Report on Drilling of One Hole On Claim 1247797 in the Kerr Lake Area, Coleman Township, Ontario

Assessment Report for Cabo Mining Enterprises Corp.

S. Sears July, 2005

2,30305

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INTRODUCTION

One drill hole (COB-24) totalling 320 metres was completed on Claim 1247797 (the Silver Leaf claim) as part of a larger drill program being carried out in the Cobalt area. The hole was drilled to test for Cobalt Type Ag-Co mineralization hosted by calcite/quartz veins and is located just WSW of Kerr Lake within an area containing several exploration trenches and pits and three old shafts. The drilling was contracted out to Norex Drilling Ltd. of Timmins, Ontario. Logging and drill supervision were completed by personnel of Cabo Mining Enterprises Corp. under the supervision of Seymour Sears, P.Geo. (Sears, Barry & Associates Ltd.). The drilling was completed between May 26th and 29th, 2005, with logging completed by June 31st, 2005. Kerr Lake is located approximately three (3) km southeast of the town of Cobalt (Figures 1 & 2).

PROPERTY DESCRIPTION & ACCESS

Hole COB-24 was collared on Claim 1247797, which is located in the eastern part of Coleman Township, Larder Lake Mining Division, Ontario (Fig. 2).

Access is via the all season gravel Coleman Road that departs southeastwards from Highway 11B at the southwestern end of the town of Cobalt for 2.8 km.

GEOGRAPHY

Maximum relief in the area is less than 25 metres. Topography is generally rolling with local bedrock ridges. Kerr Lake occupies the eastern part of the claim area and is drained southwestwards by a creek that crosses the southern part of the claim en route to Giroux Lake.

Much of the area is covered by relatively shallow overburden and vegetation consists mainly of mature mixed forest and locally dense underbrush. Mine waste piles are common along the edge of Kerr Lake and along its drainage creek.

EXPLORATION HISTORY

The following is taken from Thompson (1961) and Sergiades (1968). Extensive work and limited silver production have been carried out on the claim. This includes three shafts: a) the Main, b) the Crown Reserve and c) the North, all with associated underground workings. Silver Leaf Mining Co. Ltd. commenced work in 1905 and discovered a vein in 1907 along the shore of Kerr Lake in the vicinity of the Main Shaft. This vein, later known as the Carson vein, proved to be one of the richest silver veins in the Cobalt Camp yielding a little over 9.2 million oz. silver by the end of 1919. However, the major and richest part of the Carson vein was on the contiguous Crown Reserve claim to the east of the Silver Leaf claim. Intermittent silver production between 1906 and 1931 from the Silver Leaf claim, which was leased to the Crown

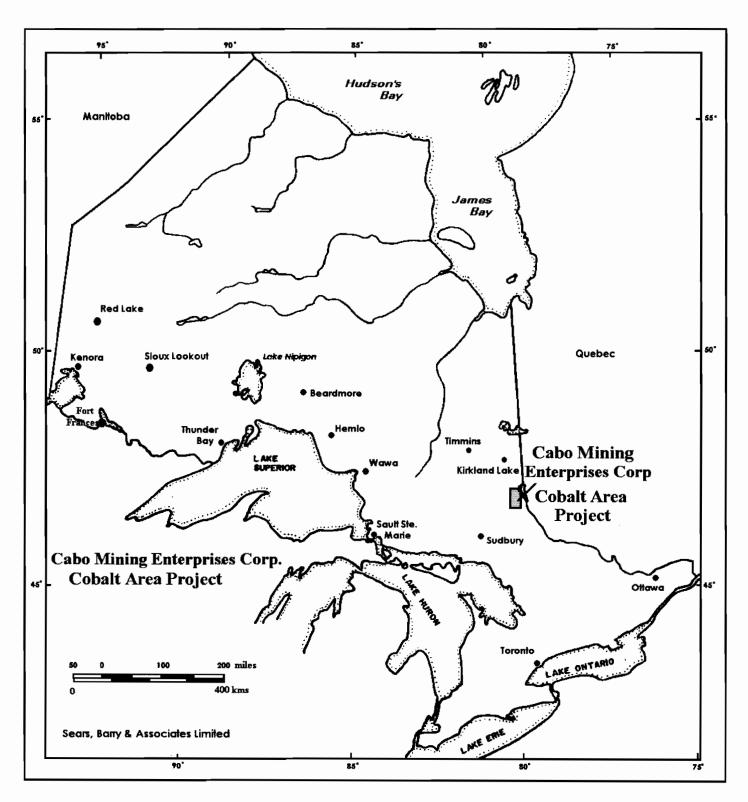
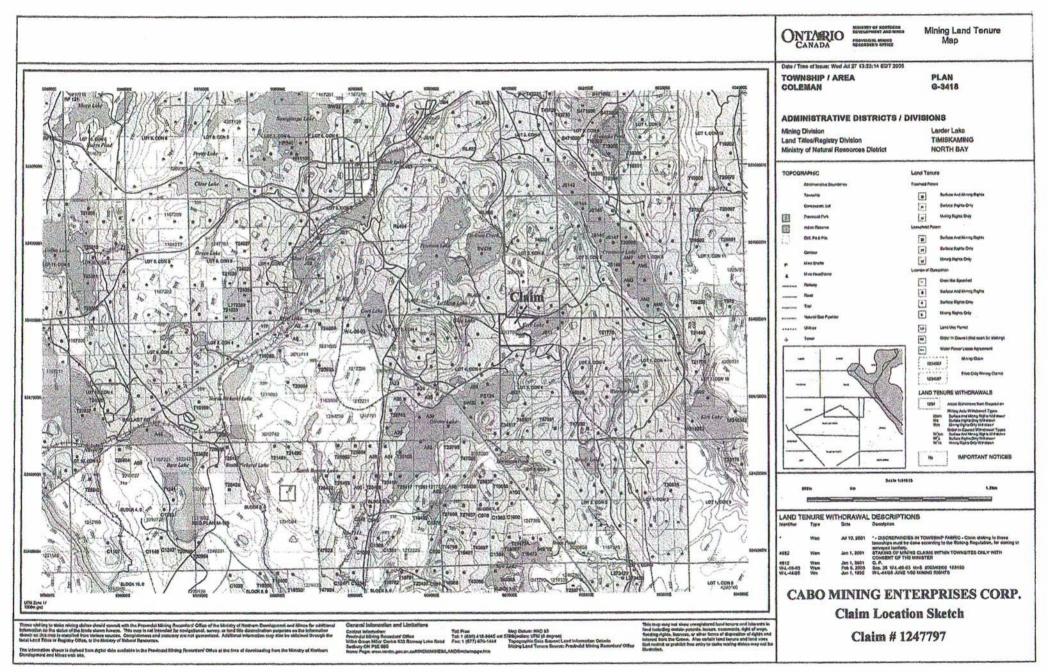


Figure 1: Regional Location Map of Ontario



Reserve Mining Co. Ltd. from 1909 to 1919 amounted to 495,443 oz. silver and 1206 lbs. cobalt. From 1906 to 1921, excluding 1916 to 1920, the ore had a grade of 1,516 oz. Ag/ton. The Main Shaft was 300 feet deep with levels at 50, 75, 100, 130, and 300 feet. A one inch wide vein assaying 1,000 oz. Ag/ton has been reported from the 75 foot level about 500 feet west of the Main Shaft.

The Crown Reserve Shaft is about 90 m ESE of the Main Shaft and is 300 feet deep. Levels occur at 50, 100, 150, 200, 250, and 300 feet. A winze was put down from the 300-foot level to the 460-foot level. From 1908 to 1948 silver and cobalt production amounted to a little over 20.3 million oz. and 33,300 lbs., respectively.

The North Shaft was sunk in 1909 by the Crown Reserve Mining Co. Ltd. to gain access to the east-west trending fault-related North vein that occurs in both the Silver Leaf and Crown Reserve claims. The shaft has a depth of 500 feet and a level at 500 feet that is continuous with the 460-foot level of the Crown Reserve Shaft. A winze was sunk on the North vein from the 500-foot level to 800 feet and sublevels occur at 550, 700 and 800 feet. A raise from the 500-foot level, also driven into the North vein, gave access to sublevels at 450 and 300 feet. About 100,000 oz. of silver were produced from the North vein and it has been reported to contain some gold. There is also an 800-foot long crosscut towards the northeast on the 500-foot level from the shaft.

In 1946 seven drill holes were drilled in the southwest corner of the claim and in 1959 four drill holes were drilled in the northwestern part of the claim. The Main Shaft workings were reexamined between 1952 and 1955 when Kerr Lake was drained and the Main and Crown Reserve Shafts were dewatered.

An airborne geophysical survey carried out on behalf of the OGS (OGS, 2000, Map # 82067) includes the claim area. Reconnaissance geological mapping of the southern half of the claim was undertaken in 2003 (Sears, 2003).

REGIONAL AND PROPERTY GEOLOGY

The area is located in the heart of the Cobalt mining camp. Conglomerates and quartzites of the Coleman Formation underlie the immediate area of the drill hole with Nipissing Diabase occurring within about 75 metres towards the north and Archean mafic volcanics within 200 metres towards the south (Sears, 2003; Thompson, 1963). These rocks are part of the northern limb of the northeast trending Kerr Lake Diabase Arch with the sediments generally dipping between 15° and 20° towards the north. The bottom contact of the Nipissing Diabase, which cross cuts the sediments, dips between 40° and 60° towards the north.

Hole COB-24 lies approximately 70 metres southwest of the Main Shaft.

WORK PROGRAM AND RESULTS

The location of hole COB-24 is shown in Figure 3 and the drill log and a X-section are included in Appendix I and II, respectively. The hole was oriented at a bearing of 340° and drilled at -45° and was designed to test for western extensions of veins occurring within the eastern part of the Silver Leaf claim and the western part of the Crown Reserve claim. The hole intersected 71 metres (50 metres vertical) of Coleman conglomerates, including a basal breccia/conglomerate, before passing into predominantly pillowed mafic volcanics. Between about 208 and 277 metres the hole passed through a series of intercalated conglomerates and graywackes before again intersecting pillowed mafic volcanics. The sediments are interpreted to be part of the Archean volcanic package and may be the southwesterly extension of Archean sediments outcropping about 750 metres towards the northeast.

Several carbonate bearing stringers-veinlets-veins, often with sulphides (pyrite, pyrrhotite, chalcopyrite, sphalerite, and galena) and occasionally with sulpharsenides (cobaltite, arsenopyrite) were encountered throughout the hole, as were zones of minor disseminated sulphides/sulpharsenides. Two intervals of intense calcite veining-vein breccia, serpentine fracturing and faulting were intersected at (127.8 – 137.55) and (143.1 – 154.83) metres. The former interval contains an essentially massive cobaltite veinlet at 129.5 metres. Another semi-massive cobaltite veinlet occurs within a wedge-shaped calcite vein at 196.02 metres. Assay results are pending.

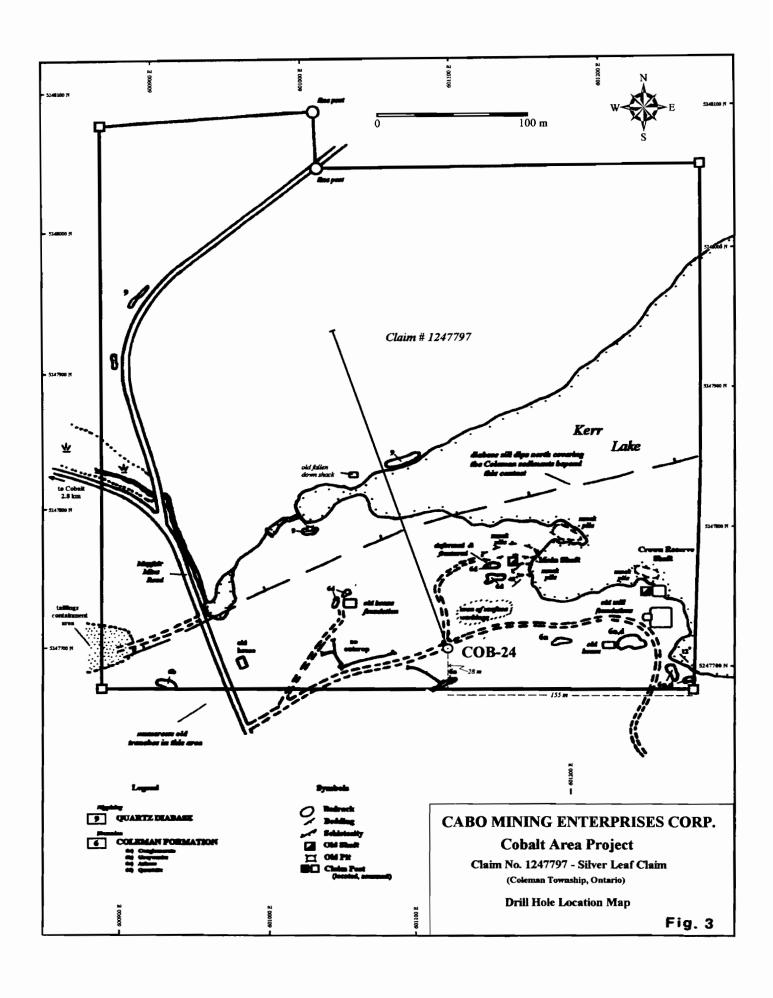
CONCLUSIONS AND RECOMMENDATIONS

Drill hole COB-24 intersected numerous narrow, sulphide, and occasional sulpharsenide, bearing calcite stringers, veinlets and veins. These include massive and semi-massive cobaltite veinlets at 129.5 and 196.02 metres, respectively. Extensive sampling and assaying is required to determine the significance of the veining and this work is currently in progress. Additional work will be dependent upon the assay results. Recommendations for further exploration will be prepared and filed once all of the data is received.

Respectfully submitted,

Seymour Sears, P.Geo.

July 27, 2005



REFERENCES

Ontario Geological Survey

2000: Airborne magnetic and electromagnetic surveys, Temagami area; Ontario Geological Survey, Map 82067, scale 1:20 000.

Sears, S.M.

2003: Report on Geological Mapping on Claim 1247797 in the Kerr Lake Area, Coleman Township, Ontario; Assessment Report for Cabo Mining Corp.

Sergiades, A.O.

1968: Silver Cobalt Calcite Vein Deposits of Ontario; Ontario Department of Mines, Mineral Resources Circular No. 10.

Thompson, R.

1961: Preliminary Report on parts of Coleman Township, Concession IV, Lots 1 to 5 and Gillies Limit, the Eastern "A" Claims, District of Timiskaming; Ontario Department of Mines, P.R. 1961-6.

1963: Cobalt Silver Area, Southeastern Sheet; Ontario Department of Mines, Map 2052, Scale 1:12,000.

Assessment Files of the Ontario Geological Survey, Larder Lake Office.

APPENDIX I

(Drill Hole Log)

Property Name: COBALT AREA PROJECT Hole #: COB-24

GRID NAME: Kerr Lake Claim #: 1247797

UTM Coordinates:

Easting:

Northing:

BEARING: 340 601115E INCLINATION: -45 degrees TOTAL DEPTH: 320 m 5247710N

CORE STORED AT: R. Nobes

Elevation: 310 m Page # 1 of 25

Sample # From To Width

DRILLED BY: Norex Drilling

SURVEY TYPE: Acid Test

START: May 26, 2005

FINISH: May 29, 2005

H. Pintson

LOGGED BY:

From To Lithological Description

0.00 6.00

Overburden; casing left in ground.

6.00 53.19

CONGLOMERATE (HURONIAN):

Massive, heterogeneous; medium green/gray, locally paler brown-green; essentially structureless; mix of polymictic pebble conglomerate and chlorite-rich graywacke; conglomerates are matrix to clast supported, clasts are subangular-subrounded mostly aphanitic/very fine-grained sediments/volcanics; locally up to 40% clasts; pale/medium gray quartz pebbles generally most abundant, minor pale brown/pink very altered/weathered granitic clasts; occasional cobbles-boulders; chlorite-rich very fine- to fine-grained matrix, locally strongly carbonatized: local trace disseminated CPY/PY; occasional calcite and/or pale pink quartz-feldspar gash veinlets with rare CPY; 3-5 joints/fractures per metre at 30-60 degrees and occasionally at 10-20 degrees to C/A, joints/fractures usually coated with serpentine/chlorite and/or calcite, lesser quartz/feldspar, rare PY/CPY, scarce-minor limonite staining until about 30.0.

- 6.0 7.1; Badly broken core; finely laminated medium green-gray to dark gray siltstone-very fine-grained sandstone; up to 8 mm wide laminations generally at 0 degrees to C/A, one core fragment has laminations at 19 degrees to C/A.
- 9.54 9.72: Irregular up to 3 mm wide pale pink feldspar/quartz-calcite veinlet at 16 degrees to C/A; barren.
- 10.94 11.1; Set of a few calcite, minor quartz/feldspar, gash stringers-stringers at 10-35 degrees to C/A; also calcite in matrix; barren.
- 11.32 12.66: Mostly broken core; one quartz/feldspar-calcite stringer at ~5 degrees to C/A, a few other fractures at ~35 degrees to C/A; barren except for minor malachite staining at 12.24.
- 12.54 13.19: Scattered CPY in matrix.
- 13.19 14.07: Mostly broken core; hematitized-serpentinized fractures at 10-35 degrees to C/A.
- 15.09 15.33: Set of about seven calcite gash stringers-veinlets at 25-45 degrees to C/A; barren.
- 16.0 26.64: Several mostly discontinuous calcite stringers-veinlets-veins, roughly parallel to perpendicular to C/A, locally form minor breccia; barren; local strongly carbonatized wall rock; scarce disseminated CPY-PY in wall rock; local moderate amount of pale purplish gray skeletal unidentified mineral-mineral aggregates, especially noticeable on core surface.
- 16.7 17.0: Moderate amount of pale purplish gray skeletal unidentified mineral, trace CPY.
- 18.38 18.5: Irregular vein-like quartz-minor feldspar-calcite-wall rock fragments, rare PY, aggregate; bound by calcite-serpentine/chlorite veinlets at 34 and 43 degrees to C/A.
- 18.82; Moderate calcite coated, trace Cobalt Bloom, fracture at 50 degrees to C/A.
- 20.88 21.16: Calcite coated joint/fracture at 10 degrees to C/A; barren.

Page # 2

HOLE #: COB-24 From To Lithological Description Sample # From To Width 22.01: Fracture at 76 degrees to C/A; minor calcite-PY-CPY, trace GN. 22.1 - 22.47: Up to 1 cm wide irregular calcite-guartz-feldspar, rare PY-CPY, vein at 7 degrees to C/A; wall rock contains trace PY-CPY, moderate pale purplish gray unidentified mineral; striated serpentinized joint/fracture adjacent and parallel to vein. 23.0 - 24.85: Mostly graywacke; trace-minor PY-CPY; abundant purplish gray unidentified mineral. 23.96: Serpentinized, moderate PY, fracture at 68 degrees to C/A. 26.85 - 31.2: About 25 irregular discontinuous and continuous pale pink/orange quartz-feldspar, trace-minor calcite, veinlets-veins at 25-75 degrees to C/A; essentially barren; local moderate pale gray-brown mm-sized skeletal grains/aggregates - altered feldspar (or SPH?). 27.0 - 27.4: Irregular up to 8 mm wide pale orange-pink quartz-feldspar, minor calcite, vein at 10 degrees to C/A; barren; cross cuts similar gash veinlets, with minor CPY, at 30 degrees to C/A. 28.33: Irregular up to 2 cm wide vein-like quartz, minor feldspar, aggregate; barren. 28.5 - 28.8: Vuggy altered calcite-quartz, minor feldspar, vein; barren; fairly sharp upper contact at 16 degrees to C/A; lower contact not recovered; trace malachite staining in wall rock. 29.0 - 53.19: Uniformly dark gray/green; pebbles-cobbles, occasional boulders, consisting predominantly of mafic volcanics and mafic-intermediate intrusives, including some biotite-bearing mafic intrusives (lamprophyre?). 32.22: Irregular semi-massive PY stringer at ~60 degrees to C/A. 32.32 - 32.44: Up to 2 cm wide fine-grained PY aggregate essentially restricted to surface of core. 32.99: Abundant calcite-PY coated fracture at 46 degrees to C/A; minor disseminated PY in wall rock. 37.27: 2 mm wide quartz-calcite, minor CPY-PY, veinlet at 60 degrees to C/A. 38.11: 5 mm wide quartz-calcite-chlorite, trace CPY-PY, vein at 47 degrees to C/A. 38.24: 1.5 cm wide quartz, moderate calcite, minor feldspar, trace CPY-PY, vein at 69 degrees to C/A. 38.6 - 39.36: Minor-moderate disseminated <2 mm-sized PY aggregates; at 39.13 have a semi-massive PY stringer at 76 degrees to C/A. 39.47 - 39.66: Irregular up to 5 mm wide calcite-quartz-serpentine vein at 23 degrees to C/A; barren. 39.92 - 40.67: About eight calcite-rich veinlets-gash veins-matrix material; occasional CPY-PY; two serpentinecalcite coated, minor GN, trace CPY, fractures at 63 and 19 degrees to C/A. 41.04 - 41.15: Two 9-12 mm wide quartz, minor-moderate calcite, trace CPY-PY, veins at 61 degrees to C/A. 41.81: 6 mm wide quartz-pale pink feldspar vein, including a calcite stringer, at 33 degrees to C/A; barren. 43.1: Split calcite-guartz, moderate PY, veinlet at ~50 degrees to C/A. 43.19: 3 mm wide quartz, moderate calcite, trace PY, veinlet at 44 degrees to C/A. 44.9 - 45.4: Moderate disseminated PY; at 45.16 have a 5 mm wide quartz, minor calcite-PY, trace CPY, vein at 47 degrees to C/A; a few stringers with minor-moderate PY, trace CPY. 46.07 - 46.67: About ten up to 8 mm wide calcite-quartz gash veinlets-veins at ~50 degrees to C/A; one GN grain, otherwise barren.

47.6 - 48.15: Four calcite, trace-moderate CPY, stringers-veinlets at ~30 degrees to C/A; one 7 cm long fine-grained PY aggregate, cross cut by one of the calcite veinlets; a few discontinuous calcite-PY stringers.

Page #3

HOLE #: COB-24 Sample # From To Width From Τo Lithological Description 48.48 - 48.62: Up to 1 cm wide dismembered quartz, minor PY, trace CPY, vein at 20 degrees to C/A. 50.09: Malachite stained calcite, minor quartz, moderate PY, stringer at 46 degrees to C/A. 51.16 - 51.49: Up to 3 mm wide guartz-pale pink feldspar, occasional calcite margins, veinlet at 10 degrees to C/A; minor CPY in bottom half of veinlet. 53.09 - 53.16: 2-3 cm wide fine-grained PY aggregate. 53.19 76.95 BASAL CONGLOMERATE/BRECCIA: Cobbles-boulders mostly comprised of previously brecciated mafic volcanics with occasional matrix containing calcite-PY, also pillowed mafic volcanics with PY-bearing pillow selvages; rare pebble conglomerates; massive chloritic very fine-grained matrix - locally cherty or carbonatized, local disseminations-blebs-stringers of PY/SPH/CPY; occasional barren calcite/quartz/feldspar stringers-veinlets; gradational upper contact. 53.32 - 53.44; 1 cm wide calcite, minor quartz, vein at 21 degrees to C/A; ~1 mm wide chlorite/serpentine-rich margins with rare CPY. 53.44 - 56.80; Several, at about every 10-15 cm, PY, rare CPY, or calcite, gash stringers-veinlets mostly at 30-45 degrees to C/A. 54.69 - 54.89: 1-3 mm wide calcite, minor chlorite/serpentine, moderate CPY, veinlet at 10 degrees to C/A; minor disseminated PY in wall rock. 55.11 - 55.26: 1.5 cm wide calcite, minor quartz, vein at 16 degrees to C/A; 1-2 mm wide chlorite/ serpentine-rich margins with rare CPY (same type of vein as at 53.32 - 53.44). 57.04: 5 mm wide vein as at (53.32 - 53.44) at 40 degrees to C/A; chlorite/serpentine margins are 1-2 mm wide. 57.67 - 57.87: 5 mm wide calcite-quartz, minor PY, trace CPY-GN, vein at 18 degrees to C/A; trace disseminated PY-CPY in wall rock. 58.0 - 58.26: Cherty matrix material; moderate PY; a few calcite coated fractures with moderate blue-green staining. 58.71 - 59.55: Set of eight up to 4 mm wide calcite-chlorite/serpentine-quartz veinlets at 30-50 degrees to C/A; rare PY-CPY; one 2 cm-sized PY aggregate. 60.13 - 60.9: Set of five pale pink quartz/feldspar, minor calcite, stringers-veinlets at 45-55 to C/A; 2 mm wide veinlet at 60.42 contains moderate GN-CPY and is cross cut by a serpentine-calcite coated joint/fracture at 170 (10) degrees to C/A; minor disseminations and stringers of SPH in wall rock. 61.1 - 62.75: Local cherty or carbonatized matrix material; minor-moderate disseminations-blebs of SPH-PY-CPY. 64.03 - 64.4: Conglomerate matrix; disseminated up to 1.5 cm-sized aggregates of semi-massive PY; some PY stringers; minor carbonatization. 64.48 - 64.64: 3 cm wide composite vein; up to 1 cm wide carbonatized serpentine margins; ~1 cm wide calcite. minor quartz-serpentine, core; at 15 degrees to C/A; barren. 66.0; 2-3 mm wide remnant at core break of a calcite-quartz-feldspar veinlet at 21 degrees to C/A; barren.

66.29 - 66.38; 7 mm wide pale orange-gray feldspar-quartz-calcite vein at 31 degrees to C/A; barren.

HOLE #: COB-24 Page # 4

Sample # From To Width

From To Lithological Description

67.47 - 67.75: Pale gray heterogeneous quartz, minor calcite-feldspar, disseminated <1 mm-sized chlorite spots, minor PY, trace CPY, vein; upper contact marked by a serpentine-calcite coated joint/fracture at 11 degrees to C/A; irregular lower contact at ~22 degrees to C/A.

67.79 - 67.98: 12 mm wide calcite, minor quartz, vein at 16 degrees to C/A; half of vein is rust stained; also an adjacent parallel calcite veinlet, barren; minor disseminated PY in wall rock.

68.0 - 69.55: Pebble wacke/conglomerate with moderate disseminated up to 1 cm-sized PY aggregates/stringers; locally with calcite; scattered CPY; two calcite, minor quartz, minor-moderate CPY-PY, veinlets at 22 and 64 degrees to C/A.

70.86 - 70.96: Up to 4 mm wide calcite, minor quartz, gash veinlet; 1 cm wide calcite, minor quartz, vein; both at 50 degrees to C/A and barren.

71.35 - 71.85: Minor-abundant disseminated PY-SPH; up to 2 cm-sized massive PY aggregates; occasional calcite stringers with/without PY; minor quartz aggregates/pebbles; at 71.62 have up to 1 cm wide calcite, minor PY, trace GN-CPY, vein at 65 degrees to C/A.

72.2 - 72.95: Seven, up to 1 cm wide, calcite, minor quartz, rare PY/CPY/SPH/GN, gash veinlets-veins at 35-80 degrees to C/A; at 72.53 have ~12 mm wide semi-massive PY-calcite vein at 41 degrees to C/A; scattered to moderate PY-SPH in wall rock.

73.07 - 73.19: Irregular 3 mm wide calcite-serpentine-quartz, trace PY, veinlet at ~15 degrees to C/A; minor PY-SPH disseminations-stringers in wall rock.

73.68 - 74.0: 4 mm wide quartz, minor calcite, minor SPH-PY, trace GN, veinlet at 75 degrees to C/A; up to 1.5 cm wide quartz, trace calcite, wall rock fragments, moderate PY, trace GN, gash vein with offshoots at 60 degrees to C/A; a couple of other calcite, with/without serpentine, veinlets with minor PY; minor disseminated PY in wall rock.

74.55 - 74.88: Up to 3 mm wide calcite-serpentine margins, trace SPH, rare GN, veinlet at 14 degrees to C/A; offset by a 3 mm wide calcite, trace GN, gash veinlet at 100 (80) degrees to C/A; another calcite, trace SPH, gash veinlet at 22 degrees to C/A.

75.27 - 75.43: ~1 cm wide calcite gash vein at 70 degrees to C/A, truncated by a slip plane with trace SPH at 20 degrees to C/A; 8 mm wide calcite, rare SPH, gash vein at 25 degrees to C/A truncated by a 6 mm wide calcite gash vein at 80 degrees to C/A; trace disseminated PY-SPH in wall rock.

76.29: 3-4 mm wide calcite, minor quartz-serpentine, veinlet at 63 degrees to C/A; barren.

76.66: 1 mm wide calcite veinlet at 25 degrees to C/A; barren.

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HOLE #: COB-24 From To Lithological Description Sample # From To Width 76.95 123.22 PILLOWED MAFIC VOLCANICS: Massive, fairly homogeneous; medium green/gray, locally brownish gray; essentially aphanitic; generally minor in situ breccia - matrix composed of network of pale gray fractures or dark green chloritic fractures; local minor PY disseminations/stringers; minor chloritization-silicification of pillow selvages, usually with minor-moderate disseminated PY; interpillow material may contain quartz/calcite, trace-moderate PY, trace-minor PO/SPH; local dm-sized zones of pillow breccia; generally cross cut by 1-3 calcite-rich, serpentine margins, occasional tracemoderate PY/PO/CPY/SPH, veinlets, rare up to 2 cm wide veins, per metre at ~20 degrees and 40-75 degrees to C/A; occasional carbonatized zones with PY/SPH; 1-3 serpentine coated, generally with calcite/PY, joints/fractures per metre at 15-25 degrees and 45-70 degrees to C/A; irregular contact with overlying sediments appears to curve from 0-40 degrees to C/A. 77.22: 3 mm wide quartz-calcite, minor CPY, veinlet at 59 degrees to C/A. 78.22 - 78.35: 12 mm wide calcite, minor quartz, trace GN, vein at 25 degrees to C/A; cross cuts and cross cut by a calcite-quartz veinlet at 115 (65) degrees to C/A; pale red-gray sulpharsenide grain in wall rock. 78.43: 4 mm wide calcite, minor quartz, veinlet at 51 degrees to C/A; barren. 80.51 - 81.0: Moderately brecciated pillow selvage roughly parallel to C/A; minor carbonatization including a calcite stringer paralleling pillow selvage; minor-moderate PY, rare SPH. 81.13: Quartz, minor calcite, moderate CPY, gash veinlet at 70 degrees to C/A. 81.7: 7 mm wide calcite-quartz, moderate PY, rare SPH, vein at 67 degrees to C/A. 82.08 - 82.24: 2 cm wide calcite, minor quartz, rare SPH-GN(?), vein at 20 degrees to C/A; serpentine coated margins. 82.33 - 82.41: Diffuse silicified-carbonatized vein-like layer at 40 degrees to C/A; trace PY-SPH. 83.67 - 84.67: Pillow breccia; minor silicification - quartz layers-aggregates; minor carbonatization; minor-moderate PY-PO, minor CPY-SPH; cross cut by six calcite-rich gash veinlets, three have moderate PY or PO, CPY, minor SPH, one with trace GN as well. 85.04: 9 mm wide calcite-serpentine margins, trace GN, vein at 74 degrees to C/A. 87.84 - 88.6: Minor disseminated <3 mm-sized calcite spots; scarce SPH; set of six calcite, scarce SPH-GN, gash veinlets over 30 cm at ~45 degrees to C/A. 88.85 - 89.02: Interpillow material/pillow selvages; moderate disseminated <5 mm-sized PY aggregates, minor CPY-SPH. 89.27 - 89.68: Interpillow material/pillow selvages; minor brecciation; minor carbonatization; moderate PY-SPH, trace CPY. 89.83: ~2 mm wide calcite, moderate SPH-PY, minor GN-CPY, veinlet at 47 degrees to C/A. 90.15 - 92.6; Breccia/pillow breccia; local matrix supported cm-sized subrounded fragments; matrix is pale green. very fine-grained, locally carbonatized, scarce PY-GN-SPH-CPY; gradational upper and lower contacts. 90.17: 1-2 mm wide irregular calcite, minor serpentine-SPH, veinlet at 61 degrees to C/A.

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HOLE #: COB-24 Lithological Description From То Sample # From To Width 91.08 - 91.25; ~9 cm wide very heterogeneous vein; calcite-rich with wall rock fragments, short cherty fragments/layers, quartz, chlorite/serpentine, trace SPH-PY; irregular upper contact at ~38 degrees to C/A; very irregular lower contact at ~25 degrees to C/A. 91.61 - 91.82: ~10 cm wide very heterogeneous vein; calcite-rich with brown-orange quartz/feldspar, interlayered wall rock, chlorite/serpentine, minor GN-CPY; irregular upper contact at ~30 degrees to C/A; irregular lower contact at ~35 degrees to C/A; surrounding wall rock contains mm-sized calcite blebs. 92.36 - 92.46: Two ~1 mm wide calcite-serpentine margins, minor SPH-PY, trace GN, veinlets at 68 and 58 degrees to C/A. 93.75 - 93.88: 11 mm wide calcite-serpentine margins, minor quartz, vein at 25 degrees to C/A; trace PY in serpentine. 95.15 - 95.6: Two discontinuous calcite, minor PY-SPH, veinlets at 15-25 degrees to C/A; 5 mm wide calciteserpentine, trace SPH-PY, veinlet at 52 degrees to C/A. 95.99: Core break; remnant ~2 mm wide calcite-serpentine, abundant PY, veinlet at 32 degrees to C/A; also interpillow material with abundant PY. 96.51 - 96.64: Interpillow material; minor carbonatization; very abundant, nearly semi-massive, SPH; abundant PY, minor GN; grouping of six 1-3 mm-sized pale red-gray nearly square cobaltite grains. 98.81: Three <1 mm-sized arsenopyrite(?) grains. 99.17 - 100.0: Minor pillow breccia; locally carbonatized or with disseminated calcite blebs; minor (~1%) disseminated SPH, lesser PY, trace CPY-arsenopyrite (?, <0.5 mm-sized very bright silver gray grains); calcite stringer over 29 cm with sections of semi-massive PY, with/without SPH, at 13 degrees to C/A. 100.0 - 100.19: Brecciated pillow selvage; abundant up to 6 mm long SPH aggregates, minor GN; underlain by strongly carbonatized interpillow material; minor SPH, lesser PY, trace very fine GN-arsenopyrite(?). 100.31 - 100.39; Interpillow material; minor carbonatization, moderate PY, minor SPH, trace CPY-very fine GN/arsenopyrite. 101.35: Serpentine-calcite coated joint/fracture at 70 degrees to C/A; minor PY, trace CPY-SPH-very fine GN. 101.7: Serpentine-calcite coated joint/fracture at 72 degrees to C/A; minor PY-SPH, lesser very fine GN/arsenopyrite(?). 102.14 - 102.21: 4 mm wide calcite-serpentine margins, minor SPH-GN, trace CPY, veinlet at 48 degrees to C/A; up to 4 mm wide calcite-serpentine, minor-moderate GN-SPH, trace CPY, gash veinlet at 42 degrees to C/A. 102.52 - 102.67: Band of interpillow material; abundant calcite with local bright yellow staining, moderate PY, minor GN-SPH; cross cuts a 3 mm wide calcite, minor GN-CPY-SPH, veinlet at 58 degrees to C/A; adjacent 1 mm wide calcite, trace SPH, veinlet at 55 degrees to C/A. 102.88 - 102.93: Two up to 1 cm wide calcite gash veins at ~65 degrees to C/A; serpentine margins, abundant quartz; one vein has minor GN.

103.24: 9 mm wide calcite, abundant quartz, serpentine margins, gash vein at 53 degrees to C/A; similar to veins

at (102.88 - 102.93); barren.

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HOLE #: COB-24 From Lithological Description Sample # From To Width 104.05 - 104.45: Pillow breccia; locally carbonatized matrix; minor-abundant PY, trace SPH. 104.36 - 104.42: ~2.5 cm wide mixed, up to 1 cm wide, calcite veins-wall rock slivers at ~ 48 degrees to C/A; calcite veins contain moderate quartz, minor GN-CPY. 104.92 - 105.19; Set of five calcite veinlets at 55-70 degrees to C/A; barren. 105.98: 7 mm wide calcite, serpentine margins, vein at 55 degrees to C/A; barren. 106.57 - 106.72: 3-4 mm wide calcite, serpentine margins, veinlet at 22 degrees to C/A; barren. 107.12 - 108.24: Abundant interpillow material-pillow selvages, minor pillow breccia; minor-abundant, up to 15 mm long, PY-SPH aggregates, trace-minor CPY-GN. 107.87 - 108.07: Strongly carbonatized interpillow material; abundant SPH associated with calcite and in wall rock, minor shiny GN, trace PY. 108.28: 3 mm wide dismembered calcite, minor serpentine, trace SPH, veinlet at 49 degrees to C/A. 109.08; 2-3 mm wide irregular calcite, minor shiny GN, trace SPH-CPY, veinlet at 32 degrees to C/A; underlying 20 cm is moderately carbonatized. 109.58: Wedge shaped 3-14 mm wide calcite, serpentine margins, minor SPH-PY, trace GN-CPY, vein at 64 degrees to C/A. 109.75: 2-4 mm wide calcite, serpentine margins, trace PY-SPH-GN, veinlet at 32 degrees to C/A. 110.33: Core break; remnant of an at least 4 mm wide calcite-serpentine, minor PY, trace SPH-GN, veinlet at 65 degrees to C/A. 110.65 - 110.9; Abundant disseminated PY; one semi-massive 1-2 mm wide massive PY veinlet at 55-80 degrees to C/A; minor SPH, trace CPY. 111.82; 1 cm wide calcite, serpentine-moderate PY margins, trace SPH, vein at 70 degrees to C/A. 112.0: A couple of <1 mm-sized medium gray arsenopyrite(?) grains. 112.32: 1-2 cm wide bifurcating calcite, minor GN, trace SPH-CPY, vein at 65 degrees to C/A; offshoot veinlet at 23 degrees to C/A. 112.93: 3 mm wide calcite, serpentine margins, trace SPH-PO-CPY, veinlet at 54 degrees to C/A. 113.41 - 113.57: Up to 4 mm wide calcite-serpentine, trace SPH-PO, scarce CPY-GN, veinlet at 19 degrees to C/A. 113.9 - 114.12: 1.5 cm wide composite vein at 18 degrees to C/A; consists of calcite, milky white quartz, wall rock fragments, serpentine, brick red quartz/feldspar, trace GN-SPH; adjacent 4 mm wide discontinuous serpentine-SPH-GN-CPY-PO veinlet. 114.0 - 115.2: Broken core; several serpentine coated fractures at 0-50 degrees to C/A. 114.85 - 114.99: 1 cm wide sheared wall rock, partial calcite, minor SPH, trace PO-GN, vein at 24 degrees to C/A. 115.51 - 116.6: Minor pillow breccia - brecciated interpillow material; at (115.51 - 116.04) have moderate carbonatization/veinlets with moderate SPH-PO, trace CPY; at (116.24 - 116.55) have moderate carbonatization, abundant SPH, moderate GN, minor CPY-PO.

117.43 - 117.57: 2 mm wide calcite, serpentine margins, minor GN-SPH, veinlet at 18 degrees to C/A.

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From To Lithological Description

Sample # From To Width

117.86 - 117.95: Wedge shaped 2 mm to 1.5 cm wide calcite, serpentine margins, minor SPH, trace GN, vein at 25 degrees to C/A.

118.45 - 119.0: Set of four, up to 1 cm wide, calcite, serpentine margins, trace PO-SPH-CPY, gash veins-veinlets at 15-55 degrees to C/A; sulphides generally along calcite-serpentine contacts.

119.55 - 122.6: Several calcite veinlets-veins, mostly roughly parallel to C/A and at up to 50 degrees to C/A; locally with moderate quartz, usually with serpentine margins; trace-minor PO-PY-CPY-SPH; trace GN only in veinlets at (121.08 - 121.67).

122.71: 7 mm wide, ~75%, sulphide vein at 46 degrees to C/A; very abundant PY-SPH, minor CPY, minor cobaltite (medium gray metallic mineral), trace GN; moderate quartz-chlorite matrix, minor calcite.

123.22 125.47 MAFIC INTRUSIVE DYKE:

Massive, medium-dark green, fine-grained; spotted texture - ~30% <1 mm-sized PX in a medium green groundmass; chloritized; cross cut by a few calcite, minor serpentine-quartz, occasional minor CPY-SPH-trace GN, veinlets at 30-50 degrees to C/A; 2-3 serpentine coated, with or without calcite, joints/fractures per metre at 40-65 degrees to C/A; occasional mafic volcanic xenoliths; sharp upper contact, partially marked by a couple of calcite-quartz veinlets, at 40 degrees to C/A; very irregular, intrusive breccia-like, lower contact at ~75 degrees to C/A.

125.47 127.80 ALTERED PILLOWED MAFIC VOLCANICS-PILLOW BRECCIA:

Massive; very heterogeneous mix of pillowed mafic volcanics and pillow breccia; pale-medium green/gray/brown; fragments often have lighter coloured-bleached margins; volcanics may be strongly carbonatized; chloritized dark green matrix material, minor-moderate carbonatization - less silicification, often with minor PO/PY/SPH-scarce CPY/GN; individual pillows moderately fractured/brecciated - chloritic fractures; 1-3 serpentine coated, often with calcite/platy PY/PO, joints/fractures at 25-35 degrees and 50-65 degrees to C/A.

125.73: Irregular up to 6 mm wide calcite vein at 45 degrees to C/A; moderate CPY-PO along vein margins; cross cuts underlying, 8 cm long, carbonatized interpillow material with minor PO, trace CPY-SPH.

126.25 - 127.0: Set of about ten quartz-chlorite-minor calcite, chloritized margins, trace-moderate PO-PY-SPH, veinlets-stringers at ~25 degrees to C/A; a few semi-massive PO-PY-SPH stringers; weakly magnetic wall rock.

126.79 - 126.91: 7 mm wide calcite, serpentine margins, minor PO-SPH (mostly along margins), vein at 155 (25) degrees to C/A; cross cuts above veinlets.

127.28 - 127.41: Irregular up to 7 mm wide calcite, serpentine margins, trace PO, scarce GN-SPH, vein at 28 (152) degrees to C/A.

HOLE #:		COB-24					
From	То	Lithological Description	Sample	#	From	То	Width
127.80	137.55	BRECCIA-FRACTURE/FAULT ZONE: Upper 3 m fairly intact; several up to 8 mm wide calcite-quartz-chlorite/serpentine and calcite-rich, trace-moderate PY-PO, veinlets-veins at 0-25 degrees to C/A; set of three veins over 25 cm at 25 degrees to C/A; local calcite vein breccia; 3-5 serpentine coated fractures usually with abundant platy PY per metre mostly at 50-75 degrees to C/A; local minor CPY; local strongly carbonatized volcanics; rest of interval consists of badly broken core, including a 75 cm long section of gravel, majority of fragments have serpentine coated fracture surfaces with minor-abundant platy PY and occasional remnant calcite stringers-veinlets; semi-intact sections generally comprised of fractured carbonatized volcanics with minor-abundant disseminated PY, minor SPH, in calcite-rich interpillow material, occasional calcite stringers-veinlets with minor SPH-PO-PY-GN. 129.5: Up to 1 mm wide very fine-grained essentially massive cobaltite (medium gray metallic), minor calcite, stringer-veinlet at 38 degrees to C/A; cross cut by a calcite gash veinlet. 129.57: Internal contact between interpillow material and pillow margin at 30 degrees to C/A; minor disseminated fine cobaltite. 133.05: Fracture, abundant platy PY-GN.	-				-
		136.0 - 138.2: Majority of volcanics are distinctly spotted - chlorite spotting; ~15% generally <1 mm-sized dark green spots. 137.09 - 137.43: 1 cm wide calcite, serpentine margins, wall rock fragments, vein at 10 degrees to C/A; barren.					
137.55	143.10	ALTERED PILLOWED MAFIC VOLCANICS-PILLOW BRECCIA: Continuation of preceding altered pillowed mafic volcanics-pillow breccia at (125.47 - 127.8). 137.84 - 137.91: Carbonatized interpillow material; moderate SPH, minor PO-PY, trace CPY-GN. 139.6: Up to 5 mm wide calcite, moderate SPH, minor PO, gash veinlet at 50 degrees to C/A. 139.9 - 140.16: ~10% 1 mm-sized disseminated SPH aggregates; ~10% 1 mm-sized chlorite spots that may be partially rimmed by SPH. 139.96: Three <1 mm-sized isolated grains of cobaltite (medium gray metallic). 140.77 - 140.96: 3 mm wide calcite gash veinlet at 78 degrees to C/A; 5 mm wide calcite, minor PO, trace CPY-SPH, vein at 50 degrees to C/A. 141.54 - 141.64: 2 mm wide calcite, abundant PY-PO, trace SPH, veinlet at 156 (24) degrees to C/A. 142.12 - 142.7: Set of four up to 5 mm wide calcite, trace-moderate PO-PY-SPH, trace CPY, veinlets at 15-42 degrees to C/A; local carbonatized interpillow material, moderate PY-PO, minor SPH-CPY, scarce GN.					
143.10	154.83	CALCITE VEINING-VEIN BRECCIA, SERPENTINE FRACTURE/FAULT, ZONE: Pillowed mafic volcanics; several up to 1.5 cm wide calcite veins-veinlets, mostly at 50-60 degrees to C/A, occasionally at ~20 degrees and ~80 degrees to C/A, usually with trace PO/PY/SPH/CPY, scarce GN; up to 30 cm long zones with cm-sized wall rock fragments in up to 2 cm wide calcite vein/matrix material; ~30% badly broken core, serpentine coated, with or without calcite, fractures; wall rock volcanics locally strongly carbonatized and have bleached appearance.					

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From To Lithological Description

Sample # From To Width

143.38 - 143.82; Calcite vein breccia; up to 8 cm-sized wall rock fragments in up to 1.5 cm wide calcite matrix; trace-minor GN-PY-PO-SPH-CPY.

144.68 - 144.75: Strongly carbonatized interpillow material; minor SPH-PY-CPY, trace GN.

145.38 - 145.6: Mafic intrusive dykelet; massive, medium green, fine-grained; sharp upper contact at 37 degrees to C/A; fairly regular lower contact at 65 degrees to C/A; lower contact cross cut by a 7 mm wide pinkish calcite vein at 135 (45) degrees to C/A.

147.68: 3-4 mm wide semi-massive PY, minor CPY, moderate calcite, veinlet at 26 degrees to C/A; cross cuts and cross cut by a 2-3 mm wide calcite, minor CPY, trace PO, veinlet at 128 (52) degrees to C/A; carbonatized-chloritized wall rock with minor SPH-PO; a few adjacent serpentine-calcite coated, minor-moderate platy PY, joints/fractures.

148.2 - 149.63: Pillow breccia; pillow fragments have a brownish hue; majority of matrix strongly carbonatized-chloritized; minor-locally abundant PO-SPH-PY, minor CPY, scarce GN, one grain of cobaltite(?) in volcanics; cross cut by six up to 5 mm wide calcite, minor PO-SPH, veinlets; cross cut by eight serpentine, calcite/PY/GN, joints/fractures.

149.28: Three <1 mm-sized cobaltite grains associated with SPH in matrix.

149.34: Irregular up to 3 mm wide calcite, minor SPH-GN-PO-CPY, veinlet at 33 degrees to C/A; adjacent serpentine, minor calcite, minor GN, joint/fracture; underlying matrix over 25 cm is silicified/cherty with moderate PO-SPH, minor CPY.

150.09 - 150.21: Calcite vein breccia at ~43 degrees to C/A; serpentine margins; minor SPH-PO, trace CPY-GN. 151.0 - 154.83: Badly broken core; most fragments with serpentine coated, often with platy PY, fracture surfaces; several calcite veinlets-veins as well; wall rock predominantly pillow breccia with carbonatized, lesser silicification, matrix.

151.35 - 151.9: Fragments of pillow breccia (some with a brownish hue) - matrix with calcite veinlets; abundant carbonatization; abundant SPH-CPY, minor PY; two calcite veinlets with abundant GN, one calcite veinlet with abundant CPY; minor chlorite spotting with SPH.

152.94: Single <1 mm-sized arsenopyrite(?) grain.

154.83 172.35 WEAKLY MINERALIZED MASSIVE MAFIC VOLCANICS:

Massive, fairly homogeneous; medium green/gray; very fine-grained; local minor deformation/brecciation; generally 1-3 up to 5 mm wide calcite veinlets-veins, with minor SPH/PY/PO-scarce GN, per metre at 40-60 degrees to C/A; scattered discontinuous semi-massive PO-SPH stringers-veinlets-aggregates; local disseminated <1 mm-sized cobaltite grains; 4-6 serpentine coated, with or without calcite/platy PY/PO/SPH, joints/fractures per metre at 35-60 degrees to C/A, occasionally at 20-30 degrees to C/A; gradational contact with overlying pillowed volcanics over ~1 cm at ~50 degrees to C/A.

154.8 - 157.12: Every 5-10 cm have a stringer/veinlet; usually discontinuous and with calcite, with trace-moderate SPH-PY-PO-CPY, trace GN only with calcite.

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HOLE #: COB-24 From To Lithological Description Sample # From To Width 155.11: Irregular dismembered up to 8 mm wide calcite, moderate SPH, minor PO-PY, trace CPY-GN, vein at 82 degrees to C/A. 156.86; ~1 cm wide calcite, trace PO, scarce GN, vein at 77 degrees to C/A; adjacent underlying ~4 cm-sized calcite-PO-PY-SPH-CPY aggregate on core surface. 157.06 - 157.12: Two very irregular, up to 1 cm wide, calcite gash veins; abundant PO-PY, trace GN. 157.84 - 157.94; ~1 mm wide calcite-quartz, minor PO-PY, trace SPH-GN-CPY, veinlet at 41 degrees to C/A; 5 mm wide calcite, minor SPH, gash veinlet; a few disseminated <1 mm-sized cobaltite(?) grains in wall rock. 158.55 - 159.5; <1% disseminated generally <2 mm-sized isolated cobaltite grains; one 3 mm-sized euhedral, and two smaller grains, of cobaltite within a serpentine, minor calcite-PO-CPY, coated fracture at 65 degrees to C/A; a few calcite, minor CPY-SPH, scarce cobaltite, stringers as well. 159.7 - 159.85: Three partially semi-massive PO-SPH, trace CPY, calcite, stringers at ~45 degrees to C/A; a few calcite, trace PO-SPH-GN, gash veinlets as well. 160.52 - 160.9: Three irregular, up to 3 mm wide, calcite-serpentine, moderate PO/PY, minor CPY-GN-SPH, veinlets at 65-75 degrees to C/A; also a few calcite, minor PO-SPH, gash veinlets and discontinuous semimassive PO-SPH stringers. 161.96 - 162.09: Up to 2 mm wide calcite-quartz, moderate SPH-PO-CPY, minor GN, veinlet at 22 degrees to C/A; a few similar stringers-gash veinlets, semi-massive PO-CPY stringers, in wall rock; adjacent calcite-serpentine, abundant PY, veinlet at 59 degrees to C/A. 162.4 - 162.84: Three serpentine coated, minor calcite, abundant platy PY, joints/fractures at 30-50 degrees to C/A. 163.07: 5 mm wide calcite, abundant PY-PO along margins, minor CPY-SPH, gash vein at 42 degrees to C/A. 163.62: 7 mm wide calcite, abundant PY, moderate SPH, vein at 43 degrees to C/A. 165.57 - 166.35: Minor-moderate deformation; minor-abundant carbonatization, minor calcite gash veinlets; abundant SPH-PO, moderate PY, trace CPY-GN; moderate banding/layering at ~20 degrees to C/A. 167.85; Up to 8 mm wide calcite vein at 40 degrees to C/A; moderate SPH-PO, trace CPY-GN, along margins, 167.91 - 168.29: Several discontinuous semi-massive PY stringers, often with calcite, occasional CPY; serpentine, 1 mm wide calcite core, abundant PY, joint/fracture at 15 degrees to C/A; minor disseminated SPH in wall rock. 169.14 - 169.75: Several PO-SPH stringers-aggregates; two semi-massive PY veinlets; minor CPY; usually associated with some calcite. 170.74 - 170.87: Two up to 5 mm wide calcite, minor SPH-PY-PO-CPY-GN, veins at 58 and 45 degrees to C/A; aggregates of calcite-serpentine-SPH-PY-CPY; cross cut by serpentine-calcite-PY joints/fractures. 171.4: Irregular up to 7 mm wide dismembered calcite, moderate SPH-PO, minor GN, vein at 37 degrees to C/A: PO-SPH, minor CPY, stringers-aggregates in wall rock. 171.58 - 172.46: Minor-moderate deformation; minor-abundant carbonatization, minor calcite gash veinlets; moderate SPH-PO-PY, minor GN-CPY usually with calcite, minor semi-massive discontinuous SPH-PO-PY

172.3 - 172.46: Irregular segmented up to 5 mm wide semi-massive PY veinlet at 14 degrees to C/A.

stringers.

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HOLE #: COB-24 From Τo Lithological Description Sample # From To Width 172.35 180.65 MASSIVE MAFIC VOLCANICS: Massive, fairly homogeneous, medium green-gray, very fine-grained; minor local zones of PY disseminationsaggregates-stringers, scarce CPY-SPH-PO; cross cut by about ten up to 1 cm wide calcite, barren-minor PO/PY/SPH/CPY/GN, stringers-veinlets-veins at 30-50 degrees to C/A in upper 7 m of interval; 3-5 serpentine coated, with or without calcite/trace PY, joints/fractures at 35-55 degrees, occasionally at 0-20 degrees, to C/A; fairly regular sharp upper contact (colour difference) at 44 degrees to C/A; lower contact marked by a serpentine veinlet at 39 degrees to C/A. 172.81 - 172.84: Calcite, moderate PY, stringer at 70 degrees to C/A, moderate disseminated PY over 5 mm on each side of stringer; massive PY stringer at 130 (50) degrees to C/A. 173.03 - 173.15: A few <1 mm-sized cobaltite(?) grains. 173.51: 1 mm wide calcite, minor PY, stringer at 42 degrees to C/A, abundant PY along stringer margins in wall rock; adjacent serpentine-calcite coated, semi-massive PY, joint/fracture at 125 (55) degrees to C/A. 173.84: 1 mm wide calcite veinlet at 46 degrees to C/A; moderate PY along veinlet margins in wall rock. 174.97: 1-2 mm wide calcite, serpentine margins, minor PY, trace SPH-CPY-GN, veinlet at 37 degrees to C/A. 175.24: Sharp internal contact at 60 degrees to C/A. 175.58 - 175 84: Two serpentine-calcite, minor CPY, trace GN, joints/fractures at 54 degrees to C/A. 177.09: 1 cm wide calcite, minor serpentine, trace GN, vein at 30 degrees to C/A. 177.57 - 177.69: Serpentine, minor SPH-GN-PY, trace CPY, joint/fracture at 8 degrees to C/A. 178.68: Core break; remnant 1 cm wide calcite, minor PY, trace PO-GN, vein at 63 degrees to C/A. 178.92 - 180.0: Fracture zone; at least 15 cross cutting serpentine coated, with or without minor calcite, joints/fractures at 30-50 degrees, a couple at 0 degrees, to C/A; several discontinuous fractures as well; local calcite stringers-veinlets, minor PY. 180.62 - 180.69: 2 mm wide serpentine, minor SPH-GN-PY-CPY, veinlet at 39 degrees to C/A; minor-moderate disseminated PY in wall rock. 180.65 208.03 MIXED MAFIC INTRUSIVE DYKES: Massive, heterogeneous, medium green-gray, predominantly fine-grained, fine- medium-grained with PX/AMPH phenocrysts as well; rare minor disseminated PY/SPH; occasional xenoliths; minor interlayered mafic volcanic breccias; occasional calcite veinlets-veins (0-2 per metre); 2-6 serpentine coated, with or without calcite, joints/fractures per metre at 20-30 degrees, 55-75 degrees and occasionally at 10-15 degrees to C/A; sharp upper contact at 31 degrees to C/A; fairly regular brecciated lower contact at ~50 degrees to C/A. 180.99 - 181.14: Moderate disseminated PY; 5 mm wide calcite, moderate serpentine, minor GN, trace PY-CPY, vein at 40 degrees to C/A; minor disseminated SPH at (180.69 - 180.99). 181.6: 8 cm long rounded mafic volcanic xenolith. 181.79: Two <1 mm-sized cobaltite grains.

182.42 - 182.53: Trace of a poorly developed GN-PY stringer/fracture at 21 degrees to C/A.

182.95: 1 cm-sized carbonatized mafic volcanic xenolith with GN-SPH-PY.

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HOLE #: COB-24 From Τo Lithological Description Sample # From To Width 183.46: 7 cm long rounded pale green gabbroic xenolith; cross cut by a serpentine-calcite cored joint/fracture at 43 degrees to C/A. 183.81: 1 mm wide calcite-serpentine margins joint/fracture at 75 degrees to C/A. 184.07; Core break; remnant 2 mm wide calcite, trace PY-CPY, veinlet at ~30 degrees to C/A; underlying rock over ~25 cm is silicified breccia, minor disseminated PY-trace cobaltite/arsenopyrite. 184.24: Up to 4 mm wide nearly massive PY, minor calcite-quartz-chlorite, veinlet at 48 degrees to C/A. 184.35 - 188.51; Fine- medium-grained mafic intrusive dyke; disseminated up to 5 mm-sized AMPH/PX phenocrysts/aggregates; minor local PY/SPH disseminations/blebs or aggregates/stringers with minor calcite; gradational silicified upper contact at ~37 degrees to C/A; sharp lower contact at 31 degrees to C/A. 184.5: Up to 5 mm wide partially segmented nearly massive PY, minor calcite, vein at 42 degrees to C/A; minor PY disseminations-stringers in wall rock, a few cobaltite/arsenopyrite grains as well. 185.2 - 185.27: Partially segmented 7 mm wide calcite, pale orange quartz/feldspar margins, vein at 38 degrees to C/A; vein contains one 5 mm long PO bleb that may have a few miniscule shreds of silver along one edge. 185.95 - 186.14: 3-4 cm wide deformation/shear zone; minor brecciation; moderate quartz-feldspar-calcite-chlorite stringers-veinlets, minor PY, trace SPH-CPY; at ~15 degrees to C/A; underlying 1.5 m of rock is moderately brecciated/granulated. 187.44: 2 mm wide calcite, scarce PY-CPY-GN, veinlet at 67 degrees to C/A. 187.82: 2 mm wide quartz, minor calcite, trace GN, veinlet at 54 degrees to C/A. 188.3 - 188.4: Slightly hematitized serpentine, quartz-calcite, minor SPH-trace PY, joint/fracture at 25 degrees to C/A. 188.54 - 188.68: Two up to 3 mm wide calcite veinlets and one gash veinlet at ~60 degrees to C/A; barren; one poorly developed fracture, minor PY-SPH, at 150 (30) degrees to C/A. 188.83: 8 mm wide calcite, minor quartz, trace PY, vein at 61 degrees to C/A. 189.1: 2.5 x 2.5 cm-sized orange calcite-quartz/feldspar, trace PY-CPY, aggregate. 189.19: 3 mm wide calcite-serpentine, trace CPY, veinlet at 54 degrees to C/A. 189.38: 1 mm wide red-orange quartz-feldspar, trace calcite, abundant semi-massive PY, veinlet at 38 degrees to C/A. 189.95: 1 cm wide calcite, scarce PY, vein at 35 degrees to C/A. 190.09: Poorly developed SPH, trace PY, fracture at 130 (50) degrees to C/A. 190.25 - 191.08: Silicified, dark brown mafic volcanic xenoliths; partially disaggregated with mafic intrusive matrix; minor PY disseminations-stringers; pale green silicified alteration zones-vein like zones, two with minor-moderate calcite-PY-SPH-GN; sharp upper contact at 42 degrees to C/A; sharp lower contact at 27 degrees to C/A. 190.29: 3 mm wide calcite, moderate SPH-CPY, gash veinlet at 66 degrees to C/A. 191.08 - 193.55: Slightly coarser grained mafic intrusive dyke compared to mafic intrusive dyke in interval (188.51 -

190.25); mafic intrusive in this interval is xenolith-bearing as well.

191.6 - 191.85: About seven up to 1.5 x 2 cm-sized xenoliths; rounded; mix of intermediate intrusives.

HOLE #: COB-24

From To Lithological Description Sample # From To Width

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193.63 - 194.57: Xenolith/interlayer(?); resembles dark brown mafic volcanic xenoliths at (190.25 - 191.08) except that there is no mafic intrusive matrix material; also resembles a volcanic breccia - dark brownish green fragments floating in a medium green matrix; very irregular upper contact at ~55 degrees to C/A; lower contact marked by a serpentine, 1 mm wide calcite-cored, joint/fracture at 21 degrees to C/A.

193.64: 4 mm wide calcite, minor serpentine, trace SPH, scarce CPY-GN, veinlet at 40 degrees to C/A; underlying adjacent segmented calcite-quartz, rare GN-SPH-CPY, stringer at 52 degrees to C/A.

194.11: 7 mm wide calcite, abundant serpentine, trace GN-SPH-CPY, vein at 47 degrees to C/A; a few cobaltite grains in wall rock.

194.2: Serpentine coated, discontinuous semi-massive PY, trace CPY, joint/fracture at 147 (33) degrees to C/A. 194.57 - 196.02: In situ brecciated mafic intrusive; pale green matrix - locally carbonatized, trace-minor CPY-PY-GN; occasional xenoliths.

194.76: 7 mm wide calcite, minor GN, vein at 80 degrees to C/A.

195.02: 4 mm wide calcite, minor GN, trace SPH, veinlet at 71 degrees to C/A.

195.2 - 195.75: Several calcite-serpentine, moderate SPH-GN-CPY, stringers-veinlets at 0-20 degrees to C/A, occasionally up to 90 degrees to C/A; two up to 4 mm wide calcite veinlets and five calcite gash veinlets at 55-75 degrees to C/A, all with minor-abundant SPH, minor GN; one 6 mm wide discontinuous quartz-calcite, moderate SPH-GN, vein at 30 degrees to C/A; locally 5-10% disseminated SPH in wall rock.

195.79 - 196.0: Slip plane at 17 degrees to C/A.

196.02 - 196.1: 4.5 cm to 2 cm wide calcite, wall rock fragments, moderate CPY, minor GN, vein at 50 degrees to C/A; short discontinuous semi-massive cobaltite veinlet; lower contact marked by a serpentine-calcite coated joint/fracture; one calcite veinlet offshoot with moderate CPY-SPH.

196.1 - 200.1: Dark green-black mafic volcanics similar to (193.63 - 194.57); slight brownish hue; volcanic breccia; rare <1 mm-sized cobaltite.

196.35 - 196.65: A few poorly-moderately developed semi-massive PY stringers at 20-55 degrees to C/A; minor disseminated PY.

196.86 - 197.07: One 5 cm long oval medium orange and green quartz-feldspar-serpentine aggregate, several short orange quartz/feldspar offshoot veinlets; one 11 cm long oval basin-like structure, pale orange-gray-green, concentrically layered quartz/feldspar-calcite-serpentine, trace SPH-CPY-GN.

197.3 - 197.39: 1.7 cm wide poorly laminated pale orange-gray-green quartz/feldspar-calcite-serpentine vein at 35 degrees to C/A; minor SPH-CPY-GN; minor disseminated PY in wall rock.

197.6: 4 mm wide calcite, serpentine margins, minor PY-SPH-CPY, scarce GN, veinlet at 90 degrees to C/A. 198.30 - 199.06: Three en echelon up to 3 mm wide calcite veinlets at ~20 degrees to C/A; one veinlet curves to ~2 degrees to C/A and can be traced for 45 cm; minor guartz, moderate SPH, minor CPY-PY.

199.24: 2 mm wide calcite-serpentine, minor PY-GN, veinlet at 150 (30) degrees to C/A; a few serpentine, minor SPH-PY-CPY, stringers in underlying 30 cm.

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From To Lithological Description Sample # From To Width

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199.55 - 200.1: Three up to 3 mm wide calcite, minor-moderate PY, veinlets at ~20 degrees to C/A; veinlet near 200.0 underlain by a parallel 2 cm wide strongly carbonatized zone with minor disseminated SPH and a sharp lower contact at 17 degrees to C/A; one serpentine, minor PY, stringer at 162 (18) degrees to C/A.

200.1 - 201.75: Mafic intrusive; resembles mafic intrusive at (184.35 - 188.51); up to 5 mm-sized AMPH/PX phenocrysts/aggregates; occasional PY-SPH disseminations, calcite-PY/SPH stringers-veinlets at 20-35 degrees to C/A; fairly sharp lower contact at 31 degrees to C/A.

201.0: Single <1 mm-sized cobaltite grain.

201.75 - 206.38: Mafic intrusive; fine-grained; minor-moderate PY/SPH/calcite-occasional CPY/GN disseminationsblebs-stringers-veinlets; fairly sharp lower contact at 10 degrees to C/A.

199.55 - 200.1: Three up to 3 mm wide calcite, minor-moderate PY, veinlets at ~20 degrees to C/A; veinlet near 200.0 underlain by a parallel 2 cm wide strongly carbonatized zone with minor disseminated SPH and a sharp lower contact at 17 degrees to C/A; one serpentine, minor PY, stringer at 162 (18) degrees to C/A.

201.0: Single <1 mm-sized cobaltite grain.

201.75 - 206.38: Mafic intrusive; fine-grained; minor-moderate PY/SPH/calcite-occasional CPY/GN disseminations-blebs-stringers-veinlets; fairly sharp lower contact at 10 degrees to C/A.

201.83 - 201.93: 3 mm wide calcite, serpentine margins, trace GN-SPH-CPY, veinlet at 27 degrees to C/A.

203.35 - 203.5: 8 mm wide pale orange and gray quartz/feldspar-calcite-serpentine, minor PY, vein at 35 degrees to C/A; moderate 5 mm-sized quartz-feldspar, usually with PY, aggregates in wall rock.

203.58 - 205.2: Several semi-massive PY, with or without quartz/feldspar/calcite/SPH, stringers-veinlets at 10-80 degrees to C/A; also PY disseminations-aggregates; rare GN/CPY with calcite.

203.84: ~1 cm wide irregular calcite-pale orange quartz/feldspar-serpentine, minor PY, vein at ~50 degrees to C/A; appears to cross cut PY veinlets.

205.42 - 206.25: Five serpentine-calcite, moderate-abundant PY, usually minor SPH/CPY, rare GN, joints/fractures at 50-75 degrees to C/A; a few PY-SPH, calcite-serpentine-PY-SPH stringers at 10-45 degrees to C/A.

206.06: 2 mm wide calcite, moderate SPH-PY, minor GN, gash veinlet at 43 degrees to C/A.

206.25 - 206.46: Contact zone; above contact have abundant disseminated SPH, several calcite, minor SPH-PY, veinlets at 80-90 degrees to C/A, and carbonatized rock; on both sides of contact have parallel (10 degrees to C/A) discontinuous calcite-serpentine, minor SPH-PY, veinlets-veins.

206.38 - 208.03: Mafic intrusive/massive mafic volcanic flow; fine-grained; mottled medium-dark green; pseudo-granulated appearance; fairly regular brecciated lower contact at ~50 degrees to C/A.

206.98: 1 cm wide calcite, minor serpentine-quartz, minor CPY-PY, rare SPH, gash vein at ~52 degrees to C/A. 207.23 - 207.36: 1 cm wide poorly developed CPY-quartz, trace PO-SPH, gash vein at 47 degrees to C/A; underlain by a 5.5 cm wide calcite, minor quartz/feldspar, abundant CPY, trace GN-PY-SPH, vein at ~60 degrees to C/A; sulphides restricted to vein margins.

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HOLE #: COB-24 Sample # From To Width To Lithological Description From 207.63 - 207.8: Up to 1 cm wide calcite, minor PY, trace SPH-CPY, gash vein at 60 degrees to C/A; 4 mm wide calcite, trace SPH-PY-PO-CPY-GN, veinlet at 154 (26) degrees to C/A; several short semi-massive PY/SPH/PO/CPY/rare GN/calcite stringers in wall rock; abundant (5%) disseminated SPH in underlying 20 cm. 208.03 CONGLOMERATE: 209.94 Massive, heterogeneous, medium green; minor-abundant up to 4 cm-sized angular to subrounded clasts; essentially matrix supported; clasts consist of pale gray/green mafic/intermediate volcanics, chert, local quartz-SPH granules, rare intermediate intrusives; very fine-grained chloritic matrix; scattered cobaltite grains; occasional calcite veinlets; 1-3 serpentine coated, with or without calcite, joints/fractures per metre at 40-70 degrees, and occasionally at ~15 degrees, to C/A. 208.07: 1-2 mm wide calcite, trace PY-SPH, veinlet at 51 degrees to C/A. 208.32: Serpentine coated fracture at 58 degrees to C/A; minor PY, one 1 mm-sized euhedral cobaltite grain. 209.0: Core break: 1 mm-sized subhedral cobaltite grain. 209.2 - 209.5: Several up to 4 cm-sized angular-subrounded volcanic or siliceous clasts with SPH. 209.44 - 209.64: A few up to 1 mm wide calcite, minor SPH, trace GN, gash stringers-veinlets at 15-30 degrees to C/A. 209.94 212.25 GRAYWACKE: Massive, medium gray, fine-grained; minor PY-SPH-PO disseminations-blebs; occasional semi-massive PO stringers; local moderate up to 1.5 cm-sized pale pink quartz/feldspar-calcite, minor PY/PO, aggregates and/or up to 4 cm-sized pale gray quartz/feldspar-chlorite, trace calcite, minor PO/PY, aggregates; sharp upper contact marked by a serpentine coated, minor calcite-pale red-brown quartz/feldspar, trace PY, joint/fracture at 15 degrees to C/A; three other en echelon up to 1 mm wide calcite-serpentine, minor PY/SPH, occasional PO, stringers at 15-23 degrees to C/A as well; lower contact marked by a vein/deformation zone at 16 degrees to C/A. 212.16 - 212.34; Contact zone; 2.5 cm wide; consists of an irregular up to 1 cm wide barren pale orange-gray quartz/feldspar-calcite-serpentine vein at 16 degrees to C/A within a finely laminated deformation zone; sharp contacts between deformation zone and wall rock. 212.25 217.87 CONGLOMERATE: Continuation of preceding conglomerate at (208.03 - 209.94). 215.45: 6 cm-sized tonalitic clast. 217.87 221.54 GRAYWACKE: Massive, homogeneous, medium gray; very fine-grained; occasional clasts; 2-3 serpentine-guartz coated, minor PY, joints/fractures per metre at 50-65 degrees to C/A; sharp-gradational upper contact at ~29 degrees to C/A; irregular gradational lower contact at ~65 degrees to C/A.

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From	То	Lithological Description	Sample	#	From	То	Width
-	-	218.41: Serpentine-calcite coated, trace PO/PY, joint/fracture at 28 degrees to C/A. 220.93: Slip plane at 30 degrees to C/A.	-				-
221.54	224.98	CONGLOMERATE: Continuation of conglomerate at (212.25 - 217.87). 221.64: 5 mm wide pale orange calcite, minor quartz, gash vein at 55 degrees to C/A; barren. 222.31: Sharp internal contact at 38 degrees to C/A. 222.51 - 222.61: <1 mm wide calcite, minor quartz, stringer at 21 degrees to C/A; cross cuts a serpentine stringer at 152 (28) degrees to C/A.					
224.98	226.38	MAFIC INTRUSIVE DYKE: Massive; mottled off-white-medium green; fine- medium-grained; up to 5 mm-sized PX/AMPH phenocrysts/aggregates often surrounded by fine-grained feldspar or set in a very fine-grained pale green groundmass; trace disseminated PY-PO-CPY, scarce SPH; very irregular upper contact at ~25 degrees to C/A; sharp lower contact marked partially by a quartz stringer at 46 degrees to C/A. 226.0 - 226.3: Set of five up to 2 mm wide calcite, moderate serpentine, trace-moderate PY, scarce SPH-PO, stringers-veinlets at 50-60 degrees to C/A.					
226.38	228.86	CONGLOMERATE: Continuation of conglomerate at (221.54 - 224.98). 226.69: 6 mm wide calcite, minor SPH-GN, trace PY, vein at 47 degrees to C/A. 227.3 - 227.39: Irregular 2-15 mm wide calcite, minor quartz-PY, trace GN-CPY, gash vein at 45 degrees to C/A. 227.75 - 227.91: Cobble of weakly laminated siliceous siltstone; medium brown; moderate disseminated very fine SPH; cross cut by a very irregular 2.5 cm wide abundant calcite, minor PY-SPH, brecciated vein-like layer. 227.74 - 228.88: At least twelve up to 1 cm wide calcite, trace-minor SPH/PY/CPY/GN, stringers-veins at 35-55 degrees to C/A. 227.96 - 228.6: Mafic intrusive dykelet; massive, medium-dark gray, fine-grained; sharp upper contact at 34 degrees to C/A; sharp lower contact marked by a serpentine-calcite coated joint/fracture at 30 degrees to C/A.					
228.86	230.35	LAMPROPHYRE DYKE: Massive, medium gray, fine-grained; local minor 1-2 mm-sized biotite; local SPH/PY/PO disseminations/stringers; upper contact in broken core - appears to be at 40 degrees to C/A; sharp lower contact at 40 degrees to C/A. 229.02: Calcite-serpentine, minor PY-PO-CPY-SPH, stringer at 52 degrees to C/A. 229.36 - 229.48: Broken core; 3 cm wide calcite, minor CPY, rare SPH-PO, vein at 42 degrees to C/A; underlain by at least 10 cm long xenolith of conglomerate. 229.52 - 229.6: 1 cm wide calcite, moderate SPH-GN-PY, trace PO, vein at 30 degrees to C/A. 229.8: Internal contact at 50 degrees to C/A.					

HOLE#:		COB-24					
From	То	Lithological Description	Sample	#	From	То	Width
230.35	230.70	CONGLOMERATE: Continuation of conglomerate at (226.38 - 228.86).	-		-		
230.70	236.42	MAFIC INTRUSIVE DYKE: Similar to mafic intrusive dyke at (224.98 - 226.38); massive, fairly homogeneous, mottled off-white-medium green; fine- medium-grained; PX/AMPH phenocrysts/aggregates; trace, locally moderate, PO-CPY-PY disseminations-blebs; 1-4 serpentine-calcite coated, trace PY, joints/fractures per metre at 40-60 degrees, occasionally at 30 degrees, to C/A; no clear sharp upper contact - erosional contact(?) - clasts however are not from underlying mafic intrusive; sharp lower contact marked by a 1 mm wide calcite-serpentine, abundant PO-minor CPY, stringer at 31 degrees to C/A.					
		231.58 - 232.5: Set of at least 35 up to 1 mm wide quartz, trace calcite, stringers-veinlets at ~55 degrees to C/A; trace-moderate PY/PO, scarce CPY. 232.59: 5 mm wide quartz-wall rock, moderate CPY-PO, vein at 42 degrees to C/A. 233.53 - 234.18: Moderately deformed xenolith of breccia-conglomerate; moderate clasts; gradational contacts. 234.62: 1 x 2.5 cm-sized subangular quartz, minor calcite, moderate PO-CPY, aggregate/xenolith. 234.67 - 235.65: Five up to 6 mm wide quartz-feldspar, minor-moderate PO, stringers-veins at 20-40 degrees to C/A.					
236.4 2	237.89	MAFIC INTRUSIVE DYKE: Massive, homogeneous, medium green-gray, fine- medium-grained; cross cut by at least nine quartz-feldspar-calcite-serpentine, trace-minor PO, stringers-veinlets at 45-50 degrees to C/A; sharp upper contact marked by an irregular up to 5 mm wide quartz-calcite-serpentine-epidote, minor PO, vein at 35 degrees to C/A; fairly sharp lower contact at 20 degrees to C/A. 237.46 - 237.57: 6 cm wide interlayer/xenolith of the wall rock mafic intrusive; minor PO, trace CPY.					
		disseminations; sharp upper contact at 37 degrees to C/A; sharp lower contact at 34 degrees to C/A. 237.71: 11 mm wide quartz-serpentine, minor calcite, moderate PO, trace CPY, vein at 55 degrees to C/A.					
237.89	239.49	MAFIC INTRUSIVE DYKE: Continuation of preceding mafic intrusive dyke at (230.7 - 236.42). 238.95: Quartz-serpentine coated, moderate PO, trace CPY, joint/fracture at 21 degrees to C/A. 239.0 - 239.26: One quartz and five calcite, trace-abundant PO, trace CPY, stringers-veinlets at 30-55 degrees to C/A.					

HOLE#:		COB-24					
From	То	Lithological Description	Sample	#	From	То	Width
239.49	242.07	GRAYWACKE: Massive, fairly homogeneous, medium gray; fine-grained; abundant chlorite; isolated angular, occasionally rounded, granule-pebble-sized clasts, usually at every 5-10 cm, comprised of mafic volcanics, chert, rare mafic/intermediate intrusives, calcite-quartz-serpentine aggregates; occasional clasts with SPH-PY; local conglomerate; local minor-moderate SPH/PY/PO/CPY disseminations-stringers; occasional serpentine coated joints/fractures at 45-65 degrees, less at 25-35 degrees, to C/A. 239.53: Serpentine, minor calcite, semi-massive PO, minor CPY, joint/fracture at 71 degrees to C/A. 240.0 - 240.15: Irregular 2 mm wide calcite, minor GN-SPH, trace PO-PY, veinlet at 29 degrees to C/A; poorly	-		-		-
		developed PO, minor CPY, stringer at 39 degrees to C/A. 241.6 - 241.87: Moderate-abundant <2 mm-sized disseminated SPH aggregates; one calcite coated, moderate SPH, fracture at 50 degrees to C/A.					
242.07	243.31	MAFIC INTRUSIVE DYKE: Massive, homogeneous, medium green-gray, fine-grained; minor PY, lesser SPH/CPY, disseminations-stringers; sharp upper contact at 43 degrees to C/A; very irregular lower contact at ~45 degrees to C/A. 242.4: Poorly developed calcite, minor SPH-PO, trace CPY, veinlet at 42 degrees to C/A. 242.5 - 243.1: Two successive calcite-serpentine-PO-SPH-GN-CPY stringers roughly parallel to C/A. 243.23: 5 mm wide calcite, trace GN-PY, gash vein at 30 degrees to C/A.					
243.31	244.35	CONGLOMERATE: Abundant clasts; one 15 cm-sized mafic volcanic clast, one 10 cm-sized conglomerate clast; gradational lower contact. 244.02 - 244.12: Set of at least 15 quartz/serpentine, occasional minor-moderate SPH-GN, hairline fractures-up to 1 mm wide veinlets at ~33 degrees to C/A; underlain by a few semi-massive PY and minor-moderate SPH-CPY-PY-GN stringers-veinlets at 0-40 degrees to C/A.					
244.35	249.50	GRAYWACKE: Continuation of preceding graywacke at (239.49 - 242.07). 244.25 - 245.25: Several SPH/PY/CPY/GN, usually with calcite, stringers-veinlets, at 15-45 degrees to C/A; also as disseminations-aggregates; one 4 mm wide bifurcating calcite, moderate SPH, minor GN-CPY, veinlet at 13 and 29 degrees to C/A; one serpentine coated, moderate calcite, minor GN-SPH, joint/fracture at 48 degrees to C/A. 246.58: Up to 6 mm wide segmented quartz, abundant SPH-PY, minor GN, stringer-vein at 36 degrees to C/A; minor disseminated SPH in wall rock. 247.08 - 247.21: Two up to 3 mm wide quartz, abundant SPH, minor PY-CPY, veinlets at 34 and 46 degrees to					

HOLE #:		COB-24					
From	То	Lithological Description	Sample	#	From	То	Width
-	-	247.65 - 247.89: Quartz veinlet and stringer; minor-moderate SPH, minor GN-PY, trace CPY, at 15-20 degrees to C/A.	-		-		-
		248.56 - 248.62: Calcite veinlet and 9 mm wide calcite gash vein; minor-moderate GN, minor CPY; adjacent PY stringers-blebs; about 12 <1 mm-sized cobaltite grains in wall rock parallel to gash vein.					
		248.75 - 248.91: Set of eight up to 3 mm wide serpentine, with or without calcite, only one with minor GN, stringers-veinlets at ~32 degrees to C/A; underlain by a 6 mm wide calcite-serpentine, minor GN, veinlet at 69 degrees to C/A.					
249.50	250.65	CONGLOMERATE:					
		Numerous matrix supported up to pebble-sized angular-subrounded clasts; gradational contacts.					
250.65	262.24						
		Continuation of preceding graywacke at (244.35 - 249.5).					
		251.47: 2 mm wide serpentine, orange quartz/feldspar, trace PY-GN, gash veinlet at 26 degrees to C/A. 251.67 - 251.75: 2-3 mm wide orange quartz/feldspar, abundant PY, minor GN-SPH, gash veinlet at 10 degrees to C/A.					
		251.94: 3 x 2 cm-sized subangular quartz-serpentine-feldspar-calcite, moderate PY, trace GN, clast. 252.39: Sharp internal contact marked by a barren calcite stringer at 32 degrees to C/A; underlying 15 cm contains several up to 8 mm wide calcite, minor serpentine-quartz, minor SPH-CPY, trace GN, gash veinlets-veins at ~63 degrees to C/A.					
		252.66: Core break; remnant serpentine, quartz, trace calcite, minor PY, veinlet-fracture at 36 degrees to C/A.					
		252.94 - 253.09: Up to 2 mm wide calcite, rare GN, stringer-veinlet at 21 degrees to C/A.					
		253.13 - 253.29: Irregular up to 1 cm wide chlorite/serpentine, minor quartz, moderate PO, rare SPH-GN-CPY, vein at ~20 degrees to C/A.					
		254.2 - 254.48: Several up to 2 mm wide serpentine, minor quartz, trace calcite, minor semi-massive GN, trace CPY, stringers-veinlets at 40-50 degrees to C/A; truncated by a serpentine coated joint/slip plane at 29 degrees to C/A; cross cut a 1-2 mm wide semi-massive PO veinlet that curves from 145 (35) degrees to 0 degrees to C/A.					
		255.03 - 255.23: Irregularly shaped siliceous (cherty) clast.					
		256.53: A few discontinuous serpentine-calcite, minor PY, stringers-veinlets at 20-40 degrees to C/A.					
		258.27 - 258.51: Irregularly shaped siliceous (cherty) clast; similar to clast at (255.03 - 255.23); cross cut by a sementine coated, minor calcite, joint/fracture at 37 degrees to C/A.					
		260.25 - 260.42: Two 1-2 mm wide serpentine-calcite veinlets at 23 degrees to C/A; truncated by a 2-3 mm wide calcite, rare CPY-PO, veinlet at 61 degrees to C/A.					
		260.61 - 261.28: Several up to 2 mm wide calcite, occasional moderate PY, gash veinlets and poorly developed vein-like aggregates at 15-55 degrees to C/A; about seven serpentine coated, occasional calcite, joints/fractures at 20-85 degrees to C/A.					

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HOLE #: COB-24 From Lithological Description Sample # From To Width Τo 261.24 - 262.24: Strongly carbonatized conglomerate; minor disseminated PY; upper contact marked by an ~5 mm wide serpentine-calcite, trace GN, vein at 45 degrees to C/A; interval may be a boulder-sized clast(?). 261.9 - 262.24: Mix of up to 8 mm wide calcite veins and very strongly carbonatized wall rock; moderate-abundant PY-CPY; minor SPH; minor very fine-grained cobaltite(?) aggregates; veins at 25-30 degrees to C/A; fairly regular lower contact at 15 degrees to C/A; underlain by clast bearing graywacke. 262.24 264.39 MAFIC INTRUSIVE DYKE: Massive; upper ~55 cm is medium brown-gray, fine-grained; minor PY, lesser PO, disseminations-blebs, minormoderate disseminated SPH; grades into medium green-gray, fine- medium grained rock with acicular feldspar; lower ~20 cm is also fine-grained; sharp upper contact at 31 degrees to C/A, offset by a slip plane at 73 degrees to C/A; sharp lower contact at 25 degrees to C/A. 262.45 - 262.65; Calcite fracture at 17 degrees to C/A with an ~5 mm wide envelope of PY disseminations; up to 1 mm wide serpentine, calcite cored, abundant PY, minor PO, veinlet at 25 degrees to C/A. 262.68 - 262.83: Silicified; abundant disseminated SPH, trace PY-PO; one fracture with moderate PO-PY-SPH at 52 degrees to C/A. 263.53 - 263.66: 5 mm wide calcite vein at 20 degrees to C/A; barren. 264.13: 1-2 mm wide calcite veinlet at 50 degrees to C/A; barren. 264.39 273.14 GRAYWACKE: Continuation of preceding graywacke at (250.65 - 262.24); essentially no sulphides present. 264.48 - 264.64: 2 mm wide serpentine-calcite, trace SPH, rare GN-CPY, veinlet at 14 degrees to C/A. 266.45 - 266.56: Set of at least four serpentine coated joints/fractures at 40 degrees to C/A; one with moderate calcite-GN, minor PY. 266.68 - 266.79: Irregularly shaped siliceous clast as at (255.03 - 255.23). 267.8: 1 mm wide serpentinized-weakly carbonatized fracture at 48 degrees to C/A; trace SPH-PY. 267.85: Serpentine coated, abundant SPH, minor PY, joint/fracture at 78 degrees to C/A. 268.0 - 268.11: Irregularly shaped siliceous clast as at (255.03 - 255.23). 268.59 - 269.0: ~1 mm wide continuous massive PY stringer at 3 degrees to C/A. 268.63 - 268.71: Up to 3 mm wide calcite, moderate CPY-GN-PY, veinlet at 35 degrees to C/A; cross cuts above PY stringer. 269.41 - 269.74: Boulder-sized clast of conglomerate comprised of pale gray and pale green very fine-grained subangular-rounded granules-pebbles; appears to be clast supported; very fine-grained matrix. 271.4 - 271.5; Irregularly shaped siliceous clast as at (255.03 - 255.23); minor fine PY-PO-CPY-SPH

disseminations.

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HOLE #: COB-24 From Τo Lithological Description Sample # From To Width 273.14 276.60 BASAL BRECCIA-CONGLOMERATE: Graywacke as above still persists; up to 50 cm-sized clasts of pillowed mafic volcanics; occasional subrounded clasts of mafic/intermediate intrusives; clasts are subangular-subrounded; arbitrarily placed gradational contacts. 273.34 - 273.52: Set of at least 15 quartz, trace PO, hairline fractures-up to 1 mm wide veinlets and up to 3 mm wide calcite, minor PO, veinlets at 40-45 degrees to C/A. 274.94 - 275.09: Segmented up to 1 cm wide calcite, minor quartz, abundant PO, moderate CPY, vein at 17 degrees to C/A; partially cross cut by a 2 mm wide calcite, trace PO, gash veinlet at 60 degrees to C/A. 276.0 - 276.19: At least twelve up to 1 mm wide calcite, rare-minor PO-CPY, hairline fractures-veinlets at 40-55 degrees to C/A. 276.60 300.66 PILLOWED MAFIC VOLCANICS: Heterogeneous; essentially pale green, also medium green-pale/medium gray; aphanitic-very fine-grained; minormoderate in situ breccia, pillow selvages fractured but intact, matrix of chlorite or quartz/epidote hairline fracturesstringers-veinlets often with minor-moderate PO-CPY-SPH; epidotized/silicified/feldspathized/occasionally carbonatized, often with PO/SPH/CPY disseminations-blebs-short stringers, pillow selvages-interpillow material; 2-3 serpentine coated, occasionally with calcite/PO-CPY, joints/fractures per metre at 35-65 degrees to C/A. 276.85 - 276.94: Up to 1.5 cm wide interpillow material; abundant disseminated PO. 277.12: Serpentine coated, moderate PO, minor CPY, joint/fracture at 36 degrees to C/A. 277.58 - 277.68: 3 cm wide calcite-orange quartz/feldspar-SPH-PO-GN-CPY vein at 42 degrees to C/A; an adjacent similar parallel 1 cm wide vein as well; main vein truncates a 9 mm wide calcite, minor GN, vein at 5 degrees to C/A; another 3 mm wide calcite, minor GN-SPH, veinlet at 44 degrees to C/A 10 cm below main vein. 278.2 - 278.29: Interpillow material; moderate PO, trace CPY-SPH. 278.38: Serpentine-calcite coated, moderate CPY-PO, joint/fracture at 66 degrees to C/A. 279.12 - 279.39: At least 14 quartz/calcite hairline fractures-up to 3 mm wide veinlets at 45-50 degrees to C/A; a few with moderate PO, trace-minor CPY. 280.64 - 280.74: Serpentine coated, moderate PO, minor GN, trace CPY, joint/fracture at 22 degrees to C/A. 281.0 - 281.75: Interpillow material-pillow selvages roughly parallel to C/A; trace-minor PO-SPH-CPY. 282.5 - 283.0: Pillow breccia; silicified-epidotized, trace disseminated PO-CPY; gradational contacts. 283.41: Serpentine-calcite coated, minor PO-CPY, joint/fracture at 52 degrees to C/A. 284.28 - 285.61: Pillow breccia. 284.52: 1 mm wide serpentine-calcite, moderate PO, trace CPY, gash veinlet at 50 degrees to C/A. 284.58 - 285.35: Three up to 1 cm wide semi-continuous silicified, locally carbonatized, alteration "bands" roughly parallel to C/A; minor-abundant PO-CPY-SPH. 285.62 - 286.0: Conglomerate; up to 7 cm-sized subangular-subrounded clasts comprised of mafic volcanics, chert (silicified parts of pillowed mafics?); clast supported; fairly regular upper contact at ~30 degrees to C/A.

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Sample # From To Width

From To Lithological Description

286.0 - 286.15: Mafic intrusive dykelet; medium green, fine-grained; sharp upper contact at 30 degrees to C/A, there is a sliver of conglomerate that extends from the conglomerate into the mafic intrusive almost for its entire width and that is roughly parallel to C/A; sharp lower contact at 33 degrees to C/A.

286.15 - 286.6: Medium brown-gray to green-gray extremely silicified pseudo-breccia.

286.6 - 286.95: Abundant interpillow material; silicified, minor carbonatization, minor PO-CPY, trace SPH.

287.22: Irregular up to 3 mm wide guartz, moderate PO-CPY, veinlet at 41 degrees to C/A.

287.92 - 288.22: Moderate amount of reddish gray intermixed fine-grained quartz-SPH, minor PO-CPY, aggregates.

289.61 - 289.88: Up to 2 mm wide quartz, trace calcite, minor CPY-PO, veinlet at 165 (15) degrees to C/A; cross cut by a set of four quartz-calcite, occasional PO-CPY, stringers at 40-48 degrees to C/A.

290.32 - 290.81: Silicified-epidotized-chloritized interpillow material roughly parallel to C/A; trace calcite, minor CPY-PO.

290.8 - 291.14: Three irregular up to 4 mm wide quartz, minor chlorite, moderate PO, trace CPY, veinlets at 0-12 degrees to C/A.

291.52 - 291.63: Serpentine-quartz coated, minor calcite, minor PO-CPY, joint/fracture at 159 (21) degrees to C/A; cross cuts/offsets a 7 mm wide quartz-chlorite-wall rock, moderate PO, trace CPY, vein at 52 degrees to C/A.

291.63 - 292.43: Set of at least 25 quartz, occasional minor PO-CPY, hairline fractures-up to 2 mm wide veinlets at 45-50 degrees to C/A.

292.55 - 292.8: Irregular up to 1 cm wide silicified-chloritized alteration "band" in interpillow material at ~8 degrees to C/A; moderate PO-CPY.

293.84 - 293.94: Up to 2 mm wide segmented quartz, moderate PO, trace CPY, stringer-veinlet at ~15 degrees to C/A.

294.39 - 294.48: Two serpentine-PO coated joints/fractures at 75 and 80 degrees to C/A.

296.14 - 296.35: Two irregular up to 2 mm wide quartz, minor chlorite, moderate PO, trace CPY, stringers-veinlets at 0-20 degrees to C/A.

296.83 - 297.0: Set of four irregular up to 5 mm wide chlorite-quartz, local abundant PO-CPY, stringers-veinlets at 25-45 degrees to C/A; several short chlorite-quartz fractures as well.

297.15 - 297.68: Mafic intrusive dykelet; medium green-gray, fine-grained; cross cut, including upper contact, by at least five up to 2 mm wide quartz, abundant CPY-PO, moderate SPH, veinlets at 25-35 degrees to C/A; 2 cm wide calcite, moderate CPY, vein at 38 degrees to C/A as well; sharp upper contact at 32 degrees to C/A; lower half of dykelet comprises half the width of the core, sharp contact at 0 degrees to C/A before curving to 12 degrees to C/A.

298.33 - 298.43: 5 mm wide quartz, minor chlorite, local semi-massive PO-CPY, vein at 28 degrees to C/A; minor disseminated PO-CPY in wall rock.

299.08: 1 mm wide calcite, minor PY, veinlet at 61 degrees to C/A.

299.51: Serpentine coated, moderate platy PY, joint/fracture at 56 degrees to C/A.

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HOLE #: COB-24 From To Lithological Description Sample # From To Width 300.19: 1 mm wide quartz, minor chlorite, moderate PO-CPY, veinlet at 26 degrees to C/A; underlain by a serpentine coated, minor calcite, moderate platy PY, minor PO-CPY, joint/fracture at 143 (37) degrees to C/A. 300.37 - 300.66: Silicified-epidotized-chloritized interpillow material at ~10 degrees to C/A; minor carbonatization, minor-moderate disseminated PO-CPY. 300.66 311.51 LAMPROPHYRE DYKE: Massive, medium gray; fine-grained margins, fine- medium-grained biotite-rich (~15-20%) core; moderatelystrongly carbonatized; 3-7 calcite, occasionally quartz only, often with minor PO-CPY, stringers-up to 1 cm wide veins per metre at 15-80 degrees to C/A; 1-2 serpentine coated, with or without calcite/platy PY, joints/fractures per metre at 30-80 degrees to C/A; sharp slightly irregular upper contact at 26 degrees to C/A. 300.88 - 301.73: Fine- medium-grained moderately epidotized alteration zone/intermediate intrusive xenolith/magmatic segregation(?); gradational contacts. 301.74: Irregular up to 5 mm wide calcite-quartz, moderate PO-CPY, rare SPH, veinlet at 30 degrees to C/A. 301.97 - 302.74: Twelve calcite, trace-moderate PY, occasional trace CPY, stringers-up to 6 mm wide veins at 30-75 degrees to C/A; local minor disseminated PY in wall rock. 302.8: Up to 1 cm wide calcite, minor CPY-SPH-PY, gash vein at 30 degrees to C/A; up to 3 mm-sized rounded pale pink quartz/feldspar xenocrysts(?) disseminated in wall rock. 303.19: Core break, some core missing; remnant at least 2 cm wide calcite, minor PY-CPY, vein at 37 degrees to C/A. 303.74: 4 mm wide calcite vein at 55 degrees to C/A; barren. 304.13: 5 mm wide calcite, minor PY, trace CPY, vein at 80 degrees to C/A; truncates a calcite, trace PY, gash veinlet at 35 degrees to C/A. 304.3: Up to 4 mm wide calcite veinlet at 41 degrees to C/A; barren. 304.43: 5 mm wide calcite, minor PY, veinlet at 80 degrees to C/A. 304.91 - 305.1: 9 mm wide calcite, moderate serpentine, scarce PY-CPY, vein at 17 degrees to C/A; barren. 305.93: 1 mm wide calcite, scarce PY, veinlet at 27 degrees to C/A. 306.3 - 306.43: Two up to 5 mm wide calcite, trace PY, veinlets at ~60 degrees to C/A. 307.07: 3 mm wide calcite, trace PY, veinlet at 78 degrees to C/A. 307.5 - 307.73: Xenolith of pillowed mafic volcanics; sharp contacts; lamprophyre overlying xenolith is biotite-rich, underlying lamprophyre has minor biotite only near xenolith; rock contains 1-2 mm-sized PX; still carbonatized. 307.8 - 308.85: At least 11 calcite stringers-up to 7 mm wide veins at 30-35 degrees to C/A; one veinlet at 60 degrees to C/A cross cuts a 30 degree to C/A veinlet; one 7 mm vein varies from 50 to 85 degrees to C/A; most with minor-moderate PO, occasional trace-minor CPY, rare PY, rarer SPH. 309.17 - 309.28: Xenolith of pillowed mafic volcanics; sharp contacts. 310.11 - 310.25: Two up to 3 mm wide calcite, trace-minor PO, gash veinlets at 35 and 45 degrees to C/A.

310.57: 1 mm wide calcite, scarce SPH, veinlet at 59 degrees to C/A.

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HOLE #: COB-24 From Τo Lithological Description Sample # From To Width 310.97 - 314.12: At least six calcite fractures-stringers-up to 2 mm wide veinlets at 55-60 degrees to C/A; most with trace PO-CPY. 311.51 MAFIC INTRUSIVE DYKE: 314.26 Massive; medium brown-gray and very fine-grained below contact; grades into medium green, fine-grained intrusive; chloritized; moderately carbonatized; minor PO disseminations-blebs; at least twenty calcite, generally with minor-moderate PO, occasional CPY, stringers-up to 3 mm wide veinlets at 25-65 degrees to C/A; sharp upper contact marked by an up to 3 mm wide calcite, trace PO, veinlet at 22 degrees to C/A; sharp lower contact partially marked by a 2 mm wide calcite, minor PO, veinlet at 26 degrees to C/A. 311.57: Calcite-semi-massive PO stringer at 43 degrees to C/A. 311.79: Up to 1 mm wide calcite, abundant PO, minor CPY, stringer at 68 degrees to C/A. 312.41: Calcite coated, moderate PO, fracture at 76 degrees to C/A. 312.98: 1-7 mm wide calcite, minor PO, trace GN, veinlet at 56 degrees to C/A. 313.38 - 313.6: 11 mm wide calcite-serpentine, trace PO, vein at 48 degrees to C/A; ~2 cm wide calcite-wall rock vein at 53 degrees to C/A, offshoots at ~20 degrees to C/A; a few serpentine coated, moderate platy PY, joints/fractures at 55-65 degrees to C/A. 314.26 320.00 PILLOWED MAFIC VOLCANICS: Continuation of above pillowed mafic volcanics at (276.6 - 300.66). 315.09 - 315.35: Silicified-carbonatized interpillow material roughly parallel to C/A; moderate PO-SPH, minor CPY. 315.9 - 316.24: Three calcite-quartz, moderate PO, trace CPY/SPH, stringers at 50-55 degrees to C/A. 317.44: 1 mm wide calcite-quartz, trace PO-CPY, veinlet at 52 degrees to C/A. 316.86 - 317.26: Pillow breccia; extremely altered; silicified-carbonatized-abundant medium orange very finegrained feldspathization(?)-epidotized; minor-moderate PO-CPY; very irregular gradational upper contact; fairly sharp lower contact at 59 degrees to C/A. 317.9 - 318.02: 3.5 cm wide layer of interpillow material at ~38 degrees to C/A; silicified-carbonatized; abundant PO, minor CPY. 318.17: 1 mm wide quartz-chlorite/serpentine, minor PO, rare CPY, veinlet at 36 degrees to C/A. 318.31: 3 mm wide quartz-chlorite/serpentine, minor calcite, abundant PO, trace CPY-SPH, veinlet at 48 degrees to C/A. 319.05 - 319.15: 1 cm wide pale purple-gray quartz, minor calcite, moderate CPY-PO, vein at 41 degrees to C/A. 320.0 E.O.H.

APPENDIX II

(Drill Hole X-Section)

