1987 DRILLING REPORT ON THE CHEMAINUS JOINT VENTURE

607

Situated 14 km west of Chemainus, B.C. in the Victoria Mining Division

45°53'N, 123°50'W NTS 92B/13W

Kidd Creek Mines Ltd. 701 - 1281 West Georgia Street Vancouver, B.C.

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- S. Enns
- J. Pattison
- D. Money

Vancouver, B.C.

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SUMMARY

This report presents the drill results of the 1987 Chemainus Joint Venture drilling project. The target a volcanic-hosted, polymetallic, massive sulphide is deposit in the Sicker Group on Vancouver Island. Examples of such deposits in the Sicker rocks include Westmin's Buttle Lake deposits with more than 21 million tons (production plus reserves) averaging 2% Cu, 6% Zn, 1.7 oz/T Aq and 0.07 oz/T Au) and the Twin J deposits at Mount Sicker which produced over 300,000 tons of ore grading 3% Zn, 2.75 oz/T Au. Abermin Corporation has Cu, 78 announced a significant discovery on claims adjacent to the Joint Venture project. Their Coronation Zone has an average grade of 1.5% Cu, 14.9% Zn, 3.1% Pb, 6.7 oz/T Ag and 0.24 oz/T Au. over 11 feet.

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The project area consists of 15 claims (139 units) in two separate claim blocks. Drilling was conducted on the Chip 1 and Chip 12 Fr claims of the Chip-86 Group. The drilling was part of an equally funded joint venture program between Kidd Creek Mines Ltd. (wholly owned subsidiary of Falconbridge Limited) and Esso Minerals Canada; Kidd Creek Mines Ltd. was the operator for the Joint Venture.

Positive results of the 1986 drilling program led to drilling in 1987 to follow-up on mineralization discovered in the Anita area and in the eastern half of the Chip 1 claim. A total of 6754 m was drilled in 18 inclined NQ holes over the period May 14 to July 15, 1987.

The volcanic stratigraphy of the Chip 1 claim is comprised of a steep north-dipping, felsic and mafic volcaniclastic succession, the south portion of which contains mineralization and which appears to be an overturned sequence. Drilling has traced two weakly mineralized felsic tuffs for 600 and 400 m along strike on the claim. The felsic host to mineralization known as the "Active Tuff" lies adjacent to a mafic volcanic contact and is characterized by high sericite content, variable 2 to 30% pyrite, elevated Ba, Au and base metals and depleted Na₂O.

The best intersection came from hole CHEM87-37 drilled in the Anita area which assayed 2.37% Cu, 0.73% Pb, 2.74% Zn, 41.8 g/t Ag, 0.7 g/t Au and 0.95% Ba across This intersection lies about 45 m updip from a 2.5 m. 86-18. mineralized intercept in hole CHEM The mineralization is comprised of thick seams and stringers of up to 30% pyrrhotite, 7% chalcopyrite, 5% sphalerite and variable pyrite over 7.8 m. The lower part of this interval assayed 2.14% Ba over 2.8 m.

Bore-hole geophysics using the Crone pulse-EM system was conducted on most holes. This survey succeeded in detecting pyrrhotite mineralization but gave no appreciable response to pyritic base metal mineralization which typically is a poor conductor. ii

CONCLUSIONS

Mineralizing processes of fossil hydrothermal systems have been active in the felsic volcanics on the Chip claims. The mineralized horizons within the "Active Tuff" lie close to the felsic-mafic contact.

Two areas of mineralization have been identified each with significant strike-length in "Active Tuffs". In the Anita area, the best mineralization in the "Active Tuff" occurs west of a small felsic dome (sub volcanic centre) which demonstrates marked, regional Ba and Au enrichment toward it. In the east side of the Chip l claim the "Active Tuff" appears to be weakly mineralized over 400 m of strike length.

A major reverse fault, known as the Fulford fault, has divided the volcanic belt into two or more panels. The displacement of this fault is unknown. Significant mineralization appears to lie south of this fault. The structural pattern on the property is further complicated by a Cretaceous unconformity with Nanaimo sediments overlying Sicker volcanic and gabbro intrusive rocks.

Late Jurassic, gabbroic, sill-like intrusions have dilated the "Active Tuff" in the Anita area as well as in the area between sections 40+00E and 49+00E on the east side of the Chip 1 claim. In "dyking out" mineralized stratigraphy, these intrusions are of considerable negative importance.

The IP surveys have succeeded in guiding drilling toward the poorly conductive mineralized sulphide zones to depths as great as 150 m. VLF conductors in most cases have pointed to structures such as faults. The Crone bore-hole Pulse-EM surveys on the other hand have met with limited success. Strongly conductive bodies comprised of chalcopyrite-rich sulphides or those containing pyrrhotite are easily detected, but massive pyrite intersections failed to respond, even as in-hole anomalies, presumably due to their poor conductivity. iv

The Chip claims have only received significant exploration on about one-quarter of the favourable area. Given the positive results to date, the chances for discovering economic concentrations of volcanic massive sulphides are excellent. Systematic exploration of the rest of the Chip claims and the Brent 1 and Holyoak claims will ensure discovery of a future mine in this belt.

RECOMMENDATIONS

Continuing exploration is recommended for 1988 with an escalated drilling component. Ongoing exploration must, however, include additional elements to guide the drilling.

- 1. Geophysical surveys should be completed along fill-in lines before the next phase of drilling All the favourable starts. geology should be 100 covered at m intervals. The two proven time-domain IΡ surveys utilizing Gradient and Schlumberger arrays should continue, along with VLF and magnetometer surveys.
- 2. Fill-in geological mapping at 5,000 scale should be completed on all newly cut, fill-in grid lines. New geologic data must be integrated with existing data and should emphasize volcanic stratigraphy and structure so that improved re-interpretation of the geology can point to the most likely sites of ore deposition. Detailed mapping at 1:2,000 scale (or better) is also recommended for selected areas such as Anderson Creek, Anita area, Silver Creek area, Sharon showing and the Pit on the Brent 1 claim.
- 3. Where applicable, trenching should be employed to improve surface geology in conjunction with drilling data.
- 4. Diamond drilling should again be planned in two stages with the bulk of the drilling completed before the annual dry season (bush closure) sets in.

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Stage 1: 12,000 m March to July.

- Detailed drilling on the Sharon, Silver Creek, Anderson Creek areas and reconnaissance drilling of Chip 2, 3 and Chip 4 claims.

Stage 2: 5,200 m in fall.

- Follow-up on results of reconnaissance drilling.

5. Bore-hole geophysical surveys with superior resolution of poor conductors should be routinely employed on all drill holes. At the time of writing, the best method has yet to be determined. Several systems are presently under consideration.

LOCATION, ACCESS, TERRAIN

The Chemainus project area is located 12 to 16 km west of Chemainus on southeast Vancouver Island, in southwestern British Columbia (Figure 1). Chemainus lies just off the Trans-Canada Highway about 60 km northwest of Victoria. Established port facilities and related infrastructure in Chemainus and vicinity would enhance the economics of an orebody. 1

Access to the two claim blocks is by MacMillan Bloedel's main haul road known as the Copper Canyon Mainline which follows the Chemainus River. From this road, three 4-wheel drive roads provide access to various parts of the claims (Figure 2). The powerline road at mile 12 was used as the main access to drilling on the Chip 1 claim. Property access within the claim area is good due to numerous logging roads and old railway grades.

Surface and timber rights on much of the Chip claims are owned by MacMillan Bloedel. Access permits are required and damage to timber is subject to compensation charges.

The terrain is characterized by rolling topography and incised canyons. All of the property has been logged and is in various stages of regrowth with cedar, fir and hemlock. The bush varies from dense second growth to clear cut areas. Undergrowth of salal is widespread and in places can be very thick. Elevations on the property vary between 500 and 1,100 m. Large, old stumps are a common inconvenience to the construction of access routes and drill set-ups.

A mild climate prevails with warm, dry summers and autumns, and short winters. Spring is usually wet. The higher elevations (above 1000 m) tend to have more severe winter temperatures and heavy snowfall but are usually clear of snow by the end of May. Elevations below 500 m may be snow-free throughout the entire year making extended fieldwork possible. Dry forest conditions usually occur from mid-July to mid-September, and forest closures due to high fire hazard must be taken into account when planning field work. 2



PROPERTY DEFINITION AND CLAIMS STATUS

The Chemainus property consists of 15 claims (139 units) in two separate blocks within the Victoria Mining Division. Table 1 and Figure 2 summarize relevant details on claim data. The claims are jointly owned by Esso Minerals Canada and Kidd Creek Mines Ltd. (wholly owned subsidiary of Falconbridge Limited). 4

The Chip claims have all been grouped as the **Chip 86** group. At present, the Brent 1 and Holyoak 1 to 3 claims are ungrouped.

TABLE 1: STATUS OF CLAIMS

CLAIM	RECORD	NO. U	JNITS	STAKING	DATE	EXPIRY DATE	:
Dwont 1	162		10	Mary E	1070	Mara 11 100	~
Brent I	103		10	May 5,	19/8	May 11, 199	16
Holyoak	1 1598		8	Oct 22,	1985	Oct 31, 199	16
Holyoak	2 1599		16	Oct 23,	1985	Oct 31, 199	96
Holyoak	3 1560	-	12	Oct 24,	1985	Oct 31, 199	6
Chip 1	720		20	Nov 11,	1982	Dec 7, 199	7
Chip 2	721		20	Nov 13,	1982	Dec 7, 199)7
Chip 3	722		16	Nov 13,	1982	Dec 7, 199)7
Chip 4	723		16	Nov 15,	1982	Dec 7, 199)7
Chip 5	920		4	May 16,	1983	May 24, 199)7
Chip 6	921		4	May 17,	1983	May 24, 199)7
Chip 7	922		6	May 18,	1983	May 24, 199)7
Chip 8	1424		4	Feb 22,	1985	Feb 27, 199)7
Chip 11	1526		1	May 31,	1985	Jun 17, 198	38.
Chip 12	Fr 1608		1	Dec 11,	1985	Dec 12, 199)7
Chip 13	Fr 1609		1	Dec 11,	1985	Dec 12, 199)7

Total 15 claims 139 units

Notes:

The area comprised by the claims covers about 3,425 hectares (8,424 acres).

The claims are covered by NTS sheets 92 B/13W and 92C/16E.

Expiry dates are pending Gold Commisioner's approval of 1987 assessment work.



PROPERTY HISTORY OF THE CHIP CLAIMS

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

"The Chip claims have seen sporadic periods of exploration acitivity 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 1944 in with the development of the Twin-J massive sulphideprecious metal deposit, 15 km to the southeast. The volcanic belt has since undergone several periods of staking and prospecting.

recent development In years, of Westmin's deposit the Buttle Lake Uplift has in renewed exploration interest in the Chemainus area. An polarization survey induced 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 claim in 1978."

In 1983, Esso conducted a field program on the Chip claim group. Their work included 2500 scale geologic mapping, soil and stream sampling, line cutting, HLEM and magnetometer surveys of Chip 1, 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 identified on the Chip 1 claim. Several whole rock analyses suggested 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 Ouestor's Mark VT helicopter INPUT system in September 1984. The following year, ground follow-up of the selected airborne anomalies was started using time domain IP (Schlumberger array), VLF magnetometer and 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 1534 m in 6 holes. Two of the holes significant sulphides. intersected The geophysical surveys also covered selected parts of the Chip claims.

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In 1986, exploration focused on the Chip Work included 5,000 scale mapping of most of the claims. claims and expansion of the grid to cover the entire Chip claim block on a 200 m line spacing with IP, VLF and magnetometer surveys. Selected areas were covered with a deep penetrating IP survey using the Gradient Array, results of which guided the late fall drilling program. A total of 1854 m 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 along its entire exposure.

Positive results of this work led to an aggressive drill program for 1987.

GENERAL PROPERTY GEOLOGY

blocks lie The two claim within the Cowichan-Horne Lake Uplift, in which lower Paleozoic Sicker Group rocks are exposed. The property is underlain by felsic and mafic volcanic rocks (of Myra Formation trend northwest and dip steeply equivalent) which The surface geology of the Chip claims has northeast. been described in greater detail by Mallalieu, et al (1986), Enns (1985), and Everett and Cooper (1984). The volcanics are flanked on both sides by dark coloured pelitic and cherty sediments mapped by Muller (1980) as the "Sediment Sill Unit". These two formations are thought to be separated by a major fault at the north volcanic contact. The felsic volcanics host polymetallic sulphide mineralization.

Surface mapping on the Chip and Holyoak claims has shown that the volcanic succession is comprised of a complex, interbedded mixture of felsic tuffs and flows, mafic tuffs and flows with thin, green and black cherty intermediate tuffs. The volcanic and minor beds. stratigraphy which encloses Abermin's Coronation Zone, 2 km southeast, extends along strike onto the Chip 1 claim. Hanging wall stratigraphy in the Coronation Extension Zone underlies the southwest corner of the Holyoak 3 claim.

Small, localized quartz porphyry bodies (thick rhyolite flows) were identified at five localities and may be sites of felsic domes which could represent important, small, volcanic centres. The "footwall rhyolite" which lies beneath and east of Abermin's Coronation Zone is interpreted to be a local felsic dome. The volcanics are intruded by late gabbroic sill-like bodies of Jurassic age. These gabbro intrusions have separated or dilated the volcanic stratigraphy, often in mineralized zones. 9

Cretaceous, Nanaimo sediments comprised of basal cobble conglomerate, sandstone and black shale unconformably overlie both volcanic and gabbro lithology. The Nanaimo sediments have been truncated by compressional (reverse) faulting which is bedding plane parallel. These faults have been oversteepened by a yet later structural event.

THE 1987 DRILLING PROGRAM

Introduction

The drilling was conducted over a period extending from May 14 to July 15, 1987. A total of 6753.7 m of NQ core was drilled in 18 inclined holes. Table 2 summarizes the drilling data including results. The all-inclusive drilling costs for the program were \$580,000.

The contractor for the job was Burwash Enterprises Ltd. of Cobble Hill, B.C., who used two Longyear Super 38 drills equipped with air-cooled diesel engines. A D-6H Caterpillar tractor was used to move drills and to prepare the drill pads.

All the drill sites were accessible by four-wheel drive vehicles. Site locations were chosen to avoid large timber and steep slopes as much as possible and to take maximum advantage of abandoned logging roads.

This year, timber was cut and bucked to 8-foot lengths ahead of construction of access routes. This method significantly reduced timber damage and lowered clean-up costs. At one locality, an excavator was used to construct an access route over steep, rocky terrain in the Powerline Creek area.

The drill hole locations are plotted on Figure 3 at a scale of 1:10,000 and on Figures 4a and 4b at a scale of 1:2,000. Drill sections are plotted on a scale of 1:1,000 (Figures 5 to 19) with descriptions given by section for individual drill holes in Appendix A. Each core run was converted to metric depth, and marked on special pre-cut wooden blocks. The drill core was then systematically photographed and logged. RQD (rock quality designation) data was also recorded for future use. Dip



tests were taken by single-shot Sperry Sun instrument with an attempt to test every 50 to 75 m. Selected mineralized intervals were split, or sawn in half for analysis. Lithogeochemical samples were taken about every 10 metres A skeletal core record was routinely (on average). selected during logging with samples about every 10 or so The skeletal core and major oxide data are metres. valuable in making lithological correlations between drill The logging was conducted using Derry, Michener, holes. Booth and Wahl's LOG II system. Data was entered on Radioshack TRS 80 computers at the core box, then uploaded into a Toshiba T-3100 computer at the end of each day for Later, the analytical data were editing and print-out. merged with the drill logs' 'files' and final logs were The drill logs are listed in Appendix B. printed out.

Most of the drill holes were surveyed with the Crone Pulse-EM bore-hole system. Surveys were conducted by Dennis Woods of White Geophysical Ltd. Prior to the survey, the holes were lined with threaded white plastic piping which was recovered on completion. The results from this survey are covered in separate reports.

Bondar-Clegg of North Vancouver analysed the split core by geochemical methods for Cu, Pb, Zn, Mo, Ag, Ni, As and Ba. An HNO3-HC1 hot Mn, Cd, Co, Fe, extraction and analysis by DC Plasma were used for analysis of 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. An assay preparation method was applied to all samples. Base metal levels exceeding 3000 ppm were re-analysed using standard assay techniques, as were Ag and Au levels respectively, exceeding 30 ppm and 1,000 ppb.

X-Ray assay Labs of Don Mills, Ontario analysed the lithogeochemistry samples. The analysis included a standard major oxide package which includes Cu, Zn and Ba.

Results for base metal analysis are listed by hole in Appendix C and in the drill logs. Major oxide analytical results are listed by hole in Appendix D with sample plots shown on appropriate drill sections keyed to lithology. The Cu, Zn and Ba results of major oxide samples are listed in the drill logs.

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



TABLE 2: SUMMARY OF DRILLING DATA AND RESULTS

HOLE	LOCATION	DIRECTION	DEPTH	DURATION	TARGET	RESULTS
CHEM87-20 Section 25+00E	CHIP 12 Fr Claim Grid: 25+00E: 0+755 Elev: 495m UTM: N 5,417,070 E 429,330	-55/210 Az	419.9m	May 15/87 Dm May 23/87 Bm	Test shallow IP chargeability centered on 1+405 and 2+205 at depth.	Two felsic weakly mineralized "active tuff" beds were intersected; together they total 30.5 m but are separated by Anita Gabbro. Mafic volcanics at bottom of hole includes 3 komatiitic samples.
CHEM87-21 Section 26+00E	CHIP 1 Claim (West) Grid: 26+00E; 2+00N Elev: 510m UTM: N 5,417,280 E 430.050	-50/210 Az	495.3m	May 19/87 Dm May 26/87 am	Determine geology north of "Active Tuff" in Anita area.	About 40 m of weakly Zn mineralized (300 to 650 ppm) "active tuff" intersected at base of long felsic tuff interval. Gabbro at bottom of hole with felsic inclusion contains 5.3 m of 2636 ppm Ba and 200 to 400 ppm Cu. Fulford fault between 300 and 350 m.
· · · · · · · · · · · · · · · · · · ·						
CHEM87-22 Section 34+00E	CHIP 1 Claim (Centre Grid: 34+20E; 0+20N Elev: 555m UTM: N 5,416,700 E 430,666) -50/210 Az	474.6m	May 24/87 am May 31/87 am	Determine geology north of "Active Tuff". Test broad, deep resistivity low between 1+00 and 2+00S. Test VLF at 1+40S and 2+20S.	Felsic tuffs intruded by gabbro at top of hole. Fulford Fault at 195 m has thrust in Nanaimo Group sediments which unconformably overlie gabbro. Graphitic Nanaimo sediments explain resistivity low. Mafic volcanics at bottom of hole.
						a di katalah sa katalah sa katalah <u>katala</u> katalah sa katala
CHEM87-23 Section 28+00E	CHIP 1 Claim (West) Grid: 28+00E; 1+10N Elev: 545m UTM: N 5,417,105 E 430,850	-50/210 Az	449.5m	May 26/87 pm June 3/87 am	Determine geology north of "Active Tuff".	Weak mineralization in felsic tuffs: 1671 ppm Zn over 1.3 m @ 189.5 m. 1610 ppm Zn over 1.3 m @ 249.5 m. "Active Tuff" from 298.3 to 330.8m with weak mineralization: 14m of 2415 ppm Ba @ 307.0 m which includes 2470 ppm Zn over 1.0 m @ 307.0 m. 280 to 433 ppm Cu. 103 to 944 ppm Pb, 200 to 1164 ppm Zn, 80 to 220 ppb Au over 4 m @ 316.0 m. Fulford Fault @ around 250 m.
						ANILA GADOLO DETOM 330.6 M.
CHEM87-24 Section 31+00E	CHIP 1 Claim (West) Grid: 31+00E: 0+955 Elev: 535m UTM: N 5.416,765 E 430,340	-60/210 Az	364.2m	May 31/87 Dm June 5/87 am	Test IP chargeability and resistivity buildup showing sudden resistivity drop south of 2+805.	Felsic tuffs faulted (Fulford Fault) against Nanaimo sediments which unconformably overly Anita Gabbro Felsic flow (dome), 127.2 m thick with weak local pyritic mineralization and elevated Au and Ba overlies "Active Tuff", and includes: 2630 ppm Ba over 71 m @ 166.0 m 1250 ppm Cu over 5 m @ 126.5 m 1248 ppm Zn over 1.5 m @ 213.0 m 1672 ppm Zn over 1.5 m @ 217.5 m 25 to 130 ppb Au over 23 m @ 207.0 m "Active Tuff" 248.6 m to 298.0 m includes: 0.57 % Zn over 4.5 m @ 257.0 m 0.29 % Zn. 4860 ppm Ba, 543 ppb Au over 3.4 m @ 268.6 m Mafic volcanics below 290.0 m.
CHEM87-25 Section 26+00E	CHIP 1 Claim (West) Grid: 26+00E: 0+70S Elev: 470m UTM: N 5,417,030 E 429,920	-55/210 Az	434.6m	June 4/87 am June 10/87 am	Test shallow IP chargeability anomaly at 2+805.	Fulford Fault near top of hole. Felsic tuffs separated by 200 m of Anita Gabbro. Very weakly mineralized "Active Tuff" with three samples 400 to 1273 ppm Cu each over 0.5 m in interval 319.7 to 325.2 m. Mafic volcanics at bottom of hole include one komatiitic sample.

RESULTS TARGET DIRECTION DEPTH DURATION CHIP 1 Claim (West) -70/210 Az 264.3m June 6/87 am Test down-dip Pulse-EM extension Entire hole in gabbro. Section 28+80E Grid: 28+00E: 1+35S June 9/87 am of mineralization hole CHEM86-18 UTM: N 5.416.885 F 430,343

CHFN87-27 CHIP 1 Claim (West) -50/210 Az 357.5m June 10/87 am Test shallow IF chargeability Fulford Fault (at about 61 m) has thrust felsic tuffs against Nanaimo sediments unconformably overlying gabbro. "Active Tuff" (222.1 to 282.0m) includes: 0.40 % Zn. 1419ppm Cu. 2500 ppm Ba over 10 m @ 234.8 m. Section 29+00E Grid: 28+90E: 0+855 June 16/87 am build-up from 1+40S to 3+60S. Flev: 500m 4200 ppm Ba and 30 to 55 ppb Au over 10.0 m @ 267.3 m. Mafic volcanics below Active Horizon . UTM: N 5.416.880 E 430,150 CHEM87-28 Intersected Fulford Fault -two fault zones at 25 and 45 m. CHIF 1 Claim (West) -50/210 Az 382.8m June 11/87 am Test weak, shallow charges-Section 27+00E Grid: 26+85E: 1+005 June 16/87 am Anita Gabbro intersected for 134 m and directly below the shaft. bility anomaly with coinci-Elev: 475m dent weak resistivity low "Active Tuff" intersected below gabbro (208.4 to 291.2 m) with 2 to 4.5 m intervals of 2000 to 3400 UTM: N 5.416.980 between 2+60S and 3+00S. ppm Ba. 300 to 900 ppm Cu and elevated Au (50 to 200 ppb over lower zones). E 429,960 Massive pyrite over 23 cm (277.1 to 277.3 m) with 0.28 % Cu and 220 ppb Au: Test double-peaked chargesbility anomaly centred at also a 1.0 m interval with 2084 ppm Cu 2 279.0 m. 3+805 at depth. No massive pyrrhotite below shaft. Mafic volcanics from 291.2 to end of hole. Explore geology beneath Anita shaft. CHEM87-29 Test VLF anomalies at 1+605 and Mafic volcanics at top of hole overlie 58.8 m of felsics in fault contact with Nanaimo sediments. CHIP 1 Claim (Centre) -50/210 Az 296.3m June 16/87 pm Section 38+00E Grid: 38+00E: 0+885 June 20/87 am 2+15S and deep chargeability Nanaimo rocks unconformably overlie mafic volcanics. Elev: 557m anomaly between 2+205 and 2+805 Fault positions explain VLF anomalies. UTM: N 5.416.425 Deep chargeability not explained by drill core. with a flanking weak resistivity E 430,962 low between 1+855 and 2+005. CHEM87-30 CHIP 1 Claim (Centre) -50/210 Az 340.2m June 17/87 am Test VLF anomalies at 0+60N and VLF explained by faults. Section 38+00E Grid: 38+05E: 1+22N June 21/87 am 1+605 at depth. Mainly felsic tuffs with short mafic and intermediate sections. Elev: 585m UTM: N 5.416.605 E 431,100 CHEN87-31 CHIP 1 Claim (Centre) -50/210 Az 340.5m June 21/87 am Test VLF anomaly at 2+005. Mixed matic and felsic volcanics in upper half of hole. Section 40+00E Grid: 40+00E: 0+605 June 26/87 am Test shallow IP anomalies VLF anomaly explained by strong fault at 170 m. Elev: 570m centred at 0+805 and 2+605 Fulford Fault truncated top of "Active Tuff" at 221.6 m. UTM: N 5.416.350 Chargeability explained by pyritic "Active Tuff" at 221.6 to 239.7 m above mafic volcanics contact. and weak, deep IP anomalies E 431.138 centred at 1+40S. 2+20S and Mineralized intersection includes 0.4 m @249.6 m of 0.50% Cu. 1.36% Pb. 134g/t Ag and 4.76g/t Au. 3+005. CHEM87-32 CHIP 1 Claim (Centre) -50/210 Az 465.1m June 21/87 pm Test VLF conductors at 0+60N and Upper 290 m is mainly felsic with minor mafic volcanic interbeds. Section 36+00E Grid: 36+00E: 0+80N June 28/87 am 1+805. Nanaimo shales are faulted in unconformably overlie pyritic felsic tuffs ("Active Tuff"). Elev: 585m VLF anomaly explained by fault and resistivity low by the black graphitic Nanaimo shales. Test deep chargeability centred at

123.5 m of "Active Tuff" with low core angles contain: elevated Ba and Au, (2000 to 4000 ppm Ba and up

to 200 ppb Au), including 4.0 m of 3700 ppm Ba @ 410.0 m, and 0.5 m of 2731 ppm Cu @ 416.4 m.

1+60S and 2+40S and a broad re-

sistivity low centred at 1+80S.

6 26 8

LOCATION

Elev: 500m

UTM: N 5.416.675

E 430.910

HOLE

CHEN87-26

RESULTS HOLE LOCATION DIRECTION DEPTH DURATION TARGET 85.5 m of felsic tuffs at top of hole, followed by 117.6 m of mafic tuffs and minor flows, followed by 64.4 m CHEM87-33 CHIP 1 Claim (East) -50/210 Az 441.3m June 26/87 pm Test weak deep IP chargeability Section 43+00E Grid: 43+00E: 0+405 June 29/87 pm anomaly between 1+805 and 3+005. of faulted-in felsic tuffs and last third is gabbro. Elev: 595m July 9/87 am Test strong VLF conductor at VLF anomaly expained by Fulford Fault at 226 m. UTM: N 5.416.675 July 13/87 pm 2+205. "Active Tuff" absent on this section. E 431.407 Test for strike extention of weakly mineralized zone in hole CHEM86-16, 200 m east. CHEM87-34 CHIP 1 Claim (East) -50/210 Az 391.1m June 29/87 pm Test coincident, deep and Intersected felsic tuffs to 169.7 m. then mafic tuff to 270 m with narrow pyrrhotite mineralized band Section 47+00E Grid: 47+00E: 0+40S July 5/87 am shallow IP resistivity low in minor felsic succession. Pyrrhotite-byrite-chalcopyrite band contains 0.69 % Cu over 1.0 m @ 224.0 m. Elev: 660m at 2+05% and a shallow IP A major fault (Fulford Fault?) at 270 m lies above "Active Tuff" which includes: UTM: N. 5,416,150 chargeability at 2+80. 0.34 % Zn over 2.0 m @ 280.0 m. E 431.850 Test VLF conductors at 2+405 1748 ppm Zn over 2.1 m @ 296.0 m. and 2+805. 1403 ppm Zn over 2.0 m @ 320.0 m. Ba-rich cherts and argillite followed by 39.0 m of gabbro at bottom of hole. Cherty argillite includes:11,000 ppm Ba over 2.0 m at 388.0 m. VLF anomalies caused by faults. Pyrrhotite mineralization cause of VLF at 2+403 CHEM87-35 CHIP 1 Claim (East) -50/210 Az 359.1m June 30/87 pm Define stratigraphy north of Thick sucession of felsic tuffs with 44.9 m of felsic flow or dome? (183.8 to 227.7m) and minor Section 47+00E Grid: 47+00E: 1+83N July 5/87 am holes CHEM87-34 and 36. mafic interbeds. Elev: 710m UTM: N 5.416.248 E 431.862 CHEM87-36 CHIP 1 Claim (East) -45/210 Az 257.6m July 5/87 pm Test VLF anomaly at 2+405 and 140 m felsic sucession including 4.2 m of semi - massive pyrrhotite-pyrite-chalcopyrite-sphalerite with Section 47+00E Grid: 47+00E: 1+525 July 9/87 am 2+805. 0.89 % Cu over 0.8 m @ 107.0 m corresponds to VLF anomaly at 2+405. Elev: 640m Fulford Fault at 145.0 m with underlying 6.1 m of "Active Tuff" correlates with CHEM87-34 and weak Test coincident, shallow and UTM: N 5.415.970 deep chargeability anomalies chargeability anomaly and includes: 1900 ppm Zn over 1.3 m @ 150.7 m E 432.200 at 1+ 805. 1650 ppm Zn over 1.0 m @ 153.0 m Test coincident shallow and 1228 ppm Zn over 1.8 m @ 155.0 m deep IP resistivity lows at Bottom half of hole is mafic cherty tuffaceous sediments transitional into dark cherty argillite. 2+805 and 3+005. as in CHEM87-34. CHEN87-37 CHIP 1 Claim (West) -45/210 Az 219.8m July 6/87 am Test up-dip extension of mineral-Mineralized felsic volcanics near contact with mafic tuffs host 6.8 m of massive to semi-massive Section 28+00E Grid: 28+00E; 1+855 July 8/87 pm zation indicated by pulse-EM and pyrrhotite-pyrite-sphalerite-chalcopyrite banded mineralization which correlates with Elev: 500 m by hole CHEM86-18. hole CHEM86-18 and is source of pulse-EM anomaly. UTM: N 5.416.842 Best intersection starting at 99.3 m is 5.0 m of 1.64% Cu, 1.42% Zn, 28.8g/t Ag, 0.04g/t Au and 0.92% Ba E 430.030 and includes 2.5 m of 2.37% Cu, 2.74% Zn, 41.79/t Ag and 0.07g/t Au. Mafic tuffaceous cherty sediments underlie mafic tuffs and flows at bottom of hole.

OBJECTIVES OF DRILLING

The 1987 drill program was confined to the Chip 1 claim (17 holes) and Chip 12 Fr claim (1 hole). The objectives of the drilling program were as follows:

1. To seek extensions of the mineralization discovered in CHEM86-18, and to test the altered felsic tuffs in the Anita area.

2. To determine the geology of the Anita area in order to better evaluate the potential for development of significant tonnage of economic grade.

3. To test the along-strike potential indicated by IP anomalies of two mineralized intersections which underlie IP anomalies in felsic tuffs on Lines 45+00E and 49+00E in the east half of the Chip 1 claim.

Most of the drill targets were time-domain IP chargeability anomalies. The chargeability anomalies are caused by anomalous sulphide concentrations which are poor conductors that fail to respond to conventional EΜ Significant anomalies have a range from 10 to techniques. 25 m sec above background and drilling these anomalies has resulted in sulphide intersections up to 200 m below Two, IP survey methods found to be effective surface. were the Schlumberger array (designed to get most of its response at a 60 m depth) and the Gradient array (designed to get most of its response at a depth of 120 m).

In the Anita area, on the west side of Chip 1 claim, drill holes were collared on 100 m sections with several holes stepped back to the north to give stratigraphic sectional data. In the east half of the Chip 1 claim, the drill holes were collared along sections about 200 m apart.

DISCUSSION OF DRILLING RESULTS

For details on individual drill hole results the reader is referred to Appendix A, where drill hole descriptions are given on a section by section basis.

Drilling on the Chip 1 claim has outlined north-dipping volcanic stratigraphy along strike of Abermin Corporation's Coronation Deposit located 2 km southeast of the claim. Significant sulphide mineralization was intersected in the vicinity of the old Anita Shaft and a 400 m weakly mineralized zone was confirmed in the "Active Tuff" on the east side of Chip 1.

A major north-dipping fault was encountered on every section drilled. This major structure divides the volcanic sequence into two blocks. It correlates with the Fulford Fault which is a north-dipping, over-steepened reverse fault with a west-northwest strike extending from Fulford Harbour on Saltspring Island along the entire Cowichan - Horne Lake Uplift. Abermin Corporation's Coronation Deposit lies within the hanging wall of this fault. On the Chip 1 claim, however, the strongest sulphide mineralization occurs in the footwall of the Volcaniclastic rocks from the north have been fault. thrust over Late Cretaceous Nanaimo Group sediments to the south along this fault between Lines 29+00E and 38+00E (in the centre of the Chip 1 claim). A north-dipping unconformity separates the Nanaimo sediments from volcaniclastics south of the fault. Considerable relief is apparent along this conformity.

Sulphides are hosted by a belt of sericitic, felsic, ash to lapilli tuffs and flows collectively known as the "Active Tuff". The "Active Tuff" is characterized by high sericite content and 2 to 30% pyrite, high Ba levels (often 2,000 to 4,000 ppm), variably anomalous Au levels of 50 to 300 ppb, and Na₂O depletion. Cu, Pb, Zn and Ag mineralization may be locally present; chalcopyrite commonly is accompanied by trace amounts of pale green mariposite (?). This "Active Tuff" occurs immediately south of the Fulford Fault except where it has been eroded away along the unconformity, or faulted out, or where it has been "dyked out" by one of several east-west trending gabbro intrusions. The stratigraphic position of the "Active Tuff" appears to be adjacent to the mafic volcanic succession.

large gabbroic body known as "Anita the Α Gabbro" extends from at least line 25+00E to line 33+00E and is exposed immediately north of the massive sulphide mineralization at the Anita Shaft. Its northern contact dips 75 to 90° north and its southern contact dips about 75° south. It trends grid east with irregular margins, is 40 to 90 m wide at the 500 m elevation and appears to widen with depth. The "Anita Gabbro", typically, has a fine- to coarse-grained intrusive texture, is usually feldspar porphyritic and contains trace to 5% ilmenite. Trace amounts of disseminated chalcopyrite are common and chalcopyrite-bearing quartz veins occur occasional locally.

The strongest sulphide mineralization occurs The zone is 8 to 12 m wide and dips on section 28+00E. It was intersected by holes CHEM86-18 and 50° north. CHEM86-18 intersected 13 of m CHEM87-37. Hole mineralization containing 6 to 17% total sulphides pyrite-chalcopyrite-pyrrhotite consisting of and Average grade over the entire section is sphalerite. 0.71% Cu, 0.07% Zn, 5.0 g/t Ag and 0.12 g/t Au including a 5 m interval grading 1.59% Cu. Hole CHEM87-37 intersected 7.8 m of mineralization approximately 45 m updip from hole CHEM86-18. Here, the zone consists of 5 to 25% total sulphides again comprised of pyrrhotite-chalcopyritepyrite-sphalerite and galena in felsic lapilli tuff. The overall grade across 7.8 m of the zone is 1.28% Cu, 0.97% Zn, 25.6 g/t Ag, 0.3 g/t Au and 1.35% Ba. This includes 2.5 m of 2.37% CU, 2.74% Zn, 41.8 g/t Ag, and 0.7 g/t Au.

Four discrete Ba-rich horizons are apparent within "Active Tuff" on section 28+00E. In both holes, CHEM87-37 and CHEM86-18, Ba analysis exceeding 3000 ppm define these horizons and consistently indicate maximum Ba levels at the bottom of the mineralized intercepts where strongest mineralization was intersected. The Ba-rich horizons may reflect pulses of mineralizing fluids during the hydrothermal event.

Strong sulphide mineralization also occurs in holes CHEM87-27 and CHEM87-28, on adjacent sections respectively located 100 m east and west of Line 28+00E. The "Active Tuff" on both sections 27+00E and 29+00E occurs 150 to 200 m lower downhole or, at a deeper elevation than it does on section 28+00E (Figures 7, 8 and 9). This indicates that the mineralized horizon on section 28+00E has been offset along possible northeasttrending cross faults. In CHEM87-28 on section 27+00E, pyritic felsic tuff with 5 to 15% disseminated and banded (bedded?) pyrite with trace amounts of chalcopyrite occurs 15.6 m of felsic tuff between the "Anita throughout Gabbro" and mafic volcanics to the south. This interval contains a 23 cm-wide band of massive pyrite with 0.28% Cu and 220 ppb Au. On surface, a 5.5 m long by 1.0 m wide lens of massive pyrrhotite and chalcopyrite is exposed in felsic tuff immediately south of the gabbro contact beside the Anita Shaft on Line 27+00E contains 0.9% Cu across 0.9 m. In CHEM87-27, on section 29+00 E, an 18.7 m section of felsic tuff with 5 to 20% pyrite was intersected between the "Anita Gabbro" and the volcanics to the south.

Two hundred metres east of section 29+00E, on Line 31+00E, CHEM87-24 intersected a felsic flow unit at least 70 m thick which may be part of a small felsic dome. The "dome" contains trace to 15% pyrite and a 23 m interval with 70 ppb Au and 2,600 ppm Ba. Felsic lapilli and ash tuffs occur south of (stratigraphically above) the "dome". CHEM86-17 on section 32+00E did not intersect any felsic flows or tuffs. Instead, cherty argillaceous sediments and black, qrey and brown cherts were In places, 2 to 4 mm pyritic argillaceous intersected. beds contain 30% very fine grained pyrite. A 6 m section of black graphitic, cherty argillite contains an average of 12% pyrite and from 5,900 to 19,000 ppm Ba. These sediments were likely deposited in a basin on a flank of the felsic dome.

In the central Chip l claim, the "Active Tuff" is partly to completely dyked out by the gabbro. The "Active Tuff" appears to be continuous from Line 45+00E to 49+00E and is at least 15 to 45 m wide. Here it contains 5 to 17% pyrite but little economic mineralization.

A mafic sequence occurs immediately south of the "Active Tuff" between lines 25+00E and 40+00E. This sequence is comprised of dark- to medium-green mafic ash to lapilli tuffs, flows and mafic tuffaceous sediments. Bedding is often present; occasional graded beds can be recognized. Most graded beds show tops to the south indicating that stratigraphy is overturned. The mafic tuffs and flows are often spotted with epidote patches 1 to 10 mm long and frequently contain up to 5% black, chloritized hornblende crystals (altered pyroxenes) 1 to 10 mm long. The sequence is about 115 m thick on section 28+00E. The flows are massive with rare amygdaloidal sections. This mafic sequence is "dyked out" on line 43+00E and appears to pinch out into cherty argillites and siltstones farther to the east.

Fewer holes test the geology north of the Fulford Fault. Between Lines 25+00E and 34+00E, barren, often weak to moderately chloritic fine-grained felsic tuffs with minor beds of mafic and intermediate tuffs occur north of the fault. In general, the felsic tuffs are less sericitic than those south of the fault.

A distinctive, magnetite-bearing felsic flow approximately 50 m thick is present on Line 47+00E (CHEM87-35). This flow is massive and contains up to 5% finely disseminated magnetite. Felsic lapilli tuff with clasts of pink-tinged flow material occurs immediately north and south of the flow. Pinkish tinged, magnetitebearing felsic tuffs were also noted 300 m to the east on section 43+00E (top of hole CHEM87-33).

The structure is still not well understood. One major fault zone (Fulford Fault) has been recognized but numerous fault gouges in most of the holes indicate the abundance of splays and possible offsets. The lack of outcrop and ambiguous core axis angles often limit the reliability of dip measurements. Section 28+00E indicates that the stratigraphy south of the "Anita Gabbro" is dips at 50° to the north whereas overturned and stratigraphy appears to dip 58° north, north of the On section 47+00E, the Fulford Fault on section 38+00E. tuffs north of the fault dip 78° north.

A peculiar lithologic sequence was noted on sections 47+00E and 49+00E. The geology intersected by the two "fences" of drill holes (especially section 49+00E) indicates that in addition to the trace of the Fulford Fault, a shallow south-dipping fault may be present, but with small apparent displacement.

INCLINED SECTION OF THE ANITA AREA

Figure 20 is a plot of an inclined section contained within the "Active Tuff" in the Anita area. The plot extends from Line 24+00E to Line 34+00E at a dip of Shown on the section are drill about 60° to the north. hole pierce points with mineralized intervals and the projected intersection of gabbro with the inclined plane. The closest approach of off-hole conductors and theoretical outer pulse-EM survey limits are indicated by the flower pattern.

The geological sections indicate an offset of section 28+00 geology possibly by cross-faults as illustrated. This feature is also suggested by the bore hole geophysics pattern.

The Coronation Zone in the inset in Figure 20, is plotted on an inclined section at the same scale. About 1 million tons of mineralized rock are indicated by the outer contour. The two mineralized holes (CHEM86-18 and CHEM87-37) along section 28+00E are of better grade than the \$65 contour (calculated from 1985 gold equivalent figure) shown on the Coronation Zone. This comparison effectively illustrates the untested volume of "Active Tuff" which could be mineralized.

The need to tighten up drill hole spacing to 50 m is obvious.



LITHOGEOCHEMISTRY

Four hundred and eighty one whole rock samples were taken to help identify hydrothermal alteration and to aid in correlating geology between holes. The samples averaged 0.1 m in length and were taken at approximately 10 m interavls, except in large gabbro intrusions where a larger spacing was used. In addition to major oxides, the samples were analysed for Cu, Zn, Sr, Y, Zr, Nb and Ba. Study of the plotted data has led to the following conclusions.

- Hydrothermal alteration is more common and stronger along the "Active Tuff" than in the felsic tuffs and flows north of the Fulford Fault.
- Volcanism is bimodal (intermediate volcanics are rare).
- Felsic tuffs and flows on both sides of the Fulford Fault are of calc-alkalic affinity.
- 4. Mafic tuffs and flows north of the Fulford Fault straddle the calc-alkalic - tholeiitic boundary on many discrimination diagrams.
- tuffs flows south of (i.e. 5. Mafic and stratigraphically above) the "Active Tuff" straddle tholeiitic-komatiitic boundary the on many discrimination diagrams. The hornblende-bearing flows and tuffs may be of komatiitic affinity.
- 6. Gabbro is easily distinguished from the massive mafic flows by the fact that it invariably contains >1.00% TiO₂ while the mafic flows almost always contain <0.9%.</p>

To identify zones of hydrothermal alteration, the data was screened for samples with Ishikawa Alteration Indices: IA= $\frac{MgO+K2O}{MgO+K_2O+Na_2O+CaO} \times 100$

>60 (Ishikawa <u>et al</u>, 1976) and Na₂O contents <1.00%. Samples meeting these criteria are considered altered and are listed in Table 3. About 75% of the altered samples come from south of the Fulford Fault. Strong alteration (Ishikawa Index >70) occurs exclusively in samples from the "Active Tuff". Strongest alteration occurs along the "Active Tuff" from Section 27+00E to 31+00E and on section 40+00E and 49+00E.

To determine the geochemical features of the different rock units the samples were divided into the following 6 groups on the basis of rock type and geographic location:

- felsic tuffs and flows of the "Active Tuff"

- felsic tuffs and flows north of the Fulford Fault

- mafic tuffs and flows south of the Fulford Fault

 hornblende-bearing mafic tuffs and flows south of the Fulford Fault

- gabbro

Heavily mineralized samples and those with a high sedimentary component were removed from the data set. The remaining samples were plotted on an A/CNK versus SiO₂ variation diagram (Figure 21) where A/CNK is defined as the molecular ratio of Al_2O_3 : (CaO+Na₂O+K₂O).
Samples plotting outside the unaltered envelope as defined by Keith (1984) were removed from the data set (Figure 22).

An obvious and significant feature of the data is the bimodal mafic-felsic nature of the volcanism. A histogram of SiO_2 in volcanic rocks (Figure 23) shows two distinct populations with mean SiO_2 values of 53% and 75%.

Samples of felsic tuffs and flows north and south of the Fulford Fault plot almost exclusively within the calc-alkalic fields on the AFM and Jensen Cation plots (Figures 24 and 25), but they straddle the calc-alkalic and tholeiitic fields on a K_2O versus SiO_2 variation diagram (Figure 26) indicating that K has been mobile.

The mafic flows and tuffs range from calc-alkalic to komatiitic in composition. In general, mafic rocks south of the Fulford Fault tend to have a more primitive chemistry than those north of the Fault. On a Jensen Cation plot, 21 of 26 samples of mafic tuffs and south of the fault plot in the high-magnesium flows tholeiitic basalt or basaltic komatiite fields while 17 of 22 samples of mafic volcanics from north of the Fulford Fault plot in the calc-alkalic field (Figure 25).

Some, or perhaps all of the hornblende-bearing tuffs and flows south of the Fulford Fault are of komatiitic affinity. A basaltic komatiite is defined as having a CaO/Al_2O_3 ratio close to or greater than 1, MgO >9%, TiO₂ <0.9%, and K₂O <0.2%. The average sample of hornblende-bearing mafic volcanic has a CaO/Al_2O_3 ratio of 0.93 and contains 10.15% MgO, 0.58% TiO₂ and 0.33% K_2O (see Table 4). As noted previously, K appears to have been mobile in thse rocks and the degree of mobility of the other major elements is not known. Therefore, several samples of these hornblende-bearing mafic volcanics will be analysed for a suite of rare earth elements to determine if they actually are komatiitic.

Most of the gabbro samples plot in the high iron tholeiitic field on the AFM and Jensen Cation plots. In most cases, gabbro is easily distinguished from massive mafic volcanics by its relatively high TiO_2 content (average 2.08%) compared to most of the mafic volcanics (average 0.80%).

TABLE 3 ALTERED WHOLE ROCK SAMPLES FROM CHIP 1 DRILLING

SAMPLE		A.I.	***	Na2O	SECTION	HOLE	DESCRIPTION
Ħ	100 X	K20H	MgO	*	Ħ	Ħ	
		K20HMgOH	Na20+Ca0				
							*
AB20385		46		0.17	25E	CHEM87-20	Felsic tuff, north of fault
AB20386		50		<0.01	25E	CHE1187-20	Felsic tuff, Active Horizon
AB15440		53		0.62	26E	CHEM87-21	Felsic tuff. north of fault
AB15493		47		0.82	26E	CHE1187-21	Felsic tuff, north of fault
AB21613		49		0.97	27E	CHEM87-28	Felsic tuff, north of fault
AB21615		73		0.47	27E	CHEM87-28	Felsic tuff, Active Horizon
AB21623		25		0.80	27E	CHEM87-28	Felsic tuff, Active Horizon
AB21225		70		0.94	28E	CHEM86-18	Felsic tuff, Active Horizon
AB21247		30		0.89	28E	CHE1486-18	Felsic tuff, Active Horizon
AB21355		63		0.80	28E	CHE1486-18	Felsic tuff, Active Horizon
AB21360		69		0.54	28E	CHEM86-18	Felsic tuff, Active Horizon
AB21361		76		0.70	28E	CHE1186-18	Felsic tuff, Active Horizon
AB21364		73		0.40	28E	CHEM86-18	Felsic tuff, Active Horizon
AD02619		59		0.99	28E	CHEM87-37	Felsic tuff, Active Horizon
AD02620		73		0.53	28E	CHEM87-37	Felsic tuff, Active Horizon
AD02623		84		0.33	28E	CHEM87-37	Felsic tuff, Active Horizon
AD02346		66		0.68	29E	CHEM87-27	Felsic tuff, Active Horizon
AD02305		45		0.64	31E	CHEM87-24	Felsic flow, Active Horizon
AD02461		72		0.97	31E	CHEM87-24	Felsic flow, Active Horizon
AD02308		24		0.81	31E	CHEM87-24	Felsic flow, Active Horizon
AD02310		87		0.37	31E	CHEM87-24	Felsic flow, Active Horizon
AD02311		78		0.49	31E	CHEM87-24	Felsic flow, Active Horizon
AD02314		76		0.73	31E	CHEM87-24	Felsic tuff, Active Horizon
AD02315		88		0.46	31E	CHEM87-24	Felsic tuff, Active Horizon
AD02317		83		0.59	31E	CHEM87-24	Felsic tuff, Active Horizon
AB15356		56		0.55	34E	CHE1187-22	Felsic tuff, north of fault
AB15357		28		0.71	34E	CHEM87-22	Felsic tuff, north of fault
AB21671		44		0.79	36E	CHEM87-32	Felsic tuff, north of fault
AB21687		67		0.94	36E	CHEM87-32	Felsic tuff, Active Horizon
AB21643	•	40		0.70	38E	CHEM87-30	Felsic tuff, north of fault
AD02443		81		0.23	40E	CHEM87-31	Felsic tuff, Active Horizon
AD02445		85		0.40	40E	CHEM87-31	Felsic tuff. Active Horizon
AD02459		49		0.78	43E	CHEM87-33	Felsic tuff, porth of fault
AD02476		50		0.72	43E	CHEM87-33	Felsic tuff, north of fault
AD02478		68		0.62	43E	CHEM87-33	Felsic tuff porth of fault
AB21936		60		0.53	47F	CHEM87-36	Felsic tuff north of fault
AB21937		64		0.92	47E	CHEM87-36	Felsic tuff, north of fault
AB21142		84		0.52	49E	CHEM86-14	Felsic tuff Active Horizon
AB21152		87		0.45	43F	CHEM86-14	Felsic tuff, Active Horizon
AB21163		2. 77		0.28	49E	CHEM86-14	Felsic tuff, Active Horizon
AB21166		86		0.21	49E	CHEM86-14	Felsic tuff. Active Horizon
AB21170		80		0.16	49E	CHE1486-14	Felsic tuff, Active Horizon



SAMPLE #	CaO/A12O3	Mg/Fe	TiO2 %	К20 %	MgO %	Cr ppm	SECTION #	HOLE #
			· · · · · · · · ·				<u></u>	<u> </u>
KOMATIITE	>1.00		<0.9	<0.2	>9.0			
AB20407	1.12	1.23	0.61	0.31	14.9	616	25+00 E	CHEM87-20
AB20408	1.13	1.25	0.59	0.44	14.8	684	25+00 E	CHEM87-20
AB20409	1.34	1.48	0.50	0.28	17.2	1094	25+00 E	CHEM87-20
AB21604	1.05	0.87	0.53	0.81	10.0	274	26+00 E	CHEM87-25
AB21605	1.11	0.78	0.49	0.19	9.3	342	26+00 E	CHEM87-25
AB21608	1.42	1.39	0.53	0.38	15.8	889	26+00 E	CHEM87-25
AB21612	0.49	0.45	0.90	0.32	4.0	<68	26+00 E	CHEM87-25
AB21631	0.96	0.84	0.53	0.33	10.1	274	27+00 E	CHEM87-28
AB21632	0.96	0.80	0.55	0.43	8.7	274	27+00 E	CHEM87-28
AB21634	0.88	0.74	0.56	0.28	8.2	205	27+00 E	CHEM87-28
AD02626	0.91	0.73	0.57	0.20	9.2	205	28+00 E	CHEM87-37
AD02627	0.91	0.74	0.55	0.22	8.7	205	28+00 E	CHEM87-37
AD02628	0.59	0.74	0.66	0.29	10.0	205	28+00 E	CHEM87-37
AD02629	0.66	0.67	0.61	0.19	6.6	68	28+00 E	CHEM87-37
AD02630	0.78	0.77	0.69	0.42	10.2	342	28+00 E	CHEM87-37
AD02348	0.77	0.72	0.56	0.35	8.1	205	29+00 E	CHEM87-27
AD02324	0.94	0.89	0.54	0.15	9.9	274	31+00 E	CHEM87-24
AB15379	0.87	0.69	0.57	0.55	8.8	205	34+00 E	CHEM87-22
AB15380	0.99	0.89	0.53	0.21	10.3	342	34+00 E	CHEM87-22
AB15381	0.78	0.72	0.60	0.22	8.3	205	34+00 E	CHEM87-22
AVEDACE								
LODNEL FNDF-	Λ Q	<u> </u>	06	03	10 2	217		
BENDING MART	0.3	0.9	0.0	v.J	10.2	341		
TUFF/FLOW								

TABLE 4: CHEMISTRY OF UNALTERED HORNBLENDE-BEARING MAFIC VOLCANICS





Figure 21: A/CNK versus SiO₂ diagram (Kieth, 1984) for Chip 1 drill core samples



Figure 22: A/CNK versus SiO₂ diagram (Kieth, 1984) for "unaltered" Chip 1 drill core samples







Figure 24: AFM diagram for Chip 1 drill core samples









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APPENDIX A

DESCRIPTION OF DRILL SECTIONS

Section 25+00E (Figure 5):

Hole CHEM87-20 intersected felsic tuffs, gabbro, mafic tuffs and tuffaceous sediments. The Fulford Fault was intersected near the top of the hole and appears to dip steeply to the north. The general stratigraphy correlates well with that found in other holes on the east side of Powerline Creek. 1

The IP anomalies correspond to two sections of pyritic, sericitic felsic tuff ("Active Tuff") containing These pyritic tuff sections have been 1 to 3% pyrite. dismembered and are separated by 175.5 m of "Anita Gabbro". The pyritic felsic tuff immediately north of the "Anita Gabbro" is 10.5 m long in core and is 110 m directly below the IP anomaly centred at 1+40S. The last metre of felsic tuff contains 2,300 ppm Ba. The section of pyritic felsic tuff south of the gabbro is 20.5 m long This pyritic zone is located 30 m south of and in core. 260 m below the IP anomaly at 2+20S indicating that the "Active Tuff" dips steeply to the south and has considerable depth extent.

dark-green Mediumto mafic tuffaceous hornblende-bearing mafic tuffs sediments and were intersected immediately south of the pyritic felsic tuff. All three whole rock samples from a 34.8 m section (378.4 to 397.0 m) of hornblende-bearing mafic lapilli tuff have a komatiitic chemistry (see lithogeochemistry). A thin graded bed of mafic tuff near the bottom of the hole fines

uphole (north). The hole had to be abandoned when the bit and part of the core barrel were lost at a depth of 419.9 m.

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Section 26+00E (Figure 6):

Two drill holes CHEM87-21 and 25 were drilled on this section which lies 100 m west of the section through the Anita showing.

The upper 343.8 m of CHEM87-21 intersected a thick succession of felsic tuffs with many, less than 10 m sections of chlorite schist and mafic to intermediate tuffs. The tuffs are generally barren of sulphides, although 12 intervals 1 to 5 m long contain trace to 2% pyrite. Three fault zones 20 to 30 m apart occur between 301 and 351 m, but which of these is the Fulford Fault is uncertain.

Mafic tuffaceous sediments with minor white to pink chert beds, some containing magnetite, occur between 351 and 372.9 m. Sediment-enriched, epidote-bearing quartz-eye felsic tuffs with occasional beds of magnetitebearing pink chert occur from 372.0 to 394.9 m. A 2.1 m section of chlorite schist separates the sediment-enriched felsic tuffs from the pyritic felsic tuffs below.

Sericitic felsic tuff of the "Active Tuff" with 5% pyrite and trace to 1% chalcopyrite occurs between 397.0 and 444.3 m. It contains an average of 2,550 ppm Ba.

The "Anita Gabbro" extends from 405.0 m to the end of the hole at a depth of 495.3 m. The gabbro has a fine- to medium-grained texture and hematite is common along fractures. Two small inclusions of "Active Tuff", or alternatively folded equivalents of a single inclusion, occur between 343.1 and 444.4 m. The inclusions contain 3 to 5% pyrite. The upper inclusion contains an average of 2,133 ppm Ba and the lower one 2,636 ppm Ba. The "Active Tuff" appears to have been dismembered by the gabbro into several short intervals.

Hole CHEM87-25 intersected 200 m of the "Anita Gabbro". The intrusion is centred at 1+80S and the northern contact dips 77° north. The gabbro intruded a succession of quartz-eye bearing felsic tuffs. Minor mafic and intermediate tuffs are interbedded with the felsic tuffs north of the gabbro. Two fault gouge zones, 16 and 48 m above (north of) the gabbro dip 65° north and are part of the Fulford Fault system. The felsic tuffs below the upper fault are weakly pyritic.

A 28.7 m section of "Active Tuff" occurs immediately below the "Anita Gabbro" between 300.5 and 330.0 m. It includes a 0.4 m section with 50% pyrite and trace chalcopyrite (1,273 ppm Cu). A fault at 330.0 m separates the pyritic felsic tuff from a succession of mafic flows and tuffs to the south.

Epidote-spotted feldspar porphyritic mafic flow with chloritized hornblende crystals occurs between 330.0 and 348.8 m. Below 348.8 m, the hole intersected mafic tuffaceous sediments and tuffs with occasional beds of green chert. Three mafic hornblende-bearing flows, 2.5 to 8.1 m wide, occur below 379.1 m. A sample from the thickest of these flows has a definite komatiitic chemistry (see lithogeochemistry section).

Section 27+00E (Figure 7):

Hole CHEM87-28 was drilled below the Anita shaft. Above 75 m, the hole intersected felsic tuffs before drilling through a long section of "Anita Gabbro", centred just north of the shaft. The "Anita Gabbro" is 134.4 m wide in drill core and has "dyked out"

mineralization beneath the Anita Showing. The Anita showing occurs in felsic tuffs immediately south of the "Anita Gabbro", the south contact of which apparently dips steeply south and truncates the north-dipping "Active Tuff". 4

Two faults occur in the felsic tuffs north of the "Anita Gabbro". These are part of the Fulford Fault system. Barren felsic to intermediate, quartz-eye bearing, feldspar crystal tuffs occur north of the upper fault zone, whereas quartz-eye bearing, felsic tuffs with trace to 1% pyrite occur below it. Below the second fault, at 45 m, are quartz-eye bearing felsic tuffs with 1 to 2% pyrite.

Mixed pyritic felsic tuffs ("Active Tuff"), are present between 208.4 and 291.2 m and explain the IP anomaly between 2+60S and 3+00S. The tuffs contain up to 8% pyrite above 275.6 m. Pyrite content increases (2 to 15% pyrite) below 275.6 m. A 23 cm wide band of massive pyrite containing 0.28% Cu and 220 ppb Au occurs at 277.3 m. Below this, the tuff averages 15% pyrite for 13.9 m. This pyritic section although 240 m below surface, may extend updip and explain the double peaked chargeability anomaly centred at 3+80S.

Section 28+00E (Figure 8):

This section contains four drill holes and lies about 100 m east of the Anita shaft. Two of these drill holes contain mineralized intersections (CHEM86-18 and CHEM87-37).

CHEM87-37 intersects geology which correlates well with that in CHEM86-18 (45 m downdip) and indicates that statigraphy south of the "Anita Gabbro" dips 50 to 55° north. CHEM87-37 was collared in sericitic felsic crystal tuff ("Active Tuff") with 1 to 7% disseminated and stringer pyrite with nil to trace sphalerite. An 8.0 m interval contains 60 ppb Au and 3,212 ppm Ba.

Between 73.5 and 84.6 m, the tuff contains up to 7% pyrite, 3% pyrrhotite, 2% sphalerite and trace chalcopyrite. The best assay from this section is 720 ppm Cu, 0.38% Zn and 750 ppb Au over 0.8 m.

Silicified felsic lapilli tuff containing up to 30% pyrrhotite, 7% chalcopyrite and 5% sphalerite was intersected between 99.3 and 107.1 m. This pyrrhotitechalcopyrite rich horizon is a pulse EM conductor which was detected from hole CHEM86-18. A 0.2 m thick bed of pyrrhotite-sphalerite-chalcopyrite containing massive 2.85% Cu, 0.19% Pb, 23.61% Zn, 50g/t Ag and 1.44 g/t Au occurs at the top of the silicified zone. The upper 5.0 m of the zone grades 1.64% Cu, 1.42% Zn, 28.8 g/t Ag, 0.4 g/t Au and 0.92% Ba which includes 2.37% Cu, 0.73% Pb, 2.74% Zn, 41.76 g/t Ag, 0.7 g/t Au, and 0.95% Ba over 2.5 The lower 2.8 m is very Ba-rich (averaging 2.14% Ba) m. indicating a strong increase in Ba downhole in the mineralized interval. The 7.8 m intersection of is the mineralization updip extension of similar pyrrhotite-chalcopyrite-sphalerite mineralization in hole CHEM86-18 about 45 m away. The mineralization in both holes appears to lie at the felsic-mafic volcanic contact.

A succession of mafic flows and tuffs occurs from 107.1 m to 205.2 m. Epidote spots and chloritized hornblende crystals are common in the mafic flows. Below the mafic succession, the hole intersected light brown, thermal, biotite-altered immature volcanic wacke with minor cherty tuffaceous beds.

drilled CHEM86-18 was to test the Hole strongest, deep chargeability anomaly in an area of poor exposure. The hole encountered 56.8 m of Anita gabbro before intersecting about 108 m of felsic volcanics of which 70 m were significantly altered and mineralized. The 5 to 17% total sulphides are comprised of pyrite, pyrrhotite, chalcopyrite, and minor sphalerite as 3 to 4 mm stringers and 4 to 5 cm bands. A general increase in total sulphides, particularly chalcopyrite and sphalerite was noted toward the base of the mineralized interval toward the mafic volcanic contact. Ba and Zn reach their highest concentrations at the very base of the interval. The best mineralization lies in the interval 133.6 to 138.6 m which assays 1.59% Cu across 5.0 m, including 2.0 m assaying 2.89% Cu, 15.2 g/t Ag and 0.24 g/t Au. The lower part of the hole intersected a mafic volcanic sequence similar to that intersected in CHEM87-37 and brown greywacke and dark argillite and ended in siltstones.

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CHEM87-26 intersected gabbro over its entire length proving that the southern contact of the "Anita Gabbro" dips to the south. The gabbro is from fine- to medium-grained and contains up to 20% ilmenite and trace disseminated chalcopyrite pyrite. amounts of and Two Hematite-filled fractures are common. chalcopyritebearing quartz veins occur within the upper 100 m of the hole. One contains 0.47% Cu and 100 ppb Au over 0.6 m.

CHEM87-23 intersects a long succession of felsic and intermediate tuffs before reaching the "Anita Gabbro" at a depth of 330.8 m. A graded bed of tuff fines uphole (north) at 127.5 m. Five fault zones occur between 248.1 and 330.8 m. The upper two, at 248.2 and 265.9 m are part of the Fulford Fault system. The tuffs above 248.2 m contain only minor pyrite over narrow intervals. The best mineralization sampled is 1,672 ppm Zn and 545 ppb Au over 1.8 m. 7

An epidote-spotted andesite with 5 to 7% disseminated pyrite occurs immediately below the fault at 248.2 m and extends to 252.3 m. Felsic tuff with 2 to 6% disseminated and banded pyrite extends from 252.3 to 265.9 m where it is separated by a fault from felsic crystal tuff with trace pyrite which continues to 278.1 m. Cherty and in places hematitic, mafic to felsic tuffaceous sediments occur from 278.1 to 298.3 m.

Pyritic quartz-sericite schist of the "Active Tuff" occurs from 298.3 to 330.8 m where it is cut truncated by the "Anita Gabbro". The quartz-sericite schist contains 4 to 5% fine-grained, dominantly banded pyrite with trace sphalerite and chalcopyrite. The best geochemical result is 2,470 ppm Zn over 1.0 m. Much of the unit is anomalously high in Ba (>2,000 ppm). A 13 m interval contains 2,450 ppm Ba which includes a 5 m section averaging 130 ppb Au. This unit is probably the cause of the IP anomaly at 1+40S.

Section 29+00E (Figure 9):

in barren CHEM87-27 was collared chloritic The Fulford Fault at 60.8 m separates felsic ash tuffs. felsic tuffs from Nanaimo Group sediments below and could explain the VLF conductor at station 1+60S. The Nanaimo sediments consist of dark brown greywacke and pebble A minor slip separates the Nanaimo conglomerates. conglomerate from the "Anita Gabbro" below, but the contact probably is an unconformity. The "Anita Gabbro" extends to a depth of 121.4 m.



"Active Tuff" is present from 222.1 to 282.0 m. This intersection may account for the IP anomaly centred at 3+50S although the mineralization does not extend nearly as far south as the anomaly. It may be a downdip extension of the indicated sulphides. The strongest sulphides occur in two zones. The first between 229.0 and 244.3 m and the other between 263.3 and 282.0 m. The upper zone contains up to 15% pyrrhotite, nil to 5% pyrite and nil to trace chalcopyrite and sphalerite. The sulphides are mostly fracture-controlled. The best assay from the zone is 1,419 ppm Cu and 0.40% ppm Zn, over 1 m. The second zone contains 5 to 20% pyrite and 0.42% Ba, over 10 m. The pyrite is very fine grained, resembling a pyritic sediment in places. This zone is generally along the strike of the strongest mineralization in holes CHEM86-18 and CHEM87-37

A fault at a low angle to the core axis separates the pyritic felsic tuff from mafic tuffaceous sediments, tuffs and flows below, which extend to 354.6 m. Four graded beds occur between 284.6 m and 332.0 m and all indicate tops downhole (i.e. overturned beds).

Section 31+00E (Figure 10):

The hole was collared in barren sericitic felsic tuffs. The Fulford Fault, at 50.3 m, separates felsic tuffs from Nanaimo Group sediments below. The Nanaimo sediments consist of sheared, dark brown argillic and greywacke, and pebble to cobble conglomerate. A minor slip occurs along the unconformity between the Nanaimo conglomerate and the "Anita Gabbro" at 94.9 m. The "Anita Gabbro" extends to a depth of 121.4 m.

The hole intersected 127.2 m of felsic flow beneath the "Anita Gabbro". The felsic flow is

characterized by its massive structure and lack of tuffaceous features. It contains up to 15% disseminated and stringer pyrite. A weak pyrite stringer zone occurs between 190.5 and 191.1 m. A 23.0 m section between 207.0 and 230.0 m contains 70 ppb Au and 2600 ppm Ba. The flow grades into felsic lapilli tuff ("Active Tuff") at a depth of 248.6 m. The sudden drop in resistivity and increase in chargeability observed immediately south of 2+80S is an expression of the contact between a massive felsic flow (possibly a dome) and felsic tuffs south of the dome.

The lapilli tuff extends to a depth of 264.1 m and contains occasional pyrite clasts. Starting at 257.0 m, a 4.5 m section of the tuff contains 0.59% Zn. A narrow gabbro dyke separates lapilli felsic tuff from a fine felsic ash tuff. This fine tuff occurs between 267.3 and 274.6 m and contains up to 10% pyrite which is banded in places. It is anomalous in Ba, Au and Zn averaging 0.32% Zn, 534 ppb Au and 4,860 ppm Ba, over 3.4 m. A 1.0 m interval contains 1,350 ppb Au.

A narrow gabbro dyke occurs between 274.6 and 279.9 m separating the "Active Tuff" from mafic tuffaceous sediments, tuffs and flows to the south.

Section 32+00E (Figure 11):

Hole CHEM86-17 was drilled to test part of a deep IP chargeability anomaly. The drill hole intersected a short interval of Nanaimo conglomerate which unconformably overlies gabbro intrusions. Most of the lithology intersected was bedded cherty black argillite High Ba levels were sampled and brown volcanic wacke. across significant widths averaging 4900 to 9400 ppm. The IP anomaly apparently is caused by black pyritic cherty

argillite with 12 to 30% fine pyrite (locally pyrite mudstone) and locally up to 1 cm pyrite rosettes. The pyrite-rich sediments are high in Ba; this section appears to be unique as similar lithology has not been intersected in either adjacent section in drilling. The apparently unique geology of the CHEM86-17 led to the interpretation that the Ba-rich pyritic black sediments are timestratigraphic equivalent with the felsic dome intersected in CHEM87-24 on section 31+00E.

Short, peridotite intervals logged as "biotite-altered gabbro" (Enns, 1987) were intersected at the bottom of hole CHEM86-17. Similar peridotite intersections were also observed in hole CHEM87-34 below 380 m.

Section 34+00E (Figure 12):

Hole CHEM87-22 intersected a 170 m succession of relatively barren felsic, intermediate and mafic tuffs followed by 20.6 m of gabbro. The Fulford Fault at 197.4 m has "thrust in" a panel of younger Nanaimo Group sediments unconformably overlying a gabbro intrusion at 261.8 m. This fault appears to dip about 65° north which, when projected to surface, correlates well with the axis of the VLF conductor.

The "Anita Gabbro" extends to a depth of 396.00 m and appears to have completely "dyked out" the "Active Tuff".

A sequence of mafic tuffs, flows and tuffaceous sediments occur beneath the gabbro. The hole ends in a massive hornblende-bearing flow at a depth of 474.6 m. The broad resistivity low and the broad VLF conductor centred at 2+00S are probably explained by the black graphitic argillite of the Nanaimo Group.

Section 36+00E (Figure 13)

Drill hole CHEM87-32 was collared in felsic tuff and intersected mainly barren felsic tuff above 289.6 m with minor intervals of chlorite schist and mafic flows, tuffs and sills. At 222.3 m, a graded bed of felsic quartz-feldspar crystal tuff fines to the north. The best assay sample is 0.5 m long, starts at 205.9 m with 4% pyrrhotite and 5% chalcopyrite assaying 1.62% Cu. The chargeability anomaly weak IΡ is centred on this zone.

Fulford Fault, 289.6 The at m, separates felsic tuffs from Nanaimo Group sediments. The Nanaimo sediments consist of argillite, sandstone Group and conglomerate. The deep IP resistivity low is probably due to the graphitic Nanaimo argillite. The Nanaimo sediments rest unconformably on felsic tuffs at 322.8 m.

Pyritic felsic tuffs of the "Active Tuff" occur for 123.5 m below the unconformity. Core axis angles are low, indicating that the hole is subparallel to the weakly mineralized zone. Minor chalcopyrite, galena and traces of mariposite are locally present where pyrite reaches up to 8%. This unit is probably the source of the second IP chargeability anomaly centred at 2+40S. The entire unit contains anomalous amounts of Au. The longest continuous sample interval is 56.7 m (starting at 324.0 m) which averages 62 ppb Au. A 0.5 m sample taken at 416.4 m contains 2,731 ppm Cu and 2,900 ppm Ba. A 7.0 m interval

starting at 410.0 m and including the previously mentioned sample contains 3,300 ppm Ba.

The hole ended in gabbro at a depth of 465.1 m.

Section 38+00E (Figure 14):

A fence of two holes CHEM87-29 and 30 was drilled along section 38+00E. Hole CHEM87-30 at the north end of the section, intersected relatively barren felsic tuffs with minor mafic tuffs and flows to a depth of 247.7 m. These tuffs are sheared and contorted; fault gouges Two major fault zones occur in this interval. are common. One is at 42 m and corresponds to the VLF conductor at 0+60N, and other is at 150 m and does not have a geophysical expression. A graded bed at 93.7 m fines to the south. Epidote-altered mafic flow occurs between 247.7 and 274.1 m. Below 274.1 m, the hole intersects felsic to intermediate tuffs until it ends at a depth of 340.2 m. A major fault occurs just above the bottom of the hole, which may be a splay off the main Fulford Fault.

CHEM87-29 was collared in epidote-spotted mafic flows with minor mafic tuffs which extend to a depth of 84.9 m. They appear to correlate with epidote-altered mafic flows between 224.3 and 274.1 m in CHEM87-30 indicating that stratigraphy dips 53° north. Core axis angles, however, suggest steeper dips (75 to 80°) to the north.

Chloritic felsic tuff with less than 2% pyrite was intersected between 84.9 and 139.6 m. Numerous minor slips occur throughout this section. A major fault zone at 100 m correlates with the fault zone at the bottom of hole CHEM87-30 (splay from Fulford Fault). It dips 70° north and explains the VLF conductor at 1+60S.

The Fulford Fault at 143.7 m has "faulted in" younger Nanaimo Group sediments below older mafic tuffs. The fault correlates with the VLF conductor at 2+15S. The Nanaimo sediments consist of dark brown argillite with 2-38 very fine grained pyrite and a basal pebble Pebble conglomerate rests unconformably on conglomerate. mafic ash tuff at 156.6 m. The deep resistivity low is probably expression of an the graphitic Nanaimo argillite.

The "Active Tuff" has either pinched out or been completely eroded away on this section. Mafic ash tuff with minor mafic flows and occasional beds of cherty sediments less than 10 cm thick occur below the unconformity and continue to the end of the hole at a depth of 296.3 m. This mafic unit lies directly beneath the deep and shallow IP chargeability anomalies between 2+20S and 2+80S but the amount of contained sulphides encountered in the hole is insufficient to explain the chargeability anomalies.

Section 40+00E (Figure 15):

Hole Chem87-31 began in barren chloritic tuff but quickly passed into a 92.3 m section of mafic tuffs and flows down to a depth of 118.4 m. The tuffs are mediumto dark-green, are often epidote-spotted and occasionally range into intermediate compositions. They lie 200 m east along strike of the epidote-spotted mafic flows encountered at the top of CHEM87-29 and in the middle of CHEM87-30 on Line 38+00E. The shallow IP chargeability anomaly at 0+40S and the deep IΡ chargeability anomaly at 1+25S are not explained by the

sulphides found in core. The hole may have passed over top of the source to the anomalies.

Between 118.4 and 192.1 m a succession of barren felsic tuffs, usually quartz-eye bearing, contains several minor intervals of mafic to intermediate tuff. Α 175 m explains the VLF conductor at 1+80S. fault at Another fault at 192.1 m separates chloritic quartz-feldspar crystal tuff from massive gabbro below which extends down to 221.6 m.

The gabbro contains an 0.8 m wide inclusion of felsic ash tuff and is separated by the Fulford Fault from the "Active Tuff" below.

Pyritic sericitic, mostly quartz-eye bearing felsic tuffs make up the "Active Tuff" (between 221.6 and 239.7 m) which contains 1 to 10% pyrite and nil to trace chalcopyrite. The upper 6.5 m of the section contains 1,093 ppm Cu and 103 ppb Au. Mineralization occurs directly beneath the deep IP chargeability anomaly at 2+20S. The shallow IP anomaly at 2+50S is probably an up-dip expression of the same zone.

Below the "Active Tuff" the hole intersected a succession of mafic tuffs and flows to the end of the hole at 340.5 m. These mafic rocks differ from those found south of the "Active Tuff" in holes farther to the west in that the mafic rocks here contain trace to 3% disseminated ilmenite (average 0.95% TiO₂)

A small section of altered quartz-eye bearing felsic ash tuff occurs between 249.3 and 250.0 m with 10% pyrite, 2% chalcopyrite and 1% galena. A 0.4 m sample of this tuff contains 0.59% Cu, 1.36% Pb, 134 g/t Ag and 4.77 g/t Au.

Section 43+00E (Figure 16):

Drill hole CHEM87-33 was collared in a mottled pale salmon pink to green felsic tuff with traces of magnetite. The pink colouration is caused by hematization of the feldspars. This tuff is similar in appearance to magnetite-bearing felsic tuffs and flows in hole CHEM87-35 (163.9 and 250.9 m) on Line 47+00E. Magnetite-bearing tuffs (felsic and mafic) occur to a depth of 25.5 m. Chloritic felsic ash to lapilli tuffs with minor amounts of mafic ash tuff continue to a depth of 83.5 m.

Mafic ash tuffs and two feldspar porphyritic occur between 83.5 and 201.1 m. The flows feldspar porphyritic flows contain 2 to 3% leucoxene and may actually be gabbro sills. The flows contain an average of 1.89% TiO₂ While the tuffs average 0.70% TiO₂. This mafic sequence is similar to the one near the top of CHEM87-31 (26.1 to 118.4 m) on Line 40+00E and in the (119.5 to 139.5 middle of CHEM86-16 m) on Line 45+00E.

Felsic tuffs with less than l% pyrite and minor (<1.0 m thick) sections of mafic ash tuffs occur from 202.1 m to 265.5 m. The tuffs are light green and weakly chloritic above 231.7 m. The Fulford Fault occurs at 226.7 m and explains the VLF conductor at station The tuffs below the fault may belong to the 2+00S. "Active Tuff" but are not strongly pyritic. The strongly pyritic portion of the "Active Tuff" at this locality may have been "dyked out" by gabbro which was intersected from 265.5 m to the end of the hole. An inclusion of felsic and mafic tuffs occurs in gabbro between 338.8 and 352.3 m. The felsic interseciton may also be a fault remnant of the "Active Tuff".

Section 45+00E (Figure 17):

CHEM86-16 was drilled in 1986 to test a deep IP chargeability anomaly. The results are discussed in detail by Enns (1987). Based on a brief re-examination of the skeletal core and whole rock geochemical data some modifications have been made to the geology.

The interval between 35.9 and 75.3 m logged as dark green andesitic lapilli crystal tuffs has a felsic chemical composition. This also applies to the interval between 83.0 and 119.5 m. The interval from 119.5 to 139.5 m logged as gabbro with minor inclusions of felsic tuff is a sequence of mafic volcaniclastics and volcanics, some of which are hornblende-bearing.

With these changes, the geology in CHEM86-16 correlates along strike with holes CHEM87-33 and 34, respectively 200 m to the west and east.

Section 47+00E (Figure 18):

This section of three holes along Line 47+00E includes the following drill holes from north to south; CHEM87-34, 35 and 36.

CHEM87-35 was set up at the north edge of the powerline clearing. It intersected a long sequence of relatively barren felsic tuffs and flows, occasionally intruded by mafic dykes, with minor amounts of mafic tuff. A massive felsic feldspar porphyritic flow which may be part of a felsic dome occurs between 183.8 and 243.8 m. It is intruded by two mafic dykes near its lower contact. The flow has a pinkish tinge similar to that in the upper part of hole CHEM87-33. It contains trace amounts of disseminated magnetite. Magnetite-bearing felsic crystal lapilli tuff with clasts of pinkish flow material occur immediately above and below the flow. Mafic tuff and flow units alternate with thermal biotite-altered, quartz feldspar crystal tuff between 340.0 m and the end of the hole at 359.1 m. The hole ends in a massive mafic hornblende-bearing mafic flow.

CHEM87-34 was collared in a mafic flow and cut through barren felsic tuffs with minor mafic flows, tuffs and dykes to a depth of 169.7 m. A fault at 56 m explains the VLF anomaly at 0+90S. The sequence of mafic flows and tuffs between 63.0 and 74.6 m correlates with a similar sequence at the bottom of CHEM87-35 indicating dips of 80° north.

Mafic tuffs and flows, (some hornblendebearing), and minor felsic tuffs occur from 169.7 to 269.7 m. A narrow interval of felsic tuff with up to 15% chalcopyrite, 15% pyrrhotite and 12% pyrite occurs between 224.0 and 225.6 m. A 1.0 m sample from the top of the interval contains 0.69% Cu. A 0.2 m sample of the mafic ash tuff contains 0.76% Cu. This zone correlates in a structural sense with a similar zone between 103.6 and 107.8 CHEM87-36, but in m in hole CHEM87-36 the mineralization occurs within a thick sequence of felsic tuffs.

A fault at 271.0 m (Fulford Fault) separates mafic volcanics from felsic volcanics below and explains the VLF conductor at 2+80S.

Pyritic quartz-sericite schist ("Active Tuff") occurs from 271.0 to 324.8 m. The felsic schist contains 1 to 4% disseminated and banded pyrite. Generally the sulphide content increases downhole. This zone is probably responsible for the weak shallow and deep IP chargeability anomalies respectively centred at 2+80S and 3+00S. The best assay result from this unit is 1.0 m of 0.52% Zn starting at 280.0 m. The entire unit is slightly anomalous in Au (5 to 140 ppb). A similar but narrower zone of pyritic, quartz-sericite schist occurs between 150.7 and 156.8 m in CHEM87-36. The quartz-sericite schist/gabbro contact appears to dip 83° to the south.

Massive fine- to coarse-grained gabbro with up to 5% ilmenite occurs from 324.8 to 365.8 m. The lower contact of the gabbro dips 73° north.

At the very bottom of this hole, cherty black argillite siltstone and with minor greywacke was intersected. A medium- to dark-green, fine-grained, altered peridotite intrudes the sediments between 380.6 385.4 m. and This peridotite is identical to that intersected at the bottom of hole CHEM86-17. Cherty sediments above the peridotite contain trace to 58 fracture-controlled pyrite and an average of 3,400 ppm Ba. Below the peridotite, sediments contain an average 7,875 ppm Ba including a 2.0 m section averaging 1.1% Ba.

was CHEM87-36 collared in felsic feldspar crystal tuff. Felsic crystal tuffs with several gabbro intrusions extend to a depth of 140.6 m. This felsic succession does not correlate with the predominantly mafic rocks in hole CHEM87-34. A pyritic quartz-eye bearing tuff between 103.6 and 107.8 m contains an average of 5% pyrite, 2% pyrrhotite, trace to 2% chalcopyrite and nil to trace sphalerite. The bottom 0.8 m of the section contains up to 50% bedded pyrite with 2% chalcopyrite, and 10% pyrrhotite. A 0.8 m sample of this section assayed 0.89% Cu, 570 ppm Zn, and 55 ppb Au. This pyrrhotite mineralized horizon correlates with one between 224.0 and 225.6 m in CHEM87-34 (described above) and explains the VLF conductor at 2+40S indicating a dip of 67° north for the mineralization. The pyrrhotite mineralization appears to be a distinct and separate stratigraphic mineralization on the opposite side of the Fulford Fault from mineralization in the "Active Tuff".

A thin, epidote-spotted andesite occurs below the felsic sequence to a depth of 144.7 m. The Fulford Fault from 144.7 to 150.7 m has truncated the andesite flow.

Pyritic quartz-sericite schist of the "Active Tuff" occurs below the Fulford Fault in the interval 150.7 to 156.8 m. It contains 2 to 7% disseminated and banded pyrite. A 6.1 m interval contains 1,126 ppm Zn, 52 ppb Au and 2,318 ppm Ba. This interval correlates with a similar but thicker section of pyritic quartz sericite schist in CHEM87-34. It is truncated by an 11.3 m long section of gabbro which may be part of a larger, irregular intrusion intersected by hole CHEM87-27, whose northern contact dips 83° south.

Mafic tuffaceous sediments below this gabbro are intruded by several thin gabbro dykes which may be part of the irregular gabbro body mentioned above.

Cherty argillaceous sediments were intersected at the bottom of the hole. A 2.4 m interval of these sediments contains 2,800 ppm Ba.

Section 49+00E (Figure 19):

In 1986, two holes, CHEM86-14 and 15 were drilled on Line 49+00E to test coincident deep and shallow IP anomalies. CHEM86-14 is 200 m grid-east of CHEM87-34 and CHEM86-15 is 200 m grid-east of CHEM87-36. The results of these holes are described by Enns (1987).

Based on brief re-examination of the skeletal core and whole rock geochemistry, some changes have been made to the geology on section 49+00E. The unit logged as "sheared, dark grey-green gabbro" between 178.3 and 234.2 m in hole CHEM86-14 is dominantly a mafic tuff which in places is hornblende-bearing. The unit from 240.2 to 275.5 m logged as "variable medium gabbro" is also a mafic volcaniclastic/volcanic sequence. The section between 26.4 and 59.7 m in CHEM86-15 plotted on the 1986 section as "dark green andesitic lapilli crystal tuffs" are felsic in composition.

When these re-interpretations are plotted on sections, the geology in CHEM87-34 correlates with that in CHEM86-14. However, problems still exist in correlating between holes CHEM86-14 and 15 north of the Fulford Fault (Figure 19). This is also the case between CHEM87-34 and 36 north of the same fault, and 200 m to the west. This suggests that a shallow, south-dipping fault such as that interpreted by Enns (1986) may run between the upper portions of the holes on sections 47+00E and 49+00E.



DRILL LOGS AND SELECTED ANALYTICAL RESULTS



From

To

PROPERTY: CHEMAINUS JV

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

Hole Location: 25+00 E 0+75 S

NTS: 92B13	UTM: 5417070 N	429830 E
Azimuth: 210	Elevation: 495	m .
Dip: -55	Length: 419.	9 m

Started: 15-MAY-1987 Completed: 24-MAY-1987

Purpose: To test weak shallow IP anomalies centred at 1+40 S and 2+20 S. HOLE No: Page Number CHEM87-20 1

Claim No. CHIP 12 FRACTION Section No.: Line 25 West

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

Core Size: NO

Length	Azi- muth	Dip	Length	Azi- muth	Dip									
111.20 224.60 261.20	215.0 215.0 215.0	-56.0 -56.0 -56.0	322.20 398 .40	217.0 218.0	-55.0 -54.0									
				Sa	ample	From	То	Width	Cu	РЪ	Zn	Ag	Au	

(m) (m) -----DESCRIPTION------ No. (m) (m) (ppm) (ppm) (ppm)

DIP TESTS

- .0 66.1 OVERBURDEN AND CASING
- 66.1 98.8 SHEARED QUARTZ EYE BEARING FELSIC TUFF

Green-grey, highly sheared, crushed and contorted. Kink banding is common. Strong pervasive carbonatization and weak chloritization. The rock is soft and friable over most of the section above 90.6 m. 5 % quartz eyes 2 to 5 mm long. Trace disseminated pyrite. Foliation is at 30 degrees to core axis at 91.5 m. Possible bedding plane at 94.7 m at 30 degrees to core axis. Broken rubbly quartz vein material at lower contact. Lower contact is at 55 degrees to core axis.

64.5 65.3 Fault runs parallel to the core axis.

- 69.2 Mafic dyke 2 cm wide at 25 degrees to core axis. Fine-grained medium green.
- 69.7 69.9 Mafic dyke medium green with abundant carbonate veinlets parallel to foliation at 25 degrees to core axis. Upper and lower contacts are at 30 degrees to core axis. Trace to 1 % finely disseminated pyrite.
- 72.5 Fault at 35 degrees to core axis.
- 72.5 72.9 Fine-grained chloritic zone.
- 75.8 76.8 Occasional pyrite stringer at 40 to 50 degrees to core axis. 1 to 2 % pyrite overall.

AB20385	66.3	66.4	.1	40	n/a	50	n/a	n/a	1040
AB20386	77.3	77.4	.1	33	n/a	226	n/a	n/a	915
AB20387	93.2	93.3	.1	24	n/a	37	n/a	n/a	829

Ba

(ppb) (ppm)

(mom)





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

- 81.6 83.5 Fault zone (?). Rock is very crushed soft and friable. Fault runs parallel to core axis.
- 83.9 mm wide pyrite stringer parallel to foliation at 42 degrees to core axis.
- 84.1 84.3 Barren quartz vein at 48 degrees to core axis.
- 85.9 86.1 Fault gouge at 50 degrees to core axis.
- 86.1 90.6 Core is badly broken and rubbly. Rock is very loosely consolidated from 90.2 to 90.6 m. Weak to moderate sericite alteration. 10 % quartz eyes.
- 90.6 98.8 Weak chloritization centred on quartz eyes and fracture controlled.
- 93.1 Fine-grained felsic fragment 2 cm long oriented at 50 degrees to core axis.
- 96.1 96.3 Fault zone. Upper contact is at 47 degrees to core axis. Lower contact is at 25 degrees to core axis at lower contact.
- 96.4 4 cm wide barren quartz vein at 50 degrees to core axis.
- 96.6 8 moderate fracture controlled hematite alteration.
- 97.4 98.8 Moderate pervasive silicfication. Quartz eyes are much more abundant (up to 50%) in this section. 10 cm wide barren quartz vein at 60 degrees to core axis at 97.8 m and another 5 cm vein at 98.2 m. Broken quartz vein material from 98.5 to 98.8.
- 98.8 101.0 MAFIC TUFF

Very fine-grained and chloritic with 10 % black mud clasts. Mud clasts are streched parallel to foliation at 30 degrees to core axis. They average 5 to 10 mm in length and less than 2 mm in width. Rock contains a few specks of magnetite. Nil to trace pyrite. Lower contact is at 30 degrees to core axis.

- 99.8 100.2 Bed of quartz eye bearing felsic tuff. Upper contact is at 20 degrees to core axis and lower contact is at 30 degrees to core axis.
- 100.2 100.3 Cherty sediments. Very fine-grained moderate fracture controlled red carbonate alteration. Rock has a pinkish caste. Lower contact is at 35 degrees to core axis.

HOLE No: Page Number CHEM87-20 2

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
101.0	123.3	QUARTZ EYE BEARING FELSIC TUFF										
		Light grey-green fine-grained with darker more chloritic sections.	AB20388	108.4	108.5	.1	49	n/a	68	n/a	n/a	860
		Nil to 5% guartz eyes 2 to 3 mm in diameter. Occasional carbonate	AB20389	118.3	118.4	.1	151	n/a	130	n/a	n/a	820
		veinlet. Some carbonate veinlets contain spots of red calcite. The	AB20390	119.0	119.1	.1	36	n/a	46	n/a	n/a	1040
		rock becomes moderately sericitic with weak spotty epidote	AB20391	123.2	123.3	.1	52	n/a	52	n/a	n/a	302
		alteration below 104./ m. Nil to trace pyrite.										
		ANGLES 10 CORE ANIS:. Bedding at 102 2 m ig at 50 degrees to core avis										
		Bedding at 102.2 m is at 30 degrees to core axis.										
		Foliation at 104.5 m is at 30 degrees to core axis.										
		Bedding at 104.7 m is at 40 degrees to core axis.		· · · · ·					÷ .			
		Foliation at 106.3 m is at 30 degrees to core axis.										
		Foliation at 112.5 m is at 30 degrees to core axis.										
		Bedding at 114.5 m is at 30 degrees to core axis.										
-		Lower contact is at 40 degrees to core axis.										
		101.0 102.0 Moderate pervasive chloritzation makes rock darker										
		dreen.										
		102.0 102.3 Moderate pervasive silicification.										
		102.3 104.7 Moderate pervasive chloritization.										
		106 6 Fault at 25 degrees to save avia										

115.9 116.3 Mafic dyke. Few specks of hematite along foliation planes. Broken core at upper and lower contacts. Nil to trace pyrite.

117.3 Fault at 25 degrees to core axis.

- 118.0 119.0 Mafic dyke. Dark brown- green fine-grained massive and moderately carbonatized. Very irregular sharp upper contact at 45 to 50 degrees to core axis. Lower contact is at 40 degrees to core axis.
- 122.0 123.3 Well developed kink banding. Trace finely disseminated thermal biotite.

123.3 129.4 MAFIC DYKE

Fine-grained dark green and massive. Moderate pervasive and fracture controlled carbonate and spotty epidote alteration. Core is broken and rubbly between 126.7 and 127.0 m. Nil sulphides. Lower contact is at 80 degrees to core axis.

125.7 125.9 Quartz carbonate chlorite vein at 55 degrees to core axis. Weak hematitzation.

129.4 139.9 SERICITIC FELSIC ASH TUFF

Grey fine-grained and moderately to strongly sericitic. The

170 AB20392 126.0 126.1 .1 247 n/a 150 n/a n/a



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

foliation is contorted in many places and kink banding is common throughout the section. 1 to 3 % pyrite disseminated along foliation planes. Foliation at 130.0 m is at 60 degrees to core axis. Bedding at 132.0 m is at 55 degrees to core axis. Thermal biotite first occurs at 131.0 m and increases in intensity towards the lower contact. The upper contact is at 60 degrees to core axis and the lower contact is sharp at 65 degrees to core axis. The lower contact may be a fault.

-----DESCRIPTION------

132.2 132.4 Two clay filled slips at 35 degrees to core axis.

- 133.9 134.7 Fault zone. Fault runs at about 20 degrees to core axis. Core is broken and rubbly with a high clay content.
- 135.1 Clay filled slip 1 cm wide at 60 degrees to core axis.
- 138.3 A 5 X 10 mm patch of pyrite with a few speck of chalcopyrite.

139.9 314.4 FELDSPAR PHYRIC GABBRO

Massive dark green generally medium to coarse grained with fine-grained sections. Feldspar phenocrysts 1 to 4 mm long comprise 10 to 30 % of the rock. A fine-grained red-purple very weakly magnetic rectangular shaped mineral up to 4 mm long with a submetallic lustre (ilmenite?) comprises up to 15 % of the medium to coarse grained sections of the unit. This mineral is often rimmed by a white mineral (leucoxene ?). Nil to trace disseminated pyrite and chalcopyrite and weak fracture controlled carbonate alteration. Below 244.4 m brown carbonate is common in occasional carbonate veinlets.

147.7 152.5 Fine-grained section.

155.5 159.0 Fine-grained section. Moderate pervasive carbonatization from 155.5 to 156.7 m. Moderate pervasive chloritization from 156.7 to 159.0 m which is probably related to quartz veining. Barren quartz vein 7 cm wide runs close to the core axis from 156.7 to 156.9 m. At 157.0 m there is a 3 cm wide quartz vein at a low angle to the core axis. From 157.5 to 157.9 m there is a barren quartz vein at a low angle to the core axis. Barren 158.2 and 158.4 m is at 60 degrees to core axis and there is an irregular quartz clot from 158.7 to 158.8 m.

160.4 161.5 Fine-grained moderately chloritic section with several minor quartz +/- carbonate veins most of which are at 50 degrees to core axis.

Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
AB21840	130.0	131.0	1.0	80	14	61	(1	۲5	1600
AB21841	131.0	132.0	1.0	31	7	56	<1	< 5	1200
AB21842	132.0	133.0	1.0	47	11	53	(1)	5	1200
AB21843	133.0	134.0	1.0	48	8	54	(1	<5	1200
AB21844	134.0	135.0	1.0	24	17	118	<1	5	1600
AB21845	135.0	136.0	1.0	55	12	56	<1	<5	870
AB21846	136.0	137.0	1.0	38	31	65	<1	10	1400
AB21847	137.0	138.0	1.0	59	24	93	<1	15	1400
AB21848	138.0	139.0	1.0	144	75	198	1	35	2300
AB20393	131.7	131.8	0.1	269	n/a	856	n/a	n/a 🐇	2870
AB20394	138.9	139.0	0.1	55	n/a	56	n/a	n/a	1670

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HOLE No:

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AB21849	139.0	140.0	1.0	199	<5	89	<1	10	390
AB20395	145.3	145.4	.1	212	n/a	88	n/a	n/a	212
AB20396	157.2	157.3	.1	168	n/a	113	n/a	n/a	269
AB21850	173.6	174.6	1.0	154	<5	77	(1	< 5	110
AB21851	174.6	175.2	. 6	808	6	42	1	- 5	<20
AB21852	175.2	176.2	1.0	229	7	75	<1	10	50
AB20397	181.1	181.2	.1	320	n/a	169	n/a	n/a	158
AB21853	181.2	182.2	1.0	192	8	61	<1	5	70
AB21854	182.2	183.0	. 8	204	13	51	(1	(5	90
AB21855	183.0	184.0	1.0	145	6	76	(1	10	<20
AB20398	186.0	186.1	.1	227	n/a	97	n/a	0	165
AB21856	192.8	193.8	1.0	382	6	72	(1	10	150
AB21857	193.8	194.8	1.0	1043	21	221	<1	20	120
AB21858	194.8	195.3	.5	96	12	93	(1	<5	50
AB21859	195.3	195.8	.5	2269	6	106	2	10	100
AB21860	195.8	196.8	1.0	158	10	92	(1	< 5	60
AB20399	197.2	197.3	.1	361	n/a	101	n/a	n/a	114
AB20400	240.4	240.5	.1	244	n/a	89	n/a	n/a	141
AB20401	275.8	275.9	.1	179	n/a	88	n/a	n/a	157
AB20402	315.6	315.7	.1	48	n/a	15	n/a	n/a	1040
AB20404	328.2	328.3	1	61	n/a	<10	n/a	n/a	1450
AB21861	312.8	313.8	1.0	719	- 9	79	(1)		70
AB21862	313.8	314.4	.6	4300	7	107	4	85	<20





HOLE No: Page Number CHEM87-20 5

From	To		
(m)	(m)	DESCRIPTION	

164.4 164.7 Barren quartz vein at 50 degrees to core axis.

173.4 173.6 Strong epidote alteration probably related to 2 cm wide quartz vein at 80 to degrees to core axis at 173.5 m.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

- 174.0 175.2 Fine-grained chloritic section probably related to quartz veining at 174.1 m 3 cm wide quartz vein at 40 degrees to core axis. Quartz pod with trace chalcopyrite along its edges at 174.2 m. From 174.6 to 175.2 m quartz carbonate chlorite vein at 20 degrees to core axis with 0.5 to 1 % chalcopyrite.
- 180.3 181.6 Moderate fracture controlled carbonatization. Many 1 to 4 mm wide carbonate filled gashes at 50 to 65 degrees to core axis.

182.0 182.2 Moderate epidote alteration centred on feldspars.

- 182.2 189.0 Rock is moderately chloritic. The chlorite occurs in clots up to 3 cm in diameter. The section contains 1 % pyrite overall and from 182.2 to 183.0 m 3 % disseminated pyrite. Few specks of chalcopyrite associated with a small guartz carbonate chlorite clot at 186.8 m and minor chalcopyrite in guartz veinlets at 188.4 m.
- 190.1 Quartz carbonate chlorite vein 3 cm wide at 40 degrees to core axis with several specks of chalcopyrite.
- 190.2 Chlorite slip at 53 to degrees to core axis.
- 193.0 Quartz carbonate vein with chlorite biotite and 1 to 2% chalcopyrite 3 cm wide at 50 degrees to core axis.
- 193.8 194.8 1 to 3 % fracture controlled pyrite and trace chalcopyrite. Most fractures are at 30 to 50 degrees to core axis.
- 194.8 5 cm wide barren quartz carbonate vein at 50 degrees to core axis.
- 195.3 195.7 Irregular quartz carbonate clot with 1 % chalcopyrite.
- 195.8 202.6 Fine-grained section. Only occasional feldspar phenocrysts. From 200.9 to 201.2 m a barren 2 cm wide guartz carbonate vein runs parallel to core axis.
- 203.3 206.3 Several minor quartz veins less than 1 cm wide at 30 degrees to core axis.

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

211.5

213.0

From To (m) (m)



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample From To Width Cu No. (m) (m) (m) (ppm) I cm quartz vein at 40 degrees to core axis is cut by a quartz veinlet running parallel to the core axis. Small patch of purple carbonate.

- 215.0 215.5 Moderate fracture controlled carbonatization. Carbonate filled hairline fractures are at 65 to 80 degrees to core axis.
- 217.2 218.6 Zone of strong pervasive carbonatization. The zone has sharp upper and lower contacts. Upper contact is at 46 degrees to core axis and lower contact is at 50 degrees to core axis.
- 226.0 Quartz calcite vein 1.5 cm wide with trace chalcopyrite at 20 degrees to core axis.
- 227.1 227.3 Very coarse-grained section at 55 to 60 degrees to core axis.
- 227.2 Trace chalcopyrite associated with 3 cm wide zone of quartz flooding.
- 228.0 244.4 Fine-grained section. Less than 5 % feldspar phenocrysts. Speck of chalcopyrite at 233.3 m. Strong pervasive carbonatization from 240.1 m to 244.4 m. Carbonate vein 6 cm wide at 78 degrees to core axis at 242.6 m.
- 249.0 249.4 Minor fault zone. Clay filled slip at a low angle to the core axis.
- 249.6 Carbonate filled slip at 40 degrees to core axis.
- 261.0 261.4 Chloritic zone at 20 to 30 degrees to core axis associated with a 1.5 cm wide barren quartz vein at 25 degrees to core axis.
- 267.6 267.7 Zone of strong pervasive carbonatization at 65 degrees to core axis.
- 268.0 268.1 Barren quartz carbonate vein at 40 degrees to core axis.
- 268.7 Quartz carbonate vein 1 cm wide at 68 degrees to core axis with specks of chalcopyrite.
- 272.3 273.6 Barren quartz vein with carbonate filled microfractures. Broken core at upper contact. Lower contact is at 24 degrees to core axis.
- 277.2 277.9 Fine-grained chloritized section with several specks of

HOLE No: Page Number CHEM87-20 6

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
FALCONBRIDGE LIMITED

DIAMOND DRILL LOG



HOLE No: Page Number CHEM87-20 7

From (m)	To (m)	DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		chalcopyrite at 277.8 m.		. *									

- to 30 degrees to core axis.
- 291.6 4 mm wide speck of chalcopyrite.
- 281.8 292.0 Two barren quartz carbonate veins 5 cm wide at 75 to 80 degrees to core axis.

287.0 287.2 Numerous brown carbonate veins less than 1 cm wide at 0

- 293.1 5 cm wide quartz carbonate vein at 58 degrees to core axis with a bleb of chalcopyrite.
- 299.5 299.8 Broken core.
- 301.5 301.9 Chloritic slip runs along core axis. Core is broken and rubbly over most of this section.

303.0 Bleb of chalcopyrite 5X10 mm.

- 304.0 Thin (less than 5 mm wide) chlorite veinlets running parallel to core axis.
- 313.8 314.4 Quartz vein with carbonate filled microfractures and 1 to 2% chalcopyrite at 75 degrees to core axis.

314.4 334.9 FELSIC ASH TUFF

Grey fine-grained very siliceous and microfractured with nil to 5 % quartz eyes 2 to 4 mm in diameter. Moderately sericitic and weakly to strongly silicified. Occasional spots of mariposite. Overall 1 to 2 % pyrite and nil to trace chalcopyrite. Bedding is at 65 degrees to core axis at 321.0 m and at 326.6 m is at 50 degrees to core axis. Foliation at 321.5 m is at 40 degrees to core axis. Lower contact is at 25 degrees to core axis.

- 314.6 315.1 Bleached very siliceous section at upper contact with nil sulphides.
- 315.1 315.6 2 to 3 % pyrite concentrated along foliation planes at 50 degrees to core axis.
- 316.0 316.8 3 to 5 % pyrite and trace chalcopyrite. Most sulphides are in bands parallel to to foliation (or bedding ?) at 40 degrees to core axis.
- 317.5 Angular chloritic clast (?) 5 mm in diameter.
- 318.0 Clast of felsic ash tuff with 3 % disseminated pyrite.
- AB21863 314.4 315.4 575 1.0 <5 37 <1. <5 650 AB21864 315.4 316.0 167 7 <5 . 6 8 <1 810 AB21865 316.0 317.0 129 11 7 (1 ć5 1100 1.0 AB21866 317.0 318.0 1.0 41 9 8 (1 (5 820 AB21867 318.0 319.0 1.0 85 16 7 2 <5 810 AB21868 319.0 320.0 1.0 135 (1 840 11 4 <5 AB21869 320.0 321.0 1.0 125 6 3 <1 <5 1100 32 5 AB21870 321.0 322.0 1.0 1 <1 (5) 1000 AB21871 322.0 323.0 <5 1.0 12 2 <1 <5 920 AB21872 323.0 324.0 1.0 24 <5 1 (1 <5 1100 AB21873 324.0 325.0 1.0 36 ٢5 1 (1 (5 1200 AB21874 325.0 326.0 1.0 247 <5 46 (1 5 980 AB21875 326.0 327.0 1.0 126 7 4 <1 <5 940 AB21876 327.0 328.0 47 4 <5 1200 1.0 6 (1 AB21877 328.0 329.0 1.0 40 5 3 <1 <5 1100 AB21878 329.0 330.0 1.0 53 <5 9 (1 <5 950 AB21879 330.0 331.0 1.0 63 7 <1 (5 880 6 AB21880 331.0 332.0 1.0 79 <5 3 <1 10 890 <1 AB21503 332.0 333.0 1.0 148 13 5 (5 1000 AB21504 333.0 334.0 1.0 127 8 7 **X1** (5) 860 AB21505 334.0 334.9 . . 9 158 12 12 (1 5 1000

318.0 319.0 2 % pyrite.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From То (m) (m)

319.0 320.0 2 to 3 % pyrite nil to trace chalcopyrite.

2 cm wide pyrite stringer (?) at 40 degrees to core 320.4 axis. Rock is moderately silicified along edge of the stringer.

-----DESCRIPTION------

- 320.4 321.0 2 to 3 * pyrite.
- 321.7 323.0 3 % pyrite concentrated along foliation planes at 44 degrees to core axis.
- 323.2 Grey very fine-grained siliceous 20 X 4 mm clast with 30 % fine dusty pyrite.
- 323.5 10 cm wide silcified zone with 5 % pyrite at 55 degrees to core axis.
- 323.7 1 cm wide clay-filled slip at 40 degrees to core axis.
- 324.0 Clay-filled slip at 65 degrees to core axis.
- 324.0 324.1 Silicified zone with 5 to 6 % pyrite.
- 325.2 325.4 Green-brown fine-grained mafic dyke with 2 % disseminated pyrite. Upper contact is at 55 degrees to core axis and lower contact is at 80 degrees to core axis.
- 325.9 327.2 5 % pyrite concentrated in 1 to 2 mm wide bands parallel to foliation at 48 to 50 degrees to core axis.
- 327.5 328.2 5 % pyrite concentrated along foliation planes at 50 degrees to core axis.
- 328.7 Clay filled slip at 15 degrees to core axis.
- 329.1 329.5 4 % pyrite concentrated along foliation planes at 50 degrees to core axis. Foliation appears to be parallel to bedding here.
- 330.4 334.9 3 to 5 % pyrite concentrated in bands 1 to 3 mm wide parallel to to foliation and bedding. From 330.4 to 331.0 m foliation and bedding are at 45 to 40 degrees to core axis. From 331.0 to 333.0 m foliation and bedding are at 40 to 35 to degrees to core axis. From 333.0 to 334.9 m kink banding is weakly to moderately developed and foliation is at 25 degrees to core axis. Broken core from 333.1 333.4 m.

HOLE No: Page Number CHEM87-20 8

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)







HOLE No: CHEM87-20 Page Number 9

•	NOI DAI	FALCONBRIDGE LIMITED DIAMOND DRILL LOG							CHEM87-20 9								
From (m)	To (m)		*****	DESCRIPT	ION		•	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
334.9	337.6	GREEN FELSI Light green chloritized Bedding at at 50 degree	IC QUARTZ I n with 10 % 1 and mode 336.9 m is sees to core	YE TUFF quartz eyes 1 rately sericit at 40 degrees axis.	to 2 mm cic. Trace to core a	in diamet dissemina xis. Low	er. Weakly ited pyrite. ver contact is	1719 1 1									
337.6	378.4	MIXED MAFIC Green ash t chert beds	C TUFFACEOU tuff with u (< 1.0 cm)	S SEDIMENTS p to 10 % che wide. Moder	erty lithic ate therma	fragment 1 biotite	s and thin alteration.	AB20403 AB20405 AB20406	338.2 347.6 358.7	338.3 347.7 358.8	.1 .1 .1	95 68 97	n/a n/a n/a	106 109 93	n/a n/a n/a	n/a n/a n/a	1360 1090 631
		BEDDING AND Bedding is Bedding is Bedding is Bedding is Bedding is	GLES:. at 50 degn at 45 degn at 65 degn at 58 degn at 28 degn	ees to core av ees to core av ees to core av ees to core av ees to core av	tis at 338. tis at 340. tis at 353. tis at 357. tis at 368.	5 m. 7 m. 8 m. 0 m. 0 m.											
		337.9 338.0) Two 5 cm minor pyr	thick sections ite at 50 to 5	of finel 5 degrees	y bedded to core a	chert with xis.			5 a ær⊀							
		340.1	Minor fau	lt at 85 degre	es to core	axis.											
		340.1 340.7	7 FELSIC TO block si medium gr	INTERMEDIATE zed clasts com een and is onl	LAPILLI T prise 5 % y weakly	UFF. Cher of the r biotite a	ty lapilli to ock. Rock is ltered.	2) 									
		342.0	10 X 3 mm	sulphide cla	st (pyrite).											
		357.1 360.9	FELSIC TO m. Lower	INTERMEDIATE contact is at	LAPILLI T 45 degrees	UFF. As 3 to core	40.1 to 340. axis.	7				lang sala Karang sala					
		367.7	Graded be cm thick	ds of green t at 28 degrees	uffaceous to core a	sediment xis fine	less than 1.0 up hole.										
		371.0	1.0 cm wj several o few blebs	de quartz vein uartz veins at of chalcopyri	at 35 deg 35 degree te.	rees to c s to core	ore axis with axis with a										
		374.0 376.9	Intense t	hermal biotit	e alterati	on.											
		376.9 378.4	Strong pe	rvasive carbo	natization	•											
			× 1														
378.4	397.0	HORNBLENDE- Medium gree hornblende lithic cla contact is mafic unit	BEARING MA en massive crystals 2 asts up to gradationa in hole B	FIC TUFF fine-grained w to 5 mm in d 1.2 cm long. N l over 10 cm. F87-2.	rith 5 to 7 Liameter an Fil to trac Compare w	% black d up to 5 e pyrite ith hornb	subhedral % pale green . Lower lende bearing	AB20407 AB20408	382.3 388.4	382.4 388.5	.1 .1	92 87	n/a n/a	53 51	n/a n/a	n/a n/a	250 320



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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From	To			Gammla	Busen	.				-			
			1. S.	рашћте	FLOM	10	widin	- Cu	PD	Zn	AÇ	Au	ва
(m)	(m)	DESCRIPTION		No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

S. Marson

378.4 378.7 Moderate pervasive carbonate alteration.

390.5 391.0 1 cm wide quartz vein running parallel to the core axis.

397.0 413.2 MAFIC LAPILLI TUFF

Similiar to 378.4 to 397.0 m except more lithic lapilli sized clasts (3 to 10 %) and fewer hornblende crystals (<5 %). Weakly to moderately carbonatized. Nil to trace pyrite. Foliation is at 35 degrees to core axis at 398.6 m and at 33 degrees to core axis at 412.7. Possible bedding plane at 55 degrees to core axis at 409.4 m. Lower contact is at 52 degrees to core axis.

400.7 402.6 Strong pervasive carbonatization.

405.0 406.0 Moderate fracture carbonatization. Trace disseminated pyrite.

406.6 408.0 5 % hornblende as 2 to 5 mm crystals.

410.0 3 cm wide quartz carbonate vein at 62 degrees to core axis with 5 % pyrite in vein and immediate wall rock.

413.2 419.9 CHERTY MAFIC TUFFACEOUS SEDIMENTS

Very fine-grained dark green and chloritic. 2 to 5 % pyrite concentrated in microfractures and disseminated. A 1.0 cm wide graded bed at 70 degrees to core axis at 414.4 m fines up hole. Bedding at 416.0 m is at 40 degrees to core axis.

413.2 413.5 Thermal biotite alteration.

416.7 419.9 Drill bit and part of core barrel lost. Core is broken and mixed up. Section is a mixture of cherty mafic sediments and hornblende bearing mafic lapilli tuff. AB20409 408.1 408.2 .1 97 n/a 50 n/a n/a 360

AB20410 415.3 415.4 .1 83 n/a 57 n/a n/a 230



FALCONBRIDGE LIMITED

DIP TESTS

DIAMOND DRILL LOG

PROPERTY: Chemainus J.V. - Chip Claims

Hole Location: 26+00 E 2+00 N

NTS: 092/	/B13	UTM: 541728	80 N/ 430050 H
Azimuth:	210	Elevation:	510 m
Dip:	-50	Length:	495.3 m

Started: May 19, 1987 Completed: May 26, 1987

Purpose: To determine geology and stratigraphy north of the mineralized horizon.

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Claim No. CHIP1 Section No.: Line 26+00 East

Logged By: David P. Money Drilling Co.: Burwash Enterprises, Cobble Hill Assayed By: Bondar-Clegg, Vancouver and X-Ray Assay, Don Mills

Core Size: NO

		Length	Azi- muth	Dip	Length	Azi- muth	Dip	• •								
		41.3 2	207.0	-49.0	33 4. 06	207.0	-40.0									
		166.42 267.00	207.0 207.0	-45.0 -42.0	459.03 495.30	213.0 214.0	-37.0									
From (m)	To (m)	 DESCRIPTIO	N				Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (pom)	Ag (ppm)	Au (ppb)	Ba (ppm)

.0 6.7 OVERBURDEN AND CASING

6.7 20.4 FELSIC CRYSTAL TUFFS

Felsic crystal tuff with feldspar crystals at the top of the unit, approximately 15 % 1 mm, and feldspar and quartz crystals at the base of the unit. The tuff is sericitized with the foliation at 40 to 50 degrees to core axis. Minor quartz - carbonate veining occurs in the upper 2 m. The core is oxidized to a depth of 39.5. The tuff locally grades into intermediate chloritic tuffs with trace pyrite, from 11.3 to 11.6. Possible faults at 17.5 and 19.5, where carbonate rubble lines fractures at 80 to 90 degrees to core axis. Blocky, highly fractured core occurs from 14.3 to 14.7, 19.0 to 20.0. Minor local disseminated trace pyrite occurs. Trace lapilli sized clasts occur. Zones in the core are locally contorted. Apparent bedding is at 42 to 44 degrees to core axis.

AB18969	7.0	8.0	1.0	5	10	38	<1	<5	900
AB15417	9.2	9.3	.1	5	8	26	<1	<5	878
AB18970	11.0	12.0	1.0	19	16	47	<1	<5	1200
AB15418	18.4	18.5	.1	20	n/a	20	n/a	n/a	1050

20.4 20.8 INTERMEDIATE TUFF

Fine-grained green ash tuff with contorted alternating chlorite and carbonate. There are soft sediment slump (?) features. There is a sharp upper contact and contorted wavy lower contact. The foliation is at 40 degrees to core axis.

20.8 44.2 FELSIC CRYSTAL TUFFS

Alternates with bands of the above INTERMEDIATE TUFF, which locally hosts trace to 0.5 % pyrite in micro-bands parallel or sub-parallel to bedding. These chlorite - carbonate meta-tuffs are found from 21.4 to 22.0, 22.5 to 24.0, 30.9 to 31.1, 36.5 to 36.6,

AB15419 23.0	23.2	.2	94	10	97	<1	<5	892
AB15420 31.1	31.3	.2	28	n/a	12	n/a	n/a	783
AB18971 37.4	38.4	1.0	34	10	67	<1	<5	890
AB15421 39.8	39.9	.1	20	n/a	14	n/a	n/a	1150

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

(m) -----DESCRIPTION------

37.4 to 38.2 38.4 to 38.6, 42.5 to 42.6 and 42.7 to 42.8.

Rhyolitic quartz and feldspar crystal tuff with approximately 15 % crystals. Trace local pyrite cubes occur. The tuff locally varies to rhyo-dacitic in composition. The foliation is at 63 degrees to core axis, foliation is imparted by sericite. Minor contorted zones are found locally. The bedding appears to be sub-parallel to schistosity at approximately 58 to 61 degrees to core axis. There are minor local quartz veins. Quartz eye content increases with depth. Minor local quartz veins of approximately 1 cm at 80 degrees to core axis , that contain no sulphides, comprise up to 1 % of the rock starting at 30.0. FAULT ZONE with blocky, highly fractured core and ground carbonate occur from 31.0 to 31.5, 38.0 to 38.3, and from 39.5 to 39.8 with the last fault plane is oriented at 24 degrees to core axis. Minor kink banding occurs locally from 40 to end.

- 44.2 121.4 QUARTZ SERICITE SCHIST WITH LOCAL CHLORITE SCHIST AND CHERT BEDS Quartz sericite schist after felsic tuff with minor chert interbeds and with local bands of intermediate tuff with mud clasts and carbonatization with trace pyrite.
 - 44.2 50.1 Dacitic quartz and feldspar crystal tuff which has graded into rhyolitic quartz and feldspar crystal tuff by 50.1. The rock has been subjected to moderate pervasive carbonatization and weak to moderate chloritization. There is local quartz - carbonate veinlets. Minor chert beds and mudstone lapilli are present. Bedding is at 53 to 66 degrees to core axis and the foliation is at 20 to 40 degrees to core axis.
 - 50.1 56.4 Quartz sericite schist with quartz and feldspar crystals. Locally contorted into kink bands. Minor local disseminated pyrite in trace amounts. From 52.3 to 52.7 alternating chlorite tuffs and chert. Apparent bedding is at 54 degrees to core axis. Local quartz - carbonate veins occur.
 - 56.4 76.3 Intermediate crystal tuff with felsic crystal tuff interbeds and local chert beds and minor chert sequences. Tuffs and cherts are locally cross-cut by carbonate veinlets. At 60.8 20 cm quartz chlorite vein with no sulphides. Bedding at 63.5 is at 46 degrees to core axis and at 68.7 is at 54 degrees to core axis. Tuff composition varies by visual estimate from andesitic to rhyolitic with invisible gradational contacts. Locally contorted with kinks appearring towards the end.
 - 76.3 79.3 Highly contorted chloritic intermediate tuff with moderate to strong carbonatization. Minor fault slips, and fault clay occur at 78.5.
 - 79.3 85.4 Andesitic to dacitic green chlorite sericite schist with quartz eyes. Weak to moderate contortions and local quartz - chlorite veinlets. Minor local chert clasts. The

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

AB15422	51.3	51.4	.1	25	n/a	23	n/a	n/a	778
AB18972	52.6	53.6	1.0	11	16	9	<1	< 5	700
AB17200	58.0	59.0	1.0	18	9	41	<1	< 5	950
AB18451	59.0	60.0	1.0	22	9	53	· <1	< 5	1200
AB15423	60.3	60.4	.1	55	n/a	113	n/a	n/a	1130
AB18452	60.0	61.0	1.0	14	7.	36	. (1	<5	930
AB18453	61.0	62.0	1.0	13	7	38	<1	<5	780
AB15424	73.0	73.1	.1	5	2	32	<1	<5	860
AB15425	88.2	88.4	.2	90	<2	72	<1	<5	99
AB18973	88.5	89.5	1.0	49	6	42	(1	< 5	370
AB18974	89.5	91.0	1.5	59	14	54	(1	< 5	490
AB18975	91.0	92.0	1.0	68	10	77	(1	<5	660
AB18976	92.0	93.0	1.0	34	9 .	63	<1	<5	470
AB18977	93.0	94.0	1.0	25	6	50	(1	<5	940
AB15426	99.6	99.7	.1	22	n/a	28	n/a	n/a	980
AB15427	111.0	111.1	.1	44	n/a	48	n/a	n/a	848





FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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

foliation is at 58 degrees to core axis.

- 85.4 93.8 Chlorite schist with trace pyrite and carbonate veinlets. Pyrite has undergone hematitzation and rock has been subjected to strong carbonatization. The intermediate ash tuff (?) is highly contorted and there are numerous local fault slips. Pyrite and (?) hematite, after pyrite, is disseminated in the chlorite and comprises up to 1 % of the rock.
- 93.8 97.0 Dacitic quartz crystal tuff which grades into rhyolitic tuff by the end. Sericite - chlorite - quartz schist with local carbonate veinlets and minor local chert beds.
- 97.0 121.4 Felsic quartz crystal tuff with minor chert beds of green, white or red and local quartz - carbonate chlorite veins. Locally is a massive siliceous rock or is very sericitic, trend is to become more siliceous at depth the foliation averages 50 degrees to core axis and bedding is at 43 degrees to core axis (chert at 107.3). Nil to trace sulphides are present.

121.4 137.4 GABBRO

Sharp upper and lower contacts are present. The gabbro is locally coarse to fine grained with epidote metacrysts after feldspar phenocrysts. The rock is locally foliated at 18 degrees to core axis. There are local quartz - chlorite veins of up to 30 cm which do not host sulphides. There is blocky, highly fractured core from 125.5 to 128.5 with 30 cm of lost core prior to 128.3.

137.4 350.5 FELSIC TUFF

- 137.4 151.4 Rhyolitic tuff with weak sericitization and 10 to 20 % epidote grains. Bedding appears to be sub- parallel to the foliation, which is at 55 degrees to core axis. Minor INTERMEDIATE FINE GRAINED SILL OR DYKEs from 139.5 to 139.6 and from 139.7 to 140.0. Rock is weakly carbonated. From 146 to the end there is micro-faulting, kinking and cherty interbeds, which lie parallel to to the foliation (approximately 60 degrees to core axis).
- 151.4 154.0 Similar to the above tuff, but has less epidote, approximately 3 %, and has quartz crystals, approximately 2 %, up to 1 mm to 2 mm. More contorted and kinked than above. At 153.3 a 2 mm band of pyrite and (?) sphalerite occurs.
- 154.0 155.4 Sericite schist. Minor local chlorite schist interbeds. Trace pyrite occurs parallel to to the schistosity, which is at 60 degrees to core axis. From 154.9 to 155.1 there is sericite rubble. Approximately 5 % total quartz and feldspar crystals of up to 1 mm in diameter are present.

155.4 156.6 Quartz - sericite schist with quartz eyes and feldspar

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Sample	From	То	Width	Cu	Pb .	Zn	λq	Au	Ba
No.	(m)	(m)	(m)	(mag)	(ממככו)	(תמס)	(מממ)	(dag)	(mag)

AB15428	127.0	127.2	.2	169	n/a	123	n/a	n/a	223	
AB15429	129.9	130.0	.1	191	n/a	85	n/a	n/a	128	
AB15430	141.9	142.0	.1	25	64	98	(1	۲5	1620	
AB18978	152.2	153.2	1.0	15	10	70	(1	<5	970	
AB18979	153.2	153.3	.1 .1	8	11	17	<1	< 5	1200	
AB18980	153.3	154.3	1.0	6		28	<1	<5	1100	
AB18981	154.3	155.4	1.1	2	13	15	<1	<5	820	
AB15431	155.8	155.9	.1	30	0.5	42	n/a	n/a	892	
AB18982	160.0	161.0	1.0	8	< 5	23	(1	< 5	1200	
AB15432	162.8	163.0	.2	22	n/a	34	n/a	n/a	1120	
AB18983	168.0	169.0	1.0	4	11	28	<1	< 5	920	
AB15433	172.0	172.2	.2	25	n/a	24	n/a	n/a	1260	
AB18984	172.5	173.5	1.0	26	9	33	(1	< 5	820	
AB18985	173.5	173.6	1	23	< 5	5,9	<1	<5	70	
AB18986	173.6	173.8	.2	22	< 5	103	· (1 ·	<5	1100	
AB18987	173.8	174.8	1.0	9	7.	26	<1	<5	830	
AB18988	174.8	175.2	.4	69	11	31	<1	< 5	800	
AB18989	175.2	175.4	.2	- 68	24	49	1 -	< 5	920	
AB18990	175.4	176.4	1.0	12	7	-34 -	(1	< 5	860	
AB18991	176.4	177.4	1.0	· 5	11	29	· · · (1	< 5	730	
AB15434	185.1	185.2	1	23	n/a	33	n/a	n/a	1110	
AB18992	195.0	196.0	1.0	13	<5	53	<1	< 5	830	
AB18993	196.0	197.0	1.0	8	6 :	36	i ∢1	·<5	870	

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From	То		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb) (ppm)
		crystals. Minor local kinking is present with the	AB18994	197.0	198.0	1.0	17	10	42	<1	<5	760
		foliation at approximately 40 degrees to core axis.	AB15435	198.7	198.8	.1	27	n/a	47	n/a	0	907
		Minor fault slip at 155.7 at 85 degrees to core axis	AB18995	198.0	199.0	1.0	31	< 5	41	<1	< 5	930
		with carbonate dominated clay.	AB18996	201.0	202.0	1.0	17	< 5	40	(1	< 5	840
	156.6 1	57.1 Chlorite schist with quartz - carbonate - epidote veins	AB15436	204.9	205.0	.1	31	n/a	48	n/a	n/a	1060
		and veinlets and trace to nil pyrite cubes.	AB15437	225.0	225.1	.1	27	n/a	26	n/a	n/a	1010
	157.1 1	64.2 Quartz - sericite - chlorite schist. Locally has quartz	AB18997	236.5	237.5	1.0	18	8	63	(1	< 5	1000
		eyes, quartz - carbonate veins, and kinking. Trace	AB15438	237.8	237.9	.1	25	n/a	41	n/a	n/a	1130
		pyrite in micro- bands and rare cubes throughout.	AB18998	243.3	244.4	1.1	28	12	170	<1	< 5	850
		Local minor fault slips at approximately 80 degrees to	AB18999	247.3	248.5	1.2	17	12	107	<1	<5	790
		core axis at 157.5 and 158.5.	AB19000	248.5	249.5	1.0	26	13	133	. <1	<5	1200
	164.2 1	65.0 Mafic dyke. Black to dark green chlorite occurs for 15	AB15439	250.2	250.4	.2	10	10	35	<1	. ₹5	974
		cm at the sharp upper contact and for 2 cm at the	AB15440	265.8	265.9	.1	12	<2	48	· <1	<5	1220
		lower. Has minor epidote - carbonate veins and is	AB17151	269.8	270.8	1.0	35	10	47	<1	< 5	630
		epidote phyric, 3 to 4% 1mm grains.	AB17152	270.8	271.2	.4	64	13	100	<1	<5	760
	165.0 1	73.5 Moderate sericitic quartz eye bearing felsic tuff with	AB17153	271.2	272.2	1.0	23	6	41	<1	<5	630
		local chlorite schist beds of up to 25 cm. At 168.6 a	AB15441	275.1	275.2	.1	60	n/a	52	n/a	n/a	1250
		up to 1 mm pyrite stringer is found, there is also	AB15442	286.1	285.2	.1	13	- 6	19	<1	21	1080
		much up to 1 % disseminated pyrite as local blebs. The	AB17154	285.5	286.4	.9	8	11	5 5	<1	< 5	890
		foliation is at 43 degrees to core axis and there is	AB17155	286.4	287.4	1.0	9	8	4	. <1	× K5	830
		bedding (?) at 46 degrees to core axis. It is locally	AB15443	287.4	287.6	.2	221	0	95	n/a	0	667
		weakly contorted.	AB17156	288.0	288.6	.6	75	6	60	<1	<5	780
	173.5 1	73.8 Chlorite schist, upper half is banded chlorite,	AB15444	295.4	295.6	.2	56	0	42	n/a	0	1080
		carbonate and sericite with local pyrite bands, pyrite	AB17157	299.6	300.6	1.0	63	11	99	. (1	×5 ·	890
		is fine-grained and is up to 1 %, and the lower is	AB17158	300.6	302.0	1.4	27	14	44	< (1	<5	860
		massive chlorite with minor carbonate veins and no	AB17159	302.0	303.0	1.0	34	14	170	<1	<5	990
		sulphides the upper foliation or bedding (?) is at	AB17160	303.0	304.1	1.1	9	36	115	· (1)	<5	800
		approximately 30 degrees to core axis, but it varies	AB17161	304.1	305.4	1.3	96	10	113	<1	<5	530
		from weakly to strongly contorted.	AB17162	305.4	306.1	.7	6	. 8.	39	<1	<5	890
	173.8 1	74.9 Felsic guartz eye tuff, { moderately schistose guartz -	AB17163	306.1	306.2	.1	64	5	127	(1	<5	1500
		sericite 'schist'). Contains 3 % approximately 3 mm	AB17164	306.2	307.0	.8	24	8	27	<1	<5	930
		quartz eyes and trace disseminated pyrite. The foliation	AB17165	307.0	308.0	1.0	18	10	29	<1	<5	950
		is at 54 degrees to core axis.	AB17166	308.0	309.0	1.0	14	8	52	(1	<5	990
	174.9 1	87.4 Intermediate to felsic tuff, locally is cherty, is grey	AB17167	309.0	310.0	1.0	39	9	65	(1	<5	980
		to green and contains 5 to 15 % guartz eves and	AB17168	310.0	310.2	.2	105	10	192	(1	<5	1700
		feldspar crystals of up to 1 to greater than 3 mm in	AB17169	310.2	311.5	1.3	18	10	63	<1	<5	970
		diameter. Local pyrite stringers, up to 1 mm thick and	AB17170	311.5	312.2	.7	50	14	78	(1	<5	80
		up to 1 %, from 175.2 to 175.4 and local disseminated	AB15445	315.9	316.0	.1	43	0	37	n/a	0	1270
		pyrite. Chlorite and guartz - carbonate locally from	AB17171	321.0	322.0	1.0	43	9	68	(1	(5	980
		186.5 to lower contact.	AB17172	322.0	323.0	1.0	44	7	47	(1	<5	1000
	187.4 1	95.2 Quartz - sericite schist with local ripped up mm scale	AB17173	323.0	324.0	1.0	77	7	71	(1)	(5	1000
		chert beds and trace guartz eves. For upper 50 cm	AB17174	324.0	325.0	1.0	.87	7	96	1	. (5	720
		there is a possible fault zone. It is moderately	AB17175	325.0	326.0	1.0		10	95	(1	(5	810
		contorted and kinked. Minor guartz - feldspar -	AB17176	326.0	326.3		32	8	109	(1		110
		carbonate veing in the unner metre. The foliation is at	1817177	326 3	326 7	4	2	10	63	(1	(5	1200
		53 degrees to core avis and hedding (based on 4.3 mm	AB17178	227 3	328 1		5	15	67	21 ·····	25	1200
		chert hode) is at 48 dograps to core avis There is	AB17170	228 1	320.1	1 0	Л	, J	54	/1	25	1200
		annovimataly nil sulnhidas with un to trace surite	AD1/1/5	320.1	320 7	1	17		200	/1		1520
1.1	195 2 1	approximately nil sulphiles with up to trace pylite.	AD10440	222.0	220 1	1 0	20	- 0	100	1		1100
	175.4 1	when the state to maile tuil, children schill with minor	AD17404	347.1	221 4	1.0	47 E C	10	105	(T.	·()	1400
		quarez eyes and chronice - carbonate zones from 195.2	ADI/IQT	220.1	227.1	1.0	30	10	140	(1	(3	T400

AB17182 331.1 332.1 1.0

35

5

159

<1

<5 1200

to 195.7 and from 198.0 to 198.4. 0.2 m of lost core

HOLE No: Page Number CHEM87-21 4

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

> at 195.4. Trace to 0.5 % pyrite as stringers and disseminations in both the altered and unaltered zones. Foliations occur at 20 and 70 degrees to core axis.

----DESCRIPTION------

- 199.0 207.7 Dacitic to rhyolitic quartz and feldspar crystal tuff with substantial chert component towards the lower contact. Minor quartz - carbonate - chlorite veins occur and at 201.5 there is the largest vein trace pyrite cubes on the contact of the 15 cm vein with the tuffs. Bedding is at 45 degrees to core axis and is locally contorted.
- 207.7 211.0 Mafic tuff which has been chloritized and carbonitized. Has a gradual transition to intermediate in composition by the lower contact. Has approximately 10 % stretched epidote grains and minor carbonate yeining. The foliation is at 51 degrees to core axis.
- 211.0 234.0 Felsic quartz and feldspar crystal tuff with a considerable sedimentary component. The tuff composition also very locally varies from felsic to intermediate. Local quartz veining is present, especially from 214 to 215 where there are 6 5 to 10 cm veins. FAULT ZONEs occur from 219 to 219.8 and from 220.8 to 220.9 with blocky, highly fractured core and clay. The sedimentary component is mainly white and green chert, but some calcite is also added minor trace pyrite cubes occur. The rock is kinked and contorted. Bedding is at 51 degrees to core axis.
- 234.0 235.0 Brown-purplish green chlorite schist with rotated pink calcite grain, greater than 1 cm and trace greater than 1 cm pyrite cubes. The rock is very strongly carbonatized and it hosts numerous carbonate veinlets and veins. The foliation is at 51 degrees to core axis.
- 235.0 243.3 Cherty felsic to intermediate feldspar crystal tuff. Very disky sub-unit due to the chert beds. Local zones of sericitic, and chloritic natures. Minor local quartz - carbonate veining occurs. Locally kinked and contorted. Trace pyrite stringers occur near and at 237. Bedding is at 55 degrees to core axis.
- 243.3 244.3 Chlorite schist with carbonate veins and veinlets. Foliation is at 36 degrees to core axis and the rock contains some rotated pink calcite eyes.
- 244.3 247.3 Intermediate to felsic quartz and feldspar crystal tuff. Contorted and has a small clay fault slip at 246.6. Minor quartz veins near the top of the sub-unit. The foliation is at 57 degrees to core axis.
- 247.3 249.5 Contorted chloritic and cherty zone which has undergone chloritization and carbonatization. Trace disseminated pyrite occurs.
- 249.5 262.5 White to grey, cherty to sericitic sediment enriched felsic tuff with quartz and feldspar crystals. Locally highly veined, ie. From 256 to 258 locally is contorted. In zone of nil deformation the bedding is at

Sample	From	10	width	Cu	PD	2 <u>n</u>	AG	AU	Da.
No.	(m)	(m)	(m.)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
AB17183	332.1	333.1	1.0	30	6	650	<1	<5	1300
AB17184	333.1	333.8	.7	5	7	97	(1)	< 5	1100
AB17185	333.8	335.0	1.2	108	. 9	465	<1	30	1300
AB17186	335.0	336.0	1.0	79	< 5	256	(1	10	1400
AB17187	336.0	337.0	1.0	51	14	163	<1	<5	1200
AB15447	337.7	337.9	.2	63	n/a	208	n/a	n/a	1140
AB17188	337.0	338.0	1.0	47	13	308	<1	<5	970
AB17189	338.0	339.0	1.0	36	7	43	<1	< 5	810
AB17190	339.0	340.0	1.0	6	18	55	<1	₹5	820
AB17191	340.0	341.0	1.0	52	6	290	(1	20	1100
AB17192	341.0	342.0	1.0	45	7	173	(1)	5	1000
AB17193	342.0	343.0	1.0	104	6	380	<1	10	340
AB17194	343.0	344.0	1.0	120	< 5	338	<1	<5	200
AB17195	344.0	345.0	1.0	38	<5	260	<1	< 5	250
AB17196	345.0	346.0	1.0	29	5	132	<1	5	740
AB17197	346.0	347.0	1.0	13	. 9	82	<1	< 5	910
AB17198	347.0	348.0	1.0	30	8	125	<1	<5	870
AB17199	348.0	349.0	1.0	6	6	25	<1	<5	720



HOLE No: Page Number CHEM87-21 5

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m)

(m)

46. There is nil to up to trace disseminated pyrite cubes.

262.5 270.8 Contorted rubbly bleached white to grey sericitic to rhyolitic tuff with strong carbonatization and local carbonate veins. Ground carbonateous rubble from 268 8 to 269.7.

----DESCRIPTION------

- 270.8 272.2 Chlorite carbonate schist with 0.5 % pyrite as cubes and stringers.
- 272.2 285.5 Cherty (?) or siliceous felsic to intermediate guartz and feldspar crystal tuff with minor guartz - feldspar - calcite veins. The crystals are 2 to 4 mm and comprise 10 to 20 % of the rock. Minor fault at 278.8 at 60 degrees to core axis topped by 12 cm of chlorite schist. Bedding is at 50 degrees to core axis and the foliation is at 75 to 90 degrees to core axis. There are nil sulphides.

285.5 287.3 Quartz - sericite schist with trace disseminated pyrite and with the foliation at 30 degrees to core axis.

- 287.3 287.8 Chlorite schist with stretched epidote, after feldspar crystals, and chlorite, after hornblende. Very sharp contacts, is at an orientation of 65 degrees to core axis. No sulphides occur. Is probably a dyke, sub-parallel to bedding, of intermediate or mafic composition. The foliation is at 57 degrees to core axis
- 287.8 288.0 Felsic feldspar crystal tuff with minor guartz carbonate veinlets.
- 288.0 288.6 Quartz chlorite sericite contorted schist with local carbonate veinlets and moderate pervasive carbonatization. Hosts trace to 1 % disseminated pyrite.
- 288.6 297.5 Intermediate quartz and feldspar crystal tuff local zones of felsic and mafic tuffs. Carbonate rubble at 291.5. Local zones of pervasive chloritization. (ie. 291, 294.4 average 15 cm). Crystals content varies in crystal size and abundance from up to 1 mm to 4 mm and from 3 to 15 %. The foliation is at 55 degrees to core axis and bedding appears to be sub-parallel. Nil to up to trace disseminated pyrite occurs.
- 297.5 297.9 Chlorite schist with carbonate veinlets and moderate pervasive carbonatization. Nil sulphides. The foliation is at 65 degrees to core axis.
- 297.9 299.4 Sericitic felsic guartz and feldspar crystal tuff. Contains approximately 3 %, 2 to 4 mm in diameter. quartz eyes and 10 %, 1 to 3 mm in diameter, feldspar crystals. The feldspars have been moderately saussuritized. The foliation is approximately 47 degrees to core axis and the bedding is sub-parallel. There are nil sulphides.
- 299.4 300.6 Contorted chlorite sericite schist which has undergone pervasive carbonatization and hosts local quartz veins, but no sulphides. There are numerous kink hands.

HOLE No. Page Number CHEM87-21 6...

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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

- 300.6 304.1 Quartz sericite schist with local chert beds. Fault gouge is found at 300.8, 301.1, 301.3 and from 301.4 to 301.6. The rock is cross-cut by minor quartz carbonate veins. 0.5 % to 1 % pyrite and trace chalcopyrite occur as pseudo- stringers or as disseminations elongated sub-parallel to the foliation. The rock is locally contorted and the trend of the foliation is at 70 degrees to core axis.
- 304.1 305.6 Chlorite schist, that has undergone pervasive carbonatization. Sharp upper and lower contacts. The foliation is at 72 degrees to core axis. Nil sulphides are present. From 305.3 to 305.45 there is a bed of intermediate crystal tuff.
- 305.6 311.5 Felsic quartz eye crystal tuff with approximately 1 % pyrite in pseudo-stringers. Minor chlorite - carbonate from 306.1 to 306.2 and 310.1 to 310.2. 3 cm bull quartz vein with orientation of 85 degrees to core axis at 307.75 and minor sericitic clay at 309.2. The foliation is at 80 degrees to core axis.
- 311.5 312.2 Contorted quartz chlorite carbonate schist with kinking and no sulphides.
- 312.2 324.2 Intermediate to felsic quartz eye crystal tuff. Varies from massive to a quartz sericite schist, that is weakly to highly kinked. Minor fault slips, sericitic rubble occur at 312.2 313.1, 313.4, 313.9, 314.4, 314.6 317.4, 317.8, 320.0, 320.3 to 320.5 and 321.9. A FAULT ZONE occurs from 319.0 to 319.5 with quartz feldspar carbonate veins and fragments in a mustard yellow to green micaceous clay with minor chlorite. The foliation varies from 60 to 90 degrees to core axis. Trace to nil disseminated pyrite occurs locally.
- 324.2 326.3 Banded cherty to chloritized intermediate crystal tuff. The rock is contorted and bedding and foliation are at approximately 75 degrees to core axis. 326.0 326.3 chlorite - carbonate , finely banded and kinked up to 1 % to 1 % fine-grained stringer pyrite.
- 326.3 342.0 Quartz sericite +/- chlorite schist the rock is variably contorted and kinked, from negligibly to highly there is trace to 2 % stringer and disseminated pyrite locally, with pyrite concentrated in or proximal to the chloritic zone. Local minor quartz veins and very minor fault slips occur in this sub-unit. Foliation and bedding are at approximately 90 degrees to core axis.
- 342.0 344.6 Strongly contorted and kinked carbonatized chloritic schist approximately 1 % pyrite in stringers parallel to foliation. Has approximately 5 % quartz - carbonate veins.
- 344.6 350.5 Felsic quartz and feldspar crystal tuff , brecciated over first 50 cm with biotite acting as the matrix.

HOLE No: Page Number CHEM87-21 7

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-21 8

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

(m) (m) -----DESCRIPTION-----

Local stringers of pyrite and biotite and pyrite cubes. The total pyrite content is between 1 and 2 %. The crystals are large, greater than 3 mm, and comprise 15 % of the rock.

350.5 351.2 FAULT ZONE

To

From

Clay chloritic fault zone.

351.2 359.0 METASEDIMENTS

Dark green to black fine-grained greywacke with minor hematite veinlets and minor carbonate veinlets. Locally faulted, no bedding visible and the foliation is 60 to 70 degrees to core axis.

359.0 368.0 CHERTY TUFFACEOUS SEDIMENTS

Quartz eye bearing, approximately 5 %, 2 to 4 mm, with epidote bands locally and epidote grains, after feldspar, total is approximately 4 %, cherty tuff with chert and greywacke beds. Bedding is at 53 degrees to core axis. Locally the rock is faulted.

368.0 372.9 MIXED GREYWACKE

Green and brown greywacke with local zones of chloritization and carbonatization. Contains minor tuff beds and chert beds, ie. White to pink chert with 2 % magnetite at 272 over 10 cm. Bedding is at 80 to 85 degrees to core axis.

372.9 377.3 QUARTZ EYE BEARING FELSIC TUFF

Coarse to fine-grained felsic quartz eye crystal tuff with minor chert beds and local 10 to 20 cm quartz - chlorite veins, which host nil sulphides. At 275.5 there is pink chert with 2 % magnetite grains. Bedding is at 80 degrees to core axis. Trace to nil disseminated pyrite occurs.

377.3 387.6 SEDIMENT ENRICHED BANDED EPIDOTIC QUARTZ EYE CRYSTAL TUFF The rock is approximately 60 % epidote, which occurs as mainly epidote bands and as crystals , which comprise locally 5 % of the rock. The quartz eyes occur locally and comprise 3 to 4 % of the rock. There are local chert beds and minor quartz - carbonate veinlets. There is minor local mm scale folding and faulting. No sulphides occur. From 317.9 to 318.0, there is a welded tuff (?), this rock has cigar shaped quartz eyes and very thin quartz lined fractures in a green clayey rock. There is no conclusive tops direction, with graded beds in different parts of the unit indicating up or down hole. Bedding is at approximately 67 degrees to core axis.

AB15448 382.8	382.9	.1	19	6	50	<1	< 5	754

Augen Charles A





FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-21 9

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
387.6	394.9	FELSIC TUFF										
		QUARTZ EYE BEARING FELSIC TUFF with 10 % SEDIMENT ENRICHED BANDED										
		EPIDOTIC QUARTZ EYE CRYSTAL TUFF beds locally conformable and as										
		ripped up or locally faulted beds. No sulphides occur.										
391 9	397 0	CHINDITE COULCE										
554.5	591.0	Chlorite schist with minor epidote clots and veinlets and quartz -	1815//Q	395 0	395 2	2	350	n/-	105	-	- /-	177
		carbonate veinlets. 50 % veins over lower 50 cm and into lower	AB18454	396.5	397.0	.5	83	12	69	. 11/a. (1	10	(20
		tuffs. The foliation is at 78 degrees to core axis.							0,5	`*		120
			a en est				5					
207 0	404 1	DUDITIO ANDER CEDICIME CONTAM										
391.0	404.1	Contorted and kinked schist with 1 to 2 % discominated nurite	10166	207 0	200 0	1 0	FO	13	50			1000
		397.7 397.9 MAFIC DYKE, chlorite schist with enidote clots and (2)	AD10400 AB18456	397.0	300 0	1.0	20	13	59	(1	. (5	1600
		thermal biotite on lower contact.	AB18457	399.0	400.0	1.0	72	15	25	21	. 40	1700
		Clayey fault gouge for 1 to 3 cm at 401.6 and 401.7. Bedding is at	AB15450	400.4	400.6	.2	27	- 6	34	(1)	9	937
		89 degrees to core axis.	AB18458	400.0	401.0	1.0	18	13	13	<1	10	880
		Local pyrite stringer occur over last 2 m.	AB18459	401.0	401.7	.7	19	10	15	<1	<5	830
			AB18460	401.7	403.0	1.3	18	19	31	<1	< 5	910
			AB18461	403.0	404.1	1.1	38	14	23	<1	< 5	1300
404.1	434.1	GABBRO										
		Fine-grained gabbro with local epidote, after feldspar, phenocrysts	AB18462	404.1	405.0	9	193	5	5.8	· (1	10	(20
		and local epidote and carbonate veins. Barren bull guartz veins	AB15451	416.4	416.6	.2	224	n/a	85	n/a	n/a	224
		from 409.75 to 410.0. The foliation is at 50 degrees to core axis	AB15452	430.8	431.0	.2	282	n/a	98	n/a	n/a	112
		and the veins are oriented at low angles to the core axis. No	AB18463	433.0	434.1	1.1	216	<5	68	<1	<5	60
		chalcopyrite is present.										
434.1	437.1	PYRITIC QUARTZ EYE BEARING FELSIC TUFF									1.0	
		thermal high the 2 to 5 % number and there to 1 % challen with	AB18470	434.1	435.0		303	27	307	1	10	2900
		which is concordant to bedding and occurs as using which are (2)	AD104/1 AD15452	435.0	430.0	1.0	200	· · · /	12		1.4	1600
		fracture controlled. Bedding is at 66 to 84 degrees to core axis	AB15455 AB18472	436.0	430.0	1 0	234	6	149	(1)	14	1900
10 C		the average is 77 degrees.		10010		1		U U	55			1500
437.1	438.9	GABBRO										
		Gabbro with 5 to 10 %, 2 to 3 mm, epidote grains in a fine-grained	AB18464	437.1	438.1	1.0	275	(5	73	(1	<5	(20
		chloritic matrix.	AB18465	438.1	438.9	.8	204	< 5	62	<1	<5	70
438.9	444.3	PYRITIC QUARTZ-SERICITE SCHIST										
		Thermal biotite coloured guartz eye crystals and feldsnar crystals	AB18473	439_0	440 0	. 1.0	318	(5	52	<1	(5	2600
		tuff. Blocky, highly fractured core from 438.9 to 439.5 and 442.1	AB15454	440.6	440.7	.1	97	4	60	d ·	<5	2670
		to 442.5. At 442.2 there is a fault slip lined by a carbonate vein	AB18474	440.0	441.0	1.0	344	14	70	(1	<5	2600
		with the orientation at 40 degrees to core axis. The tuff hosts 5 %	AB18475	441.0	442.0	1.0	273	11	56	(1	<5	2400
		disseminated and conformably bedded pyrite with trace to 1 %	AB21501	442.0	443.0	1.0	428	9	54	(1	<5	2600

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-21 10

From (m)	T0 (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		chalcopyrite locally. There are local quartz - carbonate veinlets. Bedding is at 70 degrees to core axis.	AB21502	443.0	444.3	1.3	154	<5	63	<1	<5	3000
144.3	495.3	GABBRO										
		Numerous phased gabbro with fine-grained phase to coarse phase with	AB18466	444.3	445.3	1.0	216	<5	54	(1	. (5	60
		10% 3 mm epidote grain. Local epidote, epidote - carbonate, guartz	AB15455	450.0	450.1	.1	243	n/a	90	n/a	n/a	308
		- carbonate veins occur and vary from 5 mm to 3 cm in thickness	AB18467	476.0	477.0	1.0	6000	8	114	2	20	40
		and in orientation vary from cross-cutting to sub-paralleling the	AB18468	477.0	478.0	1.0	624	<5	49	<1	<5	50
		core axis. Minor trace chalcopyrite and pyrite associated with	AB15456	480.6	480.8	.2	150	(2	100	<1	2	130
		quartz - carbonate veins at 456.2. The foliation is at 30 degrees	AB18469	492.0	493.0	1.0	276	<5	48	<1	< 5	100
		to core axis. After 461, the rock is coarse grained and comprised										
		of approximately 49 % epidote, 49 % chlorite and 2 % hematite. From										
		476 to 478 and 492 to 493 there is guartz veins with 1 cm										
		chalcopyrite blebs, which comprise 0.3 % of these intervals.										

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HOLE No: Page Number CHEM87-22 1

Claim No. CHIP 1

Core Size: NO

Section No.: Line 34+00 E

Logged By: S. Enns and J. Pattison Drilling Co.: Burwash Enterprises

Assayed By: Bondar-Clegg & XRAL

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 34+20 E 0+20 N

NTS: 9281	.3 .	UTM:	541670	00 N	430666	E
Azimuth:	210	Elev	ation:	555	m	
Dip:	-50	Leng	th:	474	.6 m	

Started: MAY 24, 1987 Completed: 31-MAY-87

Purpose: To examine geology, test a deep, broad resistivity low between 1+00 S and 2+00 S and a VLF conductor between 1+40 S and 2+20 S.

DIP TESTS

				Length	Azi- muth	Dip	Length	Azi- muth	Dip										
				57.00 127.10 233.50 282.50	207.0 207.0 209.0 209.0	-49.5 -48.5 -47.0 -47.0	337.40 410.60 474.50	211.0 214.0 217.0	-47.0 -46.0 -46.0										
From (m)	To (m)		 D]	ESCRIPTION	{				Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)	

.0 6.7 OVERBURDEN AND CASING

6.7	17.6 CHLORITIC INTERMEDIATE CRYSTAL TUFF							
	Fine-grained feldspar crystals guartz eves 1 to 4mm < 5%.	AB15351	7.3	7.4 .1	17 n/	a 89 n	la n/a	662
	Locally.2 to.4 m wide crystal- rich tuff beds.						/	
	Generally greenish-gray in colour.							
	Locally lapilli-sized interval of felsic lapilli, 9.8 to 10.8m.							
	Dark green chlorite-rich hands 1 to 2 m wide at 11 0 to 11 2m •at							
	16.9 to 17.6m							
	Thermal biotite at 8.5 to 9.5m							
	Strongly foliated throughout 65 degrees to core avis at 7.4 m							
	54 Degrees to core avis at 16 7 m							
	Quartz with minor white calcite hands 1 to 10 cm are locally					e de la companya de l		
	grantic when minor white callies bands i to to the are locally nesent here and there have a 9 and 15 m - locally with		an an an a'					
	chalconvrite at 13 6 m							
	Shear zone at 14.5 to 15.0 45 degrees to core avis				1			
	Lost core: 30 cm at 14 7 m and 20 cm at 23 2 m							
			· ·					
17.6	39.0 FELSIC CRYSTAL THEF							
	Grev feldsnar quartz sericite crystal unit Variable proportions of	1815352	31 0 31	> A 1	20		1	1100
	quartz feldsnar and sericité	ADIJJJZ	51.5 52		20 11/0	1 25 11	/	1100
	5 to 10 % quartz crystals 2 to 10 mm Unit becomes less sorigitio	a states i						
	and better sorted between 32 5 and 35 2 m. A few local 5 to 10 mm							· ·
	white quarty hands are present with strongly folisted should							
	contacts The interval is strongly foliated thoushout smallel to							
	badding							
	BEDDING ANCING							
	Podding 35 dogroog to gore evid at 20 5 m							
	<u></u>	1						



FALCONBRIDGE LIMITED

From	То		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m.)	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
		Bedding 40 degrees to core axis at 31.8 m. Bedding 35 degrees to core axis at 33.8 m.							· · · · · · · ·			
		22.8 23.4 Small fault. Variable foliations and gouge zones present.										
		26.5 29.6 0.15 m of lost core.										
		33.5 33.9 Minor pyrite (<1%) as foliation parallel disseminations.		. · ·								
		36.8 38.1 Fault zone. Gouge and breccia at 43 to 55 degrees to core axis. Strongly contorted to 38.6 m.										
39.0	A0 A	INTERMENTATE COVETAL THEF										
55.0		Dark grey chlorite rich , strongly foliated at 30 to 35 degrees to										
		2 to 3 % 2-4 mm guartz eyes and 10 to 12 % 1-4 mm feldspar crystals.										
			1 									
40.4	53.1	FELSIC LITHIC CRYSTAL TUFF										
		Hard siliceous rock criss-crossed by numerous 1-4 mm white quartz-carbonate veinlets. Many offsets. 1-4 cm white quartz masses. Generally massive grey appearance. Light grey cherty bands 4-10 mm wide at 75 degrees to core axis.	AB15353	48.2	48.3	.1	6	10	19	<1	<5	1200
		41.5 42.7 0.4 m of lost core.										
		50.0 52.3 Fault zone. Crushed locally gouge present. Fractured zone extends down to 53.0 m. Small faults (1 cm gouge zones) at 50.2 and 50.4 m at 20 to 30 degrees to core										
		axis.	-			2 - P						
53.1	57.1	INTERMEDIATE CRYSTAL TUFF Dark green chlorite rich and strongly foliated. Epidote patches 1 to 2 cm @ 55 degrees to core axis. Local bedding 30 degrees to core axis at 54.7m, and 30 degrees to										
		core axis at 55.2m. Locally 4 to 5% 3 to 5mm quartz crystal with variable chlorite in local sections										
		Minor pyrite fractures parallel to foliation 1 to 2mm wide at 54 to 55 m with epidote quartz calcite alteration.										
57.1	88.2	FELSIC CRYSTAL TUFF										
-		White foliation quartz sericite crystal tuff.	AB19902	59.0	60.0	1.0	26	8	18	<1	<5	700
		5 to 5% 2 to 10 mm quartz. Strong foliation 25 degrees to core axis with weak banding parallel	AB19903 AB15354	60.0 60.5	61.0 60.6	1.0	22	67 n/a	. 43 95	(1 n/a	(5 n/a	840 900

Page Number 2

HOLE No:

CHEM87-22

HOLE No:

CHEM87-22

Page Number

3

λσ

(ppm)

<1

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<1

n/a

<1

Au

۲5

(5

Ba

(ppb) (ppm)

<5 1000

<5 1000
<5 1000</pre>

n/a 1480

<5 1200

n/a 1070

970

<5

<1 <1

n/a

950

480

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)
		to foliation as bedding ? with disseminated fine-grained 1% pyrite. FAULT GOUGE at 57.3 to 58.3 lost core.	AB19904 AB19905 AB19906	61.0 62.0 63.0	62.0 63.0 64.0	1.0 1.0 1.0	8 4 5	58 53	16 26 25
		Mafic dark green sills with epidotized feldspars and a few epidote clots 10 to 15mm wide with white quartz veinlets @ 65.2 to 66.1, 66.2 to 66.4, 67.0 to 68.1 m. Unit is massive near top with moderate foliation and 12 to 15%, 2 to 6mm feldspar with indistingt gravitals often gampletaly	AB19907 AB15355 AB19908	64.0 72.3 79.0	65.0 72.4 80.0	1.0 .1 1.0	5 28 7	23 n/a 16	29 16 18
		epidotized and 5 to 7% 2 to 8mm rounded quartz eyes. Lower down at about 72m quartz increases and becomes coarser 7 to 10% 5 to 17mm accompanied with much higher sericite. At 72 to 76 m a stronger foliation is present.Interval becomes darker green gray at depth.							
		Core loss 0.2 m at 67.4 m. 0.1 M at 72.0 m. 0.5 M at 74.0 m. 0.7 M at 78.3 m.							
		Small shear 10 degrees to core axis at 74.0 m.							
		Less pyritic than above 65.2 m at about 0.5% disseminated pyrite as thin 1mm fracture fillings.							
		White quartz calcite chlorite masses with minor pyrite 76.7 to 79.2m							
		Blocky core 81 to 87m.							
		Rapid gradation to next ashy tuff unit below.							
88.2	110.0	FELSIC ASH TUFF Strongly foliated gray-green, fine-grained sericite rich rock with 1 to 2% 2 to 4mm scattered quartz crystals.	AB19909 AB19910	91.3 97.0	92.3 98.0	1.0 1.0	28 29	6 9	25 36
		Foliated 40 degrees to core axis with 92.4. 55 Degrees to core axis at 97.8.	AB15356	98.1	98.2	.1	38	n/a	24
		Less than 1% pyrite fracture fillings parallel foliation @ 91.3 to 92.4m and 96.7 to 98.3m. Local siliceous sections show fine bedding 40 degrees to core axis at 93.0 , 55 degrees to core axis at 98.0.							
		Small fault @ 93.6 to 94.5m and contorted foliations below fault.							
		Winey white 0 to far much mains while 00 to 00 m		-					

Minor white 2 to 5cm quartz veins veins 90 to 96 m.

Below 109 m the unit is still felsic in composition but becomes steaky from presence of darker green 2 to 4mm chlorite feldspar bands, beds?. Banding 40 degrees to core axis at 100.7 m 54 degrees to core axis at 99.7 m.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG



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From To

(m) (m) -----DESCRIPTION------

Sample From To Width Cu Pb No. (m) (m) (m) (ppm) (ppm)

From To Width Cu Pb Zn Ag Au Ba (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm)

Small fault at 109.0 m.

Overall foliation parallel to pyrite with less than 1% chalcopyrite pyrite chlorite fracture fillings parallel to foliation at 108.8 m.

Blocky core 0.3m @ 105.5m. 0.5m @ 106.7m. 0.9m @ 108.5m. 0.2m @ 109.0m.

110.0 125.8 INTERMEDIATE CRYSTAL TUFF

Dark green streaky appearance.

Conspicuous quartz sericite crystal tuff with 7 to 10% 2 to 8mm quartz from 112.2 to 112.8m with both contacts 55 degrees to core axis.

15 to 20%, 2 to 8mm Feldspars.

Bedding on compositional banding 53 degrees to core axis at 114.2. 50 Degrees to core axis at 123 to 124 m.

Transitional into coarse generally massive feldspar crystal tuff but banded in places. Bedding 5 to 15 cm, lighter calcareous beds 54 degrees to core axis at 115.3 50 degrees to core axis at 123.8. Pervasive epidote replaced feldspars.

Quartz chlorite pyrite chalcopyrite mass at 125.3 to 125.4.

125.8 132.9 FELSIC CRYSTAL TUFF

Massive dull white unit with 7 to 10% 2 to 8mm quartz in feldspar sericite mass.

Poor foliation 60 degrees to core axis 126 to 130 m.

Vague bedding indicated by lighter coloured 5 to 10mm bands.

Dark green 1 to 6 mm chlorite fragments.

Dark green chlorite rich sections 128.3 to 128.6, 130.9 to 131.3 m with white quartz calcite veinlets crisscross this interval. Pyrite chalcopyrite veins 5 to 10mm wide at 128.3 and 128.6m sill margins?.

Hematitic fractures 130.9 to 131.1m.

132.9 145.6 MAFIC CRYSTAL TUFF

Dark green relatively massive no bedding recognizable. Epidotized lapilli sized feldspars comprise 7 to 15 % of the rock. Weak pervasive carbonatization. Nil to trace pyrite over most of the section. Foliation is at 65 degrees to core axis at 135.2 m. Upper and lower contacts are also at 65 degrees to core axis.

136.0 136.3 Hematite associated with carbonate veinlet.

AB15357 113.2 113.3 .1 19 n/a 44 n/a n/a 370 AB15358 121.3 121.4 .1 24 n/a 86 n/a n/a 180

AB15360 133.2 133.3 .1 63 n/a 73 n/a n/a 410



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
		139.6 143.0	FAULT ZONE ?. Abundant quartz carbonate veining (veins up to 20 cm thick parallel to foliation) and core is broken and rubbly from 139.6 to 140.3 m. 0.25 m of lost core between 139.3 m and 142.3 m. Two to 3 % pyrite between 140.9 and 142.4 m associated with quartz veining. Clay filled slip at 141.8 m at 30 degrees to core axis.										
		143.3 143.6	Zone of quartz carbonate veining at 55 to 60 degrees to core axis. Trace pyrite.										
145.6	148.1	FELSIC QUAR Pale green- and 5 to 20 fine-graine at 50 degree axis. Nil s m at 68 deg	TZ-FELDSPAR CRYSTAL TUFF grey with 1 to 10 % quartz eyes 2 to 4 mm in diameter % epidotized feldspar crystals 1 to 3 mm long in a d sericitic matrix. No bedding recognized. Foliation is es to core axis. Lower contact is at 50 degrees to core ulphides except for a 2 mm wide band of pyrite at 145.9 rees to core axis.	AB15361	146.1	146.2	•1	17	n/a	13	n/a	n/a	1350
						1.1.							
148.1	156.5	INTERMEDIAT Dark green feldspar cr lapilli to the section Broken core	E FELDSPAR CRYSTAL TUFF similiar to 132.9 to 145.6 m. Epidotized lapilli-sized ystals comprise 5 to 20 % of the rock. Occasional block-sized lithic clast. Nil sulphides over most of . Bedding is at 50 degrees to core axis at 151.3 m. at the lower contact.	AB15362	148.3	148.4	.1	135	n/a	80	n/a	n/a	830
		144.3 144.4	Bleached silicified zone with 10 % pyrite filling fractures at 50 to 80 degrees to core axis.										
		150.0 151.0	Moderate pervasive carbonate.										
		151.0	3 cm wide clay filled slip at 50 to degrees to core axis										
		151.0 151.3	Bed of felsic quartz feldspar crystal tuff at 50 degrees to core axis. Moderately carbonatized.										
		151.3 156.5	FAULT ZONE ?. Many clay-filled slips at 60 to 75 degrees to core axis. Moderately carbonatized and up to 5 % hematite disseminated and along foliation planes.										
		158.3	10 cm wide barren quartz carbonate vein at 60 to 80 degrees to core axis.										
156.5	176.8	MIXED SHEAR Pale to med mm quartz e 158.5 m and bedding play	ED ASH TO LAPILLI FELSIC TUFF ium grn fine-grained and crushed with nil to 10 % 1 to 4 yes. Weakly chloritized and sericitized. Foliation at at 162.1 m is at 60 degrees to core axis. Possible ne at 163.7 m is at 60 degrees to core axis. Nil to 2 %	AB15363 AB15364 AB15365 AB15366	157.4 167.5 169.5 176.2	157.5 167.6 169.6 176.3	.1 .1 .1 .1	19 19 57 52	n/a n/a n/a n/a	61 15 31 20	n/a n/a n/a n/a	n/a n/a n/a n/a	1200 360 1020 770

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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From (m)	To (m)			Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
(11)	(111)	fracture c	ontrolled pyrite. Lower contact is also at 60 degrees to					••					
		core axis.											
		157.2	Clay filled slip at 30 degrees to core axis.										
		163.7 168.0	Strongly crushed weak to moderate chloritization.										
		168.0 170.3	FAULT ZONE. Core is highly fractured high clay component. Strongly chloritized and numerous clay filled slips at 40 to degrees to core axis.							· ·		÷	
176 0	107 4	FTNE CONTNE											
1/0.0	191.4	Fine-graine feldspar ph and rubbly	d dark green highly chloritic with less than 5 % enocrysts 1 to 3 mm in length. Core is generally broken over most of the section above 192.0 m (RQD > 12).	AB15367 AB15368	178.2 195.5	178.3 195.6	.1 .1	37 228	n/a n/a	82 104	n/a n/a	n/a n/a	100 290
		Foliation is	s at about 50 degrees to core axis. Nil sulphides.										
		177.4 177.7	Abundant carbonate-quartz veins (about 50 % of rock) parallel to foliation at 50 degrees to core axis. Nil sulphides.			e Sector	.,						
		179.2 179.8	Broken rubbly core.										
		180.6 182.3	Blocky, highly fractured core.										
		182.9	Trace chalcopyrite along foliation planes.										
		183.7 188.0	3 mm wide clay filled slip at 20 degrees to core axis.										
		185.0	2 mm wide quartz veinlet with chalcopyrite at 35 degrees to core axis.										
		186.7 189.0	Blocky, highly fractured core.										
		190.2 190.5	Blocky, highly fractured core.										
		192.0	Clay-filled slip at 65 degrees to core axis.										
		193.0 193.5	Blocky, highly fractured core.										
		195.1	4 mm wide carbonate hematite vein at 40 degrees to core axis.										
		196.4 197.4	Moderate fracture controlled carbonate alteration.								- - -		

197.4 198.2 FAULT ZONE

Loosely consolidated fault breccia with high clay component and a moderate amount of carbonate. Upper and lower contacts are at 70



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m) Sample From To No. (m)

Width	Cu	Pb Zn	Ag	Au	Ba
(m)	(ppm)	(ppm) (ppm)	(ppm)	(ppb)	(ppm)

degrees to core axis.

198.2 218.3 DARK BROWN ARGILLITE

Dark brown very fine-grained and soft with slaty cleavage at 25 to 30 degrees to core axis. Relatively massive bedding rarely seen. Core is broken and crumbly above 209.0 m (RQD > 15). Bedding at 216.6 m is at 55 degrees to core axis. Lower contact is at 68 degrees to core axis.

-----DESCRIPTION------

200.7 1 cm wide clay filled slip at 80 degrees to core axis.

203.3 3 cm wide clav filled slip at 75 degrees to core axis.

206.3 206.4 Fault zone (?). Crushed with high clay component. The zone is at 60 degrees to core axis.

206.7 3 cm wide bed of greywacke at 55 degrees to core axis. Graded bedding fines downhole. A 1 X 4 cm clast of greywacke is 3 cm downhole from the greywacke bed.

213.4 213.7 Several round clasts of greywacke up to 4 cm in diameter

- 215.6 Bedding plane at 65 degrees to core axis.
- 216.3 218.3 Unsorted angular guartz granules and granule to pebble sized round lithic clasts comprise nil to 50 % of the rock.

218.3 231.3 GREYWACKE AND PEBBLE CONGLOMERATE

Grey fine-grained massive with 1 to 5 % black mud clasts up to 4 mm long and occasional pebble-sized lithic clasts. Beds of unsorted pebble conglomerate up to 30 cm thick comprise about 10 % of the unit. The pebble conglomerates are matrix supported and contain rounded pebbles of Myra Formation volcaniclastics (50-80%, some with quartz eyes and sulphides) feldspar phyric gabbro (<1-20%) mafic clasts (1-10%) and guartz pebbles (1-3%). Bedding is at 55 to 60 degrees to core axis. Lower contact is at 60 to degrees to core axis. Bedding is at 55 to 60 degrees to core axis. Lower contact is at 60 degrees to core axis.

231.3 261.8 COBBLE CONGLOMERATE

Medium green clast supported conglomerate composed of unsorted, rounded to angular pebble-sized clasts of feldspar phyric gabbro (70-80%), sediment sill sediments (nil-5%), Myra volcaniclastics (nil-30%) and quartz (nil-5%) in a matrix of greywacke. Below 256.4 m the matrix is composed mostly of quartz granules. Some Myra clasts contain disseminated sulphides (pyrite and chalcopyrite). Boulder-sized gabbro clasts are common below 255.0 m. Bedding is

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(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From	То	
(m)	(m)	DESCRIPTION

at 68 degrees to core axis at 244.0 m. Occasional local quartz fracture filling. Lower contact is an unconformity at 30 degrees to core axis.

- 237.0 Bull quartz vein 3 to 7 cm thick at 90 degrees to core axis.
- 243.0 243.3 Fault breccia (?) at about 90 degrees to core axis. Angular pale brown clasts in a carbonate rich matrix.
- 243.3 244.0 Relatively clast free section.
- 252.4 253.0 Beds of greywacke with 5 to 10 % granular sized quartz and lithic clasts. Bedding is at about 70 degrees to core axis.
- 254.4 2.5 cm wide clast of felsic tuff with 1 % pyrite and chalcopyrite.
- 254.8 4.0 cm wide rounded clast of Myra felsic with 3 % pyrite and 1 % chalcopyrite.
- 259.0 1.5 X 4.0 cm clast of felsic Myra tuff with 20 % pyrite.

261.8 396.0 FELDSPAR PHYRIC GABBRO

Massive dark green medium to coarse-grained sections 0.5 to 10.0 m long alternate with fine-grained sections 0.1 to 4.0 m long which are usually associated with quartz +/- carbonate veins. Fine-grained below 391.0 m. Feldspar phenocrysts 1 to 4 mm long comprise about 30 % of the rock. Nil to 5 % hematite as grains less than 2 mm in diameter and smeared along foliation planes. Foliation is at 50 degrees to core axis at 359.5 m. Nil to trace chalcopyrite most of which is in minor quartz-carbonate veins at 20 to 60 degrees to core axis. Lower contact is at 15 degrees to core axis.

- 263.7 264.2 Abundant quartz veining (<2 cm wide) and clotting at 20 degrees to core axis. Trace chalcopyrite.
- 266.3 266.6 Fine-grained section associated with a 1.0 cm wide barren quartz vein at 60 degrees to core axis. Weak fracture controlled epidotization.
- 268.7 268.9 Brown mafic dyke or carbonatized zone. Dark brown fine-grained feldspar phyric strong fracture controlled carbonatization. Sharp contacts. Runs almost parallel to the core axis.
- 271.1 271.2 Dark brown fine-grained mafic dyke at 39 degrees to core axis.

AB15369	263.3	263.4	.1	185	n/a	91	n/a	n/a	110	
AB15370	287.4	287.5	.1	13	n/a	160	n/a	n/a	150	
AB15371	308.4	308.5	.1	146	n/a	156	n/a	n/a	460	
AB15372	315.4	315.5	.1	148	n/a	90	n/a	n/a	110	
AB15373	349.6	349.7	.1	336	n/a	87	n/a	n/a	120	
AB21551	363.0	364.0	1.0	78	12	84	<1	<5	160	
AB21552	364.0	365.0	1.0	269	<5	119	<1	5	160	
AB21553	365.0	366.0	1.0	57	· <5	84	<1	5	50	
AB21554	366.0	367.0	1.0	161	5	63	<1	<5	40	
AB21555	367.0	368.0	1.0	336	<5	96	<1	<5	60	
AB15374	369.2	369.3	.1	287	n/a	148	n/a	n/a	860	
AB21556	377.0	378.0	1.0	252	5	98	<1	< 5	140	



Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)





From To (m) (m)

278.1 278.2 Quartz vein 2 cm wide with trace chalcopyrite and a silicified halo which extends 5 cm from the vein.

281.5 281.8 Fine-grained section with 7 % hematite.

- 284.2 288.0 Fine-grained section. Abundant quartz-carbonate veining. Soft beige anhedral mineral occurs as spots less than 3 mm wide throughout the section and comprises less than 5 % of the rock. Quartz-carbonate-chlorite veins from 285.6 to 285.8 m and from 286.4 to 286.8 m at 40 to 80 degrees to core axis.
- 297.0 297.8 Moderate hematite alteration associated with carbonate veinlets at 40 to 80 degrees to core axis.
- 308.3 308.8 Mafic dyke (?). Dark brown fine-grained massive moderate fracture controlled carbonatization and 3 % fracture controlled pyrite. Sharp upper contact at 50 degrees to core axis and lower contact at 72 degrees to core axis.
- 330.0 1.0 cm wide quartz-carbonate vein at 30 degrees to core axis with trace chalcopyrite.
- 332.4 333.6 Barren quartz-carbonate vein at 30 degrees to core axis.
- 333.6 334.4 Abundant quartz-carbonate veins and pods at 30 degrees to core axis.
- 339.4 340.5 Moderate fracture controlled carbonate alteration. Carbonate filled hairline fractures at 30 to 40 to degrees to core axis.
- 352.2 Several blebs of chalcopyrite associated with minor quartz-carbonate veinlets at 58 degrees to core axis.
- 353.6 354.9 Weak fracture controlled carbonatization. Most fractures at 20 degrees to core axis.
- 362.9 368.0 Quartz-carbonate veins 1.0 to 10.0 cm wide at 20 to 50 degrees to core axis comprise about 20 % of the section. The veins contain up to 2 % chalcopyrite.
- 368.1 369.9 Massive fine-grained dark grey brown mafic dyke. Upper contact is sharp and irregular at 40 degrees to core axis. The lower contact is sharp and irregular at 40 to 55 degrees to core axis. Inclusion (?) of gabbro from 369.4 to 369.7 m at 30 degrees to core axis.
- 371.0 371.2 Mafic dyke as 368.1 to 369.9 with 2 % fracture controlled pyrite. Upper contact is at 20 degrees to core axis and lower contact is at 40 to degrees to core

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





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From (m)	T0 (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Wiđth (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
			axis.										
		375.6	Quartz vein 2.0 cm wide at 50 degrees to core axis with 1 % chalcopyrite.										
		377.2	0.8 X 0.8 cm wide patch of chalcopyrite and pyrite centred on a quartz clot of about the same size. Several nearby quartz-carbonate veins less than 1.0 cm wide at 20 to 30 degrees to core axis contain specks of chalcopyrite.										
		394.4 395.0	Moderate chloritization. Rock is strongly foliated. Foliation is at 20 degrees to core axis.				· · · ·						
		395.0 396.0	Moderate fracture controlled carbonatization at 30 degrees to core axis. Fault breccia at 40 degrees to core axis between 395.5 and 395.6 m.										
396.0	406.7	MIXED TUFFA Medium gree Generally m Lower conta	CEOUS SEDIMENTS n fine-grained with patchy thermal biotite alteration. afic to intermediate in composition. Nil sulphides. ct is at 20 degrees to core axis. LFS.	AB15375 AB15376	399.7 404.6	399.8 404.7	.1 .1	54 58	n/a n/a	59 30	n/a n/a	n/a n/a	1200 290
		20 to 30 de 30 Degrees 48 Degrees 50 Degrees 40 Degrees	grees to core axis at 396.9 m. to core axis at 397.8 m. to core axis at 398.7 m. to core axis at 398.7 m. to core axis at 400.1 m. to core axis at 403.5 m.										
		404.1 404.7	Felsic crystal tuff. Contacts are gradational.										
									•				
406.7	420.3	MASSIVE MAF Medium gree	IC FLOW n fine-grained massive feldspar crystals less than 4 mm	AB15377	413.9	414.0	.1	171	n/a	95	n/a	n/a	210
		long in a c Finely diss and occurs (deuturic a magnetic. N	hloritic matrix comprise less than 5 % of the rock. eminated hematite (?) comprises about 5 % of the core in the centre of white specks less than 2 mm in diameter lteration of amphiboles ?). Rock is very weakly il sulphides. Lower contact is at 55 degrees to core axis										
		421.1 421.6	Zone of moderate carbonatization and strong epidotization. Lower contact is at 40 degrees to core axis. Upper contact is indistinct.										
420.3	474.6	MASSIVE MAF As 406.7 to foliation p to 2 mm in hornblende	IC HORNBLENDE-BEARING FLOW 420.3 but has only trace hematite smeared along lanes and nil to 1 % hornblende as subhedral crystals up diameter above 428.0 m. Below 428.0 m up to 10 % crystals up to 4 mm in diameter. Nil to trace	AB15378 AB15379 AB15380 AB15381	428.6 438.3 456.3 467.2	428.7 438.4 456.4 467.3	.1 .1 .1 .1	75 78 217 235	n/a n/a n/a	84 64 61 57	n/a n/a n/a	n/a n/a n/a n/a	460 350 159 196



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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From	То			1	Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	 -DESCRIPTION			No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

disseminated chalcopyrite. Foliation is at 55 degrees to core axis at 445.5 and 452.6 m.

- 427.0 428.0 Moderate epidote alteration centred on carbonate veins up to 7.0 cm wide at 20 to 45 degrees to core axis.
- 430.3 433.3 Quartz-carbonate +/- epidote veins less than 1.0 cm wide at 50 degrees to core axis comprise about 5 % of the rock. Carbonate-hematite vein 0.5 cm wide at 80 degrees to core axis at 433.3 m.
- 443.1 5 mm wide carbonate-hematite vein at 80 degrees to core axis.
- 445.4 Carbonate-hematite vein 1.0 cm wide at 70 degrees to core axis.
- 446.5 Quartz-carbonate-hematite vein 5 mm wide at 50 to 60 degrees to core axis cross-cuts quartz-carbonate pods.
- 449.2 449.5 Fault breccia zone at 60 degrees to core axis. Angular clasts some of which are bleached in a quartz calcite matrix.
- 449.5 455.7 Randomly oriented quartz-carbonate +/- hematite filled fractures generally less than 1.0 cm wide comprise about 5 % of the rock. Minor fault breccia 3 cm wide at 70 degrees to core axis at 451.4 m. Rock is darker and more chloritic in this section.
- 471.2 Quartz-carbonate vein 5 mm wide at 50 degrees to core axis with several blebs of chalcopyrite.
- 473.2 473.3 Dark brown feldspar phyric dyke (?). Feldspars are less than 2 mm long and comprise about 4 % of the rock. 2 % finely disseminated pyrite. Contacts are sharp and irregular at 50 to 80 degrees to core axis.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 2800 E 110 N

 NTS:
 092/B13
 UTM:
 5417105
 N
 430850
 E

 Azimuth:
 210
 Elevation:
 545
 m

 Dip:
 -50
 Length:
 449.5
 m

Started: May 26, 1987 Completed: June 3, 1987

Purpose: To outline geology north of CHEM86-18. Weak shallow IP anomaly at 1+40 S. Claim No. CHIP1 Section No.: Line 28+00 East

HOLE No:

CHEM87-23

Logged By: David P. Money Drilling Co.: Burwash Enterprises, Cobble Hill, B.C. Assayed By: Bondar-Clegg, Vancouver and X-Ray Assay, Don Mills

Page Number

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Core Size: NQ

Length	Azi- muth	Dip	Length	Azi- muth	Dip
80.80	210.0	-45.0	349.30	214.0	-39.0
117.70	211.0	-42.0	416.40	216.0	-38.0
199.90	212.0	-40.0	449.50	217.0	-38.0
279.20	212.0	-40.0			

DIP TESTS

From	То		Sample	From	То	Width	Cu	Pb Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm) (ppm)	(ppm)	(ppb)	(ppm)

.0 4.9 OVERBURDEN AND CASING

4.9

7.8 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Hosts 3 %, < 1 to 3 mm, quartz eyes and 5 to 15 % feldspar to epidote crystals, which are up to 1 to 1.5 mm in diameter. Bedding and foliation are sub-parallel and are approximately at 50 degrees to core axis. No sulphides occur.

7.8 8.2 SERICITIC QUARTZ EYE BEARING FELSIC TUFF Possibly bleached (?) sericitic and moderately kinked quartz eye bearing rhyolitic to rhyo-dacitic tuff with 1 % carbonate veinlets, which host trace 1 to 2 mm pyrite cubes. The foliation is approximately 45 degrees to core axis.

8.2 12.0 CHLORITIC QUARTZ-FELDSPAR CRYSTAL TUFF Black to medium green tuff with local chloritization and quartz carbonate veins, which from 10.2 to 10.4 comprise 20 % of the rock and host 0.5 to 1 % pyrite and trace chalcopyrite. There are approximately 15 to 20 % feldspar to epidote grains to approximately 1 mm crystals and trace to 1 % quartz eyes. There is minor local kinking and bedding and foliation are at approximately 40 degrees to core axis.

12.0 16.1 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Light green to grey weakly carbonatized and chloritized tuff with trace local quartz veins. Trace minor local pyrite stringers, up to

AB21506	9.0	10.0	1.0	11	<5	30	<1	<5	1000
AB21507	10.0	11.0	1.0	15	25	117	(1	(5	1300
AB21508	11.0	12.0	1.0	8	12	37	<1	< 5	1200

AB15457	14.1	14.2	.1	25	n/a	38	n/a	n/a	870	
AB21509	15.1	16.1	1.0	24	5	35	(1	<5	880	



FALCONBRIDGE LIMITED DIAMOND DRILL LOG



HOLE No: Page Number CHEM87-23 2

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba) (ppm)
		1 mm, and pyrite cubes occur. The bedding is at 40.5 degrees to core axis at 13.7 and at 15.8, where there is minor kinking, is at 44 degrees to core axis. The foliation is at 43 degrees to core axis at 15.5.										
16.1	16.6	ALTERED FELSIC TUFF Chloritic and carbonatized tuff with local disseminated pyrite, up to 1 %, and quartz - carbonate veins. Has minor kinks and folds.	AB21510	16.1	16.6	.5	40	< 5	198	(1	<5	350
16.6	26.3	CHLORITIC QUARTZ-FELDSPAR CRYSTAL TUFF Locally crystal rich, with average crystal content of 5 to 7 % 1 to 3 mm quartz eyes and feldspar crystals, with the rich zones containing greater than 25 %. There is trace to nil disseminated	AB21511 AB15458	16.6 22.5	17.6 22.6	1.0 .1	45 12	9 4	39 42	<1 <1	<5 <1	830 1270
		and stringer pyrite. Bedding at 21.5 is at 58 degrees to core axis and the foliation is at 46 degrees to core axis at 20.0. There are minor quartz veinlets.										· · ·
26.3	33.0	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF At start is intermediate and there is a gradual transition to felsic. Hosts minor cherty beds. At 33.0 the interbedded transition zone, which ends at 33.6, begins. There is minor trace pyrite cubes, and trace quartz veins in the unit. There is minor kinking, bedding is approximately 43 degrees to core axis and the foliation is approximately 45 degrees to core axis.										
33.0	36.0	MAFIC QUARTZ EYE BEARING FELDSPAR CRYSTAL TUFF Dark black to brown tuff with average crystal content of 20 %, 2 % quartz eyes, 1 to 3 mm, and 18 % feldspar crystals, up to 1 to 2.5 mm. From 33.6 to 34.1 there is contorted black - brown chlorite and carbonate veinlets. Hosts trace disseminated and stringer pyrite and nil to trace chalcopyrite.	AB15459 AB21512 AB21513 AB21514	33.6 33.0 34.0 35.0	33.7 34.0 35.0 36.0	.1 1.0 1.0 1.0	82 22 14 4	<2 11 5 6	160 79 45 34	<1 <1 <1 <1	<1 <5 <5 <5	1410 1000 1300 1100
36.0	49.0	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Medium green to grey crystal tuffs with chlorite - carbonate contorted zones from 39.4 to 39.5, 40.4 to 40.5, 41.0 to 41.15, and from 42.3 to 42.4. There are 5 to 15 cm quartz veins at 36.8 and 42.7. There is local trace stringer and disseminated pyrite, which is associated with the chlorite zones and guartz veins.	AB15460 AB21515	45.5 48.0	45.6 49.0	.1 1.0	19 6	n/a 5	31 24	n/a <1	n/a <5	910 1300
49.0	50.5	CHLORITIC INTERMEDIATE TUFF Chlorite - carbonate zone with trace to 1 % banded and disseminated pyrite.	AB21516	49.0	50.5	1.5	15	<5	59	<1	<5	1500
50.5	75.0	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF										



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

 Rhyolitic to dacitic quartz eye feldspar crystal tuff. Light grey AD2551 61.5 1.0 13 9 37 (1 65 990 to green massize to moderately soritic. Trace banded and AD2561 61.4 1.1 5 4 31 (1 61 600 Toliation, which at 56.7 is at 00 degrees to core axis. 75.0 80.7 CHERY TUFFACEOUS SEDIMENTS General advice the thyolitic quartz eye feldspar crystal tuffs at the eto and matic quartz eye feldspar crystal tuffs at the eto and matic quart eye feldspar crystal tuffs at the eto. Chert coopende decreases from 3 90 to approximately 50 degrees to core axis. 80.7 91.9 INTERMEDIATE TO FELSIC QUARTZ FYS AND FELDSPAR CHYSTAL TUFF Starts as black rhyolitic crystal tuff, with 15 to 20 % quarts and feldspar crystal tuff, with 15 to 20 % quarts and feldspar crystal tuff. Trace prytic occrea locally in quartz veins, which occur locally in trace amounts and are white bull quartz veins, 2 to 5 cm wide. The foldspar crystal tuffs core axis at 90.6. 91.9 94.0 FAUHT ZOME Clay and sericitic tuffaceous rubble and sheared material. 94.0 126.0 FELSIC QUARTZ-FELDSPAR CHYSTAL TUFF River and approximately 50 degrees to core axis at 90.6. 91.9 94.0 FAUHT ZOME Clay and sericitic tuffaceous rubble and sheared material. 94.0 126.0 FELSIC QUARTZ-FELDSPAR CHYSTAL TUFF AND Charles to approximately 50 degrees to core axis and bedding is at 45 degrees to core axis and bedding is at 46 degrees to core axis at 90.6. 91.9 94.0 FAUHT ZOME Clay and sericitic rystal tuffs with local trace to 2 4, 1 AB1545 97.0 98.0 1.0 2 7 27 (1 45 980 10.0 2, 7 27 41 42 m/a 980 10.0 2, 7 27 41 42 m/a 980 10.0 2, 7 27 41 42 m/a 980 10.0 2, 7 27 41 41 m/a 980 10.0 12.5 m/a 33 m/a m/a 980 10.0 2, 7 27 41 42 m/a 980 10.0 2, 7 27 41 42 m/a 980 10.0 2, 7 27 41 42 m/a 980 10.0 2, 7 27 41 41 m/a 980 10.0 12.5 m/a 33 m/a m/a 980 10.0 2 7 27 41 41 m/a 980 10.0 12.5 m/a 33 m/a m/a 980 10.0 2 7 27 41 41 m/a 980 10.0 12.5 m/a 33 m/a m/a 980 10.0 2 7 27 41 41 m/a 980 10.0 12.5 m/a 33 m/a m/a 980 10.0 2 7 27 41 41 m/a 980 10.	From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
 to green massive to moderately sericitic. Trace banded and AB15461 61.3 61.4 .1 5 4 33 (1 (1 960 foliation, which at 56.7 is at 60 degrees to core axis. AB15462 74.0 73.0 1.0 9 6 27 (1 (5 1000 foliation, which at 56.7 is at 60 degrees to core axis. AB15462 74.0 74.1 .2 29 n/a 52 n/a n/a 1000 75.0 80.7 CHENT TUTFACEOUS SEDIAMTS created to form and white the try below of approximately 50 4 with apth. Bodding is at a average of approximately 50 4 with depth. Bodding is at a average of approximately 50 4 with depth. Bodding is at a average of approximately 50 4 with depth. Bodding is at a average of approximately 50 4 with depth. Bodding is a to 20 4 warts and foliation is at 50 degrees to core axis. 80.7 91.9 INTERMEDIATE TO FILSIC QUMATE XFM ND FILSSPAR CHYSTAL TUFF form and write buil quarts verse, 2 to 5 cm wide. The foliation is at 50 degrees to core axis at 90.6. 91.9 94.0 FAULT ZONE Clay and sericitic tuffscours rubble and sheared material. 94.0 126.0 FILSIC QUMATE-FILDSPAR CHYSTAL TUFF RUBJOY for chorie core of a set of a set of tuffs, from 98.5 to 98.5 107.4 to 107.5, AB15465 13.6 13.1 7 1 20 n/a 32 n/a 32 n/a 39.4 n/a 980 foliater set as equivalent and approximately 1 and fine or chorie cores, ster AB15465 13.6 13.1 7 1 20 n/a 31 n/a 32 n/a 39.4 n/a 980 foliater set as equivalent and the set of 98.5 to 98.5 107.4 to 107.5, AB15465 13.6 13.1 7 1 20 n/a 31 n/a n/a 980 foliater set of a set of tuffs, from 98.5 to 98.5 107.4 to 107.5, AB15465 13.6 13.1 7 1 20 n/a 31 n/a n/a 980 foliater set of a set of tuffs, from 98.5 to 98.5 107.4 to 107.5, AB15465 13.6 13.1 7 1 20 n/a 31 n/a n/a 980 foliater set of a set of tuffs, from 98.5 to 98.5 107.4 to 107.5, AB15465 13.6 13.1 7 1 20 n/a 31 n/a n/a 980 foliater set of a set of tuffs, from 98.5 to 98.5 to			Rhyolitic to dacitic quartz eye feldspar crystal tuff. Light grey	AB21517	50.5	51.5	1.0	13	9	37	<1	<5	990
 disseminated pyrite cubes occur. Bedding is sub-parallel to foliation, which at 56.7 is at 60 degrees to core axis. 75.0 80.7 CHERT VUFFACEOUS SEDIMENTS Green and white cherty beds with thyolitic quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at the top and main quartz eye feldspar crystal tuffs at a warage of approximately 50 degrees to core axis. 80.7 91.9 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSFAR CRYSTAL TUFF Starts as black thyolitic crystal tuff, with 15 to 20 % quartz and a feldspar crystal rufn, which occur locally in trace anounts and are shile bull quartz weins 20 or 30 m wide. The cours locally in quartz weins, 20 or 30 m wide. The cours locally in quartz weins 20 or 30 m wide. The cours locally in quartz weins 20 or 30 m wide. The cours locally in quartz weins 20 or 30 m wide. The cours is at 90.6. 91.9 94.0 FAULT ZONE Clay and sericitic tuffaceous rubble and sheared material. 94.0 126.0 FELSIC QUARTZ-FELDSFAR CRYSTAL TUFF Rhyolitic to rhyo-dacitic crystal tuffs with local trace to 2 %, 1 Apprint cours and micro pseudo stringers occur in 117.9 to 118.1. Local 112.6 112.6 112.7 . 1. 20 n/a 31 n/a 30 at 20 n/a 390 indications. Fault slips and score stais and contradicting tops indications. Fault slips and zone stais and contradicting tops indications. Fault slips and zones:. Targe, pu to 35 c m in with, bull quartz weins occur, from 98.2 to 98.4 there is a epidote rith uffaceore exis. 30 and a slips 43 31 degrees to core axis and contradicting tops indications. Fault slips and zones:. Targe, pu to 35 c m in dith. Hoult are core rawing at 31 d			to green massive to moderately sericitic. Trace banded and	AB15461	61.3	61.4	.1	, e 5	4	33	(1	<1	960
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94.0 126.0 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Rhyolitic to rhyo-dacitic crystal tuffs with local trace to 2 %, 1 to 2.5 mm, quartz eyes and approximately 10 to 15 % epidote - feldspar grains, approximately 1 mm. Minor chlorite zones, after feldspar grains, approximately 1 mm. Minor chlorite zones, after sindications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			ciay and sericitic turraceous rubble and sheared material.		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -								
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Rhyolitic to rhyo-dacitic crystal tuffs with local trace to 2 %, 1AB2151997.098.01.02727(1<5980to 2.5 mm, quartz eyes and approximately 10 to 15 % epidote -AB1546499.399.4.123n/a32n/an/a980feldspar grains, approximately 1 mm. Minor chlorite zones, afterAB15465112.6112.7.120n/a41n/an/a980intermediate to mafic tuffs, from 98.5 to 98.8, 107.4 to 107.5,AB15465112.6112.7.129n/a33n/an/a980107.6 to 107.8, 109.2 to 109.3 and from 117.9 to 118.1.Localpyrite cubes and micro pseudo- stringers occur in trace amounts.Large, up to 35 cm in width, bull quartz veins occur. From 98.2 to98.4 there is a epidote rich tuffaceous cherty sediment, with thebedding at 50 degrees to core axis and contradicting topsindications.Fault slips and zones:.114.1 to 114.7 blocky, highly fractured core from 115.2 to115.3, slip at 115.8 at 48 degrees to core axis, blocky, highlyfractured core and 0.3 m of lost core at 117, and clay from 124.3to 124.4.Bedding at 122.2 is at 53 degrees to core axis and thefoliation at 123.2 is at 45 degrees to core axis.	94.0	126.0	FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF										
to 2.5 mm, quartz eyes and approximately 10 to 15 % epidote - AB15464 99.3 99.4 .1 23 n/a 32 n/a n/a 980 feldspar grains, approximately 1 mm. Minor chlorite zones, after AB15465 112.6 112.7 .1 20 n/a 41 n/a n/a 980 intermediate to mafic tuffs, from 98.5 to 98.8, 107.4 to 107.5, AB15465 112.6 112.7 .1 20 n/a 41 n/a n/a 980 107.6 to 107.8, 109.2 to 109.3 and from 117.9 to 118.1. Local pyrite cubes and micro pseudo- stringers occur in trace amounts. Large, up to 35 cm in width, bull quartz veins occur. From 98.2 to 98.4 there is a epidote rich tuffaceous cherty sediment, with the bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 123.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			Rhvolitic to rhvo-dacitic crystal tuffs with local trace to 2 %, 1	AB21519	97.0	98.0	1.0	2	7	27	<1	<5	980
 feldspar grains, approximately 1 mm. Minor chlorite zones, after intermediate to mafic tuffs, from 98.5 to 98.8, 107.4 to 107.5, 123.6 112.7 .1 20 n/a 41 n/a n/a 980 107.6 to 107.8, 109.2 to 109.3 and from 117.9 to 118.1. Local pyrite cubes and micro pseudo- stringers occur in trace amounts. Large, up to 35 cm in width, bull quartz veins occur. From 98.2 to 98.4 there is a epidote rich tuffaceous cherty sediment, with the bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis. 			to 2.5 mm, guartz eves and approximately 10 to 15 % epidote -	AB15464	99.3	99.4	.1	23	n/a	32	n/a	n/a	980
<pre>intermediate to mafic tuffs, from 98.5 to 98.8, 107.4 to 107.5, 107.6 to 107.8, 109.2 to 109.3 and from 117.9 to 118.1. Local pyrite cubes and micro pseudo- stringers occur in trace amounts. Large, up to 35 cm in width, bull quartz veins occur. From 98.2 to 98.4 there is a epidote rich tuffaceous cherty sediment, with the bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.</pre>			feldspar grains, approximately 1 mm. Minor chlorite zones, after	AB15465	112.6	112.7	.1	20	n/a	41	n/a	n/a	980
<pre>107.6 to 107.8, 109.2 to 109.3 and from 117.9 to 118.1. Local pyrite cubes and micro pseudo- stringers occur in trace amounts. Large, up to 35 cm in width, bull quartz veins occur. From 98.2 to 98.4 there is a epidote rich tuffaceous cherty sediment, with the bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.</pre>			intermediate to mafic tuffs, from 98.5 to 98.8, 107.4 to 107.5,	AB15466	123.6	123.7	1	29	n/a	33	n/a	n/a	980
<pre>pyrite cubes and micro pseudo- stringers occur in trace amounts. Large, up to 35 cm in width, bull quartz veins occur. From 98.2 to 98.4 there is a epidote rich tuffaceous cherty sediment, with the bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.</pre>			107.6 to 107.8, 109.2 to 109.3 and from 117.9 to 118.1. Local										
Large, up to 35 cm in width, bull quartz veins occur. From 98.2 to 98.4 there is a epidote rich tuffaceous cherty sediment, with the bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			pyrite cubes and micro pseudo- stringers occur in trace amounts.										
98.4 there is a epidote rich tuffaceous cherty sediment, with the bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core axis, blocky, highly			Large, up to 35 cm in width, bull guartz veins occur. From 98.2 to										
bedding at 50 degrees to core axis and contradicting tops indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			98.4 there is a epidote rich tuffaceous cherty sediment, with the	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1							÷		
indications. Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			bedding at 50 degrees to core axis and contradicting tops										
Fault slips and zones:. 114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			indications.										
114.1 to 114.7 blocky, highly fractured core and slips at 33 degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			Fault slips and zones:										
degrees to core axis, blocky, highly fractured core from 115.2 to 115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			114.1 to 114.7 blocky, highly fractured core and slips at 33		· · ·								
115.3, slip at 115.8 at 48 degrees to core axis, blocky, highly fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			degrees to core axis, blocky, highly fractured core from 115.2 to										
fractured core and 0.3 m of lost core at 117, and clay from 124.3 to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			115.3 clin at 115.8 at 48 degrees to core axis. blocky highly			· · · ·							
to 124.4. Bedding at 122.2 is at 53 degrees to core axis and the foliation at 123.2 is at 46 degrees to core axis.			fractured core and 0.3 m of lost core at 117 and clay from 124.3										
foliation at 123.2 is at 46 degrees to core axis.			to 124 4 Bodding at 122 2 is at 53 dograps to core avid and the										
			foliation at 123.2 is at 46 degrees to core axis.							ે તે			

126.0 127.0 CHLORITE SCHIST

Chlorite - carbonate schist with trace disseminated pyrite and carbonate veinlets. The foliation is at 43.5 degrees to core axis.

AB21520 126.0 127.0 1.0 4 <5 70 <1 <5 530

HOLE No:

CHEM87-23

Page Number

3

PROPERTY: Chemainus J.V. - Chip Claims HOLE No: Page Number FALCONBRIDGE LIMITED CHEM87-23 4 DIAMOND DRILL LOG From To Sample From Width Cu. To Pb Zn Ba Aσ Au (m) (m) -----DESCRIPTION-----No. (m) (m) (m) (הממ) (mgg) (mgg) (maa) (mog) (dog) Likely is a metamorphosed and altered mafic or intermediate tuff. 127.0 131.3 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Moderately to weakly sericitic felsic to intermediate crystal light green to grey tuff with approximately 5 %, 1 to 2.5 mm guartz eyes and approximately 5 %. 1 mm, feldspar grains. Local epidote lapilli and trace disseminated pyrite occur. At 127.5 a graded bed indicates tops is up-hole. Bedding at 127.5 is 42 degrees to core axis and at 129.1 is at 41 degrees to core axis. The foliation at 46 degrees to core axis. 131.3 142.8 INTERMEDIATE TO MAFIC OUARTZ EYE AND FELDSPAR CRYSTAL TUFF Light to medium green to dark blackish- green tuff with 2 to 5 % AB15467 134.4 134.6 . 2 72 n/a 39 n/a n/a 1160 guartz eves locally and 5 to 15 % epidote - feldspar grains. Hosts local 1 to 7 cm quartz - feldspar - carbonate veins with the orientations ranging from 0 to 90 degrees to core axis. Blocky. highly fractured core and clay from 138.0 to 138.7. Trace to nil pyrite occurs and no other sulphides occur. The foliation varies - 3 de locally from 40 to 69 degrees to core axis and bedding appears to be sub-parallel. 142.8 155.9 SERICITIC OUARTZ EYE BEARING FELSIC TUFF Whitish guartz - sericite schist to massive rhvolitic to AB15468 148.6 148.7 .1 15 n/a 22 n/a n/a 1000 rhyo-dacitic tuff with 5 %, 1.5 to 3 mm, guartz eyes. It is locally contorted and kinked. There is trace to nil pyrite cubes and local guartz - carbonate veins and veinlets. $\langle 1 \rangle$ and concordant and discordant 1 mm to 3 cm. Bedding at 151.5 is at 42 degrees to core axis. The foliation locally varies from 30 to 75 degrees to core axis. 155.9 176.6 HEMATITIC CHERTY QUARTZ EYE FELDSPAR CRYSTAL TUFF Intermediate to felsic quartz eye and feldspar crystal tuff mixed AB15472 157.1 157.3 43 <1 (1 900 .2 4 <2 with pink chert - rhondonite (?) . which occurs as massive zones AB15473 162.6 162.8 .2 28 n/a 28 n/a n/a 740 AB15469 165.6 165.7 and beds no manganese crusts were observed; however, rhodonite may (1 1000 .1 5 <2 40 <1 be present. Magnetite, 1 % disseminated, occurs and the pink colour AB15474 169.9 170.0 .1 20 n/a 39 n/a n/a 1040 is likely due to hematitzation. Bedding varies locally between 35 AB15475 175.6 175.8 .2 5 6 24 <1 (1 470 22 590 and 70 c/a. AB15470 176.0 176.1 .1 n/a 55 n/a n/a 176.6 180.2 FAULT ZONE Chloritic and sericitic clay and rock with numerous cross-cutting bull quartz veins. Slips vary from 10 to 70 degrees to core axis.

180.2 186.0 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Intermediate to felsic tuff to sericite - chlorite schist with 15 to 25 % 1 to 2 mm epidote - feldspar grains to crystals and trace

AB15471 184.7 184.9 .2 28 n/a 55 n/a n/a 1690

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-23 5

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba) (ppm)
		to 1 % quartz eyes. Local quartz - feldspar veins, 2 mm to 1 cm, < 1 %, and have orientations between 11 and 30 degrees to core axis. There are nil sulphides.			۲. ۲.							
186.0	189.5	INTERMEDIATE TO MAFIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Chlorite schist with local chert or dust tuff beds and quartz - feldspar veinlets. Minor fracture controlled carbonate with trace pyrite cubes occurs. The foliation is at 53 degrees to core axis. The unit ends in a fault slip, which is at an orientation of 38 degrees to core axis.										
189.5	193.5	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Quartz - sericite to chlorite - sericite schists. Up to 1 % chalcopyrite and 2 % pyrite, which are fracture controlled and disseminated. Fault slip at 190.6 is at 22 degrees to core axis.	AB21521 AB21522 AB21523 AB21524	189.5 190.4 191.3 192.5	190.4 191.3 192.2 193.5	.9 .9 .9 1.0	75 1014 89 72	273 115 12 48	2863 480 271 411	<1 <1 <1 <1	20 20 <5 15	1300 1200 1100 1600
193.5	202.0	HEMATITIC CHERTY MAFIC TO FELSIC CRYSTAL TUFFS Blocky, highly fractured core with 0.6 m lost core at 199.9. Highly altered with hematitzation from 193.5 to 195.0 and 196.9 to 202.0 and chloritization from 195.0 to 196.9. Trace local disseminated pyrite and magnetite occurs. There is minor quartz veining. Bedding at 194 is 71 degrees to core axis and at 201 is at 65 degrees to core axis.	AB15476 AB15477	193.9 195.2	194.0 195.3	.1 .1	14 110	6 <2	40 130	(1 (1	12	1300 960
202.0	220.9	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Light white to grey felsic feldspar and quartz eye crystal tuffs, which is locally sericitic, and locally grades into chloritized and unaltered light to dark green feldspar and quartz eye crystal tuffs. The zones of chloritization are 3 to 50 cm wide and comprises up to 2 % of the rock. Local fine-grained pyrite stringers, up to 1 %, occur and are concordant with bedding or more rarely are fracture controlled. There are local, 1 to 5 cm quartz - feldspar veins that cross-cut and are parallel to bedding. There is local minor kinking and cm scale faults. There are minor cherty beds in the upper 5 m of the unit. Bedding at 205 is at 52 degrees to core axis, at 210.4 is at 40 degrees to core axis and at 220 is at 45 degrees to core axis.	AB15478 AB15479	209.0 218.1	209.1 218.2	.1	15 59	n/a n/a	23 81	n/a n/a	n/a n/a	980 960
220.9	232.3	ALTERED MIXED TUFFS Kinked and contorted with local quartz - carbonate veinlets and up to 2 % disseminated and conformable to foliation pyrite. 220.9 222.3 Quartz - sericite - chlorite schist. Hosts 1 to 2 % quartz eyes and 5 % feldspar grains and approximately 1.5 % disseminated and fracture controlled pyrite. Local guartz - carbonate veins occur. The foliations are at 40, 47	AB15480 AB21525 AB21526 AB15481	221.3 222.3 223.2 223.9	221.4 223.2 224.1 224.0	.1 .9 .9 .1	60 38 24 137	n/a 14 8 n/a	67 237 190 204	n/a (1 (1 n/a	n/a 5 (5 n/a	660 860 940 1190

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From	To		
(m)	(m)	DESCRIPTION	

and 80 degrees to core axis at 221.3.

- 222.3 224.1 Chlorite schist, after intermediate tuff, which has undergone strong pervasive chloritization and carbonatization and hosts white bull quartz veins up to 30 cm thick. Is moderately to highly kinked and contorted. Hosts from 2 to 3 % fracture controlled and disseminated pyrite and trace chalcopyrite.
- 224.1 227.6 Felsic to intermediate feldspar and quartz eye crystal tuff, which has been subjected to weak to moderate chloritization, carbonatization and silicification. Is moderately schistose, foliation at 224.5 is at 43 degrees to core axis, and hosts local quartz - chlorite veins, 5 mm to 12 cm, which have orientations parallel to to foliation. Hosts up to 2 % fine-grained pyrite.
- 227.6 228.4 Chlorite carbonate zone with the foliation at 23 degrees to core axis and hosts no sulphides.
- 228.4 231.3 Contorted quartz sericite schist. Fault grey clay, 2 cm, at 230.2 at 82 degrees to core axis. Foliation locally varies from 0 to 70 degrees to core axis. Hosts from 1 to 2 % fine-grained pyrite.
- 231.3 232.3 Green to grey siliceous fractured, parallel to to foliation in lower sub-unit. Locally contorted and has minor cross-cutting carbonate veinlets and no sulphides

232.3 248.2 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF

Massive siliceous grey to schistose quartz eye and feldspar crystal tuffs with, up to 1 %, 3 to 10 mm, local green chert beds and local 2 to 30 mm quartz +/- feldspar +/- carbonate veins with the orientations at 30 to 90 degrees to core axis. Locally concentrated fracture controlled and banded pyrite, 5 % fine-grained, from 232.9 to 233.9, below 30 cm intermediate tuff with moderate pervasive chloritization. Average pyrite content is 1 to 2 % disseminated and banded pyrite. Is locally contorted and fault slips with sericitic rubble occurs over 10 cm at 242.9, 244.3, 245.35, 245.8 246.9 and the lower contact is a fault with the orientation at 58 degrees to core axis. Bedding at 244.9 is at 61 degrees to core axis.

248.2 252.3 EPIDOTE SPOTTED ANDESITE

Dark green volcanic with 30 to 40 %, 1 to 3 mm, epidote grains. Locally over 7 cm hosts 5 to 7 % disseminated pyrite, average pyrite is approximately 1 %. Lower 0.5 m is contorted and highly deformed.

252.3 265.9 PYRITIC FELSIC TUFF

Very highly deformed, kinking, faulting and folding, quartz eye feldspar crystal felsic tuff to quartz - sericite schist. There are 5 to 10 % crystals, which are 2 to 4 mm in diameter. The average pyrite content is 2 %, and locally over 10 to 20 cm there HOLE No: Page Number CHEM87-23 6

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AB21527 AB15482 AB15483	232.9 235.3 247.1	233.9 235.4 247.2	1.0 .1 .1	45 78 31	8 6 n/a	85 73 45	<1 <1 n/a	<5 4 n/a	800 1090 920	
AB21528	249.5	250.8	1.3	121	6	1610	<1	15	300	
AB15484	250.5	250.6	.1	86	<2	180		2	240 830	

AB21530	252.8	254.0	1.2	5	6	45	(1	5	1300
AB21531	254.0	255.0	1.0	2	8	14	(1	<5	1300
AB15485	254.8	255.0	.2	3	<2	26	<1	<1	1240
AB21532	255.0	256.0	1.0	27	8	36	(1)	<5	1100









FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		is 6 % disseminated and banded pyrite. Minor local quartz veins occur.	AB21533 AB21534	256.0 257.0	257.0 258.0	1.0	1 15	79	25 18	<1 <1	<5 <5	1800 1100
			AB21535	258.0	259.0	1.0	1	6	16	<1	<5	1100
			AB21536	259.0	260.0	1.0	1	5	24	<1	<5	990
			AB21537	260.0	261.0	1.0	9	- 7	34	<1	<5	1100
			AB21538	261.0	262.0	1.0	2	8	16	<1	<5	1400
			AB21539	262.0	264.0	2.0	12	5 7	105	(1	(5	1200
			AB21540	264.0	264.9	.9	9	11	31	(1)	10	1400
			AB21541	264.9	266.0	1.1	86	17	52	. (1	10	<20
			· · · ·				•••					
265.9	270.9	FAULT ZONE										
		Highly fractured intermediate feldspar crystal tuff with numerous clay zones, up to 25 cm wide.				•						
	· · ·											
270.9	278.1	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF										
		Similar to above felsic tuff, but is only locally deformed, kinked	AB15486	272.6	272.7	.1	33	n/a	46	n/a	n/a	830
		and faulted, to a much lesser degree. Hosts nil to trace			•.							
		disseminated pyrite locally. At 276 there is a minor fault slip at			i de la composición d							
		33 degrees to core axis. There is local guartz - carbonate veins										
		with trace pyrite. The crystals are dominantly 5 to 10 % 2 mm										
		quartz eves with some local feldsnar grains. The foliation at 274										
		is 50 degrees to core axis and no distinct measurable bads are										
		is so degrees to core axis and no distinct measurable beds are										
		VISIDIE.										
070 1	070 0											
278.1	219.8	HEMATITIC CHERTY MAFIC TO FELSIC CRYSTAL TUFFS	1015407	070 0	070 4		•		27			4714
		Hematitic purple to reddish sediment enriched, chert and epidote	AB1548/	218.3	2/8.4	• 1	- Z	2	31	<u>(1</u>	(1	4/1
		beds, 5% 2 to 100 mm, cherty feldspar and quartz eye crystal tuff,										
		with gradational lower contact and fault gouge as the upper										
		contact. Hosts approximately 1 % disseminated pyrite and trace										
		magnetite. Has local fractures. Bedding at 278.3 is at 18 degrees										
		to core axis and at 279.5 is at 25 degrees to core axis.										
										·		
279.8	291.0	CHERTY MAFIC TUFFACEOUS SEDIMENTS										
		Chlorite schist with feldspar crystals and chert beds. Sediment is	AB15488	284.5	284.6	.1	20	n/a	184	n/a	n/a	1520
		2 mm to 5 cm grey to green chert bands and local epidote bands.										
		except for one 20 cm band at 290.3. Bedding is weakly contorted and										
		varies throughout the unit from 20 to 35 degrees to core avis Nil										
		to trace nurite accure										
		to trace printe occurs.										
201 0	200 2	AIRDAW MIRES ADALLA CEDIMENTA										
491.0	298.3	UNERTI TUFFACEUUD SEDIMENTS	1015400	0.04 5	201 6	•	c a			- 1-		01 3
		Chlorite schist, locally malic to intermediate feidspar crystal tull,	AB15489	291.5	291.0	•	68	n/a	611	n/a	n/a	913
		with minor chert beds. Local chloritization with black chlorite,	AB21542	296.0	297.0	1.0	190	< 5	130	(1	5	8/0
		top approximately 1 m and 295.5 to 295.8. Local quartz - carbonate	AB21543	297.0	298.3	1.3	433	6	147	<1	10	<20
		veins, one from 297.6 to 297.8 has 1 % chalcopyrite, and is										
	:	cross-cutting, as opposed to the sub-parallel up to 1 cm veins.										
		The foliation at 291.5 is 35 degrees to core axis and at 298.2 is										





Sample

No.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m)

at 35 degrees to core axis. The bedding, chert beds, at 292.1 is at 31 degrees to core axis. The rock is locally contorted. There is trace pyrite associated with carbonate veining.

----DESCRIPTION----

298.3 330.8 PYRITIC QUARTZ-SERICITE SCHIST

Ouartz - sericite schist with minor biotite and chlorite, guartz eve and feldspar crystals, are approximately 3 to 5 % of the rock and are approximately 2 mm in diameter and are more or less uniformly distributed. Pyrite is fine-grained, constitutes on average approximately 4 to 5 % of the rock, the pyrite is dominantly bedded or parallel to schistosity, locally it is fracture controlled or disseminated. From 299.7 to 300.6 there is 10 % pyrite and trace chalcopyrite in 1 to 4 mm 70 % pyrite and 5 % chalcopyrite bands sub-parallel or parallel to to the foliation, which is at 28 degrees to core axis. There is weak silicification surrounding the pyrite rich zones and locally the pyrite may be the matrix for a brecciated tuff zone. FAULT ZONE from 305.6 to 306.6 with numerous clay fault slips, at 305.6 at 90 degrees to core axis and at 306.1 and 306.6 at approximately 30 degrees to core axis. There are local zones of up to 20 cm with 3 to 7 mm pyrite bands with trace to 1 % chalcopyrite and trace to nil sphalerite. These bands act as a matrix and are also stratiform, they occur at 311.6, 317.0. 320.1. and locally from 327.0 to the end. Trace galena occurs in a 10 cm guartz vein at 330.2 and fuchsite occur as a mm scale sheet at 321.4. Thermal biotite appears at 320.4. The lower 3 to 4 m have been subjected to silicification. There are mafic micro-sills, up to 10 cm. at 321.7 and 322.1. The unit is locally weakly to moderately contorted and kinked. There are minor feldspar - epidote crystal rich zones. The foliation at 312.5 is at 48 degrees to core axis and at 324.5 it is approximately 40 degrees to core axis. There are local trace chert beds in the lower 10 m and these indicate that bedding is approximately 47 degrees to core axis There is a fault clay zone from 315.3 to 316.0 at an orientation of 35 degrees to core axis, there are also minor local slips.

AB21546	300.0	301.0	1.0	366	8	68	<1	55	1200
AB21547	301.0	302.0	1.0	57	- 5	43	(1)	15	1500
AB21548	302.0	303.0	1.0	36	6	43	<1	10	1300
AB21549	303.0	304.0	1.0	81	. 7	49	(1	15	1400
AB21550	304.0	305.0	1.0	188	16	58	<1	5	1100
AB21557	305.0	306.0	1.0	145	55	216	<1	25	1300
AB21558	306.0	307.0	1.0	43	40	362	<1	5.	920
AB21559	307.0	308.0	1.0	106	8	2470	<1	10	1600
AB21560	308.0	310.0	2.0	249	17	202	. <1	<5	2000
AB21561	310.0	311.0	1.0	156	14	97	(1	15	2600
AB21562	311.0	312.0	1.0	154	28	93	(1	30	2700
AB21563	312.0	313.0	1.0	226	16	90	<1	30	2800
AB21564	313.0	314.0	1.0	93	25	78	<1	15	2800
AB21565	314.0	315.0	1.0	- 117	15	86	<1	10	3200
AB21566	315.0	316.0	1.0	147	97	164	<1	40	2900
AB21567	316.0	317.0	1.0	433	944	1164	2	170	2100
AB21568	317.0	318.0	1.0	308	142	244	1	220	1700
AB21569	318.0	319.0	1.0	280	103	199	. <1	80	1900
AB21570	319.0	320.0	1.0	326	105	274	1	100	2500
AB21571	320.0	321.0	1.0	296	37	170	<1	75	2200
AB21572	321.0	322.0	1.0	30	11	55	1.	25	1200
AB21573	322.0	323.0	1.0	18	10	- 37	<1	15	1100
AB21574	323.0	324.0	1.0	4	12	. 39	<1	10	1400
AB21575	324.0	325.0	1.0	15	16	. 50	<1	20	1300
AB21576	325.0	326.0	1.0	44	432	232	<1	20	1000
AB21577	326.0	327.0	1.0	46	167	444	<1	10	1200
AB21578	327.0	328.0	1.0	26	100	258	<1	10	2000
AB21579	328.0	329.0	1.0	37	95	204	<1	45	2200
AB21580	329.0	330.0	1.0	28	121	240	<1	25	3000
AB21581	330.0	330.8	. 8	31	32	30	<1	25	2400
AB21852	330.8	332.0	1.2	229	7	75	<1	10	50
AB15490	339.6	339.7	• .1	6	<2	190	<1	<1	161
AB15491	347.8	347.9	.1	210	<2	140	<1	2	148
AB21583	385.0	386.0	1.0	165	9	66	<1	20	120
AB15492	408.3	408.5	.2	135	n/a	93	n/a	n/a	125

HOLE No:

CHEM87-23

Width

(m)

.7

1.0

Cu

(mmm)

60

106

To

(m)

From

AB21544 298.3 299.0

AB21545 299.0 300.0

(m)

Page Number

ø

РЪ

5

Zn

70

57

(mag) (mag)

λσ

(maga)

(1

(1

Ba

730

990

(mag) (dag)

Au

10

25

330.8 449.5 GABBRO

Locally coarse to fine-grained to 341, then is coarse grained. The rock is chlorite, epidote and hematite porphyritic. The hematite is after magnetite and occurs as approximately 2 % of the rock and is disseminated. The chlorite imparted foliation varies from 20 to 80 degrees to core axis locally. There is local variable epidotization and carbonatization in 10 to 50 cm zones. Local fine-grained zones, of up to 2 m, occur locally after 352 and modally constitutes up to 10 % of the rock. There are local quartz +/- calcite +/- chlorite +/- biotite veins, up to 20 cm thick, with the orientation at 414.8 at 55 degrees to core axis and at 427 the orientation is at 45







FALCONBRIDGE LIMITED

DIAMOND DRILL LOG



HOLE No: Page Number CHEM87-23 9

From	To			Comple	From	T ~	TIALL	A	DL	7	•		N -
				Sambie	r i Om	10	width	Cu	PD	Zn	Ag	Au	ba
(m) ·	(m)	DESCRIPTI	ON	No.	(m)	(m) -	(m)	(מממ) -	(maa)	(nnm)	(mmm)	(nph)	(nnm)
					•			F. F	(FF)		(P P · · ·)	(PP-)	(P P)

degrees to core axis. There is a fault from 445.5 to 445.7 with the orientation at 55 degrees to core axis.



Hole Location: 31+00 E 0+95 S

 NTS:
 92B13
 UTM:
 5416765
 N
 430340
 E

 Azimuth:
 210
 Elevation:
 535 m

 Dip:
 -60
 Length:
 364.2 m

Started: 31-MAY-87 Completed: 5-JUN-87

Purpose: To test an IP chargeability and resistivity build-up with a sudden drop.in resitivity and increase in chargeability south of 2+80 S. HOLE No: Page Number CHEM87-24 1

Claim No. CHIP 1 Section No.: Line 31+00 East

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

Core Size: NQ

		-Accelerated south of mood of		DIP TESTS			·							
			Azi- Length muth Di	p Length	Azi- muth Dig	p ¹								
			230.70 220.0 -54. 282.50 220.0 -53.	5 346.50 0	223.0 -52.0	0							· ·	
From (m)	To (m)	D	ESCRIPTION	··	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0	38.1	OVERBURDEN AND CASING			enne.									
38.1	38.5	MAFIC DYKE Fine-grained dark grey and m < 5 mm wide at 70 to 90 deg	assive. Abundant carbon rees to core axis. Nil	ate filled gashe sulphides.	s AD02301	38.2	38.3	.1	326	n/a	136	n/a	n/a	305
38.5	50.3	Lower contact is a clay fill SERICITIC FELSIC TUFF	ed slip at 30 degrees t	o core axis.										
		Light grey fine-grained foli eyes. Moderate pervasive s chloritization (spots are (most of the section. Nil to foliation planes. Two clay f 2 cm above the lower contact contact.	ated and crushed. Less ericitization and weak 3 mm). Core is broken trace pyrite dissemina illed slips at 60 degr . Broken core (fault) a	than 5 % quartz spot and blocky over ited along ees to core axis it the actual	AD02302 AD02303 AD02304	40.9 43.3 50.0	41.0 43.4 50.1	.1 .1 .1	46 36 39	n/a n/a n/a	37 31 31	n/a n/a n/a	n/a n/a n/a	1400 1790 1550
		BEDDING, FOLIATION AND SLIP Foliation 37 degrees to core Bedding 56 degrees to core a Minor clay filled slip at 40 Minor clay filled slip at 45 Foliation 45 degrees to core Foliation 48 degrees to core 1.0 Cm wide clay filled slip	ANGLES. axis at 38.7 m. xis at 41.3 m. degrees to core axis a degrees to core axis a axis at 42.5 m. axis at 43.8 m. at 53 degrees to core	at 39.9 m. at 41.0 m. axis at 43.9 m.										
		Minor clay filled slip at 60 Minor slip at 30 degrees to Minor slip at 30 degrees to Foliation at 50 degrees to c Foliation at 40 degrees to c Foliation at 45 degrees to c	degrees to core axis a core axis at 44.6 m. core axis at 45.0 m. ore axis at 47.7 m. ore axis at 48.1 m. ore axis at 48.0 m.	it 44.5 m.										

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

From

(m)

То

(m)



FALCONBRIDGE LIMITED

DTAMOND DRTLL LOG



Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

2.0 Cm wide clay filled slip at 60 degrees to core axis at 50.3 m.

-----DESCRIPTION-----

LOST CORE INTERVALS:. From 38.2 to 40.8 m 0.8 m of lost core. From 40.8 to 43.6 m 0.3 m of lost core. From 45.4 to 47.2 m 1.2 m of lost core. From 47.2 to 50.3 m 0.7 m of lost core.

50.3 52.5 DARK BROWN ARGILLITE

Loosely consolidated, graphitic and turns to mud when wet. May be a fault gouge. Occasional minor calcite veinlet. Core is broken and blocky over most of the section. Nil sulphides. Foliation is at 50 to 60 degrees to core axis. Lower contact is very sharp at 80 to degrees to core axis and may be a fault.

56.3 2.0 cm wide clay filled slip at 50 degrees to core axis.

52.5 65.3 GREYWACKE

Medium grey fine-grained massive bedding not discernable. 1 to 2 % flattened mud clasts less than 0.5 mm long. Occasional granule-sized felsic lithic clast (Myra?). Below 63.1 m rock becomes quartz rich (>80 %) and contains about 3 % angular granular sized clasts of black cherty argillite. Weak fracture controlled carbonatization. Nil sulphides. Core is blocky between 57.8 and 62.7 m. Bedding at 63.4 m is at 24 degrees to core axis.

54.1 55.4 Strong pervasive carbonatization.

55.8 56.7 0.3 m of lost core.

58.0 3 mm wide clay filled slip at 55 degrees to core axis.

- 58.8 59.0 Granular sized angular quartz and minor lithic clasts comprise about 30 % of the rock.
- 63.1 63.7 Unsorted matrix supported pebble conglomerate. Clasts are subangular and include quartz (50-60%) fine-grained sediments (30%) felsic tuffs (10%) and gabbro (<5%).
- 64.4 65.0 Fault zone. Rock is crushed and very loosely consolidated. Slip at 70 degrees to core axis at 64.5 m. Moderate pervasive carbonatization.

65.3 66.6 DARK BROWN ARGILLITE

As 50.3 to 52.5 m. Round pyrite clast 2.0 cm in diameter at 65.7 m. Lower contact is at 67 degrees to core axis.
FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-24 3

Sample	From	То	Width	С
No.	(m)	(m)	(m)	(p

Pb Zn Αg Ba 'n Au (מסו (ppm) (ppm) (ppm) (ppb) (ppm)

As 52.5 to 65.3. Core is broken and blocky below 68.3 m. Nil sulphides.

At 68.0 m 2 mm wide clay filled slip at 63 degrees to core axis. Foliation is at 50 degrees to core axis at 70.0 m. Lower contact is a slip at 36 degrees to core axis.

-----DESCRIPTION-----

73.2 73.4 Dark brown argillite as 50.3 to 52.5 m.

73.4 94.9 PEBBLE TO COBBLE CONGLOMERATE

Matrix supported angular to subangular pebble to cobble sized clasts in a dark brown argillaceous matrix. Loosely consolidated and strongly sheared. Nil sulphides except in occasional clast of Myra rock. Lower contact is a slip at 50 degrees to core axis. CLAST COMPOSTION: . 50-80 % Myra felsics (some with sulphides). 1-5 % guartz. <1-10% dark green fine-grained rock. FOLIATION ANGLES. Foliation is at 45 degrees to core axis at 86.0 m.

Foliation is at 20 degrees to core axis at 91.2 m.

74.7 Minor slip at 45 degrees to core axis.

75.3 76.2 Rock is crushed very soft and broken.

76.2 Minor slip at 48 degrees to core axis.

78.3 78.6 Fault zone (?). Rock is very soft and crushed. A slip runs parallel to to the core axis.

79.6 Rock is crushed and has a high clay component. Foliation is contorted. Numerous slips at 10 to 50 degrees to core axis.

89.9 Slip at 18 degrees to core axis.

91.2 92.0 Angular clasts of hornblende bearing mafic volcanic comprise 25 % of the rock.

94.9 121.4 FELDSPAR PHYRIC GABBRO

Dark green fine to medium grained and massive. Weak epidote AD02305 99.7 99.8 AD02306 114.5 114.6 alteration centred on feldspars. Nil to trace chalcopyrite disseminated along foliation planes. Broken core at lower con (fault?). It appears to be at 60 degrees to core axis. FOLIATION ANGLES. Foliation is at 53 degrees to core axis at 95.3 m. Foliation is at 52 degrees to core axis at 96.2 m. Foliation is at 57 degrees to core axis at 98.3 m.

ontact	AB204	51 120.4 121.4	1.0	128	16	156	<1	
		the second second second						
				1.00				

.1

.1

312

257

n/a

n/a 🗠

820

127

n/a

n/a

n/a

n/a

<5

408 221

170

Foliation is at 40 degrees to core axis at 101.7 m.

From

(m)

To

(m)



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

-----DESCRIPTION------

95.5 98.3 Moderate pervasive carbonatization. Carbonate has a slight pinkish caste.

101.0 103.9 Blocky, highly fractured core.

104.8 105.0 Blocky, highly fractured core.

106.0 Minor clay filled slip at 23 degrees to core axis.

107.4 109.2 Blocky, highly fractured core.

110.1 111.3 Blocky, highly fractured core.

116.0 117.3 Blocky, highly fractured core.

121.0 121.4 Blocky, highly fractured core.

121.4 248.6 SERICITIC FELSIC FLOW

5 SERICITIC FELSIC FLOW	2									
Grey fine-grained foliated with nil to 5 % quartz eyes 1 to 3	3 mm in AB20452	121.4	122.5	1.1	78	15	18	<1	. 5	1100
diameter. In less sericitic sections lapilli sized feldspar	AB20453	122.5	123.5	1.0	273	14	33	<1	15	1100
crystals comprise 20 to 30 % of the rock. Moderate pervasive	e AB20454	123.5	124.5	1.0	565	12	36	<1	15	1300
sericitization. Occasional spot of mariposite < 1.0 cm in dia	ameter. AB20455	124.5	125.5	1.0	511	12	358	<1	15	1300
Some sections contain siliceous patches 0.5-5.0 cm in diame	ter AD02307	125.9	126.0	.1	265	n/a	59	n/a	n/a	1010
which give the rock a mottled appearance.	AB20456	126.5	126.5	1.0	1186	11	102	2		1100
The rock becomes less sericitic and more massive below 156.0	0 m. AB20457	126.5	127.5	1.0	927	12	970	<1	20	1000
Feldspar crystals < 2mm long comprise 3-5 % of the core. Num	merous AB20458	127.5	128.5	1.0	1602	13	409	· · · (1	10	1300
microfractures. In many places rock has a brecciated appeara	ance AB20459	128.5	129.5	1.0	1604	13	97	<1	35	1000
(crackle breccia ?).	AB20460	129.5	130.5	1.0	948	15	58	<1	15	1100
Lower contact is gradational.	AB20467	130.5	131.5	1.0	270	14	61	<1	5	1400
	AB20468	131.5	132.5	1.0	140	20	88	<1	60	1400
FOLIATION ANGLES.	AB20469	132.5	133.5	1.0	81	73	277	<1	90	1900
Foliation is at 15 degrees to core axis at 125.1 m.	AB20470	133.5	134.5	1.0	22	25	24	<1	30	1900
Foliation is at 10 degrees to core axis at 130.5 m.	AB20471	134.5	135.5	1.0	18	26	37	· <1	40	1600
Foliation is at 28 degrees to core axis at 133.8 m.	AB20472	135.5	136.5	1.0	7	31	30	· <1	30	1300
Foliation is at 15 degrees to core axis at 136.5 m.	AB20473	136.5	137.5	1.0	4	33	20	<1	15	1500
Foliation is at 22 degrees to core axis at 140.4 m.	AB20461	137.3	137.4	.1	43	n/a	42	n/a	n/a	1780
Foliation is at 34 degrees to core axis at 146.0 m.	AB20474	137.5	138.5	1.0	6	48	24	<1	20	1400
Foliation is at 20 degrees to core axis at 149.6 m.	AB20475	138.5	139.5	1.0	, 7	101	- 37	· . (1	30	1400
Foliation is at 18 degrees to core axis at 158.0 m.	AB20476	139.5	140.5	1.0	7.	91	25	<1	20	1500
Foliation is at 25 degrees to core axis at 166.3 m.	AB20477	140.5	141.5	1.0	4	- 78	18	<1	10	1300
Foliation is at 29 degrees to core axis at 169.8 m.	AB20478	141.5	142.5	1.0	. 7	41	15	(1	15	1400
Foliation is at 20 degrees to core axis at 171.1 m.	AB20479	142.5	143.5	1.0	10	27	. 10	<1	45	1800
Foliation is at 35 degrees to core axis at 172.2 m.	AB20480	143.5	144.5	1.0	6	29	12	<1	30	1400
Foliation is at 22 degrees to core axis at 180.3 m.	AB20481	-144.5	145.5	1.0	- 7	25	10	(1	20	1400
Foliation is at 30 degrees to core axis at 183.6 m.	AB20462	145.8	145.9	.1	38	n/a	20	n/a	n/a	1490
Foliation is at 24 degrees to core axis at 190.1 m.	AB20482	145.5	146.5	1.0	12	19	13	<1	35	1300
Foliation is at 24 degrees to core axis at 195.1 m.	AB20483	146.5	147.5	1.0	26	22	18	<1	30	1400
Foliation is at 32 degrees to core axis at 200.3 m.	AB20484	147.5	148.5	1.0	12	13	10	<1	25	1700
Foliation is at 25 degrees to core axis at 208.4 m.	AB20485	148.5	149.5	1.0	18	10	10	<1	35	1600
-										

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HOLE No:

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

Page Number

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From	То			Sample	From	То	Width	Cu	РЪ	Zn	Ag	Au	Ba
(m)	(m)	· · · · · ·	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb	(ppm)
		Foliation is	at 30 degrees to core axis at 209.4 m.	AB20486	149.5	150.5	1.0	8	9	9	<1	25	2000
		Clay-filled s	lip at 12 degrees to core axis at 214.0 m.	AB20487	150.5	151.5	1.0	9	8	8	(1)	15	1700
		3.5 Cm clay-f	illed slip at 20 degrees to core axis at 215.0 m.	AB20488	151.5	152.5	1.0	66	9	10	(1	30	1600
		1.0 Cm wide c	lay-filled slip at 20 degrees to core axis at 221.4 m.	AB20489	152.5	153.5	1.0	44	10	10	- (1	10	1700
		Foliation is	at 35 degrees to core axis at 225.3 m.	AB20490	153.5	154.5	1.0	36	11	9	<1	30	1400
		Foliation is	at 15 degrees to core axis at 229.3 m.	AB20491	154.5	155.5	1.0	21	. 9	12	(1	- 5	1600
		Foliation is	at 10 degrees to core axis at 232.0 m.	AB20492	155.5	156.5	1.0	4	. 9 .	. 8	<1	< 5	1500
		Foliation is	at 27 degrees to core axis at 235.5 m.	AB20493	156.5	157.5	1.0	6	17	8	<1	< 5	1600
		Foliation is	at 25 degrees to core axis at 243.6 m.	AB20494	157.5	158.5	1.0	9	19	6	<1	<5	1500
				AB20463	158.6	158.7	.1	44	n/a	15	n/a	n/a	2130
		SULPHIDES:.		AB20495	158.5	159.5	1.0	8	15	. 5	<1	<5	1600
		121.4 124.4 U	Ip to 10 % foliation disseminated pyrite and trace	AB20496	159.5	160.5	1.0	13	8	5	<1	<5	1700
		c	halcopyrite. About 5 % pyrite and <0.25% chalcopyrite	AB20497	160.5	161.5	1.0	35	7	9	<1	5	1500
		0	verall. At 123.2 m a 5 mm wide band (bed?) of pyrite	AB20498	161.5	162.0	.5	30	13	8	(1	10	1500
		W	ith 1 % chalcopyrite at 22 degrees to core axis.	AB20499	162.0	163.0	1.0	11	13	8	<1	< 5	1600
		124.4 128.6 7	% pyrite and up to 0.5 % chalcopyrite. Sulphides are	AB20500	163.0	164.0	1.0	8	11	6	<1	5	1600
		C	concentrated in in siliceous patches 3-20 mm in	AD02501	164.0	165.0	1.0	8	9	8	<1	< 5	1700
		đ	iameter. 1 % chalcopyrite between 125.9 and 126.0 m.	AD02502	165.0	166.0	1.0	. 52	9	10	<1	15	1600
		S	iliceous band (stringer ?) of chalcopyrite 5 mm wide	AD02308	166.3	166.4	.1	68	n/a	15	n/a	n/a	1690
1997 - 1997 -		a	t 10 degrees to core axis at 127.5 m.	AD02503	166.0	167.0	1.0	73	15	12	<1	<5	1900
		128.6 128.8 3	* chalcopyrite and 8 to 10 * pyrite concentrated in 2	AD02504	167.0	168.0	1.0	5	14	5	<1	< 5	1900
		m	m wide bands at 20 to 40 degrees to core axis.	AD02505	168.0	169.0	1.0	9	28	7	<1	< 5	2200
		128.8 129.0 1	to 2 % pyrite and trace chalcopyrite.	AB20464	168.2	168.3	.1	37	0	<10	n/a	0	1960
		129.0 130.0 5	<pre>% pyrite and up to 0.5 % chalcopyrite overall in</pre>	AD02506	169.0	170.0	1.0	11	10	- 7	<1	<5	2000
		0	ccasional stringers (?) running close to the core axis	AD02507	170.0	171.0	1.0	15	12	8	<1	< 5	1800
			and disseminated along foliation planes. At 129.3 m 5	AD02508	171.0	172.0	1.0	15	56	9	<1	10	2000
		m	m wide band of pyrite at 25 degrees to core axis.	AD02509	172.0	173.0	1.0	142	67	271	<1	10	2500
		130.0 130.4 T	race to 2 % disseminated pyrite.	AD02510	173.0	174.0	1.0	604	49	766	<1	65	3300
		130.4 130.8 6	<pre>% pyrite and 0.5-1 % chalcopyrite concentrated in</pre>	AD02511	174.0	175.0	1.0	138	12	30	<1	20	2800
		b	ands at 20 to 30 degrees to core axis. Cross-cutting	AD02512	175.0	176.0	1.0	28	15	18	<1	< 5	2500
		(80 degrees to core axis) 2 mm wide pyrite stringer at	AD02513	176.0	177.0	1.0	7	10	15	· (1 ·	10	2600
		1	30.7 m.	AD02514	177.0	178.0	1.0	25	9	11	<1	n/a	n/a
		130.8 132.4 3	% pyrite and trace pyrite concentrated in siliceous	AD02515	178.0	179.0	1.0	10	11	14	.<1	<5	2400
		S	pots and patches 2-10 mm in diameter.	AD02516	179.0	180.0	1.0	15	10	8	<1	25	2500
		132.4 133.3 8	% pyrite mostly in 1-5 mm wide siliceous bands	AD02517	180.0	181.0	1.0	30	16	14	-<1	45	2600
· · · ·		· · · · · (stringers?) running parallel to core axis.	AD02518	181.0	182.0	1.0	12	50	15	<1	10	2700
		133.3 134.0 2	% disseminated pyrite and trace chalcopyrite.	AB20465	181.8	181.9	.1	47	n/a	14	n/a	n/a	2370
		134.0 135.0 1	0 % pyrite and trace chalcopyrite concentrated in	AD02519	182.0	183.0	1.0	12	133	23	(1	20	2800
		b b	ands 1-3 mm wide parallel to foliation at 10 degrees	AD02520	183.0	184.0	1.0	39	99	28	<1	15	3100
		t	o core axis. Possible sulphides clast (pyrite) at	AD02521	184.0	185.0	1.0	111	81	40	(1	35	3100
		1	34.2 m. The clast is angular and 1.5 cm long.	AD02522	185.0	186.0	1.0	25	17	16	(1	5	2900
		135.0 136.4 1	to 2 % disseminated pyrite.	AD02523	186.0	187.0	1.0	56	18	16	<1	5	2500
		136.4 143.5 5	<pre>% pyrite and trace (<0.25%) chalcopyrite disseminated</pre>	AD02524	187.0	188.0	1.0	8	15	22	<1	15	2800
		P	arallel to foliation and in siliceous bands up to 4 mm	AD02525	188.0	189.0	1.0	7	15	7	(1	15	3000
		W	ide at 15 to 25 degrees to core axis.	AD02526	189.0	190.0	1.0	14	14	8	<1	20	2400
*** · · · ·	i le marci s	143.5 146.0 2	to 3 % disseminated pyrite.	AB20466	189.7	189.8	.1	48	n/a	14	n/a	n/a	2880
		146.0 149.4 3	to 5 % pyrite in 2 to 4 mm bands at 20 to 60 degrees	AD02527	190.0	191.0	1.0	23	44	10	<1	100	2500
		t	o core axis. Most are subparallel to foliation. Below	AD02528	191.0	192.0	1.0	. 18 -	25	11	(1)	45	2500
		1	48.7 m the pyrite bands contain carbonate.	AD02529	192.0	193.0	1.0	19	45	16	<1	30	2800
		149.4 156.0 2	to 3 % foliation disseminated pyrite. Between 153.4	AD02530	193.0	194.0	1.0	30	50	36	· (1	30	2300
		a	nd 153.5 15 % pyrite concentrated in 1.0 cm wide	AD02531	194.0	195.0	1.0	. 58	85	26	<1	10	3000

and the second		
FALCONBRIDGE LIMITED		
DIAMOND DRILL LOG		

HOLE No: Page Number CHEM87-24 6

From (m)	To (m)			DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
				quartz-carbonate veins at 30 degrees to core axis.	AD02532	195.0	196.0	1.0	15	63	30	(1	<5	2200
		156.0	173.2	2 % disseminated pyrite and nil to trace (<0.25%)	AD02533	196.0	197.0	1.0	12	21	13	1	<5	2400
				chalcopyrite. Sulphides occur in spots <1-2 mm in	AD02534	197.0	198.0	1.0	9	34	15	(1	10	2600
				diameter. From 166.6 to 166.7 m 15 % disseminated	AD02535	198.0	199.0	1.0	12	14	14	<1 ·	5	2400
				pyrite in a zone of moderate pervasive carbonatization.	AD02536	199.0	200.0	1.0	43	21	21	<1	10	2300
		173.2	174.2	Breccia zone (?) fine-grained siliceous fragments in a	AD02537	200.0	201.5	1.5	37	18	22	(1)	5	2400
				more sericitic matrix. 5 % pyrite and 0.25 %	AD02309	200.3	200.4	.1	59	n/a	20	n/a	n/a	3060
				chalcopyrite concentrated in siliceous fragments. Weak	AD02538	201.5	203.0	1.5	37	19	14	<1	5	3000
				patchy mariposite alteration over this section.	AD02539	203.0	204.5	1.5	39	16	18	<1	<5	2800
		174.2	184.4	2 to 3 % disseminated pyrite.	AD02540	204.5	206.0	1.5	38	13	19	<1	<5	3200
		184.4	184.7	8 % pyrite concentrated in siliceous patches and bands	AD02541	206.0	207.0	1.0	.14	24	16	<1	<5	1700
				2-8 mm wide parallel to foliation.	AD02542	207.0	208.5	1.5	138	34	19	<1	30	2500
		184.7	190.5	1-2 % pyrite disseminated and as occasional stringers	AD02543	208.5	210.0	1.5	89	24	18	<1	20	2000
				(no siliceous alteration halos around stringers). At	AD02544	210.0	211.5	1.5	63	16	12	<1	40	2100
				185.9 m siliceous band 1.0 cm wide at 35 degrees to	AD02545	211.5	213.0	1.5	103	19	15	<1	25	1700
				core axis with 20 % pyrite. At 187.9 2 mm wide stringer	AD02310	212.1	212.2	.1	144	n/a	28	n/a	n/a	1610
				of pyrite at 30 degrees to core axis. At 188.4 m 3 mm	AD02546	213.0	214.5	1.5	189	24	1248	1	110	1900
				wide pyrite stringer at 27 degrees to core axis.	AD02547	214.5	216.0	1.5	75	15	27	.<1	25	2100
		190.5	191.1	STRINGER ZONE. 15-20 % pyrite in stringers 2-4 mm wide	AD02548	216.0	217.5	1.5	124	24	422	(1	80	2300
				with siliceous alteration halos. Most stringers are	AD02549	217.5	219.0	1.5	399	22	1672	1	90	2800
				subparllel to foliation at 30 degrees to core axis.	AD02550	219.0	220.5	1.5	153	39	62	1	80	3600
		2011 - E		Several, however are at 53 to 60 degrees to core axis.	AD02551	220.5	221.0	.5	82	13	32	<1	100	3400
		191.1	192.2	5 % pyrite mostly in stringers as 190.5 to 191.1.	AD02552	221.0	222.0	1.0	337	16	30	1	130	2800
		192.2	192.6	15 to 20 % pyrite in stringers as 190.5-191.1 m. Most	AD02553	222.0	223.0	1.0	45	15	14	- <1	110	2600
				subparallel to foliation at 20-30 degrees to core axis.	AD02554	223.0	224.0	1.0	28	13	5	<1	130	2500
		192.6	195.0	5 % pyrite in stringers at 20 to 40 degrees to core axis	AD02555	224.0	225.0	1.0	27	12	2	<1	70	2500
		195.0	197.4	1-2 % disseminated pyrite. Quartz-carbonate vein 7 mm	AD02311	224.5	224.6	.1	72	n/a	<10	n/a	n/a	2080
				wide with 10 % pyrite runs parallel to core axis.	AD02556	225.0	226.0	1.0	40	8	1	<1	25	2000
		197.4	198.0	5 % pyrite disseminated and in stringers 2-6 mm wide at	AD02557	226.0	227.0	1.0	75	10	17	<1	70	3100
				0 to 50 degrees to core axis.	AD02558	227.0	228.0	1.0	106	17	85	<1	55	3500
		198.0	200.0	2-3% pyrite overall. Occasional 2-3 mm wide stringer at	AD02559	228.0	229.0	1.0	105	12	26	<1	50	3500
				0 to 60 degrees to core axis.	AD02560	229.0	230.0	1.0	40	17	49	<1	110	4000
		200.0	207.0	2 % pyrite disseminated and as occasional stringers.	AD02561	230.0	231.0	1.0	22	13	6	(1	2	3100
				Two 2 mm pyrite stringers at 18 and 25 degrees to core	AD02562	231.0	232.5	1.5	23	12	20	(1)	<5	2500
				axis.	AD02563	232.5	234.0	1.5	12	- 14 -	17	(1	25	2600
		207.0	218.5	5 % pyrite in foliation parallel disseminations. 3 X 6	AD02564	234.0	235.5	1.5	9	12	20	(1	5	2700
				cm patch of pyrite with minor chalcopyrite along its	AD02565	235.5	237.0	1.5	12	1	12	(1 -	(5	2300
				edges.	AD02566	237.0	238.5	1.5	35	8	10		(5	1300
		218.5		3 % sphalerite disseminated along foliation planes at	AD02312	238.7	238.8	.1	32	n/a	23	n/a	n/a	1060
		010 [°] 5		25 degrees to core axis.	AD02567	238.5	240.0	1.5	. 11	8	13	(1	(5	2700
		218.5	221.0	5-/ * pyrite nil-0.5* chalcopyrite. Mostly in bands 1-3	AD02568	240.0	241.5	1.5	5	1 .	12		· (5	1500
				mm wide subparallel to foliation. Some have 2-3 mm	AD02569	241.5	243.0	1.5	3	. 11	16		(5	1400
				siliceous alteration halos.	AD02570	243.0	244.5	1.5	17	1	11	(1	(5	1100
		221.0	224.1	10-15% pyrite mostly in 2-4 mm stringers with siliceous	AD02571	244.5	246.0	1.5	9	1	15	. (1	(5	1200
				haios at 30 degrees to core axis. Bed of massive pyrite	AD02572	246.0	247.5	1.5	43	12	.14	0	(5	1300
		004 4		at 25 degrees to core axis from 221.6-221.7 m.	AD02573	247.5	248.6	1.1	24	11	10	(1)	····(5	2000
		224.1	227.0	3-5% pyrite in wispy bands 2-4 mm wide subparallel to	AD02313	248.3	248.4	.1	29	n/a	15	n/a	n/a	1710
		007 0	0.27	Iollation.										
		441.0	237.1	2-45 disseminated pyrite. Several 2-4 mm pyrite										
				stringers with 2"3 mm afteration halos at 24 to 37										
				degrees to core axis detween 234.4 and 234.8 m. At										



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)	DESCRIPTION
		236.5 m 1 X 6 cm patch of pyrite along edge of an 8.0 cm wide quartz pod.
		237.1 248.6 Nil-tr disseminated pyrite. Between 244.9 and 245.3 % pyrite disseminated along foliation planes.
		121.0 122.5 0.5 cm of lost core.
		126.2 126.9 Fault zone at 45 to 50 to degrees to core axis. Rock is crushed and loosely consolidated.

127.0 127.3 Crushed zone 2.0 cm wide at 10 degrees to core axis.

130.4 133.2 20 cm lost core.

133.2 133.3 Crushed zone.

133.3 136.4 Weak pervasive mariposite alteration.

- 144.8 Clasts of fine-grained felsic volcanics with disseminated pyrite up to 2.0 cm long.
- 145.0 149.5 Weak to moderate thermal biotite alteration.
- 143.0 146.2 Less sericitic section. 20 % lapilli sized feldspar crystals.

148.4 151.5 0.5 m of lost core.

161.5 161.9 Blocky, highly fractured core.

166.3 4 mm bed (?) of white fine-grained mineral that does not fizz with HCl (gypsum ?). See sample AD02308.

166.7 167.0 Blocky, highly fractured core.

168.1 168.5 Blocky, highly fractured core.

175.8 175.9 Broken rubly core.

184.7 184.8 Moderate mariposite alteration along foliation planes at 30 degrees to core axis.

200.3 207.1 Weak spot chloritization alteration.

2-5% grey to pale green fine-grained siliceous clasts 207.0 3-5 mm wide and up to 6.0 cm long aligned parallel to foliation. Some contain a large amount of pyrite.

210.1 210.4 Crushed sheared zone at 30 degrees to core axis.

211.6 211.9 4 mm wide clay-quartz filled slip at 12 degrees to core

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Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)



To

(m)

From (m)

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82

146

211

145

94

82

71

170

442

247

164

959

931

1185

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1.0

1.0

1.5

1.5

1.5

1.5

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1.5

1 5

2.0

.1

. 6

14

13

14

15

15

36

26

476

n/a

48

38

18

n/a

12

9

11

18

19

15

212

33

5200

3060

9800

2816

153

93

83

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n/a

130

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10

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50

50

10

140

5

2000

2000

2700 10 1400

2300

2400

1700

1400

1800

2700

(5 1400

n/a 1620

25 2700 n/a 2100

		C	Enem	M-	U-141	<i>C</i>	n L	7	3 -	8	8.
		Sampie	r l'om	10	WIGCD -	Cu	r D	411	NY	Au	Da
DESCRIPTION		No.	(m)	(m)	(m)	(ppm)	(mqq)	(ppm)	(ppm)	(ppb)	(ppm)

AD02574 248.6 249.5

AD02575 249.5 250.5

AD02576 250.5 251.5

AD02577 251.5 252.5

AD02578 252.5 254.0

AD02579 254.0 255.5

AD02580 255.5 257.0

AD02581 257.0 258.5

AD02314 257.8 257.9

AD02582 258.5 260.0

AD02583 260.0 261.5

AD02584 261.5 263.5

AD02315 263.2 263.3

AD02585 263.5 264.1

axis.

226.6 227.1 Rock is crushed and foliation is contorted.

229.5 248.6 2-4% guartz eves <3 mm in diameter. Milky guartz fills randomly oriented gashes < 3 mm wide.

229.5.232.0 Rock is crushed and foliation is contorted.

237.1 245.0 Weak pervasive chloritization and patchy silicification. Mottled and pale green.

248.6 264.1 FELSIC LAPILLI TUFF

Less than 5 to 10% dark grey to white lapilli to block-sized (most 0.5-1.0 cm) felsic clasts in a light grey sericitic matrix. Occasional sulphides clast up to 2.5 cm in diameter but most are 3-5 mm wide. Occasional spot of mariposite <0.5 cm in diameter. Milky guartz filled fractures (4 mm wide are common. Lower contact is sharp at 44 degrees to core axis. FOLIATION AND BEDDING ANGLES:. Foliation is at 24 degrees to core axis at 249.5 m. Foliation is at 30 degrees to core axis at 252.6 m. Possible bedding at 30 degrees to core axis at 256.8 m. Minor clay filled slip at 30 degrees to core axis at 257.9. Foliation is at 30 degrees to core axis at 259.6 m. Bedding is at 40 degrees to core axis at 262.5 m. Foliation is at 48 degrees to core axis at 262.6 m. Foliation is at 40 degrees to core axis at 263.7 m.

SULPHIDES: .

- 248.6 253.0 7-10 % disseminated pyrite and an occasional sulphides clast.
- 253.0 264.1 2-4% spotty pyrite. Couple of 3 mm wide pyrite bands at 35-40 degrees to core axis at 263.7 m.

254.1 254.5 Blocky, highly fractured core.

- 258.2 4.0 cm wide patch of red biotite disseminated along foliation planes. Some of this may be sphalerite.
- 259.1 260.2 Patchy thermal biotite alteration. Maybe some sphalerite
- 261.7 261.9 Moderate carbonatized beige clast or alteration patch at 45 to degrees to core axis. 10 % pyrite concentrated in microfractures.

262.3 267.4 Crushed zone at 20 degrees to core axis.



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From (m)	T0 (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Massive medium green fine-grained with 7 % feldspar phenocrysts < 1 to 4 mm long. Trace disseminated and fracture controlled pyrite and chalcopyrite. Lower contact is at 30 degrees to core axis.	AD02586 AD02316 AD02587	264.1 265.6 266.3	265.1 265.7 267.3	1.0 .1 1.0	257 366 271	7 n/a 11	92 108 41	<1 n/a <1	10 n/a 10	100 134 910
267.3	274.6	SERICITIC FELSIC QUARTZ CRYSTAL TUFF Light - medium grey fine-grained and foliated. 1-5 % 1-3 mm quartz eyes. Occasional spot of apple green mariposite. Below 269.7 m rock has a mottled altered appearance due to silicification. 2-20% pyrite. Lower contact is at about 60 degrees to core axis.	AD02588 AD02589 AD02317 AD02590 AD02591	267.3 268.6 269.8 269.6 270.6	268.6 269.6 269.9 270.6	1.3 1.0 .1 1.0	704 328 720 507 701	18 948 n/a 264 390	40 1434 9050 2480 5000	<1 5 n/a 8 5	40 1350 n/a 260 170	1400 4800 5220 4300 5300
		FOLIATION AND BEDDING ANGLES:.	AD02592	272.0	273.5	1.5	104	45	162	<1	30	4000
		Foliation is at 45 degrees to core axis at 267.6 m. Bedding is at 45 degrees to core axis at 269.0 m. Bedding is at 55 degrees to core axis at 269.1 m. Bedding is at 32 degrees to core axis at 270.8 m.	AD02593	273.5	274.6	1.1	28	45	74	<1	20	2200
		SULPHIDES:. 267.3 268.6 7-10 % pyrite and <0.25% chalcopyrite disseminated and in 1-4 mm bands parallel to foliation. From 268.2 to 268.6 20 % pyrite and trace pyrrhotite in a silicified						: * <u>0</u> :				
		zone. 268.6 269.1 5 % disseminated pyrite. 269.1 269.7 7-10% pyrite in 1-2 mm bands parallel to foliation.										
		269.7 274.6 2-3% disseminated pyrite trace chalcopyrite and sphalerite.										
	• * * •	269.1 269.7 20 % quartz eyes. Mylonitic texture.	· ·									
		269.7 270.1 Moderate thermal biotite alteration. May be some sphalerite.										
		273.1 274.6 Quartz pods comprise about 25 % of the rock.										
274.6	279.9	FELDSPAR PHYRIC GABBRO OR MASSIVE MAFIC FLOW Massive dark green with 7 % feldspar phenocrysts 1-3 mm in length. Becomes fine-grained and foliated below 278.0 m. Lower contact is at 32 degrees to core axis.	AD02594	274.6	275.6	1.0	165	19	51	(1	5	380
279.9	287.9	MIXED MAFIC TUFFACEOUS SEDIMENTS Medium to dark green mafic in composition and fine-grained. Weak fracture controlled carbonate alteration. Occasional pebble sized lithic clast. Mottled due to patchy silicification and thermal	AD02318	282.2	282.3	.1	172	n/a	276	n/a	n/a	224
		biotite alteration 1.0 m from lower contact. Bedding is at 52 degrees to core axis at 283.3 m. Foliation is at 34 degrees to core axis at 282.5 m. Lower contact is gradational.							••••••••••••••••••••••••••••••••••••••			
		279.9 280.7 5 % pyrite and 1% chalcopyrite fracture controlled.										

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					DIAMOND DRI	LL LOG										
From (m)	To (m)			DESCRIPTI	ON		Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		280.7 281.0	Blocky, highly	y fractured	core.					tan an Roman an ta						
		281.1 281.6	Moderate patc fracture cont	ny thermal rolled chal	biotite altera copyrite and p	ation trace pyrite.										
		284.8 285.7	Angular pebble	e sized cla	sts of cherty	y sediments.										
287.9	298.8	MAFIC FLOW Dark green 290.4 m at and 296.3 m sulphides.	OR TUFF fine-grained a 55 degrees to (<5-10% felds Quartz vein a	nd massive. core axis. par phenocr t lower con	Possible bedd Feldspar phyri ysts 3 1 in 1 tact.	ding plane at ic between 293.0 Lenth). Nil	AD02319	292.0	292.1	.1	472	n/a	128	n/a	n/a	346
		291.5 291.9	Moderate perv	asive carb	onate.									1997. 1		
		296.3 296.6	Quartz carbon parallel to c	ate vein wi ore axis.	th a few ble	os of pyrite runs										
		297.0 298.1	Spots (<2 mm) an alteration	of a beig product.	e anhedral min	neral. Looks like					19 s					
		298.1 298.8	Barren quartz	-carbonate	vein at 25 deg	prees to core axis.									• •	
298.8	307.3	FELDSPAR PH Dark green and chalcop contact. Lo	YRIC GABBRO and medium to yrite. 0.5 cm wer contact is	coarse-grai wide band at 35 degr	ned. Trace di of chalcopyrit ees to core as	isseminated pyrite te at the lower kis.	AD02320	300.1	300.2	.1	157	n/a	100	n/a	n/a	339
		298.8 299.1	Blocky, highl	y fractured	core.											
		300.8 301.8	Barren quartz axis.	-carbonate	vein runs pai	rallel to the core			an an An taon							
		302.3 302.7	Barren guartz	-carbonate	vein at 10 to	25 degrees to										

303.3 304.8 Barren quartz-carbonate vein at 10 to 20 degrees to core axis.

core axis.

- 305.8 307.3 Numerous randomly oriented quartz-carbonate filled fractures 2-4 mm wide.
- 307.3 331.6 MAFIC ASH TUFF

Dark green fine-grained with 1-5% lapilli sized block mud clasts 1-5% anhedral hornblende crystals <1-3 mm in diameter. Trace to 1 % disseminated pyrite and nil to trace chalcopyrite. Patchy epidote alteration centred on carbonate patches <0.1 to 10.0 cm wide. Many randomly oriented quartz-carbonate filled fractures <0.5 cm wide.

316 AD02321 323.9 324.0 106 n/a 68 n/a n/a .1

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From Tο

(m

i)	(m)	DESCRIPTION

Lower contact is at 45 degrees to core axis.

FOLIATION AND BEDDING ANGLES: Foliation is at 45 degrees to core axis at 311.2 m. Foliation is at 38 degrees to core axis at 322.3 m. Bedding is at 38 degrees to core axis at 323.0 m. Bedding is at 48 degrees to core axis at 326.6 m. Bedding is at 35 degrees to core axis at 328.3 m.

306.9 310.0 0.8 m of lost core.

309.2 309.7 Blocky, highly fractured core.

310.0 314.2 Blocky, highly fractured core. 3.8 m of lost core.

316.9 8 Minor clay filled slip at 62 degrees to core axis.

317.0 317.4 Hematite along foliation planes.

326.0 326.6 Bleached zone.

331.6 354.3 MIXED MAFIC TUFFACEOUS SEDIMENTS

Grev green felsic to mafic in composition. Composed of ash-sized guartz in a matrix of chlorite biotite and sericite above 338.2 m. Becomes coarser-grained and more mafic in composition below 338.2 m. Mafic hornblende bearing tuff between 347.0 and 350.0 m. Small bed of feldspar lapilli tuff at 50 degrees to core axis between 149.3 and 149.5 m. Bed of cherty laminated green and pink sediments at 38 degrees to core axis at lower contact.

BEDDING ANGLES: .

Bedding is at 33 degrees to core axis at 333.4 m. Bedding is at 50 degrees to core axis at 349.3 m. Bedding is at 18 degrees to core axis at 338.2 m. Bedding is at 50 degrees to core axis at 338.5 m.

343.5 343.6 Minor pink calcite.

344.5 346.4 Bleached, mottled zone.

354.3 364.2 MASSIVE MAFIC HORNBLENDE-BEARING FLOW

Massive dark green and fine to medium-grained. 5-30 % block hornblende crystals. Most are < 3mm in diameter. Nil sulphides.

HOLE No: Page Number CHEM87-24 11

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

AD02322 333.9	334.0 .1	46	n/a	51	n/a	n/a	667
AD02323 342.5	342.6 .1	216	n/a	99	n/a	n/a	442

AD02324 355.6 355.7 .1 167 n/a 58 n/a n/a 274

UTM: 5417030 N 429920 E

Elevation: 470 m

Length: 434.6 m

Hole Location: 26+00 E 0+70 S

NTS: 092/B13

Azimuth: 210

-55

Started: June 4, 1987

Dip:

t.



DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-25 1

Claim No. CHIP1 Section No.: Line 26+00 East

Logged By: David P. Money Drilling Co.: Burwash Enterprises, Cobble Hill, B.C. Assayed By: Bondar-Clegg, Vancouver and X-Ray Assay, Don Mills, (

Co	ompleted: June 10, 1987		Coro Si	NO							
Pu	urpose: To test a shallow IP chargeability anomaly at 2+80 S.		COLE 21	ze: Ný							
	DIP TESTS							. 1			
	Azi- Length muth Dip Length	Azi- muth Di	P								
	209.10 218.0 -55.0 337.10 257.90 220.0 -55.5 407.20	220.0 -55. 221.0 -54.	0								
From (m)	To (m)DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0	40.2 OVERBURDEN AND CASING		•	31 - 100 - 000 21 - 2							
40.2	52.7 QUARTZ-SERICITE SCHIST Quartz - sericite to quartz - sericite - chlorite schist with 2 to 3 %, 2 mm, quartz eyes and 5 to 10 %, 1 to 2 mm, feldspar grains, local trace quartz - carbonate - (chlorite) veinlets and trace sulphides. The rock is light grey to green and is moderately contorted and kinked. The sulphides are local minor fine-grained pyrite bands which occur in trace amounts after 46.0. The foliation, schistosity, at 41.7 is at 42 degrees to core axis and at 47.7 it is at 55 degrees to core axis. There are local faults after 49.0 to the end of the unit, with a greater than 10 cm clay zone at 50 and the slip orientation at 51.2 is 45 degrees to core axis.	AB15493 AB21584	42.8 51.7	43.0 52.7	.2 1.0	58 69	n/a <5	39 96	n/a <1	n/a <5	1090 1300
52.7	52.9 FAULT ZONE Brown to purple fault gouge with minor carbonate and 2 % disseminated pyrite. The upper and lower contacts are wavy and irregular.	AB21585	52.7	52.9	.2	636	15	554	(1	20	1500
52.9	58.1 PYRITIC QUARTZ-SERICITE SCHIST Highly contorted quartz - sericite schist with on average 5 %, 3 to 4 mm, quartz eyes. There is on average 2 % pyrite, which is in fine-grained bands, up to 1 mm to 1.5 mm, conformable to schistosity with trace sphalerite (?). There is a fault at 55.6 with the orientation at approximately 80 degrees to core axis.	AB21586 AB15494 AB21587 AB21588 AB21589 AB21589	52.9 53.6 54.0 55.0 56.0 57.0	54.0 53.8 55.0 56.0 57.0 58.0	1.0 .2 1.0 1.0 1.0	33 39 243 58 46 57	9 n/a <5 <5 <5 <5	32 49 46 17 18 19	<1 n/a <1 <1 <1 <1	<5 n/a 5 (5 (5	1300 1220 1200 1200 1300 1300

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

to 40 cm thick. The tuffs are quartz eye rich with 10 to 20 %, 1 mm, quartz eyes. The tuffs are locally contorted and foliation and bedding (?) varies from 0 to 90 degrees to core axis. There are local quartz - chlorite, quartz - carbonate - chlorite veins and

		DIAMOND DRILL LOG										
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba) (ppm
	. *	Dark grey to green moderately contorted tuff with epidote lapilli, trace quartz eyes and approximately 5 % feldspar grains. There is trace to nil pyrite as rarely occuring bands and disseminations.	AB21591	58.1	59.0	.9	31	7	88	° (1	<5	1100
		Trace local minor carbonate veinlets occur.										
63.2	67.4	QUARTZ EYE BEARING FELSIC TUFF Rhyolitic guartz eye crystal tuff with 2 %, 3 to 5 mm, guartz eyes	AB15495	65.8	66.0	.2	39	n/a	14	n/a	n/a	1260
		and 5 to 10 % epidote grains. The rock is extremely contorted and										
		no sulphiles occur.										
67.4	73.7	MAFIC LAPILLI TUFF										
		Massive to semi- massive mafic lapilli tuff with epidote lapilli, up to 10 % epidote grain locally, and trace guartz eves. There is no										
		apparent bedding and the foliation is so weakly developed as to be unmeasurable. There is trace disseminated pyrite. There is blocky.										
		highly fractured core from 72.6 to 72.9.										
73.7	77.7	QUARTZ EYE BEARING FELSIC TUFF Felsic tuff with 3 to 5 % quartz eyes and minor local zones of intermediate tuff. The average pyrite content is approximately 2 %.		1. 1 . 1. 1.			•					
		the modes of occurence are disseminations, < 1 mm fracture fillings and < 1 mm conformable beds. The rock is highly contorted and there										
		is 30 cm of lost core at 74.0 and 20 cm of lost core at 75.8.			1.							
77.7	80.0	MAFIC LAPILLI TUFF Same as 67.4 to 73.7.	AB15496	78.7	78.8	.2	126	n/a	90	n/a	n/a	700
80.0	82.2	QUARTZ EYE BEARING FELSIC TUFF										
		Felsic quartz eye, approximately 4 % 2 mm, crystal tuff with fault slips at 80.4 at a orientation of 54 degrees to core axis and at 81.5 at 50 degrees to core axis.	AB21592	80.0	82.2	2.2	25	14	44	(1	<5	1100
82.2	84.8	FAULT ZONE Dominantly a clay zone with hematitic felsic to intermediate guartz										
L.		eye feldspar crystal tuff.										
04:0												
84.8	99.4	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Felsic to intermediate crystal tuffs, locally variable composition with gradational and sharp contacts, distinct bands or beds are up	AB15497	94.4	94.6	.2	37	n/a	71	n/a	n/a	991

HOLE No:

CHEM87-25

Page Number

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-25 3

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

From To (m) (m)

veinlets that cross-cut and are parallel to foliation. There is silicification and local trace disseminated and stringer pyrite in the 2 m above the underlying gabbro.

-----DESCRIPTION-----

99.4 100.1 GABBRO

Fine-grained gabbro with minor quartz - chlorite veins.

100.1 100.9 QUARTZ EYE BEARING FELSIC TUFF

Contorted quartz eye felsic tuff with trace disseminated pyrite.

100.9 300.5 GABBRO

Fine-grained gabbro with minor blocks of epidote and felsic tuff from 100.9 to 110. There are quartz - carbonate - chlorite veins with no sulphides. From 110 to 147.5 there is coarse grained gabbro which hosts 5 to 20 % hematite, after magnetite, and the rock is weakly magnetic and has minor local chloritization and associated carbonate, in zones up to 1 m. The foliation at 115.6 is at 51 degrees to core axis, at 134.6 is at 36 degrees to core axis, at 137.6 is at 90 degrees to core axis and at 133 is at 46 degrees to core axis, the foliation is locally variable between 0 and 90 degrees to core axis and occurs in numerous orientations that cross-cut each other. There are guartz - carbonate - chloritization veins, 1 mm to 6 cm, up to 0.5 % of the rock, which show hydraulic fracture spurs and three generations of crosscutting relationships. The yeins do not host sulphides. From 147.5 to approximately 193, (medium grained transition from 192.7 to 193.6), the gabbro is coarse grained with local fine-grained zones of up to 1 m. There are numerous local veins, 1 mm to 50 cm, vuggy guartz - calcite (ie. 160.6 to 160.8), guartz - chlorite - calcite (1 mm to 20 cm) and suggary guartz (ie. 183.2 to 183.7). The veins have orientations from 0 to 90 degrees to core axis, as do the foliations, and the veins cross-cut each other. There are local chalcopyrite blebs disseminated throughout, from 1 mm up to 8 mm in size, the quantity of chalcopyrite is trace to nil with significant grains at 130.2, 182 and 192.3. The fine-grained gabbro, starting at 193 is a fine-grained green rock with approximately 3 % 1 to 2.5 mm feldspar grains. From 197.3 to 197.8 there is a guartz - biotite vein. There is a 5 cm vein, with the orientation at 11 degrees to core axis, with a fringed margin and 0.5 % chalcopyrite. The fine-grained zone also hosts local epidote or guartz - calcite veins. The fine-grained gabbro ends at 212.1, where there is a chlorite epidote alteration zone with quartz veins, that extends to 213.1. There is fine-grained gabbro from 213.1 to 225.8. The gabbro has been subjected to epidotization and silicification from 225.8 to 228.7 and this zone hosts local trace chalcopyrite. There is blocky, highly fractured core from 244.2 to 245.2 and at 247 there is a transition to medium grained gabbro, which occurs to 288 and hosts numerous cross-cutting 1 to 2 mm fracture controlled carbonate

1815498	103 7	103 8	1	140	n/a	. 72	n/a	n/a	195
AB15499	116 3	116 5	2	578	n/a	1 3 5	n/a	n/a	224
AB15500	144.3	144.4	.1	282	n/a	105	n/a	n/a	113
AB21601	196.5	196.7	.2	244	n/a	95	n/a	n/a	160
AB21602	248.5	248.7	.2	161	n/a	87	n/a	n/a	137
AB21593	299.5	300.5	1.0	185	6	117	<1	< 5	30
AB21603	300.2	300.3	.1	218	n/a	100	n/a	n/a	73



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

----DESCRIPTION-----

veinlets. In the interval from 278 to 284.5 there is 10 % guartz chlorite veins, up to 60 cm thick with there average vein chalcopyrite content as 0.5 % blebs. From 288 to the end of the unit at 300.5 there is a chilled margin with local veins and epidotization.

300.5 329.2 PVRTTTC OUARTZ EVE BEARING FELSIC TUFF

300.5 303.5 Schistose guartz eve bearing felsic tuff with 3 %, < 1 to 3 mm guartz eves. Numerous micro-faults with up to 1 cm offsets and predominant orientations of 20 and 25 degrees to core axis. There are local minor cherty bands. The average pyrite content is 1 to 1.5 %. At 301.2 there is 5 to 10 cm of sericitic rubble. The foliation at 301.5 is at 56 degrees to core axis. At 301.6 there are minor fault slips at 52 degrees to core axis.

303.5 307.0 Cherty felsic tuff. Has local minor contortions. At 305.1 there is a 5 cm clay fault slip with the orientation at 42 degrees to core axis. There is blocky, highly fractured core from 306.2 to 307 with carbonitized brecciated clayey material over the last 50 cm, the lower fault slip is at 37 degrees to core axis. Bedding is at 40 degrees to core axis. There is minor sulphides, trace pyrite, in the fault gouge.

- 307.0 308.2 Siliceous light grey massive fractured rhyolitic tuff (?) or flow with fracture controlled carbonate. There is trace fracture controlled pyrite. There are greyish guartz veins with white margins.
- 308.2 312.8 Grey guartz sericite schist with siliceous grey tuff from 309.0 to 309.1 and 309.9 to 310.5. The siliceous grev tuff also hosts minor carbonate veinlets and trace fuchsite. There are local quartz veins and chert beds. At 310.5 there is 5 mm of fault gouge with the orientation at 66 degrees to core axis. There is a minor fault at 309.5 with the orientation at 50 degrees to core axis and a displacement of 1 cm. There are numerous other similar faults with 2 to 5 mm displacements. The average pyrite content is 1 to 1.5 %, with approximately 3 % pyrite from 311.5 to 311.8 as cubes, dominantly statiform, but also disseminated and fracture controlled.
- 312.8 313.0 Fault zone. Black fine-grained sheared material with minor hematitzation, quartz veins and local 5 mm bands of 50 % pvrite.
- 313.0 317.9 Sericitic felsic tuff, which is weakly to moderately contorted. There are zones of silicification and minor guartz veining. There is stratiform pyrite, locally up to 1 % with an average of 0.5 %.
- 317.9 318.2 The top is 1 cm of fault gouge with the orientation at 44 degrees to core axis. The rock is highly contorted

AB21594 300 5 302.0 134 (5 1600 1.5 7 19 <1 AB21595 302.0 303.5 1.5 261 9 9 (1) <5 1600 AB21596 303.5 305.0 4 ۲5 970 1.5 21 7 (1) AB21597 305.0 306.5 1.5 78 6 6 (1 (5 1200 AB21598 306.5 308.0 1.5 34 6 2 (1 <5 890 AB21599 308.0 309.5 1.5 111 6 4 (1 <5 990 AB21600 309.5 311.0 63 9 <1 <5 1100 1.5 9 AE08501 311.0 312.5 1.5 62 7 17 (1 (5 1300 AE08502 312.5 314.0 1.5 50 12 33 1 <5 920 AE08503 314.0 315.5 1.5 27 8 12 1 <5 1000 AE08504 315.5 317.0 153 8 (1 15 880 1.5 <5 AE08505 317.0 318.5 1.5 49 6 8 <1 -+45 1300 9 9 1 5 1100 AE08506 318.5 319.7 1.2 30 AE08507 319.7 320.2 408 17 .1 25 1800 5 14 1500 AE08508 320.2 321.7 79 15 8 1 <5 1.5 AE08509 321.7 322.2 37 65 . 5 1273 12 (1 610 AE08510 322.2 323.2 1200 1.0 175 11 8 (1 10 AE08511 323.2 324.7 1.5 107 25 (1 5 1100 13 AE08512 324.7 325.2 .5 872 21 24 (1 25 . 640 5 820 . 7 (1) AE08513 325.2 326.0 . 8 140 12 AE08514 326.0 327.0 134 4 (1 15 1100 1.0 13 1020 AE08515 327.0 328.0 1.0 150 11 5 (1 25 107 <1 20 1300 AE08516 328.0 329.2 1.2 <5 Δ

HOLE N CHE

Cn

(mag)

Width

(m)

То

(m)

From

(m)

Sample

No.

LE NO:	Page	Number			
M87-25		4			

Zn

(mgg) (mgg)

Aα

(ppm)

Au

Ba

(mgg) (dgg)

Ph



From

(m)

То

(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Width Sample From To Cu Pb Zn Aσ Au (ppm) (ppm) (ppm) (ppb) (ppm) -----DESCRIPTION------No. (m) (m) (m) (ppm)

HOLE No:

CHEM87-25

Page Number

5

Ba

and has guartz - pyrite veins with average pyrite being 3 %.

- 318.2 319.8 Felsic tuff with weak silicification and minor weak kinking. There is 0.5 to 1 % stringer pyrite. The bedding at 319.4 is at 38 degrees to core axis and the foliation at 319.5 is at 46 degrees to core axis, and bedding appears to be sub-parallel to the foliation.
- 319.8 320.2 12 % pyrite with trace chalcopyrite in a moderately contorted felsic tuff. The pyrite is in 1 to 2 mm stratiform bands with the orientation at 45 degrees to core axis.
- 320.2 321.7 Moderately contorted felsic tuff with kink bands and fracture controlled quartz veins. There is 1 to 2 % disseminated pyrite elongated along foliation.
- 321.7 321.9 25 % pyrite and 0.3 % chalcopyrite as a contorted massive bleb and as 5 to 10 mm conformable bands.
- 321.9 322.1 70 % pyrite and trace chalcopyrite with minor tuff beds and guartz eyes. It is locally contorted with the orientation at 321.9 at 39 degrees to core axis, at 322.0 it is at 36 degrees to core axis and at 322.1 it is at 35 degrees to core axis.
- 322.1 322.3 Zone of silicification.
- 322.3 322.8 Contorted guartz sericite schist with 5 % pyrite.
- 322.8 323.2 Zone of silicification.
- 323.2 323.4 5 % pyrite in moderately contorted tuff.
- 323.4 325.3 Silicified light grey felsic tuff with minor white guartz veinlets. The rock is moderately contorted with the foliation trend at 35 degrees to core axis. From 324.7 to 325 there is 30 % pyrite as clots and stringers with 0.25 % chalcopyrite.
- 325.3 329.2 Very highly contorted sericite schist with on average 9 . % pyrite, 5 % at top and 12 % by the bottom with a gradual transition. The contorted nature of the schist increases with depth from weak to strong. The pyrite is in bands conformable to the foliation. There is numerous local minor faults with the orientations at 0 to 30 degrees to core axis and up to 1 cm displacements. There is a 2 cm band of watermellon chert at the base of the tuffs.

329.2	330.7 FAULT ZONE 329.2 329.5 Chlorite - carbonate shear zone. 329.5 330.7 Moderately sheared mafic flow with epidotization numerous quartz veins.	and	AE 08517	329.2	330.2	1.0	192	39	85	<1	<5	530	
330.7	348.8 EPIDOTE SPOTTED FELDSPAR PORPHYRITIC MAFIC FLOW Mafic flow with sausuritized feldspar grains and 3 %, 1 mm, after hornblende crystals. The flow is fine-grained at the has a gradational transition to medium grained. The foliati	chlorite top and on	AB21604 AB21605	331.9 341.0	332.0 341.2	.1 .2	32 152	n/a n/a	4 0 59	n/a n/a	n/a n/a	2010 179	



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m

(m) ------DESCRIPTION------

varies from 70 to 90 degrees to core axis. There are local epidote rich leopard spots. There are numerous minor quartz - calcite and quartz - biotite veinlets with numerous orientations. There is trace to nil pyrite in the veins.

348.8 434.6 MIXED MAFIC TUFFACEOUS SEDIMENTS

Transition from mafic flow is 10 cm of 5 mm green chert beds with the bedding at 46 degrees to core axis.

348.8 352.5 Medium grained mafic tuff with minor chert beds, chert clasts, up to lapilli size and 20 to 30 % up to 1 mm quartz eyes, approximately 1 mm feldspar grains and chlorite after hornblende crystals. Feldspar grain are the most numerous, approximately 15 to 18 %, there is approximately 3 to 4 % chlorite and there is trace to 1 % quartz eyes. Chert occurs as 1 to 2 % beds and 1 % clasts throughout. At 351.3 there is a hydraulic fracture spur type, 2 cm thick, quartz vein with 1 % pyrite. There are micro-faults with 5 to 10 mm displacements at 35 to 15 degrees to core axis visible in chert beds from 349.5 to 350.1. There is trace to nil pyrite in the matrix and it occurs in trace amounts in and with the chert.

Bedding :.

- At 349.4 is at 52 degrees to core axis.
- At 350.5 is at 60 degrees to core axis.
- 352.5 360.2 Purple version of the above green mafic tuff. Purple colour is due to the presence of thermal biotite. There is minor local quartz - carbonate - biotite veins with pyrite cubes. The lower contact is marked by a purple - brown contorted chert sequence with approximately 40 % tuff. At 356.4 bedding is at 41 degrees to core axis.
- 360.2 373.7 Green with minor purple green zones. Mafic tuff as before. Has some fine-grained sections that are crystal poor. From 369.3 to 370.0 there is purple brown chert rich sediments with 1 to 2 % pyrite. From 366.7 to 370.7 there are numerous sediment beds, greater than 35 % of the rock and which are 5 mm to 5 cm thick and are cherty and range in colour from cream yellow to white to green to purple to brown, they are contorted and approximately at 70 to 80 degrees to core axis.
- 373.7 375.5 Purple mafic tuff as in previous intervals with several creamy yellow contorted wavy sediment bed, 5 cm thick, bedding at approximately 0 degrees to core axis from 373.8 to 374.
- 375.5 378.4 Light green to tan contorted crystal ash tuff with local pervasive carbonatization and carbonate veinlets. The rock is similar to the previous green mafic tuff.
- 378.4 379.1 Shear zone with chlorite carbonate and local quartz veins at approximately 62 degrees to core axis. The

HOLE No: Page Number CHEM87-25 6

Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
			la de la composición de la com						
AB21606	351.0	351.1	.1	60	n/a	14	n/a	n/a	291
AE08518	369.3	370.3	1.0	55	111	99	, a	(5	1300
AB21607	374.2	374.3	.1	134	n/a	118	n/a	n/a	754
AB21608	387.4	387.6	.2	108	n/a	53	n/a	n/a	285
AE08519	391.8	393.0	1.2	74	15	77	<1	10	90
AE08520	393.0	394.5	1.5	62	19	85	(1	<5	40
AE08521	394.5	396.0	1.5	47	13	82	1	<5	180
AE08522	396.0	397.5	1.5	44	7	64	(1	(5	390
AE08523	397.5	399.4	1.9	53	(5	81	(1	5.	850
AB21609	402.1	402.2	.1	84	n/a	93	n/a	n/a	404
NB21610	122 6	122 7	1	99	n/a	85	n/a	n/a	86
AD21010	421 0	421 1	1	A A	17.0	150	/1	21	763
ND41011	432.0	434 C	• 4	1818 0.0	4	220	/1	15	200
AEU8524	432.5	434.6	1.1	80	<u>+</u> 2	10			400
AB21612	433.5	433.6	.1	13	n/a	70	n/a	n/a	454



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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

trend is at approximately 60 degrees to core axis.

- 379.1 381.6 Andesitic flow with 5 to 12 % chlorite after hornblende crystals, 1 to 3 mm. Lower contact is a fault slip at 50 degrees to core axis. There are minor epidote and minor quartz veins.
- 381.6 383.7 Mafic tuff with 5 % green chert beds and clasts. Average bedding is at 46 degrees to core axis.
- 383.7 391.8 Andesitic chlorite, after hornblende, crystal bearing flow. There is a minor fault slips at 385.4 and 389.0 and there is a 30 cm shear zone at 390.5. The lower contact is at 34 degrees to core axis. There is minor epidote blotches, and quartz - biotite veins.
- 391.8 399.4 Green chert rich sediments with 1 % fracture controlled pyrite. Bedding at 393.0 is at 43 degrees to core axis, at 396.4 is at 38 degrees to core axis and at 399.4 is at 37 degrees to core axis.

399.4 405.4 Dark to medium green lapilli tuff. 405.4 421.6 sediment rich green to brown to slightly purplish tuff with numerous local chert beds. Hosts numerous local quartz - carbonate veinlets at orientations from 0 to 90 degrees to core axis. There are numerous micro-faults, ie. at 409.5 there is a fault with a 2 cm offset with the orientation at 22 degrees to core axis. There is minor local pyrite blebs with the chert beds. Bedding varies locally and is approximately 40 degrees to core axis.

- 421.6 431.9 Black to green mafic crystal tuff with local quartz eyes, 2 to 3 mm, up to 5% at the base of the sub-unit. The rock appears to be bleached from 426.5 to 428.5 and silicified from 428.5 to the base. The zone of silicification may be an intrusive rock. There is local quartz veinlets and trace fracture controlled and disseminated pyrite in the rock.
- 431.9 434.6 Andesitic chlorite, after hornblende, bearing flow. Epidote clots occur at 434.1 and 434.5 which host trace pyrite and quartz veinlets. Minor pyrite stringer occur at 432.5. The foliation is at 60 degrees to core axis and the volcanic bedding is weakly contorted.

HOLE No: Page Number CHEM87-25 7

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)



Hole Location: 28+00 E 1+35 S

NTS: 92813 UTM: 5416885 N 430343 E Flevation: 500 m Azimuth: 210 -70 Length: 264.3 m

Started: 6-JUN-87 Completed: 9-JUN-87

Dip:

Page Number HOLE No: CHEM87-26 1

Claim No. CHTP 1 Section No.: Line 28+00 E

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

Core Size: NO

Purpose: To test down-dip extension of mineralization intersected by hole CHEM86-18. Preliminary test of pulse EM anomaly.

DIP TESTS Azi-Azimuth Dip mith Dip Length Length 206.0 -73.0 160.60 210.0 -74.096.60 Cu Pb Zn Aσ Au Ba Width Sample From То To From (ppb) (ppm) (mgg) (mgg) (ppm) -----DESCRIPTION------No. (m) (m) (m) (ppm) (m) (m) 25.5 OVERBURDEN AND CASING . 0 No chit at top of box number 1.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

25.5 102.0 MEDIUM-GRAINED GABBRO n/a 196 315 n/a 35.2 35.3 .1 560 n/a AD02325 Massive dark green and medium grained over most of the section. 5 150 45.6 1.0 626 7 84 $\langle 1 \rangle$ Minor coarse-grained sections. Rock contains up to 20 % ilmenite AD02595 44.6 71 2 100 60 55.4 56.0 .6 4700 10 and is weakly magnetic. In places ilmenite is rimmed by a white AD02596 719 <5 112 <1 5 80 57.0 1.0 mineral (leucoxene ?). Weak to nil fracture controlled carbonate. AD02597 56.0 315 n/a 70.3 .1 540 n/a 180 n/a 70.2 Trace disseminated chalcopyrite and pyrite. AD02326 1706 100 $\langle 1 \rangle$ 40 190 75.0 76.0 1.0 6 Core is broken and blocky over most of the section above 70.0 m. AD02598 50 86 <1 40 1.0 1954 6 78.3 Minor slip at 30 degrees to core axis at 45.5 m. Slip at 16 degrees AD02599 77.3 to core axis at 46.0 m.

25.5 33.2 Fine-grained section.

25.5 36.4 Blocky, highly fractured core.

27.2 28.7 0.2 m of lost core.

28.7 29.6 0.6 m of lost core.

47.6 47.7 Crushed zone foliation is at 15 degrees to core axis.

55.4 56.0 Quartz vein with 3 % chalcopyrite.

61.5 65.2 Blocky, highly fractured core.

69.0 69.5 Blocky, highly fractured core.

70.1 72.0 Coarse-grained section.

75.4 75.6 Quartz vein at 60 degrees to core axis with 3-4 %

189.0 191.0 Weak to moderate pervasive carbonate.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

			DIAMOND DRILL LOG										
From (m)	T0 (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		cl	halcopyrite.										
		77.3 78.3 S 7 cl	everal quartz veins with carbonate filled microfractures -20 mm wide at 10-30 degrees to core axis. 1% halcopyrite concentrated along vein margins.	;									
		84.4 87.5 1	.0 m of lost core.										
		85.5 87.2 B	locky, highly fractured core.										
		94.8 102.0	Blocky, highly fractured core.										
102.0	126.1	FINE GRAINE	D INEQUIGRANULAR GABBRO massive with 2-5% 1-4 mm feldspars in a fine-grained atrix . Up to 5 % finely disseminated ilmenite makes roo	AD02327	111.1	111.2	.1	159	n/a	105	n/a	n/a	100
		slightly ma Lower conta	agnetic in places. Trace disseminated chalcopyrite. ct is relatively sharp but very irregular at 70-90	-4		÷.,*•	а.* 						
		degrees to (fractures <-	core axis. Abundant quartz-carbonate +/- hematite-fille 4 mm wide for 40 cm above contact.	ed		1. 1						 N	
		102.0 117.0	Blocky, highly fractured core.										
		120.0 120.4	Blocky, highly fractured core.										
100 1	101 0	VEDTIN CDAT	NER CIRRO										
126.1	191.0	As 25.5 to magnetic. T	NED GABBRO 102.0 m. 5-15% ilmenite rock is weakly to moderately race (up to 0.5% over 10 cm) disseminated chalcopyrite.	AD02328 AD02600 AD02329	127.3 151.5 167.3	127.4 152.0 167.4	.1 .5 .1	583 498 359	n/a <5 n/a	185 93 144	n/a <1 n/a	n/a 15 n/a	237 130 236
		130.6 132.5	Weakly carbonatized slightly sheared zone. Shearing is at 30-50 degrees to core axis.	3									
		147.7 151.7	Moderate pervasive carbonatization.										
		151.5 153.0	Several quartz-carbonate veins (1.0 to 2.0 cm wide at $0-70$ degrees to core axis with chalcopyrite ($^{-}0.25$ % over the section).	er									
		163.8	0.5 cm wide quartz-carbonate -pyrite vein at 30 degrees to core axis.	5									
		181.4 181.9	Blocky, highly fractured core.										
		184.4 185.0	Blocky, highly fractured core.										
		190.6	0.8 cm wide band of fine-grained chlorite at 40 degrees to core axis.	3	•						* .		

PROPE	RTY: CHEMAIN	IUS JV	FALCONBRI DIAMOND	DGE LIMITED DRILL LOG				HOLE N CHEM87-	o: Pa 26	ge Numb 3	er			
From T (m) (0 m)		DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
191.0 248	.1 FINE GRAI As 102.0	NED INEQUIGRANU to 126.1 m. Low	LAR GABBRO er contact is at 10 deg	rees to core axis.	AD02330	191.2	191.3	.1	249 220	n/a n/a	97 113	n/a n/a	n/a n/a	118 118
	191.1 192	.0 Blocky, high	ly fractured core.		ND02001			•-	110			,	, -	
	204.0 204	.5 Blocky, high	ly fractured core.											
	207.0 207	.3 Blocky, high	ly fractured core.								•			
	218.0 218	3.6 Quartz-carbo chalcopyrite	nate vein 1.5 cm wide w runs along core axis.	ith trace										
	221.8 223	.2 Moderate per	vasive carbonatization.											
	226.5 233	8.8 Very blocky	and broken, rubbly core	•										
	234.6 235	5.1 Quartz-carbo trace chalco	nate vein at 25 degrees pyrite.	to core axis with										
	247.2 248	3.1 Moderate per	vasive carbonatization.											
248.1 264	.3 MEDIUM-GR Medium gr	RAINED GABBRO Seen massive wit	h 10-15% feldspars 1-4	mm and <5% ilmenite.	AD02332	254.3	254.4	.1	158	n/a	77	n/a	n/a	102
	255.5	Sphalerite i degrees to g	s smeared along a cleav	age plane at 80										

259.5 259.9 Moderate pervasive carbonatization.



HOLE No: Page Number CHEM87-27 1

DIAMOND DRILL LOG

Hole Location: 28+90 E 0+85 S

NTS: 92B1	13	UTM: 54168	80 N	430150	E
Azimuth:	210	Elevation:	510	m	
Dip:	~50	Length:	357	.5 m	

Started: 10-JUN-1987 Completed: 16-JUN-1987

Purpose: To test a shallow chargeability buildup from 1+40 S to 3+80 S.

Claim No. CHIP 1 Section No.: Line 29+00 E

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

Core Size: NQ

					DIP	TESTS											
			Length	Azi- muth	Dip	Length	Azi- muth	Dip	, I								
		· · · · · · · · · · · · · · · · · · ·	90.50 158.50 227.70	208.0 207.0 210.0	-50.0 -50.0 -50.0	294.70 357.50	210.0 212.0	-48.0 -47.0) 								
From (m)	To (m)		-DESCRIPTION	N			S	ample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0	9.1	OVERBURDEN AND CASING															
9.1	43.8	SHEARED CHLORITIC FELSIC A Light green fine-grained a and kinked in many places. 3 % dark green lapilli-siz foliation. Weak to modera carbonatization above 25.6	SH TUFF nd well fol: Occasiona ed mud clas te pervasive m.	iated. 1 vague ts (?) e e chlori	Foliation bedding. longated tization	is contorted Locally up to parallel to and	AD D AD AD	02333 02334 02335	15.2 18.8 40.6	15.3 18.9 40.7	.1 .1 .1	62 60 46	n/a n/a n/a	118 109 75	n/a n/a n/a	n/a 1 n/a 1 n/a 1	.010 .350 1170
		Quartz eyes occur in the f 19.8-26.0 m, 5-10%, 3-5 mm 28.1-43.8 m, 7 %, 2-4 mm q Nil-1% pyrite above 32.0 m depth.	ollowing sed quartz eyes uartz eyes. and 2-3% d:	ctions : s. issemina	ted pyrit	e below this							· .				
		FOLIATION AND BEDDING ANGL Foliation is at 43 degrees	ES:. to core ax:	is at 13	.0 m.												
		Foliation is at 30 degrees Foliation is at 34 degrees Foliation is at 30 degrees Possible bedding at 40 deg Minor folds with fold axes	to core ax: to core ax: to core ax: rees to core at 30 degre	is at 17 is at 21 is at 22 e axis a ees to c	.3 m. .2 m. .2 m. t 22.2 m. ore axis.												
		Foliation is at 40 degrees Foliation is at 45 degrees Foliation is at 50 degrees Bedding (?) is at 35 degre	to core ax: to core ax: to core ax: es to core ax	is at 26 is at 27 is at 35 axis at	.0 m. .5 m. .2 m. 34.9 m.												
		Bedding (7) is at 50 degre Foliation is at 31 degrees	es to core a to core ax:	axis at is at 37	35.3 m. 7.4 m.												

9.1-11.3 m, 0.6 m of lost core.

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From

To

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FALCONBRIDGE LIMITED

DIAMOND DRILL LOG							
		Sample	From	To	Width	Cu	Pb
TON		No.	(m)	(m)	(m)	(ממממ)	תממ)

- ----DESCRIPTION (m) (m)
 - 27.4-29.3 m. 0.5 m of lost core.
 - 11.0 11.3 Blocky, highly fractured core.
 - 17.0 18.1 Chloritic carbonatized zone. The carbonate is concentrated along foliation planes.
 - 21.3 21.4 2 mm pyrite stringer runs along the core axis.
 - 4.0 cm wide slip filled with clay and crushed rock at 70 21.9 degrees to core axis.
 - 29.0 30.6 Strongly chloritic zone at 35 degrees to core axis. Rock is soft broken and rubbly over this section. Probably a fault.
 - 31.4 31.9 Chloritic zone at 17 degrees to core axis.
 - 32.9 33.3 3 % pyrite along foliation planes.
 - 35.9 36.2 Crushed fault zone at 70 to 90 degrees to core axis. Loosely consolidated fault breccia.
 - 36.2 37.2 Blocky, highly fractured core.
 - 38.4 39.1 Dark chlorite-carbonate alteration zone. No quartz eyes.

40.0 40.1 As 38.4 to 39.1 m.

- 40.2 40.4 Two large (3.0 to 6.0 cm wide) dark green chlorite carbonate rich clasts.
- 40.7 Occasional 1-2 mm chlorite-pyrite stringers. Some are crosscutting.
- 42.0 42.4 Bed of dark fine-grained sediment or fault gouge with a 10.0 cm wide irregular shaped clast of tuff. Upper contact is at 53 degrees to core axis and lower contact is at 40 degrees to core axis.

43.8 47.6 MAFIC ASH TO LAPILLI TUFF

45.0

Up to 25 % ash to lapilli-sized epidotization feldspars and occasional lapilli-sized altered lithic clasts in a fine-grained dark green chloritic matrix. Weak pervasive carbonatization. Foliation is contorted throughout the unit. Foliation is at 48 degrees to core axis at 44.0 m. Core is broken and blocky below 45.0 m. Trace to 3 % disseminated pyrrhotite. Rock is weakly magnetic. Lower contact is a fault at 55 degrees to core axis.

8.0 cm wide fault gouge at 70 degrees to core axis.

978 AD02336 n/a 44.8 44.9 .1 321 n/a 165 n/a

HOLE No: Page Number CHEM87-27 2

mple	From	To	Width	Cu	Pb Zi	n Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm) (pj	pm) (ppm)	(ppb)	(ppm)

FALCONBRIDGE LIMITED DTAMOND DRTLL LOG

Width Cu To Sample From То (m) -----DESCRIPTION------No. (m) (m) (m) 45.5 45.8 Fault gouge at 40 degrees to core axis. 46.9 47.6 Fault zone. Crushed very soft rock. Upper contact is at 50 and lower contact is at 55 degrees to core axis. 56.4 CHLORITIC FELSIC TUFF Light to medium green and fine-grained. Amount of chlorite sericite AD02337 51.4 51.5 and guartz varies giving rock a mottled appearance. Rock is broken and blocky over most of the section. Occasional guartz eye < 3 mm

in diameter. 2 % disseminated pyrite. Up to 5 % epidotization ash to lapilli-sized feldspar below 53.0 m. Two 0.5 cm wide bleached bands at 55 degrees to core axis near the lower contact. Broken core at lower contact. Bedding (?) is at 50 degrees to core axis at 50.0 m.

47.8 49.7 0.3 m of lost core.

- 50.1 50.3 Fault zone (?). Rock is crushed broken rubbly and clay rich. Upper contact is at 50 degrees to core axis.
- 50.3 51.0 Dark green fine-grained mafic dyke. Microfracturess filled with guartz and calcite. Broken core at upper contact. Lower contact is sharp at 50 degrees to core axis.

52.2 52.3 Fault gouge at 55 degrees to core axis.

54.6 54.8 Dark green fine-grained mafic dyke at 56 degrees to core axis.

60.8 FELSIC ASH TUFF 56.4

Light grey mottled fine-grained and massive. Locally up to 7 % feldspar crystals. Occasional guartz eve <3 mm in diameter. 2 % fracture controlled pyrite. Foliation is at 30 degrees to core axis at 59.8 m. Possible bedding plane at 70 degrees to core axis at 60.5 m. Lower contact is sharp at 90 degrees to core axis.

58.1 58.9 Fault zone (?). Rock is crushed and very soft. Broken core at upper contact. Lower contact is at 70 degrees to core axis.

60.8 79.2 GREYWACKE AND PEBBLE CONGLOMERATE

> Dark grey-brown massive greywacke with several beds of pebble conglomerate 25 to 80 cm thick.

The greywacke contains 2-3% blue mud clasts stretched parallel to foliation 3-8 mm long and (1-3 mm wide and occasionally a granule to pebble sized clast.

The conglomerates are unsorted clast supported and consist of rounded to subangular pebble sized clasts of Myra volcaniclastics AD02338 59.9 60.0 40 n/a 16 n/a n/a 1220 1

.1 41 n/a 25 718 n/a n/a

HOLE No: Page Number CHEM87-27 3

(maga)



Zn

(mog) (mog)

Aα

(mgg)

Au

Ba

(mag) (dag)

Ph

From

47.6

(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

То From (m) (m)

(80 %) , some with sulphides, black mud clasts (10 %) and guartz (10 %).

Conglomerate occurs over the following intervals.

60.8 to 61.2 m (5.0 cm of sulphides mud at lower contact of bed). 62.7 to 63.4 m.

-----DESCRIPTION------

63.7 to 64.0 m.

77.8 to 79.2 m (this is a matrix supported granule to pebble conglomerate and contains about 30 % gabbro clasts). Lower contact is an unconformity at 25 to degrees to core axis. A 0.5 cm wide band of guartz pebbles in a sulphide-rich matrix occurs along the unconformity.

61.2 62.2 Blocky, highly fractured core.

62.0 2.0 cm wide sulphides rich zone at 62.0 m.

64.0 66.2 Blocky, highly fractured core.

66.1 69.2 0.5 m of lost core.

69.0 69.4 Blocky, highly fractured core.

70.1 70.4 Blocky, highly fractured core.

71.5 72.0 Blocky, highly fractured core.

72.2 74.7 0.2 m of lost core.

79.2 126.1 FINE-GRAINED FELDSPAR PHYRIC GABBRO

Massive dark green with up to 20 % 1-3 mm epidotization feldspars in a fine-grained chloritic matrix with up to 3 % ilmenite. Occasional glomerophyric clumps of feldspar. Nil-trace disseminated pyrite. Lower contact is at 55 degrees to core axis.

79.8 80.2 Blocky, highly fractured core.

80.2 82.1 Moderate hematization associated with pervasive and fracture controlled carbonate alteration. 3 % disseminated pyrite from 80.2 to 80.6 m.

82.1 84.0 Moderate pervasive hematization.

86.6 89.0 Blocky, highly fractured core.

91.7 94.0 Blocky, highly fractured core.

93.1 93.8 Strong pervasive hematization.

95.6 96.3 Blocky, highly fractured core.

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02339 124

85.7 85.8 .1 131 n/a 104 n/a n/a

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HOLE No: Page Number CHEM87-27 4

PROPERTY: CHEMAINUS JV

From

То

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

PROGRAM TON

Page Number HOLE No: CHEM87-27 5



(m)	(m)	DESCRIPTION	NO.	A MLY	()	(m)
		96.3 98.8 Barren quartz vein with chlorite. Upper contact is at about 90 degrees to core axis. Broken rock at lower contact				
		98.8 101.8 Blocky, highly fractured core.				
		102.1 103.6 0.4 m of lost core.				
	4	102.7 105.2 Blocky, highly fractured core.				
		111.5 112.2 Blocky, highly fractured core.				
		115.4 123.1 Blocky, highly fractured core.				
126.1 1	48.4	MEDIUM-GRAINED GABBRO Massive dark green with 10-15 % ilmenite. Rock is weakly to moderately magnetic. Nil sulphides broken core at lower contact.	AD02340	146.6	146.7	.1
		128.8 White mineral (leucoxene ?) is replacing ilmehite.			· ·	
		129.3 130.2 Blocky, highly fractured core.		з Х. — ,		
		132.3 132.9 Leucoxene (?) replacing ilmenite.				
		132.6 134.0 Blocky, highly fractured core.				
		138.3 140.1 Blocky, highly fractured core.				
				1		
148.4 1	52.4	FINE-GRAINED FELDSPAR PHYRIC GABBRO				
		Massive dark green 1-3%, 1-3 mm feldspars in a chloritic				
		fine-grained matrix. Less than 5 % fine-grained ilmenite often				
		rimmed by leucoxene.				
152.4 2	22.1	MEDIUM-GRAINED GABBRO				
		As 126.1 to 148.4 m. Weak patchy epidotization. Up to 20 % ilmenite. Up to 5 % quartz below 177.9 m. Broken core at lower contact.	AE08551 AE08552	197.8 198.8	198.8 199.8	1.0
		163.0 164.0 Blocky, highly fractured core.	AE08553 AE08554	199.8	200.8	1.0
		169.8 172.1 Moderate carbonatization and chloritization. Rock is fine-grained.	AE08555 AE08556 AD02341 AE08557	201.8 202.8 214.4 215 2	202.8 203.8 214.5 216.0	1.0 1.0 .1
		173.4 177.9 Quartz flooding and patchy epidotization.	AE08558 AE08559	215.2 216.0 217.0	217.0 218.0	.8 1.0 1.0

- 185.3 186.0 7 % fracture controlled pyrite and trace chalcopyrite.
- 186.0 189.0 Numerous guartz veins at 30-90 to degrees to core axis with chalcopyrite (<0.25 % over the interval).

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02340 146.	6 146.7	.1	508	n/a	172	n/a	n/a	197

68

88

92

126

127

321

84

624

3000

1251

1541

2567

274

1.0

1.0

1.1

.6

AE08560 218.0 219.0

AE08562 220.0 220.6

AE08563 220.6 221.7

AE08561

219.0

220.0

181

20

28

18

19

66

61

n/a

57

<5

<5

6

<5

<5

<5

72

84

78

176

205

206

130

132

127

132 62

63

89

88

<1

1

<1

<1

<1

<1

<1

<1

1

<1

<1

1

<1

n/a

5 1400 5

5

<5

<5

<5

<5

25

35

30

40

70

.5

n/a

1300 2000

860

350

420

241

300

70

<20

<20

<20

(20

(20



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

189.0 189.7 Quartz vein runs along core axis. Trace chalcopyrite along vein margins.

-----DESCRIPTION------

- 197.8 200.7 Numerous quartz +/- carbonate veins 1.0-7.0 cm wide at 0 to 70 degrees to core axis. 2-3 % pyrite and about 0.25 % chalcopyrite over this section.
- 200.7 203.3 Numerous quartz veins and pods (15 %). Spot Fe-carbonate alteration. 3 % pyrite and trace chalcopyrite over this section.
- 203.3 205.3 Spots of a purple carbonate mineral 1-4 mm in diameter comprise 15 % of the rock. Carbonate replacing ilmenite (?). Rock is quartz porphyritic.
- 205.3 205.8 Blocky, highly fractured core.
- 207.0 208.2 Blocky, highly fractured core.
- 215.2 216.7 Quartz veins 0.5 cm wide at 30 to 70 degrees to core axis comprise 20 % of the section. 1 % pyrite and trace chalcopyrite associated with quartz veins.
- 216.7 218.0 Quartz vein with carbonate-filled fractures 0.5-1.0% chalcopyrite and trace-1% pyrite-pyrrhotite at 50 degrees to core axis.
- 218.0 219.0 Numerous quartz veins at 0-30 degrees to core axis. Trace chalcopyrite.
- 219.0 220.6 Quartz vein with 0.5-1.5 % chalcopyrite. Upper contact is at a very low angle to the core axis while the lower contact is at 80 degrees to core axis.

220.6 222.1 Fine-grained chill margin.

222.1 235.8 MOTTLED QUARTZ EYE FELSIC TUFF

Massive hard light brown and mottled due to patchy thermal biotite alteration which gives way to weak patchy chlorite alteration below 232.2 m. 2-5%, 1-3 mm quartz eyes in an aphyric siliceous matrix. Occasional spot of mariposite. Lower contact is arbitrary.

FOLIATION	ANGLES:.										
Foliation	is	at	50	degrees	to	core	axis	at	227.0	m.	
Foliation	is	at	50	degrees	to	core	axis	at	232.2	n.	

SULPHIDES:.

222.1-230.2 M $\langle 1-2^* \rangle$ pyrite mostly in microfractures. Occasional spot of pyrrhotite and chalcopyrite. 223.3 m 1 X 4 cm patch of pyrrhotite with trace chalcopyrite.

AD02342	223.8	223.9	.1	38	n/a	58.	n/a	n/a	1650
AE08564	229.0	230.0	1.0	157	25	80	<1	< 5	1700
AE08565	230.0	231.0	1.0	155	42	77	<1	5	1800
AE08566	231.0	232.0	1.0	347	9	71	<1	<5	1400
AD02343	231.6	231.7	.1	59	n/a	74	n/a	n/a	925
AE08567	233.6	234.1	.5	1339	11	89	<1	20	1900
AE08568	234.1	234.8	.7	467	17	135	(1	10	1800
AE08569	234.8	235.8	1.0	1419	15	4000	1	45	2500

HOLE No: Page Number CHEM87-27 6

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-27 7

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		230.2-230.6 m 4% fracture controlled pyrite.										
		230.6-232.0 M trace-1 % fracture controlled pyrite.										
		232.0-233.6 m 3-5% fracture controlled pyrite and trace sphalerite										
		and chalcopyrite.	1								с. ₁ . х	
		233.6-234.1 m 15% pyrrhotite and 1 % chalcopyrite as 1-3 mm										
		stringers at 40-50 degrees to core axis.										
		234.1-234.8 m 2-3 % pyrite-pyrrhotite disseminated and as occasional										
		stringers.										
		234.8-235.8 m 4 % fracture controlled pyrite 0.25 % chalcopyrite										
		0.25 % sphalerite and 2 % pyrrhotite.										
										1 - F		
						•						
·235.8	263.3	SERICITIC FELSIC ASH TUFF OR FLOW										
		Light grey fine-grained and well foliated. Occasional spot of	AE08570	235.8	236.8	1.0	387	26	671	(1	15	1900
		apple-green mariposite. No bedding. Quartz eyes are rare. Locally	AE08571	236.8	237.8	1.0	134	. 8	341	1	5 ر	1600
		numerous sericite-filled microfractures give rock a brecciated	AD02344	238.1	238.2	.1	43	n/a	26	n/a	n/a	1980
		appearance (crackle breccia ?). Lower contact is arbitrary.	AE08572	237.8	238.8	1.0	114	10	76		(5	2000
			AE085/3	238.8	239.8	1.0	110	. 0	200	(1	(5	2000
		ANGLES TO THE CORE AXIS:.	AE085/4	239.8	240.8	1.0	128	18	.44	< <u>1</u>	(5)	1/00
		Foliation is at 40 degrees to core axis at 236.9 m.	AE085/5	240.8	241.8		. 52	8	25	(1	(5)	1800
		Foliation is at 35 degrees to core axis at 240.5 m.	AE08576	241.8	242.8	1.0	67	. (5	26	<u>(1</u>)	(5	1900
		Foliation is at 50 degrees to core axis at 241.8 m.	AE08577	242.8	244.3	1.5	21	10	28		(5	1600
		Foliation is at 48 degrees to core axis at 242.3 m.	AD02345	254.4	254.5	.1	41	n/a	35	n/a	n/a	1770
		Foliation is at 45 degrees to core axis at 249.4 m.	AE08578	262.3	263.3	1.0	25	$T_{\rm eff} = T_{\rm eff}$	16	$\langle 1 \rangle$	(5	1800
		Foliation is at 50 degrees to core axis at 253.6 m.	6 T									
		Foliation is at 55 degrees to core axis at 255.5 m.										
		Foliation is at 40 degrees to core axis at 257.1 m.										
		SULPHIDES:.										
		235.8-244.3 m 3% fracture controlled pyrite. Occasional 1-2 mm wide										
		pyrite stringer.										
		244.3-250.9 M nil-trace disseminated pyrite.				· .						
		250.9-252.6 M trace to 1 % disseminated pyrite.										
	÷	252.6-263.3 M trace to 1.5 % fracture controlled and disseminated										
		pyrite. At 258.3 m 1.0 cm wide siliceous band with 20 % pyrite at										
		35 degrees to core axis.										
263.3	282.0	PYRITIC FELSIC TUFF										
		Medium to dark grey depending on sulphide content, well foliated	AE08579	263.3	264.3	1.0	32	(5	16	α	(5)	2100
		and fine-grained. Foliation is often contorted and rock has a	AE08580	264.3	265.3	1.0	236	21	38	(1)	25	1900
		deformed protomylonitic texture in many places. Fine pyrite	AE08581	265.3	266.3	1.0	168	37	.60	< <u>1</u> :	15 1	800
		(almost a mud) and sericite surrounds breccia clasts. Occasional	AE08582	266.3	267.3	1.0	213	48	12		15	2300
		quartz eye (3mm in diameter and lapilii-sized felsic clast.	AEU8583	267.3	268.3	1.0	96	96	231		25	3400
		Moderate to strong sericitization. Foliation is at 40-50 degrees to	AE08584	268.3	269.3	1.0	116	/5	193	· (1,	45	3400
		core axis. Lower contact is a fault zone at 10 degrees to core axis.	AE08585	269.3	Z10.3	1.0	48	11	168		50	4500
		a da anti-anti-anti-anti-anti-anti-anti-anti-	AE08586	270.3	2/1.3	1.0	80	12	53		22	4000
		SULPHIDES:	AE08587	2/1.3	272.4	1.1	85	13	13		30	4000
		263.3-265.6 m 5 % finely disseminated pyrite. Pyrite is disseminated	AEU8588	272.4	273.3		10	5	9	< <u>1</u>	- /-	2000
		along follation planes.	AD02346	273.6	413.1		100	n/a	19	n/a	n/a	2300
		200.0-201.0 m /-10 % pyrite.	AEU8589	213.3	414.5	1.0	102	(5	TO	· • • •	40	2200

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From	To		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm
		267.6-268.3 m 15 % pyrite.	AE08590	274.3	275.3	1.0	58	5	3	(1	30	5500
		268.3-269.0 m 5 % disseminated pyrite.	AE08591	275.3	276.3	1.0	148	<5	11	<1	25	3700
		269.0-272.0 m 15-20 % pyrite.	AE08592	276.3	277.3	1.0	423	<5	34	<1	25	3300
		272.0-274.4 M sericite-rich zone, poker chip core with 1-3 %	AE08593	277.3	278.3	1.0	256	6	2	<1	10	1800
		disseminated pyrite.	AE08594	278.3	279.3	1.0	516	22	25	1	35	1600
		274.4-281.5 m 4-5% pyrite in 1-3 mm wide siliceous bands running	AE08595	279.3	280.0	. 7	514	19	16	1	35	1700
		subparallel to foliation and in microfractures.	AE08596	280.0	281.0	1.0	175	21	3	1	10	1700

AE08597 281.0 282.0

ANGLES TO THE CORE AXIS:.

Foliation is at 55 degrees to core axis at 264.1 m. Foliation is at 35 degrees to core axis at 266.4 m. Foliation is at 33 degrees to core axis at 271.0 m. Bedding is at 28 degrees to core axis at 269.0 m. Clay-filled slip 0.5 cm is at 23 degrees to core axis at 269.6 m. Foliation is at 43 degrees to core axis at 273.4 m. Minor fault is at 25 degrees to core axis at 274.5 m. Foliation is at 35 degrees to core axis at 275.0 m. Foliation is at 40 degrees to core axis at 278.0 m. Foliation is at 35 degrees to core axis at 279.5 m.

- 265.1 265.6 EARLY MAFIC DYKE ?. Olive-green fine-grained with 7 % disseminated pyrite. Weak fracture controlled carbonate alteration. Upper contact is sharp at 40 degrees to core axis and lower contact is at 30 degrees to core axis.
- 276.6 EARLY MAFIC DYKE ? 1.5 cm wide dark brown very irregular contacts at about 30 degrees to core axis.
- 281.5 282.0 FAULT ZONE at 10 degrees to core axis. Very soft loosely consolidated fault breccia.

282.0 310.6 MIXED MAFIC LAPILLI-ASH TUFFS AND TUFFACEOUS SEDIMENTS Medium green fine-grained foliation is not well developed. Dominantly a mafic lapilli tuff which fines in places to an ash tuff. Up to 10 % 1-4 mm guartz eyes and <5 % lapilli-sized lithic clasts. Occasional 0.5 to 2.0 cm wide sections of very fine-grained pale green-grey fine bedded to laminated cherty sediments. Locally weak to strong thermal biotite alteration. Trace to 3 % disseminated and fracture controlled pyrite. Lower contact is at 50 degrees to core axis.

> BEDDING AND FOLIATION ANGLES:. Bedding is at 40 degrees to core axis at 284.8 m. Bedding is at 30 degrees to core axis at 288.7 m. Bedding is at 50 degrees to core axis at 291.9 m. Bedding is at 30 degrees to core axis at 292.4 m. Bedding is at 62 degrees to core axis at 294.4 m. Bedding is at 48 degrees to core axis at 309.5 m.

AE AE AD

Page Number HOLE NO. CHEM87-27 Q

165

1.0

23

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10 1900

	1 A									
08598	282.0	283.0	1.0	369	25	70	1	15	3200	
08599	283.0	284.0	1.0	169	14	145	<1	<5	640	
02347	286.3	286.4	.1	72	n/a	94	n/a	n/a	556	

284.6 284.8 Sediments fine down hole.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

(m) (m

285.9 10 X 3 mm pyrite clast.

288.0 288.6 Blocky, highly fractured core.

290.0 292.9 Blocky, highly fractured core.

293.4 Cherty sediments fine down hole.

297.2 299.9 Blocky, highly fractured core.

300.0 302.0 Moderate fracture controlled hematite carbonate alteration.

----DESCRIPTION-----

301.7 302.5 Blocky, highly fractured core.

304.5 307.0 Weak hematite alteration along foliation planes.

310.6 327.4 MASSIVE MAFIC HORNBLENDE-BEARING FLOW

Dark green and massive. 5-40 % dark green-black subhedral chloritized hornblende crystals (1-4 mm in diameter. Fine-grained and no hornblende crystals for 30 cm from upper contact. This zone contains 3 % calcite filled amygdales (?) 2-6 mm long. Weak fracture controlled carbonate and spot epidotization. Nil sulphides. Lower contact is arbitrary.

327.4 354.6 MIXED MAFIC LAPILLI-ASH TUFFS AND TUFFACEOUS SEDIMENTS As 282.0 to 310.6 m. Well bedded. Beds are < 1.0-30.0 cm thick. Lower contact is irregular at 70-90 degrees to core axis.

BEDDING ANGLES:. Bedding is at 50 degrees to core axis at 330.5 m. Sediments fine down hole. Bedding is at 40 degrees to core axis at 331.3 m. Bedding is at 38 degrees to core axis at 332.0 m. Sediments fine down hole. Bedding is at 43 degrees to core axis at 332.3 m. Bedding is at 50 degrees to core axis at 333.5 m. Bedding is at 30 degrees to core axis at 334.5 m. Bedding is at 40 degrees to core axis at 334.5 m. Bedding is at 53 degrees to core axis at 339.8 m. Bedding is at 32 degrees to core axis at 342.3 m.

HOLE No: Page Number CHEM87-27 9

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02348 317.0	317.1	.1	101	n/a	61	n/a	n/a	328

AD02349 334.8 334.9 .1 142 n/a 108 n/a n/a 916

^{319.4} Flow contact sharp at 42 degrees to core axis. Rock is very fine-grained on down hole side of contact.

^{324.0 325.0} Weak fracture controlled carbonate and hematite alteration.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)]	DESCR	IP T IO	N			
		Bedding Bedding	is is	at at	34 35	degrees degrees	to to	core core	axis axis	at at	344.3 345.3	m. m.	

Bedding is at 53 degrees to core axis at 345.5 m. Bedding is at 63 degrees to core axis at 346.7 m. Bedding is at 47 degrees to core axis at 352.3 m.

328.5 329.0 Moderate pervasive carbonatization.

331.4 334.1 Weak to moderate patchy thermal biotite alteration and weak pervasive carbonate alteration.

334.1 337.6 Strong pervasive thermal biotite alteration. Compare with brown greywacke in hole CHEM86-18.

339.0 339.5 Blocky, highly fractured core. 0.15 m of lost core.

348.8 354.8 Moderate to strong pervasive and patchy thermal biotite alteration. Occasional 1-3.0 cm wide pale green to medium brown chert bed.

350.8 351.4 Blocky, highly fractured core.

354.6 357.5 FELDSPAR PHYRIC GABBRO

Massive dark green fine-grained with 1-4 mm white feldspar phenocrysts. 3 % disseminated ilmenite. Nil sulphides.



HOLE No: Page Number CHEM87-27 10

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

AD02350 356.6 356.7 .1 271 n/a 108 n/a n/a 233

1



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 26+85 E 1+00 S

NTS: 092/	/B13	UTM: !	541698	O N	429960	Е
Azimuth:	210	Eleva	tion:	475	m	
Dip:	-50	Lengt	h:	382	.8 m	

Started: June 11, 1987 Completed: June 16, 1987

Purpose: To test an IP chargeability anomaly with a weak coincident resistivity low between 2+60 S and 3+00 S.

DIP TESTS

		Azi- Length muth	Dip	Length	Azi- muth	Dip						· · · ·			
		78.00212.0168.90214.0	-48.0 -48.0	25 4 .80 309.70	216.0 216.0	-46.0 -44.0			н н 1 - н - М			•			
From (m)	To (m)	 -DESCRIPTION			S	ample 1 No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)

AB21613

AB21614

11.7

22.0

11.8

22.1

.0 8.0 OVERBURDEN AND CASING

8.0 24.6 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Light green to grey intermediate to felsic crystal tuff. The tuff is very contorted and schistose with no foliation being discernible. The crystals are feldspar grains and 1 to 3 % large, approximately 5 mm, quartz eyes. There is trace disseminated pyrite. There are quartz - carbonate - chlorite veins that cross-cut and are up to 5 cm thick which occur locally in trace amounts. There is 50 cm of lost core at 10.5 and 60 cm at 20.0. There is blocky, highly fractured core from 8.0 to 9.6, 18.5 to 19.0 and from 20.0 to 21.0.

24.6 27.5 FAULT ZONE

Highly contorted shear zone.

Chloritic zone with bull white quartz veins up to 20 cm thick and with 10 % carbonate alternating with the chlorite. There are minor epidote grains.

27.5 55.2 QUARTZ EYE BEARING FELSIC TUFF

Highly contorted schistose felsic tuff with 5 to 10 %, 2 to 5 mm, quartz eyes and local kink bands. There is trace to 1 % pyrite disseminated along the foliation. From 34.5 to 35.1 there is a chlorite shear zone and 10 cm of lost core. From 39.9 to 40.6 there is a contorted shear zone with a slip at 40.4 at an orientation of 34 degrees to core axis. From 44.6 to 49.0 there is blocky, highly fractured core and fault gouge. From 49.0 to 55.2 there is silicification.

AB21615	32.2	32.4	.2	38	n/a	86	n/a	n/a	1040
AB21616	42.9	43.0	.1	27	n/a	42	n/a	n/a	1240
AB21617	54.7	54.8	.1	32	n/a	<10	n/a	n/a	1010

HOLE No: Page Number CHEM87-28 1

Claim No. CHIP1 Section No.: 27+00 East

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

.1

.1

127

46

n/a

n/a

113

145

n/a

n/a

n/a 1280

n/a 860

Core Size: NO



		DIRHOND DRIVE HOS										
Fro (m	m To) (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
55.2	57.4	FINE GRAINED GABBRO All grains are less than 1 mm in diameter. Fine-grained dark green sill.						• • •				
57.4	65.0	QUARTZ EYE BEARING FELSIC TUFF Moderately contorted schistose felsic quartz eye tuff with on average 5 %, 3 to 5 mm, quartz eyes and a minor amount of rhyolitic lapilli. There are minor local epidote veinlets. The foliation trend is at 40 degrees to core axis and there are numerous minor fault slips at 0 to 70 degrees to core axis. There is on average 2 % pyrite as cubes and fine-grained disseminations along foliation, which are associated with trace chalcopyrite. There is a brown fault zone from 58.95 to 59.2	AE08525 AE08526 AE08527 AE08528 AB21618	59.8 61.2 62.8 64.0 64.6	61.2 62.8 64.0 65.0 64.8	1.4 1.6 1.2 1.0 .2	502 555 821 791 769	17 13 25 39 n/a	83 148 170 143 77	(1 (1 (1 1 n/a	55 150 200 170 n/a	1500 1100 940 860 1060
65.0	69.8	, GABBRO Chilled margin type gabbro with 2 %, 1 to 3 mm, sausuritized feldspar grains in a fine-grained green matrix. There are minor quartz - carbonate veinlets.				ء ب بر						
69.8	70.7	FELSIC TUFF Light white to grey felsic tuff with feldspar grains.										
70.7	74.0	SILICIFIED FELSIC CRYSTAL ASH TUFF Silicified felsic tuff with local fine-grained feldspar grains and on average 3 % quartz eyes, which are less than 1 mm in diameter. The tuff is contorted with the foliation at 71.0 at approximately 25 degrees to core axis and at 26 degrees to core axis at 72.8. There is trace to 1.5 % pyrite with trace chalcopyrite locally.										
74.0	208.4	GABBRO To approximately 100 there is a chilled margin, which is a fine-grained green matrix with 3 to 4 %, 1 to 2 mm, epidotized feldspar grains and minor quartz - biotite, epidote, quartz, and quartz - carbonate veins and veinlets locally with orientations from 0 to 90 degrees to core axis.	AB21619 AB21620 AE08529 AE08530 AE08531 AE08532	87.2 125.5 173.4 179.0 182.7 205.0	87.3 125.7 174.1 180.0 183.2 206.0	.1 .2 .7 1.0 .5 1.0	320 634 1356 527 1447 2391	n/a n/a <5 <5 <5 7	96 162 86 62 63 97	n/a n/a <1 <1 <1 <1	n/a n/a 15 10 10 20	201 249 60 <20 <20 <20
		The gabbro is medium grained from 100 to 120 with local veins and ilmenite, approximately 5 to 10 %.	AB21621	207.8	207.9	.1	289	n/a	117	n/a	n/a	221
		Coarse grained gabbro from about 120 to 135. Ilmenite rich, with average of 10 %, occurs as up to 20 % of the rock. Minor trace disseminated chalcopyrite blebs occur. There are numerous local quartz - chlorite veins of up to 50 cm thick.						5 5 - 10 - 1 6 - 1	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	- 		

From 135 to 206 the gabbro alternates with an almost random

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

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(m) -----DESCRIPTION------

appearance between medium and fine-grained. There are numerous veins as in the previous zones. The foliations vary from 0 to 90 degrees to core axis and may also be jointing. There are numerous micro-faults in the core at orientations of 30 to 70 degrees to core axis with offsets of up to 1 cm. There is blocky, highly fractured core from 146.1 to 146.3. From 168 to 206 the gabbro has been subjected to pervasive chloritization and minor carbonatization and hosts quartz - chlorite +/- carbonate veins, up to 80 cm thick with trace to 0.25 % chalcopyrite blebs locally. There are some unaltered medium grained zones, up to 1 m, in the zone of chloritization. There may be some shearing in this zone , but there is no dominant orientation. At 183.6 there is a approximately 2 cm by 5 cm bleb of chalcopyrite.

From 206 to 208.4 there is a chilled margin as at the upper contact. The contact is at approximately 55 degrees to core axis.

208.4 275.6 MIXED FELSIC TUFFS

- 208.4 214.4 Quartz eye, 1 to 5 mm (avrg 1 to 2 mm), approximately 5 % bearing felsic tuff with 1 to 2 % pyrite +/chalcopyrite. The sulphides are locally concentrated, ie. 5 % from 208.8 to 209.2, as stringers , blebs and disseminations. The rock is locally contorted with kink bands. There is silicification from 214.4 to 216.4. Fuchsite occurs at 215.75.
- 216.4 217.5 MAFIC SILL. Dark green to light green yellow at the edges. Hosts approximately 4 % pyrite as clots, up to 3 cm in diameter. There are numerous quartz - carbonate veinlets at orientation of 0 to 90 degrees to core axis. 217.5 220.6 Silicified and contorted tuff with 1 to 2 %
 - disseminated pyrite +/- chalcopyrite and minor pyrite stringers. There is fuchsite from 218.7 to 219.3 as trace to 0.2 %. The lower 1 to 2 m are fracture with white quartz veinlet.

220.6 221.7 Bleached weak greenish yellow fine-grained rock. Hosts on average 8 % pyrite, locally 3 to 20 %. There is a white bull quartz vein from 220.8 to 220.9. The rock is not magnetic, is strongly pervasively carbonatized and is hard. May be a dyke, was referred to as such by S.G.E. in 1986.

221.7 225.9 Moderately silicified quartz eye bearing felsic tuff with approximately 1 % disseminated pyrite. The lower contact is at 35 degrees to core axis in the opposite direction to the foliation of 45 degrees to core axis.

225.9 235.5 Quartz eye felsic tuff with minor biotization and several local bleached zones as from 220.6 to 221.7. There is a 15 mm biotite band at 227.6. The rock hosts minor stringer pyrite and the average pyrite content is less than 1 %. From 232.8 to 233.3 there is a bleached zone.

HOLE No: Page Number CHEM87-28 3

Sample	From	То	Width	Cu .	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AE08533	208.4	209.4	1.0	539 ~~~	10	473	<1	40	2000	
AE08534	209.4	210.4	1.0	298	26	184	(1	20	1500	
AE08535	210.4	211.4	1.0	77	19	59	<1	<5	1500	
AE08536	211.4	212.4	1.0	49	19	46	<1	<5	1600	
AE08537	212.4	213.4	1.0	45	25	39	(1 -	< 5	1500	
AE08538	213.4	214.4	1.0	201	<u>9</u>	46	<1	40	1500	
AE08539	214.4	215.4	1.0	64	< 5	28	<1	< 5	1600	
AE08540	215.4	216.4	1.0	89	< 5	30	(1	< 5	1800	
AB21622	216.8	216.9	.1	168	n/a	70	n/a	n/a	134	
AE08541	216.4	217.5	1.1	81	. 17	46	<1	< 5	110	
AE08542	217.5	219.0	1.5	203	. < 5	. 32	<1	< 5	1600	
AE08543	219.0	220.6	1.6	68	5	26	<1	10	1700	
AE08544	220.6	221.6	1.0	266	14	150	1	< 5	<20	
AB21623	221.2	221.3	.1	197	n/a	72	n/a	n/a	14	
AE08545	221.6	223.0	0.4	61	28	38	<1	10	1900	
AE08546	223.0	224.3	1.3	61	21	26	<1	20	2200	
AB21624	225.4	225.6	. 2	21	n/a	18	n/a	n/a	1530	
AE08547	229.0	230.0	1.0	229	31	55	1	<5	1800	
AB21625	232.6	232.7	.1	73	n/a 🛛	65	n/a	n/a	362	
AB21627	235.6	235.7	.1	530	28	140	<1	. 6	724	
AB08548	238.0	239.0	1.0	n/a	n/a	n/a	n/a	n/a	n/a	
AE08549	239.0	240.5	1.5	54	71	42	<1	<5	2200	
AE08550	240.5	242.0	1.5	169	33	39	<1	15	2100	
AE08601	242.0	243.5	1.5	133	30	42	- <1	<5	1500	
AB21626	249.0	249.1	.1	94	n/a	42	n/a	n/a	2090	
AB21628	259.9	260.0	.1	40	n/a	24	n/a	n/a	1970	
AB21629	269.9	270.0	.1		n/a	11	n/a	n/a	1910	
AE08602	274.6	275.6	1.0	38	< 5.	13	· <1	< 5	2500	

FALCONBRIDGE LIMITED DIAMOND DRILL LOG



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- 235.5 236.2 Alteration zone with bleaching over the first 50 cm and the lower 20 cm containing quartz - carbonate biotite +/- fuchsite. The upper portion contains quartz eyes indicating that this is a altered tuff and that the similar interval from 220.6 to 221.7, which does not host quartz eyes was probably a tuff.
- 236.2 238.9 Moderately to weakly silicified tuff with 1 % disseminated pyrite and 1 to 2 % pyrite +/chalcopyrite +/- sphalerite bands , up to 5 mm thick, parallel to the foliation.
- 238.9 242.8 Sericitic quartz eye bearing tuff with trace to 1 % disseminated pyrite and 2 to 3 mm pyrite bands at 239.8 and at 241.2. Moderately contorted with the foliation approximately sub- parallel to the core axis.
- 242.8 275.6 Locally weakly to strongly silicified moderately to weakly contorted light grey to white quartz eye bearing, 0.5 to 3 %, 1 to 2.5 mm, felsic tuff. There is trace to 1 % pyrite with minor pyrite in local quartz veins in the upper part of the zone. From 246.7 to 247.1 there is bleaching with minor biotization. There is biotization with trace fuchsite from 247.5 to 247.6. After 250 there are local sulphide, pyrite and trace chalcopyrite, bearing clasts or broken beds, up to 4 cm thick. There is bleaching (?) from 266.3 to 266.4 and from 273.8 to 274.0. There is 30 % bedded pyrite from 266.5 to 266.7 with the orientation at 42 degrees to core axis. The average pyrite in the lower zone is. < 1 % and it occurs with trace chalcopyrite. There are numerous white fracture controlled guartz veinlets throughout at orientations of 0 to 90 degrees to core axis.

Foliations :.

At 215.7 it is at 65 degrees to core axis. At 225.4 it is at 52 degrees to core axis. At 229.8 it is at 65 degrees to core axis. At 232.7 it is at 66 degrees to core axis. At 241.0 it is at 90 degrees to core axis. At 246.9 it is at 44 degrees to core axis. At 253.2 it is at 54 degrees to core axis. At 260.7 it is at 65 degrees to core axis. At 265.5 it is at 33 degrees to core axis. At 270.1 it is at 60 degrees to core axis. At 274.3 it is at 35 degrees to core axis.

Bedding:.

From 208.4 to 275.6, bedding is indistinguishable and may be sub-parallel or parallel to foliation.

275.6 291.2 PYRITIC FELSIC TUFF

Pyrite rich felsic tuff with rare local quartz eyes, only observed

HOLE No: Page Number CHEM87-28 4

Sample То Width Cu From Рb Zn Ag Au Ba No. (m) (m) (ppm) (ppm) (ppb) (ppm) (m) (ppm) (ppm)

AE08603 275.6 277.1 1.5 334 <5

5 2000

2

1

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-28 5

From (m)	To (m)	DESCRIPTION	Sample	From (m)	To (m)	Width (m)	Cu (nnm)	Pb (nnm)	Zn (nnm)	Ag (nnm)	Au (pph)	Ba (nnm)
()	()			((40)	(111)	(ppm)	(ppm)	(ppm)	(1)(1)	(ננקקי)	(ppm)
		at 277.8 282.4 and 287.4. There are minor local micro-faults with 1	AE08604	277.1	277.3	.2	2800	< 5	39	8	220	1000
		to 2 cm displacements at orientations of 0 to 30 degrees to core	AE08605	277.3	278.0	.7	346	<5	1	1	10	1200
		axis. The rock is weakly contorted locally. There are numerous	AE08606	278.0	279.0	1.0	954	21	20	2	30	1500
		minor randomly oriented quartz veinlets.	AE08607	279.0	280.0	1.0	2084	24	57	4	65	2700
		275.6 277.1 5 % pyrite as bands sub- parallel and parallel to to the	AE08608	280.0	281.0	1.0	490	24	28	1	70	2700
		foliation. The pyrite is fine-grained except for the up	AE08609	281.0	282.0	1.0	252	19	8	1	50	1800
		to 6 mm cubes and triangles in a 1 cm band at 276.7.	AE08610	282.0	283.0	1.0	324	18	15	1	80	1400
		277.1 277.3 A 23 cm weakly contorted zone of 80 % pyrite with black	AE08611	283.0	284.0	1.0	220	19	14	1	55	950
		interlayers, which are sericite with fine-grained pyrite	AE08612	284.0	285.0	1.0	608	18	10	1	45	1000
	· ·	277.3 278.2 10 % disseminated and banded pyrite, mostly	AE08613	285.0	286.0	1.0	328	13	12	1	65	1100
		fine-grained, but cubes up to 4 mm occur. The bands are	AE08614	286.0	287.0	1.0	240	18	12	1	30	1100
		1 to 2 mm thick.	AE08615	287.0	288.0	1.0	632	18	16	ī	55	730
		278.2 278.7 1 to 2 % disseminated pyrite with trace guantities of	AE08616	288.0	289.0	1.0	310	(5	9	1	50	1100
		bands.	AE08617	289.0	290.0	1.0	435	43	82	<1	45	2100
		278.7 279.5 15 % pyrite in 1 to 2 cm bands with pseudo- black	AE08618	290.0	291.2	1.2	372	22	26	(1	95	4500
		sericite and a quartz vein from 279.2 to 279.5 with 2										· ·
		mm cubes and fine-grained pyrite elsewhere.										
		279.5 291.2 On average contains 15 % pyrite with trace chalcopyrite.										
		The pyrite occurs in bands and stringers with an										
		average thickness of 10 mm, the range is from $\langle 1 mm$ to		· •								
		70 mm. The pyrite is both concordant and discordant to										
		the foliation. The pyrite distribution is fairly										
		uniform, but there are minor pyrite rich zones with										
		'black' sericite and minor pyrite poor zones with 5 %										
		disseminated and banded pyrite. The pyrite occurs both										
		as fine-grained and as distinct cubes, approximately 1										
		mm. with silicate grains occuring between the purite										
		grains.										
		3										
		Sphalerite :										
		No sphalerite was observed, but it may occur with the fine-grained										
		nurite										
		hirror										
		Chalconvrite :										
		277.8 2 Blebs 2 to 4 mm in pose of contortion near quartz vein										
		with nurite cubes										
		278 6 1 Bleb 3 by 3 mm with nurite cube on margin of guartz										
		voinlat										
		278 8 1 Blob 25 by 2 mm in guartz wain										
		278 9 1 Blab 2 mm in nurita										
		210.5 I DIED, 2 mm, IN PYILLE.										
			1									

279.0 279.2 0.5 to 1 % chalcopyrite as blebs with pyrite.

279.7 1 Bleb, 2 mm, with pyrite.

- 279.8 1 Clot, 3 cm by 2 mm, 60 % chalcopyrite and 40 % pyrite, in a 2 cm quartz vein.
- 280.8 1 Bleb, 2 mm, in pyrite.
- 282.4 3 Blebs, 1 to 3 mm, in pyrite bands.

283.0 8 Blebs, 1 to 2 mm, in a 1 to 2 cm quartz vein.

284.1 7 Elongated blebs, with pyrite bands and silicification.

286.2 2 Blebs, 1 mm, in quartz.



FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

minor trace pyrite bands with the cherts. There is very local minor epidotization. Bedding at 341.5 is at 46 degrees to core axis and at HOLE No: Page Number CHEM87-28 6

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		287.2 1 Bleb, 2 mm, in pyrite. 287.7 3 Blebs, 1 mm, in pyrite. 288.7 3 Blebs, 1 mm, in pyrite.										
		289.5 1 Bleb, 4 mm.										
		Fuchsite :. Trace at 289.5.										
		Structure :.									1. A.	
		Lower contact is at 54 degrees to core axis.										
		Sulphides :. The pyrite bands are at 50 to 90 degrees to core axis and varies local	ly.									
		Bedding :. At 281.6 the bedding is at 57 degrees to core axis. At 286.3 the bedding is at 51 degrees to core axis.										
		Foliations :. At 277.9 it is at 64 degrees to core axis. At 280.0 it is at 43 degrees to core axis. At 284.8 it is at 71 degrees to core axis. At 288.7 it is at 51 degrees to core axis. At 290.1 it is at 62 degrees to core axis.										
201 2	205 2	NTYED WARTS MURRAGEOUS CEDIVENMS										
291.2	305.3	MARIC TOFFACEOUS SEDIMENTS Mafic tuffs with local cherty beds and minor local epidotization. The tuff hosts collapsed pumice fragments, chlorite, after hornblende, crystals, quartz eyes and chert lapilli. There is minor quartz veining. There is biotization from 299.0 to 300.9 and fracture controlled trace pyrite over the same interval. The bedding at 292.4 is at 75 degrees to core axis. There are distorted fine tuff or chert beds from 303.8 to 304. At 304.2 there is a coarse bed that fines downhole.	AE08619 AE08623 AB21700 AB21630	291.2 292.0 296.6 298.8	292.0 293.5 296.7 298.9	.8 1.5 .1 .1	238 518 160 82	6 568 2 n/a	85 147 80 76	<1 5 <1 n/a	5 220 <1 n/a	80 410 572 711
305.3	331.2	MAFIC FLOW Chlorite porphyritic mafic flow, the chlorite occurs after hornblende crystals, 1 to 5 mm crystals, which comprise up to 30 % of the rock and average 20 %. The foliations vary from 40 to 80	AB21631 AB21632	318.8 328.7	318.9 328.8	.1 .1	179 183	n/a n/a	66 54	n/a n/a	n/a n/a	280 355
		degrees to core axis. There is nil to trace disseminated pyrite and local epidote veinlets and quartz +/- carbonate veinlets.										
331.2	362.1	MIXED MAFIC TUFFACEOUS SEDIMENTS			2							
		Quartz eye bearing cherty mafic tuff, green with purple zones, due to biotite from 338.8 to 342, 335.5 to 336 and 350 to 353. There is	AB21633	343.5	343.6	.1	93	n/a	95	n/a	n/a	450





FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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

351.8 is at 58 degrees to core axis.

362.1 371.6 MAFIC FLOW Same as from 305.3 to 331.2.

							1.1		
AB21634	368.8	369.0	.2	165	n/a	62	n/a	n/a	146

62

n/a

HOLE No: Page Number

Cu

(ppm)

CHEM87-28

Width

(m)

Sample

No.

From

(m)

AB21635 376.5 376.6 .1

То

(m)

7

Pb

Zn

(mgg) (mgg)

Aα

54 n/a

(ppm)

Au

n/a

399

Ba

(ppb) (ppm)

371.6 382.8 MIXED MAFIC TUFFACEOUS SEDIMENTS Green quartz eye mafic tuff with purple from 377 to 381.4. Hosts cherty lapilli and at 381.5 there is a lapilli of a mafic flow. Bedding at 381.4 is at 47 degrees to core axis.


FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 38+00 E 0+88 S

NTS: 928	13	UTM: 5416425	N	430962	Е
Azimuth:	210	Elevation: 5	57	m	
Dip:	-50	Length: 2	96	.3 m	

Started: 16-JUNE-87 Completed: 20-JUN-87

Purpose: To test VLF anomalies at 1+60 S and 2+15 S, a deep IP chargeability anomaly between 2+20 and 2+80 S and a deep IP resistivity low between 1+85 and 2+00 S.

DIP TESTS

			Length	Azi- muth	Dip	Length	Azi- muth	Dip							·		
			39.00 148.40	205.0 208.0	-50.0 -48.0	224.60 282.50	210.0 211.0	-46.0 -45.0								. *	
From (m)	To (m)		 DESCRIPTIO)N			S	ample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)

.0 12.2 OVERBURDEN AND CASING

12.2 84.9 EPIDOTE SPOTTED MAFIC FLOWS WITH MINOR MAFIC ASH TUFFS Dark green massive fine to medium-grained and spotty epidote alteration. Epidote spots (altered feldspars) are (1-3mm in diameter and comprise about 30 % of the rock. Occasional epidote-carbonate patches up to 10 cm wide with minor pyrite and sometimes chalcopyrite. Appears to be tuffaceous between 57.0 and 69.0 m. Rock has a vague

banded appearance. Two block sized mafic clasts at 57.9 m. Core is broken and blocky for 4.7 m from the lower contact. The lower contact is at 50 degrees to core axis.

28.3 28.9 Blocky, highly fractured core. Rust along fractures.

- 29.5 31.0 2-3% pyrite and trace chalcopyrite associated with quartz-carbonate +/- epidote veins and clots up to 5 cm wide.
- 36.1 36.7 Broken rubbly core. Fractured surfaces are rusty.
- 62.0 64.5 INTERMEDIATE ASH TUFF epidote spots are rare and rock is intermediate in composition.
- 65.4 Vague banding (bedding?) at 45 degrees to core axis.
- 69.9 20 cm wide band of <1-3mm quartz filled amygdales at 40 degrees to core axis.
- 73.4 Minor slip at 70 degrees to core axis.

AD02401	24.2	24.3	.1	105	n/a	111	n/a	n/a	341
AD02402	51.3	51.4	.1	100	n/a	111	n/a	n/a	472
AD02403	63.7	63.8	.1	43	n/a	67	n/a	n/a	1170
AD02404	79.9	80.0	.1	152	n/a	115	n/a	n/a	108

Claim No. CHIP 1 Section No.: Line 31+00 East

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

HOLE No:

CHEM87-29

Page Number

1

Core Size: NQ

PROPERTY: CHEMAINUS JV HOLE No: Page Number CHEM87-29 2 FALCONBRIDGE LIMITED DTAMOND DRTLL LOG Width Ba Sample From То Cu Pb Zn Aα Au From Τo -----DESCRIPTION------No. (m) (m) (m) (ppm) (mgg) (mgg) (ppm) (mag) (dag) (m) (m) 76.0 79.0 Minor hematite within carbonate veinlets and clots. 80.2 81.7 Blocky, highly fractured core. 0.7 m of lost core. 82.0 Flow contact (?) at 52 degrees to core axis. 82.6 84.9 Blocky, highly fractured core. 84.9 88.4 CHLORITIC FELSIC ASH TUFF n/a 1910 Pale grey-green hard and siliceous. Chlorite occurs in spots and AD02405 85.8 .1 138 n/a 38 n/a 85.7 streaks. Core is broken and blocky over the entire section. 2 % disseminated and fracture controlled pyrite. Foliation is at 60 degrees to core axis at 87.6 m. Broken core at lower contact. 85.0 87.5 0.4 m of lost core. 87.1 15.0 cm wide fault gouge at about 5 degrees to core axis. 87.8 Minor slip at 60 degrees to core axis. 90.0 MAFTC DYKE 88.4 Massive dark grev-green and fine-grained. Moderate pervasive carbonate alteration. Broken and blocky core over the entire section 99.7 CHLORITIC FELSIC TUFF 90.0 99 33 n/a n/a 551 Medium grey-green and well foliated. Foliation is contorted. AD02406 99 4 99.5 1 n/a Locally guartz eye bearing. <1-3%, 1-4mm guartz eyes. Moderate spotty and pervasive chloritization and pervasive sericitization. 1-2 % disseminated and fracture controlled pyrite. Lower contact is sharp at 65 degrees to core axis. 92.4 1.5 cm wide clay filled slip at 50 degrees to core axis. 96.3 Minor slip at 50 degrees to core axis. 97.1 Minor slip at 30 degrees to core axis.

99.7 104.8 FAULT ZONE

Loosely consolidated fault breccia comprised of broken and crushed felsic tuff fragments in a clay-rich matrix. Upper contact is at 70 degrees to core axis and lower contact is at 60 degrees to core axis. LOST CORE INTERVALS:. 99.4-101.5 m 0.6 m of lost core. 103.1-104.2 m 0.9 m of lost core.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

-----DESCRIPTION------

As 90.0 to 99.7 m. Numerous minor slips rock has crushed appearance above 108.0 m. Between 108.0 and 125.6 m sections of massive siliceous quartz crystal tuff (~ 5% of unit) alternate with sections of crushed felsic tuff. Below 125.6 m rock is crushed and occasionally mylonitic. Moderate to strong sericitization and weak spotty chloritization. Lower contact is gradational. Trace to 1% disseminated pyrite.

104.8 107.0 Blocky, highly fractured core. Rock is crushed. Numerous slips at 50-60 degrees to core axis.

107.0 107.3 Fault at 5 degrees to core axis.

- 107.4 10 cm wide fault at 30 degrees to core axis.
- 110.0 Several minor slips at 80-90 degrees to core axis.
- 111.0 Minor slip at 78 degrees to core axis.
- 115.5 118.3 Blocky, highly fractured core. 0.5 m of lost core between 117.7 and 118.3 m.

118.8 2.0 cm wide clay-filled slip at 48 degrees to core axis.

- 119.9 121.0 Blocky, highly fractured core.
- 124.0 Strong foliation at 48 degrees to core axis.
- 124.0 124.4 Fault breccia at 40 degrees to core axis. Tightly packed clasts of felsic tuff <0.5 5.0 cm in diameter in a sericitic matrix.
- 125.6 126.1 Fault breccia. As 124.0 and 124.4 m except matrix is a soft black mud.
- 127.1 129.7 Fault breccia. Foliation is at 20-30 degrees to core axis
- 129.7 131.3 Intensely crushed zone. Rock is very soft and loosely consolidated.
- 130.6 132.1 Strongly chloritized zone or mafic dyke at 60 degrees to core axis. Fine-grained and dark green. Moderate hematization and weak fracture controlled quartz-carbonate alteration. Strongly crushed for 70 cm from upper contact.

132.8 133.8 Blocky, highly fractured core.

139.5 Minor slip at 25 degrees to core axis.

Sample	From	To	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
AD02407	119.3	119.4	.1	37	n/a	65	n/a	n/a	1020
AD02408	131.7	131.8		141	n/a	47	n/a	n/a	505

Page Number

3

HOLE No:

CHEM87-29





From

(m)

PROPERTY: CHEMAINUS JV

FALCONBRIDGE LIMITED

HOLE No: Page Number CHEM87-29 4

DIAMOND DRILL LOG То Width Cu Sample From To PЬ Zn Ag Au Ba (m) -----DESCRIPTION------No. (m) (m) (m) (nom) (mgg) (mgg) (ppm) (nob) (non) 139.6 143.7 FELSIC LAPILLI TUFF Pale grey to pale green lapilli and occasional block-sized felsic AE08600 139.6 140.6 1.0 496 36 115 1 15 1500 clasts (5-15%) in a light grey sericitic matrix. Occasional pyrite AD02409 141.0 141.1 51 .1 n/a 37 n/a n/a 1820 clast. Foliation is at 30-35 degrees to core axis. Lower contact is AE08651 141.1 142.0 ...9 68 20 72 <1 5 1400 a sharp fault at 60 degrees to core axis. AE08652 142.0 143.0 1.0 88 28 84 1 5 1300 78 <1 5 2000 AE08653 143.0 143.7 .7 181 18 SULPHIDES:. 139.6-142.0 M Nil-1% disseminated pyrite. 142.0-143.0 m 1-3 % disseminated pyrite.

143.0-143.7 m 5 % disseminated pyrite.

141.6 Clay-filled slip at 60 degrees to core axis. Rock is strongly crushed for 50 cm below the slip.

143.7 155.6 DARK BROWN ARGILLITE

Dark brown almost black and soft. Broken and blocky over the entire section. 2-3% very fine-grained pyrite. The pyrite occurs in clots <3 mm in diameter. Massive bedding not observed. Lower contact is sharp at 70 degrees to core axis.

155.6 156.6 PEBBLE CONGLOMERATE

Matrix supported, unsorted, angular guartz (50 %) fine-grained mafic material (30 %), gabbro (10 %) and assorted lithic (<10 %) clasts in a dark brown fine-grained matrix. Lower contact is sharp at 70 degrees to core axis. A slip at 90 degrees to core axis occurs 2.0 cm below the lower contact.

156.6 285.0 MAFIC ASH TUFF

Fine-grained medium green soft, crushed, sheared and strongly chloritic. The unit may include some minor flows. Foliation is at a very low angle to the core axis throughout the section (0-20 degrees to core axis). Occasional bed (<2.0 cm thick) or clast of cherty grey-green sediment. Nil sulphides. Rock has a more sedimentary appearance below 207.0 m. Thermal biotite alteration is stronger and cherty sediment beds become more common and thicker (up 10.0 cm thick). The cherty beds sometimes contain trace to 1 % pyrite in hairline fractures. Broken core at lower contact.

CORE ANGLES:.

Bedding is at 30 degrees to core axis at 164.5 m. Bedding is at 12 degrees to core axis at 169.1 m. Minor slip at 30 degrees to core axis at 169.4 m. Bedding is at 15 degrees to core axis at 175.7 m. Bedding is at 0 degrees to core axis at 179.3 m. Bedding (?) is at 40 degrees to core axis at 190.0 m. Bedding is at 17 degrees to core axis at 203.6 m.

AD02410	159.7	159.8	.1	218	n/a	83	n/a	n/a	601
AD02411	173.4	173.5	.1	100	n/a	83	n/a	n/a	869
AD02412	192.7	192.8	.1	163	n/a	110	n/a	n/a	1050
AD02413	217.6	217.7	.1	204	n/a	78	n/a	n/a	792
AD02414	223.4	223.5	.1	140	n/a	97	n/a	n/a	831
AE08655	248.0	249.0	1.0	126	66	205	<1	<5	350
AE08656	249.0	250.0	1.0	127	61	206	(1	< 5	420
AE08657	250.0	251.0	1.0	84	57	132	<1	< 5	300
AD02415	260.3	260.4	.1	230	n/a	245	n/a	n/a	553

AE08654 143.7	144.7	1.0	92	19	176	<1	<5 86	0

То

(m)

From (m)

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG



HOLE No: Page Number CHEM87-29 5

Sample	From	То	Width	Cu	Ph	Zn	λα	A 11	Ra
o amp z o		. • •			- ~			****	24
No	(m)	(m)	(m)	(nnm)	(nnm)	(nnm)	(nnm)	(nnh)	(nnm)
	1	()	()	(Ppm)	(ppm)	(""	(ppm)	(ppp)	("

Bedding is at 14 degrees to core axis at 207.0 m. Bedding is at 10 degrees to core axis at 209.4 m. Bedding is at 14 degrees to core axis at 209.7 m. Bedding is at 25 degrees to core axis at 217.0 m. Bedding is at 20 degrees to core axis at 218.0 m. Bedding is at 42 degrees to core axis at 224.3 m. Bedding is at 35 degrees to core axis at 225.9 m. Bedding is at 17 degrees to core axis at 230.0 m. Bedding is at 5 degrees to core axis at 231.0 m. Bedding is at 20 degrees to core axis at 244.0 m. Bedding is at 20 degrees to core axis at 248.5 m. Bedding is at 50 degrees to core axis at 255.4 m. Bedding is at 17 degrees to core axis at 265.0 m. Bedding is at 30 degrees to core axis at 265.2 m. Bedding is at 25 degrees to core axis at 266.8 m. Bedding is at 12 degrees to core axis at 267.6 m. Bedding is at 0 degrees to core axis at 268.5 m. Bedding is at 35 degrees to core axis at 282.8 m.

-----DESCRIPTION------

170.3 173.1 Blocky, highly fractured core.

173.1 174.3 Moderate pervasive thermal biotite alteration.

173.5 175.9 Blocky, highly fractured core.

178.3 180.1 About 0.9 m of EXCESS CORE.

187.7 209.0 Weak-nil thermal biotite alteration.

189.5 190.2 Blocky, highly fractured core.

194.3 Minor slip at 0 degrees to core axis.

195.4 195.7 Blocky, highly fractured core.

- 199.0 203.8 1.0 cm wide clay-filled slip at 0 degrees to core axis. Core is broken and blocky over most of this section.
- 208.1 208.7 0.5 cm wide clay-filled slip at 0 degrees to core axis. Core is broken and blocky.
- 209.0 Moderate to strong patchy thermal biotite alteration. Up to 10 % pale to dark green lapilli-sized clasts.

215.0 Several quartz eyes 3-4 mm in diameter.

231.9 233.5 Blocky, highly fractured core.

234.8 235.4 Blocky, highly fractured core.

240.3 240.8 Blocky, highly fractured core.

Sample

No.

From

(m)

To

(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

То From (m)

(m)

241.1 241.7 Minor slip at 5 degrees to core axis.

241.7 242.9 Blocky, highly fractured core.

245.4 246.3 Blocky, highly fractured core. 0.2 m of lost core between 244.4 and 246.0 m.

-----DESCRIPTION-----

250.1 251.2 Blocky, highly fractured core.

252.4 255.4 Blocky, highly fractured core. 0.3 m of lost core between 252.4 and 253.3 m.

273.7 273.9 Blocky, highly fractured core.

- 274.3 275.6 Blocky, highly fractured core. 0.3 m of lost core between 273.4 and 275.5 m.
- 277.8 278.4 Bleached, quartz flooded fault breccia. Upper contact is at 12 degrees to core axis and lower contact is at 30 degrees to core axis.

285.0 296.3 MAFIC FLOW

Massive dark green and fine-grained. Nil-5 % chlorite-filled amygdales < 3 mm in diameter. Nil to trace disseminated chalcopyrite

AD02416	291.7	291.8	.1	242	n/a	76	n/a	n/a	401

HOLE No:

Cu

(ppm)

CHEM87-29

Width

(m)

Page Number

6

Pb

Zn

Ag

(ppm) (ppm) (ppm) (ppb) (ppm)

Au

Ba



FALCONBRIDGE LIMITED

DTAMOND DRILL LOG

PROPERTY: Chemainus J.V. - Chip Claims

Hole Location: 38+05 E 1+22 N

NTS: 092/	/B13	UTM: 541660	05 N	431100	E
Azimuth:	210	Elevation:	585	m	
Dip:	-50	Length:	340.	.2 m	

Started: June 17, 1987 Completed: June 21, 1987

Purpose: To test a VLF anomalies at 0+60 N and 1+60 S.

HOLE No: Page Number CHEM87-30 1

Claim No. CHIP 1 Section No.: 38+00 East

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

Core Size: NO

	pober io	cebe a far anomatres	ut 0.00 h un		DIP 1	TESTS									
			Length	Azi- muth	Dip	Length	Azi- muth	Dip							
			102.40 203.00	209.0 - 212.0 -	48.0 48.0	256.00 340.20	212.0 213.0	-46.0 -46.0							
From (m)	To (m)		DESCRIPTION	v			Sa	mple From No. (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn Ag (ppm) (ppm	Au B;) (ppb) (p	a pm)

.0 9.1 OVERBURDEN AND CASING

9.1 40.0 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Light grey to medium green tuff with on average 5 %, 2 to 3 mm, quartz eyes and 10 %, 1 to 2 mm, feldspar grains. The rock is moderately contorted and hosts local dust tuff beds and/or cherty beds. The rock is oxidized with minor rust throughout and trace to nil disseminated pyrite. There are 5, 0.5 to 1.5 mm, pyrite bands from 39.4 to 39.6.

> Foliations :. At 10.0 the foliation is at 27 degrees to core axis. At 20.8 the foliation is at 52 degrees to core axis. At 30.5 the foliation is at 60 degrees to core axis. At 38.5 the foliation is at 51 degrees to core axis.

Bedding :. At 21.6 the bedding is at 52 degrees to core axis. At 24.7 the bedding is at 61 degrees to core axis. At 33.4 the bedding is at 45 degrees to core axis.

AB21638	38.4	38.5	.1	32	n/a	64	n/a	n/a	1510
AB21637	25.1	25.2	.1	22	n/a	25	n/a	n/a	1060
AB21636	13.3	13.4	.1	25	n/a	28	n/a	n/a	1090

40.0 42.1 FELSIC TUFF

Rusty felsic tuff with quartz eyes, 2 to 3 %, 1 to 3 mm and no visible sulphides in a medium fine-grained greenish grey siliceous matrix. At 40.7 the foliation is at 65 degrees to core axis and the bedding is at 48 degrees to core axis.

AB21639 41.2 41.3 .1 23 n/a 17 n/a n/a 1280

42.1 46.0 FAULT ZONE

From 42.1 to 45.3 there is 0.8 m of lost core in a blocky, highly



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

			Sample	From	То	Width	Cu	Pb	Zn	Ag
1	DESCRIPTION		No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)

HOLE No: Page Number

52

67

2

n/a

n/a

49

38

n/a

n/a

Au

n/a

n/a

Ba

776

757

(mob) (mom)

CHEM87-30

.1

.1

fractured core chloritic rock with a shear zone from 45.3 to 46.0.

46.0 59.7 ALTERED INTERMEDIATE CRYSTAL TUFF

Moderately sheared tuff, which is locally weakly to strongly contorted and has been subjected to weak to moderate carbonatization and moderate to strong chloritization. The tuff hosts quartz eyes and feldspar grains and calcite occurs in the pressure shadow of the quartz eyes and as local fracture controlled veinlets. There are also minor contorted quartz veins. The unit is disky and medium green with chlorite bands.

Foliations :.

From To

(m) (m)

At 47.0 the foliation is at 55 degrees to core axis. At 49.4 the foliation is at 61 degrees to core axis. At 53.7 the foliation is at 71 degrees to core axis. At 56.9 the foliation is at 59 degrees to core axis. At 58.9 the foliation is at 55 degrees to core axis.

59.7 153.6 QUARTZ EYE BEARING FELSIC TUFF

White to grey felsic quartz eye crystal tuff with minor dust or	AB21642	64.2	64.4	.2	28	n/a	34	n/a	n/a	1400
fine-grained ash beds. The unit is sulphide poor with a pyrite cube	AB21643	71.1	71.2	.1	18	n/a	46	n/a	n/a	980
at 64.5 and trace disseminated pyrite locally after 98.2. The	AB21644	88.7	88.8	.1	39	n/a	100	n/a	n/a	963
depth of oxidation is to 63 m. There are numerous local faults and	AB21645	97.2	97.3	.1	41	n/a	126	n/a	n/a	880
shears, which are weakly to strongly contorted with orientations	AB21646	114.5	114.6	.1	26	n/a	36	n/a	n/a	755
of 0 to 90 degrees to core axis.	AB21647	128.3	128.4	.1	23	n/a	61	n/a	n/a	960

AB21640

47.0 47.1

AB21641 57.1 57.2

STRUCTURE :.

Fault gouge :. 66.1 to 66.2. 79.2 to 80.0. 82.8 to 83.1. 131.7 to 134. 136.3 to 136.9. 139.4 to 140.2. 146.5 to 147.1. 147.5 to 153.6.

Blocky, highly fractured core :. 59.7 to 63.0. 66.0 to 68.5. 74.3 to 92.0. 103.0 to 111.8. 134.0 to 136.3.

Chloritic shear zones :. 96.3 to 96.5. 98.2 to 99.1. 107.6 to 108.0.



HOLE No: CHEM87-30 Page Number 3

		FALCONBRIDGE LIMITED DIAMOND DRILL LOG				CHEM87-	-30	3		n de la composition Na de la composition Na de la composition		
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		117.9 to 118.2.										
		123.3 to 123.7.										
		140.2 to 140.4.										
		Locally minor between 142.3 and 146.5.						en de la composition de la composition Composition de la composition de la comp				
		Locally minor between 148.5 and 153.6.										
		Lost core :.										
		0.1 M from 67.7 to 68.6.										
		2.0 M from 75.3 to 78.0.										
		0.2 M from 74.1 to 75.3.										
		0.3 M from 85.0 to 87.3.										
		0.15 M from 88.1 to 89.9.										
		0.1 M at 107.6.										
		1.0 M from 111.3 to 113.7.	1.11									
		Paliations .										
		At 60.0 the foliation is at 70 degrees to gove avis										
		At 69.9 the foliation is at 35 degrees to core axis.										
		At 80.5 the foliation is at 88 degrees to core axis.			1.00							
		At 93.5 the foliation is at 55 degrees to core axis.										
		At 96.2 the foliation is at 53 degrees to core axis.								· ·		
		At 102.8 the foliation is at 56 degrees to core axis.										
		At 116.0 the foliation is at 57 degrees to core axis.										
		At 127.3 the foliation is at 55 degrees to core axis.										
		At 138.0 the foliation is at approximately 60 degrees to core axis.										
		Dallin				•						
		At 93.7 the hedding is at 48 degrees to core avis										
		No other measurements were obtainable due to the deformed nature										
		of the core.										
		Tops :.						- 				
		A bedding at 93.7 indicates that tops is dowhhole.										
450 6												
153.6	164.0	MAFIC LAPILLI TUFF	3001640	157 0	157 0	1	154	- 1-	00		n/a	05
		The fuff is dark to medium green with minor local fault gouge	AD21040	13/.0	107.9	• 1	194	n/a	. 00	117 a	II/a	
		local quartz ~ carbonate weins and trace to nil disseminated purite										
		and pyrite cubes. There are minor kinks and contortions with the										
	•	foliation at 163.2 at 45 degrees to core axis and at 155.5 at 70										
		degrees to core axis. The bedding at 158.3 is at 52 degrees to core										
		axis and at 162.2 it is at 54 degrees to core axis.										
164 0	001 -											
164.0	224.3	FELSIC TUFF	3001640	167.7	167 4	i	24	- 1-			n/a	1060
		164.0 1/5.4 Feisic tuil with minor local intermediate zones. The	A521049	10/.J	101.4	•1	30	n/a	. 14	n/a	n/a n/a	1 3 30
		turn is white to measure grey - green in colour with anidote grains and trade lanilli. There are minor local	AD41030 AB21651	195 6	195 7	• ± 1	29	n/a n/a	(10	n/a	n/a	1430
		fault sline and quarty voine From 166 A to 166 5	AE08620	199.5	201.0	1.5	46	6	10	(1	<5	1500
		there is fault gouge and shear.	AE08621	201.0	201.7	.7	66	<5	20	<1	<5	1300



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m)

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Bedding :. At 165.8 the bedding is at 65 degrees to core axis. At 169.1 the bedding is at 55 degrees to core axis. At 171.4 the bedding is at 60 degrees to core axis.

Foliation :.

The foliation at 169 is at 54 degrees to core axis.

175.4 178.7 Sheared and contorted felsic tuff to sericite schist with local kinked zones and fault gouge. There is a chlorite shear over 5 cm at 177.7 with an orientation of 50 degrees to core axis.

-----DESCRIPTION------

178.7 215.2 Medium grey - green to very light green - white felsic tuff with minor intermediate tuff component locally. Siliceous rock with localized quartz eyes and epidote grains. Hosts minor epidote - carbonate clots or lapilli with trace pyrite. The quartz eyes are locally up to 10 %, 1 to 4 mm, average 2 mm. From 201.0 to 201.7 there is 1 to 2 % fine-grained pyrite stringer with trace to 1 % pyrite locally on the margin of this zone. There are rhyolitic lapilli from 192.5 to 193.0. There is a epidote rich zone from 203 to 205, sediment enriched ?. From 182.4 to 185 there are black chlorite - carbonate cross-cutting 2 to 5 mm slips or shears at 20 to 25 degrees to core axis and minor slips and gouge also occur at 186.4, 187.6, 192.2, 193.4, and 193.6.

Bedding :.

At 184.4 bedding is at 42 degrees to core axis. At 201.2 bedding is at 45 degrees to core axis.

Foliations :. At 181.5 the foliation is 46 degrees to core axis. At 187.1 the foliation is 66 degrees to core axis. At 192.7 the foliation is 61 degrees to core axis. At 199.8 the foliation is 60 degrees to core axis. At 211.4 the foliation is 55 degrees to core axis.

215.2 224.3 Light green to grey felsic tuff with 5 % 1 to 4 mm quartz eyes on average. Minor suggary white quartz veins, ie. 215.0 to 215.2 and there is a zone, 216.0 to 216.2 with minor chlorite. There are local epidote rich beds. There is trace to nil pyrite cubes. The unit terminates in a fault.

Foliations :. At 215.3 the foliation is 72 degrees to core axis. At 218.2 the foliation is 64 degrees to core axis. At 221.3 the foliation is 47 degrees to core axis.

Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
AE08622	201.7	203.2	1.5	7	8	3	<1	<5	1100
AB21652	205.4	205.5	.1	39	n/a	12	n/a	n/a	1020
AB21653	213.6	213.7	.1	51	n/a	12	n/a	n/a	1050
AB21654	218.2	218.3	.1	47	n/a	17	n/a	n/a	970

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alteration zones with chlorite stringers. Local quartz - carbonate veins up to 10 cm wide occur, which host trace chalcopyrite blebs. There is local goethitic to hematitic staining in fractures or veinlets (?). At 253.6 there is minor chloritization with 2, 1 to 2 mm, fine-grained pyrite bands. The foliation varies locally from 20 to 90 degrees to core axis.







FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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

Sample From To Widt

No.

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HOLE No:

From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

Page Number

274.1 279.3 MASSIVE FELSIC BLOCK TUFF Tuff breccia with epidote blocks. There are quartz - carbonate veins and veinlets with local trace pyrite and trace to nil chalcopyrite.

279.3 283.6 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Felsic to intermediate tuff with epidote grains and minor local quartz eyes. The rock is moderately sheared and epidotized. There are local quartz veins with chlorite margins. The foliation varies locally.

283.6 331.0 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Highly contorted and moderately sheared felsic to intermediate tuff with quartz eyes and minor chlorite shear zones, which host trace to 1 % pyrite. The foliation trend varies from 20 to 90 degrees to core axis. There are minor quartz - carbonate veins and local kink bands and minor local micro-faults.

STRUCTURE :.

Fault gouge :. 283.6 to 284.0. 286.2 to 286.4. 287.6 to 290.0. 290.7 to 291.9. 300.0 to 300.3. 303.2 to 303.3. 303.7 to 304.2.

Shear zones :. 284.0 to 284.4. 285.6 to 285.8.

Clay :. 293.8 to 294.0.

331.0 337.0 FAULT ZONE

Fault breccia with clasts of the underlying rhyolitic tuff.

337.0 340.2 FELSIC TUFF

Massive green felsic tuff or possibly (?) a flow with a cherty component and 3 % stretched epidote grains. Slightly banded with green and white bands/ beds (?). Trace disseminated pyrite occurs. There is 0.9 m of lost core from 337.1 to 340.2 and the core is moderately blocky. AB21660 339.5 339.7 .2 44 n/a 34 n/a n/a 153





HOLE No: Page Number CHEM87-30 7

From To (m) (m) FALCONBRIDGE LIMITED DIAMOND DRILL LOG

-----DESCRIPTION------

Sample From To Width Cu Pb Zn Ag Au Ba No. (m) (m) (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) PROPERTY: CHEMAINUS JV - Chip Claims



HOLE No: Page Number 1

Hole Location: 40+00 E 0+60 S

NTS: 9281	13	UTM: 54163	50 N	431138	E
Azimuth:	210	Elevation:	570	m	
Dip:	-50	Length:	340.	.5 m	

Started: 21-JUNE-1987 Completed: 26-JUNE-1987

Purpose: To test a VLF conductor at 1+80 S, a shallow IP chargeability anomaly between 0+80 and 1+60 S. and an IP chargeability anomaly between 1+25 and 2+00 S.

DIP TESTS

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

			Length	Azi- muth	Dip	Length	Azi- muth	Dip									
			102.70 191.10	209.0 209.0	-50.0 -48.5	290.50 340.50	210.0 215.0	-48.5 -48.5									
From To (m) (m)		 DESCRIPTION	4	· · · · · · · · · · · · · · · · · · ·		S	ample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)

.0 10.7 OVERBURDEN AND CASING

10.7 26.1 CHLORITIC FELSIC TUFF

> Light green fine-grained moderate chloritization and sericitization and well foliated. Generally an ash tuff but occasional lapilli-sized felsic clast. Nil to 5 % 2-4 mm quartz eyes. Locally intensely microfractured and brecciated. Microfractures are filled with sericite.

Below 21.0 m there are no quartz eyes. Rock varies from felsic to intermediate in composition, contains up to 25 % epidotized feldspar crystals and has a crushed almost mylonitic appearance. Nil-trace pyrite. Lower contact is at 40 degrees to core axis.

CORE AXIS ANGLES:.

Foliation is at 40 degrees to core axis at 12.4 m. Foliation is at 50 degrees to core axis at 15.0 m. Bedding (?) is at 50 degrees to core axis at 16.5 m. Minor slip is at 60 degrees to core axis at 17.7 m. Foliation is at 40 degrees to core axis at 18.8 m. Foliation is at 45 degrees to core axis at 19.8 m. Foliation is at 44 degrees to core axis at 23.1 m.

11.8 12.2 Blocky, highly fractured core.

13.0 Intensely microfractured zone. Microfractures are filled with sericite.

17.4 20.4 0.2 m of lost core.

19.1 21.0 MAFIC DYKE (?). Strongly chloritic and carbonatized. Rock is dark green fine-grained and mafic in composition.

CHEM87-31

Claim No. CHIP 1 Section No.: Line 40+00 E

Logged By: J. Pattison Drilling Co.: Burwash Enterprises Assaved By: Bondar-Clegg and XRAL

Core Size: NO

AD02417 15.6

15.7

.1

33

n/a

13

n/a

n/a

940



FALCONBRIDGE LIMITED DIAMOND DRILL LOG



HOLE No: Page Number CHEM87-31 2

From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
			Broken core at upper and lower contacts.										
		20.2 23.0	Blocky, highly fractured core. 0.4 m of lost core between 20.4 and 22.6 m. Fault gouge at 22.6 m. Core is broken not possible to measure orientation. 0.3 M of lost core between 22.6 and 23.5.										
		24.2 24.3	MAFIC DYKE (?). Dark green fine-grained massive at 40 degrees to core axis. 1.0 cm wide quartz vein at lower contact.				• • •						
		24.7 24.8	Barren quartz vein at 60 degrees to core axis.										
		24.8 25.2	MAFIC TUFF. Dark green mafic epidote spotted tuff.										
26.1	33.5	MAFTC ASH	TUFF										
		Dark gree diameter. core axis	n fine-grained and massive. Occasional quartz eye 2-3 mm in Trace disseminated pyrite. Bedding is at 37 degrees to at 31.0 m. Lower contact is at 55 degrees to core axis.	AD02418	31.8	31.9	.1	30	n/a	97	n/a	n/a	363
		29.3 29.9	Bleached quartz flooded zone at 50 degrees to core axis.										
	·	30.2 30.6	Blocky, highly fractured core. Hematite along foliation planes.										
33.5	99.8	MAFIC TO Medium gr lapilli-s spots (s a chlori sections quartz po Lower con BEDDING A Bedding i Bedding i	INTERMEDIATE ASH TUFF een relatively massive and epidote spotted. 5 % ash to sized quartz grains and 3-10 % ash to lapilli-sized epidote some are feldspar crystals and others are altered clasts) in the matrix. Dominantly mafic in composition but minor may be intermediate. Occasional block-sized fine-grained orphyritic felsic clast. Fracture surfaces are often rusty. Atact is at 65 degrees to core axis. NGLES:. Is at 60 degrees to core axis at 36.8 m. (?) is at 40 degrees to core axis at 69.5 m. Is at 48 degrees to core axis at 94.5 m.	AD02419 AD02420 AD02421 AD02422 AE08624 AE08625 AE08625 AE08626 AE08627 AD02423	34.8 45.8 54.3 75.4 85.7 86.7 87.7 88.7 93.8	34.9 45.9 54.4 75.5 86.7 87.7 89.7 93.9	.1 .1 .1 1.0 1.0 1.0 .1	292 115 169 137 277 260 105 110 211	n/a n/a n/a 28 20 6 54 n/a	124 93 97 81 87 56 47 88 88	n/a n/a n/a <1 <1 <1 <1 <1 <1 <1 <1 <1 n/a	n/a n/a n/a <5 10 <5 5 n/a	521 313 323 1030 830 990 790 950 266
		SULPHIDES 40.5-41.8 43.3-47.0 chalcopyr 80.0-89.0 +/- carbo pyrite.	S:. 3 m 2 % disseminated pyrite. 3 m 1-2 % disseminated pyrite. Most as euhedral cubes. Trace 5 site at 35.4 m. 3 m 1-2 % pyrrhotite disseminated and in clots and quartz 5 onate +/- epidote veinlets and 1-2 % fracture controlled										

36.1 36.8 MAFIC LAPILLI TUFF. Quartz eyes are rare.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

	From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Wi (
			67.7 86.0 Weak to moderate thermal biotite alteration.				
			71.3 71.9 Blocky, highly fractured core. Fractures are rusty.				
			75.1 76.8 Blocky, highly fractured core. Rusty fractures.				
			80.0 80.4 Blocky, highly fractured core. Rusty fractures.				
			85.1 86.0 Blocky, highly fractured core. 0.2 m of lost core.				
			86.9 87.5 FELSIC ASH TUFF. Fine-grained light grey siliceous and massive.				
			87.7 88.7 Numerous (~25 % of the sec). Unoriented quartz +/- carbonate +/- epidote veins and pods <3.0 cm wide. 3 % pyrrhotite and 1 % pyrite mostly in veins.				
			89.3 89.8 Blocky, highly fractured core.	a t Type (
			90.0 91.8 Weak patchy thermal biotite alteration.				
			91.8 93.4 Moderate thermal biotite alteration. Quartz flooded between 92.6 and 92.8 m.				
			96.5 99.8 Weak patchy thermal biotite alteration.				
9	9.8	103.4	FELDSPAR PORPHYRITIC MAFIC FLOW / GABBRO Massive 1-5 %, 1-3 mm white feldspar laths in a fine-grained green chloritic matrix. Trace disseminated pyrite and pyrhotite. Occasional quartz +/- carbonate vein < 1.0 cm wide with trace pyrrhotite and pyrite. Lower contact is at 34 degrees to core axis.	AD02424	102.6	102.7	
10)3.4	114.0	MAFIC TO INTERMEDIATE ASH TUFF Medium green and epidote spotted. Similiar to 33.5 to 99.8 m except this unit contains beds of cherty pale green to brown tuffaceous sediments up to 15.0 cm thick which contain up to 5 % fracture controlled pyrite. Weak thermal biotite alteration gives rock a banded appearance. Lower contact is at 70 degrees to core axis.	AD02425	108.9	109.0	
		•	BEDDING ANGLES:. Bedding is at 33 degrees to core axis at 103.4 m. Bedding is at 45 degrees to core axis at 104.9 m. Bedding is at 37 degrees to core axis at 108.5 m.				
			103.4 104.1 Blocky, highly fractured core.				
			106.6 106.9 Blocky, highly fractured core.				

HOLE No: Page Number CHEM87-31 3

imple	From	То	Width	Cu	РЬ 2	n Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm) (r	(ppm) (ppm)	(ppb)	(ppm)

AD02424 102.6 102.7 .1 311 n/a 124 n/a n/a 140

AD02425 108.9 109.0 .1 192 n/a 151 n/a n/a 369



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)		DESCRIPTION	5	ample No.	F
		109.9	110.2 Blocky, highly fractured core. 0.2 m of lost core between 108.8 and 111.9 m.			
		111.9	112.5 Blocky, highly fractured core.			
		112.5	112.7 2 % pyrite 2 % pyrrhotite and trace chalcopyrite concentrated in microfractures.			

114.0 118.4 FELDSPAR PORPHYRITIC MAFIC FLOW / GABBRO

As 99.8 to 103.4. Trace disseminated pyrite. Lower contact is at about 45 degrees to core axis.

118.4 129.6 ALTERED FELSIC ASH TUFF

Light grey to green-grey fine-grained and well foliated (foliation is sometimes kinked). Core is broken and blocky over the entire section. Moderately sericitized above 120.2 m. Sericite-filled microfractures are common. Becomes moderately chloritized below 120.2 m. Chlorite tends to occur in discrete streaks and bands ,1-3mm wide parallel to foliation. Moderate pervasive carbonatization between 121.6 and 125.0 m. Nil-trace disseminated pyrite. Broken core at lower contact.

FOLIATION ANGLES: .

Foliation is at 50 degrees to core axis at 118.9 m. Foliation is at 47 degrees to core axis at 119.7 m. Foliation is at 53 degrees to core axis at 122.0 m. Foliation is at 57 degrees to core axis at 124.7 m. Foliation is at 60 degrees to core axis at 128.6 m.

121.6 128.6 Poker chip core.

124.9 128.0 3-10 % lapilli-sized felsic clasts and rare chloritic lapilli-sized clasts.

127.4 128.6 0.6 m of lost core.

129.6 139.7 OUARTZ EYE BEARING FELSIC TUFF

Medium grey fine-grained moderately sericitic and weakly chloritic. 6 % clear 1-4 mm quartz eyes stretched slightly parallel to foliation. Below 137.2 m quartz eyes are <1.5 mm in diameter and comprise < 1 % of the rock. Core is broken and blocky over the entire section. Trace disseminated pyrite. Fault at lower contact.

FOLIATION ANGLES:.

Foliation is at 60 degrees to core axis at 131.1 m. Foliation is at 70 degrees to core axis at 133.0 m. Foliation is at 68 degrees to core axis at 137.1 m. Foliation is at 67 degrees to core axis at 138.1 m.

HOLE No: Page Number CHEM87-31 Δ

1e '	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
•	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02426 116.8 116.9 271 n/a 155 n/a n/a 65 1

n/a 957 AD02427 120.2 120.3 .1 60 n/a 32 n/a

50 81 n/a n/a 1140 AD02428 131.1 131.2 .1 n/a

	PROPERT	Y: CHEMAINUS JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG				HOLE N Chem87-	lo: Pa 31	ige Numb 5	er			
From (m)	n To) (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		138.6 138.7 Two minor slips at 40 and 75 degrees to core axis.										
		139.4 139.7 Fault gouge. Loosely consolidated fault breccia. Rock is soft and clay-rich. Not possible to measure the orientation of the fault. 0.2 m of lost core between 139.3 and 142.3 m.										
139.7	145.4	MAFIC TO INTERMEDIATE ASH TUFF Medium green massive fine-grained and well foliated. Foliation is often kinked. Moderate to strong pervasive carbonatization. Nil sulphides. Foliation is at 51 degrees to core axis at 142.2 m. Minor slip at 60 degrees to core axis at 144.3 m. Ground core at lower contact.	AD02429	140.8	140.9	.1	425	n/a	93	n/a	n/a	271
145.4	145.8	QUARTZ EYE BEARING FELSIC TUFF As 129.6 to 139.7. 5 % 1-4 mm quartz eyes. Nil sulphides. Lower contact is sharp at 65 degrees to core axis.										
145.8	147.8	MAFIC TO INTERMEDIATE ASH TUFF Similiar to 139.7 to 145.4 m. Strongly deformed foliation is kinked and contorted. Moderate pervasive carbonatization. Lower contact is sharp at 68 degrees to core axis.	AD02430	147.6	147.7	.1	182	n/a	132	n/a	n/a	762
147.8	153.8	QUARTZ EYE BEARING FELSIC TUFF Felsic tuff accounts for 70 % of the unit and is as 129.6 to 139.7 m. Up to 7 % 1-6 mm quartz eyes. Strongly crushed. Foliation is contorted for 0.6 m from upper contact. Foliation is contorted throughout the unit. Weak to moderate pervasive chloritization. Nil sulphides. Mafic tuff occurs in 3 beds at 60-70 degrees to core axis. Lower contact is at 55 degrees to core axis.	AD02431	150.7	150.8	.1	35	n/a	72	n/a	n/a	848
		FOLIATION ANGLES:. Foliation is at 68 degrees to core axis at 148.2 m. Foliation is at 60 degrees to core axis at 150.6 m.						•				
		149.0Clay-filled slip at 65 degrees to core axis.149.4Clay-filled slip at 45 degrees to core axis.										
		150.8 151.5 Bed of CARBONATIZED MAFIC TUFF at 33 degrees to core axis. As 145.8 to 147.8 m. Drag structures along the upper and lower bedding contacts.										
		152.1 Minor slip at 53 degrees to core axis.										

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

			CHEM87-31	6
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HOLE No: Page Number

From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		152.3	3.0 cm wide bed of MAFIC ASH TUFF at 70 degrees to core axis.										
		152.6 152.7	Lapilli to block-sized felsic fragments.										
		152.7 153.4	Carbonatized, crushed MAFIC ASH TUFF bed at 60 degrees to core axis. Minor slip at 60 degrees to core axis at 153.1 m and another at 50 degrees to core axis at 153.2 m				2 2 2 4 2 4						
		153.5 153.8	FAULT GOUGE. Medium green to grey loosely consolidated clay-rich fault breccia at 55 degrees to core axis.										
153.8	160.3	MASSIVE SIL Mottled aph chloritizat Locally up pyrite and Broken core	ICEOUS FELSIC TUFF/FLOW yric very hard siliceous and microfractured. Weak spotty ion. Core is broken and blocky over the entire section. to 5 % 1-2 mm epidotized feldspar crystals. Trace-1% nil-trace chalcopyrite concentrated in microfractures. at lower contact.	AD02432	153.9	154.0	.1	30	n/a	14	n/a	n/a	868
		154.5 156.1	0.6 m of lost core. Fault gouge 3.0 cm wide at 30 degrees to core axis at 156.0 m.										
		157.0	Slip at 30 degrees to core axis.										
		157.0 158.3	Many slips at 50-60 degrees to core axis. Rock is crushed and the core is rubbly.										
		158.2 159.1	0.3 m of lost core.										
		158.3 158.8	Weak thermal biotite alteration.										
		158.8 160.3	Moderate sericitization.										

160.0 Lapilli-sized felsic fragments.

160.3 165.8 THERMAL BIOTITE ALTERED FELSIC ASH TUFFS AND CHERTY ARGILLACEOUS

SEDIMENTS Grey-brown, moderately sericitized and weakly to moderately chloritized felsic ash tuffs (85 % of the unit) with 1.0 to 10.0 cm thick sections of medium grey cherty fine bedded to laminated sediments with occasional clasts of black cherty argillite up to 0.5 cm wide and 4.0 cm long. Core is broken and and blocky over the entire section. Rock has a crushed texture and foliation varies from 0-50 degrees to core axis. Lower contact is arbitrary.

BEDDING ANGLES:. Bedding is at 65 degrees to core axis at 161.7 m. Bedding is at 40 degrees to core axis at 164.9 m. Bedding is at 65 degrees to core axis at 165.6 m.

AD02433	161.1	161.2	.1	39	n/a	56	n/a	n/a	1430	
AD02434	164.0	164.1	.1	69	n/a	20	n/a	n/a	977	



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-31 7

From (m)	.To (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		161.7	5.0 cm wide bed of argillaceous sediments at 65 degrees to core axis.			•							
		162.7	Slip at 0 degrees to core axis.										
		162.8	0.5 cm wide clay-filled slip at 47 degrees to core axis.										
		163.1 163.5	40.0 cm wide bed of cherty argillaceous sediments. Broken core at upper and lower contacts. Bedding is at 55 degrees to core axis. 1-2 % disseminated pyrite.										
		164.0 164.2	Cherty argillaceous sediments. Bedding is contorted. Broken core at upper and lower contacts.		• •								
		165.0	Bedded argillaceous cherty sediments. Beds are 2-5 mm wide and are contorted (15-50 degrees to core axis).										
165.8	176.0	FELSIC ASH Light grey above 169.0 Weak to mod altered fel crushed app section. 1 contact is	TUFF and fine-grained. Moderate thermal biotite alteration m. Moderately sericitized over most of the section. erate patchy chloritization above 169.0 m. Up to 10 % dspar crystals in less sericitized sections. Rock has a earance and foliation is contorted over most of the -5 %, 1-3 mm quartz eyes between 174.7 and 175.5 m. Lower a fault at 45 degrees to core axis.	AD02435	171.5	171.6	.1	41	n/a	20	n/a	n/a	1320
		FOLIATION A Foliation i Foliation i 1.0 Cm wide Foliation i Foliation i	NGLES:. s at 10 degrees to core axis at 166.4 m. s at 45 degrees to core axis at 166.7 m. fault gouge is at 30 degrees to core axis at 168.4 m. s at 30 degrees to core axis at 171.4 m. s at 30 degrees to core axis at 172.0 m.										
		168.6 168.8	Blocky, highly fractured core.										·.
		169.7 170.0	Fault gouge at 20 degrees to core axis. Core is broken blocky and crushed.										
		170.5	Minor slip at 15 degrees to core axis.										
		170.6 171.6	Blocky, highly fractured core.										
		172.2	Minor slip at 25 degrees to core axis.										

173.3 174.0 Blocky, highly fractured core. 0.5 m of lost core between 169.8 and 173.1. 0.1 m of lost core between 173.1 and 173.4. 0.3 m of lost core between 173.4 and 174.0.

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

From To (m) (m)

> 174.8 175.6 Blocky, highly fractured core. 0.3 m of lost core between 174.0 and 175.6 m.

-----DESCRIPTION------

176.0 178.3 MASSIVE CARBONATIZED MAFIC FLOW/INTRUSION

Massive fine-grained dark green. Moderate to strong fracture controlled and pervasive carbonatization. Locally core is speckled (<3%) with a beige alteration mineral (probably a carbonate). Moderate fracture controlled hematization. Hematite is often associated with carbonate veinlets. Core is broken and blocky over most of the section. Broken core at lower contact.

178.3 179.7 CHLORITIC FELSIC ASH TUFF

Pale grey-green hard siliceous and microfractured. Weakly chloritized (microfracture controlled). Foliation is at a low angle to the core axis (< 20 degrees). Lower contact is a chloritic slip at 55 degrees to core axis.

178.9 179.1 Slip at 20 degrees to core axis.

179.7 180.8 LITHIC LAPILLI TUFF

1-3 % lapilli-sized felsic and cherty sedimentary lithic fragments in a felsic to intermediate matrix of quartz chlorite biotite and carbonate. Core is broken and blocky over most of the section. 0.4 m of lost core between 178.3 to 180.4 m. Trace disseminated pyrite. Lower contact is a slip at 60-70 degrees to core axis.

180.8 2 X 5 cm clast of felsic quartz eye tuff with 4 % fracture controlled pyrite.

180.8 183.8 MASSIVE MAFIC ASH TUFF

As 176.0 to 178.3 but only weak fracture controlled carbonatization and rare <2 mm quartz eyes. Core is broken and blocky over most of the section. Lower contact is sharp at 65 degrees to core axis.

183.8 192.1 CHLORITIC QUARTZ-FELDSPAR CRYSTAL TUFF

Grey-green, 5-7 %, 1-4 mm quartz and feldspar crystals in a fine-grained to aphyric siliceous matrix. Weakly to moderately sericitic. Weak thermal biotite alteration. Occasional brown lapilli-sized lithic clast. Trace disseminated pyrite. Broken core (fault) at lower contact.

190.4 Slip at 15 degrees to core axis.

1904.0 192.0 Blocky, highly fractured core. 0.2 m of lost core between 191.1 and 192.0 m. HOLE No: Page Number CHEM87-31 8

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02436 177.0 177.1 .1 530 n/a 131 n/a n/a 205

AD02437 179.4 179.5 .1 69 n/a 26 n/a n/a 1380

AD02438 183.3 183.4 .1 129 n/a 115 n/a n/a 592

AD02439 185.0 185.1 .1 42 n/a 46 n/a n/a 822





FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-31 9

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
192.1	203.9	GABBRO ? Medium green medium-grained and massive. About 2-5 % ilmenite most of which has altered to leucoxene. Fine-grained for 0.5 m from the upper contact and for 1.0 m from the lower contact. Weak fracture controlled carbonatization and moderate hematization. Nil sulphides. Lower contact is at 70-80 degrees to core axis.	AD02440	199.0	199.1	.1	252	n/a	112	n/a	n/a	131
		194.5 195.7 Blocky, highly fractured core. 0.5 m of lost core. 197.9 198.1 Blocky, highly fractured core. 0.2 m of lost core between 197.2 and 198.1 m.										
		199.7 200.3 Blocky, highly fractured core. 0.1 m of lost core between 198.1 and 200.3 m.										
203.9	204.7	MASSIVE SILICEOUS FELSIC ASH TUFF Massive hard siliceous, mottled and microfractured. Occasional (<1 %) 1-3 mm feldspar crystals. Nil sulphides. Lower contact is at 15 degrees to core axis.	AD02441	204.3	204.4	•1	39	n/a	35	n/a	n/a	624
		204.2 Slip at 65 degrees to core axis.										
204.7	221.6	GABBRO ? Massive dark green medium to fine-grained. Biotite rich for 10.0 cm from the upper contact. 2-3% ilmenite most has been altered to leucoxene. Similiar to 192.1-203.9 m. Lower contact is a fault gouge at 55 degrees to core axis.	AD02442 AE08658	214.3 220.6	21 4.4 221.6	.1 1.0	172 206	n/a 8	91 77	n/a <1	n/a <5	102 180
		213.1 213.5 Moderate pervasive carbonatization.										
221.6	229.1	<pre>SERICITIC FELSIC TUFF Light grey fine-grained and well foliated. Occasional hairline fracture filled with black material (fine-grained sulphides ?). <1-5 % lapilli-sized felsic fragments. Quartz eye bearing below 223.2 m. <5 %, 1-2 mm feldspars below 227.1 m. Lower contact is at 48 degrees to core axis. FOLIATION ANGLES:. Foliation is at 50 degrees to core axis at 222.4 m. Foliation is at 20 degrees to core axis at 223.3 m. Foliation is at 20 degrees to core axis at 225.7 m. Foliation is at 20 degrees to core axis at 226.8 m. Foliation is at 30 degrees to core axis at 228.6 m. SULPHIDES:.</pre>	AE08659 AE08660 AE08661 AE08662 AE08663 AE08664 AD02443 AE08665 AE08666	221.6 222.6 223.7 224.4 225.4 226.3 227.3 227.1 228.1	222.6 223.7 224.4 225.4 226.3 227.1 227.4 228.1 229.1	1.0 1.1 .7 1.0 .9 .8 .1 1.0 1.0	400 649 2112 1079 964 2231 703 784 163	86 21 33 19 19 23 n/a 5 33	1645 509 156 149 196 161 277 432 190	<1 <1 <1 <1 <1 <1 n/a <1 <1	110 130 240 95 75 70 n/a 30 10	1200 920 940 970 1000 1390 1100 1700
		221.6-222.6 m 3-5 % pyrite in 1-3 mm bands parallel to foliation and in 2-5 mm long spots stretched parallel to foliation.		• • • •								



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-31 10 CHEM87-31

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm
•		222.6-223.7 m 5-7 % pyrite and trace chalcopyrite as above. 223.7-224.4 m 7-10 % pyrite and trace-0.25 % chalcopyrite in 1-3 mm bands and 2-5 mm spots at about 20 degrees to core axis										
		224.4-226.3 m 7 % pyrite and trace chalcopyrite as above. 226.3-227.1 m 5-7 % pyrite and 0.25-0.5 % chalcopyrite as above.										
		227.1-229.1 m 3-5 % disseminated pyrite and occasional lapilli-sized clast of pyrite.										
		221.6 221.8 Fault gouge at 55 degrees to core axis. Upper 10 cm is a dark brown mud (similiar to the dark brown argillite										
		described in previous noies). Lower 10 cm is crushed felsic tuff.										
		222.9 223.1 Slip at 0 degrees to core axis.										
		223.1 223.2 Fault gouge at 30 degrees to core axis.										
		224.5 Slip at 10 degrees to core axis.										
229.1	230.	5 MAFIC FLOW ?										
		Pale green relatively massive and medium-grained. Composed of 30-40	AE08667	229.1	230.0	.9	119	13	68	<1	<5	30
		* white () mm feldspars in a chioritic matrix, weak to moderate pervasive carbonatization. May be a dyke. Lower contact is sharp at 20 degrees to core axis.	AD02444 AE08668	230.0	230.5	.5	56	19	88	1/a <1	17 a (5	730
230.5	239.	7 SERICITIC QUARTZ EYE BEARING FELSIC TUFF Light grey fine-grained weakly chloritic in places. 1-5 %, 1-5 mm	AE08669	230.5	231.5	1.0	72	14	92	(1	<5	640
		quartz eyes. Locally up to 5 % lapilli-sized felsic fragments. 1-3	AE08670	231.5	232.5	1.0	18	14	68 72	(1	<5 /5	830
		* pyrite disseminated roughly parallel to follation. Lower contact is at 40 degrees to core axis.	AE08672 AE02445	232.5 233.5 234.3	233.5 234.3 234.4	.8	15 53 46	15 10 n/a	73 87	(1 n/a	10 n/a	380 720
		FOLIATION AND BEDDING ANGLES:.	AE08673	234.5	235.5	1.0	20	24	122	<1	30	810
		Foliation is at 45 degrees to core axis at 230.7 m.	AE08674	235.5	236.5	1.0	14	12	51	<1	10	960
		Foliation is at 40 degrees to core axis at 231.9 m.	AE08675	236.5	237.5	1.0	14	22	51	<1	35	1300
		Foliation is at 37 degrees to core axis at 233.2 m.	AE08676	237.5	238.5	1.0	29	11	60	(1	30	1400
		Foliation is at 40 degrees to core axis at 233.4 m.	AE08677	238.5	239.7	1.2	210	20	41	(1	45	1200
		Bedding is at 50 degrees to core axis at 233.7 m.										
		Foliation is at 40 degrees to core axis at 255.0 m.										
		Redding is at 45 degrees to core axis at 236.8 m.										
		Foliation is at 45 degrees to core axis at 238.0 m.										
		233.6 234.0 Bleached zone.			-							
		233.7 233.8 Sericitic tuffaceous sediments. Bedding is at 50 degrees										

to core axis. 235.1 235.3 Bleached, weakly carbonatized zone at 60-40 degrees to core axis with 15 % pyrite.





FALCONBRIDGE LIMITED DIAMOND DRILL LOG



HOLE No: Page Number CHEM87-31 11

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
		238.1 238.9 Bed of MAFIC ASH TUFF. Nil sulphides. Broken core at										
		upper and lower contacts. 0.5 cm wide clay-filled slip at 30 degrees to core axis in the middle of the bed.										
239.7	249.3	MAFIC TUFFS WITH MINOR MAFIC TUFFACEOUS SEDIMENTS										
		Dark green massive mafic tuff or flow with minor beds and rip up clasts of pale green mafic tuffaceous sediments (<5.0 cm thick). 1-3 % finely disseminated ilmenite. Occasional epidote-rich patch up to 10 cm in diameter. Weak to nil carbonatization. Broken core	AE08678 AD02446 AE08679	239.7 241.9 248.6	240.7 242.0 249.6	1.0 .1 1.0	336 246 129	373 n/a 25	72 106 78	2 n/a <1	160 n/a 15	250 154 120
		at lower contact.										
		BEDDING ANGLES:. Bedding is at 53 degrees to core axis at 242.6 m. Bedding is at 55 degrees to core axis at 247.0 m.										
		239.7 240.4 Finely bedded pale green ash tuff. Bedding is very contorted.										
		245.0 245.4 Blocky, highly fractured core. 0.2 m of lost core.										
		248.8 249.3 Blocky, highly fractured core.										
249.3	250.0	ALTERED FELSIC ASH TUFF										
		Massive hard and bleached looking. 10 % pyrite 2 % chalcopyrite and 1 % galena (?) concentrated in microfractures. Broken core at upper and lower contacts.	AE08680	249.6	250.0	.4	5900	13600	231	134	4766	1300
250 0	340 5	MIYED NAFTC THEFE AND FLOUS										
230.0	340.3	Dark green massive with $1-2$ % finely disseminated ilmenite above	AE08681	250.0	251.0	1.0	353	379	102	<1	85	190
		275.0 m. Occasional epidote rich patches < 10.0 cm in diameter.	AD02447	257.3	257.4	.1	349	n/a	104	n/a	n/a	154
		From 250.0 to 251.7 m MAFIC LITHIC LAPILLI TUFF. About 20 % pale	AD02448	262.6	262.7	.1	276	n/a	85	n/a	n/a	615
		green lithic fragments in a chloritic matrix.	AD02449	273.7	273.8	.1	164	n/a	96	n/a	n/a	1480
		From 251.7 to 259.1 m MAFIC ASH TUFF with minor beds ((3.0 cm thick)	AD02450	286.0	286.1	.1	44	n/a	91	n/a	n/a	231
		and rip up clasts of pale green cherty sediments. 1-5 %, 1-3 mm	AD02451	290.1 314 C	290.4	1	103	n/a	93	n/a n/a	n/a	407
		From 259.1 to 262.4 m WEAKLY THERMAL BIOTITE ALTERED MAFIC ASH TUFF.	AD02452 AD02453	331.3	331.4	.1	166	n/a	90	n/a	n/a	560
		From 262.4 to 275.0 m STRONG THERMAL BIOTITE ALTERED MAFIC TUFF.										
		Occasional bed or clast of pale brown cherty sediment.										
		From 275.0 to 283.5 m FINE MAFIC ASH TUFF. Weak patchy thermal	1									
		biotite alteration. Occasional minor bed of cherty turfaceous beds						Sec. 1				
		From 283.5 to 298.5 m massive fine-grained section rare										
		lapilli-sized mafic clast (flow?). Up to 3 % up to 3 mm wide										
		chlorite spots which occur in clusters < 10.0 cm thick (anvodales?).										
		Also up to 3 % lighter coloured epidote carbonate spots <3 mm wide. Weak fracture controlled hematite-carbonate alteration. Several										



From

(m)

To

(m)

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-31 12

From Width Cu Pb Ba Sample То Zn Au Åα No (m) (m) (m) (mgg) (mag) (mag) (mom) (mag) (dag)

irregular epidote carbonate patches up to 15 cm in diameter. Some

of these patches have a pinkish caste. Nil to trace pyrite and nil to trace chalcopyrite. From 298.5 to 318.5 m WEAKLY TO STRONGLY THERMAL BIOTITE ALTERED

-----DESCRIPTION------

MAFIC TUFF. Occasional bed of finer light brown tuffaceous sediment and up to 15 % lapilli-sized lithic fragments of tuffaceous sediment From 318.5 to 322.2 m MASSIVE MAFIC FLOW ?. Chlorite spotted as 283.5 to 298.5 m. Trace chalcopyrite associated with quartz-carbonate veinlets and pods. Fault gouge at lower contact (not possible to measure orientation) 0.3 m of lost core between

319.1 and 322.2 m. From 322.2 to 326.6 m MAFIC TUFF with beds of tuffaceous sediments. Moderate patchy thermal biotite alteration. Thermal biotite appears

to occur in discrete beds. From 326.6 to 337.4 m MAFIC FLOW ?. Massive no thermal biotite alteration chlorite spots as 283.6 to 298.5 m. Below 328.7 m occasional bleached patch up to 15.0 cm in diameter. Ash tuff from 330.9 to 331.2 m.

Form 337.4 to 340.5 MAFIC ASH TUFF with beds of pale green cherty tuffaceous sediments <3.0 cm thick. Moderate patchy thermal biotite alteration.

ANGLES TO CORE AXIS:.

Bedding is at 20 degrees to core axis at 266.9 m. Minor slip at 15 degrees to core axis at 268.5 m. Bedding is at 15 degrees to core axis at 272.8 m. Bedding is at 12 degrees to core axis at 275.6 m. Bedding is at 70 degrees to core axis at 279.7 m. Bedding is at 77 degrees to core axis at 280.0 m. Bedding is at 66-70 degrees to core axis at 281.0 m. Bedding is at 70 degrees to core axis at 281.8 m. Bedding is at 60 degrees to core axis at 299.5 m. Bedding is at 65 degrees to core axis at 299.9 m. Bedding is at 40 degrees to core axis at 301.6 m. Bedding is at 40 degrees to core axis at 304.3 m. Bedding is at 15 degrees to core axis at 306.5 m. Bedding is at 25 degrees to core axis at 315.2 m. Bedding is at 58 degrees to core axis at 323.0 m. Bedding is at 25 degrees to core axis at 338.2 m. Bedding is at 40 degrees to core axis at 339.8 m. Bedding is at 38 degrees to core axis at 340.0 m.

251.7 Broken rubbly core.

259.5 260.0 Blocky, highly fractured core.

278.0 278.3 Blocky, highly fractured core.

313.1 1.0 cm wide clay-filled slip at 15 degrees to core axis.

313.1 318.5 Fault zone. Blocky, highly fractured core. 2.4 m of lost







FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-31 13

From	То			Sample	From	То	Width	Cu	Pb 2	Zn A	g Av	i Ba
(m)	(m)	DESCRIPTION		No.	(m)	(m)	(m)	(ppm)	(ppm) (]	ppm) (p	pm) (pr)b) (ppm)

core between 312.4 and 318.5 m.

324.3 326.1 Fault zone. Blocky, highly fractured core. 0.7 m of lost core between 323.7 and 325.8 m.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 36+00 E 0+80 N

NTS: 092/B	13	UTM:	541667	75 N	430910	E
Azimuth: 2	10	Eleva	ation:	585	m	
Dip: -	50	Lengt	ch:	465.	.1 m	

Started: June 21, 1987 Completed: June 28, 1987

Purpose: To test VLF conductors at 0+60 N and 1+80 S, a shallow IP chargeability anomaly between 0+80 and 1+00 S and a deep IP chargeability anomaly between 1+25 and 2+20 S.

p IP chargeability anomaly between 0+30 and 1+00'S p IP chargeability anomaly between 1+25 and 2+20 S. DIP TESTS Azi- Azi-

	Length	muth	Dip	Length	muth	Dig	> `		
	50.30	212.0	-50.0	320.30	218.0	~45.0)		
	120.70	213.0	-46.0	388.30	220.0	-44.0)*		
	196.90	216.0	-45.0	455.70	218.0	-42.0)		
	260.90	217.0	-45.0						
					S	ample	From	То	1

From To (m) (m)

.0 20.3 OVERBURDEN AND CASING

20.3 26.1 FELSIC FELDSPAR CRYSTAL TUFF

Medium to dark bluish- green tuff with up to 20 %, up to 2 mm, feldspar crystals. There is a minor fault slip at 20.6 with the orientation at 54 degrees to core axis and there is 0.6 m of lost core just prior to 23.2 and there is 2.1 m of lost core between 23.2 and 26.2. The foliation at 20.4 is at 50 degrees to core axis and at 21.3 it is at 60 degrees to core axis.

-----DESCRIPTION------

26.1 26.6 FAULT GOUGE

26.6 30.6 SERICITIC QUARTZ-FELDSPAR CRYSTAL TUFF

Felsic tuff with white - green sericite and 1 to 2 %, 1 to 2 mm, quartz eyes and 10 to 15 %, 2 mm, feldspar grains. There is trace to nil disseminated pyrite and a local pyrite band, 1 mm thick, at 29.1. There is 0.6 m of lost core between 28.0 and 29.3. The foliation at 29.4 is at 38 degrees to core axis.

30.6 32.7 CHLORITIC SHEAR ZONE

Chloritic shear with minor quartz eyes and calcite grains. There are quartz +/- carbonate +/- feldspar veins, up to 10 cm thick. The upper and lower contacts are at 31 degrees to core axis and 29 degrees to core axis respectively and are very sharp with minor faulting cutting the lower contact. There is minor fault gouge in HOLE No: Page Number CHEM87-32 1

Claim No. Chip 1 Section No.: Line 36+00 East

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

Core Size: NQ

ample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AB21661 21.9 22.0 .1 61 n/a 38 n/a n/a 708

AB21662	32.1	32.2	.1	73	n/a	169	n/a	n/a	1090	





				FALCONBRIDGE LI DIAMOND DRILL	IMITED LOG				CHEM87-	32	2				
From (m)	To (m)		DESCRIPTIO	N		Sample No.	From (m)	T0 (m)	Wiđth (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
32 7	59 0	SERICITIC OUARTZ-FEI	LDSPAR CRYSTAL THE	F											
52.1	55.0	Locally schistose to	o massive siliceous	s felsic tuff w	vith < 1 to 5 %,	AB21663	43.7	43.8	.1	27	n/a	64	n/a	n/a	813
		up to 3 mm, quartz	eyes and 5 to 15	%, up to 2 mm, i	feldspar	AB21664	55.2	55.3	.1	36	n/a	30	n/a	n/a	974
		locally bleached a	nd is medium grev	y contortea. I to white. There	e rock nas been										
		highly fractured con	re from 36 to 46. '	There is 0.3 m	of lost core										
		from 37 to 38, 0.4	m from 38.4 to 40	.5, and 0.4 m i	from 40.5 to			·							
		there is a minor cl	t gouge from 40.0 hloritic shear at 4	43 degrees to co	42.6 to 42.8 ore axis. The	1 									
		foliation at 46.0	is at 41 degrees t	o core axis, at	52.7 is at 41					1					
		degrees to core axis	s and at 57.0 is a management of $t = \frac{1}{2}$	t 27 degrees to	core axis. At										
		bleb at an orientat:	ion of 10 degrees	to core axis.	a i cm pyrice						· .				
					•										•
59.0	59.6	CHLORITE SCHIST													
		Blocky, highly fract	tured core, possib	ly a shear zone	•										
59.6	68.0	SHEARED INTERMEDIAT	E TUFF												
		Sheared felsic to in	ntermediate tuff w	ith chert (?) (or ash / dust	AB21665	66.4	66.6	.2	40	n/a	42	n/a	n/a	494
		tuff beds and minor	r quartz eyes. The	ré is nil sulpl e margins at lou	nides and local										
		core axis.	eins with chiolit	e margins at io	angles to the										
											÷				
		Foliations :.	on is at 32 degree	s to core avis											
		At 67.0 the foliation	on is at 46 degree	s to core axis.											
1.		Bedding :.	is at 45 degrees	to core avia											
		At 62.5 the bedding	is at 48 degrees	to core axis.											
68 0	60 0	CHLORTTE SCHIST													
00.0	0.00	Chlorito cohist with	h carbonate veinle	te and quarte -	arrhonato										

Chlori e schist with carbonate veinlets and q nate veins. There are minor calcite eyes and the rock is sheared with the foliation at 68.6 at 45 degrees to core axis.

71.0 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF 69.8

Siliceous grey felsic tuff with up to 1 % , up to 1 mm, quartz eyes and up to 5 % feldspar grains. The rock is moderately kinked and contorted.

71.0 72.3 CHLORITE SCHIST

Sheared chlorite - carbonate zone with calcite veins and a 6 cm quartz - chlorite - calcite vein at the base.



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		DIMOND DATH 100										
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
72.3	73.7	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Felsic tuff with 2 %, up to 5 mm, quartz eyes and 5 to 20 % feldspar grains locally with a 5 cm shear at 72.8.	AB21666	72.7	72.8	.1	55	n/a	18	n/a	n/a	622
73.7	74.7	CHLORITE SCHIST As in previous intervals.										
74.7	79.3	QUARTZ EYE BEARING FELSIC TUFF Moderately schistose to massive siliceous grey felsic tuff with trace quartz eyes. The foliation at 76.7 is at 30 degrees to core axis. At 77.2, there is a 10 cm shear with the orientation at 36										
		degrees to core axis. From 75.2 to 75.5 there is a fault with chloritic gunge and quartz veins that are cross-cut by slips.										
79.3	79.8	CHLORITE SCHIST Black sheared chlorite schist with pervasive and veinlet hosted carbonate.					**					
79.8	80.0	WHITE BULL QUARTZ VEIN +/- CHLORITE WITH NO SULPHIDES										
80.0	86.8	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF										
		Siliceous grey - green moderately contorted felsic tuff with 1 to 3 %, 2 to 4 mm, quartz eyes and up to 20 % feldspar grains. There are minor quartz - carbonate veinlets at orientations of 0 to 90	AB21667	84.7	84.8	.1	54	n/a	44	n/a	n/a	939
		degrees to core axis. No sulphides occur. The foliation at 84.0 is at 51 degrees to core axis. There is blocky, highly fractured core from 83.3 to 83.8.										
86.8	87.0	FAULT GOUGE										
87.0	94.1	FELSIC TUFF Locally chloritic felsic tuff, broken with fault gouge at 89 6 and	AB21668	93.4	93.5	. 1	29	n/a	14	n/a	n/a	1270
		91.2 for 15 to 20 cm. From 92.4 to 94.1 there is sericitic quartz eye crystal tuff with fine-grained feldspar grains and minor ash to				• •			÷ •	, *		
		dust turr beds. The bedding at 94.0 is at 48 degrees to core axis and the foliation at 93.7 is at 55 degrees to core axis.										

94.1 97.3 MAFIC TO INTERMEDIATE LAPILLI TUFF Sheared and carbonitized mafic to intermediate lapilli tuff with large epidote clots with quartz - carbonate veinlets. The top of the unit is sheared chlorite and carbonate bands.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

AB21669 105.0 105.1

AB21670 114.7 114.8

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231

n/a

103

n/a

93 n/a

n/a

312

927

n/a

. 1

.1

	Sample	From	То	Width	Cu	Pb	Zn	Aa	Au	Ba
DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

97.3 106.5 FELSIC TUFF

ቸስ

(m)

From

(m)

- 97.3 97.4 Weakly contorted felsic tuff with epidote grains. The foliation is at 67 degrees to core axis and the bedding is at 47 degrees to core axis.
- 97.4 (?) fault, missing core (?).
- 97.4 99.2 Felsic tuff, intermediate lapilli tuff and fault gouge in the core with the orientation at 0 degrees to core axis. 99.2 99.3 Fault gouge.
- 99.3 106.5 Locally weakly to moderately contorted sericitic felsic tuff with trace to 2 %, 2 to 4 mm, quartz eyes and 5 to 15 % fine-grained epidote grains. The foliation at 101 is at 49 degrees to core axis and at 105.8 is at 25 degrees to core axis.
- 106.5 110.3 MAFIC TO INTERMEDIATE LAPILLI TUFF
 - Intermediate / mafic lapilli tuff with epidotized clasts and minor quartz +/- carbonate veining.

110.3 110.3 FAULT GOUGE

110.3 115.8 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Locally chloritic and sericitic tuff with local quartz - carbonate veins and kink bands. The foliation is between 60 and 90 degrees to core axis, with the rock being moderately contorted and a chlorite shear at 112.3. There is trace to 1 % local disseminated pyrite.

115.8 137.3 SERICITIC QUARTZ-FELDSPAR CRYSTAL TUFF

Moderately sericitic to siliceous felsic tuff with 2 to 3 %, 2 to 6 mm, guartz eyes and approximately 10 % feldspar grains. There are minor fracture controlled quartz - carbonate veinlets. The rock is grey - green in colour and at approximately 118 becomes moderately contorted and more siliceous, with an increase in quartz eyes to 4 to 5 % and in average size to 3.5 mm. The foliation at 118.6 is at 61 degrees to core axis. From 119.3 to 119.8 there is a guartz vein with a biotite margin and in spurs, which is at 20 to 25 degrees to core axis and appears to be along a fault slip. At 120.3 there is a 7 cm mafic sill or dyke with epidote grains and the orientation at 74 degrees to core axis. At 121.2 there is a chlorite - carbonate shear. The rock is highly contorted from 124 to 125. From 125 to 132.9 is darkish grey - green with local fracture controlled carbonate veinlets. At 125.1 bedding is at 36 degrees to core axis. At 126.3 the foliation is at 30 degrees to core axis. At 130.0 there is a 1 mm pyrite stringer. There is minor fault gouge at 132.2. From 132.9 to 137.3 there is a bleached

AB21671	129.1	129.2	.1	38	n/a	<10	n/a	n/a	1020	
AE08628	132.9	134.0	1.1	<1	12	8	<1	10	850	
AE08629	134.0	135.0	1.0	1	11	7	<1	< 5	890	
AE08630	135.0	136.0	1.0	<1	6	9	<1	< 5	910	
AE08631	136.0	137.3	1.3	<1	13	6	<1	< 5	1100	

61

n/a

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	То (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba) (ppm)
		white sericitic tuff with 1 to 2 % disseminated pyrite and 3 to 5 %, 2 to 6 mm, quartz eyes. There are minor pyrite stringer from 133.1 to 133.4. There is 5 cm of carbonatization with 5 % pyrite at 135.6. The foliation at 134.0 is at 28 degrees to core axis and at 136.1 is at 39 degrees to core axis.										
137.3	140.0	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF	AE08632	137.3	138.2	.9	66	9	25	<1	<5	640
140.0	164.6	FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF										
		Intermediate to felsic crystal rich tuff with chlorite - carbonate shear from 137.5 to 139.0 with minor trace chalcopyrite blebs and up to 3 % pyrite. Fine-grained white to medium grained grey - green	AB21672 AB21673	141.3 156.9	141.4 157.0	.1	53 31	n/a n/a	10 23	n/a n/a	n/a n/a	1060 1210
		siliceous felsic tuff with quartz eyes and local epidote crystal rich beds and epidote crystals throughout. The rock gradually changes throughout the unit. The crystal content varies from trace										
		epidote grains. The rock is locally contorted with trace to 1 % pyrite bands, up to 1 mm occuring locally.										
		Foliations :. At 142.3 : 45 degrees to core axis. At 149.1 : 46 degrees to core axis. At 153.1 : 42 degrees to core axis.							• • • •			
		At 161.2 : 41 degrees to core axis.										
		Blocky, highly fractured core :. 144.4 to 145.1. 159 to 160.										
		Fault gouge :. 151.3 to 151.4. 152.7 to 152.8.										
		164.3 to 164.3.										
164.6	165.8	CHLORITIC SHEAR ZONE Chlorite - carbonate shear with the foliation trend at about 80 degrees to core axis.										
165.8	169.6	INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Moderately sheared intermediate to felsic tuff with minor felsic ash to dust tuff beds. There are 10 to 15 % epidote grains in a medium to dark green matrix. There is blocky, highly fractured core			و ور ما در مه					-		
		from 167.2 to 168.2 and from 169.3 to 169.6. Bedding at 168.0 is at 71 degrees to core axis and foliation varies locally from 60 to 90 degrees to core axis and appears to be sub-parallel to bedding.										

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From	То	
(m)	(m)	DESCRIPTION

169.6 188.5 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Locally white and siliceous, usually medium to dark green and moderately siliceous. Hosts 20 %, up to 1 mm, crystals as 5 % quartz eyes and 15 % epidote grains. From 176 to 177 it is moderately sheared. At 178.0 there are blebs of chalcopyrite in a quartz vein. At 187.6 there is a carbonate - hematite veinlet. The tuff is bleached from 186.6 to 187.0.

Foliations :.

170.4 : 65 degrees to core axis. 174.5 : 65 degrees to core axis. 177.5 : 70 degrees to core axis. 184.1 : 50 degrees to core axis.

Bedding :. 174.8 : 53 degrees to core axis. 179.3 : 38 degrees to core axis.

188.5 199.2 MASSIVE FELSIC CRYSTAL TUFF

Massive medium grained felsic tuff with 20 to 25 % epidote, 2 to 4 mm, as grains and laths and 1 to 3 % quartz eyes, 1 to 5 mm. There are local quartz veinlets and the foliation at 191.5 is at 61 degrees to core axis.

199.2 201.3 MAFIC SILL

Black chloritic mafic sill or dyke with a sharp upper contact and the lower contact at a fault. There are no quartz eyes and there are 20 to 30 % epidote grains. The rock is moderately sheared with carbonate veinlets and moderate pervasive carbonatization locally. The foliation at 199.5 is at 46 degrees to core axis.

201.3 203.3 QUARTZ EYE BEARING FELSIC TUFF

Grey to green siliceous tuff with 3 to 5 , 2 to 4 mm, quartz eyes. The foliation at 202.6 is at 65 degrees to core axis.

203.3 204.4 MAFIC SILL

Fine-grained green sill with 30 %, up to 1 mm, epidote grain and minor chlorite - carbonate veinlets and quartz veins. There are sharp contacts, with the lower contact orientation at 58 degrees to core axis and the foliation variable between 30 and 90 degrees to core axis.

204.4 207.6 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

Felsic tuff with 2 to 4 %, 2 to 5 mm, quartz eyes and locally up to

HOLE No:	Page	Number
CHEM87-32		6

Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
AB21674	174.5	174.6	.1	49	n/a	17	n/a	n/a	1440
AB21675	184.6	184.7	.5 .1	397	n/a	38 60	n/a	n/a	200 203

AB21676 192.8 192.9 .1 59 n/a 18 n/a n/a 1120

AB21677 199.3 199.4 .1 101 n/a 104 n/a n/a 931

AE08634 205.9 206.9 1.0 28 <5 20 <1 <5 950

P	ROPER	Y: Chemainus J.V Chip Claims				HOLE	lo: Pa	ge Numb	er			
•		FALCONBRIDGE LIMITED DIAMOND DRILL LOG				CHEM87-	-32	7				
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		15 % epidote grains. From 206.85 to 207.35 there is 5 to 6 % chalcopyrite and 3 to 4 % weakly magnetic pyrrhotite as blebs and bands in quartz veins, which comprise 20 % of that interval.	AE08635 AE08636	206.9 207.4	207.4 208.4	.5 1.0	16200 756	10 <5	311 56	9 1	75 <5	930 700
207.6	211.7	MAFIC SILL Same as from 203.3 to 204.35 with minor chalcopyrite and pyrite in a quartz vein at the base of the unit.										
211.7	214.3	MASSIVE QUARTZ-FELDSPAR CRYSTAL TUFF Massive light grey to a epidote yellow coloured felsic tuff with 5 %, 2 to 4 mm, quartz eyes and 35 %, 2 to 3 mm, epidote grains and	AB21678	213.4	213.5	.1	29	n/a	23	n/a	n/a	932
		laths, after feldspar with local epidotized blocks, up to 7 cm long.				1. C						
214.3	217.5	MAFIC TO INTERMEDIATE LAPILLI TUFF Mafic tuff with minor quartz eyes, epidote lapilli and grains. The foliation is from 60 to 80 degrees to core axis. From 217.2 to 217.5 there is blocky, highly fractured core and fault gouge.										
												. ·
217.5	219.5	MAFIC FLOW OR TUFF Massive mafic rock with approximately 1 % fracture controlled carbonate veinlets at 0 to 90 degrees to core axis. There is minor pyrite in local quartz veins. There are approximately 20 % epidote grains and no quartz eyes are present.	AB21679	218.8	218.9	.1	35	n/a	16	n/a	n/a	1270
219.5	223.2	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Felsic tuff with approximately 10 %, 1 to 5 mm, epidote grains and trace quartz eyes. Trace pyrite occurs. A graded crystal rich bed at 222.3 indicates that tops is uphole. At 222.7 the foliation is at 55 degrees to core axis and bedding is at 62 degrees to core axis.									• .	
223.2	251.0	MAFIC FLOW Mafic flow with local zones of epidotization and chloritization with	AB21680	228.8	228.9	.1	74	n/a	154	n/a	n/a	175
		2 to 3 % carbonate - hematite veinlets. There is local pyrite in the zones of epidotization. At 248.0 there is a 2 to 5 mm band of chalcopyrite and pyrite, which occurs with a quartz vein and hematite. The veins are at orientation of 0 to 90 degrees to core	AE08638 AE08637 AE08639 AE08640	242.4 243.4 244.4 245.4 245.4	243.4 244.4 245.4 246.4 247.6	1.0 1.0 1.0 1.0	222 175 116 197 81	10 <5 15 10	45 60 61 51 46	<1 <1 <1 <1 <1	<5 <5 <5 <5	630 1000 500 710 110
		axis and the follation varies from 50 to 90 degrees to core axis locally.	AE08642	247.6	248.1	.5	2951	11	143	1	<5	530
251 0	256 0	FAILT ZONE										
231.0	450.0	Fault gouge with local felsic tuff and mafic flow material. From	AE08643	253.8	254.7	.9	50	9	20	(1	10	1000

HOLE No: Page Number **PROPERTY:** Chemainus J.V. - Chip Claims CHEM87-32 8 FALCONBRIDGE LIMITED DIAMOND DRILL LOG Au Ba To Width Cu Рb Zn Åσ Sample From From То -----DESCRIPTION------No. (m) (m) (m) (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) 256.0 269.4 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF AB21681 258.2 258.3 536 Locally contorted siliceous white to medium grey felsic tuff with .1 32 n/a 12 n/a n/a feldspar crystals and trace quartz eyes. There are numerous minor cross-cutting carbonate veinlets and local bull guartz veins. Up to 1 % pyrite occurs as bands and blebs. There is 0.5 m of lost core at 268.0 and 0.3 m between 268.5 and 269.4. There is local minor fault couce. 269.4 274.4 MAFIC SILL AB21682 273.4 273.5 .1 348 n/a 112 n/a n/a 117 Fine-grained dark green sill with 10 % leucoxene and trace disseminated pyrite. The upper contact is at blocky, highly fractured core and the lower contact is sharp at 47 degrees to core axis. There is moderate fracture controlled carbonate and local guartz - carbonate veinlets. There is minor hematite on the fractures. 274.4 276.2 QUARTZ EYE BEARING FELSIC TUFF Whitish felsic tuff with 2 to 3 % guartz eyes. There are numerous fracture controlled carbonate veinlets. The foliation at 275.1 is at 55 degrees to core axis. There is 0.2 m of lost core at 275.6 and the lower contact is at minor fault gouge. 276.2 278.5 MAFIC SILL As from 269.4 to 274.4 and lower contact is fault breccia. 278.5 283.6 OUARTZ EYE BEARING FELSIC TUFF n/a 1150 36 n/a White siliceous to weakly sericitic felsic tuff with quartz eyes. AB21683 281.0 281.1 .1 43 n/a There is < 1 % fracture controlled pyrite. The tuff is weakly to moderately pervasively carbonitized. The tuff is weakly brecciated and the lower contact is a fault breccia. 283.6 284.5 MAFIC SILL As from 276.2 to 278.5. 284.5 285.5 OUARTZ EYE BEARING FELSIC TUFF Highly contorted and moderately silicified guartz eye felsic tuff with fracture controlled carbonate veinlets. 285.5 286.6 MAFIC SILL n/a 141 AB21684 286.4 286.5 99 n/a 243 n/a .1 As from 283.6 to 284.5.

286.6 289.6 QUARTZ EYE BEARING FELSIC TUFF As from 284.5 to 285.5 with lower 50 cm sheared.

PH	OPERT	Y: Chemainus J.V Chip Claims FALCONBRIDGE LIMITED				HOLE N CHEM87-	o: Pa 32	ge Numbe 9	er		-12	
		DIAMOND DRILL LOG										
From	То		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm
0 6	220 14	NADY DDAUN ADATIITAT										
	340.4	Brown argillite, soft with strong to moderate pervasive	AB21685	300.0	300.1	.1	126	n/a	136	n/a	n/a	637
		carbonatization, with up to 1 % carbonate veinlets and minor pyrite	AB21686	318.3	318.4	.1	126	n/a	144	n/a	n/a	961
		blebs, trace to 1 %. There is up to 2 % very fine-grained pyrite in the matrix. The top of the unit is fault gauge to 2021. There is										
		blocky, highly fractured core from 314.0 to 320.4.										
04	321 4	SANDSTONE										
	541.3	Brownish quartzite with bedding at 35 degrees to core axis and										
	1.11	argillite, felsic tuff and Nanaimo conglomerate matrix as clasts										
		in the lower 35 cm with grading indicating that tops is uphole.										
1.4	321.7	DARK BROWN ARGILLITE				· ·						
		sandstone.										
	200 4	C3 ND CMAND										
	322.4	Fine-grained green sandstone with 3 to 5 % pyrite blebs.	AE08644	321.7	322.4	.7	156	14	105	{1	10	2000
	200 0	NANATWO CONCLONEDATE		- 11 A								
• *	J44.0	Gabbro and felsic tuff cobbles in a matrix similar to the green										
		sandstone.										
2.8	446.3	PYRITIC FELSIC TUFF										
		The unconformity with the Nanaimo Group sedimentary cover is at an	AE08645	324.0	324.7	.7	29	43	56	<1	35	1500
		orientation of 85 degrees to core axis. The tuff varies in terms of	AE08646	324.7	326.0	1.3	6	41	25	(1	- 25	3100
		322.8 324.7 Brecciated with local Nanaimo Group inclusions.	AE08648	327.5	329.0	1.5	3	36	23	<1 <1	65	2000
		324.7 349.8 Felsic tuff with trace quartz eyes and locally 5 to 15 %	AE08649	329.0	330.5	1.5	10	50	52	(1	90	1100
		feldspar grains, up to 1 mm. The average pyrite content	AE08650	330.5	332.0	1.5	47	78	23	<1	15	1600
		is 2 % and the content varies locally from 1 to 5 %. The purite is disceminated and bedded. There is 0.5 m of	AE08701	332.0	335.5	1.5	15	169	37	1 (1	50	1400
		lower contact from 342.9 to 344.4 and 0.5 m of lower	AE08703	335.0	336.5	1.5	39	102	-55	(1	35	960
		contact from 344.4 to 345.9. There is blocky, highly	AE08704	336.5	338.0	1.5	46	106	57	<1	55	980
		fractured core and fault gouge from 343 to 345.9.	AE08705	338.0	339.0	1.0	52	107	217	(1	1 20	970
		349.8 Micro-fault.	AE08708	340.0	340.0	1.5	60	83	455	(1	160	1500
		349.8 351.0 Bleached felsic tuff with stringer pervasive	AE08708	341.5	343.0	1.5	44	57	187	(1	95	1400
		carbonatization and 5 to 7 % pyrite and trace galena (?)	AE08709	343.0	346.0	3.0	40	53	99	-(1 -	75	1400
		351.0 354.8 Locally weakly to moderately brecciated felsic tuff with	AE08710	346.0	347.2	1.2	37	56	284	(1)	65 50	1200
		quartz - carponate and carponate veins and veinlets with 1 to 2 % disseminated purite. The foliation is	AE08712	341.2	348.5 349 8	1.3	207	41 9	37	1	65	1300
		parallel to or sub- parallel to to the core axis.	AE08713	349.8	351.0	1.2	167	17	203	(1	200	380
		354.8 355.2 Bleached felsic tuff with 7 % pyrite.	AE08714	351.0	353.0	2.0	26	14	39	(1	70	1200

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To		DFSCDIDTION	Sample	From	To	Width	Cu (nnn)	Pb (mmm)	Zn	Ag (app)	Au	Ba
(111)	(11)		DESCRIPTION	NO.	(ш)	(111)	(111)	(ppm)	(ppm)	(ppm)	(ppm)	(ppp)	(ppm)
		355.2 367.7	Light to medium grey siliceous to locally sericitic	AE08715	353.0	355.0	2.0	74	33	585	<1	65	1200
			felsic tuff with minor quartz eyes, trace to 2 %, up to	AE08716	355.0	357.0	2.0	52	36	133	<1	60	1500
			7 mm. From 358.0 to 358.2 there is bleaching with a	AE08717	357.0	359.0	2.0	13	42	77	<1	65	1400
			true thickness of 2 cm, which hosts 1 to 2 % pyrite and	AE08718	359.0	361.0	2.0	21	61	95	<1	30	1300
			is at an orientation of 3 degrees to core axis, bedding	AE08719	361.0	363.0	2.0	12	92	94	<1	35	1000
			(?). There are local lithic lapilli in the tuff. There	AE08720	363.0	365.0	2.0	19	54	284	<1	20	1100
			are minor quartz - carbonate veinlets. The average	AE08721	365.0	367.0	2.0	15	30	54	(1)	35	2300
			pyrite content is 2 %, which is disseminated with trace	AE08722	367.0	369.0	2.0	45	16	48	<1	60	1700
			beds or bands.	AE08723	369.0	371.0	2.0	40	14	59	<1	80	1700
		363.0	Minor fault gouge.	AE08724	371.0	373.0	2.0	27	10	43	<1	100	1600
		367.7 368.0	Fault gouge.	AE08725	373.0	375.0	2.0	32	12	30	<1	35	1400
		368.0 381.0	White grey speckled tuff with minor fracture controlled	AE08726	375.0	377.0	2.0	120	16	38	<1	25	1700
			carbonate veinlets and 3 to 4 % disseminated pyrite and	AE08727	377.0	379.0	2.0	282	12	45	<1	30	1200
			minor trace stringer pyrite.	AE08728	379.0	380.7	1.7	104	21	17	(1	25	1500
		381.0 388.6	Grey moderately siliceous to sericitic tuff with quartz	AE08729	387.0	388.6	1.6	57	11	13	<1	60	2800
			eyes and lapilli. The tuff is locally weakly to	AE08730	388.6	389.8	1.2	484	10	35	<1	10	2000
			strongly contorted. On average there is trace to 1 %	AE08731	389.8	391.4	1.6	65	8	17	<1	110	1300
			pyrite with 10 to 15 % locally over 5 to 10 cm at 384.9	AE08732	391.4	392.0	.6	17	24	12	<1	5	1200
			and at 386.6. There are local quartz - carbonate veins	AE08733	392.0	393.0	1.0	14	23	18	<1	40	1200
			with local pyrite cubes. The veins are up to 2 cm thick.	AE08734	393.0	395.0	2.0	35	7	16	. (1	35	1300
		388.6 389.8	7 to 8 % fine-grained pyrite bands parallel to foliation	AE08735	400.5	402.0	1.5	31	29	12	<1	15	1800
			in a grey fine-grained quartz sericite schist cross-cut	AE08736	402.0	403.0	1.0	67	39	11	<1	40	2100
			by minor quartz - carbonate veinlets.	AE08737	403.0	404.0	1.0	19	63	16	<1	10	2200
		389.8 391.4	1 to 2 % disseminated and trace band pyrite in a grey	AE08738	404.0	404.8	. 8	53	172	51	<1	20	2100
			quartz sericite schist.	AE08739	404.8	406.3	1.5	18	49	16	<1	< 5	2600
		391.4 392.0	Trace chalcopyrite and 5 % pyrite as folded and pinched	AE08740	410.0	412.5	2.5	37	22	21	<1	<5	4000
			out bands sub- parallel to and parallel to to	AE08741	412.5	414.0	1.5	104	70	24	<1	20	3300
			foliation. There is also trace fuchsite in this tuff,	AE08742	415.0	416.4	1.4	51	29	35	<1	<5	2900
			which varies locally from massive to schistose and is	AE08743	416.4	416.9	.5	2731	68	236	4	120	2900
			quartz eye bearing.	AE08744	416.9	418.0	1.1	66	22	40	1	<5	2400
		392.0 393.0	2 to 3 % pyrite, which occurs as from 391.4 to 392.0.	AB21687	427.2	427.3	.1	34	n/a	17	n/a	n/a	1210
		393.0 402.0	Tuff contains 1 to 2 % pyrite, which is disseminated and	AE08745	427.3	428.7	1.4	45	12	17	<1	<5	1000
			also occurs as minor bands, which are locally	AE08746	428.7	429.5	.8	187	83	26	<1	30	750
			concentrated over 10 to 15 cm as 5 to 10 % at 393.8 and	AE08747	429.5	431.0	1.5	61	19	30	(1	۲5	810
			400.6.	AB21688	434.1	434.2	.1	170	n/a	237	n/a	n/a	276
		402.0 404.8	3 to 4 % parallel to foliation pyrite, which is	AE08748	444.0	445.0	1.0	172	11	21	<1	30	710
			fine-grained and occurs in 1 to 4 mm bands. The tuff	AE08749	445.0	446.3	1.3	327	11	32	<1	15	740
			also contains minor parallel to foliation guartz veins								-		
			with trace pyrite.										
		404.8 416.6	1 to 3 % pyrite, average 1.5 to 2 %, concentrated in										
			zones of guartz - carbonate veinlets. Pyrite is										
			disseminated and also occurs as minor 1 mm bands.					· · · · ·					

- 416.6 416.8 8 % pyrite with dust tuff beds, parallel to foliation and discordant with trace chalcopyrite.
- 416.8 426.0 Quartz eye rich, 5 to 7 %, up to 4 mm, locally with stringer pervasive carbonatization, felsic tuff with on average 1 % pyrite, locally 10 % over up to 10 cm.
- 426.0 428.7 Same as above with tr to 1 % pyrite.
- 428.7 429.5 Quartz eye rich felsic tuff with 15 % disseminated and band pyrite.
- 429.5 429.7 Beige sill with trace pyrite and stringer pervasive

HOLE No: Page Number CHEM87-32
FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-32 11

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

From To (m) (m)

(111)

carbonatization.

429.7 433.7 Tuff with trace to 1 % disseminated pyrite and trace to nil pyrite bands.

-----DESCRIPTION------

- 433.7 434.4 Beige sill as at 429.5 with sharp lower and upper contacts at 13 degrees to core axis. The sill has been subjected to stringer pervasive carbonatization and the composition is beige biotite and carbonate.
- 434.4 442.0 Quartz eye feldspar rhyolitic tuff with trace to nil pyrite and minor pyrite with quartz - carbonate veins.
- 442.0 442.1 Beige sill.
- 442.1 444.5 Silicified tuff, similar to 434.4 to 442.0.
- 444.5 446.3 Moderately carbonitized distorted and weakly brecciated felsic tuff with 2 % pyrite. There is local fuchsite throughout in trace quantities. There are quartz carbonate veinlets throughout, that cross-cut and have no dominant orientation.

Foliations :.

To approximately 355 at approximately 0 degrees to core axis. 360 : 20 degrees to core axis. 362 : 18 degrees to core axis. 365.2 : 13 degrees to core axis. 370 : 10 degrees to core axis. 375 : 14 degrees to core axis. 380 : 21 degrees to core axis. 385 : 25 degrees to core axis. 388.7 : 29 degrees to core axis. 389 : 31 degrees to core axis. 390 : 14 degrees to core axis. 395 : 22 degrees to core axis. 400 : 23 degrees to core axis. 405 : 6 degrees to core axis. 410 : 13 degrees to core axis. 415 : 22 decrees to core axis. 420 : 12 degrees to core axis. 425 : 21 degrees to core axis. 430 : 17 degrees to core axis. 435 : 25 degrees to core axis.

- 440 : 35 degrees to core axis.
- 445 : 35 degrees to core axis.

446.3 465.1 FINE GRAINED PLAGIOPHYRIC GABBRO

Chilled margin type gabbro with approximately 5 %, 1 to 3 mm, feldspar grains in a fine-grained green matrix. The gabbro is very weakly magnetic with 2 to 3 % fine-grained ilmenite, which is breaking down to hematite. There are local quartz - carbonate veins with chlorite margins.

AE08750	446.3	447.3	1.0	157	<5	91	<1	<5	<20
AB21689	456.9	457.1	.2	242	n/a	96	n/a	n/a	183
				and the second sec	an in the second	and the second			



PROPERTY: CHEMAINUS JV - Chip Claims

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 43+00 E 0+40 S

NTS: 92B1	13	UTM: 541622	25 N	431407	Е
Azimuth:	210	Elevation:	595	m	
Dip:	-50	Length:	441	.3 m	

Started: 26-June-1987 Completed: 13-July-1987 HOLE No: Page Number CHEM87-33 1

Claim No. CHIP 1 Section No.: 43+00 East

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

Core Size: NQ

Purpose:	To test between	a weak, deep IP 1+80 S and 3+00	chargeability S.	anomaly	DIP 1	rests		
			Length	Azi- muth	Dip	Length	Azi- muth	Dip
			38.40 117.90 194.10 276.50	213.0 214.0 215.0 216.0	-52.5 -50.0 -49.0 -48.0	324.90 388.00 424.00	216.0 217.0 217.0	-47.5 -46.0 -46.0
m To							S	ample

(m) (m) -----DESCRIPTION-----

Width From То Cu Pb Zn Ag Au Ba No. (m) (m) (m) (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

.0 9.1 OVERBURDEN AND CASING

9.1 15.5 MOTTLED FELSIC TUFF

From

Mottled, pale salmon pink, green and and cream coloured. Relatively massive hard and siliceous. Rare quartz eye. Pink colour may be due either to rhodonite or to hematization of feldspars. Moderate spotty chlorite alteration and moderate pervasive sericitization. Core is blocky and broken over the entire section. Trace disseminated magnetite and trace fracture controlled pyrite. Broken core at lower contact.

LOST CORE INTERVALS:. 9.1 - 9.8 m 0.6 m of lost core. 9.8 - 11.3 m 0.7 m of lost core. 11.3 - 12.2 m 0.7 m of lost core. 12.2 - 12.5 m 0.1 m of lost core. 12.5 - 13.0 m 0.3 m of lost core.

15.5 19.0 CARBONATIZED MAFIC LAPILLI TUFF

Dark green and fine-grained. Dominantly an ash tuff with up to 5 % AD02455 16.3 16.4 .1 42 n/a 106 n/a n/a 1140 chloritic lapilli-sized fragments stretched parallel to foliation. Foliation is at 40 degrees to core axis at 18.0 m. Nil-3% disseminated magnetite. Broken core at lower contact.

15.5 16.8 0.2 m of lost core.

19.0 83.5 MIXED CHLORITIC FELSIC TUFFS

AD02454 10.6 10.7 .1 57 n/a 31 n/a n/a 685



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m)

(m)

Similiar to 9.1 to 15.5 m but not as pink. Trace disseminated magnetite. Becomes a chloritic ash tuff below 25.5 m. Occasional chloritic lapilli-sized clast. <1 %, 3-5 mm guartz eves and no magnetite below 25.5 m. Occasional bed of mafic tuff. Nil sulphides but rusty fractures are common throughout the unit From 47.3 to 53.9 m 10-30 % lapilli-sized felsic clasts in a guartz + sericite + chlorite matrix. Weak-nil pervasive carbonate. No guartz eves.

-----DESCRIPTION------

From 53.9 to 58.7 m weakly carbonatized felsic ash tuff and minor argillaceous sediments. Argillaceous sediments are black to medium grev and occur in beds and rip-up clasts < 2.5 cm thick and comprise < 5 % of the section (some are graphitic).

From 58.7 to 68.9 m FELDSPAR CRYSTAL TUFF (< 1% guartz eves). 5-10 %. 1-4 mm feldspars in a hard very siliceous, almost aphyric matrix. Moderate patchy thermal biotite alteration with beds of thermal biotite altered mafic tuff and tuffaceous sediments up to 1.1 m thick From 59.8 to 60.5 m 20 % lapilli-sized felsic clasts.

From 68.2 to 68.9 m 5 % felsic lapilli-sized clasts.

From 68.9 to 69.8 m chloritic and rust spotted. 5 % chlorite and 2-3% rust spots <4 mm in diameter. Rusty spots are centred on specks of chalcopyrite +/- sphalerite (?). Occasional patch of malachite on fracture surfaces. Mafic tuff bed from 69.2 to 69.5 m which also contains rusty spots.

From 69.8 to 72.2 m felsic ash tuff with rusty fractures and occasional mafic tuff beds.

72.2 to 74.1 m mafic tuff with up to 5 % 1-3 mm epidote spots (altered feldspars). Minor beds with lapilli-sized clasts of cherty felsic rock. Broken core at upper contact. Lower contact is at 35 degrees to core axis.

From 74.1 to 75.4 m felsic feldspar crystal tuff. Mottled appearance due to thermal biotite alteration variable sericite and chlorite content and quartz flooding. Up to 5 % lapilli-sized felsic clasts. Grades into a mafic to intermediate tuff at the lower contact.

75.4-76.3 M mafic tuff with minor beds and clasts of cherty tuffaceous sediments. Grades into felsic tuff.

76.3-77.0 M felsic feldspar +/- guartz crystal tuff. Moderate thermal biotite alteration. Lower contact is gradational. 77.0-78.0 M felsic ash-lapilli tuff. Gradational lower contact. 78.0-82.5 M felsic quartz-feldspar crystal tuff. 15 % epidotized feldspar crystals 1-3 mm long 1-4 % guartz eyes 2-5 mm in diameter. Quartz eyes have a bluish caste. Moderate thermal biotite alteration. Grades into the mafic tuff below. 82.5-83.1 M mafic ash tuff. Nil-trace disseminated chalcopyrite. Lower contact is at 50 degrees to core axis.

83.1-83.5 M felsic quartz-feldspar crystal tuff. As 78.0 to 82.5 m. Rusty microfractures.

LOST CORE INTERVALS:. 20.4-21.3 m 0.2 m of lost core. 21.3-21.9 m 0.2 m of lost core.

Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
AD02456	20.8	20.9	.1	37	n/a	27	n/a	n/a	874
AD02457	30.0	30.1	.1	36	n/a	18	n/a	n/a	961
AD02458	44.4	44.5	.1	35	n/a	24	n/a	n/a	634
AD02459	54.2	54.3	.1	35	n/a	12	n/a	n/a	1450
AD02460	64.5	64.6	.1	26	n/a	16	n/a	n/a	1370
AE08682	67.9	68.9	1.0	15	5	24	(1	<5	1300
AE08683	68.9	69.8	.9	449	<5	100	<1	<5	1300
AD02461	72.6	72.7	.1	47	n/a	61	n/a	n/a	181
AD02462	79.7	79.8	.1	34	n/a	17	n/a	n/a	1710





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DIAMOND DRILL LOG

From To (m) (m)

-----DESCRIPTION-----

25.9-26.5 m 0.5 m of lost core. 26.5-27.4 m 0.7 m of lost core. 27.4-28.0 m 0.4 m of lost core. 28.0-29.3 m 0.7 m of lost core.

STRUCTURE: .

Foliation is at 50 degrees to core axis at 20.0 m. Foliation is at 35 degrees to core axis at 22.5 m. 0.4 Cm wide clay-filled slip at 30 degrees to core axis at 23.3 m. Foliation is at 55 degrees to core axis at 25.0 m. Fault gouge at 80 degrees to core axis at 26.5 m. Bedding is at 40 degrees to core axis at 30.8 m. Foliation is at 70 degrees to core axis at 35.0 m. Foliation is at 60 degrees to core axis at 37.0 m. Minor slip is at 60 degrees to core axis at 37.9 m. Foliation is at 58 degrees to core axis at 38.0 m. Foliation is at 50 degrees to core axis at 39.3 m. Minor slip is at 47 degrees to core axis at 40.1 m. Bedding is at 45 degrees to core axis at 42.2 m. Foliation is at 58 degrees to core axis at 43.4 m. Foliation is at 50 degrees to core axis at 46.4 m. Foliation is at 60 degrees to core axis at 47.2 m. Bedding is at 50 degrees to core axis at 47.2 m. Bedding is at 55 degrees to core axis at 47.6 m. Foliation is at 50 degrees to core axis at 52.1 m. Foliation is at 52 degrees to core axis at 53.3 m. Minor slips are at 55-60 degrees to core axis at 53.8 m. Foliation is at 60 degrees to core axis at 55.0 m. Bedding is at 66 degrees to core axis at 56.8 m. Bedding is at 65 degrees to core axis at 57.3 m. Bedding is at 50 degrees to core axis at 59.5 m. Foliation is at 50 degrees to core axis at 68.2 m. Bedding is at 35 degrees to core axis at 71.0 m. Bedding is at 35 degrees to core axis at 74.1 m. Bedding is at 58 degrees to core axis at 82.2 m.

23.7 Minor hematite along foliation planes.

30.4 30.8 Crushed zone. Core is broken and blocky.

- 31.8 32.0 Bed of mafic tuff at 40 degrees to core axis. Weak pervasive carbonatization.
- 32.4 32.6 Mafic tuff bed at 55-60 degrees to core axis. Moderate carbonatized.
- 33.3 34.1 Blocky, highly fractured core.
- 41.1 42.2 Blocky, highly fractured core.

42.2 Bed of cherty, cream coloured felsic tuffaceous sediments



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

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)		DESCRIPTION	Sample No.	F
			at 45 degrees to core axis.		
		43.0 47.3	Weak-nil thermal biotite alteration. 1-2 2-4 mm quartz eyes.		
		47.0	10.0 cm wide bed of carbonatized mafic tuff at 50 degrees to core axis.		
		47.6	5.0 cm wide bed of mafic tuff at 55 degrees to core axis.		
		52.4	10.0 cm wide bed of carbonatized mafic tuff at 25 degrees to core axis.		
		54.0 54.8	Moderate pervasive carbonatization.		
		57.2 57.3	Carbonatized mafic tuff bed at 60-70 degrees to core axis.		
		59.5 59.8	Bed of thermal biotite altered mafic tuffaceous sediments at 50 degrees to core axis.		
		62.5 63.7	Thermal biotite alteration mafic tuffaceous sediments. Medium green-brown, medium-grained with 10-15 % epidote spots < 5 mm in diameter. Upper contact is at 35 degrees to core axis. Lower contact is gradational into felsic feldspar crystal tuff.		
		68.7 68.9	Mafic tuff bed at 45 degrees to core axis.		

83.5 140.2 MAFIC TUFF

Medium to dark grey-brown fine-grained and relatively massive. May be intermediate in compostion in some places. Dominantly an ash tuff above 105.6 m but occasional lapilli rich sections. Nil-weak thermal biotite alteration. Up to 2 % 1-3 mm chlorite spots. Fracture surfaces are rusty throughout the unit. Nil-trace chalcopyrite pyrite and sphalerite associated with minor quartz-carbonate clots and veinlets. Locally up to 5 % 1-5 mm epidote spots below 103.8 m.

Below 105.6 m 5-10 % rounded felsic fragments 1.0-10.0 cm in diameter. Trace-2 % disseminated pyrite nil-trace chalcopyrite and sphalerite. Lower contact is at 47 degrees to core axis.

BEDDING ANGLES:.

Bedding is at 57 degrees to core axis at 89.8 m. Bedding is at 50 degrees to core axis at 123.3 m. Bedding is at 60 degrees to core axis at 132.6 m. Bedding is at 50 degrees to core axis at 135.0 m. Bedding is at 47 degrees to core axis at 140.2 m.

94.0 94.1 3.0 cm long clast of felsic tuff.

AD02463	88.4	88.5	.1	16	n/a	83	n/a	n/a	507
AD02464	98.2	98.3	.1	51	n/a	98	n/a	n/a	612
AD02465	108.7	108.8	.1	277	n/a	650	n/a	n/a	221
AD02466	124.4	124.5	.1	179	n/a	134	n/a	n/a	588
AD02467	136.8	136.9	.1	98	n/a	101	n/a	n/a	298



HOLE No:

nple	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
lo.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

Page Number



PROPERTY: CHEMAINUS JV HOLE No: Page Number CHEM87-33 FALCONBRIDGE LIMITED 5 DTAMOND DRILL LOG From То Sample From To Width Cu Pb 7.n Åσ An Ba -----DESCRIPTION------(m) (m) No (m) (m) (m) (nom) (ממכת) (מתכת) (mag) (maa) (daa) 98.2 98.4 Blocky, highly fractured core. 134.2 134.7 Blocky, highly fractured core. 140.2 146.0 FELDSPAR PORPHYRTTTC MAFTC FLOW Medium green up to 7 % white 1-4 mm feldspars in a chloritic matrix AD02468 143.3 143.4 .1 253 n/a 118 n/a n/a 160 with 2-3 % finely disseminated leucoxene. Trace-1 % disseminated pyrrhotite and trace pyrite and chalcopyrite associated with guartz-carbonate veinlets. Rusty fractures common. Very fine-grained for 20.0 cm from lower contact. Broken core at lower contact. 146.0. 196 8 MAFTC THEF As 83.5 to 140.2 m. No chloritic or felsic clasts above 155.7 m. AD02469 153.6 153.7 381 n/a 90 n/a n/a 287 .1 40 27 n/a 1330 Rusty fractures occur throughout the unit. Trace disseminated AD02470 154.9 155.0 .1 n/a n/a AD02471 165.2 165.3 pyrite. Weak-moderate patchy thermal biotite alteration. Weak-nil .1 126 n/a 125 n/a n/a 324 AD02472 169.3 169.4 32 321 780 pervasive carbonatization. Mixed mafic to felsic tuffaceous .1 n/a n/a n/a AD02473 180.4 180.5 .1 157 n/a 138 n/a n/a 420 seediments below 194.2 m. Lower contact is at 60 degrees to core axis 917 AD02474 192.2 192.3 .1 79 n/a 43 n/a n/a STRUCTURE:. Slip at 25 degrees to core axis at 146.4 m. Bedding is at 50 degrees to core axis at 165.9 m. Bedding is at 36 degrees to core axis at 188.1 m. Bedding is at 45 degrees to core axis at 194.1 m. Foliation is at 45 degrees to core axis at 194.1 m. 146.4 147.0 Blocky, highly fractured core. 0.3 m of lost core between 145.4 and 147.0 m. Rusty microfractures. 154.6 155.7 OUARTZ EYE-BEARING FELSIC TUFF. Weak thermal biotite alteration. 7-10 %, 2-5 mm guartz eyes in a hard siliceous aphyric matrix. 1-2% disseminated pyrite and nil-trace pyrrhotite and chalcopyrite. 10.0 cm wide band of strongly biotite altered sediment at 155.4 m. Broken core at upper contact. Lower contact is at 47 degrees to core axis. 169.9 171.3 FESIC ASH TUFF. Grev hard and siliceous with up to 20 % 1-3 mm sericitzed feldspars. Bedding is at 40-60 degrees to core axis.

- 171.3 192.0 Mafic tuff is very massive. No clasts larger than ash-sized.
- 192.0 193.4 FELSIC ASH TUFF. Moderately sericitic and weakly chloritic. Minor epidote spots. Nil sulphides. Occasional cherty felsic clasts up to 1.0 cm in diameter. Upper contact is at 50 degrees to core axis and lower contact is at 60 degrees to core axis.



6

HOLE No:

CHEM87-33

DIAMOND DRILL LOG From Τo Width Cu Sample From Tο Ph Zn λα An Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m) (maga) (mag) (mag) (mgg) (mgg) (dgg) 194.2 195.0 Beds < 0.5 cm wide of tuffaceous sediments at 50 degrees to core axis. 196.8 201.1 FELDSPAR PORPHYRITIC MAFIC FLOW As 140.2 to 146.0 m. Several guartz-carbonate veins and pods up to 3 AD02475 199.9 200.0 .1 249 n/a 115 n/a n/a 46 cm wide with 1-3 % pyrrhotite and trace chalcopyrite. Lower contact is at 52 degrees to core axis. 199.4 199.9 Blocky, highly fractured core. 200.6 201.1 Moderate pervasive carbonatization. 201.1 215.3 CHLORITIC FELSIC TUFF Fine-grained medium green-grey foliated. Foliation is contorted and AD02476 208.3 208.4 35 .1 n/a38 n/a n/a 869 kinked over most of the section. Weak-nil pervasive carbonatization. Occasional 1-3 mm guartz eve. Foliation is at a very low angle (< 15 degrees) to the core axis between 204.0 and 205.3 m. Trace-1 % disseminated and fracture controlled pyrite. Nil-trace chalcopyrite. Broken core at lower contact. STRUCTURE:. Bedding is at 50 degrees to core axis at 202.2 m. 0.5 Cm clav-filled slip at 85 degrees to core axis at 203.2 m. Foliation is at 65 degrees to core axis at 207.3 m. Foliation is at 55 degrees to core axis at 210.8 m. Foliation is at 50 degrees to core axis at 212.4 m. 209.7 210.2 Bed of carbonatized mafic ash tuff at about 50 degrees to core axis. Upper and lower contacts are gradational. 213.7 214.0 Bed of carbonatized mafic tuff. Broken core at upper contact. Lower contact is at 25 degrees to core axis. 214.2 215.3 Blocky, highly fractured core. 215.3 217.5 CHLORITIC OUARTZ EYE BEARING FELSIC TUFF 3-7 %, 1-5 mm guartz eyes in a fine-grained pale green-grey, AD02477 215.7 215.8 36 n/a 30 .1 n/a n/a quartz+sericite+chlorite matrix. Many of the quartz eyes have a bluish caste. Trace finely disseminated pyrite. Very rare lapilli-sized pyrite clast. Foliation at 217.0 m is at 45 degrees to core axis. Lower contact is parallel to foliation at 70 degrees to core axis. 217.5 219.3 CHLORITIC FELSIC TUFF

AD02478 217.8 217.9

60

n/a

34

n/a

. 1

n/a 1160

As 201.1 to 215.3 m. Dominantly an ash tuff but lapilli-sized felsic

fragments are abundant between 217.6 and 217.8 m. 0.15 cm wide bed

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

wide. Upper contact is a slip at 70 degrees to core

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		of mafic tuff and biotite-rich tuffaceous sediments at 60-70 degrees to core axis. Nil-trace disseminated pyrite.										
•		217.6 Minor slip at 76 degrees to core axis.										
219.3	225.6	CHLORITIC QUARTZ EYE BEARING FELSIC TUFF As 215.3 to 217.5 m. Trace-1 % finely disseminated pyrite. Lower contact is at 70-75 degrees to core axis.	AD02479	223.6	223.7	.1	37	n/a	54	n/a	n/a	1460
		232.2 Chloritic slip at 47 degrees to core axis.										
		224.0 224.3 Two 10.0 cm wide biotite rich mafic tuffaceous sediment beds at 65-70 degrees to core axis.										
		224.4 224.9 Altered mafic tuff. Bleached and weakly to moderately carbonatized. Irregular upper and lower contacts.										
225.6	226.1	ALTERED MAFIC-INTERMEDIATE TUFFACEOUS SEDIMENTS Pale green-brown, bleached, fine-grained and relatively massive. Moderate thermal biotite alteration. Broken core at lower contact.							- 1			
226.1	226.4	MAFIC ASH TUFF Dark green and fine-grained. Moderate fracture controlled hematization. Broken core at upper contact. Lower contact is a slip at 70 degrees to core axis.										
226.4	228.3	FAULT GOUGE Up to 20 % 0.5-3.0 cm long fine-grained chloritic felsic clasts in a clay-rich loosely consolidated matrix. Core is broken and blocky over the first 0.2 m of the unit.										
228.3	231.7	FELSIC FELDSPAR CRYSTAL TUFF Light green siliceous and hard with up to 10 % 1-2 mm white feldspar crystals. Strongly crushed above 228.7 m. Weakly to moderately sericitic and weak to nil chloritization. Microfractured. Lower contact is a slip at 75 degrees to core axis.	AD02637	230.5	230.6	.1	21	n/a	45	n/a	n/a	983
		228.3 229.0 Numerous slips at 70-80 degrees to core axis.										
	• • •	 229.3 230.0 MAFIC TUFF. Dark green fine-grained and massive with up to 20 % 1-3 mm epidote spots and 3 % chlorite spots up to 3 mm in diameter often with epidote alteration halos. 1-3 % fracture controlled pyrite and nil-trace disseminated pyrrhotite and trace chalcopyrite associated with quartz-carbonate veins up to 4.0 cm 										- 200 - 00 - 200 - 00 - 200 - 00



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Page Number HOLE No: CHEM87-33 8

From (m)	T0 (m)	DESCRIPTION		Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		axis. Lower contact is at 50 degrees to core axis.			· .								
		231.0 231.1 FAULT ZONE at 40 degrees to core axis.											
		231.2 231.7 3 % chlorite spots < 2mm in diameter.											
231.7	247.6	FELSIC FELDSPAR-QUARTZ CRYSTAL TUFF Light grey to grey-green with $10-15 \% < 3$ mm feldspar crystals and		AD02638	239.3	239.4	.1	28	n/a	16	n/a	n/a	409
		fine-grained to aphyric matrix. Up to Nil to weak sericitization, chloritization and epidotization. Nil-1 % disseminated and fractu- controlled pyrite. Lower contact is sharp at 70 degrees to core a	re xis	AD02039	440.4	240.0	•1	το,	п/а	41	n/a	п/а	1130

- 232.0 232.2 Fault (?). Core is broken and rubbly. 0.3 m of lost core between 230.4 and 232.6 m.
- 232.6 233.4 Blocky, highly fractured core.
- 233.7 235.3 Blocky, highly fractured core. Fault centred at 235.1 m. Not possible to measure orientation of the fault. 0.6 m of lost core.
- 235.7 236.5 Dark green MAFIC TUFF. Relatively massive fine-grained with up to 30 % (3 mm epidote spots. Upper contact is a chloritic slip at 23 degrees to core axis. 1-2 % finely disseminated beige alteration mineral. Weak fracture controlled carbonatization. Broken core at lower contact.
- 237.1 237.2 Crushed FAULT ZONE at 60 degrees to core axis.
- 237.7 238.2 Blocky, highly fractured core.
- 5.0 cm wide FAULT at 40-50 degrees to core axis. 239.0
- 239.5 239.7 <5 % lapilli-sized felsic clasts and spots of very fine-grained pyrite <2 mm in diameter.
- 242.2 242.3 FAULT ZONE at 30 degrees to core axis.
- 242.3 243.3 Rock is crushed and moderately sericitic. Foliation is at 40-50 degrees to core axis. 2-3 % < 3mm chlorite spots (altered clasts ?).
- 244.0 244.8 Blocky, highly fractured core. Fault at 50 degrees to core axis. 0.6 m of lost core between 242.3 and 244.8 m.
- 245.2 245.3 FAULT ZONE. Loosely consolidated fault breccia at 60 degrees to core axis.

245.5 245.6 1.0 cm wide fault gouge at 12 degrees to core axis.

PROPERTY: CHEMAINUS JV HOLE No: Page Number FALCONBRIDGE LIMITED CHEM87-33 a DTAMOND DRILL LOG From To Sample Width Cu From Τo Ph Zn Aα Δu Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) (mmm) (mgg) (mgg) (maga) (maa) (daa) 246.1 8.0 cm thick bed of brown thermal biotite altered volcanic wacke at 58 degrees to core axis 236.9 Minor slip at 40 degrees to core axis. 247.6 249.1 FELSIC ASH TUFF Light grey moderately sericitic and well foliated. Foliation is at AD02640 248.4 248.5 19 .1 n/a 16 n/a n/a 840 60-70 degrees to core axis. Nil-1 % fracture controlled pyrite. 247.8 0.5 cm wide clav-filled slip at 15-40 degrees to core axis. 248.9 Minor slip at 42 degrees to core axis. 249.1 251.4 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Light grey-green and comprised mainly of ash-sized guartz and AD02641 251.1 251.2 .1 25 n/a 10 n/a 784 n/a feldspar crystals. Up to 5 % fine-grained lapilli-sized felsic clasts. Weak pervasive chloritization and moderate sericitization. Trace disseminated pyrite. Lower contact is a 1.0 cm wide clay-filled slip at 45 degrees to core axis. 251.4 252.5 OUARTZ EYE BEARING FELSIC TUFF Up to 5 % weakly chloritized 2-4 mm guartz eyes in a light grey very fine-grained hard siliceous microfractured matrix. Nil-trace disseminated pyrite. Lower contact is at 60 degrees to core axis. 251.7 252.2 Veinlets of a beige to bright pink, soft mineral which fizzes only weakly in HCl. 252.5 265.5 FELSIC OUARTZ-FELDSPAR PHYRIC TUFF/FLOW Light grey with up to 20 % <3 mm feldspars and up to 10 % < 5 mm AD02642 264.4 264.5 .1 17 n/a 27 n/a n/a 1550 quartz eyes above 254.0 m. Below 254.0 m feldspars become much less conspicuous and quartz eyes become more abundant. Weakly sericitic and relatively massive. Trace-1 % disseminated pyrite and nil-trace chalcopyrite. Rock is broken and blocky for 0.8 m from the lower contact. Lower contact is a fault at 55 degrees to core axis. 252.6 Slip at 66 degrees to core axis. 260.8 260.9 FAULT GOUGE at 80 degrees to core axis. 261.0 261.1 FAULT GOUGE at 50 degrees to core axis. 261.6 261.9 Dark green mafic dyke <1.0 cm wide runs nearly parallel

to core axis.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-33 10

From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		264.8 265.5	Blocky, highly fractured core. Weak to moderate fracture controlled Fe-carbonate alteration.										
265.5	338.8	GABBRO Dark green and for 16. 272.0 m. Up leucoxene. alteration.	massive and fine-grained for 6.5 m from the upper contact 2 m from the lower contact. Becomes medium-grained below to 5 % disseminated ilmenite paritially altered to Locally moderate fracture controlled carbonate The carbonate altered rock is darker green and finer	AD02643 AD02644 AD02645 AD02646	269.4 280.7 304.3 329.6	269.5 280.8 304.4 329.7	.1 .1 .1 .1	128 333 335 308	n/a n/a n/a n/a	103 122 116 89	n/a n/a n/a n/a	n/a n/a n/a n/a	202 150 198 108
		grained tha contain up to moderate associated m, 298.1 an disseminate	n the unaltered gabbro. The carbonate altered zones to 3 % $\langle 3 mm spots of a beige alteration mineral. Weakfracture controlled hematite alteration is oftenwith calcite veins and veinlets between 272.0 and 286.2d 304.5 m and btwn 308.6 and 321.1 m. Nil-traced pyrite and chalconvrite. Broken core (fault) at lower$										
		contact.	a prince and charcopyrice. Broken core (radie, at lower										
		266.0 266.1	FAULT ZONE. Rubbly core, not possible to measure orientation of the fault.										
		273.8 275.2	Slip runs along the core axis. Core is broken and blocky between 274.6 and 275.2 m.										
		275.7 275.9	FAULT ZONE at 50 degrees to core axis. Core is broken and blocky.										
		277.4 280.7	Core is blocky over most of the section. Moderate fracture controlled hematization.							•			
		284.5 286.1	Blocky, highly fractured core.										
		287.9 301.9	Moderate pervasive carbonatization.										
		291.0	Minor slip at 10 degrees to core axis.										
		294.0 297.2	Blocky, highly fractured core. 0.4 m of lost core between 294.7 and 297.2 m.										
	1. 1. j. j.	297.5 298.1	Blocky, highly fractured core.										
		302.3 302.9	Blocky, highly fractured core.										
		304.6 304.8	Blocky, highly fractured core.										
		305.8 308.6	Moderate to strong pervasive carbonatization.						an ta ang ang ang ang ang ang ang ang ang an	- 	in an an a' an an a' a' an an a' a' an an a' a' an an a' an an a' an an a'	•	
		308.4	Minor slip at 25 degrees to core axis.										
		310.4	Minor slip at 45 degrees to core axis.										



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	T0 (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)
		310.4 312.3	Moderate pervasive carbonatization.				
		318.3 8	Minor FAULT GOUGE. Not possible to measure its orientation.				
		321.2 328.6	Sheared fine-grained and moderately carbonatized zone. Foliation is at 15-25 degrees to core axis. 0.5 cm wide clay-filled slip at 30 degrees to core axis.				
		330.0 331.3	Fine-grained sheared carbonatized zone. Shearing is at 45 degrees to core axis.				
		337.3 338.4	Inclusion of FLESIC QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF up to 10 % <4 mm feldspar crystals and quartz eyes and < 5% lapilli-sized felsic fragments in a very fine-grained to aphyric light grey-green, siliceous, hard and microfractured matrix. Weak pervasive chloritization. Trace disseminated pyrite. Upper and lower contacts are at 30 degrees to core axis.				
338.8	340.4	FELSIC ASH Medium grey bedding at biotite alt Trace-1 % finely diss core axis.	TUFF -brown with up to 2 % < 2 mm clear quartz eyes. Vague 30 degrees to core axis. Up to Weak to moderate thermal eration and weak chloritization and carbonatization. disseminated and fracture controlled pyrite and trace eminated sphalerite. Lower contact is at 30 degrees to	AD02647	339.2	339.3	.1
340.4	348.3	THERMAL BIO Dark brown- fracture co tuffaceous	TITE ALTERED MAFIC ASH TUFF green. Moderate to weak thermal biotite alteration and untrolled carbonatization. Ripped up beds of cherty sediment are common. Trace-2 % pyrite in hairline	AD02648	347.2	347.3	.1

fractures. Lower contact is gradational.

BEDDING ANGLES:.

Bedding is at 35 degrees to core axis at 341.3 m. Bedding is at 50 degrees to core axis at 347.4 m.

340.4 341.3 Moderate pervasive carbonatization.

341.4 341.7 4 % <4 mm epidote spots.

342.7 343.2 Blocky, highly fractured core.

345.4 347.0 Trace-2 % <3 mm guartz eyes.

346.0 347.5 Trace-2 % < 4 mm epidote spots.

Page Number HOLE No: CHEM87-33 11

ple	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
o.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02647	339.2	339.3	.1	29	n/a	34	n/a	n/a	1140
AD02648	347.2	347.3	.1	86	n/a	80	n/a	n/a	330





HOLE No: Page Number CHEM87-33 12

	*.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG				CHEM87-	-33	12	el			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Medium green chloritic mafic matrix with up to 5 % lapilli to ash-sized pale green to cream coloured felsic and mafic clasts. Bedding is at 55 degrees to core axis at 348.5 m. Nil-2 % fracture controlled pyrite. Lower contact is a fault at 45 degrees to core axis										
352.3	441.3	FELDSPAR PHYRIC GABBRO										
		20 % white feldspars in a medium green fine-grained matrix. 1-3 % disseminated ilmenite. Rare speck of chalcopyrite or pyrite.	AD02649 AD02650	359.3 404.4	359. 4 404.5	.1 .1	88 110	n/a n/a	68 62	n/a n/a	n/a n/a	341 438
		352.3 352.5 Fault gouge at 45 degrees to core axis.										
		352.7 352.9 Fault gouge at 70 degrees to core axis. 0.2 m of lost core.										
		352.9 354.8 Moderate pervasive carbonatization. No feldspar phenocrysts. Calcite-filled fractures and gashes are common.										
		365.3 365.8 Blocky, highly fractured core.										
		369.1 369.8 Dark green fine-grained section.										
		373.1 376.4 Dark green fine-grained section. Slip at 30 degrees to core axis at 374.7 m.	 									
		382.3 382.6 Blocky, highly fractured core.										
		384.6 385.0 Blocky, highly fractured core.										
		390.8 391.1 Blocky, highly fractured core.										
		394.8 395.0 Crushed zone (FAULT) at 35 degrees to core axis.										
		405.7 407.1 Fine-grained moderately carbonatized zone.										
		421.2 423.1 Moderate pervasive carbonate alteration. Weak hematization associated with calcite veins and veinlets. Slip at 60 degrees to core axis at 421.7 m.										
		423.4 424.3 Blocky, highly fractured core. 0.2 m of lost core between 422.7 and 424.0 m.										
		427.6 428.1 Blocky, highly fractured core. 0.2 m of lost core.										
		428.8 441.3 Finer-grained section with <1 % feldspar phenocrysts. Minor patchy carbonatization.										
		441.3 Hole abandoned due to caving.										



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 47+00 E 0+40 S

NTS: 092/	B13	UTM:	54161	50 N	4	131850	E
Azimuth:	210	Eleva	ation:	660	m		
Dip:	-50	Lengt	th:	391.	.1	m	

Started: June 28, 1987 Completed: July 5, 1987

Purpose: To test VLF conductors at 0+90, 2+40 and 2+80 S, coincident deep and shallow IP resistivity lows at 2+05 S and a shallow IP chargeability anomaly at 2+80 S.

DIP TESTS

	Azi-			Azi-		
Length	muth	Dip	Length	muth	Dip	
29.30	206.0	-50.0	251.50	207.0	-42.0	
87.20	205.0	-45.0	340.80	208.0	-39.5	
165.80	204.0	-44.0				

 From
 To

 (m)
 (m)

.0 8.2 OVERBURDEN AND CASING

8.2 9.2 MAFIC FLOW

Moderately contorted massive , but with a well developed schistosity, mafic rock, which has undergone pervasive carbonatization. Hosts trace to 2 % epidote grains and 1 to 2 % hematite cubes, up to 3 mm, after pyrite. The foliation varies locally from approximately 50 to 80 degrees to core axis.

9.2 11.5 FELSIC TUFF

Green to grey felsic tuff with minor feldspar to epidote grains. At the top there are numerous quartz - carbonate veinlets. There is 0.3 m of lost core from 9.2 to 10.1, 0.7 m lost core from 10.1 to 11.0 and 0.4 m lost core from 11.0 to 11.9. The unit is blocky, highly fractured core with fault gouge at the lower contact.

11.5 13.5 CHLORITIC SHEAR ZONE

Chlorite - carbonate schist with minor carbonate veinlets, which has been highly sheared at approximately 70 to 80 degrees to core axis. There is 0.7 m of lower contact from 11.9 to 13.1.

13.5 22.5 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

Grey siliceous felsic tuff with fine-grained feldspar grains and trace quartz eyes and pyrite. The unit is oxidized throughout with strong rust (goethite) from 15.1 to 16.3. The rock is locally weakly contorted. HOLE No: Page Number CHEM87-34 1

Claim No. : CHIP 1 Section No.: Line 47+00 East

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

Core Size: NQ

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AB21901 8.3 8.4 .1 695 n/a 77 n/a n/a 839

AB21902 14.1 14.2 .1 53 n/a 36 n/a n/a 901



FALCONBRIDGE LIMITED

HOLE No: Page Number CHEM87-34 2

_	_	DIMOND DAILS 104										
from (m)	(m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Foliations :.										
		15.5 : 65 degrees to core axis.										
		22.4 : 56 degrees to core axis.										
22.5	22.6	CHLORITIC SHEAR ZONE Moderately magnetic chlorite - carbonate shear zone with 2 to 3 %										
		core axis.										
22.6	32.1	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Same as from 13.5 to 22.5 with oxidation ceasing after 30.2 and the	AB21903	25.5	25.6	.1	43	n/a	27	n/a	n/a	1460
		inclusion of minor dust turf or cherty green siliceous beds.										
		Foliations :. 25.0 : 63 degrees to core axis. 30.2 : 56 degrees to core axis										
		Bedding ·									· ·	
		28.2 : 53 degrees to core axis. 30.0 : 66 degrees to core axis.										
32.1	38.7	FELSIC TUFF										

Blocky, highly fractured core felsic tuff with local quartz veins. Lost core : 0.4 m from 32.3 to 33.5, 0.3 m from 33.5 to 34.1, 0.7 m from 36.3 to 37.2 and 0.2 m from 37.2 to 38.7.

38.7 57.1 FELSIC TUFF

Sericite schist, after felsic tuff with trace quartz eyes and AB21904 .2 43.8 44.0 48 n/a <10 n/a n/a 1310 feldspar grains. There is local guartz +/- chlorite veinlets, AB21905 51.3 51.5 .2 35 n/a 10 n/a n/a 1150 usually 5 mm to 3 cm, but there is a vein from 48.5 to 48.8. There is local sericitization in the upper half and a progressive increase in sericitization in the lower half accompanied by deformation, such as kinking. No sulphides were observed. There is 0.3 m of lost core from 42.0 to 42.7 and there is 10 cm of fault gouge at 53.3.

Foliations :. 44.3 : 58 degrees to core axis. 51.2 : 61 degrees to core axis. 56.6 : 56 degrees to core axis.

57.1 57.3 FAULT GOUGE

16.5 Cm of fault gouge.





FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m) -----DESCRIPTION------

57.3 59.6 MAFIC FLOW Moderately sheared carbonitized mafic flow with trace to 2 % epidote grains and local trace pyrite cubes, up to 3 mm. Hosts guartz - carbonate veins up to 5 cm thick.

Foliations :. 57.6 : 55 degrees to core axis.

58.8 : 52 degrees to core axis.

59.6 63.0 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

Green siliceous felsic tuff with approximately 5 % stretched feldspar ash and trace to 4 % (average 3 %), 3 to 5 mm, quartz eyes local epidote, after feldspar, rich 1 to 3 mm beds at the base of the unit, above the basal 5 cm hydraulic fracture quartz calcite vein. There are minor sericitic zones.

Foliations :.

60.0 : 61 degrees to core axis. 61.3 : 71 degrees to core axis.

Bedding :.

59.9 : 66 degrees to core axis. 62.8 : 41 degrees to core axis.

63.0 65.8 MAFIC FLOW

Fine-grained green mafic flow with 15 to 30 % epidote grains locally. The flow is weakly sheared locally and at 64.6 there is 4 cm of quartz eye felsic tuff, indicating bedding at 51 degrees to core axis. No sulphides occur.

Foliations :.

63.4 : 43 degrees to core axis. 65.0 : 49 degrees to core axis.

65.8 71.9 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

White to medium grey - green felsic tuff with 3 to 5 %, 1 to 4 mm, quartz eyes and approximately 5 %, 1 mm, stretched feldspar grains. The first 25 cm is composed of highly contorted sericite. There is 0.7 m of lost core from 67.0 to 68.0. There is 2 mm of fault gouge at 70.6. No sulphides are present.

Foliations :.

68.2 : 49 degrees to core axis.
69.2 : 42 degrees to core axis.
71.8 : 54 degrees to core axis.

Bedding :. 66.2 : 46 degrees to core axis. HOLE No: Page Number CHEM87-34 3

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AB21906	59.7	59.8	. 1	31	n/a	16	n/a	n/a	1220
AD21300	22.1	JJ.0	· • +	77	n/a	. TO	u/a	. II/a	1440

AB21907 70.3 70.4 .1 63 n/a (10 n/a n/a 1020



From To (m)

(m)

PROPERTY: Chemainus J.V. - Chip Claims



FALCONBRIDGE LIMITED

DIAMOND DRTLL LOG

HOLE No: Page Number CHEM87-34 Λ

	Sample	From	То	Width	Cu	РЬ	Zn	Ag	Au	Ba
DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb) ((ppm)

71.9 74.6 MAFTC TUFF

Mafic tuff with trace guartz eyes, 10 to 25 % epidote grains, after feldspar, locally and locally up to 8 % chlorite as stretched grains, after hornblende (?). To 72.7 the tuff is extremely contorted. The rock has been subjected to moderate pervasive carbonatization and there are local veins of epidote - guartz calcite, guartz - calcite, and calcite, up to 7 cm in width.

Foliations ·

73.2 : 73 degrees to core axis. 74.0 : 75 degrees to core axis.

- 74.6 75.1 MASSIVE OUARTZ EYE BEARING FELSIC TUFF Dark green siliceous felsic tuff with 3 to 5 %. < 1 mm to 5 mm. guartz eves.
- 75.1 78.2 CHLORITIC SHEAR ZONE Sheared chlorite - carbonate schist with local very contorted zones. The foliation varies, but trends at approximately 80 degrees to core axis.
- 78.2 79.6 INTERMEDIATE TO FELSIC OUARTZ EYE AND FELDSPAR CRYSTAL TUFF Chloritic and sericitic tuff with 20 to 30 % fine-grained guartz and feldspar crystals to grains. Local carbonate veinlets and weak carbonatization.

Foliation : 79.1 : 56 degrees to core axis.

- 79.6 80.4 CHLORITIC SHEAR ZONE Sheared felsic and intermediate tuff with a dominant composition of chlorite - carbonate.
- 80.4 81.7 SERICITIC FELSIC CRYSTAL LAPILLI TUFF Felsic lapilli in a sericite schist matrix with local zones of sericitization. The tuff is weakly to strongly contorted.

81.7 91.3 MASSIVE QUARTZ-FELDSPAR CRYSTAL TUFF

Locally light grey to medium green tuff with up to 10 % quartz eyes, < 1 to 5 mm, and up to 20 % feldspar grains, 1 to 3 mm.

Foliations :. 81.8 : 54 degrees to core axis. 84.9 : 60 degrees to core axis.

AB21908 74.7	74.8 .1	31 n/a	86 n/a	n/a	81

AB21909 86.7 86.8 .1 31 n/a 16 n/a n/a 807

PRC	OPERTY	Y: Chemainus J.V Chip Claims FALCONBRIDGE LIMITED DIAMOND DRILL LOG				HOLE N CHEM87-	o: Pa 34	ge Numb 5	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppr
		90.0 : 67 degrees to core axis.			· ·							
		Bedding :. 85.2 : 55 degrees to core axis. 89.6 : 76 degrees to core axis.										
91.3	93.2	MASSIVE QUARTZ-FELDSPAR PORPHYRITIC FLOW Black crystal rich massive intrusive or extrusive rhyolite with 15 to 20 %, 1 to 3 mm, feldspar grains and 5 to 10 %, 2 to 5 mm, quartz eyes. Very siliceous with no evidence of bedding or flow banding.	AB21910	92.6	92.8	.2	38	n/a	<10	n/a	n/a	812
93.2	97.1	MASSIVE QUARTZ-FELDSPAR CRYSTAL TUFF Light grey sericitic to siliceous tuff as from 81.7 to 91.3.	AB21911	95.4	95.6	. 2	20	n/a	16	n/a	n/a	987
		Foliations :. 93.5 : 61 degrees to core axis. 96.7 : 45 degrees to core axis.										
		Lost core :. 0.2 M from 94.0 to 95.1. 0.1 M from 95.1 to 95.4.			1. 1. 4.							
		a de la companya de A serie de la companya										
97.1	98.0	MASSIVE QUARTZ-FELDSPAR PORPHYRITIC FLOW As from 91.3 to 93.2, but is dark green.										
		And the second										
98.0	98.4	MAFIC SILL Symmetrically zoned mafic sill with fine-grained speckled rims, 15 cm at upper contact and 2 cm at the lower. The core of the sill is a fine-grained green matrix with 3 %, 2 mm, feldspar grains. There is also a 1 to 2 cm quartz veins. It is non-magnetic. The										
		follation is at 60 degrees to core axis.	•									
98.4	101.8	MASSIVE QUARTZ-FELDSPAR CRYSTAL TUFF Felsic tuff with (?) bedding and local lapilli. Hosts approximately 5 %, 1 to 3 %, quartz eyes and 10 to 20 % locally, feldspar white grains. The unit is oxidized. Tan brown to green due to presence of thermal biotite. May be a flow, but appears to be tuffaceous.										
		Foliations :. 99.8 : 58 degrees to core axis. 100.1 : 54 degrees to core axis.			1000 1000 1000 1000 1000 1000 1000 100							
		Bedding :. 100.0 : 67 degrees to core axis.										







HOLE No: CHEM87-34 Page Number 6

•	KOI EKI	FALCONBRIDGE LIMITED DIAMOND DRILL LOG	CHEM87-34 6													
From (m)	T0 (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)				
101.8	103.3	MAFIC SILL														
		Fine-grained green mafic sill with white barren bull quartz veins and locally epidote / feldspar phyric.														
											n The second					
103.3	104.5	FELSIC CRYSTAL LAPILLI TUFF Locally biotitic white rhyolitic lapilli tuff with felsic lapilli and feldspar crystals. From 103.9 to 140.1 there is rusty blocky, highly fractured core.														
		Dodding .														
		103.6 : 68 degrees to core axis. 103.9 : 70 degrees to core axis.										н. - С				
104.5	108.6	FINE GRAINED PLAGIOPHYRIC GABBRO														
		Fine-grained gabbro with 5 to 7 %, 1 to 2 mm, feldspar grains and local quartz - chlorite veins.	AB21912	106.5	106.6	.1	263	n/a	116	n/a	n/a	96				
108.6	116.2	ALTERED FELSIC CRYSTAL LAPILLI TUFF Bleached felsic tuff with felsic lapilli and sausuritized feldspar grains. Hosts 2 to 3 % fracture controlled pyrrhotite with trace chalconvrite. There is 1.8 m of lost core as approximately 10 cm	AE08751 AE08752 AE08753	111.4 112.8 114.6	112.8 114.6 116.2	1.4 1.8 1.6	45 28 57	5 8 8	22 18 26	<1 <1 <1	<5 <5 <5	1500 1600 1000				
		blocky, highly fractured core from 112.8 to 114.6. Thermal biotite appears throughout and increases with depth.														
	<u>_</u>	Foliations :. 115.0 : 80 degrees to core axis. 116.0 : 80 degrees to core axis.														
		ter an														
116.2	120.7	MASSIVE QUARTZ-FELDSPAR PORPHYRITIC FLOW Grey to green oxidized felsic flow with 10 to 15 %, 1 to 2 mm, sausuritized feldspar grains and 1 to 3 % quartz grains. The foliation varies locally and averages 55 degrees to core axis.	AE08754 AB21913	116.2 118.4	117.7 118.5	1.5 .1	28 44	5 n/a	45 24	<1 n/a	<5 n/a	1000 1360				
120.7	121.4	MAFIC SILL														
		Fine-grained green mafic sill with sharp lower and upper contacts, at 42 and 47 degrees to core axis. The sill hosts 1 to 2 % pyrite and trace carbonate veinlets. The foliation averages 45 degrees to														
		CULE ANID.														
121.4	154.3	MASSIVE QUARTZ-FELDSPAR CRYSTAL TUFF	3000755	105 0	106 4	1 4				/1	. c	000				
		park plack to medium grey - green feisic tuir with locally variable crystal content, 2 to 25 % (average 15 %), 1 to 3 mm, feldspar grains to laths and trace to 5 %, (average < 1 %) quartz	AE08755 AE08756 AE08757	125.0 126.4 127.0	126.4 127.0 128.0	1.4 .6 1.0	41 88 10	6 8	73 30	<1 <1	> <5 <5	1800 1200				
		crystals. There are up to 5 % epidotized clasts, which range from	AB21914	128.6	128.8	. • .1	37	n/a	23	n/a	n/a	847				

From

To



FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

HOLE No: CHEM87-34

То

Sample From

Width

Cu

Page Number

7

Ph.

Zn

Åα

Au

Ba

(m) (m) -----DESCRIPTION-----No. (m) (m) (m) (nnm) (mag) (mag) (mom) (mgg) (dgg) AB21915 134 6 134 8 n/a 675 1 cm by 0.5 cm to 10 cm thick and continuous across the core. Some .1 56 n/a 25 n/a clasts have been completely replaced by epidote and others have AE08758 146.6 148.1 1.5 12 6 31 (1 (5 1200 been rimmed by ep or have 20 to 50 % epidote interstitial to AB21916 148.8 148.9 38 21 n/a 680 . 1 n/a n/a 27 (5. 1100 feldspar grains. There is very rusty, bleached and cooked tuff AE08759 148.1 149.0 . . 9 <5 28 (1 from 142.0 to 143.2 and from 146.2 to 151.6. There is only trace AE08760 149.0 150.0 1.0 11 26 (1 (5 930 11 pyrite in the rusty zones. There are trace local, approximately 5 AE08761 150.0 151.9 1.9 12 5 23 <1 (5 1200 cm. guartz - chlorite - calcite veins. From 144 to 146.5 the thermal biotite is a dominant feature and it occurs to a lesser degree throughout. There are minor other lithologies :. 123.7 123.8 Rusty mafic sill. 126.4 127.0 Intermediate lapilli tuff with epidote lapilli, 20 to 35 %. in a thermal biotite matrix with 1 to 2 % pyrrhotite and trace chalcopyrite. Foliations :. 126.6 : 59 degrees to core axis. 131.5 : 61 degrees to core axis. 134.5 : 41 degrees to core axis. 144.1 : 60 degrees to core axis. 152.4 : 56 degrees to core axis. 154.3 155.9 INTERMEDIATE LAPILLI TUFF 30 to 40 % epidote grains and lapilli in a intermediate to felsic AB21917 154.5 154.6 .1 51 n/a 125 n/a n/a 120 matrix. The tuff is massive and possibly is a flow. 155.9 169.7 MASSIVE OUARTZ-FELDSPAR CRYSTAL TUFF n/a At upper contact is similar to 121.4 to 154.3 til 161 where clasts AB21918 163.5 163.6 .1 34 24 n/a n/a 1970 disapear and tuff is locally light green and black zones with on average 5 % feldspar and quartz crystals. There are minor dust tuff beds. Locally there is fracture controlled carbonatization. Foliations :. 162.3 : 43 degrees to core axis. 163.5 : 20 degrees to core axis. 166.0 : 54 degrees to core axis. 168.5 : 50 degrees to core axis. Bedding :. 162.5 : 43 degrees to core axis. 162.0 : 70 degrees to core axis. 169.7 224.0 INTERMEDIATE TO MAFIC OUARTZ EYE AND FELDSPAR CRYSTAL TUFF 805 Dominantly andesitic tuffs with local felsic tuffaceous components AB21919 185.5 185.6 .1 181 n/a 234 n/a n/a 134 366 AB21920 201.5 201.6 129 n/a n/a n/a with a gradational transition into rhyolitic tuff for 1 to 2 m. .1 AB21921 206.5 206.6 196 n/a 107 n/a n/a 638 The tuff hosts 5 to 30 % epidote to feldspar grains, up to 2 mm, .1 1000 AE08762 212.1 213.1 1050 70 78 <1 ٢5 and trace to 2 %, up to 2 mm, quartz eyes. There are minor local 1.0

PROPERTY: Chemainus J.V. - Chip Claims HOLE No: Page Number FALCONBRIDGE LIMITED CHEM87-34 8 DIAMOND DRILL LOG Sample From То Width Cu Pb Ba From Τo Zn Aσ Au -----DESCRIPTION------(m) (m) No. (m) (m) (m) (ppb) (ppm) (ppm) (ppm) (ppm) (ppm) AB21922 218.4 218.5 .1 n/a beds, with chlorite crystals after hornblende. There is trace to 329 n/a 140 n/a 171 AE08763 223.0 224.0 182 73 nil local chalcopyrite and pyrite associated with epidotization. 1.0 (5 (1 (5 1600 Thermal biotite occurs from 204.5 to the end of the unit. There is rust from 174 to 187.5 locally. Foliations :. 173.0 : 36 degrees to core axis. 178.5 : 15 degrees to core axis. 184.5 : 40 degrees to core axis. 188.4 : 40 degrees to core axis. 194.0 : 36 degrees to core axis. 199.9 : 60 degrees to core axis. 203.6 : 54 degrees to core axis. 209.5 : 50 degrees to core axis. 215.4 : 51 degrees to core axis. 223.7 : 61 degrees to core axis. Bedding :. 185.4 : 55 degrees to core axis. 195.8 : 53 degrees to core axis. 224.0 225.0 FELSIC TUFF Felsic tuff with thermal bt and, trace quartz eyes and 30 % AE08764 224.0 225.0 6900 35 1400 1.0 17 151 2 AB21923 224.5 224.6 18 sulphides. The sulphides are 12 % pyrite, 12 % pyrrhotite and 6 % 0.1 18 n/a n/a n/a 1690 chalcopyrite. The sulphides occur as disseminated and pseudostringers. Pyrite occurs as cubes which occur separately from and with the other sulphides. The pyrrhotite and chalcopyrite are ductilely deformed and occur together. 225.0 225.4 INTERMEDIATE ASH TUFF AE08765 225.0 225.4 0.4 92 Andesitic fine-grained green tuff with basal guartz eyes. The tuff 568 <5 <1 <5 <20 has been subjected to pervasive carbonatization. 225.4 225.6 FELSIC TUFF 15 % chalcopyrite and 15 % pyrrhotite, with a swirled deformation AE08766 225.4 225.6 0.2 7600 (5 195 2 25 60 texture, with quartz veins, which host trace chalcopyrite in a felsic rock, tuff (?). 225.6 228.4 FELDSPAR PORPHYRITIC MAFIC FLOW Fine-grained green mafic flow with feldspar phenocrysts, similiar to a chilled margin gabbro. Local quartz - epidote veinlets occur. Sheared at 40 degrees to core axis for lower 1 m. There is trace disseminated pyrite. Trace guartz crystals occurs. The foliation at 226.7 is at 44 degrees to core axis.

P	ROPLAT	Y: Chemainus J.V Chip Claims FALCONBRIDGE LIMITED				HOLE N CHEM87-	o: Pa 34	age Numbe 9	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Fine-grained massive felsic flow with purple tint, due to thermal biotite. Blocky, highly fractured core from 228.8 to 231.1.										
231.1	242.0	MAFIC FLOW Medium green mafic flow with 20 to 30 % epidote grains. There are local quartz +/- chlorite +/- epidote veins. In the upper 1 m there are felsic dust tuff beds or cherty beds, 1 mm to 2 cm thick with bedding at 60 degrees to core axis.	AB21924	233.3	233.4	.1	27	n/a	110	n/a	n/a	536
242.0	247.2	CEDICIMIC OUNDRY EVE DEADING DELCTC MUDE										
442.0	247.3	8 to 9 %, 2 to 8 mm, quartz eyes in a rhyolitic tuff to sericite schist, which is weakly to moderately contorted with local kink bands. Bedding appears to be sub-parallel to the foliation.	AB21925	242.1	242.2	.1	44	n/a	49	n/a	n/a	1090
		Foliations :. 242.3 : 41 degrees to core axis. 243.5 : 61 degrees to core axis. 245.3 : 58 degrees to core axis.										
247.3	247.4	FAULT GOUGE Fault gouge to clay green rubble.										
247.4	269.7	MAFIC FLOW Andesitic fine-grained light green flow with approximately 30 % up to 1 mm epidote grains and local quartz +/- chlorite +/- carbonate veins to veinlets. There is local trace to 0.5 % disseminated pyrite. Contain locally trace to 4 % quartz grains, averages approximately 1 %.	AB21926	264.6	264.8	.1	142	n/a	98	n/a	n/a	187
	· · ·	Foliations :. 249.0 : 46 degrees to core axis. 261.0 : 51 degrees to core axis.										
269.7	271.0	FAULT GOUGE Andesitic fault gouge and clay for 30 cm from upper contact and then felsic fault gouge to lower contact.										
271.0	324.8	PYRITIC QUARTZ-SERICITE SCHIST 271.0 272.8 Highly to moderately contorted felsic with a deformational breccia structure. Hosts 1 to 2 % pyrite, mostly concordant with some disseminated. 272.8 273.0 FAULT ZONE black pyrite rich matrix with minor brecciated clasts.	AE08767 AE08768 AE08769 AE08770 AE08771	272.8 280.0 281.0 282.0 285.0	274.1 281.0 282.0 283.0 286.0	1.3 1.0 1.0 1.0	712 912 593 222 80	64 286 438 42 94	560 5200 1587 396 262	1 <1 1 1 <1	80 30 65 45	1200 1500 1800 1600 1600
		273.0 274.1 Brecciated zone with fault gouge and black fault material. Trend at approximately 70 degrees to core	AE08772 AE08773	286.0 287.0	287.0 288.0	1.0 1.0	57 173	38 20	96 48	<1 <1	10 35	2000 2000

.



То

(m)

From

(m)

PROPERTY: Chemainus J.V. - Chip Claims

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

		·	_					_	_		
		Sample	From	To	Width	Cu	Pb	Zn	Ag	Au	Ba
	DESCRIPTION	No.	(m)	(m)	· (m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
	axis. 2 % pyrite occurs.	AE08774	288.0	289.0	1.0	300	24	31	<1	65	1300
274.1 2	4.9 Weak pervasive carbonatization in white rhyolitic rock	AE08775	289.0	290.0	1.0	122	12	16	` <1 `	45	890
	with trace to 1 % disseminated pyrite.	AE08776	290.0	291.6	1.6	68	6	7	<1	20	860
274.9 2	5.0 Mafic sill with 1 % disseminated pyrite.	AE08777	291.6	292.6	1.0	70	6	· · 7	<1	20	550
275.0 28	1.0 Brecciated felsic with local minor fault slips and	AE08778	292.6	293.8	1.2	.95	8	7	<1	30	630
	guartz veins. Pyrite content averages 2 % and locally	AE08779	293.8	295.0	1.2	186	11	232	<1	20	1800
	there is trace to nil chalcopyrite.	AE08780	295.0	296.0	1.0	237	108	415	<1	5	1800
281.0 28	1.7 5 to 6 % banded pyrite, bands up to 7 mm at average	AE08781	296.0	297.1	1.1	275	17	1814	<1	30	1800
	foliation of approximately 40 degrees to core axis.	AE08782	297.1	298.1	1.0	482	48	1675	2	130	1500
	Pyrite is fine-grained and hosts trace to nil	AE08783	298.1	299.0	.9	449	68	487	<1	55	1700
	chalcopyrite.	AE08784	299.0	299.9	.9	896	13	275	<1	15	1700
281.7 28	5.6 Sericite schist with local guartz +/- carbonate veins	AE08785	300.0	300.7	.7	569	< 5	342	1	30	640
	and 1 to 2 % disseminated pyrite with minor local	AE08786	300.7	302.0	1.3	986	10	185	<1	15	1400
1997 - 19	micro-bands of fine-grained pyrite. There is minor	AE08787	302.0	303.0	1.0	416	16	210	(1)	15	1400
	fuchsite at 282.75. Foliation varies locally from 20 to	AE08788	303.0	304.0	1.0	277	45	352	<1	95	1100
	30 degrees to core axis. There is minor local fault	AE08789	304.0	305.0	1.0	122	38	432	<1	55	1700
	gouge.	AE08790	305.0	306.0	1.0	132	13	217	<1	45	1600
285.6 2	1.6 Highly contorted with chevron style kinking. Local	AE08791	306.0	307.0	1.0	122	10	57	<1	15	1300
	fault gouge at 288.8, 289.4 and 291.4 for on average	AE08792	307.0	307.8	.8	82	12	49	<1	<5	<20
	10 cm. Pyrite is disseminated and banded conformable to	AE08793	307.8	309.4	1.6	54	21	27	<1	< 5	860
	foliation, which is sub-parallel to the core axis.	AE08794	309.4	310.4	1.0	50	8	17	<1	35	1200
	There is average 4 % pyrite, locally 2 to 7 %. There	AE08795	310.4	312.0	1.6	19	16	33	<1	25	1200
	are local quartz veins with trace pyrite cubes. There	AE08796	313.0	314.5	1.5	80	13	386	1	20	1100
	is trace chalcopyrite locally.	AE08797	314.5	316.0	1.5	39	28	141	1	35	990
291.6 2	3.8 Silicified rock with approximately 2 % disseminated	AE08798	316.0	317.5	1.5	50	97	210	2	50	1200
	pyrite and sericite fault gouge at 292.6 and 293.6.	AE08799	320.0	322.0	2.0	173	147	1403	4	140	2300
	Locally contorted with foliation trend at approximately	AE08800	323.5	324.5	1.0	248	105	1297	1	45	2400
	25 degrees to core axis. Minor fuchsite at 292.35.										
293.8 2	7.1 White, bleached and highly contorted sericite schist										
	with local pyrite band rich zones, up to 10 % over 10										
	cm, average 1 to 2 % pyrite, most is disseminated.							•			
	· · · · · · · · · · · · · · · · · · ·										

Local chalcopyrite blebs. 1.5 cm fuchsite rich band at 295.2.

- 297.1 297.4 Light green mafic sill with 22 cm barren bull quartz vein core.
- 297.4 297.5 Fault gouge.
- 297.5 298.1 Moderately contorted silicified rock with 2 to 3 % disseminated and banded pyrite with trace fuchsite.
- 298.1 299.0 Sericite and carbonate fault gouge.
- 299.0 299.9 Contorted weakly silicified. Micro-scale chevrons. 1 to 2 % very fine-grained disseminated pyrite.
- 299.9 300.6 Mafic sill or dyke, fine-grained light light green with 1 to 3 % carbonate veinlets that host 1 % pyrite cubes and grains.
- 300.6 307.0 Sericite schist with approximately 2 % pyrite disseminated and local bands, up to 2 mm. 10 blebs of chalcopyrite at 300.9 and trace to nil elsewhere. Locally weakly to strongly contorted. Foliation at 302 is 50 degrees to core axis and at 305 is at 62 degrees to core axis. From 303.2 to 303.4 and 305.0 to 305.1 there are mafic sills as from 299.9 to 306.6.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From То (m) (m) -----DESCRIPTION------

- 307.0 307.8 Dark green mafic sheared and carbonitized sill. Upper contact at 20 degrees to core axis and lower contact is sharp, but irregular.
- 307.8 308.5 Contorted white to light green sericite schist with approximately 5 %, up to 2 mm, guartz eves.
- 308.5 308.7 Mafic sill as from 307.0 to 307.8.
- 308.7 309.1 Sericite schist as from 307.8 to 308.5 with silicification below the sill for approximately 10 cm. Foliation at 309.1 : 59 degrees to core axis.
- 309.1 309.4 0.3 m of lost core.
- 309.4 310.1 2 to 3 % banded pyrite in contorted guartz sericite schist. Local guartz eves.
- 310.1 312.2 Quartz sericite schist with 3 to 5 %. 1 to 3 mm. guartz eyes and trace to 1 % local disseminated and banded pyrite.
- 312.2 312.3 Mafic sill, as from 308.5 to 308.7 with fault gouge over lower 5 cm.
- 312.3 324.5 Ouartz sericite with local guartz eves, up to 5 %, up to 4 mm. Local fuchsite, 1 cm thick, semi-continous band at 315 .1. Pyrite averages approximately 1 %. locally trace to 2 % is both disseminated and rarely bands, fine-grained up to 3 mm. Foliations : 316.1 : 35 degrees to core axis. 320.4 : 51 degrees to core axis. 323.2 : 38 degrees to core axis and 324.4 : 51 degrees to core axis.
- 324.5 324.8 Fault gouge and guartz veins.

324.8 365.8 GABBRO

324.8 348.1 Fine-grained gabbro, chilled margin, feldspar phyric, up to 20 %, up to 2 mm. Contains numerous epidote, quartz, and carbonate veins and veinlets. There is minor hematite lining some vnlt' and after ilmenite. Up to 5 % leucoxene also occurs and the rock is weakly magnetic.

348.1 357.4 Coarse grained gabbro with 3 to 5 % weakly magnetic ilmenite.

357.4 361.4 Medium grained.

361.4 365.8 Fine-grained gabbro, less veining than at upper contact.

365.8 380.6 CHERTY BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE

365.8 368.9 Medium to dark green to grey siliceous siltstone with AD02652 367.8 368.9 32 7 <5 2800 1.1 64 <1 minor black argillite beds and local fracture AD02653 368.9 370.3 1.4 50 14 58 (1 <5 4500 0.59. SILT 37 controlled carbonate veinlets and local quartz veins. AD02654 371.1 372.0 .7 111 <1 <5 2900 .9 There is trace to 0.5 % fracture controlled pyrite. AD02655 372.7 374.0 1.3 33 7 58 <1 <5 2700 35 54 <5 4000 Bedding at 368 is at 60 degrees to core axis. AD02656 374.0 375.0 1.0 9 <1 368.9 370.3 Black cherty argillites with local whitish chert beds. AD02657 375.0 376.0 1.0 31 <5 87 <1 <5 4600 ARGL CON There are numerous cross-cutting fracture controlled AD02658 376.0 377.0 1.0 25 7 90 <1 <5 3500 carbonate veinlets. The zone hosts approximately 5 % AD02659 377.0 377.7 .7 32 6 73 <1 3500 < 5 pyrite, about 1 % is disseminated and fine-grained, 1 % AD02660 377.7 378.5 .8 58 11 59 <1 <5 3700

HOLE No: Page Number CHEM87-34 11

Sample	From	То	Width	Cu	Pb	Zn	Aq	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02651	325.8	326.0	.3	150	5	76	<1	< 5	50	
AB21927	356.8	357.0	.2	260	n/a	103	n/a	n/a	328	



Page Number

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HOLE No:

CHEM87-34

PROPERTY: Chemainus J.V. - Chip Claims

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)	DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
	is fracture controlled and 3 % is in beds as original pyrite beds and/or as replacement.	AD02661 AD02662	378.5 379.5	379.5 380.6	1.0 1.1	35 52	7 8	51 163	<1 <1	.<5 35	3300 2000
	Bedding :.										
	369.0 : 30 degrees to core axis.										
	369.5 : 33 degrees to core axis.										
	370.2 : 40 degrees to core axis.					1999 - A.					
	370.3 371.1 Grey brown siliceous sandstone hosts minor argillite										
12 SAND	clasts and 1 to 2 % disseminated and banded pyrite.										
• - / ·	There are quartz grains which fine out downhole.										
	3/1.1 3/2.0 Black argillite and tan chert with minor carbonate					· · · .					
30% AKGL	veiniets and up to 3 % pyrite in the argillite. Bedding										
5 ~ ~ ?	at 3/1.8 is at 40 degrees to core axis.										
	372.0 372.7 Sandstone as perore.										
5% 4%5~	372.7 572.9 Black cherty argillite with 5 % pyrite.										
-U SIAL	572.9 560.4 fail cherty sand/siltscolles interbedded with cherty			1.11							
5 '0	$g_{0,b}$ black arginites. All nost fracture controlled carbonate										
	with numerous 1 to 3 mm purite bads / hands total										
	with numerous 1 to 5 mm pyrite beus / bands, total										
	pyrice approximately 5%. Beduing . 574.6 . 46 degrees to gove swig $376.0 + 45$ degrees to gove swig $378.0 + 45$										
	43 degrees to gore axis, 378.0 . 45 degrees to core axis, 578.0 .										
·	45 degrees to core axis and 500.4 . 45 degrees to core										
	ALLS. 320 4 320 5 Peridotite as below										
	390 5 390 6 Green chart or siltstone										
	Sous sous dieen cheft of siltstone.										
390 6 395 4	DFDTDATTF										
500.0 505.4	Medium to dark green fine-grained locally weakly to very strongly	AB21928	380 7	380.8	. 1	47	n/a	401	n/a	n/a	2630
	magnetic rock There are numerous local green clay fault slips	AD02663	380.6	381.7	1.1	94	6	177	(1	(5	1900
	There is clay and fault gouge from 382.8 to 383.1 which hosts 2 to	AD02664	381.7	381.9	.2	239		120	(1	75	1800
	3 & ashestos The unner contact is very sharp at 381.8 there is a	AD02665	381.9	382.8	.9	145	7	161	(1	<5	830
	7 mm guartz vein with 2 % chalconvrite. Minor guartz - calcite -	AB21929	384.3	384.4	.1	8	(2	100	<1	<1	162
	high the very state hase									-	
	biotite verning at the babe.										
								÷ .			
385 4 391 1	CHERTY BLACK ARGILLITE AND STUTSTONE WITH MINOR GREYWACKE										
505.4 551.1	385.4 387.3 Green cherts and greywackes.	AD02666	387.0	388.0	1.0	33	5	80	<1	<5	5600
	387.3 389.8 Green and brown cherts and cherty argillites with	AD02667	388.0	389.0	1.0	58	7	27	(1	< 5	11000
	fracture controlled carbonate and local fracture	AD02668	389.0	390.0	1.0	72	8	36	<1	<5	11000
	controlled pyrite pseudo-beds, total pyrite	AD02669	390.0	391.0	1.0	39	6	24	<1	< 5	3900
	approximately 2 %.						-				
	389.8 390.2 1 to 2 % disseminated pyrite in a dark green greywacke.										
	390.2 391.1 Cherts and argillites as before.										

Bedding :. 368.8 : 35 degrees to core axis. 388.4 : 26 degrees to core axis. 390.5 : 38 degrees to core axis.

Lost core :. 0.4 M from 388.6 to 389.0.



PROPERTY: CHEMIANUS J.V. - Chip Claims

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 47+00 E 1+83 N

NTS: 92B13	UTM: 5416248 N	431862 E
Azimuth: 210	Elevation: 710	m
Dip: -50	Length: 359.	1 m

Started: 30-June-1987 Completed: 5-July-1987

Purpose: To define stratigraphy north of IP and VLF anomalies tested by holes CHEM87-34 and 36.

HOLE No: Page Number CHEM87-35 1

Claim No. CHIP 1 Section No.: Line 47+00 E

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

Width

(m)

Cu

(ppm)

Pb

Zn

(ppm) (ppm)

Ag

(ppm)

Ba

(ppb) (ppm)

Au

n/a

103

n/a

n/a

142

Core Size: NQ

21.3

AD02481

21.4

			DIF					
		Azi-			Azi-			
	Length	muth	Dip	Length	muth	Dip		
	32.60	206.0	-52.0	281.90	206.0	-47.5		
	127.10	206.0	-48.0	353.60	206.0	-42.0		
	215.50	206.0	-49.0					
					S	ample	From	То
	DESCRIPTION	{				No.	(m)	(m)

NTD MRCMC

.

То

(m)

From

(m)

.0

3.4 OVERBURDEN AND CASING

3.4 19.1 FELSIC QUARTZ CRYSTAL TUFF

Overall colour of unit is pale greenish-gray but in detail white and dark green slightly chloritic steaks produce a distinctly banded appearance. White 2 to 8 cm bands are parallel to foliation as beds (?).

Unit is strongly foliated and sericite-rich.

Foliation and bedding (?) 60 degrees to core axis at 8.7 m.

50 Degrees to core axis at 10.7 m.

8 to 15 % 2 to 8 mm quartz eyes, up to 1 cm locally; feldspars generally nil to minor.

2 to 3 mm white quartz veins about 2 per m 70 to 80 degrees to core axis.

Rare pyrite as 1 to 4 mm cubes up to 1 cm - less than 1 %.

White irregular quartz vein masses several cm wide at 17.0 to 17.4 m and 18.2 to 18.4 m.

Fine grained dark green section 17.4 to 17.6 m - early mafic dyke ?. Lower contact becomes darker green but retains quartz content and is weakly calcareous.

19.1 24.6 MAFIC TUFF

Probably a sheared mafic tuff.

Unit has a dark green colour, is streaky in appearance, strongly foliated and calcareous.

5 to 6 % 2 to 3 mm quartz eyes are present in this unit.

Abrupt, gradational upper contact; lower contact grades into massive

AD02480 16.8 16.9 .1 32 n/a 28 n/a n/a 903

255

.1



		FALCONBRIDGE LIMITED DIAMOND DRILL LOG	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CHEM87-35 2								
From (m)	T0 (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)				
		quartz bearing tuff.														
		At 24.2 m a massive dark green quartz crystal tuff is present. Locally, epidote stringers parallel foliation cleavage.														
24 6	36 5	CHLORTTTC FELSTC OHARTZ-FELDSPAR CRYSTAL THEF														
24.0	50.5	Unit has a dark green colour, is strongly foliated 60 degrees to	AE08684	25.0	26.0	1.0	317	(5	63	<1	۲5	1100				
		core axis at 31.5 m 50 degrees to core axis at 34.7 m.	AE08685	26.0	27.0	1.0	63	(5	49	<1	<5	760				
		Quartz eyes 4 to 7 %, 2 to 6 mm and up to 8 mm and gray feldspar 7	AE08686	27.0	28.0	1.0	51	<5	40	<1	< 5	790				
		to 10 %, 3 to 6 mm.	AE08687	28.0	29.0	1.0	43	<5	35	<1	5	770				
		At 25 to 26 m a few white flattened lithic clasts 2 to 5 mm by 20 mm										20 10				
		Pwrite as foliation marallel stringers 2 to 3 % from 25 to 30 m.														
		Unit has a steaky appearance caused by variably chlorite-rich dark														
		green and pale green epidote (after feldspar) bands 5 to 10 mm wide.														
		Weakiy Calcaleous.														
36.5	108.2	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF														
		Unit is similar to 3.4 to 19.1 m.	AD02482	40.3	40.4	.1	36	n/a	38	n/a	n/a	1070				
		Upper contact grades from 10 % feldpspar to quartz-rich sericite	AD02483	53.2	53.3	.1	37	n/a	36	n/a	n/a	1120				
		tuff.	AE08688	61.3	62.3	1.0	8	<5	18	<1	5	1000				
		12 to 15 %, 2 to 8 mm quartz and abundant sericite.	AE08689	62.3	63.3	1.0	4	6.	21	<1	` <5	1100				
		Generally sub-massive; locally streaky due to variable sericite	AD02484	70.2	70.3	.1	25	n/a	27	n/a	n/a	1250				
		content.	AD02485	85.5	85.6	.1	23	n/a	26	n/a	n/a	1020				
		A few sericitic lithic clasts parallel foliation cleavage at 41.2 m.	AD02486	95.3	95.4	.1	49	n/a	64	n/a	n/a	1240				
		Foliation at 40.2 m is at 60 degrees to core axis.	AD02487	105.1	105.2	.1	34	n/a	24	n/a	n/a	649				
		Dark green chlorite-rich (plus epidote) strongly sheared section 55														
		degrees to core axis at 35.5 to 35.7 m.														
		Streaky sections 46.7 to 49.0 defined by finer grained more														
		chlorite-rich.														
		And epidote altered feldspar bands (beds ?) 60 degrees to core axis														
		;they are often subtle.														
		Pale pistachio green epidote veined sections with irregular quartz														
		veining 43.9 to 44.2 m.														
		Feidspars generally more common, 6 to 10 % 2 to 6 mm and generally														
		epidote altered at 50 to 53 m.														
		At 54.1 to 54.5 m white quartz veins with dark chiorite.										· · · ·				
		A finer grained crystal tull interval 40.0 to 40.5 m gives a streaky														
		appearance to this generally massive unit. Local steaking is caused by variable ablevite content														
		by variable chiorice content. Paliation of stroke at 62.0 m is at 60 downeds to some owin														
		rollation of Streaks at 02.0 m is at 00 degrees to core dx15.														
		Small Lault (Chiofile Silp) 5 Cm wide at 53.4 m.														
		occassional pyrite crystals, overall less than quarter 4.														
		At 01.5 to 05.4 m follation parallel fine grained pyrite focally														
		reaches a to 5 % in time grained siliceous looking gray quartz														
		Selicice cull.														





FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)	DESCRIPTION
		Below 66.0 m the unit becomes predominantly greener due to increase
		in chlorite. Feldspar also increases to 8 to 10 % as 2 to 4 mm
		crystals.
		Foliation at 69.0 m is at 55 degrees to core axis.
		Stretched lithic clasts at 69.5 and 72.3 m.
		White quartz vein masses accompanied by dark chlorite at 71.0 to72.2
		n.
		From 69.0 to 90.0 m monotonous lithology of variably streaked
		overall light greenish quartz feldspar crystal tuff. Probable
		bedding is defined by increased darker chlorite content relative to
		quartz and feldspar. Feldspar generally is subordinate in amount to
		quartz.
		Bedding defines foliation cleavage:.
		50 Degrees to core axis at 74.6 m.
		55 Degrees to core axis at 80.0 m.
		55 Degrees to core axis at 80.3 m.
		55 Degrees to core axis at 86.8 m.
		55 Degrees to core axis at 93.7 m.
		50 Degrees to core axis at 101.4 m.
		Blocky core 88.2 to 89.2 m small fault 35 degrees to core axis.
		Blocky core 90.4 to 91.2 m.
		Rare pyrite crystals 4 to 6 mm at 89.1 m.
		Small fault with gouge 92.5 m.
		Small fault with gouge 105.8 is at 50 degrees to core axis.
	÷.,	Dark green chlorite calcite epidote sheared sections:.
		50 Degrees to core axis at 97.5 98.1 m.
		50 Degrees to core axis at 99.1 99.3 m with small fault.
		50 Degrees to core axis at 102.2 102.9 m.
		Lower contact sharp.

108.2 113.5 QUARTZ-FELDSPAR PORPHYRITIC FELSIC FLOW

This interval is massive less sericitic and only moderately foliated AD02488 110.2 110.3 .1 24 n/a 25 n/a n/a 1170 compared to the above unit. Darker gray coloured, possible flow unit. Moderate foliation at 109.0 m is at 55 degrees to core axis.

113.5 127.8 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Same gray colour as unit above but with stronger foliation. Lithic clasts here and there. 10 to 13 % 2 to 4 mm quartz eyes, 8 to 10 % 2 to 4 mm feldspars with proportional ratios quite variable in broad 0.1 to 0.7 m bands. Also, local 1 to 7 cm dark green chlorite shear zones. Local white quartz veins here and there parallel foliation. Lithic clasts 115.3 m. Fault with gouge 114.2 to 114.9 m; adjacent foliation 45 degrees to

AD02489 124.8 124.9 .1 105 n/a 35 n/a n/a 726

HOLE No: Page Number CHEM87-35 3

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba	•
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(mgg)	

From (m)



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-35 4

То		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)DESCRIPT	ION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

AD02490 137.4 137.5

.1

n/a

46

33

n/a

n/a 1070

core axis Lost core 0.4 m. Foliations:. 55 Degrees to core axis 121.2 m. 53 Degrees to core axis 125.0 m. Blocky core 126.5 to 127.8 m.

127.8 128.6 EARLY MAFIC SILLS Dark mafic dyke/sill with sharp upper and lower contacts respectively 90 and 60 degrees to core axis. Lithology is fine-grained moderately magnetic (in contrast to tuffs), highly calcareous (HCl fizz) and riddeled with calcite veinlets.

128.6 136.0 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Similar to 113.5 to 127.8 m but with dark streaks of sheared dark gray argillaceous bands 3 to 5 mm wide sheared beds. Bedding; 45 degrees to core axis at 131.7 m.
48 Degrees to core axis at 135.4 m. Local large isolated quartz eyes 8 to 12 mm. Small fault @ 130.9 m 58 degrees to core axis. White 0.2 m quartz vein @ 133.5 m. Last 0.2 m of interval is more strongly sheared. Less than 1/4 % pyrite dissemination as 1 to 2 mm crystals here and there.

136.0 141.0 QUARTZ-FELDSPAR PORPHYRITIC FELSIC FLOW White unit; contrastinly distinctive from above unit, especially near the top of this interval.
15 % 2 to 6 mm white feldspar; 7 to 10 % 2 to 4 mm quartz. Banded 1 to 3 cm wide; otherwise massive: 55 degrees to core axis at 137.2 m.

141.0 148.0 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

This interval is strongly foliated, darker gray than above unit and grades from it. The composition looks similar but with more sericite and foliation parallel irregular 5 to 15 mm calcite patches (some pink calcite).

Fault with gouge 35 to 50 degrees to core axis at 144.3 145.3 m Lost Core 0.5 m.





FALCONBRIDGE LIMITED

DIAMOND DRILL LOG.



From	То			Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION		No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

Lower contact 40 degrees to core axis.

148.0 155.5 FELSIC ASH TUFF

Felsic to intermediate composition dust and ash tuff with hard cherty intervals and minor dark green intervals. Strong foliation cleavage, except near faults 60 to 68 degrees to core axis.

Faults : 149.0 to 149.2 m 53 degrees to core axis Lost Core 0.2 m. 150.0 to 150.4 m 30 to 74 degrees to core axis gouge and Lost Core 0.4 m.

150.7 to 150.8 m 70 degrees to core axis.

155.5 158.2 EARLY MAFIC DYKE

Sharp upper contact 62 degrees to core axis ; lower contact broken core.

AD02491 157.6 157.7 .1 .47 n/a 86 n/a n/a 682

White calcite veinlets and irregular patches; pervasive calcite throughout. Fine grained equigranular.

158.2 160.7 FELSIC CRYSTAL ASH TUFF Mainly broken core hard, cherty, and siliceous. 1/2 % pyrite dissemination.

160.7 163.9 EARLY MAFIC DYKE

As above in 155.5 to 158.2. Small 2 cm fault with gouge at 162.5 m 80 degrees to core axis.

163.9 183.8 FELSIC CRYSTAL LAPILLI TUFF

Mottled appearance with gray-green and pink tinged white patches. Possible weak chloritic alteration on fractures especially 166 to 170 m. Pale pink hue appears to be on larger lithic clasts 2 to 3 cm with poorly defined outlines. (Perhaps a welded lithic tuff ?) Very fine grained less than 1/2 mm disseminated magnetite crystals noted - about 1/2 % and cause of pinkish tinge. Darker matrix to the pale patches (clasts) is quartz feldspar crystal composition similar to unit 141 to 148 m above.

AD02492	169.5	169.6	.1	44	n/a	35	n/a	n/a	786
AD02493	177.8	177.9	.1	63	n/a	47	n/a	n/a	1100



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From То (m)

(m)

-----DESCRIPTION------

The intervals 170.4 to 171.6 m and 174.0 to 175.0 m looks like a white guartz crystal tuff, with distinctive guartz eyes. Small mafic dyke 172.5 to 172.8 m - weakly magnetic. Small faults with gouge : 30 degrees to core axis at 173.5 m. 45 Degrees to core axis at 176.3 m. Lower 2 m possibly weakly tectonized - pinkish tinge conspicuous due to disseminated fine grained magnetite presence.

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

Page Number

6

n/a 1410 n/a

785 n/a 1020 n/a 1590

HOLE No:

CHEM87-35

183.8	3 227.7	QUARTZ-FELDSPAR PORPHYRITIC FELSIC FLOW									
		This unit has a massive uniform structure without mottled	AD02494	187.0	187.1	.1	31	n/a	3	7 : n.	/a
		appearance, and has a pinkish tinge.	AD02495	196.3	196.4	.1	43	n/a	3	0 n,	/a 🐩
		10 % 2 to 6 mm quartz and 8 to 12 % 2 to 4 mm feldspar and about 1 5	AD02496	206.1	206.2	.1	40	n/a	4	6 п,	/a -
		disseminated magnetite. Local, 8 to 9 mm quartz-eyes.	AD02497	219.8	219.9	.1	36	n/a	. 1	9 n,	/a
	1.	Fairly uniform 50 to 55 degrees to core axis foliation cleavage				the second					
		throughout unit.									
		3 Cm shear slip, dark-green with magnetite and hematite									
		concentrations at 193.3 m and common 193.5 to 194.4 m.		a state of the second				Neg State			
		From about 197 to 206 m this interval is cross-cut by semi-random	•								
		sericite and minor chlorite fractures about 15 to 20 per metre. At									
		204.0 to 204.5 the fracturing reaches pseudo-breccia intensity.									
		Small, creamy-white 1 to 2 cm felsic clasts here and there eg. 209 m.									
,		At 203.5 m, a 1 cm quartz vein with blades of hematite (?).									
		Below 209.0 m get fine grained short sections of felsic flow.									
'		Local fine grained magnetite concentrations 4 to 5 % magnetite @									
		197.2 to 197.4 m in short sections 50 degrees to core axis.									
		At 212 to 217 m the unit is fine to medium grained and becomes pale									
		greenish in colour; it displays a local clastic (lithic) structure									
		due to flow brecciation (?).									
		Below 217 m unit is generally similar to above 212 m with pinkish									
		tinge and conspicuous quartz eyes and accessory 1/2 to 1 %									
		accessory magnetite.									
		Local shears with brecciation:.									
		30 Degrees to core axis at 212.1 m.				$e = 2 - e^{2\pi i t} = 1 - e^{2\pi i t}$					
		60 Degrees to core axis at 218.9 m.									
		60 Degrees to core axis at 219.1 m.									
		60 Degrees to core axis at 221.1 m.									
		45 Degrees to core axis at 224.5 m gouge.									
		50 Degrees to core axis at 224.8 m.									
		56 Degrees to core axis at 227.0 m gouge.					· · · · ·				
		Core becomes increasingly blocky below 222.5 m and foliation									
		cleavage core axis angles gradually change to 45 degrees to core									
		axis.									
		Lower contact faulted.		1.257.5	ener en la la						









HOLE No: Page Number CHEM87-35 7

From	To	DESCRIPTION	Sar	ple	From	T0	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)		I	o.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb) (ppm
		Calcite veined, and moderately magnetic.	ADO	498	227.7	227.8	.1	38	n/a	83	n/a	n/a	1120

228.3 230.0 OUARTZ-FELDSPAR PORPHYRITIC FELSIC FLOW

Pink tinge as before.

Very siliceous 0.1 m section adjacent to mafic sill at upper contact. Strong foliation cleavage 40 degrees to core axis.

230.0 232.0 EARLY MAFIC DYKE

Upper contact 40 degrees to core axis Lower contact 36 degrees to core axis. As 227.7 to 228.3 m.

Strong foliation cleavage 35 to 40 degrees to core axis.

232.0 243.8 FELDSPAR PORPHYRITIC FELSIC FLOW

Gray colour ,fine-grained with less conspicuous quartz-eyes; feldspar crystals predominant. Locally sheared. Early mafic dykes 234.8 to 235.0 m contacts 50 degrees to core axis and 55 degrees to core axis respectively and at 237.5 to 237.7 m. Faults generally small and numerous:. 237.8 to 237.9 m. 238.7 to 239 0 m strongly sheared 238.3 to 239.8 m with foliation 45 to 50 degrees to core axis. 240.9 to 241.2 m 30 degrees to core axis. 243.7 to 243.8 m 45 degrees to core axis. Pyrite about 1 % 236.6 to 245.0 m as minor disseminations in 1 to 5

cm wide zones parallel to core axis at 40 to 45 degrees.

243.8 250.9 FELSIC LAPILLI TUFF

Felsic clasts generally cream to pale pink tinged flow material less than 1 to 5 cm (as 183.3 to227.7 m). Overall greenish gray colour. Contacts very deformed by shearing and small faults. Foliation cleavage 35 to 40 degrees to core axis. A few fine-grained pyrite stringers parallel foliation 250.0 to

250.2 m (2 to 3 % pyrite).

AD02499 230.6	230.7	.1	39	n/a	96	n/a	n/a	1330	

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-35 8

From	То		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

250.9 254.9 EARLY MAFIC DYKE Both contacts 45 degrees to core axis. Dark-green, strongly foliated but otherwise massive unit. Flat 1 by 5 mm chloite patches parallel foliation at 45 degrees to core axis.

254.9 268.4 FELSIC CRYSTAL LAPILLI TUFF Greenish-gray strongly foliated locally sheared and faulted unit. AD02500 262.4 262.5 .1 48 n/a 128 n/a n/a 583 Weak pyritic stringers 262.2 m, less than 1 %. Foliation cleavage 55 degrees to core axis. Faults: 258.7 to 259.4 m; 0.4 m Lost Core. 260.0 to 261.2 m; 1.0 m Lost Core; 45 degrees to core axis. 261.4 to 261.8 m; 55 degrees to core axis.

268.4 271.6 EARLY MAFIC DYKE

Dark green chlorite schist. White ragged calcite patches are very common. At 269.2 to 269.4 m white siliceous felsic tuff inclusion. Lower 0.2 m section is epidote altered in 1 to 3 cm patches. Strong foliation cleavage, generally 30 to 40 degrees to core axis. Small fault 5 cm at 271.2 m with gouge, 75 degrees to core axis. Lower contact 65 degrees to core axis.

271.6 278.0 FELSIC CRYSTAL LAPILLI TUFF

Light gray colour, strongly sheared blocky core. At 273.9 to 275.1 m gravel - strong fault; adjacent shearing 50 degrees to core axis; Lost Core 0.9 m. Small fault 275.8 m; 50 degrees to core axis. Fine-grained section 275 to 277.5; bedding 45 degrees to core axis. Abundant quartz carbonate pods between 277.9 and 278.0 m. Broken core at lower contact.

278.0 281.7 FELDSPAR PORPHYRITIC FELSIC FLOW

5 to 10 % < 2 mm epidotized feldspar in a hard massive siliceous aphyric matrix. Weak to moderate, pervasive, chlorite alteration makes the rock a light green colour. Moderately sericitic below 281.0 m. Nil to trace pyrite. Lower contact is at 42 degrees to

HOLE No: Page Number CHEM87-35 9

					DIAMOND D	GE LIMITED RILL LOG					CHEM8/-	.30	3				
From (m)	To (m)			DESCRIPTIO	N			Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		core axis.															
281.7	285.8	MAFIC AND F	ELSIC TUFFS	- -				·									
		Roughly 60 mafic ash	% felsic ash tuff in beds	tuff in beds 0.2 to 1.0 m	0.3 to 1.4 thick. The	m thick and a felsic tuff:	40 % s are	AD02601 AD02602	282.7 283.8	282.8 283.9	.1 .1	33 29	n/a n/a	61 <10	n/a n/a	n/a n/a	813 1550
		light to me	dium grey-gr	een relatively	v massive we	akly chlorit:	ized ash										
		mm long ep	idotized fel	dspars and are	weakly to	moderately	°, 1-)										
		STRUCTURE:	CION WITH Ca	ICIT6-IIIIEd	yasnes and	microrractur	- .										
		Bedding is Foliation i	at 42 to deg s at 42 to d	rees to core a egrees to core	xis at 281. e axis at 28	8 m. 1.8 m.						-					
		Minor slip	is at 76 deg	rees to core a	xis at 282.	4 m.											
		Bedding is	at 60 degree	s to core axis	s at 282.5 m s at 283 3 m	l• .											
		Bedding is	at 68 degree	s to core axis	at 283.5 m												
		Foliation i	s at 62 degr	ees to core ax	tis at 284.0	m.											
		Bedding is	at 74 degree	s to core axis	at 284.2 m	1. ·											
		Bedding is	at 76 degree	s to core axis	at 284.4 m	ال المراجع (المراجع							14 - L				
		0.5 Cm wide	clay-filled	Slip is at 65	aegrees to	core axis a	C 285.4 mi 5 m										
		Minor clay- Minor clay-	filled slip	is at 55 degre	es to core	axis at 285.	7 m.										
		281.7 282.2	Moderately Quartz-carb	carbonatized M onate vein at	MAFIC TUFF. lower conta	Nil sulphide ct.	5.										
		282.2 282.5	Felsic tuff feldspars) degrees to	with 5 % 1-3 . Lower conta core axis.	mm epidote act is a ch]	spots (alter oritic slip	ed at 70										
					3. 1.3 .4 4	alais och fu	66										
		282.5 283.5	65 degrees 68 degrees	to core axis a to core axis a	at 283.3 m.	Lower contac	t is at										
												÷					
		283.5 284.2	FELSIC ASH axis.	TUFF. Lower co	ontact is at	74 degrees	to core										
		284.2 284.4	Mafic tuff.	Lower contact	t is at 76 (o degrees to	core		-9								
			uniot														
	n de la composition de la comp	284.4 285.8	B FELSIC TUFE degrees to m rock has	'. 5.0 cm wide core axis near a crushed tect	mafic ash (the upper tonized appe	uff bed at 6 contact. Bel earance. Sev	0-70 ow 285.4 eral										
			clay-filled mafic tuff	slips at 60- between 285.	70 degrees 4 5 and 285.6	o core axis. m. Lower con	Bed of tact is					· .					atorro.
			at bo degre	es to core axi	15.												

285.8 291.4 MAFIC FLOWS/DYKES AND FELSIC TUFFS Mafic flows/dykes are fine-grained dark green with numerous

AD02603 287.1 287.2 .1 27 n/a 64 n/a n/a 1850



Sample

No

From

(m)

То

(m)

Width

(m)

HOLE No: Page Number CHEM87-35 10

Ph

Zn

(mag) (mag)

Aσ

(mag)

Au

Ra

(mag) (dag)

Cu

(mag)

FALCONBRI	DGE	L1	MIT	ED
DIAMOND	DRIL	L	LOG	

From To (m) (m)

> calcite-filled microfractures and clots. Up to 10 % 1-3 mm epidotized feldspars. Very similiar to the Early Mafic Dykes described earlier in this hole. They alternate with beds of grey felsic tuff described in more detail below. Lower contact is at 70 degrees to core axis. STRUCTURE:.

-----DESCRIPTION------

Bedding is at 70 degrees to core axis at 288.2 m. 0.5 Cm wide clay-filled slip at 55 degrees to core axis at 288.4 m. Bedding is at 70 degrees to core axis at 289.7 m. Bedding is at 60 degrees to core axis at 290.7 m.

- 287.2 287.5 FELSIC TUFF. Rare lapilli-sized felsic clast. Lower contact is a slip at 30 degrees to core axis.
- 288.2 288.5 Bed of FELSIC TUFF with <1% rusty <2 mm in diameter centred on a silver metallic mineral (arsenopyrite or metal from the core barrel).
- 289.1 289.2 FELSIC TUFF.
- 289.7 0.3 cm wide FELSIC TUFF bed at 70 degrees to core axis.
- 290.7 291.0 CHERTY MAFIC TUFFACEOUS SEDIMENTS. Numerous sericite-filled fractures and gashes. Upper contact is at 60 degrees to core axis and the lower contact is at 75 degrees to core axis.

291.4 294.9 MAFIC TUFF WITH MINOR BEDS OF CHERTY SEDIMENTS

Dark green moderately carbonatized mafic tuff with occasional beds up to 1.5 cm thick of cherty sediments. Nil-trace disseminated chalcopyrite. Lower contact is gradational. STRUCTURE: Bedding is at 50 degrees to core axis at 292.5 m. Bedding is at 65 degrees to core axis at 292.6 m.

Minor slip is at 65 degrees to core axis at 293.3 m. Foliation is at 55 degrees to core axis at 294.2 m.

294.9 335.6 CHLORITIC FELSIC ASH-LAPILLI TUFF

Medium green hard siliceous and aphyric with up to 10 % ash-sized epidotized feldspars. Feldspars tend to occur in bands or patches 3.0 - 7.0 cm wide. $\langle 1-5\%$ lapilli-sized felsic clasts. Moderate to strong chloritization. 2-3 %, 2-5 mm quartz eyes between 317.6 and 319.6 m and between 332.0 and 334.0 m. Foliation is at a low angle to degrees to core axis ($\langle 25 \ degrees \rangle$) between 301.4 and 303.9 m. STURCTURE:.

Bedding is at 60 degrees to core axis at 296.5 m. Foliation is at 65 degrees to core axis at 300.4 m. Minor slip is at 25 degrees to core axis at 301.8 m. Minor slip is at 15 degrees to core axis at 302.8 m.

AD02606	295.7	295.8	.1	19	n/a	14	n/a	n/a	688
AD02604	296.8	296.9	.1	23	n/a	13	n/a	n/a	1180
AD02605	307.4	307.5	.1	30	n/a	16	n/a	n/a	1240
AD02607	319.4	319.5	.1	28	n/a	16	n/a	n/a	1780
AD02608	332.5	332.6	.1	34	n/a	14	n/a	n/a	1020
						11. A. 19. A. 19.	Sec. As		



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

> Bedding is at 50 degrees to core axis at 304.6 m. Foliation is at 15 degrees to core axis at 310.0 m. Bedding is at 47 degrees to core axis at 310.9 m. Bedding is at 55 degrees to core axis at 312.8 m. Bedding is at 45 degrees to core axis at 315.1 m. 1.0 Cm wide clay-filled slip is at 80 degrees to core axis at 317.0 m Slip is at 90 degrees to core axis at 317.6 m. Bedding is at 55 degrees to core axis at 320.5 m. Foliation is at 52 degrees to core axis at 324.3 m. Bedding is at 40 degrees to core axis at 324.9 m. Bedding is at 45 degrees to core axis at 325.7 m. Bedding is at 40 degrees to core axis at 326.0 m. Bedding is at 50 degrees to core axis at 326.8 m. Bedding is at 50 degrees to core axis at 328.1 m. Bedding is at 45 degrees to core axis at 330.0 m. Bedding is at 45 degrees to core axis at 331.5 m. Foliation is at 55 degrees to core axis at 333.5 m. Bedding is at 50 degrees to core axis at 334.6 m.

-----DESCRIPTION------

- 298.1 298.6 Carbonatized MAFIC ASH TUFF. Broken core at upper and lower contacts.
- 298.6 300.0 Foliation is contorted and kinked. Strong chlorite-calcite alteration between 299.3 and 299.7 m. 1 % disseminated pyrite.
- 309.4 310.3 Carbonatized MAFIC TUFF with nil-3 % disseminated magnetite. Quartz vein parallel to core axis at the upper contact. Lower contact is a slip at 30 degrees to core axis.

310.9 311.0 MAFIC TUFF BED at 47 degrees to core axis.

- 312.8 312.9 MAFIC TUFF BED at 55 degrees to core axis.
- 315.1 1.0 cm wide MAFIC TUFF bed at 45 degrees to core axis.
- 317.6 318.5 Blocky, highly fractured core. Rock is crushed.
- 320.5 321.8 Massive MAFIC FLOW OR TUFF. Upper contact is at 55 degrees to core axis and lower contact is at 75 degrees to core axis.

322.0 322.3 Bed of MAFIC TUFF.

324.7 324.9 Carbonatized MAFIC TUFF bed at 48 degrees to core axis.

325.0 325.7 MAFIC TUFF bed at 45-50 degrees to core axis.

325.9 326.1 MAFIC TUFF bed with 3 % disseminated pyrite at 40 degrees to core axis.

HOLE No: Page Number CHEM87-35 11

Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
PROPERTY: CHEMIANUS J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		326.8 327.2 MAFIC TUFF bed at 50 degrees to core axis.										
		327.6 328.1 MAFIC TUFF/FLOW at 50 degrees to core axis.										
		328.4 328.7 MAFIC TUFF at 50 degrees to core axis.										
		328.7 335.6 INTERBEDDED FELSIC ASH TUFF (70%) AND MAFIC ASH TUFF (30%). Felsic tuff beds are <1.0 cm to 10.0 cm thick and mafic tuff beds are <1.0-5.0 cm thick.										
335.6	340.0	THERMAL BIOTITE ALTERED FELSIC ASH-LAPILLI TUFF Massive mottled green-brown with nil to 2 % 2-4 mm quartz eyes. Up to 15 % 1-3 mm epidotized feldspars. Nil sulphides. Foliation is at 55 degrees to core axis at 339.3 m. Lower contact is at 55 degrees to core axis.	AD02609	337.2	337.3	.1	25	n/a	15	n/a	n/a	1510
340.0	341.9	MAFIC ASH TUFF Medium green massive 5 - 10 % ash-sized epidotized fragments. 0.5 cm cream-coloured chert bed at 55 degrees to core axis at 341.8 m. Nil sulphides. Lower contact is at 60 degrees to core axis.	AD02610	341.2	341.3	.1	37	n/a	48	n/a	n/a	483
341.9	347.7	THERMAL BIOTITE ALTERED QUARTZ-FELDSPAR CRYSTAL TUFF 20 % white 1-2 mm feldspar crystals and $\langle 1-7 $ %, 2-4 mm quartz eyes in a mottled, pale brown-green, hard, siliceous very fine-grained to aphyric matrix. Nil sulphides. Lower contact is at 55 degrees to core axis.	AD02611	345.4	345.5	.1	47	n/a	22	n/a	n/a	1220
		344.5 344.7 Bed of MAFIC ASH TUFF at 55 degrees to core axis.										
		346.0 346.1 Bed of MAFIC ASH TUFF at 55 degrees to core axis.										
347.7	351.0	MAFIC ASH TUFF Massive fine-grained dark green to brown-green. Weak to moderate patchy thermal biotite alteration. Two bleached patches. One 20.0 cm wide at 348.7 m and another 10.0 cm wide at 350.0 m. Patches are medium-grained and feldspar rich (looks like a leucocratic mafic intrusive). Lower contact is gradational.	AD02612	350.8	350.9	.1	37	n/a	45	n/a	n/a	315
351.0	354.4	THERMAL BIOTITE ALTERED QUARTZ-FELDSPAR CRYSTAL TUFF As 341.9 to 347.7 m. Nil sulphides. Broken core at the lower contact										

HOLE No: CHEM87-35 Page Number

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353.3 353.6 Ground core.







PROPERTY: CHEMIANUS J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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

354.4 359.1 MASSIVE MAFIC HORNBLENDE-BEARING FLOW Massive dark green fine-grained with 2-4 %, 1-4 mm subhedral chloritized hornblende crystals and up to 10 % 2-10 mm wide epidote spots. Nil-trace disseminated chalcopyrite and sphalerite.

356.0 Flow contact (?) at 50 degrees to core axis.

357.8 358.0 Blocky, highly fractured core.

HOLE NO:	Page Number	
CHEM87-35	13	

		Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)	
m subhedral	enidote	AD02613	358.6	358.7	.1	296	n/a	172	n/a	n/a	327	



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 47+00 E 1+50 S

NTS: 092/B1	3 UTM:	5415970	N 4	432200	Е
Azimuth: 21	D Eleva	tion: 6	40 m		
Dip: -4	5 Lengt	h: 2	57.6	m	

Started: July 6, 1987 Completed: July 9, 1987

Purpose: To test VLF anomalies at 2+40 and 2+80 S, coincident shallow and deep IP chargeability anomalies at 1+80 S, coincident deep and shallow IP resistivity lows at 2+05 S and IP chargeability anomalies at 2+80 and 3+00 S HOLE No: Page Number CHEM87-36 1

Claim No. CHIP 1 Section No.: Line 47+00 East

Logged By: David P. Money Drilling Co.: Burwash Enterprises, Cobble Hill Assayed By: Bondar-Clegg, Vancouver and X-Ray Assay, Don Mills

Core Size: NO

Length	Azi- muth Dip	Length	Azi- muth I	Dip	
32.00 110.90	211.5 -46.0 211.0 -46.0	203.00 257.60	210.0 -44 211.5 -44	4.0 4.0	

 From
 To

 (m)
 (m)

.0 11.0 OVERBURDEN AND CASING

11.0 21.9 FELSIC FELDSPAR CRYSTAL TUFF

Same as tuff beginning at 9.2 in DDH CHEM87-34. Blue to white rusty, oxidized felsic tuff, locally siliceous with 5 to 15 %, up to 2 mm, average 1 mm, feldspar grains. Locally weakly contorted. Minor local vugs, may have hosted calcite, some associated with minor local quartz veins and veinlets. Trace disseminated pyrite occurs.

Bedding :. 11.5 : 73 degrees to core axis. 17.0 : 68 degrees to core axis. 21.6 : 54 degrees to core axis.

Foliations :. 12.6 : 58 degrees to core axis. 17.1 : 63 degrees to core axis.

21.9 22.0 FAULT ZONE Rusty clay and blocky, highly fractured core.

22.0 34.2 FINE GRAINED PLAGIOPHYRIC GABBRO Dyke or sill of chilled margin type gabbro with 5 to 10 %, up to 2 mm, feldspar phenocrysts. The gabbro is rusty and broken with 0.7 m lost core from 32.0 to 33.4. There are numerous vugs throughout the gabbro and in the rare quartz veins.

AB21931 27.8 27.9 .1 204 n/a 106 n/a n/a 155

Au Ba Width Cu Pb Zn Åα Sample From To (m) (m) (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m)

AB21930 17.1 17.3 .2 52 n/a 371 n/a n/a 1670 up

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m)

34.2

55.5 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF

34.2 35.4 Rusty blocky, highly fractured core with 0.4 m of lost core.

-----DESCRIPTION-------

- 35.4 40.0 Very rusty tuff with 2 % biotite +/- goethite (?). The tuff is white to medium grey and is very likely altered hydrothermally, with the est A.I. = 75, H.A.I. = 82. The crystal content varies from 2 to 10 %, 1 to 3 mm, quartz eyes and 5 to 15 %, up to 2 mm, feldspar grains. There is trace local pyrite.
- 40.0 41.5 Medium grey to bluish siliceous tuff with approximately 10 % feldspar to epidote grains and trace quartz eyes.
- 41.5 43.8 Moderately rusty version of 40.0 to 41.5.
- 43.8 55.5 Grey to blue tuff with local rusty zones, up to 30 cm thick, with thermal biotite appearing at 48.8. The rust is centred on fractures. There tuff is locally crystal poor, with up to 10 % feldspar grains in the more porous rusty zones and trace to 1 % quartz eyes and trace to 2 % feldspar grains in the weakly contorted grey siliceous zones. There is local epidotization, up to 5 cm thick with 1 to 2 % associated disseminated and fracture controlled pyrite. There is trace to 1 % local disseminated and stringer pyrite throughout the zone.

Foliations :.

36.4 : 70 degrees to core axis. 44.4 : 73 degrees to core axis. 50.4 : 52 degrees to core axis.

55.5 61.6 FINE GRAINED PLAGIOPHYRIC GABBRO

Fine-grained gabbro with 3 to 10 % feldspar grains and rust coated fracture and local vugs, concentrated especially in the trace local quartz veins.

Lost core :.

0.5 M from 56.7 to 58.5. 0.2 M from 58.5 to 60.7. 0.3 M from 60.7 to 61.6.

61.6 63.0 INTERMEDIATE TO FELSIC QUARTZ EYE AND FELDSPAR CRYSTAL TUFF Rusty and vuggy green tuff with 5 to 10 % feldspar grains and trace quartz eyes. Hosts local quartz veins.

63.0 65.9 ALTERED FELSIC CRYSTAL TUFF

Siliceous or silicified grey to white felsic tuff with up to 1 % pyrite +/- goethite stringers. The crystal content varies from approximately nil to 30 % epidote grain to crystals, up to 3 mm. There are local quartz +/- carbonate veins and local chlorite +/- goethite veins.

AB21934	56.3	56.4	.1	208	n/a	97	n/a	n/a	98

AB21935 64.4 64.5 .1 125 n/a <10 n/a n/a 1540

HOLE No: Page Number CHEM87-36 2

Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		1							
AB21932	38.6	38.7	.1	25	n/a	24	n/a	n/a	1310
AB21933	51.2	51.3	.1	.37	n/a	27	n/a	n/a	1670

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m)

HOLE No: CHEM87-36	Page	Number 3	

	Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

Foliations :. 63.8 : 47 degrees to core axis. 65.6 : 38 degrees to core axis.

65.9 67.6 MAFIC SILL Weakly magnetic mafic sill, dyke or flow with approximately 20 % epidote grains in a medium to dark green fine-grained matrix. The

epidote grains in a medium to dark green fine-grained matrix. There are local minor quartz - carbonate +/- biotite veinlets and trace pyrite.

 67.6 76.3 FELSIC FELDSPAR CRYSTAL TUFF Moderately siliceous bluish grey locally rusty tuff with 5 to 15 %, up to 2 mm feldspar / epidote grains. There are minor quartz +/carbonate +/- biotite veins and veinlets. There is trace local disseminated and fracture controlled pyrite.

> Foliations :. 68.8 : 43 degrees to core axis. 74.5 : 34 degrees to core axis.

Lost core : 0.2 m from 71.9 to 73.2.

- 76.3 77.5 MASSIVE FELSIC LAPILLI TUFF Massive light green felsic tuff with epidotized lapilli.
- 77.5 82.0 FELSIC FELDSPAR CRYSTAL TUFF

Medium grey locally oxidized and vuggy felsic tuff with trace to 20 % feldspar to epidote grains. There is bleaching centred at 80.6. The foliation averages approximately 70 to 80 degrees to core axis.

- 82.0 83.0 MAFIC SILL
 - Salt and pepper texture mafic sill or dyke. Weak pervasive carbonatization. Non-magnetic.
- 83.0 103.6 FELSIC TUFF
 - 83.0 89.0 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF, moderately sericitic to siliceous medium grey felsic tuff with 5 to 15 % fine-grained feldspar / epidote and trace to 5 %, up to 3 mm, quartz eyes. There are local kink bands. There are white bull quartz veins +/- chlorite +/- biotite +/pyrite.
 - 89.0 95.0 SILICIFIED FELSIC FELDSPAR CRYSTAL TUFF, silicified white to light grey, locally weakly to moderately contorted felsic tuff with average 10 %, up to 2 mm,

AB21936	82.4	82.5	.1	147	n/a	77	n/a	n/a	261
AB21937	86.8	87.0	.2	33	n/a	28	n/a	n/a	1410
AB21938	91.6	91.7	.1	24	n/a	14	n/a	n/a	2900
AD02670	102.0	103.6	1.6	13	<5	62	(1	(5	1300



No.

(m)

(m)

FALCONBRIDGE LIMITED DTAMOND DRTLL LOG

(nnm)

(m)

			HOLE No	: Page	Number	•			
			CHEM87-3	6	4	,			
Sample	From	To	Width	Cu	Pb	Zn	λσ	Au	В

(ppm) (ppm) (ppm) (ppb) (ppm)

From To (m) (m)

> feldspar grains with minor feldspar / epidote crystal rich, up to 10 cm bands. There is local pyrite blebs and fracture controlled stringers which are up to 1 % over 1 m 95.0 103.6 Locally varies from silicified lapilli tuff, with epidotized lapilli to as at the start, ie. 83 - 89. Local guartz +/- chlorite veins with trace to 5 % pyrite over up to 5 cm. Local kink bands and is weakly contorted

-----DESCRIPTION------

Foliations :.

85.2 : 61 degrees to core axis. 88.0 : 56 degrees to core axis. 93.0 : 49 degrees to core axis. 99.2 : 49 degrees to core axis. 102.2 : 75 degrees to core axis.

Bedding :.

89.7 : 73 degrees to core axis. 94.1 : 65 degrees to core axis.

103.6 107.8 PYRITIC OUARTZ EYE BEARING FELSIC TUFF

Locally bleached and sheared felsic tuff with trace to 5 %, up to 4 mm. quartz eves. Hosts pyrite, pyrrhotite, chalcopyrite and sphalerite.

- 103.6 103.9 7 % pyrite, 2 % chalcopyrite, 2 % pyrrhotite and trace sphalerite. Siliceous grey rhyolitic tuff with the pyrite as fine-grained cubes in pseudo- bands with the other sulphides in the pyrite bands.
- 103.9 105.4 Weakly to moderately bleached grey to white, weakly contorted tuff with guartz eyes and 1 to 2 % disseminated pyrite. approximately 1 % disseminated pyrrhotite and trace to 1 % disseminated chalcopyrite and sphalerite.
- 105.4 105.7 Sheared sericite and chlorite with approximately 4 % pyrrhotite and trace to 0.5 % chalcopyrite.
- 105.7 106.8 Similiar to both 103.9 to 105.4 and 105.4 to 105.7. Grevish moderately to weaked sheared tuff with sericite development and guartz eyes. Sulphide stringers appear to be parallel to foliation, but this may be due to deformation. Hosts approximately 2 % pyrrhotite, 1 % pyrite and trace to 0.5 % chalcopyrite and sphalerite.
- 106.8 107.4 50 % coarse grained pyrite in beds with up to 2 % chalcopyrite. There are trace local pyrrhotite stringers

107.4 107.8 10 % pyrrhotite and up to 1 % chalcopyrite in rock similiar to 105.4 to 105.7.

107.8 140.6 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF

Locally light grey to medium - dark black - green weakly sericitic to siliceous felsic tuff, changes are transitional and moderate.

D02671	103.6	104.8	1.2	1900	22	765	1	20	1800
DO2672	104.8	106.0	1.2	700	32	360	<1	45	2600
D02673	106.0	107.0	1.0	365	8	189	<1	< 5	2100
D02674	107.0	107.8	.8	8900	41	570	5	55	2300

2100 AD02675 107.8 109.0 1.2 310 -5 110 <1 <5 .1 48 n/a 850 AB21939 114.9 115.0 64 n/a n/a



156.3 : 58 degrees to core axis.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-36 5

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Hosts trace to 4 %, up to 3 mm, quartz eyes and locally up to 15 % epidote / feldspar grains. From 138.0 to 140.6 appears to be silicified with thermal biotite. Is sericitic at the upper contact. There are local minor quartz +/- biotite veins and veinlets. Oxidized to 128.6.	AB21940 AB21941	128.8 138.8	128.9 138.9	.1 .1	32 32	n/a n/a	35 34	n/a n/a	n/a n/a	811 744
		Foliations :										
		109.5 : 64 degrees to core axis. 115.0 : 61 degrees to core axis.										
		137.1 : 61 degrees to core axis. 140.2 : 72 degrees to core axis.			:							
140.6	144.7	EPIDOTE SPOTTED ANDESITE Light to medium green flow, locally contorted with chevron kinks. Hosts 10 to 30 % epidote grains. Trace local quartz - carbonate veinlets.	AB21942	143.3	143.4	•1	188	n/a	119	n/a	n/a	989
				•								
144.7	150.7	FAULT ZONE 144.7 145.0 Chloritic fault gouge and green and grey clays. 145.0 145.9 Sheared to fault gouge chlorite and carbonate. 145.9 147.1 Grey clay and sericite shear and rubble with local	AD02676	149.0	150.7	1.7	92	33	86	<1	15	1200
		minor chlorite bands. 147.1 149.1 Chlorite clay, shears and local rock with pyrite and quartz weins										
		149.1 150.7 Felsic shear, clay and rubble.										
		Trend varies, average approximately 60 to 80 degrees to core axis.										
						11						
150.7	156.8	PYRITIC QUARTZ-SERICITE SCHIST 150.7 151.1 Sericite schist with foliation at 30 degrees to core axis and 1 % disseminated pyrite and 2 to 3 % pyrite parallel to foliation.	AD02677 AD02678 AD02679	150.7 152.0 153.0	152.0 153.0 154.0	1.3 1.0 1.0	96 23 63	44 29 165	1900 265 1650	2 1 2	55 45 75	2600 3000 2300
		151.1 155.2 Light grey fault gouge to schist with foliation approximately 0 degrees to core axis and is moderately contorted. Hosts trace local fuchsite and 2 % disseminated nurite.	AD02680 AD02681 AD02682	154.0 155.0 156.0	155.0 156.0 156.8	1.0 1.0 .8	27 71 880	30 45 147	275 1050 1450	1 1 3	35 20 90	2100 1600 2200
		155.2 156.8 Moderate contorted light greenish sericite schist with trace local quartz eyes, 1 % disseminated and parallel to foliation pyrite to 156.0 and 5 to 7 % banded pyrite with trace to 0.25 % chalcopyrite in up to 5 mm bands.										
		Foliations :. To 154 : 0 to 30 degrees to core axis locally, contorted.										
		155.0 : 16 degrees to core axis. 155.5 : 51 degrees to core axis. 156.0 : 53 degrees to core axis.										



FALCONBRIDGE LIMITED DTAMOND DRILL LOG

From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)
156.8	168.1	FINE GRAINED PLAGIOPHYRIC GABBRO							
		Locally sheared and fine-grained, but dominantly 20 to 40 %	AD02683	156.8	158.0	1.2	150	9	795
		feldspar grains in a fine-grained dark green chloritic matrix with	AB21943	162.2	162.4	.2	260	n/a	90
		trace to nil ilmenite. There are numerous guartz +/- epidote +/-							

168.1 197.0 MAFIC TUFFACEOUS SEDIMENTS

168.1 170.0 Sheared and moderately contorted soft green sediment with numerous quartz - carbonate - chlorite veins and veinlets. Local weak thermal biotite.

chlorite +/- biotite veins and veinlets with no sulphides and thicknesses up to 20 cm and orientations from 0 to 90 degrees to core axis. The upper contact is at 52 degrees to core axis and the lower contact is in blocky, highly fractured core. The foliation varies locally from approximately 40 to 90 degrees to core axis.

- 170.0 181.2 Immature soft green tuffaceous mafic sediment with local cherty epidote contorted bands. Foliation is parallel to sub- parallel to the core axis. There are local minor quartz, quartz - chlorite +/- biotite +/epidote veins.
- 181.2 184.0 Blocky, highly fractured core and local competent green tuffaceous sediments. There is 0.6 m of lower contact from 181.2 to 181.8 and 0.6 m of lower contact from 183.5 to 184.7.
- 184.0 190.8 Similiar to green mafic tuffaceous sediments, but is brown, locally has minor cherty bands. Lower transition to green is gradational over 0.5 m. Cherty near the base with minor fracture controlled pyrite, locally up to 1 %. Bedding and foliations vary locally.
- 190.8 191.8 Brecciated green cherty with minor fault gouge and trace fracture controlled pyrite.
- 191.8 5 cm fault gouge with slip at 21 degrees to core axis.
- 191.8 197.0 Immature sediment to tuffaceous sediment, soft and mafic, dominantly brown, locally green. 1 % local fracture controlled carbonate veinlets. Foliation and bedding vary, average approximately 50 degrees to core axis. Minor local fracture controlled pyrite, trace to nil.

197.0 202.0 CONGLOMERATE

Mafic green tuffaceous sediments and cherts, faulted and brecciated with numerous fracture controlled carbonate veinlets. Trace pyrite as ripped beds (?). Lower zone hosts cherty cobbles and boulders.

202.0 206.6 MAFIC TUFFACEOUS SEDIMENTS

Green to brown mafic tuffaceous sediments as before.

AB21944 173.3 173.4 .1 120 n/a 77 n/a n/a 556 AD02684 189.0 191.0 2.0 106 6 63 <1 <5 1500

HOLE No:

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6

Aσ

<1 n/a

(mag)

Au

10

n/a

Ba

80

291

(ppb) (ppm)





FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-36 7

From 7 (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
206.6 208	8.2	FINE GRAINED PLAGIOPHYRIC GABBRO Gabbro sill or dyke with approximately 5 to 10 % feldspar grain in fine-grained green matrix with local quartz and epidote veinlets.										
208.2 232	2.0	CHERTY TUFFACEOUS SEDIMENTS Begins with brown sandstone/ quartzite as in DDH CHEM87-34 and alternates with green cherty tuffaceous sediments. Bedding is not visible and the foliation ranges very locally from 30 to 70 degrees to core axis.										
		Lost core :. 0.5 M from 198.0 to 198.7. 0.2 M from 223.1 to 223.2. 0.2 M from 230.0 to 231.0.										
232.0 242	2.2	FINE GRAINED PLAGIOPHYRIC GABBRO From 232 to 240 is competent and relatively unbroken gabbro with 5 to 15 %, up to 2 mm, feldspar grains and local quartz +/- chlorite +/- biotite and epidote veins to veinlet. From 240 on it is sheared or blocky, highly fractured core.	AB21945	237.9	238.1	.2	73	n/a	93	n/a	n/a	204
		Lost core :. 0.6 M from 240.0 to 240.8.										
242.2 25	7.6	CHERTY ARGILLACEOUS SEDIMENTS Black, brown and grey cherty beds and argillites as in DDH CHEM87-34 with minor mafic tuffaceous sediment inclusions.	AD02685	244.0	246.4	2.4	58	7	46	<1	<5	2800
		Lost core :. 0.7 M from 242.3 to 243.8. 0.3 M from 245.2 to 246.2. 0.4 M from 250 to 250.5. 0.8 M from 250.5 to 251.9. 0.2 M from 251.9 to 252.3. 0.2 M from 252.3 to 253.0. 0.7 M from 253.0 to 254.2. Bedding :. 243.9 : 47 degrees to core axis. 245.3 : 47 degrees to core axis.										



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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 28+00 E 1+85 S

NTS: 92B1	L3	UTM:	541684	42 N	430030	E
Azimuth:	210	Eleva	ation:	500	m .	
Dip:	-45	Lengt	th:	219	.8 m .	

Started: 6-July-87 Completed: 8-July-87

Purpose: To test up-dip extension of mineralization intersected by hole CHEM86-18 and pulse EM anomaly. HOLE No: Page Number CHEM87-37 1

Claim No. CHIP 1 Section No.: Line 28+00 E

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

Core Size: NQ

DIP TESTS

Length	Azi- muth	Dip	Length	Azi- muth	Dip
87.50	213.0	-42.5	182.00	208.5	-40.0

From	То		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m) ((m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

1 ----

.0 15.2 OVERBURDEN AND CASING

		and the second										
15.2	70.6	SERICITIC FELSIC FELDSPAR CRYSTAL LAPILLI TUFF										
		Up to 10 % grey fine-grained lapilli-sized felsic fragments (some	AE08690	15.2	16.6	1.4	14	5	31	(1	<5	1000
		with disseminated pyrite) in a fine-grained matrix of quartz and	AE08691	16.6	18.0	1.4	79	(5	30	<1	< 5	920
		sericite. Weak to nil patchy chlorite and thermal biotite	AE08692	18.0	19.0	1.0	315	6	43	<1	15	1300
		alteration give rock a mottled appearance in places.	AE08693	19.0	20.0	1.0	310	7	41	(1	25	1500
		Sericite-filled microfractures are common. Occasional spot of	AE08694	20.0	21.0	1.0	28	- 7	26	· <1 ·	5	1600
		mariposite. Occasional 2-4 mm pale blue quartz eye between 15.2 and	AE08695	21.0	22.0	1.0	28	9	24	<1	<5	1900
		32.3 m and below 58.5 m. Rare biotite stringer. Less than 5 %	AE08696	22.0	23.0	1.0	23	7	29	(1	< 5	1700
		lapilli below 22.6 m. Up to 5 % 1-2 mm white feldspar crystals	AE08697	23.0	24.0	1.0	50	6	25	<1	< 5	1200
		below 32.3 m. Broken core at lower contact.	AE08698	24.0	25.0	1.0	34	7	29	<1	<5	1600
		SULPHIDES:.	AE08699	25.0	26.0	1.0	14	8	23	(1 -	<5	1700
		15.2 - 26.0 m 1-3% disseminated pyrite and nil-trace sphalerite.	AE08700	26.0	27.0	1.0	14	. 7	14	<1	< 5	1200
		26.0-27.9 m nil sulphides.	AB21951	27.0	28.0	1.0	45	- 14	36	1	<5	1300
		27.9-28.2 m 10 % finely disseminated pyrite.	AB21952	28.0	29.0	1.0	104	8	25	<1	10	1900
		28.2-30.0 m 1-3 % pyrite disseminated and as clasts < 3 mm in	AB21953	29.0	30.0	1.0	57	9	22	(1	<5	1500
		diameter.	AB21954	30.0	31.0	1.0	74	8	26	(1	<5	2000
		30.0-30.6 m 3-4 % pyrite concentrated in ash to lapilli-sized	AD02614	30.6	30.7	.1	344	n/a	46	n/a	n/a	1570
		felsic clasts.	AB21955	31.0	32.0	1.0	32	6	28	<1	10	2100
		30.6-33.6 m 1-3% pyrite disseminated and in spots stretched	AB21956	32.0	33.0	1.0	29	8	23	(1	< 5	2000
		parallel to foliation <2 mm long. Nil to trace disseminated	AB21957	33.0	34.0	1.0	SI 31	9	18	· (1)	<5	1800
		sphalerite. Occasional hairline fracture filled with a dark brown	AB21958	34.0	35.0	1.0	24	10	19	<1	15	2400
		to black mineral which may be galena sphalerite tetrahedrite or	AB21959	35.0	36.0	1.0	48	· . 9	17	<1	10	2300
		very fine-grained pyrite.	AB21960	36.0	37.0	1.0	88	17	41	1	10	2100
		33.6 35.4 M 2-4 % disseminated and fracture controlled pyrite. 20 %	AD02615	37.3	~ 37 . 4~	• • 1 .	45	n/a	22	n/a	n/a	2370
		pyrite at 34.3 m.	AB21961	37.0	38.0	1.0	23	24	25	<1	<5	2400
		35.4-36.7 m 4-5 % pyrite and trace sphalerite in 1-3 mm stringers	AB21962	38.0	39.0	1.0	53	40	42	<1	10	2100
		at 40-60 degrees to core axis with siliceous alteration envelopes.	AB21963	39.0	40.0	1.0	110	17	76	<1	10	910
		36.7 - 39.2 m 1-2 % pyrite disseminated and in an occasional	AD02616	40.0	40.1	.1	216	n/a	71	n/a	n/a	371
		stringer.	AB21964	40.0	41.0	1.0	99	11	75	(1	10	1700
		39.2 - 41.6 3-7 % pyrite and trace sphalerite concentrated in early	AB21965	41.0	42.0	1.0	44	12	56	<1	5	2800



FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-37 2

From	To		Sample	From	То	Width	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
		andesitic dykes or bleached altered zones <0.2 m wide.	AB21966	42.0	43.0	1.0	30	50	42	(1	20	2300
		41.6 - 45.7 m 1-3 % pyrite disseminated and in lapilli-sized felsic	AB21967	43.0	44.0	1.0	39	63	46	1	5	2600
		clasts.	AB21968	44.0	45.0	1.0	19	37	26	(1	(5	2900
		45.7 - 47.6 m 5 % pyrite disseminated and in lapilli-sized felsic	AB21969	45.0	46.0	1.0	52	107	55	<1	25	2800
		clasts and occasional stringers.	AB21970	46.0	47.0	1.0	240	395	615	3	40	4500
		47.6 - 48.7 m 5 - 10 % finely disseminated pyrite.	AB21971	47.0	48.0	1.0	200	200	750	2	70	4500
		48.7-52.8 m 4-5 % pyrite disseminated and in stringers. At 50.8 m	AB21972	48.0	49.0	1.0	22	12	28	(1	95	2600
		1.0 cm wide bed of massive purite at 60 degrees to core axis.	AB21973	49.0	50.0	1.0	26	13	30	(1	70	2300
		52.8 - 53.5 trace - 1 % disseminated pyrite. At 52.9 m 2 mm wide	AB21974	50.0	51.0	1.0	132	. 8	64	1	110	4100
		dark grey hand at 60 degrees to core axis. Possibly galena.	AD02617	51.3	51.4	- 1	44	n/a	<10	n/a	n/a	3180
		53 5-55 5 m 2-4 % purity finely disceminated and in 1-3 mm stringers	AB21975	51 0	52 0	1 0	12	(5	11		40	3200
		55 5-58 5 m 2-3 % nurite finely discominated and in lanilli-sized	AB21976	52 0	53.0	1 0	29	(5	14	(1	25	1700
		felsic clasts	AB21977	53 0	54 0	1 0	10	5	13	<i>(</i> 1	(5	2100
		58.5 - 61.5 m nil - 1 & diccominated nurite	AB21977	54 0	55 0	1 0	30	25	15	71	(5)	1600
		50.5 01.5 m = 1.3 mar = 1.5 mar = 1.0 mar	AB21070	55 0	56 0	1 0	A1		21	21	5	1700
		62.5 - 65.5 m + 3% pyrite disseminated and in occasional stringers.	1021070	56.0	57 0	1 0	110	12	25	(1	15	1700
		65 5 - 70 6 m trace - 1% pyrite in stringers and discominated	AD21980	57 0	58 0	1 0	1.20	16	20	· /1	15	1000
		cronoming.	ND21901	50 0	50.0	1.0	20	10	20	/1	/6	1900
		Foliation is at 43 degroes to gove avis at 20.0 m	AD41304	50.0	60 0	1 0	20	5	25	11	(5)	1100
		Poliation is at 45 degrees to core axis at 20.0 m.	AD21303	59.0	60.0	1.0	20	6	20	- (1	()	1100
		Political is at 45 degrees to cole axis at 21.1 m.	AD41304	60.0	60 F	1.0	20	· · · · ·	22	- 1		900
		Bedding (f) is at 50 degrees to core axis at 24.0 m.	AD02010	60.4	60.5	1 0	20 50	n/a	10	n/a	n/a	1100
		Foliation is at 50 degrees to core axis at 27.7 m.	AD21905	61.0	62.0	1.0	10		17	(1)	()	1100
		Politicion is at 45 degrees to core axis at 50.0 m.	AD41500	62.0	64 0	1.0	19		10	. (1	()	1000
		bedding is at 40 degrees to core axis at 30.0 m.	AB41987	63.0	04.0	1.0		()	18	(1	(5)	1000
		Foliation is at 50 degrees to core axis at 31.4 m.	AB21988	64.0	05.0	1.0	20	5	19		(5	120
		Foliation is at 50 degrees to core axis at 35.1 m.	AB21989	65.0	60.0	1.0	40	(5)	15		(5)	960
		1.0 cm wide slip is at 50 degrees to core axis at 35.4 m.	AB21990	66.0	67.0	1.0	14	. (5	12	(1	(5	1200
		Foliation is at 56 degrees to core axis at 40.6 m.	AB21991	67.0	68.0	1.0	8	(5)	: 11	· (1 ·	12	1200
		Bedding is at 50 degrees to core axis at 41.2 m.	AD02619	68.6	68.7		25	n/a	12	n/a	n/a	1750
		Foliation is at 50 degrees to core axis at 42.0 m.	AB21992	68.0	69.0	1.0	18	(5	14	(1	<5	1600
		Bedding is at 55 degrees to core axis at 42.5 m.	AD02620	69.4	69.5	.1	35	n/a	<10	n/a	n/a	1830
		0.5 Cm wide clay-filled slip is at 45 degrees to core axis at 48.2 m	AB21993	69.0	70.0	1.0	. 5	(5	13	<1	<5	1900
		Foliation is at 50 degrees to core axis at 50.5 m.	AB21994	70.0	70.6	.6	6	<5	21	<1	<5	2000
		Bedding is at 60 degrees to core axis at 50.8 m.										
		Bedding is at 60 degrees to core axis at 55.8 m.						- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10				
		Bedding is at 55 degrees to core axis at 56.1 m.										
		Foliation is at 55 degrees to core axis at 58.5 m.										
		1.0 Cm wide clay-filled slip is at 50 degrees to core axis at 62.4 m	· · · · ·									
		Foliation is at 65 degrees to core axis at 64.2 m.										
		Foliation is at 60 degrees to core axis at 66.2 m.										
		Foliation is at 55 degrees to core axis at 70.1 m.										
· . · ·		19.5 Biotite stringers at 30-40 degrees to core axis.										
		22.3 22.6 Blocky, highly fractured core. 0.2 m of lost core between 20.1 and 22.6 m.				ιψ.						
		22.6 48.7 Moderate fracture controlled sericitization Rock has an			1. j.							
		in situ brecciated appearance. Sericite fills microfractres which separate grey siliceous felsic										

breccia clasts 0.2 - 3.0 cm in diameter.



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

- From To (m) (m) -----DESCRIPTION------
 - 29.3 34.0 Gashes 1-2 mm wide filled with a milky white mineral which can be scratched with a knife and fizzes only weakly in HC1 (anhydrite or barite).
 - 39.2 39.4 Early andesitic dyke or bleached altered zone. Pale olive green and mottled. Upper and lower contacts are irregular but relatively sharp. Upper contact is at 80 degrees to core axis and the lower contact is at 55 degrees to core axis. 7 % fracture controlled pyrite and 1 % sphalerite.
 - 39.5 39.8 Early andesitic dyke or bleached altered zone as 39.2 to 39.4 m. 5-7 % fracture controlled pyrite. Broken core at upper contact. Lower contact is at 80 degrees to core axis.
 - 39.9 40.1 Early andesitic dyke or bleached altered zone as 39.2 to 39.4 m. 5-7 % pyrite. Lower contact is at 80 degrees to core axis.
 - 40.2 40.3 Early andesitic dyke or bleached altered zone. As 39.2 to 39.4 m. 5 % pyrite and 0.5 % sphalerite.
 - 40.8 40.9 Early andesitic dyke or bleached altered zone. As 39.2 to 39.4 m. 7 % fracture controlled pyrite and trace sphalerite.
 - 41.3 41.4 Early andesitic dyke or bleached altered zone. As 39.2 to 39.4 m. 7 % pyrite and 1 % sphalerite.
 - 41.5 41.6 Early andesitic dyke or bleached altered zone as 39.2 to 39.4 m with 7 % pyrite.
 - 45.7 45.8 Early andesitic dyke or bleached altered zone. As 39.2 to 39.4 m. 3 % pyrite and trace sphalerite.
 - 47.6 48.7 Crushed zone. Foliation is contorted and rock is friable. Sulphidess are very fine-grained.
 - 48.7 58.7 Many microfractures, gashes and veinlets < 5 mm wide filled with a soft milky white mineral which fizzes weakly in HCl (anhydrite or barite).
 - 55.5 57.6 6 beds of felsic ash to dust tuff up to 0.2 m thick at 55-60 degrees to core axis with 1-2 % finely disseminated pyrite.
 - 58.4 70.6 Rock has a green caste due weak patchy chlorite alteration. Less sericitic and more massive in appearance.
 - 58.5 70.6 \langle 1-2 %, 1-2 mm clear guartz eyes.

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Sample From To Width No. (m) (m) (m)

h Cu Pb Zn Ag Au Ba (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	То (m)			DESCRIPTI	ON			Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
70 6	73 3	MARTC DVKP															
/0.0	1	Dark green fi 72.0 m. Broke	ine-grained	with 5 % 1-4 lower contact	mm feldspar	phenocrys	ts below	AB21995	70.6	71.6	1.0	63	5	113	(1	<5 (5	630
					•			ADZI JJU	14.5	13.5	1.0	200	()	04		1.0	210
		72.5 72.7 Bar	ren quartz	vein runs r	early parall	lel to core	axis.										
			i de te														
73.3	84.6	FELSTC OUARTZ	-FELDSPAR	CRVSTAL THEF						-							
		Similiar to 1	L3.2 to 70.	6 m but rich	er in sulphi	ides. Light	to	AB21997	73.3	74.0	7	116	12	31	(1	(5)	2400
		medium grev	moderately	sericitic wi	th up to 10) % (2 mm fe	ldsnar	AB21998	74.2	75 0	8	320	28	180	2	150	1900
		crystals and	<1 - 5% a	uartz eves. I	ip to 7 % pyr	ite and tra	ice .	AB21999	75 0	76 0	1 0	140	20	400	/1	20	1600
		sphalerite ov	ver 0.5 m.	Foliation i	s at 65 degr	rees to core	avie at	AB22000	76 0	77.2	1 2	410	10	10	1	50	1000
		82.9 m Stro	ong thermal	hiotite alte	ration for C	16 m from 1	ower	A522000	70.0	70.0	1.4	410	101	3900	Ţ	750	3000
		contact Brok	ong cherman	t the contact	Tacion for 0	.0 m liom i	IOHET	AF00101	70 0	70.0	-0	120	101	3800	6	150	3700
		Foldenar phyr	ia mofia d	who 1 0 am wi	· do E Ó am f			AD02621	18.4	78.3		50	n/a	41	n/a	n/a	3350
		Peruspar phyr	ic malle u	YKE I.U CH WI		rom the upp	ber contact	AFUU152	78.0	.19.3	1.3	260	11	104	2	35	2800
		KOCK Has a mo	butted pink	caste Detwe	en 14.0 and	/S.U m prop	abiy due	AF00153	19.3	80.3	1.0	86	11	30	1	5	1900
		to weak nemat	lite altera	tion. Occasio	nal spots of	and fractu	ires	AF00154	80.3	81.1	.8	580	17	103	1	10	850
		filled with a	a milky whi	te mineral d	escribed in	15.2 to 70.	.6 m	AF00155	81.1	82.1	1.0	280	20	1900	1	55	1600
		(anhydrite or	barite).					AF00156	82.1	83.1	1.0	168	19	230	<1	15	1500
		<1 - 5 % lapi	illi-sized	felsic fragme	nts.			AF00157	83.1	84.0	.9	410	18	405	1	35	1800
		SULPHIDES:.		· •				AF00158	84.0	84.5	.5	540	32	970	1	10	1400
		73.3 - 77.2 m	a, 4-5 % di	sseminated py	rite.												
		77.2 - 78.0 m	n, 4-7 % py	rite, nil-3	<pre>% pyrrhotite</pre>	e 2 % sphale	rite and										
		< 1% chalcopy	rite.														
		78.0 - 79.3 m pyrrhotite.	n 1-2 % dis	seminated pyr	ite usually	/ associated	l with										
		<u>79.3</u> - 80.3 m	n, trace-ni	l sulphidess.	ter an	a service and the service of the ser	1	<u> </u>									
	· · · ·	77.2 - 78.0 m	n, 4-7 % py	rite nil-3 %	pyrrhotite	2 % sphaler	ite and < \							· · ·			
		1% chalcopyri	ite.													× *	
		78.0 - 79.3 m	n, 1-2 % di	sseminated py	rite and tr	ace chalco	pyrite			19. 11 A							
	·]	often associa	ated with p	vrrhotite.													
	(79.3 - 80.3 m	trace-nil	sulphidess		للمرجاب المتعاقبين المستعملين											
	٦ ،	80 3 - 81 1 7	1% nurite t	raco-1 & enh	alorito and	trace chalo	onurito										
		81.1 - 83.9 m	n, 2-4 % di	sseminated py	rite and fr	acture cont	rolled										
		sphalerite.	i e e te														
		83.9 - 84.6 m	n 5 % disse	minated pyrit	e and trace	sphalerite	.										
		74.0 0-1			1.1. 7.0												
		74.2 Pal	le green ea	rly andesitio	dyke 1.0 cm	a wide at 6	0			1 A A A A A A A A A A A A A A A A A A A							
		deg	rees to co	re axis.													
						· ·											
		79.0 80.3 Flo	ow (?). Mas:	sive siliceou	s and highl	ly microfrac	tured. No										
		รบ	lphidess o	r clasts.						1			1.1				
		80.4 81.1 Two	early and	esitic dykes	or bleached	altered zon	es. At 25		يحتديها ولاد			2.1					
		to	50 degree	s to core axi	.s.	·											
			•						· .								

84.6 97.7 FELDSPAR PHYRIC GABBRO

Fine-grained dark green massive with < 1 to 5 % 1-3 mm white

AF00159 84.5 85.5 1.0 77 8 165 (1

<5 410



FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CHEM87-37 5

From (m)	To (m)DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba) (ppm)
		feldspars and 1-4% finely disseminated leucoxene +/- ilmenite. Trace disseminated chalcopyrite. Lower contact is at 50 degrees to core axis.	AD02622	87.7	87.8	.1	234	n/a	108	n/a	n/a	146
		88.5 90.1 No feldspars. Core is dusted with a fine brown-beige alteration mineral (Fe-carbonate ?).				к. 						
97.7	99.	3 MAFIC ASH TUFF										
		Dark green fine-grained weak to moderate thermal biotite alteration. Bedding is at 50 degrees to core axis. Rock is altered and bedding is contorted between 98.2 and 98.6 m. Alteration obscures the lower contact	AF00160	98.3	99.3	1.0	600	1116	1000	3.5	274.3	2500
	•	98.1 99.2 Altered (bleached, quartz flooded and epidotization) zone with 0.5 % fracture controlled chalcopyrite.										
00.2	107	STITCTETED PEICTC INDIIIT THEF										
33.3	107.	Madium to dark grey (depending on sulphide content) Pelatively	100161	00.2	00 5		20500	2700 2	26100	70 E	1440	4000
		macsive siliceous hard fine-grained to aphyric. Up to 30 %	AF00161	99.5	99.5	.4	4900	3700 2	22000	10.0	2263	4000
		lanilli-sized felsic clasts (some with disseminated sulphides) and	AF00163	99.7	100 7	1 0	15400	4000	9800-	40.0	446	6300
		up to 5 % < 2mm feldspar crystals (most < 1 mm). Contorted and	AF00164	100.7	101.8	1.1	33800	- 76	6200	54 9	549	14000
		ripped up beds of cherty mafic tuff near the lower contact. Broken	AF00165	101.8	102.8	1.0	12500	135	1300	20	171	7900
		core at lower contact but it appears to be at 70 degrees to core	AD02623	102.3	102.4	.1	676	n/a	24	n/a	n/a	9750
		axis.	AF00166	102.8	103.5	.7	12800	38	800	21	69	9800
		SULPHIDES:.	AF00167	103.5	104.3	.8	1600	695	700	6	(69	8800
		99.3 - 99.5 m massive pyrrhotite - sphalerite - chalcopyrite -	AF00168	104.3	105.0	.7	2300	94	600	2	137	12000
		pyrite. 40 % pyrrhotite 20 % sphalerite 7 % chalcopyrite and 5 %	AF00169	105.0	105.5	.5	4800	124	7600	. 7	137	31000
		pyrite. The sulphidess appear to be bedded. Bedding is at 60	AF00170	105.5	106.0	.5	8100	62	300	12	480	30000
		degrees to core axis.	AF00171	106.0	106.5	.5	16500	194	300	26	789 3	24000
		99.5 - 99.7 m, 3 % finely disseminated pyrite 3-5 % galena (?) and 1 % chalcopyrite.	AF00172	106.5	107.1	.6	3300	284	200	6	69 3	15000
		99.7 - 101.8 7-10 %, pyrrhotite, 2-5 % chalcopyrite and trace-2 %										
		sphalerite. Sulphidess surround clasts forming a net texture. 20 %										
		finely disseminated pyrite and 7 % chalcopyrite between 99.7 and 99.8 m.										
		101.8 - 103.5 m, 3% chalcopyrite, 3-5% pyrrhotite as above and <1-5										
		* sphalerite.										
		103.5 - 104.3 m, 1-3% pyrite-pyrnotite, trace - 1% sphalerite.		· · · · .								
		Suiphidess are iracture controlled.										
		and trace sphalerite surrounding clasts.										
		105.0 - 105.5 m, 20 % pyrrhotite 3 % sphalerite and 2 %										
		charcopyrite. Bed of massive pyrrhotite at 105.2 m with a 3 mm band					÷ .					
		degrade to gove avia and the lever contact. The upper contact 1s at 50										
		agrees to core axis and the lower contact is at 40 degrees to core axis.										
		105.5 - 106.5 m, 20 % pyrrhotite 5 % chalcopyrite 3 % sphalerite										
		(finely disseminated). Sulphidess are net textured.										
		106.5 - 107.0 m, 30 % pyrrhotite 5 % pyrite and trace chalcopyrite.										

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)	DESCRIPTION	Sa	mple No.	From (m)	To (m)	Width (m)	Cu (ppm)	Pb (ppm)	ł
	Massive pyrrhotite - pyrite between 106.8 and 106.9 m.								
	104.7 Bedding is at 60 degrees to core axis.								
	106.9 107.0 Early andesitic dyke or bleached altered zone at 80 degrees to core axis.								
107.1 108.	CARBONATIZED MAFIC TUFF OR FLOW Grey-green fine-grained moderate fracture controlled carbonatization and weak pervasive biotite alteration. Nil sulphidess. Broken core at lower contact.	AFO	0173	107.1	108.1	1.0	600	125	

107.4 108.0 Blocky, highly fractured core.

108.1 130.6 MASSIVE MAFIC FLOWS AND MINOR MAFIC TUFFS

Dark green massive and fine-grained. Occasional epidote-carbonate patch <10.0 cm wide with up to 3% pyrite. Locally up to 3 % <2 mm wide chlorite spots. Occasional carbonate +/- quartz veinlet with red-brown < 5 mm wide alteration envelope (biotization?) above 124.0 m. Below 124.0 m several bleached zones <10.0 cm wide with up to 30 % <1-5 mm amphiboles. Epidote spots < 5 mm in diameter are common. Up to 3 % finely disseminated white mineral (leucoxene ?). Trace disseminated pyrite chalcopyrite and trace sphalerite associated with carbonate veinlets. Lower contact is arbitrarily placed where chloritized hornblende crystals become conspicuous. STRUCTURE:.

Flow contact is at 60 degrees to core axis at 108.7 m. Flow contact is at 60 degrees to core axis at 109.2 m. Bedding is at 78 degrees to core axis at 120.8 m. Bedding is at 67 degrees to core axis at 127.2 m.

- 115.1 116.5 Mafic tuff (?). Less than 5 % ash to lapilli-sized elongated chloritic fragments. Weak thermal biotite alteration.
- 120.0 121.1 Reworked mafic tuff. Rip-up beds of mafic ash tuff in a slightly coarser mafic tuffaceous matrix are common.
- 126.6 Several white donut-shaped spots 3 mm in diameter.

127.0 127.2 Ripped up beds < 0.5 cm thick of pale green cherty mafic tuffaceous sediments are common.

130.6 170.4 HORNBLENDE-BEARING MAFIC FLOW

Massive medium green fine-grained with up to 5 % chloritized subhedral hornblende crystals 1-3 mm in diameter. Occasional zones of weak to moderate fracture controlled carbonatization up to 0.3 m long. Below 141.0 m weak to nil patchy and fracture controlled

AD02624	109.7	109.8	.1	205	n/a	71	n/a	n/a	629
AD02625	124.0	124.1	.1	191	n/a	92	n/a	n/a	142

HOLE No:

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Page Number

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Zn

(mag

300

Αq

(ppm)

Au

Ba

(ppb) (ppm)

69 1700

AD02626	134.6	134.7	.1	191	n/a	60	n/a	n/a	162
AD02627	146.9	147.0	.1	511	n/a	57	n/a	n/a	196
AD02628	159.8	159.9	.1	193	n/a	83	n/a	n/a	218
AD02629	168.7	168.8	.1	82	n/a	33	n/a	n/a	187

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CHEM87-37 7

Sample	From	То	Width	Cu	Pb	Zn	Αq	Au	Ba
No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

From To

(m) (m)

epidotization. Up to 5 % epidote +/- carbonate spots < 1.0 cm in diameter below 166.5 m. Nil-trace disseminated chalcopyrite.

-----DESCRIPTION-----

158.9 159.9 Broken rubbly core.

170.4 172.0 MAFIC ASH TUFF

Medium green fine-grained fine bedded to laminated. Bedding is at 35 degrees to core axis. Nil-1 % fracture controlled pyrite. Moderate thermal biotite alteration below 171.5 m. Lower contact is at 40 degrees to core axis.

172.0 172.9 MIXED TUFFACEOUS SEDIMENTS

Grades from a light grey-brown dirty quartz eye tuff into a medium brown lithic lapilli tuff. Nil to moderate pervasive carbonatization

172.9 174.6 EPIDOTE SPOTTED MAFIC TUFF

Massive medium green with up to 5 % < 0.5 cm epidote spots some of which may be altered clasts. Nil sulphidess. 0.2 cm wide bleached carbonate-quartz alteration patch at the lower contact.

174.6 175.4 MIXED CHERTY TUFFACEOUS SEDIMENTS AND FELSIC FELDSPAR CRYSTAL TUFF Finely bedded pale green cherty tuffaceous sediments with a 0.2 m wide bed of grey-green feldspar crystal tuff in the middle of the unit. Bedding is very contorted for 0.2 m from upper contact. Bedding is at 75 degrees to core axis. Broken core at lower contact.

175.4 180.7 HORNBLENDE-BEARING MAFIC FLOW

Massive medium green with up to 10 % dark green 1-3 mm chloritized AD02630 175.7 175.8 hornblende crystals. Occasional 2-5 mm epidote spot. Nil-trace chalcopyrite. Lower contact is a slip at 50 degrees to core axis.

n/a

122 n/a

n/a 224

.1 236

180.7 201.5 THERMAL BIOTITE ALTERED MAFIC ASH TUFF Green-brown to medium brown depending on the strength of thermal biotite alteration. Relatively well bedded over the entire section. Occasional bed of pale green to dark brown cherty mafic tuffaceous sediment usually < 0.5 cm thick and very minor sections of brown immature volcanic wacke. Trace to 1 % pyrite. Broken core at the lower contact. BEDDING ANGLES:. Bedding is at 63 degrees to core axis at 180.8 m (appears to fine DOWN HOLE). Bedding is at 58 degrees to core axis at 181.4 m. Bedding is at 58 degrees to core axis at 183.5 m. Bedding is at 58 degrees to core axis at 185.1 m. Bedding is at 58 degrees to core axis at 186.6 m.

AD02631 184.4	184.5	.1	189	n/a	94	n/a	n/a	881
AD02632 185.7	185.8	.1	228	n/a	101	n/a ·	n/a	504
AD02633 199.1	199.2	.1	277	n/a	81	n/a	n/a	605



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FALCONBRIDGE LIMITED

DIAMOND DRILL LOG



HOLE No: Page Number CHEM87-37 8

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	No.	(m)	(m)	(m)	(ppm)	(ppm)	(ppm)	(ppm)	(ppb) (pp	m)

USALL

183.9 184.0 Bed of pale green cherty tuffaceous sediments.

Bedding is at 55 degrees to core axis at 187.0 m. Bedding is at 55 degrees to core axis at 191.6 m. Foliation is at 60 degrees to core axis at 193.7 m. Bedding is at 57 degrees to core axis at 195.3 m. Bedding is at 54 degrees to core axis at 196.4 m. Bedding is at 60 degrees to core axis at 200.3 m.

190.9 191.4 Cobble conglomerate. Angular cobble-sized clasts of medium green mafic tuff with 2 % dark green chloritized flattened lapilli-sized clasts in a dark brown thermal biotite altered volcanic wacke with 3 % finely disseminated pyrite.

-----DESCRIPTION------

- 193.6 194.3 Rock is sheared at 60 degrees to core axis and has a streaky, mylonitic appearance.
- 201.5 205.2 HORNBLENDE-BEARING MAFIC FLOW/TUFF

Massive medium green (1-3 %, 1-3 mm black hornblende crystals and occasional epidote +/- carbonate clots (0.5 m in diameter. Trace pyrite chalcopyrite and sphalerite associated with calcite veinlets. Calcite veinlets often have a red-brown alteration envelope (5 mm) wide. Lower contact is at 65 degrees to core axis.

205.2 216.3 THERMAL BIOTITE ALTERED IMMATURE VOLCANIC WACKE AND MINOR CHERTY TUFFACEOUS BEDS

> Dark brown to light green-brown. Similiar to 180.7 to 201.5 m but somewhat more sedimentary in appearance. Mafic to intermediate in composition. Occasional light to dark brown bed of cherty sediment. Patchy carbonatization between 207.0 and 210.0 m. Lower contact is at 60 degrees to core axis. BEDDING ANGLES:.

Bedding is at 60 degrees to core axis at 205.5 m. Bedding is at 62 degrees to core axis at 208.5 m. Bedding is at 55 degrees to core axis at 210.8 m.

214.0 214.2 Rip-up beds and clasts of pale green cherty tuffaceous sediments.

216.3 219.8 GABBRO

Massive dark green fine-grained with $5-7 \ 1-3 \ mm$ white feldspars below 217.5 m. Moderate pervasive carbonatization above 217.5 m and weak fracture controlled carbonate alteration below this depth. 2 $\$ finely disseminated ilmenite. Trace disseminated pyrite and chalcopyrite.

AD02634	202.2	202.3	.1	467	n/a	96	n/a	n/a	595

AD02635 212.0 212.1 .1 92 n/a 46 n/a n/a 1740

AD02636 219.7 219.8 .1 307 n/a 97 n/a n/a 804

APPENDIX

С

ANALYTICAL RESULTS -- METALS

SAMPLE NUMBER	FROM	TO	BA ((ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
AB21839	129.40	130.00	1600.0	63.0	40.0	<0.5	<5.0	4.0	4.0	10:0	<5.0	<1.0	2.0	61.2			
AB21840	130.00	131.00	1600.0	80.0	61.0	<0.5	<5.0	7.0	5.0	14.0	<5.0	<1.0	2.0	56.7			
AB21841	131.00	132.00	1200.0	31.0	56.0	<0.5	<5.0	4.0	4.0	7.0	<5.0	<1.0	<1.0	35.6			
AB21842	132.00	133.00	1200.0	47.0	53.0	<0.5	5.0	6.0	3.0	11.0	6.0	<1.0	1.0	47.0			
AB21843	133.00	134.00	1200.0	48.0	54.0	<0.5	<5.0	5.0	2.0	8.0	6.0	<1.0	1.0	47.1			
AB21844	134.00	135.00	1600.0	24.0	118.0	<0.5	5.0	8.0	6.0	17.0	<5.0	1.0	1.0	16.9			· .
AB21845	135.00	136.00	870.0	55.0	56.0	<0.5	<5.0	5.0	2.0	12.0	<5.0	<1.0	1.0	49.5			
AB21846	136.00	137.00	1400.0	38.0	65.0	<0.5	10.0	6.0	4.0	31.0	8.0	<1.0	1.0	36.9			
AB21847	137.00	138.00	1400.0	59.0	93.0	<0.5	15.0	8.0	5.0	24.0	8.0	<1.0	1.0	38.8	÷		
AB21848	138.00	139.00	2300.0	144.0	198.0	0.5	35.0	8.0	4.0	75.0	5.0	2.0	2.0	42.1			
AB21849	139.00	140.00	390.0	199.0	89.0	<0.5	10.0	33.0	46.0	<5.0	<5.0	<1.0	<1.0	69.1			
AB21850	173.60	174.60	110.0	154.0	77.0	<0.5	<5.0	37.0	39.0	<5.0	<5.0	<1.0	<1.0	66.7			
AB21851	174.60	175.20	<20.0	808.0	42.0	0.5	5.0	15.0	27.0	6.0	<5.0	<1.0	<1.0	95.1			
AB21852	175.20	176.20	50.0	229.0	75.0	<0.5	10.0	34.0	57.0	7.0	<5.0	<1.0	<1.0	75.3			
AB21853	181.20	182.20	70.0	192.0	61.0	<0.5	5.0	27.0	37.0	8.0	<5.0	<1.0	<1.0	75.9			
AB21854	182.20	183.00	90.0	204.0	51.0	<0.5	<5.0	28.0	35.0	13.0	10.0	<1.0	1.0	80.0			
AB21855	183.00	184.00	<20.0	145.0	76.0	<0.5	10.0	32.0	42.0	6.0	<5.0	<1.0	<1.0	65.6			

Hole No. CHEM-87-20

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	МО (ррж)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
										• • • • • • • • • • • • • • • • • • •				***********		199 dia disetta tanàn am-am-am-am-am-am-am-am-	
AB21856	192.80	193.80	150.0	382.0	72.0	<0.5	10.0	25.0	44.0	6.0	<5.0	<1.0	<1.0	84.1			
AB21857	193.80	194.80	120.0	1043.0	221.0	<0.5	20.0	105.0	193.0	21.0	<5.0	<1.0	<1.0	82.5			
AB21858	194.80	195.30	50.0	96.0	93.0	<0.5	<5.0	26.0	40.0	12.0	<5.0	<1.0	<1.0	50.8			
AB21859	195.30	195.80	100.0	2269.0	106.0	1.6	10.0	34.0	47.0	6.0	<5.0	<1.0	<1.0	95.5			a An an An
AB21860	195.80	196.80	60.0	158.0	92.0	<0.5	<5.0	37.0	82.0	10.0	<5.0	<1.0	<1.0	63.2			
AB21861	312.80	313.80	70.0	719.0	79.0	<0.5	5.0	30.0	43.0	9.0	<5.0	<1.0	1.0	90.1			
AB21862	313.80	314.40	<20.0	4300.0	107.0	3.8	85.0	25.0	21.0	7.0	23.0	5.0	2.0	97.6			
AB21863	314.40	315.40	650.0	575.0	37.0	<0.5	<5.0	15.0	15.0	<5.0	9.0	<1.0	3.0	93.9			•
AB21864	315.40	316.00	810.0	167.0	8.0	<0.5	<5.0	7.0	4.0	7.0	13.0	<1.0	8.0	95.4			
AB21865	316.00	317.00	1100.0	129.0	7.0	<0.5	<5.0	6.0	2.0	11.0	8.0	<1.0	6.0	94.8	5		
AB21866	317.00	318.00	820.0	41.0	8.0	<0.5	<5.0	3.0	4.0	9.0	<5.0	<1.0	3.0	83.7	• • •		
AB21867	318.00	319.00	810.0	85.0	7.0	2.1	<5.0	4.0	3.0	16.0	6.0	<1.0	6.0	92.4			
AB21868	319.00	320.00	840.0	135.0	4.0	<0.5	<5.0	6.0	2.0	11.ò	5.0	<1.0	3.0	97.1	· · · · · ·		
AB21869	320.00	321.00	1100.0	125.0	3.0	<0.5	<5.0	8.0	3.0	6.0	6.0	<1.0	4.0	97.7			
AB21870	321.00	322.00	1000.0	32.0	1.0	<0.5	<5.0	4.0	2.0	5.0	7.0	<1.0	3.0	97.0			
AB21871	322.00	323.00	920.0	12.0	2.0	<0.5	<5.0	2.0	3.0	<5.0	<5.0	<1.0	6.0	85.7			
AB21872	323.00	324.00	1100.0	24.0	1.0	<0.5	<5.0	2.0	1.0	<5.0	<5.0	<1.0	3.0	96.0			
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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
			· .											•••••••••••••••••••••••••••••••••••••••			
AB21873	324.00	325.00	1200.0	36.0	1.0	<0.5	<5.0	3.0	3.0	<5.0	<5.0	<1.0	6.0	97.3			
AB21874	325.00	326.00	980.0	247.0	46.0	<0.5	5.0	19.0	25.0	<5.0	<5.0	<1.0	6.0	84.3			
AB21875	326.00	327.00	940.0	126.0	4.0	<0.5	<5.0	9.0	7.0	7.0	<5.0	<1.0	7.0	96.9			
AB21876	327.00	328.00	1200.0	47.0	4.0	<0.5	<5.0	8.0	3.0	6.0	<5.0	<1.0	4.0	92.2			
AB21877	328.00	329.00	1100.0	40.0	3.0	<0.5	<5.0	6.0	2.0	5.0	<5.0	<1.0	7.0	93.0			
AB21878	329.00	330.00	950.0	53.0	9.0	<0.5	<5.0	6.0	2.0	<5.0	<5.0	<1.0	4.0	85.5			
AB21879	330.00	331.00	880.0	63.0	6.0	<0.5	<5.0	10.0	4.0	7.0	<5.0	<1.0	6.0	91.3			
AB21880	331.00	332.00	890.0	79.0	3.0	<0.5	10.0	7.0	2.0	<5.0	<5.0	<1.0	4.0	96.3			
AB21503	332.00	333.00	1000.0	148.0	5.0	<0.5	<5.0	11.0	5.0	13.0	8.0	<1.0	7.0	96.7		Aller and and a second	
AB21504	333.00	334.00	860.0	127.0	7.0	<0.5	<5.0	8.0	5.0	8.0	7.0	<1.0	7.0	94.8			
AB21505	334.00	334.90	1000.0	158.0	12.0	<0.5	5.0	14.0	32.0	12.0	10.0	<1.0	4.0	92.9			

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SAMPLE NUMBER	FROM	TO	BA (ppm)	; CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	KO (ppm)	CU/(CU+ZN) + 100	ROCK	CODES ALT	MI
****			ہے کے ان ان ان ان ان ان اور														••••••••••••••••••••••••••••••••••••••
AB18969	7.00	8.00	900.0	5.0	38.0	<0.5	<5.0	<1.0	<1.0	10.0	<5.0	<1.0	<1.0	11.6			
AB18970	11.00	12.00	1200.0	19.0	47.0	<0.5	<5.0	4.0	5.0	16.0	42.0	<1.0	1.0	28.8			
AB18971	37.40	38.40	890.0	34.0	67.0	<0.5	<5.0	14.0	9.0	10.0	<5.0	<1.0	<1.0	33.7			
AB18972	52.60	53.60	700.0	11.0	9.0	<0.5	<5.0	1.0	2.0	16.0	<5.0	<1.0	<1.0	55.0			
AB17200	58.00	59.00	950.0	18.0	41.0	<0.5	<5.0	5.0	3.0	9.0	<5.0	<1.0	3.0	30.5			
AB18451	59.00	60.00	1200.0	22.0	53.0	<0.5	<5.0	8.0	2.0	9.0	<5.0	<1.0	1.0	29.3			
AB18452	60.00	61.00	930.0	14.0	36.0	<0.5	<5.0	5.0	2.0	7.0	<5.0	<1.0	1.0	28.0			
AB18453	61.00	62.00	780.0	13.0	38.0	<0.5	<5.0	6.0	2.0	7.0	<5.0	<1.0	1.0	25.5			
AB18973	88.50	89.50	370.0	49.0	42.0	<0.5	<5.0	19.0	38.0	6.0	<5.0	<1.0	<1.0	53.8			
AB18974	89.50	91.00	490.0	59.0	54.0	<0.5	<5.0	18.0	33.0	14.0	<5.0	<1.0	<1.0	52.2	· · ·		
AB18975	91.00	92.00	660.0	68.0	77.0	<0.5	<5.0	26.0	37.0	10.0	<5.0	<1.0	<1.0	46.9			
AB18976	92.00	93.00	470.0	34.0	63.0	<0.5	<5.0	20.0	29.0	9.0	<5.0	<1.0	<1.0	35.0			
AB18977	93.00	94.00	940.0	25.0	50.0	<0.5	<5.0	7.0	30.0	6.0	<5.0	<1.0	1.0	33.3			
AB18978	152.20	153.20	970.0	15.0	70.0	<0.5	<5.0	11.0	4.0	10.0	<5.0	<1.0	<1.0	17.6			
AB18979	153.20	153.30	1200.0	8.0	17.0	<0.5	<5.0	2.0	2.0	11.0	6.0	<1.0	1.0	32.0			
AB18980	153.30	154.30	1100.0	6.0	28.0	<0.5	<5.0	2.0	<1.0	7.0	<5.0	<1.0	1.0	17.6			
AB18981	154.30	155.40	820.0	2.0	15.0	<0.5	<5.0	2.0	1.0	13.0	<5.0	<1.0	1.0	11.8			

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	АU (ррђ)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	СU/(CU+ZN) + 100	ROCK	CODES ALT	MIN
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AB18999	247.30	248.80	790.0	17.0	107.0	<0.5	<5.0	8.0	2.0	12.0	<5.0	<1.0	2.0	13.7			
AB19000	248.50	249.50	1200.0	26.0	133.0	<0.5	<5.0	15.0	4.0	13.0	<5.0	<1.0	4.0	16.4			
AB17151	269.80	270.80	630.0	35.0	47.0	<0.5	<5.0	5.0	4.0	10.0	<5.0	<1.0	<1.0	42.7			
AB17152	270.80	271.20	760.0	64.0	100.0	<0.5	<5.0	26.0	31.0	13.0	<5.0	<1.0	<1.0	39.0			
AB17153	271.20	272.20	630.0	23.0	41.0	<0.5	<5.0	3.0	1.0	6.0	<5.0	<1.0	<1.0	35.9			
AB17154	285.50	286.40	890.0	8.0	5.0	<0.5	<5.0	2.0	1.0	11.0	8.0	<1.0	<1.0	61.5			
AB17155	286.40	287.40	830.0	9.0	4.0	<0.5	<5.0	3.0	1.0	8.0	9.0	<1.0	<1.0	69.2			
AB17156	288.00	288.60	780.0	75.0	60.0	<0.5	<5.0	18.0	17.0	6.0	<5.0	<1.0	<1.0	55.6			
AB17157	299.60	300.60	890.0	63.0	99.0	<0.5	<5.0	13.0	9.0	11.0	<5.0	<1.0	<1.0	38.9	~		
AB17158	300.60	302.00	860.0	27.0	44.0	<0.5	<5.0	6.0	3.0	14.0	6.0	<1.0	<1.0	38.0	а" "!-		
AB17159	302.00	303.00	990.0	34.0	170.0	<0.5	<5.0	4.0	3.0	14.0	11.0	<1.0	<1.0	16.7			
AB17160	303.00	304.10	800.0	9.0	115.0	<0.5	<5.0	4.0	<1.0	36.Ò	<5.0	<1.0	<1.0	7.3			
AB17161	304.10	305.40	530.0	96.0	113.0	<0.5	<5.0	22.0	15.0	10.0	<5.0	<1.0	<1.0	45.9			
AB17162	305.40	306.10	890.0	6.0	39.0	<0.5	<5.,0	5.0	2.0	8.0	6.0	<1.0	<1.0	13.3			
AB17163	306.10	306.20	1500.0	64.0	127,0	<0.5	<5.0	19.0	5.0	5.0	<5.0	<1.0	<1.0	33.5			
AB17164	306.20	307.00	930.0	24.0	27.0	<0.5	<5.0	3.0	<1.0	8.0	5.0	<1.0	<1.0	47.1			
AB17165	307.00	308.00	950.0	18.0	29.0	<0.5	<5.0	4.0	2.0	10.0	5.0	<1.0	<1.0	38.3			

Hole No. CHEM-87-21

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SAMPLE NUMBER	FROM	TO	BA (ppm)	i CU (ppm)	ZN (ppm)	AG (ppm.)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
									********							• • • • • • • • • • • • • • • • • • •	
AB17166	308.00	309.00	990.0	14.0	52.0	<0.5	<5.0	2.0	<1.0	8.0	9.0	<1.0	<1.0	21.2			
AB17167	309.00	310.10	980.0	39.0	65.0	<0.5	<5.0	4.0	2.0	9.0	7.0	<1.0	1.0	37.5	•		
AB17168	310.00	310.20	1700.0	105.0	192.0	<0.5	<5.0	9.0	11.0	10.0	<5.0	<1.0	<1.0	35.3			
AB17169	310.20	311.50	970.0	18.0	63.0	<0.5	<5.0	3.0	3.0	10.0	8.0	<1.0	1.0	22.2			
AB17170	311.50	312.20	80.0	50.0	78.0	<0.5	<5.0	22.0	198.0	14.0	<5.0	<1.0	<1.0	39.1			
AB17171	321.00	322.00	980.0	43.0	68.0	<0.5	<5.0	3.0	4.0	9.0	8.0	<1.0	2.0	38.7			
AB17172	322.00	323.00	1000.0	44.0	47.0	<0.5	<5.0	3.0	3.0	7.0	10.0	<1.0	2.0	48.3			
AB17173	323.00	324.00	1000.0	77.0	71.0	<0.5	<5.0	2.0	<1.0	7.0	10.0	<1.0	3.0	52.0			
AB17174	324.00	325.00	720.0	87.0	96.0	<0.5	<5.0	9.0	13.0	7.0	<5.0	<1.0	<1.0	47.5			
AB17175	325.00	326.00	810.0	77.0	95.0	<0.5	<5.0	13.0	16.0	10.0	<5.0	<1.0	<1.0	44.8	· · ·		
AB17176	326.00	326.30	110.0	32.0	109.0	<0.5	<5.0	18.0	50.0	8.0	<5.0	<1.0	<1.0	22.7			
AB17177	326.30	326.70	1200.0	2.0	63.0	<0.5	<5.0	2.0	3.0	19.0	7.0	<1.0	<1.0	3.1			
AB17178	327.30	328.10	1200.0	5.0	67.0	<0.5	<5.0	3.0	3.0	<5.0	9.0	<1.0	<1.0	6.9		•	
AB17179	328.10	329.10	1200.0	4.0	54.0	<0.5	<5.0	2.0	1.0	6.0	11.0	<1.0	<1.0	6.9			
AB17180	329.10	330.10	1100.0	29.0	189.0	<0.5	<5.0	13.0	20.0	8.0	5.0	<1.0	<1.0	13.3			
AB17181	330.10	331.10	1400.0	56.0	125.0	<0.5	<5.0	12.0	20.0	10.0	<5.0	<1.0	<1.0	30.9			
AB17182	331.10	332.10	1200.0	35.0	159.0	<0.5	<5.0	4.0	2.0	5.0	9.0	<1.0	<1.0	18.0			

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppa)	CD (ppm)	HO (ppm)	CU/(CU+ZN) ROCK * 100	CODES ALT MIN
					n an										
AB17183	332.10	333.10	1300.0	30.0	650.0	<0.5	<5.0	3.0	1.0	6.0	6.0	2.0	<1.0	4.4	
AB17184	333.10	333.80	1100.0	5.0	97.0	<0.5	<5.0	3.0	2.0	7.0	8.0	<1.0	<1.0	4.9	
AB17185	333.80	335.00	1300.0	108.0	465.0	<0.5	30.0	16.0	25.0	9.0	<5.0	<1.0	<1.0	18.9	
AB17186	335.00	336.00	1400.0	79.0	256.0	<0.5	10.0	13.0	8.0	<5.0	6.0	<1.0	<1.0	23.6	
AB17187	336.00	337.00	1200.0	51.0	163.0	<0.5	<5.0	4.0	5.0	14.0	<5.0	<1.0	1.0	23.8	
AB17188	337.00	338.00	970.0	47.0	308.0	<0.5	<5.0	3.0	2.0	13.0	7.0	1.0	2.0	13.2	
AB17189	338.00	339.00	810.0	36.0	43.0	<0.5	<5.0	3.0	13.0	7.0	<5.0	<1.0	3.0	45.6	
AB17190	339.00	340.00	820.0	6.0	55.0	<0.5	<5.0	3.0	3.0	18.0	5.0	<1.0	1.0	9.8	
AB17191	340.00	341.00	1100.0	52.0	290.0	<0.5	20.0	9.0	8.0	6.0	<5.0	2.0	1.0	15.2	
AB17192	341.00	342.00	1000.0	45.0	173.0	<0.5	5.0	13.0	17.0	7.0	<5.0	<1.0	<1.0	20.6	
AB17193	342.00	343.00	340.0	104.0	380.0	<0.5	10.0	46.0	63.0	6.0	<5.0	<1.0	<1.0	21.5	
AB17194	343.00	344,00	200.0	120.0	338.0	<0.5	<5.0	44.0	81.0	<5.0	<5.0	<1.0	<1.0	26.2	
AB17195	344.00	345.00	250.0	38.0	260.0	<0.5	<5.0	23.0	52.0	<5.0	<5.0	<1.0	<1.0	12.8	
AB17196	345.00	346.00	740.0	29.0	132.0	<0.5	5.0	6.0	8.0	5.0	<5.0	<1.0	4.0	18.0	
AB17197	346.00	347.00	910.0	13.0	82.0	<0.5	<5.0	4.0	6.0	9.0	<5.0	<1.0	1.0	13.7	
AB17198	347.00	348.00	870.0	30.0	125.0	<0.5	<5.0	4.0	4.0	8.0	<5.0	2.0	2.0	19.4	
AB17199	348.00	349.00	720.0	6.0	25.0	<0.5	<5.0	7.0	4.0	6.0	5.0	<1.0	<1.0	19.4	
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Hole No. CHEM-87-21

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ppm)	СU/(CU+ZN) * 100	ROCK	CODES ALT	MIN

AB18454	396.50	397.00	<20.0	83.0	69.0	<0.5	10.0	20.0	47.0	12.0	8.0	<1.0	<1.0	54.6			
AB18455	397.00	398.00	1600.0	50.0	59.0	<0.5	<5.0	6.0	12.0	13.0	6.0	<1.0	<1.0	45.9			
AB18456	398.00	399.00	2000.0	38.0	46.0	<0.5	<5.0	5.0	5.0	12.0	<5.0	<1.0	1.0	45.2			
AB18457	399.00	400.00	1700.0	72.0	25.0	<0.5	40.0	5.0	4.0	15.0	18.0	<1.0	2.0	74.2			
AB18458	400.00	401.00	880.0	18.0	13.0	<0.5	10.0	4.0	4.0	13.0	16.0	<1.0	2.0	58.1			
AB18459	401.00	401.70	830.0	19.0	15.0	<0.5	<5.0	3.0	3.0	10.0	12.0	<1.0	2.0	55,9			
AB18460	401.70	403.00	910.0	18.0	31.0	<0.5	<5.0	4.0	5.0	19.0	11.0	<1.0	2.0	36.7			
AB18461	403.00	404.10	1300.0	38.0	23.0	<0.5	<5.0	4.0	5.0	14.0	11.0	<1.0	2.0	62.3			
AB18462	404.10	405.00	<20.0	193.0	58.0	<0.5	10.0	28.0	59.0	5.0	21.0	<1.0	<1.0	76.9	\$		
AB18463	433.00	434.10	60.0	216.0	68.0	<0.5	<5.0	24.0	50.0	<5.0	<5.0	<1.0	<1.0	76.1	***	ta di secondo di second Secondo di secondo di se	
AB18470	434.10	435.00	2900.0	303.0	307.0	<0.5	10.0	11.0	13.0	27.0	6.0	2.0	3.0	49.7			
AB18471	435.00	436.00	1600.0	206.0	72.0	<0.5	10.0	7.0	5.0	7.0	9.0	<1.0	4.0	74.1			
AB18472	436.00	437.00	1900.0	234.0	39.0	<0.5	5.0	8.0	11.0	6.0	17.0	<1.0	6.0	85.7			
AB18464	437 10	438 10	<20.0	275.0	73.0	<0.5	(50	27.0	56.0	<5.0	<5.0	<1.0	1.0	79.0			
AR18465	439 10	439 90	70.0	204 0	62.0	<0.5	(5.0	24.0	51.0	(5.0	<5.0	<1.0	<1.0	76.7			
AP19473	430.10	430.70	2600 0	219 0	52 0	70 5	<5.0	15.0	26.0	(5.0	(5.0	(1.0	1.0	85.9			
AD10474	437.00	441 00	2600 0	310.V	70.0	20 5	<5 A	14 0	15 0	14.0	14 0	<1.0	A 0	83 1			
HD104/4	440,00	311.VV	2000.0	J77.V	/	10.3		14.4	12.0	11.4	11.4	11.0	7.V	03.1			

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CHEM-87-21

Page No.



SAMPLE NUMBER	FROM	TO	BA (ppm)	ⁱ CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
															• • • • • • • • • • • • • • • • • • •		
AB18475	441.00	442.00	2400.0	273.0	56.0	<0.5	<5.0	18.0	25.0	11.0	<5.0	<1.0	2.0	83.0			
AB21501	442.00	443.00	2600.0	428.0	54.0	<0.5	<5.0	21.0	21.0	9.0	<5.0	<1.0	2.0	88.8			
AB21502	443.00	444.30	3000.0	154.0	63.0	<0.5	<5.0	9.0	16.0	<5.0	<5.0	<1.0	1.0	71.0			
AB18466	444.30	445.30	60.0	216.0	54.0	<0.5	<5.0	23.0	45.0	<5.0	<5.0	<1.0	<1.0	80.0			
AB18467	476.00	477.00	40.0	6000.0	114.0	2.1	20.0	45.0	70.0	8.0	12.0	5.0	<1.0	98.1			
AB18468	477.00	478.00	50.0	624.0	49.0	<0.5	<5.0	19.0	35.0	<5.0	<5.0	<1.0	<1.0	92.7			
AB18469	492.00	493.00	100.0	276.0	48.0	<0.5	<5.0	19.0	46.0	<5.0	<5.0	<1.0	<1.0	85.2			

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SAMPLE NUMBER	FROM	то	BA (ppm)	; CU (ppm)	2N (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) ROCK * 100	CODES ALI MIN
							antan araw Antana araw								
AB15353	48.20	48.30	1200.0	6.0	19.0	<0.5	<5.0	<1.0	1.0	10.0	6.0	<1.0	<1.0	24.0 TFAYEL	? A
AB19902	59.00	60.00	700.0	26.0	18.0	<0.5	<5.0	2.0	2.0	8.0	5.0	<1.0	2.0	59.1	
AB19903	60.00	61.00	840.0	5.0	43.0	<0.5	<5.0	2.0	2.0	67.0	7.0	<1.0	2.0	10.4	
AB19904	61.00	62.00	1000.0	8.0	16.0	<0.5	<5.0	1.0	1.0	58.0	<5.0	<1.0	1.0	33.3	
AB19905	62.00	63.00	1000.0	4.0	26.0	<0.5	<5.0	1.0	5.0	53.0	7.0	<1.0	2.0	13.3	
AB19906	63.00	64.00	1000.0	5.0	25.0	<0.5	<5.0	4.0	2.0	19.0	6.0	<1.0	1.0	16.7	
AB19907	64.00	65.00	950.0	5.0	29.0	<0.5	<5.0	4.0	2.0	23.0	6.0	<1.0	2.0	14.7	
AB19908	79.00	80.00	480.0	7.0	18.0	<0.5	<5.0	<1.0	1.0	16.0	<5.0	<1.0	<1.0	28.0	
AB19909	91.30	92.30	1200.0	28.0	25.0	<0.5	<5.0	4.0	5.0	6.0	65.0	<1.0	2.0	52.8	
AB19910	97.00	98.00	970.0	29.0	36.0	<0.5	<5.0	7.0	12.0	9.0	363.0	<1.0	2.0	44.6	
AB21551	363.00	364.00	160.0	78.0	84.0	<0.5	<5.0	36.0	191.0	12.0	9.0	<1.0	<1.0	48.2	
AB21552	364.00	365.00	160.0	269.0	119.0	<0.5	5.0	36.0	130.0	<5.Q	<5.0	<1.0	<1.0	69.3	
AB21553	365.00	366.00	50.0	57.0	84.0	<0.5	5.0	19.0	64.0	<5.0	<5.0	<1.0	<1.0	40.4	
AB21554	366.00	367.00	40.0	161.0	63.0	<0.5	<5.0	18.0	54.0	5.0	<5.0	<1.0	<1.0	71.9	
AB21555	367.00	368.00	60.0	336.0	96.0	<0.5	<5.0	25.0	79.0	<5.0	<5.0	<1.0	<1.0	77.8	
AB21556	377.00	378.00	140.0	252.0	98.0	<0.5	<5.0	25.0	74.0	5.0	<5.0	<1.0	<1.0	72.0	

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SAMPLE NUMBER	FROM	TO	BA (ppm)	(ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
<u> </u>												***			بي ميرين بل بلامل بن بن بن بن بن بن بن بن الد		
AB21506	9.00	10.00	1000.0	11.0	30.0	<0.5	<5.0	2.0	1.0	<5.0	<5.0	<1.0	1.0	26.8			
AB21507	10.00	11.00	1300.0	15.0	117.0	<0.5	<5.0	8.0	9.0	25.0	<5.0	<1.0	1.0	11.4			
AB21508	11.00	12.00	1200.0	8.0	37.0	<0.5	<5.0	2.0	1.0	12.03	<5.0	<1.0	1.0	17.8			
AB21509	15.10	16.10	880.0	24.0	35.0	<0.5	<5.0	4.0	8.0	5.0	<5.0	<1.0	1.0	40.7			
AB21510	16.10	16.60	350.0	40.0	198.0	<0.5	<5.0	29.0	144.0	<5.0	<5.0	<1.0	<1.0	16.8			
AB21511	16.60	17.60	830.0	45.0	39.0	<0.5	<5.0	5.0	12.0	9.0	<5.0	<1.0	4.0	53.6			
AB21512	33.00	34.00	1000.0	22.0	79.0	<0.5	<5.0	· 7.0	11.0	11.0	<5.0	<1.0	1.0	21.8			
AB21513	34.00	35.00	1300.0	14.0	45.0	<0.5	<5.0	3.0	1.0	5.0	<5.0	<1.0	<1.0	23.7			
AB21514	35.00	36.00	1100.0	4.0	34.0	<0.5	<5.0	2.0	<1.0	6.0	<5.0	<1.0	<1.0	10.5			
AB21515	48.00	49.00	1300.0	6.0	24.0	<0.5	<5.0	2.0	2.0	5.0	<5.0	<1.0	<1.0	20.0			
AB21516	49.00	50.00	1500.0	15.0	59.0	<0.5	<5.0	15.0	2.0	<5.0	<5.0	<1.0	<1.0	20.3			N
AB21517	50.50	51.50	990.0	13.0	37.0	<0.5	<5.0	5.0	<1.0	9.0	<5.0	<1.0	6.0	26.0			
AB21518	72.00	73.00	1000.0	9.0	27.0	<0.5	<5.0	1.0	<1.0	6.0	<5.0	<1.0	<1.0	25.0			
AB21519	97.00	98.00	980.0	2.0	27.0	<0.5	<5.0	1.0	<1.0	7.0	<5.0	<1.0	<1.0	6.9			
AB21520	126.00	127.00	530.0	4.0	70.0	<0.5	<5.0	7.0	<1.0	<5.0	<5.0	<1.0	<1.0	5.4			
AB21521	189.50	190.40	1300.0	75.0	2863.0		20.0	3.0	1.0	273.0	<5.0	22.0	5.0	2.5			
AB21522	190.40	191.30	1200.0	1014.0	480.0	<0.5	20.0	8.0	2.0	115.0	<5.0	1.0	2.0	67.9			
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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppd)	CO (ppm)	NI (ppm.)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	СU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
		ف کا او ان پر ان ان این در ای هر ا					******			·							
AB21523	191.30	192.20	1100.0	89.0	271.0	<0.5	<5.0	1.0	<1.0	12.0	<5.0	1.0	<1.0	24.7			
AB21524	192.50	193.50	1600.0	72.0	411.0	<0.5	15.0	4.0	3.0	48.0	<5.0	3.0	2.0	14.9			
AB21525	222.25	223.20	860.0	38.0	237.0	<0.5	5.0	14.0	75.0	14.0	<5.0	<1.0	<1.0	13.8			
AB21526	~ 223.20	224.10	940.0	24.0	190.0	<0.5	<5.0	11.0	79.0	8.0	<5.0	<1.0	<1.0	11.2			
AB21527	232.90	233.90	800.0	45.0	85.0	<0.5	<5.0	4.0	4.0	8.0	<5.0	<1.0	<1.0	34.6			
AB21528	249.50	250.80	300.0	121.0	1610.0	<0.5	15.0	25.0	26.0	6.0	<5.0	6.0	2.0	7.0			
AB21529	250.80	252.80	830.0	45.0	145.0	<0.5	<5.0	20.0	26.0	6.0	<5.0	<1.0	<1.0	23.7			
AB21530	252.80	254.00	1300.0	5.0	45.0	<0.5	5.0	4.0	3.0	6.0	5.0	<1.0	1.0	10.0			
AB21531	254.00	255.00	1300.0	2.0	14.0	<0.5	<5.0	3.0	<1.0	8.0	5.0	<1.0	1.0	12.5	\$		
AB21532	255.00	256.00	1100.0	27.0	36.0	<0.5	<5.0	9.0	1.0	8.0	15.0	<1.0	1.0	42.9			
AB21533	256.00	257.00	1800.0	1.0	25.0	<0.5	<5.0	2.0	3.0	7.0	<5.0	<1.0	1.0	3.8			
AB21534	257.00	258.00	1100.0	15.0	18.0	<0.5	<5.0	3.0	2.0	9.0	<5.0	<1.0	1.0	45.5		•	
AB21535	258.00	259.00	1100.0	1.0	16.0	<0.5	<5.0	3.0	1.0	6.0	<5.0	<1.0	1.0	5.9			
AB21536	259.00	260.00	990.0	1.0	24.0	<0.5	<5.0	2.0	2.0	5.0	<5.0	<1.0	1.0	4.0			
AB21537	260.00	261.00	1100.0	9.0	34.0	<0.5	<5.0	2.0	1.0	7.0	10.0	<1.0	1.0	20.9			
AB21538	261.00	262.00	1400.0	2.0	16.0	<0.5	<5.0	2.0	<1.0	8.0	5.0	<1.0	1.0	11.1			
AB21539	262.00	264.00	1200.0	12.0	105.0	<0.5	<5.0	3.0	2.0	7.0	10.0	<1.0	1.0	10.3	-		

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
AB21540	264.00	264.90	1400.0	9.0	31.0	<0.5	10.0	2.0	<1.0	11.0	10.0	<1.0	2.0	22.5			
AB21541	264.90	266.00	<20.0	86.0	52.0	<0.5	10.0	6.0	3.0	17.0	6.0	<1.0	2.0	62.3			
AB21542	296.00	297.00	870.0	190.0	130.0	<0.5	5.0	31.0	70.0	<5.0	<5.0	<1.0	<1.0	59.4			
AB21543	297.00	298.30	<20.0	433.0	147.0	<0.5	10.0	37.0	75.0	6.0	<5.0	<1.0	<1.0	74.7			
AB21544	298.30	299.00	730.0	60.0	70.0	<0.5	10.0	4.0	4.0	6.0	<5.0	<1.0	<1.0	46.2			
AB21545	299.00	300.00	990.0	106.0	57.0	<0.5	25.0	4.0	4.0	5.0	<5.0	<1.0	<1.0	65.0			
AB21546	300.00	301.00	1200.0	366.0	68.0	<0.5	55.0	4.0	1.0	8.0	7.0	<1.0	<1.0	84.3			
AB21547	301.00	302.00	1500.0	57.0	43.0	<0.5	15.0	3.0	1.0	5.0	<5.0	<1.0	1.0	57.0			
AB21548	302.00	303.00	1300.0	36.0	43.0	<0.5	10.0	3.0	2.0	6.0	<5.0	<1.0	<1.0	45.6	P		
AB21549	303.00	304.00	1400.0	81.0	49.0	<0.5	15.0	6.0	3.0	7.0	<5.0	<1.0	1.0	62.3	•••		
AB21550	304.00	305.00	1100.0	188.0	58.0	<0.5	5.0	3.0	2.0	16.0	<5.0	<1.0	<1.0	76.4			
AB21557	305.00	306.00	1300.0	145.0	216.0	<0.5	25.0	6.0	12.0	55.0	10.0	1.0	1.0	40.2			
AB21558	306.00	307.00	920.0	43.0	362.0	<0.5	5.0	14.0	92.0	40.0	<5.0	1.0	<1.0	10.6			
A821559	307.00	308.00	1600.0	106.0	2470.0	<0.5	10.0	5.0	10.0	8.0	5.0	15.0	<1.0	4.1			
AB21560	308.00	310.00	2000.0	249.0	202.0	<0.5	<5.0	4.0	3.0	17.0	<5.0	1.0	1.0	55.2			
AB21561	310.00	311.00	2600.0	156.0	97.0	<0.5	15.0	3.0	2.0	14.0	<5.0	<1.0	2.0	61.7			
AB21562	311.00	312.00	2700.0	154.0	93.0	<0.5	30.0	4.0	2.0	28.0	10.0	<1.0	2.0	62.3			

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	2N (ppm)	AG (ppm)	АU (ррь)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	M IN
				• •													
AB21563	312.00	313.00	2800.0	226.04	90.0	<0.5	30.0	3.0	1.0	16.0	<5.0	<1.0	1.0	71.5			
AB21564	313.00	314.00	2800.0	93.0	78.0	<0.5	15.0	4.0	1.0	25.0	10.0	<1.0	1.0	54.4			
AB21565	314.00	315.00	3200.0	117.0	86.0	<0.5	10.0	3.0	2.0	15.0	<5.0	<1.0	1.0	57.6			
AB21566	315.00	316.00	2900.0	147.0	164.0	<0.5	40.0	12.0	3.0	97.0	8.0	1.0	1.0	47.3			
AB21567	316.00	317.00	2100.0	433.0	1164.0	2.2	170.0	16.0	8.0	944.0	7.0	16.0	4.0	27.1			
AB21568	317.00	318,00	1700.0	308.0	244.0	0.6	220.0	18.0	8.0	142.0	<5.0	2.0	3.0	55.8			
AB21569	318.00	319.00	1900.0	280.0	199.0	<0.5	80.0	13.0	4.0	103.0	<5.0	2.0	2.0	58.5			
AB21570	319.00	320.00	2500.0	326.0	274.0	0.6	100.0	15.0	9.0	105.0	15.0	2.0	2.0	54.3			
AB21571	320.00	321.00	2200.0	296.0	170.0	<0.5	75.0	10.0	7.0	37.0	7.0	1.0	2.0	63.5			
AB21572	321.00	322.00	1200.0	30.0	55.0	<0.5	25.0	6.0	8.0	11.0	<5.0	<1.0	<1.0	35.3			
AB21573	322.00	323.00	1100.0	18.0	37.0	<0.5	15.0	8.0	9.0	10.0	6.0	<1.0	<1.0	32.7			
AB21574	323.00	324.00	1400.0	4.0	39.0	<0.5	10.0	4.0	1.0	12.0	<5.0	<1.0	1.0	9.3		~	
AB21575	324.00	325.00	1300.0	15.0	50.0	<0.5	20.0	3.0	1.0	16.0	<5.0	<1.0	3.0	23.1		3 7 1. 1 1.	
AB21576	325.00	326.00	1000.0	44.0	232.0	<0.5	20.0	4.0	1.0	432.0	<5.0	2.0	1.0	15.9			· . ·
AB21577	326.00	327.00	1200.0	46.0	444.0	<0.5	10.0	4.0	1.0	167.0	<5.0	2.0	1.0	9.4			
AB21578	327.00	328.00	2000.0	26.0%	258.0	<0.5	10.0	2.0	1.0	100.0	<5.0	1.0	<1.0	9.1			
AB21579	328.00	329.00	2200.0	37.0	204.0	<0.5	45.0	3.0	1.0	95.0	<5.0	<1.0	1.0	15.4			

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Hole No. CHEM-87-23



SAMPLE NUMBER	FROM	то	BA (ppm)	i CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm.)	CD (ppm)	НО (ррм)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
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AB21580	329.00	330.00	3000.0	28.0	240.0	<0.5	25.0	3.0	7.0	121.0	12.0	1.0	2.0	10.4			
AB21581	330.00	330.80	2400.0	31.0	30.0	<0.5	25.0	8.0	6.0	32.0	12.0	<1.0	2.0	50.8			
AB21582	330.80	332.00	300.0	84.0	91.0	<0.5	<5.0	24.0	60.0	6.0	<5.0	<1.0	<1.0	48.0			
AB21583	385.00	386.00	120.0	165.0	66.0	<0.5	20.0	24.0	34.0	9.0	27.0	<1.0	<1.0	71.4			

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SAMPLE NUMBER	FROM	то	BA (ppm.)	CU (ppm)	ZN (ppm)	AG (ppm)	АU (ррь)	СО (ррш)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррж)	CU/(CU+ZN) ROCK * 100	CODES ALT	MIN

AB20451	120.40	121.40	170.0	128.0	156.0	<0.5	<5.0	31.0	81.0	16.0	<5.0	<1.0	<1.0	45.1		
AB20452	121.40	122.50	1100.0	78.0	18.0	<0.5	5.0	4.0	2.0	15.0	<5.0	<1.0	1.0	81.2		
AB20453	122.50	123.50	1100.0	273.0	33.0	<0.5	15.0	4.0	3.0	14.03	<5.0	<1.0	1.0	89.2		
AB20454	123.50	124.50	1300.0	565.0	36.0	<0.5	15.0	3.0	1.0	12.0	<5.0	<1.0	2.0	94.0		
AB20455	124.50	125.50	1300.0	511.0	358.0	<0.5	15.0	3.0	3.0	.12.0	6.0	1.0	18.0	58.8		
AB20456	125.50	126.50	1100.0	1186.0	102.0	2.4	30.0	3.0	3.0	11.0	6.0	<1.0	2.0	92.1		
AB20457	126.50	127.50	1000.0	927.0	970.0	<0.5	20.0	3.0	1.0	12.0	<5.0	4.0	1.0	48.9		
AB20458	127.50	128.50	1300.0	1602.0	409.0	<0.5	10.0	4.0	3.0	13.0	<5.0	2.0	3.0	79.7	an ta ta Ta ta ta Ta ta	
AB20459	128.50	129.50	1000.0	1604.0	97.0	<0.5	35.0	3.0	2.0	13.0	<5.0	<1.0	2.0	94.3		
AB20460	129.50	130.50	1100.0	948.0	58.0	<0.5	15.0	4.0	2.0	15.0	<5.0	<1.0	3.0	94.2		
AB20467	130.50	131.50	1400.0	270.0	61.0	<0.5	5.0	4.0	1.0	14.0	<5.0	<1.0	2.0	81.6	?	A
AB20468	131.50	132.50	1400.0	140.0	88.0	<0.5	60.0	6.0	3.0	20.0	<5.0	<1.0	2.0	61.4		
AB20469	132.50	133.50	1900.0	81.0	277.0	<0.5	90.0	6.0	1.0	73.0	8.0	1.0	2.0	22.6	• .	
AB20470	133.50	134.50	1900.0	22.0	24.0	<0.5	30.0	6.0	2.0	25.0	19.0	<1.0	2.0	47.8		
AB20471	134.50	135.50	1600.0	18.0	37.0	<0.5	40.0	3.0	3.0	26.0	16.0	<1.0	1.0	32.7		
AB20472	135.50	136.50	1300.0	7.0	30.0	×0.5	30.0	3.0	2.0	31.0	<5.0	<1.0	1.0	18.9		
AB20473	136.50	137.50	1500.0	4.0	20.0	<0.5	15.0	4.0	2.0	33.0	6.0	<1.0	2.0	16.7		

Hole No. CHEM87-24

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppa)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
~~*************										•==== =						· · · · · · · · · · · · · · · · · · ·	
AB20474	137.50	138.50	1400.0	6.0	24.0	<0.5	20.0	3.0	1.0	48.0	<5.0	<1.0	1.0	20.0			
AB20475	138.50	139.50	1400.0	7.0	37.0	<0.5	30.0	3.0	2.0	101.0	9.0	<1.0	2.0	15.9		•	
AB20476	139.50	140.50	1500.0	7.0	25.0	<0.5	20.0	4.0	2.0	91.0.0	8.0	<1.0	2.0	21.9		n an an an Arrange Ann an Arrange Ann an Arrange	
AB20477	140.50	141.50	1300.0	4.0	18.0	<0.5	10.0	3.0	3.0	78.0	<5.0	<1.0	2.0	18.2			
AB20478	141.50	142.50	1400.0	7.0	15.0	<0.5	15.0	3.0	2.0	41.0	6.0	<1.0	2.0	31.8		e a se	
AB20479	142.50	143.50	1800.0	10.0	10.0	<0.5	45.0	3.0	2.0	27.0	6.0	<1.0	2.0	50.0			
AB20480	143.50	144.50	1400.0	6.0	12.0	<0.5	30.0	3.0	2.0	29.0	<5.0	<1.0	1.0	33.3			
AB20481	144.50	145.50	1400.0	7.0	10.0	<0.5	20.0	2.0	1.0	25.0	<5.0	<1.0	1.0	41.2			
AB20482	145.50	146.50	1300.0	12.0	13.0	<0.5	35.0	1.0	2.0	19.0	<5.0	<1.0	1.0	48.0			
AB20483	146.50	147.50	1400.0	26.0	18.0	<0.5	30.0	7.0	1.0	22.0	21.0	<1.0	1.0	59.1	TC.		
AB20484	147.50	148.50	1700.0	12.0	10.0	<0.5	25.0	3.0	3.0	13.0	18.0	<1.0	2.0	54.5			
AB20485	148.50	149.50	1600.0	18.0	10.0	<0.5	35.0	3.0	1.0	10.0	10.0	<1.0	1.0	64.3			
AB20486	149.50	150.50	2000.0	8.0	9.0	<0.5	25.0	3.0	1.0	9.0	<5.0	<1.0	1.0	47.1			
AB20487	150.50	151.50	1700.0	9.0	8.0	<0.5	15.0	3.0	1.0	8.0	<5.0	<1.0	<1.0	52.9			
AB20488	151.50	152.50	1600.0	66.0	10.0	<0.5	30.0	7.0	2.0	9.0	7.0	<1.0	1.0	86.8			
AB20489	152.50	153.50	1700.0	44.0	10.02	K0.5	10.0	6.0	1.0	10.0	8.0	<1.0	2.0	81.5			
AB20490	153.50	154.50	1400.0	36.0	9.0	<0.5	30.0	4.0	2.0	11.0	<5.0	<1.0	2.0	80.0			

Hole No. CHEM87-24

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AMPLE UMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm.)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MII
n Altera																	
B20491	154.50	155.50	1600.0	21.0	12.0	<0.5	5.0	4.0	2.0	9.0	<5.0	<1.0	2.0	63.6			
B20492	155.50	156.50	1500.0	4.0	8.0	<0.5	<5.0	2.0	2.0	9.0	<5.0	<1.0	1.0	33.3			
B20493	156.50	157.50	1600.0	6.0	8.0	<0.5	<5.0	3.0	1.0	17.0	<5.0	<1.0	1.0	42.9		•	
B20494	157.50	158.50	1500.0	9.0	6.0	<0.5	<5.0	2.0	1.0	19.0	<5.0	<1.0	1.0	60.0			
B20495	158.50	159.50	1600.0	8.0	5.0	<0.5	<5.0	2.0	1.0	15.0	<5.0	<1.0	1.0	61.5			
B20496	159.50	160.50	1700.0	13.0	5.0	<0.5	<5.0	2.0	2.0	8.0	<5.0	<1.0	1.0	72.2			
B20497	160.50	161.50	1500.0	35.0	9.0	<0.5	5.0	5.0	1.0	7.0	<5.0	<1.0	1.0	79.6			
B20498	161.50	162.00	1500.0	30.0	8.0	<0.5	10.0	4.0	1.0	13.0	<5.0	<1.0	1.0	78.9			
B20499	162.00	163.00	1600.0	11.0	8.0	<0.5	<5.0	4.0	1.0	13.0	<5.0	<1.0	1.0	57.9			
B20500	163.00	164.00	1600.0	8.0	6.0	<0.5	5.0	3.0	3.0	11.0	<5.0	<1.0	<1.0	57.1	• • •		
D02501	164.00	165.00	1700.0	8.0	8.0	<0.5	<5.0	3.0	<1.0	9.0	<5.0	<1.0	1.0	50.0			
D02502	165.00	166.00	1600.0	52.0	10.0	<0.5	15.0	4.0	<1.0	9.0	7.0	<1.0	1.0	83.9			
D02503	166.00	167.00	1900.0	73.0	12.0	<0.5	<5.0	10.0	5.0	15.0	7.0	<1.0	2.0	85.9			
D02504	167.00	168.00	1900.0	5.0	5.0	<0.5	<5.0	1.0	<1.0	14.0	<5.0	<1.0	<1.0	50.0			
D02505	168.00	169.00	2200.0	9.0	7.0	<0.5	<5.0	3.0	1.0	28.0	5.0	<1.0	1.0	56.2			
AD02506	169.00	170.00	2000.0	11.0	7.0	<0.5	<5.0	2.0	1.0	10.0	<5.0	<1.0	1.0	61.1			
D02507	170.00	171.00	1800.0	15.0	8.0	<0.5	<5.0	3.0	<1.0	12.0	<5.0	<1.0	1.0	65.2			
AD02506 AD02507	169.00 170.00	170.00 171.00	2200.0 2000.0 1800.0	9.0 11.0 15.0	7.0 8.0	<0.5 <0.5	<5.0 <5.0	2.0 3.0	1.0 1.0 <1.0	10.0 12.0	<5.0 <5.0	<1.0 <1.0 <1.0	1.0 1.0 1.0	61.1 65.2			

Hole No. CHEM87-24

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DES LT MI	CODE! ALT	ROCK	CU/(CU+ZN) * 100	HO (ppm)	CD (ppm)	AS (ppm)	PB (ppm)	NI (ppm)	CO (ppm)	AU (ppb)	AG (ppm.)	ZN (ppm)	i CU (ppm)	BA (ppm)	TO	FROM	SAMPLE NUMBER
														<u></u>			
			62.5	2.0	<1.0	<5.0	56.0	1.0	3.0	10.0	<0.5	9.0	15.0	2000.0	172.00	171.00	AD02508
			34.4	2.0	1.0	<5.0	67.0	1.0	4.0	10.0	<0.5	271.0	142.0	2500.0	173.00	172.00	AD02509
			44.1	2.0	5.0	<5.0	49.03	3.0	7.0	65.0	<0.5	766.0	604.0	3300.0	174.00	173.00	AD02510
			82.1	1.0	<1.0	7.0	12.0	1.0	4.0	20.0	<0.5	30.0	138.0	2800.0	175.00	174.00	AD02511
			60.9	1.0	<1.0	<5.0	15.0	<1.0	4.0	<5.0	<0.5	18.0	28.0	2500.0	176.00	175.00	AD02512
			31.8	1.0	<1.0	<5.0	10.0	2.0	3.0	10.0	<0.5	15.0	7.0	2600.0	177.00	176.00	AD02513
	•		69.4	1.0	<1.0	<5.0	9.0	<1.0	3.0	10.0	<0.5	11.0	25.0	2500.0	178.00	177.00	AD02514
			41.7	1.0	<1.0	<5.0	11.0	<1.0	1.0	<5.0	<0.5	14.0	10.0	2400.0	179.00	178.00	AD02515
			65.2	1.0	<1.0	<5.0	10.0	<1.0	2.0	25.0	<0.5	8.0	15.0	2500.0	180.00	179.00	AD02516
		N	68.2	1.0	<1.0	5.0	16.0	<1.0	3.0	45.0	<0.5	14.0	30.0	2600.0	181.00	180.00	AD02517
			44.4	2.0	<1.0	7.0	50.0	2.0	2.0	10.0	<0.5	15.0	12.0	2700.0	182.00	181.00	AD02518
			34.3	1.0	<1.0	10.0	133.0	1.0	5.0	20.0	<0.5	23.0	12.0	2800.0	183.00	182.00	AD02519
40 ⁻¹	art art		58.2	2.0	<1.0	9.0	99.0	4.0	7.0	15.0	<0.5	28.0	39.0	3100.0	184.00	183.00	AD02520
			73.5	3.0	<1.0	10.0	81.0	5.0	10.0	35.0	<0.5	40.0	111.0	3100 0	185.00	184 00	AD02521
			61.0	2.0	<1.0	<5.0	17.0	2.0	5.0	5.0	<0.5	16.0	25.0	2900.0	186 00	185 00	AD02522
			77.8	2.0	<1.0	(5.0	18.0	2.0	3.0	5.0	20 S	16.0	56 0	2500.0	100.00	105100	AD02522
			26.7	2.0	(1.0	75 0	15 0	2.0	2 0	15 0	.ν.υ /Λ Ε	10.0	J0.V	2300.0	10/.00	100.00	HDV2J23
			73.5 61.0 77.8 26.7	3.0 2.0 2.0 2.0	<1.0 <1.0 <1.0 <1.0	10.0 <5.0 <5.0 <5.0	81.0 17.0 18.0 15.0	5.0 2.0 2.0 3.0	10.0 5.0 3.0 2.0	35.0 5.0 5.0 15.0	<0.5 <0.5 <0.5 <0.5	40.0 16.0 	111.0 25.0 56.0 8.0	3100.0 2900.0 2500.0 2800.0	185.00 186.00 187.00 188.00	184.00 185.00 186.00 187.00	AD02521 AD02522 AD02523 AD02523

Hole No. CHEM87-24

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SAMPLE NUMBER	FROM	TO	BA (ppm)	; CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppa:)	CD (ppm)	HO (ppm)	CU/(CU+ZN) ROCK + 100	CODES ALT	MIN
				,												
AD02542	207.00	208.50	2500.0	138.0	19.0	<0.5	30.0	7.0	2.0	34.0	12.0	<1.0	2.0	87.9	•	
AD02543	208.50	210.00	2000.0	89.0	18.0	<0.5	20.0	8.0	2.0	24.00	10.0	<1.0	2.0	83.2		
AD02544	210.00	211.50	2100.0	63.0	12.0	<0.5	40.0	7.0	3.0	16.0	15.0	<1.0	2.0	84.0		
AD02545	211.50	213.00	1700.0	103.0	15.0	<0.5	25.0	6.0	2.0	19.0	20.0	<1.0	3.0	87.3		
AD02546	213.00	214.50	1900.0	189.0	1248.0	0.6	110.0	7.0	3.0	24.0	25.0	7.0	3.0	13.1	an talatan. Talatan	
AD02547	214.50	216.00	2100.0	75.0	27.0	<0.5	25.0	7.0	4.0	15.0	18.0	<1.0	2.0	73.5		
AD02548	216.00	217.50	2300.0	124.0	422.0	<0.5	80.0	10.0	5.0	24.0	28.0	3.0	1.0	22.7		
AD02549	217.50	219.00	2800.0	399.0	1672.0	1.1	90.0	9.0	3.0	22.0	23.0	10.0	3.0	19.3		
AD02550	219.00	220.50	3600.0	153.0	62.0	0.5	80.0	6.0	1.0	39.0	26.0	<1.0	3.0	71.2		
AD02551	220.50	221.00	3400.0	82.0	32.0	<0.5	100.0	6.0	1.0	13.0	26.0	<1.0	1.0	71.9		
AD02552	221.00	222.00	2800.0	337.0	30.0	0.6	130.0	10.0	4.0	16.0	22.0	<1.0	2.0	91.8		
AD02553	222.00	223.00	2600.0	45.0	14.0	<0.5	110.0	11.0	6.0	15.0	23.0	<1.0	3.0	76.3		
AD02554	223.00	224.00	2500.0	28.0	5.0	<0.5	130.0	11.0	4.0	13.0	23.0	<1.0	3.0	84.8		
AD02555	224.00	225.00	2500.0	27.0	2.0	<0.5	70.0	5.0	1.0	12.0	7.0	<1.0	4.0	93.1		
AD02556	225.00	226.00	2000.0	40.0	1:0-	K0.5	25.0	7.0	3.0	8.0	9.0	<1.0	2.0	97.6		
AD02557	226.00	227.00	3100.0	75.0	17.0	<0.5	70.0	7.0	<1.0	10.0	16.0	<1.0	3.0	81.5		
AD02558	227.00	228.00	3500.0	106.0	85.0	<0.5	55.0	7.0	2.0	17.0	13.0	<1.0	2.0	55.5	eret e e	

Hole No. CHEM87-24

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SAMPLE NUMBER	FROM	TO	BA (ppm)	() (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) * 100	CODES Alt min
									********					~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
AD02525	188.00	189.00	3000.0	7.0	7.0	<0.5	15.0	3.0	1.0	15.0	<5.0	<1.0	2.0	50.0	
AD02526	189.00	190.00	2400.0	14.0	8.0	<0.5	20.0	3.0	2.0	14.0	<5.0	<1.0	1.0	63.6	
AD02527	190.00	191.00	2500.0	23.0	10.0	<0.5	100.0	3.0	2.0	44.0	<5.0	<1.0	2.0	69.7	
AD02528	191.00	192.00	2500.0	18.0	11.0	<0.5	45.0	2.0	<1.0	25.0	5.0	<1.0	2.0	62.1	
AD02529	192.00	193.00	2800.0	19.0	16.0	<0.5	30.0	4.0	<1.0	45.0	7.0	<1.0	1.0	54.3	
AD02530	193.00	194.00	2300.0	30.0	36.0	<0.5	30.0	3.0	2.0	50.0	<5.0	<1.0	1.0	45.5	
AD02531	194.00	195.00	3000.0	58.0	26.0	<0.5	10.0	4.0	<1.0	85.0	<5.0	<1.0	1.0	69.1	
AD02532	195.00	196.00	2200.0	15.0	30.0	<0.5	<5.0	6.0	1.0	63.0	<5.0	<1.0	<1.0	33.3	
AD02533	196.00	197.00	2400.0	12.0	13.0	<0.5	<5.0	3.0	<1.0	21.0	<5.0	<1.0	1.0	48.0	
AD02534	197.00	198.00	2600.0	9.0	15.0	<0.5	10.0	4.0	<1.0	34.0	<5.0	<1.0	3.0	37.5	
AD02535	198.00	199.00	2400.0	12.0	14.0	<0.5	5.0	3.0	<1.0	14.0	<5.0	<1.0	1.0	46.2	
AD02536	199.00	200.00	2300.0	43.0	21.0	<0.5	10.0	3.0	4.0	21.0	5.0	<1.0	<1.0	67.2	
AD02537	200.00	201.50	2400.0	37.0	22.0	<0.5	5.0	3.0	<1.0	18.0	<5.0	<1.0	1.0	62.7	•
AD02538	201.50	203.00	3000.0	37.0	14.0	<0.5	5.0	5.0	1.0	19.0	7.0	<1.0	1.0	72.6	
AD02539	203.00	204.50	2800.0	39.0	18.0		<5.0	4.0	1.0	16.0	<5.0	<1.0	1.0	68.4	
AD02540	204.50	206.00	3200.0	38.0	19.0	<0.5	(5.0	5.0	2.0	13.0	<5.0	<1.0	1.0	66.7	
AD02541	206.00	207.00	1700.0	14.0	16.0	<0.5	<5.0	5.0	<1.0	24.0	5.0	<1.0	1.0	46.7	

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DIAMOND	DRILL	CORE	LITHOGEOCI	HEMICAL	RECORD
		CMINC	DR ELEMENTS)		

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CŪ (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	CU/(CU+ZN) ROCK * 100	CODES Alt min
							. (* 1. (-	·				
AD02559	228.00	229.00	3500.0	105.0	26.0	<0.5	50.0	5.0	<1.0	12.0	13.0	<1.0	2.0	80.2	
AD02560	229.00	230.00	4000.0	40.0	49.0	<0.5	110.0	7.0	2.0	17.0	11.0	<1.0	7.0	44.9	
AD02561	230.00	231.00	3100.0	22.0	6.0	<0.5	5.0	6.0	2.0	13.0	7.0	<1.0	4.0	78.6	
AD02562	231.00	232.50	2500.0	23.0	20.0	<0.5	<5.0	2.0	1.0	12.0	<5.0	<1.0	2.0	53.5	
AD02563	232.50	234.00	2600.0	12.0	17.0	<0.5	25.0	6.0	<1.0	14.0	10.0	<1.0	2.0	41,4	
AD02564	234.00	235.50	2700.0	9.0	20.0	<0.5	5.0	4.0	1.0	12.0	<5.0	<1.0	5.0	31.0	
AD02565	235.50	237.00	2300.0	12.0	12.0	<0.5	<5.0	5.0	2.0	7.0	<5.0	<1.0	4.0	50.0	
AD02566	237.00	238.50	1300.0	35.0	10.0	<0.5	<5.0	3.0	<1.0	8.0	<5.0	<1.0	1.0	77.8	
AD02567	238.50	240.00	2700.0	11.0	13.0	<0.5	<5.0	2.0	2.0	8.0	<5.0	<1.0	3.0	45.8	
AD02568	240.00	241.50	1500.0	5.0	12.0	<0.5	<5.0	1.0	<1.0	7.0	<5.0	<1.0	5.0	29.4	
AD02569	241.50	243.00	1400.0	3.0	16.0	<0.5	<5.0	1.0	1.0	11.0	<5.0	<1.0	1.0	15.8	
AD02570	243.00	244.50	1100.0	17.0	11.0	<0.5	<5.0	1.0	1.0	7.0	<5.0	<1.0	2.0	60.7	
AD02571	244.50	246.00	1200.0	9.0	15.0	<0.5	<5.0	3.0	1.0	7.0	<5.0	<1.0	1.0	37.5	
AD02572	246.00	247.50	1300.0	43.0	14.0	<0.5	<5.0	2.0	<1.0	12.0	<5.0	<1.0	1.0	75.4	
AD02573	247.50	248.60	2000.0	24.0	10.0	<0.5	<5.0	2.0	1.0	11.0	<5.0	<1.0	1.0	70.6	
AD02574	248.60	249.50	2000.0	82.0	9.0	<0.5	130.0	7.0	1.0	14.0	<5.0	<1.0	2.0	90.1	
AD02575	249.50	250.50	2000.0	146.0	11.0	<0.5	15.0	19.0	7.0	13.0	<5.0	<1.0	4.0	93.0	
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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALI MIN
AD02576	250.50	251.50	2700.0	211.0	18.0	<0.5	10.0	18.0	7.0	14.0	8.0	<1.0	4.0	92.1		
AD02577	251.50	252.50	1400.0	145.0	19.0	<0.5	10.0	14.0	7.0	15.0	<5.0	<1.0	4.0	88.4		
AD02578	252.50	254.00	2300.0	94.0	15.0	<0.5	10.0	8.0	1.0	15.03	7.0	<1.0	3.0	86.2		
AD02579	254.00	255.50	2400.0	82.0	212.0	<0.5	5.0	6.0	<1.0	36.0	<5.0	<1.0	2.0	27.9		
AD02580	255.50	257.00	1400.0	71.0	33.0	<0.5	<5.0	7.0	12.0	26.0	<5.0	<1.0	2.0	68.3		4°.
AD02581	257.00	258.50	1700.0	170.0	5200.0	1.5	50.0	6.0	2.0	476.0	7.0	16.0	4.0	3.2		
AD02582	258.50	260.00	1400.0	247.0	9800.0	0.5	50.0	6.0	2.0	48.0	<5.0	45.0	3.0	2.5		
AD02583	260.00	261.50	1800.0	164.0	2816.0	<0.5	10.0	8.0	3.0	38.0	7.0	15.0	2.0	5.5		
AD02584	261.50	263.50	2700.0	959.0	153.0	<0.5	25.0	9.0	9.0	18.0	<5.0	<1.0	<1.0	86.2		
AD02585	263.50	264.10	2700.0	1185.0	83.0	0.5	140.0	7.0	11.0	12.0	<5.0	<1.0	3.0	93.4	***	
AD02586	264.10	265.10	100.0	257.0	92.0	<0.5	10.0	36.0	70.0	7.0	<5.0	<1.0	<1.0	73.6		
AD02587	266.30	267.30	910.0	271.0	41.0	<0.5	10.0	22.0	34.0	11.0	<5.0	<1.0	1.0	86.9		
AD02588	267.30	268.60	1400.0	704.0	40.0	<0.5	40.0	8.0	4.0	18.0	31.0	<1.0	1.0	94.6	•	•
AD02589	268.60	269.60	4800.0	328.0	1434.0	5.1	926.1	7.0	3.0	948.0	30.0	8.0	-5.0	18.6	•	
AD02590	269.60	270.60	4300.0	507.0	2480.0	7.8	, 260.0	11.0	10.0	264.0	15.0	13.0	3.0	17.0		
AD02591	270.60	272.00	5300.0	701.0	5000.0	4.9	170.0	12.0	44.0	390.0	10.0	26.0	7.0	12.3		
AD02592	272.00	273.50	4000.0	104.0	162.0	<0.5	30.0	7.0	8.0	45.0	8.0	<1.0	4.0	39.1		

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm.)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO CU/(CU+ZN) (ppm) + 100	ROCK	CODES ALT	MIN
						********				······	 		• • • • • • • • • • • • • • • • • • •	,		
AD02593	273.50	274.60	2200.0	28.0	74.0	<0.5	20.0	4.0	5.0	45.0	<5.0	<1.0	4.0 27.5			
AD02594	274.60	275.60	380.0	165.0	51.0	<0.5	5.0	25.0	51.0	19.03	<5.0	<1.0	<1.0 76.4			

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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)	HO (ppm)	CU/(CU+ZN) ROCK + 100	CODES Alt min
AB21584	51.70	52.70	1300.0	69.0	96.0	<0.5	<5.0	4.0	19.0	<5.0	<5.0	<1.0	<1.0	41.8	
AB21585	52.70	52.90	1500.0	636.0	554.0	<0.5	20.0	24.0	21.0	15.0	14.0	4.0	7.0	53.5	
AB21586	52.90	54.00	1300.0	33.0	32.0	<0.5	<5.0	3.0	1.0	9.07	<5.0	<1.0	2.0	50.8	
AB21587	54.00	55.00	1200.0	243.0	46.0	<0.5	5.0	7.0	<1.0	<5.0	<5.0	<1.0	2.0	84.1	
AB21588	55.00	56.00	1200.0	58.0	17.0	<0.5	<5.0	1.0	<1.0	<5.0	<5.0	<1.0	1.0	77.3	
AB21589	56.00	57.00	1300.0	46.0	18.0	<0.5	<5.0	1.0	<1.0	<5.0	<5.0	<1.0	<1.0	71.9	
AB21590	57.00	58.00	1300.0	57.0	19.0	<0.5	<5.0	3.0	<1.0	<5.0	<5.0	<1.0	1.0	75.0	
AB21591	58.10	59.00	1100.0	31.0	88.0	<0.5	<5.0	17.0	5.0	7.0	<5.0	<1.0	<1.0	26.0	
AB21592	80.00	82.20	1100.0	25.0	44.0	<0.5	<5.0	8.0	1.0	14.0	<5.0	<1.0	2.0	36.2	
AB21593	299.50	300.50	30.0	185.0	117.0	<0.5	<5.0	23.0	40.0	6.0	<5.0	<1.0	<1.0	61.3	
AB21594	300.50	302.00	1600.0	134.0	19.0	<0.5	<5.0	7.0	3.0	7.0	<5.0	<1.0	2.0	87.6	
AB21595	302.00	303.50	1600.0	261.0	9.0	<0.5	<5.0	7.0	2.0	9.0	<5.0	<1.0	3.0	96.7	
AB21596	303.50	305.00	970.0	21.0	4.0	<0.5	<5.0	1.0	1.0	7.0	<5.0	<1.0	1.0	84.0	
AB21597	305.00	306.50	1200.0	78.0	6.0	(0.5	<5.0	4.0	1.0	6.0	<5.0	(1.0	1.0	92.9	
AR21598	306 50	308 00	890.0	34 0	2.0	(0.5	(5.0	3.0	2.0	6.0	(5.0	<1.0	4 0	94 4	
AD21500	200.00	200 EA	000.0	111 0	4 A A		15.0	11 0	7 6	6 0	/5 0	<1 0	1.0	96 5	
HB21379	308.00	303.20	990.0	111.0	1 • V.	1	(0.0	11.0	4.V	0.0	(0.0	(1.0	1.0	20.J	
AB21600	309.50	311.00	1100.0	63.0	9.0	<0.5	<2.0	3.0	2.0	9.0	<2.0	<1.0	3.0	0/.J	

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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)	CU/(CU+ZN) RC + 100	оск	CODES ALT	MI
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	- 16								****		**************************************					*****
AE08501	311.00	312.50	1300.0	62.0	17.0	<0.5	<5.0	7.0	5.0	7.0	6.0	<1.0	2.0	78.5			
AE08502	312.50	314.00	920.0	50.0	33.0	<0.5	<5.0	11.0	20.0	12.0	<5.0	<1.0	3.0	60.2		×	
AE08503	314.00	315.50	1000.0	27.0	12.0	0.5	<5.0	6.0	10.0	8.03	6.0	<1.0	2.0	69.2			
AE08504	315.50	317.00	880.0	153.0	8.0	<0.5	15.0	8.0	3.0	<5.0	6.0	<1.0	2.0	95.0			
AE08505	317.00	318.50	1300.0	49.0	8.0	<0.5	<5.0	6.0	4.0	6.0	6.0	<1.0	1.0	86.0		an an tri Galaisteach	
AE08506	318.50	319.70	1100.0	30.0	9.0	0.6	5.0	5.0	3.0	9.0	8.0	<1.0	2.0	76.9			
AE08507	319.70	320.20	1800.0	408.0	17.0	0.6	25.0	24.0	8.0	14.0	17.0	<1.0	3.0	96.0			
AE08508	320.20	321.70	1500.0	79.0	8.0	0.6	<5.0	8.0	3.0	15.0	15.0	<1.0	,3.0	90.8			
AE08509	321.70	322.20	610.0	1273.0	37.0	<0.5	65.0	104.0	31.0	12.0	39.0	<1.0	12.0	97.2			
AE08510	322.20	323.20	1200.0	175.0	8.0	<0.5	10.0	17.0	6.0	11.0	<5.0	<1.0	<1.0	95.6	*		
AE08511	323.20	324.70	1100.0	107.0	25.0	<0.5	5.0	5.0	<1.0	13.0	<5.0	<1.0	2.0	81.1	••		
AE08512	324.70	325.20	640.0	872.0	24.0	<0.5	25.0	35.0	13.0	21.0	19.0	<1.0	2.0	97.3			
AE08513	325.20	326.00	820.0	140.0	7.0	<0.5	5.0	6.0	2.0	12.0	<5.0	<1.0	3.0	95.2		an a	
AE08514	326.00	327.00	1100.0	134.0	4.0	<0.5	15.0	11.0	3.0	13.0	<5.0	<1.0	3.0	97.1			
AE08515	327.00	328.00	1020.0	150.0	5.0	<0.5	25.0	14.0	2.0	11.0	7.0	<1.0	3.0	96.8			
AE08516	328.00	329.20	1300.0	107.0	4.0		20.0	8.0	<1.0	<5.0	<5.0	<1.0	<1.0	96.4			
AE08517	329.20	330.20	530.0	192.0	85.0	(0.5	<5.0	31.0	82.0	39.0	<5.0	<1.0	<1.0	69.3			

Hole No. CHEM87-25

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm.)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
AE08518	369.30	370.30	1300.0	55.0	99.0	<0.5	<5.0	18.0	14.0	111.0	<5.0	<1.0	1.0	35.7			
AE08519	391.80	393.00	90.0	74.0	77.0	<0.5	10.0	17.0	17.0	15-0	<5.0	<1.0	<1.0	49.0			
AE08520	393.00	394.50	40.0	62.0	85.0	<0.5	<5.0	16.0	21.0	19.07	<5.0	<1.0	<1.0	42.2			
AE08521	394.50	396.00	180.0	47.0	82.0	<0.5	<5.0	13.0	12.0	13.0	<5.0	<1.0	<1.0	36.4			
AE08522	396.00	397.50	390.0	44.0	64.0	<0.5	<5.0	12.0	8.0	7.0	<5.0	<1.0	<1.0	40.7			
AE08523	397.50	399.40	850.0	53.0	81.0	<0.5	5.0	15.0	6.0	<5.0	<5.0	<1.0	<1.0	39.5			
AE08524	432.50	434.60	200.0	88.0	75.0	<0.5	<5.0	28.0	29.0	12.0	<5.0	<1.0	<1.0	54.0		•	•

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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)	CU/(CU+) * 100	^{ZN)} ROCK	CODES ALT	MIN
				· •									******			• • • • • • • • • • • • • • • • • • •	
AD02595	44.60	45.60	150.0	626.0	84.0	<0.5	5.0	30.0	30.0	7.0	7.0	<1.0	1.0	88.2		• • • • • •	
AD02596	55.40	56.00	60.0	4700.0	71.0	1.7	100.0	18.0	18.0	10.0	10.0	<1.0	2.0	98.5			
AD02597	56.00	57.00	80:0	719.0	112.0	<0.5	5.0	44.0	45.0	<5.0	<5.0	<1.0	1.0	86.5			
AD02598	75.00	76.00	190.0	1706.0	100.0	<0.5	40.0	32.0	13.0	6.0	<5.0	1.0	1.0	94.5			
AD02599	77.30	78.30	50.0	1954.0	86.0	<0.5	40.0	35.0	20.0	6.0	<5.0	2.0	1.0	95.8			
AD02600	151.50	152.00	130.0	498.0	93.0	<0.5	15.0	31.0	6.0	<5.0	2530	<1.0	<1.0	84.3			
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SAMPLE NUMBER	FROM	TO	BA (ppm.)	і СU (ррв)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	CU/(* 1	CU+ZN) 00	ROCK	CODES ALT	MIN
AE08551	197.80	198.80	<20.0	1659.0	123.0	<0.5	35.0	42.0	17.0	14.0	<5.0	2.0	<1.0	93	1.1			
AE08551	197.80	198.80	<20.0	1657.0	123.0	<0.5	35.0	42.0	17.0	14.00	<5.0	2.0	<1.0	93	.1			
AE08552	198.80	199.80	<20.0	2049.0	125.0	<0.5	45.0	30.0	11.0	11.0	<5.0	2.0	<1.0	94	.3			
AE08552	198.80	199.80	<20.0	2049.0	125.0	<0.5	45.0	30.0	11.0	11.0	<5.0	2.0	<1.0	94	.3	- - -	et i en	
AE08553	199.80	200.80	<20.0	1726.0	125.0	<0.5	30.0	43.0	15.0	10.0	<5.0	1.0	<1.0	93	.3			
AE08553	199.80	200.80	<20.0	1726.0	125.0	<0.5	30.0	43.0	15.0	10.0	<5.0	1.0	<1.0	93	.3			
AE08554	200.80	201.80	<20.0	591.0	111.0	<0.5	10.0	34.0	17.0	9.0	<5.0	<1.0	<1.0	84	.2			
AE08554	200.80	201.80	<20.0	591.0	111.0	<0.5	10.0	34.0	17.0	9.0	<5.0	<1.0	<1.0	84	1.2			
AE08555	201.80	202.80	<20.0	863.0	111.0	<0.5	70.0	34.0	14.0	14.0	<5.0	<1.0	<1.0	88	8.6	8		
AE08555	201.80	202.80	<20.0	863.0	111.0	<0.5	70.0	34.0	14.0	14.0	<5.0	<1.0	<1.0	88	8.6			
AE08556	202.80	203.80	<20.0	835.0	106.0	<0.5	45.0	35.0	48.0	14.0	357.0	<1.0	1.0	88	.7			
AE08556	202.80	203.80	<20.0	835.0	106.0	<0.5	45.0	35.0	48.0	14.0	357.0	<1.0	1.0	88	.7			
AE08557	215.20	216.00	50.0	707.0	113.0	<0.5	15.0	38.0	40.0	10.0	17.0	<1.0	<1.0	8(.2			
AE08557	215.20	216.00	50.0	707.0	113.0	<0.5	15.0	38.0	40.0	10.0	17.0	<1.0	<1.0	80	.2			
AE08558	216.00	217.00	70.0	624.0	88.04	x0.5	25.0	26.0	49.0	<5.0	7.0	<1.0	<1.0	8:	.6			
AE08559	217.00	218.00	<20.0	3000.0	127.0	0.6	35.0	35.0	36.0	<5.0	14.0	3.0	<1.0	9	5.9			
AE08560	218.00	219.00	<20.0	1251.0	132.0	<0.5	30.0	31.0	47.0	6.0	<5.0	<1.0	1.0	9(.5			
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Hole No. CHEM87-27

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SAMPLE NUMBER	FROM	TO	BA (ppm)	í CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
									**********						, , , , , , , , , , , , , , , , , , ,		
AE08561	219.00	220.00	<20.0	1541.0	62.0	<0.5	40.0	12.0	17.0	< 5. 0,	6.0	1.0	<1.0	96.1			
AE08562	220.00	220.60	<20.0	2567.0	63.0	0.8	70.0	10.0	11.0	<5.03	<5.0	2.0	1.0	97.6			
AE08563	220.60	221.70	<20.0	274.0	89.0	<0.5	5.0	27.0	55.0	<5.0	<5.0	<1.0	<1.0	75.5			
AE08564	229.00	230.00	1700.0	157.0	80.0	<0.5	<5.0	8.0	4.0	25.0	<5.0	<1.0	3.0	66.2			
AE08565	230.00	231.00	1800.0	155.0	77.0	<0.5	5.0	13.0	7.0	42.0	<5.0	<1.0	1.0	66.8			
AE08566	231.00	232.00	1400.0	347.0	71.0	<0.5	<5.0	3.0	2.0	9.0	<5.0	<1.0	<1.0	83.0			
AE08567	233.60	234.10	1900.0	1339.0	89.0	<0.5	20.0	9.0	<1.0	11.0	<5.0	<1.0	4.0	93.8			
AE08568	234.10	234.80	1800.0	467.0	135.0	<0.5	10.0	7.0	<1.0	17.0	<5.0	<1.0	4.0	77.6			
AE08569	234.80	235.80	2500.0	1419.0	4000.0	0.5	45.0	7.0	<1.0	15.0	<5.0	28.0	3.0	26.2	Ŷ		
AE08570	235.80	236.80	1900.0	387.0	671.0	<0.5	15.0	2.0	1.0	26.0	<5.0	3.0	6.0	36.6	•••		
AE08571	236.80	237.80	1600.0	134.0	341.0	<0.5	5.0	3.0	<1.0	8.0	<5.0	2.0	3.0	28.2			
AE08572	237.80	238.80	2000.0	114.0	76.0	<0.5	<5.0	6.0	<1.0	10.0	<5.0	<1.0	2.0	60.0			
AE08573	238.80	239.80	2000.0	110.0	200.0	<0.5	<5.0	3.0	<1.0	6.0	<5.0	1.0	<1.0	35.5			
AE08574	239.80	240.80	1700.0	128.0	44.0	<0.5	<5.0	4.0	<1.0	18.0	5.0	<1.0	1.0	74.4			
AE08575	240.80	241.80	1800.0	52.0	25.0	~~~ ~ <0.5	<5.0	4.0	<1.0	8.0	7.0	<1.0	2.0	67.5			•
AE08576	241.80	242.80	1900-0	67.0	26.0	<0.5	<5.0	3.0	<1.0	<5.0	<5.0	<1.0	1.0	72.0			
AE08577	242.80	244.30	1600.0	21.0	28.0	<0.5	<5.0	2.0	<1.0	10.0	<5.0	<1.0	1.0	42.9			

Hole No. CHEM87-27

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррм)	AS (ppm)	CD (ppm)	МО (ррм)	СU/(CU+ZN) * 100	ROCK	CODES ALT MIN
							*****	· • • • • • • • • • • • • • • • • • • •								
AE08578	262.30	263.30	1800.0	25.0	16.0	<0.5	<5.0	2.0	<1.0	7.0	<5.0	<1.0	1.0	61.0		
AE08579	263.30	264.30	2100.0	32.0	16.0	<0.5	<5.0	3.0	<1.0	<5.0	<5.0	<1.0	1.0	66.7		
AE08580	264.30	265.30	1900.0	236.0	38.0	<0.5	25.0	6.0	<1.0	21.0	<5.0	<1.0	2.0	86.1		
AE08581	265.30	266.30	1800.0	168.0	60.0	<0.5	15.0	10.0	2.0	37.0	<5.0	<1.0	1.0	73.7		
AE08582	266.30	267.30	2300.0	213.0	72.0	<0.5	15.0	5.0	<1.0	48.0	5.0	<1.0	2.0	74.7		
AE08583	267.30	268.30	3400.0	96.0	231.0	<0.5	25.0	5.0	<1.0	96.0	13.0	<1.0	1.0	29.4		
AE08584	268.30	269.30	3400.0	116.0	193.0	<0.5	45.0	8.0	13.0	75.0	9.0	<1.0	1.0	37.5		
AE08585	269.30	270.30	4300.0	48.0	168.0	<0.5	50.0	7.0	5.0	77.0	11.0	1.0	<1.0	22.2		
AE08586	270.30	271.30	4500.0	80.0	53.0	<0.5	55.0	9.0	9.0	72.0	11.0	<1.0	1.0	60.2	3	
AE08587	271.30	272.40	4600.0	85.0	13.0	<0.5	30.0	7.0	4.0	13.0	6.0	<1.0	1.0	86.7		
AE08588	272.40	273.30	3900.0	16.0	9.0	<0.5	30.0	6.0	2.0	6.0	6.0	<1.0	1.0	64.0		
AE08589	273.30	274.30	5300.0	102.0	16.0	<0.5	20.0	5.0	3.0	<5.0	<5.0	<1.0	1.0	86.4		
AE08590	274.30	275.30	5500.0	58.0	3.0	<0.5	30.0	5.0	4.0	5.0	6.0	<1.0	<1.0	95.1		
AE08591	275.30	276.30	3700.0	148.0	11.0	<0.5	25.0	6.0	2.0	<5.0	7.0	<1.0	5.0	93.1		
AE08592	276.30	277.30	3300.0	423.0	34.0	* <0.5	25.0	6.0	7.0	<5.0	9.0	<1.0	4.0	92.6		
AE08593	277.30	278.30	1800.0	256.0	2.0	<0.5	10.0	9.0	8.0	6.0	13.0	<1.0	<1.0	99.2		
AE08594	278.30	279.30	1600.0	516.0	25.0	1.3	35.0	16.0	4.0	22.0 -	-16-0	<1.0	3.0	95.4		

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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 (ppw)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
							*********	****			*********						
AE08595	279.30	280.00	1700.0	514.0	16.0	1.2	35.0	19.0	2.0	19.0	25.0	<1.0	2.0	97.0			
AE08596	280.00	281.00	1700.0	175.0	3.0	0.5	10.0	18.0	1.0	21.03	16.0	<1.0	2.0	98.3			
AE08597	281.00	282.00	1900.0	165.0	4.0	<0.5	10.0	18.0	2.0	23.0	14.0	<1.0	2.0	97.6			
AE08598	282.00	283.00	3200.0	369.0	70.0	0.8	15.0	25.0	34.0	25.0	22.0	<1.0	3.0	84.1			
AE08599	283.00	284.00	640.0	169.0	145.0	<0.5	<5.0	39.0	39.0	14.0	8.0	<1.0	2.0	53.8			

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

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SAMPLE NUMBER	FROM	TO	BA (ppm)	(ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) ROCK * 100	CODES ALT	мін
AE08525	59.80	61.20	1500.0	502.0	83.0	<0.5	55.0	8.0	2.0	17.0	10.0	<1.0	2.0	85.8		
AE08526	61.20	62.80	1100.0	555.0	148.0	<0.5	150.0	9.0	3.0	13.0	16.0	1.0	3.0	78.9		
AE08527	62.80	64.00	940.0	821.0	170.0	<0.5	200.0	9.0	5.0	25.0	33.0	2.0	9.0	82.8		
AE08528	64.00	65.00	860.0	791.0	143.0	0.8	170.0	9.0	3.0	39.0	26.0	2.0	9.0	84.7		
AE08529	173.40	174.10	60.0	1356.0	86.0	<0.5	15.0	28.0	28.0	<5.0	<5.0	<1.0	<1.0	94.0		
AE08530	179.00	180.00	<20.0	527.0	62.0	<0.5	10.0	15.0	21.0	<5.0	<5.0	<1.0	<1.0	89.5		
AE08531	182.70	183.20	<20.0	1447.0	63.0	<0.5	10.0	22.0	14.0	<5.0	23.0	<1.0	<1.0	95.8		
AE08532	205.00	206.00	<20.0	2391.0	97.0	<0.5	20.0	31.0	45.0	7.0	<5.0	1.0	<1.0	96.1		
AE08533	208.40	209.40	2000.0	539.0	473.0	<0.5	40.0	8.0	2.0	10.0	6.0	3.0	1.0	53.3		
AE08534	209.40	210.40	1500.0	298.0	184.0	<0.5	20.0	4.0	<1.0	26.0	<5.0	<1.0	<1.0	61.8		
AE08535	210.40	211.40	1500.0	77.0	59.0	<0.5	<5.0	2.0	<1.0	19.0	<5.0	<1.0	1.0	56.6		
AE08536	211.40	212.40	1600.0	49.0	46.0	<0.5	<5.0	1.0	<1.0	19.0	<5.0	<1.0	1.0	51.6		
AE08537	212.40	213.40	1500.0	45.0	39.0	<0.5	<5.0	4.0	<1.0	25.0	17.0	<1.0	3.0	53.6		
AE08538	213.40	214.40	1500.0	201.0	46.0	<0.5	40.0	3.0	<1.0	9.0	<5.0	<1.0	2.0	81.4		
AE08539	214.40	215.40	1600.0	64.0	28.0	<0.5	<5.0	4.0	<1.0	<5.0	<5.0	<1.0	1.0	69.6		
AE08540	215.40	216.40	1800.0	89.0	30.0	×0.5	<5.0	5.0	1.0	<5.0	5.0	<1.0	1.0	74.8		
AE08541	216.40	217.50	110.0	81.0	46.0	<0.5	<5.0	37.0	12.0	17.0	11.0	<1.0	<1.0	63.8		

Hole No. CHEM87-28

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SAMPLE NUMBER	FROM	то	BA (ppm)	i CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	₽B (ppm)	AS (ppm)	CD (ppm)	HQ (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
AE08542	217.50	219.00	1600.0	203.0	32.0	<0.5	<5.0	9.0	1.0	<5.0	6.0	<1.0	2.0	86.4			
AE08543	219.00	220.60	1700.0	68.0	26.0	<0.5	10.0	10.0	1.0	5.0	12.0	<1.0	1.0	72.3			
AE08544	220.60	221.60	<20.0	266.0	150.0	0.6	<5.0	54.0	62.0	14.0	<5.0	<1.0	1.0	63.9			
AE08545	221.60	223.00	1900.0	61.0	38.0	<0.5	10.0	10.0	6.0	28.0	<5.0	<1.0	2.0	61.6			
AE08546	223.00	224.30	2200.0	61.0	26.0	<0.5	20.0	10.0	2.0	21.0	<5.0	<1.0	1.0	70.1			
AE08547	229.00	230.00	1800.0	229.0	55.0	0.5	<5.0	8.0	3.0	31.0	<5.0	<1.0	2.0	80.6			
AE08548	238.00	239.00	2000.0	94.0	45.0	<0.5	10.0	8.0	1.0	36.0	<5.0	<1.0	2.0	67.6			
AE08549	239.00	240.50	2200.0	54.0	42.0	<0.5	<5.0	7.0	<1.0	71.0	<5.0	<1.0	1.0	56.2			
AE08550	240.50	242.00	2100.0	169.0	39.0	<0.5	15.0	6.0	<1.0	33.0	<5.0	<1.0	2.0	81.2			
AE08601	242.00	243.50	1500.0	133.0	42.0	<0.5	<5.0	7.0	<1.0	30.0	<5.0	<1.0	1.0	76.0	3		
AE08602	274.60	275.60	2500.0	38.0	13.0	<0.5	<5.0	4.0	<1.0	<5.0	<5.0	<1.0	<1.0	74.5		•	
AE08603	275.60	277.10	2000.0	334.0	2.0	0.7	5.0	32.0	6.0	<5.0	<5.0	<1.0	2.0	99.4			
AE08604	277.10	277.30	1000.0	2800.0	39.0	8.3	220.0	81.0	19.0	<5.0	14.0	<1.0	7.0	99.1		•	
AE08605	277.30	278.00	1200.0	346.0	1.0	0.8	10.0	34.0	8.0	<5.0	8.0	<1.0	1.0	99.7			
AE08606	278.00	279.00	1500.0	954.0	20.0	2.1	30.0	27.0	6.0	21.0	13.0	<1.0	4.0	97.9			
AE08607	279.00	280.00	2700.0	2084.0	57.0	4.2	65.0	48.0	6.0	24.0	21.0	<1.0	7.0	97.3			
AE08608	280.00	281.00	2700.0	490.0	28.0	1.1	70.0	36.0	4.0	24.0	20.0	<1.0	13.0	94.6			

Hole No. CHEM87-28

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SAMPLE NUMBER	FROM	TO	BA (ppm)	i CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
													-				
AE08609	281.00	282.00	1800.0	252.0	8.0	0.6	50.0	21.0	2.0	19.0	14.0	<1.0	8.0	96.9			
AE08610	282.00	283.00	1400.0	324.0	15.0	0.7	80.0	28.0	2.0	18.0	16.0	<1.0	8.0	95.6			
AE08611	283.00	284.00	950.0	220.0	14.0	0.5	55.0	27.0	2.0	19.0	44.0	<1.0	6.0	94.0			
AE08612	284.00	285.00	1000.0	608.0	10.0	1.3	45.0	36.0	3.0	18.0	18.0	<1.0	4.0	98.4			
AE08613	285.00	286.00	1100.0	328.0	12.0	0.7	65.0	21.0	<1.0	13.0	22.0	<1.0	4.0	96.5			
AE08614	286.00	287.00	1100.0	240.0	12.0	0.6	30.0	25.0	2.0	18.0	20.0	<1.0	8.0	95.2			
AE08615	287.00	288.00	730.0	632.0	16.0	1.3	55.0	64.0	4.0	18.0	36.0	<1.0	7.0	97.5			
AE08616	288.00	289.00	1100.0	310.0	9.0	0.7	50.0	27.0	<1.0	<5.0	13.0	<1.0	2.0	97.2			
AE08617	289.00	290.00	2100.0	435.0	82.0	<0.5	45.0	25.0	86.0	43.0	<5.0	<1.0	6.0	84.1			
AE08618	290.00	291.20	4500.0	372.0	26.0	<0.5	95.0	20.0	30.0	22.0	<5.0	<1.0	3.0	93.5	2		
AE08619	291.20	292.00	80.0	238.0	85.0	<0.5	5.0	38.0	74.0	6.0	<5.0	<1.0	1.0	73.7	•		
AE08623	292.00	293.50	410.0	518.0	147.0	4.5	220.0	44.0	117.0	568.9	<5.0	<1.0	3.0	77.9			

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррм)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
												an a					
AE08600	139.60	140.60	1500.0	496.0	115.0	1.1	15.0	14.0	3.0	36.0	10.0	<1.0	1.0	81.2			
AE08655	248.00	249.00	350.0	126.0	205.0	<0.5	<5.0	25.0	22.0	66.0	21.0	<1.0	1.0	38.1			
AE08656	249.00	250.00	420.0	127.0	206.0	<0.5	<5.0	25.0	16.0	61.0	16.0	<1.0	<1.0	38.1			
AE08657	250.00	251.00	300.0	84.0	132.0	<0.5	<5.0	22.0	24.0	57.0	19.0	<1.0	1.0	38.9			

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SAMPLE NUMBER	FROM	TO	BA (ppm)	(ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	СU/(CU+ZN) * 100	ROCK	CODES ALT	MIN

AE08620	199.50	201.00	1500.0	46.0	10.0	<0.5	<5.0	8.0	3.0	6.0	43.0	<1.0	1.0	82.1		an an taon 1940 - Anna Anna 1940 - Anna Anna Anna	
AE08621	201.00	201.70	1300.0	66.0	20.0	<0.5	<5.0	14.0	6.0	<5.0 ¹	16.0	<1.0	1.0	76.7			
AE08622	201.70	203.20	1100.0	7.0	3.0	<0.5	<5.0	3.0	2.0	8.03	75.0	<1.0	1.0	70.0			

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) ROCK + 100	CODES ALT	MIN
AE08624	85.70	86.70	830.0	277.0	87.0	<0.5	<5.0	26.0	20.0	28.0	19.0	<1.0	1.0	76.1		
AE08625	86.70	87.70	990.0	260.0	56.0	<0.5	10.0	26.0	15.0	20.01	163.0	<1.0	2.0	82.3		
AE08626	87.70	88.70	790.0	105.0	47.0	<0.5	<5.0	19.0	13.0	6.07	52.0	<1.0	1.0	69.1		
AE08627	88.70	89.70	950.0	110.0	88.0	<0.5	5.0	21.0	21.0	54.0	19.0	<1.0	2.0	55.6		
AE08658	220.60	221.60	180.0	206.0	77.0	<0.5	<5.0	33.0	79.0	8.0	<5.0	<1.0	<1.0	72.8	a Ma	
AE08659	221.60	222.60	1200.0	400.0	1645.0	<0.5	110.0	9.0	11.0	86.0	25.0	8.0	2.0	19.6		
AE08660	222.60	223.70	920.0	649.0	509.0	<0.5	130.0	7.0	4.0	21.0	29.0	2.0	2.0	56.0		
AE08661	223.70	224.40	940.0	2112.0	156.0	<0.5	240.0	11.0	3.0	33.0	23.0	<1.0	2.0	93.1		
AE08662	224.40	225.40	970.0	1079.0	149.0	<0.5	95.0	5.0	1.0	19.0	19.0	<1.0	2.0	87.9		
AE08663	225.40	226.30	1000.0	964.0	196.0	<0.5	75.0	6.0	2.0	19.0	12.0	<1.0	3.0	83.1 🔊		
AE08664	226.30	227.10	1100.0	2231.0	161.0	<0.5	70.0	4.0	2.0	23.0	18.0	<1.0	1.0	93.3		
AE08665	227.10	228.10	1100.0	784.0	432.0	<0.5	30.0	1.0	1.0	5.0	<5.0	1.0	<1.0	64.5		
AF08666	228.10	229.10	1700.0	163.0	190.0	<0.5	10.0	5.0	2.0	33.0	8.0	<1.0	2.0	46.2		
AF09667	220110	220 00	30.0	119 0	68.0	(0.5	(5.0	38.0	195.0	13.0	110.0	(1.0	1.0	63.6		
AE00667	227,10	230.00	730.0	56 0	00.0	/0 5	<5 ¹ 0	14.0	66 0	19.0	20 0	<1 A	2 0	38 9		
HEVOODO	230.00	230.30	/30.0	50.0	00.V	1819 - Artes		14.0	00.0	17.0	20.0	(1.0	2.V	42.0		
AE08669	230.50	231.50	640.0	72.0	92.0		(2.0	18.0	84.0	14.0	34.0	<1.0	2.0	10.7		
AE08670	231.50	232.50	830.0	18.0	68.0	<0.5	<5.0	4.0	6.0	. 14.0	9.0	<1.0	3.0	20.9		

Hole No. CHEM87-31

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SAMPLE NUMBER	FROM	то	BA	CU	ZN	AG	AU	CO	NI	PB	AS	CD	MO	CU/(CU+ZN)	ROCK	CODES	MIN
			(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	* 100			
AE08671	232.50	233.50	760.0	15.0	73.0	<0.5	<5.0	3.0	7.0	15.0	9.0	<1.0	2.0	17.0			
AE08672	233.50	234.50	380.0	53.0	73.0	<0.5	10.0	15.0	28.0	10.0	13.0	<1.0	3.0	42.1			
AE08673	234.50	235.50	810.0	20.0	122.0	<0.5	30.0	8.0	17.0	24.07	13.0	<1.0	4.0	14.1			
AE08674	235.50	236.50	960.0	14.0	51.0	<0.5	10.0	3.0	1.0	12.0	12.0	<1.0	2.0	21.5			
AE08675	236.50	237.50	1300.0	14.0	51.0	<0.5	35.0	4.0	2.0	22.0	8.0	<1.0	3.0	21.5			
AE08676	237.50	238.50	1400.0	29.0	60.0	<0.5	30.0	2.0	1.0	11.0	13.0	<1.0	2.0	32.6	~		
AE08677	238.50	239.70	1200.0	210.0	41.0	<0.5	25.0	15.0	35.0	56.0	23.0	<1.0	2.0	83.7			
AE08678	239.70	240.70	250.0	336.0	72.0	1.6	160.0	35.0	82.0	373.0	20.0	<1.0	1.0	82.3			
AE08679	248.60	249.60	120.0	129.0	78.0	<0.5	15.0	33.0	77.0	25.0	7.0	<1.0	1.0	62.3			
AE08680	249.60	250.00	1300.0	5900.0	231.0	134.4	4765.6	9.0	7.0	13600.0	<5.0	7.0	7.0	96.2	P		
AE08681	250.00	251.00	190.0	353.0	102.0	<0.5	85.0	36.0	69.0	379.0	16.0	<1.0	2.0	77.6			
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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU) (ppm)	ZN + (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MI
AE08628	132.90	134.00	850.0	<1.0	8.0	<0.5	10.0	2.0	5.0	12.0	<5.0	<1.0	<1.0				
AE08629	134.00	135.00	890.0	1.0	7.0	<0.5	<5.0	3.0	3.0	11.0	<5.0	<1.0	1.0	12.5			
AE08630	135.00	136.00	910:0	<1.0	9.0	<0.5	<5.0	1.0	1.0	6.0	<5.0	<1.0	<1.0				
AE08631	136.00	137.30	1100.0	<1.0	6.0	<0.5	<5.0	1.0	2.0	13.0	<5.0	<1.0	1.0				
AE08632	137.30	138.20	640.0	66.0	25.0	<0.5	<5.0	27.0	6.0	9.0	<5.0	<1.0	1.0	72.5			
AE08633	177.75	178.25	200.0	410.0	38.0	<0.5	<5.0	20.0	11.0	11.0	<5.0	<1.0	1.0	91.5			
AE08634	205.85	206.85	950.0	28.0	20.0	<0.5	<5.0	3.0	7.0	<5.0	<5.0	<1.0	1.0	58.3			
AE08635	206.85	207.35	930.0	16200.0	311.0	8.5	75.0	74.0	23.0	10.0	13.0	4.0	4.0	98.2			
AE08636	207.35	208.35	700.0	756.0	56.0	1.0	<5.0	16.0	15.0	<5.0	<5.0	<1.0	<1.0	93.1			
AE08638	242.40	243.40	630.0	222.0	45.0	<0.5	<5.0	19.0	7.0	10.0	<5.0	<1.0	<1.0	83.2			
AE08637	243.40	244.40	1000.0	175.0	60.0	<0.5	<5.0	13.0	10.0	<5.0	<5.0	<1.0	<1.0	74.5			
AE08639	244.40	245.40	500.0	116.0	61.0	<0.5	<5.0	19.0	10.0	15.0	<5.0	<1.0	1.0	65.5			
AE08640	245.40	246.40	710.0	197.0	51.0	<0.5	<5.0	19.0	8.0	10.0	<5.0	<1.0	<1.0	79.4		3	
AE08641	246.40	247.60	530.0	465.0	72.0	<0.5	<5.0	22.0	18.0	<5.0	<5.0	<1.0	1.0	86.6			
AE08642	247.60	248.10	530.0	2951.0	143.0	1.2	<5.0	32.0	27.0	11.0	<5.0	<1.0	1.0	95.4			
AE08643	253.80	254.70	1000.0	50.0	20.0	<0.5	10.0	8.0	3.0	9.0	<5.0	<1.0	1.0	71.4			•
AE08644	321.70	322.40	2000.0	156.0	105.0	<0.5	10.0	17.0	18.0	14.0	<5.0	<1.0	2.0	59.8			

Hole No. CHEM87-32

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	; CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CU (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MI
											n de la deservación d En deservación de la d						
AE08645	324.00	324.70	1500.0	29.0	56.0	<0.5	35.0	5.0	8.0	43.0	<5.0	<1.0	1.0	34.1			
AE08646	324.70	326.00	3100.0	6.0	25.0	<0.5	25.0	2.0	2.0	41.0	<5.0	<1.0	1.0	19.4			
AE08647	326.00	327.50	2000.0	6.0	24.0	<0.5	65.0	3.0	2.0	60.03	<5.0	<1.0	1.0	20.0	6		
AE08648	327.50	329.00	2000.0	3.0	23.0	<0.5	65.0	3.0	4.0	36.0	<5.0	. <1₊0 ; ;: ¹	2.0	11.5			
AÉ08649	329.00	330.50	1100.0	10.0	52.0	<0.5	90.0	4.0	<1.0	50.0	<5.0	<1.0	1.0	16.1			3. .
AE08650	330.50	332.00	1600.0	47.0	23.0	<0.5	15.0	5.0	15.0	78.0	7.0	<1.0	4.0	67.1			
AE08701	332.00	333.50	1500.0	75.0	20.0	0.7	55.0	6.0	1.0	169.0	6.0	<1.0	1.0	78.9			
AE08702	333.50	335.00	1400.0	56.0	37.0	<0.5	50.0	5.0	5.0	78.0	<5.0	<1.0	2.0	60.2			
AE08703	335.00	336.50	960.0	39.0	55.0	<0.5	35.0	4.0	<1.0	102.0	<5.0	<1.0	1.0	41.5			
AE08704	336.50	338.00	980.0	46.0	57.0	<0.5	55.0	4.0	<1.0	106.0	<5.0	<1.0	<1.0	44.7	2		
AE08705	338.00	339.00	970.0	52.0	217.0	<0.5	70.0	5.0	<1.0	107.0	6.0	<1.0	1.0	19.3	•		
AE08706	339.00	340.00	1500.0	79.0	453.0	<0.5	180.0	4.0	<1.0	145.0	17.0	2.0	1.0	14.9			
AE08707	340.00	341.50	1500.0	60.0	89.0	<0.5	160.0	5.0	<1.0	83.0	23.0	<1.0	2.0	40.3		т	
AE08708	341.50	343-00	1400.0	44.0	187.0	(0.5	95.0	4.0	<1.0	57.0	14.0	<1.0	2.0	19.0	• • •		
AF08709	347 00	246 00	1400.0	40.0	99.0	/0 5	75.0	4.0	1.0	52 0	11.0		2.0	22.0			
AE00710	343.00	340.00	1400.0	-V.V		2013. 2016 - 1	/J.V	7.V	1.0	5.0	11.0		2.0	20.0			
MEV8/10	346.00	347.20	1400.0	37.0	284.V	(0.5	62.V	4.0	2.0	26.0	(2.0	1.0	2.0	11.5			
AE08711	347.20	348.50	1200.0	26.0	101.0	<0.5	50.0	4.0	1.0	41.0	<5.0	<1.0	2.0	20.5		•	

Hole No. CHEM87-32

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DIAMOND	DRILL CORE	LITHOGEO	CHEMICA	L RECORI)
	(MIN	OR 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)	HO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
												** • • • • • • • • • • • • • • • • • •			**********		
AE08712	348.50	349.80	1300.0	207.0	37.0	0.9	65.0	6.0	3.0	9.0	8.0	<1.0	<1.0	84.8			
AE08713	349.80	351.00	380.0	167.0	203.0	<0.5	200.0	27.0	50.0	17.0	35.0	<1.0	<1.0	45.1			
AE08714	351.00	353.00	1200.0	26.0	39.0	<0.5	70.0	7.0	10.0	14.0	7.0	<1.0	1.0	40.0			
AE08715	353.00	355.00	1200.0	74.0	585.0	<0.5	65.0	7.0	8.0	33.0	14.0	3.0	1.0	11.2		ta an	
AE08716	355.00	357.00	1500.0	52.0	133.0	<0.5	60.0	10.0	10.0	36.0	17.0	<1.0	1.0	28.1			
AE08717	357.00	359.00	1400.0	13.0	77.0	<0.5	65.0	4.0	1.0	42.0	8.0	<1.0	1.0	14.4			
AE08718	359.00	361.00	1300.0	21.0	95.0	<0.5	30.0	5.0	<1.0	61.0	9.0	<1.0	1.0	18.1			
AE08719	361.00	363.00	1000.0	12.0	94.0	<0.5	35.0	4.0	<1.0	92.0	7.0	<1.0	1.0	11.3			
AE08720	363.00	365.00	1100.0	19.0	284.0	<0.5	20.0	4.0	<1.0	54.0	9.0	1.0	1.0	6.3			
AE08721	365.00	367.00	2300.0	15.0	54.0	<0.5	35.0	5.0	<1.0	30.0	9.0	<1.0	1.0	21.7			
AE08722	367.00	369.00	1700.0	45.0	48.0	<0.5	60.0	5.0	<1.0	16.0	7.0	<1.0	2.0	48.4			
AE08723	369.00	371.00	1700.0	40.0	59.0	<0.5	80.0	5.0	1.0	14.0	8.0	<1.0	1.0	40.4			
AE08724	371.00	373.00	1600.0	27.0	43.0	<0.5	100.0	4.0	<1.0	10.0	<5.0	<1.0	2.0	38.6			
AE08725	373.00	375.00	1400.0	32.0	30.0	<0.5	35.0	4.0	<1.0	12.0	8.0	<1.0	1.0	51.6			
AE08726	375.00	377.00	1700.0	120.0	38.0	<0.5	25.0	6.0	<1.0	16.0	(5.0	(1.0	2.0	75.9			
AE08727	377.00	379.00	1200.0	282.0	45.0	(0.5	30.0	6.0	2.0	12 0	5 0	Z1 A	2.0	0()			
AE08728	379 00	380 70	1500 0	104 0	17.0	10 5	25.0	7 0	2.0	21 0	5.0	~	4.0	00.4			
	0/7100	JJV./V	130010		1/10	.v.J	∡ J.V	·/.V	4.V	21.0	D. 0	<1.0	1.0	82.9			

Hole No. CHEM87-32

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm	CU/(CU+ZN) , * 100	ROCK	CODES ALT	MIN
AE08729	387.00	388.60	2800.0	57.0	13.0	<0.5	60.0	5.0	<1.0	11.0	7.0	<1.0	3.0	81.4			
AE08730	388.60	389.80	2000.0	484.0	35.0	<0.5	10.0	12.0	2.0	10.0	12.0	<1.0	3.0	93.3	4 ¹		
AE08731	389.80	391.40	1300.0	65.0	17.0	<0.5	110.0	5.0	<1.0	8.0	<5.0	<1.0	2.0	79.3			
AE08732	391.40	392.00	1200.0	17.0	12.0	<0.5	5.0	4.0	1.0	24.0	<5.0	<1.0	2.0	58.6			
AE08733	392.00	393.00	1200.0	14.0	18.0	<0.5	40.0	5.0	1.0	23.0	<5.0	<1.0	2.0	43.7			
AE08734	393.00	395.00	1300.0	35.0	16.0	<0.5	35.0	3.0	1.0	7.0	<5.0	<1.0	2.0	68.6			
AE08735	400.50	402.00	1800.0	31.0	12.0	<0.5	15.0	5.0	1.0	29.0	<5.0	<1.0	2.0	72.1			
AE08736	402.00	403.00	2100.0	67.0	11.0	<0.5	40.0	4.0	1.0	39.0	<5.0	<1.0	5.0	85.9			
AE08737	403.00	404.00	2200.0	19.0	16.0	<0.5	10.0	3.0	<1.0	63.0	<5.0	<1.0	2.0	54.3			
AE08738	404.00	404.80	2100.0	53.0	51.0	<0.5	20.0	3.0	1.0	172.0	<5.0	<1.0	2.0	51.0			
AE08739	404.80	406.30	2600.0	18.0	16.0	<0.5	<5.0	3.0	<1.0	49.0	<5.0	<1.0	1.0	52.9			
AE08740	410.00	412.50	4000.0	37.0	21.0	<0.5	<5.0	3.0	<1.0	22.0	<5.0	<1.0	2.0	63.8			
AE08741	412.50	414.00	3300.0	104.0	24.0	<0.5	20.0	4.0	<1.0	70.0	<5.0	<1.0	2.0	81.2			
AE08742	415.00	416.40	2900.0	51.0	35.0	<0.5	<5.0	3.0	1.0	29.0	<5.0	<1.0	2.0	59.3			
AE08743	416.40	416.90	2900.0	2731.0	236.0	4.3	120.0	11.0	1.0	68.0	5.0	2.0	3.0	92.1			
AE08744	416.90	418 00	2400-0	66.0	40.0	0.6	(5.0	3.0	41.0	22.0	(5.0	(1.0	5.0	62.3			
4508745	427 20	429 70	1000 0	45 0	17 0	(0.5	<5.0	5.0	22.0	12.0	(5.0	(1.0	3.0	90 L			
PL/0/17	14/.30	140./V	1000.0	7J.V	1/.4	1013		J.V	44.V	14.1		\4 • V		/4.0			

Hole No. CHEM87-32

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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)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
	· · ·							· · · ·		-							
AE08746	428.70	429.50	750.0	187.0	26.0	<0.5	30.0	17.0	13.0	83.0	71.0	<1.0	17.0	87.8			
AE08747	429.50	431.00	810.0	61.0	30.0	<0.5	<5.0	8.0	16.0	19.0	8.0	<1.0	5.0	67.0			
AE08748	444.00	445.00	710.0	172.0	21.0	<0.5	30.0	13.0	11.0	11.0	<5.0	<1.0	6.0	89.1			
AE08749	445.00	446.30	740.0	327.0	32.0	<0.5	15.0	17.0	15.0	11.0	11.0	<1.0	3.0	91.1			
AE08750	446.30	447.30	<20.0	157.0	91.0	<0.5	<5.0	30.0	61.0	<5.0	10.0	<1.0	2.0	63.3			

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA; (ppm)	CU i (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT MIN
										********					**********	
AE08682	67.90	68.90	1300.0	15.0	24.0	<0.5	<5.0	9.0	23.0	5.0	<5.0	<1.0	1.0	38.5		
AE08683	68.90	69.80	1300.0	449.0	100.0	<0.5	<5.0	18.0	18.0	<5,0	<5.0	1.0	1.0	81.8		

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN • (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+Z) * 100	() ROCK	CODES ALT	MIN
AE08751	111.40	112.80	1500.0	45.0	22.0	<0.5	<5.0	6.0	5.0	5.0	47.0	<1.0	1.0	67.2			
AE08752	112.80	114.60	1600.0	28.0	18.0	<0.5	<5.0	7.0	6.0	8.0	47.0	<1.0	1.0	60.9			
AE08753	114.60	116.20	100010	57.0	26.0	<0.5	<5.0	7.0	3.0	8.0	25.0	<1.0	1.0	68.7			
AE08754	116.20	117.70	1000.0	28.0	45.0	<0.5	<5.0	6.0	6.0	5.0	5.0	<1.0	1.0	38.4			
AE08755	125.00	126.40	890.0	41.0	31.0	<0.5	5.0	10.0	1.0	6.0	<5.0	<1.0	1.0	56.9			
AE08756	126.40	127.00	1800.0	88.0	73.0	<0.5	<5.0	15.0	3.0	6.0	<5.0	<1.0	2.0	54.7			
AE08757	127.00	128.00	1200.0	10.0	30.0	<0.5	<5.0	6.0	2.0	8.0	<5.0	<1.0	1.0	25.0			
AE08758	146.60	148.10	1200.0	12.0	31.0	<0.5	<5.0	5.0	3.0	6.0	5.0	<1.0	1.0	27.9			
AE08759	148.10	149.00	1100.0	27.0	28.0	<0.5	<5.0	5.0	1.0	<5.0	<5.0	<1.0	1.0	49.1			
AE08760	149.00	150.00	930.0	11.0	26.0	<0.5	<5.0	5.0	2.0	11.0	<5.0	<1.0	1.0	29.7			
AE08761	150.00	151.90	1200.0	13.0	23.0	<0.5	<5.0	3.0	3.0	5.0	<5.0	<1.0	1.0	36.1			
AE08762	212.10	213.10	1000.0	1050.0	78.0	<0.5	<5.0	17.0	10.0	70.0	<5.0	<1.0	18.0	93.1			·
AE08763	223.00	224.00	1600.0	182.0	73.0	<0.5	<5.0	23.0	13.0	<5.0	<5.0	<1.0	5.0	71.4		27.	
AE08764	224.00	225.00	1400.0	6900.0	151.0	2.1	35.0	55.0	18.0	17.0	12.0	<1.0	50.0	97.9			
AE08765	225.00	225.40	<20.0	568.0	92.0	<0.5	<5.0	36.0	72.0	<5.0	<5 _v 0	<1.0	5.0	86.1			
AE08766	225.40	225.60	60.0	7600.0	195.0	2.2	25.0	35.0	66.0	<5.0	<5.0	1.0	63.0	97.5			
AE08767	272.80	274.10	1200.0	712.0	560.0	0.5	80.0	10.0	8.0	64.0	42.0	3.0	5.0	56.0			
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Hole No. CHEM87-34



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)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
				*********			******						**				
AE08768	280.00	281.00	1500.0	912.0	5200.0	<0.5	30.0	12.0	10.0	286.0	61.0	36.0	6.0	14.9			
AE08769	281.00	282.00	1800.0	593.0	1587.0	0.6	65.0	17.0	12.0	438.03	<5.0	9.0	5.0	27.2			
AE08770	282.00	283.00	1600.0	222.0	396.0	0.6	45.0	6.0	3.0	42.0	<5.0	2.0	3.0	35.9	n an an Ar An Ar		
AE08771	285.00	286.00	1600.0	80.0	262.0	<0.5	5.0	6.0	3.0	94.0	<5.0	1.0	3.0	23.4			
AE08772	286.00	287.00	2000.0	57.0	96.0	<0.5	10.0	7.0	3.0	38.0	6.0	<1.0	3.0	37.3			
AE08773	287.00	288.00	2000.0	173.0	48.0	<0.5	35.0	10.0	5.0	20.0	33.0	<1.0	5.0	78.3			
AE08774	288.00	289.00	1300.0	300.0	31.0	<0.5	65.0	10.0	3.0	24.0	57.0	<1.0	3.0	90.6			
AE08775	289.00	290.00	890.0	122.0	16.0	<0.5	45.0	11.0	2.0	12.0	38.0	<1.0	2.0	88.4			
AE08776	290.00	291.60	860.0	68.0	7.0	<0.5	20.0	10.0	3.0	6.0	13.0	<1.0	2.0	90.7	2		
AE08777	291.60	292.60	550.0	70.0	7.0	<0.5	20.0	10.0	5.0	6.0	20.0	<1.0	2.0	90.9			
AE08778	292.60	293.80	630.0	95.0	7.0	<0.5	30.0	11.0	7.0	8.0	22.0	<1.0	5.0	93.1			
AE08779	293.80	295.00	1800.0	186.0	232.0	<0.5	20.0	17.0	17.0	11.0	11.0	1.0	3.0	44.5			•
AE08780	295.00	296.00	1800.0	237.0	415.0	<0.5	5.0	11.0	10.0	108.0	<5.0	4.0	2.0	36.3			
AE08781	296.00	297.10	1800.0	275.0	1814.0	<0.5	30.0	8.0	34.0	17.0	<5.0	15.0	2.0	13.2			
AE08782	297.10	298.10	1500.0	482.0	1675.0	1.7	130.0	12.0	30.0	48.0	<5.0	12.0	2.0	22.4			
AE08783	298.10	299.00	1700.0	449.0	487.0	<0.5	55.0	9.0	15.0	68.0	(5.0	3.0	2.0	48.0			
AE08784	299.00	299.90	1700.0	896.0	275.0	<0.5	15.0	6.0	- 12:0~	13.0	<5.0	2.0	1.0	76.5			t in open



SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN)ROCK * 100	CODES ALT	MI
					•								*******			
AE08785	300.00	300.70	640.0	569.0	342.0	<0.5	30.0	32.0	64.0	<5.0	<5.0	<1.0	1.0	62.5		
AE08786	300.70	302.00	1400.0	986.0	185.0	<0.5	15.0	5.0	8.0	10.0	<5.0	1.0	1.0	84.2		
AE08787	302.00	303.00	1400.0	416.0	210.0	<0.5	15.0	5.0	6.0	16.0	<5.0	1.0	1.0	66.4		
AE08788	303.00	304.00	1100.0	277.0	352.0	<0.5	95.0	17.0	17.0	45.0	<5.0	2.0	1.0	44.0		•
AE08789	304.00	305.00	1700.0	122.0	432.0	<0.5	55.0	7.0	5.0	38.0	<5.0	3.0	1.0	22.0		
AE08790	305.00	306.00	1600.0	132.0	217.0	<0.5	45.0	10.0	6.0	13.0	<5.0	1.0	1.0	37.8		
AE08791	306.00	307.00	1300.0	122.0	57.0	<0.5	15.0	8.0	9.0	10.0	<5.0	<1.0	2.0	68.2		
AE08792	307.00	307.80	<20.0	82.0	49.0	<0.5	<5.0	33.0	190.0	12.0	<5.0	<1.0	1.0	62.6		
AE08793	307.80	309.40	860.0	54.0	27.0	<0.5	<5.0	9.0	49.0	21.0	<5.0	<1.0	3.0	66.7		
AE08794	309.40	310.40	1200.0	50.0	17.0	<0.5	35.0	5.0	7.0	8.0	8.0	<1.0	3.0	74.6		
AE08795	310.40	312.00	1200.0	19.0	33.0	<0.5	25.0	5.0	5.0	16.0	7.0	<1.0	3.0	36.5		
AE08796	313.00	314.50	1100.0	80.0	386.0	0.5	20.0	8.0	5.0	13.0'	<5.0	4.0	4.0	17.2		
AE08797	314.50	316.00	990.0	39.0	141.0	1.1	35.0	4.0	5.0	28.0	<5.0	<1.0	4.0	21.7		
AE08798	316.00	317.50	1200.0	50.0	210.0	2.1	50.0	6.0	4.0	97.0	<5.0	1.0	4.0	19.2		
AE08799	320.00	322.00	2300.0	173.0	1403.0	3.7	140.0	5.0	3.0	147.0	<5.0	9.0	5.0	11.0		
AE08800	323.50	324.50	2400.0	248.0	1297.0	1.2	45.0	5.0	5.0	105.0	<5.0	7.0	5.0	16.0		
AD02651	325.75	326.00	50.0	150.0	76.0	<0.5	<5.0	36.0	104.0	5.0	44.0	<1.0	2.0	66 A		

Hole No. CHEM87-34

SAMPLE NUMBER	FROM	TO	BA (ppm)	, CU i(ppm)	2N (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	МО (ppm)	CU/(CU+ZN) ROCK	CODES ALT MIN
	- 4 - 8 - 7 - 7 - 4 - 4 - 4 - 4 - 4					n									
AD02652	367.80	368.90	2800.0	32.0	64.0	<0.5	<5.0	8.0	45.0	7.0	<5.0	<1.0	2.0	33.3	
AD02653	368.90	370.30	4500.0	50.0	58.0	<0.5	<5.0	5.0	40.0	14.0	<5.0	<1.0	2.0	46.3	
AD02654	371.10	372.00	2900.0	37.0	111.0	<0.5	<5.0	5.0	26.0	7.0.3	<5.0	<1.0	2.0	25.0	
AD02655	372.70	374.00	2700.0	33.0	58.0	<0.5	<5.0	23.0	166.0	7.0	22.0	<1.0	2.0	36.3	an an Array An
AD02656	374.00	375.00	4000.0	35.0	54.0	<0.5	<5.0	4.0	32.0	9.0	<5.0	<1.0	2.0	39.3	
AD02657	375.00	376.00	4600.0	31.0	87.0	<0.5	<5.0	3.0	28.0	<5.0	<5.0	<1.0	11.0	26.3	
AD02658	376.00	377.00	3500.0	25.0	90.0	<0.5	<5.0	3.0	22.0	7.0	<5.0	<1.0	4.0	21.7	
AD02659	377.00	377.70	3500.0	32.0	73.0	<0.5	<5.0	3.0	21.0	6.0	<5.0	<1.0	4.0	30.5	
AD02660	377.70	378.50	3700.0	58.0	59.0	<0.5	<5.0	4.0	39.0	11.0	<5.0	<1.0	7.0	49.6	
AD02661	378.50	379.50	3300.0	35.0	51.0	<0.5	<5.0	3.0	26.0	7.0	<5.0	<1.0	5.0	40.7	•
AD02662	379.50	380.60	2000.0	52.0	163.0	<0.5	35.0	9.0	57.0	8.0	<5.0	<1.0	2.0	24.2	
AD02663	380.60	381.70	1900.0	94.0	177.0	<0.5	<5.0	36.0	194.0	6.0	<5.0	<1.0	3.0	34.7	
AD02664	381.70	381.90	1800.0	239.0	120.0	<0.5	75.0	40.0	230.0	8.0	<5.0	<1.0	3.0	66.6	
AD02665	381.90	382.80	830.0	145.0	161.0	<0.5	<5.0	44.0	301.0	7.0	<5.0	<1.0	3.0	47.4	
AD02666	387.00	388.00	5600.0	33.0	80.0	<0.5	<5.0	5.0	20.0	5.0	42.0	<1.0	<1.0	29.2	
AD02667	388.00	389.00	11000.0	58.0	27 .04	iento'.5.	<5.0	5.0	28.0	7.0	35.0	<1.0	2.0	68.2	
AB02668	389.00	390.00	11000.0	72.0	36.0	<0.5	<5.0	5.0	26.0	8.0	<5.0	<1.0	1.0	66.7	

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	CU/(CU+ZN) + 100	ROCK	CODES ALT	MIN
AD02669	390.00	391.00	3900.0	39.0	24.0	<0.5	<5.0	2.0	18.0	6.0	18.0	<1.0	<1.0	61.9			

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Hole No. CHEM87-34

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	МО (ррм)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
							14 0 4 4 4 4 4 4 4 4 4 4 4 4	*******					***********				
AE08684	25.00	26.00	1100.0	317.0	63.0	<0.5	<5.0	16.0	17.0	<5.0	<5.0	<1.0	2.0	83.4			
AE08685	26.00	27.00	760.0	63.0	49.0	<0.5	<5.0	15.0	16.0	(5.00	<5.0	<1.0	3.0	56.2			
AE08686	27.00	28.00	790.0	51.0	40.0	<0.5	<5.0	14.0	15.0	<5.0	<5.0	<1.0	1.0	56,0			
AE08687	28.00	29.00	770.0	43.0	35.0	<0.5	5.0	11.0	12.0	<5.0	<5.0	<1.0	<1.0	55.1			
AE08688	61.30	62.30	1000.0	8.0	18.0	<0.5	5.0	3.0	1.0	<5.0	<5.0	<1.0	<1.0	30.8			
AE08689	62.30	63.30	1100.0	4.0	21.0	<0.5	<5.0	3.0	2.0	6.0	<5.0	<1.0	<1.0	.16.0			

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SAMPLE NUMBER	FROM	TO	BA (ppm.)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ррь)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm.)	CD (ppm)	MO (ppm)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
									******				**********				
AD02670	102.00	103.60	1300.0	13.0	62.0	<0.5	<5.0	5.0	4.0	<5.0	8.0	<1.0	<1.0	17.3			
AD02671	103.60	104.80	1800.0	1900.0	765.0	1.0	20.0	7.0	6.0	22.0	57.0	5.0	10.0	71.3			
AD02672	104.80	106.00	2600.0	700.0	360.0	<0.5	45.0	12.0	10.0	32.0	40.0	2.0	7.0	66.0			
AD02673	106.00	107.00	2100.0	365.0	189.0	<0.5	<5.0	6.0	4.0	8.0	32.0	1.0	2.0	65.9			
AD02674	107.00	107.90	2300.0	8900.0	570.0	5.0	55.0	46.0	30.0	41.0	93.0	4.0	79.0	94.3			
AD02675	107.80	109.00	2100.0	310.0	110.0	<0.5	<5.0	8.0	8.0	5.0	32.0	<1.0	4.0	73.8			
AD02676	149.00	150.70	1200.0	92.0	86.0	<0.5	15.0	5.0	11.0	33.0	10.0	<1.0	4.0	51.7			
AD02677	150.70	152.00	2600.0	96.0	1900.0	1.5	55.0	5.0	4.0	44.0	6.0	8.0	6.0	4.8			
AD02678	152.00	153.00	3000.0	23.0	265.0	1.0	45.0	5.0	4.0	29.0	32.0	1.0	6.0	8.0			
AD02679	153.00	154.00	2300.0	63.0	1650.0	2.0	75.0	5.0	6.0	165.0	20.0	9.0	9.0	3.7			
AD02680	154.00	155.00	2100.0	27.0	275.0	0.5	35.0	5.0	6.0	30.0	33.0	<1.0	4.0	8.9			
AD02681	155.00	156.00	1600.0	71.0	1050.0	0.5	20.0	5.0	4.0	45.0	34.0	4.0	4.0	6.3		t de la composition d Composition de la composition de la comp	
AD02682	156.00	156.80	2200.0	880.0	1450.0	3.0	90.0	4.0	6.0	147.0	54.0	5.0	10.0	37.8			
AD02683	156.80	158.00	80.0	150.0	795.0	<0.5	10.0	35.0	83.0	9.0	23.0	<1.0	2.0	15.9			
AD02684	189.00	191.00	1500.0	106.0	63.0	<0.5	<5.0	20.0	28.0	6.0	32.0	<1.0	1.0	62.7			
AD02685	244.00	246.40	2800.0	58.0	46.0	<0.5	<5.0	7.0	30.0	7.0	<5.0	<1.0	7.0	55.8			• •

Hole No. CHEM87-36

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SAMPLE NUMBER	FROM	TO	BA	cu	ZN .	AG	AU	co	NI	рв	AS	CD	но	CU/(CU+ZN)	ROCK	CODES ALT	MIN
			(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)	(ppm)	(ppm.)	(ppm)	(ppm)	(pps)	* 100			
														•			
AE08690	15.20	16.60	1000.0	14.0	31.0	<0.5	<5.0	4.0	4.0	5.0	<5.0	<1.0	3.0	31.11			
AE08691	16.60	18.00	920.0	79.0	30.0	<0.5	<5.0	8.0	6.0	<5.0	6.0	<1.0	3.0	72.48			
AE08692	18.00	19.00	1300:0	315.0	43.0	<0.5	15.0	15.0	10.0	6.0	<5.0	<1.0	7.0	87.99			
AE08693	19.00	20.00	1500.0	310.0	41.0	<0.5	25.0	12.0	8.0	7.0	13.0	<1.0	7.0	88.32			
AE08694	20.00	21.00	1600.0	28.0	26.0	<0.5	5.0	7.0	5.0	7.0	14.0	<1.0	3.0	51.85			
AE08695	21.00	22.00	1900.0	28.0	24.0	<0.5	×5.0	6.0	3.0	9.0	<5:10	<1.0	2.0	53.85			
AE08696	22.00	23.00	1700.0	23.0	29.0	<0.5	<5.0	4.0	2.0	7.0	33.0	<1.0	4.0	44.23			
AE08697	23.00	24.00	1200.0	50.0	25.0	<0.5	<5.0	7.0	4.0	6.0	<5.0	<1.0	3.0	66.67			-
AE08698	24.00	25.00	1600.0	34.0	29.0	<0.5	<5.0	6.0	4.0	7.0	<5.0	<1.0	3.0	53.97			
AE08699	25.00	26.00	1700.0	14.0	23.0	<0.5	<5.0	4.0	2.0	8.0	26.0	<1.0	3.0	37.84			
AE08700	26.00	27.00	1200.0	14.0	14.0	<0.5	<5.0	1.0	2.0	7.0	17.0	<1.0	2.0	50.00			
AB21951	27.00	28.00	1300.0	45.0	36.0	0.5	<5.0	4.0	5.0	14.0	15.0	<1.0	2.0	55.56			
AB21952	28.00	29.00	1900.0	104.0	25.0	<0.5	10.0	13.0	8.0	8.0	31.0	<1.0	4.0	30.62			
AB21953	29.00	30.00	1500.0	57.0	22.0	<0.5	<5.0	7.0	4.0	9.0	8.0	<1.0	3.0	72.15			
		50.00	100000														
AB21954	30.00	31.00	2000.0	74.0	26.0	<0.5	<5.0	7.0	5.0	8.0	12.0	<1.0	3.0	74.00			
AB21955	31.00	32.00	2100.0	32.0	28.0	<0.5	10.0	6.0	3.0	6.0	23.0	<1.0	1.0	53.33	1970) 1970)		· · ·
AB21956	32.00	33.00	2000.0	29.0	23.0	<0.5	<5.0	5.0	4.0	8.0	19.0	<1.0	<1.0	55.77			

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SAMPLE											*********					CODES	· · · · · · · · · · · · · · · · · · ·
NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN • (ppm)	AG (ppm)	АU (ррБ)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	CU/(CU+ZN) + 100	ROCK	ALT	MIN
				•									- ⁵⁴				
AB21957	33.00	34.00	1800.0	31.0	18.0	<0.5	<5.0	3.0	5.0	9.0	<5.0	<1.0	<1.0	63.27			
AB21958	34.00	35.00	2400.0	24.0	19.0	<0.5	15.0	7.0	5.0	10.0	12.0	<1.0	1.0	55.81			
AB21959	35.00	36.00	230010	48.0	17.0	<0.5	10.0	5.0	4.0	9.0	<5.0	<1.0	1.0	73.85			
AB21960	36.00	37.00	2100.0	88.0	41.0	0.5	10.0	7.0	6.0	17.0	12.0	<1.0	1.0	68.22			
AB21961	37.00	38.00	2400.0	23.0	25.0	<0.5	<5.0	5.0	4.0	24.0	<5.0	<1.0	<1.0	47.92			
AB21962	38.00	39.00	2100.0	53.0	42.0	<0.5	10.0	5.0	3.0	40.0	26.0	<1.0	1.0	55.79			
AB21963	39.00	40.00	910.0	110.0	76.0	<0.5	10.0	25.0	12.0	17.0	10.0	<1.0	1.0	59.14			
AB21964	40.00	41.00	1700.0	99.0	75.0	<0.5	10.0	17.0	10.0	11.0	79.0	<1.0	3.0	56.90			
AB21965	41.00	42.00	2800.0	44.0	56.0	<0.5	5.0	12.0	8.0	12.0	<5.0	<1.0	1.0	44.00			
AB21966	42.00	43.00	2300.0	30.0	42.0	<0.5	20.0	5.0	2.0	50.0	9.0	<1.0	2.0	41.67	•		
AB21967	43.00	44.00	2600.0	39.0	46.0	<0.5	5.0	4.0	4.0	63.0	26.0	<1.0	1.0	45.88			
AB21968	44.00	45.00	2900.0	19.0	26.0	<0.5	<5.0	5.0	4.0	37.0	11.0	<1.0	<1.0	42.22			
AB21969	45.00	46.00	2800.0	52.0	55.0	<0.5	25.0	9.0	6.0	107.0	20.0	<1.0	2.0	48.60			
AB21970	46.00	47.00	4500.0	240.0	615.0	3.0	40.0	7.0	6.0	395.0	28.0	3.0	5.0	29 07			
AB21971	47.00	48.00	4500.0	200.0	750.0	2.0	70.0	7 0	4.0	200 0	(5.0	3.0	5.0	01 OF			
AD31073	40.00	40.00	00000						7.V	200.0	\ 4. 0	2.0	J.V	21.05			
MØ217/2	48.00	49.00	2600.0	22.0	28.0	<0.5	95.0	8.0	3.0	12.0	31.0	<1.0	4.0	44.00			
AB21973	49.00	50.00	2300.0	26.0	30.0	<0.5	70.0	6.0	4.0	13.0	24.0	<1.0	5.0	46.43			

Hole No. CHEM87-37

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AB21974 50.00 51.00 4100.0 132.0 64.0 1.0 110.0 12.0 7.0 8.0 26.0	<1.0 <1.0 <1.0 <1.0 <1.0	5.0 67.35 4.0 52.17 3.0 67.44 4.0 43.48			
AB21974 50.00 51.00 4100.0 132.0 64.0 1.0 110.0 12.0 7.0 8.0 26.0	<1.0 : <1.0 : <1.0 : <1.0 :	5.0 67.35 4.0 52.17 3.0 67.44 4.0 43.48			
	<1.0 <1.0 <1.0	4.0 52.17 3.0 67.44 4.0 43.48			
AB21975 51.00 52.00 3200.0 12.0 11.0 <0.5 40.0 9.0 4.0 <5.0 <5.0	<1.0 <1.0	3.0 67.44 4.0 43.48			
AB21976 52.00 53.00 1700:0 29.0 14.0 <0.5 25.0 5.0 3.0 <5.0 37.0	<1.0	4.0 43.48			
AB21977 53.00 54.00 2100.0 10.0 13.0 <0.5 <5.0 6.0 3.0 5.0 <5.0					
AB21978 54.00 55.00 1600.0 30.0 15.0 <0.5 <5.0 7.0 3.0 <5.0 21.0	<1.0	4.0 66.67			
AB21979 55.00 56.00 1700.0 41.0 21.0 <0.5 5.0 9.0 5.0 7.0 820	<1.0	3.0 66.13			
AB21980 56.00 57.00 1700.0 119.0 25.0 <0.5 15.0 11.0 6.0 13.0 7.0	<1.0	6.0 82.64	n an thairt		
AB21981 57.00 58.00 1900.0 138.0 26.0 <0.5 15.0 7.0 6.0 16.0 12.0	<1.0	6.0 84.15			
AB21982 58.00 59.00 1800.0 20.0 39.0 <0.5 <5.0 6.0 4.0 7.0 11.0	<1.0	3.0 33.90			
AB21983 59.00 60.00 1100.0 7.0 25.0 <0.5 <5.0 3.0 3.0 6.0 <5.0	<1.0	4.0 21.87			
AB21984 60.00 61.00 960.0 20.0 22.0 <0.5 <5.0 5.0 4.0 6.0 <5.0	<1.0	3.0 47.62			
AB21985 61.00 62.00 1100.0 53.0 16.0 <0.5 <5.0 4.0 4.0 6.0 18.0	<1.0	3.0 76.31			
AB21986 62.00 63.00 960.0 19.0 17.0 <0.5 <5.0 2.0 2.0 7.0 <5.0	<1.0	2.0 52.78		n Charles Arrist Sate Sate	
AB21987 63.00 64.00 1000.0 5.0 18.0 <0.5 <5.0 2.0 <5.0 6.0	<1.0	2.0 21.74			
AB21988 64.00 65.00 720.0 20.0 19.0 <0.5 <5.0 4.0 3.0 5.0 20.0	<1.0	1.0 51.28			
AB21989 65.00 66.00 960.0 40.0 15.0 <0.5 <5.0 4.0 3.0 <5.0 <5.0	<1.0	1.0 72.73			
AB21990 66.00 67.00 1200.0 14.0 12.0 <0.5 <5.0 4.0 4.0 <5.0 27.0	<1.0	1.0 53.85			

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Hole No. CHEM87-37





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)	CU/(CU+ZN) * 100	ROCK	CODES ALT	MIN
														**			
AB21991	67.00	68.00	1200.0	8.0	11.0	<0.5	15.0	4.0	2.0	<5.0	21.0	<1.0	1.0	42.11			
AB21992	68.00	69.00	1600.0	18.0	14.0	<0.5	<5.0	4.0	3.0	<5.0	21.0	<1.0	2.0	56.25			
AB21993	69.00	70.00	190010	5.0	13.0	<0.5	<5.0	4.0	2.0	<5.0	<5.0	<1.0	1.0	27.78			
AB21994	70.00	70.60	2000.0	6.0	21.0	<0.5	<5.0	2.0	2.0	<5.0	<5.0	<1.0	1.0	22.22			
AB21995	70.60	71.60	630.0	63.0	113.0	<0.5	<5.0	26.0	40.0	5.0	<5.0	<1.0	1.0	35.80	-		
AB21996	72.30	73.30	270.0	260.0	82.0	<0.5	<5.0	29.00	61.0	<5.0	<5.0	<1.0	1.0	76.02			
AB21997	73.30	74.00	2400.0	116.0	31.0	<0.5	<5.0	14.0	12.0	12.0	<5.0	<1.0	3.0	78.91			
AB21998	74.00	75.00	1800.0	320.0	480.0	1.5	150.0	14.0	17.0	28.0	24.0	2.0	6.0	40.00			
AB21999	75.00	76.00	1600.0	440.0	63.0	<0.5	20.0	13.0	10.0	7.0	17.0	<1.0	5.0	87.48	e transformación a consecutor a		
AB22000	76.00	77.20	3600.0	410.0	49.0	1.0	50.0	11.0	10.0	10.0	47.0	<1.0	3.0	89.32			
AF00151	77.20	78.00	3700.0	720.0	3800.0	6.0	750.0	10.0	8.0	101.0	14.0	20.0	20.0	15.93			
AF00152	78.00	79.30	2800.0	260.0	104.0	1.5	35.0	6.0	4.0	11.0	24.0	<1.0	8.0	71.43			
AF00153	79.30	80.30	1900.0	86.0	30.0	1.0	5.0	4.0	3.0	11.0	9.0	<1.0	4.0	74.14			
AF00154	80.30	81.10	850.0	580.0	103.0	1.0	10.0	34.0	41.0	17.0	33.0	<1.0	4.0	84.92			
AF00155	81.10	82.10	1600.0	280.0	1900.0	0.5	55.0	8.0	8.0	20.0	20.0	10.0	4.0	12.84			
AF00156	82.10	83.10	1500.0	168.0	230.0	<0.5	15.0	7.0	4.0	19.0	18.0	1.0	4.0	42.21			•
AF00157	83.10	84.00	1800.0	410.0	405.0	1.0	35.0	7.0	4.0	18.0	22.0	2.0	5.0	50.31			

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SAMPLE NUMBER	FROM	то	 Ba	 CU	 ZN _	AG	AU	co	NI	PB	AS	CD	HO	CU/(CU+ZN)	ROCK	CODES ALT MIN
			(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	* 100		
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AF00158	84.00	84.50	1400.0	540.0	970.0	1.0	10.0	25.0	34.0	32.0	16.0	7.0	4.0	35.76		
AF00159	84.60	85.60	410.0	77.0	165.0	<0.5	<5.0	25.0	54.0	8.0	<5.0	<1.0	5.0	31.82		
AF00160	98.30	99.30	2500,0	600.0	1000.0	3.5	274.3	14.0	13.0	1116.0	30.0	6.0	2.0	37.50		
AF00161	99.30	99.50	4000.0	28500.0	236100.	78.5	1440.0	19.0	27.0	3700.0	31.0	807.0	95.0	10.77		
AE00162	99.50	99.70	6400.0	4900.0	22900.0	45.3	2262.8	14.0	13.0	4800.0	48.0	148.0	14.0	17.63		
AF00163	99.70	100.70	6300.0	15400.0	9800.0	30.0	445.7	25.0	40.0	473.0	1000	76.0	20.0	61.11		
AF00164	100.70	101.80	14000.0	33800.0	6200.0	54.9	548.6	58.0	59.0	76.0	<5.0	79.0	17.0	84.50		na Santa Santa Santa Santa Santa
AE00165	101.80	102.80	7900.0	12500.0	1300.0	20.0	171.4	14.0	9.0	135.0	13.0	12.0	4.0	90.58		
AF00166	102.80	103.50	9800.0	12800.0	800.0	21.0	68.6	13.0	9.0	38.0	<5.0	8.0	5.0	94.12		
AF00167	103.50	104.30	8800.0	1600.0	700.0	6.4	<68.6	8.0	3.0	695.0	29.0	5.0	3.0	69.57		
AF00168	104.30	105.00	12000.0	2300.0	600.0	2.3	137.1	42.0	17.0	94.0	<5.0	4.0	3.0	79.31		
AF00169	105.00	105.50	31000.0	4800.0	7600.0	7.0	137.1	104.0	64.0	124.0	8.0	94.0	19.0	38.71		
AF00170	105.50	106.00	30000.0	8100.0	300.0	12.0	480.0	70.0	53.0	62.0	<5.0	2.0	13.0	96.43		
AF00171	106.00	106.50	24000.0	16500.0	300.0	26.0	788.6	28.0	20.0	194.0	15.0	3.0	12.0	98.21		
AF00172	106.50	107.10	15000.0	3300.0	200.0	6.0	68.6	73.0	60.0	284.0	<5.0	2.0	16.0	94.29		
AE00173	107.10	108,10	1700.0	600.0	300.0	0.5	68.6	39.0	105.0	125.0	31.0	<1.0	3.0	66.67		

Hole No. CHEM87-37

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APPENDIX D

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ANALYTICAL RESULTS -- MAJOR OXIDES

SAMPLE NUMBER	FROM	то	ZS 102	%AL203	%CAO	%MGO	ZNA20	XK20	%FE203	XT 102	%P205	ZMNO	%L0I	SUM	Α.	[. Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)

AB20385	60.30	60.40	68.00	13.10	5.24	1.30	0.17	3.40	2.74	0.24	0.06	0.14	5.77	100.16	46.	49 40.00	50.00	44.44
AB20386	77.30	77.40	69.80	12.60	4.58	1.17	<0.01	3.32	2.63	0.23	0.06	0.23	5.08	99.71	49.	56 33.00	226.00	12.74
AB20387	93.20	93.30	74.20	13.60	0.37	0.40	4.81	2.21	1.69	0.32	0.07	0.02	1.54	99.73	31.	48 24.00	37.00	39.34
AB20388	108.40	108.50	73.70	12.50	1.14	2.14	1.63	2.49	3.63	0.28	0.07	0.06	2.23	99.87	62.	57 49.00	68.00	41.88
AB20389	118.20	118.30	50.40	17.70	2.65	7.16	2.00	2.25	10.50	0.95	0.55	0.17	6.00	100.33	66.	93 151.00	130.00	53.74
AB20390	119.00	119.10	68.40	15.90	0.80	2.21	4.41	2.25	3.42	0.37	0.09	0.05	2.23	100.13	46.	12 36.00	46.00	43.90
AB20391	123.20	123.30	68.60	14.90	1.33	2.41	6.95	0.32	3.60	0.35	0.07	0.06	1.77	100.36	24.	80 52.00	52.00	50.00
AB20392	126.00	126.10	46.80	13.80	7.22	7.05	`. 2.09	0.07	13.70	1.95	0.17	0.21	6.70	99.76	43.	34 247.00	150.00	62.22
AB20393	131.70	131.80	68.30	14.40	2.01	2.16	1.69	2.35	5.55	0.44	0.11	0.08	2.77	99.86	54.	93 269.00	856.00	23.91
AB20394	138.90	139.00	69.90	14.90	2.46	2.08	1.51	2.72	3.26	0.35	0.08	0.07	2.70	100.03	54.	73 55.00	56.00	49.55
AB20395	145.30	145.40	50.30	15.80	10.20	5.29	2.88	0.34	10.90	1.51	0.13	0.18	2.39	99.92	30.	09 212.00	88.00	70.67
AB20396	157.20	157.30	47.60	18.60	2.02	6.76	4.39	0.62	12.70	2.16	0.20	0.17	4.31	99.53	53.	52 168.0	113.00	59,79
4820397	191 10	191 20	41 80	10 90	9 70	5.16	0.62	0.31	18.10	3.25	0.17	0.23	9.39	99.63	34.	64 320.00	169.00	65.44
AD20000	101.10	101.00	40.00	10.00	0.00	5 02	2 49	0 34	14 90	2 58	0.15	0.21	2.54	99.03	30.	37 227.0	97.00	70.06
A520398	186.00	185.10	48.00	13.00	9.80	3.02	4.47	0.54	14.50		0.10		2.01		27	76 261 00	101.00	79 14
AB20399	197.20	197.30	48.50	13.90	9.50	6.90	2.25	0.23	14.00	1.97	0.17	0.22	2.39	100.03	.37.	75 301.0	101.00	70.14
AB20400	240.40	240.50	44.70	12.10	10.60	6.13	1.73	0.20	12.40	1.76	0.16	0.18	10.16	100.12	33.	92 344.0	89.00	73.27
AB20401	275.80	275.90	48.50	13.50	10.90	8.30	2.39	0.30	12.00	1.40	0.13	0.18	2.39	99.99	39.	29 179.0	88.00	67.04

Hole No. CHEM-87-20

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAŪ	ZMGO	%NA20	ZK20	%FE203	XT 102	XP205	ZMNO	ZLOI	SUM		A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
																··			
AB20402	315.60	315.70	76.50	13.40	1.06	0.65	3.80	1.85	1.13	0.35	0.06	0.02	1.31	100.13		33.97	48.00	15.00	76.19
AB20404	328.20	328.30	73.00	13.40	0.39	0.34	0.23	3.31	4.57	0.38	0.07	0.02	3.77	99.48		85.48	61.00	<10.00	119.61
AB20403	338.20	338.30	51.60	18.10	5.84	5.65	1.99	1.73	10.30	1.08	0.35	0.22	3.31	100.17	•	48.52	95.00	106.00	47.26
AB20405	347.60	347.70	54.70	18.40	4.61	4.69	3.55	1.27	8.43	0.97	0.40	0.18	3.00	100.20		42.21	68.00	109.00	38.42
AB20406	358.70	358,30	53.00	18.80	4.84	4.46	5.14	0.72	8.84	0.94	0.42	0.13	2.85	100.14		34.17	97.00	93.00	51.05
AB20407	382.30	382.40	44.80	11.20	12.50	14.90	0.72	0.31	10.10	0.61	0.12	0.16	4.62	100.04		53.50	92.00	53.00	63.45
AB20408	388.40	388.50	44.50	11.20	12.60	14.80	0.60	0.44	9.84	0.59	0.12	0.17	5.16	100.02		53.59	87.00	51.00	63.04
AB20409	408.10	408.20	45.70	8.85	11.90	17.20	0.33	0.28	9.66	0.50	0.12	0.18	5.00	99.72		58.84	97.00	50.00	65.99
AB20410	415.30	415.40	56.90	16.30	4.30	4.05	7.75	0.29	7.55	0.58	0.24	0.09	2.31	100.36		26.48	83.00	57.00	59.29



Hole No. CHEM-87-21

SAMPLE NUMBER	FROM	TO	ZS 102	XAL203	ZCAO	ZMGO	ZNA20	ZK20	ZFE203	XT 102	XP205	ZMNO	ZLOI	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AB15434	185.10	185.20	71.10	14.70	2.21	1.50	2.11	3.69	2.06	0.26	0.06	0.06	2.62	100.37	54.57	23.00	33.00	41.07
AB15435	198.70	198.80	66.70	14.40	3.61	1.71	2.85	2.99	3.41	0.26	0.06	0.08	3.93	100.00	42.11	27.00	47.00	36.49
AB15436	204.90	205.00	72.50	12.50	2.34	1.43	3.48	1.91	2.59	0.23	0.06	0.10	2.77	99.91	36.46	31.00	48.00	39.24
AB15437	225.00	225.10	74.60	12.40	1.13	1.23	4.41	1.76	1.98	0.23	0.06	0.04	2.08	99.92	35.05	27.00	26.00	50.94
AB15438	237.80	237.90	69.70	14.40	2.24	1.26	3.23	2.86	2.62	0.25	0.06	0.08	3.46	100.16	42.96	25.00	41.00	37.88
AB15439	250.20	250.40	73.00	11.40	3.09	1.22	2.91	2.06	1.73	0.20	0.06		4.08	99.75	35.34	10.00	35.00	22.22
AB15440	265.90	265.90	54.50	15.50	6.39	3.61	0.62	4.44	3.92	0.25	0.06		10.77	100.06	53.45	12.00	48.00	20.00
AB15441	275.10	275.20	72.30	12.90	2.18	0.98	2.90	2.37	2.84	0.32	0.07	0.08	3.23	100.17	39.74	60.00	52.00	53.57
AB15442	286.10	286.20	72.80	15.00	0.57	0.67	2.14	3.80	2.10	0.32	0.07		2.54	100.01	62.26	13.00	19.00	40.62
AB15443	287.40	287.60	48.00	17.20	4.07	6.00	2.79	2.35	10.20	0.80	0.13	0.17	8.31	100.02	54.90	221.00	95.00	69.94
AB15444	295.40	295.60	65.30	17.40	1.53	1.35	4.00	3.34	3.62	0.35	0.09	0.05	3.08	100.11	45.89	56.00	42.00	57.14
AB15445	315.90	316.00	71.10	14.90	1.54	1.14	1.75	3.52	2.80	0.32	0.08	0.06	2.85	100.06	58.62	43.00	37.00	53.75
AB15446	329.60	329.70	71.10	13.50	3.30	1.06	1.73	3.11	2.65	0.24	0.06		3.23	99.98	45.33	17.00	290.00	5.54
AB15447	337.70	337.90	62.90	14.20	4.68	2.69	1.00	3.12	5.11	0.42	0.10	0.20	4.31	98.93	49.70	63.00	208.00	23.25
AB15448	382.80	382.90	77.10	11.20	3.24	0.67	2.11	1.68	2.17	0.28	0.07		1.24	99.76	30.52	19.00	50.00	27.54
AB15449	395.00	395.20	51.90	13.70	5.88	6.78	2.30	0.10	13.60	1.91	0.17	0.22	3.54	100.10	45.68	350.00	105.00	76.92
AB15450	400.40	400.60	69.90	16.20	1.20	1.59	2.60	2.66	2.62	0.44	0.10		3.08	100.39	52.80	27.00	34.00	44.26

Hole No. CHEM-87-21



SAMPLE NUMBER	FROM	TO	%\$102	ZAL203	ZCAO	ZMGO	ZNA20	XK20	%FE203	XI 102	XP205	7.MNO	ZLO I	รบห	ļ	.I.	Си (ррт)	Zn (ppm)	100*Cu/ (Cu+Zn)
AB15451	416.40	416.60	49.50	14.00	11.00	6.48	2.10	0.24	13.00	1.83	0.17	0.20	1.93	100.45		33.91	224.00	85.00	72.49
AB15452	430.80	431.00	49.60	14.10	11.20	6.11	2.39	0.10	12.30	1.74	0.17	0.20	1.93	99.84		31.36	282.00	98.00	74.21
AB15453	436.70	436.80	71.20	13.00	1.18	1.45	0.49	3.37	5.37	0.37	0.08		3.62	100.13		74.27	350.00	49.00	87.72
AB15454	440.60	440.70	68.30	14.20	1.57	2.53	1.20	3.25	5.04	0.39	0.09	an a	3.23	99.80		67.60	97.00	60.00	61.78
AB15455	450.00	450.10	50.20	14.60	10.70	6.43	2.33	0.37	12.00	1.61	0.16	0.19	1.93	100.52		34.29	243.00	90.00	72.97
AB15456	480.60	480.80	50.00	15.80	10.30	6.01	2.64	0.35	11.30	1.38	0.13	0.18	2.00	100.09		32.95	150.00	100.0	60.00



Hole No. CHEM-87-22

SAMPLE NUMBER	FROM	TO	%S102	XAL203	%CAO	ZMGO	ZNA20	ZK20	ZFE203	ZT 102	ZP205	ZHNO	ZLOI	SUM	 A.I.	Си (ррт)	Zn (ppm)	100*Cu/ (Cu+Zn)
AB15370	287.40	287.50	43.70	17.70	4.98	7.26	4.46	0.07	12.60	2.27	0.21	0.15	6.93	100.33	43.71	13.00	160.00	7.51
AB15371	308.40	308.50	50,20	17.40	5.59	4.50	4.39	0.78	9.27	0.66	0.26	0.17	6.08	99.30	34.60	146.00	156.00	48.34
AB15372	315.40	315.50	48.90	14.20	11.30	6.51	1.80	0.15	12.70	1.77	0.17	0.19	2.00	99.69	33.70	148.00	90.00	62.18
AB15373	349.60	349.70	48.90	13.60	11.60	6.24	2.09	0.15	10.50	1.50	0.12	0.16	4.93	99.79	31.82	336.00	87.00	79.43
AB15374	369.20	369.30	48.20	17.70	7.69	4.94	3.08	1.30	9.83	0.75	0.18	0.17	6.24	100.08	36.68	287.00	148.00	65.98
AB15375	399.70	399.80	55.80	16.20	4.98	3.85	4.16	1.24	8.07	0.87	0.27	0.16	3.77	99.37	35.77	54.00	59.00	47.79
AB15376	404.60	404.70	70.20	12.90	4.75	0.75	5.28	0.36	3.21	0.34	0.08	0.06	2.16	100.09	9.96	58.00	30.00	65.91
AB15377	413.90	414.00	47.80	14.40	11.40	7.06	2.05	0.26	13.10	1.78	0.17	0.20	1.93	100.15	35.24	171.00	95.00	64.29
AB15378	428.60	428.70	48.20	17.80	4.96	7.97	4.34	0.45	11.50	1.08	0.11	0.16	3.39	99.96	47.52	75.00	84.00	47.17
AB15379	438.30	438.40	47.80	14.40	12.50	8.80	1.68	0.55	10.70	0.57	0.13	0.17	2.77	100.07	39.74	78.00	64.00	54.93
AB15380	456.30	456.40	49.60	12.20	12.10	10.30	2.16	0.21	9.68	0.53	0.12	0.17	3.08	100.15	42.43	217.00	61.00	78.06
AB15381	467.20	467.30	50.30	14.30	11.10	8.27	2.98	0.22	9.62	0.60	0.15	0.16	2.39	100.09	37.62	235.00	57.00	80.48

SAMPLE NUMBER	FROM	TO	%S I 02	ZAL203	ZCAO	ZMGO	ZNA20	ZK20	XFE203	XT 102	XP205	ZMNO	ZLOI	SUM	A.I.	Cu (ррт)	Zn (ppm)	100*Cu/ (Cu+Zn)
AB15457	14.10	14.20	70.50	14.20	2.82	1.29	2.87	2.77	2.15	0.30	0.08	0.07	3.23	100.28	41.64	25.00	38.00	39.68
AB15458	22.50	22.60	71.40	13.90	1.74	0.74	4.82	2.78	2.08	0.29	0.07		2.00	99.82	34.92	12.00	42.00	22.22
AB15459	33.60	33.70	50.70	16.40	4.98	4.45	1.88	5.46	8.59	0.58	0.50	·	5.47	99.01	59.09	82.00	160.00	33.88
AB15460	45.50	45.60	71.40	12.50	3.92	1.27	1.51	2.72	2.26	0.24	0.07	0.09	4.31	100.29	42.36	19.00	31.00	38.00
AB15461	61.30	61.40	70.30	14.10	3.13	0.61	3.11	2.93	1.78	0.24	0.06		3.54	99.80	36.20	4.50	33.00	12.00
AB15462	73.97	74.12	72.20	13.20	1.71	1.46	2.32	2.72	3.48	0.24	0.06	0.08	2.39	99.86	50.91	29.00	52.00	35.80
AB15463	85.03	85.13	76.60	11.60	1.21	0.50	5,74	1.08	1.50	0.22	0.05	0.05	1.16	99.71	18.52	24.00	20.00	54.55
AB15464	99.30	99.40	70.00	13.50	2.97	1.21	3.44	2.60	2.02	0.24	0.06	0.09	3.62	99.75	37.28	23,00	32.00	41.82
AB15465	112.60	112.70	72.00	13.60	2.34	1.28	2.72	2.46	1.99	0.24	0.06	0.07	3.23	99.99	42.50	20.00	41.00	32.79
AB15466	123.60	123.70	71.70	14.20	1.83	1.45	2.25	2.86	1.96	0.25	0.06	0.05	3.23	99.84	51.37	29.00	33.00	46.77
AB15467	134.45	134.60	64.80	14.90	2.34	2.00	5.17	1.74	4.16	0.37	0.07	0.08	4.00	99.63	33.24	72.00	39.00	64.36
AB15468	148.60	148.70	70.70	13.20	2.37	1.00	3.53	2.55	2.30	0.24	0.06	0.09	3.93	99.97	37.57	15.00	22.00	40.54
AB15472	157.15	157.30	73.10	11.20	2.57	1.19	4.14	1.59	2.18	0.21	0.05		4.08	100.31	29.29	3.50	43.00	7.53
AB15473	162.60	162.80	74.20	12.70	1.24	0.78	5.45	1.36	1.86	0.23	0.05	0.05	2.23	100.15	24.24	28.00	28.00	50.00
AB15469	165.60	165.70	70.90	14.40	1.56	0.88	5.56	1.87	1.93	0.25	0.06		2.85	100.26	27.86	4.50	40.00	10.11
AB15474	169.90	170.00	70.50	13.40	2.22	1.16	4.22	2.05	2.32	0.25	0.06	0.10	3.70	99.98	33.26	20.00	39.00	33.90
AB15475	175.60	175.80	74.00	12.90	1.56	0.66	6.79	0.73	1.02	0.23	0.06		2.08	99.93	14.27	5.00	24.00	17.24

Hole No. CHEM-87-23

FROM	то	7S IO2	XAL203	ZCAO	ZMGO	ZNA20	ZK20	ZFE203	ZT 102	XP205	ZMNO	ZLOI	SUM		A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
											*********				• 			
176.00	176.10	68.10	12.70	3.73	1.37	5.46	1.08	2.51	0.23	0.06	0.13	4.77	100.14		21.05	22.00	55.00	28.57
184.70	184.90	65.80	14.40	3.27	1.87	2.27	3.34	2.58	0.25	0.06	0.14	6.24	100.22		48.47	28.00	55.00	33.73
193.90	194.00	73.60	12.10	2.26	0.66	4.73	1.42	1.82	0.22	0.06		3.08	99.95		22.93	14.00	40.00	25.93
195.20	195.30	44.60	16.60	7.08	4.42	1.57	3.19	10.20	0.73	0.12	0.23	11.39	100.13		46.80	110.00	130.00	45.83
209.00	209.10	72.30	14.20	1.89	0.56	3.97	2.73	1.50	0.31	0.06	0.05	2.62	100.19		35.96	15.00	23.00	39.47
218.05	218.20	69.00	14.30	2.67	. 1.11	3.14	2.73	3.11	0.31	0.07	0.09	3.54	100.07		39.79	59.00	81.00	42.14
221.30	221.40	65.90	13.10	4.60	1.93	2.82	1.91	4.85	0.31	0.07	0.12	4.08	99.69		34.10	60.00	67.00	47.24
223.90	224.00	48.80	18.00	6.31	3.48	0.93	3.57	9.52	0.76	0.13	0.24	8.08	99.82	•	49.34	137.00	204.00	40.18
235.25	235.40	69.60	13.90	3.53	0.86	2.33	2.91	2.47	0.30	0.07		4.00	99.97		39.15	78.00	73.00	51.66
247.10	247.20	70.80	13.40	3.21	1.24	1.88	2.82	2.55	0.23	0.06	0.10	4.00	100.29		44.37	31.00	45.00	40.79
250.50	250.60	54.30	15.10	5.90	6.44	3.82	0.13	7.42	0.56	0.11	0.26	4.93	98.97		40.33	86.00	180.00	32.33
254.80	255.00	71.20	13.30	2.88	1.11	3.05	2.36	2.63	0.24	0.06		2.40	99.23		36.91	2.50	26.00	8.77
272.65	272.75	68.10	16.60	0.74	0.78	3.83	3.66	3.42	0.38	0.07	0.02	2.16	99.76	. •	49.28	33.00	46.00	41.77
278.30	278.40	70.00	14.70	0.80	0.46	5.93	1.48	3.94	0.36	0.09		1.31	99.07		22.38	2.00	37.00	5.13
284.50	284.60	66.30	18.00	0.65	1.98	2.03	4.33	3.09	0.41	0.10	0.04	2.85	99.78		70.19	20.00	184.00	9.80
291.50	291.60	54.00	19.10	2.20	3.57	2.31	3.88	9.16	1.07	0.49	0.12	4.00	99.90		62.29	68.00	611.00	10.01
339.60	339.70	41.70	16.30	3.35	6.16	3.06	0.26	19.00	3.86	0.30	0.24	4.85	99.08		50.04	6.00	190.00	3.06
	FROM 176.00 184.70 193.90 195.20 209.00 218.05 221.30 223.90 235.25 247.10 250.50 254.80 272.65 278.30 284.50 291.50 339.60	FROMTO176.00176.10184.70184.90193.90194.00195.20195.30209.00209.10218.05218.20221.30221.40235.25235.40247.10247.20250.50250.60254.80255.00272.65272.75278.30278.40284.50291.60339.60339.70	FROM TO ZSI02 176.00 176.10 68.10 184.70 184.90 65.80 193.90 194.00 73.60 195.20 195.30 44.60 209.00 209.10 72.30 218.05 218.20 69.00 221.30 221.40 65.90 223.90 224.00 48.80 235.25 235.40 69.60 247.10 247.20 70.80 250.50 250.60 54.30 254.80 255.00 71.20 272.65 272.75 68.10 278.30 278.40 70.00 284.50 284.60 66.30 291.50 291.60 54.00 339.60 339.70 41.70	FROMTOZSI02XAL203176.00176.1068.1012.70184.70184.9065.8014.40193.90194.0073.6012.10195.20195.3044.6016.60209.00209.1072.3014.20218.05218.2069.0014.30221.30221.4065.9013.10235.25235.4069.6013.90247.10247.2070.8013.40250.50250.6054.3015.10254.80255.0071.2013.30272.65272.7568.1016.60278.30278.4070.0014.70284.50284.6066.3018.00291.50291.6054.0019.10339.60339.7041.7016.30	FROM TO ZSI02 XAL203 ZCA0 176.00 176.10 68.10 12.70 3.73 184.70 184.90 65.80 14.40 3.27 193.90 194.00 73.60 12.10 2.26 195.20 195.30 44.60 16.60 7.08 209.00 209.10 72.30 14.20 1.89 218.05 218.20 69.00 14.30 2.67 221.30 221.40 65.90 13.10 4.60 223.90 224.00 48.80 18.00 6.31 235.25 235.40 69.60 13.90 3.53 247.10 247.20 70.80 13.40 3.21 250.50 250.60 54.30 15.10 5.90 254.80 255.00 71.20 13.30 2.88 272.65 272.75 68.10 16.60 0.74 278.30 278.40 70.00 14.70 0.80 284	FROMTOZSI02ZAL203ZCA0ZH60176.00176.1068.1012.703.731.37184.70184.9065.8014.403.271.87193.90194.0073.6012.102.260.66195.20195.3044.6016.607.084.42209.00209.1072.3014.201.890.56218.05218.2069.0014.302.671.11221.30221.4065.9013.104.601.93223.90224.0048.8018.006.313.48235.25235.4069.6013.903.530.86247.10247.2070.8013.403.211.24250.50250.6054.3015.105.906.44254.80255.0071.2013.302.881.11272.65272.7568.1016.600.740.78278.30278.4070.0014.700.800.46284.50284.6066.3018.000.651.98291.50291.6054.0019.102.203.57339.60339.7041.7016.303.356.16	FROM TO XSI02 XAL203 XCA0 XH60 XHA20 176.00 176.10 68.10 12.70 3.73 1.37 5.46 184.70 184.90 65.80 14.40 3.27 1.87 2.27 193.90 194.00 73.60 12.10 2.26 0.66 4.73 195.20 195.30 44.60 16.60 7.08 4.42 1.57 209.00 209.10 72.30 14.20 1.89 0.56 3.97 218.05 218.20 69.00 14.30 2.67 1.11 3.14 221.30 221.40 65.90 13.10 4.60 1.93 2.82 23.90 224.00 48.80 18.00 6.31 3.48 0.93 235.25 235.40 69.60 13.90 3.53 0.86 2.33 247.10 247.20 70.80 13.40 3.21 1.24 1.88 250.50 255.00 71.20	FROM TO ZSI02 ZAL203 ZCAO ZHGO ZNA20 ZK20 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 218.05 218.20 69.00 14.30 2.67 1.11 3.14 2.73 221.30 221.40 65.90 13.10 4.60 1.93 2.82 1.91 233.90 224.00 48.80 18.00 6.31 3.48 0.93 3.57 235.25 235.40 69.60 13.90 3.53 0.86 2.33 2.91 247.10	FROM TO ZSI02 ZAL203 ZCA0 ZHGO ZNA20 ZK20 ZFE203 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 218.05 218.20 69.00 14.30 2.67 1.11 3.14 2.73 3.11 221.30 221.40 65.90 13.10 4.60 1.93 2.82 1.91 4.85 235.25 235.40 69.60 13.90 3.53 0.96 2.33 2.91 2.47 247.10	FROM TO XSI02 XAL203 XCAO XHGO XNA20 XK20 XFE203 XII02 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 218.05 218.20 69.00 14.30 2.67 1.11 3.14 2.73 3.11 0.31 223.30 224.00 48.80 18.00 6.31 3.48 0.93 3.57 9.52 0.76 235.25 235.40 69.60	FROM TO ZSI02 XAL203 XCA0 XH60 XNA20 XK20 XFE203 XI02 XP205 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.22 0.06 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 218.05 218.20 69.00 14.30 2.67 1.11 3.14 2.73 3.11 0.31 0.07 223.90 224.00 48.80 18.00 6.31 3.48 0.93	FROM TO XSI02 XAL203 XCAO XH60 XHA20 XK20 XFE203 XII02 XF205 XHN0 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 218.05 218.20 69.00 14.30 2.67 1.11 3.14 2.73 3.11 0.31 0.07 0.12 223.0 <t< td=""><td>FROM TO ZS 102 XAL203 XCA0 XM60 XMA20 XK20 XFE203 XT102 XF205 XMM0 XL01 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.62 0.22 0.06 3.08 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 2.62 218.05 218.20 69.00 14.30 2.67 1.11 3.14 2.73</td><td>FROM TO ZS 102 XAL203 XCA0 XH60 XNA20 XK20 XFE203 XT 102 XP205 XHN0 XL01 SUM 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 0.14 6.24 100.22 195.30 144.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 100.13 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.66 0.05 2.62 100.17 218.05 218.20</td><td>FROM TO XS 102 XAL203 XCA0 XMA20 XK20 XFE203 XT 102 XP205 XMM0 XLOI SUM 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 100.13 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 2.62 100.19 218.05 218.20 69.00<td>FROM TO ZSI02 ZAL203 ZCA0 XHG0 XHA20 ZK20 ZFE203 XTI02 ZP205 ZHN0 ZLOI SUH A.I. 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 22.33 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 100.13 46.80 209.0 209.10 72.30 14.30 2.67 1.11 3.14 2.73 3.11 0.31 0.07 0.93</td><td>FROM TO ZS 102 XAL203 ZCA0 XMA20 XK20 ZEE203 XT102 ZP205 XMA0 XL01 SUH A.1. Cu (ppm) 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 22.00 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 28.00 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 10.19 35.96 15.00 2195.20 195.30 44.60 16.60 7.08 4.22 1.57 3.11 0.31 0.06 0.05 2.62 100.19 35.96 15.00 210.0 20.90 22.40 48.80 18.00 1.31 3.48 0.93 3.</td><td>FROM TO ZS 102 ZAL203 ZCA0 ZMA0 ZMA20 ZK20 ZFE203 ZT 102 ZF205 ZMM0 ZLOI SUM A.I. Cu (ppm) Zn (ppm) 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 22.00 55.00 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 29.00 55.00 195.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 22.93 14.00 40.00 195.00 172.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 2.62 100.13 46.80 10.00 13.00 213.00 218.20 <</td></td></t<>	FROM TO ZS 102 XAL203 XCA0 XM60 XMA20 XK20 XFE203 XT102 XF205 XMM0 XL01 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.62 0.22 0.06 3.08 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 2.62 218.05 218.20 69.00 14.30 2.67 1.11 3.14 2.73	FROM TO ZS 102 XAL203 XCA0 XH60 XNA20 XK20 XFE203 XT 102 XP205 XHN0 XL01 SUM 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 0.14 6.24 100.22 195.30 144.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 100.13 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.66 0.05 2.62 100.17 218.05 218.20	FROM TO XS 102 XAL203 XCA0 XMA20 XK20 XFE203 XT 102 XP205 XMM0 XLOI SUM 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 100.13 209.00 209.10 72.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 2.62 100.19 218.05 218.20 69.00 <td>FROM TO ZSI02 ZAL203 ZCA0 XHG0 XHA20 ZK20 ZFE203 XTI02 ZP205 ZHN0 ZLOI SUH A.I. 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 22.33 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 100.13 46.80 209.0 209.10 72.30 14.30 2.67 1.11 3.14 2.73 3.11 0.31 0.07 0.93</td> <td>FROM TO ZS 102 XAL203 ZCA0 XMA20 XK20 ZEE203 XT102 ZP205 XMA0 XL01 SUH A.1. Cu (ppm) 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 22.00 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 28.00 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 10.19 35.96 15.00 2195.20 195.30 44.60 16.60 7.08 4.22 1.57 3.11 0.31 0.06 0.05 2.62 100.19 35.96 15.00 210.0 20.90 22.40 48.80 18.00 1.31 3.48 0.93 3.</td> <td>FROM TO ZS 102 ZAL203 ZCA0 ZMA0 ZMA20 ZK20 ZFE203 ZT 102 ZF205 ZMM0 ZLOI SUM A.I. Cu (ppm) Zn (ppm) 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 22.00 55.00 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 29.00 55.00 195.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 22.93 14.00 40.00 195.00 172.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 2.62 100.13 46.80 10.00 13.00 213.00 218.20 <</td>	FROM TO ZSI02 ZAL203 ZCA0 XHG0 XHA20 ZK20 ZFE203 XTI02 ZP205 ZHN0 ZLOI SUH A.I. 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 193.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 22.33 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 11.39 100.13 46.80 209.0 209.10 72.30 14.30 2.67 1.11 3.14 2.73 3.11 0.31 0.07 0.93	FROM TO ZS 102 XAL203 ZCA0 XMA20 XK20 ZEE203 XT102 ZP205 XMA0 XL01 SUH A.1. Cu (ppm) 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 22.00 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 28.00 195.20 195.30 44.60 16.60 7.08 4.42 1.57 3.19 10.20 0.73 0.12 0.23 10.19 35.96 15.00 2195.20 195.30 44.60 16.60 7.08 4.22 1.57 3.11 0.31 0.06 0.05 2.62 100.19 35.96 15.00 210.0 20.90 22.40 48.80 18.00 1.31 3.48 0.93 3.	FROM TO ZS 102 ZAL203 ZCA0 ZMA0 ZMA20 ZK20 ZFE203 ZT 102 ZF205 ZMM0 ZLOI SUM A.I. Cu (ppm) Zn (ppm) 176.00 176.10 68.10 12.70 3.73 1.37 5.46 1.08 2.51 0.23 0.06 0.13 4.77 100.14 21.05 22.00 55.00 184.70 184.90 65.80 14.40 3.27 1.87 2.27 3.34 2.58 0.25 0.06 0.14 6.24 100.22 48.47 29.00 55.00 195.90 194.00 73.60 12.10 2.26 0.66 4.73 1.42 1.82 0.22 0.06 3.08 99.95 22.93 14.00 40.00 195.00 172.30 14.20 1.89 0.56 3.97 2.73 1.50 0.31 0.06 0.05 2.62 100.13 46.80 10.00 13.00 213.00 218.20 <

Hole No. CHEM-87-23



SAMPLE NUMBER	FROM	TO	XS 102	%AL203	%CAO	XMGO	ZNA20	ZK20	%FE203	XT 102	XP205	20442	7L0I	รบห	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AB15491	347.80	347.90	49.00	12.00	9.55	6.32	2.23	0.38	16.40	2.20	0.20	0.23	1.62	100.13	36.26	210.00	140.00	60.00
AB15492	408.30	408.50	49.00	13.80	10.20	6.89	2.40	0.20	13.30	1.87	0.14	0.20	2.16	100.16	36.01	135.00	93.00	59.21

SAMPLE NUMBER	FROM	то	% 7 S I O 2	XAL203	%CAO	XMGO	ZNA20	ZK20	XFE203	XT 102	%P205	ZMNO	ZLOI	ទបក	 A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AD02301	38.20	36.30	42.60	13.20	8.55	7.05	<0.01	1.91	14.00	1.88	0.17	0.25	9.47	99.08	51.20	326.00	136.00	70.56
AD02302	40.90	41.00	70.40	13.80	2.19	1.38	2.21	4.14	2.69	0.25	0.08	0.06	2.85	100.05	55.65	46.00	37.00	55.42
AD02303	43.30	43.40	69.60	13.30	2.33	0.91	2.22	6.14	2.21	0.23	0.07	0.06	2.08	99.15	60.78	36.00	31.00	53.73
AD02304	50.00	50.10	70.40	14.60	1.81	1.23	2.45	4.32	2.21	0.26	0.08	0.04	2.62	100.02	56.57	39.00	31.00	55.71
AD0.2305	99.70	99.80	43.80	18.90	7.66	5.74	0.64	1.07	14.70	1.89	0.02	0.25	5.39	100.06	45.07	312.00	820.00	27.56
AD02306	114.50	114.60	47.50	15.80	9.27	7.22	2.43	0.12	12.80	1.66	0.17	0.20	3.16	100.33	38.55	257.00	127.00	66.93
AD02307	125,90	126.00	77.80	12.90	0.58	0.87	1.01	2.86	1.11	0.28	0.17	0.02	1.93	99.53	70.11	265.00	59.00	81.79
AB20461	137.30	137.40	70.10	15.80	0.84	0.97	0.97	3.67	3.37	0.45	0.08	0.02	3.70	99.97	71.94	43.00	42.00	50.59
AB20462	145,80	145.90	76.90	13.20	1.53	0.63	2.26	2.03	0.88	0.31	0.07	0.02	1.54	99.37	41.24	38.00	20.00	65.52
AB20463	158.60	158.70	65.70	17.00	3.89	0.92	1.68	3.17	2.72	0.40	0.08	0.02	2.93	98.51	42.34	44.00	15.00	74.58
AD02308	166.30	166.40	68.20	13.50	5.93	0.38	0.81	1.79	2.95	0.33	0.07	0.01	4.93	98.90	24.35	68.00	15.00	81.93
AB20464	168.20	168.30	70.00	12.90	3.09	0.67	1.50	2.54	3.89	0.37	0.08	0.02	3.16	98.22	41.15	37.00	<10.00	137.04
AB20465	181.80	181.90	74.70	11.20	3.02	0.47	1.29	2.32	2.49	0.28	0.07	0.02	2.16	98.02	39.30	47.00	14.00	77.05
AB20466	189.70	189.80	68.00	16.20	2.98	0.74	1.24	3.56	2.37	0.35	0.07	0.02	3.23	98.76	50.47	48.00	14.00	77.42
AD02309	200.30	200.40	72.80	14.90	1.71	0.86	1.23	3.24	1.89	0.33	0.06	0.02	2.31	99.35	58.24	59.00	20.00	74.68
AD02310	212.10	212.20	77.10	12.60	0.18	0.55	0.37	3.17	2.86	0.30	0.04	0.01	3.00	100.18	87.12	144.00	28.00	83.72
AD02311	224.50	224.60	82.00	10.80	0.16	0.06	0.49	2.31	1.17	0.28	0.02	0.01	1.85	99.15	78.48	72.00	<10.00	116.13

Hole No. CHEM87-24

SAMPLE NUMBER	FROM	то	2 \$102	ZAL203	ZCAO	ZMGO	ZNA20	ZK20	2FE203	ZT102	ZP205	ZMNO	XLO I	SUM	 A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AD02312	238.70	238.80	71.80	14.80	3.31	2.16	2.30	0.99	1.63	0.30	0.07	0.02	2.39	99.77	35.96	32.00	23.00	58.18
AU02313	248.30	248.40	68.40	17.60	2.09	0.82	5.21	1.78	1.01	0.39	0.10	0.02	2.39	99.81	26.26	29.00	15.00	65.91
AD02314	257.80	257.90	72.30	14.00	0.44	0.39	0.73	3.36	3.93	0.31	0.14	0.01	3.77	99.38	76.22	442.00	3060.00	12.62
AD02315	263.20	263.30	72.60	15.80	0.18	0.44	0.46	4.22	2.66	0.29	0.05	0.01	3.08	99.79	87.92	931.00	93.00	90.92
AD02316	265.60	265.70	49.20	14.10	11.10	6.52	1.40	0.13	12.70	1.78	0.17	0.20	2.70	100.00	34.73	366.00	108.00	77.22
AD02317	269.80	269.90	62.90	16.90	0.48	0.59	0.59	4.56	6.03	0.34	0.13	0.01	5.16	97.69	82.80	720.00	9050.00	7.37
AD02318	282.20	282.30	41.30	13.90	8.41	11.20	1.45	0.24	15.70	2.70	0.58	0.29	3.93	99.70	53.71	172.00	276.00	38.39
AD02319	292.00	292.10	47.80	14.00	8.46	6.74	2.96	0.40	13.20	1.86	0.18	0.21	2.47	98.28	38.47	472.00	128.00	78.67
AD02320	300.10	300.20	48.60	13.10	10.90	7.51	2.09	0.31	13.20	1.63	0.09	0.22	2.23	99.88	37.58	157.00	100.00	61.09
AD02321	323.90	324.00	45.70	12.80	14.50	9.12	1.49	0.29	9.65	0.56	0.12	0.18	4.93	99.34	37.05	106.00	68.00	60.92
AD02323	342.50	3 2. 60	51.50	18.80	3.87	4.90	4.90	0.78	8.94	0.91	0.20	0.14	3.77	98.71	39.31	216.00	99.00	68.57
AD02322	333.90	334.00	70.50	13.10	4.38	1.55	3.49	1.16	3.47	0.31	0.06	0.07	2.00	100.09	25.61	46.00	51.00	47.42
AD02324	355.60	355.70	49.80	12.40	11.70	9.90	2.96	0.15	9.22	0.54	0.12	0.17	3.39	100.35	40.67	167.00	58.00	74.22

SAMPLE NUMBER	FROM	то	% \$102	%AL203	ZCAO	ZHGO	ZNA20	ZK 20	ZFE203	XT 102	ZP205	ZMNO	ZLOI	รบห	 A.I.	Cu (ppm)	Zn (ppm)	100*Cu, (Cu+Zn
AB15493	42.80	42.95	69.50	13.20	4.19	1.00	0.82	3.46	2.47	0.25	0.06	0.13	4.62	99.70	47.10	58.00	39.00	59.79
AB15494	53.60	53.80	72.90	13.10	2.02	1.33	3.52	2.07	2.11	0.24	0.06	0.10	2.46	99.91	38.03	39.00	49.00	44.32
AB15495	65.80	66.00	73.80	13.40	2.47	0.71	4.22	1.58	2.17	0.20	0.05	0.06	1.62	100.28	25.50	39.00	14.00	73.58
AB15496	78.70	78.85	50.50	17.70	5.00	6.13	2.77	1.34	9.41	0.73	0.16	0.24	4.77	98.75	49.02	126.00	90.00	58.33
AB15497	94.40	94.60	68.00	16.10	0.72	2.61	3.78	2.75	3.34	0.37	0.08	0.04	2.31	100.10	54.36	37.00	71.00	34.26
AB15498	103.70	103.80	50.50	16.00	10.40	4.59	3.27	0.28	9.36	1.45	0.15	0.15	3.23	99.38	26.27	140.00	72.00	66.04
AB15499	116.30	116.50	45.10	11.20	9.94	5.55	1.89	0.42	18.90	3.69	0.15	0.25	1.70	98.79	33.54	578.00	135.00	81.07
AB15500	144.30	144.40	48.30	12.60	10.20	6.82	2.13	0.27	14.50	1.91	0.16	0.23	2.31	99.43	36.51	282.00	105.00	72.87
AB21601	196.50	196.70	48.80	13.30	10.90	6.99	1.83	0.22	13.50	1.84	0.16	0.21	2.00	99.75	36.16	244.00	95.00	71.98
AB21602	248.50	248.70	49.80	14.00	10.20	6.88	2.69	0.53	12.10	1.51	0.14	0.19	1.93	99.97	36.50	161.00	87.00	64.92
AB21603	300.20	300.30	49.20	14.60	11.40	5.98	1.75	0.16	12.80	1.78	0.17	0.19	1.77	99.80	31.83	218.00	100.00	68.55
AB21604	331.90	332.00	48.60	12.10	12.70	9.98	1.94	0.81	9.53	0.53	0.12	0.17	3.31	99.79	42.43	32.00	40.00	44.44
AB21605	341.00	341.20	48.70	13.00	14.40	9.31	2.01	0.19	9.99	0.49	0.11	0.18	1.77	100.15	36.67	152.00	59.00	72.04
AB21606	351.00	351.10	64.50	14.80	4.48	2.89	3.85	0.34	6.45	0.65	0.22	0.14	2.16	100.48	27.94	60.00	74.00	44.78
AB21607	374.20	374.30	58.60	15.70	3.55	4.53	3.07	1.87	8.94	0.99	0.32	0.19	2.39	100.15	49.16	134.00	118.00	53.17
AB21608	387.40	387.60	44.90	9.37	13.30	15.80	0.57	0.38	9.50	0.53	0.12	0.17	5.16	99.80	53.84	108.00	53.00	67.08
AB21609	402.10	402.20	52.80	18.80	5.52	4.18	4.23	0.79	8.93	0.96	0.47	0.12	3.23	100.03	33.76	84.00	93.00	47.46

Hole No. CHEM87-25

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SAMPLE NUMBER	EROM	то	XS 102	XAL203	ZCAO	ZMGO	XNA20	ZK20	%7E203	ZT 102	%P205	ZMNO	ZLOI	รบห	Ą	\.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
				••••••••••••••••••••••••••••••••••••••			 												
AB21610	422.60	422.70	46.00	17.70	9.32	5.61	3.89	0.22	9.19	0.97	0.27	0.22	6.93	100.32	3(0.62	99.00	85.00	53.80
AB21611	430.95	431.10	49.90	16.60	6.93	5.90	2.04	2.03	9.33	0.87	0.24	0.18	5.62	99.64	41	6.92	44.00	150.00	22.68
AB21612	433.45	433.60	51.50	17.40	8.44	3.98	5.29	0.32	7.32	0.90	0.26	0.16	4.62	100.19	2	3.85	73.00	70.00	51.05

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SAMPLE NUMBER	FROM	то	% S 102	ZAL203	%CAO	2MGO	ZNA20	ZK20	XFE203	XT 102	XP205	2MNO	ZLOI	SUM	 A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AD02325	35.20	35.30	45.90	10.70	7.07	3.76	0.97	0.27	19.10	3.78	0.32	0.27	6.31	98.45	33.39	560.00	315.00	64.00
AD02326	70.20	70.30	49.00	10.90	7.71	3.60	2.06	0.71	19.20	3.67	0.38	0.26	1.08	98.57	30.61	540.00	180.00	75.00
AD02327	111.10	111.20	47.70	13.40	10.40	7.14	1.99	0.20	14.30	1.97	0.17	0.22	2.31	99.80	37.20	159.00	105.00	60.23
AD02329	167.30	167.40	48.30	12.10	8.94	4.70	2.34	0.73	17.20	2.93	0.22	0.24	1.70	99.40	32.50	359.00	144.00	71.37
AD02330	191.20	191.30	47.70	13.30	10.10	6.92	2.29	0.43	13.40	1.95	0.17	0.19	2.70	99.15	37.23	249.00	97.00	71.97
AD02331	228.50	228.60	48.90	13.40	10.10	6.82	2.05	0.22	14.00	1.94	0.16	0.22	2.08	99.89	36.69	220.00	113.00	66.07
AD02332	254.30	254.40	48.10	13.40	12.40	8.01	1.77	0.27	11.50	1.27	0.12	0.18	2.62	99.64	36.88	158.00	77.00	67.23
AD02328	127.30	27.40	45.10	10.50	8.20	4.36	2.01	0.47	21.10	4.81	0.21	0.28	1.16	98.20	32.11	583.00	185.00	75.91

SAMPLE NUMBER	FROM	то	25102	%AL203	ZCAO	2MG0	ZNA20	ZK20	ZFE203	ZT 102	%P205	ZMNO	XLO I	SUK		A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
											v*******		÷.						
AD02333	15.20	15.30	61.90	14.40	5.08	2.08	1.20	3.15	4.84	0.43	0.13	0.26	5.77	99.24		45.44	62.00	118.00	34.44
AD02334	18.80	18.90	67.20	13.60	3.94	1.79	1.01	3.26	3.58	0.34	0.10	0.18	4.47	99.47		50.50	60.00	109.00	35.50
AB02335	40.60	40.70	71.60	13.20	3.15	0.97	2.82	2.08	2.31	0.25	0.06	0.09	3.08	99.61		33.81	46.00	75.00	38.02
AD02336	44.80	44.90	53.00	16.30	8,94	3.36	1.18	1.52	9.34	0.63	0.13	0.23	4.47	99.10		32.53	321.00	165.00	66.05
AD02337	51.40	51.50	73.90	11.70	2.95	0.78	3.75	0.83	3.14	0.28	0.06	0.07	2.08	99.54		19.37	41.00	25.00	62.12
AD02338	59.90	60.00	71.60	15.20	1.26	0.98	3.49	3.37	1.82	0.34	0.09	0.03	2.08	100.26		47.80	40.00	16.00	71.43
AD02339	85.70	85.80	48.10	13.30	9.74	7.22	1.93	0.21	14.30	1.97	0.17	0.22	2.23	99.39		38.90	131.00	104.00	55.74
AD02340	146.60	146.70	47.10	11.70	7.30	4.47	2.13	0.38	19.50	3.72	0.26	0.29	1.62	98.47		33.96	508.00	172.00	74.71
AD02341	214.40	214.50	46.60	15.50	8,95	4.74	2.29	0.30	15.80	2.81	0.21	0.23	2.46	99.88		30.98	321.00	130.00	71.18
AD02342	223.80	223.90	70.30	14.40	2,18	2.22	1.55	3.59	2.39	0.34	0.07	0.05	2.77	99.86		60.90	38.00	58.00	39.58
AD02343	231.60	231.70	70.40	13.90	2.30	2.05	3.60	1.30	3.40	0.33	0.07	0.04	2.39	99.78		36.22	59.00	74.00	44.36
AD02344	238.10	238.20	74.20	14.20	0.94	0.83	1.66	3.07	1.30	0.32	0.08	0.02	2.31	98.93		60.00	43.00	26.00	62.32
AD02345	254.40	254.50	71.90	12.70	3.18	1.94	1.57	2.39	2.06	0.32	0.08	0.04	3.54	99.72		47.69	41.00	35.00	53.95
AD02346	273.60	273.70	74.00	14.20	1.01	0.28	0.68	2.94	1.90	0.36	0.06	0.01	2.77	98.21		65.58	81.00	19.00	81.00
AD02347	286.30	286.40	59.70	15.40	4.15	3.57	4.04	0.84	7.35	0.84	0.31	0.13	3.31	99.64	•	35.00	72.00	94.00	43.37
AD02348	317.00	317.10	48.50	13.80	10.60	8.05	3.15	0.35	9.37	0.56	0.14	0.16	5.08	99.76		37.92	101.00	61.00	62.35
AD02349	334.80	334.90	50.70	16.00	4.57	7.70	3.68	3.04	9.75	0.86	0.20	0.20	2.31	99.01		56.56	142.00	108.00	56.80

Hole No. CHEM87-27

SAMPLE NUMBER	FROM TO	ZS 102	XAL203	ZCAO	ZMGO	ZNA20	XK20	XFE203	ZT 102	XP205	ZMNO	2L0I	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AD02350	356.60 356.70	47.90	13.40	10.10	6.87	1.89	0.31	13.70	1.93	0.18	0.21	2.39	98.88	37.45	271.00	108.00	71.50



SAMPLE NUMBER	FROM	TO	% S102	ZAL203	%CAO	ZMGO	ZNA20	XK20	ZFE203	ZT 102	%P205	2MNO	ZLO I	SUM		A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
																			
AB21613	11.70	11.80	69.30	13.20	3.60	1.31	0.97	3.01	2.57	0.31	0.06	0.15	4.24	98.72		48.59	127.00	113.00	52.92
AB21614	22.00	22.50	63.70	14.70	3.97	2.05	2.11	2.71	4.49	0.42	0.13	0.17	4.24	98.69		43.91	46.00	145.00	24.08
AB21615	32.20	32.40	71.10	14.50	1.56	1.43	0.47	3.97	2.47	0.27	0.07	0.09	3.08	99.01		72.68	38.00	86.00	30.65
AB21616	42.90	43.05	69.10	13.40	3.89	1.03	1.37	3.25	2.67	0.26	0.07	0.10	3.31	98.45		44.86	27.00	42.00	39.13
AB21617	54.70	54.85	79.60	11.40	0.96	0.46	4.27	1.18	0.49	0.24	0.06	0.02	0.93	99.61		23.87	32.00	<10.00	· .
AB21618	64.60	64.75	71.50	13.00	2.38	0.60	2.79	2.35	3.27	0.33	0.07	0.04	2.23	98.56		36.33	769.00	77.00	90.90
AB21619	87.20	87.30	49.70	13.60	9.84	6.36	2.26	0.32	12.20	1.62	0.16	0.18	2.08	98.32		35.57	320.00	96.00	76.92
AB21620	125.50	125.70	47.40	11.20	8.45	4.08	2.30	0.50	19.70	3.73	0.30	0.25	0.85	98.76		29.88	634.00	162.00	79.65
AB21621	207.90	207.90	48.10	14.60	8.99	6.67	2.49	0.17	13.70	1.96	0.19	0.21	2.46	99.54		37.34	289.00	117.00	71.18
AB21622	216.90	216.90	45.00	12.60	5.66	5.81	3.42	0.04	17.00	1.98	0.37	0.17	8.31	100.36		39.18	168.00	70.00	70.59
AB21623	221.20	221.30	41.00	16.00	16.70	5.30	0.80	0.02	10.30	0.68	0.19	0.32	4.00	95.81	•	24.96	197.00	72.00	73.23
AB21624	225.40	225.55	74.10	14.50	2.04	0.75	4.12	1.84	0.53	0.33	0.06	0.02	1.70	99.99		29.60	21.00	18.00	53.85
AB21625	232.60	332.70	63.50	10.10	8.82	2.79	1.39	0.71	4.40	0.25	0.04	0.13	3.46	95.59		25.53	73.00	65.00	52.90
AB21627	235.60	235.70	42.20	16.30	13.30	5.99	1.15	1.05	6.29	0.67	0.18	0.21	6.16	93.50		32.76	530.00	140.00	79.10
AB21626	249.00	249.10	69.50	15.10	1.26	1.40	1.41	3.26	2.99	0.32	0.07	0.02	3.23	98.56		63.57	94.00	42.00	69.12
AP21629	259 90	260 00	73.00	15.00	1.20	0.78	2.99	2.42	1.19	0.37	0.07	0.02	1.85	98.89		43.30	40.00	24.00	62.50
AP21020	269.90	270.00	74 20	13.70	2.30	0.22	3.72	1.50	0.51	0.36	0.16	0.01	1.85	98.63		22.22	34.00	11.00	75.56
ND41047	202.90	2/0.00	/1.30	10.70	2104														

Hole No. CHEM87-28

SAMPLE NUMBER	FROM	то	ZS102	XAL203	%CA0	ZMGO	ZNA20	ZK20	XFE203	XT 102	XP205	2HN0	%L0I	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
																	••••••••••	
AB21700	296.60	296.70	48.80	17.00	5.70	8.52	3.98	0.45	10.70	0.94	0.17	0.19	3.31	99.76	48.10	160.00	80.00	66.67
AB21630	298.80	298.90	50.30	18.40	5.51	5.45	4.91	0.60	9.86	0.90	0.28	0.17	2.54	98.92	36.73	82.00	76.00	51.90
AB21631	318.90	318.90	48.50	13.00	12.50	10.10	2.16	0.33	10.00	0.53	0.12	0.16	1.85	99.25	41.57	179.00	66.00	73.06
AB21632	328.70	328.80	49.30	13.10	12.60	8.69	2.49	0.43	9.05	0.55	0.14	0.15	2.62	99.12	37.67	183.00	54.00	77.22
AB21633	343.50	343.60	52.40	18.40	5.04	4.29	4.52	0.86	8.68	0.94	0.26	0.13	3.62	99.14	35.01	93.00	95.00	49.47
AB21634	368.80	369.00	48.80	13.30	11.70	8.17	3.10	0.28	9.16	0.56	0.14	0.16	3.93	99.30	36.34	165.00	62.00	72.69
AB21635	376.50	376.60	50.70	10.80	9.08	11.40	2.67	0.78	9.71	0.51	0.11	0.21	3.16	99.13	50.90	62.00	54.00	53.45

SAMPLE NUMBER	FROM	TO	%S I02	ZAL203	ZCAO	ZMGO	ZNA20	% K20	%7E203	ZT 102	ZP205	ZHNO	XLO I	SUM	***	A.I.	Cu (ppm)	Zn (ppm)	100*Cu, (Cu+Zn
			********										•••••			~			
AD02401	24.20	24.30	54.00	17.30	7.54	4.41	3.22	0.68	9.14	0.66	0.12	0.18	2.85	100.10		32.11	105.00	111.00	48.61
AD02402	51.30	51.40	53.80	17.80	4.79	5.10	4.25	0.84	9.02	0.68	0.12	0.15	3.08	99.63		39.65	100.00	111.00	47.39
AD02403	63.70	63.80	53.90	20.20	1.96	5.73	6.60	0.93	5.59	0.83	0.16	0.10	3.54	99.44		44.05	43.00	67.00	39.09
AD02404	79.90	80.00	52.10	15.40	5.85	7.50	2.74	0.04	9.81	0.66	0.08	0.19	5.31	99.68		46.75	152.00	115.00	56.93
AD02405	85.70	85.80	66.10	16.30	3.15	0.99	3.90	2.01	3.88	0.23	0.13	0.06	2.85	99.60		29.85	138.00	38.00	78.41
AD02406	99.40	99.50	70.80	14.50	1.72	1.14	5.88	1.11	2.73	0.29	0.07	0.05	1.93	100.22		22.84	99.00	33.00	75.00
AD02407	119.30	119.40	69.00	14.60	2.52	1.40	3.33	3.09	2.82	0.27	0.08	0.07	3.00	100.18		43.42	37.00	65.00	36.27
AD02408	131.70	131.80	50.10	20.60	3.64	4.75	4.98	1.67	7.11	0.92	0.16	0.08	5.47	99.48		42.69	141.00	47.00	75.00
AD02409	141.00	141.10	72.60	15.10	0.99	1.01	2.96	2.72	1.77	0.35	0.07	0.06	1.93	99.56		48.57	51.00	37.00	57.95
AD02410	159.70	159.80	49.30	16.70	4.29	10.10	4.21	0.50	9.45	0.72	0.18	0.18	4.62	100.25		55.50	218.00	83.00	72.43
AD02411	173.40	173.50	53.10	15.10	4.94	7.96	3.73	2.36	9.02	0.68	0.17	0.17	2.16	99.39		54.34	100.00	83.00	54.64
AD02412	192.70	192.80	43.50	15.80	6.27	10.60	1.29	2.41	13.30	1.02	0.20	0.25	4.47	99.11		63.25	163.00	110.00	59.71
AD02413	217.60	217.70	47,10	17.20	5.35	10.40	2.62	2.09	10.10	0.69	0.18	0.19	3.85	99.77		61.05	204.00	78.00	72.34
AD02414	223.40	223.50	49.70	17.10	6.41	7.13	2.89	2.95	9.27	0.82	0.23	0.20	2.54	99.24		52.01	140.00	97.00	59.07
AD02415	260.30	260.40	49.80	17.50	5.01	6.91	4.25	1.32	10.60	0.89	0.21	0.19	2.70	99.38	in dia Maj	47.06	230.00	245.00	48.42
AD02416	291.70	291.80	48.90	16.00	7.97	8.30	3.51	0.26	11.20	0.83	0.17	0.21	2.85	100.20		42.71	242.00	76.00	76.10

SAMPLE NUMBER	FROM	то	XS 102	%AL203	ZCAO	2HG0	ZNA20	ZK20	%FE203	XT 102	%205	ZMNO	XLOI	SUM		A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
							* ***											•	
AB21636	13.30	13.40	69.90	14.50	1.00	1.36	4.02	3.06	2.56	0.28	0.07	0.09	2.08	98.92		46.82	25.00	28.00	47.17
AB21637	25.10	25.20	69.00	13.60	3.68	1.00	2.48	3.00	1.65	0.24	0.06	0.08	4.08	98.87		39.37	22.00	25.00	46.81
AB21638	38.40	38.50	65.40	12.60	5.28	2.09	1.64	2.13	3.59	0.27	0.07	0.13	5.93	99.13		37.88	32.00	64.00	33.33
AB21639	41.20	41.30	70.30	14.40	3.41	0.31	2.45	2.97	1.64	0.26	0.07	0.13	4.08	100.02		35.89	23.00	17.00	57.50
AB21640	47.00	47.10	59.70	13.60	6.62	2.92	3.20	1.91	4.65	0.36	0.07	0.17	7.00	100.20	•	32.97	52.00	49.00	51.49
AB21641	57.10	57.20	65.30	14.20	3.66	1.99	4.12	2.15	3.70	0.33	0.07	0.08	4.24	99.84		34.73	67.00	38.00	63.81
AB21642	64.20	64.40	70.40	13.30	3.02	0.90	2.64	2.91	2.08	0.24	0.06	0.09	4.08	99.72		40.23	28.00	34.00	45.16
AB21643	71.10	71.20	66.20	12.10	5.98	1.34	0.70	3.17	3.17	0.25	0.06	0.17	6.85	99.99		40.30	18.00	46.00	28.12
AB21644	88.70	88.80	70.70	13.90	2.74	0.71	2.93	2.63	2.23	0.25	0.07	0.10	3.46	99.72		37.07	39.00	100.00	28.06
AB21645	97.20	97.30	69.20	13.90	3.37	0.49	3.01	2.84	2.19	0.29	0.07	0.10	3.93	99.39		34.29	41.00	126.00	24.55
AB21646	114.50	114.60	71.10	13.60	2.96	0.46	3.48	2.37	1.89	0.25	0.06	0.07	3.39	99.63		30.53	26.00	36.00	41.94
AB21647	128.30	128.40	71.20	13.90	2.35	0.70	2.23	2.81	2.63	0.24	0.06	0.06	3.31	99.49	e e	43.39	23.00	61.00) 27.38
AB21648	157.75	157.90	46.20	15.10	10.70	5.74	2.64	0.04	10.10	0.69	0.11	0.23	8.54	100.09		30.23	154.00	80.00) 65.81
AB21649	167.30	167.40	68.50	13.30	5.03	1.35	2.53	1.74	2.70	0.29	0.07	0.04	4.39	99.94		29.01	34.00	14.00	> 70.83
AB21650	181.40	181.50	71.70	14.00	2.17	1.23	4.12	1.65	2.83	0.33	0.08	0.06	1.77	99.94		31.41	38.00	17.00) 69.09
AB21651	195.60	195.70	70.40	13.40	3.67	0.82	1.57	3.06	1.84	0.24	0.06	0.04	4.00	99.10		42.54	29.00	<10.0	0 152.63
AB21652	205.40	205.50	70.00	15.10	2.51	0.74	4.75	1.75	2.49	0.38	0.10	0.07	1.54	99.43		25.54	39.00	12.0	5 76.47

Hole No. CHEM87-30

SAMPLE NUMBER	FROM	то	ZS 102	ZAL203	ZCAO	%MGO	ZNA20	ZK20	%7E203	XT 102	XP205	2800	%LOI	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
									······									
AB21653	213.60	213.70	72.00	14.20	1.65	0.86	4.71	1.51	2.50	0.26	0.06	0.03	1.31	99.09	27.1	5 51.00	12.00	80.95
AB21654	218.20	218.30	72.60	13.80	2.20	0.97	3.02	2.33	1.96	0.25	0.06	0.02	2.77	99.98	38.7	47.00	17.00	73.44
AB21655	229.80	229.90	51.40	18.30	6.07	4.31	3.95	1.09	10.20	0.72	0.13	0.19	3.23	99.49	35.2	5 252.00	89.00	73.90
AB21656	232.80	232.90	72.20	13.50	2.15	1.24	4.86	1.52	2.77	0.26	0.06	0.05	1.47	100.08	28.2	5 40.00	24.00	62.50
AB21657	243.60	243.70	72.10	13.60	2.57	0.31	3.31	2.31	3.03	0.26	0.06	0.07	1.70	99.82	34.6	41.00	25.00	62.12
AB21658	249.30	249.40	53.20	17.10	4.67	6.59	4.35	0.54	9.43	0.71	0.14	0.20	3.23	100.16	44.1	5 241.00	120.00	66.76
AB21659	264.30	264.40	49.60	17.20	6.09	7.78	2.69	0.98	10.40	0.73	0.13	0.23	4.16	99.99	49.9	178.00	119.00	59.93
AB21660	339.50	339.70	77.00	11.40	1.95	0.35	6.31	0.12	1.50	0.14	0.04	0.04	1.16	100.01	5.3	44.00	34.00	56.41

SAMPLE NUMBER	FROM	то	% \$102	%AL203	ZCAO	ZHGO	ZNA20	XK20	%7E203	7T 102	ZP205	7.MNO	ZLOI	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ '(Cu+Zn)

AB21661	21.90	22.00	65.50	14.40	3.48	1.66	3.51	2.47	4.21	0.34	0.07	0.09	4.39	100.12	37.1	61.00	38.00	61.62
AB21662	32.10	32.20	61.90	15.90	3.96	2.11	3.54	2.36	4.79	0.26	0.18	0.14	5.00	100.14	37.3	73.00	169.00	30.17
AB21663	43.70	43.80	70.20	13.60	2.55	0.91	3.17	2.74	2.05	0.25	0.06	0.09	3.95	99.47	38.9	5 27.00	64.00	29.67
AB21664	55.20	55.30	70.80	14.20	2.03	0.92	3.77	2.66	1.83	0.26	0.06	0.06	3.39	99.98	38.1	36.00	30.00	54.55
AB21665	66.40	66.60	72.00	13.90	1.75	1.03	4.52	1.57	2.24	0.30	0.07	0.06	2.46	99.90	29.3	40.00	42.00	48.78
AB21666	72.70	72.80	70.60	11.90	4.32	1.21	3.38	1.57	1.95	0.27	0.07	0.10	4.70	99.97	26.5	55.00	18.00	75.34
AB21667	84.70	84.80	67.00	13.80	4.22	1.17	2.35	2.55	3.33	0.30	0.08	0.10	4.77	99.67	36.15	54.00	44.00	55.10
AB21668	93.40	93.50	68.70	14.40	4.05	0.88	1.97	2.87	2.20	0.31	0.07	0.04	4.62	100.11	38.3	29.00	14.00	67.44
AB21669	105.00	105.10	47.90	16.90	9.99	4.03	2.51	0.49	11.00	0.78	0.14	0.26	6.16	100.16	26.50	231.00	103.00	69.16
AB21670	114.70	114.80	57.50	13.90	7.45	3.18	1.47	2.49	5.23	0.43	0.12	0.25	8.08	100.10	38.86	61.00	93.00	39.61
AB21671	129.10	129.20	69.50	13.40	4.61	0.76	0.79	3.47	2.28	0.27	0.06	0.04	4.85	100.03	43.93	38.00	<10.00	
AB21672	141.30	141.40	70.70	15.60	1.87	0.84	3.33	3.12	1.70	0.37	0.13	0.04	1.77	99.47	43.23	53.00	10.00	84.13
AB21673	156.90	157.00	72.10	14.90	1.10	1.20	4.40	2.09	2.26	0.36	0.10	0.05	1.54	100.10	37.43	31.00	23.00	57.41
AB21674	174.50	174.60	69.50	14.60	3.08	1.11	3.53	2.23	2.10	0.27	0.06	0.03	2.54	99.05	33.52	49.00	17.00	74.24
AB21675	184.60	184.70	53.20	16.50	6.98	4.21	4.02	0.57	9.23	0.66	0.13	0.17	4.31	99.98	30.29	397.00	60.00	86.87
AB21676	192.80	192.90	72.40	13.80	2.59	1.17	4.92	1.53	1.81	0.26	0.06	0.05	1.47	100.06	26.44	59.00	18.00	76.62
AB21677	199.30	199.40	48.10	16.40	6.69	5.02	2.58	2.01	10.90	0.70	0.11	0.23	6.85	99.59	43.13	101.00	104.00	49.27

Hole No. CHEM87-32

SAMPLE NUMBER	FROM	то	%S102	XAL203	XCAO	ZNGO	XNA20	XK20	XFE203	ZT 102	XP205	ZMNO	%L0I	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
															 •••••••••••••••••••••••••••••••••••••••			
AB21678	213.40	213.50	73.20	13.90	2.94	0.87	2.16	2.68	2.40	0.25	0.06	0.06	1.77	100.19	41.52	29.00	23.00	55.77
AB21679	218.80	218.90	71.70	13.40	2.20	0.83	2.09	3.19	2.83	0.30	0.07	0.07	2.39	99.07	48.38	35.00	16.00	68.63
AB21680	228.80	228.90	51.20	16.10	4.86	6.81	2.85	1.14	9.14	0.67	0.12	0.24	6.93	100.06	50.77	74.00	154.00	32.46
AB21681	258.20	258.30	71.00	13.70	3.01	1.04	5.25	1.22	1.56	0.26	0.09	0.03	3.16	100.32	21.48	32.00	12.00	72.73
AB21682	273.40	273.50	44.40	12.80	8.25	6.55	1.93	0.55	13.00	1.87	0.17	0.17	10.08	99.77	41.09	348.00	112.00	75.65
AB21683	281.00	281.10	71.90	14.00	2.08	0.51	4.87	2.40	1.73	0.26	0.09	0.03	2.23	100.10	29.51	43.00	36.00	54.43
AB21684	286.40	286.50	45.40	12.60	10.30	5.15	2.35	0.37	10.80	1.47	0.15	0.18	11.00	99.77	30.38	243.00	99.00	71.05
AB21685	300.00	300.10	54.40	17.90	2.95	3.60	2.29	1.71	8.32	0.89	0.21	0.09	6.47	98.83	50.33	126.00	136.00	48.09
AB21686	318.30	318.40	53.60	17.20	2.33	3.46	2.42	1.85	10.30	0.90	0.22	0.10	6.85	99.23	52.78	126.00	144.00	46.67
AB21687	427.20	427.30	74.80	15.70	0.91	0.62	0.94	3.09	1.18	0.35	0.12	0.01	2.46	100.18	66.73	34.00	17.00	66.67
AB21688	434.10	434.20	44.30	11.90	11.70	8.86	0.33	0.05	9.99	0.68	0.15	0.11	10.31	98.28	42.55	170.00	237.00	41.77
AB21689	456.90	457.10	49.10	14.30	11.40	6.55	1.59	0.19	12.90	1.73	0.17	0.20	2.16	100.29	34.16	242.00	96.00	71.60

FROM	то	X SI02	ZAL203	%CAO	ZHGO	%NA20	X K20	ZFE203	ZT 102	%P205	ZHNO	%LOI	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
											<u></u>						
10.60	10.70	71.00	12.40	3.63	0.61	5.65	0.92	2.01	0.28	0.07	0.10	3.16	99.83	14.15	57.00	31.00	64.77
16.30	16.40	55.30	16.90	5.43	2.60	2.26	2.91	6.94	0.47	0.35	0.17	6.16	99.49	41.74	42.00	106.00	28.38
20.80	20.90	73.90	13.50	1.49	0.65	5.74	1.19	1.66	0.29	0.03	0.05	1.77	100.32	20.29	37.00	27.00	57.81
30.00	30.10	68.70	13.60	3.99	1.45	2.29	2.38	2.46	0.26	0.06	0.04	4.77	100.00	37.88	36.00	18.00	66.67
44.40	44.50	72.30	13.20	1.34	1.32	5.10	1.19	3.07	0.24	0.06	0.06	2.23	100.11	28.04	35.00	24.00	59.32
54.20	54.30	66.50	14.40	4.45	1.38	0.78	3.68	2.75	0.29	0.07	0.03	5.54	99.87	49.17	35.00	12.00	74.47
64.50	64.60	69.00	14.90	3.47	2.57	3.00	2.47	2.44	0.32	0.08	0.04	1.70	99.99	43.79	26.00	16.00	61.90
72.60	72.70	51.80	16.80	8.54	5.38	2.75	0.44	10.80	0.76	0.13	0.17	2.85	100.42	34.02	47.00	61.00	43.52
79.70	79.80	72.70	13.80	2.65	0.66	4.01	2.41	2.65	0.26	0.06	0.04	0.85	100.09	31,.55	34.00	17.00	66.67
88.40	88.50	50.70	17.20	5.69	7.15	4.11	0.93	10.60	0.68	0.09	0.21	2.93	100.29	45.19	16.00	83.00	16.16
98.20	98.30	48.80	16.70	6.84	7.38	2.92	1.01	12.10	0.76	0.14	0.25	3.46	100.36	46.23	51.00	98.00	34.23
108.70	108.80	51.90	18.00	6.29	4.37	5.70	0.36	9.20	0.72	0.14	0.25	2.46	99.39	28.29	277.00	650.00	29.88
124.40	124.50	56.00	17.50	4.21	4.58	6.00	1.12	7.76	0.68	0.12	0.16	2.00	100.13	35.83	179.00	134.00	57.19
136.80	136.90	55.30	17.80	4.34	4.39	6.84	0.46	7.39	0.66	0.11	0.16	2.08	99.53	30.26	98.00	101.00	49.25
143.30	143.40	47.90	14.20	10.20	6.45	1.44	0.29	13.60	1.87	0.18	0.20	3.08	99.41	36.67	253.00	118.00	68.19
153.60	153.70	54.80	16.90	7.35	3.71	4.36	0.80	8.07	0.62	0.12	0.16	2.77	99.66	27.81	381.00	90.00	80.89
154.90	155.00	70.60	13.80	2.51	1.09	5.04	1.99	3.02	0.29	0.06	0.06	1.39	99.85	28.97	40.00	27.00	59.70
	FROM 10.60 16.30 20.80 30.00 44.40 54.20 64.50 72.60 79.70 88.40 98.20 108.70 124.40 136.80 143.30 153.60 154.90	FROM TO 10.60 10.70 16.30 16.40 20.30 20.90 30.00 30.10 44.40 44.50 54.20 54.30 64.50 64.60 72.60 72.70 79.70 79.80 88.40 88.50 98.20 98.30 108.70 108.80 124.40 124.50 136.80 136.90 143.30 143.40 153.60 153.70 154.90 155.00	FROM TO ZSI02 10.60 10.70 71.00 16.30 16.40 55.30 20.80 20.90 73.90 30.00 30.10 68.70 44.40 44.50 72.30 54.20 54.30 66.50 64.50 64.60 69.00 72.60 72.70 51.80 79.70 79.80 72.70 88.40 88.50 50.70 98.20 98.30 48.80 108.70 108.80 51.90 124.40 124.50 56.00 136.80 136.90 55.30 143.30 143.40 47.90 153.60 153.70 54.80	FROM TO XSID2 XAL203 10.60 10.70 71.00 12.40 16.30 16.40 55.30 16.90 20.80 20.90 73.90 13.50 30.00 30.10 68.70 13.60 44.40 44.50 72.30 13.20 54.20 54.30 66.50 14.40 64.50 64.60 69.00 14.90 72.60 72.70 51.80 16.80 79.70 79.80 72.70 13.80 88.40 88.50 50.70 17.20 98.20 98.30 48.80 16.70 108.70 108.80 51.90 18.00 124.40 124.50 56.00 17.50 136.80 136.90 55.30 17.80 143.30 143.40 47.90 14.20 153.60 153.70 54.80 16.90 154.90 155.00 70.60 13.80	FROMTOZSI02ZAL203ZCA010.6010.7071.0012.403.6316.3016.4055.3016.905.4320.8020.9073.9013.501.4930.0030.1068.7013.603.9944.4044.5072.3013.201.3454.2054.3066.5014.404.4564.5064.6069.0014.903.4772.6072.7051.8016.808.5479.7079.8072.7013.802.6588.4088.5050.7017.205.6998.2098.3048.8016.706.84108.70108.8051.9018.006.29124.40124.5056.0017.504.21136.80136.9055.3017.804.34143.30143.4047.9014.2010.20153.60153.7054.8016.907.35154.90155.0070.6013.802.51	FROM TO XSI02 XAL203 ZCA0 ZMG0 10.60 10.70 71.00 12.40 3.63 0.61 16.30 16.40 55.30 16.90 5.43 2.60 20.30 20.90 73.90 13.50 1.49 0.65 30.00 30.10 68.70 13.60 3.99 1.45 44.40 44.50 72.30 13.20 1.34 1.32 54.20 54.30 66.50 14.40 4.45 1.38 64.50 64.60 69.00 14.90 3.47 2.57 72.60 72.70 51.80 16.80 8.54 5.38 79.70 79.80 72.70 13.80 2.65 0.66 88.40 88.50 50.70 17.20 5.69 7.15 98.20 98.30 48.80 16.70 6.84 7.38 108.70 108.80 51.90 18.00 6.29 4.37 124.40 <td>FROM TO XSID2 XAL203 XCA0 XHGO XNA20 10.60 10.70 71.00 12.40 3.63 0.61 5.65 16.30 16.40 55.30 16.90 5.43 2.60 2.26 20.80 20.90 73.90 13.50 1.49 0.65 5.74 30.00 30.10 68.70 13.60 3.99 1.45 2.29 44.40 44.50 72.30 13.20 1.34 1.32 5.10 54.20 54.30 66.50 14.40 4.45 1.38 0.78 64.50 64.60 69.00 14.90 3.47 2.57 3.00 72.60 72.70 51.80 16.80 8.54 5.38 2.75 79.70 79.80 72.70 13.80 2.65 0.66 4.01 88.40 88.50 50.70 17.20 5.69 7.15 4.11 98.20 98.30 48.80 16.70<td>FROM TO XSID2 XAL203 XCA0 XHG0 XMA20 XK20 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 20.30 20.90 73.90 13.50 1.49 0.65 5.74 1.19 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 64.50 64.60 69.00 14.90 3.47 2.57 3.00 2.47 72.60 72.70 51.80 16.80 8.54 5.38 2.75 0.44 79.70 79.80 72.70 13.80 2.65 0.66 4.01 2.41 88.40 88.50</td><td>FROM TO XSI02 XAL203 XCA0 XHGD XNA20 XK20 XFE203 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 16.30 15.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 20.30 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 64.50 69.00 14.90 3.47 2.57 3.00 2.47 2.44 72.60 72.70 51.80 16.80 8.54 5.38 2.75 0.44 10.80 79.70 79.80 72.70</td><td>FROM TO XSI02 XAL203 XCA0 XHG0 XNA20 XK20 XFE203 XII02 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 0.29 64.50 69.00 14.90 3.47 2.57 3.00 2.47 2.44 0.32 72.60 72.70 51.80 16.80 8.54</td><td>FROM TO ZSI02 XAL203 ZCA0 ZMG0 ZNA20 ZK20 ZFE203 ZII02 ZP205 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 0.29 0.07 64.50 69.00 14.90 3.47 2.57 3.00 2.47 2.44</td><td>FROM TO XSI02 XAL203 ZCA0 ZHGO XNA20 ZK20 ZE203 ZTI02 ZP205 ZHN0 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.09 0.05 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 0.06 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 0.29 0.07 0.03 64.50</td><td>FROM TO XSI02 XAL203 XCA0 XMGO XMA20 XK20 XFE203 XI102 XP205 XHMO XL01 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 0.05 1.77 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 0.66 2.23 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68</td><td>FRDM TD XSI02 ZAL203 ZCA0 ZMG0 ZMA20 ZK20 ZFE203 XTI02 ZP205 ZMM0 ZLOI SUM 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 0.05 1.77 100.32 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 100.00 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 0.06 2.23 100.11 54.20 54.30</td><td>FROM TO XSI02 XAL203 ZGA0 XM60 ZNA20 ZK20 ZEE203 XTI03 XP205 ZMN0 XL01 SUM A.I. 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 14.15 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 41.74 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 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Cu (ppm) 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 14.15 57.00 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 41.74 42.00 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 0.05 1.77 100.32 20.29 37.00 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 100.00 37.88 36.00 44.40 44.50 72.30 13.20 1.34 1.32 5.10</td> <td>FROM TO X5102 XAL203 ZLAU XHAQ XK2Q XEE203 XT102 XP205 XHNO XL01 SUH A.I. Cu (ppm) Zn (ppm) 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 14.15 57.00 31.00 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 41.74 42.00 106.00 20.30 20.99 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.03 0.05 1.77 100.32 20.29 37.00 27.00 30.00 30.10 66.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 100.00 37.88 36.00 18.00 44.00 4.70 100.11<</td>	FROM TO XSID2 XAL203 XCA0 XHG0 XMA20 XK20 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 20.30 20.90 73.90 13.50 1.49 0.65 5.74 1.19 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 64.50 64.60 69.00 14.90 3.47 2.57 3.00 2.47 72.60 72.70 51.80 16.80 8.54 5.38 2.75 0.44 79.70 79.80 72.70 13.80 2.65 0.66 4.01 2.41 88.40 88.50	FROM TO XSI02 XAL203 XCA0 XHGD XNA20 XK20 XFE203 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 16.30 15.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 20.30 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 64.50 69.00 14.90 3.47 2.57 3.00 2.47 2.44 72.60 72.70 51.80 16.80 8.54 5.38 2.75 0.44 10.80 79.70 79.80 72.70	FROM TO XSI02 XAL203 XCA0 XHG0 XNA20 XK20 XFE203 XII02 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 0.29 64.50 69.00 14.90 3.47 2.57 3.00 2.47 2.44 0.32 72.60 72.70 51.80 16.80 8.54	FROM TO ZSI02 XAL203 ZCA0 ZMG0 ZNA20 ZK20 ZFE203 ZII02 ZP205 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 0.29 0.07 64.50 69.00 14.90 3.47 2.57 3.00 2.47 2.44	FROM TO XSI02 XAL203 ZCA0 ZHGO XNA20 ZK20 ZE203 ZTI02 ZP205 ZHN0 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.09 0.05 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 0.06 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68 2.75 0.29 0.07 0.03 64.50	FROM TO XSI02 XAL203 XCA0 XMGO XMA20 XK20 XFE203 XI102 XP205 XHMO XL01 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 0.05 1.77 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 0.66 2.23 54.20 54.30 66.50 14.40 4.45 1.38 0.78 3.68	FRDM TD XSI02 ZAL203 ZCA0 ZMG0 ZMA20 ZK20 ZFE203 XTI02 ZP205 ZMM0 ZLOI SUM 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 0.05 1.77 100.32 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 100.00 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 0.06 2.23 100.11 54.20 54.30	FROM TO XSI02 XAL203 ZGA0 XM60 ZNA20 ZK20 ZEE203 XTI03 XP205 ZMN0 XL01 SUM A.I. 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 14.15 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 41.74 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 0.05 1.77 100.02 20.29 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.06 2.23 100.11 28.04 44.40 44.50 72.30 13.20 1.34 1.32 5.10 1.19 3.07 0.24 0.06 0	FROM TO ZSI02 XAL203 ZCA0 XMA20 XKA20 ZE203 XTI02 ZP205 XMA0 XL01 SUM A.I. Cu (ppm) 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 14.15 57.00 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 41.74 42.00 20.80 20.90 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.08 0.05 1.77 100.32 20.29 37.00 30.00 30.10 68.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 100.00 37.88 36.00 44.40 44.50 72.30 13.20 1.34 1.32 5.10	FROM TO X5102 XAL203 ZLAU XHAQ XK2Q XEE203 XT102 XP205 XHNO XL01 SUH A.I. Cu (ppm) Zn (ppm) 10.60 10.70 71.00 12.40 3.63 0.61 5.65 0.92 2.01 0.28 0.07 0.10 3.16 99.83 14.15 57.00 31.00 16.30 16.40 55.30 16.90 5.43 2.60 2.26 2.91 6.94 0.47 0.35 0.17 6.16 99.49 41.74 42.00 106.00 20.30 20.99 73.90 13.50 1.49 0.65 5.74 1.19 1.66 0.29 0.03 0.05 1.77 100.32 20.29 37.00 27.00 30.00 30.10 66.70 13.60 3.99 1.45 2.29 2.38 2.46 0.26 0.06 0.04 4.77 100.00 37.88 36.00 18.00 44.00 4.70 100.11<

SAMPLE NUMBER	FROM	то	ZS 102	%AL203	ZCAO	ZMGO	%NA20	ZK20	%FE203	ZT 102	ZP205	ZMNO	%L0I	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AD02471	165.20	165.30	51.20	17.90	6.98	5.97	4.42	0.94	8.83	0.72	0.13	0.26	2.70	100.05	37.	74 126.00	125.00	50.20
AD02472	169.30	169.40	69.90	11.90	6.45	1.26	2.59	0.86	4.64	0.30	0.10	0.14	1.93	100.07	19.	00 32.00	321.00	9.07
AD02473	180.40	180.50	53.10	17.50	4.08	6.58	5.19	0.82	8.54	0.73	0.13	0.20	2.93	99.80	44.	39 157.00	138.00	53.22
AD02474	192.20	192.30	62.30	17.30	7.65	1.08	2.04	1.99	4.79	0.24	0.15	0.14	2.23	99.91	24.	06 79.00	43.00	64.75
AD02475	199.90	200.00	49.10	13.30	11.50	6.20	1.10	0.12	13.60	1.90	0.19	0.21	2.31	99.53	33.	40 249.00	115.00	68.41
AD02476	208.30	208.40	73.70	12.00	3.15	0.72	0.72	3.16	2.63	0.28	0.06	0.08	3.31	99.81	50.	06 35.00	38.00	47.95
AD02477	215.70	215.80	73.20	13.50	1.82	0.70	1.96	3.14	1.98	0.25	0.06	0.07	2.54	99.22	50.	39 36.00	30.00	54.55
AD02478	217.80	217.90	74.30	13.40	1.40	0.67	0.62	3.62	2.47	0.29	0.07	0.06	2.54	99.44	67.	99 60.00	34.00	63.83
AD02479	223.60	223.70	72.90	14.70	0.62	0.81	2.60	3.39	1.94	0.30	0.07	0.04	1.85	99.12	56.	60 37.00	54.00	40.66
AD02637	230.50	230.60	65.90	15.20	2.46	2.06	1.42	3.62	3.48	0.24	0.06	0.07	4.31	98.82	59.	41 21.00	45.00	31.82
AD02638	239.30	239.40	75.80	12.60	1.35	0.37	6.09	0.84	0.89	0.20	0.06	0.02	1.47	99.69	13.	99 28.00	16.00	63.64
AD02639	246.40	246.50	70.70	14.70	1.52	0.88	4.25	2.80	2.16	0.24	0.06	0.04	2.08	99.43	38.	94 16.0	0 21.00	3 43.24
AD02640	248.40	248.50	76.20	13.00	0.36	1.29	3.29	2.40	1.35	0.20	0.05	0.02	1.54	99.69	50.	20 19.00	0 16.00	54.29
AD02641	251.10	251.20	69.60	13.40	2.29	2.35	2.62	2.71	0.99	0.22	0.06	0.02	4.39	98.65	50.	75 25.0	0 10.0	0 71.43
AD02642	264.40	264.50	73.20	12.90	2.33	0.30	3.17	3.44	1.33	0.20	0.05	0.03	2.39	99.34	40.	48 17.0	27.00	38.64
AD02643	269.40	269.50	47.80	18.60	5.25	4.91	4.42	0.29	12.60	0.87	0.41	0.18	3.54	98.87	34.	97 128.0	0 103.0	0 55.41
AD02644	280.70	280.80	47.90	13.30	9.17	5.33	1.88	0.19	15.30	2.42	0.21	0.22	3.08	99.00	33.	31 333.0	0 122.0	0 73.19

Hole No. CHEM87-33

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SAMPLE NUMBER	FROM	TO	ZS I 02	XAL203	ZCAO	ZMGO	ZNA20	ZK20	XFE203	XT 102	XP205	ZMNO	XLO I	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
								. 20 20 ta di, ta 20 21 ti di an ar il			- 							
AD02645	304.30	304.40	48.50	13.40	9.62	4.73	2.06	0.34	15.30	2.45	0.22	0.22	1.93	98.77	30.27	335.00	116.00	74.28
AD02646	329.60	329.70	48.50	13.30	10.50	6.28	1.94	0.18	13.60	1.88	0.16	0.21	2.85	99.40	34.18	308.00	89.00	77.58
AD02647	339.20	339.30	68.20	13.50	3.26	0.89	3.86	2.54	3.35	0.33	0.07	0.08	3.08	99.16	32.51	29.00	34.00	46.03
AD02648	347.20	347.30	54.30	17.30	5.46	1.39	6.27	1.01	8.21	1.06	0.37	0.16	3.54	99.07	16.99	86.00	80.00	51.81
AD02649	359.30	359.40	47.60	14.30	11.80	7.92	1.81	0.41	11.20	1.29	0.11	0.18	2.39	99.01	37.97	88.00	68.00	56.41
AD02650	404.40	404.50	48.00	14.60	11.30	7.93	2.12	0.44	10.60	1.15	0.11	0.16	2.62	99.03	38.41	110.00	62.00	63.95

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SAMPLE NUMBER	FROM	то	XS 102	XAL203	ZCAO	ZMGO	ZNA20	XK20	%FE203	XT 102	XP205	ZMNO	ZLOI	รบห	 A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
											. ·				 			
AB21901	8.30	8.40	50.00	17.20	6.60	2.91	2.18	2.98	9.10	0.74	0.13	0.17	7.85	99.86	40.15	695.00	77.00	90.03
AB21902	14.10	14.20	67.10	12.40	5.31	1.21	1.79	2.29	3.24	0.27	0.07	0.14	6.00	99.82	33.02	53.00	36.00	59.55
AB21903	25.50	25.60	68.40	17.00	1.45	0.46	4.49	2.83	2.09	0.38	0.07	0.05	2.54	99.76	35.64	43.00	27.00	61.43
AB21904	43.80	43.95	66.20	14.30	4.73	1.44	3.76	1.25	3.18	0.31	0.07	0.05	4.85	100.14	24.06	48.00	<10.00	
AB21905	51.30	51.45	69.30	13.40	4.03	0.98	2.37	2.23	2.88	0.35	0.10	0.04	4.47	100.15	33.40	35.00	10.00	77.78
AB21906	59.70	59.85	70.00	14.20	2.97	1.21	3.47	1.98	2.52	0.26	0.07	0.04	3.23	99.95	33.13	31.00	16.00	65.96
AB21907	70.30	70.40	69.70	13.90	3.50	1.16	2,56	2.31	2.28	0.27	0.07	0.03	4.54	100.32	36.41	63.00	<10.00	
AB21908	74.70	74.80	43.00	15.80	8.79	8.54	1.52	0.08	12.20	0.79	0.21	0.22	9.00	100.15	45.54	31.00	86.00	26.50
AB21909	86.70	86.80	70.90	13.50	2.78	1.33	2.79	2.30	2.48	0.26	0.06	0.03	3.62	100.05	39.46	31.00	16.00	65.96
AB21910	92.60	92.75	72.70	12.80	2.14	0.93	4.50	1.46	2.08	0.24	0.06	0.04	2.54	99.49	26.47	38.00	<10.00	n ¹ 1
AB21911	95.40	95.60	71.70	13.50	1.68	1.46	3.76	1.96	2.83	0.26	0.06	0.05	2.54	99.80	38.60	20.00	16.00	55.50
AB21912	106.50	106.60	48.00	14.00	10.60	6.40	1.97	0.21	13.30	1.90	0.18	0.20	2.31	99.07	34.46	263.00	116.00	69.35
AB21913	118.40	118.50	73.00	13.80	2.12	0.47	5.29	1.99	2.43	0.33	0.07	0.07	0.77	100.34	24.92	44.00	24.00	64.7]
AB21914	128.60	128.75	71.70	13.90	1.72	0.85	5.80	1.30	2.87	0.33	0.07	0.08	0.93	99.55	22.23	37.00	23.00	61.67
AB21915	134.60	134.75	72.20	13.60	2.63	0.90	5.33	1.21	2.84	0.31	0.06	0.07	1.24	100.39	20.95	56.00	25.00	69.1
AB21916	146.85	146.95	74.50	13.10	1.62	0.77	5.74	0.86	2.21	0.30	0.06	0.05	0.93	100.14	18.13	38.00	21.00	64.4
AB21917	154.50	154.60	43.40	18.70	11.40	5.47	1.23	0.46	14.00	0.92	0.15	0.32	4.00	100.05	31.95	51.00	125.00	28.9

Hole No. CHEM87-34

FROM	то	XS102	%AL203	ZCAO	%MGO	ZNA20	ZK 20	ZFE203	ZT 102	ZP205	ZHNO	2L0 I	รบห	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
163.50	163.60	70.60	14.90	1.35	1.44	2.51	3.95	2.56	0.34	0.07	0.04	1.54	99.30	58.27	34.00	24.00	58.62
185.50	185.60	54.20	16.90	6.35	4.89	4.96	0.77	7.64	0.68	0.18	0.20	2.93	99.70	33.35	181.00	234.00	43.61
201.50	201.60	50.60	15.90	7.94	7.58	3.59	0.65	9.87	0.67	0.12	0.24	2.23	99.39	41.65	129.00	134.00	49.05
206.50	206.60	52.80	16.50	7.09	5.35	1.02	2.25	11.30	0.69	0.20	0.25	2.70	100.15	48.38	196.00	107.00	64.69
218.40	218.50	49.40	16.80	9.37	4.89	0.73	0.80	12,90	0.70	0.14	0.28	3.70	99.71	36.04	329.00	140.00	70.15
224.50	224.60	74.50	13.00	2.01	1.03	3.30	2.10	1.88	0.31	0.07	0.05	1.77	100.02	37.09	18.00	18.00	50.00
233.30	233.40	51.00	17.00	6.38	5.26	2.68	1.12	10.30	0.71	0.11	0.20	5.08	99.84	41.32	27.00	110.00	19.71
242.10	242.20	68.10	13.30	3.15	2.35	2.16	2.53	4.41	0.29	0.08	0.09	3.23	99.69	47.89	44.00	49.00	47.31
264.65	264.80	54.70	17.10	8.41	2.97	2.99	0.37	8.93	0.66	0.13	0.18	3.62	100.06	22.66	142.00	98.00	59.17
356.80	356.95	48.00	13.80	10.30	6.39	2.31	0.31	12.70	1.73	0.16	0.19	3.54	99.43	34.70	260.00	103.00	71.63
380.70	380.80	44.20	13.80	7.02	11.40	1.73	1.46	12.30	1.63	0.22	0.38	4.16	98.30	59.51	47.00	401.00	10.49
384.30	384.40	41.00	7.78	8.25	22.60	0.23	0.19	11.80	1.14	0.27	0.19	6.08	99.53	72.88	7.50	100.00	6.98
	FROM 163.50 185.50 201.50 206.50 218.40 224.50 233.30 242.10 264.65 356.80 380.70 384.30	FROM TO 163.50 163.60 185.50 185.60 201.50 201.60 206.50 206.60 218.40 218.50 224.50 224.60 233.30 233.40 242.10 242.20 264.65 264.80 356.80 356.95 380.70 380.80 384.30 384.40	FROM TO ZSI02 163.50 163.60 70.60 185.50 185.60 54.20 201.50 201.60 50.60 206.50 206.60 52.80 218.40 213.50 49.40 224.50 224.60 74.50 233.30 233.40 51.00 242.10 242.20 68.10 264.65 264.80 54.70 356.80 356.95 48.00 380.70 380.80 44.20 384.30 384.40 41.00	FROM TO XSI02 XAL203 163.50 163.60 70.60 14.90 185.50 185.60 54.20 16.90 201.50 201.60 50.60 15.90 206.50 206.60 52.80 16.50 218.40 213.50 49.40 16.80 224.50 224.60 74.50 13.00 233.30 233.40 51.00 17.00 242.10 242.20 68.10 13.30 264.65 264.80 54.70 17.10 356.80 356.95 48.00 13.80 380.70 380.80 44.20 13.80 384.30 384.40 41.00 7.78	FROM TO ZSI02 ZAL203 ZCA0 163.50 163.60 70.60 14.90 1.35 185.50 185.60 54.20 16.90 6.35 201.50 201.60 50.60 15.90 7.94 206.50 206.60 52.80 16.50 7.09 218.40 213.50 49.40 16.80 9.37 224.50 224.60 74.50 13.00 2.01 233.30 233.40 51.00 17.00 6.38 242.10 242.20 68.10 13.30 3.15 264.65 264.80 54.70 17.10 8.41 356.80 356.95 48.00 13.80 10.30 380.70 380.80 44.20 13.80 7.02 384.30 384.40 41.00 7.78 8.25	FROM TO XSI02 XAL203 XCA0 XMG0 163.50 163.60 70.60 14.90 1.35 1.44 185.50 185.60 54.20 16.90 6.35 4.89 201.50 201.60 50.60 15.90 7.94 7.58 206.50 206.60 52.80 16.50 7.09 5.35 218.40 213.50 49.40 16.80 9.37 4.89 224.50 224.60 74.50 13.00 2.01 1.03 233.30 233.40 51.00 17.00 6.38 5.26 242.10 242.20 68.10 13.30 3.15 2.35 264.65 264.80 54.70 17.10 8.41 2.97 356.80 356.95 48.00 13.80 10.30 6.39 380.70 380.80 44.20 13.80 7.02 11.40 384.30 384.40 41.00 7.78 8.25 22.60 <td>FROM TO XSI02 XAL203 XCA0 XMG0 XNA20 163.50 163.60 70.60 14.90 1.35 1.44 2.51 185.50 185.60 54.20 16.90 6.35 4.89 4.96 201.50 201.60 50.60 15.90 7.94 7.58 3.59 206.50 206.60 52.80 16.50 7.09 5.35 1.02 218.40 218.50 49.40 16.80 9.37 4.89 0.73 224.50 224.60 74.50 13.00 2.01 1.03 3.30 233.30 233.40 51.00 17.00 6.38 5.26 2.68 242.10 242.20 68.10 13.30 3.15 2.35 2.16 264.65 264.80 54.70 17.10 8.41 2.97 2.99 356.80 356.95 48.00 13.80 10.30 6.39 2.31 380.70 380.80 44.20<td>FROM TO XSI02 XAL203 XCA0 XMG0 XMA20 XK20 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 218.40 213.50 49.40 16.80 9.37 4.89 0.73 0.80 224.50 224.60 74.50 13.00 2.01 1.03 3.30 2.10 233.30 233.40 51.00 17.00 6.38 5.26 2.68 1.12 242.10 242.20 68.10 13.30 3.15 2.35 2.16 2.53 264.65 264.80 54.70 17.10 8.41 2.97 2.99 0.37 356.80</td><td>FROM TO XSI02 XAL203 XCA0 XMGO XMA20 XK20 XFE203 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 218.40 218.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 224.50 224.60 74.50 13.00 2.01 1.03 3.30 2.10 1.88 233.30 233.40 51.00 17.00 6.38 5.26 2.68 1.12 10.30 242.10 242.20 68.10 13.30 3.15 2.35 2.16 2.53 4.41 264.65</td><td>FROM TO XSI02 XAL203 XCA0 XH60 XNA20 XE20 XFE203 XI02 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 218.40 218.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 224.50 224.60 74.50 13.00 2.01 1.03 3.30 2.10 1.88 0.31 233.30 233.40 51.00 17.00 6.38 5.26 2.68 1.12 10.30 0.71 242.10 242.20 68.10</td><td>FROM TO XSI02 XAL203 XCA0 XH60 XNA20 XK20 XFE203 XII02 XP205 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 218.40 218.50 49.40 16.80 9.37 4.39 0.73 0.80 12.90 0.70 0.14 224.50 224.60 74.50 13.00 2.01 1.03 3.30 2.10 1.88 0.31 0.07 233.30 233.40 51.00 17.00 6.38 5.26 2.68</td><td>FROM TO XSI02 XAL203 XCA0 XHG0 XNA20 XE20 XEE203 XII02 XP205 XHN0 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 0.25 218.40 213.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 0.14 0.28 224.50 224.60 74.50 13.00 2.01 1.03 3.30 2.10 1.88 0.31 0.07 0.05 <t< td=""><td>FROM TO XSI02 XAL203 XCA0 XHG0 XNA20 XK20 XFE203 XII02 XP205 XHN0 XL0I 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 0.25 2.70 218.40 213.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 0.14 0.28 3.70 224.50 224.60 74.50 13.00 2.01 1.03 3.30</td><td>FROM TO XSI02 XAL203 XCA0 XHG0 XNA20 XK20 XFE203 XII02 XP205 XHN0 XL01 SUH 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.70 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 0.25 2.70 100.15 218.40 218.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 0.14 0.28 3.70 99.71 224.50</td><td>FROM TO ZSI02 XAL203 XAG0 XMA20 XK20 XFE203 XII02 XP205 XHM0 XLOI SUH A.1. 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 58.27 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.70 33.35 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 41.65 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.67 0.14 0.28 3.70 99.71 36.04 218.40 218.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 0.14 0.28</td><td>FROM TO XSI02 XAL203 XAG0 XMA20 XK20 XEE203 XTI02 XP205 XMM0 XL01 SUH A.1. Cu (ppm) 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 58.27 34.00 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.39 33.35 181.00 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 41.65 129.00 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.67 0.14 0.28 3.70 99.71 36.04 229.00 224.50 224.60 74.50 13.00 2.01 1.03 3.3</td><td>FROM TO XSI02 XAL203 XCA0 XHA20 XX20 XEE203 XI02 XP205 XHN0 XL01 SUH A.1. 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Cu (ppm) 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 58.27 34.00 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.39 33.35 181.00 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 41.65 129.00 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.67 0.14 0.28 3.70 99.71 36.04 229.00 224.50 224.60 74.50 13.00 2.01 1.03 3.3</td><td>FROM TO XSI02 XAL203 XCA0 XHA20 XX20 XEE203 XI02 XP205 XHN0 XL01 SUH A.1. Cu (ppm) Zn (ppm) 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 58.27 34.00 24.00 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.70 33.35 181.00 234.00 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 41.65 129.00 134.00 206.50 25.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 0.25 2.70 100.15 48.38 196.00 16.00 218.40 218.50 <</td></t<>	FROM TO XSI02 XAL203 XCA0 XHG0 XNA20 XK20 XFE203 XII02 XP205 XHN0 XL0I 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 0.25 2.70 218.40 213.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 0.14 0.28 3.70 224.50 224.60 74.50 13.00 2.01 1.03 3.30	FROM TO XSI02 XAL203 XCA0 XHG0 XNA20 XK20 XFE203 XII02 XP205 XHN0 XL01 SUH 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.70 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 0.25 2.70 100.15 218.40 218.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 0.14 0.28 3.70 99.71 224.50	FROM TO ZSI02 XAL203 XAG0 XMA20 XK20 XFE203 XII02 XP205 XHM0 XLOI SUH A.1. 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 58.27 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.70 33.35 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 41.65 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.67 0.14 0.28 3.70 99.71 36.04 218.40 218.50 49.40 16.80 9.37 4.89 0.73 0.80 12.90 0.70 0.14 0.28	FROM TO XSI02 XAL203 XAG0 XMA20 XK20 XEE203 XTI02 XP205 XMM0 XL01 SUH A.1. Cu (ppm) 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 58.27 34.00 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.39 33.35 181.00 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 41.65 129.00 206.50 206.60 52.80 16.50 7.09 5.35 1.02 2.25 11.30 0.67 0.14 0.28 3.70 99.71 36.04 229.00 224.50 224.60 74.50 13.00 2.01 1.03 3.3	FROM TO XSI02 XAL203 XCA0 XHA20 XX20 XEE203 XI02 XP205 XHN0 XL01 SUH A.1. Cu (ppm) Zn (ppm) 163.50 163.60 70.60 14.90 1.35 1.44 2.51 3.95 2.56 0.34 0.07 0.04 1.54 99.30 58.27 34.00 24.00 185.50 185.60 54.20 16.90 6.35 4.89 4.96 0.77 7.64 0.68 0.18 0.20 2.93 99.70 33.35 181.00 234.00 201.50 201.60 50.60 15.90 7.94 7.58 3.59 0.65 9.87 0.67 0.12 0.24 2.23 99.39 41.65 129.00 134.00 206.50 25.80 16.50 7.09 5.35 1.02 2.25 11.30 0.69 0.20 0.25 2.70 100.15 48.38 196.00 16.00 218.40 218.50 <

SAMPLE NUMBER	FROM	TO	ZS 102	ZAL203	%CAO	ZKGO	ŽNA20	ZK20	%7E203	XT 102	XP205	ZMNO	ZLOI	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AD02480	16.80	16.90	69.30	13.10	4.64	0.58	2.65	2.66	2.07	0.24	0.06	0.05	4.39	99.74	30.77	32.00	28.00	53.33
AD02481	21.30	21.40	45.00	17.00	6.77	6.09	4.49	0.30	11.20	0.91	0.14	0.20	6.85	98.95	36.20	255.00	103.00	71.23
AD02482	40.30	40.40	70.10	14.20	2.39	0.92	3.08	3.27	2.33	0.26	0.06	0.07	2.85	99.43	42.78	36.00	38.00	48.65
AD02483	53.20	53.30	69.60	14.60	2.86	1.54	2.05	3.19	2.48	0.25	0.06	0.06	2.62	99.31	49.07	37.00	36.00	50.68
AD02484	70.20	70.30	69.40	14.90	2.64	1.03	2.43	3.64	1.92	0.27	0.06	0.06	3.54	99.79	47.95	25.00	27.00	48.08
AD02485	85.50	85.60	70.50	12.80	3.72	0.98	2.51	2.63	1.79	0.22	0.05	0.09	4.24	99.53	36.69	23.00	26.00	46.94
AD02486	95.30	95.40	70.10	14.80	0.92	2.10	2.66	2.76	3.25	0.26	0.06	0.05	2.70	99.66	57.58	49.00	64.00	43.36
AD02487	105.10	105.20	73.90	10.80	3.59	1.05	3.35	1.41	1.68	0.19	0.05	0.08	3.46	99.56	26.17	34.00	24.00	58.63
AD02488	110.20	110.30	77.10	12.00	0.41	1.81	3.38	1.73	1.26	0.22	0.05	0.03	1.70	99.69	48.29	24.00	25.00	48.98
AD02489	124.80	124.90	66.10	13.70	4.00	1.52	5.90	1.25	3.13	0.30	0.07	0.09	3.93	99.99	21.86	105.00	35.00	75.00
AD02490	137.40	137.50	71.30	13.30	2.47	0.98	2.87	2.64	2.15	0.23	0.06	0.04	3.93	99.97	40.40	46.00	33.00	58.23
AD02491	157.60	157.70	51.20	18.10	5.46	3.78	3.78	0.92	8.97	0.53	0.23	0.16	6.39	99.52	33.72	47.00	86.00	35.34
AD02492	169.50	169.60	68.90	13.00	2.98	1.40	3.93	1.97	2.68	0.24	0.06	0.10	4.77	100.03	32.78	44.00	35.00	55.70
AD02493	177.80	177.90	65.00	14.70	3.17	1.61	3.43	2.72	3.11	0.34	0.08	0.09	5.54	99.79	39.62	63.00	47.00	57.27
AD02494	187.00	187.10	70.50	13.60	1.98	0.80	4.43	2.08	2.36	0.24	0.06	0.08	3.46	99.59	31.00	31.00	37.00	45.59
AD02495	196.30	196.40	70.90	13.30	2.00	0.84	4.49	1.95	2.25	0.24	0.06	0.07	3.31	99.41	30.06	43.00	30.00	58.90
AD02496	206.10	206.20	68.60	13.00	3.46	0.99	3.51	2.37	2.69	0.23	0.05	0.11	4.85	99.86	32.53	40.00	46.00	46.51

Hole No. CHEM87-35

SAMPLE NUMBER	FROM	то	%S102	ZAL203	XCA0	ZMGO	ZNA20	ZK 20	%7E203	ZT 102	%P205	ZMNO	ZLOI	SUM	A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
AD02497	219.80	219.90	72.10	13.60	2.07	0.59	3.45	2.47	2.12	0.25	0.06	0.05	3.08	99.84	35.66	36.00	19.00	65.45
AD02498	227.70	227.80	61.80	16.60	3.54	1.25	3.07	3.09	5.36	0.26	0.18	0.11	4.77	100.03	39.63	38.00	83.00	31.40
AD02499	230.60	230.70	64.10	17.00	2.17	1.15	3.33	3.06	4.58	0.27	0.19	0.09	3.77	99.71	43.36	39.00	96.00	28.89
AD02500	262.40	262.50	72.40	11.10	3.58	1.30	2.65	1.73	2.90	0.27	0.08	0.11	3.77	99.89	32.72	48.00	128.00	27.27
AD02601	282.70	282.80	50.60	20.80	4.47	4.67	3.72	1.01	9.00	0.73	0.54	0.07	4.16	99.77	40.95	33.00	61.00	35.11
AD02602	283.80	283.90	70.50	14.40	4.33	0.51	2.56	2.07	1.81	0.33	0.10	0.03	3.39	100.03	27.24	29.00	<10.00	152.63
AD02603	287.10	287.20	46.50	15.70	9.82	4.74	2.59	0.93	9.06	0.70	0.13	0.14	9.54	99.85	31.36	27.00	64.00	29.67
AD02606	295.70	295.80	64.20	15.20	5.40	1.51	5.56	0.48	4.48	0.38	0.11	0.08	2.77	100.17	15.37	19.00	14.00	57.58
AD02604	296.80	296.90	67.30	14.10	4.05	1.40	5.40	0.82	3.37	0.37	0.10	0.07	2.85	99.83	19.02	23.00	13.00	63.89
AD02605	307.40	307.50	66.00	14.60	4.05	1.35	2.41	2.62	3.44	0.43	0.10	0.04	4.77	99.81	38.06	30.00	16.00	65.22
AD02607	319.40	319.50	71.70	13.00	3.74	0.82	1.99	2.18	2.09	0.23	0.05	0.04	3.85	99.69	34.36	28.00	16.00	63.64
AD02608	332.50	332.60	70.10	13.40	3.51	1.41	1.93	2.48	2.68	0.25	0.07	0.05	4.08	99.96	41.69	34.00	14.00	70.83
AD02609	337.20	337.30	67.50	14.10	4.29	1.09	2.05	2.99	3.54	0.35	0.10	0.05	3.16	99.22	39.16	25.00	15.00	62.50
AD02610	341.20	341.30	51.80	16.80	8.12	4.79	2.87	1.25	9.49	0.63	0.12	0.16	4.24	100.27	35.47	37.00	48.00	43.53
AD02611	345.40	345.50	71.90	13.50	2.76	1.40	4.12	1.52	2.92	0.25	0.06	0.04	1.47	99.84	29.80	47.00	22.00	68.12
AD02612	350.80	350.90	52.90	16.80	6.76	5.13	3.53	0.91	9.80	0.65	0.13	0.15	2.46	99.22	36.99	37.00	45.00	45.12
AD02613	358.60	358.70	53.10	17.10	4.81	6.64	5.89	0.32	8.63	0.66	0.12	0.14	2.54	99.95	39.41	296.00	172.00	63.25

Hole No. CHEM87-35
SAMPLE NUMBER	FROM	TO	XSIO 2	ZAL203	%CAO	ZNGO	ZNA20	X K20	%FE203	XT 102	%P205	ZMNO	2L01	SUM	A. I	. Çu (ppm)	Zn (ppm)	100*Cu, ′(Cu+Zn)
									*******		****			*****				
AB21930	17.10	17.30	71.00	14.70	2.41	0.96	3.76	1.94	2.65	0.35	0.07	0.11	1.62	99.57	31.9	7 52.00	371.00	12.29
AB21931	27.80	27.90	49.00	14.50	10.90	6.12	1.58	0.32	12.80	1.82	0.17	0.19	2.70	100.10	34.0	4 204.00	106.00	65.81
AB21932	38.60	38.70	72.70	13.70	1.11	0.62	4.53	1.89	2.75	0.33	0.06	0.07	1.70	99.46	30.8	25.00	24.00	51.02
AB21933	51.20	51.30	69.20	15.10	2.85	0.83	3.59	2.74	2.53	0.36	0.07	0.06	1.85	99.18	35.6	5 37.00	27.00	57.81
AB21934	56.30	56.40	49.00	14.00	10.80	6.22	2.16	0.24	12.60	1.78	0.17	0.20	2.16	99.33	33.2	5 208.00	97.00	68.20
AB21935	64.40	64.50	74.40	12.20	2.59	0.28	4.31	1.80	2.23	0.28	0.08	0.04	1.39	99.60	23.1	125.00	<10.00	
AB21936	82.40	82.50	44.50	13.10	10.30	15.60	0123	0.47	10.10	0.42	0.07	0.19	4.31	99.59	59.74	147.00	77.00	65.62
AB21937	86.80	87.00	70.10	14.30	2.36	1.92	0.92	4.00	2.38	0.34	0.08	0.06	3.39	99.85	64.35	33.00	28.00	54.10
AB21938	91.60	91.70	74.80	12.80	1.63	1.26	2.63	2.68	1.11	0.29	0.06	0.04	1.47	98.77	48.05	24.00	14.00	63.16
AB21939	114.90	115.00	67.50	15.60	2.73	1.36	4.38	1.75	4.28	0.45	0.13	0.12	1.62	99.92	30.43	64.00	48.00	57.14
AB21940	128.80	128.90	72.10	13.90	2.25	1.45	4.33	1.48	2.88	0.29	0.07	0.06	1.47	100.28	30.81	32.00	35.00	47.76
AB21941	138.80	138.90	69.90	14.90	2.65	1.14	5.01	1.27	3.37	0.36	0.09	0.07	1.39	100.15	23.93	32.00	34.00	48.48
AB21942	143.30	143.40	53.20	17.10	7.72	3.85	1.77	1.71	8.24	0.63	0.12	0.21	5.16	99.71	36.94	188.00	119.00	61.24
AB21943	162.20	162.40	48.40	13.50	10.50	6.46	2.32	0.45	12.30	1.67	0.16	0.19	3.46	99.41	35.02	260.00	90.00	74.29
AB21944	173.30	173.40	49.10	15.80	3.37	9.95	3.63	1.65	9.39	0.73	0.19	0.18	5.77	99.76	62.37	120.00	77.00	60.91
AB21945	237.95	238.15	46.20	11.90	11.30	8.74	1.80	0.21	13.60	1.65	0.15	0.21	2.93	98.69	40.59	73.00	93.00	43.98

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	ZS102	XAL203	ZCAO	ZMGO	ZNA20	XK20	XFE203	XT 102	ZP205	ZMNO	ZLO I [.]	SUM		A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)

AD02614	30.60	30.70	63.90	14.90	3.64	2.42	1.43	2.15	5.73	0.45	0.14	0.04	4.08	98.88	1	47.41	344.00	46.00	88.21
AD02615	37.30	37.40	72.90	13.10	1.50	0.67	1.03	3.07	2.98	0.29	0.07	0.02	3.00	98.63	`;	59.65	45.00	22.00	67.16
AD02616	40.00	40.10	46.90	17.30	10.90	2.93	1.14	0.36	12.10	2.57	0.51	0.13	5.24	100.08		21.46	216.00	71.00	75.26
AD02617	51.30	51.40	62.40	21.20	1.62	0.39	1.07	3.96	4.07	0.52	0.07	0.01	4.54	99.85	•	61.79	44.00	<10.00	
AD02618	60.40	60.50	71.60	14.80	2.51	2.93	1.67	1.33	1.78	0.27	0.08	0.02	2.31	99.30	•	50.47	26.00	27.00	49.06
AD02619	68.60	68.70	70.50	14.80	2.69	2.31	0.99	2.88	1.51	0.30	0.09	0.01	2.77	98.85		58.51	25.00	12.00	67.57
AD02620	69.40	69.50	75.80	12.60	1.15	1.55	0.53	3.06	1.42	0.28	0.07	<0.01	2.39	98.85		73.29	35.00	<10.00	
AD02621	78.20	78.30	67.00	18.70	1.94	0.87	3.34	3.18	1.59	0.42	0.09	0.01	2.16	99.30		43.41	50.00	41.00	54.95
AD02622	87.70	87.30	48.10	13.70	10.90	6.62	1.93	0.13	13.20	1.82	0.18	0.19	1.77	98.54		34.47	234.00	108.00	68.42
AB02623	102.30	102.40	82.00	9.31	0.14	0.10	0.33	2.46	2.58	0.27	0.03	0.02	1.70	98.94		84.49	676.00	24.00	96.57
AD02624	109.70	109.80	47.90	17.30	7.38	7.19	3.72	0.45	11.10	0.90	0.17	0.19	3.00	99.30		40.77	205.00	71.00	74.28
AD02625	124.00	124.10	48.80	14.90	10.20	8.48	2.88	0.20	10.60	0.62	0.15	0.16	2.23	99.22		39.89	191.00	92.00	67.49
AD02626	134.60	134.70	48.90	13.90	12.60	9.17	1.92	0.20	10.50	0.57	0.13	0.17	2.00	100.06		39.22	191.00	60.00	76.10
AL02627	146.90	147.00	49.60	13.70	12.40	8.73	1.76	0.22	9.85	0.55	0.12	0.16	2.62	99.71		38.73	511.00	57.00	89.96
AD02628	159.80	159.90	48.30	14.70	8.65	10.00	2.83	0.29	11.20	0.66	0.14	0.16	3.00	99.93		47.27	193.00	83.00	69.93
AD02629	168.70	168.80	49,90	15.00	9,94	6.61	4.48	0.19	8.26	0.61	0.15	0.10	5.00	100.24		32.05	82.00	33.00	71.30
4002630	175 70	175 90	48 50	13 20	10.30	10.20	2.44	0.42	11.00	0.69	0.18	0.18	3.16	100.27		45.46	236.00	122.00	65.92
100000	1/0./0	170.00	10.00	10100	10100	4 4 1 4 4													

Hole No. CHEM87-37

Page No.

SAMPLE NUMBER	FROM	то	ZS 102	XAL203	ZCAO	ZMGO	%NA20	ZK20	%7E203	ZT 102	XP205	ZMNO	2L01	SUM	 A.I.	Cu (ppm)	Zn (ppm)	100*Cu/ (Cu+Zn)
										*********					 			~
AD02631	184.40	184.50	52.30	15.70	5.91	7.55	3.39	2.70	9.78	0.81	0.17	0.20	1.47	99.98	52.43	189.00	94.00	66.78
AD02632	185.70	185.80	47.60	16.50	4.42	8.92	3.58	1.51	12.10	0.95	0.20	0.23	3.39	99.40	56.59	228.00	101.00	69.30
AD02633	199.10	199.20	48.20	16.90	4.21	8.56	3.92	1.44	11.20	0.89	0.20	0.20	3.62	99.34	55.16	277.00	81.00	77.37
AD02634	202.20	202.30	46.70	16.80	8.05	7.80	3.03	0.59	12.50	0.86	0.19	0.20	2.93	99.65	43.09	467.00	96.00	82.95
AD02635	212.00	212.10	49.10	15.80	7.11	9.30	1.25	3.03	8.65	0.74	0.27	0.12	3.23	98.60	59.59	92.00	46.00	66.67
AD02636	219.70	219.80	48.80	13.90	9.27	6.90	2.56	0.93	12.40	1.71	0.16	0.20	2.62	99.45	39.83	307.00	97.00	75.99

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)



ic	Argillite	

4b	Cherty black argillite and siltstone with minor greywacke
4a	Brown greywacke
3b	Felsic tuff
3a	Felsic flow
2b	Intermediate tuff
2a	Intermediate flow
1c	Mixed mafic tuffaceous sediments
1b	Mafic tuff
1a	Mafic flow

nv	pyrite	ро	pyrrhot	tite
P 9	chalconvrite	sp	sphale	rite
ga	galena	qe	quartz	eyes

+	younging direction
·····	fault
and the second	active tuff
-	significant sulphide (>2%, >10% total)
u	unconformity

FALCONE	BRIDGE LTD.						
CHEMAINUS Vancouver Islan	JOINT VENTUR nd, British Columbi	æ					
CHIP 1							
DRILLING	PLAN MAR	•					
WORK BY: JP, SE, DM							
DATE OF WORK: July, 1987	PROJECT NO: 116	FIG. NO.:					
DRAWN BT. VJG		42					



6c Argillite
6b Greywacke
6a Conglomerate
INTRUSIVE ROCK
5c Peridotite
5b Mafic sill
5a Gabbro
SICKER GROUP
4b Cherty black arginite and sinstene with and greywacke
4a Brown greywacke
3b Felsic tuff
3a Felsic flow
2a Intermediate flow
1c Mixed mafic tuffaceous sediments
1b Mafic tuff
1a Mafic flow
SYMBOLS po pyrrhotite
cpy chalcopyrite sp sphalerite
ga galena
younging direction
active tuff
significant sulphides
(>2%, >10% total)
-u unconformity
ga Broma Grinnin we year
ZICKES CHONE
CANDINIA T
S VICTOR MO K
T R MOE K RESOURCES
I I CHIP & CHIP B CORONATIC
HIP & CHIP II CHIP B
NORANDA RESOURCESCHIP
GABERY!
ANTAN MARANY FORM
KEY MAP
CONTOUR INTERVAL : 20 m
40 0 40 80 120 160
metres
SCALE 1: 2,000
FALCONBRIDGE LTD.
Vancouver Island, British Columbia
CHIP 1
DRILLING PLAN MAP
(VERTICAL PROJECTION)
WORK BY: JP, SE, DM
WORK BY: JP, SE, DM DATE OF WORK: July, 1987 PROJECT NO: FIG. NO.:

DATE: Sept. 9, 1987 N.T.S. NO.: 928/13W



FALCON	BRIDGE LTD.				
CHEMAINUS	JOINT VENTURE				
Vancouver Island, British Columbia					
CHIP 1					
DRILLING	PLAN MAP				
ORILLING (VERTICAL	PLAN MAP PROJECTION)				
WORK BY: JP, SE, DM	PLAN MAP PROJECTION)				
DRILLING (VERTICAL WORK BY: JP, SE, DM DATE OF WORK: July, 1987	PROJECTION) PROJECT NO: FIG.				



	LEGEND
	NANAIMO GROUP
	6c Argillite
	6b Greywacke
	6a Conglomerate
	INTRUSIVE ROCK
	5c Peridotite
1 contraction of the second se	5b Mafic sill
0.00 N	5a Gabbro
2+00 N	
500	SICKER GROUP
	4b Cherty black argillite and siltstone with minor greywacke
	4a Brown greywacke
	3b Felsic tuff
	3a Felsic flow
	2b Intermediate tuff
	2a Intermediate flow
	1c Mixed mafic tuffaceous sediments
	1b Mafic tuff
	1a Mafic flow
400	
100	SYMBOLS
	py pyrite po pyrrhotite
	cpy chalcopyrite sp sphalerite
	ga galena de quartz eyes
	bedding
	foliation
	t vounging direction
	fault
	*ABI9951, 65 Whole rock sample, Ishikawa index >60
	geochemical/assay sample
	K rocks with komatiitic compositions
300 —	u unconformity
	geological contact (inferred)
	active tuff
	significant sulphides (>2%, >10% total)
	(gab) gabbro quartz vein mineralization
	0 20 40 60 80 m
200 —	SEALE: 1:1000
	FALCONBRIDGE LTD
	CHEMAINUS JOINT VENTURE
	Vancouver Island, British Columbia
	SECTION 25 + 00E
	(looking west)
	DDH CHEM87-20
	WORK BY: JP
	DATE OF WORK: July, 1987 PROJECT NO: FIG. NO.:
2+00N	DRAWN BY: ER 116
	DATE: Sant 0 1007

2+00N 1

DRAWN BY: ER DATE: Sept. 9, 1987

N.T.S. ND.: 928/13



humberger Arroy I.P adient Arroy I.P adient Arroy I.P adient Arroy I.P i+00N i+0		LEGEND
Humberger Arroy LP deient Arroy LP de		NANAIMO GROUP
adient Array LP adient Array LP bb Greywacke adie Greywacke adie Greywacke bb Mafic sill adobro SICKER GROUP 40 SIC	chlumberg <mark>er Array I.P.</mark>	6c Argillite
Autom Park International Provided Prov	radient Array LP	6b Greywacke
INTRUSIVE ROCK 56 Periodite 56 Maile sill 56 Gabro SICKER GROUP 40 Cherty black argilite and siltstone with minor groywacke 38 Felsic turf 38 Felsic flow 29 Intermediate flow 20 Mixed maile turfaceous sediments 300 SYMBOLS py pyrite py pyri	durent Array i.i.	6a Conglomerate
So Personie So Personie So Matic sill Sa Gabbro SICKER GROUP 4 Cherty black arglitite and siltatone with minor growsacke 3b Felsic tuf 3a Felsic tuf 3a Felsic tuf 3a Felsic flow 3c Intermediate fl		
1+00N Sin Gabbro SICKER GROUP 4b Cherty black argilite and sittstone with minor groywacke 3b Felsic tiow 3a Felsic tiow 3a Felsic tiow 3b Felsic tiow 3c Felsic tiow </td <td></td> <td>5c Peridotite</td>		5c Peridotite
SICKER GROUP H-OON SICKER GROUP 40 Cherty black argilite and siltstone with minor greywacke SO SO SYMBOLS SYMOL <td></td> <td>5a Gabbro</td>		5a Gabbro
4b Chargeywacke arrive black arrillite and siltstone with minor greywacke 3b Felsic tuff 3a Felsic tuff 3b Intermediate flow 1c Mixed matic tuffaceous sedments 1a Matic tuff 1a Matic flow SYMBOLS py pyrite pp pyrithe 3b gelena 400 Sympolic 400 bedding 400 foliation 400 geochemical/assay sample K rock with komatilitic compositions 40		SICKER GROUP
4a Brown greywacke 3b Felsic turf 3c Felsic turf 3c Felsic turf 2a Intermediate turf 2a Intermediate turf 2a Intermediate turf 2a Intermediate turf 3c Palsic turf 3c Intermediate say sample k rocks with komatilic compositions a unconformity geological contact (Inferred) active turf significant suphides (-2%, x10% total) gabbro quartz vein mineralization 3co FALCONBRIDGE LTD FALCONBRIDGE LTD Chematers upt, by: 197	1+00 N	4b Cherty black argillite and siltstone with minor greywacke
3b Felsic fully 3c Felsic fully 2b Intermediate fully 2a Intermediate fully badding Intermediate fully cyp chalcopyrite sp sphalerite ge galena ep epidote 400 badding foliation ep epidote wow fauit		4a Brown greywacke
300 300 10 termediate tuff 2a Intermediate tuff 2a Intermediate flow 1c Mixed malic tuffaceous sediments 1b Mafic tuff 1a Mafic tuff 1b bodding 400 falit 1 younging direction 1 rocks with komatilitic compositions 1 unconformity 1 geoloaid contact (Inferred) active tuff significant subplides (r2%, rI0% total) 300 gabbro quartz vein mineralization SECTION 27 + 00EE (looking west) DDH CHEMB7-28 WORK BY: DPM PARE or WORK BY: DPM PARE or WORK BY: DPM Parte or WORK BY: DPM Darte or WORK July, 1987 116 Darte: sept. 9, 1987 Nate or WORK BY: <t< td=""><td></td><td>3b Felsic tuff</td></t<>		3b Felsic tuff
500 2a Intermediate flow 10 Mixed mafic tuffaceous sediments 1b Mafic tuff 1a Mafic flow SYMBOLS py pyrite pp pyrite cpy chalcopyrite sp sphalerite ge quartz yes hb hornblende 400 bedding 400 foliation worw fault younging direction - wassus whole rock sample, Ishikawa index >60 geochemical/assay sample K K rocks with komatilitic compositions u unconformity geological contact (inferred) active tuff siztive tuff gabbro quartz vein mineralization gabbro quartz vein mineralization 300 FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + 00E (jooking west) DDH CHEM87-28 DPM WORK BY: DPM Marke BY: Nor: Norte Gr WORK: Jup 116 DATE Gr WORK: Jup 7 PROJECT NO: rid. ND: Torwn Wr. VGC		2b Intermediate tuff
1c Mixed mafic tuffaceous sediments 1b Mafic tuff 1a Mafic tuff 1b Mafic tuff 1a Mafic tuff 1b Dedding 1c Junning direction 1c younging direction 1c rocks with komatilitic compositions 1c unconformity geological contact (inferred) active tuff significant sulphides (>2%, >10%	500	2a Intermediate flow
1b Marice turf 1a Marice flow SYMBOLS py pyrite pp pyrite ga galena ge quartz eyes b bedding 400 - 400 - 400 - 400 - 400 - 400 - 400 - 400 - 400 - 400 - 400 - 400 - 400 - 501 - 900 - 400 - 400 - 501 - 900 - 900 - 900 - 900 - 900 - 900 - 900 - 900 - 900 - 900 - 900 - 900 -		1c Mixed mafic tuffaceous sediments
1a Matic flow SYMBOLS py pyrite po pyrhotile gy chalcopyrite sp sphalerite gy chalcopyrite sp sphalerite ge quartz eyes hb homblende ep epidote 400 bedding foliation 400 foliation wown fault 400 geochemical/assay sample K rocks with komatititic compositions u unconformity geological contact (inferred) active tuff significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization significant sulphides (>2%, >10% total) gabbro quartz vein mineralization <		1b Mafic tuff
SYMBOLS py pyrite cpy chalcopyrite the hornblende po pyrhatierite cpy chalcopyrite cpy chalcopyrite the hornblende po pyrhatierite cp quartz eyes ep epidote 400 - bedding - - poteding - 400 - bedding - - - 400 - bedding - - - 400 - bedding - - - 400 - foliation - - - - - bedding - - - - - - - - - - - - - - - - - - - - - -		1a Mafic flow
Py pyrite po pyrite		
py pyrite po pyrite		SYMBOLS
400 400 400 400 400 400 400 400		py pyrite po pyrrhotite
Hb <		cpy chalcopyrite sp sphalerite ga galena qe quartz eyes
400 400 400 400 400 400 400 400		hb hornblende ep epidote
400 foliation 400 foliation 400 foliation 400 fault 40 fault <t< td=""><td></td><td>bedding</td></t<>		bedding
Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service whole rock sample, ishikawa index >60 Item is a service with komating index index with komating index index with index in	400	foliation
younging direction younging		un fault
HOON 1+00N Processes Process		younging direction
I+00N I+00N I+00N I+00N		•AB19951,65 whole rock sample, Ishikawa index >60
Image: state of the state		K rocks with komatilitic compositions
soon geological contact (inferred) active tuff significant sulphides (+2%, +10% total) gabbro quartz vein mineralization 300 300 300 300 300 300 300 30		u unconformity
active tuff significant sulphides (>2%, >10% total) gabbro quartz vein mineralization 300 300 300 300 300 300 300 30		geological contact (inferred)
isignificant sulphides (>2%, >10% total) gabbro quartz vein mineralization 300 300 300 Image: subprogram in the subprogram i		active tuff
(900) gabbro quartz vein mineralization 300 300 300 300 FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE DF WORK: July, 1987 PROJECT NO: FIG. ND.: DRAWN BY: VJG 116 DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 FIG. ND.: 7		significant sulphides (>2%, >10% total)
200 200 200 200 200 200 200 200		(gab) gabbro quartz vein mineralization
200 200 PALCONBRIDGE LTD. FALCONBRIDGE LTD. FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE DF WORK: July, 1987 PROJECT NO: FIG. NO.: 116 DATE: Sept. 9, 1987 N.T.S. NO.: 92B/13 T		
200 FALCONBRIDGE LTD. FALCONBRIDGE LTD. FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (Iooking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: JUly, 1987 PROJECT NO: FIG. ND.: DRAWN BY: VJG DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 T	300	
200 FALCONBRIDGE LTD. FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: July, 1987 PROJECT NO: TIG. ND.: DRAWN BY: VJG DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 TIG. ND.: 7		
200 FALCONBRIDGE LTD. FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: July, 1987 PROJECT NO: FIG. ND.: DRAWN BY: VJG 116 DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 TIG. ND.:	and the second sec	
200 FALCONBRIDGE LTD. FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: JUly, 1987 PROJECT NO: FIG. ND.: DRAWN BY: VJG DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 TO 16		
200 FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE. (looking west) DDH CHEM87-28 WORK BY: DPM DATE DF WDRK: July, 1987 PROJECT NO: DRAWN BY: VJG DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 FIG. ND.: 7		
SEALE: 1:1,000 FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE DF WORK: July, 1987 PROJECT NO: 116 PIG. ND: 7		0 20 40 60 80 m
FALCONBRIDGE LTD. CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: July, 1987 PROJECT NO: 116 DATE: Sept. 9, 1987 N.T.S. NO.: 92B/13		SEALE: 1:1,000
200 CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: July, 1987 PROJECT NO: FIG. ND.: DRAWN BY: VJG DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13		FALCONBRIDGE LTD.
200 Vancouver Island, British Columbia SECTION 27 + OOE. (looking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: July, 1987 PROJECT NO: 116 FIG. ND.: 7 DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 7		CHEMAINUS JOINT VENTURE
I+00N SECTION 27 + OOE (looking west) DDH CHEM87-28 WORK BY: DPM DATE OF WORK: July, 1987 DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13	200	Vancouver Island, British Columbia
I+00N	200 —	SECTION 27 + OOF
I+OON I+		(looking west)
WORK BY: DPM DATE DF WDRK: July, 1987 PROJECT NO: FIG. ND.: DRAWN BY: VJG DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13		DDH CHEM87-28
WORK BY: DPM DATE OF WORK: July, 1987 PROJECT NO: FIG. NO.: DRAWN BY: VJG 116 7 DATE: Sept. 9, 1987 N.T.S. NO.: 92B/13 7		
I+OON DRAWN BY: VJG 116 7 DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13 7		DATE DE WORK JULY 1987 PROJECT NO: EIE NO.
DATE: Sept. 9, 1987 N.T.S. NO.: 92B/13	L+ OON	DRAWN BY: VJG 116 7
		DATE: Sept. 9, 1987 N.T.S. ND.: 928/13



	LEGEND-			
	NANAIMO CROUD			
30 msec	6c Argillite			
20msec	6b Greywacke			
10 msec	6a Conglomerate			
	INTRUSIVE ROCK			
	5c Peridotite			
	5b Mafic sill			
	5a Gabbro			
	SICKER GROUP			
	4b Cherty black argillite and siltstone with minor greywacke			
	4a Brown greywacke			
I + 00 N	3b Felsic tuff			
	3a Felsic flow			
	2b Intermediate tuff			
	2a Intermediate flow			
	1c Mixed mafic tuffaceous sediments			
	1b Mafic tuff			
	Ta Matic flow			
	SYMBOLS			
	py pyrite po pyrrhotite			
500 -	ga galena qe quartz eyes			
	hb hornblende ep epidote			
	bedding			
	foult			
	<u>+</u> younging direction			
	*ABI3951, 65 Whole rock sample Ishikawa index >60			
	geochemical/assay sample			
	K rocks with komatilitic compositions			
	u unconformity			
	geological contact (inferred)			
	active tuff			
400	significant sulphides (>2%, >10% total)			
	(gab) gabbro quartz vein mineralization			
300 -	20 40 60 80 m			
	SCALE: 1:1,000			
	FALCONBRIDGE LTD.			
	CHEMAINUS JOINT VENTURE			
	Vancouver Island, British Columbia			
	SECTION 28 + OOE			
	(looking west)			
	DDHs CHEM97-23 26 37 and			
	CHEM86 - 18			
	WORK BY: JMP, SGE, DPM			
200 -	DATE OF WORK: July, 1987 PROJECT NO: FIG. NO .:			
2+00N	DRAWN BY: ER 116 Q			
	DATE: Sept. 11, 1987 N.T.S. NO.: 928/13			







	LEGEND					
	NANAIMO GROUP					
	6b Greywacke					
	6a Conglomerate					
	INTRUCIVE DOCK					
lumberger Array I.P.	5c Peridotite					
dient Array I.P.	5b Mafic sill					
	5a Gabbro					
	4b Cherty black argillite and siltstone with minor					
	greywacke					
	4a Brown greywacke					
600	3a Felsic flow					
	2b Intermediate tuff					
	2a Intermediate flow					
	1c Mixed mafic tuffaceous sediments					
	1b Mafic tuff					
	Ta Matic flow					
	SYMBOLS					
	py pyrite po pyrrhotite					
500 —	cpy chalcopyrite sp sphalerite ga galena ge guartz eves					
	hb hornblende ep epidote					
	bedding					
	t vounging direction					
	fault					
	•AB19951,65 whole rock sample, Ishikawa index >60					
	geochemical/assay sample					
	K rocks with komatilitic compositions					
	geological contact (inferred)					
400	active tuff					
100	significant sulphides (>2%, >10% total)					
	0 20 40 60 80 m					
	SCALE: 1:1,000					
300	FALCONBRIDGE LTD.					
	CHEMAINUS JOINT VENTURE					
	Vancouver Island, British Columbia					
	SECTION 32 + OOE					
	(looking west)					
	DDH CHEM86-17					
	WORK BY: SGE					
Ν	DRAWN BY: VJG 116 11					
	DATE: Sept. 9, 1987 N.T.S. ND.: 928/13					



	LEG	END				
	6c Argillite	>				
2.13.	6b Greywacke					
232	6a Conglomerate					
		<				
	5b Mafic sill					
	5a Gabbro					
	SICKER GROUP					
	4b Cherty black an greywacke	rgillite and siltstone with minor				
	4a Brown greywac	ke				
	3b Felsic tuff					
	3a Felsic flow					
600	25 Intermediate flo	ow				
	1c Mixed mafic tu	ffaceous sediments				
	1b Mafic tuff					
	1a Mafic flow					
	SY	MBOLS				
	py pyrite	po pyrrhotite ite sp sphalerite				
	ga galena	qe quartz eyes				
	nd nornblende	e ep epidote				
	bedding					
	foliation					
500	· ···· fault					
	younging dir	ection				
	• ABI9951,65 Whole rock sa → geochemical/	assav sample				
	K rocks with ko	matiitic compositions				
	u unconformity					
	geological contact (inferred)					
	significant sulphides (>2%, >10% total)					
400	-					
	and the second second second					
	0 20	40 80 80 m				
	SCALE:	1:1,000				
	FALCON	BRIDGE LTD.				
	CHEMAINUS JOINT VENTURE					
300	Vancouver Island, British Columbia					
500	SECTION 40 + 00E					
	(looking west)					
	DDH CHEM87-31					
	WORK BY: JP					
	DATE OF WORK: July, 1987	PROJECT NO: FIG. NO.				
	DRAWN BY: VJG	110 15				



	LEGEND				
Schlumberger Array I.P.	NANAIMO GROUP 6c Argillite				
Gradient Array L.P.	6b Greywacke				
or dation i randy inte	6a Conglomerate				
	INTRUSIVE ROCK				
	5c Peridotite				
	5b Mafic sill				
	5a Gabbro				
	SICKER GROUP				
OON	4b Cherty black argillite and siltstone with minor greywacke				
	4a Brown greywacke				
700 ——	3b Felsic tuff				
	3a Felsic flow				
	2b Intermediate tuff				
	1c Mixed matic tuffaceous sediments				
	1b Mafic tuff				
	1a Mafic flow				
	SYMBOLS				
	py pyrite po pyrrhotite				
	ga galena qe quartz eyes				
600	hb hornblende ep epidote				
	bedding				
	foliation				
	-+ younging direction				
	nn fault				
	Geochemical/assay sample				
	K rocks with komatilitic compositions				
	u unconformity				
	geological contact (inferred)				
	active tuff				
500	significant sulphides (>2%, >10% total)				
	0 20 40 60 80 m				
	SCALE: 1:1.000				
	FALCONBRIDGE LTD.				
400	CHEMAINUS JOINT VENTURE				
	Vancouver Island, British Columbia				
	SECTION 45 + OOF				
	(looking west)				
	DDH CHEM86-16				
	WORK BY:				
+ 00N	DATE OF WORK: July, 1987 PROJECT NO: FIG. NO .:				
	DRAWN BY: VJG 116 17				
	DATE: Sept. 9, 1987 N.T.S. ND.: 92B/13				



-	-L	Ε	G	Ε	Ν	D –	
	NANA	IMO G	ROUP				
6c	Arg	gillite					
вь	Gre	ywack	е				
Sa	Co	nglome	rate				
	INTRU	SIVE	ROCK				
ōc	Pe	ridotite					

SICKER GROUP

Mafic sill

Gabbro

5c

5b

5a

4b	Cherty black argillite and siltstone with minor greywacke
4a	Brown greywacke
ЗЬ	Felsic tuff
3a	Felsic flow
2b	Intermediate tuff
2a	Intermediate flow
1c	Mixed mafic tuffaceous sediments
1b	Mafic tuff
1a	Mafic flow

SYMBOLS

	ру	pyrite	ро	pyrrhotite
	сру	chalcopyrite	sp	sphalerite
	ga	galena	qe	quartz eyes
	hb	hornblende	ep	epidote
-	bec	Iding		
~	foli	ation		
~~~	fau	It		
4	you	unging direction	n	
819951, 65	who	ole rock sample,	Ishikawa	index >60
	geo	ochemical/assay	y sample	
к	roc	ks with komatii	tic compo	sitions
u	unc	onformity		
	geo	logical contact	(inferred)	

significant sulphides (>2%, >10%total)



active tuff

## FALCONBRIDGE LTD.

CHEMAINUS JOINT VENTURE Vancouver Island, British Columbia

SEC	TION	47	+ st	00	)E
DDHs	CHEM87-	34,	35	and	36

WORK BY: DPM, SGE, JMF	)	
DATE OF WORK: July, 1987	PROJECT NO:	FIG. NO .:
DRAWN BY: VJG	116	10
DATE: Sept. 9, 1987	N.T.S. ND.: 928/13	10



	L	E G	E	N D-	
	NA	NAIMO GROUI	P		
	6c	Argillite			
	6b	Greywacke			
	6a	Conglomerate			
	IN	TRUSIVE ROC	к		
	5c	Peridotite			
Schlumberger Array I.P.	5b	Mafic sill			
	5a	Gabbro			
Gradient Array I.P.					
person and a state of the second	SI	CKER GROUP		Leiltetone wi	th minor
	40	greywacke	rymite and	antorono m	
1+00N	4a	Brown greywad	cke		2
	3b	Felsic tuff			
	3a	Felsic flow			
700	2b	Intermediate to	uff		
	2a	Intermediate fl	ow		
	1c	Mixed mafic tu	ffaceous	sediments	
	1b	Mafic tuff			
	1a	Mafic flow	*		
	, u				
		SYN	BOLS		
		py pyrite		po pyrrhoti	te
		cpy chalcopyrit	te	sp sphaler	ite
		hb hornblende		ep epidote	5y83
000	~	bedding			
600	~	foliation			
	<u>+</u>	younging directio	n		
		fault			
	* AB19951, 65	whole rock sam	ple, Ishik	awa index >	-60
		geochemical/a	ssay sam	ple	
	к	rocks with kom	natiitic co	mpositions	
	u	unconformity			
	;	geological cont	act (infer	red)	
	-	active tuff			
	-	significant sulph	nides (>2%,	>10% total)	
	(gab)	gabbro quartz v	vein minera	lization	
500					
	-				
		0 20	40	80 80	m
		SCALE: 1	1.000		
		FALCON	BRIDGE	LTD.	
	C	HEMAINUS	JOINT	VENTURI	E
400	V	ancouver Isla	nd, Britis	h Columbia	
		CTION	1 40	+ 00	E
	(looking west) DDHs CHEM86-14 and 15				
	WORK BY:	SGE			
	DATE OF W	ORK: July, 1987	PROJE	ECT NO:	FIG. NO .:
1 + 00 N	DRAWN BY	VJG	1	16	19
	DATE: Sep	t. 9, 1987	N.T.S. ND.	92B/13	10