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1988 DRILLING ASSESSMENT REPORT
ON THE
CHIP188 AND CHIP288 CLAIM GROUPS
CHEMAINUS JOINT VENTURE

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Situated 10 kilometres west of Chemainus, B.C.
in the Victoria Mining Division

48 53'N, 123 50'W
NTS 92B/13 and 92C/16

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

January 1989
Stan Clemmer

18,293

Vancouver,

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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SUMMARY AND CONCLUSIONS

This report summarizes the results of six drill holes drilled on the Chip188 and Chip288 claim groups. The claim groups are located within the Chemainus Joint Venture which is a 50-50 agreement between Falconbridge Ltd. and Esso Resources Canada Ltd. The target is a volcanic-hosted polymetallic massive sulphide deposit within the Sicker Group of Vancouver Island. Examples of this deposit type are Westmin's Buttle Lake that now list production plus reserves in excess of 21 million tons averaging 2% Cu, 6% Zn, 1.7 oz/ton Ag and 0.07 oz/ton Au. Abermin Corporation on claims adjacent to the Joint Venture list geological reserves in the order of 500,000 tonnes in the Lara deposit.

Drill hole CH88-42, was drilled to test a coincident shallow and deep IP anomaly near the powerline 700 metres north of the Anita area. The hole intersected felsic tuffs to 40.9 m and then remained in gabbro to the bottom of the hole at 196.9. No significant base metal mineralization was intersected in hole CH88-42. The IP anomaly appears to be caused by local concentrations of 10 to 15% ilmenite in gabbro or it may be due to a pendant of pyritic volcanic rock.

Two holes were drilled on section 22+00E to test pyritic felsic tuffs. Drill hole CH88-78 collared in the intercalated felsic and mafic tuffs and intersected a major fault zone at a depth of 119.0 metres. It then intersected two sections of pyritic felsic tuff and lapilli tuff separated by a large body of gabbro. No significant economic mineralization was intersected. The last part of the hole intersected mafic tuffaceous sediments. Drill hole CH88-80 collared in the same gabbro as CH88-78 which has "dyked out" most of the pyritic felsic tuff in this hole. Only 1.1 m of barren felsic tuff was intersected before the hole reached the mafic tuffaceous sediments.

The Watson Creek Area is located from line 1+00 E to line 6+00 E on the eastern edge of the Chip 3 Claim through the Chip 16 Fraction into the western portion of the Chip 2 Claim. It derives its name from its location immediately to the east of Watson Creek. The 1988 program consisted of 3 diamond drill holes and along section 2+00 E. Program objectives were to: 1) Test deep IP chargeability anomaly at 0+80 N and 2) Develop a stratigraphic section. The drilling was entirely within McLaughlin Ridge Formation volcaniclastics and sediments. CH88-77 collared in sodium depleted (< 1.0 % Na₂O) felsic tuffs with 1 % disseminated pyrite and strong sericite alteration. The tuffs contain about 500 ppm Mn and 1000 ppm Ba with no anomalous base or precious metal values. The

graphitic argillite intersected in CH88-79 contains 10 % pyrite and was the cause of the IP chargeability anomaly. It did not contain significant levels of base or precious metals.

LOCATION, ACCESS, TERRAIN

The Holyoak-Brent claim group is located 10 to 15 kilometres west of Chemainus on southeast Vancouver Island, in southwestern British Columbia (Figure 1). Chemainus lies just east of the Trans-Canada Highway about 60 kilometres northwest of Victoria. Established deep water marine port facilities and infrastructure in Chemainus and vicinity would enhance the economics of any orebodies discovered.

Access to the claim group is by MacMillan Bloedel's main haul road known as the Copper Canyon Mainline which follows the Chemainus River. The claims may be accessed via a 4X4 secondary dirt road that leaves the Copper Canyon road just beyond mile 12.

Timber and surface rights are owned by CIP, MacMillan Bloedel and the Crown. Access permits are required and damage to timber is subject to compensation charges.

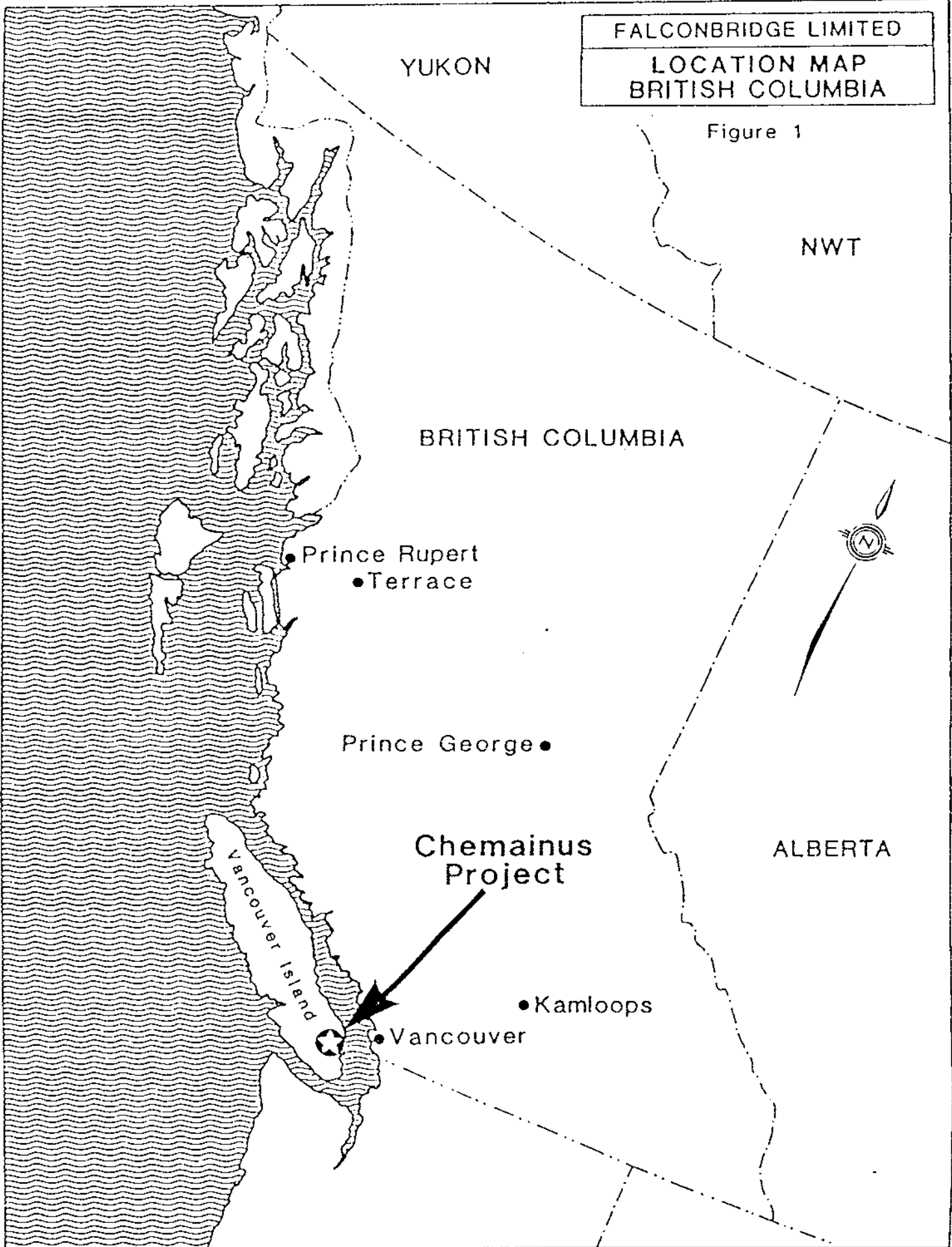
The terrain is characterized by rolling topography and deep incised creek valleys. All of the property has been logged and is in various stages of regrowth with fir, hemlock, balsam, and local pine. The vegetation varies from dense second growth to clear cut areas. Elevations vary from 500 to 1100 metres.

A mild climate prevails with warm, dry summers and autumns, and short winters. Spring and late fall are usually very wet. Higher elevations (above 1000 metres) tend to have more severe winter temperatures and heavy snowfall but most areas are clear of snow by the end of May. Dry forest conditions and extreme fire hazard usually occur from mid-July to mid-September and forest closures during this period are common.

FALCONBRIDGE LIMITED

LOCATION MAP
BRITISH COLUMBIA

Figure 1



YUKON

NWT

BRITISH COLUMBIA

• Prince Rupert
• Terrace

Prince George •

Chemainus
Project

ALBERTA

• Kamloops

• Vancouver

Vancouver Island

CLAIM STATUS

The Chip188 and Chip288 claim groups consists of 16 claims with 123 units within the Victoria Mining Division. Four of the claims are fractions. The status of the claims is listed below and the location of the claims is shown in figure 2. The claims are jointly owned by Esso Resources Canada Limited and Falconbridge Ltd.

The claims in the Chip 188 group are as follows.

CLAIM	RECORD NO.	UNITS	STAKING DATE	EXPIRY DATE
Chip 1	720	20	Nov 11, 1982	Dec 7, 1998
Chip 5	920	4	May 16, 1983	May 24, 1997
Chip 8	1424	4	Feb 22, 1985	Feb 27, 1998
Chip 11	1526	1	May 31, 1985	Jun 17, 1997
Chip 12 Fr	1608	1	Dec 11, 1985	Dec 12, 1998

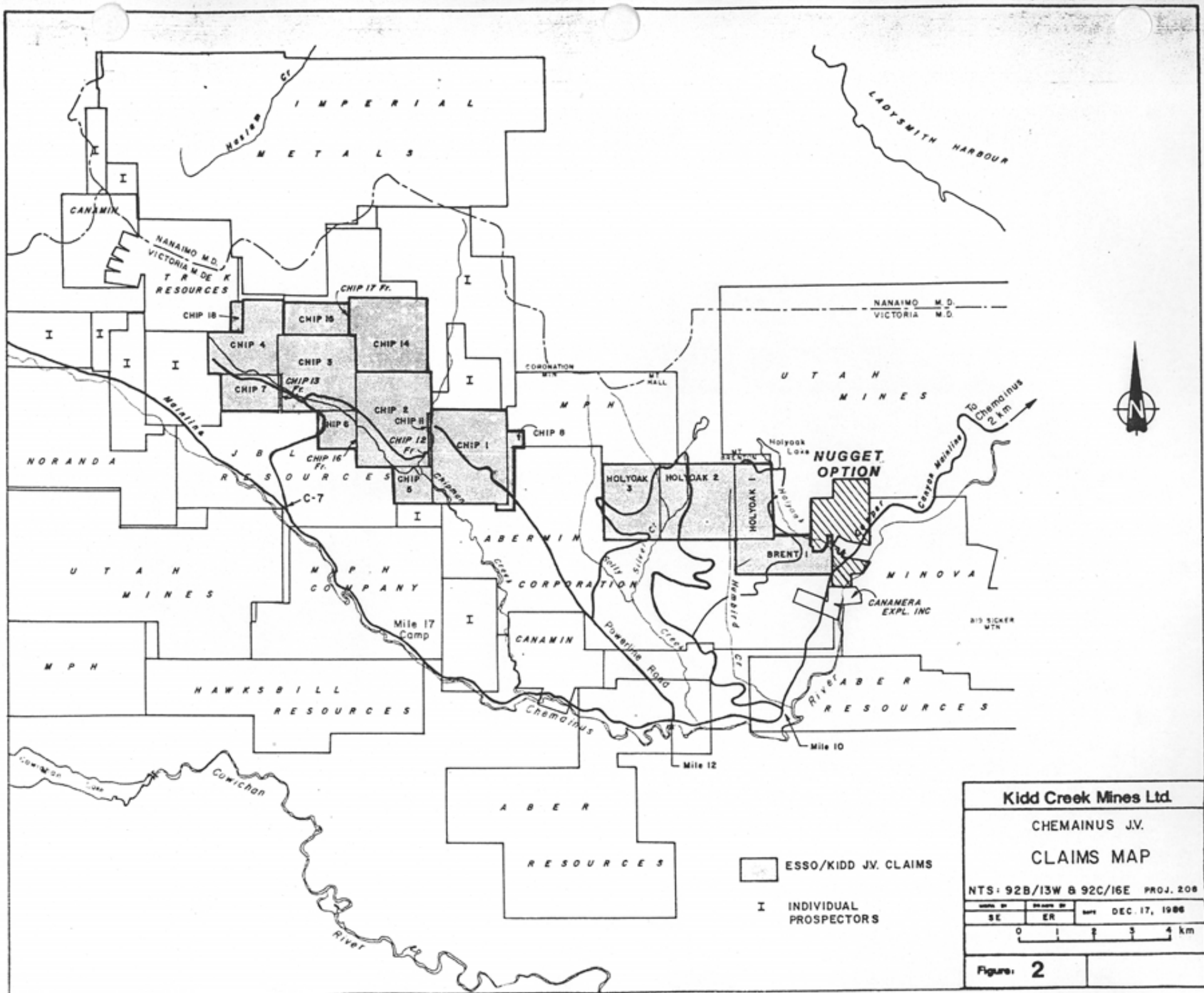
30 units

The claims in the Chip 288 group are as follows.

CLAIM	RECORD NO.	UNITS	STAKING DATE	EXPIRY DATE
Chip 2	721	20	Nov 13, 1982	Dec 7, 1998
Chip 3	722	16	Nov 13, 1982	Dec 7, 1998
Chip 4	723	16	Nov 15, 1982	Dec 7, 1998
Chip 6	921	4	May 17, 1983	May 24, 1998
Chip 7	922	6	May 18, 1983	May 24, 1998
Chip 13 Fr	1609	1	Dec 11, 1985	Dec 12, 1998
Chip 14	2092	16	Feb 16, 1988	Feb 29, 1998
Chip 15	2093	8	Feb 16, 1988	Feb 29, 1998
Chip 16 Fr	2185	1	Jul 5, 1988	Jul 13, 1998
Chip 17 Fr	2186	1	Jul 8, 1988	Jul 13, 1998
Chip 18	2230	4	Sep 28, 1988	Sep 28, 1998

93 units

Expiry dates are subject to approval by Gold Commissioner.



Kidd Creek Mines Ltd.

CHEMAINUS J.V.

CLAIMS MAP

NTS: 92B/13W & 92C/16E PROJ. 208

DATE OF	BY WHOM	DATE
SE	ER	DEC 17, 1988

Figure: **2**

EXPLORATION HISTORY

Early property history on the Chip claims has been described by Everett and Cooper (1984):

"The Chip claims have seen sporadic periods of exploration activity since the early 1900's. The oldest recorded work was in 1915 with the sinking of a 50 foot shaft on a weak chalcopyrite-bearing pyrrhotite vein (part of the Anita Showing). Interest in the Sicker Group schists intensified in 1944 with the development of the Twin J massive sulphide-precious metal deposit, 15km to the southeast. The volcanic belt undergone several periods of staking and prospecting.

In recent years, development of Westmin's deposit at Buttle Lake Uplift has renewed exploration interest in the Chemainus area. An induced polarization was completed by Cominco in the vicinity of the Chip 4 claim in 1966 and a soil survey was completed by UMEX in the vicinity of the Chip 1 in 1978."

In 1983, Esso conducted a field program on the Chip claim group. Their work include 2500 scale geologic mapping, soil and stream sampling, line cutting, HLEM and magnetometer surveys of the Chip 1 and 2 and part of the Chip 3 claims. Part of the favourable felsic volcanic lithology was defined by mapping and several weak, copper-zinc soil anomalies and two weak conductors were indentified on the Chip 1 claim. Several whole rock analyses suggest the presence of Na₂O depletion on the Chip 1 claim.

Kidd Creek Mines Ltd. entered into an option agreement for a joint venture with Esso Minerals in August 1984. The entire Chemainus property (Brent-Holyoak and Chip claims) was flown with Questor's Mark VI helicopter INPUT system in September 1984. The following year, ground follow-up of selected airborne anomalies was started using time domain IP (Schlumberger array), VLF and magnetometer surveys, in conjunction with soil sampling and mapping of the grid lines. Most of the work focused on the Brent 1 and Holyoak 1, 2 and 3 claims and resulted in drilling 1,534 metres in 6 holes. Two of the holes intersected significant sulphides. The geophysical surveys also covered selected parts of the Chip claims.

In 1986, exploration focused on the Chip claims. Work included 5,000 scale mapping of most of the claims and expansion of the grid to cover the entire Chip claim block on a 200 metre line spacing with IP, VLF and magnetometer surveys. Selected areas were covered with a deep penetrating

IP survey using Gradient Array, results of which guided the late fall drilling program. A total of 1,854 metres was drilled in six widely spaced holes, four of which intersected significant sulphides (three on the Chip 1 claim). The Anita shaft area was trenched with an excavator, mapped in detail and the exposed pyrrhotite lens was chip sampled.

In 1987, a drill program was carried out over the Chip 1 claim and 6,753.7 metres of NQ core was drilled in 18 inclined holes. Drilling traced a pyritic felsic tuff unit for 600 metres across the Chip 1 claim. One hole intersected economic sulphides; hole CH87-37 intersected 2.5 metres of pyritic felsic tuff that contains 2.37% Cu, 0.73% Pb, 2.74% Zn, 41.8 g/t Ag, 0.7 g/t Au and 0.95% Ba. All holes were probed using the Crone Pulse EM system. Further Gradient Array induced polarization surveys were carried over the Chip claims.

REGIONAL GEOLOGY

Introduction

Vancouver Island is made up of two allochthonous terrains known as the Insular and Pacific Belts (figure 3). The allochthonous Insular belt makes up most of Vancouver Island and is composed of a varied assortment of volcanic, sedimentary, metamorphic and plutonic rocks that range in age from early Paleozoic to Tertiary (Muller 1981). It is separated from the Mesozoic and Tertiary volcanic and sedimentary rocks of the Pacific Belt by the San Juan and Leech River faults near the southern end and west coast of Vancouver Island.

The Chemainus property is underlain by sedimentary and volcanic rocks of the Sicker Group. Clapp(1912) mapped the southern half of Vancouver Island and noted a series of deformed volcanic and sedimentary rocks that extend from Saltspring Island to Port Alberni and named them the Sicker Series. The Sooke and Duncan area was mapped by Cooke (1917) who also recognized the Sicker Series. Fyles (1955) completed mapping in the Cowichan Lake area and was the first to refer these rocks as the Sicker Group.

The Sicker Group is exposed in five separate areas on Vancouver Island (figure 3). The areas are the Buttle Lake Uplift, the Cowichan-Horne Lake Uplift, Nanoose area and two unnamed areas northwest and southwest of Buttle Lake. The Chemainus project is located at the southeast end of the Cowichan-Horne Lake Uplift. The Sicker Group is thought to be the oldest rocks exposed on Vancouver Island. They are unconformably overlain by the Vancouver Group volcanics and sediments. The bulk of the Vancouver Group is made up of up to 4500 metres of basaltic flows and pyroclastics of the Karmutsen Formation (Muller, 1981). The preceding older rocks are intruded by the Lower to Middle Jurassic intermediate to felsic intrusive rocks referred to as the Island Intrusions. Finally, the rocks are unconformably overlain by relatively undeformed shale, siltstone, sandstone, conglomerate, and locally coal of the Late Cretaceous Nanaimo Group.

Stratigraphy of the Sicker Group

Muller (1980) after extensive work on Vancouver Island proposed that the Sicker Group could be divided into four units as listed in Table 2. Previous work completed on the Chemainus project has used the Myra and Sediment Sill unit divisions of Muller.

Table 1 : Muller (1980) Stratigraphy of the Sicker Group

Buttle Lake Formation

Limestone, calcarenite, crinoidal, commonly recrystallized; interbedded with subordinate or equal thickness of calcareous siltstone and chert; some diabase sills. (thickness 400m ?) Age indicated by fossils is Pennsylvanian to Permian.

Sediment-Sill Unit (not a formational name)

Thinly bedded to massive argillite, siltstone and chert with interlayered sills of diabase. (no estimate of thickness given by Muller)

Myra Formation (new name)

Basic to rhyodacitic banded tuff, breccia and (?) lava; thinly bedded to massive argillite, siltstone, chert. (thickness estimated to be 1000m). Overlies Nitinat possibly with minor unconformity and the base of the Myra is defined by the first appearance of bedded volcanoclastic rocks. A few K-Ar age determinations indicate that an Early Jurassic thermal metamorphic event has affected the Myra formation. Age dating by U-Pb technique indicates a late Silurian to Devonian age.

Nitinat Formation (new name)

Metabasaltic lavas, pillowed or agglomeratic, commonly with large conspicuous unresorbed pyroxene phenocrysts and amygdules of quartz and dark green minerals; minor massive to banded tuff. (thickness estimated to be 2000m)

Massay (1986) after completing mapping on the Cowichan-Horne Lake Uplift area now proposes a new set of formations to sub-divide the group. The new formation names are an improvement over Muller and will be adopted for the Chemainus project. The units are listed in Table 3 and are briefly described below; oldest to youngest. The following descriptions are taken from Massey(1988).

Table 2 : Stratigraphy of the Duncan and Chemainus River
Area. (Massaey, 1988)

Upper Cretaceous

Nanaimo Group

Cedar District Formation : argillite, shale, sandstone
and siltstone

Extension-Protection Formation : conglomerate, sandstone

Haslam Formation : argillite, shale, sandstone and siltstone

Comox Formation : conglomerate, sandstone, siltstone

Upper Triassic

Vancouver Group

Karmutsen Formation : mafic flows and pyroclastics,
minor sediments

?Middle Devonian to Lower Permian

Sicker Group

Mount Mark Formation : limestone, chert, siltstone

Cameron River Formation : chert, argillite, tuff,
tuffaceous sandstone,
sandstone, siltstone














McLaughlin Ridge Formation : mafic to felsic
volcanics and
volcaniclastics

Nitinat Formation : pyroxene-feldspar porphyritic
basaltic andesites

FIGURE 3 : Regional Geology (after Muller 1981)

Geological sketch map of Vancouver Island.

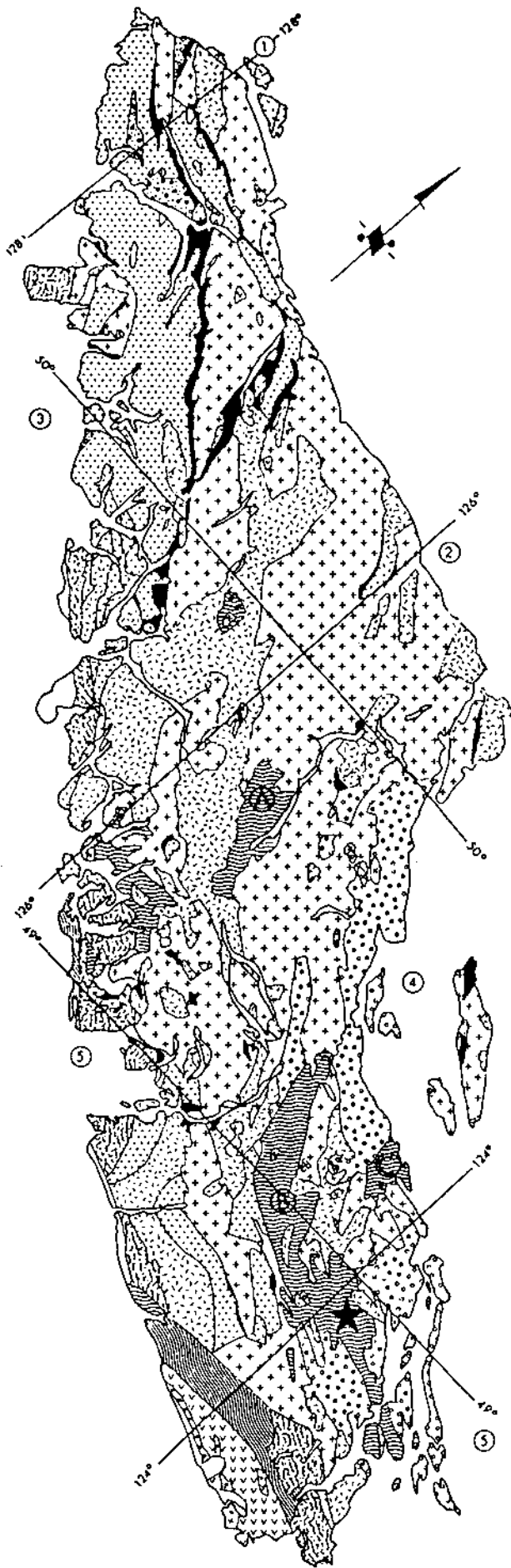
LEGEND

	CARMANAH GROUP	MIDDLE TERTIARY
	CATFACE INTRUSIONS	EARLY TO MIDDLE TERTIARY
	METCHOSIN VOLCANICS	EARLY TERTIARY
	NANAIMO GROUP	LATE CRETACEOUS
	QUEEN CHARLOTTE GROUP KYUQUOT GROUP	LATE JURASSIC TO
	LEECH RIVER FORMATION PACIFIC RIM COMPLEX	EARLY CRETACEOUS
	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

★ HOLYOAK-BRENT CLAIM GROUP

- 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



Nitinat Formation

The oldest rocks of the Sicker Group are pyroxene-feldspar porphyritic basaltic andesites of the Nitinat Formation. The volcanics occur as agglomerates, breccias, lapilli tuffs and crystal tuffs. Flows, pillowed flows and minor bedded tuff and volcanic sandstone occur locally. This unit is equivalent to the Nitinat formation of Muller (1980). There is no age dating currently available for the Nitinat but because it lies stratigraphically below the McLaughlin Ridge Formation it must be Late Devonian or older.

McLaughlin Ridge Formation

The intermediate to felsic, locally mafic volcanics and volcanoclastics of the McLaughlin Ridge Formation apparently conformably overlie the Nitinat Formation. In the Duncan area and the vicinity of the Chemainus property this formation is dominantly made up of volcanic material with only minor tuffaceous sediments. Further to the south around Cowichan Lake this formation is composed of massive to lithic tuffites with interbedded sediments. The volcanic rocks yield U/Pb ages of Late Silurian to Devonian (Muller, 1980).

The Saltspring Intrusions are a group of felsic intrusions that yield Early Devonian radiometric ages (Brandon et al., 1986) and for this reason are thought to be cogenetic with the McLaughlin Ridge volcanics. These rocks are exposed just north of the McLaughlin Ridge Formation towards the southeast end of the Cowichan-Horne Lake Uplift. They are however not seen anywhere in direct contact with the volcanics so their relationship is uncertain.

The top of the McLaughlin is marked by a distinctive purple or maroon schistose heterolithic breccia and lapilli tuff. Falconbridge geologists refer to this unit as the purple pyroclastic unit.

The McLaughlin Ridge formation is equivalent to the lower parts of the Myra Formation of Muller (1980).

Cameron River Formation

The Cameron River Formation is a dominantly epiclastic package that forms the upper portion of the Sicker Group. Contacts with the lower volcanic units are often faulted but where present the contact is unconformable. The lower 200 metres of the unit is composed of ribbon cherts, laminated cherts and cherty tuffs. The bulk of the unit is

composed of thinly bedded, turbiditic sandstone-siltstone-argillite intercalations. The Cameron River Formation is equivalent to the upper part of Muller's Myra Formation together with the sediments of the informal sediment-sill unit.

Mount Mark Formation

Massey(1988) recognizes a Buttle Lake Formation equivalent south of the Cowichan River and these calcarenites are placed in a new formation called the Mount Mark Formation. Brandon et al.(1986) report an outcrop of interbedded limestone and chert in the Copper Canyon adjacent to the Chemainus property that yields Early Permian conodonts.

Karmutsen Formation

A brief mention of the Karmutsen Formation of the Vancouver Group is necessary here. The Karmutsen basalts were deposited during an extensional event in the Late Triassic. The underlying Sicker Group rocks were dilated and intruded by numerous gabbro sills, dykes and bodies at this time. The upper half of the Sicker Group and in particular the Cameron River Formation contains more gabbroic material than the lower half. These gabbros are the 'sill' in Muller's sediment-sill unit.

Buttle Lake Uplift Stratigraphy

The Buttle Lake Uplift Sicker Group rocks host Westmin's Buttle Lake deposits and the current stratigraphic interpretations are summarized below. Juras(1987) proposes to divide the Sicker Group rocks at Buttle Lake into several formations as shown in figure (n+3). There is a broad similarity between the stratigraphy of the Cowichan-Horne Lake Uplift of Massey(1988) and that of Buttle Lake. Juras indicates that the Price formation may correlate with the Nitinat formation. There is at present no age dating or detailed chemical information to support this. The McLaughlin Ridge Formation of Massey(1987) correlates with the Myra Formation. The Thelwood formation probably correlates with the lower chert-rich part of the Cameron River Formation in the Cowichan-Horne lake uplift. The mafic volcanics higher in the Cameron River Formation may correlate with the Flower Ridge Formation of Juras.

Table 3 : Buttle Lake Uplift Stratigraphy of the Sicker Group (Juras, 1987)

Early Permian	Henshaw Formation	5 - 100m	Conglomerate, epiclastic deposits, vitric tuff
(unconformity)			
Early Permian to Pennsylvanian	Buttle Lake Formation	300m	Crinoidal limestone and minor chert
Pennsylvanian or Mississippian	Flower Ridge Format	650 + m	Moderately to strongly amygduloidal lapilli-tuff, tuff-breccia, minor tuff and flows
Early Mississippian (?)	Thelwood Formation	270 to 500 m	Subaqueous pyroclastic deposits, siliceous tuffaceous sediments, mafic sills.
Late Devonian	Myra Formation	310 to 440 m	Intermediate to felsic volcanics, volcani-clastics, minor sediments, massive sulphide mineralization.
Late Devonian or older	Price Formation	300 + m	Feldspar-pyroxene porphyritic andesite flows, flow breccia, minor pyroclastic deposits.

PROPERTY GEOLOGY

The Chip claims lie within the Cowichan-Horne Lake Uplift, in which lower Paleozoic Sicker Group rocks are exposed. The geology of the Chip claims is shown on figure 4. The claims are underlain by felsic and mafic volcanic rocks of the Myra Formation that trend northwest and dip steeply. The volcanic rocks are flanked on the north side by dark coloured pelitic and cherty sediments of the "Sediment Sill Unit" of Muller or the Cameron River Formation of Massey. These rocks are intruded by gabbro bodies that vary from less than one metre to over 100 metres in thickness. To the south the Sicker Group rocks are unconformably overlain by the Nanaimo Group sediments.

DRILLING

The drilling of hole CH88-42 was commenced on April 14 and completed on April 17, 1988. Drill holes CH88-78,79,80,81 and 82 were drilled in the period from October 13 to 26, 1988. The core size was NQ and a total of 1,445.90 metres were drilled.

The contractor for the job was Burwash Enterprises Ltd. of Cobble Hill, B.C. who used a Longyear Super 38 drill equipped with air cooled diesel engines. A D-6H Caterpillar tractor was used to move the drill. Site preparation was completed by a John Deer 590 Excavator contracted from Ellison Excavating Limited of Duncan, B.C.

All timber destroyed during pad construction was broken up, placed flat on the ground and often buried.

The location of drill hole CH88-42 is shown on figure 5 and the location of drill holes CH88-78,79,80,81 and 82 is shown in figure 6. The drill logs and analytical results are listed in appendix 1. Each core run was converted to metric depth, and marked on pre-cut wooden blocks. The drill core was then systematically photographed and logged. A dip test was taken using a single shot Sperry Sun instrument every 100 metres when possible. Generally, any volcanic rock containing greater than 2% pyrite was split in less than one to two metre intervals and submitted for geochemical analysis. Each individual volcanic unit was sampled for alteration by taking a 10cm split piece of core every 1 to 2 metres through the unit and submitting this composite sample for whole rock analysis. The alteration samples do not exceed 30 metres. Whole rock samples of 10 to 20 cm of split core were collected to characterize the volcanic rock types. A skeletal core record was routinely collected of all major rock units collected. The logging was conducted using Derry, Michener, Booth, and Wahl's LOG II computer system. Log data was entered directly into a Toshiba 1100 computer and then transferred into a Toshiba 3200 computer in the evening.

Bondar-Clegg of North Vancouver analysed the split core samples by geochemical methods for Cu, Pb, Zn, Mo, Ag, Fe, Mn, Cd, Co, Ni, As, and Ba. An HNO₃-HCl hot extraction and analysis by DC Plasma were used for all elements except Au and Ba. A fire assay preparation with AA finish was used for Au and X-ray Fluorescence was used to give a total analysis for Ba. If a sample contains more than 3000 ppm Zn, 30 ppm Ag, or 1000 ppb Au then the samples are re-analysed using standard assay techniques for the respective element.

X-Ray Assay Laboratories of Don Mills, Ontario ana-

lysed the lithogeochemistry samples. The analysis includes a major oxide x-ray fluorescence package plus Cu, Zn, Ni, and Ba.

All drill core (including previous drilling) is stored on metal core racks at a farm just outside of Chemainus, at 3037 River Road.

OBJECTIVES AND RESULTS OF DRILLING

Drill hole CH88-42 was drilled to test a coincident shallow and deep IP chargeability anomaly. The hole is shown on figure 7. The hole intersected barren felsic tuffs to 40.9 metres and then entered gabbro and remained in gabbro until the end of the hole. The IP anomaly may have been caused by concentrations of up to 15% ilmenite in the gabbro or a pendant of volcanics within the gabbro above the drill hole.

Drill holes CH88-78 and 80 were drilled on section 22+00E and are shown on figure 8. CH88-78 collared in the intercalated felsic and mafic tuffs and intersected a major fault zone at 119.0 metres. The hole then cut a series of pyritic felsic tuff and lapilli tuff separated by a large gabbro body. The felsic lapilli tuffs and tuffs south of the gabbro are of the sericitic and pyritic. Unfortunately, no significant economic mineralization was intersected. The hole ended in a sequence of mafic tuffaceous sediments. CH88-80 collared in the same gabbro as CH88-78 intersected which has "dyked out" most of the felsic tuff in this hole. Only 1.1 m of barren felsic tuff was intersected before the hole reached the mafic tuffaceous sediments.

The Watson Creek Area is located from line 1+00 E to line 6+00 E on the eastern edge of the Chip 3 Claim through the Chip 16 Fraction into the western portion of the Chip 2 Claim. It derives its name from its location immediately to the east of Watson Creek. The 1988 program consisted of 3 diamond drill holes along section 2+00 E (see figure 9). Program objectives were to test deep IP chargeability anomaly at 0+80 N and develop a stratigraphic section. The drilling was entirely within McLaughlin Ridge Formation volcanoclastics and sediments. Predominantly felsic tuffs with minor mafic tuffs and sediments occur from 3+90 to 2+40 N. Within these felsic tuffs are weakly pyritic and sodium depleted felsic tuffs (3+10 to 3+50 N). From 2+40 to 0+80 N mafic tuffs with thin felsic tuff beds were intersected. Predominantly felsic tuffs occur from 0+80 N to 1+20 S. A 6 m thick argillite (0+50 N) and several minor mafic tuffs and cherts are interbedded within the felsic tuffs. Felsic tuffs vary from being strongly sericitic (3+10 to 3+50 N) to being chloritic. They are aphyric to strongly porphyritic with quartz and/or

feldspar phenocrysts. Lapilli occur locally. Mafic tuffs are generally chloritic with trace to abundant epidotized feldspar crystals, local chloritized hornblende crystals and epidotized lapilli. The mafic from 1+80 to 2+10 N is a chlorite - biotite - calcite schist with local garnets and quartz augens. Trace disseminated and fracture controlled pyrite occurs throughout the felsic and mafic tuffs. Cherts are generally blocky and white to creamy in colour. Argillites are black, graphitic, contain up to 10 % pyrite and occasionally are interbedded with thin cherts. Bedding and a strong subparallel foliation strikes 120 degrees and dips from 74 to 85 degrees to the north. Numerous faults occur and one small (10 metre) tight isoclinal fold was observed.

CH88-77 collared in sodium depleted ($< 1.0 \% \text{ Na}_2\text{O}$) felsic tuffs with 1 % disseminated pyrite and strong sericite alteration. The tuffs contain about 500 ppm Mn and 1000 ppm Ba with no anomalous base or precious metal values.

The graphitic argillite intersected in CH88-79 contains 10 % pyrite and was the cause of the IP chargeability anomaly. It did not contain significant levels of base or precious metals.

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STATEMENT OF COSTS

COSTS FOR THE CHIP188 GROUP

Drilling Costs

Burwash Enterprises Ltd.	
Hole CH88-42, 196.9 metres	\$11,377.58

Site Preparation

Ellison Excavating Ltd.	
Excavator 8hrs @ \$90.00/hr	\$ 720.00

Analytical

X-Ray Laboratories Ltd.	
Whole Rock 5 samples @ \$23.50	\$ 117.50
Alteration 1 samples @ \$18.90	\$ 18.90

Bondar-Clegg & Co. Ltd.	
Geochemical Rock samples 1 @ \$23.00	\$ 23.00

Labour

David Money, Geologist 3 days @ \$150.00	\$ 450.00
Trevor Cowans, Splitter 2 days @ \$100.00	\$ 200.00
Bryan Cochrane, Swamper 1 day @ \$120.00	\$ 120.00

Room & Board	
3 days @ \$30.00/day	\$ 90.00

Report	\$ 500.00
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Vehicle Rental	\$ 320.00
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Total Expenditures	<u>\$13,936.98</u>
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COSTS FOR THE CHIP288 GROUP

Drilling Costs

Burwash Enterprises Ltd.

Costs for drill holes CH88-
78,79,80,81,82 ; 1249.0 metres \$77,860.81

Site Preparation

Ellison Excavating Ltd.

Excavator 7 days @ \$720.00/day \$ 5,040.00

Analytical

X-Ray Laboratories Ltd.

Whole Rock 25 samples @ \$23.50 \$ 587.50
Alteration 104 samples @ \$18.90 \$ 1,965.60

Bondar-Clegg & Co. Ltd.

Geochemical Rock samples 163 @ \$23.00 \$ 3,749.00

Labour

David Money, Geologist 7 days @ \$150.00 \$ 1,050.00
John Pattison Geologist 9 days @ \$150.00 \$ 1,350.00
M. VandeGuchte Geologist 6 days @ \$150.00 \$ 900.00
Trevor Cowans Splitter 14 days @ \$100.00 \$ 1,400.00
Ron Barrick Splitter 14 days @ \$ 90.00 \$ 1,260.00
Bryan Cochrane, Swamper 7 days @ \$120.00 \$ 840.00

Room & Board

22 days @ \$30.00/day \$ 660.00

Report \$ 500.00

Vehicle Rental

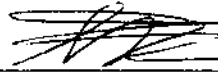
2 trucks, 14 days @\$40.00/day \$ 1,120.00

Total Expenditures \$98,282.91

STATEMENT OF QUALIFICATIONS

Stanley G. Clemmer

- 1) I received a Honours BSc. in Geology from Carleton University, Ottawa in 1978.
- 2) I have practiced my profession continuously since graduation in Canada; a period of 10 years.
- 3) I am fellow of the Geological Association of Canada.
- 4) I wrote this report and supervised the work.




Stanley G. Clemmer, BSc, FGAC

STATEMENT OF QUALIFICATIONS

I, David P. Money, of 9977 Cochrane Crescent, Chemainus, British Columbia state that:

- 1) I graduated in 1987 with a B.A.Sc. in Geological Engineering from the University of Toronto.
- 2) I have been actively involved in mineral exploration since 1982.
- 3) I am an Associate Member of the Geological Association of Canada and a Member of the B.C. and Yukon Chamber of Mines.

Dated at Chemainus on November 22, 1988

A handwritten signature in cursive script that reads "David P. Money". The signature is written in dark ink and is positioned above the printed name.

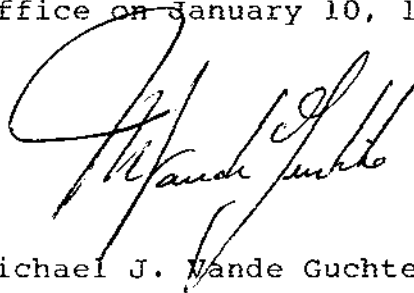
David P. Money, B.A.Sc.

STATEMENT OF QUALIFICATIONS

I, Michael Vande Guchte, of Vancouver, British Columbia state that :

1. I graduated in 1986 with a B. Sc. degree, specialization in geology, from the University of Alberta.
2. I have been employed in the mineral exploration industry since 1987 and I am currently employed as an Associate Geologist for Falconbridge Limited.

Dated at the Vancouver Exploration
Office on January 10, 1989

A handwritten signature in cursive script, appearing to read "Michael J. Vande Guchte". The signature is written in dark ink and is positioned above the printed name.

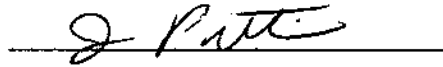
Michael J. Vande Guchte

STATEMENT OF QUALIFICATIONS

I, John Pattison, of Chemainus, British Columbia state that:

- 1) I graduated in 1983 with a B.Sc. degree, specialist in geology from the University of Toronto.
- 2) I have been employed in the mineral exploration industry since 1983 and I am currently working as a Field Geologist for Falconbridge Limited.
- 3) I am a member of the Pacific Section of the Geological Association of Canada.

Dated at Chemainus on November 22, 1988

A handwritten signature in cursive script, appearing to read "J. Pattison", is written over a horizontal line.

John Pattison, B.Sc.

APPENDIX 1

DRILL LOGS AND ANALYTICAL RESULTS

Summary Log: DDH CH88-42
Location: 30+00 E, 4+80 N; Chip 1 Claim
Azimuth: 030, Dip: -50
Hole Completed: April 18, 1988
Core Logged By: D.P. Money

0.0 - 4.8 Casing.
4.8 - 29.0 Intercalated felsic and mafic tuffs.
29.0 - 40.9 Felsic quartz eye tuff.
40.9 - 196.9 Gabbro, fine grained plagiophyric to coarse grained, with
local occurrences of 1 to 2 % chalcopyrite over intervals
up to 0.7 m. There are two small, up to 1.8 m, inclusions:
one of argillite and one felsic tuff.
196.9 End of hole.

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

MOLE No: Page Number
ch88-42 4

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)
		fine-grained medium to light green matrix with trace fine-grained ilmenite.											
118.3	118.9	White bull quartz - chlorite vein.											
118.9	127.8	As from 115.6 to 118.9 with minor local epidotization.											
127.8	133.0	MAFIC INTRUSIVE Strongly sheared gabbro with strong pervasive carbonatization, white calcite streaks with local brown carbonate specks. A piece of faulted felsic ash tuff occurs at 130.5. Is sheared at 45 degrees to core axis. There is 1 to 2 %, < 1 mm, fine-grained ilmenite with purple rims.											
133.0	137.4	MEDIUM TO COARSE-GRAINED GABBRO fine-grained gabbro with local epidote veins, at 60 to 90 degrees to core axis, 0.5 to 4 cm.											
137.4	142.3	MEDIUM TO COARSE-GRAINED GABBRO Coarse grained gabbro with up to 1 cm chloritized hornblendes, 40 %, 5 to 10 % purple sphene rimmed ilmenite (?). Epidote is in matrix with local feldspar clots. There is trace chalcopyrite with clots at 140.0 and 141.4. There is 0.2 m lost core from 142.0 to 142.6.											
142.3	196.9	FELDSPAR PORPHYRITIC GABBRO Medium green gabbro with 5 to 20 %, averages 12 to 15 %, 1 to 4 mm, feldspar grains. Has trace to 2 % ilmenite and minor local fine-grained leucoxene. There are numerous local 0.5 to 2 cm fracture controlled quartz - calcite veinlets. Strongly sheared from 169.6 to 170.6 at 31 degrees to core axis. Is massive with trace blocky, highly fractured core. Minor chloritic clay fault gouge at 192.3 and 193.5. At 193.5 is at 14 degrees to core axis for the 2 cm of fault gouge. From 167 to 168 there are minor fault slips at angles near to the core axis.											

End of Hole : 646 feet, 9:00 a.m. On Monday April 18, 1988.

Total Lost Core: 3.2 m % Recovery = 98.4%.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	TSIO2	TAL2O3	ICAO	INGO	INA2O	IX2O	TFE2O3	TIIO2	TP2O5	IMMO	ILOI	SUM	BA	AI	NACA
VA00562	14.10	14.20	73.70	13.90	1.85	1.02	2.17	2.65	2.36	0.27	0.07	0.04	2.00	100.03	1380.	48.	4.
VA00563	32.40	32.50	71.60	14.80	2.88	0.40	5.00	1.89	0.49	0.24	0.05	0.02	2.93	100.30	2880.	23.	8.
VA00564	38.00	38.10	73.10	12.60	2.68	0.79	3.70	1.43	2.27	0.23	0.06	0.03	3.00	99.89	598.	26.	6.
VA00565	81.00	81.10	53.20	13.40	6.35	2.41	4.00	1.71	11.30	1.51	0.55	0.20	5.54	100.17	218.	28.	10.
VA00566	99.50	99.60	66.80	14.60	4.03	0.74	6.24	0.78	3.76	0.22	0.03	0.07	3.08	100.35	493.	13.	10.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	Sg (ppm)	SK (ppm)	SA (ppm)	Y (ppm)	JK (ppm)	VB (ppm)	CU (ppm)	Zn (ppm)	NI (ppm)	CODES		
												ROCK	ALT	MIN
VA00562	14.10	14.20	56.0	110.0	1380.0	28.0	91.0	<10.0	49.0	12.0	<10.0	TEA0	?	A
VA00567	22.40	22.50	38.0	227.0	2880.0	15.0	89.0	<10.0	28.0	<10.0	<10.0	TEA0	?	A
VA00564	38.00	38.10	30.0	29.0	599.0	17.0	92.0	11.0	12.0	<10.0	<10.0	TEA0	?	A
VA00565	81.00	81.10	65.0	92.0	218.0	62.0	232.0	44.0	51.0	156.0	<10.0	EA	?	DEP
VA00566	99.50	99.60	12.0	104.0	492.0	152.0	525.0	62.0	32.0	60.0	<10.0	TEA	?	A

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	SI02	AL2O3	CaO	MgO	Fe2O	K2O	Fe2O3	XTIO2	SP2O5	ZnO	LiO	SUM	BA	AI	NACA
9A01032	29.00	40.00	71.70	13.60	3.38	0.79	3.45	2.05	1.73	0.24			3.23	100.07	1890.	30.	7.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	ZK (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	CODES		
												ROCK	ALT	MIN
9A01032	29.00	40.00			1899.0				49.0	24.0	17.0	TEAD		A

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	CUZN	EIS	FE
UA01576	80.20	82.00	190.0	44.0	150.0	<0.5	<5.0	17.0	6.0	<5.0	17.0	1.0	3.0	807.0	23.	1.	5.

Summary Log: DMI C1188-78
Location: 22+00 E, 0+40 S; Chip 2 Claim
Azimuth: 210, Dip: -45
Hole Completed: October 20, 1988
Core Logged By: J. Pattison

0.0 - 15.2	Casing.
15.2 - 41.7	Chloritic felsic quartz-feldspar crystal tuff
41.7 - 74.1	Mafic lapilli tuff
74.1 - 124.5	Felsic tuff; occasional bed of mafic tuff up to 3.5 m wide. Major fault zone (Fulford Fault Splay) between 124.5 and 126.1 m.
124.5 - 134.7	Mafic lapilli tuff; fault zone from 124.5 to 126.1 m
134.7 - 137.5	Felsic tuff/flow
137.5 - 141.6	Gabbro
141.6 - 190.4	Intermediate tuff; andesitic to dacitic in composition
190.4 - 192.6	Chlorite schist
192.6 - 197.6	Chloritic felsic quartz eye tuff
197.6 - 271.0	Gabbro (Anita Gabbro)
271.0 - 320.3	Felsic lapilli tuff; 2-7 % disseminated and stringer pyrite, trace to 0.5 % chalcopyrite and nil to trace sphalerite
320.3 - 346.6	Mafic tuffs and tuffaceous sediments.
346.6 m	End of Hole.

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: Page Number
CM88-78 1

Hole Location: 2200 E -40 N

NTS: 92B13 Grid:22+00 E, 0+40 S
Azimuth: 210 Elevation: 512 m
Dip: -45 Length: 346.6 m

Claim No. Chip 2
Section No.: 22+00 E

Logged By: J. Pattison
Drilling Co.: Burwash Enterprises
Assayed By: Bondar-Clegg

Started: 15-OCT-88
Completed: 20-OCT-88

Core Size: NQ

Purpose:

DIP TESTS

Length	Azi- muth	Dip	Length	Azi- muth	Dip
24.40	216.0	-45.0	205.70	213.0	-38.0
115.80	213.0	-40.0	298.70	215.0	-36.5

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)
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.0 15.2 OVERBURDEN

15.2	41.7	CHLORITIC FELSIC QUARTZ - FELDSPAR PHYRIC TUFF Up to 10 % ash-sized feldspar crystals and 5 % 2-4 mm quartz eyes in a green grey moderately chloritic and sericitic schistose felsic matrix. Trace to nil sulphides. Lower contact is at 60 degrees to core axis.	VA04288	15.2	41.7	26.5	n/a	14	n/a	43	n/a	n/a	1020
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STRUCTURE:

15.6 - 19.8 m: blocky, highly fractured core. 0.9 m of lost core.
 17.0 - 17.2 m: fault gouge at 30 degrees to core axis.
 At 22.5 m foliation is at 55 degrees to core axis.
 At 29.0 m minor fault gouge at 70 degrees to core axis.
 33.7 - 41.0 m: FAULT ZONE. Blocky, highly fractured core. Numerous fault gouges up to 5 cm wide at 40 to 50 degrees to core axis. 0.6 m of lost core.
 37.4 - 38.0 m: chloritic fault gouge runs nearly parallel to the core axis.
 40.3 - 41.0 m: FAULT ZONE. Rock is broken throughout. Fault appears to be at 15-30 degrees to core axis.

ALTERATION:

15.2 41.7 MODERATE PERVASIVE CHLORITIZATION.
 Chlorite-epidote alteration zone associated with quartz veining between 40.3 and 41.2 m.

21.7 22.2 Dark green, chloritic mafic dyke. Broken core at upper contact. lower contact is a strongly crosscutting fault gouge 1.0 cm wide at 55 degrees to core axis.

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: Page Number
CH88-78 2

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)
28.1	28.5	Dark green, chloritic mafic dyke or mafic tuff. Slip at 70 degrees to core axis at the upper contact and minor fault gouge at lower contact at 60 degrees to core axis.											
36.9	37.6	Milky white quartz vein at 45 degrees to core axis.											
40.2	40.3	Barren quartz vein at 25 to 70 degrees to core axis.											
41.7	74.1	MAFIC LAPILLI TUFF Medium green, chloritic, fine to coarse mafic tuff which locally contains up to 10 % slightly bleached mafic lapilli. Locally up to 3 % hematite pseudomorphing (2 mm magnetite grains. Broken core at the lower contact.	VA04289	41.7	74.1	32.4	n/a	79	n/a	106	n/a	n/a	625
			VA04757	55.7	56.7	1.0	0	111	9	152	1	10	650
			VA04758	56.7	57.9	1.2	1	26	9	46	<1	<5	800
			VA04759	57.9	58.9	1.0	0	165	7	167	<1	<5	480
		STRUCTURE: At 46.2 m foliation is at 60 degrees to core axis. 54.0 - 54.2 m: fault gouge at 50 degrees to core axis. 54.0 - 55.6 m: blocky, highly fractured core. 0.2 m of lost core. 57.9 - M: blocky, highly fractured core. 0.6 m of lost core 69.0 - 71.0 m: foliation runs nearly parallel to the core axis. At 72.7 m bedding is at 60 degrees to core axis.											
		ALTERATION: 41.7 54.0 WEAK SPOTTY HEMATIZATION and WEAK PERVASIVE CHLORITIZATION. 54.0 74.1 WEAK FRACTURE CONTROLLED CARBONATIZATION and WEAK PERVASIVE CHLORITIZATION.											
		54.2 54.6 FELSIC QUARTZ EYE TUFF. Rock has a crushed appearance and is broken and blocky throughout. Fault gouge at 50 degrees to core axis at upper contact and broken core at lower contact.											
		56.7 57.9 FELSIC QUARTZ EYE TUFF. As 54.2 to 54.6 m. 2 % finely disseminated pyrite. Broken core at upper and lower contacts.											
		72.7 72.9 Bedding of felsic tuff at 60 degrees to core axis											
74.1	88.1	FELSIC TUFF Light grey sericitic, crushed, tectonized felsic volcanic. Essentially a quartz-sericite schist. Several beds of dark green weakly to moderately carbonatized, chlorite	VA04290	74.1	88.0	13.9	n/a	18	n/a	32	n/a	n/a	798
			VA04760	74.1	75.0	.9	2	46	9	28	1	6	790
			VA04761	75.0	76.0	1.0	2	13	10	26	<1	<5	840

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)
		Bands are 1 to 10 cm thick and are the result of slight differences in chlorite, sericite and pyrite contents and likely represent primary bedding. Banding is at 65 degrees to core axis.											
		ALTERATION: 88.0 101.8 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.											
		MINERALIZATION: 88.0 - 99.5 m: nil-trace disseminated pyrite. 99.5 - 101.8 m: 1-2% disseminated pyrite.											
		95.5 95.7 Bed of chlorite schist (mafic tuff?). Upper contact is sharp at 63 degrees to core axis. Lower contact is very sharp but irregular at almost 90 degrees to core axis.											
101.8	104.5	MAFIC VOLCANIC ROCKS Dark green chlorite schist. Foliation is at 60 degrees to core axis. Bed of felsic quartz eye tuff 10 cm thick at 60-65 degrees to core axis at 102.3 m. Weak fracture controlled carbonatization and spotty epidote alteration. Epidote alteration spots are < 5 mm in diameter. Lower contact is sharp at 50 degrees to core axis.	VA04292	101.8	104.5	2.7	n/a	104	n/a	175	n/a	n/a	251
		ALTERATION: 101.8 104.5 WEAK FRACTURE CONTROLLED CARBONATIZATION and locally WEAK SPOTTY EPIDOTIZATION.											
104.5	115.2	FELSIC QUARTZ EYE TUFF Light green-grey crushed moderately chloritic quartz-sericite schist with 10%, 2-4 mm highly fractured quartz eyes. Occasional < 20 cm bed of mafic chlorite schist. Broken core at lower contact.	VA04293	104.5	115.2	10.7	n/a	45	n/a	91	n/a	n/a	716
		STRUCTURE: At 105.7 m foliation is at 43 degrees to core axis. At 107.3 m foliation is at 40 degrees to core axis.	VA04778	104.5	105.5	1.0	1	50	20	74	<1	<5	1500
		ALTERATION: 105.7 115.2 MODERATE PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.	VA04779	105.5	106.5	1.0	2	41	51	131	1	<5	660
		MINERALIZATION: 105.7 - 115.2 m: 2 % pyrite in < 3 mm stringers parallel to foliation and disseminated.	VA04780	106.5	107.5	1.0	2	40	<5	71	<1	<5	760
		106.2 888.8 10.0 cm band of chlorite schist (mafic	VA04781	107.5	108.5	1.0	2	90	<5	253	<1	<5	800
			VA04782	108.5	109.5	1.0	2	44	<5	88	<1	<5	770
			VA04783	109.5	110.5	1.0	2	38	<5	92	<1	<5	790
			VA04784	110.5	111.5	1.0	2	55	<5	51	<1	<5	890
			VA04785	111.5	112.5	1.0	2	62	<5	32	<1	<5	770
			VA04786	112.5	113.5	1.0	2	8	<5	33	<1	<5	510
			VA04787	113.5	114.5	1.0	2	6	<5	21	<1	<5	590
			VA04788	114.5	115.2	.7	2	10	<5	27	<1	<5	680

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)
		tuff/dyke) contacts are sharp irregular and intrusive-looking at 55-60 degrees to core axis											
	107.7	107.9 Chlorite schist at 65 degrees to core axis.											
115.2	118.3	MAFIC TUFF Dark green, chloritic mafic tuff with an occasional epidotized mafic fragment up to 3.0 cm long. Fault gouge at 50 degrees to core axis at the lower contact.	VA04294	115.2	118.3	3.1	n/a	169	n/a	128	n/a	n/a	442
		STRUCTURE: 117.7 - 117.9 m: fault gouge at 60. 118.1 - 118.3 m: graphitic fault gouge at 50 degrees to core axis.											
		ALTERATION: 115.2 118.3 WEAK FRACTURE CONTROLLED CARBONATIZATION.											
	116.2	116.6 Crushed felsic quartz eye tuff.											
	117.2	117.7 Crushed felsic quartz eye tuff.											
118.3	124.5	SHEARED FELSIC QUARTZ EYE TUFF Strongly tectonized, crushed felsic tuff with 10 %, 2-4 mm quartz eyes. Many minor fault gouges. Quite massive and very siliceous between 121.2 and 121.9 m (silicified?). Lower contact is a fault gouge at 75 degrees to core axis.	VA04295	118.3	124.5	6.2	n/a	14	n/a	28	n/a	n/a	557
		STRUCTURE: 119.0 - 119.8 m: FAULT ZONE which appears to be at 43 degrees to core axis. 0.6 m of lost core. 120.5 - 121.2 m: fault gouge at 60 degrees to core axis. 0.2 m of lost core. 121.2 - 121.9 m: blocky, highly fractured core. 0.4 m of lost core. 122.2 - 124.0 m: FAULT ZONE. Appears to be at 55 degrees to core axis. 1.4 m of lost core.											
		ALTERATION: 118.3 124.5 MODERATE PERVASIVE SERICITIZATION.											
	122.2	122.4 Black graphitic argillite. Broken core throughout and at upper and lower contacts.											
124.5	134.7	MAFIC LAPILLI TUFF Dark green, hematitic chlorite schist with an occasional lapilli-sized mafic fragment. Below 130.0 m tuff contains 5 % chloritized lapilli (3 mm wide and up to 40 mm long	VA04296 VA04297	124.5 130.0	130.0 134.7	5.5 4.7	n/a n/a	108 59	n/a n/a	125 81	n/a n/a	n/a n/a	263 550

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)
		gabbro with 2-3 % interstitial ilmenite and trace chalcopyrite. Fine-grained chilled margin over the first 1.2 m's. Core is relatively blocky throughout. Occasional randomly oriented quartz+/-carbonate vein (9 cm thick (most < 1.0 cm). Lower contact is gradational.											
		STRUCTURE:. At 201.9 m: minor fault gouge at 50 degrees to core axis. 204.5 - 205.0 m: blocky fault zone at 30 (?) degrees to core axis.											
		ALTERATION:. 197.6 208.2 WEAK FRACTURE CONTROLLED CARBONATIZATION.											
208.2	219.8	MEDIUM GRAINED MAFIC INTRUSION Dark green, medium-grained gabbro. Rock has a crushed, tectonized appearance over the entire interval. Broken core at the lower contact.											
		STRUCTURE:. 212.7 - 216.6 m: blocky, highly fractured core. 0.5 m of lost core. 217.6 - 218.8 m: blocky, highly fractured core.											
219.8	224.0	FINE GRAINED MAFIC INTRUSION Massive dark green, fine-grained gabbro, no feldspar phenocrysts. 5 % interstitial ilmenite and trace chalcopyrite. Broken core at the lower contact.											
224.0	232.0	MEDIUM GRAINED MAFIC INTRUSION As 208.2 to 219.8 m. Lower contact is gradational.											
232.0	271.0	FINE GRAINED FELDSPAR PHYRIC MAFIC INTRUSION Massive fine to medium-grained gabbro with 5 to 15 %, 1-4 mm sausseritized feldspar phenocrysts. Locally weak to moderate carbonatization. 1.5 M chill margin at the lower contact. Broken core at lower contact.											
		STRUCTURE:. 248.7 - 250.6 m: blocky zone due to a fault at 249.0 m at 60 degrees to core axis. 0.5 m of lost core. 256.5 259.8 M: blocky, highly fractured core.											
271.0	320.3	FELSIC LAPILLI TUFF Light grey quartz-sericite schist with nil to 5 %, 5 to 20 mm felsic fragments and up to 5 %, < 1 mm sericitized	VA04J06	271.0	289.6	18.6	n/a	49	n/a	112	n/a	n/a	1770
			VA04797	271.0	272.0	1.0	4	94	9	33	<1	<5	1900

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)
		feldspar crystals. Felsic fragments are difficult to distinguish from the matrix.	VA04798	272.0	273.0	1.0	4	74	<5	23	<1	<5	1800
		Rock is somewhat more siliceous, less foliated and more vitric below 289.6 m. Foliation is contorted and disrupted at the lower contact. The lower contact is at 50 degrees to core axis. Several spots of mariposite/fuchsite at the contact.	VA04799	273.0	274.0	1.0	4	216	11	311	<1	9	2200
			VA04801	274.0	275.0	1.0	4	72	28	71	<1	8	2500
			VA04802	275.0	276.0	1.0	4	74	9	131	1	10	2200
			VA04803	276.0	277.0	1.0	2	40	10	177	<1	<5	1800
			VA04804	277.0	278.0	1.0	2	37	11	180	1	<5	1600
			VA04805	278.0	279.0	1.0	2	67	9	46	1	<5	1500
			VA04806	279.0	280.0	1.0	2	69	9	23	<1	<5	2000
		STRUCTURE:	VA04807	280.0	281.0	1.0	2	61	6	147	<1	<5	2500
		At 274.2 m 0.5 cm fault gouge at 50 degrees to core axis.	VA04808	281.0	282.0	1.0	4	127	8	37	<1	<5	2200
		At 275.8 m foliation is at 42 degrees to core axis.	VA04809	282.0	283.0	1.0	2	35	<5	24	<1	<5	1500
		At 281.7 m 0.5 cm fault gouge at 80 degrees to core axis.	VA04810	283.0	283.9	.9	2	61	8	54	<1	<5	1300
		At 283.2 m foliation is at 60 degrees to core axis.	VA04811	283.9	285.0	1.1	7	203	7	480	<1	12	140
		At 283.6 m chloritic slip at 55 degrees to core axis.	VA04812	285.0	285.7	.7	3	23	39	56	<1	<5	940
		At 289.4 m foliation is at 40 degrees to core axis.	VA04813	285.7	286.1	.4	7	191	8	159	1	13	60
		At 305.7 m foliation is at 60 degrees to core axis.	VA04814	286.6	286.1	-.5	2	57	11	38	<1	8	820
		At 306.0 m bedding (?) is at 70 degrees to core axis.	VA04815	286.6	286.9	.3	2	246	8	454	<1	23	20
		At 308.2 m 2.0 cm fault gouge at 70 degrees to core axis.	VA04816	286.9	288.0	1.1	2	37	13	33	<1	<5	820
		At 315.5 m foliation is at 45 degrees to core axis.	VA04817	288.0	289.0	1.0	2	98	10	37	<1	<5	920
		ALTERATION:	VA04818	289.0	290.0	1.0	2	51	9	21	<1	<5	1400
		271.0 289.6 MODERATE PERVASIVE SERICITIZATION. Rare speck of apple green mariposite/fuchsite.	VA04307	289.6	304.0	14.4	n/a	27	n/a	27	n/a	n/a	1930
		289.6 304.0 WEAK PERVASIVE SILICIFICATION, WEAK PERVASIVE SERICITIZATION.	VA04819	290.0	291.0	1.0	2	92	20	21	<1	<5	1600
			VA04320	291.0	292.0	1.0	2	47	15	22	1	9	1600
			VA04821	292.0	293.0	1.0	2	68	11	27	<1	13	1600
			VA04822	293.0	294.0	1.0	2	21	13	15	<1	9	1300
		304.0 320.3 MODERATE PERVASIVE SERICITIZATION.	VA04823	294.0	295.0	1.0	2	15	7	14	<1	10	1900
			VA04824	295.0	296.0	1.0	3	27	8	15	<1	12	2100
		MINERALIZATION:	VA04825	296.0	297.0	1.0	5	16	7	13	<1	15	1900
		271.0 - 276.0 m: 3-4 % pyrite, disseminated and as irregular stringers < 3 mm thick roughly parallel to foliation. Trace chalcopyrite and sphalerite.	VA04826	297.0	298.0	1.0	5	12	8	14	<1	17	2700
			VA04827	298.0	299.0	1.0	5	31	7	13	<1	30	2400
			VA04828	299.0	300.0	1.0	5	24	8	26	<1	17	2500
		276.0 - 281.0 m: 2 % disseminated pyrite.	VA04829	300.0	301.0	1.0	2	26	7	15	<1	8	2500
		281.0 - 282.0 m: 4 % pyrite, disseminated and < 3 mm stringers.	VA04830	301.0	302.0	1.0	2	28	10	15	<1	6	1900
			VA04831	302.0	303.0	1.0	2	30	11	15	<1	7	1300
		282.0 - 283.9 m: 2 % disseminated pyrite.	VA04832	303.0	304.0	1.0	2	19	10	12	1	<5	2000
		283.9 - 285.0 m: 7 % disseminated pyrite.	VA04308	304.0	320.3	16.3	n/a	78	n/a	21	n/a	n/a	1760
		285.0 - 285.7 m: 3 % disseminated pyrite.	VA04833	304.0	305.0	1.0	2	42	5	11	1	<5	2600
		285.7 - 286.1 m: 7 % disseminated pyrite.	VA04834	305.0	305.5	.5	2	34	9	13	<1	13	2800
		286.1 - 295.0 m: 2 % disseminated pyrite.	VA04835	305.5	306.0	.5	5	166	11	245	1	12	2500
		295.5 - 300.0 m: 5 % pyrite and trace red-brown sphalerite. Sulphides are disseminated and in < 4 mm stringers subparallel to foliation.	VA04836	306.0	307.0	1.0	4	99	12	22	1	20	2700
			VA04837	307.0	308.0	1.0	4	47	9	19	1	10	1700
			VA04838	308.0	309.0	1.0	4	38	<5	5	1	<5	1500
		300.0 - 305.5 m: 2 % disseminated pyrite.	VA04839	309.0	310.0	1.0	4	262	6	16	1	11	1700
		305.5 - 306.0 m: 4 % pyrite, 0.5 % chalcopyrite and trace sphalerite.	VA04840	310.0	311.0	1.0	4	53	6	6	<1	<5	1600
			VA04841	311.0	312.0	1.0	4	111	8	33	1	8	1400
		306.0 - 316.0 m: 4 % disseminated and stringer pyrite, nil-0.25 % chalcopyrite.	VA04842	312.0	313.0	1.0	4	219	7	417	1	21	1500
			VA04843	313.0	314.0	1.0	4	199	6	884	<1	6	2100
			VA04844	314.0	315.0	1.0	4	439	8	40	1	33	1500
		316.0 - 319.0 m: 2 % disseminated pyrite.	VA04845	315.0	316.0	1.0	4	107	6	14	<1	<5	1700
		319.0 - 320.3 m: 4 % disseminated and stringer pyrite.	VA04846	316.0	317.0	1.0	2	33	6	12	<1	<5	1200
		283.9 285.0 Beige coloured bleached EARLY MAFIC DYKE:	VA04847	317.0	318.0	1.0	2	100	6	282	<1	<5	1100

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	XSIO2	XAL2O3	XCAO	XMGO	XNA2O	XK2O	XFE2O3	XTIO2	XP2O5	XMNO	XLOI	SUM	ROCK	CODES	
																ALT	MIN
VA04021	55.20	55.50	44.30	14.00	7.09	6.81	1.40	2.14	10.20	0.63	0.11	0.26	12.20	99.14	TMBT	FCW	DBP
VA04022	85.20	85.50	47.00	16.10	8.34	4.61	1.07	2.40	9.58	0.64	0.12	0.19	9.70	99.83	TFAT	PSM	DCP
VA04023	137.70	138.00	50.40	14.50	7.19	4.47	0.79	0.65	13.60	2.44	0.27	0.21	4.16	98.68	PMAM	FEW	AA-
VA04024	149.60	149.90	70.40	13.80	1.66	1.85	2.01	3.64	3.16	0.32	0.08	0.05	2.00	98.97	TIAT	SEW	AA-
VA04025	160.00	160.60	69.40	14.40	2.27	1.47	2.73	3.00	3.10	0.32	0.08	0.05	1.93	98.75	TIAT	SEW	AA-
VA04026	178.50	179.00	69.80	15.10	1.12	2.58	2.57	3.16	3.25	0.35	0.08	0.05	2.47	100.53	TIAT	SEW	AA-
VA04027	191.80	192.10	35.00	17.30	6.94	9.01	2.14	0.17	17.00	2.85	0.20	0.24	0.47	99.32	VMAT	FCW	DCP
VA04028	323.20	323.70	52.80	17.40	4.50	4.76	6.31	0.19	8.56	0.82	0.24	0.14	2.92	98.64	TMBT	PMW	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	ROCK	CODES	
													ALT	MIN
VA04021	55.20	55.50	48.0	316.0	718.0	<10.0	<10.0	11.0	63.0	189.0	43.0	TMBT	FCW	DBP
VA04022	85.20	85.50	51.0	120.0	503.0	<10.0	29.0	16.0	77.0	108.0	27.0	TFAT	PSM	DCP
VA04023	137.70	138.00	39.0	404.0	137.0	22.0	126.0	21.0	49.0	126.0	71.0	PMAM	FEW	AA-
VA04024	149.60	149.90	103.0	322.0	1060.0	21.0	132.0	<10.0	26.0	56.0	12.0	TIAT	SEW	AA-
VA04025	160.00	160.60	82.0	630.0	1120.0	25.0	142.0	<10.0	20.0	68.0	<10.0	TIAT	SEW	AA-
VA04026	178.50	179.00	73.0	191.0	975.0	33.0	153.0	14.0	<10.0	66.0	<10.0	TIAT	SEW	AA-
VA04027	191.80	192.10	15.0	57.0	164.0	35.0	153.0	26.0	26.0	278.0	110.0	VMAT	FCW	DCP
VA04028	323.20	323.70	21.0	183.0	220.0	31.0	66.0	<10.0	51.0	87.0	<10.0	TMBT	PMW	DBP

Hole No. CH88-78 WHOLE ROCK SAMPLES

Page No.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	XSIO2	XAL2O3	XCAO	XMGO	XMA2O	XK2O	XFE2O3	XII02	XP2O5	XMNO	XLOI	SUM	CODES		
															ROCK	ALT	MIN
VA04288	15.30	41.70	68.00	13.80	1.94	2.03	3.31	2.57	2.76	0.28			3.70	98.39	TFAGFT	PHH	DBP
VA04289	41.70	74.10	48.70	16.00	7.18	4.04	2.61	2.17	9.20	0.62			8.39	98.91	TMET	SFW	DBP
VA04290	74.10	98.00	70.70	13.60	3.54	1.18	1.25	3.07	2.87	0.27			3.39	99.97	TFAT	PSS	DCP
VA04291	88.00	101.80	68.70	13.00	3.93	1.17	1.81	2.90	2.60	0.25			4.00	98.36	TFAPT	PHW	DCP
VA04292	101.80	104.50	48.40	14.90	7.43	6.10	3.26	0.41	9.37	0.63			7.47	97.97	TMAT	FCW	AA-
VA04293	104.50	115.20	70.40	13.50	2.17	1.37	3.59	2.05	2.78	0.25			2.62	98.73	TFAPT	PHH	DCP
VA04294	115.20	118.30	50.90	15.00	5.55	5.23	2.63	1.25	9.75	1.04			6.77	99.12	TMAT	FCW	DBP
VA04295	118.30	124.50	73.30	12.70	1.60	1.34	3.35	2.17	1.81	0.19			2.21	98.78	TFAPT	PSH	DBP
VA04296	124.50	130.00	51.40	15.90	2.95	5.60	1.20	2.93	11.40	1.21			6.00	98.69	TMET	FEH	AA-
VA04297	130.00	134.70	56.30	16.30	5.11	3.17	1.72	2.61	9.96	0.72			3.16	99.05	TMET	POW	AA-
VA04298	134.70	137.50	77.30	11.20	2.84	0.34	3.70	0.98	1.89	0.24			0.77	99.26	TEA	POH	AA-
VA04299	141.60	151.60	68.90	15.20	1.40	1.71	3.37	3.13	3.52	0.36			2.58	99.67	TIA	?	DBP
VA04301	151.60	165.20	70.80	15.00	2.59	1.31	3.22	2.86	2.98	0.32			0.62	99.70	TIA	?	DBP
VA04302	165.20	174.30	74.60	12.80	1.87	0.85	3.93	2.11	2.16	0.28			1.31	99.91	TIA	?	DBP
VA04302	174.30	185.00	69.20	15.40	1.46	2.12	3.41	2.67	3.55	0.34			2.00	100.15	TIA	?	DBP
VA04304	185.00	190.40	70.70	14.00	2.44	2.60	3.22	1.46	2.93	0.32			2.16	99.82	TIA	?	DBP
VA04305	192.60	197.60	70.00	15.50	1.89	1.64	2.01	2.58	3.23	0.39			2.54	99.78	TEAUT	?	DBP
VA04306	201.00	209.60	74.80	13.20	1.86	0.99	1.50	2.59	2.24	0.29			2.39	99.86	TEET	PSH	DBP
VA04307	209.60	304.00	71.50	14.70	2.11	1.36	1.68	2.13	2.65	0.31			3.08	99.52	TEET	POW	DBP
VA04308	304.00	320.30	74.20	13.50	0.54	0.22	1.01	3.06	3.39	0.24			3.22	99.49	TEET	POH	DBP
VA04309	320.30	330.00	48.30	15.60	10.40	6.06	2.99	0.27	10.30	1.01			2.08	98.01	TMET	PHW	DBP
VA04310	330.00	346.60	57.50	16.50	5.45	3.61	3.90	0.64	7.76	0.79			2.93	99.08	TMET	PHW	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	RB (ppm)	SK (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	ROCK	CODES	
													ALT	MIN
VA04288	15.30	41.70			1020.0				14.0	43.0	<10.0	TEA0ET	PHM	DBP
VA04289	41.70	74.10			625.0				79.0	106.0	17.0	TA0ET	SFW	DBP
VA04290	74.10	89.00			798.0				18.0	32.0	<10.0	TEAT	PSS	DCP
VA04291	88.00	101.80			710.0				16.0	74.0	<10.0	TEA0T	PHW	DCP
VA04292	101.90	104.50			251.0				104.0	175.0	17.0	TAAT	ECW	AA-
VA04293	104.50	115.20			716.0				45.0	91.0	<10.0	TEA0T	PHM	DCP
VA04294	115.20	118.30			442.0				169.0	128.0	24.0	TAAT	ECW	DBP
VA04295	118.30	124.50			557.0				14.0	28.0	<10.0	TEA0T	PSM	DBP
VA04296	124.50	130.00			262.0				198.0	125.0	61.0	TA0T	PEM	AA-
VA04297	130.00	134.70			550.0				59.0	81.0	22.0	TA0T	POW	AA-
VA04298	134.70	137.50			429.0				15.0	23.0	<10.0	TEA	PDM	AA-
VA04299	141.60	151.60			1130.0				17.0	56.0	<10.0	TIA	?	DBP
VA04301	151.60	165.20			1060.0				24.0	45.0	<10.0	TIA	?	DBP
VA04302	165.20	174.30			1080.0				21.0	26.0	<10.0	TIA	?	DBP
VA04302	174.30	185.00			1110.0				<10.0	56.0	14.0	TIA	?	DBP
VA04304	185.00	190.40			862.0				15.0	57.0	<10.0	TIA	?	DBP
VA04305	192.60	197.60			1710.0				68.0	53.0	<10.0	TEA0T	?	DBP
VA04306	271.00	289.60			1770.0				49.0	112.0	<10.0	TEET	PSM	DBP
VA04307	289.60	304.00			1930.0				27.0	27.0	<10.0	TE0T	POW	DBP
VA04308	304.00	320.30			1760.0				78.0	21.0	<10.0	TE0T	PDM	DBP
VA04309	320.30	330.00			210.0				73.0	90.0	59.0	TA0T	PHW	DBP
VA04310	330.00	346.60			326.0				41.0	98.0	<10.0	TA0T	PHW	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO													CODES	
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	ZFEO	ROCK	ALI
VA04757	55.70	56.70	650.0	111.0	152.0	0.7	10.0	30.0	25.0	9.0	<5.0	2.0	1441.0	5.07	IMBT	A
VA04758	56.70	57.90	800.0	26.0	46.0	<0.5	<5.0	7.0	6.0	9.0	15.0	<1.0	479.0	1.62	IFADY	DBP
VA04759	57.90	58.90	480.0	165.0	167.0	<0.5	<5.0	42.0	37.0	7.0	9.0	3.0	1948.0	6.36	IMBT	AA-
VA04760	74.10	75.00	790.0	46.0	28.0	0.6	6.0	7.0	5.0	9.0	12.0	<1.0	555.0	1.65	IFAT	BCP
VA04761	75.00	76.00	840.0	13.0	26.0	<0.5	<5.0	4.0	3.0	10.0	14.0	<1.0	456.0	1.73	IFAT	BCP
VA04762	76.00	77.00	950.0	138.0	121.0	0.9	9.0	18.0	8.0	11.0	11.0	2.0	899.0	2.75	IFAT	BCP
VA04763	77.00	78.00	890.0	64.0	85.0	0.5	<5.0	12.0	8.0	16.0	21.0	<1.0	674.0	2.76	IFAT	BCP
VA04764	78.00	79.00	840.0	14.0	22.0	<0.5	<5.0	4.0	4.0	14.0	8.0	<1.0	367.0	1.63	IFAT	BCP
VA04765	79.00	80.00	890.0	24.0	16.0	0.6	<5.0	5.0	3.0	35.0	9.0	<1.0	338.0	1.86	IFAT	BCP
VA04766	80.00	81.00	840.0	82.0	143.0	0.7	5.0	27.0	17.0	11.0	6.0	2.0	1063.0	4.04	IFAT	BCP
VA04767	81.00	82.00	840.0	49.0	30.0	0.5	16.0	11.0	6.0	19.0	8.0	1.0	736.0	2.92	IFAT	BCP
VA04768	82.00	83.00	960.0	20.0	10.0	<0.5	6.0	4.0	3.0	10.0	8.0	<1.0	264.0	1.59	IFAT	BCP
VA04769	83.00	84.00	890.0	25.0	83.0	<0.5	12.0	6.0	3.0	42.0	6.0	1.0	357.0	1.83	IFAT	BCP
VA04770	84.00	85.00	600.0	128.0	172.0	0.6	<5.0	26.0	17.0	6.0	<5.0	1.0	3023.0	4.90	IFAT	BCP
VA04771	85.00	86.00	630.0	90.0	83.0	<0.5	<5.0	22.0	13.0	7.0	24.0	1.0	1146.0	4.30	IFAT	BCP
VA04772	86.00	87.00	740.0	14.0	7.0	<0.5	<5.0	5.0	1.0	14.0	11.0	<1.0	360.0	1.69	IFAT	BCP
VA04773	87.00	88.00	920.0	10.0	12.0	<0.5	<5.0	5.0	4.0	18.0	14.0	<1.0	367.0	1.33	IFAT	BCP
VA04774	88.00	89.00	940.0	15.0	47.0	<0.5	<5.0	3.0	<1.0	6.0	11.0	<1.0	531.0	1.08	IFART	DBP
VA04775	98.50	99.50	820.0	23.0	94.0	<0.5	<5.0	4.0	<1.0	6.0	7.0	<1.0	747.0	1.21	IFART	DBP
VA04776	99.50	100.70	800.0	29.0	113.0	<0.5	<5.0	6.0	2.0	10.0	7.0	<1.0	658.0	1.80	IFADY	BCP
VA04777	100.70	101.80	920.0	40.0	126.0	0.5	<5.0	5.0	2.0	97.0	12.0	<1.0	660.0	1.85	IFART	BCP
VA04778	104.50	105.50	1500.0	50.0	74.0	<0.5	<5.0	5.0	<1.0	20.0	<5.0	<1.0	496.0	1.74	IFART	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	ELEMENTS												ROCK	CODES	
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	FEED		ALT	MIN
VA04779	105.50	106.50	660.0	41.0	131.0	0.5	<5.0	6.0	<1.0	51.0	7.0	<1.0	601.0	2.26	TEAQT	DCP	
VA04780	106.50	107.50	760.0	40.0	71.0	<0.5	<5.0	10.0	<1.0	<5.0	9.0	<1.0	841.0	2.96	TEAQT	DCP	
VA04781	107.50	108.50	800.0	90.0	253.0	<0.5	<5.0	9.0	1.0	<5.0	<5.0	5.0	689.0	2.81	TEAQT	DCP	
VA04782	108.50	109.50	770.0	44.0	88.0	<0.5	<5.0	5.0	<1.0	<5.0	8.0	<1.0	505.0	1.89	TEAQT	DCP	
VA04783	109.50	110.50	790.0	38.0	92.0	<0.5	<5.0	8.0	<1.0	<5.0	11.0	<1.0	694.0	2.72	TEAQT	DCP	
VA04784	110.50	111.50	890.0	55.0	51.0	<0.5	<5.0	5.0	<1.0	<5.0	6.0	<1.0	549.0	1.90	TEAQT	DCP	
VA04785	111.50	112.50	770.0	62.0	32.0	<0.5	<5.0	6.0	2.0	<5.0	5.0	<1.0	514.0	1.87	TEAQT	DCP	
VA04786	112.50	113.50	510.0	8.0	33.0	<0.5	<5.0	3.0	<1.0	<5.0	18.0	<1.0	428.0	1.37	TEAQT	DCP	
VA04787	113.50	114.50	590.0	6.0	21.0	<0.5	<5.0	3.0	<1.0	<5.0	18.0	<1.0	364.0	1.29	TEAQT	DCP	
VA04788	114.50	115.20	680.0	10.0	27.0	<0.5	<5.0	3.0	<1.0	<5.0	11.0	<1.0	335.0	1.23	TEAQT	DCP	
VA04789	189.40	190.40	890.0	18.0	28.0	<0.5	<5.0	3.0	3.0	<5.0	<5.0	<1.0	180.0	0.82	TIAT	DRP	
VA04790	190.40	191.40	840.0	57.0	158.0	<0.5	<5.0	41.0	38.0	<5.0	15.0	1.0	762.0	5.66	UHAT	DCP	
VA04791	191.40	192.60	370.0	144.0	194.0	0.7	6.0	50.0	86.0	<5.0	<5.0	3.0	964.0	7.29	UHAT	DCP	
VA04792	192.60	193.60	1600.0	191.0	60.0	1.3	28.0	13.0	5.0	6.0	23.0	<1.0	379.0	2.41	TEAQT	DCP	
VA04793	193.60	194.60	1200.0	63.0	59.0	0.5	<5.0	11.0	14.0	<5.0	7.0	<1.0	455.0	2.56	TEAQT	DCP	
VA04794	194.60	195.60	1300.0	66.0	32.0	<0.5	<5.0	6.0	5.0	7.0	6.0	<1.0	330.0	1.60	TEAQT	DCP	
VA04795	195.60	196.60	1200.0	46.0	32.0	<0.5	6.0	7.0	6.0	9.0	15.0	1.0	302.0	1.87	TEAQT	DCP	
VA04796	196.60	197.60	1500.0	26.0	95.0	<0.5	12.0	9.0	6.0	18.0	15.0	1.0	407.0	2.14	TEAQT	DCP	
VA04797	271.00	272.00	1900.0	94.0	33.0	<0.5	<5.0	5.0	6.0	9.0	16.0	1.0	196.0	1.38	TFBT	DCP	
VA04798	272.00	273.00	1800.0	74.0	23.0	<0.5	<5.0	4.0	5.0	<5.0	20.0	<1.0	125.0	1.02	TFBT	DCP	
VA04799	273.00	274.00	2200.0	216.0	311.0	<0.5	9.0	5.0	4.0	11.0	20.0	3.0	102.0	1.43	TFBT	DCP	
VA04801	274.00	275.00	2500.0	72.0	71.0	<0.5	8.0	5.0	5.0	28.0	10.0	2.0	81.0	1.56	TFBT	DCP	

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO												CODES		
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	ZFEO	ROCK	ALT
VA04802	275.00	276.00	2200.0	74.0	131.0	0.5	10.0	5.0	5.0	9.0	<5.0	<1.0	67.0	1.34	TFBT	DCP
VA04803	276.00	277.00	1800.0	40.0	177.0	<0.5	<5.0	5.0	4.0	10.0	10.0	1.0	114.0	1.08	TFBT	DCP
VA04804	277.00	278.00	1600.0	37.0	180.0	0.5	<5.0	5.0	5.0	11.0	18.0	1.0	177.0	1.37	TFBT	DCP
VA04805	278.00	279.00	1500.0	67.0	46.0	0.5	<5.0	5.0	4.0	9.0	8.0	<1.0	234.0	1.32	TFBT	DCP
VA04806	279.00	280.00	2000.0	69.0	23.0	<0.5	<5.0	7.0	4.0	9.0	17.0	<1.0	121.0	1.61	TFBT	DCP
VA04807	280.00	281.00	2500.0	61.0	147.0	<0.5	<5.0	6.0	5.0	6.0	<5.0	<1.0	108.0	1.61	TFBT	DCP
VA04808	281.00	282.00	2200.0	127.0	37.0	<0.5	<5.0	4.0	5.0	8.0	12.0	<1.0	105.0	1.95	TFBT	DCP
VA04809	282.00	283.00	1500.0	35.0	24.0	<0.5	<5.0	4.0	5.0	<5.0	18.0	<1.0	137.0	1.33	TFBT	DCP
VA04810	283.00	283.90	1300.0	61.0	54.0	<0.5	<5.0	8.0	10.0	8.0	12.0	<1.0	213.0	1.49	TFBT	DCP
VA04811	283.90	285.00	140.0	203.0	480.0	<0.5	12.0	54.0	66.0	7.0	13.0	3.0	1080.0	4.70	TFBT	DDP
VA04812	285.00	285.70	940.0	23.0	56.0	<0.5	<5.0	10.0	13.0	39.0	13.0	<1.0	245.0	1.25	TFBT	DCP
VA04813	285.70	286.10	60.0	191.0	159.0	0.6	13.0	41.0	57.0	8.0	<5.0	2.0	1194.0	4.39	TFBT	DDP
VA04814	286.60	286.10	820.0	57.0	38.0	<0.5	8.0	14.0	12.0	11.0	16.0	<1.0	204.0	1.43	TFBT	DCP
VA04815	286.60	286.90	20.0	244.0	454.0	<0.5	23.0	49.0	77.0	8.0	5.0	4.0	1671.0	6.62	TFBT	DCP
VA04816	286.90	288.00	820.0	37.0	33.0	<0.5	<5.0	12.0	9.0	13.0	10.0	<1.0	214.0	1.83	TFBT	DCP
VA04817	289.00	289.00	920.0	98.0	37.0	<0.5	<5.0	12.0	8.0	10.0	9.0	<1.0	240.0	2.22	TFBT	DCP
VA04818	289.00	290.00	1400.0	51.0	31.0	<0.5	<5.0	8.0	8.0	9.0	<5.0	<1.0	130.0	1.66	TFBT	DCP
VA04819	290.00	291.00	1600.0	92.0	21.0	<0.5	<5.0	6.0	6.0	20.0	13.0	<1.0	125.0	1.39	TFBT	DCP
VA04820	291.00	292.00	1600.0	47.0	23.0	0.5	9.0	5.0	6.0	15.0	15.0	<1.0	115.0	1.12	TFBT	DCP
VA04821	292.00	293.00	1600.0	68.0	27.0	<0.5	13.0	5.0	6.0	11.0	6.0	<1.0	117.0	1.11	TFBT	DCP
VA04822	293.00	294.00	1300.0	21.0	15.0	<0.5	9.0	5.0	5.0	13.0	10.0	1.0	133.0	1.38	TFBT	DCP
VA04823	294.00	295.00	1900.0	15.0	14.0	<0.5	10.0	5.0	5.0	7.0	9.0	<1.0	124.0	1.90	TFBT	DCP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO													CODES	
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	ZFEO	ROCK	ALT
VA04824	295.00	296.00	2100.0	27.0	15.0	<0.5	12.0	6.0	5.0	8.0	<5.0	<1.0	133.0	2.07	TFBT	DCP
VA04825	296.00	297.00	1900.0	16.0	13.0	<0.5	15.0	6.0	6.0	7.0	7.0	<1.0	119.0	2.03	TFBT	DDP
VA04826	297.00	298.00	2700.0	12.0	14.0	<0.5	17.0	7.0	6.0	8.0	<5.0	1.0	122.0	1.52	TFBT	DDP
VA04827	298.00	299.00	2400.0	31.0	13.0	<0.5	30.0	5.0	6.0	7.0	9.0	<1.0	122.0	2.21	TFBT	DDP
VA04828	299.00	300.00	2500.0	24.0	26.0	<0.5	17.0	7.0	8.0	8.0	6.0	1.0	152.0	2.56	TFBT	DDP
VA04829	300.00	301.00	2500.0	26.0	15.0	<0.5	8.0	5.0	6.0	7.0	7.0	<1.0	116.0	1.25	TFBT	DCP
VA04830	301.00	302.00	1900.0	28.0	15.0	<0.5	6.0	4.0	6.0	10.0	16.0	<1.0	105.0	1.11	TFBT	DCP
VA04831	302.00	303.00	1300.0	30.0	15.0	<0.5	7.0	6.0	5.0	11.0	15.0	<1.0	103.0	1.32	TFBT	DCP
VA04832	303.00	304.00	2000.0	19.0	12.0	0.7	<5.0	3.0	3.0	10.0	10.0	<1.0	38.0	0.73	TFBT	DCP
VA04833	304.00	305.00	2600.0	42.0	11.0	0.7	<5.0	4.0	4.0	5.0	10.0	<1.0	25.0	1.10	TFBT	DCP
VA04834	305.00	305.50	2800.0	34.0	13.0	<0.5	13.0	5.0	4.0	9.0	<5.0	<1.0	21.0	1.15	TFBT	DCP
VA04835	305.50	306.00	2500.0	166.0	245.0	0.6	12.0	7.0	3.0	11.0	22.0	<1.0	26.0	2.19	TFBT	DCP
VA04836	306.00	307.00	2700.0	99.0	22.0	0.5	20.0	6.0	2.0	12.0	16.0	<1.0	16.0	2.46	TFBT	DCP
VA04837	307.00	308.00	1700.0	47.0	19.0	0.5	10.0	6.0	5.0	9.0	16.0	<1.0	16.0	1.90	TFBT	DCP
VA04838	308.00	309.00	1500.0	38.0	5.0	0.7	<5.0	5.0	4.0	<5.0	10.0	<1.0	9.0	1.03	TFBT	DCP
VA04839	309.00	310.00	1700.0	262.0	16.0	0.6	11.0	8.0	5.0	6.0	14.0	<1.0	18.0	2.13	TFBT	DCP
VA04840	310.00	311.00	1600.0	53.0	6.0	<0.5	<5.0	6.0	2.0	6.0	16.0	<1.0	15.0	1.34	TFBT	DCP
VA04841	311.00	312.00	1400.0	111.0	33.0	0.5	8.0	12.0	23.0	8.0	7.0	<1.0	114.0	2.93	TFBT	DCP
VA04842	312.00	313.00	1500.0	219.0	417.0	0.8	21.0	7.0	6.0	7.0	10.0	1.0	69.0	1.85	TFBT	DCP
VA04843	313.00	314.00	2100.0	199.0	884.0	<0.5	6.0	7.0	5.0	6.0	18.0	2.0	42.0	1.98	TFBT	DCP
VA04844	314.00	315.00	1500.0	439.0	40.0	0.7	33.0	10.0	5.0	8.0	18.0	<1.0	23.0	3.03	TFBT	DCP
VA04845	315.00	316.00	1700.0	107.0	14.0	<0.5	<5.0	8.0	4.0	6.0	7.0	<1.0	22.0	1.70	TFBT	DCP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO														CODES	
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PR (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	ZFEO	ROCK	ALT	MIN
VA04846	316.00	317.00	1200.0	33.0	12.0	<0.5	<5.0	3.0	2.0	6.0	6.0	<1.0	17.0	0.51	TEBT		DCP
VA04847	317.00	318.00	1100.0	100.0	282.0	<0.5	<5.0	8.0	14.0	6.0	14.0	<1.0	39.0	1.55	TEBT		DCP
VA04848	318.00	319.00	1100.0	30.0	10.0	<0.5	<5.0	3.0	4.0	6.0	6.0	<1.0	17.0	0.59	TEBT		DCP
VA04849	319.00	320.30	1000.0	131.0	11.0	<0.5	<5.0	5.0	6.0	7.0	11.0	<1.0	24.0	1.39	TEBT		DCP
VA04851	320.30	331.30	380.0	240.0	64.0	<0.5	<5.0	27.0	186.0	7.0	<5.0	<1.0	608.0	4.12	TMBT		DCP
VA04852	324.50	325.20	710.0	28.0	118.0	<0.5	<5.0	11.0	12.0	9.0	13.0	<1.0	718.0	4.54	TMAT		DBP
VA04853	325.20	325.90	240.0	28.0	123.0	<0.5	<5.0	7.0	27.0	12.0	17.0	<1.0	548.0	3.59	TMATA		DCP
VA04854	325.90	327.00	510.0	34.0	126.0	<0.5	<5.0	10.0	18.0	10.0	13.0	<1.0	623.0	4.03	TMATA		DCP
VA04855	327.00	328.00	290.0	71.0	71.0	<0.5	<5.0	21.0	26.0	9.0	15.0	<1.0	814.0	3.89	TMATA		DBP
VA04856	340.40	341.00	30.0	60.0	109.0	<0.5	6.0	13.0	20.0	8.0	8.0	<1.0	549.0	4.98	TMAT		FCP
VA04857	341.00	342.00	90.0	91.0	97.0	<0.5	12.0	24.0	41.0	<5.0	14.0	1.0	528.0	5.69	TMAT		FCP
VA04858	342.00	342.80	50.0	68.0	92.0	<0.5	<5.0	15.0	16.0	<5.0	41.0	<1.0	503.0	4.94	TMAT		FCP

Summary Log: DDI CH88-79
Location: 2+00 E, 1+95 N; Chip 2 Claim
Azimuth: 210, Dip: -50
Hole Completed: October 23, 1988
Core Logged By: M. Vande Guchte

0.0 - 6.7	Casing.
6.7 - 67.1	Mafic tuff
67.1 - 71.0	Felsic quartz eye tuff.
71.0 - 92.3	Mafic feldspar - mafic phyric tuff.
92.3 - 93.0	Fault zone
93.0 - 120.3	Mafic lapilli tuffs with mafic phyric lapilli.
120.3 - 132.4	Mafic tuff.
132.4 - 133.2	Felsic tuff
133.2 - 168.4	Mafic tuff, moderately magnetic below 140.0 m.
168.4 - 174.0	Weakly chloritic felsic tuff.
174.0 - 177.6	Mafic tuff.
177.6 - 179.4	Chloritic felsic quartz crystal tuff.
179.4 - 182.8	Cherty felsic volcanic wacke.
182.8 - 192.0	Argillaceous felsic quartz crystal tuff with interbedded black argillite.
192.0 - 199.4	Black argillite with up to 10% pyrite
199.4 - 213.5	Chloritic felsic quartz crystal tuff.
213.5 - 215.2	Mafic tuffaceous sediments, moderately magnetic
215.2 - 298.5	Chloritic felsic quartz crystal tuff.
298.5 - 300.9	Mafic tuffaceous sediment, moderately magnetic.
300.9 - 328.3	Chloritic felsic quartz crystal tuff.
328.3	End of hole.

PROPERTY: CHEMAINUS J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

ROLE No: Page Number
CH88-79 1

Hole Location: 28008 E 13485 N

NTS: 092B/13 Grid: 2+00 E, 1+95 N
Azimuth: 210 Elevation: 635 m
Dip: -50 Length: 328.3 m

Started: October 17, 1988
Completed: October 23, 1988

Claim No. CHIP 2
Section No.: Section 2+00 East, Chip Claim Group

Logged By: M. Vande Guchte (40.7 - E.O.M.) + D.P. Money (0 - 40.7)
Drilling Co.: Burwash Enterprises
Assayed By: Bondar-Clegg and X-Ray Assay

Core Size: NQ

Purpose: To test IP chargeability anomalies

DIP TESTS

Length	Azi- muth	Dip	Length	Azi- muth	Dip
198.00	215.0	-45.0	323.10	217.0	-42.0
289.60	216.0	-42.5			

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)
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6.7 CASING

6.7 67.1 MAFIC TUFF

Very similar to mafic tuff or flow in CH88-77 from 170 to 222.3 m. Less biotite than in CH88-77, but is moderately biotitic to approximately 30 m and locally there is biotite after 30 m. There are numerous < 1 to 10 cm quartz - calcite - chlorite veins throughout with an average of approximately 3%. At 38.0 a quartz - calcite vein hosts 5% chalcocopyrite over 1 cm. Quartz augens, 2 mm to 1.5 cm, occur with calcite pressure shadows from approximately 16 to 30 m. There appear to be trace < 5 mm pink garnets in the interval with the augens. Is moderately to strongly sheared. No disseminated sulphides occur. There is moderate fracture controlled carbonatization. Substantial decrease in quartz carbonate veins below approximately 57.0 m and changing to weak to moderate pervasive carbonatization over a gradational contact. Core remains light to med green, well foliated with occasional quartz augens found locally.

VA09317	6.7	30.0	23.3	n/a	51	n/a	73	n/a	n/a	469
VA09318	30.0	40.7	10.7	n/a	33	n/a	79	n/a	n/a	371
VA09319	40.7	57.0	16.3	n/a	53	n/a	75	n/a	n/a	421
VA09320	57.0	67.1	10.1	n/a	<10	n/a	44	n/a	n/a	1120

Alteration :
6.7 57.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION.
57.0 67.1 MODERATE PERVASIVE CARBONATIZATION.

Foliations :
8.6 : 51 degrees to core axis.
14.5 : 50 degrees to core axis.
22.9 : 49 degrees to core axis.
31.4 : 53 degrees to core axis.
39.8 : 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)
45.0	55	degrees to core axis.											
52.5	50	degrees to core axis.											
60.0	45	degrees to core axis.											
65.0	50	degrees to core axis.											
53.8	53.9	: fault with fault gouge.											
54.4	54.5	: fault with fault gouge.											
55.6	55.7	: fault with fault gouge.											
Bedding at lower contact : 43 degrees to core axis.													
Lost core :													
6.7	7.9	: 0.5 m.											
11.9	14.0	: 0.5 m.											
15.8	17.4	: 0.3 m.											
24.7	26.2	: 0.3 m.											
29.2	30.5	: 0.3 m.											
30.5	32.3	: 0.6 m.											
38.7	39.8	: 0.2 m.											
43.0	44.0	: 0.5 m.											
50.6	50.9	: 0.2 m.											
53.9	54.6	: 0.5 m.											
56.0	58.0	: 0.2 m.											
67.1	71.0	FELSIC QUARTZ EYE TUFF											
		Light grey, with weak greenish tinge, coarse felsic ash tuff with up to 15% 2 mm quartz eye. Minor quartz - carbonate veins with traces of chlorite. Moderate pervasive sericite and weak to very weakly chloritic. Sharp upper and lower contacts at 43 and 53 degrees to the core axis, respectively. Traces of pyrite. .	VA09321	67.1	71.0	3.9	n/a	41	n/a	82	n/a	n/a	474
		67.1 71.0 MODERATE PERVASIVE SERICITIZATION.											
Foliations :													
68.0	55	degrees to core axis.											
Bedding at upper contact : 43 degrees to core axis.													
Bedding at lower contact : 53 degrees to core axis.													
71.0	92.3	MAFIC FELDSPAR AND MAFIC PHYRIC TUFF											
		Medium to light green - grey mafic tuff with localized areas containing up to 15% 1-2 mm sauseratized feldspar crystals. Up to 5% stretched chloritic mafic phenocrysts found locally throughout unit. Moderate to strongly chloritic, moderate pervasive carbonate alteration and weak, spotty epidote found locally and centered on feldspar crystals. Weak fracture controlled carbonate and	VA09322	71.0	83.0	12.0	n/a	39	n/a	79	n/a	n/a	495
			VA09323	83.0	92.0	9.0	n/a	43	n/a	73	n/a	n/a	463

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)
		Foliations : 108.5 : 60 degrees to core axis.											
111.3	114.8	MAFIC TUFF Medium to dark green mafic tuff with intercalated tuffaceous sediments. Locally weak to moderately magnetic. Strongly quartz veined near upper contact with minor quartz flooding. Moderate fracture controlled carbonate alteration to locally weak pervasive carbonatization. Trace to 2% disseminated pyrite. . 111.3 114.8 MODERATE FRACTURE CONTROLLED CARBONATIZATION.	VA09326 VA09327	111.3 114.6	114.6 120.3	3.3 5.7	n/a n/a	21 84	n/a n/a	84 79	n/a n/a	n/a n/a	585 434
		Foliations : 110.5 : 40 degrees to core axis.											
		Bedding : 114.3 : 38 degrees to core axis.											
114.8	120.3	MAFIC MAFIC PHYRIC LAPILLI TUFF Medium to dark green mafic lapilli tuff with up to 50% mafic porphyritic lapilli fragments. Unit is similar to previous unit at 93.0 to 103.5 m, however lapilli are not as distinct. Lapilli fragments contain up to 15% stretched and chloritized mafic phenocrysts, up to 5%, <2 mm sauseratized feldspar crystals, and minor localized quartz crystals. General orientation of the fragments is at approximately 45 to 50 degrees to core axis. Matrix is moderate to strongly chloritic with minor localized feldspar crystals and chloritized mafic phenocrysts. Trace to 2% disseminated pyrite. 118.2 118.9 : medium grey, fine-grained siliceous interbed with occasional dark chloritic fragments. Moderately chloritic with black chlorite found along lower contact and a fine-grained epidotized mafic dyke (10 cm) marking the upper contact. . 114.8 120.3 WEAK FRACTURE CONTROLLED CARBONATIZATION.											
		Foliations. 115.0 : 50 degrees to core axis.											
120.3	132.4	MAFIC TUFF Medium green to greenish grey mafic tuff with weak to moderate magnetic zones. Localized fine-grained to 1 mm	VA09328	120.3	132.4	12.1	n/a	59	n/a	92	n/a	n/a	847

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)
		sauseratized feldspar crystals and minor, up to 1 mm quartz crystals found particularly towards the upper contact. Massive, weak to moderately chloritic siliceous horizons up to 40 cm which show gradational upper contacts and generally sharp lower contacts. Moderate wavy foliation with minor less well foliated to massive sections. Trace to 2% disseminated pyrite with up to 4% disseminated to blebby pyrite within the siliceous horizons. Weak fracture controlled carbonate with weak pervasive epidote from approximately 129.4 to 131.4 m. Minor quartz veins with some associated quartz flooding.											
126.8	127.1	: massive, siliceous interbed with lower contact at 48 degrees to core axis.											
127.4	127.7	: massive, siliceous interbed with lower contact at 55 degrees to core axis.											
		Alteration : 120.3 132.4 WEAK FRACTURE CONTROLLED CARBONATIZATION. 129.4 131.4 WEAK PERVASIVE EPIDOTIZATION.											
		Foliation : 124.0 : 50 degrees to core axis. 131.4 : 55 degrees to core axis.											
		125.8 : fault with fault gouge.											
		Bedding at 124.5 : 40 degrees to core axis.											
132.4	133.2	FELSIC TUFF Light grey felsic ash tuff with up to 4% disseminated pyrite.											
		132.4 133.2 MODERATE PERVASIVE SERICITIZATION.											
		Foliation : 133.0 : 45 degrees to core axis.											
133.2	168.4	MAFIC TUFF Medium green to greenish grey fine-grained mafic ash tuff with interbedded siliceous zones showing sharp upper and lower contacts. Overall, moderate to strongly chloritic with zones of weak to moderate pervasive epidote alteration. Weak to very weak fracture controlled carbonate alteration and minor calcite filled tension gashes. Moderate to strongly quartz veined from 139.0 to 144.4 m with increasing intensity downhole. Weak to moderately magnetic below approximately 140.0 m. Trace to	VA09329	133.2	139.0	5.8	n/a	40	n/a	131	n/a	n/a	508
			VA09330	139.0	168.4	29.4	n/a	61	n/a	107	n/a	n/a	952
			VA09617	147.3	148.0	.7	3	45	<5	68	1	5	860
			VA09618	148.0	149.0	1.0	3	29	<5	73	1	7	830
			VA09619	149.0	150.0	1.0	3	59	<5	75	1	7	990
			VA09620	150.0	151.0	1.0	3	54	<5	86	1	<5	840
			VA09621	151.0	152.0	1.0	3	44	<5	77	1	6	820
			VA09622	152.0	153.0	1.0	3	63	<5	99	<1	<5	1000
			VA09623	153.0	154.0	1.0	3	48	<5	77	<1	<5	1200

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)
		4% disseminated pyrite. Minor fracture controlled hematization observed locally and minor biotite along lower contact. Weak to moderate foliation.	VA09624	154.0	155.0	1.0	3	35	<5	69	1	<5	1200
		155.8 156.0 : massive, siliceous zone with up and lower contact at 45 and 80 degrees to core axis, respectively.	VA09625	155.0	156.0	1.0	3	61	<5	85	<1	6	1300
		159.5 160.4 : Similar to above with slightly higher mafic component, with up and lower contact at 50 and 43 degrees to core axis, respectively.	VA09626	156.0	157.0	1.0	3	77	<5	112	1	5	1000
		133.2 168.4 WEAK FRACTURE CONTROLLED CARBONATIZATION.											
		131.3 139.0 MODERATE PERVASIVE EPIDOTIZATION.											
		150.0 161.1 WEAK PERVASIVE EPIDOTIZATION, locally moderate											
		Foliations : 136.0 : 53 degrees to core axis. 153.0 : 48 degrees to core axis. 164.0 : 55 degrees to core axis.											
		Bedding at 168.4 (lower contact) : 55 degrees to core axis.											
168.4	174.0	WEAKLY CHLORITIC FELSIC TUFF Light greenish grey, fine-grained felsic tuff. Weakly chloritic increasing to moderate towards lower contact. Minor, up to 10 cm interbedded mafic units and a 10 cm argillite bed at 171.6 m. Weak to moderately foliated with blocky, highly fractured core from 169.9 to 172.0 m. Weak fracture controlled carbonatization and moderate pervasive sericitization. Trace to 2% disseminated pyrite.	VA09331	168.4	174.0	5.6	n/a	41	n/a	49	n/a	n/a	756
		168.4 174.0 MODERATE PERVASIVE SERICITIZATION.											
		Foliations : 173.2 : 42 degrees to core axis.											
		169.2 172.0 : blocky, highly fractured core with numerous fault zones with fault gouge.											
		Lost core : 169.2 172.0 : .8 m.											
174.0	177.6	MAFIC TUFF Medium to dark green mafic tuff or possible flow. Weakly foliated to massive. Minor hematization observed on fractures and fine-grained biotite found proximal to carbonate fractures. Weak to moderately magnetic. Weak fracture controlled to slightly pervasive carbonatization.	VA09332	174.0	177.6	3.6	n/a	23	n/a	135	n/a	n/a	359

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)
		Traces of disseminated pyrite.											
		174.0 177.6 WEAK FRACTURE CONTROLLED CARBONATIZATION.											
		Foliation : 177.3 : 53 degrees to core axis. 175.4 : fault with fault gouge.											
177.6	179.4	CHLORITIC FELSIC QUARTZ EYE TUFF Medium to light greenish grey felsic ash tuff. Moderately chloritic decreasing towards the lower contact. Up to 10%, < 3 mm quartz crystals. Moderate to well foliated with trace to 1% disseminated pyrite.	VA09333	177.6	179.4	1.8	n/a	17	n/a	53	n/a	n/a	864
		177.6 179.4 MODERATE PERVASIVE SERICITIZATION. 177.6 179.4 WEAK PERVASIVE CARBONATIZATION.											
		Foliation : 179.0 : 48 degrees to core axis.											
179.4	182.8	FELSIC VOLCANIC WACKE Light grey felsic ash tuff with a variable cherty sediment component. Local up to 3%, < 3 mm quartz crystals. Small, 5 cm argillic bed at 180.25 m with lower contact at 52 degrees to core axis. Weak fracture controlled to pervasive carbonate alteration. Moderate to well foliated with trace to 1% disseminated pyrite. Gradational upper contact and sharp lower contact.	VA09334 VA09627	179.4 182.0	182.8 183.0	3.4 1.0	n/a 1	53 79	n/a 6	87 94	n/a 1	n/a 7	817 1100
		179.4 182.8 MODERATE PERVASIVE SERICITIZATION. 179.4 182.8 WEAK FRACTURE CONTROLLED CARBONATIZATION.											
		Foliation : 180.0 : 50 degrees to core axis. Bedding at 180.3 : 52 degrees to core axis. Bedding at 182.8 : 68 degrees to core axis.											
182.8	192.0	ARGILLACEOUS FELSIC QUARTZ EYE TUFF Medium grey to green grey felsic tuff with a variable intercalated argillaceous sediment component and massive interbedded black argillite units ranging in thickness from several cm up to 50 cm. The felsic tuff varies from a well bedded, clean to weakly chloritic ash tuff with up	VA09335 VA09628 VA09629 VA09630 VA09631	182.8 183.0 184.0 185.0 186.0	192.0 184.0 185.0 186.0 187.0	9.2 1.0 1.0 1.0 1.0	n/a 3 1 3 3	32 72 79 73 32	n/a <5 <5 9 5	71 56 62 68 52	n/a <1 <1 <1 <1	n/a 6 6 <5 <5	1840 1400 2000 1600 1900

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)
		to 8%, < 3 mm quartz crystals to a medium to dark grey argillaceous ash tuff. The felsics are moderately to well foliated whereas the argillite units are generally massive to weakly foliated (contorted). Weak to moderate fracture controlled to weakly pervasive carbonate alteration throughout and moderate sericite alteration within the felsics. Trace to 4% pyrite found primarily within the argillite.	VA09632	187.0	188.0	1.0	3	37	<5	50	<1	<5	1800
			VA09633	188.0	189.0	1.0	1	11	<5	53	<1	<5	1600
			VA09634	189.0	190.0	1.0	1	10	<5	43	<1	<5	1700
			VA09635	190.0	191.0	1.0	1	13	<5	53	<1	<5	1900
			VA09636	191.0	192.0	1.0	3	21	6	18	<1	<5	2000
		182.8 192.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION.											
		Foliation : 186.0 : 52 degrees to core axis.											
		Bedding at 184.6 : 58 degrees to core axis.											
		186.3 187.4 : moderate quartz veined blocky, highly fractured core.											
		186.3 : fault with fault gouge.											
		187.0 : fault with fault gouge.											
192.0	199.4	ARGILLITE											
		Interbedded massive black argillite with less weakly foliated dark grey to black argillaceous sediments. 1.3 m argillaceous felsic interbed from 196.7 to 198.0 m. The argillites and sediments contain numerous quartz and calcite veinlets and minor cherty beds. Locally up to 10% disseminated to cubes of pyrite primarily within the argillite.	VA09637	192.0	193.0	1.0	3	72	107	176	1	9	1500
			VA09336	192.0	199.4	7.4	n/a	55	n/a	294	n/a	n/a	1940
			VA09638	193.0	194.0	1.0	3	69	22	143	1	9	1700
			VA09639	194.0	195.0	1.0	3	65	12	125	1	7	1900
			VA09640	195.0	196.0	1.0	3	61	18	100	1	5	1700
			VA09641	196.0	196.8	.8	3	63	8	94	<1	<5	2000
			VA09642	196.8	198.0	1.2	1	17	<5	52	<1	<5	2200
			VA09643	198.0	199.0	1.0	3	73	18	92	<1	<5	2200
		193.0 199.4 MODERATE FRACTURE CONTROLLED CARBONATIZATION.	VA09644	199.0	200.0	1.0	1	21	<5	53	<1	<5	1600
		Foliation : 197.5 : 54 degrees to core axis.											
		Bedding at 196.8 : 48 degrees to core axis.											
		196.1 : fault with fault gouge.											
		199.4 : fault with fault gouge.											
		Lost core. 198.6 199.5 : .5 m.											
199.4	213.5	CHLORITIC FELSIC QUARTZ EYE TUFF											
		Weakly chloritic, light greenish grey felsic ash tuff. Up to 10%, < 2 mm quartz crystals. Moderate to strong pervasive sericite alteration and weak fracture	VA09337	200.0	213.0	13.0	n/a	17	n/a	50	n/a	n/a	1240

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%L0I	SUM	CODES		
															ROCK	ALT	MIN
VA09070	75.20	75.50	51.40	17.10	10.20	3.23	1.25	1.74	9.29	0.58	0.49	0.15	4.54	99.97	TMA	N	AA
VA09071	79.00	79.30	55.80	18.10	6.95	3.12	2.49	2.05	7.22	0.66	0.26	0.14	3.39	100.18	TMA	PCM	AA
VA09072	127.35	127.70	58.90	16.80	3.80	1.77	4.97	3.06	5.64	0.30	0.26	0.14	3.77	99.41	TMA	PSH	BCP
VA09073	128.00	128.30	47.90	11.60	8.94	8.52	1.70	0.81	9.79	0.54	0.17	0.19	10.00	100.16	TMA	FCW	AA
VA09074	158.30	159.00	48.00	17.10	8.53	3.21	3.30	1.75	9.71	0.69	0.52	0.28	6.16	99.25	TMA	FCW	AA
VA09075	159.40	159.80	59.60	16.60	4.90	1.63	2.99	2.42	5.41	0.27	0.23	0.17	4.85	100.07	TMA	PSM	BCP
VA09076	214.50	214.90	51.70	15.80	7.63	2.72	2.53	2.27	8.33	0.50	0.40	0.20	8.16	100.14	TMA	FCW	DBP
VA09077	221.20	221.50	68.40	14.70	3.40	0.86	2.82	2.03	2.14	0.26	0.07	0.05	4.68	99.82	TEAP	PSH	DBP
VA09078	230.10	230.30	41.30	17.90	8.35	4.22	1.36	3.25	11.50	0.95	0.43	0.14	9.70	99.60	TMA	FCW	DBP
VA09079	299.40	299.70	46.10	17.10	8.61	2.76	2.04	2.93	9.45	0.78	0.18	0.22	9.23	100.30	TMA	FCW	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	Zr (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	CODES		
												ROCK	ALT	MIN
VA09070	75.20	75.50	55.0	904.0	1110.0	12.0	39.0	27.0	18.0	58.0	<10.0	PHA	N	AA
VA09071	79.00	79.30	58.0	611.0	745.0	14.0	62.0	10.0	46.0	80.0	<10.0	TMA	PCM	AA
VA09072	127.35	127.70	68.0	295.0	1390.0	24.0	133.0	27.0	14.0	89.0	<10.0	TMA	FSM	DCP
VA09073	138.00	138.30	40.0	192.0	398.0	20.0	20.0	<10.0	83.0	87.0	53.0	TMA	ECW	AA
VA09074	158.20	159.00	34.0	762.0	616.0	<10.0	76.0	31.0	22.0	124.0	<10.0	TMA	ECW	AA
VA09075	159.40	159.80	78.0	262.0	1230.0	36.0	114.0	19.0	<10.0	108.0	14.0	TMA	FSM	DCP
VA09076	214.50	214.90	49.0	325.0	721.0	16.0	88.0	20.0	34.0	105.0	<10.0	TMA	ECW	DBP
VA09077	221.20	221.50	54.0	212.0	968.0	12.0	83.0	<10.0	22.0	100.0	<10.0	TEAD	FSM	DBP
VA09078	230.10	230.30	61.0	370.0	912.0	15.0	53.0	18.0	23.0	104.0	<10.0	TMA	ECW	DBP
VA09079	299.40	299.70	50.0	310.0	533.0	16.0	21.0	15.0	123.0	135.0	<10.0	TMA	ECW	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SiO ₂	%Al ₂ O ₃	%CaO	%MgO	%Na ₂ O	%K ₂ O	%Fe ₂ O ₃	%TiO ₂	%P ₂ O ₅	%MnO	%LOI	SUM	CODES		
															ROCK	ALT	MIN
VA09317	6.70	30.00	49.00	16.10	9.23	3.03	2.00	1.30	8.35	0.94			8.93	98.88	TMA	ECM	AA-
VA09318	30.00	40.70	51.00	15.50	7.82	3.77	3.28	1.02	7.91	0.65			7.93	98.89	TMA	ECM	AA-
VA09319	40.70	57.00	47.70	13.70	10.30	5.69	2.04	0.94	9.10	0.73			9.62	99.82	TMAW	ECM	AA-
VA09320	57.00	67.10	71.20	12.90	3.66	0.90	1.77	3.04	1.37	0.18			4.00	99.52	TMA	PCM	AA-
VA09321	67.10	71.00	46.00	13.50	11.20	6.32	0.72	1.16	10.00	0.73			10.40	100.03	TFAO	PSH	DBP
VA09322	71.00	82.00	51.00	16.10	8.78	4.33	2.34	1.30	8.22	0.69			6.47	99.23	TMAFW	ECM	DBP
VA09323	82.00	92.00	50.80	15.10	8.48	4.48	2.54	1.38	8.71	0.72			7.62	99.83	TMAFW	ECM	DBP
VA09324	92.40	103.50	49.60	13.70	8.33	7.84	3.12	0.68	11.00	0.66			4.16	99.09	TOROW	PCM	DBP
VA09325	106.30	111.30	52.60	17.50	5.90	2.37	3.94	3.43	5.39	0.48			7.70	99.31	TMA	ECM	DBP
VA09326	111.30	114.60	35.20	12.40	12.90	8.12	0.87	2.39	9.80	0.56			17.20	99.44	TMA	ECM	DBP
VA09327	114.60	130.30	51.10	11.40	8.99	9.32	2.79	0.66	9.41	0.51			5.47	99.65	TMB	ECM	DBP
VA09328	120.30	132.40	47.30	14.20	8.37	7.77	2.52	1.44	9.50	0.58			7.62	99.31	TMA	ECM	DBP
VA09329	132.20	139.00	50.90	15.90	9.11	4.71	3.02	1.10	9.25	0.60			4.23	98.82	TMA	ECM	DBP
VA09330	139.00	168.40	49.00	17.30	7.19	3.45	2.94	2.61	9.65	0.68			5.39	98.21	TMA	ECM	DBP
VA09331	168.40	174.00	62.70	13.70	6.23	1.88	2.46	2.18	3.77	0.35			6.39	99.66	TFA	PSH	DBP
VA09332	174.00	177.60	46.70	16.70	6.56	4.19	3.15	1.02	11.10	1.17			7.31	97.90	TMA	ECM	DBP
VA09333	177.60	179.40	70.40	12.40	3.64	1.30	2.96	1.94	2.98	0.25			3.77	99.64	TFAO	PSH	DBP
VA09334	179.40	182.80	44.30	14.60	11.70	5.03	1.22	1.82	8.26	0.64			12.30	99.87	TFA	PSH	DBP
VA09335	182.80	192.00	60.80	15.50	5.05	2.12	1.99	2.68	4.91	0.36			6.00	99.41	TFAO	ECM	DBP
VA09336	192.00	199.40	72.00	7.96	5.23	1.23	0.51	1.76	3.87	0.39			4.93	97.88	SATH	ECM	DBP
VA09337	209.00	212.00	69.10	13.90	3.26	0.95	2.62	2.56	2.72	0.28			3.93	99.32	TFAO	PSH	DBP
VA09338	212.50	230.00	70.30	14.10	3.26	0.93	2.51	2.01	1.96	0.25			4.00	100.32	TFAO	PSH	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO										ROCK	CODES		
			RE (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	Zr (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)		ALT	MIN	
VA09317	6.70	30.00			469.0					51.0	73.0	31.0	TMA	ECH	AA-
VA09318	30.00	40.70			371.0					33.0	79.0	11.0	TMA	ECH	AA-
VA09319	40.70	57.00			421.0					53.0	75.0	32.0	TMAW	ECH	AA-
VA09320	57.00	67.10			1120.0					<10.0	44.0	<10.0	TMA	PCM	AA-
VA09321	67.10	71.00			474.0					41.0	82.0	35.0	TEAQ	PSH	DBP
VA09322	71.00	83.00			495.0					39.0	79.0	20.0	TMAEW	ECH	DBP
VA09323	83.00	92.00			463.0					42.0	73.0	35.0	TMAEW	ECH	DBP
VA09324	92.00	103.50			328.0					111.0	34.0	40.0	TOSBW	ECW	DBP
VA09325	103.50	111.30			1190.0					<10.0	48.0	<10.0	TMA	ECW	DBP
VA09326	111.30	114.60			585.0					21.0	84.0	39.0	TMA	ECW	DBP
VA09327	114.60	129.30			434.0					34.0	79.0	54.0	TMR	ECW	BBP
VA09328	129.30	132.40			847.0					59.0	92.0	52.0	TMA	ECW	DCP
VA09329	132.40	139.00			508.0					40.0	131.0	15.0	TMA	ECW	DCP
VA09330	139.00	168.40			952.0					61.0	107.0	<10.0	TMA	ECW	DCP
VA09331	168.40	174.00			756.0					41.0	49.0	10.0	TFA	PSH	DBP
VA09332	174.00	177.60			359.0					23.0	135.0	27.0	TMA	ECW	DBP
VA09333	177.60	179.40			864.0					17.0	53.0	<10.0	TEAQ	PSH	DBP
VA09334	179.40	182.80			817.0					53.0	87.0	80.0	TFA	PSH	DBP
VA09335	182.80	192.00			1840.0					32.0	71.0	<10.0	TEAQ	ECH	DCP
VA09336	192.00	199.40			1940.0					55.0	204.0	16.0	SATM	ECH	DCP
VA09337	200.00	213.00			1240.0					17.0	50.0	<10.0	TEAQ	PSH	DBP
VA09338	213.00	230.00			1000.0					14.0	63.0	<10.0	TEAQ	PSH	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	XSIO2	XAL2O3	XCAO	XMGO	XNA2O	XK2O	XFE2O3	XTIO2	XP2O5	XMNO	XLOI	SUM	CODES		
															ROCK	ALT	MIN
VA09339	230.00	260.00	70.20	13.40	3.23	0.87	2.50	3.27	1.99	0.24			3.85	99.55	TEAO	PSM	DBP
VA09340	260.00	280.00	69.50	14.20	2.39	0.79	2.02	4.04	2.14	0.26			3.23	98.57	TEAO	PSM	DBP
VA09341	280.00	298.50	69.00	14.10	3.13	0.93	1.98	3.72	2.28	0.37			3.70	99.11	TEAO	PSM	DBP
VA09342	301.00	328.30	64.20	13.50	5.06	2.07	2.35	2.34	4.20	0.31			5.23	99.26	TEAO	PSM	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	RB (ppm)	SK (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NR (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	CODES		
												ROCK	ALT	MIN
VA09339	230.00	260.00			1140.0				<10.0	48.0	<10.0	TEAO	PSM	DBP
VA09340	260.00	280.00			1100.0				27.0	56.0	<10.0	TEAO	PSM	DBP
VA09341	280.00	298.50			1040.0				19.0	47.0	<10.0	TEAO	PSM	DBP
VA09342	301.00	328.30			834.0				51.0	97.0	<10.0	TEAO	PSM	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MH (ppm)	ZFE0	ROCK	CODES	
																ALT	MIN
VA09614	104.00	104.80	520.0	108.0	82.0	0.6	8.0	38.0	40.0	<5.0	<5.0	<1.0	1426.0	6.17	IMR		DBP
VA09615	104.80	105.30	980.0	97.0	73.0	0.7	13.0	40.0	39.0	9.0	<5.0	<1.0	1442.0	5.51	IMR		DCP
VA09616	105.30	106.30	440.0	62.0	75.0	<0.5	<5.0	29.0	34.0	<5.0	<5.0	1.0	1831.0	6.32	IMR		DBP
VA09617	147.30	148.00	860.0	45.0	68.0	1.0	5.0	15.0	4.0	<5.0	13.0	<1.0	1485.0	4.82	TMA		DCP
VA09618	148.00	149.00	830.0	29.0	73.0	0.9	7.0	16.0	1.0	<5.0	<5.0	1.0	1384.0	4.90	TMA		DCP
VA09619	149.00	150.00	990.0	59.0	75.0	0.9	7.0	15.0	3.0	<5.0	21.0	<1.0	1492.0	4.65	TMA		DCP
VA09620	150.00	151.00	840.0	54.0	86.0	0.5	<5.0	18.0	<1.0	<5.0	17.0	<1.0	1534.0	4.72	TMA		DCP
VA09621	151.00	152.00	820.0	44.0	77.0	0.9	6.0	20.0	2.0	<5.0	<5.0	<1.0	1465.0	5.04	TMA		DCP
VA09622	152.00	153.00	1000.0	63.0	99.0	<0.5	<5.0	25.0	<1.0	<5.0	<5.0	<1.0	1650.0	5.58	TMA		DCP
VA09623	153.00	154.00	1200.0	48.0	77.0	<0.5	<5.0	19.0	4.0	<5.0	6.0	<1.0	1371.0	4.89	TMA		DCP
VA09624	154.00	155.00	1200.0	35.0	69.0	0.5	<5.0	22.0	6.0	<5.0	13.0	<1.0	1136.0	5.31	TMA		DCP
VA09625	155.00	156.00	1300.0	61.0	85.0	<0.5	6.0	24.0	11.0	<5.0	33.0	<1.0	1262.0	4.73	TMA		DCP
VA09626	156.00	157.00	1000.0	77.0	112.0	0.5	5.0	27.0	6.0	<5.0	<5.0	<1.0	1422.0	5.11	TMA		DCP
VA09627	182.00	183.00	1100.0	79.0	94.0	0.5	7.0	18.0	33.0	6.0	35.0	<1.0	1188.0	4.78	TEA		DBP
VA09628	183.00	184.00	1400.0	72.0	56.0	<0.5	6.0	10.0	25.0	<5.0	41.0	<1.0	621.0	3.13	SATH		DCP
VA09629	184.00	185.00	2000.0	79.0	62.0	<0.5	6.0	20.0	43.0	<5.0	25.0	<1.0	1062.0	3.92	TEAO		DBP
VA09630	185.00	186.00	1600.0	73.0	68.0	<0.5	<5.0	12.0	26.0	9.0	33.0	<1.0	729.0	3.21	TEAO		DCP
VA09631	186.00	187.00	1900.0	32.0	52.0	<0.5	<5.0	7.0	16.0	5.0	44.0	<1.0	782.0	2.91	SATH		DCP
VA09632	187.00	188.00	1800.0	37.0	50.0	<0.5	<5.0	10.0	13.0	<5.0	21.0	<1.0	684.0	3.01	SATH		DCP
VA09633	188.00	189.00	1600.0	11.0	53.0	<0.5	<5.0	2.0	2.0	<5.0	22.0	<1.0	597.0	2.34	TEAO		DBP
VA09634	189.00	190.00	1700.0	10.0	43.0	<0.5	<5.0	2.0	3.0	<5.0	9.0	<1.0	717.0	2.08	TEAO		DBP
VA09635	190.00	191.00	1900.0	13.0	53.0	<0.5	<5.0	2.0	3.0	<5.0	20.0	<1.0	752.0	2.54	TEAO		DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO													CODES		
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	IFED	ROCK	ALT	MIN
VA09636	191.00	192.00	2000.0	21.0	18.0	<0.5	<5.0	3.0	3.0	6.0	39.0	<1.0	778.0	1.99	IFAG		DBP
VA09637	192.00	193.00	1500.0	72.0	176.0	1.2	9.0	8.0	32.0	107.0	39.0	<1.0	832.0	3.62	SATH		DCP
VA09638	193.00	194.00	1700.0	69.0	143.0	0.8	9.0	7.0	23.0	22.0	74.0	1.0	686.0	3.74	SATH		DCP
VA09639	194.00	195.00	1900.0	65.0	125.0	0.6	7.0	5.0	25.0	12.0	32.0	<1.0	761.0	3.34	SATH		DCP
VA09640	195.00	196.00	1700.0	61.0	100.0	0.5	5.0	9.0	16.0	18.0	7.0	1.0	652.0	2.62	SATH		DCP
VA09641	196.00	196.80	2000.0	63.0	94.0	<0.5	<5.0	11.0	21.0	8.0	21.0	1.0	889.0	3.17	SATH		DCP
VA09642	196.80	198.00	2200.0	17.0	52.0	<0.5	<5.0	5.0	3.0	<5.0	24.0	<1.0	521.0	2.96	IFAG		DBP
VA09643	198.00	199.00	2200.0	73.0	92.0	<0.5	<5.0	9.0	19.0	18.0	78.0	<1.0	551.0	2.62	SATH		DCP
VA09644	199.00	200.00	1600.0	21.0	53.0	<0.5	<5.0	4.0	4.0	<5.0	<5.0	<1.0	331.0	3.14	IFAG		DBP

Summary Log: DDH CH88-80
Location: 22+00 E, 1+90 S; Chip 2 Claim
Azimuth: 210, Dip: -45
Hole Completed: October 23, 1988
Core Logged By: J. Pattison

0.0 - 12.5	Casing.
12.5 - 114.6	Gabbro (Anita Gabbro)
114.6 - 115.7	Felsic tuff/flow; very fine grained to aphanitic, siliceous felsic volcanic. Quite massive, foliation is not well developed. Nil sulphides.
115.7 - 132.7	Massive mafic porphyritic flow
132.7 - 174.0	Mafic tuff and tuffaceous sediments
174.0 m	End of Hole.

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: CR88-80 Page Number 1

Hole Location: 2207 E -40 N

NTS: 92B11 Grid: 22+07 E, 0+40 S
Azimuth: 210 Elevation: 501 m
Dip: -45 Length: 174.0 m

Started: 20-OCT-88
Completed: 23-OCT-88

Claim No. Chip 2
Section No.: 22+00 E

Logged By: J. Pattison
Drilling Co.: Burwash Enterprises
Assayed By: Bondar-Clegg & XRAL

Core Size: NQ

Purpose:

DIP TESTS

Length	Azi- muth	Dip	Length	Azi- muth	Dip
22.90	210.0	-45.0	174.30	210.0	-45.0
114.30	209.0	-44.5			

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)
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0 12.5 OVERBURDEN

12.5 97.7 MEDIUM GRAINED FELDSPAR PHYRIC MAFIC INTRUSION
Massive (foliation not well developed) medium to fine-grained gabbro with 1 to 5 % interstitial ilmenite and nil to trace chalcopyrite. Rock is speckled with 5 to 25 %, 2-4 mm saussuritized feldspar phenocrysts. Occasional irregular quartz-carbonate veins < 1 cm thick. Core is blocky throughout most of the interval. Nil to weak fracture controlled carbonatization. 0.4 M barren quartz vein at 75 degrees to core axis at the lower contact

VA04859	73.0	74.0	1.0	0	37	<5	49	<1	<5	30
VA04860	74.0	74.5	.5	1	910	<5	83	<1	46	50
VA04861	74.5	75.0	.5	0	178	<5	46	<1	6	100
VA04862	94.5	95.5	1.0	0	219	<5	50	<1	8	30
VA04863	95.5	96.0	.5	1	138	<5	52	<1	8	<20
VA04864	96.0	97.0	1.0	0	91	<5	48	<1	9	50

STRUCTURE:

16.0 - 26.0 m: blocky, highly fractured core. Weak foliation developed parallel to the core axis. 0.3 m of lost core between 16.2 and 17.7 m.
At 19.4 m 1.0 cm fault gouge at 45 degrees to core axis.
29.2 - 36.7 m: blocky, highly fractured core. Weak to moderate shearing parallel to the core axis. 0.3 m of lost core between 34.4 and 36.7 m.
37.6 - 38.8 m: FAULT ZONE at 0-45 degrees to core axis. Fault gouge over most of the interval.
40.7 - 41.3 m: blocky, highly fractured core.
46.3 - 46.9 m: blocky, highly fractured core.
48.2 - 48.4 m: fault gouge at 60 degrees to core axis.
48.4 - 49.2 m: blocky, highly fractured core.
55.0 - 55.8 m: slip runs parallel to the core axis. Blocky, highly fractured core.
At 59.9 m minor fault gouge at 60 degrees to core axis.
At 61.5 m minor fault gouge at 50 degrees to core axis.
64.0 - 64.8 m: slip runs parallel to the core axis.

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: Page Number
CH88-80 3

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)
115.7	132.7	WEAK FRACTURE CONTROLLED HEMATIZATION and moderate pervasive and fracture controlled epidotization.											
132.7	174.0	MAFIC TUFF											
		Above 134.0 m.s fine, medium green, mafic tuff intercalated with very fine-grained, pale green to brown cherty sediments. Between 134.0 and 146.5 m's it is a coarse mafic tuff with up to 15 % angular, 2 to 5 mm cherty clasts and quartz grains and 20 %, 2 to 5 mm chloritic mafic phenocrysts. The tuff is unsorted and bedding was not recognized. Becomes a fine tuff with occasional < 1 cm cherty clast or bed below 146.5 m.s. Weakly to moderately cherty from 150.0 to 154.7 m.	VA04313	132.7	134.0	1.3	n/a	42	n/a	126	n/a	n/a	653
			VA04314	134.0	146.5	12.5	n/a	89	n/a	91	n/a	n/a	180
			VA04315	146.5	150.0	3.5	n/a	49	n/a	111	n/a	n/a	680
			VA04868	150.0	151.7	1.7	1	101	<5	98	<1	<5	540
			VA04316	150.0	154.7	4.7	n/a	48	n/a	84	n/a	n/a	416
			VA04869	151.7	152.7	1.0	3	45	<5	80	1	<5	320
			VA04870	152.7	153.4	.7	3	46	<5	82	1	<5	390
			VA04871	153.4	154.4	1.0	1	31	<5	67	<1	<5	810
			VA04317	154.7	174.0	19.3	n/a	60	n/a	101	n/a	n/a	223

STRUCTURE:.

At 133.2 m a 2.0 cm thick bed at 50 degrees to core axis
FINES UP-HOLE.

At 152.0 m bedding is at 66 degrees to core axis.

ALTERATION:.

132.7 174.0 WEAK SPOTTY EPIDOTIZATION. Epidote occurs in epidote +/- calcite knots 2 to 20 mm in diameter, in patches up to 20 cm in diameter and in veins < 5 mm thick. Locally weak biotization in areas with a major sedimentary component.

MINERALIZATION:.

132.7 - 150.0 m: nil to trace disseminated pyrite.

150.0 - 151.7 m: trace to 1 % disseminated pyrite.

151.7 - 153.4 m: 2-3% pyrite. As dark brown to black < 2 mm spots.

153.4 - 174.0 m: nil to trace pyrite.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SiO2	%Al2O3	%CaO	%MgO	%Na2O	%K2O	%Fe2O3	%TiO2	%P2O5	%MnO	%LOI	SUM	CODES		
															ROCK	ALT	MIN
VA04311	114.60	115.70	64.40	19.90	0.93	0.78	8.61	1.80	1.35	0.61			1.08	99.46	IFAN	?	AA-
VA04312	115.70	132.70	50.20	11.70	11.80	10.70	1.97	0.24	10.50	0.52			2.00	99.63	VMAN	SHW	AA-
VA04313	132.70	134.00	57.60	16.80	3.55	3.35	5.78	0.65	7.62	0.85			2.54	98.74	THAT	SEW	DBP
VA04314	134.00	146.50	49.60	18.70	2.66	4.70	4.21	0.41	10.00	0.99			3.35	99.12	THAT	SEW	DBP
VA04315	146.50	150.00	53.20	18.50	5.11	4.05	3.54	1.77	9.66	0.94			3.00	98.77	THAT	SEW	DBP
VA04316	150.00	154.70	58.10	16.40	6.97	2.97	3.08	0.95	7.63	0.83			2.77	99.70	THAT	SEW	DBP
VA04317	154.70	174.00	49.10	19.10	9.94	4.16	3.24	0.41	9.35	0.97			3.54	98.91	THAT	SEW	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	Rb (ppm)	Sr (ppm)	Ba (ppm)	Y (ppm)	Zr (ppm)	Nb (ppm)	Cu (ppm)	Zn (ppm)	Ni (ppm)	CODES		
												ROCK	ALT	MIN
VA04311	114.60	115.70			687.0				16.0	32.0	<10.0	IFAN	?	AA-
VA04312	115.70	132.70			112.0				51.0	68.0	66.0	VMAN	SHW	AA-
VA04313	132.70	134.00			653.0				42.0	106.0	16.0	THAT	SEW	DBP
VA04314	134.00	146.50			380.0				89.0	91.0	36.0	THAT	SEW	DBP
VA04315	146.50	150.00			680.0				49.0	111.0	<10.0	THAT	SEW	DBP
VA04316	150.00	154.70			416.0				48.0	84.0	<10.0	THAT	SEW	DBP
VA04317	154.70	174.00			223.0				60.0	101.0	33.0	THAT	SEW	DBP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MH (ppm)	ZFE0	ROCK	CODES	
																ALI	MIN
VA04859	73.00	74.00	30.0	37.0	49.0	<0.5	<5.0	22.0	57.0	<5.0	33.0	<1.0	488.0	3.71	PHBK		DBP
VA04860	74.00	74.50	50.0	910.0	83.0	<0.5	46.0	29.0	73.0	<5.0	37.0	<1.0	939.0	5.24	PHBK		SBC
VA04861	74.50	75.00	100.0	178.0	46.0	<0.5	6.0	19.0	47.0	<5.0	33.0	<1.0	395.0	3.29	PHBK		DBP
VA04862	94.50	95.50	30.0	219.0	50.0	<0.5	8.0	24.0	45.0	<5.0	54.0	<1.0	455.0	3.70	PHBFM		AA-
VA04863	95.50	96.00	<20.0	138.0	52.0	<0.5	8.0	18.0	36.0	<5.0	<5.0	<1.0	358.0	3.27	OA		VCC
VA04864	96.00	97.00	50.0	93.0	48.0	<0.5	9.0	20.0	37.0	<5.0	6.0	<1.0	383.0	3.56	PHBFM		AA-
VA04865	113.60	114.60	220.0	1051.0	99.0	<0.5	25.0	31.0	47.0	<5.0	21.0	2.0	752.0	6.48	PEAM		AA-
VA04867	114.60	114.70	1100.0	34.0	40.0	<0.5	6.0	6.0	11.0	<5.0	24.0	<1.0	292.0	1.62	TFAT		AA-
VA04866	115.70	116.70	740.0	52.0	81.0	<0.5	6.0	30.0	58.0	<5.0	21.0	<1.0	1121.0	6.21	VMAM		AA-
VA04868	150.00	151.70	540.0	101.0	98.0	<0.5	<5.0	19.0	14.0	<5.0	17.0	<1.0	1051.0	5.53	IMAT		DCP
VA04869	151.70	152.70	320.0	45.0	80.0	0.6	<5.0	13.0	7.0	<5.0	31.0	<1.0	631.0	3.73	IMAT		DCP
VA04870	152.70	153.40	390.0	46.0	82.0	0.6	<5.0	12.0	6.0	<5.0	22.0	<1.0	618.0	3.59	IMAT		DCP
VA04871	153.40	154.40	810.0	31.0	67.0	<0.5	<5.0	12.0	17.0	<5.0	12.0	<1.0	653.0	3.30	IMAT		DBP

Summary Log: DDH CH88-B1
Location: 2+00 E, 0+25 N; Chip 2 Claim
Azimuth: 210, Dip: -50
Hole Completed: October 26, 1988
Core Logged By: D.P. Money

0.0 - 7.3	Casing.
7.3 - 16.9	Felsic crystal tuff.
16.9 - 17.9	Gabbro.
17.9 - 74.0	Felsic crystal tuffs with minor thin chlorite schists intercalated.
74.0 - 76.5	Mafic tuff.
76.5 - 87.5	Felsic crystal tuff.
87.5 - 90.1	Mafic tuff.
90.1 - 129.8	Thin interbedded felsic crystal and lapilli tuffs with minor interbedded very thin mafic tuffs and argillite.
129.8 - 138.3	Felsic flow.
138.3 - 144.5	Mafic tuff.
144.5 - 147.8	Felsic flow.
147.8 - 149.0	Gabbro.
149.0 - 153.8	Felsic crystal tuff.
153.8 - 156.1	Mafic flow.
156.1 - 159.5	Felsic tuff.
159.5 - 178.1	Fault zone.
178.1 - 180.7	Felsic crystal tuff.
180.7 - 181.0	Mafic tuff.
181.0 - 184.5	Andesitic tuff.
184.5 - 217.0	Felsic crystal lapilli tuffs with thin interbedded mafic tuffs.
217.0 - 221.5	Chert.
221.5	End of hole.

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FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: Page Number
CH88-81 1

Hole Location: 27921 E 18J33 N

NTS: 092B/13 Grid: 2+00 E, 0+25 N
Azimuth: 210 Elevation: 615 m
Dip: -50 Length: 221.5 m

Started: October 23, 1988
Completed: October 26, 1988

Purpose: Stratigraphic Section

Claim No. CHIP 2
Section No.: Section 2+00 East, Chip Claim Group

Logged By: D.P. Money
Drilling Co.: Burwash Enterprises
Assayed By: Bondar-Clegg and X-Ray Assay

Core Size: NQ

DIP TESTS

Length	Azi- muth	Dip	Length	Azi- muth	Dip
15.20	208.0	-52.0	198.10	209.0	-48.0
106.70	210.0	-50.0			

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	7.3	CASING											
7.3	16.9	FELSIC QUARTZ EYE TUFF Light white to medium green chloritic to strongly sericitic felsic tuff with on average 10 % 2 to 4 mm. quartz eyes. Possibly coarse clastic or variable alteration in tuff. Local quartz veinlets occur. There is trace fracture controlled pyrite. There is minor fault gouge and minor slips parallel to foliation. Foliations : 9.8 : 50 degrees to core axis. 14.5 : 50 degrees to core axis. Lost core : 10.1 11.3 : 0.2 m. 12.9 14.3 : 0.2 m. 15.0 16.9 : 0.7 m.	VA09143	7.3	16.9	9.6	n/a	22	n/a	38	n/a	n/a	1030
16.9	17.9	MAFIC INTRUSIVE ROCK Mafic sill or gabbro (?). Minor fracture controlled calcite. Massive and dark green. Locally appears weakly magnetic. Lost core : 16.9 18.0 : 0.4 m.											
17.9	24.0	FELSIC QUARTZ - FELDSPAR PHYRIC TUFF Light grey to locally weakly green chloritic felsic tuff	VA09144	17.9	24.0	6.1	n/a	13	n/a	50	n/a	n/a	1110

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)
28.4	47.3	CHLORITIC FELSIC QUARTZ - FELDSPAR PHYRIC TUFF Moderately schistose medium grey to grey - green tuff with approximately 5 to 10 %, 1 to 4 mm, quartz eyes and locally trace to 5 %, 1 to 2 mm, feldspar grains. There is approximately 1 % quartz - calcite - (chlorite) veinlets. Local fracture controlled sericite and biotite occurs. Minor fault slips occur parallel to foliation. Is weakly chloritic on average with nil to moderate chloritic. There is nil to trace disseminated and fracture controlled pyrite locally. Alteration : 28.4 47.3 WEAK PERVASIVE CHLORITIZATION. Foliations : 28.6 : 52 degrees to core axis. 34.5 : 52 degrees to core axis. 39.2 : 54 degrees to core axis. 42.4 : 60 degrees to core axis. 46.5 : 52 degrees to core axis.	VA09347	28.4	47.3	18.9	n/a	13	n/a	56	n/a	n/a	1010
47.3	47.5	MAFIC TUFF Dark green sheared carbonatized mafic, very similar to 26.9 to 28.4. Lower contact at 40 degrees to core axis parallel to foliation.											
47.5	74.0	CHLORITIC FELSIC QUARTZ EYE TUFF Very weakly to moderately chloritic light grey - green to medium green felsic tuff with on average 7 to 10 %, 2 to 4 mm, quartz eyes. Locally appears to have spotty pervasive silicification. Is weakly contorted with gentle kinking. There is minor local fracture controlled sericite. Trace quartz +/- sericite and chlorite veins, up to 20 cm, occur locally. trace pyrite occurs in quartz veins and nil elsewhere. Alteration : 47.5 74.0 WEAK PERVASIVE CHLORITIZATION. 47.5 74.0 WEAK SPOTTY SILICIFICATION. Faults : 47.5 47.7 : blocky, highly fractured core and minor fault gouge. 50.0 : minor fault gouge. 53.7 : 2 mm slip at 67 degrees to core axis. 60.6 60.8 : fault breccia with minor fault gouge slips at 37 and 20 degrees to core axis. 62.0 : 5 mm fault gouge with slip at 41 degrees to core	VA09348	47.5	73.8	26.3	n/a	12	n/a	46	n/a	n/a	1100

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)
		axis.											
		Foliations : 49.2 : 54 degrees to core axis. 52.0 : 52 degrees to core axis. 55.0 : 52 degrees to core axis. 57.6 : 46 degrees to core axis. 62.4 : 48 degrees to core axis. 69.0 : 52 degrees to core axis. 72.0 : 58 degrees to core axis.											
74.0	76.5	MAFIC TUFF Blocky, highly fractured core with 1.4 m lost core from 73.8 to 75.9 and 0.4 m from 75.9 to 77.1 m. Is sheared mafic blocky, highly fractured core with minor fracture controlled carbonatization and hematite from approximately 74 to 75.5 and 76 to 76.5. Felsic crystal tuff occurs from approximately 76 to 76.5 with numerous fault gouge slips.											
76.5	87.5	CHLORITIC FELSIC QUARTZ EYE TUFF Light to medium green - grey contorted felsic tuff with approximately 15 % 1 to 3 mm quartz eyes. There are approximately 1 to 2 % contorted quartz - calcite. There are local kink bands. There is trace pyrite in a quartz vein at 85.6. Alteration : 76.5 84.5 WEAK PERVASIVE CHLORITIZATION. Faults : 75.0 78.7 : 20 % fault gouge in blocky, highly fractured core with slips at numerous orientations. 82.3 82.4 : fault gouge and slips at approximately 60 degrees to core axis. 83.0 85.6 : numerous minor fault slips. 86.3 : 5 mm fault gouge slip at 34 degrees to core axis. Foliations : 77.5 : 54 degrees to core axis. 80.9 : 56 degrees to core axis. 84.0 : 66 degrees to core axis. 86.4 : 55 degrees to core axis.	VA09349	77.1	84.7	7.6	n/a	11	n/a	46	n/a	n/a	935
87.5	90.1	MAFIC TUFF Dark green to brown contorted chlorite - biotite schist with moderate to strong fracture controlled carbonatization. There is a 1.5 cm pyrite cube at 88.15.	VA09351	87.5	90.1	2.6	n/a	30	n/a	95	n/a	n/a	1130

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)
99.5	107.5	WEAK FRACTURE CONTROLLED SILICIFICATION. Foliations : 100.3 : 46 degrees to core axis. 101.7 : 44 degrees to core axis. 104.0 : 47 degrees to core axis. 107.0 : 57 degrees to core axis.											
107.5	107.6	CHLORITE SCHIST Medium to dark green chloritization schist with 5 to 10 % disrupted quartz, quartz - feldspar and calcite veinlets.											
107.6	115.8	FELSIC QUARTZ EYE LAPILLI TUFF Felsic tuff with fracture controlled alteration or 50 % siliceous lapilli in sericitic and weakly chloritic matrix with 3 to 7 %, 1 to 3 mm, quartz eyes. There are minor fracture controlled quartz veinlets. Trace fracture controlled and disseminated pyrite occurs. Foliations : 108.6 : 66 degrees to core axis. 111.4 : 44 degrees to core axis. 112.5 : 55 degrees to core axis. 113.8 : 58 degrees to core axis.	VA09354	107.6	115.8	8.2	n/a	<10	n/a	47	n/a	n/a	1130
115.8	116.2	CHLORITE SCHIST Dark green chlorite with weak to moderate fracture controlled calcite veinlets and trace to 1 % pyrite and trace hematite in the calcite veinlets. Is weakly to strongly contorted locally.	VA09645	115.8	116.2	.4	1	29	<5	182	1	<5	1400
116.2	120.7	FELSIC QUARTZ - FELDSPAR PHYRIC LAPILLI TUFF Similar to 107.6 to 115.8 m. Grey tuff with siliceous lapilli or silicified tuff in sericitic to very weakly locally chloritic matrix with trace to 2 %, 1 to 3 mm, feldspars and 3 to 7 %, 1 to 2 mm, quartz eyes. There is trace minor fracture controlled quartz veinlets. Trace to nil fracture controlled pyrite occurs. Foliations : 117.0 : 55 degrees to core axis. 118.3 : 47 degrees to core axis. 118.8 : 53 degrees to core axis. Faults : 119.3 : minor slip with chlorite parallel to foliation.	VA09355	116.2	122.3	6.1	n/a	11	n/a	49	n/a	n/a	935

PROPERTY: CHEMAINUS J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOGHOLE No: Page Number
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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)
120.7	120.8	MAFIC TUFF Dark massive magnetic mafic. tuff (?), with trace disseminated pyrite and weak to moderate fracture controlled carbonatization.											
120.8	121.0	FELSIC QUARTZ - FELDSPAR PHYRIC LAPILLI TUFF As from 116.2 to 120.7.											
121.0	121.1	MAFIC TUFF As from 120.7 to 120.8.											
121.1	122.3	FELSIC QUARTZ - FELDSPAR PHYRIC LAPILLI TUFF As from 116.2 to 120.7.											
122.3	122.4	MAFIC TUFF As from 120.7 to 120.8.											
122.4	127.3	CHLORITIC FELSIC QUARTZ EYE TUFF Weakly to moderately chloritic medium grey green felsic tuff with approximately 5 % 2 to 4 mm. quartz eyes. There are minor fracture controlled calcite and quartz veinlets. Nil sulphides occur. Alteration : 122.4 127.3 MODERATE PERVASIVE CHLORITIZATION. Foliations : 122.8 : 47 degrees to core axis. 125.2 : 50 degrees to core axis. 126.4 : 52 degrees to core axis.	VA09356	122.4	127.3	4.9	n/a	<10	n/a	40	n/a	n/a	802
127.3	127.5	CHLORITE SCHIST Dark green chlorite schist with trace disseminated pyrite. fracture controlled carbonatization and foliation at 46 degrees to core axis.											
127.5	129.6	FELSIC QUARTZ EYE TUFF Medium to light grey felsic tuff with 10 to 20 %, 1 to 3 mm. quartz grains. There is weak fracture controlled chloritization. Trace minor fracture controlled quartz and calcite veinlets occur. Nil sulphides occur. Foliations :.	VA09357	127.5	129.6	2.1	n/a	<10	n/a	36	n/a	n/a	924

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)
159.5	178.1	FAULT ZONE Fault gouge and clay with minor blocky, highly fractured core of argillaceous felsic tuff. Lost core :. 160.3 163.4 : 2.2 m, interval is fault gouge. 163.4 164.9 : 0.7 m, interval is mostly fault gouge with minor blocky, highly fractured core. 164.9 167.9 : 2.0 m, blocky, highly fractured core and fault gouge in interval. 167.9 169.5 : 1.4 m, blocky, highly fractured core. 169.5 171.1 : 0.3 m, blocky, highly fractured core. 171.1 172.2 : 0.4 m, blocky, highly fractured core with minor fault gouge. 172.2 173.7 : 0.1 m, minor blocky, highly fractured core, cherty core with clay fault gouge in fractures. 173.7 175.4 : 1.5 m, fault gouge and blocky, highly fractured core. 175.4 176.8 : 1.1 m, fault gouge and blocky, highly fractured core. 176.8 178.6 : 0.1 m, massive fault gouge with cherty clasts											
178.1	180.7	FELSIC QUARTZ EYE TUFF Light grey felsic tuff, locally siliceous blocky, highly fractured core. Hosts 5 to 7 %, 2 mm, quartz eyes. There is local fracture controlled chlorite and quartz veins. Foliations :. 178.2 : 54 degrees to core axis. 180.4 : 49 degrees to core axis. Faults :. Minor fault gouge in fractures and parallel to foliation.	VA09364	178.1	180.7	2.6	n/a	17	n/a	52	n/a	n/a	775
180.7	181.0	CHLORITE SCHIST Dark green magnetic chlorite schist with moderate fracture controlled to pervasive carbonatization.											
181.0	184.5	INTERMEDIATE QUARTZ - FELDSPAR PHYRIC TUFF Possibly very chloritic felsic or mafic, but probably andesitic tuff. Locally strongly contorted to massive with 5 to 7 %, 1 to 2 mm, epidotized feldspars and trace to 3 %, 1 mm, quartz grains. There is approximately 0.5 % fracture controlled calcite and hematite veinlets.	VA09365	181.0	184.5	3.5	n/a	134	n/a	116	n/a	n/a	581

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FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: CH88-81
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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)
		Mafic tuff or possibly flow or even gabbro. Sheared upper contact and lower contact in lost core and blocky, highly fractured core. Massive with 10 to 15 %, 1 to 2.5 mm, epidotized feldspars. There is weak fracture controlled carbonatization and minor quartz veins.	VA09367	191.5	194.8	3.3	n/a	256	n/a	89	n/a	n/a	61
194.8	217.0	<p>FELSIC QUARTZ - FELDSPAR PHYRIC LAPILLI TUFF</p> <p>Is mostly blocky, highly fractured core. Is felsic with minor blocks or beds of epidotized mafic lapilli tuff from 208.6 to 209.8 and 214.7 to 215.2. Felsic is white to medium green in colour with lapilli or silicified tuff surrounded by sericitic matrix to very schistose fine-grained crystal tuffs. There is on average 7 to 10 %, 3 to 5 mm, quartz eyes and locally up to 5 %, 1 mm, epidote grains occur. Is weakly to moderately contorted with local 1 cm scale 'S' folds. Quartz veins occur locally. There is trace fracture controlled and disseminated pyrite. From 211.5 to 217 is a fault breccia with minor fault gouge.</p> <p>Foliations : 195.8 : 42 degrees to core axis. 201.1 : 51 degrees to core axis. 205.7 : 57 degrees to core axis. 211.3 : 50 degrees to core axis.</p> <p>Lost core : 210.3 211.5 : 0.3 m. 216.5 217.8 : 0.8 m.</p>	VA09368	194.8	217.0	22.2	n/a	16	n/a	48	n/a	n/a	870
217.0	221.5	<p>CHERT</p> <p>Blocky and broken white to yellowish - white chert in fault gouge.</p> <p>Lost core : 217.9 219.2 : 1.2 m. 219.2 221.3 : 0.6 m. 221.3 221.5 : 0.1 m.</p> <p>End of hole: 726.5 feet (221.5 metres) on Wednesday October 26, 1988 at 9:00 a.m.</p> <p>Total lost core = 16.1 m, % Recovery = 92.7.</p>	VA09369	217.0	221.5	4.5	n/a	<10	n/a	26	n/a	n/a	2220

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SiO2	%Al2O3	%CaO	%MgO	%Na2O	%K2O	%Fe2O3	%TiO2	%P2O5	%MnO	%LOI	SUM	CODES		
															ROCK	ALT	MIN
VA09080	16.90	17.40	47.70	18.00	7.37	4.04	3.90	1.74	9.56	0.70	0.21	0.20	7.85	100.27	PMA	ECW	AA-
VA09081	97.40	97.30	50.80	17.90	4.22	3.62	3.45	3.45	9.26	0.76	0.56	0.19	5.39	99.60	SAT	ECW	AA-
VA09082	147.80	148.20	47.20	13.80	10.90	6.97	1.38	0.18	13.70	1.75	0.16	0.22	3.62	99.89	PMA	?	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO											CODES		
			RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	Zr (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	ROCK	ALT	MIN	
VA09080	16.90	17.40	41.0	512.0	604.0	22.0	32.0	17.0	<10.0	107.0	<10.0	PMA	ECW	AA-	
VA09081	97.40	97.30	54.0	186.0	1250.0	20.0	83.0	17.0	22.0	124.0	<10.0	SAT	ECW	AA-	
VA09082	147.80	148.20	21.0	404.0	144.0	29.0	66.0	18.0	137.0	115.0	80.0	PMA	?	AA-	

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	YSI02	XAL203	XCAU	ZMG0	ZNA20	ZK20	ZFE203	ZTI02	ZP205	ZMNO	ZLO1	SUM	CODES		
															ROCK	ALT	MIN
VA09343	7.30	16.90	71.70	11.80	4.88	0.82	2.44	2.07	1.61	0.29			4.39	99.91	TEAQT	?	FBP
VA09344	17.90	24.00	71.70	12.60	2.84	0.83	2.32	2.65	2.18	0.23			3.47	99.82	TEAQT	?	FBP
VA09345	24.20	26.90	70.10	13.30	3.36	0.80	2.50	2.91	1.72	0.23			4.08	99.01	TEAQT	FCW	AA-
VA09346	26.90	28.40	49.90	17.90	6.74	2.63	2.90	3.70	7.68	0.62			7.54	99.61	TMA	PCS	DBP
VA09347	28.40	47.30	69.60	13.60	3.21	1.03	2.84	2.80	2.41	0.24			3.92	99.66	TEAQT	PHW	DBP
VA09348	47.50	73.80	71.10	13.70	3.00	1.14	2.78	2.52	1.89	0.24			3.62	99.99	TEAQT	PHW	AA-
VA09349	77.10	84.70	70.50	12.10	3.44	0.85	2.59	2.82	2.04	0.23			4.00	99.57	TEAQT	PHW	AA-
VA09351	97.50	90.10	52.20	16.90	5.41	3.76	1.00	4.21	8.46	0.50			7.08	99.42	TMA	ECS	DBP
VA09352	90.10	97.40	69.70	13.20	2.66	1.49	2.74	2.38	2.39	0.24			3.23	99.02	TEAQT	SDW	DBP
VA09353	99.50	107.50	70.60	14.20	1.99	1.00	4.04	2.76	2.45	0.25			2.54	99.74	TEAQT	FCW	DBP
VA09354	107.60	115.90	70.00	14.50	2.04	1.21	2.57	3.32	2.45	0.24			3.23	99.57	TEAQT	?	FBP
VA09355	116.20	122.30	70.00	13.40	2.17	1.34	2.13	2.84	2.83	0.26			3.06	99.05	TEAQT	?	FBP
VA09356	122.40	127.30	70.70	13.10	2.61	0.70	3.95	2.43	2.47	0.24			3.16	99.36	TEAQT	?	AA-
VA09357	127.50	129.60	70.60	13.60	2.91	0.71	3.23	3.00	2.42	0.26			3.22	100.06	TEAQT	?	AA-
VA09358	129.90	138.30	69.50	13.10	3.39	0.75	2.90	3.21	2.52	0.23			3.77	99.27	TEAQT	EMW	DBP
VA09359	138.30	144.50	49.40	16.50	7.65	4.09	3.75	1.61	8.63	0.70			7.06	99.41	TMA	PCS	DBP
VA09360	144.50	147.80	69.70	13.20	3.62	1.16	3.45	1.83	2.95	0.32			2.54	98.77	TEAQT	?	DBP
VA09361	149.00	153.80	63.50	14.30	5.20	1.32	3.60	1.75	5.19	0.25			4.08	99.29	TEAQT	?	AA-
VA09362	153.80	156.10	54.10	17.60	4.24	3.41	6.31	0.43	8.22	0.52			3.39	98.22	UMAE	?	AA-
VA09363	156.10	159.50	67.40	14.10	3.45	1.22	5.78	1.47	3.69	0.34			3.47	100.82	TEAQT	?	DBP
VA09364	178.10	189.70	70.50	13.30	3.20	0.71	3.35	2.47	2.31	0.22			3.47	99.53	TEAQT	?	AA-
VA09365	181.00	184.50	50.20	17.00	5.82	4.89	4.19	1.24	9.92	0.71			6.54	100.11	TIAD	FCW	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO										CODES			
			RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	ROCK	ALI	MIN	
VA09343	7.30	16.90			1030.0					22.0	39.0	<10.0	IFAQI	?	FBP
VA09344	17.90	24.00			1110.0					13.0	50.0	<10.0	IFAQI	?	FBP
VA09345	24.20	26.90			1050.0					<10.0	47.0	<10.0	IFAQI	ECW	AA-
VA09346	26.90	28.40			1230.0					44.0	101.0	12.0	IMA	PCS	DBP
VA09347	28.40	47.30			1010.0					13.0	56.0	<10.0	TEAQI	PHW	DBP
VA09348	47.50	72.80			1100.0					12.0	46.0	<10.0	IFAQI	PHW	AA-
VA09349	77.10	84.70			935.0					11.0	46.0	<10.0	TEAQI	PHW	AA-
VA09351	87.50	90.10			1130.0					30.0	95.0	<10.0	IMA	ECB	DBP
VA09352	90.10	97.40			997.0					129.0	58.0	<10.0	IFAQI	SDW	DBP
VA09353	99.50	107.50			854.0					<10.0	52.0	<10.0	IFAQI	ECW	DBP
VA09354	107.60	115.80			1120.0					<10.0	47.0	<10.0	TEBQI	?	FBP
VA09355	116.20	122.30			935.0					11.0	49.0	<10.0	TEBQI	?	FBP
VA09356	122.40	127.30			802.0					<10.0	40.0	<10.0	TEAQI	?	AA-
VA09357	127.50	129.60			924.0					<10.0	36.0	<10.0	TEAQI	?	AA-
VA09359	129.80	138.30			832.0					14.0	39.0	<10.0	VEAQI	FMW	DBP
VA09359	138.30	144.50			577.0					51.0	95.0	15.0	IMA	PCS	DBP
VA09360	144.50	147.80			791.0					20.0	46.0	<10.0	VEAQI	?	DBP
VA09361	149.00	153.80			1180.0					241.0	121.0	<10.0	TEAQI	?	AA-
VA09362	153.80	156.10			246.0					19.0	129.0	<10.0	UMAE	?	AA-
VA09363	156.10	159.50			888.0					20.0	61.0	<10.0	TEAQI	?	DBP
VA09364	178.10	180.70			775.0					17.0	52.0	<10.0	TEAQI	?	AA-
VA09365	181.00	184.50			581.0					134.0	114.0	12.0	TIAD	ECW	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	ZSI02	ZAL203	ZCA0	ZMG0	ZNA20	ZK20	ZFE203	ZTI02	ZP205	ZnNO	ZLO1	SUM	CODES		
															ROCK	ALT	MIN
VA09366	184.70	191.50	70.80	13.40	2.79	1.03	3.20	2.70	2.23	0.23			3.16	99.54	TEAD	?	DBP
VA09367	191.50	194.80	49.90	12.30	11.70	5.83	2.26	0.21	11.50	1.47			4.77	99.94	TMAF	ECW	AA-
VA09368	194.80	217.00	70.60	13.50	2.45	1.07	4.15	2.14	2.68	0.26			2.47	99.32	TEAD	?	DBP
VA09369	217.00	221.50	77.00	11.60	1.27	0.46	2.93	2.68	1.16	0.16			1.39	99.65	S	?	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	SS (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	ZK (ppm)	NR (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	CODES		
												ROCK	ALT	MIN
VA09366	184.70	191.50			1030.0				22.0	50.0	<10.0	TEAD	?	DBP
VA09367	191.50	194.80			61.0				255.0	89.0	71.0	TMAF	ECW	AA-
VA09368	194.80	217.00			670.0				16.0	48.0	<10.0	TEAD	?	DBP
VA09369	217.00	221.50			2220.0				<10.0	26.0	<10.0	S	?	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO												CODES			
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CD (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CO (ppm)	MN (ppm)	FEED	ROCK	ALT	MIN
VA09645	115.80	116.20	1400.0	29.0	182.0	0.6	<5.0	17.0	<1.0	<5.0	<5.0	2.0	1163.0	6.19	TMA		FCP
VA09646	133.80	134.60	1100.0	40.0	24.0	<0.5	<5.0	5.0	<1.0	5.0	21.0	<1.0	663.0	1.46	VEAD		FCP

Summary Log: DDH CH88-82
Location: 23+87 E, 1+90 S; Chip 2 Claim
Azimuth: 210, Dip: -45
Hole Completed: October 26, 1988
Core Logged By: J. Pattison

0.0 - 10.7 Casing.
10.7 - 116.4 Gabbro (Anita Gabbro)
116.4 - 126.2 Sericitic felsic lapilli tuff; 5 % pyrite and 3 % sp in
1-4mm stringers parallel to foliation for 1.3 m from the
lower contact
126.2 - 129.5 Fine-grained feldspar porphyritic gabbro
129.5 - 131.5 Sericitic felsic lapilli tuff; 4-5 % pyrite, disseminated
and as 1-3 mm stringers parallel to foliation.
131.5 - 134.1 Sheared gabbro
134.1 - 138.0 Mafic tuff
138.0 - 149.0 Mafic porphyritic mafic flow
149.0 - 168.5 Mafic tuff
168.5 - 180.4 Mafic porphyritic flow
180.4 m End of Hole.

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: Page Number
CH88-82 1

Hole Location: 2183 E -190 N

NTS: Grid:23+83 E; 1+90 S
Azimuth: 210 Elevation: 497 m
Dip: -45 Length: 180.4 m

Started: 23-OCT-88
Completed: 26-OCT-88

Claim No. Chip 2
Section No.: 24+00 E

Logged By: J. Pattison
Drilling Co.: Burwash Enterprises
Assayed By: Bondar-Clegg & XRAL

Core Size: NQ

Purpose:

DIP TESTS

Length	Azi- muth	Dip	Length	Azi- muth	Dip
19.80	211.0	-46.0	178.30	210.0	-44.0
111.20	212.0	-45.0			

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	10.7	OVERBURDEN											
10.7	116.4	MEDIUM GRAINED MAFIC INTRUSION Dark green, massive medium-grained gabbro with 3-10 % interstitial ilmenite. Locally coarse-grained. Core is broken and blocky over most of the interval. Irregular quartz-carbonate veins < 1.0 cm thick are common. STRUCTURE: 10.7 - 13.7 m: blocky, highly fractured core. 0.2 m of lost core. At 23.9 m slip at 14 degrees to core axis. 29.0 - 30.4 m: FAULT ZONE at 15 degrees to core axis. Blocky, highly fractured core. 42.5 - 43.5 m: slip runs nearly parallel to the core axis. Blocky, highly fractured core. 44.6 - 45.7 m: blocky, highly fractured core. 53.0 - 53.9 m: blocky, highly fractured core. 55.0 - 55.6 m: fault zone at 10 degrees to core axis. 57.3 - 58.0 m: FAULT ZONE. Blocky, highly fractured core. not possible to measure orientation. 0.3 m of lost core. 58.2 - 59.3 m: blocky, highly fractured core. 0.5 m of lost core. 54.2 - 65.1 m: <1-4 mm fault gouge runs nearly parallel to the core axis. Blocky, highly fractured core. 65.8 - 66.1 m: fault at 20 degrees to core axis. Blocky, highly fractured core. 72.6 - 72.9 m: blocky, highly fractured core. 73.9 - 74.6 m: blocky, highly fractured core due to faulting at 20 degrees to core axis. At 80.2 m slip at 40 degrees to core axis. 102.0 - 106.4 m: blocky, highly fractured core. Probably a	VA04872	38.5	39.5	1.0	0	248	<5	75	<1	6	40
			VA04873	39.5	40.0	0.5	1	1554	<5	79	<1	35	110
			VA04874	40.0	41.0	1.0	0	192	<5	56	<1	13	80
			VA04875	115.4	116.4	1.0	0	227	<5	63	<1	<5	<20

From (m)	To (m)	-----DESCRIPTION-----	Sample No.	From (m)	To (m)	Width (m)	Total Sulphur (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		fault zone. Not possible to determine the orientation.											
	35.3	37.0 Numerous quartz-carbonate veins* foliation is at 42 degrees to core axis.											
116.4	126.2	FELSIC LAPILLI TUFF											
		Light grey quartz-sericite schist with up to 20 % 0.5 to 3 cm grey, sericitic felsic fragments stretched parallel to foliation.	VA04876	116.4	117.2	.8	2	301	7	37	<1	10	1500
		STRUCTURE:	VA04318	116.4	126.2	9.8	n/a	63	n/a	24	n/a	n/a	1970
		116.7 - 119.9 m: blocky, highly fractured core. 0.5 m of lost core.	VA04877	117.2	118.2	1.0	2	78	<5	33	1	<5	1700
		At 120.0 m: foliation is at 55 degrees to core axis.	VA04878	118.2	119.2	1.0	3	198	5	23	<1	25	1900
		At 122.0 m: fault gouge at 30-60 degrees to core axis.	VA04879	119.2	120.2	1.0	3	21	<5	1	1	19	2100
		At 123.5 m: 0.5 cm fault gouge at 55 degrees to core axis.	VA04880	120.2	121.0	.8	3	18	<5	3	1	19	2000
		At 125.0 m: foliation is at 47 degrees to core axis.	VA04881	121.0	122.0	1.0	3	27	<5	4	1	17	1800
		ALTERATION:	VA04882	122.0	123.0	1.0	5	196	<5	35	1	31	1600
		116.4 126.2 MODERATE PERVASIVE SERICITIZATION.	VA04883	123.0	124.0	1.0	5	415	<5	292	1	56	1600
		MINERALIZATION:	VA04884	124.0	124.9	.9	5	271	10	267	1	81	2000
		116.4 - 118.0 m: 2 % disseminated pyrite.	VA04885	124.9	125.7	.8	8	214	69	4000	4	136	2500
		118.0 - 122.0 m: 3 % disseminated pyrite.	VA04886	125.7	126.2	.5	8	99	72	2129	2	132	2500
		122.0 - 124.9 m: 5 % pyrite disseminated and in stringers 2-5 mm wide parallel to foliation. 3 mm sphalerite (or possibly biotite) stringer at 123.8 m. Trace disseminated chalcocopyrite.											
		124.9 - 126.2 m: 5 %, and 3.5 % sphalerite in 1-4 mm stringers parallel to foliation. Sphalerite is of the reddish brown variety and some might be biotite. Trace disseminated chalcocopyrite.											
126.2	129.5	FINE GRAINED FELDSPAR PHYRIC MAFIC INTRUSION											
		Medium green, fine-grained, massive gabbro with 5-10%, 2 to 4 mm sausseritized feldspar phenocrysts. 1 % fracture controlled pyrite.	VA04887	126.2	127.5	1.3	1	283	<5	93	1	12	90
		Lower contact is a 0.5 cm fault gouge at 75 degrees to core axis.	VA04888	127.5	128.5	1.0	1	221	<5	66	1	8	170
			VA04889	128.5	129.5	1.0	1	428	49	77	2	73	70
129.5	131.5	FELSIC LAPILLI TUFF											
		As 116.4 to 126.2 m. 2.0 cm wide biege early mafic dyke with very irregular but sharp contacts at about 50 degrees to core axis at 131.1 m. Broken core at the lower contact but it appears to be at 60 degrees to core axis.	VA04890	129.5	130.5	1.0	5	285	6	18	1	30	3800
		STRUCTURE:	VA04319	129.5	131.5	2.0	n/a	183	n/a	50	n/a	n/a	4340
		At 130.3 m foliation is at 50 degrees to core axis.	VA04291	130.5	131.5	1.0	5	436	5	350	1	59	3700

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: CH88-82 Page Number 4

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)
138.0	149.0	MODERATE FRACTURE CONTROLLED EPIDOTIZATION and MODERATE SPOTTY EPIDOTIZATION.											
149.0	168.5	MAFIC TUFF Medium green, massive, mafic porphyritic tuff between 149.0 and 153.2 m. Between 153.2 and 154.1 m the tuff is very cherty (intermediate to felsic in composition) and light green in colour. Mafic tuff becomes intercalated with brownish-green biotite altered beds of fine to coarse mafic tuffaceous sediments. STRUCTURE: At 155.0 m bedding is at 47 degrees to core axis and is offset by numerous microfaults. 165.8 - 168.5 m: FAULT ZONE at 30-50 degrees to core axis. Blocky, highly fractured core. Many fault gouges greater than 0.3 m long. 0.2 m of lost core. ALTERATION: 149.0 168.5 WEAK SPOTTY EPIDOTIZATION.	VA04323	149.0	168.5	19.5	n/a	99	n/a	103	n/a	n/a	537
168.5	180.4	MASSIVE MAFIC PHYRIC MAFIC FLOW Massive med green, fine-grained mafic flow or tuff with up to 25 % 1-3 mm chloritic mafic phenocrysts. Definitely tuffaceous below 179.2 m's. Occasional irregular 2-30 mm quartz-carbonate vein with dark brown biotite along the vein edges. STRUCTURE: At 179.8 m bedding is at 55 degrees to core axis. 165.5 - 168.8 m: FAULT ZONE at 30-50 degrees to core axis. Blocky, highly fractured core. Many fault gouges greater than 0.3 m long. 0.2 m of lost core. ALTERATION: 168.5 180.4 WEAK SPOTTY EPIDOTIZATION and locally WEAK PERVASIVE CARBONATIZATION.	VA04324	168.5	180.4	11.9	n/a	85	n/a	64	n/a	n/a	187

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	XSIO2	XAL2O3	XCAO	XMGO	XNA2O	XK2O	XFE2O3	XTIO2	XP2O5	XMNO	XLOI	SUM	CODES		
															ROCK	ALT	MIN
VA04029	133.30	133.70	48.30	16.00	11.20	5.74	2.67	0.15	10.50	1.35	0.12	0.17	3.62	98.83	PMBT	?	AA-
VA04030	153.30	154.10	74.20	12.20	2.69	1.24	4.27	0.63	3.15	0.29	0.07	0.07	1.16	99.97	VMAH	SHW	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	RB (ppm)	SR (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	CODES		
												ROCK	ALT	MIN
VA04029	133.30	133.70	15.0	392.0	223.0	39.0	49.0	26.0	116.0	79.0	70.0	PMBT	?	AA-
VA04030	153.30	154.10	21.0	316.0	337.0	28.0	69.0	<10.0	20.0	52.0	<10.0	VMAH	SHW	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	TiO2	P2O5	MnO	LOI	SUM	CODES		
															ROCK	ALT	MIN
VA04318	116.40	126.20	72.20	15.60	0.84	0.45	1.21	2.98	2.50	0.37			3.16	99.31	TFBT	FSH	DCP
VA04319	129.50	131.50	63.40	19.70	0.43	0.17	1.53	3.39	5.01	0.50			5.00	99.13	TFBT	FSH	DCP
VA04320	131.50	134.10	46.30	15.60	11.50	9.86	1.79	0.14	10.60	0.61			3.00	99.40	PHAT	SEW	AA-
VA04321	134.10	138.00	48.50	17.30	9.10	5.79	2.66	0.67	10.80	1.00			2.93	98.75	THAT	SEW	AA-
VA04322	138.00	149.00	50.10	12.70	10.70	8.37	2.89	0.42	9.86	0.54			2.00	98.58	VMAN	PHW	AA-
VA04323	149.00	168.50	51.60	18.20	5.73	4.58	4.33	0.84	9.03	0.84			2.08	98.23	THAT	SEW	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	SR (ppm)	SK (ppm)	BA (ppm)	Y (ppm)	ZR (ppm)	NB (ppm)	CU (ppm)	ZN (ppm)	NI (ppm)	ROCK	ALT	MIN
VA04318	116.40	126.20			1970.0				63.0	24.0	<10.0	TFBT	FSH	DCP
VA04319	129.50	131.50			4340.0				193.0	50.0	<10.0	TFBT	FSH	DCP
VA04320	131.50	134.10			115.0				84.0	89.0	237.0	PHAT	SEW	AA-
VA04321	134.10	138.00			816.0				119.0	90.0	48.0	THAT	SEW	AA-
VA04322	138.00	149.00			285.0				110.0	69.0	45.0	VMAN	PHW	AA-
VA04323	149.00	168.50			537.0				99.0	102.0	34.0	THAT	SEW	AA-

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO													CODES		
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	ZFEO	ROCK	ALT	MIN
VA04872	38.50	39.50	40.0	248.0	75.0	<0.5	6.0	28.0	42.0	<5.0	26.0	<1.0	682.0	5.64	PHBM		DBC
VA04873	39.50	40.00	110.0	1554.0	79.0	<0.5	35.0	29.0	41.0	<5.0	18.0	<1.0	694.0	5.89	PHBM		FCC
VA04874	40.00	41.00	80.0	192.0	56.0	<0.5	10.0	22.0	33.0	<5.0	25.0	<1.0	435.0	4.11	PHBM		DBC
VA04875	115.40	116.40	<20.0	227.0	63.0	<0.5	<5.0	25.0	47.0	<5.0	<5.0	<1.0	442.0	4.52	PHAF		DBP
VA04876	116.40	117.20	1500.0	301.0	37.0	<0.5	10.0	9.0	6.0	7.0	16.0	<1.0	123.0	2.32	TFBT		DCP
VA04877	117.20	118.20	1700.0	78.0	33.0	0.6	<5.0	6.0	4.0	<5.0	33.0	<1.0	80.0	1.63	TFBT		DCP
VA04878	118.20	119.20	1900.0	198.0	23.0	<0.5	25.0	5.0	2.0	5.0	24.0	<1.0	33.0	1.49	TFBT		DCP
VA04879	119.20	120.20	2100.0	21.0	1.0	1.1	19.0	7.0	4.0	<5.0	23.0	<1.0	13.0	1.62	TFBT		DCP
VA04880	120.20	121.00	2000.0	18.0	3.0	0.7	19.0	5.0	2.0	<5.0	15.0	<1.0	10.0	1.00	TFBT		DCP
VA04881	121.00	122.00	1800.0	27.0	4.0	0.9	17.0	4.0	3.0	<5.0	30.0	<1.0	9.0	1.20	TFBT		DCP
VA04882	122.00	123.00	1600.0	196.0	35.0	0.5	31.0	9.0	7.0	<5.0	26.0	<1.0	22.0	3.31	TFBT		DCP
VA04883	123.00	124.00	1600.0	415.0	392.0	0.9	56.0	9.0	5.0	<5.0	29.0	2.0	25.0	2.99	TFBT		DCP
VA04884	124.00	124.90	2000.0	271.0	267.0	1.0	81.0	11.0	6.0	10.0	32.0	2.0	17.0	4.84	TFBT		DCP
VA04885	124.90	125.70	2500.0	214.0	4000.0	3.8	136.0	8.0	3.0	68.0	16.0	32.0	21.0	2.50	TFBT		DBY
VA04886	125.70	126.20	2500.0	99.0	2139.0	2.0	132.0	3.0	9.0	72.0	9.0	12.0	68.0	2.23	TFBT		DBY
VA04887	126.20	127.50	90.0	288.0	93.0	0.6	12.0	28.0	70.0	<5.0	25.0	<1.0	566.0	4.51	PHAME		DBP
VA04888	127.50	128.50	170.0	231.0	66.0	0.7	8.0	30.0	57.0	<5.0	17.0	<1.0	380.0	3.80	PHAME		DBP
VA04889	128.50	129.50	70.0	428.0	77.0	1.5	73.0	27.0	61.0	49.0	13.0	<1.0	402.0	3.86	PHAME		DBP
VA04890	129.50	130.50	3800.0	285.0	18.0	0.9	30.0	7.0	4.0	6.0	22.0	<1.0	23.0	3.08	TFBT		DCP
VA04891	130.50	131.50	3700.0	436.0	350.0	0.9	59.0	11.0	37.0	5.0	29.0	1.0	139.0	4.58	TFBT		DCP
VA04892	131.50	132.50	30.0	109.0	46.0	0.8	6.0	29.0	178.0	<5.0	18.0	<1.0	501.0	3.22	PHAM		DBP
VA04893	136.00	137.00	350.0	99.0	49.0	0.5	<5.0	28.0	31.0	<5.0	24.0	<1.0	635.0	4.22	THAT		DCP

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO												CODES			
			BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MN (ppm)	ZFEO	ROCK	ALI	MIN
VA04894	137.00	138.00	230.0	93.0	40.0	<0.5	<5.0	21.0	24.0	<5.0	33.0	<1.0	607.0	4.27	IMAT		DCP



CERTIFICATE OF ANALYSIS
REPORT 4818

TO: FALCONBRIDGE LIMITED
ATTN: P. WHITING
701-1281 WEST GEORGIA STREET
VANCOUVER, BRITISH COLUMBIA
V6E 3J7

CUSTOMER No. 1282
DATE SUBMITTED
25-Apr-88

REF. FILE 1221-D3

Total Pages 4

63 WHOLE CORES Proj. 605-116

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

1-1

✓ (

- VA 005115-225-
- VA 01070-132-
- VA 02271-2131-
- VA 03227-2775-

DATE 16-AUG-88

X-RAY ASSAY LABORATORIES LIMITED
CERTIFIED BY *J. Eagle*



SAMPLE \ %	SiO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TiO2	P2O5	CR2O3	LOI	SUM
VA00546	70.7	14.2	1.67	0.91	5.87	1.60	2.97	0.08	0.35	0.10	<0.01	1.39	100.0
VA00547	69.7	14.7	1.52	0.95	5.14	2.13	2.76	0.07	0.33	0.07	<0.01	1.62	99.2
VA00548	67.5	16.6	2.68	0.95	7.14	0.91	3.06	0.09	0.34	0.08	<0.01	0.93	100.4
VA00549	70.0	15.1	2.34	0.61	6.25	1.40	2.37	0.05	0.35	0.07	0.01	1.31	100.1
VA00550	63.0	17.3	3.64	2.25	3.35	2.76	4.47	0.09	0.48	0.15	0.01	2.70	100.5
VA00551	52.9	17.5	7.98	4.88	2.14	0.47	10.4	0.28	0.64	0.12	<0.01	5.16	100.6
VA00552	71.6	13.6	3.03	0.64	4.26	1.77	2.61	0.06	0.33	0.12	0.01	1.23	99.5
VA00553	52.7	16.0	5.45	7.13	4.83	0.28	9.88	0.23	0.68	0.15	0.01	2.70	100.1
VA00554	52.9	17.5	4.89	6.25	4.01	0.56	9.99	0.24	0.69	0.13	<0.01	3.31	100.5
VA00555	50.3	17.9	7.09	4.04	0.66	2.41	11.8	0.25	0.80	0.12	0.02	3.08	98.7
VA00556	44.3	12.9	10.6	5.41	2.10	0.31	12.2	0.24	1.75	0.17	<0.01	9.47	99.5
VA00557	48.7	13.7	11.9	5.63	1.44	0.20	13.2	0.21	1.86	0.18	<0.01	2.31	99.4
VA00558	62.3	16.6	5.29	2.57	1.66	2.56	5.24	0.11	0.48	0.13	<0.01	2.77	100.0
VA00559	55.4	16.7	5.74	3.76	3.46	0.58	9.59	0.19	0.68	0.15	<0.01	3.16	99.5
VA00560	35.3	21.2	10.6	11.5	<0.01	0.03	12.3	0.19	0.58	0.08	0.11	6.93	99.0
VA00561	48.4	16.6	8.11	6.18	4.13	0.48	10.2	0.18	0.85	0.16	<0.01	3.93	99.3
VA00562	73.7	13.9	1.85	1.02	2.17	2.65	2.36	0.04	0.27	0.07	0.01	2.00	100.2
VA00563	71.6	14.8	2.88	0.40	5.00	1.89	0.49	0.02	0.24	0.05	0.02	2.93	100.7
VA00564	73.1	12.6	2.68	0.79	3.70	1.43	2.27	0.03	0.23	0.06	0.01	3.00	100.0
VA00565	53.2	13.4	6.35	2.41	4.00	1.71	11.3	0.20	1.51	0.55	<0.01	5.54	100.3
VA00566	66.8	14.6	4.03	0.74	6.24	0.78	3.76	0.07	0.22	0.03	0.01	3.08	100.5
VA01020	70.0	14.5	1.78	0.93	5.13	1.87	3.00	---	0.34	---	---	1.54	99.3
VA01021	67.6	15.5	1.11	0.80	5.22	2.72	3.34	---	0.33	---	---	2.08	98.9
VA01022	70.4	14.9	1.78	1.11	6.20	1.04	3.22	---	0.36	---	---	1.16	100.3
VA01023	74.5	12.1	3.25	0.46	4.86	0.79	2.77	---	0.26	---	---	1.08	100.2
VA01024	69.7	14.4	3.47	1.35	3.24	1.96	3.47	---	0.37	---	---	1.93	100.1
VA01025	52.0	16.5	5.80	6.07	4.19	0.55	9.49	---	0.68	---	---	2.85	98.2
VA01026	52.3	18.1	5.93	3.53	0.85	3.06	10.3	---	0.68	---	---	3.39	98.3
VA01027	53.3	16.8	7.15	3.73	2.56	1.09	9.97	---	0.66	---	---	3.23	98.6
VA01028	71.0	14.1	2.59	1.29	2.85	2.31	3.41	---	0.29	---	---	2.39	100.4
VA01029	68.1	14.6	1.63	0.74	0.85	2.52	5.54	---	0.35	---	---	5.23	99.8
VA01030	72.4	13.1	1.29	1.24	0.29	2.98	4.02	---	0.28	---	---	4.00	100.0
VA01031	45.5	16.3	13.5	4.75	3.06	0.49	10.2	---	0.78	---	---	5.23	99.9
VA01032	71.7	13.6	3.28	0.79	3.45	2.05	1.73	---	0.24	---	---	3.23	100.3
VA02271	49.0	13.7	11.2	5.59	1.47	0.45	14.3	0.22	1.91	0.16	<0.01	2.16	100.3
VA02272	75.6	14.6	0.78	0.61	<0.01	4.66	1.34	0.02	0.26	0.06	<0.01	2.39	100.6
VA02273	70.3	15.6	2.10	0.92	4.80	1.93	1.83	0.05	0.30	0.07	<0.01	1.85	99.9
VA02274	73.4	14.5	2.10	0.95	1.96	2.99	1.56	0.02	0.25	0.06	0.01	2.06	100.2
VA02275	70.5	14.0	3.12	1.11	2.09	2.73	2.41	0.08	0.24	0.06	<0.01	3.54	100.0
VA02276	67.0	12.6	4.98	1.70	0.11	2.91	3.40	0.14	0.31	0.07	<0.01	5.70	99.1
VA02277	46.5	15.7	8.26	6.10	2.61	0.04	11.8	0.21	1.55	0.14	0.02	6.62	99.6
VA02278	65.9	12.5	6.47	1.22	0.59	2.50	2.60	0.09	0.29	0.07	<0.01	7.47	99.9
VA02279	66.8	13.0	4.08	2.06	0.52	2.94	3.08	0.13	0.33	0.08	<0.01	6.31	99.5
VA02280	67.4	13.0	4.11	1.26	1.93	2.66	2.90	0.11	0.33	0.08	<0.01	5.08	99.0
VA02281	65.0	13.1	4.80	2.53	0.20	3.32	3.63	0.14	0.35	0.08	<0.01	6.54	99.9
VA02282	67.2	13.7	4.01	1.39	2.01	2.48	2.85	0.10	0.32	0.08	<0.01	5.31	99.6
VA02283	66.2	13.4	3.92	1.48	0.43	3.40	2.14	0.11	0.23	0.07	<0.01	7.39	99.0
VA02284	67.5	13.4	3.68	1.63	0.64	2.95	2.74	0.07	0.27	0.07	<0.01	6.08	99.2
VA02285	64.0	12.5	5.86	2.81	0.72	2.37	2.79	0.16	0.22	0.06	<0.01	8.39	100.0
VA02286	71.1	14.3	2.52	1.21	0.60	3.23	1.61	0.06	0.21	0.06	<0.01	4.85	99.9

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



SAMPLE \ %	SiO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TiO2	P2O5	CR2O3	LOI	SUM
VA02287	70.6	12.9	3.35	0.91	3.15	2.01	2.59	0.10	0.25	0.06	<0.01	4.23	100.3
VA02288	52.5	16.7	7.84	1.92	2.97	1.06	7.82	0.14	0.67	0.18	<0.01	8.54	100.4
VA02289	45.9	15.7	8.88	4.19	3.37	0.96	8.22	0.16	0.75	0.16	<0.01	12.1	100.5
VA02290	59.3	15.1	5.85	2.04	4.49	0.98	5.43	0.12	0.47	0.17	<0.01	6.08	100.1
VA02291	53.3	18.7	4.65	2.32	2.72	0.76	9.98	0.13	1.11	0.43	<0.01	5.54	99.8
VA02768	69.4	14.1	3.62	1.37	1.52	2.56	4.20	---	0.33	---	---	2.70	100.0
VA02769	72.1	14.0	2.62	1.04	2.07	2.65	2.42	---	0.28	---	---	2.70	100.0
VA02770	65.7	13.3	5.08	1.23	0.33	3.12	3.59	---	0.32	---	---	5.39	98.2
VA02771	66.2	13.1	4.95	1.74	0.56	2.96	3.04	---	0.29	---	---	6.23	99.2
VA02772	69.0	13.6	3.77	1.49	0.81	3.14	2.61	---	0.29	---	---	5.31	100.2
VA02773	68.4	13.4	3.56	1.58	0.81	2.97	2.99	---	0.25	---	---	5.31	99.4
VA02774	69.1	12.9	3.83	1.48	0.61	2.83	2.71	---	0.28	---	---	5.62	99.5
VA02775	67.7	13.8	3.89	1.83	0.61	2.86	2.62	---	0.21	---	---	6.47	100.1

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
VA00546	26	110	25	127	15	1120	<10	32	31
VA00547	34	99	26	105	<10	1300	15	33	26
VA00548	26	183	21	118	<10	912	<10	18	23
VA00549	29	195	33	145	<10	1410	<10	22	35
VA00550	56	248	14	105	<10	2130	15	28	61
VA00551	<10	210	<10	35	<10	198	24	113	112
VA00552	46	206	29	88	16	1860	<10	27	19
VA00553	18	244	21	25	<10	251	42	84	125
VA00554	26	164	20	34	18	387	20	142	125
VA00555	41	296	19	34	<10	852	34	343	101
VA00556	17	104	22	88	24	146	67	188	88
VA00557	<10	326	14	88	28	80	67	190	85
VA00558	52	426	25	96	10	1410	<10	51	58
VA00559	22	269	15	16	19	311	19	143	101
VA00560	30	484	<10	<10	<10	82	261	129	444
VA00561	13	348	<10	<10	18	574	37	36	60
VA00562	56	110	25	91	<10	1380	<10	33	14
VA00563	38	237	15	89	<10	2880	<10	26	<10
VA00564	30	89	17	92	11	598	11	27	12
VA00565	68	83	68	233	44	218	16	34	145
VA00566	13	104	152	535	62	493	11	26	72
VA01020	---	---	---	---	---	1300	<10	28	94
VA01021	---	---	---	---	---	1610	<10	28	34
VA01022	---	---	---	---	---	1080	<10	31	35
VA01023	---	---	---	---	---	740	<10	77	25
VA01024	---	---	---	---	---	1630	<10	31	35
VA01025	---	---	---	---	---	351	19	83	138
VA01026	---	---	---	---	---	1250	25	348	89
VA01027	---	---	---	---	---	496	32	446	90
VA01028	---	---	---	---	---	1170	<10	62	29
VA01029	---	---	---	---	---	1670	<10	197	481
VA01030	---	---	---	---	---	2240	10	191	772
VA01031	---	---	---	---	---	259	53	144	51
VA01032	---	---	---	---	---	1890	25	53	22
VA02271	28	223	25	83	21	130	53	220	75
VA02272	88	<10	19	109	15	2200	<10	42	<10
VA02273	52	222	<10	112	<10	1310	12	33	10
VA02274	58	177	<10	95	18	2010	<10	44	10
VA02275	58	74	<10	115	14	927	<10	33	50
VA02276	63	52	25	104	<10	1290	<10	59	143
VA02277	13	224	11	77	24	139	73	128	92
VA02278	49	137	31	105	<10	1070	<10	44	72
VA02279	54	41	40	126	13	1020	<10	61	59
VA02280	46	55	37	121	12	887	<10	53	49
VA02281	69	70	28	109	<10	1150	<10	57	87
VA02282	42	88	38	117	13	987	<10	45	60
VA02283	74	58	<10	85	13	1290	<10	45	34
VA02284	49	82	19	104	11	1040	<10	42	25
VA02285	57	81	12	98	<10	829	<10	25	53
VA02286	62	84	17	105	19	1130	<10	13	18



SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
VA02287	42	97	21	85	13	917	<10	50	31
VA02288	19	175	33	46	15	280	<10	33	70
VA02289	26	177	18	40	<10	279	27	45	66
VA02290	40	235	18	89	28	371	26	31	53
VA02291	29	403	23	32	<10	718	16	57	195
VA02768	---	---	---	---	---	1700	<10	297	15
VA02769	---	---	---	---	---	1190	<10	34	52
VA02770	---	---	---	---	---	1460	<10	82	83
VA02771	---	---	---	---	---	1180	<10	90	44
VA02772	---	---	---	---	---	1200	<10	43	61
VA02773	---	---	---	---	---	1310	<10	40	175
VA02774	---	---	---	---	---	1190	<10	75	46
VA02775	---	---	---	---	---	1020	<10	33	41



in copy to N. von Fersen

**CERTIFICATE OF ANALYSIS
REPORT 6928**

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

CUSTOMER No. 1282

DATE SUBMITTED
26-Oct-88

REF. FILE 3245-J3

Total Pages 6

2 PULPS, 106 ROCKS Proj. 605-116

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

DATE 17-NOV-88

X-RAY ASSAY LABORATORIES LIMITED
CERTIFIED BY *[Signature]*

- ✓ VAO 901 - 9012 -
- ✓ VAO 1269 - 9303 -
- ✓ VAO 901 - 09069 -
- ✓ VAO 9271 - 07314 -

Standards - VAO 9300, VAO 9300

XRAL

SAMPLES WITH LOW SUMS HAVE BEEN REPEATED WITH NO CHANGE

WE HAVE CHECKED FOR THE FOLLOWING ELEMENTS:

CU, ZN, NI, PB, CO, AS, U, MO

OF WHICH NONE WERE FOUND
IN GREATER THAN TRACE/MINOR QUANTITIES



SAMPLE \ %	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	CR2O3	LOI	SUM
VA04015	42.2	16.5	11.4	8.71	0.44	0.26	11.1	0.23	0.70	0.20	0.06	6.85	98.8
VA04016	49.2	14.4	10.5	8.64	2.95	0.32	10.7	0.18	0.62	0.14	0.03	2.00	99.8
VA04017	48.1	14.0	10.1	7.85	3.17	0.27	9.75	0.15	0.56	0.13	0.03	4.54	98.7
VA04018	61.5	16.8	5.05	3.19	4.39	0.69	4.90	0.11	0.32	0.08	<0.01	2.47	99.6
VA04019	43.8	13.7	9.78	4.76	1.89	0.99	11.6	0.14	2.12	0.42	<0.01	5.70	95.0
VA04020	46.5	15.1	11.4	9.14	2.00	0.16	10.2	0.18	0.49	0.08	0.11	3.00	98.5
VA04021	44.3	14.0	7.09	6.81	1.40	2.14	10.2	0.26	0.63	0.11	<0.01	12.2	99.3
VA04022	47.0	16.1	8.34	4.61	1.07	2.48	9.58	0.19	0.64	0.12	<0.01	9.70	99.9
VA04023	50.4	14.5	7.19	4.47	0.79	0.65	13.6	0.21	2.44	0.27	0.01	4.16	98.8
VA04024	70.4	13.8	1.66	1.85	2.01	3.64	3.16	0.05	0.32	0.08	<0.01	2.00	99.2
VA04025	69.4	14.4	2.27	1.47	2.73	3.00	3.10	0.05	0.32	0.08	<0.01	1.93	99.0
VA04026	69.8	15.1	1.12	2.58	2.57	3.16	3.25	0.05	0.35	0.08	<0.01	2.47	100.7
VA04027	35.0	17.3	6.94	9.01	2.14	0.17	17.0	0.24	2.85	0.20	0.04	8.47	99.5
VA04028	52.8	17.4	4.50	4.76	6.31	0.18	8.56	0.14	0.82	0.24	<0.01	2.93	98.7
VA04269	54.8	20.6	4.50	2.59	1.16	3.67	5.95	---	0.73	---	---	3.77	98.5
VA04270	60.8	19.6	4.98	1.90	2.02	3.31	2.36	---	0.58	---	---	3.00	99.0
VA04271	71.0	14.2	1.23	1.20	1.07	3.40	3.12	---	0.35	---	---	2.77	98.7
VA04272	70.2	13.8	2.24	1.61	1.91	2.92	2.82	---	0.30	---	---	2.08	98.1
VA04273	54.2	15.9	9.03	4.42	0.48	1.91	6.37	---	0.53	---	---	4.39	97.4
VA04274	41.1	16.8	15.1	6.17	0.74	0.24	8.95	---	0.70	---	---	5.23	95.1
VA04275	40.1	16.1	17.1	5.42	0.53	0.31	7.90	---	0.68	---	---	6.31	94.5
VA04276	64.5	14.9	6.50	2.49	1.92	1.44	3.95	---	0.43	---	---	3.16	99.5
VA04277	71.8	14.2	0.34	0.23	0.93	2.82	3.84	---	0.38	---	---	3.85	98.7
VA04278	49.1	14.5	12.7	7.97	2.37	0.23	10.4	---	0.63	---	---	2.31	100.3
VA04279	49.0	18.6	7.75	4.14	4.05	0.79	8.96	---	0.92	---	---	3.85	98.1
VA04280	48.7	13.3	10.5	8.26	3.01	0.28	9.67	---	0.56	---	---	5.00	99.3
VA04281	46.9	16.8	7.27	5.95	3.92	1.04	9.39	---	0.84	---	---	5.85	98.0
VA04282	49.2	13.7	9.00	7.58	3.55	0.31	9.07	---	0.61	---	---	5.93	99.0
VA04283	70.8	14.5	1.83	0.90	1.54	3.46	2.50	---	0.32	---	---	2.70	98.8
VA04284	70.6	15.2	0.43	0.43	1.13	3.09	4.10	---	0.39	---	---	3.62	100.3
VA04285	45.8	14.8	10.6	10.8	1.77	0.18	10.2	---	0.44	---	---	3.39	98.1
VA04286	50.2	15.3	7.60	6.92	3.25	0.64	10.5	---	1.08	---	---	3.08	98.7
VA04287	49.8	13.1	12.3	9.03	2.35	0.28	9.98	---	0.54	---	---	1.70	99.1
VA04288	68.0	13.8	1.94	2.03	3.31	2.57	2.76	---	0.28	---	---	3.70	98.5
VA04289	48.7	16.0	7.18	4.04	2.61	2.17	9.20	---	0.62	---	---	8.39	99.0
VA04290	70.7	13.6	3.54	1.18	1.25	3.07	2.87	---	0.27	---	---	3.39	100.0
VA04291	68.7	13.0	3.93	1.17	1.81	2.90	2.60	---	0.25	---	---	4.00	98.5
VA04292	48.4	14.9	7.43	6.10	3.26	0.41	9.37	---	0.63	---	---	7.47	98.0
VA04293	70.4	13.5	2.17	1.37	3.59	2.05	2.78	---	0.25	---	---	2.62	98.8
VA04294	50.9	15.0	5.55	5.23	2.63	1.25	9.75	---	1.04	---	---	6.77	98.2
VA04295	73.3	12.7	1.60	1.34	3.36	2.17	1.81	---	0.19	---	---	2.31	98.8
VA04296	51.4	15.9	2.95	5.60	1.20	2.93	11.4	---	1.31	---	---	6.00	98.8
VA04297	56.3	16.3	5.11	3.17	1.72	2.61	9.96	---	0.72	---	---	3.16	99.1
VA04298	77.3	11.2	2.84	0.34	3.70	0.98	1.89	---	0.24	---	---	0.77	99.3
VA04299	68.9	15.2	1.40	1.71	3.37	3.13	3.52	---	0.36	---	---	2.08	99.8
VA04300	69.9	14.6	1.42	0.86	3.44	4.36	3.29	---	0.45	---	---	0.70	99.1
VA04301	70.8	15.0	2.59	1.31	3.22	2.86	2.98	---	0.32	---	---	0.62	99.8
VA04302	74.6	12.8	1.87	0.85	3.93	2.11	2.16	---	0.28	---	---	1.31	100.0
VA04303	69.2	15.4	1.46	2.12	3.41	2.67	3.55	---	0.34	---	---	2.00	100.3
VA09055	70.4	13.4	3.02	1.23	0.77	3.39	1.75	0.09	0.20	0.06	<0.01	4.93	99.4

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



SAMPLE \ %	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	LOI	SUM
VA09056	63.1	13.4	4.73	2.18	0.38	3.71	3.81	0.15	0.34	0.08	<0.01	7.08	99.1
VA09057	43.6	13.9	10.2	5.59	0.62	2.21	8.73	0.27	0.65	0.11	0.04	11.6	97.7
VA09058	49.9	15.4	8.07	3.52	0.69	3.07	6.62	0.23	0.73	0.16	<0.01	8.54	97.1
VA09059	47.0	19.6	4.92	4.72	0.49	3.39	8.99	0.15	0.98	0.43	<0.01	8.00	98.9
VA09060	44.1	13.5	11.0	5.17	0.42	2.51	8.05	0.33	0.62	0.10	0.03	12.7	98.7
VA09061	64.8	15.8	4.81	1.95	3.85	0.62	4.19	0.07	0.46	0.15	<0.01	2.62	99.5
VA09062	61.7	13.6	6.23	0.90	1.12	3.34	5.88	0.11	0.61	0.21	<0.01	6.08	100.0
VA09063	49.4	14.3	9.43	3.84	2.93	0.21	14.6	0.21	2.39	0.23	<0.01	2.16	99.8
VA09064	48.5	11.1	7.96	3.39	2.61	0.49	18.1	0.29	4.22	0.31	<0.01	1.62	98.8
VA09065	45.5	13.9	8.50	5.90	2.40	0.33	11.3	0.18	1.54	0.14	0.02	9.77	99.6
VA09066	43.8	12.8	11.5	5.46	2.52	0.05	10.8	0.22	1.51	0.14	0.01	10.9	99.8
VA09067	72.9	12.0	3.07	0.69	6.41	0.17	1.54	0.06	0.16	0.05	<0.01	2.70	99.8
VA09068	50.1	16.1	10.2	2.13	1.73	1.19	7.08	0.13	0.79	0.20	<0.01	10.3	100.1
VA09069	44.3	16.1	11.1	3.56	1.53	1.00	9.27	0.16	0.79	0.18	<0.01	12.5	100.6
VA09271	70.3	13.3	3.12	1.26	0.98	3.20	2.02	---	0.23	---	---	4.77	99.3
VA09272	67.6	13.1	4.63	1.18	3.26	2.15	2.05	---	0.20	---	---	4.62	98.9
VA09273	47.0	12.7	8.22	5.84	1.79	0.03	14.0	---	1.91	---	---	8.23	99.8
VA09274	66.9	13.2	4.38	2.02	0.66	2.95	3.03	---	0.34	---	---	5.93	99.5
VA09275	63.1	12.4	5.61	2.72	0.77	2.60	3.83	---	0.33	---	---	7.39	98.9
VA09276	66.7	12.9	4.31	1.98	0.78	2.77	3.07	---	0.33	---	---	6.23	99.2
VA09277	61.3	12.9	5.51	2.75	0.64	2.93	3.96	---	0.33	---	---	7.54	98.0
VA09278	66.4	13.5	3.89	1.93	0.81	2.91	3.07	---	0.33	---	---	6.08	99.1
VA09279	63.5	12.0	5.48	2.96	0.63	2.65	3.42	---	0.28	---	---	7.85	98.9
VA09280	67.5	13.1	3.49	1.86	0.71	2.86	3.14	---	0.33	---	---	5.31	98.4
VA09281	64.6	13.3	4.23	2.25	0.68	3.03	3.26	---	0.32	---	---	6.47	98.3
VA09282	66.8	13.2	3.70	1.69	0.78	2.92	3.08	---	0.32	---	---	5.62	98.2
VA09283	56.8	10.3	8.04	3.66	0.38	2.65	5.23	---	0.26	---	---	9.77	97.2
VA09284	70.5	12.4	3.76	1.30	0.46	2.86	3.03	---	0.22	---	---	4.62	99.3
VA09285	70.7	14.0	2.55	1.59	0.35	3.34	2.78	---	0.29	---	---	3.62	99.4
VA09286	70.8	13.4	3.05	1.52	0.99	3.20	2.21	---	0.23	---	---	3.77	99.3
VA09287	47.2	14.7	9.98	4.58	2.54	0.06	12.4	---	1.78	---	---	6.23	99.5
VA09288	68.7	13.6	3.71	1.56	1.72	2.60	2.84	---	0.27	---	---	4.23	99.3
VA09289	70.4	15.1	2.13	1.23	2.83	2.55	2.63	---	0.27	---	---	2.62	99.9
VA09290	70.2	15.1	3.48	1.18	4.33	0.92	2.27	---	0.34	---	---	2.39	100.3
VA09291	73.2	14.4	2.46	1.31	2.32	2.09	1.93	---	0.27	---	---	2.00	100.2
VA09292	68.9	13.3	4.14	2.11	2.66	1.39	4.24	---	0.38	---	---	2.93	100.2
VA09293	68.2	13.7	3.19	1.71	2.53	3.09	3.18	---	0.40	---	---	3.77	99.9
VA09294	56.0	13.4	6.11	2.35	3.72	1.98	8.85	---	1.13	---	---	5.31	98.9
VA09295	72.7	12.7	2.29	1.17	0.85	2.51	2.27	---	0.18	---	---	3.85	98.6
VA09296	75.1	12.5	1.81	0.96	0.63	2.81	1.56	---	0.12	---	---	3.77	99.4
VA09297	71.9	13.8	2.08	0.86	2.02	2.67	2.87	---	0.26	---	---	3.08	99.7
VA09298	38.0	12.7	12.8	5.99	1.23	1.06	10.8	---	1.36	---	---	14.5	98.5
VA09299	44.3	12.9	10.3	5.75	2.10	0.21	11.2	---	1.55	---	---	10.8	99.2
VA09300	69.7	14.5	1.42	0.87	3.46	4.39	3.33	---	0.44	---	---	0.77	99.0
VA09301	67.5	13.4	4.40	1.68	2.75	2.18	2.85	---	0.30	---	---	4.93	100.1
VA09302	71.0	14.2	1.93	0.80	2.34	2.91	2.37	---	0.27	---	---	3.31	99.3
VA09303	69.6	13.9	2.61	1.05	3.07	2.27	3.34	---	0.17	---	---	3.31	99.5
VA09304	47.1	13.9	10.8	4.44	2.44	0.97	8.72	---	0.63	---	---	11.2	100.3
VA09305	66.5	14.2	3.59	1.71	2.52	2.39	4.39	---	0.33	---	---	3.70	99.4
VA09306	71.4	14.3	1.56	1.94	2.21	2.71	2.09	---	0.19	---	---	3.00	99.6

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

SAMPLE \ %	SI02	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
VA09307	49.5	15.6	9.31	4.25	1.47	1.59	9.13	---	0.78	---	---	7.93	99.7
VA09308	73.6	12.7	1.97	1.20	2.12	2.16	1.83	---	0.18	---	---	2.70	98.6
VA09309	48.3	14.9	10.8	2.88	1.36	2.69	7.70	---	0.69	---	---	10.8	100.2
VA09310	47.7	13.2	10.3	4.47	2.00	1.38	9.63	---	0.62	---	---	10.6	100.0
VA09311	46.1	14.1	10.3	3.86	2.00	1.72	9.66	---	0.61	---	---	11.4	99.9
VA09312	61.5	15.6	4.65	1.63	2.17	3.17	3.88	---	0.21	---	---	6.70	99.7
VA09313	47.5	16.2	9.03	3.51	2.09	1.22	8.70	---	0.81	---	---	10.8	99.9
VA09314	50.0	15.9	7.53	4.91	2.47	0.97	9.49	---	0.73	---	---	7.31	99.4

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
VA04015	13	389	16	<10	<10	161	69	203	157
VA04016	17	185	<10	<10	<10	170	56	111	59
VA04017	19	378	<10	<10	<10	245	47	49	49
VA04018	25	385	21	113	17	441	11	18	74
VA04019	38	343	32	140	25	420	<10	30	77
VA04020	22	225	16	<10	<10	124	212	124	101
VA04021	48	316	<10	<10	11	718	43	63	189
VA04022	51	120	<10	29	16	503	27	77	108
VA04023	39	404	22	126	21	137	71	49	126
VA04024	103	322	21	132	<10	1060	13	26	56
VA04025	82	630	25	142	<10	1120	<10	20	68
VA04026	73	191	33	153	14	975	<10	<10	66
VA04027	15	57	35	153	26	164	110	26	278
VA04028	21	183	31	66	<10	220	<10	51	87
VA04269	---	---	---	---	---	6640	21	71	38
VA04270	---	---	---	---	---	4310	18	97	20
VA04271	---	---	---	---	---	2900	<10	65	147
VA04272	---	---	---	---	---	1530	<10	68	361
VA04273	---	---	---	---	---	1060	34	157	77
VA04274	---	---	---	---	---	129	54	96	104
VA04275	---	---	---	---	---	171	61	134	94
VA04276	---	---	---	---	---	1290	24	64	52
VA04277	---	---	---	---	---	2790	<10	77	<10
VA04278	---	---	---	---	---	209	58	105	72
VA04279	---	---	---	---	---	402	31	47	100
VA04280	---	---	---	---	---	225	58	58	49
VA04281	---	---	---	---	---	453	55	72	75
VA04282	---	---	---	---	---	240	48	87	73
VA04283	---	---	---	---	---	2360	<10	41	83
VA04284	---	---	---	---	---	9910	<10	1480	70
VA04285	---	---	---	---	---	325	290	88	99
VA04286	---	---	---	---	---	592	70	129	85
VA04287	---	---	---	---	---	159	65	75	72
VA04288	---	---	---	---	---	1020	<10	14	43
VA04289	---	---	---	---	---	625	17	79	106
VA04290	---	---	---	---	---	798	<10	18	32
VA04291	---	---	---	---	---	710	<10	16	74
VA04292	---	---	---	---	---	251	17	104	175
VA04293	---	---	---	---	---	716	<10	45	91
VA04294	---	---	---	---	---	442	24	169	128
VA04295	---	---	---	---	---	557	<10	14	28
VA04296	---	---	---	---	---	263	61	108	125
VA04297	---	---	---	---	---	550	22	59	81
VA04298	---	---	---	---	---	429	<10	15	23
VA04299	---	---	---	---	---	1130	<10	17	56
VA04300	---	---	---	---	---	602	13	25	86
VA04301	---	---	---	---	---	1060	<10	24	45
VA04302	---	---	---	---	---	1080	<10	21	26
VA04303	---	---	---	---	---	1110	14	<10	56
VA09055	72	85	36	79	<10	1060	20	38	39

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NJ	CU	ZN
VA09056	77	61	12	110	<10	1050	<10	31	57
VA09057	59	116	24	<10	<10	734	46	66	167
VA09058	73	102	17	34	<10	991	15	41	119
VA09059	90	62	32	50	12	1260	13	51	528
VA09060	53	144	<10	<10	<10	790	38	59	96
VA09061	16	413	40	95	<10	728	16	11	39
VA09062	83	44	99	364	61	694	<10	22	146
VA09063	<10	250	20	124	38	86	27	301	124
VA09064	22	196	45	204	37	412	<10	605	140
VA09065	31	149	15	65	21	198	93	115	139
VA09066	18	75	31	88	20	59	87	126	163
VA09067	19	66	<10	98	<10	202	<10	<10	41
VA09068	29	364	30	24	<10	396	21	48	52
VA09069	36	382	22	22	<10	271	39	42	57
VA09271	---	---	---	---	---	1130	<10	10	48
VA09272	---	---	---	---	---	886	<10	<10	59
VA09273	---	---	---	---	---	71	70	159	116
VA09274	---	---	---	---	---	1150	<10	15	64
VA09275	---	---	---	---	---	1030	<10	18	37
VA09276	---	---	---	---	---	1020	<10	17	44
VA09277	---	---	---	---	---	905	<10	21	49
VA09278	---	---	---	---	---	1120	<10	14	49
VA09279	---	---	---	---	---	1210	<10	24	58
VA09280	---	---	---	---	---	1000	<10	25	65
VA09281	---	---	---	---	---	1010	<10	10	64
VA09282	---	---	---	---	---	1040	<10	19	54
VA09283	---	---	---	---	---	931	<10	21	75
VA09284	---	---	---	---	---	1110	<10	16	52
VA09285	---	---	---	---	---	1530	<10	15	74
VA09286	---	---	---	---	---	1160	<10	13	89
VA09287	---	---	---	---	---	41	53	129	81
VA09288	---	---	---	---	---	836	<10	15	56
VA09289	---	---	---	---	---	1520	<10	20	24
VA09290	---	---	---	---	---	929	<10	16	25
VA09291	---	---	---	---	---	1550	<10	15	25
VA09292	---	---	---	---	---	1400	18	10	43
VA09293	---	---	---	---	---	1100	<10	29	34
VA09294	---	---	---	---	---	284	29	28	131
VA09295	---	---	---	---	---	1040	<10	<10	50
VA09296	---	---	---	---	---	1010	<10	<10	27
VA09297	---	---	---	---	---	1160	12	15	39
VA09298	---	---	---	---	---	252	53	45	117
VA09299	---	---	---	---	---	88	89	131	108
VA09300	---	---	---	---	---	615	<10	22	84
VA09301	---	---	---	---	---	894	<10	16	55
VA09302	---	---	---	---	---	1420	<10	12	49
VA09303	---	---	---	---	---	1320	<10	17	66
VA09304	---	---	---	---	---	284	57	28	62
VA09305	---	---	---	---	---	894	12	23	55
VA09306	---	---	---	---	---	1210	<10	119	54



SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
VA09307	---	---	---	---	---	691	49	68	99
VA09308	---	---	---	---	---	1180	<10	33	28
VA09309	---	---	---	---	---	588	35	71	67
VA09310	---	---	---	---	---	387	51	83	68
VA09311	---	---	---	---	---	467	35	71	77
VA09312	---	---	---	---	---	1330	<10	<10	34
VA09313	---	---	---	---	---	378	31	56	61
VA09314	---	---	---	---	---	406	26	48	74



no computer Dec 1/88

CERTIFICATE OF ANALYSIS
REPORT 6966

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

CUSTOMER No. 1282
DATE SUBMITTED
7-Nov-88

REF. FILE 3363-M1

Total Pages 6

109 WHOLE CORES, 1 PULP Proj. 116-605

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

X-RAY ASSAY LABORATORIES LIMITED

DATE 22-NOV-88 *led*

CERTIFIED BY *[Signature]*

- ✓ VA0900-9 9035
- ✓ 04309-9338
- ✓ 03010-07082 ✓
- ✓ VA0930-09369

VA09300 - 09369

GEOLOGY

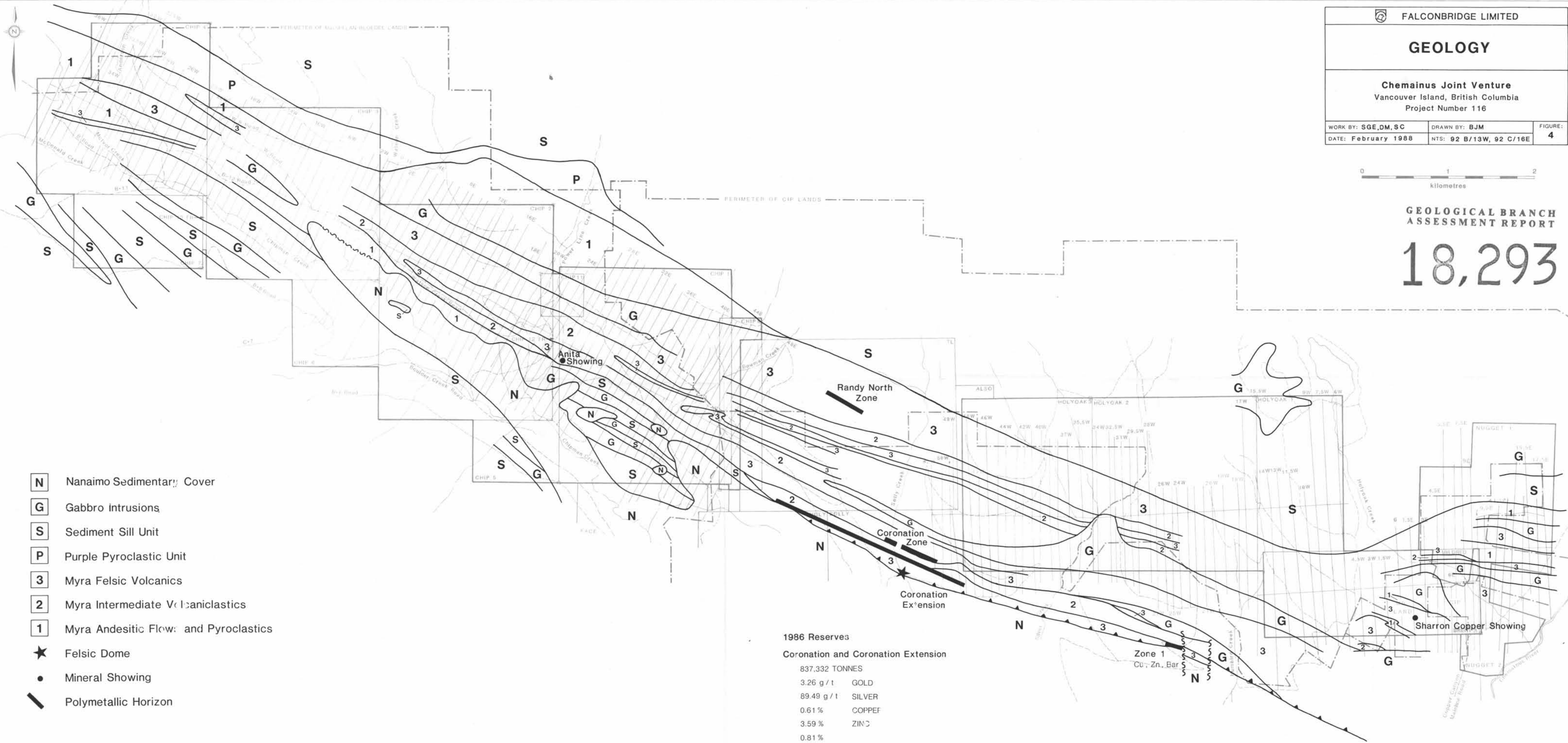
Chemainus Joint Venture
 Vancouver Island, British Columbia
 Project Number 116

WORK BY: SGE,DM,SC DRAWN BY: BJM FIGURE:
 DATE: February 1988 NTS: 92 B/13W, 92 C/16E 4



**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

18,293



- N** Nanaimo Sedimentary Cover
- G** Gabbro Intrusions
- S** Sediment Sill Unit
- P** Purple Pyroclastic Unit
- 3** Myra Felsic Volcanics
- 2** Myra Intermediate Volcanics
- 1** Myra Andesitic Flow and Pyroclastics
- ★ Felsic Dome
- Mineral Showing
- ▬ Polymetallic Horizon

1986 Reserves
Coronation and Coronation Extension

837,332 TONNES	
3.26 g/t	GOLD
89.49 g/t	SILVER
0.61 %	COPPER
3.59 %	ZINC
0.81 %	

Zone 1
 Cu, Zn, Bar



GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,293



BY ORDER OF THE REGISTRAR OF THE B.C. MINES ACT
THIS REPORT WAS PREPARED BY THE B.C. MINES ACT
ON BEHALF OF THE REGISTRAR OF THE B.C. MINES ACT



REF. NO. 113 D

The McElkenny Group Ltd.
156 Alberni Street, Vancouver, B.C., Canada
Compiled from aerial photographs taken in May 1987
at an approximate scale of 1:50,000

SCALE 1:5000	PLANTING INTERVAL 20 metres
DATE OBTAINED 20th 1987	EXPERT NUMBER C.W.

FALCONBRIDGE LIMITED
CHEMINUS JOINT VENTURE
LOCATION OF DRILL HOLE CH88-42
CHIP 1 CLAIM
NTS 92B/13 VICTORIA MINING DIVISION PROJ. 116

Work by SC	Drawn by VJG	Date: Nov 88	Figure 5
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,293



McEldanney Group Ltd
1166 Gilbert Street, Vancouver B.C., Canada
Compiled from aerial photographs taken in May 1987
at an approximate scale of 1:20,000

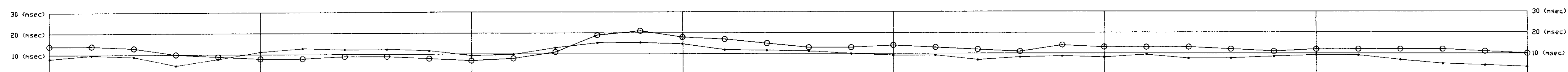


The McEldanney Group Ltd
1166 Gilbert Street, Vancouver B.C., Canada
Compiled from aerial photographs taken in May 1987
at an approximate scale of 1:20,000

FALCONBRIDGE LIMITED

CHEMAINUS JOINT VENTURE
LOCATION OF DRILL HOLES
CH88-77, 78, 79, 80, 81
CHIP 2, 3, 16 FR CLAIMS

Work by: SC Drawn by: VJG Date: Nov 88 **Figure 6**



shallow — Schlumberger array IP chargeability
 deep ○ Gradient array IP chargeability

LEGEND

MAJOR ROCK UNITS

- 11 Nanaimo Sediments
- 10 Late Mafic Intrusions
- 9 Felsic Intrusive Rocks
- 8 Intermediate Intrusive Rocks
- 7 Mafic Intrusive Rocks
- 6 Ultramafic Intrusive Rocks
- 5 Sedimentary Rocks
- 4 Felsic Volcanic Rocks
- 3 Intermediate Volcanic Rocks
- 2 Mafic Volcanic Rocks
- 1 Ultramafic Volcanic Rocks

ROCK UNIT LETTER QUALIFIERS

The second letter indicates the type of rock; if omitted a dash should be inserted if a third letter is used.

- | | |
|------------------|------------------------|
| A Tuff | K Wacke |
| B Lapilli Tuff | L Conglomerate |
| C Tuff Breccia | M Chert |
| D Massive Flow | N Iron Formation |
| E Pillowed Flow | O Limestone |
| F Flow Breccia | P Exhalite/Suiphides |
| G Pillow Breccia | Q Tuffaceous Sediments |
| H Intrusive | R Fine Grained |
| I Argillite | S Medium Grained |
| J Siltstone | T Coarse Grained |

The third and fourth letters are placed in alphabetical order; they are optional and further define the rock.

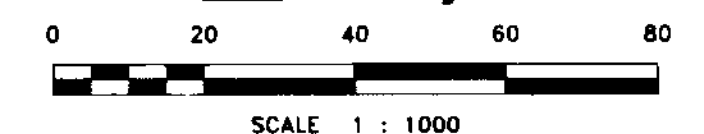
- | | |
|--------------------------|--------------------|
| A Quartz Phyric | J Melanocratic |
| B Feldspar Phyric | K Bedded |
| C Quartz-Feldspar Phyric | L Chloritic |
| D Mafic Phyric | M Graphitic |
| E Mafic-Feldspar Phyric | N Calcareous |
| F Amygdaloidal | O Argillaceous |
| G Spherulitic | P Siliceous/Cherty |
| H Variolitic | Q Sheared |
| I Leucocratic | R Massive |
| | S Lithic |

SYMBOLS

- Overburden
 - Bedding
 - Foliation
 - Fault
 - Stratigraphic top
 - Whole rock sample
 - Significant intersections
 - Geochemical/assay sample interval
 - Geological contact (inferred)
 - Anito Horizon
- | | |
|------------------|------------------|
| u Unconformity | py Pyrite |
| FZ Fault zone | cpy Chalcopyrite |
| FB Fault breccia | po Pyrrhotite |
| CAS Casing | sp Sphalerite |
| | ga Galena |

GEOLOGICAL BRANCH ASSESSMENT REPORT

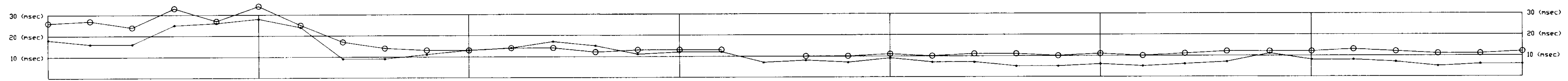
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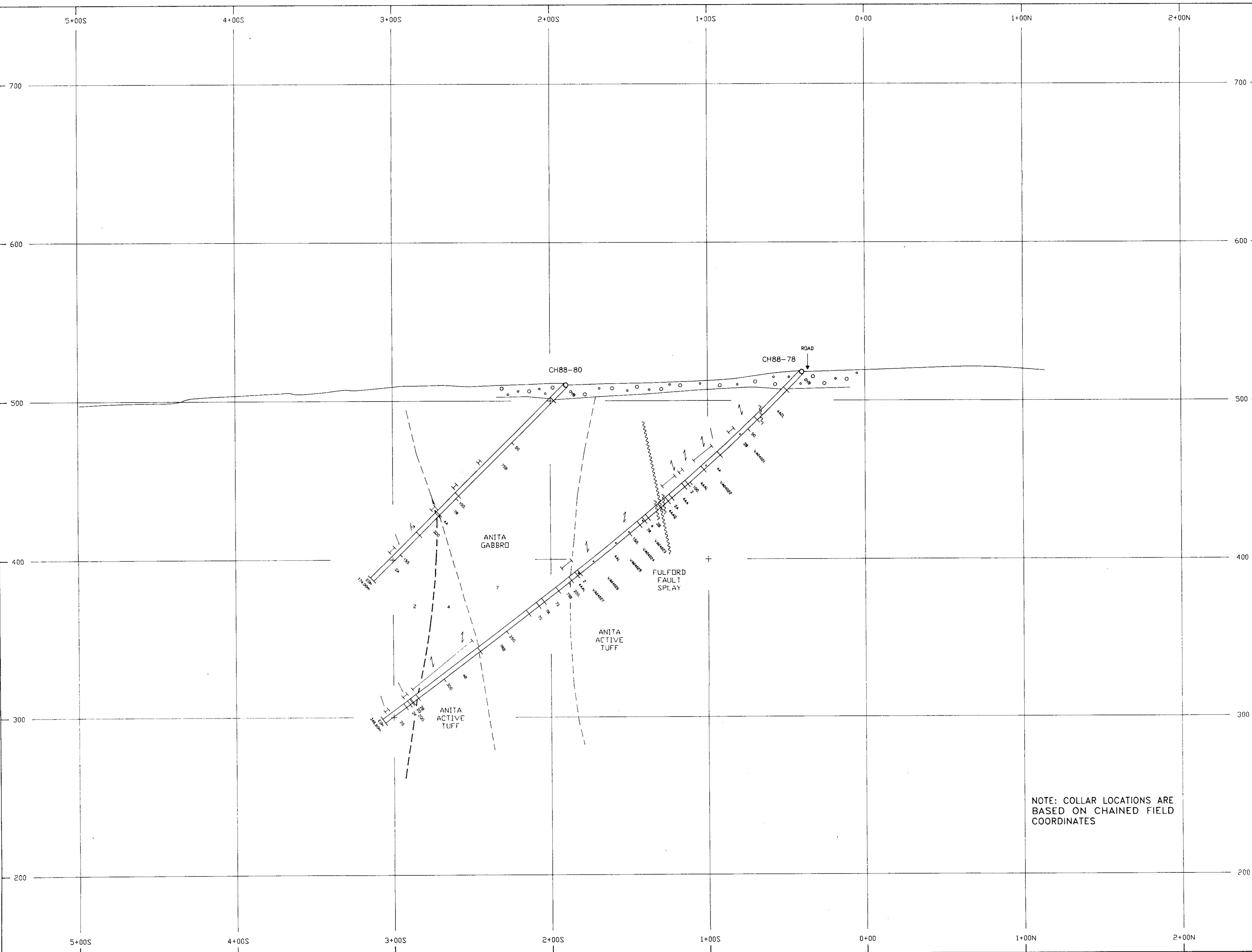
NOTE: COLLAR LOCATIONS ARE BASED ON CHAINED FIELD COORDINATES

FALCONBRIDGE LIMITED
 CHEMAINUS JOINT VENTURE
 Vancouver Island, British Columbia
 WATSON CREEK AREA
 SECTION 2+00 EAST
 HOLES CH88-77, CH88-79 & CH88-81

WORK BY: DPM & MVG	CLAIM: CHIP 2	FIG NO: 7
DATE OF WORK: OCT 1988	PROJECT NO: 116	
DRAWN BY: PW & COMPUTER		
DATE DRAWN: NOV 30 1988	N.T.S. NO.: 092B/13W	



shallow — Schlumberger array IP chargeability
 deep ○ Gradient array IP chargeability



LEGEND

MAJOR ROCK UNITS

- 11 Nainimo Sediments
- 10 Late Mafic Intrusions
- 9 Felsic Intrusive Rocks
- 8 Intermediate Intrusive Rocks
- 7 Mafic Intrusive Rocks
- 6 Ultramafic Intrusive Rocks
- 5 Sedimentary Rocks
- 4 Felsic Volcanic Rocks
- 3 Intermediate Volcanic Rocks
- 2 Mafic Volcanic Rocks
- 1 Ultramafic Volcanic Rocks

ROCK UNIT LETTER QUALIFIERS

The second letter indicates the type of rock; if omitted a dash should be inserted if a third letter is used.

- | | |
|------------------|------------------------|
| A Tuff | K Wacke |
| B Lapilli Tuff | L Conglomerate |
| C Tuff Breccia | M Chert |
| D Massive Flow | N Iron Formation |
| E Pillowed Flow | O Limestone |
| F Flow Breccia | P Exhalite/Sulphides |
| G Pillow Breccia | Q Tuffaceous Sediments |
| H Intrusive | R Fine Grained |
| I Argillite | S Medium Grained |
| J Siltstone | T Coarse Grained |

The third and fourth letters are placed in alphabetical order; they are optional and further define the rock.

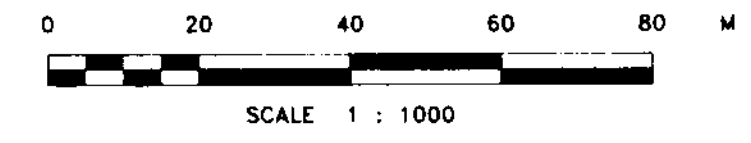
- | | |
|---------------------------|--------------------|
| A Quartz Phyrlic | J Melanocratic |
| B Feldspar Phyrlic | K Bedded |
| C Quartz-Feldspar Phyrlic | L Chloritic |
| D Mafic Phyrlic | M Graphitic |
| E Mafic-Feldspar Phyrlic | N Calcareous |
| F Amygdaloidal | O Argillaceous |
| G Spherulitic | P Siliceous/Cherty |
| H Variolitic | Q Sheared |
| I Leucocratic | R Massive |
| | S Lithic |

SYMBOLS

- Overburden
- Bedding
- Foliation
- Fault
- Stratigraphic top
- Whole rock sample
- Significant intersections
- Geochemical/assay sample interval
- Geological contact (inferred)
- Anita Horizon
- u Unconformity
- FZ Fault zone
- FB Fault breccia
- CAS Casing
- py Pyrite
- cpy Chalcopyrite
- po Pyrrhotite
- sp Sphalerite
- ga Galena

GEOLOGICAL BRANCH ASSESSMENT REPORT

18,293

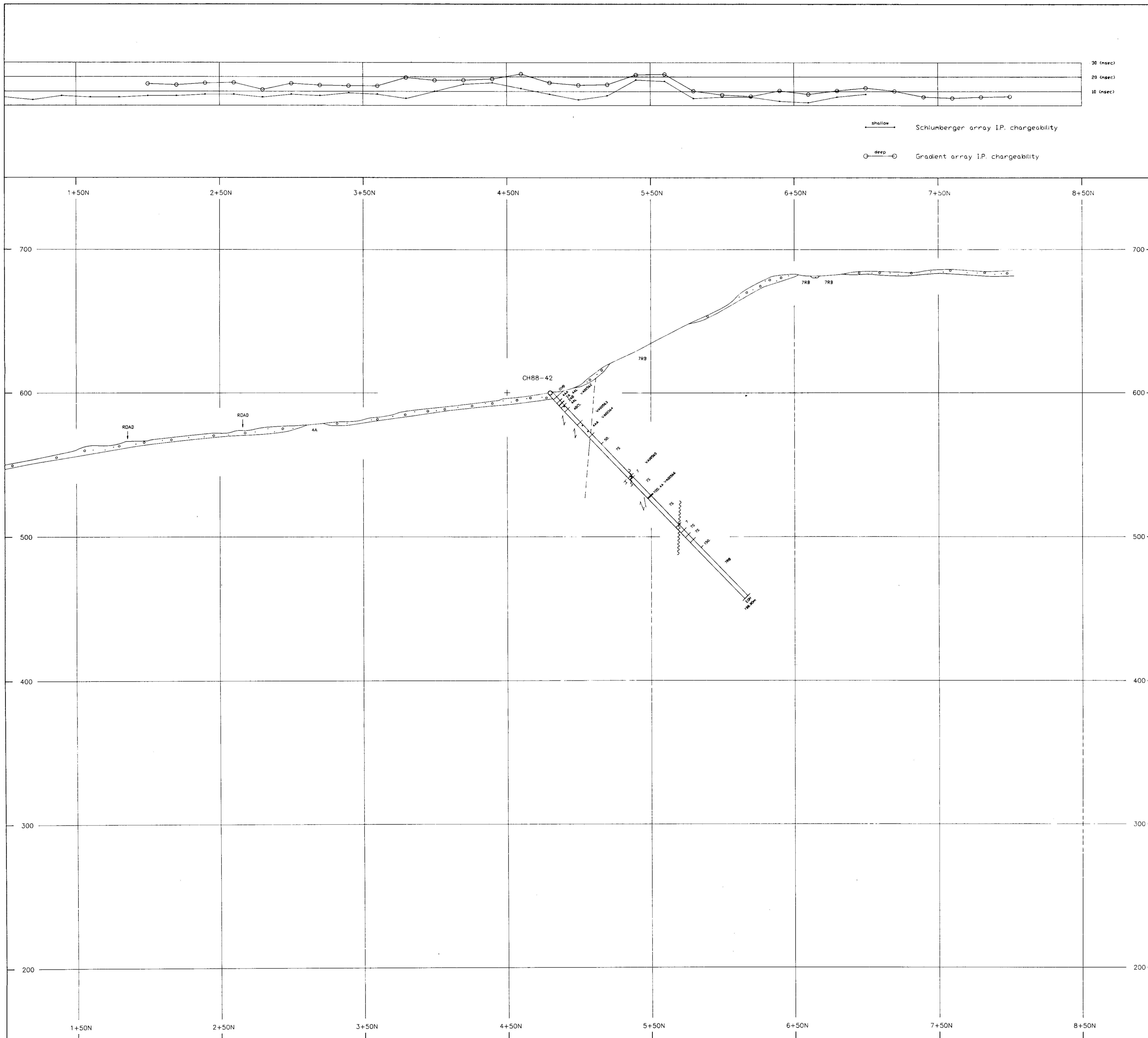


NOTE: COLLAR LOCATIONS ARE BASED ON CHAINED FIELD COORDINATES

FALCONBRIDGE LIMITED
 CHEMAINUS JOINT VENTURE
 Vancouver Island, British Columbia

ANITA AREA
SECTION 22+00 EAST
 HOLES CH88-78 & CH88-80

WORK BY: JP	CLAIM: CHIP 2	FIG NO:
DATE OF WORK: OCT 1988	PROJECT NO: 116	8
DRAWN BY: PW & COMPUTER	H.T.S. NO.: 092B/13W	
DATE DRAWN: NOV 30 1988		



LEGEND

MAJOR ROCK UNITS

- 11 Nanaimo Sediments
- 10 Late Mafic Intrusions
- 9 Felsic Intrusive Rocks
- 8 Intermediate Intrusive Rocks
- 7 Mafic Intrusive Rocks
- 6 Ultramafic Intrusive Rocks
- 5 Sedimentary Rocks
- 4 Felsic Volcanic Rocks
- 3 Intermediate Volcanic Rocks
- 2 Mafic Volcanic Rocks
- 1 Ultramafic Volcanic Rocks

ROCK UNIT LETTER QUALIFIERS

The second letter indicates the type of rock; if omitted a dash should be inserted if a third letter is used.

- | | |
|------------------|------------------------|
| A Tuff | K Wacke |
| B Lapilli Tuff | L Conglomerate |
| C Tuff Breccia | M Chert |
| D Massive Flow | N Iron Formation |
| E Pillowed Flow | O Limestone |
| F Flow Breccia | P Exhalite/Sulphides |
| G Pillow Breccia | Q Tuffaceous Sediments |
| H Intrusive | R Fine Grained |
| I Argillite | S Medium Grained |
| J Siltstone | T Coarse Grained |

The third and fourth letters are placed in alphabetical order; they are optional and further define the rock.

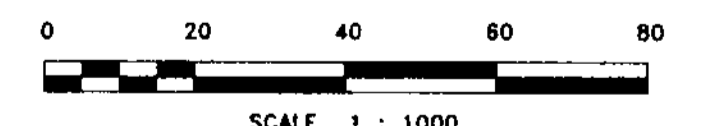
- | | |
|---------------------------|--------------------|
| A Quartz Phyrlic | J Melanocratic |
| B Feldspar Phyrlic | K Bedded |
| C Quartz-Feldspar Phyrlic | L Chloritic |
| D Mafic Phyrlic | M Graphitic |
| E Mafic-Feldspar Phyrlic | N Calcareous |
| F Amygdaloidal | O Argillaceous |
| G Spherulitic | P Siliceous/Cherty |
| H Variolitic | Q Sheared |
| I Leucocratic | R Massive |
| | S Lithic |

SYMBOLS

- Overburden
 - Bedding
 - Foliation
 - Fault
 - Stratigraphic top
 - Whole rock sample
 - Significant intersections
 - Geochemical/assay sample interval
 - Geological contact (inferred)
 - Felsic-mafic contact
- | | |
|------------------|------------------|
| u Unconformity | py Pyrite |
| FZ Fault zone | cpy Chalcopyrite |
| FB Fault breccia | po Pyrrhotite |
| CAS Casing | sp Sphalerite |
| | ga Galena |

GEOLOGICAL BRANCH ASSESSMENT REPORT

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FALCONBRIDGE LIMITED
CHEMAINUS JOINT VENTURE
 Vancouver Island, British Columbia

SECTION 30+00 EAST
 (NORTH HALF)
 HOLE CH88-42

WORK BY: DPM	PROJECT NO: 116	FIG NO: 9
DATE OF WORK: MAY 1988	DRAWN BY: PW & COMPUTER	
DATE DRAWN: OCT 4 1988	N.T.S. NO.: 092B/13W	