1988 DRILLING ASSESSMENT REPORT

ON THE

HOLYOAK 2 CLAIM

CHEMAINUS JOINT VENTURE

PROJECT 116

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

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

Falconbridge Ltd.(Owner-Operator)
701-1281 West Georgia Street
Vancouver, B.C.

Esso Resources Canada Limited (Owner)
1600-409 Granville Street
Vancouver, B.C.

November 1988

Vancouver, B.C.

Stanley G. Clemmer

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SUMMARY AND CONCLUSIONS

This report summarizes the results of a single drill hole drilled on the Holyoak-Brent claim group. The claim group is 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 1986 of 837,332 tonnes averaging 3.26 g/t Au, 89.49 g/t Ag, 0.61% Cu, 3.59% Zn, and 0.81% Pb in the Lara deposit.

No significant base metal mineralization was intersected in hole CH88-64. The hole cut chloritic felsic tuffs to a depth of 47.3 and then entered gabbro and remained in gabbro to the bottom of the hole at 195.1 metres.

LOCATION, ACCESS, TERRAIN

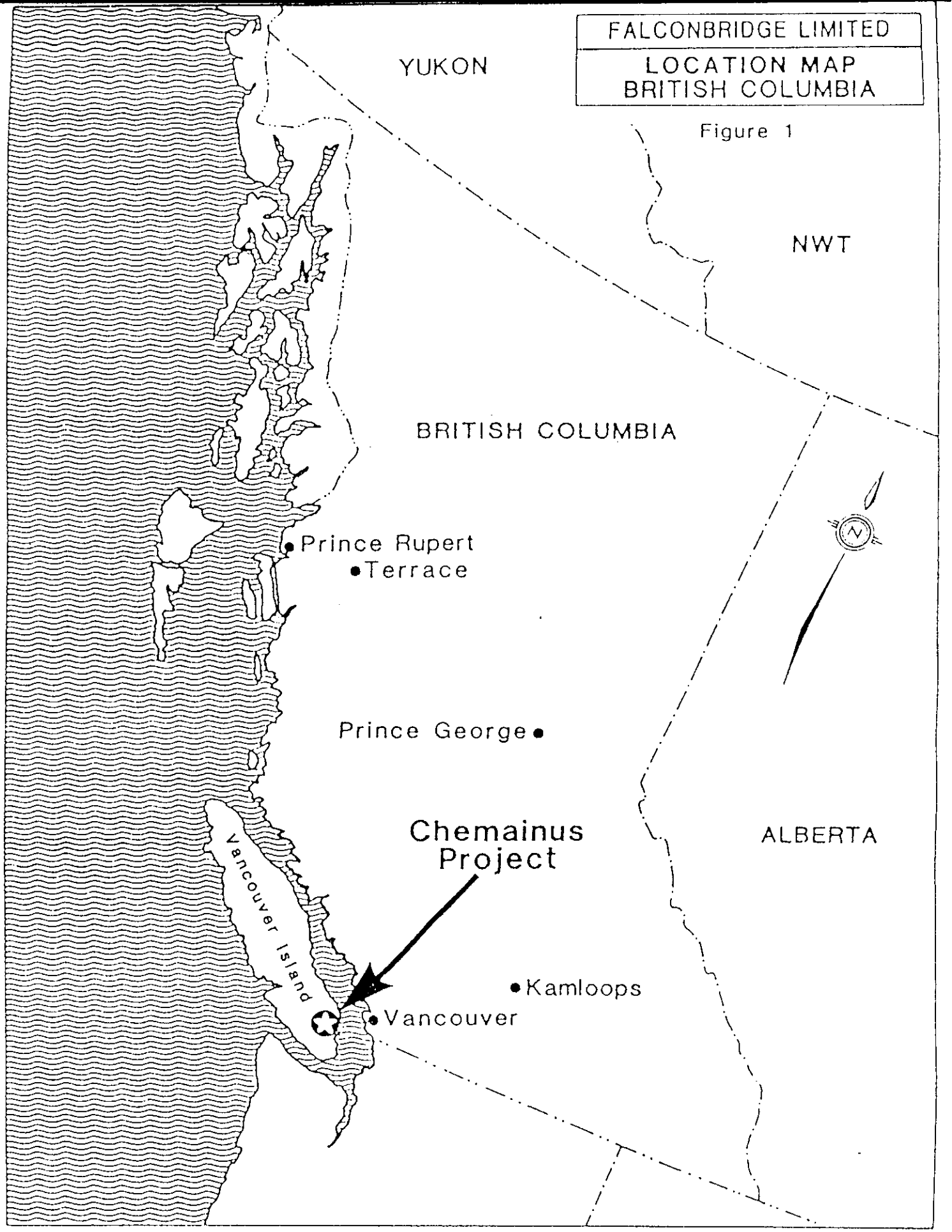
The Holyoak-Brent claim group is located 8 to 12 kilometres west of Chemainus on southeast Vancouver Island, in southwestern British Columbia (Figure 1). Chemainus lies just east of the Trans-Canada Highway about 60 kilometres northwest of Victoria. Established deep water marine port facilites and infrastructure in Chemainus and vicinity would enhance the ecomomics 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 at mile 10.

Timber and suface 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. Higer 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 clousures during this period are common.


FALCONBRIDGE LIMITED
LOCATION MAP
BRITISH COLUMBIA
Figure 1
YUKON
NWT
BRITISH COLUMBIA
Prince Rupert
Terrace
Prince George
Chemainus
Project
Vancouver Island
Kamloops
Vancouver
ALBERTA

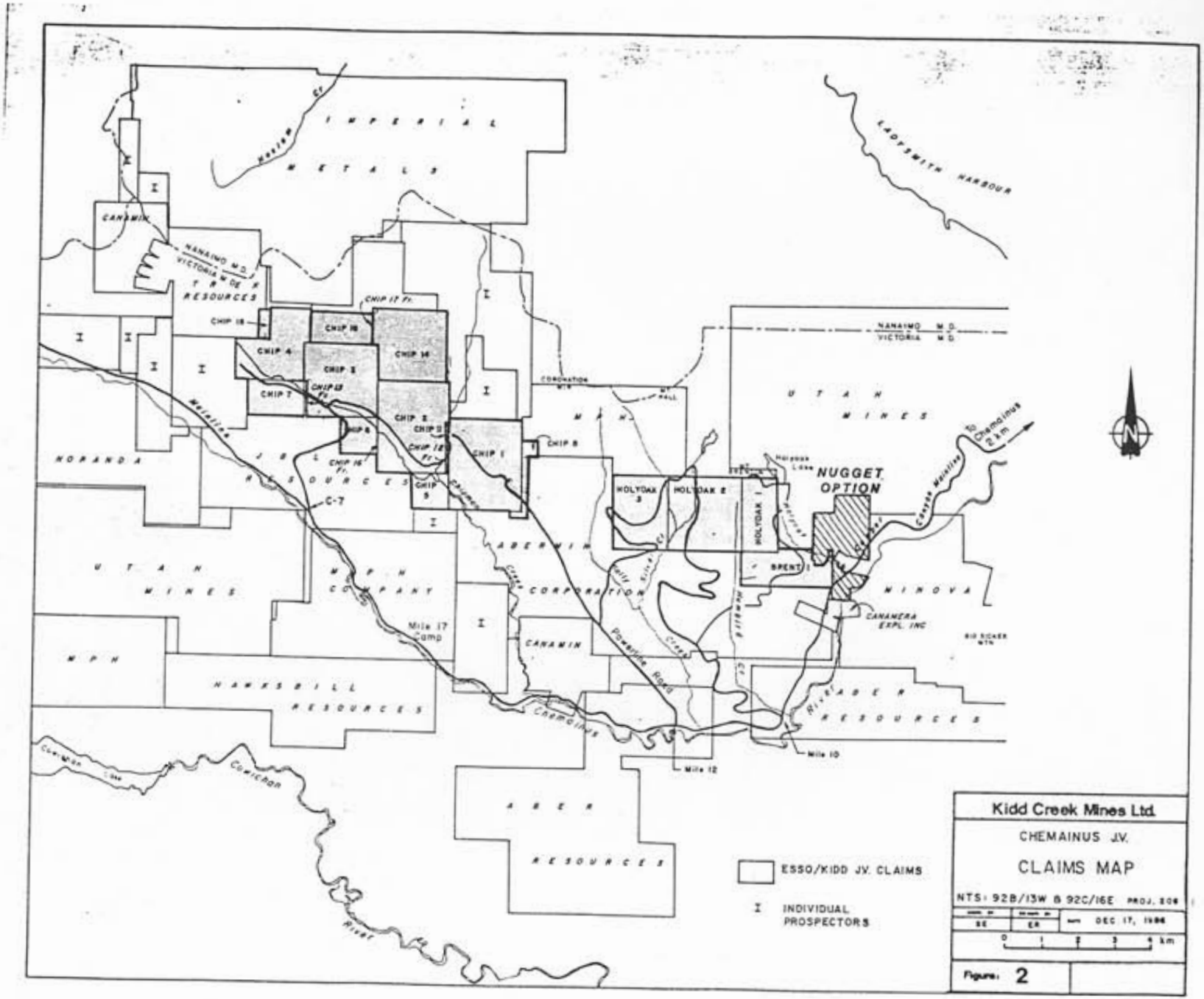
CLAIM STATUS

The Holyoak-Brent claim group consists of 4 claims with 46 units within the Victoria Mining Division. The status of the claims is listed in Table 1 and the location of the claims is shown on figure 2. The claims are jointly owned by Esso Resources Canada Limited and Falconbridge Ltd. The claims have all been grouped into the Holy88 Group.

Table 1 : List of Claims

CLAIM	RECORD NO.	UNITS	STAKING DATE	EXPIRY DATE
Brent 1	163	10	May 5, 1978	May 11, 1998
Holyoak 1	1598	8	Oct 22, 1985	Oct 31, 1998
Holyoak 2	1599	16	Oct 23, 1985	Oct 31, 1998
Holyoak 3	1560	12	Oct 24, 1985	Oct 31, 1998

Expiry dates are subject to approval by Gold Commissioner.


IMPERIAL METALS
CANAMIN
NANAIMO M.D.
VICTORIA M.D.
TRADER RESOURCES
CHIP 17 Fr.
CHIP 18
CHIP 16
CHIP 4
CHIP 2
CHIP 14
CHIP 7
CHIP 13 Fr.
CHIP 3
CHIP 5
CHIP 12 Fr.
CHIP 6
CHIP 16 Fr.
CHIP 1
CHIP 9
CHIP 8
NORANDA
ISL RESOURCES
C-7
UTAH MINES
MPH CONSOLIDATED
ABERMIN CORPORATION
Mile 17 Camp
MPH
HAWKSBILL RESOURCES
Cowichan River
ABER RESOURCES
CORONATION MTN
MT HALL
HOLTOAK 3
HOLTOAK 2
HOLTOAK 1
BRENT
NUGGET OPTION
Holtoak Lake
Canyon Meadow Creek
10 Chemainus 24 km
MINOVA
CANAMERA EXPL. INC
BIG SICKER MTN
Powerline Road
Chemainus River
Mile 10
Mile 12
LADYSMITH HARBOUR
ESSO/KIDD JV. CLAIMS
I INDIVIDUAL PROSPECTORS
Kidd Creek Mines Ltd.
CHEMAINUS JV.
CLAIMS MAP
NTS: 92B/13W & 92C/16E PROJ. 804
DEC. 17, 1986
0 1 2 3 4 km
Figure: 2

EXPLORATION HISTORY

Early property history on the Brent-Holyoak claims has been described by Britten (1984):

> "The Brent 1 mineral claim overlies what is beleived to have been the Pauper C.G. claim (L31G) crown granted in 1903. The BCDM Annual reports for 1924 and 1927 report underground development of a pyritized schist belt 60 feet wide. An undated map by Sharon Copper Mines Limited shows three parallel adits.
>
> In 1966 and 1967 Cominco Ltd. carried out geological mapping, a geochemical soils survey and an induced polarization survey (Tikkanen 1966) on the Tot and Rum claims, for which the base metal rights were optioned from Canadian Pacific Oil and Gas Limited, who at that time controlled the E&N Railway Land grant.
>
> Imperial Oil Limited staked the Mons 4 mineral claim in 1976 and upon surrender of the E&N mineral rights to the Crown in 1978 this claim was abandoned and restaked as the Brent 1 claim. The Oak 1, 2 and 3 claims were staked at the same time to cover anomalies outlined by a Scintrex airborne EM and magnetic survey. Imperial Oil carried out minor geological mapping, a self potential survey and drilled four holes on this block of claims now known as the Oak Group. Traces of copper in pyritic quartz-sericite schists were noted in one drill hole (78 CHEM 1) sited on the Brent claim (Sommerville 1979)."

Esso conducted geological mapping in 1984 on the Oak Group and applied this work for assessment. In 1984 Kidd Creek Mines Ltd. (now Falconbridge Ltd.) entered an option agreement with Esso Resources Canada Limited to explore the OAK group. Late in 1984 Kidd Creek Mines completed a Questor Mark IV INPUT airborne EM survey over the claim group.

In 1985 the Oak 1,2 and 3 claims were abandoned and restaked as the Holyoak 1, 2 and 3 claims. Kidd Creek Mines Ltd. conducted ground follow-up of the 1984 airborne anomalies with induced polarization surveys, geological mapping, lithogeochem, and soil sampling. Limited backhoe trenching and 1,534 metres of NQ diamond drilling was completed in 7 holes. Minor zinc mineralization was noted in a trench and a drill hole just east of Silver Creek on the Holyoak 2 claim.

After the take over of Kidd Creek Mines Ltd.,

Falconbridge Limited continued exploration in 1986 with geological mapping, soil geochemistry and induced polarization, magnetic and VLF surveys. In 1987, additional magnetic, VLF and induced polarization surveys were carried out on the Holyoak-Brent 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 Tertiay 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 unamed 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 unconformalbly 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 these rocks are unconformably overlain by relatively undeformed shale, siltstone, sandstone, conglomerate, and locally coal of the Late Cretaceous Nanaimo Group.

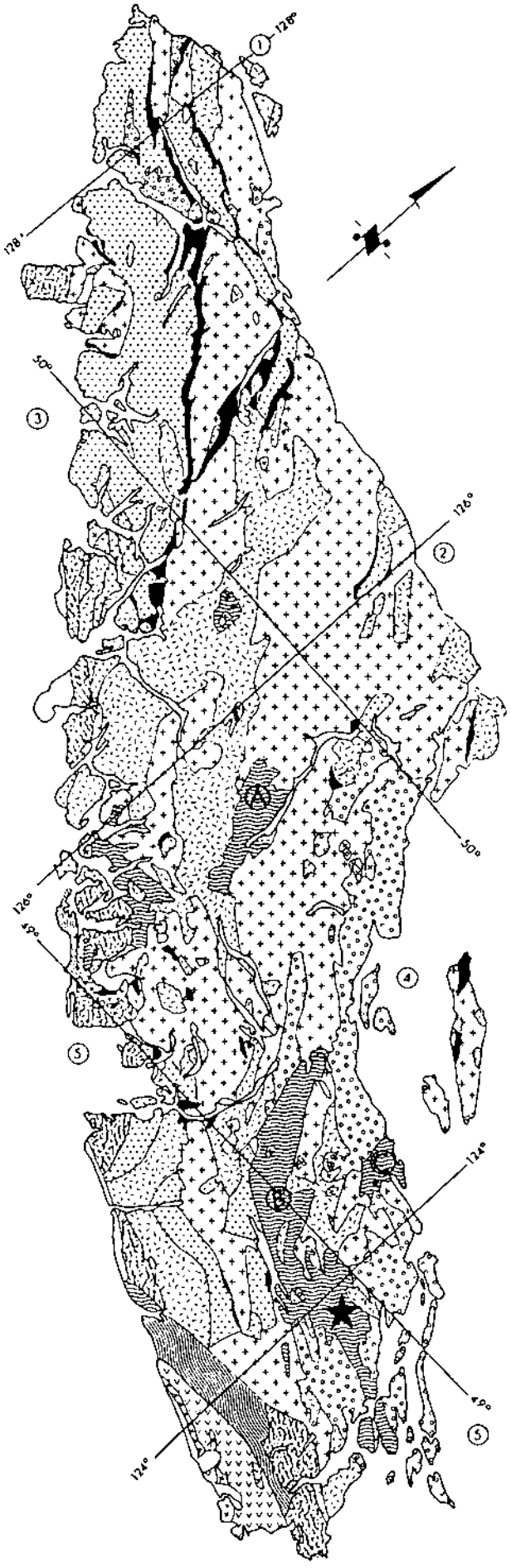


FIGURE 3 : Regional Geology (after Muller 1981)

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 EARLY CRETACEOUS
	LEECH RIVER FORMATION PACIFIC RIM COMPLEX	
	ISLAND INTRUSIONS	EARLY AND (?) MIDDLE JURASSIC
	BONANZA GROUP	EARLY JURASSIC
	VANCOUVER GROUP PARSON BAY FORMATION QUATSINO FORMATION KARMUTSEN FORMATION	LATE AND (?) MIDDLE TRIASSIC
	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

MILES
0 20 40

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 2 : Stratigraphy of the Sicker Group (Muller, 1980)

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 appearence of bedded volcaniclastic 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 aggolomeratic, commonly with large conspicuous uralized 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 breifly described below; oldest to youngest. The following descriptions are taken from Massey(1988).

Table 3 : Stratigraphy of the Duncan and Chemainus River Area. (Massay,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

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 equivilent to the Nitinat formation of Muller(1980). There is no age dating currently available for the Nitinat but because is 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 volcaniclastics 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 yeild 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 there relationship is uncertain.

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

The Mclaughlin Ridge formation is equivilent 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

equivilent 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 equivialent 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 breif 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 particuar 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 listed in table 4. 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 stratigraphic, 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 volanics higher in the Cameron River Formation may correlate with the Flower Ridge Formation of Juras.

TABLE 4 : 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 Holyoak and Brent claims lie within the Cowichan-Horne Lake Uplift, in which lower Paleozoic Sicker Group rocks are exposed. The geology of the Holyoak-Brent claims is shown on figure 4. The claims are underlain by felsic to 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 CH88-64 was commenced on June 2 and completed on June 5, 1988. The core size was NQ and the hole was drilled to a depth of 195.1 metres.

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 Caterpiller 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 CH88-64 is shown on figure 5 and a section along line 31+00W is shown on figure 6. The drill log 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 sytematically photographed and logged. A dip test was taken using a single shot Sperry Sun instrument at a depth of 146.3 metres. 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 transfered into a Tochiba 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 analysed 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 CH88-64 was drilled to test the down dip extent of geochemically anomalous zinc mineralization in felsic volcanics intersected in 1985 drill holes and one trench just east of Silver Creek on line 31+00W. The hole was also drilled in an area of anomalous induced polarization chargeability.

No significant base metal mineralization was intersected in hole CH88-64. The hole cut chloritic felsic tuffs to a depth of 47.3 and then entered gabbro and remained in gabbro to the bottom of the hole at 195.1 metres.

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LIST OF PERSONEL

1)	Stan Clemmer Project Geologist	June 3, 1988
2)	David Money Associate Geologist	June 3 to 6, 1988
3)	Trevor Cownans Technician	June 3 to 5, 1988
4)	Bryan Cochrane Swamper	June 2, 1988

STATEMENT OF COSTS

Drilling Costs

Burwash Enterprises Ltd.	
Moving	
13 tractor hours @ 75.00/hr.....	$ 975.00
20 man hours @ 22.00/hr	$ 440.00
Overburden	
20' @ $15.00/ft.	$ 300.00
Reaming Casing	
18 man hours @ $22.00/hr.....	$ 396.00
9 drill hours @ $19.00/hr.....	$ 171.00
Core	
480' @ $14.75/ft.	$ 6,840.00
140' @ $14.75/ft.	$ 2,065.00
Consumables	$ 2,663.14
Testing and hole stabilization	$ 693.00

Site Preparation

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

Analytical

X-Ray Laboratories Ltd.	
Whole Rock 16 samples @ $23.49	$ 375.84
Alteration 11 samples @ $18.90	$ 207.90
Bondar-Clegg & Co. Ltd.	
Geochemical Rock samples 17 @ $23.00	$ 391.00

Labour

Stan Clemmer, Geologist 1 day @ $150.00	$ 150.00
David Money, Geologist 4 days @ $150.00	$ 600.00
Trevor Cowans, Splitter 4 days @ $100.00	$ 400.00
Bryan Cochrane, Swamper 1 day @ $120.00	$ 120.00
Room & Board	
9 days @ $30.00/day	$ 270.00
Report	$ 1,000.00
Total Expenditures	$18,777.88

STATEMENT OF QUALIFICATIONS

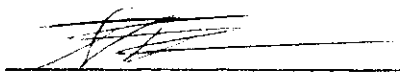
Stanley G. Clemmer
202-856 Homer Street
Vancouver, B.C.

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 Cresent, 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

David P. Money

David P. Money, B.A.Sc.

APPENDIX I

DRILL LOG AND ANALYTICAL RESULTS

Summary Log: DDH CH88-64
Location: 31+00 W, 1+30 S; Holyoak 2 Claim
Azimuth: 180, Dip: -50
Hole Completed: June 5, 1988
Core Logged By: D.P. Money

0.0	- 10.2	Casing.
10.2	- 14.4	Gabbro.
14.4	- 30.8	Weakly chloritic felsic tuff with 3 to 5 % fracture controlled pyrrhotite from 23.0 to 25.2 m.
30.8	- 35.1	Gabbro.
35.1	- 39.0	Felsic crystal tuff with minor collapsed pumice and scoria. Quartz eyes display lineation and may be welded.
39.0	- 39.8	Gabbro.
39.8	- 47.3	Felsic crystal tuff as from 35.1 to 39.0 m.
47.3	- 195.1	Gabbro. Hosts trace to 0.5 % disseminated chalcopyrite from 104.0 to 122.0 m. From 125 to 134 m there is 15 % ilmenite. From 136.1 to 138.0 m 5 to 7 % pyrite, 1 to 2 % pyrrhotite, and trace chalcopyrite occur as fracture fillings.
195.1		End of hole.

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FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: CH88-64 | Page Number 1

Hole Location: 31+00 W 1+30 S

NTS: 092B/13 UTM:
Azimuth: 180 Elevation: 797 m
Dip: -50 Length: 195.1 m

Started: June 2, 1988
Completed: June 5, 1988

Claim No. Holyoak 2
Section No.: Section 31+00 West, Holyoak Claim Group

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

Core Size: NQ

Purpose: To test Chem85-10 mineralization downdip

DIP TESTS

Length	Azimuth	Dip	Length	Azimuth	Dip
146.30	178.0	-52.0			

From (m)	To (m)	DESCRIPTION
.0	10.2	OVERBURDEN Gabbro, white quartz and felsic tuff pebbles and cobbles. No chit marked start of coring.
10.2	14.4	FELDSPAR PORPHYRITIC GABBRO Fine-grained medium green gabbro with trace to 10 %, 2 to 4 mm, average 5 to 7 %, feldspars. There are minor quartz - chlorite veins with trace pyrite. There is approximately 2 % leucoxene.
14.4	30.8	WEAKLY CHLORITIC FELSIC TUFF Weakly chloritic felsic tuffs. 14.4 18.9 Medium to light grey to green schistose tuff with up to 5 % chlorite. There are approximately 5 %, 1 to 3 mm, quartz eyes and up to 1 % (?) feldspars, with reaction rims. Very local compositional banding. Locally weakly contorted. There is trace banded and disseminated pyrite. 18.9 20.3 Very similiar to 14.4 to 18.9 with local epidotized and silicified zones. From 19.8 to 19.9 there is 2 % pyrrhotite in a quartz vein. 20.3 23.0 Very siliceous banded tuff with dark green and white bands. There are approximately 5 to 7 %, 2 to 3 mm, quartz and feldspar crystals. There are rare trace pyrrhotite stringers. 23.0 24.0 Light green sericitic massive tuff with 3 to 5 % fracture controlled pyrrhotite and very fine-grained grey mineral, galena (?) as approximately 3 %. There are trace fracture controlled calcite veinlets.

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA01201	14.4	30.8	16.4	n/a	80	n/a	104	n/a	n/a	1130
VA02059	22.0	23.0	1.0	1	60	22	820	<1	<5	1100
VA02060	23.0	24.0	1.0	4	47	11	58	<1	<5	840
VA02061	24.0	25.2	1.2	4	36	18	41	<1	<5	870
VA02062	25.2	26.0	.8	1	37	24	605	<1	<5	890

From (m)	To (m)	----------DESCRIPTION----------	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		24.0 25.2 Same as 23.0 to 24.0 without the grey mineral, but with 0.5 %, 2 to 4 mm, pyrite cubes.											
		25.2 30.8 Very siliceous medium green tuff with locally up to 5 % quartz eyes, 2 to 4 mm, and up to 5 %, 3 mm, epidote grains. Locally there is strong pervasive silicification. There are minor siliceous lapilli and beds (?) with strong epidotization. There are rare kink bands approximately perpendicular to the foliation. From 29.9 to 30.8 there is strong hematite on fractures.											
		Alteration :.											
		14.4 30.8 WEAK PERVASIVE CHLORITIZATION.											
		20.3 22.2 STRONG PERVASIVE SERICITIZATION.											
		27.4 27.7 MODERATE PERVASIVE EPIDOTIZATION , very bleached.											
		Foliations :.											
		14.7 : 68 degrees to core axis.											
		16.3 : 76 degrees to core axis.											
		24.0 : 60 degrees to core axis.											
		26.8 : 71 degrees to core axis.											
		29.7 : 56 degrees to core axis.											
		Lost core :.											
		20.6 22.3 : 0.5 m.											
		28.5 29.4 : 0.2 m.											
30.8	35.1	MAFIC INTRUSIVE											
		30.8 32.1 Fine-grained green gabbro with 2 %, 2 to 5 mm, feldspars and approximately 10 % fine-grained mafic crystals.											
		32.1 32.8 Fine-grained with approximately 2 % leucoxene, minor mafic and feldspar crystals.											
		32.8 33.0 Epidotized and silicified light green with 5 % mafic crystals, up to 3 mm.											
		33.0 35.1 Similiar to 32.1 to 32.8 with green epidote from 34.1 to 34.4 and 34.6 to 34.8 with minor spots similiar to 32.8 to 33.0.											
		There are local calcite veinlets, hydraulic fracture controlled with a speck of chalcopyrite at 32.1. There is a minor breccia hosted by a quartz vein from 33.75 to 33.85											
35.1	39.0	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF											
		Variably welded tuff, hot ash pyroclastic surge deposit ?. Light green siliceous tuff, massive. There are approximately 10 % feldspar crystals, laths up to 3 mm, with minor reaction rims. There is approximately 10 to 12 % rounded and stretched quartz eyes, 2 to 5 mm, average approximately 3 mm. From 37.5 to 38 is grey with 0.5 to 1 % disseminated pyrrhotite. There is approximately 0.5 to 1 % quartz - chlorite veins. There is very local	VA01202	35.1	39.0	3.9	n/a	149	n/a	46	n/a	n/a	1730

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)
		epidotization at the lower gabbro contact. Foliations :. 39.4 : 62 degrees to core axis. 37.6 : 34 degrees to core axis. 38.2 : 47 degrees to core axis.											
39.0	39.8	MAFIC INTRUSIVE Fine-grained green mafic sill with trace calcite, and epidote veins. At 39.2 there is minor pyrrhotite in a calcite vein.											
39.8	47.3	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Light to medium grey, with local greenish tinge. Is massive and siliceous. Hosts 15 to 20 %, 2 to 4 mm, quartz eyes, which are elongated and rounded. Locally there are up to 3 % feldspars, 1 to 2 mm, mostly rounded, some with reaction rims and locally as laths. There are collapsed pumice lapilli, notably at 42.7 which are lighter green with stretched quartz grains in the lapilli. There is minor local epidotization and local quartz - chlorite and epidote fracture controlled veinlets. Rock is a hot ash flow, surge deposit (?), and fragments are welded to various degrees. Foliations :. 40.6 : 66 degrees to core axis. 44.4 : 38 degrees to core axis. 45.8 : 62 degrees to core axis. Upper contact : 63 degrees to core axis. Bleached mafic sill from 40.7 to 41.2.	VA01203	39.8	47.3	7.5	n/a	84	n/a	25	n/a	n/a	1490
47.3	195.1	FELDSPAR PORPHYRITIC GABBRO											
		47.3 47.6 Fine-grained medium green chilled margin with fracture controlled epidote veinlets.	VA01204	48.0	58.0	10.0	n/a	177	n/a	77	n/a	n/a	85
			VA01205	59.0	92.0	33.0	n/a	329	n/a	99	n/a	n/a	123
		47.6 52.6 Fine-grained medium green with 5 to 10 %, 1 to 5 mm, feldspar clots to grains. There is minor epidote and calcite veinlets. There is approximately 3 % ilmenite and leucoxene.	VA01206	93.0	104.0	11.0	n/a	334	n/a	122	n/a	n/a	272
			VA02063	102.6	103.5	.9	1	530	<5	98	<1	10	180
			VA01207	104.0	120.0	16.0	n/a	548	n/a	145	n/a	n/a	335
			VA02064	104.0	106.0	2.0	0	520	<5	101	<1	5	210
		52.6 54.6 Strongly epidotized with minor fracture controlled epidote, quartz and calcite veinlets with trace pyrrhotite and chalcopyrite at 53.6 and trace chalcopyrite at 54.5 and 54.6. There is approximately 5 %, 2 to 3 mm, leucoxene and 1 to 2 %, up to 1 mm, ilmenite.	VA02065	106.0	108.0	2.0	0	460	<5	125	<1	9	280
			VA02066	108.0	110.0	2.0	0	560	<5	111	<1	22	310
			VA02067	110.0	112.0	2.0	0	380	<5	97	<1	9	140
			VA02068	112.0	114.0	2.0	0	520	<5	93	<1	11	280
			VA02069	114.0	116.0	2.0	0	490	<5	105	<1	49	270
			VA02070	116.0	118.0	2.0	0	580	<5	98	<1	31	280
		54.6 55.8 Medium grained with approximately 20 to 30 %, 1 to 2 mm, feldspar laths and approximately 3 % leucoxene - ilmenite. There are minor quartz - chlorite veins at 55.1, 55.2 and 55.6.	VA02071	118.0	120.0	2.0	0	580	<5	112	<1	25	280
			VA02072	120.0	122.0	2.0	0	760	<5	115	<1	44	270
			VA01208	120.0	145.0	25.0	n/a	611	n/a	142	n/a	n/a	521
			VA02073	136.0	137.0	1.0	8	420	<5	110	<1	<5	390
		55.8 58.0 STRONG PERVASIVE EPIDOTIZATION , epidote and	VA02074	137.0	138.0	1.0	8	376	<5	158	<1	<5	360

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FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: CH88-64 | Page Number 4

From (m)	To (m)	DESCRIPTION
		quartz flooded with minor medium grained and chloritic zones. There is trace chalcopyrite at 57.5 in chlorite.
58.0	59.5	Medium grained, similiar to 54.6 to 55.8 with chalcopyrite speck at 58.8 and 58.9, associated with minor fracture controlled epidote. There are 3 < 1 mm pyrite cubes at 59.5.
59.5	92.5	Coarse grained gabbro with on average 40 to 50 %, 1 to 5 mm, feldspar laths to clots of intergrown crystals, 50 to 55 % mafic crystals and 5 % ilmenite, 1 to 4 mm crystals, average 2 mm, often associated with leucoxene rims. Variably feldspar or mafic dominated, usually mafics dominate groundmass with feldspars in clots. Sulphides occur as trace locally. Chalcopyrite and pyrite occur as < 1 mm blebs associated with fracture controlled chloritization or fracture controlled < 3 mm calcite veinlets. Chloritization and quartz or calcite veins constitute less than 1 % of the interval and are concentrated around 79.0 and 81.8.
92.5	102.6	Dark green siliceous (?), slightly glassy and approximately 7 %, 3 to 4 mm, feldspar laths. There are approximately 10 to 15 % light purple to brown grains, appear to be sphene rimming ilmenite. Is not magnetic. There are up to 5 % zones with 20 % feldspar clots locally. Mafic crystals are altered to chlorite, with some retaining elongate hornblende crystal forms. There is trace chalcopyrite throughout, some appears to be interstitial to crystals, but most is associated with fracture controlled calcite and quartz veinlets.
102.6	103.5	Coarse grained gabbro with 0.25 to 0.5 % magmatic chalcopyrite, 2 to 3 %, 2 to 3 mm, ilmenite and equal mix of 2 to 5 mm feldspar and mafic crystals.
103.5	104.0	Fine-grained greyish medium green with 3 %, 1 to 2 mm, epidote to feldspar grains. There is weak fracture controlled carbonatization.
104.0	122.0	Variable coarse grained gabbro, similiar to 92.5 to 102.6. There is approximately 10 to 12 %, 1 to 3 mm, purple non- to strongly magnetic ilmenite grains. Is locally 'glassy'. Feldspars vary from 10 to 20 %, 2 to 6 mm, clots and laths. There is trace to 0.5 % chalcopyrite locally, average approximately 0.25 %. Most chalcopyrite is magmatic, i.e. interstitial to mafic and feldspar grains and some is associated with minor chlorite and

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
VA01209	145.0	164.0	19.0	n/a	673	n/a	161	n/a	n/a	1660
VA01210	164.0	174.0	10.0	n/a	798	n/a	128	n/a	n/a	974
VA01211	174.0	195.0	21.0	n/a	572	n/a	115	n/a	n/a	327
VA02075	190.2	191.4	1.2	0	250	<5	107	<1	5	110

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FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

HOLE No: CH88-64

From (m)	To (m)	DESCRIPTION
		calcite veins and veinlets.
122.0	145.8	Medium to coarse grained gabbro with 5 to 25 % variably epidotized feldspar laths, up to 4 mm. From approximately 125 to 134 there is 15 % ilmenite and is strongly to moderately magnetic. Averages 3 %, 1 to 5 % locally, ilmenite thru the rest of the interval. There is local strong epidotization of feldspar laths with minor associated fracture controlled epidote veinlets from approximately 127 to 128 and 139.6 to 140.6. From 136.1 to 138.0 there is 5 to 7 % pyrite, 1 to 2 % pyrrhotite and trace to 0.5 % chalcopyrite, appears to be fracture controlled. There is strong hematite locally on fractures. Trace chalcopyrite in minor quartz and calcite veinlets locally.
145.8	164.0	Medium to coarse grained with trace to 20 % feldspars, average 5 to 7 %, 1 to 2 mm, thin laths. Dominated by mafic and ilmenite crystals. Weakly to moderately magnetic with on average 3 to 5 % ilmenite. There are approximately 25 to 35 %, 2 to 4 mm, mafic crystals, probably chloritized hornblendes, in light green matrix. There is minor fracture controlled hematite.
164.0	190.2	Medium to fine-grained with approximately 60 %, 1 to 2 mm, chloritized mafic crystals in light green matrix with approximately 3 to 5 %, approximately 1 mm, ilmenite grains and trace very fine-grained pyrite and chalcopyrite. There are minor quartz - chlorite - calcite veinlets and fracture controlled epidote veinlets with small, < 1.5 mm chalcopyrite blebs. There is minor fracture controlled hematite. From 177 to 190 there are minor < 1 m zones with 5 to 10 %, 1 to 2 mm feldspars, locally epidotized, epidotization associated with fracture controlled epidote veinlets.
190.2	191.4	Shear zone, non-magnetic dark green chlorite with 10 % white quartz veins and approximately 5 % white calcite streaks. Shearing is at 60 degrees to core axis.
191.4	195.1	Same as 164.0 to 190.2.

Gabbro is locally blocky with no long runs of competent core.

Lost core :.
72.8 74.7 : 0.2 m.

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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DIAMOND DRILL LOG

HOLE No: CH88-64 | Page Number 6

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)
		74.7 78.5 : 0.1 m. 120.0 120.4 : 0.3 m. 130.0 131.0 : 0.2 m. 142.0 143.0 : 0.3 m. 143.9 144.8 : 0.1 m. 149.5 150.6 : 0.2 m. End of hole: 640 feet (195.1 m) on Sunday June 6, 1988 at 4:00 p.m. Total lost core: 2.1 m; % Recovery = 98.9 %. Lack of dip tests due to breakdown of Sperry-Sun single shot.											

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	ETS	EE
VA02059	22.00	23.00	1100.0	60.0	820.0	<0.5	<5.0	25.0	15.0	22.0	8.0	3.0	10.0	1320.0	7.	1.	2.
VA02060	23.00	24.00	840.0	47.0	58.0	<0.5	<5.0	20.0	6.0	11.0	130.0	<1.0	5.0	590.0	45.	4.	6.
VA02061	24.00	25.20	870.0	36.0	41.0	<0.5	<5.0	21.0	5.0	18.0	190.0	<1.0	4.0	580.0	47.	4.	6.
VA02062	25.20	26.00	890.0	37.0	605.0	<0.5	<5.0	8.0	10.0	24.0	8.0	9.0	7.0	580.0	6.	1.	2.
VA02063	102.60	103.50	180.0	530.0	98.0	<0.5	10.0	20.0	9.0	<5.0	6.0	<1.0	5.0	480.0	84.	1.	6.
VA02064	104.00	106.00	210.0	520.0	101.0	<0.5	5.0	22.0	8.0	<5.0	<5.0	<1.0	5.0	620.0	84.	0.	7.
VA02065	106.00	108.00	280.0	460.0	125.0	<0.5	9.0	27.0	10.0	<5.0	<5.0	<1.0	5.0	820.0	79.	0.	10.
VA02066	108.00	110.00	310.0	580.0	111.0	<0.5	22.0	22.0	8.0	<5.0	<5.0	<1.0	4.0	645.0	82.	0.	8.
VA02067	110.00	112.00	140.0	380.0	97.0	<0.5	9.0	19.0	6.0	<5.0	<5.0	<1.0	4.0	560.0	80.	0.	6.
VA02068	112.00	114.00	280.0	520.0	93.0	<0.5	11.0	18.0	6.0	<5.0	<5.0	<1.0	4.0	510.0	85.	0.	6.
VA02069	114.00	116.00	270.0	490.0	105.0	<0.5	49.0	20.0	6.0	<5.0	<5.0	<1.0	4.0	540.0	82.	0.	7.
VA02070	116.00	118.00	280.0	580.0	98.0	<0.5	31.0	18.0	5.0	<5.0	<5.0	<1.0	3.0	550.0	86.	0.	6.
VA02071	118.00	120.00	280.0	580.0	113.0	<0.5	25.0	20.0	5.0	<5.0	<5.0	<1.0	4.0	535.0	84.	0.	7.
VA02072	120.00	122.00	270.0	760.0	115.0	<0.5	44.0	23.0	6.0	<5.0	<5.0	<1.0	4.0	605.0	87.	0.	8.
VA02073	136.00	137.00	390.0	420.0	110.0	<0.5	<5.0	16.0	8.0	<5.0	<5.0	<1.0	3.0	900.0	79.	8.	8.
VA02074	137.00	138.00	360.0	376.0	158.0	<0.5	<5.0	20.0	8.0	<5.0	<5.0	<1.0	3.0	800.0	70.	8.	9.
VA02075	190.20	191.40	110.0	250.0	107.0	<0.5	5.0	32.0	21.0	<5.0	6.0	<1.0	4.0	950.0	70.	0.	9.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	%SIO2	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TIO2	%P2O5	%MNO	%LOI	SUM	BA	AI	NACA
VA00774	11.60	12.00	47.20	13.90	10.30	5.28	1.41	0.06	12.10	1.84	0.17	0.17	6.08	98.51	49.	31.	12.
VA00775	15.70	16.20	62.20	14.50	1.98	4.90	3.22	1.31	6.97	0.42	0.08	0.11	3.62	99.31	736.	54.	5.
VA00776	21.00	22.00	61.10	13.10	7.57	3.25	2.01	2.12	3.48	0.36	0.08	0.25	6.39	99.71	1450.	36.	10.
VA00777	29.50	30.00	62.50	14.30	5.72	3.46	4.20	1.03	4.91	0.42	0.08	0.10	3.23	99.95	629.	31.	10.
VA00778	32.30	32.60	45.20	15.10	9.73	6.33	1.63	0.17	13.70	2.06	0.20	0.21	5.08	99.41	143.	36.	11.
VA00779	40.20	40.50	64.90	14.40	2.94	3.20	4.75	1.75	3.75	0.42	0.09	0.07	2.62	96.89	1610.	39.	8.
VA00780	45.00	46.00	60.90	14.80	7.09	3.77	2.82	1.87	5.63	0.43	0.09	0.10	1.93	99.42	928.	36.	10.
VA00781	49.50	50.00	48.00	14.00	10.50	5.66	2.40	0.27	13.40	2.05	0.21	0.23	2.08	98.80	119.	31.	13.
VA00782	60.00	60.50	48.20	14.20	9.75	4.31	2.25	0.38	14.70	2.42	0.23	0.23	2.00	98.67	139.	28.	12.
VA00783	83.80	84.30	48.40	13.60	8.84	4.35	2.78	0.27	15.00	2.50	0.22	0.21	2.54	98.71	122.	28.	12.
VA00784	98.00	98.50	51.80	11.70	7.27	2.85	3.31	0.53	16.00	2.55	0.44	0.23	1.93	98.61	369.	24.	11.
VA00785	115.00	115.50	47.80	11.00	7.51	3.08	2.42	0.51	18.90	3.73	0.38	0.27	2.70	98.30	275.	27.	10.
VA00786	128.00	129.00	55.80	11.20	6.03	1.53	3.02	0.71	17.10	2.05	0.62	0.27	1.62	99.95	400.	20.	9.
VA00787	147.00	148.00	50.30	10.70	6.72	1.96	1.90	0.50	20.20	2.33	1.05	0.31	3.70	99.67	1550.	22.	9.
VA00788	168.00	168.60	47.30	10.90	7.98	2.63	2.30	0.48	18.10	3.52	0.41	0.29	5.39	99.30	1190.	23.	10.
VA00789	187.00	189.00	49.30	10.70	9.33	4.13	2.76	0.34	17.90	3.39	0.30	0.26	2.00	100.41	167.	27.	12.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	%SIO2	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TIO2	%P2O5	%MNO	%LOI	SUM	BA	AI	NACA
VA01201	14.40	30.80	61.10	14.20	5.49	3.02	3.00	2.06	4.66	0.42			3.70	97.65	1130.	37.	8.
VA01202	35.10	39.00	64.20	14.70	4.41	3.19	3.94	1.64	5.61	0.45			1.62	99.76	1730.	37.	8.
VA01203	39.80	47.30	62.60	14.90	6.55	3.36	3.02	2.22	5.14	0.43			2.31	100.53	1490.	37.	10.
VA01204	48.00	58.00	49.00	13.70	11.10	4.62	1.81	0.27	13.50	1.90			3.16	99.06	85.	27.	13.
VA01205	59.00	92.00	48.40	13.70	9.43	4.54	2.58	0.31	15.60	2.58			2.00	99.14	123.	29.	12.
VA01206	93.00	104.00	46.80	11.40	8.86	3.29	2.96	0.53	17.10	3.14			4.93	99.01	272.	24.	12.
VA01207	104.00	120.00	48.90	11.10	7.69	3.03	2.62	0.59	18.90	3.94			2.08	98.85	335.	26.	10.
VA01208	120.00	145.00	54.10	11.30	6.48	1.59	3.12	0.64	17.40	2.08			2.62	99.33	521.	19.	10.
VA01209	145.00	164.00	50.60	10.90	6.88	2.20	2.52	0.67	19.00	2.60			2.54	97.91	1660.	23.	9.
VA01210	164.00	174.00	47.40	10.80	7.62	3.16	2.23	0.44	18.10	3.70			3.31	96.76	974.	27.	10.
VA01211	174.00	195.00	50.20	10.70	8.25	3.85	2.68	0.39	17.70	3.42			2.31	99.50	327.	28.	11.

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Telex: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

in completion July 27/88

REPORT: V88-04422.0 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LIMITED
PROJECT: 605-116

SUBMITTED BY: D.P. MONEY
DATE PRINTED: 30-JUN-88

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - Fire Assay	193	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag	Silver	193	0.5 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
3	As	Arsenic	193	5 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
4	Cd	Cadmium	193	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
5	Co	Cobalt	193	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
6	Cu	Copper	193	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
7	Fe	Iron	193	0.05 PCT	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
8	Mn	Manganese	193	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
9	Mo	Molybdenum	193	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
10	Ni	Nickel	193	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
11	Pb	Lead	193	5 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
12	Zn	Zinc	193	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
13	Ba	Barium	193	20 PPM		X-RAY Fluorescence
14	Pt	Platinum	10	15 PPB	FIRE-ASSAY	
15	Pd	Palladium	10	2 PPB	FIRE-ASSAY	

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	193	2 -150	193	ASSAY PREP	193

REMARKS: ASSAY OF Cu AND Zn >3000 ppm TO FOLLOW ON V88-04422.6.

REPORT COPIES TO: MR. N. VON FERSEN
MS. PAT WHITING
MR. D. MONEY

INVOICE TO: MR. N. VON FERSEN

Leach

✓VA02054-02072 ##-
✓VA08235-08408 ##-

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Geochemical Lab Report

REPORT: V88-04422.0 PROJECT: 605-116 PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Cd PPM	Co PPM	Cu PPM	Fe PCT	Mn PPM	Mo PPM	Ni PPM	Pb PPM
D2 VA02054		<5	<0.5	<5	<1	25	49	6.40	1320	7	53	6
D2 VA02055		<5	<0.5	<5	<1	19	70	5.60	940	6	26	<5
D2 VA02056		<5	<0.5	<5	<1	20	78	7.00	760	8	19	6
D2 VA02057		<5	<0.5	21	1	5	46	2.45	800	19	18	18
D2 VA02058		<5	<0.5	120	<1	7	48	2.80	900	12	19	17
D2 VA02059		<5	<0.5	8	3	25	60	2.32	1320	10	15	22
D2 VA02060		<5	<0.5	130	<1	20	47	5.60	590	5	6	11
D2 VA02061		<5	<0.5	190	<1	21	36	5.60	580	4	5	18
D2 VA02062		<5	<0.5	8	9	8	37	1.82	580	7	10	24
D2 VA02063		10	<0.5	6	<1	20	530	5.50	480	5	9	<5
D2 VA02064		5	<0.5	<5	<1	22	520	7.20	620	5	8	<5
D2 VA02065		9	<0.5	<5	<1	27	460	9.50	820	5	10	<5
D2 VA02066		22	<0.5	<5	<1	23	560	8.00	645	4	8	<5
D2 VA02067		9	<0.5	<5	<1	19	380	6.40	560	4	6	<5
D2 VA02068		11	<0.5	<5	<1	18	520	6.40	510	4	6	<5
D2 VA02069		49	<0.5	<5	<1	20	490	6.50	540	4	6	<5
D2 VA02070		31	<0.5	<5	<1	18	580	6.20	550	3	5	<5
D2 VA02071		25	<0.5	<5	<1	20	580	6.80	535	4	5	<5
D2 VA02072		44	<0.5	<5	<1	23	760	7.80	605	4	6	<5
D2 VA08235		73	<0.5	32	<1	2	12	2.00	1560	7	4	6
D2 VA08236		64	<0.5	24	<1	2	10	2.25	1680	9	3	<5
D2 VA08237		34	<0.5	24	<1	3	14	2.00	940	6	3	7
D2 VA08238		18	<0.5	15	<1	3	11	1.55	765	3	3	6
D2 VA08239		5	<0.5	6	<1	3	11	1.35	710	4	3	8
D2 VA08240		12	<0.5	21	<1	2	11	2.26	970	6	4	12
D2 VA08241		5	<0.5	14	<1	2	9	1.60	880	4	3	7
D2 VA08242		8	<0.5	20	<1	2	16	2.00	960	4	4	10
D2 VA08243		<5	<0.5	<5	<1	3	9	1.20	530	4	3	7
D2 VA08244		<5	<0.5	5	<1	2	9	1.56	715	4	3	6
D2 VA08245		<5	<0.5	6	<1	3	8	1.22	615	3	3	<5
D2 VA08246		6	<0.5	28	<1	3	10	1.26	740	4	4	11
D2 VA08247		5	<0.5	16	<1	2	5	1.02	740	4	3	6
D2 VA08248		7	<0.5	12	<1	1	7	1.06	550	4	3	<5
D2 VA08249		27	<0.5	11	<1	2	6	1.76	810	4	4	8
D2 VA08250		12	<0.5	9	<1	2	6	1.30	900	3	4	6
D2 VA08251		16	<0.5	10	<1	2	8	1.52	930	4	4	6
D2 VA08252		<5	<0.5	<5	<1	2	4	1.00	570	4	3	5
D2 VA08253		20	<0.5	7	<1	9	28	2.25	855	3	15	8
D2 VA08254		<5	<0.5	<5	<1	3	4	1.28	590	3	3	5
D2 VA08255		<5	<0.5	11	<1	5	17	1.70	750	4	7	10

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Geochemical
Lab Report

REPORT: V88-04422.0 PROJECT: 685-116 PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Zn PPM	Ba PPM	Pt PPB	Pd PPB
D2 VA02054		87	830		
D2 VA02055		73	330		
D2 VA02056		89	650		
D2 VA02057		88	900		
D2 VA02058		60	1100		
D2 VA02059		820	1100		
D2 VA02060		58	840		
D2 VA02061		41	870		
D2 VA02062		605	890		
D2 VA02063		98	180	25	55
D2 VA02064		101	210	<15	60
D2 VA02065		125	280	30	80
D2 VA02066		111	310	<15	75
D2 VA02067		97	140	<15	70
D2 VA02068		93	280	15	45
D2 VA02069		105	270	15	100
D2 VA02070		98	280	<15	90
D2 VA02071		112	280	<15	120
D2 VA02072		115	270	<15	70
D2 VA08235		30	650		
D2 VA08236		33	630		
D2 VA08237		28	720		
D2 VA08238		24	870		
D2 VA08239		34	950		
D2 VA08240		65	700		
D2 VA08241		46	830		
D2 VA08242		42	840		
D2 VA08243		41	940		
D2 VA08244		42	890		
D2 VA08245		32	880		
D2 VA08246		30	770		
D2 VA08247		17	830		
D2 VA08248		18	820		
D2 VA08249		25	730		
D2 VA08250		24	750		
D2 VA08251		24	720		
D2 VA08252		31	830		
D2 VA08253		76	870		
D2 VA08254		34	810		
D2 VA08255		40	820		

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Geochemical Lab Report

In (complete July 27/88

REPORT: V88-04798.0 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LIMITED
PROJECT: 605-116

SUBMITTED BY: D.P. MONEY
DATE PRINTED: 15-JUL-88

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - Fire Assay	237	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag	Silver	237	0.5 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
3	As	Arsenic	237	5 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
4	Cd	Cadmium	237	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
5	Co	Cobalt	237	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
6	Cu	Copper	237	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
7	Fe	Iron	237	0.05 PCT	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
8	Mn	Manganese	237	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
9	Mo	Molybdenum	237	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
10	Ni	Nickel	237	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
11	Pb	Lead	237	5 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
12	Zn	Zinc	237	1 PPM	HNO3-HCL HOT EXTR	PLASMA EMISSION SPEC
13	Ba	Barium	237	20 PPM		X-RAY Fluorescence
14	Pt	Platinum	10	15 PPB	FIRE-ASSAY	
15	Pd	Palladium	10	2 PPB	FIRE-ASSAY	

SAMPLE TYPES		NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R	ROCK OR BED ROCK	237	2 -150	237	ASSAY PREP	237

REPORT COPIES TO: MR. N. VON PERSEN
MS. PAT WHITING
MR. D. MONEY

INVOICE TO: MR. N. VON PERSEN

Leader
✓ VA02073-02226.PM —
✓ VA08409-08491.PM —

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Geochemical Lab Report

REPORT: V88-04798.0 | PROJECT: 605-116 | PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Cd PPM	Co PPM	Cu PPM	Fe PCT	Mn PPM	Mo PPM	Ni PPM	Pb PPM
R2 VA02073		<5	<0.5	<5	<1	16	420	7.60	900	3	8	<5
R2 VA02074		<5	<0.5	<5	<1	20	376	8.50	800	3	8	<5
R2 VA02075		5	<0.5	6	<1	32	250	9.20	950	4	21	<5
R2 VA02076		<5	<0.5	<5	<1	24	155	6.05	1340	3	56	<5
R2 VA02077		<5	<0.5	7	<1	24	158	5.60	1320	3	52	<5
R2 VA02078		<5	<0.5	<5	<1	24	190	5.30	710	3	52	<5
R2 VA02079		<5	<0.5	<5	<1	22	180	4.80	595	2	48	<5
R2 VA02080		<5	<0.5	<5	<1	10	270	2.45	245	2	36	<5
R2 VA02081		<5	<0.5	5	<1	24	150	5.80	1000	3	62	<5
R2 VA02082		<5	<0.5	<5	<1	26	190	5.60	820	3	60	<5
R2 VA02083		<5	<0.5	<5	<1	30	340	5.20	650	2	43	<5
R2 VA02084		<5	<0.5	<5	<1	28	760	5.60	850	3	44	<5
R2 VA02085		<5	<0.5	<5	<1	20	30	3.35	1150	1	23	<5
R2 VA02086		20	<0.5	<5	<1	22	1820	4.30	1280	2	38	<5
R2 VA02087		<5	<0.5	<5	<1	24	23	3.85	1220	3	28	<5
R2 VA02088		27	<0.5	<5	<1	26	2600	5.90	1150	2	32	<5
R2 VA02089		<5	<0.5	<5	<1	30	92	5.55	750	2	37	<5
R2 VA02090		7	<0.5	<5	<1	32	360	5.95	1000	3	49	<5
R2 VA02091		<5	<0.5	<5	<1	22	80	4.85	730	2	26	<5
R2 VA02092		<5	<0.5	<5	<1	32	460	5.20	900	2	30	<5
R2 VA02093		<5	<0.5	<5	<1	12	1080	2.15	410	2	20	<5
R2 VA02094		<5	<0.5	5	<1	4	63	1.30	310	19	15	<5
R2 VA02095		<5	<0.5	<5	<1	6	18	1.80	210	5	26	<5
R2 VA02096		<5	<0.5	<5	<1	6	88	1.90	150	4	32	<5
R2 VA02097		<5	<0.5	<5	<1	2	120	0.80	95	76	20	<5
R2 VA02098		<5	<0.5	20	<1	24	124	4.10	1600	3	26	11
R2 VA02099		<5	<0.5	<5	<1	20	40	4.00	590	4	14	<5
R2 VA02100		<5	<0.5	<5	<1	20	40	3.90	560	4	12	<5
R2 VA02101		<5	<0.5	<5	<1	20	5	0.70	130	2	6	<5
R2 VA02102		<5	0.8	<5	<1	16	120	2.75	310	2	8	9
R2 VA02103		13	<0.5	<5	<1	20	260	2.45	320	1	8	<5
R2 VA02104		16	<0.5	<5	<1	38	170	2.10	220	2	9	6
R2 VA02105		<5	<0.5	<5	<1	8	5	0.50	60	4	7	<5
R2 VA02106		<5	<0.5	<5	<1	4	4	0.30	50	6	4	13
R2 VA02107		<5	<0.5	<5	<1	2	4	0.25	40	7	2	77
R2 VA02108		<5	<0.5	<5	<1	<1	4	0.20	20	16	2	59
R2 VA02109		<5	<0.5	<5	<1	<1	4	0.20	30	16	2	35
R2 VA02110		6	<0.5	<5	<1	<1	4	0.20	25	19	2	35
R2 VA02111		<5	<0.5	<5	<1	<1	4	0.15	30	15	4	47
R2 VA02112		<5	<0.5	<5	<1	<1	4	0.20	20	5	4	67

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Geochemical Lab Report

REPORT: V88-04798.0

PROJECT: 605-116 PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Zn PPM	Ba PPM	Pt PPB	Pd PPB
R2 VA02073		110	390	<15	<2
R2 VA02074		158	360	<15	<2
R2 VA02075		107	110	<15	20
R2 VA02076		85	100	<15	15
R2 VA02077		79	70	<15	15
R2 VA02078		77	250	<15	20
R2 VA02079		70	80	<15	20
R2 VA02080		32	20	<15	25
R2 VA02081		75	30	<15	15
R2 VA02082		70	250	<15	15
R2 VA02083		42	90		
R2 VA02084		46	260		
R2 VA02085		56	60		
R2 VA02086		54	120		
R2 VA02087		42	30		
R2 VA02088		42	120		
R2 VA02089		51	190		
R2 VA02090		55	150		
R2 VA02091		50	110		
R2 VA02092		82	260		
R2 VA02093		35	40		
R2 VA02094		20	90		
R2 VA02095		34	1000		
R2 VA02096		30	290		
R2 VA02097		25	240		
R2 VA02098		175	360		
R2 VA02099		39	1100		
R2 VA02100		38	1100		
R2 VA02101		8	1400		
R2 VA02102		19	2900		
R2 VA02103		17	3500		
R2 VA02104		15	2300		
R2 VA02105		5	2800		
R2 VA02106		3	1700		
R2 VA02107		4	1400		
R2 VA02108		5	2400		
R2 VA02109		4	1900		
R2 VA02110		5	2600		
R2 VA02111		4	2400		
R2 VA02112		7	2500		

XRAL

in Comput. Sept 14/88

CORRECTED REPORT

CERTIFICATE OF ANALYSIS

REPORT 5391

TO: FALCONBRIDGE LIMITED
ATTN: N. VON FERSEN
701-1281 WEST GEORGIA STREET
VANCOUVER, BRITISH COLUMBIA
V6E 3J7

CUSTOMER No. 1282

DATE SUBMITTED
20-Jun-88

REF. FILE 1764-05

Total Pages 4

74 SPLIT CORES Proj. 605-116

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

VA00771-00786
VA01188-1203
VA02422-2441
VA02857-2878

X-RAY ASSAY LABORATORIES LIMITED

DATE 16-AUG-88

CERTIFIED BY J. Eagle

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
VA00771	45.0	16.7	10.0	2.45	2.92	1.83	10.3	0.23	0.82	0.44	<0.01	9.39	100.2
VA00772	69.3	14.1	3.26	1.27	2.15	3.58	2.26	0.09	0.24	0.07	<0.01	3.54	100.1
VA00773	71.6	12.5	2.76	1.27	4.10	1.88	2.62	0.09	0.23	0.05	<0.01	2.77	100.0
VA00774	47.2	13.9	10.3	5.28	1.41	0.06	12.1	0.17	1.84	0.17	<0.01	6.08	98.6
VA00775	62.2	14.5	1.98	4.90	3.22	1.31	6.97	0.11	0.42	0.08	<0.01	3.62	99.4
VA00776	61.1	13.1	7.57	3.25	2.01	2.12	3.48	0.25	0.36	0.08	<0.01	6.39	99.9
VA00777	62.5	14.3	5.72	3.46	4.20	1.03	4.91	0.10	0.42	0.08	<0.01	3.23	100.1
VA00778	45.2	15.1	9.73	6.33	1.63	0.17	13.7	0.21	2.06	0.20	<0.01	5.08	99.5
VA00779	64.9	14.4	2.94	3.20	4.75	1.75	3.75	0.07	0.42	0.09	0.01	2.62	99.1
VA00780	60.9	14.8	7.09	3.77	2.82	1.87	5.63	0.10	0.42	0.09	<0.01	1.93	99.6
VA00781	48.0	14.0	10.5	5.66	2.40	0.27	13.4	0.23	2.05	0.21	<0.01	2.08	98.9
VA00782	48.2	14.2	9.75	4.31	2.25	0.38	14.7	0.23	2.42	0.23	<0.01	2.00	98.8
VA00783	48.4	13.6	8.84	4.35	2.78	0.27	15.0	0.21	2.50	0.22	<0.01	2.54	98.8
VA00784	51.8	11.7	7.27	2.85	3.31	0.53	16.0	0.23	2.55	0.44	<0.01	1.93	98.8
VA00785	47.8	11.0	7.51	3.08	2.42	0.51	18.9	0.27	3.73	0.38	<0.01	2.70	98.5
VA00786	55.8	11.2	6.83	1.53	3.02	0.71	17.1	0.27	2.05	0.62	<0.01	1.62	100.2
VA01188	70.2	14.8	2.61	0.82	1.58	2.81	2.56	---	0.30	---	---	3.47	99.3
VA01189	69.3	14.8	3.57	0.70	1.61	3.41	2.17	---	0.29	---	---	4.16	100.2
VA01190	72.0	14.0	2.44	0.70	3.39	2.98	1.87	---	0.26	---	---	2.70	100.5
VA01191	44.7	12.8	10.1	9.23	1.95	0.40	8.45	---	0.60	---	---	10.5	98.8
VA01192	70.1	13.8	2.51	0.94	3.37	2.97	2.33	---	0.26	---	---	3.00	99.4
VA01193	70.1	14.8	2.19	1.02	3.21	3.04	2.37	---	0.27	---	---	2.77	99.9
VA01194	70.4	14.2	2.58	1.09	3.33	2.45	2.25	---	0.27	---	---	2.85	99.6
VA01195	61.7	15.2	3.24	3.11	3.99	2.02	5.81	---	0.43	---	---	3.77	99.4
VA01196	72.1	14.0	1.46	0.70	5.14	2.14	1.80	---	0.20	---	---	1.93	99.6
VA01197	47.9	16.0	9.69	2.59	3.68	1.53	8.86	---	0.59	---	---	8.77	99.7
VA01198	71.3	9.30	6.16	1.23	0.53	2.28	4.16	---	0.40	---	---	3.47	99.0
VA01199	67.6	13.9	3.91	1.19	2.51	3.38	2.61	---	0.28	---	---	3.77	99.3
VA01200	71.9	12.9	2.23	1.36	2.94	2.80	2.37	---	0.23	---	---	2.93	99.8
VA01201	61.1	14.2	5.49	3.02	3.00	2.06	4.66	---	0.42	---	---	3.70	97.8
VA01202	64.2	14.7	4.41	3.19	3.94	1.64	5.61	---	0.45	---	---	1.62	100.0
VA01203	62.6	14.9	6.55	3.36	3.02	2.22	5.14	---	0.43	---	---	2.31	100.7
VA02422	78.5	13.9	0.32	0.23	0.27	2.93	1.16	<0.01	0.17	0.04	<0.01	2.31	100.0
VA02423	79.7	10.5	0.70	0.33	0.15	2.45	2.03	0.03	0.15	0.04	<0.01	2.31	98.6
VA02424	77.4	13.0	0.75	0.53	0.15	3.08	1.13	0.04	0.19	0.04	<0.01	2.16	98.7
VA02425	70.8	15.0	2.21	1.02	0.33	3.19	2.37	0.07	0.27	0.07	<0.01	3.70	99.2
VA02426	73.8	12.7	2.06	1.24	0.19	3.02	1.60	0.10	0.18	0.04	<0.01	4.77	99.8
VA02427	70.8	13.4	3.08	1.65	0.14	3.01	2.27	0.11	0.24	0.06	<0.01	4.47	99.4
VA02428	44.5	11.8	11.1	6.26	<0.01	0.25	12.1	0.22	1.77	0.15	0.02	11.2	99.5
VA02429	73.9	12.9	1.93	1.19	0.15	3.06	1.57	0.09	0.19	0.04	<0.01	4.00	99.2
VA02430	72.9	13.4	2.28	1.25	0.20	3.10	1.52	0.10	0.19	0.04	<0.01	3.85	99.0
VA02431	74.0	11.6	2.20	1.35	0.05	2.97	2.15	0.17	0.22	0.06	<0.01	3.77	98.8
VA02432	65.5	13.9	4.96	2.02	0.28	1.93	5.12	0.37	0.37	0.12	<0.01	4.85	99.5
VA02433	70.2	13.7	3.91	1.60	0.28	2.37	2.17	0.14	0.18	0.05	<0.01	5.31	100.1
VA02434	70.9	13.2	2.92	1.55	0.22	3.06	2.48	0.11	0.26	0.07	<0.01	4.39	99.3
VA02435	43.7	13.0	9.68	6.78	<0.01	0.08	13.6	0.19	2.03	0.17	0.02	11.3	100.6
VA02436	68.9	14.1	3.46	1.75	0.25	3.17	2.24	0.12	0.26	0.06	<0.01	5.62	100.1
VA02437	75.3	13.3	1.30	1.00	0.16	3.41	1.41	0.08	0.26	0.06	<0.01	3.31	99.8
VA02438	76.4	11.9	1.19	0.93	0.19	2.95	2.20	0.07	0.15	0.04	<0.01	2.77	99.1
VA02439	43.3	15.0	11.5	3.91	0.70	1.11	10.7	0.17	0.87	0.14	<0.01	12.9	100.4

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
VA00771	27	248	25	40	<10	667	<10	102	63
VA00772	87	217	21	98	<10	1180	12	64	49
VA00773	43	296	24	86	16	797	13	112	46
VA00774	14	284	19	87	13	49	109	373	92
VA00775	37	119	12	77	11	736	20	100	53
VA00776	38	242	16	53	11	1450	15	84	79
VA00777	24	244	<10	60	<10	629	25	92	48
VA00778	<10	242	20	93	13	143	80	219	93
VA00779	46	105	21	64	13	1610	21	109	51
VA00780	42	229	19	60	<10	928	22	94	37
VA00781	18	196	14	86	20	119	66	211	94
VA00782	<10	199	<10	126	22	139	29	244	97
VA00783	<10	204	<10	124	14	122	31	289	93
VA00784	<10	179	27	266	39	369	<10	332	103
VA00785	<10	165	21	197	27	275	<10	475	128
VA00786	<10	223	49	397	38	400	<10	533	141
VA01188	---	---	---	---	---	1090	<10	40	31
VA01189	---	---	---	---	---	1200	<10	38	31
VA01190	---	---	---	---	---	996	<10	35	27
VA01191	---	---	---	---	---	739	127	115	50
VA01192	---	---	---	---	---	1030	<10	50	36
VA01193	---	---	---	---	---	1080	<10	60	205
VA01194	---	---	---	---	---	1070	<10	63	67
VA01195	---	---	---	---	---	671	27	104	59
VA01196	---	---	---	---	---	709	<10	30	15
VA01197	---	---	---	---	---	588	<10	16	67
VA01198	---	---	---	---	---	1270	27	126	83
VA01199	---	---	---	---	---	1120	<10	37	41
VA01200	---	---	---	---	---	992	<10	42	39
VA01201	---	---	---	---	---	1130	17	65	132
VA01202	---	---	---	---	---	1730	24	105	76
VA01203	---	---	---	---	---	1490	22	72	54
VA02422	68	34	<10	61	10	1030	<10	38	<10
VA02423	72	106	<10	54	<10	1330	12	27	34
VA02424	63	35	18	97	<10	2090	<10	31	16
VA02425	68	79	11	99	14	1240	<10	59	35
VA02426	72	30	14	84	<10	938	<10	31	24
VA02427	58	16	22	97	17	1150	<10	35	106
VA02428	22	14	15	76	17	106	81	100	555
VA02429	71	41	16	84	<10	978	<10	30	18
VA02430	63	48	16	87	<10	918	<10	27	26
VA02431	64	49	<10	79	23	1650	<10	25	54
VA02432	51	35	16	92	20	640	14	44	166
VA02433	52	50	<10	113	15	1110	<10	29	35
VA02434	91	56	26	94	10	1260	<10	48	60
VA02435	26	146	30	88	20	93	87	113	87
VA02436	75	41	27	108	13	1270	<10	30	40
VA02437	78	32	26	91	26	1130	<10	20	39
VA02438	64	26	<10	63	12	2070	13	29	102
VA02439	35	112	24	28	<10	449	20	31	82

XRAL

CORRECTED REPORT

CERTIFICATE OF ANALYSIS

REPORT 5549

TO: FALCONBRIDGE LIMITED
ATTN: N. VON FERSEN
701-1281 WEST GEORGIA STREET
VANCOUVER, BRITISH COLUMBIA
V6E 3J7

CUSTOMER No. 1282

DATE SUBMITTED
4-Jul-88

REF. FILE 1902-D3

Total Pages 10

205 S.CORES Proj. 605-116

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

VA00787-00857
VA01204-1279
VA02442-2476
VA02879-2901

X-RAY ASSAY LABORATORIES LIMITED

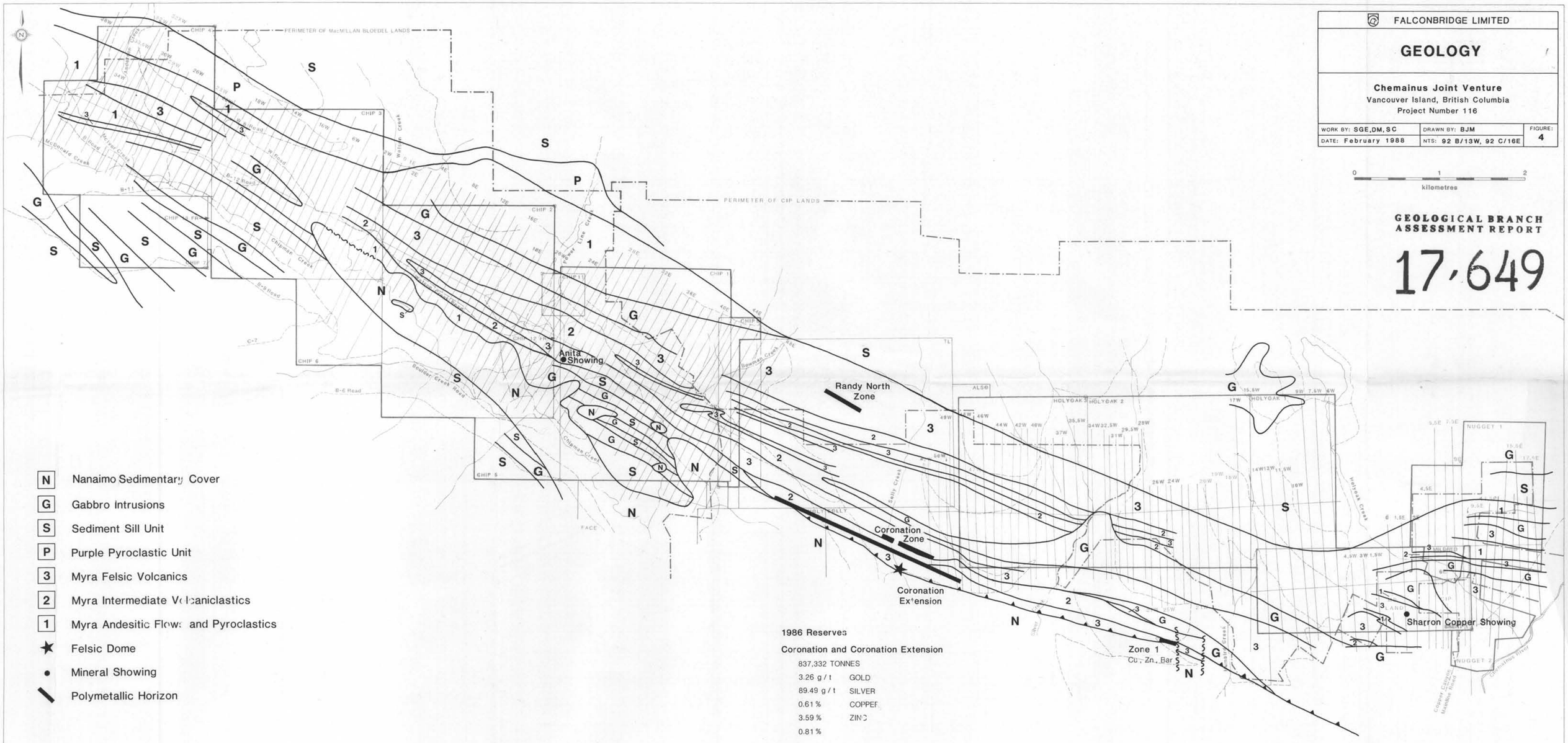
DATE 16-AUG-88

CERTIFIED BY .....

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
VA00837	65.4	15.0	4.72	1.75	3.05	1.47	3.30	0.08	0.31	0.09	<0.01	4.93	100.3
VA00838	72.5	14.0	1.99	0.46	6.22	1.67	1.38	0.03	0.21	0.05	<0.01	2.00	100.6
VA00839	51.6	18.5	9.31	3.92	3.28	0.21	8.29	0.13	0.69	0.25	<0.01	3.93	100.2
VA00840	72.6	14.9	3.17	0.92	2.53	2.28	1.62	0.05	0.28	0.07	<0.01	1.62	100.3
VA00841	72.9	13.0	2.97	1.79	3.21	1.11	2.75	0.10	0.24	0.07	0.02	1.54	99.8
VA00842	48.8	13.9	10.0	4.46	1.83	0.31	15.2	0.24	2.47	0.23	<0.01	2.31	99.9
VA00843	47.6	11.3	7.42	3.65	2.56	0.41	19.8	0.27	3.83	0.30	<0.01	2.31	99.6
VA00844	51.6	17.3	3.10	4.12	4.81	3.69	8.83	0.19	0.71	0.39	<0.01	3.54	98.5
VA00845	53.0	17.3	6.82	2.00	2.93	2.90	8.28	0.25	0.51	0.51	<0.01	5.31	100.0
VA00846	55.9	17.3	5.56	2.15	4.73	1.75	7.64	0.19	0.53	0.51	<0.01	3.70	100.2
VA00847	54.6	15.3	6.80	1.86	2.21	2.74	7.94	0.18	0.80	0.32	<0.01	7.39	100.3
VA00848	72.0	12.5	4.06	0.62	0.77	3.33	1.22	0.09	0.18	0.04	<0.01	4.70	99.7
VA00849	45.0	14.7	11.2	3.24	0.90	2.95	8.40	0.20	0.73	0.19	0.01	12.9	100.5
VA00850	71.9	13.1	2.90	1.01	1.74	2.71	1.86	0.06	0.21	0.05	<0.01	4.00	99.7
VA00851	49.5	17.5	5.72	3.64	2.54	2.71	10.2	0.24	0.92	0.44	<0.01	6.31	99.9
VA00852	46.6	14.1	11.0	6.58	1.70	0.18	13.6	0.21	1.76	0.16	0.01	3.70	99.7
VA00853	60.2	17.1	3.62	1.75	4.64	2.81	6.50	0.18	0.29	0.26	<0.01	2.08	99.7
VA00854	47.1	16.4	7.43	3.20	2.83	2.27	11.1	0.23	0.90	0.42	<0.01	8.00	100.0
VA00855	46.7	16.6	8.00	2.85	3.09	2.03	10.6	0.25	0.88	0.43	<0.01	8.23	99.8
VA00856	47.9	17.8	6.69	2.91	1.99	2.95	10.2	0.24	0.70	0.55	<0.01	7.93	100.0
VA00857	53.8	17.1	4.97	2.59	2.35	3.00	8.49	0.18	0.68	0.42	<0.01	6.31	100.1
VA01204	49.0	13.7	11.1	4.62	1.81	0.27	13.5	---	1.90	---	---	3.16	99.1
VA01205	48.4	13.7	9.43	4.54	2.58	0.31	15.6	---	2.58	---	---	2.00	99.2
VA01206	46.8	11.4	8.86	3.29	2.96	0.53	17.1	---	3.14	---	---	4.93	99.1
VA01207	48.9	11.1	7.69	3.03	2.62	0.59	18.9	---	3.94	---	---	2.08	99.0
VA01208	54.1	11.3	6.48	1.59	3.12	0.64	17.4	---	2.08	---	---	2.62	99.5
VA01209	50.6	10.9	6.88	2.20	2.52	0.67	19.0	---	2.60	---	---	2.54	98.2
VA01210	47.4	10.8	7.62	3.16	2.23	0.44	18.1	---	3.70	---	---	3.31	97.0
VA01211	50.2	10.7	8.25	3.85	2.68	0.39	17.7	---	3.42	---	---	2.31	99.6
VA01212	47.0	14.6	11.1	4.69	2.20	0.32	12.3	---	2.33	---	---	5.00	99.6
VA01213	48.3	14.6	10.7	5.14	2.40	0.32	12.4	---	2.29	---	---	3.47	99.7
VA01214	47.0	13.3	10.8	6.03	2.22	0.24	12.9	---	2.29	---	---	4.31	99.2
VA01215	47.9	13.7	11.1	6.05	2.14	0.19	13.4	---	2.45	---	---	2.54	99.5
VA01216	45.8	17.4	10.3	3.80	3.68	0.68	11.7	---	0.74	---	---	5.16	99.3
VA01217	47.0	16.6	12.0	5.34	3.15	0.15	10.6	---	0.71	---	---	2.16	97.7
VA01218	42.2	17.1	18.4	3.21	0.78	0.34	13.4	---	0.58	---	---	3.85	99.9
VA01219	45.0	16.4	10.9	4.51	3.21	0.90	12.3	---	0.68	---	---	5.39	99.3
VA01220	42.8	16.0	13.3	4.77	2.09	0.39	13.0	---	0.70	---	---	6.31	99.4
VA01221	44.7	15.7	16.4	4.41	0.94	0.38	12.0	---	0.53	---	---	4.23	99.3
VA01222	60.3	17.6	3.98	1.91	6.82	0.41	5.73	---	0.30	---	---	2.54	99.6
VA01223	67.5	16.9	2.87	1.28	6.22	1.76	0.66	---	0.35	---	---	2.62	100.3
VA01224	49.7	16.9	7.93	2.87	2.63	1.83	8.91	---	0.70	---	---	4.39	96.0
VA01225	73.4	13.2	1.73	0.52	1.54	3.41	1.71	---	0.25	---	---	2.47	98.4
VA01226	72.5	14.0	2.79	0.68	1.22	3.75	0.86	---	0.27	---	---	3.62	99.9
VA01227	74.2	13.3	2.37	0.35	3.12	2.58	0.58	---	0.25	---	---	2.47	99.5
VA01228	76.6	12.1	1.30	0.32	3.65	2.05	0.54	---	0.24	---	---	1.77	99.0
VA01229	51.4	23.7	2.58	1.75	0.04	7.75	3.51	---	0.86	---	---	6.00	98.0
VA01230	67.9	14.0	3.39	1.19	1.48	3.50	2.15	---	0.30	---	---	4.93	99.1
VA01231	49.5	18.3	6.19	2.81	1.58	3.93	8.37	---	0.67	---	---	7.00	98.5
VA01232	59.9	17.4	2.53	2.39	6.84	1.55	4.72	---	0.31	---	---	2.62	98.4

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
VA00837	31	325	<10	97	17	960	<10	24	49
VA00838	14	184	40	115	<10	621	<10	13	27
VA00839	17	569	<10	<10	<10	153	22	104	57
VA00840	39	281	<10	88	16	1480	<10	26	85
VA00841	33	252	29	99	<10	761	<10	18	43
VA00842	<10	248	<10	133	15	105	35	199	85
VA00843	35	154	36	167	19	225	14	177	116
VA00844	36	222	20	58	10	896	14	66	180
VA00845	60	750	16	84	10	1010	<10	19	83
VA00846	30	840	33	100	<10	895	<10	12	69
VA00847	53	266	44	77	<10	793	<10	27	88
VA00848	53	238	<10	69	<10	1250	<10	20	29
VA00849	66	332	13	23	<10	532	23	51	58
VA00850	54	173	18	71	11	1080	<10	<10	31
VA00851	61	289	37	71	<10	688	<10	31	93
VA00852	<10	396	20	74	36	138	80	117	82
VA00853	48	528	26	131	14	1400	<10	24	57
VA00854	36	447	24	58	12	638	<10	23	82
VA00855	42	368	20	65	13	567	<10	<10	85
VA00856	48	332	18	74	15	687	<10	<10	82
VA00857	70	424	32	86	18	751	<10	<10	59
VA01204	---	---	---	---	---	85	48	59	87
VA01205	---	---	---	---	---	123	31	229	97
VA01206	---	---	---	---	---	272	<10	209	103
VA01207	---	---	---	---	---	335	<10	401	117
VA01208	---	---	---	---	---	521	<10	466	115
VA01209	---	---	---	---	---	1660	<10	538	130
VA01210	---	---	---	---	---	974	<10	632	108
VA01211	---	---	---	---	---	327	14	474	107
VA01212	---	---	---	---	---	85	52	225	74
VA01213	---	---	---	---	---	147	66	285	77
VA01214	---	---	---	---	---	97	93	239	84
VA01215	---	---	---	---	---	72	71	217	76
VA01216	---	---	---	---	---	230	43	134	46
VA01217	---	---	---	---	---	77	34	17	45
VA01218	---	---	---	---	---	10	17	15	34
VA01219	---	---	---	---	---	160	28	<10	42
VA01220	---	---	---	---	---	123	37	258	62
VA01221	---	---	---	---	---	142	53	45	44
VA01222	---	---	---	---	---	397	<10	40	28
VA01223	---	---	---	---	---	1460	<10	29	20
VA01224	---	---	---	---	---	1120	18	41	72
VA01225	---	---	---	---	---	1510	<10	<10	16
VA01226	---	---	---	---	---	1590	<10	<10	15
VA01227	---	---	---	---	---	2550	<10	13	16
VA01228	---	---	---	---	---	3940	<10	18	14
VA01229	---	---	---	---	---	3450	34	20	18
VA01230	---	---	---	---	---	2010	<10	14	13
VA01231	---	---	---	---	---	1440	12	120	39
VA01232	---	---	---	---	---	1400	<10	46	42


FALCONBRIDGE LIMITED
GEOLOGY
Chemainus Joint Venture
Vancouver Island, British Columbia
Project Number 116
WORK BY: SGE,DM,SC
DRAWN BY: BJM
FIGURE: 4
DATE: February 1988
NTS: 92 B/13W, 92 C/16E
0 1 2
kilometres
GEOLOGICAL BRANCH
ASSESSMENT REPORT
17,649
PERIMETER OF MacMILLAN BLOEDEL LANDS
PERIMETER OF CIP LANDS
CHIP 1
CHIP 2
CHIP 3
CHIP 4
CHIP 5
CHIP 6
CHIP 7
Anita Showing
Randy North Zone
Coronation Zone
Coronation Extension
Zone 1
Cu, Zn, Bar
Sharron Copper Showing
HOLYOAK 1
HOLYOAK 2
HOLYOAK 3
NUGGET 1
NUGGET 2
MILLSIDE
Chemainus River
Holyoak Creek
Chipman Creek
Boulder Creek Road
B-6 Road
B-9 Road
B-11 Road
B-12 Road
N Nanaimo Sedimentary Cover
G Gabbro Intrusions
S Sediment Sill Unit
P Purple Pyroclastic Unit
3 Myra Felsic Volcanics
2 Myra Intermediate Volcaniclastics
1 Myra Andesitic Flows 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 %

HOLYOAK 3

HOLYOAK 2

HOLYOAK 1

BRENT 1

CH88-64

LCP

35+50W 34+00W 32+50W 37+00W 32+00W 31+00W 30+00W 29+00W 28+00W 29+50W 27+00W 26+00W 27+50W 24+00W 25+00W 22+50W 23+00W 22+00W 21+00W 20+00W 19+00W 18+00W 17+00W 15+50W 14+00W

37+00W 34+00W 32+00W 30+00W 29+00W 27+00W 25+00W 23+00W 21+00W 19+00W 17+00W 14+00W

0+00

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,649

SHEET INDEX

PRELIMINARY RECONNAISSANCE TYPE MAPPING

McElhanney

REF. No. 1113-0

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

Compiled from aerial photography taken in May 1987 at an approximate scale of 1:30000

SCALE 1:5000 | CONTOUR INTERVAL 20 metres

DATE COMPILED June 1987 | SHEET NUMBER BE

FALCONBRIDGE LIMITED

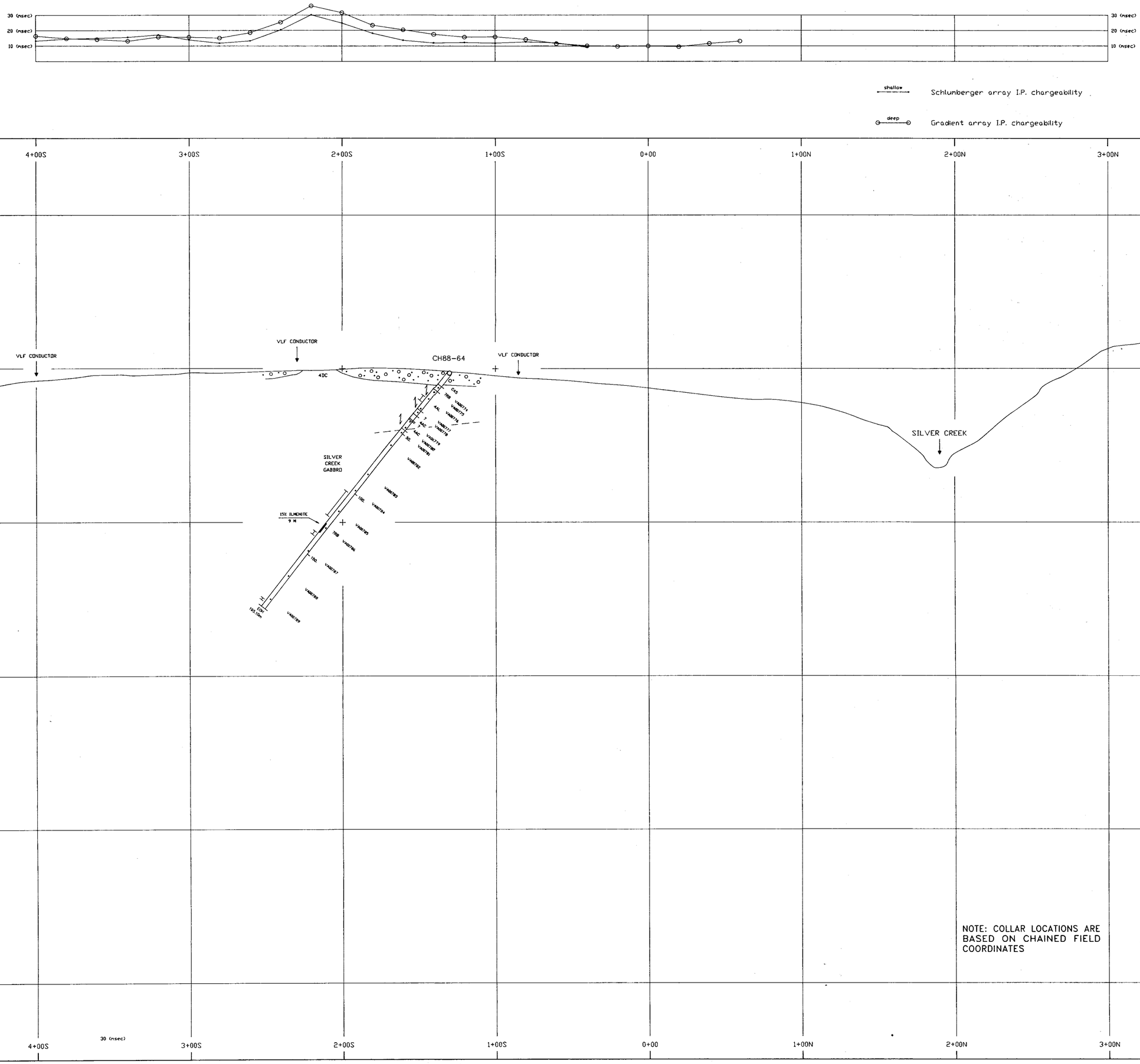
CHEMAINUS JOINT VENTURE

LOCATION OF DRILL HOLE CH88-64

CHIP 1 CLAIM

NTS 92B/13 VICTORIA MINING DIVISION PROJ. 116

Work by: SC | Drawn by: VJG | Date: Nov 88 | Figure 5



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 Phyric	J	Melanocratic
B	Feldspar Phyric	K	Bedded
C	Quartz-Felspar 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
- VA01245 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

17,649

0 20 40 60 80 M

SCALE 1 : 1000

FALCONBRIDGE LIMITED

CHEMAINUS JOINT VENTURE

Vancouver Island, British Columbia

SILVER CREEK AREA

SECTION 31+00 WEST

HOLE CH88-64

WORK BY: DPM	CLAIM: HOLYOAK 2	
DATE OF WORK: JUNE 1988	PROJECT NO: 116	FIG NO: 6
DRAWN BY: PW & COMPUTER		
DATE DRAWN: NOV 22 1988	N.T.S. NO.: 092B/13W	