wray
EO-22-003	478.54	Carbonate only vein	CrbV		18.56	36.65		73.5	43.2	560701.5	5325215.9	-42.5	SPRINT-IQ	-47.11	7.06	Peter Wray
EO-22-003	486.86	Mineralized QzCrbV	QzCrbV+MNZ		31.51	115.33		50.9	270.6	560702.2	5325221.5	-48.6	SPRINT-IQ	-47.07	7.2	Peter Wray
EO-22-003	501	Barren quartz vein	QzV		48.62	161.65		12.4	263.3	560703.4	5325231.0	-59.0	SPRINT-IQ	-47.02	7.43	Peter Wray
EO-22-003	506.56	Carbonate only vein	CrbV		33.17	56.05		85.3	231.7	560703.9	5325234.8	-63.0	SPRINT-IQ	-47.06	7.52	Peter Wray
EO-22-003	509.12	Carbonate only vein	CrbV		26.52	76.21		79.5	249.7	560704.1	5325236.5	-64.9	SPRINT-IQ	-47.05	7.59	Peter Wray
EO-22-003	513.65	Carbonate only vein	CrbV		21.89	343.32		70.5	351.3	560704.5	5325239.6	-68.2	SPRINT-IQ	-47.01	7.72	Peter Wray
EO-22-003	524.81	Mnrlzd Carbonate vn	CrbV+MNZ		25.18	339.87		74.3	349.0	560705.6	5325247.1	-76.4	SPRINT-IQ	-46.89	7.89	Peter Wray
EO-22-003	527.32	Carbonate only vein	CrbV		38.3	41.46		87.1	219.3	560705.8	5325248.8	-78.2	SPRINT-IQ	-46.86	7.94	Peter Wray
EO-22-003	531.54	Mnrlzd Carbonate vn	CrbV+MNZ		47.46	319.32		79.3	161.3	560706.2	5325251.7	-81.3	SPRINT-IQ	-46.81	7.95	Peter Wray
EO-22-003	531.7	Carbonate only vein	CrbV		29.24	53.26		89.9	52.3	560706.2	5325251.8	-81.4	SPRINT-IQ	-46.81	7.95	Peter Wray
EO-22-003	532.14	Mnrlzd Carbonate vn	CrbV+MNZ		49.35	316.82		76.8	160.7	560706.3	5325252.1	-81.7	SPRINT-IQ	-46.8	7.96	Peter Wray
EO-22-003	538.01	barren qz-carb vein	QzCrbV		40.95	323.79		86.6	161.5	560706.8	5325256.1	-86.0	SPRINT-IQ	-46.76	8.09	Peter Wray
EO-22-003	551.2	Carbonate only vein	CrbV		46.96	291.95		69.1	145.6	560708.1	5325265.0	-95.6	SPRINT-IQ	-46.64	8.27	Peter Wray
EO-22-003	557.21	Mnrlzd Carbonate vn	CrbV+MNZ		8.67	52.84		72.5	64.1	560708.7	5325269.1	-100.0	SPRINT-IQ	-46.61	8.41	Peter Wray
EO-22-003	563.38	Mnrlzd Carbonate vn	CrbV+MNZ		43.97	53.19		78.0	224.6	560709.3	5325273.3	-104.5	SPRINT-IQ	-46.58	8.5	Peter Wray
EO-22-003	567.72	Carbonate only vein	CrbV		16.45	1.54		63.0	10.2	560709.8	5325276.3	-107.6	SPRINT-IQ	-46.57	8.51	Peter Wray
EO-22-003	583.94	Carbonate only vein	CrbV		37.11	26.58		86.8	29.6	560711.4	5325287.3	-119.4	SPRINT-IQ	-46.38	8.63	Peter Wray
EO-22-003	594.75	Carbonate only vein	CrbV		44.53	272.65		61.1	134.3	560712.6	5325294.7	-127.2	SPRINT-IQ	-46.21	8.75	Peter Wray
EO-22-003	601	barren qz-carb vein	QzCrbV		48.75	268.69		56.5	136.5	560713.2	5325299.0	-131.7	SPRINT-IQ	-46.15	8.76	Peter Wray
EO-22-003	605.38	Mnrlzd Carbonate vn	CrbV+MNZ		49.97	4.05		83.9	191.4	560713.7	5325302.0	-134.9	SPRINT-IQ	-46.11	8.77	Peter Wray
EO-22-003	612.69	Contact	CONTACT		77.39	283.57		48.2	172.3	560714.5	5325307.0	-140.1	SPRINT-IQ	-46.03	8.85	Peter Wray
EO-22-003	616.5	Carbonate only vein	CrbV		16.2	308.42		77.7	318.5	560714.9	5325309.6	-142.9	SPRINT-IQ	-46	8.89	Peter Wray
EO-22-003	622.7	Mnrlzd Carbonate vn	CrbV+MNZ		63.62	50.65		63.4	211.5	560715.5	5325313.8	-147.3	SPRINT-IQ	-45.94	8.94	Peter Wray
EO-22-003	634.72	Carbonate only vein	CrbV		19.86	183.73		26.2	17.1	560716.9	5325322.1	-156.0	SPRINT-IQ	-45.85	9.12	Peter Wray

Core Alignment: Bottom of Core
REFLEX IQ-LOGGER - 3481F40142B4

Coordinates: UTM Nad83 Zone 17


555000E
560000E
565000E
570000E
575000E
5335000N
5330000N
5325000N
5320000N
N
GRENFELL
TECK
LEBEL
EBY
OTTO
BOSTON
Town of
Kirkland Lake
Macassa Mine
(Agnico Eagle)
Highway 11
Highway 112
Blanche River
Community
of Swastika
Community of
Kenogami Lake
Kenogami Lake
Highway 66
Vigrass Lake
Tinney
Claims
Round Lake
0 1 2 km
UTM NAD 83 17N