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ASSESSMENT REPORT

1989 DIAMOND DRILL PROGRAM
ON THE
NUGGET OPTION
PROJECT 142

LOG NO: 0309 RD.
ACTION:
FILE NO:

Situated 8 kilometres west of Chemainus, B.C.
in the Victoria Mining Division

48 52'N, 123 49'W
NTS 92B/13

Falconbridge Ltd.
202-856 Homer Street
Vancouver, B.C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,765

February, 1989 Vancouver, B.C.

Robert Stewart
Mike Vande-Guchte

SUMMARY AND CONCLUSIONS

The 1989 exploration program consisted of two drill holes designed to test several IP anomalies with coincident resistivity lows. Results were added to a continuing compilation of geophysical, geological, and geochemical results into an interactive data set.

Two NQ drill holes, totalling 1056.2m, were completed between November 21 and December 5, 1989. Direct drilling costs were $62.48/m with an all inclusive cost of $76,953.00 for the entire drill program.

No intersections of economic significance were encountered in the 2 drill holes. Disseminated and stringer sulphide within the volcanic stratigraphy are the source for the strong IP anomalies. Alteration recognized by low Na_2O contents is confined to a chloritic felsic flow of the upper felsic volcanics in hole NG89-2. The altered flow hosts numerous pyritic stringers, locally anomalous in copper and represents an encouraging form of alteration and mineralization for further exploration work in this area.

RECOMMENDATIONS

No further drilling on the Nugget Option claims is recommended at this time. Favourable geophysical drill targets are located in extremely rugged terrain which would be difficult and costly to access. Further evaluation of the volcanic stratigraphy underlying this area can be better tested on the adjacent Brent 1 claim (wholly owned by Falconbridge Limited). Evaluation of the Brent 1 targets is recommended prior to pursuing costly drill targets on the Nugget Property.

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INTRODUCTION

Location, Access and Physiography

The Nugget Option consists of 4 contiguous claims (Nugget 1, Nugget 2, Mildred, and Nonesuch) located in the Victoria Mining Division approximately 8 km southwest of Chemainus, B.C. (Figure 1). A central geographic coordinate of the property is 123°49'W and 48°52'N. The claims are covered by NTS map sheet 092B/13 (Figure 2).

Access to the property from Chemainus is by MacMillan Bloedel Limited's Copper Canyon Mainline haulage road which intersects the southeast corner of the Nugget Option. A secondary logging road at approximately mile 6 of the haulage road provides access to northern portions of the claim group. Road use is subject to annual permits and/or notice with the forestry companies and the Ministry of Forests.

Timber and surface rights for the claims are held by the Crown, Canadian Pacific Forest Products Limited and MacMillan Bloedel Limited. Annual notification of programs and ongoing contact throughout the year is maintained with the landowners. Compensation for damages to surface and timber rights are made annually following field inspections.

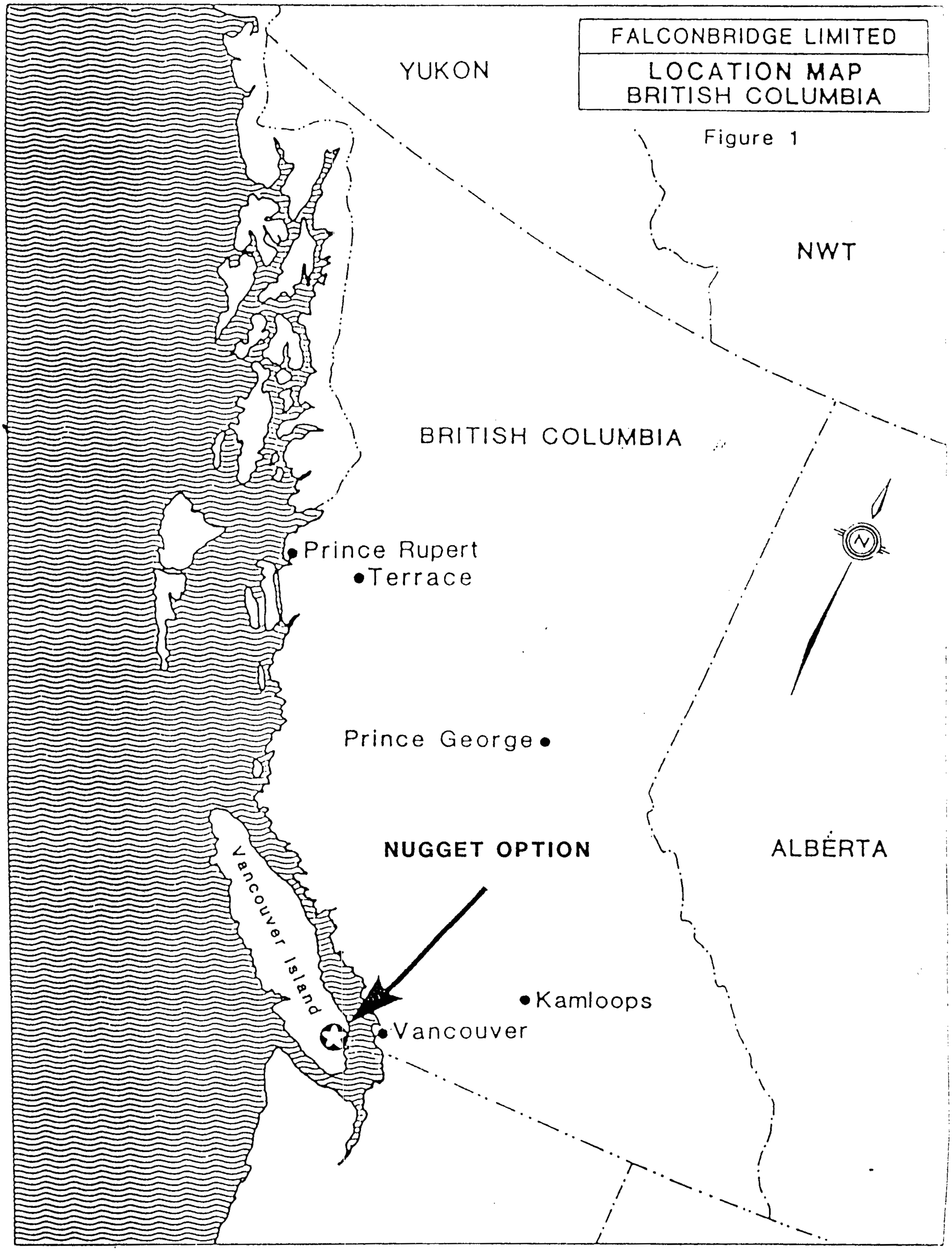
Overall topography is steep with slopes of up to 45 degrees and local deeply incised stream valleys. Terrain flattens towards the south-southeast property boundary in the direction of the Chemainus River valley. Elevations range from 100 to 900 metres, with higher elevations encountered along the northern margin of the property.

The climate is quite mild with winter temperatures in the -5 to +5 degree range and summer temperatures in the 15 to 25 degree range. A few predictable extremes that can affect programs are dry, sunny conditions that cause bush closures in mid-July to Mid-September and difficult ice and snow conditions above 700m between January and April. Periods of persistent showers and rain in the fall through spring may turn access roads into badly rutted mud tracks. Optimum periods for heavy equipment programs are in April-June and October-November.

CLAIM STATUS

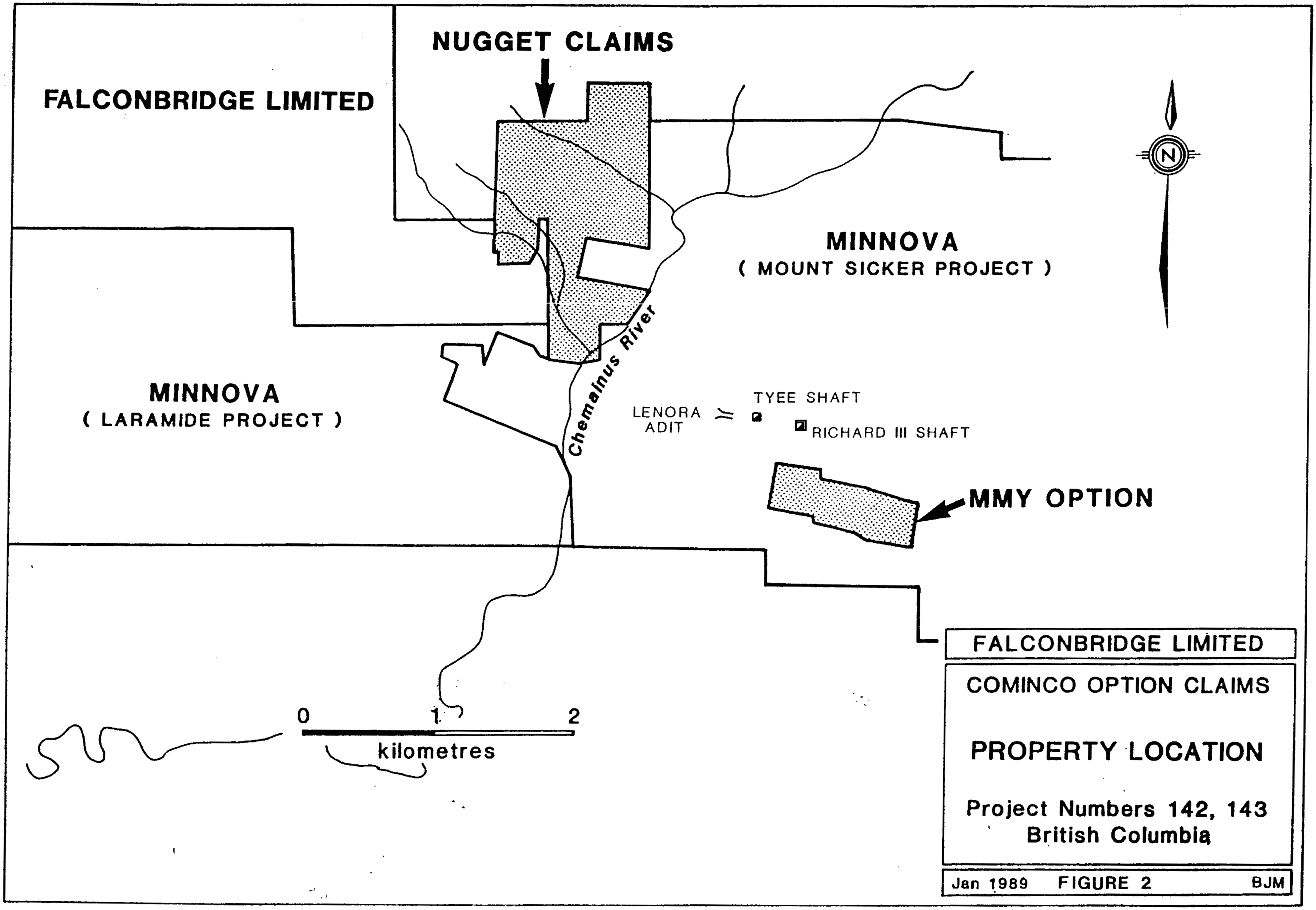
There are 4 claims comprising 17 units covering 288.0 hectares. The current claim status is as follows :

CLAIM	RECORD #	UNITS	STAKING DATE	EXPIRY DATE
Nugget 1	745	9	January 5, 1983	January 25, 1999
Nugget 2	746	6	January 5, 1983	January 25, 1999
Mildred	726	1	December 16, 1982	December 16, 1999
Nonesuch	725	1	December 16, 1982	December 16, 1999


FALCONBRIDGE LIMITED

LOCATION MAP
BRITISH COLUMBIA

Figure 1



FALCONBRIDGE LIMITED

COMINCO OPTION CLAIMS

PROPERTY LOCATION

Project Numbers 142, 143
British Columbia

Jan 1989 FIGURE 2 BJM

EXPLORATION HISTORY

Former crown grants, Mildred and Nonesuch, were held by prospector, J.R Deighton, during the mid 1970's. Deighton's work consisted of mapping and prospecting on the claims between 1976 and 1977 and represents the earliest available work on the Nugget Option property. Numerous open cuts and adits on the property, particularly along the Chemainus river and Holyoak Creek, date from the late 1890's to early 1900's. No reports of the old workings could be located, however, Clapp (1917) reported that "a great many prospect drifts and pits, and not a few adits in Mounts Sicker, Richards and Brenton".

In 1979, UMEX conducted a soil geochemical survey on the Mildred, Nonesuch, and Faith mineral claims. The Faith claim covered an area now encompassed by the Nugget 1 and 2 claims. Soil samples were analysed for Cu, Pb, and Zn and outlined several coincident element anomalies.

Cominco Limited acquired both reverted crown grants, Mildred and Nonesuch, on December 16, 1982 and subsequently staked the Nugget 1 and Nugget 2 claims on January 5, 1983. During 1983, Cominco Limited completed geological mapping, soil geochemical sampling, and cutting of five grid lines. Soil samples were analysed for Cu, Pb, Zn, Au, and Ag. All anomalous samples were interpreted to be associated with gabbro and diorite intrusions.

In 1987, the Falconbridge Limited - Esso Minerals Canada Limited Joint Venture entered into option negotiations with Cominco Limited for the Nugget, Mildred, and Nonesuch mineral claims. During this year, Falconbridge Limited established a grid totalling 36 line kilometers. This grid was geologically mapped at 1:5000 scale and covered by IP, Magnetometer, and VLF surveys (Pattison and Money, 1988).

Dr. M. G. Morrice reviewed the 1987 years geological work in 1988. Results were incorporated into a geological compilation and interpretation of the adjacent Chemainus Joint Venture project (Morrice, 1989). Our current geological understanding of the Nugget Option is largely derived from this latter compilation.

Follow-up diamond drilling was carried out during November and December, 1989. Results of this work are represented in this report.

REGIONAL GEOLOGY

On a regional scale, the area underlain by the Nugget Option is included in government maps and reports by Muller (1980), Massey and Friday (1988) and Massey *et al* (1988).

Vancouver Island is underlain by a diverse assemblage of lithologies, which, with the exception of the extreme southern tip of the island, belong to Wrangellia, an allochthonous terrain that was accreted to the continental margin of North America during the Cretaceous (eg. Muller, 1977; Jones *et al*, 1977). Paleozoic Sicker Group volcanics and sediments are the oldest rocks within Wrangellia. They occur in several structural culminations, the largest of which are the Cowichan-Horne Lake, Buttle Lake, Tofino and Nanoose uplifts (Figure 3). The Nugget Option occupies a portion of the southeast part of the Cowichan-Horne Lake uplift (Figure 3).

Most of our understanding of the Sicker Group derives from recent geological studies within the Buttle Lake (Juras, 1987) and Cowichan-Horne Lake (Massey and Friday, 1987, 1988; Sutherland Brown *et al*, 1986; Muller, 1980) uplifts. While there are striking geological similarities between the two uplifts, there has been no concentrated effort on correlating units. Each uplift has its own set of formational names.

A tentative correlation of lithologies between the two uplifts is presented in Table 1. Of prime importance in this correlation is the presence of volcanic-hosted massive and semi-massive sulphide deposits within the McLaughlin Ridge Formation in the Cowichan-Horne Lake Uplift (Twin J, Coronation, Anita, 900 Zone) and the Myra Formation of the Buttle Lake uplift (Lynx, Myra, Price, H-W). Caution is required in embracing this correlation due to several factors that include the facies changes which characterize volcanic stratigraphy and environments, the great distances over which these correlations are made, and the rather poor age constraints on lithologies of the two uplifts.

Stratigraphy for the Cowichan-Horne Lake Uplift

Within the Cowichan-Horne Lake uplift the Sicker Group has been subdivided into five formations (Table 1). From oldest to youngest these are the Duck Lake, Nitinat, McLaughlin Ridge, Fourth Lake and Mount Mark Formations.

The Duck Lake Formation is exposed in the northwest part of the Cowichan-Horne Lake uplift, near Port Alberni. This formation comprises a monotonous sequence of variolitic pillowed and massive basalts (Massey, 1989). The Duck Lake Formation is overlain by the Nitinat Formation, a fairly homogeneous sequence of mafic clinopyroxene +/- plagioclase-phyric flows and pyroclastics of calcalkalic to alkalic (shoshonitic) affinity. Flows and individual clasts are typically highly vesicular. The Nitinat Formation is overlain by the McLaughlin Ridge Formation, a heterolithic sequence of calcalkalic to alkalic (shoshonitic) felsic, intermediate and mafic volcanics, and derived sediments. Felsic volcanics are quartz +/- plagioclase-phyric pyroclastics, flows and subvolcanic intrusions. The Saltspring Intrusion, centred in southern Saltspring Island, may represent an intrusive phase (volcanic centre?) related to McLaughlin Ridge felsic volcanism. Intermediate and mafic volcanics are aphyric to clinopyroxene +/- plagioclase phyric pyroclastics, flows and subvolcanic intrusions, texturally and geochemically similar to lithologies within

FIGURE 3
Geological sketch map of Vancouver Island.
(Muller, 1980)

LEGEND

☐	CARMANAH GROUP	MIDDLE TERTIARY
×	CATFACE INTRUSIONS	EARLY TO MIDDLE TERTIARY
v	METCHOSIN VOLCANICS	EARLY TERTIARY
○	NANAIMO GROUP	LATE CRETACEOUS
⁘	QUEEN CHARLOTTE GROUP KYUQUOT GROUP	LATE JURASSIC TO EARLY CRETACEOUS
▨	LEECH RIVER FORMATION PACIFIC RIM COMPLEX	
⁖	ISLAND INTRUSIONS	EARLY AND (?) MIDDLE JURASSIC
∴	BONANZA GROUP	EARLY JURASSIC
	VANCOUVER GROUP	LATE AND (?) MIDDLE TRIASSIC
■	PARSON BAY FORMATION QUATSINO FORMATION	
+	KARMUTSEN FORMATION	
≈	SICKER GROUP	PALEOZOIC
▩	METAMORPHIC COMPLEXES	JURASSIC AND OLDER

① ALERT BAY – CAPE SCOTT, 92 L – 102 I (G.S.C. PAPER 74–8)

② BUTE INLET, 92 K (IN PREPARATION), O.P. MAP 345

③ NOOTKA SOUND, 92 E (IN PREPARATION)

④ ALBERNI 92 F (G.S.C. PAPER 68–50)

⑤ VICTORIA, 92 B, C (FIELD WORK IN PROGRESS; SEE G.S.C. PAPERS 75–1A, p.21–26 : 76–1A, p. 107–111, 77–1A, p. 287–294.)

A — BUTTLE LAKE UPLIFT
B — COWICHAN–HORNE LAKE UPLIFT
C — NANOOSE UPLIFT

MILES
0 20 40

the Nitinat Formation. The McLaughlin Ridge Formation is overlain, apparently conformably, by the Fourth Lake Formation, a dominately epiclastic and chemical sedimentary package composed of thinly bedded cherts, argillites, siltstones and wackes. The uppermost formation within the Sicker Group of the Cowichan-Horne Lake uplift is the Mount Mark Formation. This formation, not exposed in the Nugget Option, is composed of massive and laminated crinoidal calcarenites and argillites (Massey and Friday, 1987).

The Sicker Group has been intruded by gabbro and diorite sills and dykes which fed Karmutsen Formation volcanics of the overlying Vancouver Group, in response to Late Triassic crustal dilation (Massey and Friday, 1988). West of the Nugget Option area, the Sicker Group and Karmutsen intrusions are overlain unconformably by clastic sediments of the Late Cretaceous Nanaimo Group.

Available age constraints on various formations within the Sicker Group are summarized in Brandon *et al* (1986) and Juras (1987). The best estimate for the age of the Saltspring Intrusion is a U-Pb zircon date of 393(+25,-10)Ma (Early Devonian). A U-Pb zircon age of 370(+18,-6)Ma (pre- Late Devonian) is the best estimate for the age of the Myra Formation at Buttle Lake. Faunal data indicate that the Fourth Lake Formation is Early to early Late Mississippian. The Mount Mark (Cowichan-Horne Lake uplift) and Buttle Lake (Buttle Lake uplift) Formations contain early Middle Pennsylvanian through Early Permian conodonts.

Table 1. Stratigraphic Comparison between the Cowichan-Horne Lake and Buttle Lake Uplifts.

AGE	LITHOLOGY	COWICHAN-HORNE LAKE UPLIFT	BUTTLE LAKE
E.Per-Penn	Limestone	Mount Mark	Buttle Lake
Penn or Miss	Ves.MV		Flower Ridge
E.Miss?	V,S,G		Thelwood
E.Miss	S,G	Fourth Lake	
L.Dev.	M,I,FV,MS	McLaughlin Ridge	Myra
L.Dev.	MV	Nitinat	Price
Devonian?	MV	Duck Lake	

Formation names from Sutherland Brown (in press) and Juras (1987), except Duck Lake Formation, (Massey and Friday, 1989) and Fourth Lake Formation, (Massey ,1989).

Ages from Brandon, *et al*, 1986, Juras, 1987.

Abbreviations: E.-Early, L.-Late, Per-Permian, Penn-Pennsylvanian, Miss-Mississippi, Dev-Devonian,Ves-vesicular, V-volcanic, S-sediment, G-gabbro, M-mafic, I-intermediate, FV-felsic, MS-massive sulphide.

PROPERTY GEOLOGY

Property-scale geological mapping of the Nugget Option claim group was by Pattison and Money (1987). Dr. M.G. Morrice reviewed the previous years mapping in 1988 and incorporated the results into the property wide geological compilation and interpretation of the adjacent Chemainus JV Project (Morrice, 1989). Most of our understanding of the Nugget Option stratigraphy is derived from this compilation. The following geological discussions are taken with minor revisions from Morrice (1989)

The geological interpretation of the Nugget 1, Nugget 2, Mildred and Nonesuch mineral claims is shown on 1:5,000 map (Figure 4). The Nugget Option is underlain by about 63% McLaughlin Ridge Formation (units 2,3 and 4), 20% Cameron River Formation (unit 5), and 17% Karmutsen gabbro and diorite (units 7 and 8). Nitinat Formation is not exposed on the Nugget Option but it does outcrop immediately east of the property.

Lithologies within the Nugget Option trend west-northwest. Bedding attitudes are difficult to discern for most of the property. Those that were observed have dips which vary from 20 degrees to vertical. Virtually all lithologies are characterized by a steeply dipping, variably intense schistosity. Mineral lineations are shallow plunging within the plane of schistosity.

Devonian

Nitinat Formation

The following discussion is based on observations of Nitinat lithologies east and south of the property (Massey *et al*, 1987).

Lithologies within the Nitinat Formation are mafic flows, pyroclastics and subvolcanic intrusions, characterized by the presence of up to 50% large (0.25-1.5 cm) calcic clinopyroxene phenocrysts. Lesser (0-15%) plagioclase phenocrysts are present locally. Flows are massive or pillowed; pillow breccia is present on Panorama Ridge, 2 km northwest of Chemainus. Pyroclastics, which dominate the Nitinat Formation, comprise monolithic tuff breccia, lapilli tuff and lesser tuff. Clasts are invariably vesicular, with up to 65% calcite, quartz or chlorite-filled amygdules. The monolithic nature of the pyroclastics and their high vesicularity are consistent with near-vent deposition in a shallow marine to subaerial environment, perhaps in tuff or cinder cones.

McLaughlin Ridge Formation

The McLaughlin Ridge Formation is the lithologic package of exploration interest, hosting massive and semi-massive sulphide deposits in the Cowichan-Horne Lake uplift and being remarkably similar to the massive sulphide-hosting Myra Formation in the Buttle Lake uplift. The McLaughlin Ridge Formation occurs, uninterrupted, along the entire length of the claim group with an average exposed width of 2 km. The McLaughlin Ridge Formation is composed of varying proportions of felsic, intermediate and mafic volcanics and subvolcanic intrusions and lesser clastic and chemical sediments. Felsic volcanics dominate the central part of the claims, decreasing in abundance, at the expense of mafic volcanics, to the north and south.

Classification in the field is based on colour index (CI) (% mafic minerals); mafic volcanics have CI>35, intermediate volcanics 15-35 and felsic volcanics <15. The quartz-phyric nature of felsic volcanics distinguishes them from the more felsic intermediate volcanics. These colour indices correspond approximately with SiO_2 contents of 53%, 53-70% and >70%, respectively.

Mafic volcanics (Unit 2) are the main lithologies in the northern and southern parts of the property. In the north-central part of the property, mafic volcanics occur as thick, continuous units interbedded with thin felsic volcanics and sediments.

Intermediate volcanics (Unit 3) are a minor constituent of the Nugget Option's outcrops. Elsewhere, intermediate rocks are intimately associated with mafic volcanics, and may underlie portions of the Nugget property.

Felsic volcanics (Unit 4) are the dominant lithology of the McLaughlin Ridge Formation on the Nugget Option. They are the main lithology in the central part of the claims, decreasing in abundance both north and south at the expense of mafic volcanics.

Within the McLaughlin Ridge Formation, sediments (Unit 5) are a minor component, occurring as thin (<10 m thick) units of argillite, siliceous argillite, and chert.

The general stratigraphic picture that has emerged is of a basal member dominated by felsic volcanics which is overlain by a mafic and intermediate volcanic-dominated sequence. This thick volcanic succession is conformably overlain by Fourth Lake Formation sediments. The mafic Nitinat Formation is not exposed on the claim group but is inferred to underlie the McLaughlin Ridge Formation. The basal felsic volcanic member is estimated to be a maximum of 600 metres thick based on the maximum exposed width, in the central part of the belt, assuming a simple anticline with axial fold trace bisecting the belt. This member is composed dominately of felsic pyroclastic flows which are variably quartz +/- plagioclase phyric. The mafic volcanic-dominated member that overlies the felsic member is estimated to be <400 metres thick. These upper mafic volcanics are texturally and compositionally similar to thin mafic interbeds in the felsic member and to the mafic units in the Nitinat Formation. Alteration, in the form of hematitization, is prevalent near the top of the mafic member. Thin jasper units are associated with these hematitically altered mafic volcanics. The mafic member is overlain directly by Fourth Lake Formation sediments along the north margins of the property.

Mississippian

Fourth Lake Formation

The Fourth Lake Formation is defined by the presence of thick accumulations of sedimentary rocks (Unit 5) which bound the McLaughlin Ridge Formation along its northern margins. On the Nugget Option the Fourth Lake Formation is composed mainly of cherts with lesser, but significant, siltstones and wackes. Bedding is well developed, ranging in thickness from 0.1-5 cm. Grading is locally present.

Triassic

Karmutsen Formation

Mafic intrusive rocks (Unit 7) related to Late Triassic Karmutsen volcanism, are ubiquitous throughout the property. Individual intrusions vary from several cm to 400 m wide and have been traced along strike for up to 6.5 km. In a gross sense most mafic intrusions are sill-like, appearing to have intruded along lithologic contacts in many instances. Cross- cutting relationships are present locally. Attitudes range from vertical to near-horizontal.

Intermediate intrusive rocks (Unit 8) are restricted to one sill-like diorite exposure. This very magnetic diorite is medium-grained equigranular with a CI of 20-30.

Metamorphism

All lithologies have been metamorphosed. The presence of abundant calcite, actinolitic amphibole and chlorite in mafic volcanics indicate that peak metamorphic conditions reached greenschist facies. The presence of hornblende in mafic volcanics indicate slightly higher metamorphic conditions have developed locally.

1989 EXPLORATION PROGRAM

The 1989 exploration program consisted of two diamond drill holes and continued compilation of geophysical, geological and geochemical results into an interactive data set.

Drill hole locations are shown on figure 4. Results of the program are briefly discussed below with detailed descriptions in Appendix A. Drill hole summary logs, a section description with 1:5000 drill section (Figure 5), and drill logs with analytical results are included in Appendix A.

Two drill holes totalling 1056.2m were completed by Burwash Contract Drilling of Cobble Hill, B.C. between November 21 and December 5, 1989 using a Longyear Super 38 drill equipped with air cooled diesel engines. Site preparation was completed by Ellison Excavating Limited of Duncan using a John Deere 790 excavator.

All work in this program was permitted with certain specific conditions under Annual Work Approval Number NAN 89-202-24 from the Ministry of Energy, Mines and Petroleum Resources. Timber use/road access permits were obtained from Canadian Pacific Forest Products Ltd and Macmillan Bloedel Limited. A water permit was not required since all water sources used are unscheduled. Compensation for timber loss with Canadian Pacific Forest Products was established at the beginning of the drill program. A field examination by an Inspector of Mines occurred at the end of the program.

All damaged timber from site preparation and road building is either buried into the construction or properly stacked for removal.
Roads, sumps, and drill pads are reclaimed with particular attention to minimizing erosion through the use of water bars, culverts, cross drains and ditches.

Drill core was placed in wooden trays marked by metric/imperial tags. Sperry-Sun orientation tests were taken by the drill crew at 60 metre intervals and film discs were placed in the core trays. Core was delivered at the end of each shift to the Falconbridge field office in Chemainus. Drill core was logged directly into Toshiba 1100 laptop computers. Data was then transferred into Derry, Michener, Booth and Wahl's LOG II drill log system on a Toshiba 3200 computer. Sulphidic (2% sulphide) volcanics were sent to Bondar Clegg Laboratories for multi-element geochemical analysis as split or sawed samples up to 1.5 metres long. Alteration was measured by XRAL Laboratories whole rock analyses on 30 cm composite samples from volcanic intervals up to 3 metres long at a spacing of less than 30 metres. All drill core is stored at the Falconbridge Limited's Chemainus field office, 9382 Trans Canada Highway Chemainus, British Columbia.

Bondar Clegg of North Vancouver digested the mineralized samples with hot aqua regia (HNO3-Hcl) and then completed a 29 element ICP analysis. Gold was determined using a 10 gram fire assay with an AA finish. Complete barium results were obtained using an XRF analysis. Automatic assaying was triggered for Cu, Pb or Zn values greater than 3000ppm, Au values greater than 1000ppb or Ag values greater than 30ppm. Complete results were generally available within 6 to 10 days by modem access to their computer.

X-Ray Assay Laboratories of Don Mills, Ontario analysed the lithogeochem samples with a 17 element whole rock package plus Cu, Zn and Ni.

DRILL RESULTS DISCUSSION

Drilling on the Nugget Option consisted of two drill holes designed to test several strong chargeability anomalies (Figure 5). Details for each drill hole are given in Appendix A-C. This discussion serves as a summary of program results rather than a duplication of data presentation.

Program highlights include:

- Interesting disseminated and stringer sulphide (pyrite+/-chalcopyrite) associated with altered felsic tuffs and flows (NG89-2; 54.1-105.3 m).
- Best alteration, as recognized by low Na_2O, is confined to the upper felsic volcanics in NG89-2 (42.7-132.9m).

Hole NG89-1 cut through a thick sequence of mafic volcanics, terminated in the north by the steeply south dipping "Sharon Gabbro". Hole NG89-2 collared north of the "Sharon Gabbro" and intersected a thick sequence of felsic volcanics, cut midway by a thick, south dipping dioritic-gabbro sill ("Nugget Gabbro"). Mafic volcanics in NG89-1 are interpreted to stratigraphically overlie the felsic volcanic package. The entire volcanic sequence is later cut by gabbro-diorite intrusions. An age relationship between the two intrusive types is still unclear.

No intersections of significant base metal mineralization were encountered in the two drill holes. Sulphide mineralization is largely confined to disseminated pyrite and/or pyritic stringers (NG89-2 only) with local traces chalcopyrite. Chargeability responses are related to the sparsely pyritic nature of the mafic and felsic volcanics underlying the southern portion of the Nugget claims.

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APPENDIX A

Summary Drill Logs

Section Description with 1:5000

Drill Logs and Analytical Results

SUMMARY LOG AND DESCRIPTION
NG89-1 (PROPOSED HOLE N-2)

LOCATION: 956E,1991S, 190m asl.; Nugget 2 Claim
AZIMUTH: 000° **DIP:** 50°
TOTAL DEPTH: 551.1m **PROPOSED DEPTH:** 500m
STARTED: November 21,1989 **COMPLETED:** November 29,1989
REVISED: January 19,1990
LOGGED BY: David Money
PURPOSE: To test chargeability anomalies in volcanic stratigraphy along strike from the Sharon Area.
RESULTS: Mafic tuffs intercalated with felsic tuffs and mafic flows are cut by several QFP dikes. Fracture-controlled chloritic alteration with associated granular disseminated pyrite cuts the volcanics from about 33.0 to 378.5m. Trace chalcopyrite occurs with the pyritic-chlorite alteration at 147.7-174.3m and 231.9-251.4m. Borehole EM surveys detect off-hole responses at 150m and 305m.
DIRECT DRILLING COSTS: $33,182 or $60.21/m.

0.0 - 9.1m	Casing.
9.1 - 33.0m	Gabbro; fine grained, feldspar phyric.
33.0 - 39.2m	Mafic Lapilli Tuff; feldspar phyric.
39.2 - 46.2m	Mafic Tuff; feldspar phyric.
46.2 - 47.4m	QFP Intermediate Tuff.
47.4 - 88.5m	Mafic Tuffs and Lapilli Tuffs; feldspar phyric.
88.5 - 90.9m	Chloritic QP Felsic Tuff.
90.9 -348.6m	Mafic Tuffs and Lapilli Tuffs; feldspar phyric. Lapilli tuffs occur from 223.1-229.3m and 282.7-294.9m. Cut by a QFP felsic dike from 131.4 to 132.4m. From 147.7-174.3m : 2% fracture controlled and disseminated pyrite with trace chalcopyrite. An off-hole borehole EM response at 150m coincides with this mineralization. From 294.9-315.0m : 2% fracture controlled and disseminated pyrite with trace chalcopyrite. An off-hole borehole EM response at 305m coincides with this mineralization.
348.6 -390.2m	Mafic Tuffs; feldspar and pyroxene phyric.
390.2 -415.4m	Mafic Flows; massive flows separated by a mafic tuff from 404.0m to 405.0m.
415.4 -419.8m	Felsic Tuff; includes a mafic tuff (416.8-418.0m).
419.8 -435.8m	Mafic Tuff; feldspar phyric.
435.8 -441.7m	Mafic Flow; mafic phyric.
441.7 -444.7m	Intermediate to Felsic QFP Tuff.
444.7 -447.2m	Mafic Tuff.
447.2 -449.0m	FP Felsic Tuff.
449.0 -453.1m	Mafic Tuff.
453.1 -453.3m	Felsic Tuff.
453.3 -457.4m	Mafic Flow; massive.
457.4 -483.2m	Mafic Tuff; feldspar phyric.
483.2 -540.6m	Mafic Lapilli Tuff and Tuff: feldspar and/or mafic phyric. Cut by massive, medium grained QFP felsic intrusions at 493.5-504.2m and 530.2-539.3m.
540.6 -551.1m	Gabbro; fine grained, feldspar phyric.
551.1m	End of Hole. Hole lined with plastic pipe.

Geochemical Samples:103, Whole Rock Samples:18, Thin Sections:0.

NG89-1 GEOCHEMICALLY SIGNIFICANT RESULTS

Sample	From	To	Cu	Zn	Ag	Au	Pb
AG09956	84.0	85.5	551				
AG09966	146.0	147.5	558				
AG09967	147.5	149.0	610				
AG09970	152.0	153.5	2466				
AG09977	162.5	164.0	790				
AG09978	164.0	165.5	1105				
AG09979	165.5	167.0	1445				
AG09980	167.0	168.5	499				
AG09988	182.8	184.3	938				
AG09989	184.3	185.8	757				
AG09995	231.0	232.5	950				
AG09999	250.5	252.0	980				
VA06963	313.5	315.0	747				
VA06964	348.6	350.2	766				
VA06965	350.2	351.7	1085	4803			
VA06967	353.2	354.7	497				
VA06970	357.7	359.2	666				
VA06976	368.8	370.3	493				
VA06977	370.3	371.8	478				

NO SIGNIFICANT SODIUM DEPLETION PRESENT.

SUMMARY LOG AND DESCRIPTION
NG89-2 (PROPOSED HOLE N-1)

LOCATION: 980E,1300S, 255m asl.; Nugget 2 Claim
AZIMUTH: 000° **DIP:** 50°
TOTAL DEPTH: 505.1m **PROPOSED DEPTH:** 500m
STARTED: November 29,1989 **COMPLETED:** December 5,1989
REVISED: January 19,1990
LOGGED BY: Mike Vande Guchte
PURPOSE: To test chargeability anomalies in volcanic stratigraphy north of the Sharon Gabbro.
RESULTS: Chloritic felsic volcanics from 54.1 to 105.3m host interesting pyritic stringers with trace chalcopyrite.
DIRECT DRILLING COSTS: $32,809 or $64.96/m.

0.0 - 42.7m	Casing.
42.7 - 54.1m	Chloritic QP Felsic Tuff.
54.1 - 65.8m	Chloritic QP Felsic Flow; stringer pyrite and trace chalcopyrite at 58.4 and 61.3m..
65.8 - 67.7m	Gabbro; fine grained, sheared.
67.7 -105.3m	Chloritic QP Felsic Flow; 2-4% disseminated pyrite overall with local pyrite stringers. Trace chalcopyrite at 77.5-77.9m (30% pyrite stringer), 86.4-86.8m, 95.5m and 103.2m.
105.3 -106.7m	Fault Zone.
106.7 -131.3m	QFP Felsic Flow.
131.3 -132.9m	Chloritic QP Felsic Tuff.
132.9 -138.8m	Mafic Lapilli Tuff.
138.8 -148.4m	Chloritic Felsic Tuff.
148.4 -159.1m	Gabbro; medium grained.
159.1 -172.7m	QFP Felsic Tuff; trace chalcopyrite at 171.9m.
172.7 -332.2m	Gabbro; multi-phase non-magnetic and magnetic gabbros.
332.2 -374.9m	Chloritic QFP Felsic Tuff.
374.9 -380.3m	Chloritic QFP Felsic Lapilli Tuff.
380.3 -442.5m	Chloritic QFP/QP Felsic Tuff; fault zone at 410.1 to 410.5m.
442.5 -445.5m	Fault Zone.
445.5 -489.3m	Chloritic QFP Felsic Flow.
489.3 -496.5m	QFP Felsic Tuff.
496.5 -505.1m	Chloritic QP Felsic Flow.
505.1m	End of Hole. Hole lined with plastic pipe. Will be probed by borehole surveys in 1990.

Geochemical Samples:108, Whole Rock Samples:10, Thin Sections: 2.

NG89-2 GEOCHEMICALLY SIGNIFICANT RESULTS

Sample	From	To	Cu	Zn	Ag	Au	Pb
VA07910	56.5	58.0	807				
VA07911	58.0	59.5	581				
VA07912	59.5	61.0	488				
VA07913	61.0	62.5	777				
VA07815	69.9	71.4	713				
VA07916	71.4	72.9	764				
VA07917	72.9	74.4	716				
VA07918	74.4	75.9	792				
VA07920	77.4	78.0	2672		3.0	177	281
VA07921	78.0	79.5					58
VA07927	86.3	86.8	1846				
VA07930	89.8	91.3	666				
VA07931	91.3	93.0	599				
VA07932	93.0	94.5	544				
VA07933	94.5	96.0	1262				
VA07934	96.0	97.5	1272				
VA07937	100.5	102.0	1032				
VA07938	102.0	103.5	496				
VA07940	105.0	106.5	550				
VA07950	133.2	134.2		1486			
VA09917	217.8	218.8	492				
VA09919	332.3	333.5	567				
VA09920	333.5	334.0	2417				
VA09921	334.0	335.5	668		2.5		
VA09923	337.0	338.5	627				
VA09928	344.5	346.0	495				
VA09931	349.0	350.5	1212				
VA09932	350.5	352.0	874				
VA09933	352.0	353.5	2544				
VA09935	355.0	356.5	641				
VA09877	467.2	468.2	682				
VA09878	498.0	498.5				145	

NG89-2 ALTERED WHOLE ROCK SAMPLES

Sample	From	To	SiO_2	CaO	Na_2O	K_2O	MgO	Zn	Cu
VA04399	29.0	32.0	70.6	0.83	0.59	2.93	2.25	100	519

HOLE NOT SURVEYED BY BOREHOLE GEOPHYSICS.

SECTION DESCRIPTION

SECTION 9+50 E **NUGGET 2 CLAIM**

OBJECTIVE/TARGET : NG89-1 and NG89-2 were drilled to test IP chargeability anomalies in volcanics along strike from the Sharon Area.

HOLE #	LOCATION	AZIMUTH	DIP	LENGTH
NG89-1	9+56 E / 19+91 S	000	-50	551.1 m
NG89-2	9+80 E / 13+10 S	000	-50	505.1 m

RESULTS :

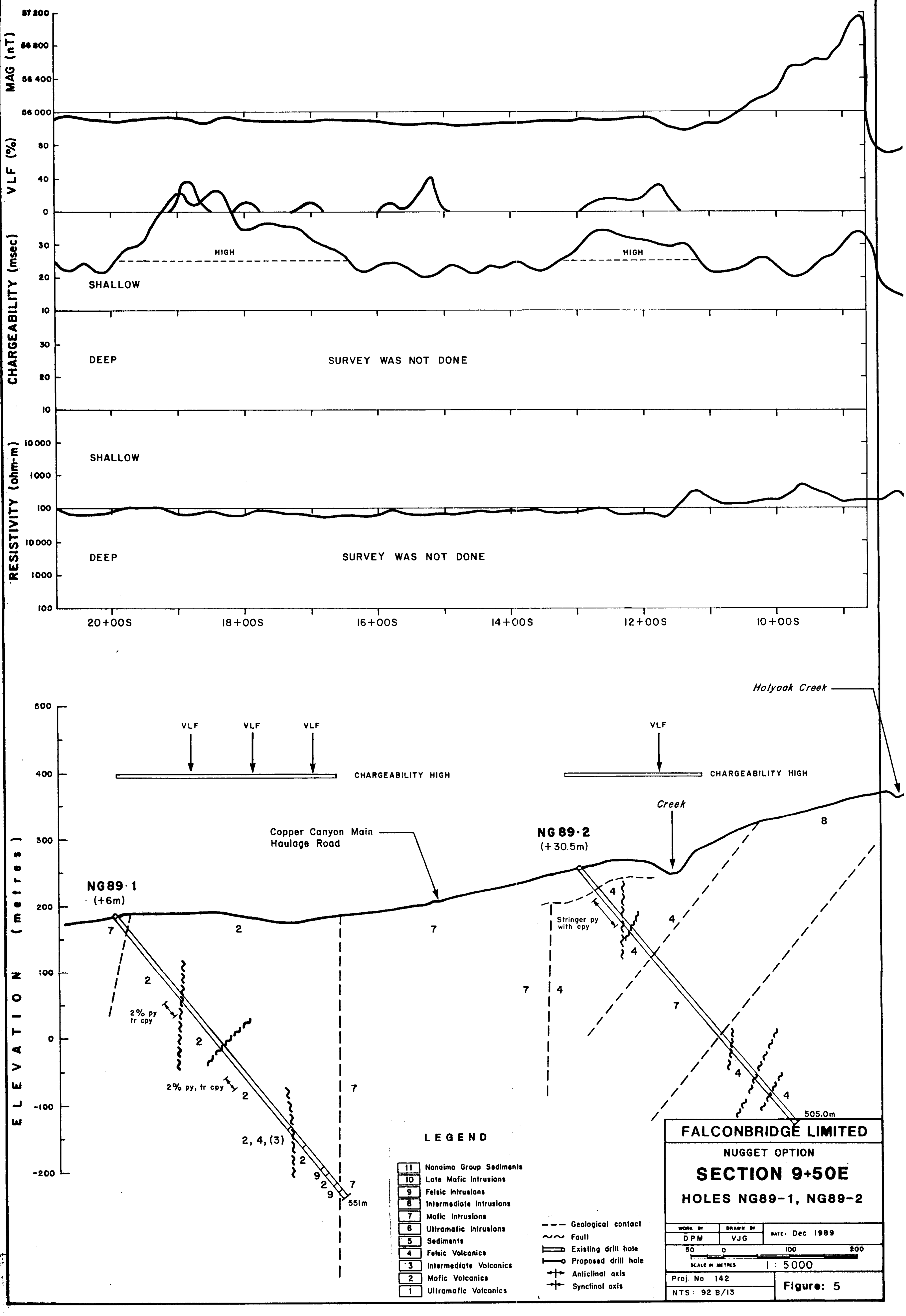
At the southern end of the section, NG89-1 collared in gabbro and terminated in the Sharon Gabbro to the north. The majority of the hole intersected a uniform succession of magnesian mafic tuffs and flows with minor QFP dykes and very rare, about 1%, felsic tuffs. The MgO/Fe2O3 ratio averaged 0.65 in the mafic tuffs and 0.48 in the mafic flows with MgO contents in the mafics ranging from 5.37% to 8.25%. Mafic tuffs drill tested in 1987 on the PF Option on Maple Mountain are visually similar with epidotized lapilli and the same style of pyrite +/- chalcopyrite mineralization. They are chemically similar with a MgO/Fe_2O_3 ratio of 0.68 (average 6.5% MgO and 9.5% Fe2O3, Money *et al*, 1987). These magnesian mafics also correlate chemically with the mafics that CH85-7 collared in at the Sharon Area. No significant economic mineralization has been encountered in these mafic volcanics, but they host on average 2% disseminated pyrite with localized chalcopyrite. There was up to 0.25% Cu over 1.5 m in NG89-1 with local zones of up to 6 m averaging almost 0.1% Cu. Similar results were obtained in the PF drilling and in the Sharon Area (CH85-7; Enns,1986). The PF mafics were thought to possibly belong to the Nitinat Formation, but samples taken by Morrice (1989) indicate that the Nitinat Formation is chemically dissimilar (MgO/Fe2O3 ratio is 0.9, averages 8.6% MgO, 9.4% Fe2O3). These limited data conflict with the view held by M. Morrice that McLaughlin Ridge Formation and Nitinat Formation mafic volcanics can not be chemically distinguished. In summation, these mafic volcanics do not merit further drilling in the Nugget Area.

Diamond drill hole NG89-2 intersected a sequence of variably chlorite-sericite altered felsic flows and tuffs cut by a thick south dipping (50°) multi-phase gabbro sill from 172.7 to 332.2 metres. Low sodium content (0.6% Na_2O) characterizes a chloritic felsic flow from 67.7 to 105.3 metres. This altered interval hosts 2-4% disseminated pyrite and pyritic stringers locally anomalous in copper. Geochemistry indicates the best overall alteration occurs within felsic flows and tuffs from 42.7 to 132.9 metres (1.3% Na_2O, 2.8% K_2O, 0.6% CaO; $Na_2O/K_2O=0.47$). Felsic volcanics below this point are significantly more sodic (3.2% Na_2O, 2.0% K_2O, 0.7% CaO; $Na_2O/K_2O=1.6$) and separated from the upper altered felsics by a mafic lapilli tuff (132.9 to 138.8 m). Sulphide content in the volcanics ranges from 1-4% disseminated pyrite with local pyritic stringers occurring between 54.1 to 105.3 metres. Trace to 0.5%

chalcopyrite is associated with several pyritic stringers some of which host anomalous copper (ie. 77.4-78.0 m - 2672 ppm Cu and 86.3-86.8 m - 1846 ppm Cu). Other anomalous copper mineralization (567-2417 ppm Cu) is confined to thin pyrite stringers between 332.3 and 335.5 metres. Weak geochemically anomalous Ag, Au, and/or Pb occurs locally within several of the pyritic stringers.

CONCLUSIONS :

1. Shallow IP anomalies are caused by pyritic stringer and disseminated pyrite hosted within the mafic and felsic stratigraphy.
2. Altered felsic volcanics with disseminated and stringer sulphide provide an attractive environment for a massive sulphide type deposit.



FALCONBRIDGE LIMITED

NUGGET OPTION

SECTION 9+50E

HOLES NG89-1, NG89-2

WORK BY	DRAWN BY	DATE: Dec 1989
DPM	VJG	

1 : 5000

Proj. No 142

NTS: 92 B/13

Figure: 5

NG89-1

PROPERTY: NUGGET OPTION

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: NG89-1
Page Number 1

Plotting Coordinates: 956 E -1991 N 190 m Elev.
Surveyed Grid Location: 9+?? E, 19+?? S, 1?? m Elev.
Field Grid Location: 9+56 E, 19+91 S, 190 m El.
NTS: 092B/13 UTM: 5413120 N, 440505 E
Azimuth: 0 Dip: -50 Length: 551.1 m

Started: Nov. 21, 1989ompleted: Nov. 29, 1989
Revision Date:

Purpose: To test high IP chargeability.

Claim No. NUGGET 2
Section No.: 9+50 W, Nugget Option

Logged By: D.P. MONEY
Drilling Co.: Burwash Enterprises
Assayed By: Bondar-Clegg and XRAL

Core Size: NQ

ORIENTATION TESTS

Length	Azimuth	Dip	Length	Azimuth	Dip
93.00	353.0	-51.0	413.60	1.0	-50.0
154.50	356.0	-51.0	463.30	2.0	-50.0
291.70	359.0	-50.5	523.30	4.0	-50.0
340.50	1.0	-50.5			

From (m)	To (m)	----------------DESCRIPTION----------------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0	9.1	CASING											
9.1	33.0	FINE GRAINED FELDSPAR PHYRIC MAFIC INTRUSION Fine-grained to medium grained plagiophyric gabbro with on average 7 to 10%, 1 to 3 mm, plagioclase phenocrysts and 1 to 2% fine-grained leucoxene and ilmenite. There are numerous minor fracture controlled calcite, epidote, quartz - calcite - chlorite, and calcite - chlorite veinlets. There is trace to nil fine-grained pyrite locally with fracture controlled chlorite.											
33.0	39.2	MAFIC FELDSPAR PHYRIC LAPILLI TUFF Light green mafic tuff with 5 to 25%, average 10%, epidote - calcite lapilli and approximately 15%, 1 to 3 mm, epidotized feldspar phenocrysts. There is minor hematite in fracture controlled calcite veinlets. There is a 10 cm zone of fault gouge at 33.3 at 40 degrees to core axis. There is trace to nil disseminated pyrite on average with 5% pyrite from 34.5 to 34.6. Foliations :. 35.6 : 41 degrees to core axis.	VA15835	33.0	36.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
39.2	46.2	MAFIC FELDSPAR PHYRIC TUFF Light to medium green mafic tuff with on average 5% epidotized feldspar phenocrysts and local epidote - calcite lapilli from 44.7 to 45.8. There are numerous	AG09946	44.2	45.7	1.5	0	52	<2	55	<1	<5	930
			AG09947	45.7	46.2	.5	15	112	<2	145	1	15	890

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		fracture controlled calcite veinlets with hematite locally. There is trace to 0.5% pyrite locally, mostly associated with fracture controlled chlorite and calcite. From 45.95 to 46.22 there is a dark green chlorite alteration zone with 20 to 30%, coarse, up to 7 mm, pyrite grains. Foliations :. 40.0 : 36 degrees to core axis. 42.9 : 50 degrees to core axis.											
46.2	47.4	INTERMEDIATE QUARTZ - FELDSPAR PHYRIC TUFF Light grey dacitic tuff with on average 5 to 10%, 1 to 3 mm, quartz phenocrysts and 20%, 1 to 4 mm, epidotized feldspar phenocrysts. There are minor fracture controlled calcite - hematite veinlets. Trace to 1% pyrite blebs occur locally. Foliation averages 40 degrees to core axis.	AG09948	46.2	47.2	1.0	1	44	<2	21	<1	<5	1500
47.4	80.0	MAFIC FELDSPAR PHYRIC TUFF Light to medium green mafic tuff with on average 10 to 15%, 1 to 2 mm, locally epidotized feldspar phenocrysts. Locally there are up to 10% epidote - calcite lapilli locally from 54.7 to 57.6, 59 to 60 and 69.0 to 69.7. There are minor fracture controlled calcite - hematite veinlets. From 71.7 to 71.8 there is 10% pyrite blebs. From 72.4 to 79.0 is blocky, highly fractured core with on average 1% pyrite in 0.5 to 1 cm chloritic alteration zones. There are minor local fracture controlled chlorite alteration zones with pyrite from 47.4 to 71.7 with on average trace pyrite, except for 2% pyrite from 49.0 to 49.5. Foliations :. 49.6 : 33 degrees to core axis. 53.2 : 42 degrees to core axis. 56.9 : 38 degrees to core axis. 61.3 : 56 degrees to core axis. 68.5 : 32 degrees to core axis. 72.0 : 32 degrees to core axis.	AG09949	48.5	50.0	1.5	1	44	<2	73	<1	6	710
			VA15836	52.0	55.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
			AG09950	71.0	72.5	1.5	1	78	<2	95	<1	<5	750
			AG09951	72.5	74.0	1.5	1	93	<2	88	<1	<5	730
			AG09952	74.0	75.5	1.5	1	238	<2	88	<1	6	890
			AG09953	75.5	77.0	1.5	1	338	<2	85	<1	<5	630
			AG09954	77.0	78.5	1.5	1	270	<2	81	<1	<5	640
			AG09955	78.5	80.0	1.5	1	80	<2	75	<1	<5	570
80.0	84.6	MAFIC FELDSPAR PHYRIC LAPILLI TUFF Light to medium green mafic tuff with 15%, 1 to 6 cm, epidote - calcite lapilli and approximately 5%, 1 to 3 mm, epidotized feldspar phenocrysts. There are minor fracture controlled calcite veinlets. Trace disseminated pyrite occurs. Foliation averages 45 degrees to core axis.	VA15837	81.0	84.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
			AG09956	84.0	85.5	1.5	1	551	2	75	<1	<5	620
84.6	88.5	MAFIC FELDSPAR PHYRIC TUFF											

From (m)	To (m)	----------------DESCRIPTION----------------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Medium green mafic tuff with on average 5% weakly epidotized feldspar phenocrysts and rare epidotized lapilli. There is on average 0.5 to 1% disseminated pyrite with trace pyrite associated with fracture controlled chloritization. Lower contact is at a 1 cm fault zone at 23 degrees to core axis. The fracture controlled chlorite - pyrite zones are up to 1 cm thick and occur at 84.9, 86.4 and 87.3 with an average orientation of 35 to 40 degrees to core axis. Foliations :. 86.1 : 44 degrees to core axis. 87.3 : 44 degrees to core axis.	AG09957	85.5	87.0	1.5	1	67	<2	69	<1	<5	940
			AG09958	87.0	88.5	1.5	1	71	4	70	<1	<5	980
88.5	90.9	CHLORITIC FELSIC QUARTZ EYE TUFF Light green to grey chloritic felsic tuff with on average 7%, < 1 to 2 mm, quartz phenocrysts and rare epidotized lapilli. There is 1 to 2% fracture controlled and disseminated pyrite. There are minor quartz veins. Foliations :. 89.3 : 36 degrees to core axis. 90.4 : 23 degrees to core axis.	AG09959	88.5	89.5	1.0	2	110	<2	60	<1	<5	1100
			AG09960	89.5	90.9	1.4	2	52	<2	56	<1	<5	2000
90.9	131.4	MAFIC FELDSPAR PHYRIC TUFF Light to medium green mafic tuff with on average 3 to 5%, locally epidotized feldspar phenocrysts. There are 10%, 1 to 5 cm, epidotized lapilli from 103.4 to 105.3 with trace elsewhere. There are minor fracture controlled calcite veinlets with local hematite. From 124.3 to 127.1 there is medium to strong pervasive epidote alteration or possibly a dyke. There are minor quartz veins. There is 0.5% pyrite on average with pyrite disseminated and in fracture controlled chlorite. There are pyrite - chlorite stringers or alteration zones with 50% pyrite over 3 cm at 112.6, 30% coarse pyrite from 113.4 to 113.5 and 20% pyrite from 122.2 to 122.6. Foliations :. 99.0 : 41 degrees to core axis. 102.0 : 50 degrees to core axis. 108.9 : 45 degrees to core axis. 113.1 : 46 degrees to core axis. 122.5 : 37 degrees to core axis. 127.8 : 36 degrees to core axis. 130.6 : 46 degrees to core axis.	AG09964	108.1	109.6	1.5	2	36	<2	64	<1	6	1900
			AG09965	109.6	111.1	1.5	2	176	<2	77	<1	<5	820
			AG09961	112.4	113.9	1.5	7	279	<2	74	<1	14	970
			VA15838	114.0	117.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
			AG09962	121.5	123.0	1.5	7	203	<2	81	<1	16	990
			AG09963	129.9	131.1	1.2	2	72	<2	73	<1	8	270
131.4	132.4	MASSIVE MEDIUM GRAINED QUARTZ AND FELDSPAR PHYRIC FELSIC INTRUSION											

From (m) To (m) ----------------DESCRIPTION----------------

Light grey massive felsic dyke or sill with 5 to 7%, 3 to 5 mm, quartz phenocrysts and 1 to 2%, 3 to 5 mm, feldspar phenocrysts. There are minor fracture controlled calcite - hematite veinlets.

132.4 223.1 MAFIC FELDSPAR PHYRIC TUFF

Medium green mafic tuff with on average 7 to 10%, 1 to 3 mm, epidotized feldspar phenocrysts. There are trace to 40% feldspar phenocrysts locally. There are 5 to 10%, epidotized 2 to 7 cm rounded lapilli from 134.4 to 137.5, 143.2 to 144.6, 208.0 to 216.5 and 218.8 to 220.5 with lapilli all through the unit. There is local fracture controlled chloritization and fracture controlled calcite veinlets. From 168.7 to 174.3 there is a fault zone with blocky, highly fractured core. The mafic tuff in the fault zone is epidotized and silicified with fracture controlled calcite - hematite veinlets. There is trace disseminated pyrite from 132.4 to 147.7. From 147.7 to 174.3 there is 1 to 3%, average 2%, fracture controlled and disseminated pyrite with trace chalcopyrite throughout the interval. There is 7% coarse disseminated pyrite from 174.3 to 178.9. From 178.9 to 190.7 there is 2% fracture controlled and disseminated pyrite. There is trace chalcopyrite at 184.6. There is a mafic dyke from 159.0 to 160.1. There is a QFP dyke from 137.6 to 137.9. There is 0.5 to 1% fracture controlled and disseminated pyrite from 192.7 to 199.9. There is on average 3 to 5% pyrite from 199.9 to 203.3 with 25% coarse pyrite from 199.9 to 200.0 and clots in quartz veins at 200.3 and 202.7. There is up to 1% pyrite from 203.3 to 223.1, except for 7% pyrite from 220.8 to 221.4.

The split core was re-examined to determine the source of the anomalous copper. From 152.0 to 153.5 there is strongly smeared chalcopyrite in dark green chloritic < 2 mm thick zones with up to 25% chalcopyrite on some faces. Trace chalcopyrite was observed in pyrite clots from 164 to 167 m, but not the 0.33 to 0.5% one would expect.

Foliations :.
135.6 : 43 degrees to core axis.
139.0 : 40 degrees to core axis.
147.8 : 40 degrees to core axis.
152.0 : 38 degrees to core axis.
159.8 : 34 degrees to core axis.
163.1 : 40 degrees to core axis.
172.3 : 43 degrees to core axis.
178.6 : 42 degrees to core axis.
182.5 : 46 degrees to core axis.
190.7 : 39 degrees to core axis.
198.0 : 50 degrees to core axis.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA15839	143.0	146.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AG09966	146.0	147.5	1.5	1	558	<2	67	<1	<5	810
AG09967	147.5	149.0	1.5	3	610	<2	72	<1	7	830
AG09968	149.0	150.5	1.5	2	459	<2	63	<1	<5	880
AG09969	150.5	152.0	1.5	3	195	<2	64	<1	<5	1100
AG09970	152.0	153.5	1.5	3	2466	<2	78	1	18	1000
AG09971	153.5	155.0	1.5	2	282	<2	64	1	<5	760
AG09972	155.0	156.5	1.5	1	292	<2	56	<1	<5	730
AG09973	156.5	158.0	1.5	3	320	<2	57	<1	<5	1100
AG09974	158.0	159.5	1.5	2	113	<2	56	<1	<5	570
AG09975	159.5	161.0	1.5	2	184	<2	54	<1	<5	350
AG09976	161.0	162.5	1.5	2	202	<2	63	<1	<5	950
AG09977	162.5	164.0	1.5	2	790	<2	61	1	<5	1000
AG09978	164.0	165.5	1.5	2	1105	<2	65	1	<5	910
AG09979	165.5	167.0	1.5	2	1445	<2	87	1	<5	1000
AG09980	167.0	168.5	1.5	2	499	<2	99	<1	<5	840
AG09981	168.5	170.0	1.5	2	185	<2	93	<1	<5	220
AG09982	170.0	171.5	1.5	2	83	<2	81	<1	<5	100
AG09983	171.5	173.0	1.5	2	132	<2	76	<1	<5	140
AG09984	173.0	174.5	1.5	3	208	<2	86	1	<5	370
AG09985	174.5	176.0	1.5	7	24	4	81	<1	<5	620
AG09986	176.0	177.5	1.5	7	101	3	73	<1	11	790
AG09987	177.5	179.0	1.5	7	46	<2	75	<1	11	750
VA15840	179.0	182.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AG09988	182.8	184.3	1.5	3	938	6	164	<1	7	340
AG09989	184.3	185.8	1.5	2	757	7	72	1	<5	780
AG09990	199.5	201.0	1.5	5	224	<2	54	1	7	740
AG09991	201.0	202.5	1.5	3	347	9	55	<1	<5	1100
AG09992	202.5	204.0	1.5	3	224	<2	68	<1	<5	730
VA15841	204.0	207.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AG09993	220.5	222.0	1.5	4	200	4	70	<1	<5	340

From (m) To (m) ----------------DESCRIPTION----------------

200.9 : 44 degrees to core axis.
210.3 : 30 degrees to core axis.
221.4 : 43 degrees to core axis.

Faults :.
At 148.6 : 1 cm fault gouge at 68 degrees to core axis.
From 168.7 to 174.3 : blocky, highly fractured core with minor fault gouge.

223.1 229.3 MAFIC FELDSPAR PHYRIC LAPILLI TUFF

Medium green mafic lapilli tuff with 15 to 20%, 1 to 5 cm epidotized lapilli and 30%, 1 to 3 mm, epidotized feldspar phenocrysts. There is trace to 0.5% disseminated pyrite. Minor fracture controlled quartz - calcite - chlorite veins occur. Is massive with no foliation.

229.3 282.7 MAFIC FELDSPAR PHYRIC TUFF

Light to medium green mafic tuff with local epidotized lapilli and on average 7 to 10%, 1 to 3 mm, epidotized feldspar phenocrysts with trace to 20% phenocrysts locally. There is trace to 0.5% pyrite and trace to nil chalcopyrite on average with a few more sulphidic intervals. There is 20% pyrite and 0.5 to 1% chalcopyrite in a chloritic zone from 231.9 to 232.4. There is 2 to 3% fracture controlled pyrite in a weakly chloritic zone from 238.3 to 239.3. There is trace chalcopyrite specks locally ie at 243.9. There is spotty quartz flooding with 3 to 5% disseminated pyrite and trace chalcopyrite from 248.0 to 251.4. There is 2 cm of 70% pyrite at 28 degrees to core axis at 259.7. There are local < 1 to 1 mm mafic phenocrysts, but are rarely distinguishable from the fine grained groundmass.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
AG09994	229.5	231.0	1.5	2	99	4	112	1	5	450
AG09995	231.0	232.5	1.5	6	950	<2	108	1	21	600
AG09996	232.5	234.0	1.5	1	112	<2	75	<1	<5	<20
VA15842	234.0	237.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AG09997	247.5	249.0	1.5	2	94	<2	62	1	<5	120
AG09998	249.0	250.5	1.5	3	36	<2	51	<1	<5	410
AG09999	250.5	252.0	1.5	2	980	<2	51	1	14	120
VA15843	264.0	267.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Foliations :.
At 230.2 : 36 degrees to core axis.
At 236.8 : 45 degrees to core axis.
At 242.7 : 42 degrees to core axis.
At 250.7 : 41 degrees to core axis.
At 262.7 : 42 degrees to core axis.
At 270.4 : 44 degrees to core axis.
At 278.2 : 47 degrees to core axis.

Faults :.
At 230.2 : fault slip at 28 degrees to core axis.
At 231.6 : fault slip at 23 degrees to core axis.
From 236.3 to 236.5 : blocky, highly fractured core and minor fault gouge.
From 241.2 to 241.5 : blocky, highly fractured core and minor fault gouge.
At 243.9 : 2 cm fault gouge at 51 degrees to core axis.

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		From 245.6 to 245.9 : fault gouge at 80 degrees to core axis and blocky, highly fractured core. At 278.9 : 10 cm fault gouge with blocky, highly fractured core.											
282.7	294.9	MAFIC FELDSPAR PHYRIC LAPILLI TUFF Medium green mafic tuff with on average 15 to 20%, 1 to 12 cm, epidotized lapilli, 20%, 1 to 2 mm, epidotized feldspar phenocrysts and trace to 3%, 1 mm, mafic phenocrysts locally. There is trace to nil disseminated pyrite, except for 3 to 5% associated with epidotization and chloritization from 287.6 to 288.3 and 1 to 2% fracture controlled pyrite from 293.2 to 293.9. There is minor fault gouge at 292.9. Is mostly massive with foliations in chloritic zones at approximately 20 degrees to core axis and 40 to 60 degrees to core axis elsewhere.	AG10000	287.0	288.5	1.5	3	88	11	87	1	<5	310
			VA15844	290.0	293.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
			VA06951	293.0	294.5	1.5	1	224	<2	93	<1	<5	130
294.9	315.0	MAFIC FELDSPAR PHYRIC TUFF Medium to dark green chloritic mafic tuff with trace epidotized lapilli and on average 5% epidotized 1 to 2 mm feldspar phenocrysts. There is 1 to 3% disseminated and fracture controlled pyrite with an average of 2% pyrite. Is well foliated. There is 4 cm of fault gouge parallel to foliation at 296.5. Foliations :. 296.7 : 46 degrees to core axis. 300.7 : 33 degrees to core axis. 305.9 : 28 degrees to core axis. 308.4 : 34 degrees to core axis. 310.6 : 26 degrees to core axis. 312.0 : 25 degrees to core axis. 314.2 : 28 degrees to core axis.	VA06952	294.9	296.5	1.6	3	89	<2	137	1	10	170
			VA06953	296.5	298.0	1.5	2	81	<2	100	1	7	420
			VA06954	298.0	299.5	1.5	3	44	<2	109	<1	7	280
			VA06955	299.5	301.0	1.5	2	75	<2	104	1	9	300
			VA06956	301.0	302.5	1.5	2	219	<2	100	1	<5	380
			VA06957	304.5	306.0	1.5	2	242	<2	105	1	7	970
			VA06958	306.0	307.5	1.5	3	77	<2	115	<1	<5	1300
			VA06959	307.5	309.0	1.5	3	83	<2	111	1	<5	1200
			VA06960	309.0	310.5	1.5	3	450	<2	102	<1	<5	1100
			VA06961	310.5	312.0	1.5	2	60	<2	111	<1	<5	910
			VA06962	312.0	313.5	1.5	3	250	<2	141	1	<5	940
			VA06963	313.5	315.0	1.5	2	747	4	148	<1	9	930
315.0	348.6	MAFIC FELDSPAR PHYRIC TUFF Massive medium green mafic tuff with 20 to 25%, 1 to 2 mm, epidotized feldspar phenocrysts, local 2 to 9 cm epidotized lapilli and possible mafic phenocrysts locally. There is trace to 1% disseminated pyrite locally with minor pyrite in up to 3 mm fracture controlled chlorite veinlets. There are minor quartz - chlorite veins locally with trace chalcopyrite at 316.3. There are trace local epidote alteration splotches with hydraulic fracture controlled quartz veins, i.e. At 323.5. Foliation is weakly developed locally at 30 to 60 degrees to core axis.	VA15845	320.0	323.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
348.6	390.2	MAFIC FELDSPAR AND MAFIC PHYRIC TUFF Locally epidotized to chloritic mafic tuff with feldspar	VA06964	348.6	350.2	1.6	2	766	<2	433	1	<5	1000

From (m) To (m) ----------------DESCRIPTION----------------

and mafic phenocrysts and trace epidotized lapilli. There is trace to 7%, 1 mm, dark green to black mafic phenocrysts locally with an average of 3%. There are trace to 20%, 1 to 2 mm, epidotized feldspar phenocrysts with an average of 5%. Epidotized lapilli are rounded to subrounded and 1 to 5 cm in diameter. There are trace lapilli locally with up to 20% lapilli from 378.7 to 383.0. There is moderate to strong pervasive chloritization over local approximately 1 m long intervals with 5% disseminated pyrite. There is 2% disseminated pyrite from 348.6 to 351.7, 3 to 5% disseminated and fracture controlled pyrite from 351.7 to 354.7, 1 to 3% fracture controlled and disseminated pyrite from 354.7 to 362.6, trace disseminated pyrite to 2% fracture controlled pyrite from 362.6 to 369.6, 3% fracture controlled pyrite from 369.6 to 372.3, 1% pyrite from 372.3 to 373.9, 3 to 5% disseminated and fracture controlled pyrite from 373.9 to 378.5 and trace disseminated pyrite from 378.5 to 390.2. There is a light green mafic dyke from 362.6 to 364.3.

Re-examination of the interval from 348.6 to 353.2 indicated that there was trace to 0.5%, average 0.25% disseminated fine-grained chalcopyrite with pyrite. No sphalerite was observed in the interval from 350.2 to 351.7.

Foliations :.
At 352.5 : 22 degrees to core axis.
At 353.8 : 21 degrees to core axis.
At 358.3 : 34 degrees to core axis.
At 364.7 : 35 degrees to core axis.
At 368.1 : 31 degrees to core axis.
At 370.1 : 36 degrees to core axis.
At 379.0 : 31 degrees to core axis.
At 385.0 : 48 degrees to core axis.
At 389.7 : 42 degrees to core axis.

Faults :.
At 352.3 : approximately 1 cm fault gouge at 21 degrees to core axis.
From 359.4 to 361.0 : minor fault slips parallel to foliation.
At 370.8 : 1 cm fault gouge at 64 degrees to core axis.
At 375.0 : 1 cm fault gouge at 26 degrees to core axis.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA06965	350.2	351.7	1.5	2	1085	<2	4400	1	<5	1000
VA06966	351.7	353.2	1.5	4	815	<2	406	1	<5	1700
VA06967	353.2	354.7	1.5	4	497	4	397	1	<5	2000
VA06968	354.7	356.2	1.5	2	243	<2	219	1	<5	1500
VA06969	356.2	357.7	1.5	2	355	<2	237	1	6	1400
VA06970	357.7	359.2	1.5	2	666	<2	215	1	<5	870
VA06971	359.2	360.7	1.5	2	431	<2	284	1	<5	1400
VA06972	360.7	362.6	1.9	2	137	<2	256	1	<5	2100
VA06973	364.3	365.8	1.5	2	370	2	266	1	<5	1300
VA15846	365.0	368.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA06974	365.8	367.3	1.5	2	384	<2	220	1	<5	470
VA06975	367.3	368.8	1.5	1	242	<2	169	1	<5	460
VA06976	368.8	370.3	1.5	3	493	<2	165	1	<5	910
VA06977	370.3	371.8	1.5	3	478	<2	156	1	<5	1500
VA06978	371.8	373.3	1.5	2	200	<2	122	1	<5	960
VA06979	373.3	374.8	1.5	2	293	<2	145	1	<5	1100
VA06980	374.8	376.3	1.5	4	468	2	110	1	6	650
VA06981	376.3	377.8	1.5	4	235	<2	144	1	<5	490
VA06982	377.8	379.3	1.5	3	187	<2	122	1	<5	850

390.2 404.0 MASSIVE MAFIC FLOW
Massive medium to dark green moderately to strongly magnetic mafic flow or intrusive. There are locally up to 2%, average < 0.5%, < 1 mm, white specks, mostly calcite, locally possibly leucoxene. Is fine-grained and aphyric,

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA15847	392.0	395.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

From (m)	To (m)	----------------DESCRIPTION----------------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		with locally up to 1 mm epidotized feldspar and dark green to black mafic phenocrysts occuring. There are minor fracture controlled calcite and epidote veinlets. There are rare quartz - chlorite veins. Trace to nil disseminated pyrite occurs. There is weak pervasive carbonatization and weak pervasive epidotization over 0.5 to 1 m intervals locally. Alteration :. 390.2 404.0 WEAK SPOTTY EPIDOTIZATION. 390.2 404.0 WEAK PERVASIVE CARBONATIZATION.											
404.0	405.0	MAFIC FELDSPAR AND MAFIC PHYRIC LAPILLI TUFF Medium to dark green mafic tuff with 25%, 1 to 5 cm, epidotized lapilli and 5 to 15%, 1 mm, mafic and epidotized feldspar phenocrysts. There is trace disseminated pyrite. Foliation averages 35 degrees to core axis.											
405.0	415.4	MASSIVE MAFIC PHYRIC MAFIC FLOW Mafic flow or intrusion similiar to 390.2 to 404.0. There are approximately 20 to 30%, 1 mm, dark green to black mafic phenocrysts in medium green chloritic to light green epidote altered matrix with 2 to 7%, average 3 to 5%, < 1 mm carbonate or possibly carbonate and leucoxene specks. There are calcite veinlets, quartz - feldspar - chlorite veins, epidote veinlets and quartz - chlorite veins. Is not magnetic to moderately magnetic locally. There is weak fracture controlled carbonatization. There is trace to nil pyrite. Is foliated at 45 degrees to core axis on average. There is moderate epidotization and strong quartz - chlorite veining from 413.7 to the lower contact. Alteration :. 405.0 413.7 WEAK FRACTURE CONTROLLED CARBONATIZATION. 405.0 413.7 WEAK SPOTTY EPIDOTIZATION. 413.7 415.4 MODERATE PERVASIVE EPIDOTIZATION.											
415.4	416.8	FELSIC TUFF Silicified blocky felsic with weak to strong fracture controlled chloritization locally. Foliation is variable from approximately 40 to 60 degrees to core axis locally.											
416.8	418.0	MAFIC TUFF Sheared medium to dark green mafic tuff with blocky, highly fractured core and fault gouge. Foliation is at approximately 30 to 0 degrees to core axis. Fault gouge is at approximately 30 degrees to core axis. Averages 1%											

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		pyrite.											
418.0	419.8	CHLORITIC FELSIC FELDSPAR PHYRIC TUFF Weakly chloritic medium grey green tinted massive siliceous felsic tuff with 10%, 1 to 2 mm, feldspar phenocrysts on average. Is locally contorted with foliations from 30 to 70 degrees to core axis. There are trace up to 5 mm quartz phenocrysts.											
419.8	435.8	MAFIC FELDSPAR PHYRIC TUFF Medium green mafic tuff with on average 5%, 1 to 3 mm, epidotized feldspars, and 5 to 7% epidotized lapilli. There are 5 to 10 cm sericitic or possibly felsic interbeds locally from approximately 430 to the lower contact. Averages 2% pyrite blebs with locally up to 15% over 5 cm associated with chloritic alteration zones. There is blocky, highly fractured core and minor fault gouge from 426.4 to 427.1. There are minor quartz - chlorite veinlets. Foliations :. 420.4 : 58 degrees to core axis. 420.7 : 41 degrees to core axis. 421.2 : 10 degrees to core axis. 422.8 : 27 degrees to core axis. 425.5 : 19 degrees to core axis. 430.0 : 28 degrees to core axis. 435.5 : 28 degrees to core axis.	VA06983	419.8	421.8	2.0	2	45	<2	83	1	<5	960
			VA06984	421.8	423.8	2.0	2	93	4	81	1	9	750
			VA06985	423.8	425.8	2.0	2	121	<2	82	1	8	560
			VA06986	425.8	427.8	2.0	2	35	<2	51	1	<5	550
			VA06987	427.8	429.8	2.0	2	22	<2	52	1	<5	1100
			VA06988	429.8	431.8	2.0	2	48	<2	48	<1	<5	2100
			VA06989	431.8	433.8	2.0	2	39	3	65	1	<5	1100
			VA06990	433.8	435.8	2.0	2	253	3	80	1	8	200
435.8	441.7	MASSIVE MAFIC PHYRIC MAFIC FLOW Medium to locally light epidote green mafic flow with approximately 30 to 35%, 1 to 2 mm, dark green to black mafic phenocrysts. There are minor fracture controlled epidote veinlets. There is a up to 1 cm thick quartz - chlorite vein with 1% chalcopyrite at 7 degrees to core axis from 439.0 to 439.3. Is blocky, highly fractured core from 440.3 to 441.7. Is massive with local foliation at 60 degrees to core axis.	VA15848	436.0	439.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
441.7	444.1	INTERMEDIATE QUARTZ - FELDSPAR PHYRIC TUFF Dacitic or chloritic felsic tuff with trace quartz phenocrysts and approximately 3% feldspar phenocrysts. Is weakly to strongly contorted locally. There is 5% disseminated pyrite on average. Is light green to grey in colour. Foliations :. From 441.7 to 442.4 : 35 degrees to core axis.	VA06991	441.7	442.9	1.2	5	295	3	75	1	<5	1600
			VA06992	442.9	444.1	1.2	5	120	<2	70	<1	5	1500

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		From 442.4 to 443.5 : folded with foliation at 30 to 0 degrees to core axis locally. Fold noses occur at 442.5, 442.7, and 443.2. From 443.5 to 444.1 : 40 degrees to core axis.											
444.1	444.7	FELSIC QUARTZ - FELDSPAR PHYRIC TUFF Very light grey sericitic tuff with approximately 3 to 5%, 2 to 4 mm, quartz phenocrysts and trace to 2%, 1 to 2 m, feldspar phenocrysts. Foliation is at 33 degrees to core axis.											
444.7	447.2	MAFIC TUFF Light to medium green mafic tuff with on average 5%, 2 to 3 mm, feldspars and local epidotized lapilli. There is fault gouge and very contorted tuff from 446.7 to 447.2. Fault is at 24 degrees to core axis. Foliation varies locally from 25 to 30 degrees to core axis. Averages 2% disseminated pyrite blebs.	VA06993	444.7	446.7	2.0	2	130	3	70	1	5	1400
447.2	449.0	FELSIC FELDSPAR PHYRIC TUFF Medium grey felsic tuff with approximately 3%, 1 mm, epidotized feldspar phenocrysts. There are trace epidotized lapilli and quartz phenocrysts. Nil sulphides occur. Foliation varies locally from 40 to 45 degrees to core axis.											
449.0	453.1	MAFIC TUFF Medium green mafic tuff with 3 to 5%, 1 to 3 mm, epidotized feldspar phenocrysts and local epidotized lapilli. There are minor epidote - calcite - quartz veinlets. There is trace to 1% fracture controlled and disseminated pyrite locally. Is blocky, highly fractured core with minor fault gouge from 449.0 to 449.2. Foliation averages 40 degrees to core axis.											
453.1	453.3	FELSIC TUFF Siliceous light grey felsic tuff with fracture controlled quartz veinlets. Foliation is at 55 degrees to core axis.											
453.3	457.4	MASSIVE MAFIC FLOW Massive dark green mafic flow or intrusive. Is sheared with minor fault gouge from the upper contact to 454.0 with fracture controlled calcite veinlets and an orientation of 35 degrees to core axis. There is 1 to 2% pyrite in the sheared zone and trace to nil elsewhere in the unit. There are minor fracture controlled epidote and											

From (m)	To (m)	DESCRIPTION
		fracture controlled calcite veinlets. Is strongly magnetic with weak to moderate pervasive carbonatization. Foliation is at 50 to 55 degrees to core axis. 453.3 457.4 MODERATE PERVASIVE CARBONATIZATION.
457.4	483.2	MAFIC FELDSPAR PHYRIC TUFF Medium green mafic tuff with on average 5 to 7%, 1 to 2 mm, epidotized feldspar phenocrysts. There are local ash tuff beds and epidotized lapilli. There are local epidote, calcite and quartz veinlets and veins. There is trace to < 1% pyrite on average with up to 3% disseminated or fracture controlled pyrite over short intervals (up to 50 cm). Biotite occurs from approximately 472 m. There is a siliceous white felsic dyke with epidote from 470.5 to 471.7. Bedding :. At 461.9 : 44 degrees to core axis. At 463.1 : 48 degrees to core axis. At 474.5 : 66 degrees to core axis. Foliations :. At 458.4 : 38 degrees to core axis. At 460.0 : 43 degrees to core axis. At 461.4 : 44 degrees to core axis. At 464.0 : 53 degrees to core axis. At 465.4 : 43 degrees to core axis. At 469.1 : 40 degrees to core axis. At 474.7 : 56 degrees to core axis. At 479.8 : 53 degrees to core axis. At 482.0 : 30 degrees to core axis. At 482.8 : 34 degrees to core axis. Faults :. From 470.1 to 470.4 : blocky, highly fractured core with minor fault gouge.
483.2	493.5	MAFIC FELDSPAR AND MAFIC PHYRIC LAPILLI TUFF Medium to dark green mafic lapilli tuff with on average 15%, < 1 to > 7 cm epidotized lapilli. There are trace to 3%, 1 to 3 mm, mafic phenocrysts locally. Averages 3 to 5%, 1 to 2 mm, epidotized feldspar phenocrysts with locally up to 10 to 12%. The lapilli are irregular shaped and subrounded with vesicles and mafic phenocrysts. Biotite occurs locally throughout the unit. There is trace to 1% disseminated pyrite locally. There are rare fracture controlled calcite veinlets. Foliations :. At 483.8 : 47 degrees to core axis.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA15849	463.0	466.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA06994	467.0	469.0	2.0	2	65	<2	68	<1	9	2700
VA06995	478.0	479.5	1.5	2	55	2	88	1	7	700
VA06996	479.5	481.0	1.5	3	28	<2	103	1	5	1000
VA06997	481.0	482.5	1.5	2	52	3	87	1	5	1500
VA15850	486.0	489.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		At 486.1 : 33 degrees to core axis. At 488.3 : 39 degrees to core axis. At 492.7 : 43 degrees to core axis.											
493.5	504.2	MASSIVE MEDIUM GRAINED QUARTZ AND FELDSPAR PHYRIC FELSIC INTRUSION Light to medium grey QFP dyke with mafic tuff inclusions from 496.4 to 497.0, and 497.4 to 498.0. On average there are 15%, locally up to 30%, 1 to 3 mm, feldspar laths and 1 to 2%, 3 to 10 mm, quartz eyes. There is local weak fracture controlled chloritization. Is massive to locally foliated at 40 degrees to core axis.											
504.2	517.0	MAFIC FELDSPAR PHYRIC LAPILLI TUFF Medium to dark green mafic tuff with 15%, 2 to 8 cm, epidotized zoned lapilli and approximately 10%, 1 to 3 mm, epidotized feldspar phenocrysts or possibly amygdules. There is trace to 1% disseminated pyrite on average with 2 to 3% from 505.7 to 506.8. There is minor biotite locally. Foliation is weakly contorted and averages 35 to 40 degrees to core axis. There is local biotite.	VA06998	506.0	508.0	2.0	2	58	<2	77	1	<5	420
517.0	530.2	MAFIC FELDSPAR PHYRIC TUFF Medium green locally dark green to brown with biotite over 1 to 5 cm mafic tuff with on average 3 to 5%, 1 to 2 mm, feldspar phenocrysts. There is a lapilli tuff interval from 521.2 to 525.5 with 10 to 20%, 1 to 7 cm, epidotized lapilli. Lapilli occur locally in the crystal tuff. There is trace to 0.5% pyrite locally. Minor fracture controlled calcite veinlets occur. Foliations :. 517.7 : 38 degrees to core axis. 518.3 : 39 degrees to core axis. 521.3 : 36 degrees to core axis. 524.6 : 33 degrees to core axis. 527.0 : 38 degrees to core axis. Faults :. There is minor fault gouge at 518.5 and 522.7.	VA06999	518.0	521.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
530.2	539.3	MASSIVE MEDIUM GRAINED QUARTZ AND FELDSPAR PHYRIC FELSIC INTRUSION Medium grey QFP dyke with 20 to 30%, 1 to 3 mm, feldspar laths and 1 to 2%, 5 mm, quartz eyes. There are mafic inclusions from 532.1 to 532.5, and 534.9 to 536.5. Is massive with rare foliations locally at 20 to 70 degrees to core axis.	VA07000	536.0	539.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

From (m)	To (m)	----------------DESCRIPTION----------------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
539.3	540.6	MAFIC TUFF Sheared mafic tuff or possibly gabbro. Foliation at 30 to 0 degrees to core axis. Contact with gabbro is at 0 degrees to core axis and occurs from at least 539.7 m.											
540.6	551.1	FINE GRAINED FELDSPAR PHYRIC MAFIC INTRUSION Fine-grained medium green plasgiophyric gabbro with 5 to 7%, 1 to 4 mm, plagioclase phenocrysts and 1 to 2% fine-grained ilmenite and leucoxene locally. There are minor quartz - chlorite and calcite veins and veinlets.											

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	RTS	ROCK
AG09946	44.20	45.70	930.0	<1.0	52.0	55.0	<0.5	<5.0	18.0	<1.0	<2.0	<5.0	1160.0	49.	0.	TMAF
AG09947	45.70	46.20	890.0	<1.0	112.0	145.0	0.6	15.0	53.0	35.0	<2.0	<5.0	1500.0	44.	15.	TMAF
AG09948	46.20	47.20	1500.0	<1.0	44.0	21.0	<0.5	<5.0	9.0	<1.0	<2.0	<5.0	305.0	68.	1.	TIAD
AG09949	48.50	50.00	710.0	<1.0	44.0	73.0	<0.5	6.0	27.0	<1.0	<2.0	<5.0	1050.0	38.	1.	TMAF
AG09950	71.00	72.50	750.0	<1.0	78.0	95.0	<0.5	<5.0	25.0	<1.0	<2.0	<5.0	1540.0	45.	1.	TMAF
AG09951	72.50	74.00	730.0	<1.0	93.0	88.0	<0.5	<5.0	36.0	<1.0	<2.0	<5.0	1520.0	51.	1.	TMAF
AG09952	74.00	75.50	890.0	<1.0	238.0	88.0	<0.5	6.0	22.0	<1.0	<2.0	<5.0	1520.0	73.	1.	TMAF
AG09953	75.50	77.00	630.0	<1.0	338.0	85.0	<0.5	<5.0	26.0	<1.0	<2.0	<5.0	1560.0	80.	1.	TMAF
AG09954	77.00	78.50	640.0	<1.0	270.0	81.0	<0.5	<5.0	20.0	<1.0	<2.0	<5.0	1530.0	77.	1.	TMAF
AG09955	78.50	80.00	570.0	<1.0	80.0	75.0	<0.5	<5.0	20.0	<1.0	<2.0	<5.0	1470.0	52.	1.	TMAF
AG09956	84.00	85.50	620.0	<1.0	551.0	75.0	<0.5	<5.0	18.0	<1.0	2.0	<5.0	1490.0	88.	1.	TMAF
AG09957	85.50	87.00	940.0	<1.0	67.0	69.0	<0.5	<5.0	22.0	<1.0	<2.0	6.0	1490.0	49.	1.	TMAF
AG09958	87.00	88.50	980.0	<1.0	71.0	70.0	<0.5	<5.0	17.0	<1.0	4.0	9.0	1420.0	50.	1.	TMAF
AG09959	88.50	89.50	1100.0	<1.0	110.0	60.0	<0.5	<5.0	16.0	<1.0	<2.0	<5.0	1300.0	65.	2.	TFAQ
AG09960	89.50	90.90	2000.0	<1.0	52.0	56.0	<0.5	<5.0	22.0	<1.0	<2.0	<5.0	1090.0	48.	2.	TFAQ
AG09964	108.10	109.60	1900.0	<1.0	36.0	64.0	<0.5	6.0	20.0	<1.0	<2.0	<5.0	1270.0	36.	2.	TMAF
AG09965	109.60	111.10	820.0	<1.0	176.0	77.0	<0.5	<5.0	29.0	<1.0	<2.0	<5.0	1460.0	70.	2.	TMAF
AG09961	112.40	113.90	970.0	<1.0	279.0	74.0	<0.5	14.0	33.0	11.0	<2.0	<5.0	1320.0	79.	7.	TMAF
AG09962	121.50	123.00	990.0	<1.0	203.0	81.0	<0.5	16.0	55.0	<1.0	<2.0	<5.0	1660.0	71.	7.	TMAF
AG09963	129.90	131.10	270.0	<1.0	72.0	73.0	<0.5	8.0	49.0	<1.0	<2.0	<5.0	1210.0	50.	2.	TMAF
AG09966	146.00	147.50	810.0	<1.0	558.0	67.0	<0.5	<5.0	21.0	<1.0	<2.0	<5.0	1530.0	89.	1.	TMAF
AG09967	147.50	149.00	830.0	<1.0	610.0	72.0	<0.5	7.0	22.0	<1.0	<2.0	<5.0	1600.0	89.	3.	TMAF
AG09968	149.00	150.50	880.0	<1.0	459.0	63.0	<0.5	<5.0	18.0	<1.0	<2.0	<5.0	1360.0	88.	2.	TMAF

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	ETS	ROCK
AG09969	150.50	152.00	1100.0	<1.0	195.0	64.0	<0.5	<5.0	27.0	<1.0	<2.0	<5.0	1510.0	75.	3.	TMAF
AG09970	152.00	153.50	1000.0	<1.0	2466.0	78.0	0.7	18.0	27.0	4.0	<2.0	<5.0	1570.0	97.	3.	TMAF
AG09971	153.50	155.00	760.0	<1.0	282.0	64.0	0.5	<5.0	28.0	<1.0	<2.0	<5.0	1400.0	82.	2.	TMAF
AG09972	155.00	156.50	730.0	<1.0	292.0	56.0	<0.5	<5.0	23.0	<1.0	<2.0	<5.0	1330.0	84.	1.	TMAF
AG09973	156.50	158.00	1100.0	<1.0	320.0	57.0	<0.5	<5.0	31.0	<1.0	<2.0	<5.0	1240.0	85.	3.	TMAF
AG09974	158.00	159.50	570.0	<1.0	113.0	56.0	<0.5	<5.0	19.0	<1.0	<2.0	<5.0	1380.0	67.	2.	TMAF
AG09975	159.50	161.00	350.0	<1.0	184.0	54.0	<0.5	<5.0	21.0	26.0	<2.0	<5.0	1320.0	77.	2.	TMAF
AG09976	161.00	162.50	950.0	<1.0	202.0	63.0	0.5	<5.0	30.0	<1.0	<2.0	<5.0	1470.0	76.	2.	TMAF
AG09977	162.50	164.00	1000.0	<1.0	790.0	61.0	0.6	<5.0	29.0	<1.0	<2.0	<5.0	1300.0	93.	2.	TMAF
AG09978	164.00	165.50	910.0	<1.0	1105.0	65.0	0.7	<5.0	28.0	6.0	<2.0	<5.0	1290.0	94.	2.	TMAF
AG09979	165.50	167.00	1000.0	<1.0	1445.0	87.0	0.7	<5.0	27.0	4.0	<2.0	<5.0	1240.0	94.	2.	TMAF
AG09980	167.00	168.50	840.0	<1.0	499.0	99.0	<0.5	<5.0	25.0	<1.0	<2.0	<5.0	1200.0	83.	2.	TMAF
AG09981	168.50	170.00	220.0	<1.0	185.0	93.0	<0.5	<5.0	18.0	<1.0	<2.0	<5.0	1160.0	67.	2.	TMAF
AG09982	170.00	171.50	100.0	<1.0	83.0	81.0	<0.5	<5.0	8.0	<1.0	<2.0	<5.0	1040.0	51.	2.	TMAF
AG09983	171.50	173.00	140.0	<1.0	132.0	76.0	<0.5	<5.0	13.0	<1.0	<2.0	<5.0	970.0	63.	2.	TMAF
AG09984	173.00	174.50	370.0	<1.0	208.0	86.0	0.5	<5.0	131.0	12.0	<2.0	<5.0	1050.0	71.	3.	TMAF
AG09985	174.50	176.00	620.0	<1.0	24.0	81.0	<0.5	<5.0	49.0	<1.0	4.0	15.0	1280.0	23.	7.	TMAF
AG09986	176.00	177.50	790.0	<1.0	101.0	73.0	<0.5	11.0	57.0	<1.0	3.0	<5.0	1280.0	58.	7.	TMAF
AG09987	177.50	179.00	750.0	<1.0	46.0	75.0	<0.5	11.0	43.0	<1.0	<2.0	7.0	1370.0	38.	7.	TMAF
AG09988	182.80	184.30	340.0	<1.0	938.0	164.0	<0.5	7.0	34.0	<1.0	6.0	<5.0	1800.0	85.	3.	TMAF
AG09989	184.30	185.80	780.0	<1.0	757.0	72.0	0.5	<5.0	25.0	<1.0	7.0	17.0	1770.0	91.	2.	TMAF
AG09990	199.50	201.00	740.0	<1.0	224.0	54.0	0.6	7.0	46.0	<1.0	<2.0	7.0	1340.0	81.	5.	TMAF
AG09991	201.00	202.50	1100.0	<1.0	347.0	55.0	<0.5	<5.0	30.0	<1.0	9.0	15.0	1320.0	86.	3.	TMAF

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	ETS	ROCK
AG09992	202.50	204.00	730.0	<1.0	224.0	68.0	<0.5	<5.0	26.0	<1.0	<2.0	<5.0	1590.0	77.	3.	TMAF
AG09993	220.50	222.00	340.0	<1.0	200.0	70.0	<0.5	<5.0	48.0	<1.0	4.0	<5.0	1680.0	74.	4.	TMAF
AG09994	229.50	231.00	450.0	<1.0	99.0	112.0	0.7	<5.0	30.0	<1.0	4.0	<5.0	2060.0	47.	2.	TMAF
AG09995	231.00	232.50	600.0	<1.0	950.0	108.0	1.0	21.0	37.0	27.0	<2.0	<5.0	1940.0	90.	6.	TMAF
AG09996	232.50	234.00	<20.0	<1.0	112.0	75.0	<0.5	<5.0	21.0	8.0	<2.0	<5.0	1480.0	60.	1.	TMAF
AG09997	247.50	249.00	120.0	<1.0	94.0	62.0	0.5	<5.0	40.0	<1.0	<2.0	<5.0	1220.0	60.	2.	TMAF
AG09998	249.00	250.50	410.0	<1.0	36.0	51.0	<0.5	<5.0	33.0	<1.0	<2.0	<5.0	995.0	41.	3.	TMAF
AG09999	250.50	252.00	120.0	<1.0	980.0	51.0	0.6	14.0	38.0	5.0	<2.0	<5.0	1100.0	95.	2.	TMAF
AG10000	287.00	288.50	310.0	<1.0	88.0	87.0	0.6	<5.0	31.0	<1.0	11.0	<5.0	1760.0	50.	3.	TMBF
VA06951	293.00	294.50	130.0	<1.0	224.0	93.0	<0.5	<5.0	32.0	<1.0	<2.0	18.0	1640.0	71.	1.	TMBF
VA06952	294.90	296.50	170.0	<1.0	89.0	137.0	0.8	10.0	29.0	32.0	<2.0	<5.0	2420.0	39.	3.	TMAF
VA06953	296.50	298.00	420.0	<1.0	81.0	100.0	0.7	7.0	27.0	16.0	<2.0	<5.0	1740.0	45.	2.	TMAF
VA06954	298.00	299.50	280.0	<1.0	44.0	109.0	<0.5	7.0	30.0	20.0	<2.0	<5.0	1790.0	29.	3.	TMAF
VA06955	299.50	301.00	300.0	<1.0	75.0	104.0	0.6	9.0	24.0	9.0	<2.0	<5.0	1700.0	42.	2.	TMAF
VA06956	301.00	302.50	380.0	<1.0	219.0	100.0	0.8	<5.0	30.0	15.0	<2.0	<5.0	1630.0	69.	2.	TMAF
VA06957	304.50	306.00	970.0	<1.0	242.0	105.0	0.6	7.0	31.0	17.0	<2.0	<5.0	1640.0	70.	2.	TMAF
VA06958	306.00	307.50	1300.0	<1.0	77.0	115.0	<0.5	<5.0	27.0	17.0	<2.0	<5.0	1740.0	40.	3.	TMAF
VA06959	307.50	309.00	1200.0	<1.0	83.0	111.0	0.9	<5.0	31.0	19.0	<2.0	<5.0	1620.0	43.	3.	TMAF
VA06960	309.00	310.50	1100.0	<1.0	450.0	102.0	<0.5	<5.0	26.0	6.0	<2.0	<5.0	1480.0	82.	3.	TMAF
VA06961	310.50	312.00	910.0	<1.0	60.0	111.0	<0.5	<5.0	26.0	12.0	<2.0	<5.0	1610.0	35.	2.	TMAF
VA06962	312.00	313.50	940.0	<1.0	250.0	141.0	0.7	<5.0	32.0	25.0	<2.0	<5.0	1960.0	64.	3.	TMAF
VA06963	313.50	315.00	930.0	<1.0	747.0	148.0	<0.5	9.0	30.0	17.0	4.0	<5.0	1910.0	83.	2.	TMAF
VA06964	348.60	350.20	1000.0	<1.0	766.0	433.0	0.8	<5.0	26.0	<1.0	<2.0	11.0	1530.0	64.	2.	TMAFW

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

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VA06965	350.20	351.70	1000.0	<1.0	1085.0	4400.0	1.0	<5.0	26.0	<1.0	<2.0	27.0	1470.0	20.	2.	TMAFW
VA06966	351.70	353.20	1700.0	<1.0	815.0	406.0	0.9	<5.0	40.0	<1.0	<2.0	13.0	1450.0	67.	4.	TMAFW
VA06967	353.20	354.70	2000.0	<1.0	497.0	397.0	0.9	<5.0	32.0	<1.0	4.0	14.0	1650.0	56.	4.	TMAFW
VA06968	354.70	356.20	1500.0	<1.0	243.0	219.0	0.7	<5.0	28.0	<1.0	<2.0	10.0	1590.0	53.	2.	TMAFW
VA06969	356.20	357.70	1400.0	<1.0	355.0	237.0	0.8	6.0	31.0	<1.0	<2.0	18.0	1670.0	60.	2.	TMAFW
VA06970	357.70	359.20	870.0	<1.0	666.0	215.0	0.6	<5.0	34.0	<1.0	<2.0	29.0	1510.0	76.	2.	TMAFW
VA06971	359.20	360.70	1400.0	<1.0	431.0	284.0	1.1	<5.0	29.0	<1.0	<2.0	<5.0	1620.0	60.	2.	TMAFW
VA06972	360.70	362.60	2100.0	<1.0	137.0	256.0	0.6	<5.0	33.0	<1.0	<2.0	16.0	1520.0	35.	2.	TMAFW
VA06973	364.30	365.80	1300.0	<1.0	370.0	266.0	0.8	<5.0	41.0	<1.0	2.0	21.0	1650.0	58.	2.	TMAFW
VA06974	365.80	367.30	470.0	<1.0	384.0	220.0	0.8	<5.0	23.0	<1.0	<2.0	<5.0	1550.0	64.	2.	TMAFW
VA06975	367.30	368.80	460.0	<1.0	242.0	169.0	0.6	<5.0	21.0	<1.0	<2.0	6.0	1370.0	59.	1.	TMAFW
VA06976	368.80	370.30	910.0	<1.0	493.0	165.0	0.9	<5.0	24.0	<1.0	<2.0	12.0	1480.0	75.	3.	TMAFW
VA06977	370.30	371.80	1500.0	<1.0	478.0	156.0	1.2	<5.0	30.0	<1.0	<2.0	15.0	1310.0	75.	3.	TMAFW
VA06978	371.80	373.30	960.0	<1.0	200.0	122.0	1.0	<5.0	27.0	<1.0	<2.0	19.0	1150.0	62.	2.	TMAFW
VA06979	373.30	374.80	1100.0	<1.0	293.0	145.0	0.9	<5.0	28.0	<1.0	<2.0	16.0	1480.0	67.	2.	TMAFW
VA06980	374.80	376.30	650.0	<1.0	468.0	110.0	1.3	6.0	34.0	<1.0	2.0	14.0	1400.0	81.	4.	TMAFW
VA06981	376.30	377.80	490.0	<1.0	235.0	144.0	1.4	<5.0	31.0	<1.0	<2.0	20.0	1890.0	62.	4.	TMAFW
VA06982	377.80	379.30	850.0	<1.0	187.0	122.0	1.0	<5.0	35.0	<1.0	<2.0	10.0	1630.0	61.	3.	TMAFW
VA06983	419.80	421.80	960.0	<1.0	45.0	83.0	0.9	<5.0	37.0	<1.0	<2.0	11.0	1180.0	35.	2.	TMA
VA06984	421.80	423.80	750.0	<1.0	93.0	81.0	1.0	9.0	39.0	<1.0	4.0	9.0	1300.0	53.	2.	TMA
VA06985	423.80	425.80	560.0	<1.0	121.0	82.0	1.0	8.0	36.0	<1.0	<2.0	23.0	1310.0	60.	2.	TMA
VA06986	425.80	427.80	550.0	<1.0	35.0	51.0	0.6	<5.0	25.0	<1.0	<2.0	11.0	961.0	41.	2.	TMA
VA06987	427.80	429.80	1100.0	<1.0	22.0	52.0	0.6	<5.0	41.0	<1.0	<2.0	13.0	897.0	30.	2.	TMA

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(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	ETS	ROCK
VA06988	429.80	431.80	2100.0	<1.0	48.0	48.0	<0.5	<5.0	32.0	<1.0	<2.0	16.0	826.0	50.	2.	TMA
VA06989	431.80	433.80	1100.0	<1.0	39.0	65.0	0.6	<5.0	41.0	<1.0	3.0	16.0	1180.0	38.	2.	TMA
VA06990	433.80	435.80	200.0	<1.0	253.0	80.0	0.7	8.0	48.0	<1.0	3.0	13.0	1240.0	76.	2.	TMA
VA06991	441.70	442.90	1600.0	<1.0	295.0	75.0	0.8	<5.0	42.0	<1.0	3.0	196.0	748.0	80.	5.	TIAD
VA06992	442.90	444.10	1500.0	<1.0	120.0	70.0	<0.5	5.0	37.0	<1.0	<2.0	<5.0	845.0	63.	5.	TIAD
VA06993	444.70	446.70	1400.0	<1.0	130.0	70.0	0.6	5.0	29.0	<1.0	3.0	10.0	1040.0	65.	2.	TMAF
VA06994	467.00	469.00	2700.0	<1.0	65.0	68.0	<0.5	9.0	29.0	<1.0	<2.0	8.0	946.0	49.	2.	TMAF
VA06995	478.00	479.50	700.0	<1.0	55.0	88.0	0.7	7.0	32.0	<1.0	2.0	11.0	1490.0	38.	2.	TMAF
VA06996	479.50	481.00	1000.0	<1.0	28.0	103.0	0.9	5.0	39.0	16.0	<2.0	11.0	1690.0	21.	3.	TMAF
VA06997	481.00	482.50	1500.0	<1.0	52.0	87.0	0.7	5.0	32.0	<1.0	3.0	15.0	1380.0	37.	2.	TMAF
VA06998	506.00	508.00	420.0	<1.0	58.0	77.0	0.9	<5.0	28.0	<1.0	<2.0	<5.0	1250.0	43.	2.	TMBF

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	%SIO2	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TIO2	%P2O5	%MNO	%LOI	SUM	AI	NACA	ALUM
VA15835	33.00	36.00	56.90	16.60	4.53	5.37	4.01	0.18	8.15	0.65	0.13	0.18	3.62	100.32	39.	9.	190.
VA15836	52.00	55.00	56.20	17.10	2.29	5.84	3.75	1.04	8.49	0.64	0.13	0.17	4.39	100.04	53.	6.	242.
VA15837	81.00	84.00	55.40	17.00	3.68	5.85	3.28	0.73	8.95	0.64	0.12	0.27	4.16	100.08	49.	7.	221.
VA15838	114.00	117.00	55.20	16.80	5.47	5.74	3.06	0.45	8.23	0.68	0.14	0.23	4.31	100.31	42.	9.	187.
VA15839	143.00	146.00	53.20	17.60	6.28	5.23	2.95	0.66	8.92	0.71	0.15	0.26	4.00	99.96	39.	9.	178.
VA15840	179.00	182.00	54.80	16.30	4.54	6.02	2.82	0.47	9.53	0.67	0.15	0.24	4.16	99.70	47.	7.	208.
VA15841	204.00	207.00	52.80	17.00	7.42	6.02	2.27	0.17	10.00	0.69	0.16	0.29	3.70	100.52	39.	10.	172.
VA15842	234.00	237.00	55.70	16.00	6.02	6.63	2.42	0.06	8.92	0.66	0.15	0.26	3.85	100.67	44.	8.	188.
VA15843	264.00	267.00	53.90	16.50	5.46	6.15	2.78	0.14	9.99	0.69	0.15	0.28	4.08	100.12	43.	8.	197.
VA15844	290.00	293.00	55.20	16.30	3.79	6.54	3.29	0.30	9.25	0.68	0.15	0.28	4.31	100.09	49.	7.	221.
VA15845	320.00	323.00	55.20	16.40	6.35	5.72	3.04	0.15	8.90	0.66	0.15	0.30	3.39	100.26	38.	9.	172.
VA15846	365.00	368.00	51.50	17.50	3.86	6.68	3.32	0.80	10.60	0.75	0.17	0.26	5.00	100.44	51.	7.	219.
VA15847	392.00	395.00	49.20	14.00	8.46	5.43	3.93	0.30	12.40	2.87	0.48	0.18	1.62	98.87	32.	12.	110.
VA15848	436.00	439.00	49.30	14.50	8.76	6.56	3.25	0.45	12.40	1.84	0.26	0.21	2.54	100.07	37.	12.	116.
VA15849	463.00	466.00	48.70	17.10	4.50	7.11	2.57	0.76	13.00	0.79	0.17	0.23	5.16	100.09	53.	7.	218.
VA15850	486.00	489.00	49.80	17.10	5.28	8.25	2.23	0.80	10.40	0.71	0.17	0.22	4.62	99.58	55.	8.	206.
VA06999	518.00	521.00	49.80	17.30	6.20	6.85	2.51	0.57	10.80	0.75	0.17	0.28	4.31	99.54	46.	9.	186.
VA07000	536.00	539.00	73.30	13.00	1.94	1.40	5.64	0.61	2.07	0.24	0.06	0.04	1.54	99.84	21.	8.	159.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NB (ppm)	CR (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	ROCK	ALT	MIN
VA15835	33.00	36.00	17.0	279.0	172.0	15.0	64.0	19.0		49.0	60.0	<10.0	TMBF	?	DBP
VA15836	52.00	55.00	28.0	158.0	1010.0	20.0	73.0	<10.0		51.0	64.0	<10.0	TMAF	?	DBP
VA15837	81.00	84.00	32.0	239.0	597.0	28.0	76.0	13.0		52.0	87.0	<10.0	TMBF	?	DBP
VA15838	114.00	117.00	23.0	336.0	743.0	16.0	59.0	<10.0		60.0	68.0	<10.0	TMAF	?	DBP
VA15839	143.00	146.00	<10.0	360.0	490.0	14.0	58.0	18.0		439.0	79.0	<10.0	TMAF	?	DBP
VA15840	179.00	182.00	<10.0	238.0	580.0	<10.0	66.0	20.0		1590.0	73.0	11.0	TMAF	?	DBP
VA15841	204.00	207.00	19.0	419.0	177.0	23.0	50.0	28.0		90.0	68.0	16.0	TMAF	?	DBP
VA15842	234.00	237.00	19.0	321.0	78.0	12.0	50.0	<10.0		115.0	75.0	<10.0	TMAF	?	DBP
VA15843	264.00	267.00	14.0	335.0	151.0	24.0	50.0	10.0		76.0	74.0	<10.0	TMAF	?	DBP
VA15844	290.00	293.00	17.0	259.0	488.0	<10.0	70.0	12.0		116.0	86.0	12.0	TMBF	?	DBP
VA15845	320.00	323.00	13.0	337.0	210.0	19.0	54.0	16.0		100.0	137.0	16.0	TMAF	SFW	DBP
VA15846	365.00	368.00	20.0	253.0	716.0	13.0	72.0	<10.0		650.0	163.0	13.0	TMAF	?	DCP
VA15847	392.00	395.00	17.0	282.0	163.0	48.0	202.0	12.0		24.0	69.0	<10.0	VMA	PCW	AA-
VA15848	436.00	439.00	18.0	380.0	182.0	35.0	120.0	15.0		193.0	75.0	13.0	VMA	PCW	AA-
VA15849	463.00	466.00	22.0	268.0	588.0	<10.0	42.0	<10.0		52.0	78.0	17.0	TMAF	?	DBP
VA15850	486.00	489.00	23.0	278.0	553.0	11.0	55.0	27.0		155.0	78.0	18.0	TMBF	?	DBP
VA06999	518.00	521.00	31.0	344.0	507.0	18.0	50.0	24.0		49.0	90.0	27.0	TMAF	?	AA-
VA07000	536.00	539.00	<10.0	224.0	792.0	18.0	97.0	<10.0		19.0	37.0	<10.0	PFBD	?	AA-

PROPERTY: NUGGET OPTION

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: NG89-2
Page Number 1

Plotting Coordinates: 981 E -1310 N 255 m Elev.
Surveyed Grid Location: 9+80.5 E, 13+10 S, 255 m Elev.
Field Grid Location: 9+80.5 E, 13+10 S, 255 m El.
NTS: 092B/13 UTM: 5413800 N, 440520 E
Azimuth: 0 Dip: -50 Length: 505.1 m

Started: November 29, 1989eted: December 5, 1989
Revision Date:

Purpose: To test high IP chargeability.

Claim No. NUGGET 2
Section No.: 9+50 W, Nugget Option

Logged By: M. Vande Guchte
Drilling Co.: Burwash Enterprises
Assayed By: Bondar-Clegg and XRAL

Core Size: NQ

ORIENTATION TESTS

Length	Azimuth	Dip	Length	Azimuth	Dip
61.00	354.0	-50.0	276.50	1.5	-50.0
99.70	357.5	-50.0	340.50	6.5	-50.0
185.00	359.5	-50.0	459.30	11.5	-45.0
212.40	355.5	-50.0	505.00	12.5	-44.0

From (m)	To (m)	----------------DESCRIPTION----------------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0	42.7	CASING											
42.7	54.1	CHLORITIC FELSIC QUARTZ EYE TUFF Medium to light green - grey, coarse to lapilli chloritic quartz phyric felsic tuff. Up to 12%, 1 - 6 mm (average 2-3 mm) quartz phenocrysts. 2 - 3% fine disseminated pyrite and local, up to 5% stringers/fracture controlled pyrite. Weak to moderately chloritic and weakly sericitic and weak fracture controlled carbonate alteration. Moderately well developed foliation with broken, blocky core from sections from 47.0 to 54.2 metres (2.5 m lost core). Foliation :. At 45.0 : 37 degrees to core axis. Faults :. From 47.0 to 54.2 : blocky, highly fractured core (2.5 m lost core). Local fault with gouge the most notable marking the lower contact, over 10 cm at 27 degrees to core axis. Alteration :. 42.7 54.1 : MODERATE PERVASIVE CHLORITIZATION. 42.7 54.1 : WEAK PERVASIVE SERICITIZATION. 42.7 54.1 : WEAK FRACTURE CONTROLLED CARBONATIZATION.												
54.1	65.8	CHLORITIC QUARTZ PHYRIC FELSIC FLOW											

From (m) To (m) ----------------DESCRIPTION----------------

Medium to light green - grey, chlorite - sericite altered felsic flows. Up to 12%, 1 - 6 mm quartz phenocrysts. Local flow textures highlighted by variable (weak) chlorite - sericite alteration giving core a weak, locally banded to fragmental appearance. Weak, local patchy silicification. Elliptical shaped, up to 7 mm quartz amygdules observed locally. 2 - 3% disseminated pyrite with local, up to 5% stringer/fracture controlled pyrite. Trace to 0.5% chalcopyrite with 3% disseminated pyrite at 58.4 and 63.1 metres. Moderately well developed foliation.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA07910	56.5	58.0	1.5	3	807	2	92	1	6	1400
VA07911	58.0	59.5	1.5	3	581	8	80	1	6	1400
VA07912	59.5	61.0	1.5	3	488	3	80	1	9	1500
VA04398	60.0	63.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA07913	61.0	62.5	1.5	3	777	14	68	1	11	1600
VA07914	62.5	64.0	1.5	3	273	12	90	1	7	1600

From 55.9 to 56.1 : medium to dark green, fine-grained sheared mafic dyke or sill at 37 degrees to core axis.

Foliation :.
At 59.0 : 46 degrees to core axis.

Faults :.
From 60.8 to 61.0 : faults with gouge at 45 degrees to core axis.
From 63.5 to 63.6 : fault zone with gouge at 32 degrees to core axis.
From 65.0 to 65.8 : fault zone, gouge, no orientation. 0.5 m lost core.

Alteration :.
54.1 65.8 : WEAK PERVASIVE SERICITIZATION.
54.1 65.8 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

65.8 67.7 FINE GRAINED MAFIC INTRUSION

Medium to dark green, fine-grained sheared mafic dyke or sill. Blocky, highly fractured core over the entire interval.

Alteration :.
65.8 67.7 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

67.7 78.0 CHLORITIC QUARTZ PHYRIC FELSIC FLOW

Medium to light grey - green, weakly chloritic quartz phyric felsic flow. Up to 10%, 1 - 6 mm quartz phenocrysts. Local brecciated, fragmental-like texture similar to previous from 54.1 to 65.8 metres. Occasional, stretched quartz amygdules observed locally. 2 - 3% disseminated pyrite, local up to 6% stringer / fracture controlled pyrite and up to 30% pyrite with trace - 1% chalcopyrite (77.5 and 77.9 m) marking the lower contact from 77.4 to 78.0 metres. Weakly chloritic and sericitic with weak fracture controlled carbonate alteration. Weak to moderately well developed foliation with blocky, highly

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA07915	69.9	71.4	1.5	3	713	9	78	1	8	1000
VA07916	71.4	72.9	1.5	3	764	3	76	1	<5	1000
VA07917	72.9	74.4	1.5	3	716	6	83	1	7	1200
VA07918	74.4	75.9	1.5	3	792	11	97	1	12	1200
VA07919	75.9	77.4	1.5	3	265	16	128	<1	9	1200
VA07920	77.4	78.0	.6	25	2672	281	172	3	177	770

From (m) To (m) ----------------DESCRIPTION----------------

fractured core over the first 1.4 metres.

Foliation :.
At 70.5 : 60 degrees to core axis.
At 75.5 : 52 degrees to core axis.

Faults :.
From 67.7 to 69.0 : blocky, highly fractured core with local faults and gouge at approximate orientations of 60 to 70 degrees to core axis.

Alteration :.
67.7 78.0 : WEAK PERVASIVE CHLORITIZATION.
67.7 78.0 : WEAK PERVASIVE SERICITIZATION.

78.0 105.3 CHLORITIC QUARTZ PHYRIC FELSIC FLOW

Medium to light grey - green, weakly chloritic quartz phyric felsic flow similar to previous unit but more massive locally fine-grained appearance. Up to 10%, 1 - 5 mm quartz phenocrysts and occasional up to 6 mm, stretched quartz amygdules found locally. 2 - 3% disseminated pyrite and local, up to 8% pyrite stringers. 10% disseminated to stringer pyrite with trace - 0.5% chalcopyrite (86.45 m) from 86.4 to 86.8 metres. 2% fracture controlled chalcopyrite (quartz stringer) at 95.5 m and trace disseminated chalcopyrite at 103.2 m. Weak to moderately chloritic, weakly sericitic and weak fracture controlled carbonate alteration. Poorly developed foliation from upper contact to 82.5 becoming more siliceous to massive in appearance below this point. Strongly quartz veined sections from 82.9-83.4, 95.4-96.2, and 102.3-103.0 m with 1 - 2% quartz - carbonate stringers between these intervals. .

Foliation :.
At 82.0 : 53 degrees to core axis.

Faults :.
From 83.5 to 83.8 : blocky, highly fractured core, fault with fault gouge, no determinable orientation at 89.3 : fault slip at 70 degrees to core axis.
From 92.7 to 93.8 : broken, blocky core.

Alteration :.
78.0 105.3 : WEAK PERVASIVE CHLORITIZATION.
78.0 105.3 : WEAK PERVASIVE SERICITIZATION.
82.5 105.3 : WEAK FRACTURE CONTROLLED SILICIFICATION.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA07921	78.0	79.5	1.5	3	53	58	94	<1	25	1300
VA07922	79.5	81.0	1.5	3	60	14	106	1	8	1300
VA07923	81.0	82.3	1.3	3	32	8	122	1	10	1100
VA07924	82.3	83.5	1.3	3	64	7	103	1	<5	910
VA07925	83.5	85.0	1.5	3	16	5	99	1	<5	1300
VA07926	85.0	86.3	1.3	3	158	16	141	<1	12	1200
VA07927	86.3	86.8	.5	12	1846	20	150	1	59	1100
VA07928	86.8	88.3	1.5	3	113	10	102	<1	11	1400
VA07929	88.3	89.8	1.5	2	62	9	91	<1	13	1300
VA07930	89.8	91.3	1.5	2	666	<2	111	1	11	1400
VA04399	90.0	93.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA07931	91.3	93.0	1.7	2	599	6	112	1	11	1400
VA07932	93.0	94.5	1.5	2	544	6	87	1	8	1400
VA07933	94.5	96.0	1.5	2	1262	24	119	1	15	1400
VA07934	96.0	97.5	1.5	2	1272	3	92	1	12	1400
VA07935	97.5	99.0	1.5	2	278	6	77	<1	5	1500
VA07936	99.0	100.5	1.5	2	310	6	66	<1	14	1400
VA07937	100.5	102.0	1.5	2	1032	5	90	1	12	1500
VA07938	102.0	103.5	1.5	2	496	23	74	<1	10	1500
VA07939	103.5	105.0	1.5	3	404	6	83	<1	17	1500
VA07940	105.0	106.5	1.5	5	550	9	99	1	14	1600

105.3 106.7 FAULT ZONE

Sheared felsic volcanics with numerous fault zones and gouge with orientations ranging from 30 to 60 degrees to

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA07941	106.5	108.0	1.5	4	90	21	69	2	10	1200

From (m) To (m) ----------------DESCRIPTION----------------

core axis (average approximately 40 degrees).

106.7 131.3 FELSIC QUARTZ - FELDSPAR PHYRIC FLOW

Medium to light grey, massive quartz - feldspar phyric felsic flow. Up to 15%, < 2 mm mottled feldspar phenocrysts and up to 8%, 1 - 6 mm quartz phenocrysts. Trace to 1% disseminated pyrite with local up to 4% stringer / fracture controlled pyrite. Weakly chloritic, weak sericite alteration and minor quartz - carbonate stringers. Overall, massive appearance with a poorly developed foliation at approximately 50 degrees to core axis.

Foliation :.
At 111.5 : 52 degrees to core axis.
At 124.0 : 50 degrees to core axis.
At 130.0 : 48 degrees to core axis.

Faults :.
From 118.0 to 119.6 : fault zone with fault gouge from 118.9 to 119.6 m. Approximate orientation at 65 degrees to core axis.
At 121.3 : fault at 80 degrees to core axis.
From 127.4 to 127.5 : fault with gouge at 40 degrees to core axis.

Alteration :.
106.7 131.3 : WEAK PERVASIVE SERICITIZATION.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA07942	108.0	109.5	1.5	3	11	2	63	1	<5	1300
VA07943	109.5	111.0	1.5	3	21	6	68	1	<5	1300
VA07944	111.0	112.5	1.5	3	32	5	69	1	<5	1200
VA04400	121.0	124.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA07945	126.0	127.5	1.5	3	70	<2	60	1	<5	1300
VA07946	127.5	128.5	1.0	3	99	7	63	1	6	1300
VA07947	128.5	129.5	1.0	3	244	13	60	2	<5	1300

131.3 132.9 CHLORITIC FELSIC QUARTZ EYE TUFF

Medium grey - green, fine-grained quartz phyric felsic tuff. Up to 12%, < 2 mm quartz phenocrysts and trace to 3%, less than 1 mm feldspar grains. 1 - 2% disseminated pyrite. Moderately to strongly chloritic and weak sericite alteration. Overall, massive - siliceous appearance with poorly developed foliation. Sharp upper contact marked by 10 cm fine-grained, dark green chloritic mafic tuff at 50 degrees to core axis.

Alteration :.
131.3 132.9 : MODERATE PERVASIVE CHLORITIZATION.
131.3 132.9 : WEAK PERVASIVE SERICITIZATION.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA07948	131.7	132.7	1.0	2	13	6	120	1	<5	1100
VA07949	132.7	133.2	.5	4	61	10	191	2	<5	2200

132.9 138.8 MAFIC LAPILLI TUFF

Medium to dark green, fine-grained mafic lapilli tuff. Up to 10% epidote altered lapilli fragments increasing in concentration to the lower contact (south tops). Siliceous-cherty, pyritic horizon over the first 30 cm with probable intercalated felsic component over the

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA07950	133.2	134.2	1.0	2	75	20	1486	1	<5	1700

From (m) To (m) ----------------DESCRIPTION----------------

first metre. Massive, fine-grained appearance with increasing fracture controlled carbonate alteration (weak to moderate) downhole. Weak to moderate fracture controlled to patchy epidote alteration. Trace to 2% disseminated to fracture controlled pyrite.

At 134.15 : 3 cm mafic dyklet at 70 degrees to core axis.

Faults :.
At 133.2 : 5 cm fault zone with gouge at 70 degrees to core axis.

Alteration :.
132.9 138.8 : MODERATE FRACTURE CONTROLLED CARBONATIZATION.
132.9 138.8 : WEAK SPOTTY EPIDOTIZATION.

138.8 148.4 WEAKLY CHLORITIC FELSIC TUFF
Medium to light grey, fine-grained felsic ash tuff. Occasional, up to 4%, 1 - 4 mm (avg. <1 mm) quartz phenocrysts. Trace to 3% disseminated pyrite increasing to the lower contact with up to 15% disseminated pyrite over 20 cm from 146.2 - 146.4 m. Weak to moderately chloritic increasing downhole with occasional chlorite stringer over the last metre. Weakly sericitic. Poorly developed foliation with sharp lower contact at 80 degrees to core axis and weakly gradational upper contact over 10 cm.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09912	143.0	144.5	1.5	2	369	7	91	1	15	1300
VA09913	144.5	146.0	1.5	3	38	<2	78	1	9	1600
VA09914	146.0	146.9	.9	7	133	9	99	1	25	1200
VA09915	146.9	148.4	1.5	2	82	6	96	1	6	1600

Foliation :.
At 147.0 : 53 degrees to core axis.

Fault :.
At 142.1 : fault slip at 60 degrees to core axis.
From 143.1 to 143.2 : pyritic (10%) fault at 50 degrees to core axis.
From 143.5 to 143.6 : fault with 5 cm fault gouge at 80 degrees to core axis.

Alteration :.
138.8 148.4 : WEAK PERVASIVE SERICITIZATION.
138.8 146.4 : WEAK PERVASIVE CHLORITIZATION.
146.4 148.8 : MODERATE PERVASIVE CHLORITIZATION.

148.4 159.1 MEDIUM GRAINED FELDSPAR PHYRIC MAFIC INTRUSION
Medium green, medium-grained feldspar phyric mafic intrusion with up to 20%, < 2 mm weakly epidote altered and mottled feldspar phenocrysts. Several up to 1 metre finer grained aphyric sections throughout and over the last 0.5 metre. Trace to 2% fine disseminated ilmenite and trace to 0.5% disseminated pyrite. Numerous (7%) quartz - carbonate stringers. Non-foliated with sharp

From (m) | To (m) | ----------------DESCRIPTION----------------

upper and lower contacts at 85 and 65 degrees to core axis.

Alteration :.
148.4 159.1 : MODERATE FRACTURE CONTROLLED CARBONATIZATION.

159.1 172.7 FELSIC QUARTZ - FELDSPAR PHYRIC TUFF

Medium to light grey, medium-grained quartz - feldspar phyric felsic tuff. Up to 14%, < 2 mm quartz phenocrysts and up to 8%, < 1.5 mm mottled feldspar phenocrysts. Trace to 1% disseminated pyrite and trace chalcopyrite with fracture controlled pyrite (4%) at 171.9 m. Overall, massive poorly foliated appearance with broken, blocky core from 163.5 to 167.5 m. Weak to moderate sericite alteration and minor quartz - carbonate stringers. Silicified -hornfelsed over the last 0.5 metre . From 160.1 to 160.4 : medium green, fine-grained mafic dyke or sill at 35 degrees to core axis.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA04149	162.0	165.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA09916	171.6	172.6	1.0	4	307	<2	43	<1	6	1100

Foliation :.
At 161.0 : 65 degrees to core axis.
At 171.0 : 70 degrees to core axis.

Faults :.
At 162.7 : fault slip at 70 degrees to core axis.
From 163.5 to 167.5 : broken, blocky core no fault zones.

Alteration :.
159.1 172.7 : WEAK PERVASIVE SERICITIZATION.
172.2 172.7 : MODERATE PERVASIVE SILICIFICATION.

172.7 195.0 MEDIUM GRAINED FELDSPAR PHYRIC MAFIC INTRUSION

Medium to dark green, fine to coarse-grained, feldspar phyric mafic diorite becoming coarse-grained downhole. Up to 20%, < 4 mm mottled feldspar phenocrysts. Up to 4% fine to coarse-grained (4 mm) interstitial ilmenite coarsening downhole and trace to 0.5% disseminated pyrite. Non-foliated with 2-3% quartz - carbonate stringers. Sharp upper contact at 75 degrees to core axis.

Alteration :.
172.7 203.2 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

195.0 239.1 COARSE GRAINED MAFIC INTRUSION

Dark green, medium to coarse-grained, massive non-foliated gabbro. Overall, granophyric-ophitic texture with 65-75% mafic minerals (cpx) with faint crystal outlines and 15 - 20% plagioclase crystals up to 5%, 1 - 3 mm interstitial ilmenite partially altered (weak) to leucoxene. Overall,

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09917	217.8	218.8	1.0	5	492	2	101	1	24	220
VA09918	222.0	222.4	.4	4	282	4	77	<1	9	460

From (m)	To (m)	----------------DESCRIPTION----------------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)

weakly magnetic becoming moderate to strongly magnetic from 208.8 - 217.4 metres. Trace to 0.5% pyrite. Weak fracture controlled carbonate alteration with up to 2% quartz - carbonate veins and stringers.

From 203.2 to 204.5 : dark green - grey, fine-grained aphyric mafic dyke. Sharp upper and lower contacts at 65 and 40 degrees to core axis.
From 218.0 to 218.8 : quartz veined with up to 7% fracture controlled pyrite.
From 222.0 to 222.1 : 4% pyrite with trace chalcopyrite.

Alteration :.
195.0 239.1 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

239.1 249.2 FINE GRAINED MAFIC INTRUSION
Dark green, fine-grained aphyric mafic gabbro. Up to 6%, 1 - 3 mm interstitial ilmenite. Weak to moderately carbonatized with up to 4% quartz - carbonate veins and stringers. Weakly magnetic becoming moderate to strongly magnetic from 245.3 to the lower contact.

From 247.1 to 247.9 : medium to dark green, fine-grained late mafic dyke or sill.

Alteration :.
239.1 249.2 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

249.2 274.2 COARSE GRAINED MAFIC INTRUSION
Dark green, medium to coarse-grained, non-foliated gabbro. Granophyric-ophitic texture with 65 - 75% mafic (cpx) crystals and up to 20% plagioclase crystals. Unit similar to previous from 195.0 to 239.1 but less massive in appearance with variable.
Crystal size to locally finer grained zones. 1 - 4% interstitial ilmenite partially altered to leucoxene, locally. Moderate to strongly magnetic from the upper contact to 253.2 metres becoming weakly magnetic below this point. Weak fracture controlled carbonate alteration with up to 4% quartz - carbonate veins and stringers.

Faults :.
From 269.3 to 269.8 : blocky, highly fractured core with fault gouge, no determinable fault orientation.

Alteration :.
249.2 274.2 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

274.2 294.0 FINE GRAINED MAFIC INTRUSION

From (m) To (m) ----------------DESCRIPTION----------------

Medium green - grey, fine to medium-grained aphyric diorite. Weak to moderate fracture controlled carbonate alteration with up to 7% quartz - carbonate stringers. Up to 4%, 1 - 3 mm interstitial ilmenite. Several up to 3.5 metre feldspar phyric zones with up to 12%, < 4 mm plagioclase phenocrysts from 275.8-278.5, 284.9-286.0, 287.1-289.7 metres.

Alteration :.
274.2 294.0 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

294.0 332.2 FINE GRAINED FELDSPAR PHYRIC MAFIC INTRUSION
Medium green, fine to medium-grained, feldspar phyric diorite. Up to 20%, 1 - 5 mm plagioclase phenocrysts becoming weakly epidote altered below approximately 306.0 metres. 2 - 4% disseminated ilmenite with occasional up to 3 mm accicular crystals. Trace quartz stringer-hosted chalcopyrite at 319.0 m. 20 cm to 1.5 m fine-grained, moderately carbonatized aphyric zones from the upper contact to 309.4 m.
Sharp lower contact at 30 degrees to core axis.

From 296.1 to 297.1 : blocky, highly fractured core, with local fault gouge, no determinable orientation.

Alteration :.
294.0 332.3 : WEAK FRACTURE CONTROLLED CARBONATIZATION.
306.0 322.3 : WEAK SPOTTY EPIDOTIZATION.

332.2 374.9 CHLORITIC FELSIC QUARTZ - FELDSPAR PHYRIC TUFF
Medium to light grey - green, medium-grained, quartz - feldspar phyric felsic ash tuff. Up to 15%, < 3 mm feldspar phenocrysts and up to 12%, 1 - 3 mm quartz phenocrysts. 2 - 4% disseminated pyrite with local stringer pyrite and up to 25% disseminated / stringer pyrite and trace chalcopyrite from 333.7 to 333.8 metres. Weak to moderately chloritic and weak sericite alteration. Massive, poorly foliated appearance over the first approximately 10.0 m becoming weak to moderately well foliated below this point.

From 352.3 to 352.7 : dark green, fine-grained mafic dyke at 60 degrees to core axis. 3% disseminated pyrite.
At 373.5 : 5 cm, dark green, fine-grained pyritic mafic dyklet at 43 degrees to core axis.

Foliation :.
At 343.0 : 50 degrees to core axis.
At 351.5 : 43 degrees to core axis.
At 360.0 : 40 degrees to core axis.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09919	332.3	333.5	1.2	2	567	<2	45	<1	<5	1200
VA09920	333.5	334.0	.5	20	2417	9	68	3	41	1400
VA09921	334.0	335.5	1.5	3	668	4	68	1	7	1400
VA09922	335.5	337.0	1.5	3	293	<2	53	<1	<5	1600
VA09923	337.0	338.5	1.5	2	627	5	60	1	10	1100
VA09924	338.5	340.0	1.5	2	9	<2	30	<1	<5	720
VA09925	340.0	341.5	1.5	2	10	<2	20	<1	<5	770
VA09926	341.5	343.0	1.5	3	12	9	29	<1	<5	1300
VA04150	342.0	345.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA09927	343.0	344.5	1.5	2	228	<2	22	<1	<5	1500
VA09928	344.5	346.0	1.5	2	495	<2	21	1	<5	1300
VA09929	346.0	347.5	1.5	3	447	<2	22	<1	8	1200
VA09930	347.5	349.0	1.5	2	453	<2	22	1	<5	1100
VA09931	349.0	350.5	1.5	3	1212	11	42	1	<5	1600
VA09932	350.5	352.0	1.5	3	874	<2	33	1	<5	1100
VA09933	352.0	353.5	1.5	3	2544	6	47	1	18	1000
VA09934	353.5	355.0	1.5	3	66	<2	28	<1	<5	1200
VA09935	355.0	356.5	1.5	3	641	4	21	1	<5	1200
VA09936	356.5	358.0	1.5	3	159	<2	26	1	<5	1100
VA09937	358.0	359.5	1.5	3	182	<2	35	1	<5	1200

From (m)	To (m)	DESCRIPTION
		At 372.0 : 45 degrees to core axis.

Faults :.
At 334.3 : fault slip with gouge at 35 degrees to core axis
From 345.6 to 346.5 : blocky, highly fractured core with fault gouge from 346.3 to 346.4 metres with approximate orientation at 45 degrees to core axis.
From 350.2 to 350.5 : fault zone with numerous fault slips at 65 degrees to core axis.
From 361.2 to 361.6 : fault zone, no determinable orientation.
From 362.4 to 362.9 : fault zone at approximately 55 degrees to core axis.
From 396.9 to 370.4 : blocky, highly fractured core with local fault gouge, approximately orientation 45 degrees to core axis.

Alteration :.
322.3 368.0 : MODERATE PERVASIVE CHLORITIZATION.
368.0 374.9 : WEAK PERVASIVE CHLORITIZATION.
322.3 374.9 : WEAK PERVASIVE SERICITIZATION.
322.3 374.9 : WEAK FRACTURE CONTROLLED CARBONATIZATION.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09938	359.5	361.0	1.5	3	73	<2	35	<1	<5	1300
VA09939	361.0	362.5	1.5	3	85	3	50	<1	<5	1300
VA09940	362.5	364.0	1.5	4	33	10	55	<1	<5	1300
VA09941	364.0	365.5	1.5	4	40	2	38	<1	<5	1200
VA09942	365.5	367.0	1.5	4	208	3	29	<1	<5	1100
VA09943	367.0	368.5	1.5	3	104	<2	35	1	<5	1300
VA09944	368.5	370.0	1.5	3	249	<2	23	1	<5	1500
VA09945	370.0	371.5	1.5	3	7	<2	24	<1	<5	1200
VA04176	370.0	373.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA09946	371.5	373.0	1.5	3	5	<2	36	<1	<5	1100
VA09947	373.0	374.5	1.5	3	6	4	42	<1	<5	1100
VA09948	374.5	376.0	1.5	3	6	<2	36	1	<5	940

374.9 380.3 CHLORITIC FELSIC QUARTZ - FELDSPAR PHYRIC LAPILLI TUFF
Medium to light grey - green, fine to medium-grained lapilli felsic tuff. Up to 20%, 1 - 3 mm quartz phenocrysts and 10%, < 2 mm mottled feldspar phenocrysts. 5 to 15% feldspar phyric lapilli fragments stretched parallel to the foliation and poorly visible within the fine to medium-grained matrix. Poorly defined, gradational upper contact with increasing fragment contents downhole with a sharp, 10 cm brecciated lower contact. 2 - 4% disseminated pyrite with local, less than 2 mm pyrite stringers. Weak sericite - chlorite alteration. Moderate well developed foliation.

Foliation :.
At 376.0 : 55 degrees to core axis.

Alteration :.
374.9 380.3 : WEAK PERVASIVE SERICITIZATION.
374.9 380.3 : WEAK PERVASIVE CHLORITIZATION.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09949	376.0	377.5	1.5	3	5	<2	31	<1	<5	720
VA09950	377.5	379.0	1.5	2	16	4	41	1	<5	650
VA09851	379.0	380.3	1.3	2	4	<2	39	1	<5	750

380.3 386.2 CHLORITIC FELSIC QUARTZ - FELDSPAR PHYRIC TUFF
Medium to light grey - green, quartz - feldspar phyric ash tuff similar to previous from 322.3 to 374.9 metres. Up to 18%, < 3 mm quartz phenocrysts and up to 10%, < 2 mm mottled feldspar phenocrysts. 2 - 3% disseminated pyrite. Weak to moderately chloritic and weak pervasive sericite alteration. Moderately well developed foliation and minor

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09852	380.3	381.7	1.4	2	3	<2	50	1	9	790
VA09853	381.7	383.2	1.5	2	6	<2	50	2	<5	860
VA09854	383.2	384.7	1.5	2	8	4	31	1	<5	960
VA09855	384.7	386.2	1.5	2	24	<2	34	1	<5	1000

From (m)	To (m)	----------------DESCRIPTION----------------

quartz - carbonate stringers.

Foliation :.
At 384.0 : 62 degrees to core axis.

Alteration :.
380.3 386.2 : MODERATE PERVASIVE CHLORITIZATION.
380.3 386.2 : WEAK PERVASIVE SERICITIZATION.

386.2 396.6 CHLORITIC FELSIC QUARTZ EYE TUFF

Medium to light grey, fine-grained quartz phyric felsic ash tuff. Up to 12%, 1 - 4 mm (avg. 2 mm) quartz phenocrysts. 2 - 3% disseminated pyrite overall and up to 12% disseminated to fracture controlled pyrite within a quartz veined zone from 187.7 - 188.7 m, and from 396.3 - 396.6 m. Very weakly chloritic (greenish tinge) and weak to moderate pervasive sericite alteration. Moderately well developed foliation.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09856	386.2	387.7	1.5	2	20	7	35	<1	<5	1100
VA09857	387.7	388.7	1.0	10	48	12	49	<1	52	970
VA09858	388.7	390.2	1.5	2	39	7	31	<1	<5	1200
VA04177	390.0	393.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA09859	390.2	391.7	1.5	2	168	4	31	1	6	1200
VA09860	391.7	393.2	1.5	2	191	<2	27	1	<5	1100
VA09861	393.2	394.7	1.5	2	286	<2	31	2	<5	1200
VA09862	394.7	395.7	1.0	2	201	7	37	2	8	960
VA09863	395.7	396.7	1.0	4	120	12	49	<1	11	1000

Foliation :.
At 391.0 : 62 degrees to core axis.
At 396.0 : 58 degrees to core axis.

Faults :.
At 394.3 : fault zone with gouge at 72 degrees to core axis

Alteration :.
386.2 396.6 : MODERATE PERVASIVE SERICITIZATION.

396.6 410.1 CHLORITIC FELSIC QUARTZ - FELDSPAR PHYRIC TUFF

Medium green - grey, medium-grained, quartz - feldspar phyric felsic ash tuff. Up to 18%, 1 - 4 mm (avg. 2mm) quartz phenocryst and up to 12%, < 2 mm mottled feldspar phenocrysts. Moderately chloritic with local streaks (stringers ?) of strong chlorite alteration, weakly sericitic with a strongly sericite altered patch from 407.3 to 407.5 metres. 2% disseminated pyrite. Moderately well developed foliation.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09864	396.7	398.2	1.5	2	14	3	52	<1	<5	1100
VA09865	398.2	399.7	1.5	2	9	<2	46	<1	<5	1200
VA09866	399.7	401.2	1.5	2	7	3	52	<1	<5	940
VA09867	401.2	402.7	1.5	2	78	3	46	<1	<5	910

Foliation :.
At 402.0 : 55 degrees to core axis.

Faults :.
From 401.1 to 401.3 : fault zone at 65 degrees to core axis
At 406.2 : 3 cm wide fault with gouge at 65 degrees to core axis.
From 406.6 to 406.9 : fault zone with several faults at 50 degrees to core axis.

Alteration :.

From (m) To (m) ----------------DESCRIPTION----------------

396.6 410.1 : MODERATE PERVASIVE CHLORITIZATION.
396.6 410.1 : WEAK PERVASIVE SERICITIZATION.
407.3 407.5 : STRONG PERVASIVE SERICITIZATION.

410.1 410.5 FAULT ZONE
Blocky, highly fractured core with fault gouge.
Approximate orientation at 65 degrees to core axis.

410.5 438.5 CHLORITIC FELSIC QUARTZ EYE TUFF
Medium to light grey - green, locally sheared fine-grained quartz phyric felsic ash tuff. Up to 20%, 1 - 4 mm quartz phenocrysts. And up to 5%, < 1 mm feldspar grains. Overall, 2 - 3% disseminated pyrite with local, stringer / disseminated pyrite. Occasional, poorly visible chloritic felsic lapilli fragments strongly stretched parallel to the foliation. Weak to moderately chloritic and weakly sericitic. Moderate well developed foliation.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA09868	419.7	420.7	1.0	2	12	7	44	<1	7	1600
VA09869	420.7	421.0	.3	7	21	22	94	1	47	1600
VA09870	421.0	421.5	.5	3	8	5	51	<1	7	1600
VA09871	421.5	422.0	.5	7	14	12	110	<1	41	1600
VA09872	422.0	423.0	1.0	2	5	4	66	<1	<5	1700
VA04178	424.0	427.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA09873	430.0	431.5	1.5	3	7	10	62	1	<5	1600
VA09874	431.5	433.0	1.5	3	13	7	100	<1	10	1600

From 420.7 to 421.0 : sheared dark green, fine-grained pyritic-chloritic mafic tuff or dyke at 75 degrees to core axis. 4% pyrite. Faulted lower contact at 75 degrees to core axis.
From 421.5 to 422.0 : similar to above at 80 degrees to core axis.

Foliation :.
At 413.0 : 65 degrees to core axis.
At 423.5 : 70 degrees to core axis.
At 434.0 : 65 degrees to core axis.

Faults :.
At 414.8 : 2 cm fault with gouge at 85 degrees to core axis
From 417.6 to 417.8 : fault zone at 40 degrees to core axis
From 421.0 to 421.4 : blocky, highly fractured core, no determinable fault orientation.
From 424.8 to 425.0 : fault zone at 80 degrees to core axis
From 428.1 to 428.9 : blocky, highly fractured core with approximate fault orientation at 55 degrees to core axis.
From 430.4 to 432.4 : numerous fault slips parallel to foliation at approximately 65 degrees to core axis.

Alteration :.
410.5 438.5 : MODERATE PERVASIVE CHLORITIZATION.
410.5 438.5 : WEAK PERVASIVE SERICITIZATION.

438.5 442.5 CHLORITIC FELSIC QUARTZ - FELDSPAR PHYRIC TUFF
Medium to light grey - green, fine-grained quartz - feldspar phyric ash tuff. Up to 15%, 1 - 4 mm quartz phenocrysts and up to 15%, < 2 mm mottled feldspar

From (m) To (m) ----------------DESCRIPTION----------------

phenocrysts. Up to 2% disseminated pyrite. Weak to moderately chloritic, weakly sericitic. Moderately well developed foliation.

Foliation :.
At 441.0 : 70 degrees to core axis.

Alteration :.
438.5 442.6 : WEAK PERVASIVE CHLORITIZATION.
438.5 442.6 : WEAK PERVASIVE SERICITIZATION.

442.5 445.5 FAULT ZONE
Broken, blocky highly fractured quartz - feldspar phyric felsic tuff. Interval composed of 70% fault zones with gouge. Approximate orientation at 70 degrees to core axis.

445.5 489.3 CHLORITIC FELSIC QUARTZ - FELDSPAR PORPHYRITIC FLOW
Medium to light grey - green, medium-grained, quartz - feldspar phyric rhyolite flow. Up to 18%, 1 - 3 mm. Mottled feldspar phenocrysts and up to 10%, 1 - 4 mm quartz phenocrysts. Stretched flow banded textures throughout unit with local more massive zones. Occasional lapilli size feldspar phyric felsic fragments. Overall, more vitric, weak to moderately well foliated appearance. Trace to 2% disseminated pyrite with local, up to 15% stringer / fracture controlled pyrite. Moderately chloritic.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA04179	452.0	455.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VA09875	464.5	466.0	1.5	2	3	<2	36	<1	<5	860
VA09876	466.0	467.2	1.2	15	219	15	54	1	29	270
VA09877	467.2	468.2	1.0	10	682	4	58	1	11	340
VA04180	480.0	483.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

From 446.6 to 446.8 : medium green, fine-grained carbonatized mafic tuff or dyke at 38 degrees to core axis.

Mineralization :.
From 466.0 to 467.2 : strongly quartz veined zone with up to 15% fracture controlled pyrite.
From 467.4 to 468.0 : strongly quartz veined similar to above with up to 10% fracture controlled pyrite.

Foliation :.
At 450.5 : 50 degrees to core axis.
At 463.0 : 65 degrees to core axis.
At 481.0 : 80 degrees to core axis.
At 486.0 : 63 degrees to core axis.

Faults :.
At 452.3 : 43 degrees to core axis.
From 460.4 to 460.7 : quartz veined fault zone at approximately 55 degrees to core axis.
From 469.0 to 470.2 : blocky, highly fractured core with approximately fault orientation at 65 degrees to core axis.

From (m)	To (m)	----------------DESCRIPTION----------------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Alteration :. 442.5 489.3 : MODERATE PERVASIVE CHLORITIZATION.											
489.3	496.5	FELSIC QUARTZ - FELDSPAR PHYRIC TUFF Medium to light grey - green, fine to medium-grained felsic ash tuff. Up to 12%, 1 - 4 mm (avg. 1.5 mm) quartz phenocrysts and up to 8%, < 2 mm feldspar grains. Trace to 15% disseminated pyrite. Weak to moderate streaky chlorite alteration decreasing downhole and weak sericite alteration. Sharp upper contact at 65 degrees to core axis with poorly defined lower contact. Moderately well developed foliation. From 495.3 to 495.5 : dark green, fine-grained carbonatized mafic dyke (or tuff) at 65 degrees to core axis. Foliation :. At 497.0 : 60 degrees to core axis. Faults :. From 490.6 to 490.8 : fault slips with gouge at 70 degrees to core axis. From 496.4 to 496.7 : fault zone at approximately 60 degrees to core axis. Alteration :. 489.6 496.5 : WEAK PERVASIVE SERICITIZATION. 489.6 496.5 : WEAK PERVASIVE CHLORITIZATION.											
496.5	505.1	CHLORITIC QUARTZ PHYRIC FELSIC FLOW Medium to light grey, medium-grained felsic flow. Up to 10%, 1 - 4 mm (avg. 2mm) quartz phenocrysts. Trace to 1.5% disseminated pyrite with up to 15% fracture controlled pyrite over 10 cm at 498.1 metres. Weakly chloritic and weak to moderately sericitic. Moderately well developed foliation. Several mafic tuff interbeds or sills similar to previous from 502.7-502.9 and 503.2-503.3 metres. Both at approximately 60 degrees to core axis. Foliation :. At 500.06 : 60 degrees to core axis. Alteration :. 496.5 505.1 : WEAK PERVASIVE SERICITIZATION.	VA09878	498.0	498.5	.5	4	35	23	32	1	145	1100

E.O.H. : 505.06 m (1657 ft).

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	EMS	ROCK
VA07910	56.50	58.00	1400.0	<1.0	807.0	92.0	0.8	6.0	6.0	<1.0	2.0	<5.0	927.0	90.	3.	VFAQ
VA07911	58.00	59.50	1400.0	<1.0	581.0	80.0	0.7	6.0	10.0	<1.0	8.0	13.0	719.0	88.	3.	VFAQ
VA07912	59.50	61.00	1500.0	<1.0	488.0	80.0	0.7	9.0	12.0	<1.0	3.0	<5.0	671.0	86.	3.	VFAQ
VA07913	61.00	62.50	1600.0	<1.0	777.0	68.0	1.0	11.0	16.0	<1.0	14.0	12.0	575.0	92.	3.	VFAQ
VA07914	62.50	64.00	1600.0	<1.0	273.0	90.0	0.9	7.0	14.0	<1.0	12.0	17.0	800.0	75.	3.	VFAQ
VA07915	69.90	71.40	1000.0	<1.0	713.0	78.0	0.6	8.0	7.0	<1.0	9.0	10.0	554.0	90.	3.	VFAQ
VA07916	71.40	72.90	1000.0	<1.0	764.0	76.0	0.9	<5.0	9.0	<1.0	3.0	<5.0	670.0	91.	3.	VFAQ
VA07917	72.90	74.40	1200.0	<1.0	716.0	83.0	0.7	7.0	10.0	<1.0	6.0	<5.0	611.0	90.	3.	VFAQ
VA07918	74.40	75.90	1200.0	<1.0	792.0	97.0	0.8	12.0	15.0	<1.0	11.0	<5.0	582.0	89.	3.	VFAQ
VA07919	75.90	77.40	1200.0	<1.0	265.0	128.0	<0.5	9.0	27.0	<1.0	16.0	<5.0	540.0	67.	3.	VFAQ
VA07920	77.40	78.00	770.0	<1.0	2672.0	172.0	3.0	177.0	153.0	28.0	281.0	25.0	546.0	94.	25.	VFAQ
VA07921	78.00	79.50	1300.0	<1.0	53.0	94.0	<0.5	25.0	29.0	<1.0	58.0	<5.0	457.0	36.	3.	VFAQ
VA07922	79.50	81.00	1300.0	<1.0	60.0	106.0	0.5	8.0	17.0	<1.0	14.0	14.0	522.0	36.	3.	VFAQ
VA07923	81.00	82.25	1100.0	<1.0	32.0	122.0	0.5	10.0	19.0	<1.0	8.0	28.0	810.0	21.	3.	VFAQ
VA07924	82.25	83.50	910.0	13.0	64.0	103.0	0.7	<5.0	17.0	<1.0	7.0	5.0	1890.0	38.	3.	VFAQ
VA07925	83.50	85.00	1300.0	<1.0	16.0	99.0	0.6	<5.0	11.0	<1.0	5.0	<5.0	987.0	14.	3.	VFAQ
VA07926	85.00	86.30	1200.0	<1.0	158.0	141.0	<0.5	12.0	16.0	<1.0	16.0	29.0	914.0	53.	3.	VFAQ
VA07927	86.30	86.80	1100.0	<1.0	1846.0	150.0	1.4	59.0	55.0	<1.0	20.0	7.0	785.0	92.	12.	VFAQ
VA07928	86.80	88.30	1400.0	<1.0	113.0	102.0	<0.5	11.0	15.0	<1.0	10.0	<5.0	527.0	53.	3.	VFAQ
VA07929	88.30	89.80	1300.0	<1.0	62.0	91.0	<0.5	13.0	19.0	<1.0	9.0	23.0	683.0	41.	2.	VFAQ
VA07930	89.80	91.30	1400.0	<1.0	666.0	111.0	0.9	11.0	9.0	<1.0	<2.0	6.0	620.0	86.	2.	VFAQ
VA07931	91.30	93.00	1400.0	<1.0	599.0	112.0	0.7	11.0	20.0	<1.0	6.0	12.0	567.0	84.	2.	VFAQ
VA07932	93.00	94.50	1400.0	<1.0	544.0	87.0	0.6	8.0	12.0	<1.0	6.0	<5.0	578.0	86.	2.	VFAQ

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	ETS	ROCK
VA07933	94.50	96.00	1400.0	<1.0	1262.0	119.0	0.8	15.0	13.0	<1.0	24.0	9.0	778.0	91.	2.	VEAQ
VA07934	96.00	97.50	1400.0	<1.0	1272.0	92.0	0.9	12.0	10.0	<1.0	3.0	<5.0	733.0	93.	2.	VEAQ
VA07935	97.50	99.00	1500.0	<1.0	278.0	77.0	<0.5	5.0	20.0	<1.0	6.0	6.0	739.0	78.	2.	VEAQ
VA07936	99.00	100.50	1400.0	8.0	310.0	66.0	<0.5	14.0	11.0	<1.0	6.0	5.0	846.0	82.	2.	VEAQ
VA07937	100.50	102.00	1500.0	7.0	1032.0	90.0	0.6	12.0	13.0	<1.0	5.0	13.0	720.0	92.	2.	VEAQ
VA07938	102.00	103.50	1500.0	5.0	496.0	74.0	<0.5	10.0	12.0	<1.0	23.0	<5.0	921.0	87.	2.	VEAQ
VA07939	103.50	105.00	1500.0	2.0	404.0	83.0	<0.5	17.0	16.0	<1.0	6.0	12.0	612.0	83.	3.	VEAQ
VA07940	105.00	106.50	1600.0	<1.0	550.0	99.0	0.8	14.0	15.0	<1.0	9.0	10.0	796.0	85.	5.	VEAQ
VA07941	106.50	108.00	1200.0	4.0	90.0	69.0	1.6	10.0	15.0	<1.0	21.0	29.0	623.0	57.	4.	VEAD
VA07942	108.00	109.50	1300.0	10.0	11.0	63.0	1.2	<5.0	7.0	<1.0	2.0	<5.0	446.0	15.	3.	VEAD
VA07943	109.50	111.00	1300.0	5.0	21.0	68.0	1.1	<5.0	6.0	<1.0	6.0	16.0	480.0	24.	3.	VEAD
VA07944	111.00	112.50	1200.0	1.0	32.0	69.0	1.1	<5.0	6.0	<1.0	5.0	24.0	596.0	32.	3.	VEAD
VA07945	126.00	127.50	1300.0	3.0	70.0	60.0	1.4	<5.0	8.0	<1.0	<2.0	9.0	598.0	54.	3.	VEAD
VA07946	127.50	128.50	1300.0	3.0	99.0	63.0	1.4	6.0	10.0	<1.0	7.0	7.0	596.0	61.	3.	VEAD
VA07947	128.50	129.50	1300.0	<1.0	244.0	60.0	1.8	<5.0	11.0	1.0	13.0	5.0	600.0	80.	3.	VEAD
VA07948	131.70	132.70	1100.0	4.0	13.0	120.0	1.2	<5.0	5.0	<1.0	6.0	8.0	1100.0	10.	2.	TEA
VA07949	132.70	133.20	2200.0	12.0	61.0	191.0	1.5	<5.0	19.0	<1.0	10.0	7.0	1500.0	24.	4.	TEA*
VA07950	133.20	134.20	1700.0	11.0	75.0	1486.0	1.3	<5.0	14.0	<1.0	20.0	<5.0	1720.0	5.	2.	TMA*
VA09912	143.00	144.50	1300.0	<1.0	369.0	91.0	0.6	15.0	17.0	<1.0	7.0	7.0	793.0	80.	2.	TEA
VA09913	144.50	146.00	1600.0	<1.0	38.0	78.0	0.7	9.0	9.0	<1.0	<2.0	14.0	625.0	33.	3.	TEA
VA09914	146.00	146.90	1200.0	<1.0	133.0	99.0	0.9	25.0	36.0	2.0	9.0	42.0	775.0	57.	7.	TEA
VA09915	146.90	148.40	1600.0	<1.0	82.0	96.0	0.6	6.0	11.0	<1.0	6.0	12.0	1100.0	46.	2.	TEA
VA09916	171.60	172.60	1100.0	2.0	307.0	43.0	<0.5	6.0	7.0	<1.0	<2.0	<5.0	417.0	88.	4.	TEA

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	ETS	ROCK
VA09917	217.80	218.80	220.0	42.0	492.0	101.0	0.5	24.0	29.0	<1.0	2.0	28.0	1420.0	83.	5.	PMA
VA09918	222.00	222.40	460.0	26.0	282.0	77.0	<0.5	9.0	29.0	<1.0	4.0	<5.0	956.0	79.	4.	PMA
VA09919	332.30	333.50	1200.0	<1.0	567.0	45.0	<0.5	<5.0	12.0	<1.0	<2.0	<5.0	333.0	93.	2.	TFAD
VA09920	333.50	334.00	1400.0	<1.0	2417.0	68.0	2.5	41.0	104.0	7.0	9.0	15.0	215.0	97.	20.	TFAD
VA09921	334.00	335.50	1400.0	8.0	668.0	68.0	0.6	7.0	9.0	2.0	4.0	<5.0	435.0	91.	3.	TFAD
VA09922	335.50	337.00	1600.0	6.0	293.0	53.0	<0.5	<5.0	15.0	<1.0	<2.0	7.0	379.0	85.	3.	TFAD
VA09923	337.00	338.50	1100.0	3.0	627.0	60.0	1.0	10.0	18.0	<1.0	5.0	<5.0	413.0	91.	2.	TFAD*
VA09924	338.50	340.00	720.0	5.0	9.0	30.0	<0.5	<5.0	7.0	<1.0	<2.0	14.0	244.0	23.	2.	TFAD*
VA09925	340.00	341.50	770.0	10.0	10.0	20.0	<0.5	<5.0	5.0	<1.0	<2.0	<5.0	175.0	33.	2.	TFAD*
VA09926	341.50	343.00	1300.0	<1.0	12.0	29.0	<0.5	<5.0	9.0	<1.0	9.0	12.0	312.0	29.	3.	TFAD*
VA09927	343.00	344.50	1500.0	<1.0	228.0	22.0	<0.5	<5.0	9.0	<1.0	<2.0	12.0	266.0	91.	2.	TFAD*
VA09928	344.50	346.00	1300.0	5.0	495.0	21.0	0.6	<5.0	11.0	<1.0	<2.0	<5.0	275.0	96.	2.	TFAD*
VA09929	346.00	347.50	1200.0	3.0	447.0	22.0	<0.5	8.0	8.0	<1.0	<2.0	10.0	291.0	95.	3.	TFAD*
VA09930	347.50	349.00	1100.0	6.0	453.0	22.0	0.5	<5.0	5.0	<1.0	<2.0	<5.0	249.0	95.	2.	TFAD*
VA09931	349.00	350.50	1600.0	3.0	1212.0	42.0	0.6	<5.0	5.0	<1.0	11.0	5.0	278.0	97.	3.	TFAD*
VA09932	350.50	352.00	1100.0	2.0	874.0	33.0	0.9	<5.0	8.0	<1.0	<2.0	<5.0	406.0	96.	3.	TFAD*
VA09933	352.00	353.50	1000.0	<1.0	2544.0	47.0	1.0	18.0	14.0	<1.0	6.0	<5.0	657.0	98.	3.	TFAD*
VA09934	353.50	355.00	1200.0	2.0	66.0	28.0	<0.5	<5.0	8.0	<1.0	<2.0	12.0	417.0	70.	3.	TFAD*
VA09935	355.00	356.50	1200.0	3.0	641.0	21.0	0.6	<5.0	8.0	<1.0	4.0	<5.0	330.0	97.	3.	TFAD*
VA09936	356.50	358.00	1100.0	2.0	159.0	26.0	0.6	<5.0	5.0	<1.0	<2.0	9.0	373.0	86.	3.	TFAD*
VA09937	358.00	359.50	1200.0	3.0	182.0	35.0	0.7	<5.0	6.0	<1.0	<2.0	<5.0	481.0	84.	3.	TFAD*
VA09938	359.50	361.00	1300.0	4.0	73.0	35.0	<0.5	<5.0	7.0	<1.0	<2.0	<5.0	476.0	68.	3.	TFAD*
VA09939	361.00	362.50	1300.0	4.0	85.0	50.0	<0.5	<5.0	11.0	<1.0	3.0	6.0	521.0	63.	3.	TFAD*

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	ETS	ROCK
VA09940	362.50	364.00	1300.0	1.0	33.0	55.0	<0.5	<5.0	16.0	<1.0	10.0	<5.0	474.0	38.	4.	TFAD*
VA09941	364.00	365.50	1200.0	5.0	40.0	38.0	<0.5	<5.0	8.0	<1.0	2.0	<5.0	541.0	51.	4.	TFAD*
VA09942	365.50	367.00	1100.0	7.0	208.0	29.0	<0.5	<5.0	6.0	<1.0	3.0	<5.0	461.0	88.	4.	TFAD*
VA09943	367.00	368.50	1300.0	3.0	104.0	35.0	0.5	<5.0	12.0	<1.0	<2.0	14.0	577.0	75.	3.	TFAD
VA09944	368.50	370.00	1500.0	5.0	249.0	23.0	0.5	<5.0	8.0	<1.0	<2.0	<5.0	328.0	92.	3.	TFAD
VA09945	370.00	371.50	1200.0	5.0	7.0	24.0	<0.5	<5.0	6.0	<1.0	<2.0	<5.0	379.0	23.	3.	TFAD
VA09946	371.50	373.00	1100.0	4.0	5.0	36.0	<0.5	<5.0	6.0	<1.0	<2.0	<5.0	589.0	12.	3.	TFAD
VA09947	373.00	374.50	1100.0	<1.0	6.0	42.0	<0.5	<5.0	13.0	<1.0	4.0	<5.0	625.0	13.	3.	TFAD
VA09948	374.50	376.00	940.0	4.0	6.0	36.0	0.5	<5.0	9.0	<1.0	<2.0	<5.0	605.0	14.	3.	TFBD
VA09949	376.00	377.50	720.0	10.0	5.0	31.0	<0.5	<5.0	5.0	<1.0	<2.0	<5.0	565.0	14.	3.	TFBD
VA09950	377.50	379.00	650.0	7.0	16.0	41.0	0.6	<5.0	7.0	<1.0	4.0	23.0	729.0	28.	2.	TFBD
VA09851	379.00	380.30	750.0	13.0	4.0	39.0	1.2	<5.0	6.0	<1.0	<2.0	<5.0	593.0	9.	2.	TFBD
VA09852	380.30	381.70	790.0	12.0	3.0	50.0	1.1	9.0	6.0	<1.0	<2.0	<5.0	701.0	6.	2.	TFAD
VA09853	381.70	383.20	860.0	<1.0	6.0	50.0	1.5	<5.0	14.0	<1.0	<2.0	<5.0	836.0	11.	2.	TFAD
VA09854	383.20	384.70	960.0	5.0	8.0	31.0	1.3	<5.0	5.0	<1.0	4.0	<5.0	639.0	21.	2.	TFAD
VA09855	384.70	386.20	1000.0	6.0	24.0	34.0	1.3	<5.0	9.0	<1.0	<2.0	12.0	548.0	41.	2.	TFAD
VA09856	386.20	387.70	1100.0	2.0	20.0	35.0	<0.5	<5.0	8.0	<1.0	7.0	<5.0	575.0	36.	2.	TFAQ
VA09857	387.70	388.70	970.0	<1.0	48.0	49.0	<0.5	52.0	38.0	<1.0	12.0	9.0	617.0	49.	10.	TFAQ
VA09858	388.70	390.20	1200.0	<1.0	39.0	31.0	<0.5	<5.0	8.0	<1.0	7.0	9.0	503.0	56.	2.	TFAQ
VA09859	390.20	391.70	1200.0	5.0	168.0	31.0	1.4	6.0	6.0	<1.0	4.0	<5.0	585.0	84.	2.	TFAQ
VA09860	391.70	393.20	1100.0	3.0	191.0	27.0	1.3	<5.0	5.0	<1.0	<2.0	<5.0	483.0	88.	2.	TFAQ
VA09861	393.20	394.70	1200.0	2.0	286.0	31.0	1.5	<5.0	7.0	<1.0	<2.0	<5.0	466.0	90.	2.	TFAQ
VA09862	394.70	395.70	960.0	1.0	201.0	37.0	1.6	8.0	13.0	<1.0	7.0	8.0	561.0	84.	2.	TFAQ

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	SC (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	MN (ppm)	CUZN	ETS	ROCK
VA09863	395.70	396.70	1000.0	<1.0	120.0	49.0	<0.5	11.0	29.0	<1.0	12.0	<5.0	799.0	71.	4.	TFAQ
VA09864	396.70	398.20	1100.0	7.0	14.0	52.0	<0.5	<5.0	8.0	<1.0	3.0	<5.0	422.0	21.	2.	TFAD
VA09865	398.20	399.70	1200.0	5.0	9.0	46.0	<0.5	<5.0	5.0	<1.0	<2.0	<5.0	536.0	16.	2.	TFAD
VA09866	399.70	401.20	940.0	<1.0	7.0	52.0	<0.5	<5.0	7.0	<1.0	3.0	<5.0	568.0	12.	2.	TFAD
VA09867	401.20	402.70	910.0	4.0	78.0	46.0	<0.5	<5.0	5.0	<1.0	3.0	<5.0	909.0	63.	2.	TFAD
VA09868	419.70	420.70	1600.0	<1.0	12.0	44.0	<0.5	7.0	17.0	<1.0	7.0	<5.0	646.0	21.	2.	TFAQ
VA09869	420.70	421.00	1600.0	<1.0	21.0	94.0	0.7	47.0	60.0	6.0	22.0	<5.0	1360.0	18.	7.	TMA
VA09870	421.00	421.50	1600.0	<1.0	8.0	51.0	<0.5	7.0	19.0	<1.0	5.0	<5.0	660.0	14.	3.	TFAQ
VA09871	421.50	422.00	1600.0	<1.0	14.0	110.0	<0.5	41.0	53.0	11.0	12.0	27.0	1460.0	11.	7.	TMA
VA09872	422.00	423.00	1700.0	<1.0	5.0	66.0	<0.5	<5.0	13.0	<1.0	4.0	8.0	534.0	7.	2.	TFAQ
VA09873	430.00	431.50	1600.0	5.0	7.0	62.0	0.6	<5.0	13.0	<1.0	10.0	<5.0	455.0	10.	3.	TFAQ
VA09874	431.50	433.00	1600.0	3.0	13.0	100.0	<0.5	10.0	13.0	<1.0	7.0	7.0	558.0	12.	3.	TFAQ
VA09875	464.50	466.00	860.0	2.0	3.0	36.0	<0.5	<5.0	9.0	<1.0	<2.0	<5.0	370.0	8.	2.	VFAQ
VA09876	466.00	467.20	270.0	<1.0	219.0	54.0	1.4	29.0	363.0	2.0	15.0	<5.0	978.0	80.	15.	VFAQ
VA09877	467.20	468.20	340.0	<1.0	682.0	58.0	0.9	11.0	101.0	<1.0	4.0	10.0	783.0	92.	10.	VFAQ
VA09878	498.00	498.50	1100.0	<1.0	35.0	32.0	1.0	145.0	43.0	<1.0	23.0	28.0	515.0	52.	4.	VFAQ

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	%SIO2	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TIO2	%P2O5	%MNO	%LOI	SUM	AI	NACA	ALUM
VA04398	60.00	63.00	72.30	12.70	0.40	1.52	1.42	2.84	4.29	0.24	0.07	0.08	3.16	99.02	71.	2.	273.
VA04399	90.00	93.00	70.60	12.90	0.83	2.25	0.59	2.93	4.73	0.23	0.05	0.08	3.54	98.73	78.	1.	297.
VA04400	121.00	124.00	70.70	13.90	0.46	2.31	1.99	2.52	4.62	0.25	0.06	0.09	3.39	100.29	66.	2.	280.
VA04149	162.00	165.00	70.20	14.10	0.95	1.73	3.84	1.92	3.27	0.26	0.06	0.04	2.54	98.91	43.	5.	210.
VA04150	342.00	345.00	70.50	13.10	0.50	2.39	3.02	2.19	4.05	0.25	0.06	0.05	3.47	99.58	57.	4.	229.
VA04176	370.00	373.00	68.40	14.00	0.97	2.19	2.94	2.24	3.65	0.25	0.09	0.09	3.47	98.29	53.	4.	228.
VA04177	390.00	393.00	70.50	14.60	0.65	1.63	3.24	2.45	3.15	0.27	0.22	0.06	2.70	99.47	51.	4.	230.
VA04178	424.00	427.00	72.10	13.40	0.34	1.59	3.20	1.96	3.49	0.25	0.06	0.06	2.70	99.15	50.	4.	244.
VA04179	452.00	455.00	72.90	13.20	0.45	1.83	3.36	1.62	3.94	0.24	0.06	0.07	2.47	100.14	48.	4.	243.
VA04180	480.00	483.00	72.40	12.90	0.88	2.01	2.88	1.74	3.29	0.24	0.06	0.08	2.47	98.95	50.	4.	235.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NB (ppm)	CR (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	ROCK	ALT	MIN
VA04398	60.00	63.00	60.0	47.0	2010.0	23.0	109.0	<10.0		399.0	72.0	<10.0	VFAQ	PSW	DCP
VA04399	90.00	93.00	64.0	35.0	1580.0	<10.0	112.0	12.0		519.0	100.0	<10.0	VFAQ	PSW	DCP
VA04400	121.00	124.00	61.0	43.0	1380.0	15.0	120.0	<10.0		14.0	57.0	<10.0	VFAD	PSW	DCP
VA04149	162.00	165.00	39.0	117.0	1310.0	<10.0	115.0	12.0		389.0	72.0	<10.0	TFAD	PSW	DBP
VA04150	342.00	345.00	43.0	59.0	1620.0	18.0	124.0	14.0		74.0	82.0	<10.0	TFAD	PSW	DCP
VA04176	370.00	373.00	57.0	44.0	1240.0	16.0	133.0	23.0		<10.0	68.0	<10.0	TFAD	PSW	DCP
VA04177	390.00	393.00	51.0	107.0	1320.0	15.0	128.0	<10.0		139.0	62.0	<10.0	TFA	PSM	DCP
VA04178	424.00	427.00	48.0	58.0	1560.0	21.0	122.0	<10.0		<10.0	57.0	<10.0	TFAQ	PSW	DCP
VA04179	452.00	455.00	39.0	86.0	1150.0	30.0	107.0	25.0		<10.0	65.0	<10.0	VFAD	PHM	DBP
VA04180	480.00	483.00	39.0	64.0	939.0	<10.0	120.0	19.0		<10.0	67.0	<10.0	VFAD	PHM	DBP

APPENDIX B

Geochemical Laboratory Certificates

XRAL

X-RAY ASSAY LABORATORIES
A DIVISION OF SGS SUPERVISION SERVICES INC.
1885 LESLIE STREET • DON MILLS, ONTARIO M3B 3J4 • CANADA
TEL: (416)445-5755 TELEX: 06-986947 FAX: (416)445-4152

CERTIFICATE OF ANALYSIS

REPORT 10564

TO: **FALCONBRIDGE LIMITED**
ATTN: N. VON FERSEN
202-856 HOMER STREET
VANCOUVER, BRITISH COLUMBIA
V6B 2W2

CUSTOMER No. 1282

DATE SUBMITTED
12-Dec-89

REF. FILE 6501-U3

Total Pages 2

12 S.CORES

	METHOD	DETECTION LIMIT
WRMAJ %	WR	0.01
WRMIN PPM	WR	10.

DATE 28-DEC-89

CERTIFIED BY ....
Jean H.L. Opdebeeck, Vice President Operations

XRAL XRF - WHOLE ROCK ANALYSIS 28-DEC-89 REPORT 10564 REFERENCE FILE 6501 PAGE 1 of 2

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
VA04149	70.2	14.1	0.95	1.73	3.84	1.92	3.27	0.04	0.26	0.06	<0.01	2.54	99.1
VA04150	70.5	13.1	0.50	2.39	3.02	2.19	4.05	0.05	0.25	0.06	<0.01	3.47	99.8
VA04176	68.4	14.0	0.97	2.19	2.94	2.24	3.65	0.09	0.25	0.09	<0.01	3.47	98.5
VA04177	70.5	14.6	0.65	1.63	3.24	2.45	3.15	0.06	0.27	0.22	<0.01	2.70	99.7
VA04178 NG89-2	72.1	13.4	0.34	1.59	3.20	1.96	3.49	0.06	0.25	0.06	<0.01	2.70	99.4
VA04179	72.9	13.2	0.45	1.83	3.36	1.62	3.94	0.07	0.24	0.06	<0.01	2.47	100.3
VA04180	72.4	12.9	0.88	2.01	2.88	1.74	3.29	0.08	0.24	0.06	<0.01	2.47	99.1
VA04398	72.3	12.7	0.40	1.52	1.42	2.84	4.29	0.08	0.24	0.07	<0.01	3.16	99.3
VA04399	70.6	12.9	0.83	2.25	0.59	2.93	4.73	0.08	0.23	0.05	<0.01	3.54	99.0
VA04400	70.7	13.9	0.46	2.31	1.99	2.52	4.62	0.09	0.25	0.06	<0.01	3.39	100.5
VA06999 NG89-1	49.8	17.3	6.20	6.85	2.51	0.57	10.8	0.28	0.75	0.17	<0.01	4.31	99.7
VA07000	73.3	13.0	1.94	1.40	5.64	0.61	2.07	0.04	0.24	0.06	<0.01	1.54	100.0

XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
VA04149	39	117	<10	115	12	1310	<10	389	72
VA04150	43	59	18	124	14	1620	<10	74	82
VA04176	57	44	16	133	23	1240	<10	<10	68
VA04177	51	107	15	128	<10	1320	<10	139	62
VA04178	48	58	21	122	<10	1560	<10	<10	57
VA04179	39	86	30	107	25	1150	<10	<10	65
VA04180	39	64	<10	120	19	939	<10	<10	67
VA04398	60	47	23	109	<10	2010	<10	399	72
VA04399	64	35	<10	112	12	1580	<10	519	100
VA04400	61	43	15	120	<10	1380	<10	14	57
VA06999	31	344	18	50	24	507	27	49	90
VA07000	<10	224	18	97	<10	792	<10	19	37

XRAL

X-RAY ASSAY LABORATORIES

A DIVISION OF SGS SUPERVISION SERVICES INC.
1885 LESLIE STREET • DON MILLS, ONTARIO M3B 3J4 • CANADA
TEL: (416)445-5755 TELEX: 06-986947 FAX: (416)445-4152

CERTIFICATE OF ANALYSIS

REPORT 10476

TO: **FALCONBRIDGE LIMITED**
ATTN: N. VON FERSEN
202-856 HOMER STREET
VANCOUVER, BRITISH COLUMBIA
V6B 2W2

CUSTOMER No. 1282

DATE SUBMITTED
30-Nov-89✓

REF. FILE 6422-R2

Total Pages 2

29 W.CORES Proj. 605-116

	METHOD	DETECTION LIMIT
WRMAJ %	WR	0.01
WRMIN PPM	WR	10.

*** UNLESS INSTRUCTED OTHERWISE WE WILL DISCARD PULPS 90 DAYS ***
AND REJECTS 30 DAYS FROM DATE OF THIS REPORT

DATE 13-DEC-89

CERTIFIED BY
Jean H.L. Opdebeeck, Vice President Operations

XRF - WHOLE ROCK ANALYSIS 13-DEC-89 REPORT 10476 REFERENCE FILE 6422

SAMPLE \ %		SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
VA04385		69.8	14.4	2.62	1.56	0.40	2.97	2.77	0.11	0.27	0.07	<0.01	4.16	99.4
VA04386	113	69.0	12.2	3.91	2.13	0.38	2.86	2.43	0.17	0.21	0.06	<0.01	5.54	99.0
VA04387		71.3	14.0	2.87	1.22	0.91	2.45	2.17	0.10	0.29	0.07	<0.01	4.47	100.1
VA04388		76.1	11.2	0.11	2.42	0.40	2.70	2.99	0.02	0.15	0.03	<0.01	3.31	99.6
VA04389		70.5	11.5	0.26	4.48	0.15	2.25	6.09	0.05	0.23	0.05	<0.01	4.47	100.2
VA04390		74.0	11.8	0.81	3.87	0.65	2.23	3.16	0.03	0.22	0.05	<0.01	3.23	100.2
VA04391	114	72.3	10.8	0.49	4.85	0.21	1.87	4.85	0.06	0.16	0.03	<0.01	3.85	99.6
VA04392		73.0	10.2	0.21	5.61	0.21	1.61	4.49	0.05	0.14	0.03	<0.01	3.77	99.4
VA04393		75.0	12.2	0.64	3.95	1.51	1.88	1.66	0.03	0.23	0.06	<0.01	2.85	100.2
VA04394		77.9	11.5	0.65	2.58	0.95	2.44	1.18	0.02	0.22	0.04	<0.01	2.39	100.0
VA04395		75.9	10.9	1.03	2.94	2.97	0.88	2.85	0.02	0.21	0.04	0.02	2.47	100.3
VA04396		57.2	17.5	0.45	6.52	0.70	3.20	7.83	0.07	0.57	0.12	<0.01	5.31	99.6
VA04397		74.0	13.1	0.57	3.37	1.39	2.73	1.67	0.03	0.28	0.08	<0.01	2.54	99.9
VA15835		56.9	16.6	4.53	5.37	4.01	0.18	8.15	0.18	0.65	0.13	<0.01	3.62	100.4
VA15836		56.2	17.1	2.29	5.34	3.75	1.04	8.49	0.17	0.64	0.13	<0.01	4.39	100.2
VA15837		55.4	17.0	3.68	5.85	3.28	0.73	8.95	0.27	0.64	0.12	<0.01	4.16	100.2
VA15838		55.2	16.8	5.47	5.74	3.06	0.45	8.23	0.23	0.68	0.14	<0.01	4.31	100.5
VA15839		53.2	17.6	6.28	5.23	2.95	0.66	8.92	0.26	0.71	0.15	<0.01	4.00	100.1
VA15840		54.8	16.3	4.54	6.02	2.82	0.47	9.53	0.24	0.67	0.15	<0.01	4.16	100.0
VA15841		52.8	17.0	7.42	6.02	2.27	0.17	10.0	0.29	0.69	0.16	<0.01	3.70	100.6
VA15842	NG89-1	55.7	16.0	6.02	6.63	2.42	0.06	8.92	0.26	0.66	0.15	<0.01	3.85	100.8
VA15843		53.9	16.5	5.46	6.15	2.78	0.14	9.99	0.28	0.69	0.15	<0.01	4.08	100.2
VA15844		55.2	16.3	3.79	6.54	3.29	0.30	9.25	0.28	0.68	0.15	<0.01	4.31	100.2
VA15845		55.2	16.4	6.35	5.72	3.04	0.15	8.90	0.30	0.66	0.15	<0.01	3.39	100.4
VA15846		51.5	17.5	3.86	6.68	3.32	0.80	10.6	0.26	0.75	0.17	<0.01	5.00	100.7
VA15847		49.2	14.0	8.46	5.43	3.93	0.30	12.4	0.18	2.87	0.48	<0.01	1.62	99.0
VA15848		49.3	14.5	8.76	6.56	3.25	0.45	12.4	0.21	1.84	0.26	<0.01	2.54	100.2
VA15849		48.7	17.1	4.50	7.11	2.57	0.76	13.0	0.23	0.79	0.17	<0.01	5.16	100.2
VA15850		49.8	17.1	5.28	8.25	2.23	0.80	10.4	0.22	0.71	0.17	<0.01	4.62	99.7

XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
VA04385	61	59	18	111	12	2100	<10	<10	57
VA04386	74	50	<10	105	<10	1040	<10	<10	50
VA04387	38	124	20	114	<10	1580	<10	<10	46
VA04388	45	18	18	106	13	1340	<10	<10	45
VA04389	42	14	34	124	14	1240	<10	<10	39
VA04390	46	63	12	124	11	1170	<10	<10	32
VA04391	25	39	21	102	13	939	<10	<10	47
VA04392	47	13	24	105	17	843	<10	<10	30
VA04393	34	106	26	105	12	914	<10	<10	39
VA04394	35	97	40	115	<10	1060	<10	<10	35
VA04395	38	192	25	97	<10	597	<10	<10	33
VA04396	56	15	21	117	11	1290	<10	<10	45
~~VA04397~~	56	60	21	133	<10	1260	<10	<10	43
VA15835	17	279	15	64	19	172	<10	49	60
VA15836	28	158	20	73	<10	1010	<10	51	64
VA15837	32	239	28	76	13	597	<10	52	87
VA15838	23	336	16	59	<10	743	<10	60	68
VA15839	<10	360	14	58	18	490	<10	439	79
VA15840	<10	238	<10	66	20	580	11	1590	73
VA15841	19	419	23	50	28	177	16	90	68
VA15842	19	321	12	50	<10	78	<10	115	75
VA15843	14	335	24	50	10	151	<10	76	74
VA15844	17	259	<10	70	12	488	12	116	86
VA15845	13	337	19	54	16	210	16	100	137
VA15846	20	253	13	72	<10	716	13	650	163
VA15847	17	282	48	202	12	163	<10	24	69
VA15848	18	380	35	120	15	182	13	193	75
VA15849	22	268	<10	42	<10	588	17	52	78
VA15850	23	278	11	55	27	553	18	155	78

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
04) 985-0681 Telex 04-352667

BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V89-08735.0 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LIMITED
PROJECT: 605-142

SUBMITTED BY: R. STEWART
DATE PRINTED: 31-JAN-90

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - Fire Assay	137	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag	Silver	137	0.5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
3	As	Arsenic	137	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
4	Ba	Barium	137	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
5	Be	Beryllium	137	0.5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
6	Bi	Bismuth	137	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
7	Cd	Cadmium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
8	Ce	Cerium	137	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
9	Co	Cobalt	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
10	Cr	Chromium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
11	Cu	Copper	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
12	Ga	Gallium	137	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
13	La	Lanthanum	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
14	Li	Lithium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
15	Mn	Manganese	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
16	Mo	Molybdenum	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
17	Nb	Niobium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
18	Ni	Nickel	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
19	Pb	Lead	137	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
20	Rb	Rubidium	137	20 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
21	Sb	Antimony	137	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
22	Sc	Scandium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
23	Sn	Tin	137	20 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
24	Sr	Strontium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
25	Ta	Tantalum	137	10 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
26	Te	Tellurium	137	10 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
27	V	Vanadium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
28	Y	Yttrium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
29	Zn	Zinc	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
30	Zr	Zirconium	137	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
31	Ba	Barium	137	20 PPM		X-Ray Fluorescence

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V89-08735.0 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LIMITED
PROJECT: 605-142

SUBMITTED BY: R. STEWART
DATE PRINTED: 31-JAN-90

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	137	2 -150	137	CRUSH,PULVERIZE -150	137
				OVERWEIGHT SAMPLE/LB	685

REMARKS: Assay of Zn >3000 ppm to follow on V89-08735.6.

REPORT COPIES TO: FALCONBRIDGE LIMITED
MR. NILS VON FERSEN
MS. PAT WHITING
MR. BOB STEWART

INVOICE TO: MR. NILS VON FERSEN

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
[illegible]4) 985-0681 Telex 04-352667

BONDAR-CLEGG

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 31-JAN-90

REPORT: V89-08735.0

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Ba PPM	Be PPM	Bi PPM	Cd PPM	Ce PPM	Co PPM	Cr PPM	Cu PPM
D2 AG09985		<5	<0.5	15	77	<0.5	5	<1	17	49	57	24
D2 AG09986		11	<0.5	<5	80	<0.5	2	<1	13	57	66	101
D2 AG09987		11	<0.5	7	94	<0.5	9	<1	16	43	43	46
D2 AG09988		7	<0.5	<5	52	<0.5	6	<1	25	34	51	938
D2 AG09989		<5	0.5	17	137	<0.5	7	<1	24	25	47	757
D2 AG09990		7	0.6	7	78	<0.5	6	<1	19	46	48	224
D2 AG09991		<5	<0.5	15	88	<0.5	9	<1	17	30	46	347
D2 AG09992		<5	<0.5	<5	65	<0.5	10	<1	23	26	52	224
D2 AG09993		<5	<0.5	<5	51	<0.5	7	<1	26	48	46	200
D2 AG09994		<5	0.7	<5	52	<0.5	6	<1	26	30	51	99
D2 AG10000		<5	0.6	<5	86	<0.5	8	<1	28	31	54	88
D2 VA06951		<5	<0.5	18	29	<0.5	2	<1	17	32	44	224
D2 VA06964		<5	0.8	11	95	<0.5	5	<1	21	26	43	766
D2 VA06965		<5	1.0	27	82	<0.5	8	33	20	26	36	1085
D2 VA06966		<5	0.9	13	162	<0.5	<2	<1	19	40	28	815
D2 VA06967		<5	0.9	14	213	<0.5	4	1	19	32	29	497
D2 VA06968		<5	0.7	10	159	<0.5	5	<1	21	28	19	243
D2 VA06969		6	0.8	18	134	<0.5	5	<1	21	31	27	355
D2 VA06970		<5	0.6	29	99	<0.5	4	<1	21	34	27	666
D2 VA06971		<5	1.1	<5	160	<0.5	<2	<1	22	29	29	431
D2 VA06972		<5	0.6	16	197	<0.5	<2	<1	20	33	16	137
D2 VA06973		<5	0.8	21	109	<0.5	3	<1	20	41	26	370
D2 VA06974		<5	0.8	<5	85	<0.5	3	<1	20	23	22	384
D2 VA06975		<5	0.6	6	76	<0.5	<2	<1	16	21	19	242
D2 VA06976		<5	0.9	12	94	<0.5	3	<1	21	24	20	493
D2 VA06977		<5	1.2	15	111	<0.5	<2	<1	20	30	16	478
D2 VA06978		<5	1.0	19	103	<0.5	7	<1	16	27	25	200
D2 VA06979		<5	0.9	16	121	<0.5	3	<1	20	28	25	293
D2 VA06980		6	1.3	14	69	<0.5	4	<1	21	34	37	468
D2 VA06981		<5	1.4	20	49	<0.5	4	<1	27	31	26	235
D2 VA06982		<5	1.0	10	83	<0.5	<2	<1	24	35	20	187
D2 VA06983		<5	0.9	11	112	<0.5	<2	<1	22	37	32	45
D2 VA06984		9	1.0	9	105	<0.5	<2	<1	22	39	33	93
D2 VA06985		8	1.0	23	72	<0.5	3	<1	24	36	24	121
D2 VA06986		<5	0.6	11	96	<0.5	7	<1	15	25	34	35
D2 VA06987		<5	0.6	13	116	<0.5	3	<1	16	41	24	22
D2 VA06988		<5	<0.5	16	124	<0.5	<2	<1	13	32	26	48
D2 VA06989		<5	0.6	16	116	<0.5	<2	<1	16	41	29	39
D2 VA06990		8	0.7	13	54	<0.5	<2	<1	15	48	26	253
D2 VA06991		<5	0.8	196	110	<0.5	6	<1	14	42	16	295

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SAMPLE NUMBER	ELEMENT UNITS	Ga PPM	La PPM	Li PPM	Mn PPM	Mo PPM	Nb PPM	Ni PPM	Pb PPM	Rb PPM	Sb PPM	Sc PPM
D2 AG09985		<2	<1	6	1280	4	5	<1	4	<20	6	<1
D2 AG09986		<2	<1	6	1280	7	6	<1	3	<20	<5	<1
D2 AG09987		<2	<1	7	1370	14	5	<1	<2	<20	7	<1
D2 AG09988		<2	<1	7	1800	<1	4	<1	6	<20	9	<1
D2 AG09989		2	<1	7	1770	2	4	<1	7	<20	<5	<1
D2 AG09990		<2	<1	7	1340	9	6	<1	<2	<20	<5	<1
D2 AG09991		<2	<1	7	1320	2	4	<1	9	<20	9	<1
D2 AG09992		<2	<1	7	1590	2	3	<1	<2	<20	5	<1
D2 AG09993		<2	<1	6	1680	7	4	<1	4	<20	9	<1
D2 AG09994		<2	<1	10	2060	2	4	<1	4	28	7	<1
D2 AG10000		<2	<1	5	1760	4	5	<1	11	<20	8	<1
D2 VA06951		<2	<1	5	1640	4	3	<1	<2	<20	6	<1
D2 VA06964		<2	<1	7	1530	<1	4	<1	<2	<20	<5	<1
D2 VA06965		<2	<1	7	1470	3	5	<1	<2	<20	5	<1
D2 VA06966		<2	<1	6	1450	1	5	<1	<2	22	<5	<1
D2 VA06967		<2	<1	7	1650	<1	4	<1	4	<20	6	<1
D2 VA06968		<2	<1	6	1590	<1	4	<1	<2	<20	<5	<1
D2 VA06969		<2	<1	9	1670	2	5	<1	<2	<20	<5	<1
D2 VA06970		<2	<1	8	1510	<1	4	<1	<2	41	<5	<1
D2 VA06971		<2	<1	9	1620	1	4	<1	<2	<20	<5	<1
D2 VA06972		<2	<1	8	1520	<1	4	<1	<2	<20	8	<1
D2 VA06973		<2	<1	9	1650	<1	4	<1	2	<20	<5	<1
D2 VA06974		<2	<1	7	1550	<1	3	<1	<2	<20	7	<1
D2 VA06975		<2	<1	5	1370	<1	3	<1	<2	<20	<5	<1
D2 VA06976		<2	<1	8	1480	<1	5	<1	<2	<20	12	<1
D2 VA06977		<2	<1	7	1310	<1	6	<1	<2	<20	<5	<1
D2 VA06978		<2	<1	5	1150	<1	4	<1	<2	<20	6	<1
D2 VA06979		<2	<1	8	1480	<1	5	<1	<2	<20	8	<1
D2 VA06980		<2	<1	8	1400	2	5	<1	2	<20	6	<1
D2 VA06981		<2	<1	10	1890	2	7	<1	<2	<20	<5	<1
D2 VA06982		<2	<1	8	1630	<1	4	<1	<2	<20	7	<1
D2 VA06983		<2	<1	11	1180	3	4	<1	<2	<20	7	<1
D2 VA06984		<2	<1	12	1300	2	5	<1	4	<20	11	<1
D2 VA06985		<2	<1	11	1310	3	5	<1	<2	<20	<5	<1
D2 VA06986		<2	<1	6	961	4	3	<1	<2	<20	<5	<1
D2 VA06987		<2	<1	6	897	2	3	<1	<2	<20	<5	<1
D2 VA06988		<2	<1	6	826	3	4	<1	<2	<20	<5	<1
D2 VA06989		<2	<1	7	1180	6	4	<1	3	<20	<5	<1
D2 VA06990		<2	<1	7	1240	1	4	<1	3	<20	9	<1
D2 VA06991		<2	<1	6	748	<1	4	<1	3	<20	7	<1

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SAMPLE NUMBER	ELEMENT UNITS	Sn PPM	Sr PPM	Ta PPM	Te PPM	V PPM	Y PPM	Zn PPM	Zr PPM	Ba PPM
02 AG09985		<20	10	40	20	120	5	81	<1	620
02 AG09986		<20	8	54	25	109	4	73	<1	790
02 AG09987		<20	13	35	17	116	3	75	<1	750
02 AG09988		<20	26	20	16	130	4	164	<1	340
02 AG09989		<20	33	54	<10	124	3	72	<1	780
02 AG09990		<20	20	44	27	96	4	54	<1	740
02 AG09991		<20	19	36	19	93	4	55	<1	1100
02 AG09992		<20	25	31	12	96	4	68	<1	730
02 AG09993		<20	26	28	19	107	2	70	<1	340
02 AG09994		<20	16	50	20	136	3	112	<1	450
02 AG10000		<20	50	48	17	111	3	87	<1	310
02 VA06951		<20	32	54	19	111	6	93	<1	130
02 VA06964		<20	19	55	20	118	6	433	<1	1000
02 VA06965		<20	19	32	29	123	7	4803	<1	1000
02 VA06966		<20	17	43	27	112	8	4106	<1	1700
02 VA06967		<20	17	40	15	111	6	397	<1	2000
02 VA06968		<20	17	50	22	111	5	219	<1	1500
02 VA06969		<20	14	45	21	126	3	237	<1	1400
02 VA06970		<20	20	41	16	116	6	215	<1	870
02 VA06971		<20	23	51	15	125	6	284	<1	1400
02 VA06972		<20	18	48	21	112	5	256	<1	2100
02 VA06973		<20	21	52	21	123	6	266	<1	1300
02 VA06974		<20	22	53	11	128	4	220	<1	470
02 VA06975		<20	28	17	14	116	4	169	<1	460
02 VA06976		<20	22	38	20	126	6	165	<1	910
02 VA06977		<20	15	39	25	100	7	156	<1	1500
02 VA06978		<20	29	27	16	100	5	122	<1	960
02 VA06979		<20	14	54	22	123	7	145	<1	1100
02 VA06980		<20	13	41	25	128	6	110	<1	650
02 VA06981		<20	9	72	42	187	6	144	<1	490
02 VA06982		<20	16	57	19	145	6	122	<1	850
02 VA06983		<20	22	43	17	140	7	83	<1	960
02 VA06984		<20	28	53	25	146	9	81	<1	750
02 VA06985		<20	25	59	23	163	6	82	<1	560
02 VA06986		<20	41	41	11	96	4	51	<1	550
02 VA06987		<20	28	18	16	88	6	52	<1	1100
02 VA06988		<20	23	41	18	72	6	48	<1	2100
02 VA06989		<20	38	43	18	103	9	65	<1	1100
02 VA06990		<20	59	36	18	120	9	80	<1	200
02 VA06991		<20	22	31	18	81	8	75	<1	1600

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Ba PPM	Be PPM	Bi PPM	Cd PPM	Ce PPM	Co PPM	Cr PPM	Cu PPM
D2 VA06992		5	<0.5	<5	115	<0.5	<2	<1	18	37	16	120
D2 VA06993		5	0.6	10	115	<0.5	2	<1	16	29	16	130
D2 VA06994		9	<0.5	8	204	<0.5	<2	<1	13	29	51	65
D2 VA06995		7	0.7	11	191	<0.5	2	<1	16	32	53	55
D2 VA06996		5	0.9	11	160	<0.5	<2	<1	18	39	60	28
D2 VA06997		5	0.7	15	152	<0.5	4	<1	15	32	99	52
D2 VA06998		<5	0.9	<5	103	<0.5	3	<1	17	28	41	58
D2 VA07910		6	0.8	<5	159	<0.5	3	<1	12	6	40	807
D2 VA07911		6	0.7	13	125	<0.5	5	<1	10	10	35	581
D2 VA07912		9	0.7	<5	143	<0.5	<2	<1	8	12	39	488
D2 VA07913		11	1.0	12	137	<0.5	6	<1	10	16	40	777
D2 VA07914		7	0.9	17	141	<0.5	<2	<1	10	14	37	273
D2 VA07915		8	0.6	10	112	<0.5	5	<1	12	7	57	713
D2 VA07916		<5	0.9	<5	111	<0.5	6	<1	10	9	52	764
D2 VA07917		7	0.7	<5	98	<0.5	<2	<1	8	10	76	716
D2 VA07918		12	0.8	<5	117	<0.5	6	<1	7	15	60	792
D2 VA07922		8	0.5	14	128	<0.5	<2	<1	11	17	49	60
D2 VA07923		10	0.5	28	123	<0.5	4	<1	14	19	35	32
D2 VA07924		<5	0.7	5	77	<0.5	6	<1	11	17	76	64
D2 VA07925		<5	0.6	<5	151	<0.5	<2	<1	6	11	38	16
D2 VA07929		13	<0.5	23	117	<0.5	7	<1	8	19	43	62
D2 VA07930		11	0.9	6	131	<0.5	2	<1	8	9	52	666
D2 VA07931		11	0.7	12	108	<0.5	8	<1	<5	20	44	599
D2 VA07932		8	0.6	<5	123	<0.5	4	<1	8	12	34	544
D2 VA07933		15	0.8	9	96	<0.5	6	<1	8	13	47	1262
D2 VA07934		12	0.9	<5	132	<0.5	8	<1	7	10	34	1272
D2 VA07935		5	<0.5	6	107	<0.5	2	<1	8	20	34	278
D2 VA07936		14	<0.5	5	115	<0.5	<2	<1	<5	11	29	310
D2 VA07937		12	0.6	13	110	<0.5	5	<1	<5	13	33	1032
D2 VA07938		10	<0.5	<5	109	<0.5	3	<1	<5	12	54	496
D2 VA07939		17	<0.5	12	136	<0.5	2	<1	7	16	32	404
D2 VA07940		14	0.8	10	190	<0.5	<2	<1	6	15	55	550
D2 VA07941		10	1.6	29	112	<0.5	<2	<1	10	15	55	90
D2 VA07942		<5	1.2	<5	117	<0.5	<2	<1	16	7	39	11
D2 VA07943		<5	1.1	16	89	<0.5	3	<1	12	6	34	21
D2 VA07944		<5	1.1	24	125	<0.5	3	<1	6	6	49	32
D2 VA07945		<5	1.4	9	113	<0.5	<2	<1	8	8	40	70
D2 VA07946		6	1.4	7	94	<0.5	4	<1	10	10	34	99
D2 VA07947		<5	1.8	5	89	<0.5	<2	<1	10	11	32	244
D2 VA07948		<5	1.2	8	106	<0.5	5	<1	20	5	34	13

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D2 VA06992		<2	<1	8	845	<1	4	<1	<2	<20	5	<1
D2 VA06993		<2	<1	10	1040	3	4	<1	3	<20	<5	<1
D2 VA06994		<2	<1	9	946	1	3	<1	<2	<20	5	<1
D2 VA06995		<2	<1	10	1490	5	3	<1	2	<20	8	<1
D2 VA06996		<2	<1	14	1690	2	4	16	<2	<20	<5	<1
D2 VA06997		<2	<1	10	1380	1	4	<1	3	<20	8	<1
D2 VA06998		<2	<1	10	1250	3	3	<1	<2	<20	8	<1
D2 VA07910		<2	4	5	927	<1	3	<1	2	<20	<5	<1
D2 VA07911		<2	4	5	719	2	3	<1	8	<20	7	<1
D2 VA07912		<2	4	5	671	<1	3	<1	3	<20	<5	<1
D2 VA07913		<2	4	5	575	11	3	<1	14	<20	<5	<1
D2 VA07914		<2	4	5	800	7	3	<1	12	<20	<5	<1
D2 VA07915		<2	5	5	554	<1	2	<1	9	<20	<5	<1
D2 VA07916		<2	4	5	670	<1	3	<1	3	<20	<5	<1
D2 VA07917		<2	3	5	611	1	3	<1	6	<20	<5	<1
D2 VA07918		<2	3	5	582	<1	3	<1	11	<20	<5	<1
D2 VA07922		<2	4	6	522	<1	3	<1	14	<20	<5	<1
D2 VA07923		<2	4	8	810	<1	2	<1	8	<20	<5	<1
D2 VA07924		<2	2	6	1890	<1	2	<1	7	<20	<5	13
D2 VA07925		<2	4	6	987	<1	2	<1	5	<20	<5	<1
D2 VA07929		<2	2	6	683	4	3	<1	9	<20	<5	<1
D2 VA07930		<2	4	5	620	1	3	<1	<2	<20	<5	<1
D2 VA07931		<2	2	5	567	3	3	<1	6	<20	<5	<1
D2 VA07932		<2	4	6	578	6	3	<1	6	<20	6	<1
D2 VA07933		<2	3	5	778	6	3	<1	24	<20	<5	<1
D2 VA07934		<2	4	5	733	<1	3	<1	3	<20	7	<1
D2 VA07935		<2	4	5	739	3	3	<1	6	<20	5	<1
D2 VA07936		<2	4	5	846	1	2	<1	6	<20	<5	8
D2 VA07937		<2	3	6	720	2	3	<1	5	<20	<5	7
D2 VA07938		<2	4	5	921	2	3	<1	23	<20	<5	5
D2 VA07939		<2	4	6	612	3	3	<1	6	<20	<5	2
D2 VA07940		<2	2	7	796	<1	4	<1	9	<20	6	<1
D2 VA07941		<2	3	6	623	2	3	<1	21	<20	<5	4
D2 VA07942		<2	7	5	446	3	2	<1	2	<20	<5	10
D2 VA07943		<2	4	6	480	1	2	<1	6	<20	5	5
D2 VA07944		<2	3	7	596	<1	3	<1	5	53	5	1
D2 VA07945		<2	4	6	598	3	3	<1	<2	<20	<5	3
D2 VA07946		<2	2	7	596	3	4	<1	7	<20	<5	3
D2 VA07947		<2	2	7	600	5	4	1	13	<20	<5	<1
D2 VA07948		<2	5	5	1100	3	3	<1	6	<20	<5	4

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D2 VA06992		<20	21	35	13	91	7	70	<1	1500
D2 VA06993		<20	21	54	16	90	10	70	<1	1400
D2 VA06994		<20	28	55	15	103	7	68	<1	2700
D2 VA06995		<20	32	40	17	146	6	88	<1	700
D2 VA06996		<20	35	61	30	175	6	103	<1	1000
D2 VA06997		<20	36	45	19	137	6	87	<1	1500
D2 VA06998		<20	44	43	13	139	5	77	<1	420
D2 VA07910		<20	10	15	<10	12	2	92	<1	1400
D2 VA07911		<20	9	<10	<10	12	2	80	<1	1400
D2 VA07912		<20	6	<10	10	5	2	80	<1	1500
D2 VA07913		<20	6	<10	<10	4	3	68	<1	1600
D2 VA07914		<20	7	16	<10	6	5	90	<1	1600
D2 VA07915		<20	7	<10	<10	6	2	78	1	1000
D2 VA07916		<20	9	24	<10	5	4	76	1	1000
D2 VA07917		<20	8	10	<10	5	1	83	1	1200
D2 VA07918		<20	9	15	<10	5	3	97	2	1200
D2 VA07922		<20	12	16	<10	4	2	106	1	1300
D2 VA07923		<20	21	18	<10	5	3	122	<1	1100
D2 VA07924		<20	79	18	<10	24	8	103	<1	910
D2 VA07925		<20	36	13	<10	6	5	99	<1	1300
D2 VA07929		<20	15	18	11	4	3	91	<1	1300
D2 VA07930		<20	16	16	<10	4	1	111	2	1400
D2 VA07931		<20	13	15	<10	3	2	112	1	1400
D2 VA07932		<20	15	<10	<10	3	3	87	1	1400
D2 VA07933		<20	16	15	<10	3	2	119	2	1400
D2 VA07934		<20	21	16	<10	3	3	92	1	1400
D2 VA07935		<20	20	24	<10	3	3	77	2	1500
D2 VA07936		<20	23	<10	<10	2	4	66	1	1400
D2 VA07937		<20	17	14	<10	2	4	90	1	1500
D2 VA07938		<20	18	15	<10	2	4	74	1	1500
D2 VA07939		<20	13	<10	<10	5	3	83	1	1500
D2 VA07940		<20	12	34	12	3	3	99	1	1600
D2 VA07941		<20	11	22	<10	4	3	69	1	1200
D2 VA07942		<20	6	13	<10	4	4	63	1	1300
D2 VA07943		<20	6	19	<10	3	2	68	1	1300
D2 VA07944		<20	9	23	<10	4	4	69	2	1200
D2 VA07945		<20	7	23	10	4	3	60	1	1300
D2 VA07946		<20	5	15	12	4	3	63	<1	1300
D2 VA07947		<20	6	<10	<10	4	2	60	<1	1300
D2 VA07948		<20	12	21	<10	5	5	120	1	1100

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Ba PPM	Be PPM	Bi PPM	Cd PPM	Ce PPM	Co PPM	Cr PPM	Cu PPM
D2 VA07949		<5	1.5	7	197	<0.5	5	<1	31	19	30	61
D2 VA07950		<5	1.3	<5	135	<0.5	5	7	35	14	11	75
D2 VA09851		<5	1.2	<5	100	<0.5	2	<1	17	6	37	4
D2 VA09852		9	1.1	<5	90	<0.5	<2	<1	17	6	27	3
D2 VA09853		<5	1.5	<5	102	<0.5	<2	<1	21	14	32	6
D2 VA09854		<5	1.3	<5	140	<0.5	2	<1	17	5	44	8
D2 VA09855		<5	1.3	12	121	<0.5	4	<1	9	9	44	24
D2 VA09859		6	1.4	<5	112	<0.5	3	<1	7	6	50	168
D2 VA09860		<5	1.3	<5	99	<0.5	<2	<1	15	5	49	191
D2 VA09861		<5	1.5	<5	137	<0.5	<2	<1	14	7	50	286
D2 VA09862		8	1.6	8	82	<0.5	<2	<1	8	13	24	201
D2 VA09863		11	<0.5	<5	114	<0.5	<2	<1	14	29	26	120
D2 VA09864		<5	<0.5	<5	111	<0.5	<2	<1	5	8	36	14
D2 VA09865		<5	<0.5	<5	137	<0.5	3	<1	13	5	31	9
D2 VA09866		<5	<0.5	<5	115	<0.5	<2	<1	15	7	39	7
D2 VA09867		<5	<0.5	<5	167	<0.5	3	<1	18	5	37	78
D2 VA09873		<5	0.6	<5	210	<0.5	<2	<1	19	13	45	7
D2 VA09874		10	<0.5	7	206	<0.5	4	<1	11	13	39	13
D2 VA09875		<5	<0.5	<5	118	<0.5	2	<1	15	9	44	3
D2 VA09876		29	1.4	<5	37	<0.5	<2	<1	<5	363	65	219
D2 VA09877		11	0.9	10	75	<0.5	<2	<1	<5	100	63	682
D2 VA09912		15	0.6	7	102	<0.5	2	<1	<5	17	33	369
D2 VA09913		9	0.7	14	138	<0.5	3	<1	8	9	29	38
D2 VA09914		25	0.9	42	61	<0.5	<2	<1	10	36	34	133
D2 VA09915		6	0.6	12	219	<0.5	3	<1	14	11	25	82
D2 VA09916		6	<0.5	<5	170	<0.5	4	<1	14	7	62	307
D2 VA09917		24	0.5	28	188	<0.5	<2	<1	61	29	21	492
D2 VA09918		9	<0.5	<5	277	<0.5	<2	<1	38	29	27	282
D2 VA09922		<5	<0.5	7	210	<0.5	4	<1	19	15	13	293
D2 VA09923		10	1.0	<5	114	<0.5	6	<1	19	18	41	627
D2 VA09924		<5	<0.5	14	95	<0.5	3	<1	17	7	44	9
D2 VA09925		<5	<0.5	<5	114	<0.5	<2	<1	14	5	63	10
D2 VA09926		<5	<0.5	12	143	<0.5	4	<1	15	9	42	12
D2 VA09927		<5	<0.5	12	176	<0.5	5	<1	11	9	44	228
D2 VA09928		<5	0.6	<5	134	<0.5	4	<1	6	11	44	495
D2 VA09929		8	<0.5	10	241	<0.5	6	<1	10	8	54	447
D2 VA09930		<5	0.5	<5	127	<0.5	6	<1	6	5	46	453
D2 VA09931		<5	0.6	5	284	<0.5	<2	<1	9	5	50	1212
D2 VA09932		<5	0.9	<5	119	<0.5	7	<1	<5	8	40	874
D2 VA09933		18	1.0	<5	123	<0.5	10	<1	13	14	36	2544

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SAMPLE NUMBER	ELEMENT UNITS	Ga PPM	La PPM	Li PPM	Mn PPM	Mo PPM	Nb PPM	Ni PPM	Pb PPM	Rb PPM	Sb PPM	Sc PPM
D2 VA07949		<2	8	5	1500	1	3	<1	10	<20	<5	12
D2 VA07950		<2	12	6	1720	2	3	<1	20	<20	9	11
D2 VA09851		<2	6	5	593	<1	2	<1	<2	<20	<5	13
D2 VA09852		<2	6	6	701	<1	2	<1	<2	<20	<5	12
D2 VA09853		<2	6	8	836	1	2	<1	<2	<20	<5	<1
D2 VA09854		<2	8	5	639	<1	2	<1	4	<20	<5	5
D2 VA09855		<2	6	6	548	1	2	<1	<2	<20	<5	6
D2 VA09859		<2	5	5	585	<1	2	<1	4	<20	<5	5
D2 VA09860		<2	5	4	483	1	2	<1	<2	88	6	3
D2 VA09861		<2	6	5	466	<1	2	<1	<2	<20	<5	2
D2 VA09862		<2	4	6	561	2	2	<1	7	<20	8	1
D2 VA09863		<2	4	7	799	17	3	<1	12	<20	6	<1
D2 VA09864		<2	7	7	422	6	2	<1	3	<20	<5	7
D2 VA09865		<2	7	6	536	3	1	<1	<2	<20	7	5
D2 VA09866		<2	7	7	568	2	2	<1	3	<20	<5	<1
D2 VA09867		<2	9	6	909	1	2	<1	3	<20	<5	4
D2 VA09873		<2	7	5	455	2	2	<1	10	<20	7	5
D2 VA09874		<2	6	7	558	4	3	<1	7	<20	<5	3
D2 VA09875		2	6	6	370	4	2	<1	<2	<20	<5	2
D2 VA09876		<2	<1	7	978	19	8	2	15	<20	9	<1
D2 VA09877		<2	<1	10	783	14	5	<1	4	<20	6	<1
D2 VA09912		<2	2	7	793	14	4	<1	7	<20	<5	<1
D2 VA09913		<2	3	6	625	4	3	<1	<2	<20	<5	<1
D2 VA09914		<2	<1	5	775	38	7	2	9	<20	<5	<1
D2 VA09915		<2	3	7	1100	4	3	<1	6	<20	5	<1
D2 VA09916		<2	6	7	417	1	3	<1	<2	<20	9	2
D2 VA09917		7	9	6	1420	1	6	<1	2	<20	<5	42
D2 VA09918		3	9	3	956	<1	4	<1	4	<20	9	26
D2 VA09922		4	8	3	379	1	3	<1	<2	<20	6	6
D2 VA09923		<2	8	7	413	2	4	<1	5	<20	<5	3
D2 VA09924		2	10	6	244	<1	2	<1	<2	<20	5	5
D2 VA09925		<2	8	4	175	<1	1	<1	<2	<20	5	10
D2 VA09926		<2	5	6	312	2	2	<1	9	<20	5	<1
D2 VA09927		<2	4	5	266	4	3	<1	<2	<20	8	<1
D2 VA09928		<2	4	4	275	<1	2	<1	<2	<20	<5	5
D2 VA09929		<2	6	5	291	<1	3	<1	<2	<20	6	3
D2 VA09930		<2	5	4	249	1	2	<1	<2	<20	<5	6
D2 VA09931		<2	3	5	278	5	3	<1	11	<20	<5	3
D2 VA09932		<2	3	6	406	3	3	<1	<2	<20	<5	2
D2 VA09933		<2	3	8	657	1	6	<1	6	<20	5	<1

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 31-JAN-90

REPORT: V89-08735.0

PROJECT: 605-142

SAMPLE NUMBER	ELEMENT UNITS	Sn PPM	Sr PPM	Ta PPM	Te PPM	V PPM	Y PPM	Zn PPM	Zr PPM	Ba PPM
D2 VA07949		<20	30	11	<10	17	10	191	<1	2200
D2 VA07950		<20	36	23	16	26	9	1486	<1	1700
D2 VA09851		<20	8	16	<10	5	5	39	<1	750
D2 VA09852		<20	7	14	<10	6	3	50	<1	790
D2 VA09853		<20	8	16	<10	6	3	50	<1	860
D2 VA09854		<20	10	19	<10	5	3	31	<1	960
D2 VA09855		<20	8	<10	<10	4	3	34	<1	1000
D2 VA09859		<20	10	<10	<10	4	2	31	1	1200
D2 VA09860		<20	9	<10	<10	4	2	27	1	1100
D2 VA09861		<20	9	<10	<10	4	2	31	3	1200
D2 VA09862		<20	10	20	<10	9	3	37	1	960
D2 VA09863		<20	19	25	10	11	3	49	<1	1000
D2 VA09864		<20	7	<10	<10	5	4	52	1	1100
D2 VA09865		<20	14	<10	<10	4	3	46	1	1200
D2 VA09866		<20	12	<10	<10	5	5	52	<1	940
D2 VA09867		<20	22	<10	<10	5	2	46	<1	910
D2 VA09873		<20	8	12	<10	4	4	62	2	1600
D2 VA09874		<20	9	16	<10	5	3	100	1	1600
D2 VA09875		<20	5	<10	<10	5	3	36	3	860
D2 VA09876		<20	28	63	31	9	4	54	<1	270
D2 VA09877		<20	15	31	13	10	3	58	2	340
D2 VA09912		<20	4	34	<10	4	5	91	<1	1300
D2 VA09913		<20	3	<10	10	4	5	78	<1	1600
D2 VA09914		<20	2	42	26	5	3	99	<1	1200
D2 VA09915		<20	4	23	14	9	6	96	<1	1600
D2 VA09916		<20	10	17	<10	13	5	43	<1	1100
D2 VA09917		<20	62	41	22	45	38	110	<1	220
D2 VA09918		<20	69	27	<10	99	26	77	<1	460
D2 VA09922		<20	17	10	<10	9	9	53	<1	1600
D2 VA09923		<20	11	24	<10	42	10	60	<1	1100
D2 VA09924		<20	6	15	<10	7	8	30	1	720
D2 VA09925		<20	6	<10	<10	7	7	20	1	770
D2 VA09926		<20	6	15	<10	5	6	29	1	1300
D2 VA09927		<20	4	<10	<10	4	4	22	1	1500
D2 VA09928		<20	4	<10	<10	3	4	21	2	1300
D2 VA09929		<20	7	<10	<10	3	6	22	<1	1200
D2 VA09930		<20	4	17	<10	2	4	22	<1	1100
D2 VA09931		23	7	22	<10	4	6	42	<1	1600
D2 VA09932		<20	5	16	<10	7	7	33	<1	1100
D2 VA09933		<20	7	27	10	45	9	47	<1	1000

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SAMPLE	ELEMENT	Au	Ag	As	Ba	Be	Bi	Cd	Ce	Co	Cr	Cu
NUMBER	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
D2 VA09934		<5	<0.5	12	120	<0.5	4	<1	8	8	37	66
D2 VA09935		<5	0.6	<5	134	<0.5	4	<1	10	8	31	641
D2 VA09936		<5	0.6	9	142	<0.5	4	<1	<5	5	32	159
D2 VA09937		<5	0.7	<5	141	<0.5	5	<1	10	6	40	182
D2 VA09938		<5	<0.5	<5	131	<0.5	3	<1	7	7	34	73
D2 VA09939		<5	<0.5	6	193	<0.5	4	<1	12	11	34	85
D2 VA09940		<5	<0.5	<5	203	<0.5	<2	<1	8	16	37	33
D2 VA09941		<5	<0.5	<5	173	<0.5	<2	<1	12	8	40	40
D2 VA09942		<5	<0.5	<5	111	<0.5	3	<1	<5	6	36	208
D2 VA09943		<5	0.5	14	192	<0.5	4	<1	8	12	56	104
D2 VA09944		<5	0.5	<5	223	<0.5	3	<1	12	8	40	249
D2 VA09945		<5	<0.5	<5	141	<0.5	<2	<1	13	6	44	7
D2 VA09946		<5	<0.5	<5	138	<0.5	5	<1	7	6	38	5
D2 VA09947		<5	<0.5	<5	128	<0.5	3	<1	9	13	35	6
D2 VA09948		<5	0.5	<5	100	<0.5	<2	<1	13	9	35	6
D2 VA09949		<5	<0.5	<5	114	<0.5	4	<1	12	5	46	5
D2 VA09950		<5	0.6	23	92	<0.5	<2	<1	8	7	48	16

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SAMPLE NUMBER	ELEMENT UNITS	Ga PPM	La PPM	Li PPM	Mn PPM	Mo PPM	Nb PPM	Ni PPM	Pb PPM	Rb PPM	Sb PPM	Sc PPM
D2 VA09934		<2	3	5	417	3	2	<1	<2	<20	7	2
D2 VA09935		<2	4	4	330	2	3	<1	4	<20	7	3
D2 VA09936		<2	4	5	373	<1	2	<1	<2	<20	<5	2
D2 VA09937		<2	3	6	481	<1	3	<1	<2	<20	<5	3
D2 VA09938		<2	5	5	476	<1	2	<1	<2	<20	<5	4
D2 VA09939		<2	5	7	521	1	3	<1	3	<20	<5	4
D2 VA09940		<2	5	4	474	4	3	<1	10	<20	<5	1
D2 VA09941		<2	9	6	541	5	2	<1	2	<20	<5	5
D2 VA09942		<2	7	5	461	3	3	<1	3	<20	<5	7
D2 VA09943		<2	7	7	577	4	3	<1	<2	<20	<5	3
D2 VA09944		<2	5	4	328	4	2	<1	<2	<20	<5	5
D2 VA09945		3	6	4	379	2	2	<1	<2	<20	<5	5
D2 VA09946		<2	6	6	589	<1	2	<1	<2	<20	<5	4
D2 VA09947		<2	5	7	625	1	3	<1	4	<20	<5	<1
D2 VA09948		<2	6	5	605	<1	2	<1	<2	<20	<5	4
D2 VA09949		<2	7	5	565	1	2	<1	<2	<20	<5	10
D2 VA09950		<2	7	5	729	2	2	<1	4	<20	<5	7

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SAMPLE NUMBER	ELEMENT UNITS	Sn PPM	Sr PPM	Ta PPM	Te PPM	V PPM	Y PPM	Zn PPM	Zr PPM	Ba PPM
D2 VA09934		<20	5	18	<10	4	6	28	<1	1200
D2 VA09935		<20	4	17	<10	4	4	21	1	1200
D2 VA09936		<20	4	14	<10	3	5	26	1	1100
D2 VA09937		<20	6	15	<10	4	5	35	<1	1200
D2 VA09938		<20	6	31	<10	3	3	35	<1	1300
D2 VA09939		<20	10	<10	<10	5	6	50	1	1300
D2 VA09940		<20	10	13	<10	5	5	55	2	1300
D2 VA09941		<20	8	16	<10	6	3	38	2	1200
D2 VA09942		<20	6	10	<10	3	4	29	<1	1100
D2 VA09943		<20	12	<10	<10	11	5	35	<1	1300
D2 VA09944		<20	11	<10	<10	3	3	23	<1	1500
D2 VA09945		<20	7	<10	<10	3	3	24	<1	1200
D2 VA09946		<20	7	<10	<10	4	4	36	<1	1100
D2 VA09947		<20	7	24	<10	4	3	42	<1	1100
D2 VA09948		<20	7	<10	<10	4	4	36	<1	940
D2 VA09949		<20	9	<10	<10	4	4	31	<1	720
D2 VA09950		<20	11	17	<10	5	3	41	<1	650

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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-08669.0 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LIMITED
PROJECT: 605-116

SUBMITTED BY: M. VANDE GUCHTE
DATE PRINTED: 8-JAN-90

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - Fire Assay	74	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag	Silver	74	0.5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
3	As	Arsenic	74	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
4	Ba	Barium	74	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
5	Be	Beryllium	74	0.5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
6	Bi	Bismuth	74	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
7	Cd	Cadmium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
8	Ce	Cerium	74	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
9	Co	Cobalt	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
10	Cr	Chromium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
11	Cu	Copper	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
12	Ga	Gallium	74	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
13	La	Lanthanum	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
14	Li	Lithium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
15	Mn	Manganese	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
16	Mo	Molybdenum	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
17	Nb	Niobium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
18	Ni	Nickel	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
19	Pb	Lead	74	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
20	Rb	Rubidium	74	20 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
21	Sb	Antimony	74	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
22	Sc	Scandium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
23	Sn	Tin	74	20 PPM	HNO3-HCl HOT EXTR	Ind. Coupled Plasma
24	Sr	Strontium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
25	Ta	Tantalum	74	10 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
26	Te	Tellurium	74	10 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
27	V	Vanadium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
28	Y	Yttrium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
29	Zn	Zinc	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
30	Zr	Zirconium	74	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
31	Ba	Barium	74	20 PPM		*X-Ray Fluorescence

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V89-08669.0 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LIMITED
PROJECT: 605-116

SUBMITTED BY: M. VANDE GUCHTE
DATE PRINTED: 8-JAN-90

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	74	2 -150	74	CRUSH,PULVERIZE -150	74
				OVERWEIGHT SAMPLE/LB	210

REPORT COPIES TO: MR. NILS VON FERSEN
MS. PAT WHITING
MR. BOB STEWART

INVOICE TO: MR. NILS VON FERSEN

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Geochemical Lab Report

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PROJECT: 605-116 PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Ba PPM	Be PPM	Bi PPM	Cd PPM	Ce PPM	Co PPM	Cr PPM	Cu PPM
D2 AG09946		<5	<0.5	<5	107	<0.5	6	<1	32	18	32	52
D2 AG09947		15	0.6	<5	86	<0.5	<2	<1	32	53	45	112
D2 AG09948		<5	<0.5	<5	212	<0.5	<2	<1	26	9	35	44
D2 AG09949		6	<0.5	<5	116	<0.5	4	<1	23	27	30	44
D2 AG09950		<5	<0.5	<5	105	<0.5	2	<1	16	25	27	78
D2 AG09951		<5	<0.5	<5	91	<0.5	6	<1	15	36	32	93
D2 AG09952		6	<0.5	<5	99	<0.5	5	<1	21	22	24	238
D2 AG09953		<5	<0.5	<5	87	<0.5	4	<1	17	26	28	338
D2 AG09954		<5	<0.5	<5	109	<0.5	6	<1	16	20	22	270
D2 AG09955		<5	<0.5	<5	131	<0.5	11	<1	18	20	26	80
D2 AG09956		<5	<0.5	<5	106	0.9	4	<1	19	18	27	551
D2 AG09957		<5	<0.5	6	104	<0.5	4	<1	18	22	25	67
D2 AG09958		<5	<0.5	9	142	1.0	4	<1	12	17	28	71
D2 AG09959		<5	<0.5	<5	184	<0.5	4	<1	9	16	25	110
D2 AG09960		<5	<0.5	<5	174	1.2	6	<1	10	22	33	52
D2 AG09961		14	<0.5	<5	101	<0.5	<2	<1	17	33	31	279
D2 AG09962		16	<0.5	<5	107	<0.5	7	<1	18	55	23	203
D2 AG09963		8	<0.5	<5	73	<0.5	<2	<1	27	49	26	72
D2 AG09964		6	<0.5	<5	146	<0.5	7	<1	22	20	18	36
D2 AG09965		<5	<0.5	<5	87	<0.5	<2	<1	39	29	26	176
D2 AG09966		<5	<0.5	<5	97	<0.5	5	<1	20	21	34	558
D2 AG09967		7	<0.5	<5	98	<0.5	5	<1	20	22	41	610
D2 AG09968		<5	<0.5	<5	79	<0.5	8	<1	20	18	21	459
D2 AG09969		<5	<0.5	<5	92	<0.5	3	<1	21	27	19	195
D2 AG09970		18	0.7	<5	97	<0.5	<2	<1	14	27	21	2466
D2 AG09971		<5	0.5	<5	63	<0.5	5	<1	18	28	22	282
D2 AG09972		<5	<0.5	<5	74	<0.5	3	<1	18	23	19	292
D2 AG09973		<5	<0.5	<5	98	<0.5	7	<1	12	31	23	320
D2 AG09974		<5	<0.5	<5	61	<0.5	6	<1	21	19	16	113
D2 AG09975		<5	<0.5	<5	56	<0.5	<2	<1	23	21	17	184
D2 AG09976		<5	0.5	<5	72	<0.5	<2	<1	19	30	25	202
D2 AG09977		<5	0.6	<5	95	<0.5	8	<1	14	29	32	790
D2 AG09978		<5	0.7	<5	77	<0.5	4	<1	18	28	31	1105
D2 AG09979		<5	0.7	<5	99	<0.5	3	<1	12	27	32	1445
D2 AG09980		<5	<0.5	<5	65	<0.5	<2	<1	17	25	33	499
D2 AG09981		<5	<0.5	<5	38	<0.5	4	<1	26	18	20	185
D2 AG09982		<5	<0.5	<5	26	<0.5	3	<1	32	8	17	83
D2 AG09983		<5	<0.5	<5	30	<0.5	8	<1	34	13	17	132
D2 AG09984		<5	0.5	<5	123	<0.5	<2	<1	18	131	31	208
D2 AG09995		21	1.0	<5	56	<0.5	7	<1	25	37	50	950

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-08669.0

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PROJECT: 605-116 PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Ga PPM	La PPM	Li PPM	Mn PPM	Mo PPM	Nb PPM	Ni PPM	Pb PPM	Rb PPM	Sb PPM	Sc PPM
D2 AG09946		<2	5	8	1160	1	3	<1	<2	<20	11	<1
D2 AG09947		<2	3	13	1500	12	11	35	<2	<20	12	<1
D2 AG09948		<2	12	2	305	<1	1	<1	<2	<20	<5	<1
D2 AG09949		<2	3	10	1050	12	4	<1	<2	<20	9	<1
D2 AG09950		<2	<1	8	1540	3	4	<1	<2	<20	<5	<1
D2 AG09951		<2	<1	8	1520	6	5	<1	<2	28	6	<1
D2 AG09952		4	2	7	1520	4	4	<1	<2	32	9	<1
D2 AG09953		<2	<1	8	1560	4	4	<1	<2	24	10	<1
D2 AG09954		<2	<1	8	1530	2	3	<1	<2	41	<5	<1
D2 AG09955		<2	1	7	1470	1	2	<1	<2	<20	<5	<1
D2 AG09956		<2	6	9	1490	5	3	<1	2	<20	6	<1
D2 AG09957		<2	2	7	1490	2	3	<1	<2	69	<5	<1
D2 AG09958		<2	6	8	1420	6	2	<1	4	<20	<5	<1
D2 AG09959		<2	<1	7	1300	5	3	<1	<2	<20	5	<1
D2 AG09960		<2	7	6	1090	9	3	<1	<2	<20	8	<1
D2 AG09961		<2	<1	8	1320	6	7	11	<2	<20	7	<1
D2 AG09962		<2	<1	9	1660	14	6	<1	<2	28	13	<1
D2 AG09963		<2	3	7	1210	15	6	<1	<2	42	<5	<1
D2 AG09964		<2	2	8	1270	3	4	<1	<2	60	12	<1
D2 AG09965		<2	4	8	1460	9	5	<1	<2	46	10	<1
D2 AG09966		<2	<1	7	1530	1	3	<1	<2	24	7	<1
D2 AG09967		<2	<1	7	1600	2	3	<1	<2	27	<5	<1
D2 AG09968		<2	<1	7	1360	<1	4	<1	<2	<20	<5	<1
D2 AG09969		3	<1	7	1510	<1	3	<1	<2	47	<5	<1
D2 AG09970		<2	<1	8	1570	<1	7	4	<2	<20	<5	<1
D2 AG09971		<2	<1	6	1400	2	4	<1	<2	<20	<5	<1
D2 AG09972		<2	<1	6	1330	<1	3	<1	<2	<20	<5	<1
D2 AG09973		<2	<1	6	1240	2	5	<1	<2	40	9	<1
D2 AG09974		<2	<1	6	1380	<1	3	<1	<2	<20	7	<1
D2 AG09975		<2	1	6	1320	2	3	26	<2	29	15	<1
D2 AG09976		<2	<1	8	1470	2	5	<1	<2	38	9	<1
D2 AG09977		<2	<1	5	1300	5	5	<1	<2	25	<5	<1
D2 AG09978		<2	<1	7	1290	1	5	6	<2	47	<5	<1
D2 AG09979		<2	<1	7	1240	1	6	4	<2	58	<5	<1
D2 AG09980		3	<1	8	1200	3	4	<1	<2	69	9	<1
D2 AG09981		<2	2	6	1160	<1	3	<1	<2	22	8	<1
D2 AG09982		6	5	6	1040	1	2	<1	<2	141	<5	<1
D2 AG09983		3	4	5	970	1	2	<1	<2	62	8	<1
D2 AG09984		<2	<1	7	1050	5	7	12	<2	<20	<5	<1
D2 AG09995		<2	<1	11	1940	5	7	27	<2	<20	<5	<1

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Geochemical Lab Report

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REPORT: V89-08669.0

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SAMPLE NUMBER	ELEMENT UNITS	Sn PPM	Sr PPM	Ta PPM	Te PPM	V PPM	Y PPM	Zn PPM	Zr PPM	Ba PPM
D2 AG09946		<20	33	34	12	100	7	55	<1	930
D2 AG09947		<20	19	102	41	121	7	145	<1	890
D2 AG09948		<20	57	<10	<10	12	6	21	2	1500
D2 AG09949		<20	19	67	17	125	6	73	<1	710
D2 AG09950		<20	11	42	13	105	5	95	<1	750
D2 AG09951		<20	14	49	21	101	4	88	<1	730
D2 AG09952		<20	18	40	11	87	6	88	<1	890
D2 AG09953		<20	16	52	26	97	4	85	<1	630
D2 AG09954		<20	20	32	10	95	4	81	<1	640
D2 AG09955		<20	22	35	<10	100	4	75	<1	570
D2 AG09956		<20	36	59	<10	99	5	75	<1	620
D2 AG09957		<20	28	34	<10	95	4	69	<1	940
D2 AG09958		<20	22	53	11	91	5	70	<1	980
D2 AG09959		<20	12	37	<10	79	5	60	<1	1100
D2 AG09960		<20	18	33	13	72	5	56	<1	2000
D2 AG09961		<20	11	80	28	128	6	74	<1	970
D2 AG09962		<20	15	57	22	116	3	81	<1	990
D2 AG09963		<20	43	33	13	71	6	73	<1	270
D2 AG09964		<20	11	52	13	102	7	64	<1	1900
D2 AG09965		<20	55	57	15	131	8	77	<1	820
D2 AG09966		<20	27	27	<10	90	3	67	<1	810
D2 AG09967		<20	29	46	10	96	4	72	<1	830
D2 AG09968		<20	24	38	11	86	3	63	<1	880
D2 AG09969		<20	20	48	<10	87	3	64	<1	1100
D2 AG09970		<20	12	78	14	112	4	78	<1	1000
D2 AG09971		<20	21	40	15	107	3	64	<1	760
D2 AG09972		<20	31	42	11	101	3	56	<1	730
D2 AG09973		<20	24	28	26	98	3	57	<1	1100
D2 AG09974		<20	43	41	16	86	5	56	<1	570
D2 AG09975		<20	56	<10	<10	78	5	54	12	350
D2 AG09976		<20	26	32	18	103	4	63	<1	950
D2 AG09977		<20	19	55	18	101	3	61	<1	1000
D2 AG09978		<20	20	51	19	109	3	65	<1	910
D2 AG09979		<20	12	55	17	117	3	87	<1	1000
D2 AG09980		<20	18	53	<10	103	4	99	<1	840
D2 AG09981		<20	44	46	<10	76	7	93	<1	220
D2 AG09982		<20	60	25	11	56	8	81	<1	100
D2 AG09983		<20	59	25	<10	52	7	76	<1	140
D2 AG09984		<20	25	51	24	68	5	86	<1	370
D2 AG09995		<20	15	55	26	126	4	108	<1	600

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Ba PPM	Be PPM	Bi PPM	Cd PPM	Ce PPM	Co PPM	Cr PPM	Cu PPM
D2 AG09996		<5	<0.5	<5	19	<0.5	2	<1	19	21	51	112
D2 AG09997		<5	0.5	<5	22	<0.5	5	<1	15	40	56	94
D2 AG09998		<5	<0.5	<5	47	<0.5	6	<1	16	33	45	36
D2 AG09999		14	0.6	<5	24	<0.5	<2	<1	22	38	54	980
D2 VA06952		10	0.8	<5	36	<0.5	5	<1	24	29	43	89
D2 VA06953		7	0.7	<5	60	<0.5	3	<1	17	27	42	81
D2 VA06954		7	<0.5	<5	51	<0.5	<2	<1	19	30	36	44
D2 VA06955		9	0.6	<5	24	<0.5	5	<1	22	24	46	75
D2 VA06956		<5	0.8	<5	27	<0.5	4	<1	16	30	51	219
D2 VA06957		7	0.6	<5	64	<0.5	10	<1	17	31	49	242
D2 VA06958		<5	<0.5	<5	115	<0.5	<2	<1	14	27	43	77
D2 VA06959		<5	0.9	<5	120	<0.5	5	<1	11	31	50	83
D2 VA06960		<5	<0.5	<5	189	<0.5	7	<1	15	26	50	450
D2 VA06961		<5	<0.5	<5	87	<0.5	<2	<1	16	26	47	60
D2 VA06962		<5	0.7	<5	66	<0.5	6	<1	17	32	49	250
D2 VA06963		9	<0.5	<5	70	<0.5	8	<1	22	30	53	747
D2 VA07919		9	<0.5	<5	85	<0.5	<2	<1	11	27	46	265
D2 VA07920		177	3.0	25	41	<0.5	10	<1	<5	153	65	2672
D2 VA07921		25	<0.5	<5	108	<0.5	4	<1	6	29	44	53
D2 VA07926		12	<0.5	29	94	<0.5	4	<1	19	16	45	158
D2 VA07927		59	1.4	7	89	<0.5	4	<1	9	55	55	1846
D2 VA07928		11	<0.5	<5	119	<0.5	6	<1	8	15	53	113
D2 VA09856		<5	<0.5	<5	124	<0.5	3	<1	12	8	66	20
D2 VA09857		52	<0.5	9	90	<0.5	3	<1	9	38	88	48
D2 VA09858		<5	<0.5	9	101	<0.5	<2	<1	6	8	67	39
D2 VA09868		7	<0.5	<5	136	<0.5	3	<1	8	17	58	12
D2 VA09869		47	0.7	<5	86	<0.5	<2	<1	17	60	37	21
D2 VA09870		7	<0.5	<5	137	<0.5	<2	<1	12	19	48	8
D2 VA09871		41	<0.5	27	84	<0.5	<2	<1	22	53	25	14
D2 VA09872		<5	<0.5	8	149	<0.5	<2	<1	10	13	50	35
D2 VA09878		145	1.0	28	90	<0.5	<2	<1	<5	43	61	35
D2 VA09919		<5	<0.5	<5	217	<0.5	<2	<1	13	12	67	567
D2 VA09920		41	2.5	15	102	<0.5	<2	<1	12	104	91	2417
D2 VA09921		7	0.6	<5	231	<0.5	<2	<1	19	9	41	668

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SAMPLE NUMBER	ELEMENT UNITS	Ga PPM	La PPM	Li PPM	Mn PPM	Mo PPM	Nb PPM	Ni PPM	Pb PPM	Rb PPM	Sb PPM	Sc PPM
D2 AG09996		6	<1	6	1480	2	2	8	<2	<20	<5	<1
D2 AG09997		<2	<1	7	1220	1	4	<1	<2	82	<5	<1
D2 AG09998		<2	<1	5	995	2	3	<1	<2	<20	9	<1
D2 AG09999		<2	<1	5	1100	1	4	5	<2	29	5	<1
D2 VA06952		<2	<1	11	2420	2	6	32	<2	<20	14	<1
D2 VA06953		<2	<1	8	1740	1	5	16	<2	<20	7	<1
D2 VA06954		<2	<1	9	1790	1	7	20	<2	91	<5	<1
D2 VA06955		<2	<1	7	1700	3	5	9	<2	52	13	<1
D2 VA06956		<2	<1	7	1630	2	5	15	<2	<20	15	<1
D2 VA06957		<2	<1	7	1640	4	7	17	<2	64	13	<1
D2 VA06958		<2	<1	8	1740	4	5	17	<2	61	15	<1
D2 VA06959		<2	<1	7	1620	3	6	19	<2	<20	7	<1
D2 VA06960		2	<1	5	1480	1	4	6	<2	<20	<5	<1
D2 VA06961		<2	<1	6	1610	2	4	12	<2	47	<5	<1
D2 VA06962		<2	<1	8	1960	3	7	25	<2	50	<5	<1
D2 VA06963		2	<1	7	1910	4	5	17	4	<20	<5	<1
D2 VA07919		<2	3	6	540	3	2	<1	16	<20	<5	<1
D2 VA07920		<2	<1	3	546	62	14	28	281	<20	9	<1
D2 VA07921		<2	2	4	457	7	2	<1	58	<20	<5	<1
D2 VA07926		<2	2	7	914	3	3	<1	16	<20	<5	<1
D2 VA07927		<2	<1	5	785	12	8	<1	20	<20	<5	<1
D2 VA07928		<2	3	6	527	3	3	<1	10	<20	<5	<1
D2 VA09856		<2	5	5	575	3	<1	<1	7	77	<5	2
D2 VA09857		<2	1	4	617	10	4	<1	12	30	<5	<1
D2 VA09858		2	3	4	503	3	<1	<1	7	<20	<5	<1
D2 VA09868		<2	3	6	646	17	2	<1	7	<20	<5	<1
D2 VA09869		<2	<1	13	1360	5	9	6	22	38	11	<1
D2 VA09870		<2	3	8	660	15	3	<1	5	<20	<5	<1
D2 VA09871		<2	<1	16	1460	7	8	11	12	<20	<5	<1
D2 VA09872		<2	3	5	534	12	2	<1	4	<20	<5	<1
D2 VA09878		<2	<1	3	515	20	4	<1	23	40	8	<1
D2 VA09919		<2	5	4	333	3	2	<1	<2	<20	<5	<1
D2 VA09920		<2	6	3	215	41	10	7	9	<20	<5	<1
D2 VA09921		<2	7	4	435	2	2	2	4	<20	6	5

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Geochemical Lab Report

A DIVISION OF [illegible]

REPORT: V89-08669.0

DATE PRINTED: 8-JAN-90
PROJECT: 605-116 PAGE 2C

SAMPLE NUMBER	ELEMENT UNITS	Sn PPM	Sr PPM	Ta PPM	Te PPM	V PPM	Y PPM	Zn PPM	Zr PPM	Ba PPM
D2 AG09996		<20	28	31	12	97	2	75	<1	<20
D2 AG09997		<20	21	49	14	101	3	62	<1	120
D2 AG09998		<20	21	26	<10	33	5	51	<1	410
D2 AG09999		<20	39	32	13	87	3	51	<1	120
D2 VA06952		<20	11	101	30	176	2	137	<1	170
D2 VA06953		<20	14	61	17	120	2	100	<1	420
D2 VA06954		<20	11	73	30	138	2	109	11	280
D2 VA06955		<20	10	72	16	134	1	104	<1	300
D2 VA06956		<20	9	68	13	127	2	100	<1	380
D2 VA06957		<20	11	59	19	111	2	105	3	970
D2 VA06958		<20	11	51	18	121	1	115	<1	1300
D2 VA06959		<20	8	66	15	114	2	111	<1	1200
D2 VA06960		<20	17	41	10	104	2	102	<1	1100
D2 VA06961		<20	15	58	<10	108	3	111	<1	910
D2 VA06962		<20	8	69	28	140	3	141	<1	940
D2 VA06963		<20	11	68	14	149	3	148	<1	930
D2 VA07919		<20	8	<10	<10	15	2	128	1	1200
D2 VA07920		<20	8	79	49	15	1	172	<1	770
D2 VA07921		<20	9	<10	<10	5	2	94	<1	1300
D2 VA07926		<20	25	<10	<10	11	3	141	1	1200
D2 VA07927		<20	19	51	22	7	3	150	2	1100
D2 VA07928		<20	10	23	<10	6	2	102	2	1400
D2 VA09856		<20	11	<10	<10	5	3	35	1	1100
D2 VA09857		<20	16	26	15	6	3	49	1	970
D2 VA09858		<20	9	23	<10	5	2	31	3	1200
D2 VA09868		<20	7	22	<10	7	3	44	1	1600
D2 VA09869		<20	14	74	37	32	5	94	<1	1600
D2 VA09870		<20	8	19	10	11	2	51	<1	1600
D2 VA09871		<20	14	69	26	38	4	110	<1	1600
D2 VA09872		<20	8	20	<10	6	2	66	2	1700
D2 VA09878		<20	19	18	16	4	3	32	1	1100
D2 VA09919		<20	16	34	<10	16	6	45	<1	1200
D2 VA09920		<20	10	<10	31	7	5	68	2	1400
D2 VA09921		<20	21	<10	11	11	9	68	2	1400

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Certificate of Analysis

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-08735.6 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LIMITED
PROJECT: 605-142

SUBMITTED BY: R. STEWART
DATE PRINTED: 25-JAN-90

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Zn	Zinc	1	0.01 PCT		Atomic Absorption

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	1	2 150	1	SAMPLES FROM STORAGE	1

REPORT COPIES TO: MR. NILS VON FERSEN
MS. PAT WHITING
MR. BOB STEWART

INVOICE TO: MR. NILS VON FERSEN

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Certificate of Analysis

REPORT: V89-08735.6

DATE PRINTED: 25-JAN-90

PROJECT: 605-142 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Zn PCT
D2 VA06965		0.44

Registered Assayer, Province of British Columbi

Appendix C

Statement of Costs

Statement of Costs

Drilling Costs

Burwash Contract Drilling	
Drill hole NG89-1	$33,182.00
Drill hole NG89-2	$32,809.00

Site Preparation

Ellison Excavating	
Excavator 20 hours @ $95.00/hour	$ 1,900.00

Analytical

X-Ray Laboratories Limited	
28 samples @ $24.00/sample	$ 672.00
Bondar-Clegg & Company Ltd.	
211 samples @ $20.00/sample	$ 4,220.00

Salaries

D. Money	Field Geologist	10 days @ $180.00	$ 1,800.00
M. Vande-Guchte	Assoc. Geologist	10 days @ $145.00	$ 1,450.00
R.D. Stewart	Project Geologist	2 days @ $250.00	$ 500.00

Report	$ 100.00

Vehicle Rental

1 Truck, 16 days @ $20.00/day	$ 320.00

TOTAL COSTS:	**$76,953.00**

Appendix D

Statements of Qualifications

STATEMENT OF QUALIFICATIONS

I, Robert D. Stewart, an employee of Falconbridge Limited, with offices at 202 - 856 Homer Street, Vancouver, British Columbia, V6B 2W2, do hereby certify that:

1. I hold a B.Sc. (Hon.) in Geology from Mount Allison University, Sackville, New Brunswick, having graduated in 1975 and a M.Sc. in Geology from Carleton University, having graduated in 1979.

2. I reside at 2621 Bruce Road, R.R. #7, Duncan, B.C., V9L 4W4.

3. I have been continuously engaged as a geologist since 1979 with Newmont Exploration of Canada Limited (1979-1980) and Texasgulf/Kidd Creek Mines/Falconbridge (1980 to present).

4. I am a Fellow in the Geological Association of Canada.

5. I am the Project Geologist for the Nugget Option and that the work was completed under my direction.

Dated at Chemainus, B.C.
February 23, 1990

Robert Stewart

Robert Stewart
Project Geologist

STATEMENT OF QUALIFICATIONS

I, David P. Money, an employee of Falconbridge Limited, with offices at 202 - 856 Homer Street, Vancouver, British Columbia, V6B 2W2, do hereby cerify that:

1. I am a Field Geologist employed by Falconbridge Limited and I have been employed continously as a geologist by Falconbridge since May, 1987.
2. I am a graduate of the University of Toronto with a B.A.Sc. degree in Geological Engineering, Mineral Exploration Option (1987).
3. I have been employed in mineral exploration in British Columbia, Ontario and the Northwest Territories since 1982.
4. I am a licenced Professional Engineer with membership in the Association of Professional Engineers of Ontario (Registration Number 90239047-12).
5. I am an Associate Member of the Geological Association of Canada.

Dated this 30th day of January, 1990 at Chemainus, B.C.

David P. Money

David P. Money/P.Eng

D. P. MONEY

STATEMENT OF QUALIFICATIONS

I, **MICHAEL J. VANDE-GUCHTE**, an employee of Falconbridge Limited, with offices at 202 - 856 Homer Street, Vancouver, British Columbia, do hereby certify :

1. That I am a geologist residing at #302, 3040-Pine Street, Chemainus, British Columbia.
2. That I graduated with a B.Sc in geology from the University of Alberta in 1986.
3. That I have been employed in mineral exploration since 1987.

Dated this 23rd day of February, 1990

M. J. Vande-Guchte

M.J. Vande-Guchte
Associate Geologist
Falconbridge Ltd.

m 100 0 100 200 m
1: 5000

PRELIMINARY RECONNAISSANCE TYPE MAPPING
Scale and elevation datum based on limited ground control resulting in good relative but uncertain map accuracy.

SHEET INDEX
EE CW DE CW CE BW BE A

McElhanney

REF. No. 1113-0

The McElhanney Group Ltd.
1166 Alberni Street, Vancouver B.C., Canada

Compiled from aerial photography taken in May 1987 at an approximate scale of 1: 30 000

SCALE 1: 5000	CONTOUR INTERVAL 20 metres
DATE COMPILED Jan 15, 1990	SHEET NUMBER A

FALCONBRIDGE

CHEMAINUS CLAIMS

NUGGET OPTION GEOLOGY

Proj. No.: 142	Work by: JPM/DPM	Drawn by: VJG	Figure 4