GM 45896

REVERSE CIRCULATION OVERBURDEN DRILLING AND HEAVY MINERAL GEOCHEMICAL SAMPLING, PN-020 PROPERTY

FALCONBRIDGE LIMITEE
PN-020 PROPERTY
GAND AND LA RONCIERE TWPS.
QUEBEC
REVERSE CIRCULATION OVERBURDEN DRILLING
AND HEAVY MINERAL GEOCHEMICAL SAMPLING
BY T.E.BURNS, D.R.HOLMES AND S.A.AVERILL
MARCH 1988

FALCONBRIDGE LTÉE

PN-020 PROPERTY

GAND AND LA RONCIÈRE TOWNSHIPS

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PREPARED BY:

T.E. BURNS AND D.R. HOLMES

OVERBURDEN DRILLING MANAGEMENT LIMITED

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BUREAU RÉGIONAL
ROUYN-NORANDA

TABLE OF CONTENTS

TABLE OF CONTENTS (cont'd)

FIGURES

TABLE OF CONTENTS (cont'd)

TABLE OF CONTENTS (cont'd)

Page

APPENDICES

1.0 SUMMARY

This report outlines the findings of a reverse circulation overburden drilling/heavy mineral geochemical sampling program conducted by Falconbridge Ltée on its PN-020 property in Gand and La Roncière Townships 5 km northeast of Minnova's Lac Shortt gold mine in northern Quebec. Ninety-nine vertical holes were drilled to (a) test the overburden for dispersed mineralization indicative of subcropping, bedding-parallel, shear-hosted gold deposits and to (b) delineate zones of intense bedrock deformation and/or alteration that could host deeper deposits. Both bedrock and coarse clastic overburden sections were sampled. Total costs averaged $96.85/metre ($29.53/foot).

The drill area is underlain by a northeast-trending series of Archean volcanic, pyroclastic and comagmatic intrusive rocks. Intermediate to felsic pyroclastics predominate in the northwest, where their distribution is profoundly influenced by the Esturgeon Syncline, and intermediate to mafic flows predominate in the southeast. No alkalic volcanics or syenite bodies of the Lac Shortt type were intersected.

The Lac Shortt Fault probably continues across the property as an east-northeast trending bedrock valley was intersected along strike from the known fault. A broad, cross-cutting zone of shearing characterized by red hematization of the Lac Shortt type and locally by anomalous concentrations of gold appears to be present in the east. Elsewhere shearing and hydrothermal alteration are spotty.

Overburden thickness in the drill holes averages 12 metres. All preserved Quaternary strata are of Early Wisconsinan to Holocene age. The direction of Late Wisconsinan ice flow was south-southwest. Chibougamau Till deposited by this ice forms a relatively thin, and discontinuous horizon across the property, being extensively supplanted by De Geer moraines especially in the east. Where present the till is predominantly bedrock-derived making it an excellent geochemical sampling medium.

The gold content of the overburden heavy mineral concentrates is in the normal background range for this part of the Abitibi Belt. Twenty-five of the twenty-eight detected heavy mineral gold anomalies are caused by nuggets or random gold grain clustering and are of no exploration significance. The remaining anomalies in Holes 80, 86 and 99 are of the dispersal train type. They are weak but appear to correlate with bedrock structures delineated by the drilling and therefore are potentially significant. Two of the anomalies have a copper association.

Based on the findings contained in this report a follow-up program consisting of IP and VLF surveys and diamond drilling is recommended to locate the sources of the three gold dispersal trains and to test anomalous sections of the cross-cutting shear zone.

2.0 INTRODUCTION

2.1 Project Outline

Falconbridge Ltée conducted a 99 hole reverse circulation drilling program for the purpose of heavy mineral geochemical sampling of Quaternary tills and chip sampling of the Precambrian bedrock subcrop on its PN-020 mineral property (Figs. 1 and 2) in the Chapais - Desmaraisville mining district of the Abitibi Greenstone Belt in northwestern Quebec from August 18 to September 1, 1987. The PN-020 property is 5 km northeast of and along the inferred geologic strike of Minnova's Lac Shortt gold mine.

The objectives of the PN-020 drilling were to test the predominantly overburden covered property for glacially dispersed gold indicative of subcropping bedrock sources and to delineate zones of intense bedrock deformation and/or alteration that could host deeper deposits. The program was of reconnaissance scale with an emphasis on positioning holes close to or on favourable geological and/or geophysical targets.

Falconbridge contracted Heath and Sherwood Drilling (1986) of Kirkland Lake, Ontario to perform the drilling and Overburden Drilling Management Limited (ODM) of Nepean, Ontario to manage the program. Geologist S. Averill prepared the hole layout in March, 1986 (the program was originally scheduled for June, 1986 but had to be postponed due to budget restrictions). Geologists T. Burns and T. Thompson together with geotechnician B. Bark spotted, logged and sampled the drill holes and supervised the drilling.

All holes penetrated the entire overburden section and were extended approximately 1.5 metres into bedrock. In total, 440 overburden and 99 bedrock samples were collected. Heavy mineral concentrates were prepared from the overburden samples at ODM's laboratories in Rouyn, Quebec and Nepean, Ontario. Gold particles sighted during processing were measured to determine their individual contributions to the overall gold content of the concentrates and were classified according to their distance of glacial transport. Subsamples of the heavy mineral concentrates were analyzed for gold, copper, zinc and arsenic.

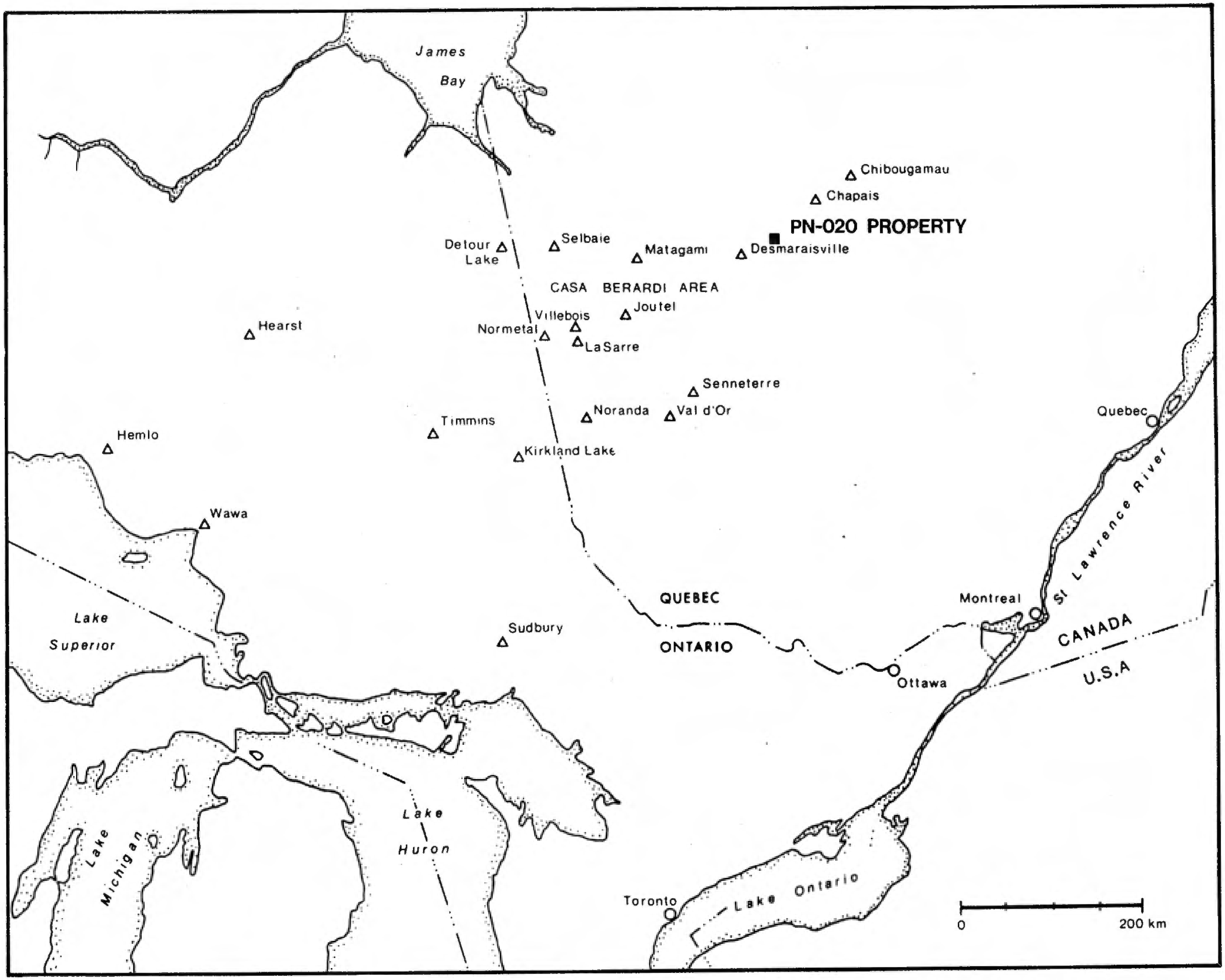

Figure 1 - PN-020 Property Location Map

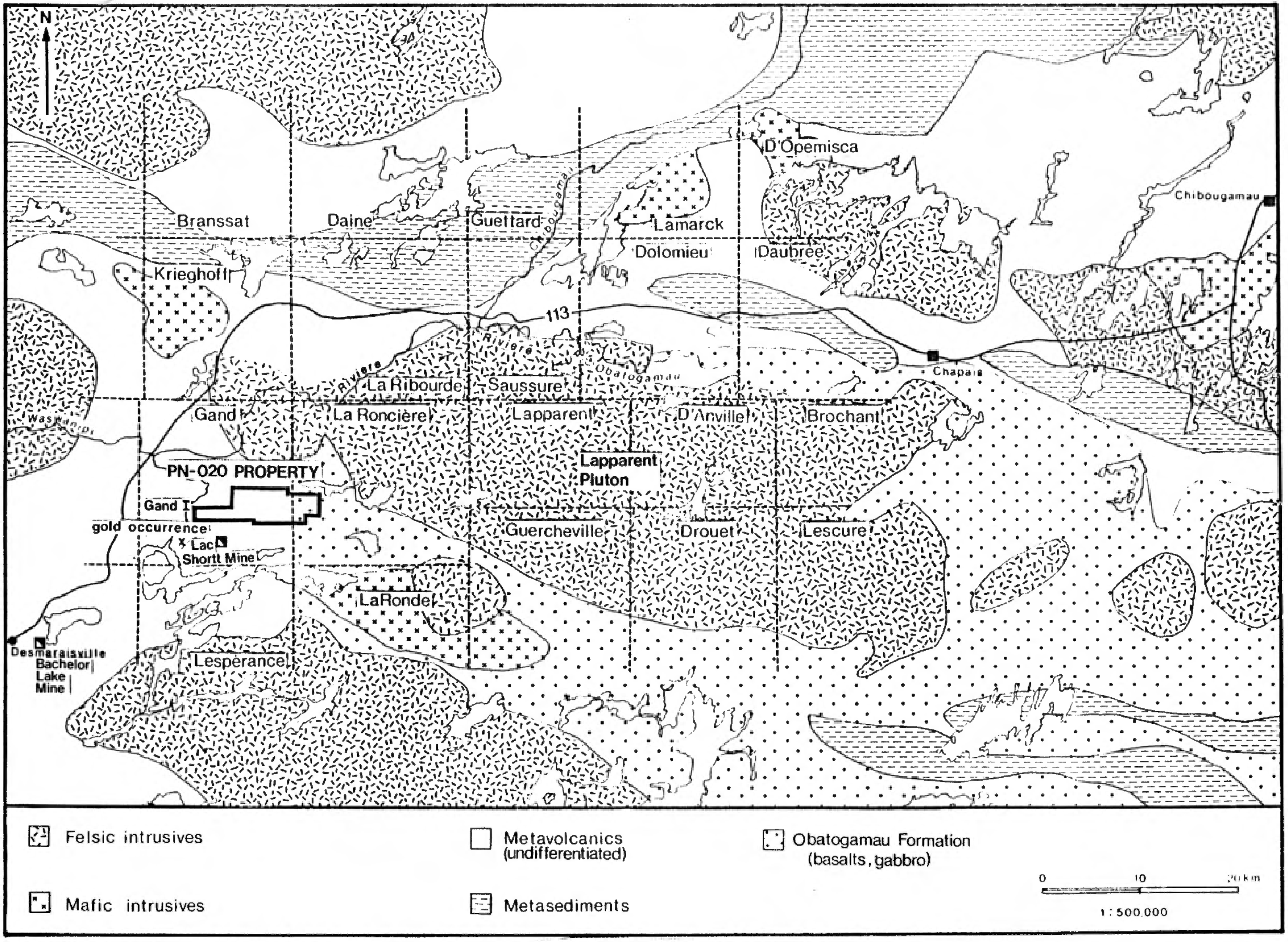

Figure 2 - Geological Setting of the PN-020 Property

(Source: MERQ-OGS, 1983)

The bedrock chip samples were logged under a binocular microscope and were analyzed for the major oxides; their lithologies and chemistry were then used to refine Falconbridge's existing interpretation of the property geology (Plan 1). Subsamples of the bedrock chips were also analyzed for gold, copper, zinc and arsenic.

A preliminary report on bedrock stratigraphy and alteration and overburden gold grain results was submitted to Falconbridge in November, 1987 (Burns and Averill, 1987). The present report constitutes the final documentation of the work performed and includes a full interpretation of processing and analytical data. A detailed analysis of local Archean and Quaternary stratigraphy is included and used in the interpretation of the bedrock and heavy mineral geochemistry.

2.2 Principles of Deep Overburden Geochemistry in Glaciated Terrain

During the Pleistocene epoch of the Quaternary period, the crowns of all ore bodies that subcropped beneath the continental ice sheets of North America were eroded and dispersed down-ice in the glacial debris. The dispersal mechanisms were systematic (Averill, 1978) and the resulting ore "trains" in the overburden are generally long, thin and narrow but most importantly are several hundred times larger than the parent ore bodies. These large trains can be used very effectively to locate the remaining roots of the ore bodies.

Because the dispersal trains originated at the base of the ice, they are either partly or entirely buried by younger, nonanomalous glacial debris. Most trains are confined to the bottom layer of debris deposited during glacial recession -- the basal till. In fact, the sampling of glacial overburden for exploration purposes is commonly referred to as "basal till sampling". It is important to note, however, that in areas affected by multiple glaciations the bottom layer of debris in the overburden section may be only the lowermost of several stacked basal tills, and that a disperal train may occur at any level within any one of the basal till horizons. Consequently, the term "basal till sampling" is not synonymous with the collection of samples from the base of the overburden section. Moreover, the term is not strictly correct because significant glacial dispersal trains can occur in formations other than basal till.

From the foregoing statements, it can be seen that glacial dispersion and glacial stratigraphy are interdependent. Consequently, the effectiveness of overburden sampling as an exploration method is related to the ability of the sampling equipment to deliver stratigraphic information from the unconsolidated glacial deposits. In areas of deep overburden, including most of the Abitibi Greenstone Belt in northwestern Quebec, drills must be used. Most drills have been designed to sample bedrock and are unsuitable for overburden exploration, but in the last fifteen years rotasonic coring rigs and reverse circulation rotary rigs have been developed to sample the overburden as well as the bedrock. Both drills provide accurate stratigraphic information throughout the hole and also deliver large samples that compensate for the natural inhomogeneity of glacial debris.

Reverse circulation rotary rigs are much more widely used in the Abitibi than are rotasonic coring rigs. They employ dual-tube pipe and a tricone bit with the outer pipe acting as a casing to contain the drill water for recirculation and to prevent contamination of samples by material caving from overlying sections. Air and water are injected at high pressure through the annulus between the outer and inner pipes to deliver a continuous sample of the entire overburden section through the small inner pipe (Fig. 3). The sample is disturbed but returns to surface instantly, and the precise positions of stratigraphic contacts can be identified. Full sample recovery is possible in all formations regardless of porosity or consistency, although sample loss due to blow-out commonly occurs in the first 1 to 3 metres of the hole until a sediment seal is made around the outer pipe.

Reverse circulation holes are normally extended 1.5 metres into bedrock. Cuttings of a maximum 1 cm size are obtained. These cuttings are used to determine the bedrock stratigraphy, structure and geochemistry and are also compared to the till clasts to help determine ice flow directions and glacial dispersal patterns.

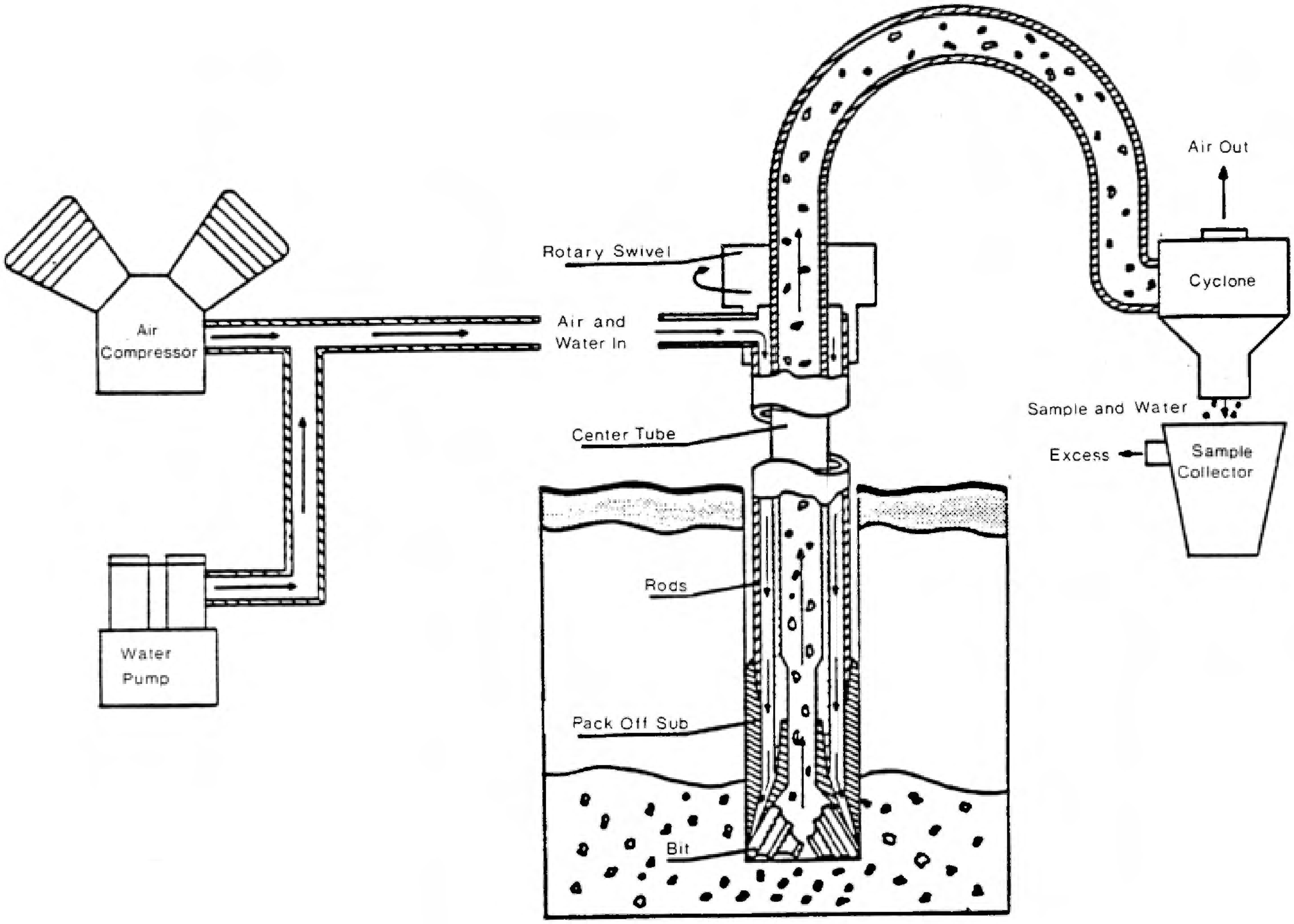

Figure 3 - Schematic Diagram of a Typical Reverse Circulation Rotary Drilling System

Most of the glacial overburden in Canada is fresh, and metals in the overburden occur in primary, mechanically dispersed minerals rather than in secondary chemical precipitates. While ore mineral dispersal trains are very large, they are also weak due to dilution by glacial transport and are difficult to identify from a normal "soil" analysis of the fine fraction of the samples. Consequently, heavy mineral concentrates are prepared to amplify the primary anomalies, and analysis of the fines is normally reserved for areas where significant post-glacial oxidation is evident. The heavy mineral concentrates are very sensitive, and special care must be taken to avoid the introduction of contaminants into the samples. On gold exploration programs, it is advantageous to separate and examine any free gold particles because most gold anomalies in heavy mineral concentrates are caused by background nugget grains that are of no interest.

2.3 Property Description and Access

The PN-020 property consists of 225 contiguous mining claims (Fig.4, Appendix A) in southern Gand and southwestern La Roncière Townships, centered approximately 5 kilometres northeast of Minnova's Lac Shortt gold mine (Fig. 2). It roughly forms a rectangle oriented east-west with a narrow western arm extending to directly north of the mine. The PN-020 claims were staked by Falconbridge Ltée in 1980 subsequent to the discovery of the Lac Shortt gold mine. At the time of staking Falconbridge Ltée entered into a joint venture agreement with Corporation Falconbridge Copper whereby the former have retained a 51 percent interest in the property. Minnova Inc. acquired Corporation Falconbridge Copper's assets in 1985, including its 49 percent interest in the PN-020 property.

The western arm of the PN-020 property is accessed by a recently constructed all-weather gravel road connecting the Lac Shortt Mine to provincial Highway 113 approximately 25 kilometres northeast of Desmaraisville. Central and eastern PN-020 are accessed by a network of logging roads and trails which connect to the Lac Shortt Mine road (Plan 1). Tractor roads were cleared to off-road drill hole sites.

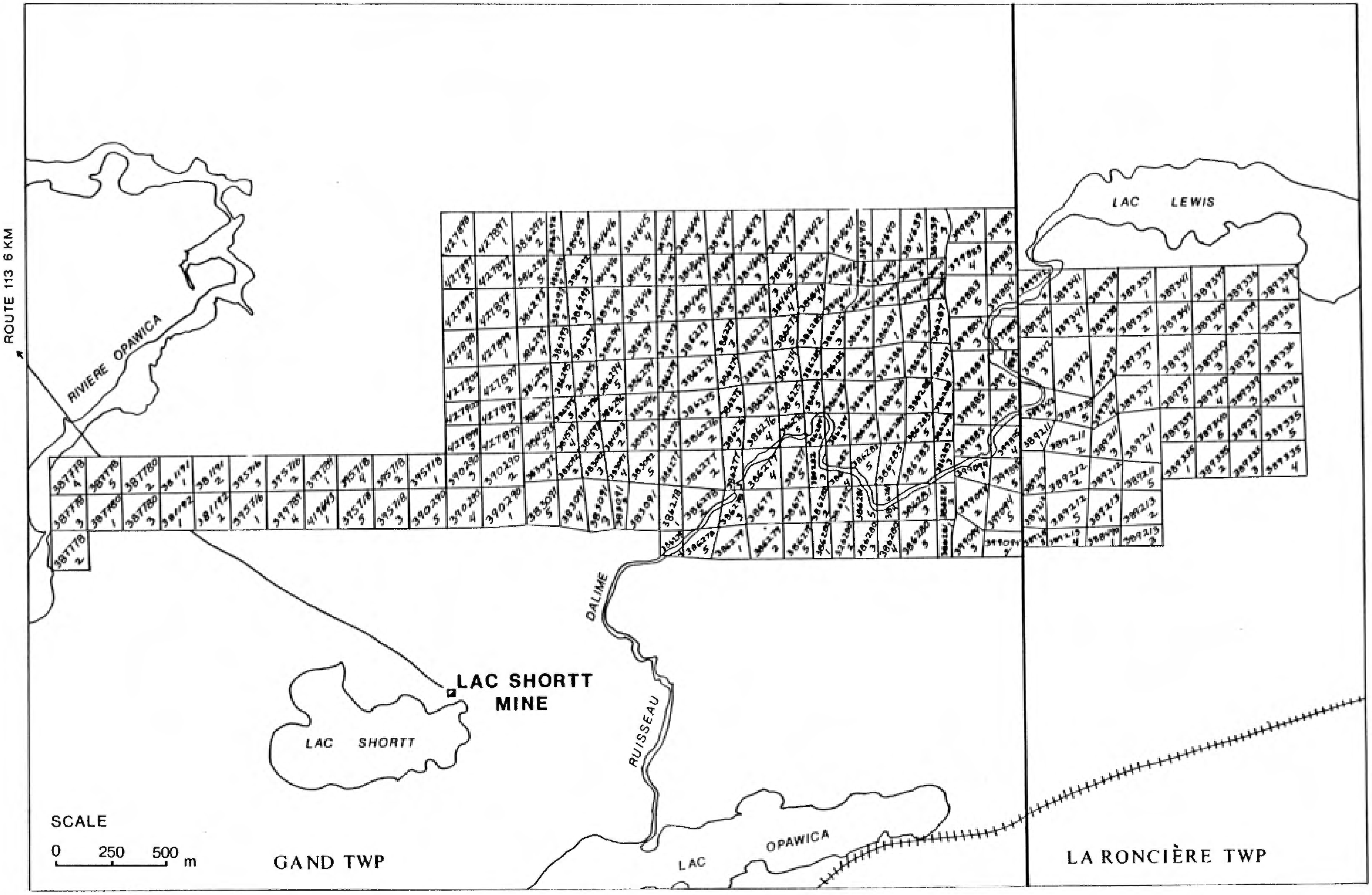

Figure 4 - Claim Map

2.4 Physiography and Vegetation

The PN-020 property lies in the southeasten margin of the Abitibi Uplands (Bostock, 1968), a north-sloping clay belt region that was covered by Lake Ojibway 10,000 years ago during Late Wisconsinan ice withdrawal. The southern boundary of the clay belt is the Hudson Bay - St. Lawrence River drainage divide, and also roughly coincides with the southern edge of the Abitibi Greenstone Belt. Average overburden thickness in the clay belt typically ranges from 10 metres in the south where Lake Ojibway was shallow to 30 metres in the north where the lake was deeper. The average overburden thickness in the PN-020 drill holes was 11.8 metres.

The highest elevation on the property is 350 m ASL on a northeast-trending, discontinuous, bedrock-cored ridge that bisects the property. The elevation drops to 305 m ASL along Ruisseau Dalime, a creek that generally follows the southeast flank of the ridge and flows from Lac Lewis in the north to Lac Opawica in the south (Fig. 5). A major U-shaped bend is present in the creek on the east-central part of the property. This diversion appears to be controlled partly by bedrock topography (Plan 2) and partly by surficial features, especially west-northwest trending De Geer moraine ridges. The area within the U-bend contains a number of small drumlins oriented 210 degrees. Outcrops are common above 320 m ASL (Plan 2).

Most of the property is drained by Ruisseau Dalime, but the northwestern corner is drained by tributaries of the north-flowing Rivière Opawica. Approximately 70 percent of the property was logged in the mid to late 1960's and is in an early stage of post-harvest regrowth. The remainder of the property supports a stunted natural boreal forest (15%) or is swamp-covered (15%).

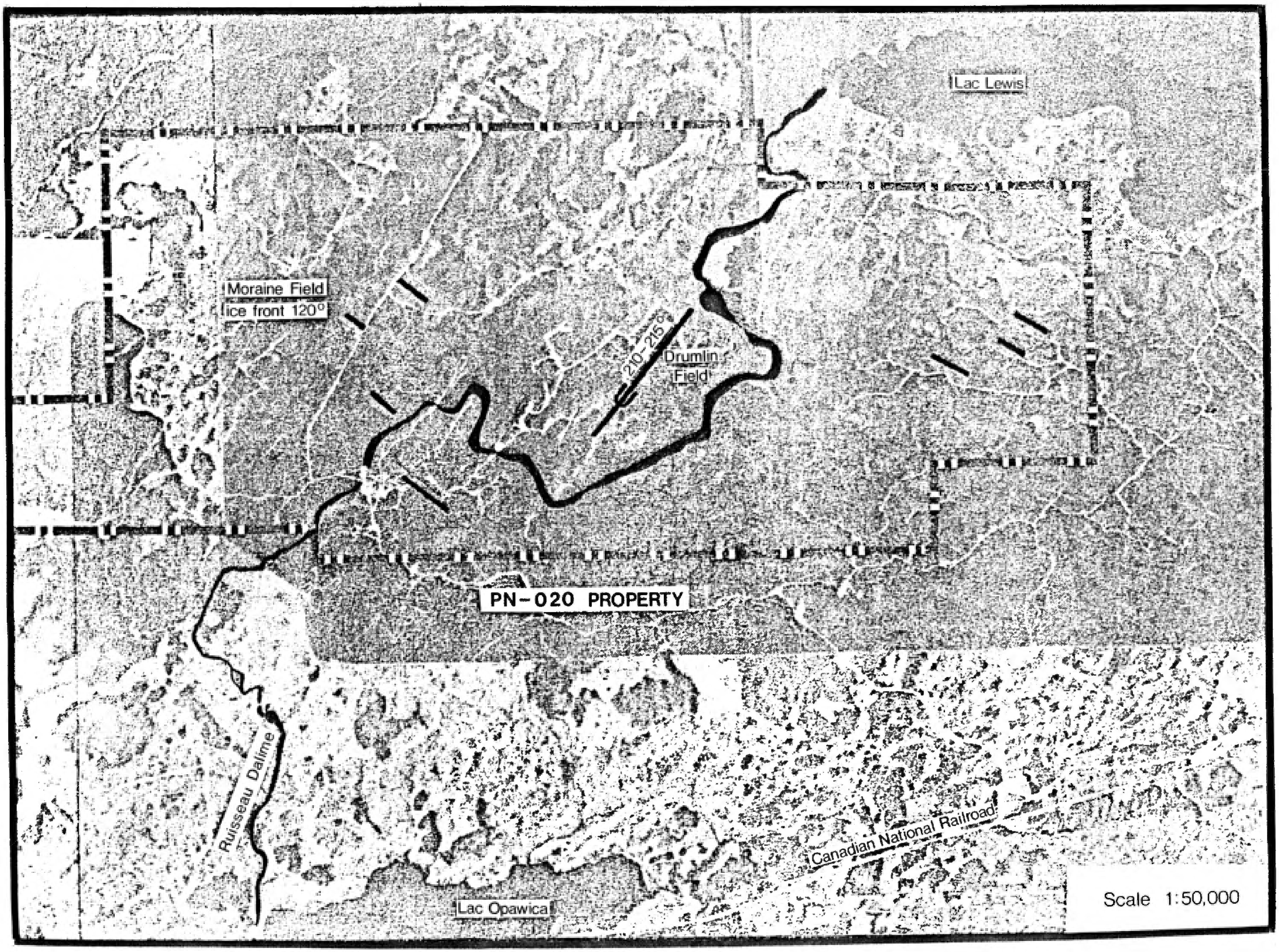

Figure 5 - Surficial Features of PN-020

2.5 Previous Work

The GSC mapped the area encompassing the PN-020 property in an early, 1 inch to 1 mile reconnaissance survey (Shaw, 1937) and documented a gold-quartz vein -- the Gand I occurrence -- 2 km west of the Lac Short Mine (Fig. 2). The Ministère de l'Energie et des Ressources du Quebec (MERQ) later mapped this area at a more detailed 1:20,000 scale (Lamothe, 1981 and 1982).

The local stratigraphic sequence, as established by Lamothe and by others working west of the property (Sharma and Lacoste, 1981) and modified to incorporate work done in the vicinity of the Lac Shortt Mine by Falconbridge Ltée (Cormier et al., 1984), is presented in Table 1. Most of the PN-020 property is said to be underlain by intermediate blocky and lapilli tuff, with mafic volcanics to the southeast of Ruisseau Dalime. Gabbro sills intrude both of these units, and granite and anorthositic gabbro intrusives underlie the northwestern and western property boundaries, respectively. The west arm of the property extends into an area of differentiated mafic intrusives named the Chute à l'Esturgeon complex.

Different workers disagree on the structural setting of the property. Cormier shows a number of northeast trending isoclinal synclines and anticlines crossing the property (Fig. 6). Lamothe (1981) initially indicates only one northeast trending syncline on the west half of the property but later (Lamothe, 1982) shows an overturned southeast trending syncline on the east half of the property contradicting his 1981 work where the maps join. All are in agreement though that the west half of the property contains northeast trending, isoclinal fold structures. The Lac Shortt Fault, which controls mineralization at the Lac Shortt Mine and is characterized by red hematization and a distinctive green mica schist is known to extend to within 1.5 km of the property, but has not been observed on the property. Along strike of the Lac Shortt Fault Cormier shows a synclinal axis crossing the property along the main course of Ruisseau Dalime.

TOP (NORTH)

Unit No. VI	Intermixed mafic lavas and gabbro sills; minor tuff bands.
Unit No. V	Chute à l'Esturgeon differentiated complex (=Bourbeau sill??).
Unit No. IV	Sub-Unit IVc
	Monogenic blocky tuff; 2 types of fragments, feldspathic crystal tuff matrix, occasional amphibole porphyries
	Sub-Unit IVb
	Volcanic alkali (Na, K) rich rock. Auriferous dolomitic and syenitic ore zone
	Lac Shortt Fault
	Sub-Unit IVa
	Polygenic blocky tuff; great variety of large and angular fragments; quartz-feldspar porphyritic matrix
Unit No. III	Pillowed and vesicular basalts, andesite; minor gabbro and diabase sills and dykes
	Opawica Lake Fault
Unit No. II	Intermediate to felsic tuff, lapilli tuff occasional quartz-feldspar porphyries, also lapillistone and blocky tuffs
Unit No. I	Porphyritic lavas; gabbro sills and mafic tuffs

Table 1 - Proposed Stratigraphic Sequence, Lac Shortt - Lac Opawica Area

(Source: Cormier et al., 1984)

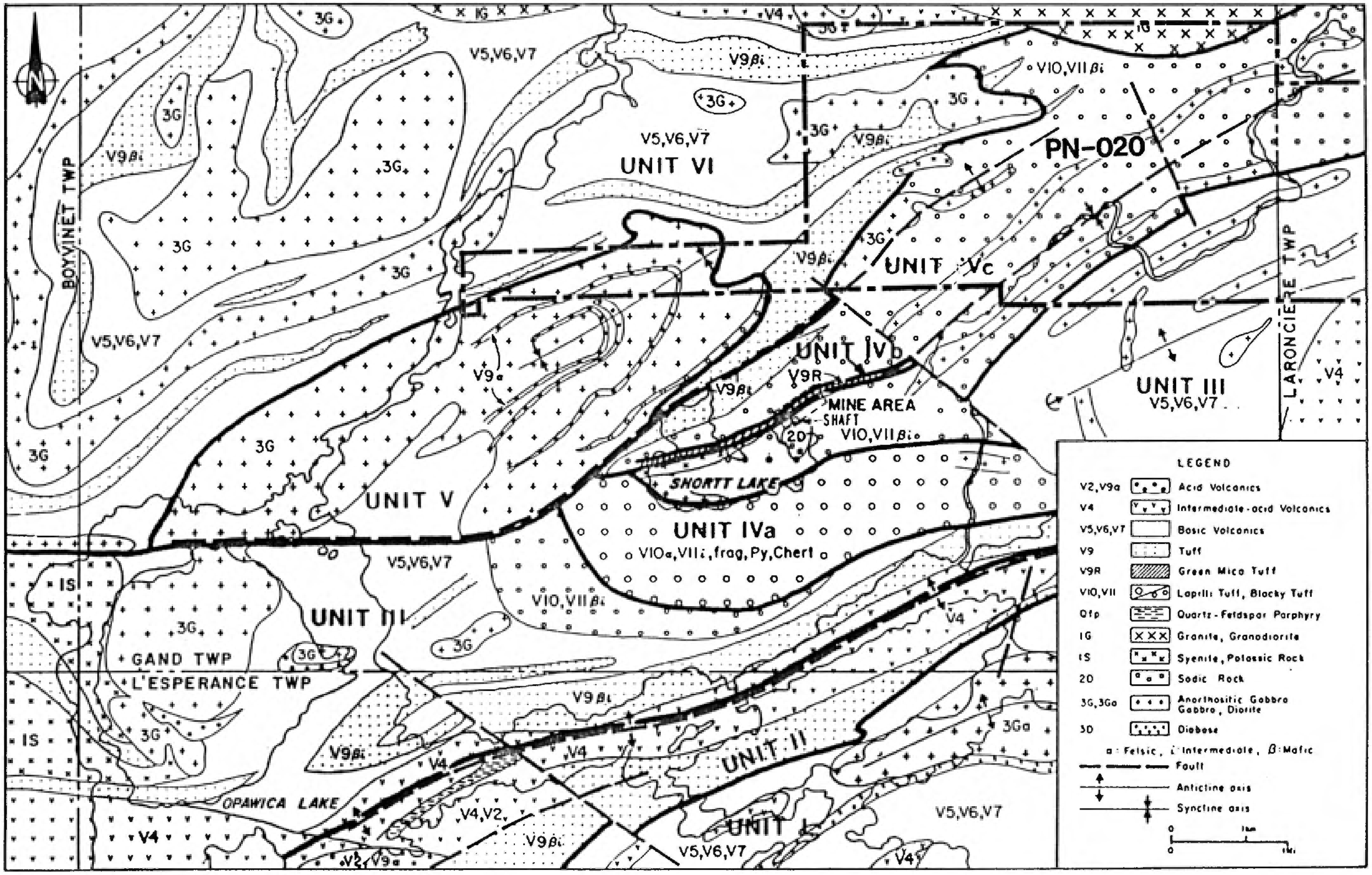

Figure 6 - Geology of the Lac Shortt Mine Vicinity
as Interpreted by Falconbridge Ltée
(Source: Cormier et al., 1984)

Regional aeromagnetic mapping represents the mafic volcanics in the southeast corner of the property in low magnetic relief, and the tuffs in moderate relief (Fig. 7). A linear high suggestive of diabase is coincident with the bedrock-cored ridge. High magnetic relief is also present at Lac Shortt, west of the property in the Chute à l'Esturgeon complex, and along sections of the long Opawica Lake Fault that passes through Lac Opawica south of PN-020.

Prior to Falconbridge's acquisition of PN-020 in 1980 there is no known record of mineral exploration on the property. Mineral exploration by Falconbridge Ltée has been carried out between 1980 and 1985 (S. Bruce, pers. comm.). To date Falconbridge has cut 100 metre corrected grids over almost the entire property (Plan 1) and subsequently carried out geology and rock geochemistry surveys on the grids. Ground magnetometer, VLF, and humus sampling surveys have also been conducted over most of the grids. Limited follow-up including MaxMin and IP surveys and 24 diamond drill holes (totalling 4,758 metres) has also been performed. Geochemical results from outcrop and drill core sampling have been generally disappointing with elevated gold values in only one outcrop and six short drill core segments, with the highest assay yielding 3.8 grams/tonne (Plan 1).

2.6 Project Costs

Budgeted and actual costs for the 1987 reverse circulation drilling program are presented in Table 2. The budget figure of $182,368.00 ($119.65/metre, $36.47/foot) was not changed from the 1986 proposal which was based on the following assumptions:

1. One hundred holes totalling 1,500 m; average 15 m per hole
2. Drilling productivity at 6 m per operating hour
3. An average bit life of 45 m
4. A total of 500 overburden samples (average 5 samples per hole)

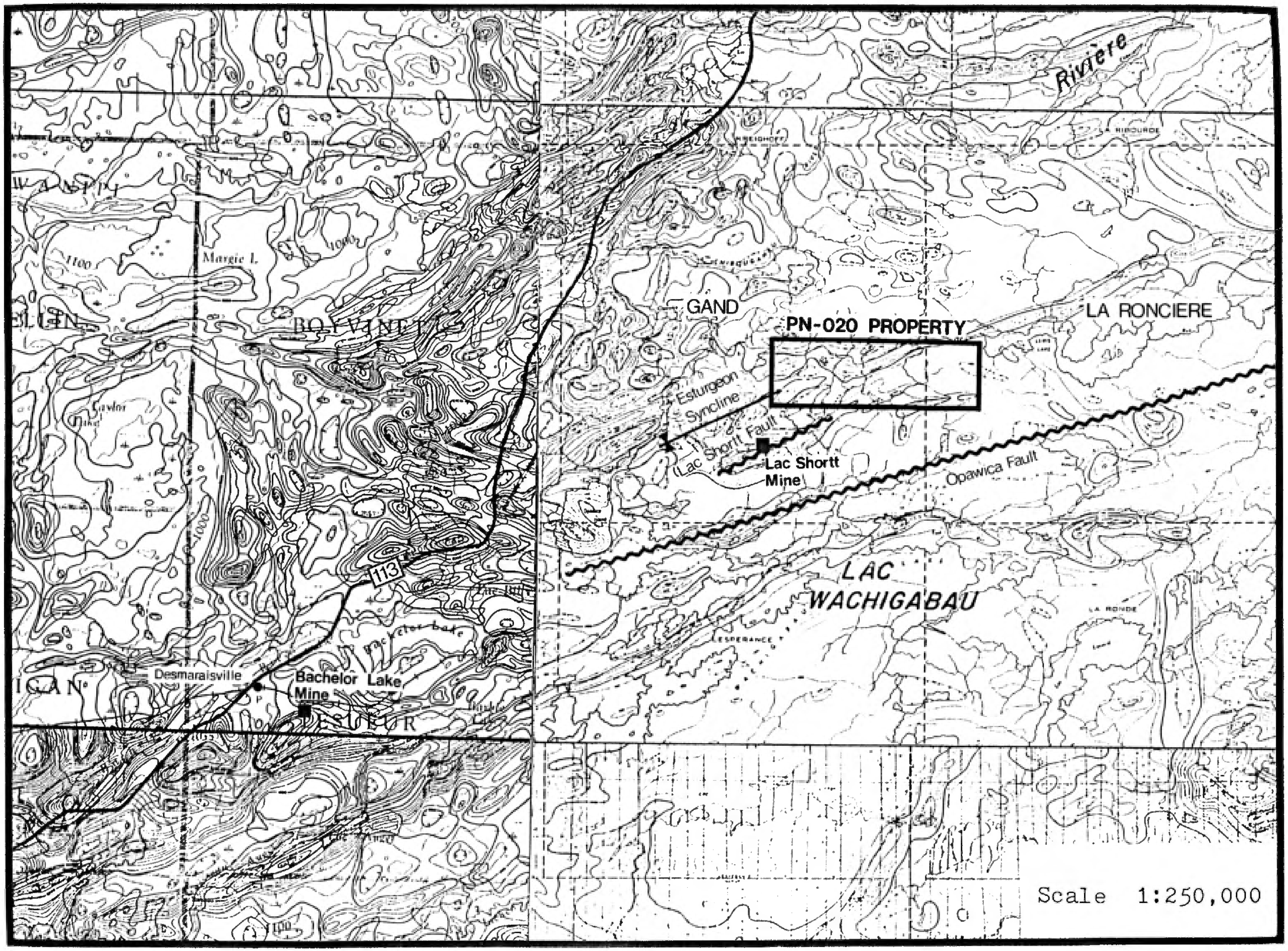

Figure 7 - Regional Aeromagnetic Map

(Source: GSC, 1966)

			Budget			Actual		
	Service	Company	$ Total	$/Metre	$/Foot	$Total	$/Metre	$/Foot
1.	Pre-drilling	ODM	1,080.00	.71	.22	277.50	.22	.07
2.	Drilling Operations and road clearing	H&S	109,390.00	71.76	21.88	65,801.98	51.08	15.57
3.	Field supervision, logging, sampling	ODM	22,585.00	14.82	4.52	12,755.99	9.90	3.02
4.	Sample shipping and processing	Various, ODM	20,250.00	13.28	4.05	17,783.98	13.81	4.21
5.	Analytical	Bondar-Clegg	11,063.00	7.26	2.21	10,137.84	7.87	2.40
6.	Report (est.)	ODM	18,000.00	11.81	3.60	18,000.00	13.97	4.26
	TOTALS		182,368.00	119.64	36.48	124,757.29	96.85	29.53

Table 2 - Budgeted and Actual Costs for the PN-020 Reverse Circulation Drilling Program

Ninety-nine holes were drilled (Appendix B) averaging 11.8 m or 22 percent below the budget estimate. Because of shallower than expected overburden, drilling productivity was 9.1 m per hour or 33 percent higher than the budget estimate. Bit life averaged 46 m, essentially as budgeted. The total number of overburden samples was 440 or 12 percent below the budget estimate. As a result of the reduced hole depth, increased drilling productivity and fewer overburden samples collected, total costs fell to $124,757.29. This is 31 percent less than the budget estimate and averages $96.85/metre; average for Abitibi programs.

3.0 DRILLING AND SAMPLING

3.1 Drill Hole Pattern

The direction of ice movement over PN-020 was from the northeast and north-northeast in the Illinoian and Wisconsinan glaciations respectively. Since the bedrock strata have a northeast strike, and since any gold mineralization would be expected to occur in bedding-parallel shears, it follows that any gold dispersal trains should trend parallel to the bedrock strata. ODM has encountered only one such bedding-parallel train (Table 3) -- the EP train at Waddy Lake, Saskatchewan. This train is very long (4.5 km) but relatively narrow (100 to 200 metres). Bedding-perpendicular trains are much more common; the average length of eleven such trains that ODM has delineated (Table 3) is only 500 metres but the width is considerably greater (generally 300 to 400 metres) than that of bedding-parallel trains.

The PN-020 holes were drilled 250 metres apart on traverses cross-sectioning the entire property except the west arm at approximately 1,000 metre intervals. This drilling pattern is tailored to long, narrow dispersal trains from bedding-parallel sources and should therefore provide effective exploration coverage. It also provides optimum bedrock stratigraphic information and ensures detection of any stratigraphically controlled bedrock valleys that could influence gold dispersal patterns.

PROVINCE	GOLD DEPOSIT	TRAIN LENGTH[1](m)	
		TRACED	EST. TOTAL
Saskatchewan	Lake "X"[2]	300	300
Saskatchewan	Star Lake	300	800
Saskatchewan	Lake "Y"	500	1000
Saskatchewan	Waddy Lake[2]	600	2000
Ontario	McCool	300	400
Quebec	Cooke Mine[3]	800	1000
Quebec	Golden Pond West	300	400[4]
Quebec	Golden Pond	400	500[4]
Quebec	Golden Pond East	800	1000[4]
Quebec	Orenada	100	200
Quebec	Kiena	100	300
Quebec	Chimo	600	1000
Newfoundland	Devil's Cove	2000	2000

1 - Based on minimum 10 gold grains of similar size and shape per 8 kg sample for free gold trains and on coincident high gold and base metal assays for invisible gold trains

2 - Deposit oriented parallel to glacial ice advance

3 - Occluded gold deposit

4 - Train foreshortened and/or gapped by erosion in last ice advance

Table 3 - Heavy Mineral Gold Dispersal Trains Identified by Overburden Drilling Management Limited Laboratory

3.2 Drilling Equipment

Heath and Sherwood's drill rig employed an Acker MP drill head with a 3 metre feed cylinder. The drill, together with all its ancillary equipment including air compressor, water pump and logging and sampling facilities, was unitized and enclosed on the bed of a Nodwell Model 160 tracked carrier for all-terrain mobility and all-weather operation.

The rig employed an air compressor with a rated capacity of 300 cfm at 160 psi and a water pump having a capacity of 20 gpm at 600 psi. Water flow was normally restricted to 4-5 gpm to improve recovery of fines. The rig was equipped with a 12 volt DC Cool White fluorescent fixture that simulates natural sunlight for accurate sample logging. All equipment except the air compressor and Nodwell carrier was operated hydrostatically from a central diesel engine.

The rig carried twenty-two 10-foot drill rods. The holes were logged in metres using the approximate conversion factor of 3 metres to 10 feet. This resulted in the logged hole depth (Appendix C) being 1.6 percent less than true depth.

Heath and Sherwood supported the drill rig with a GoTrac GT-1000 muskeg tractor equipped with a 400-gallon water tank. Road clearing was done by Heath and Sherwood using a Caterpillar D-5 wide-pad bulldozer.

3.3 Logging and Sampling

The PN-020 samples were collected in two 20 litre buckets coupled with a plastic tube. This procedure ensures a quiet settling environment thus reducing the loss of fines encountered if only one bucket is used and allowed to overflow. Most of the clay is still lost but a research study made by ODM (Dimock, 1985) showed that sand loss is insignificant and silt loss is reduced to 40 percent compared to 72 percent with the one-bucket system. Interestingly, fine gold is lost in direct proportion to fine minerals of low specific gravity such as quartz and feldspar because the flake shape rather than high density of fine gold is the primary factor controlling the rate of settling. Further research conducted by ODM (Kurina, 1986) on various inlet/outlet attachments on the second bucket showed an additional 33 percent of the fine material in the overflow could be retained by utilizing a horizontally curved inlet tube, which induces spiral flow, and a vertical stack skimmer on the outlet. The two-bucket system with the modified flow configuration was employed on the PN-020 program.

A 10-mesh (1700 micron) screen was employed over the first bucket to separate and discard the majority of rock cuttings and thereby increase the proportion of matrix material which is used to identify and trace dispersal trains. The +10 mesh rock cuttings were constantly monitored (Appendix C) to discern any variations which could give clues to overburden stratigraphy, or for any clasts indicative of an environment suitable for gold or base metal mineralization. Approximately 20 percent of the cuttings were kept for future reference. The degree of sorting of the -10 mesh matrix was monitored to differentiate till from sand and gravel.

Till units were sampled continuously using an average sample interval of 1.5 metres. Glaciofluvial sand and gravel were sampled over longer three to five metre intervals. Glaciolacustrine clay and silt were not sampled because they are of no exploration value.

In the field, both the overburden and bedrock samples were assigned an alphanumeric code denoting the drilling project, the year, the position of the hole in the drilling sequence, and the position of the sample in the drill hole. Thus a designation such as LS-87-10-03 indicates the third sample collected from the tenth hole drilled in 1987 on PN-020 (Lac Shortt).

Following collection, the overburden samples were reduced to 7-9 kilograms with an aluminum scoop, packed in heavy plastic bags and shipped in 20-litre metal pails to the ODM processing laboratory in Rouyn, Quebec.

3.4 Sample Processing

ODM's processing procedures for overburden samples are illustrated in the flow sheet of Figure 8 and may be summarized as follows:

First, a 250 gram character sample is extracted from the bulk sample using a tube-type sampler. This character sample is dried and stored for future reference. On some programs, its minus 250 mesh fraction is separated and analyzed to allow comparison with the heavy mineral analyses.

The remainder of the bulk sample is weighed wet and is sieved at 1700 microns (10 mesh) to separate the clasts from the mineral matrix. The +1700 micron clasts are weighed wet and the -1700 micron matrix is processed on a shaking table to obtain a preconcentrate. The table concentrate and all fractions obtained from it are weighed dry. The PN-020 sample weights are listed in Appendix D.

While the samples are being tabled, special procedures developed by ODM are used to effect the separation of gold grains from other heavy minerals. These grains are picked from the deck, placed under a binocular microscope, measured to obtain an estimate of their contribution to the eventual assay of the concentrate (Table 4), and classified as delicate, irregular or abraded (Fig. 9) to determine their approximate distance of glacial transport. Photomicrographs (35 mm slides) are taken if more than 10 gold grains are present.

Magnetite, with a specific gravity of 5.2, is the heaviest of the common minerals and normally forms the top mineral band on the table above garnet and epidote/pyroxene. Common flake gold coarser than 125 microns separates completely from the magnetite and is readily counted. Fine gold, thick gold and delicate gold travel with the magnetite due to size and shape effects, and only 10 to 20 percent of such grains are readily sighted on the table. Gold particles can also be obscured by pyrite which, if it is abundant, tends to cross the table in the gold path. However, ODM has developed a special panning technique to recover

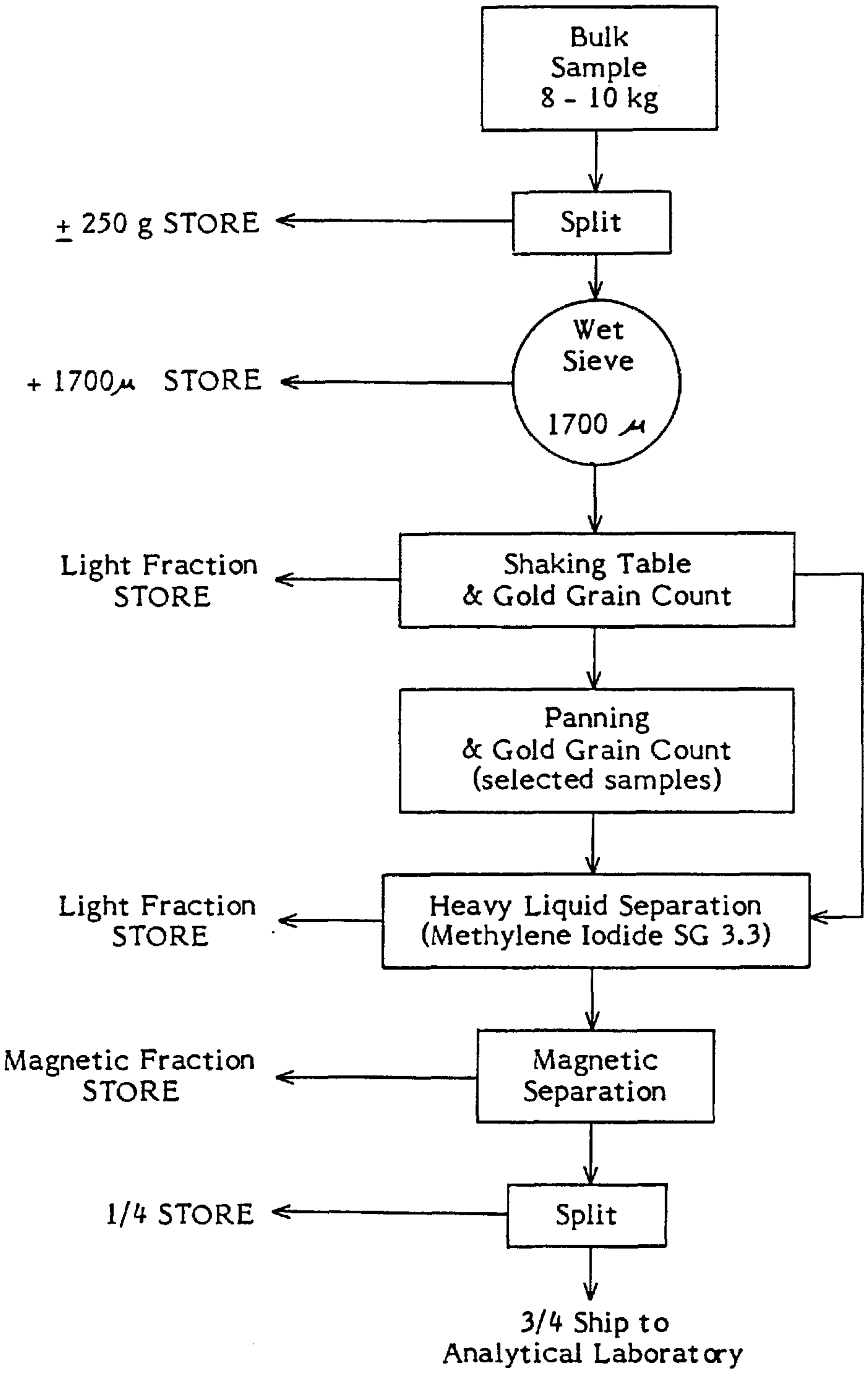

Figure 8 - Sample Processing Flow Sheet

Size Classification	Flake Diameter (microns)	ppb Au
Very Fine	50	10
"	100	100
Fine	150	330
"	200	760
Medium	300	2,400
"	400	5,400
"	500	10,000
Coarse	600	16,200
"	700	24,000
"	800	33,300
"	900	43,700
"	1,000	55,000
Very Coarse	1,000+	55,000+

Table 4 - Geochemical Contribution of One Gold Grain to a Fifteen Gram Sample

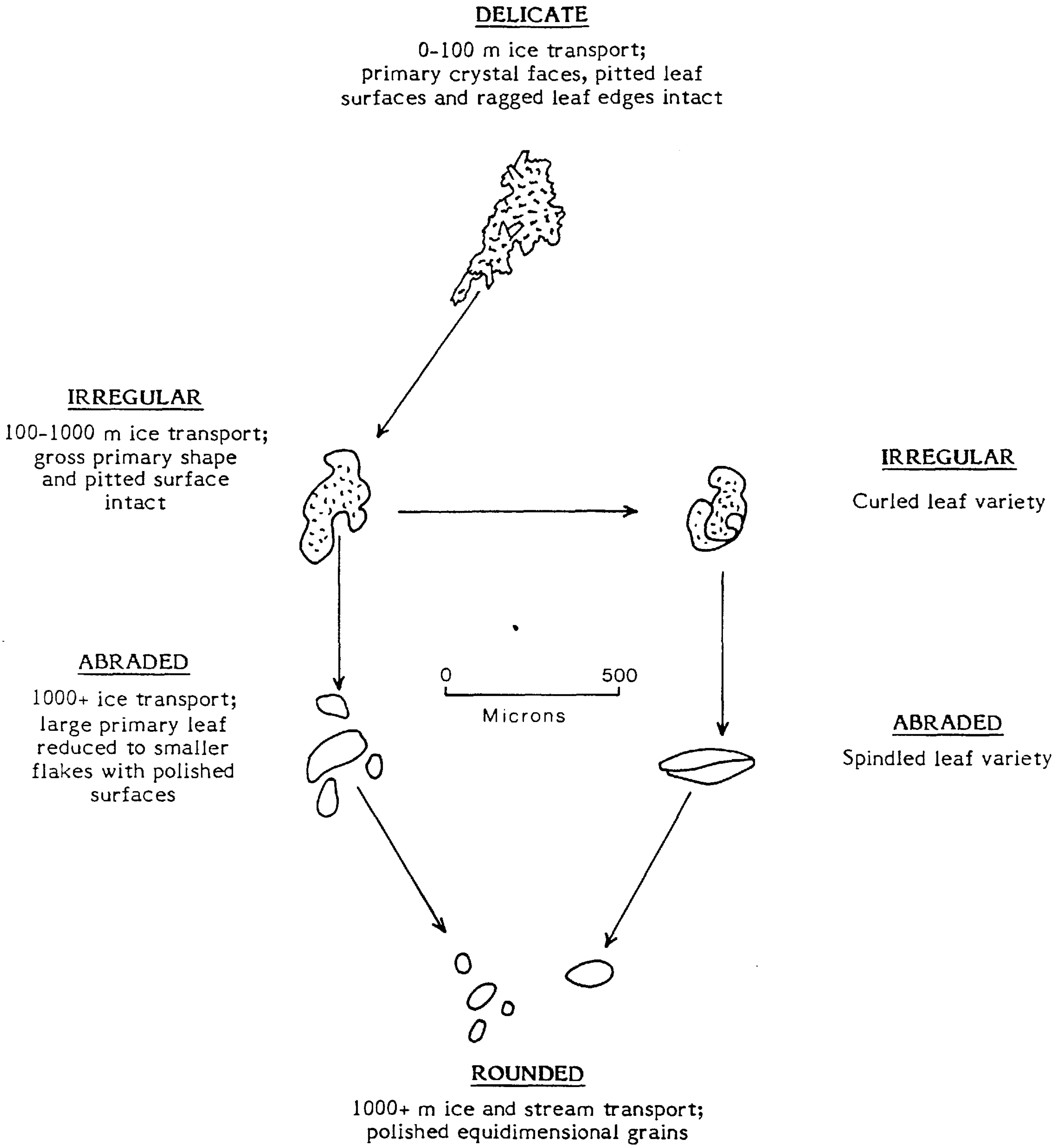

Figure 9 - Effects of Glacial Transport on Gold Particle Size and Shape

(Developed by Overburden Drilling Management Ltd.)

the hidden particles together with some copper, lead and arsenic pathfinder minerals. Samples are normally panned if two or more gold particles are sighted on the table or if any delicate gold is seen or if the table concentrate contains more than 10 percent pyrite. The PN-020 table and pan gold counts are listed in Appendix E.

After the gold grains have been examined, they are recombined with the table concentrate. This concentrate is dried and a heavy liquid separation in methylene iodide (specific gravity 3.3) is performed. The light fraction (specific gravity less than 3.3) is stored and the heavy fraction undergoes a magnetic separation to remove drill steel and magnetite. The PN-020 magnetic separates were checked to ensure that they contained not more than five percent pyrrhotite. The non-magnetic heavy minerals were separated into a 3/4 analytical subsample and a 1/4 library subsample using a riffled microsplitter.

3.5 Sample Analysis

Subsamples of the bedrock chips (Appendix F) and 3/4 splits of the non-magnetic overburden heavy mineral concentrates (Appendix G) were homogenized by pulping in a shatter-box and were then analyzed for gold by fire assay with atomic absorption finish, for Cu and Zn by atomic absorption and for As by colourimetry. In addition, major element compositions of the bedrock chip samples were determined by borate fusion extraction and DC plasma detection. All analytical work was done by the Ottawa laboratory of Bondar-Clegg and Company Limited to the specifications shown in Table 5.

Gold grains are malleable and thus are difficult to homogenize with the rest of the sample, often forming flattened "metallics" in the pulp. To alleviate this problem and obtain representative gold assays, concentrates that were known to contain one or more coarse gold grains (generally over 200 microns) capable of producing an anomalous assay (over 1000 ppb) were screened at 150 mesh after pulping. Separate gold determinations were then made on the -150 mesh pulp and the +150 mesh metallics, and a weighted average assay was calculated.

Sample Type	Sample Preparation	Element		Lower Detection Limit		Extraction	Method
All bedrock chips and H.M.C. 3/4s	Pulverize to -200 mesh	Cu	Copper	1	ppm	HC1-HNO_3, (1:3)	Atomic Absorption
		Zn	Zinc	1	ppm	HC1-HNO_3, (1:3)	Atomic Absorption
		As	Arsenic	2	ppm	HNO_3-$HC1O_4$	Colourimetric
		*Au	Gold	5	ppb	Aqua Regia	FA-AA @ 10 gm weight unless otherwise indicated
Pulp and metallics H.M.C. 3/4s	Pulverize to -200 mesh; screen 150 mesh, weigh +150 and -150	Au	-150	0.01	ppm	Aqua Regia	Fire Assay AA
		Au	+150	0.01	ppm	Aqua Regia	Fire Assay AA
		Au Average					Calculated
Selected H.M.C. 1/4s	None	Au	Gold	5	ppb	None	Neutron Activation
All bedrock chips	Pulverize to -200 mesh	SiO_2	Silica (SiO_2)	0.01	pct	Borate Fusion	DC Plasma
		TiO_2	Titanium (TiO_2)	0.01	pct	Borate Fusion	DC Plasma
		$A1_2O_3$	Alumina ($A1_2O_3$)	0.01	pct	Borate Fusion	DC Plasma
		Fe_2O_3*	Total Iron (Fe_2O_3*)	0.01	pct	Borate Fusion	DC Plasma
		MnO	Manganese (MnO)	0.01	pct	Borate Fusion	DC Plasma
		MgO	Magnesium (MgO)	0.01	pct	Borate Fusion	DC Plasma
		CaO	Calcium (CaO)	0.01	pct	Borate Fusion	DC Plasma
		Na_2O	Sodium (Na_2O)	0.01	pct	Borate Fusion	DC Plasma
		K_2O	Potassium (K_2O)	0.01	pct	Borate Fusion	DC Plasma
		P_2O_5	Phosphorous (P_2O_5)	0.01	pct	Borate Fusion	DC Plasma
		LOI	Loss on Ignition	0.01	pct		Gravimetric
		Total	Whole Rock Total	0.01	pct		

*except pulp and metallics samples

Note: All weight measurements are precise to 0.01 grams

Table 5 - Bondar-Clegg Analytical Specifications

Following receipt of the heavy mineral analytical results a number of unexplained gold anomalies were noted. To check the reproducability and significance of these anomalies, the 1/4 heavy mineral concentrates of samples which produced the anomalies were examined for visible gold by panning and submitted for non-destructive INA gold analysis.

4.0 BEDROCK GEOLOGY

4.1 Regional Geology

The PN-020 property is in the northeastern section of the Archean Abitibi Greenstone Belt which comprises repeated komatiitic through tholeiitic to calc-alkalic cycles of lavas and volcaniclastics with coeval clastic and exhalative sedimentary rocks, porphyries, layered basic-ultrabasic sills, and plutons of potassium poor dioritic to tonalitic composition. These rocks have been complexly deformed, metamorphosed to the subgreenschist to greenschist facies, and intruded by late kinematic granodiorite and monzonite plutons (Gariepy et al., 1984).

The stratigraphic sequence in the Lac Shortt area (Table 1) is similar to the sequence defined in the Chibougamau - Chapais area. The stratigraphic correlations conducted in the Chapais - Chibougamau area terminate just east of PN-020 and are shown on the Lithostratigraphic Map of the Abitibi Subprovince (MERQ-OGS, 1983). A broad belt of mafic volcanics south of the Lapparent Pluton (Fig. 2) that has been assigned to the Obatogamau Formation which probably extends into the southeast corner of the PN-020 property. The Chute à l'Esturgeon complex west of the property is very similar to the Bourbeau Sill of the Chapais - Chibougamau area while gabbro sills on PN-020 are similar to the Ventures Sill in the Chapais mining camp (Cormier et al., 1984).

Four main foliations have been recognized in the area (Cormier et al., 1984). The main foliation is related to the major folds which trend northeast and have subvertical axial surfaces and steeply plunging axes. The folding is reflected in the aeromagnetic contours coincident with the Esturgeon Syncline (Fig. 7). The "S" and

"Z" shapes in the gabbro sills north of the complex (Fig. 6) were produced by a second period of minor folding (Cormier et al., 1984).

The only major fault system is the regionally extensive Opawica Lake Fault, considered to be the southwest extension of the Campbell - Gwillim - Waconichi Lake Fault to which much of the gold and copper-gold mineralization in the Chapais and Chibougamau areas is spatially associated (Lamothe, 1981; Sharma and Lacoste, 1981). The Lac Shortt Fault, hosting the Lac Shortt gold deposit, is a structure parallel to and 3 km north of the Opawica Lake Fault and is known to extend 1.6 km northeast from the mine. Minor late-stage tensional faulting is present either as a north-northeast or a north-northwest trending set.

The principal mineral deposits in the region are (Fig. 2):

1. The Lac Shortt gold mine which started production in September, 1984 with preproduction reserves of approximately 2 million tonnes of 6.0 g/t gold (cut) at a cut-off grade of 3.0 g/t (Morasse, 1986). It is a shear-controlled deposit hosted in alkalic mafic tuff and associated with a syenite intrusion. The gold is very fine (average 6 microns) and occurs as disseminated free grains in the gangue and as micro-inclusions in pyrite (Cormier et al., 1984).

2. The Bachelor Lake gold mine which started production in July, 1982 with preproduction reserves of approximately 900,000 tonnes of ore grading 6.22 g/t including 10 percent dilution. It is an epigenetic, hydrothermal, silicified, shear-controlled deposit hosted by mafic volcanics and comagmatic gabbro sills (Buro, 1984).

3. The Opemiska copper-gold mines of Minnova in the Chapais mining camp that are hosted in sheared gabbro sills.

4. The Gand I gold occurrence (Fig. 2) contained within a series of pyritic quartz veins cutting gabbro and mafic volcanics and having reserves of 104,300 tonnes at 4.97 g/tonne (Gagnon, 1984).

4.2 Bedrock Geology of the Reverse Circulation Drill Holes

4.2.1 Stratigraphy, Structure and Alteration

Bedrock lithologies intersected on PN-020 are listed in Table 6 and their distribution is illustrated on Plan 1.

The most prominent structural feature on the property is the continuation of the Esturgeon Syncline which has closure to the northeast and underlies northwestern PN-020 (Plan 1). All of the strata in the syncline appear to belong to Unit IV of Cormier et al (1984). The thickest (average 400 m) and most continuous of the folded horizons is a pyroclastic horizon; however this horizon is much less extensive than Cormier believed. It appears to be overlain successively by a 200 m thick intermediate volcanic unit, a 150 m thick mafic volcanic unit and a tightly folded gabbro sill. On both the south and north limbs of the syncline the pyroclastics are underlain by thick (at least 1 km) sequences of intermediate volcanics (mainly andesite); the intermediate volcanics on the south limb are in turn underlain by more than 1 km of mafic volcanics (basalt; Unit III). The intermediate and mafic volcanics are intruded by several folded gabbro sills, the largest of which follows the stratigraphic top (south side) of the intermediate volcanics on the north limb of the syncline. Lamprophyre was intersected in one hole immediately north of Ruisseau Dalime and probably forms a thin dike that could be genetically related to the syenite pluton at the Lac Shortt Mine. A magnetically prominent diabase dyke parallel to and north of Ruisseau Dalime (Fig. 7) was intersected in two drill holes.

All of the intersected lithologies except diabase are of Archean age (approximately 2700-2750 million years); the diabase is of a type that elsewhere has been dated as Early Proterozoic (2485 million years; Fahrig and Wanless, 1963). The gabbro, pyroclastic and volcanic rocks are all moderately foliated to locally schistose with most primary structural and textural features left intact. The principal mafic mineral in the mafic volcanic samples is chlorite; primary volcanic pyroxene is rare, metamorphic hornblende is absent and metamorphic biotite is sparse. This mineral assemblage is diagnostic of middle greenschist facies regional

	PROTEROZOIC
6	Diabase
	ARCHEAN
5	Lamprophyre
4	Pyroclastics
	4a - intermediate
	4b - felsic
3	Intermediate volcanics
2	Gabbro
1	Mafic volcanics

Table 6 - Table of Bedrock Lithologies Intersected in the PN-020 Reverse Circulation Drilling Program

metamorphism. The lamprophyre is unfoliated but much of its biotite has been chloritized suggesting emplacement occurred during the waning stages of metamorphism. The diabase is unfoliated and unaltered and therefore post-dates metamorphism.

Shearing is relatively common. It often appears to be localized but is persistent in the area of Holes 51 to 56 between Lines 69E and 75E. This shear zone appears to be confined to the southern intermediate volcanic horizon but to cut across this horizon in a northwesterly direction. It does not offset the nearby diabase dike and therefore appears to be relatively old. The shear zone may account for the major bend that is present in Ruisseau Dalime at this point.

A 20 to 30 metre deep east-northeast trending bedrock valley (Plan 2) occurs on the south-central part of the property with the deepest segment under the offset in Ruisseau Dalime. This valley is along strike from and probably represents the northeastern extension of the Lac Shortt Fault. However the fault zone appears to be much narrower here as there is no indication of intense shearing or deformation in any of the intersections delineating the valley.

A northwest trending fault crosses the centre of the property where it is recognized by the disruption of magnetic contours and an apparent offset in the diabase dike. Faults of this type result from late-stage tensional fracturing and are generally sterile.

Earthy hematite is present in 10 bedrock intersections at concentrations of up to 3 percent. It imparts a red stain on the other minerals in the rock. This stain is similar to but generally less pronounced than that at the Lac Shortt Mine. Three of the ten hematized intersections are along the main cross-cutting shear zone and the others are scattered throughout the drill area.

The distinctive green mica associated with mineralization at the Lac Shortt Mine was not intersected in any of the drill holes. Pervasive silicification was noted only in Holes 03, 32 and 39. The Hole 32 intersection also contains one percent earthy red hematite.

Disseminated Fe/Mg carbonate is the most frequently encountered alteration product and is primarily restricted to the pyroclastic and intermediate volcanic units. It is not present in the cross-cutting shear zone in the east. Concentrations are generally in the one to two percent range with a maximum of twenty percent in Hole 42.

Calcite veining occurs primarily, although sporadically, in the southeastern half of the property and does not show any lithologic affinity. The average concentration is generally less than five percent with a maximum of thirty percent in Hole 78. The best continuity is in Holes 63 through 70.

4.2.2. Lithological Descriptions

Brief binocular lithologic descriptions of the bedrock samples were prepared (Appendix H) to confirm and amplify field descriptions with the objective of producing an accurate stratigraphic map. Particular attention was paid to primary features, and the rocks were assigned genetic names such as mafic volcanics rather than metamorphic names such as chlorite schist.

Reasonably accurate measurements of primary mineralogy, structure, texture, degree of metamorphism and alteration can be made from chip samples with a binocular microscope, but inherent limitations are present. These limitations include:

1. Inability to differentiate gray plagioclase from pale gray-brown and gray-green pyroxene where the grain size is less than 0.1 mm as in many volcanic rocks. This often impedes differentiation of intermediate volcanics from mafic volcanics in greenstone belts as many of these belts have undergone only subgreenschist facies metamorphism such that primary pyroxene is preserved. In greenschist and amphibolite facies belts where primary pyroxene has been largely converted to green chlorite and black amphibole, respectively, intermediate and mafic units can be reliably differentiated but primary textures are often obliterated.

2. Inability to determine bedding thickness or fragment size where the dimensions of the beds or fragments are greater than the 1 cm diameter of the coarsest drill cuttings.

3. Inability to recognize tops in bedded sections.

4. Difficulty in differentiating certain primary structures such as pillow selvages from secondary veins and shears.

5. Necessity of inferring gross mineralogy of aphanitic samples from rock colour and hardness.

A summary description of each lithologic unit is presented in the following sections.

4.2.2.1 Mafic Volcanics (Map Unit 1)

Mafic volcanics are present in 25 holes. This rock is generally dark green and has a moderate to well developed foliation. The majority of the samples have a grain size of 0.2-0.3 mm and an equigranular, interlocking texture. A poorly developed porphyritic texture is locally present with sparse plagioclase phenocrysts up to 0.8 mm. These textural features are suggestive of thick, massive, slowly cooled flows. The remaining samples display chill structures that are generally accompanied by a lightening of the colour from the usual dark green to an andesite-like pale green or gray-green. The grain size in most of these is gradational from aphanitic to 0.2 mm while in some the intermediate grain sizes are absent. The former pattern is suggestive of pillowed flows and the latter is suggestive of hyaloclastites (flow-top breccias).

The mafic volcanic samples consist of 40 to 70 percent dark green chlorite with the only other major mineral being white to gray-white plagioclase. Accessory minerals include two percent quartz (Holes 10 and 60), five percent magnetite (Hole 90) and five percent leucoxene (Hole 96). Secondary accessory minerals indicative of hydrothermal alteration include 15 percent epidote in Hole 60 and 0.5 percent and 10 percent sericite in Holes 10 and 85, respectively.

Disseminated calcite is present in thirteen samples with an average concentration of 2 percent and a maximum of 20 percent in Hole 86. Calcite veining is present in nine samples with a maximum concentration of 50 percent (Hole 86). Disseminated pyrite is the dominant sulphide occurring in 15 samples with a maximum concentration of 5 percent. Pyrrhotite (5 percent) and trace amounts of sphalerite and chalcopyrite are present only in Hole 12.

The SiO_2 content is within the range for typical mafic volcanics averaging 45 percent and ranging from 36.2 to 53.6 percent. Sample classification using the Jensen Cation Plot (Fig. 10) identifies sixteen of the mafic volcanics as tholeiitic basalts, six as calc-alkalic basalts, two as tholeiitic andesite and one as calc-alkalic andesite.

4.2.2.2 Gabbro (Map Unit 2)

Gabbro was intersected in 21 holes. It varies in colour from a solid dark green to mottled green-white and ranges from massive to well foliated. Massive undeformed intersections have retained their primary diabasic texture and have a grain size range of 0.5 to 2 mm. Shear deformation producing a moderate to well developed foliation has often obscured most of the original texture and reduced the grain size to 0.2-0.5 mm.

The gabbro consists of 5 to 60 percent white to locally gray-white plagioclase, 25 to 60 percent dark green chlorite, up to 40 percent dark green primary pyroxene and up to 40 percent epidote. The most common accessory mineral is finely disseminated leucoxene with concentrations up to 2 percent. Additional accessory minerals include up to ten percent finely disseminated magnetite and up to one percent colourless quartz. The predominant sulphide is pyrite which never exceeds a 3 percent concentration level. Trace amounts of finely disseminated chalcopyrite occur in Holes 48 and 84.

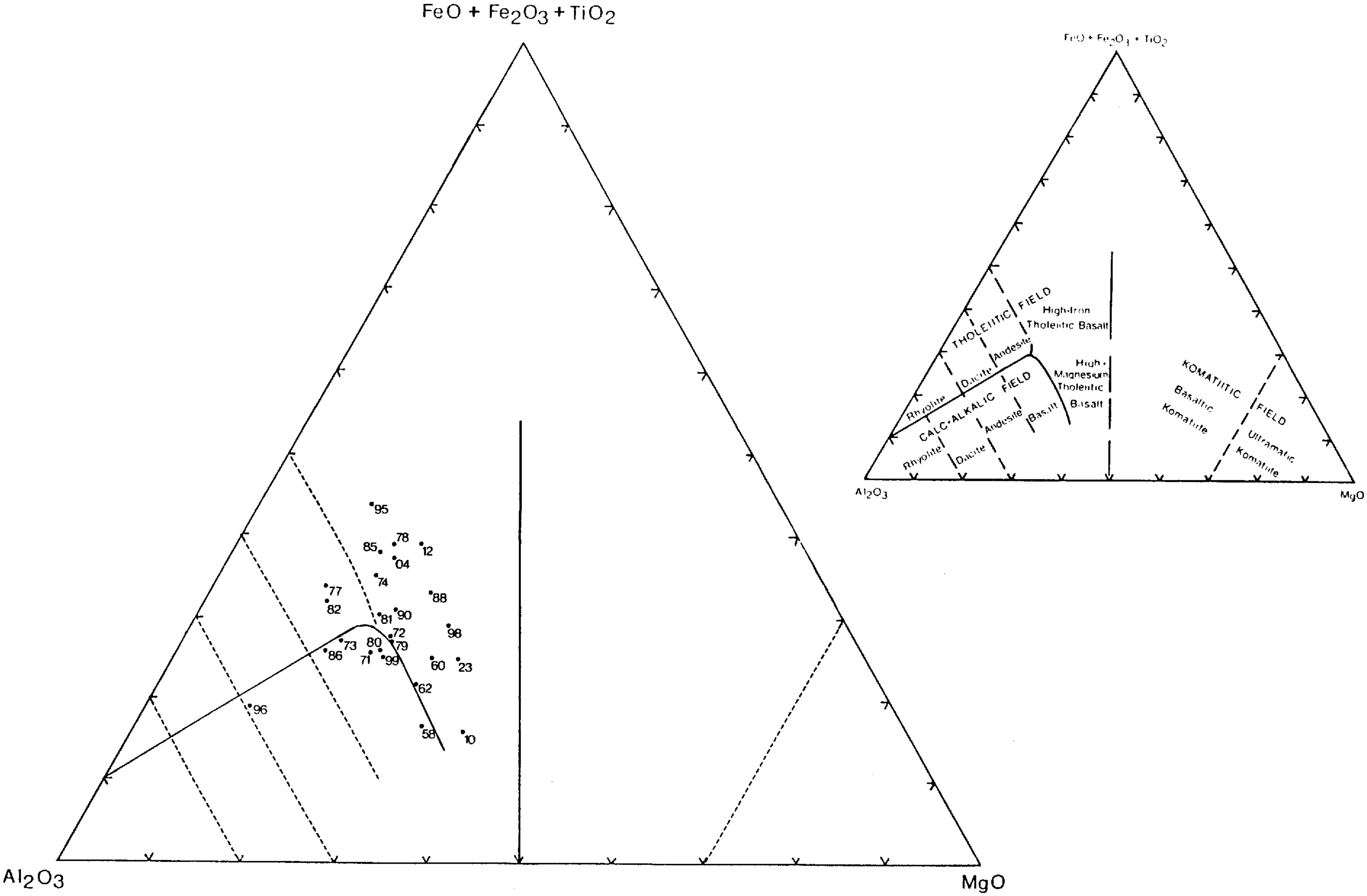

Figure 10 - Jensen Cation Plot of Mafic Volcanics

Disseminated and/or vein calcite with a total maximum concentration of 15 percent occurs in 13 samples. Disseminated Fe/Mg carbonate with a maximum concentation of one percent occurs in thirteen samples.

4.2.2.3 Intermediate Volcanics (Map Unit 3)

Intermediate volcanics are the most frequently intersected rock type on PN-020 and occur exclusively in 39 drill holes and in the upper 0.75 m of Hole 27. In undeformed, unaltered samples the rock is typically medium green to gray-green, moderately foliated to schistose, and has a grain size of 0.05 to 0.1 mm, locally up to 0.15 mm. Half of the intermediate volcanics have an equigranular interlocking texture and the other half are porphyritic with phenocrysts up to 1.5 mm constituting 10 to 70 percent of the rock. Intense deformation has obliterated the primary volcanic texture and intense hydrothermal alteration has obscured the grain boundaries in both Holes 02 and 03.

The intermediate volcanics consist of 60 to 80 percent gray-white plagioclase and a maximum of 25 percent gray-green chlorite. Relict primary pyroxene is present only in Hole 15. White plagioclase accounts for most of the phenocrysts but colourless quartz phenocrysts are locally present with a maximum concentration of 15 percent (Hole 13).

The most common accessory mineral and the only sulphide is finely disseminated pyrite with an average concentration of 0.5 percent and a maximum of 5 percent. Secondary accessory minerals indicative of hydrothermal alteration include up to 5 percent sericite (Hole 55), 2 percent earthy red hematite and 4 percent finely disseminated specular hematite (Hole 38). Pervasive silicification has affected 5, 2 and 30 percent of the rock in Holes 09, 32 and 39, respectively.

Disseminated and/or vein calcite occurs in 20 of the intermediate volcanic intersections with concentrations averaging 5 percent and never exceeding 25 percent. Veins of Fe/Mg carbonate occur in Holes 14, 15 and 35 with a maximum concentration of one percent. Disseminated Fe/Mg carbonate occurs in 26 of the intermediate volcanic intersections with a maximum concentration of 10 percent in Hole 03.

The SiO_2 content ranges from 41.1 to 68.6 percent and averages 58 percent which is normal for intermediate volcanics. Where the SiO_2 content is less than 53 percent, it has been lowered by the addition of substantial amounts of carbonate. A silica content greater than 63 percent is accompanied by pervasive silicification or quartz veining. Classification using the Jensen Cation Plot (Fig. 11) identifies 32 percent of the intermediate volcanics as calc-alkalic dacite, 2 percent as tholeiitic dacite, 52 percent as calc-alkalic andesite, 7 percent as calc-alkalic basalt, 5 percent as tholeiitic basalt, and 2 percent as komatiitic basalt.

4.2.2.4 Intermediate and Felsic Pyroclastics (Map Unit 4)

Intermediate and felsic pyroclastics were intersected, respectively, in eight and three holes. The intermediate pyroclastics (Map Unit 4a) are gray to gray-green and bedded, with a fine to coarse ash matrix (aphanitic to 0.5 mm) that comprises 25 to 75 percent of the rock. The predominant matrix component is 50 to 90 percent aphanitic gray-green andesite lithics. Other matrix fragments consist of 10 to 45 percent plagioclase crystals, 10 to 15 percent chloritized amphibole crystals and locally, 3 to 4 percent quartz crystals. The coarsest fragments are exclusively andesitic in composition, varying from predominantly buff to gray-green with a minimum size of 2.0 mm. The majority of these fragments are aphanitic but locally they contain plagioclase phenocrysts with or without chloritized amphibole phenocrysts.

The felsic pyroclastics (Map Unit 4b) are quartz-sericite schists consisting of finely laminated beds of light green (chloritic) to yellow-green (sericitic), subaphanitic to 0.1 mm, siliceous ash that are intercalated with slightly thicker beds of cryptocrystalline chert generally at a ratio of 4:1. One to two percent colourless quartz "eyes" up to 0.25 mm occur locally.

With the exception of Holes 26 and 29 all of the pyroclastic intersections contain between 0.5 and 20 percent disseminated Fe/Mg carbonate. Disseminated and/or vein calcite occurs only in Hole 26 (20 percent) and Hole 42 (5 percent).

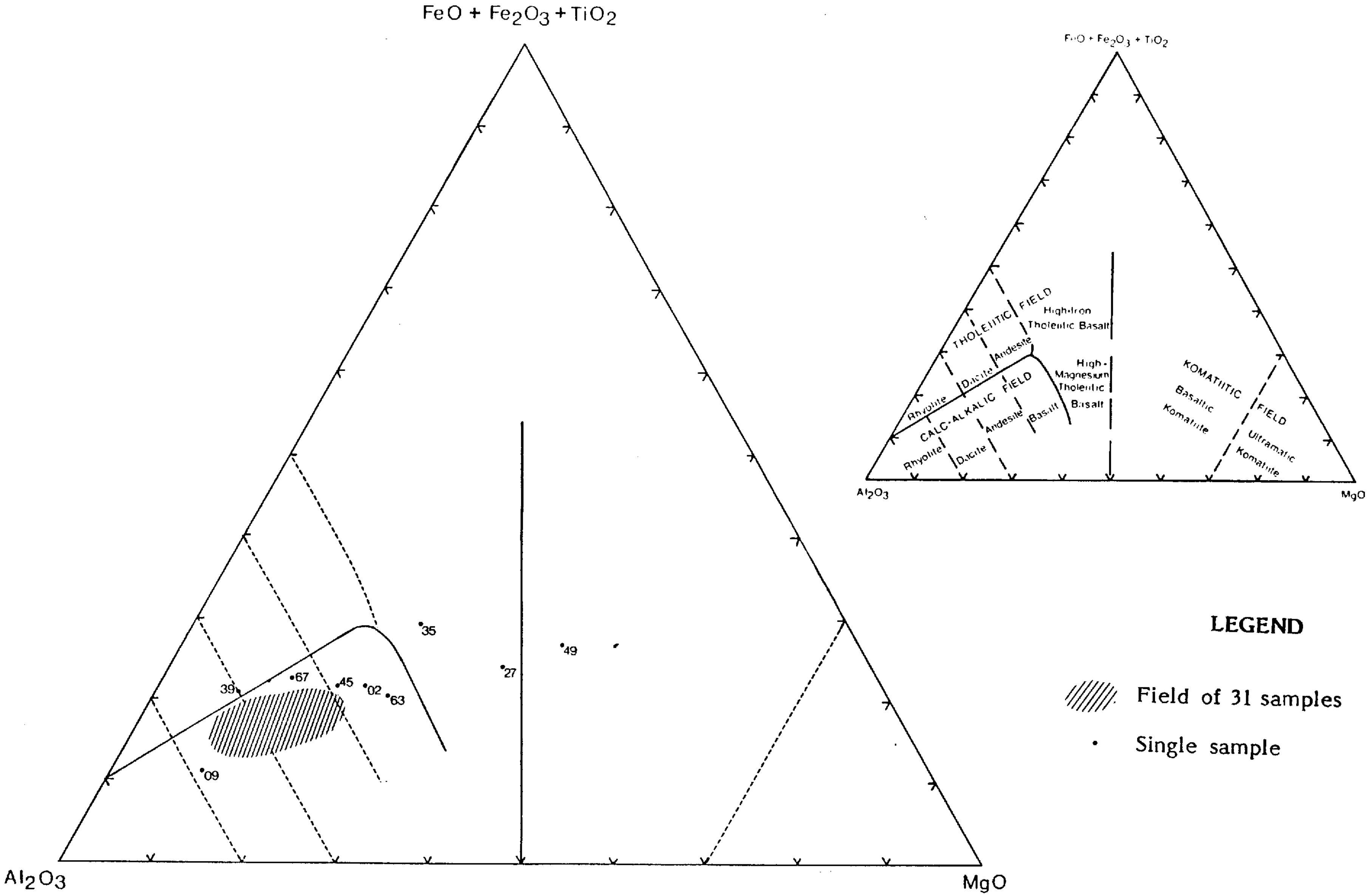

Figure 11 - Jensen Cation Plot of Intermediate Volcanics

Pyrite occurs in four of the seven intermediate pyroclastic samples as fine-grained disseminations along bedding planes and in two of the three felsic pyroclastic samples as colloform aggregates within the chert beds.

The SiO_2 content for the intermediate pyroclastics varies from 55 to 63 percent while that for the felsic pyroclastics varies from 51 to 60 percent. Classification using the Jensen Cation Plot (Fig. 12) identifies samples from Holes 28, 29 and 50 as calc alkalic basalt, Holes 01, 21, 22, 25 and 54 as calc-alkalic andesite, Hole 20 as calc-alkalic dacite, Hole 26 as tholeiitic dacite and Hole 42 as calc-alkalic rhyolite. The diverse compositions reflect the substantial hydrothermal alteration present in most samples as well as the fragmental nature of the rock.

4.2.2.5 Lamprophyre (Map Unit 5)

Lamprophyre was intersected only in the lower 0.75 m of Hole 27. The lamprophyre is red-gray and generally massive with a well developed porphyritic texture. Phenocrysts account for 50 percent of the sample of which 80 percent are euhedral biotite and 20 percent are anhedral olivine. The biotite phenocrysts are occasionally chloritized around the margins and vary in size from 0.15 to 0.75 mm. These phenocrysts show a subparallel alignment that is probably a flow foliation. The olivine phenocrysts have been altered to a green serpentine-carbonate clay that is locally rimmed by magnetite dust and vary in size from 0.5 to 1.5 mm. The groundmass is a soft, aphanitic to 0.05 mm, undifferentiated mixture of carbonate and saussurite formed from the alteration of feldspar. Hydrothermal minerals consist of 3 percent disseminated Fe/Mg carbonate and trace amounts of disseminated cubic pyrite.

4.2.2.6 Diabase (Map Unit 6)

Diabase was intersected in Holes 44 and 52. It is dark green to black and massive with a well developed diabasic texture and a grain size range of 1 to 4 mm. It consists of 55 percent gray-white, non-aligned euhedral plagioclase laths, 40 percent dark brown interstitial pyroxene, 10 percent disseminated magnetite and up to 0.5 percent finely disseminated pyrite.

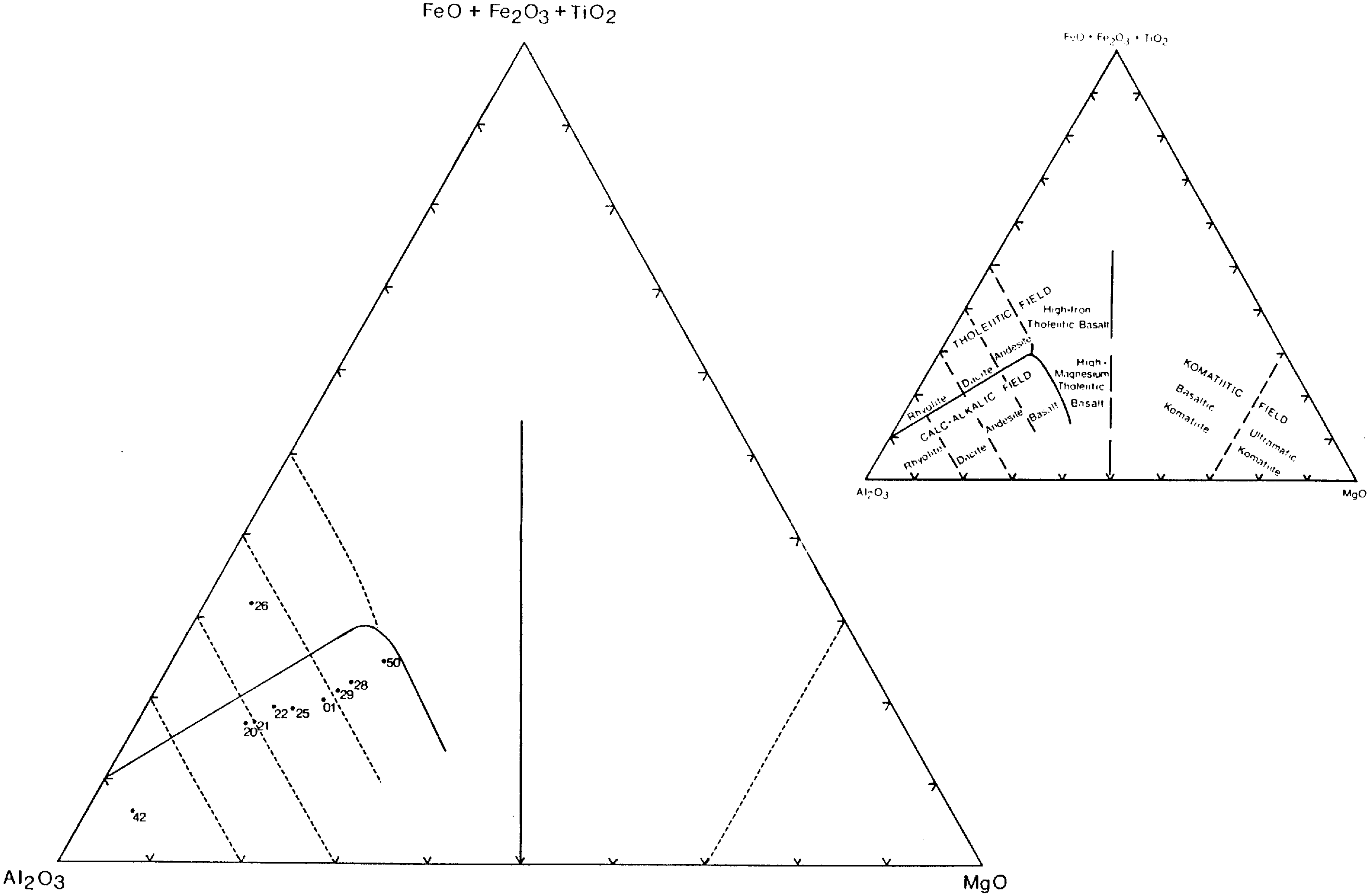

Figure 12 - Jensen Cation Plot of Intermediate and Felsic Pyroclastics

Sample No.	FIRE ASSAY-AA FINISH Au (ppb)	 Wt. Analyzed (g)	PULP AND METALLICS-FIRE ASSAY Au Ave. (ppb)	 Wt. Analyzed (g)
LS-87-26-09	25	10	L 34	37
32-11	15	10	L 34	73
53-04	20	10	274	250
56-03	25	10	68	219
67-04	1,885	10	L 34	243
95-03	80	10	L 34	217

NOTE: The pulp reject of 67-04 from the initial subsample assayed less than 5 ppb (30g test wt.) and additional subsamples of 67-04 and 95-03 returned values of less than 5 ppb and less than 0.05 ppm, respectively.

Table 7 - Summary of Elevated Bedrock Gold Assays

4.3 Bedrock Geochemistry

The only metal that reaches anomalous concentrations on the PN-020 property is gold. Copper and zinc levels are uniformly and uncharacteristically low considering that 50 percent of the property is underlain by calc-alkalic volcanics. Arsenic levels are also very low.

Six of the ninety-nine bedrock samples returned gold values over 10 ppb, with a maximum value of 1,885 ppb in Hole 67 (Table 8). New subsamples of these six were analyzed in an attempt to duplicate the initial results. Pulp and metallics were run to alleviate a suspected problem with coarse gold. All except two of the new subsamples returned values of less than the lower detection limit of 0.001 ounces per ton (34 ppb). In addition, the initial pulp reject from Hole 67 and second subsamples from Holes 67 and 95 were analyzed and all returned values of less than 5 ppb. The analyzed fraction in the pulp and metallics assays are much larger than those in the initial assays, and thus are more reliable. The low pulp and metallics assay for Hole 67 suggests that all of the gold in the sample was contained in one very coarse grain that by chance emerged in the initial subsample. As a further check all of the remaining bedrock chips from Hole 67 have been submitted for pulp and metallics assay (results pending).

The two duplicated bedrock gold anomalies are in Holes 53 and 56 along the inferred cross-cutting shear zone (Plan 1). Both anomalies are relatively weak (average 50 ppb). Associated alteration and enrichment consists of two percent disseminated Fe/Mg carbonate and one percent earthy red hematite in Hole 53 and one percent disseminated cubic pyrite in Hole 56.

5.0 OVERBURDEN GEOLOGY

5.1 Quaternary History and Stratigraphy of the Abitibi Region

The Quaternary geology of the Abitibi region, as determined by ODM from thousands of drill holes and scanty literature, is summarized in Figure 13 and Table 8. Tills from three major glaciations and sediments from two interglacial periods are present.

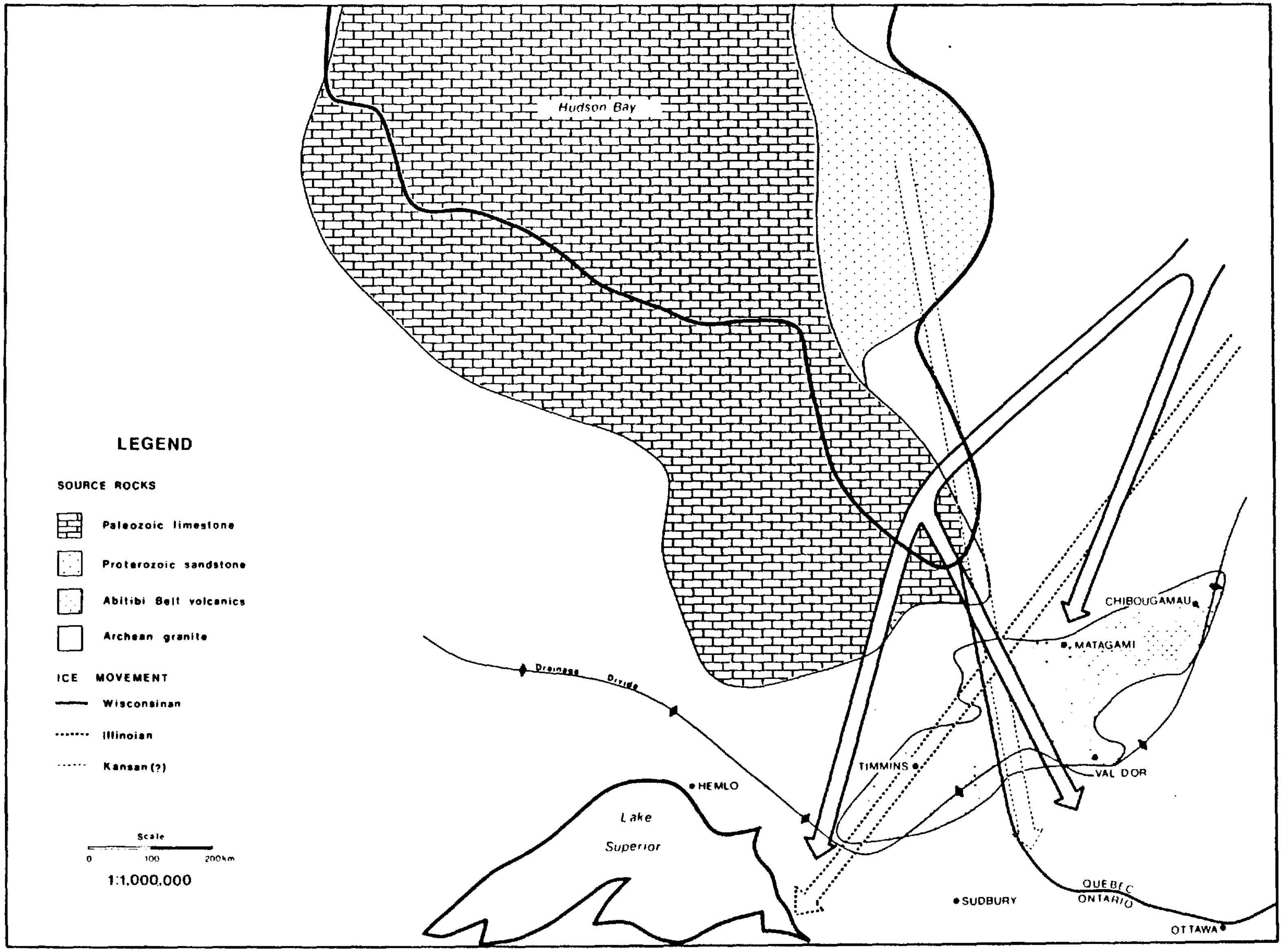

Figure 13 - Glacial History of the Abitibi Region

Abitibi Quaternary Stratigraphy

0 Years B.P.	**HOLOCENE**	
	7	Holocene sediments 7b - forest-peat member 7a - fluvial member
10,000 Years B.P.	**PLEISTOCENE** **LATE WISCONSINAN**	
	6	Cochrane Unit 6c - regressive sediments 6b - till 6a - transgressive sediments
	5	Ojibway II Sediments 5d - littoral and aeolian member 5c - glaciolacustrine clay member 5b - glaciolacustrine sand member 5a - glaciofluvial member
	4	Chibougamau/Matheson Till
100,000 Years B.P.	**EARLY WISCONSINAN AND SANGAMON**	
	3	Missinaibi Sediments 3c - Ojibway I member 3b - forest-peat member 3a - fluvial member
	ILLINOIAN	
	2	Lower Till and Sediments
1,000,000 Years B.P.	**YARMOUTH AND KANSAN**	
	1	Older Till and Sediments

Table 8 - Table of Quaternary Formations for the Abitibi Region

The oldest till was deposited by ice moving southward from Hudson Bay -- possibly 1 million years ago in Kansan time -- and is enriched in clasts of Proterozoic sandstone and Paleozoic limestone. This till is so rarely preserved that it is of no significance in exploration. The next till (Lower Till) was deposited by ice moving southwestward from New Quebec in Illinoian time more than 125,000 years ago. It is preserved in many buried valleys and contains the dispersal trains from any mineralization in these valleys. The youngest till was deposited 10,000 years ago by Late Wisconsinan ice of the Laurentide sheet that originated in New Quebec but had split into a southeast-moving Hudson mass west of Longitude 78°W (Val d'Or) and a southwest-moving New Quebec mass east of this longitude. The esker-like Harricana Moraine was deposited at the contact between the two ice masses, the till to the west is known as Matheson Till; that to the east has not been formally named but we call it Chibougamau Till.

In Yarmouth and Sangamon time immediately following the Kansan and Illinoian glaciations, respectively, interglacial sediments including soil profiles and northward-transported fluvial gravels were deposited on the Kansan and Illinoian tills. The gravels consist mostly of recycled till debris, are oxidized, and often contain wood fragments.

In Early Wisconsinan time 100,000 years ago and in Late Wisconsinan time 10,000 years ago, the region was flooded by glacial Lakes Ojibway I and II respectively, and varved clay, silt and fine sand sheets up to 30 metres thick were deposited. The Ojibway I sediments conformably overlie the Sangamon interglacial sediments, and the complete Sangamon/Early Wisconsinan package is known as the Missinaibi Formation (Skinner, 1973). The Ojibway I sediments coarsen upward because they were deposited from a transgressive ice sheet. They were overridden by the 2 km thick Wisconsinan ice sheet and are indurated, dry and platy whereas the Ojibway II sediments were deposited from regressive ice, fine upward and are soft. Glaciofluvial esker/delta sands and gravels were deposited by the meltwater rivers that fed both lakes.

The final glacial event in the Abitibi was a minor southeastward re-advance of a thin lobe of ice from the Hudson mass into the north part of Lake Ojibway II, depositing Cochrane Till which consists mainly of clay recycled from the soft lake bed. When the Cochrane ice melted, Lake Ojibway II drained catastrophically, exposing the Late Wisconsinan esker ridges which were subject to considerable erosion by wave and wind action until they became stabilized by vegetation.

5.2 Quaternary Geology of the PN-020 Property

Most of the pre-Wisconsinan the Early Wisconsinan deposits appear to have been removed from the PN-020 property during the Wisconsinan glaciation; Lower Till was not intersected and the Missinaibi Formation was intersected in only one drill hole. The erosional process was probably aided by an elevated topography in Early Wisconsinan time. Lake Ojibway I would have been very shallow here as the area is very close to the Hudson Bay/St. Lawrence River drainage divide and the land surface had not been recently depressed by a major ice load to form a deep basin as it was in Late Wisconsinan time when Lake Ojibway II formed. The Ojibway I glaciolacustrine sediments normally form the thickest part of the Missinaibi Formation; if these sediments were not deposited then the basal Sangamon portion of the formation and the underlying Lower Till would have been very susceptible to erosion by the Wisconsinan ice.

The property is 170 km east of the Harricana Moraine. During Late Wisconsinan time it was covered first by the New Quebec lobe of the Laurentide ice sheet and then by the southern edge of Lake Ojibway II, resulting in the deposition of Chibougamau Till and a thin overlying layer of Ojibway II glaciolacustrine sediments respectively. Developed concurrently with the till and visible at surface is a series of De Geer sand and gravel moraines. De Geer moraines are thought to be annual recessional ridges that develop in shallow water along a receding ice front-marking the line where the ice breaks off and starts to float away (Fairbridge, 1968). The De Geer moraines on PN-020 trend 120°, are 200 metres to 1 km apart and generally 3-5 metres high, reaching a maximum height of 15-20 metres on the south-central edge of the property where one is responsible for the sharp northwestward diversion of Ruisseau Dalime. Several drumlins are present north of this moraine. These drumlins trend 210-215 degress, or precisely perpendicular to the De Geer moraines (Fig. 5).

Based on regionally spaced data points, Vincent and Hardy (1979) have estimated the maximum lake level to occur at a present elevation of 415 to 418 metres above sea level. As the average surface elevation across the property is approximately 320 metres, this implies an average water depth of 90 to 100 metres. However, judging by the relative thinness of the Ojibway II sediments and the presence of shallow-water deposited De Geer moraines, a more realistic depth for Lake Ojibway II would be 20 to 25 metres.

Cochrane Till is not present on the property as the Late Wisconsinan ice re-advance terminated in the Joutel - Matagami area to the northwest.

Some units were mislogged in the field. Inconsistencies that became apparent while the sections were being drafted were investigated by binocular microscope examinations of the character sample splits. Wherever this led to a revision of the field classification, a note has been added to the field log (Appendix C).

Quaternary units intersected on the PN-020 property are described in detail below and are shown in section in Appendix I. The lines of section are shown on Plan 2.

5.2.1 Missinaibi Formation (Abitibi Unit 3)

The only intersection of the Missinaibi Formation on PN-020 is in Hole 80 adjacent to Ruisseau Dalime in the centre of the property. It is 9.3 metres thick and lies on bedrock in the buried valley of the Lac Shortt Fault (Plan 2). Working upwards the section consists of 3.2 metres of sand one metre of gravel, 4.8 metres of sand with pebble laminations, and 0.3 metres of pure dark brown, organic-rich clay. Both sand sections are fine grained and an unoxidized gray colour but the presence of organics in the overlying clay suggests that the sand is of interglacial origin. The gravel section has a medium grained sand matrix and half Abitibi Belt volcanic and half distal granitoid pebble and cobble clasts.

5.2.2 Chibougamau Till (Abitibi Unit 4)

During the wasting of the Late Wisconsinan ice sheet, a semi-continuous layer of Chibougamau Till was deposited on PN-020. It lies directly on bedrock in 66 of the 99 drill holes and overlies the Missinaibi Formation in Hole 80. Where the till was not intersected it has usually been supplanted by sediments associated, in most cases, with the De Geer moraines (Plan 2). The absence of till is most apparent on Section J-J', the northeasternmost traverse, as well as Sections D-D' and E-E' across the centre of the property. The till averages approximately 5 metres thick and reaches a maximum of 22.5 metres in Hole 81. The thickest till intersections occur in bedrock depressions which entrapped debris as the ice melted.

The till matrix consists largely of gray to gray-beige to greenish fine sand and silty rock flour. Recycled Early Wisconsinan glaciolacustrine clay from Lake Ojibway I is a major matrix constituent in only a few till intersections. This reflects the shallow depth of Lake Ojibway I in the area. Clasts in the till range from pebble to cobble size with occasional boulders. The clast lithologies are generally 70 percent local Abitibi Belt volcanics and sediments and 30 percent granitoid material, with the Abitibi component increasing to 80 to 85 percent in some sections, especially near the bedrock surface. A major source of granitoid material -- the Lapparent Pluton -- is present just 5 km up-ice (Fig. 2), thus the high volcanic and sedimentary clast component is indicative of intense scouring of local bedrock. This coupled with the fact that the till contacts bedrock in all but one of the holes in which it is present, indicates that the till is an excellent medium for geochemical prospecting.

5.2.3 Ojibway II Sediments (Abitibi Unit 5)

The following sediments were deposited while PN-020 was flooded by Lake Ojibway II:

Subunit 5b	Ice-contact and ice-proximal glaciolacustrine sand and gravel.
Subunit 5c:	Ice-distal silty glaciolacustrine clay.

The sand and gravel unit (Subunit 5b) was intersected in 75 holes and commonly forms De Geer moraines. The subunit overlies Chibougamau Till in 47 drill holes, and lies directly on bedrock in 28 drill holes. The thickness of the unit averages approximately 7 metres and is a maximum of 40 metres in Hole 66 south of Ruisseau Dalime.

The sand constituent of Subunit 5b is fine grained, gray, contains interbeds of clay and silt, and grades upward into glaciolacustrine clay/silt.

The gravel constituent of subunit 5b usually has a beige, medium to coarse sand matrix and is rarely clast supported. Thinly interbedded gravels and fine sands often have a till-like appearance when mixed together in the disturbed reverse circulation samples but sorting in individual beds is usually well defined. Clasts vary in size from pebbles to cobbles with occasional boulders and are lithologically similar to the clasts in the Chibougamau Till.

The clay/silt horizon (Subunit 5c) is present in 83 of the 99 drill holes, reaching a maximum thickness of 19.5 metres in Hole 80 and averaging approximately 3.5 metres. Its stratigraphy is described on the field logs as gray silt with gray clay partings at the base grading upwards into soft, "pure", gray clay, but subtle silt/clay varving is undoubtedly present throughout the section. The top metre of clay is often an oxidized brown colour and gritty. The clay/silt deposits overlie the Chibougamau Till and onlap the De Geer moraines and have a levelling effect on the surface topography.

5.2.4 Holocene Sediments (Abitibi Unit 7)

Peat (Subunit 7b) deposited during the 8,000 years that have elapsed since the draining of Lake Ojibway II overlies the Quaternary deposits in over 66 percent of the drill holes. It is generally less than 1 metre thick.

6.0 OVERBURDEN GEOCHEMISTRY

6.1 Regional Gold and Base Metal Background and Anomaly Threshold Levels

The interpretation of the heavy mineral gold geochemistry of till samples is an involved process. In summary, the gold background of tills is caused mainly by grains of visible gold and these gold grains are so thinly scattered through the till and are of such a wide size range that it is impossible to obtain either a representative number of grains (cluster effect) or a representative gold assay (nugget effect; Table 4) from a sample of reasonable size. In contrast, gold dispersal trains down-ice from known ore bodies have a large concentration of gold grains of a narrow size range such that both representative gold grain counts and gold assays can be obtained. Through experience, we have established a dispersal train threshold of 10 grains of visible gold for the 8 kg samples that are normally collected on reverse circulation drills. Recognizing that some anomalies may be caused by gold occluded in sulphides or other heavy minerals rather than by free gold grains, we also investigate any anomalies over a second, 1,000 ppb threshold. The 1,000 ppb value is based on the observation that heavy mineral concentrates from most gold dispersal trains have a gold content similar to that of the source mineralization; thus 1,000 ppb in the till is suggestive of highly anomalous bedrock and values over 3,000 ppb are suggestive of ore-grade mineralization. Significant anomalies, in addition to being caused by more than 10 gold grains of a similar size or by occluded gold, also generally display vertical stratigraphic continuity within the host till horizon and may have an associated pathfinder metal, particularly arsenic or copper. Delicate or irregular gold grains are also significant as they normally indicate a proximal source (Fig. 9).

The base metal background of a heavy mineral concentrate, and particularly of our high-density methylene iodide concentrates, is higher than that of a raw till sample, ranging up to several hundred ppm, because base metals tend to substitute to a significant extent for other metal ions in the structures of heavy silicate and sulphide minerals such as pyroxene and pyrite. The established anomaly threshold level for Cu and Zn, indicating the presence of ore-type minerals such as chalcopyrite and sphalerite in the sample, is 800 ppm. Because till concentrates from dispersal train samples tend to grade the same as the bedrock source mineralization, massive sulphide deposits which typically grade 50,000 ppm (5 percent) combined Cu-Zn often produce anomalies over 10,000 ppm in each metal. The anomaly threshold level for arsenic is about the same as for Cu and Zn but only those arsenic anomalies having a gold association are significant.

Significant base metal anomalies, like significant gold anomalies, normally display vertical continuity in the host till and have a pathfinder association. In the case of copper and zinc, the presence of grains of banded massive pyrite-chalcopyrite-sphalerite mineralization in the concentrate is a favourable indicator whereas the presence of only coarse crystalline vein-type chalcopyrite or sphalerite is unfavourable.

6.2 PN-020 Heavy Mineral Gold Anomalies

Of the 440 PN-020 heavy mineral concentrates 231 (53 percent) yielded visible gold during processing (total of 681 grains) and 5 of these yielded 10 or more grains thus exceeding our first anomaly threshold. In addition, 25 samples including 2 of the above 5 with 10 or more gold grains yielded measured and/or calculated gold assays greater than or equal to our second anomaly threshold of 1000 ppb . Thus a total of 28 samples (6.4 percent of samples collected) met or exceeded one or both of our anomaly thresholds. The 28 anomalies occur in 22 holes throughout the property (Plan 1), in both Chibougamau Till (20) and sand and gravel (8) sections.

In the Abitibi region, on average, 10 percent of samples that contain only background levels of gold yield anomalous results due to:

1. The chance occurrence of one or two coarse gold grains in the sample (nugget effect), or

2. The chance clustering of 10 or more fine gold grains in the sample (cluster effect).

The 10 percent Abitibi background noise is entirely attributable to the sampling procedure (i.e. samples are too small to give representative gold grain counts and gold assays). It increases to 15 percent or more in the south due to the cumulative effect of glaciating a vast expanse of volcanic terrane that contains a plethora of minor gold occurrences. The fact that only 6.4 percent of the PN-020 samples are anomalous reflects the fact that only 30 km of volcanic terrane are present up-ice.

A systematic, three-stage screening process has been applied to each of the anomalous samples (Table 11) with the objective of eliminating high background noise and isolating any dispersal train anomalies that may be present.

The simplest stage in the screening -- and therefore the first one applied -- is to downgrade anomalies which have no vertical stratigraphic continuity; however no anomaly is completely eliminated until the cause of the anomaly is determined. An anomaly at the base of a till horizon or in a one-sample thick till horizon is automatically assumed to have vertical stratigraphic continuity even though it generally does not. A lack of vertical stratigraphic continuity is displayed by a single, isolated anomalous sample within or at the top of a multi-sample till horizon or by an anomaly in sand or gravel. A gold anomaly with no vertical stratigraphic continuity is generally caused by either the nugget effect or the cluster effect. These nugget or cluster anomalies sometimes occur in consecutive samples in a drill hole and occasionally they are contiguous with a gold anomaly of another type; we refer to this as "chance" continuity and treat the anomalies as if they had no vertical continuity. Of the 28 PN-020 anomalies, 20 have no vertical stratigraphic continuity.

Gold Anomalies				Grains V.G. (*Not Panned)	1st Stage Screening (Strat. Cont.)	2nd Stage Screening (Meas. Assay: Calc. Assay)	3rd Stage Screening (Nugget Effect)	Remarks	Anomaly Class
Hole No.	Sample No.	Au Assay (ppb)							
		Meas.	Calc.						
LS-87- 02	04	235	219	11	Basal	Good	No	All abraded gold, no pathfinder association.	Cluster
03	05	260	863	10	Basal	Low	Observed	All abraded gold, no pathfinder association.	Nugget
06	06	3,860	1,500	4	No	High (slightly)	Confirmed	Pulp and metallics assay, only coarse gold detected. 87% of calc. assay contributed by one 275 x 350 micron grain. Check panned 1/4 conc., no V.G., estimated 10% pyrite. INA check analysis = 55 ppb Au.	Nugget
	12	1,080	348	8	Basal	High	Confirmed	All abraded gold. Check panned 1/4 conc., found one abraded gold grain 100 x 175 with predicted assay of 364 ppb Au. Estimate 10% pyrite. INA check analysis = 440 ppb Au.	Nugget
14	02	310	261	10	No (sand)	Good	No	All abraded gold; no pathfinder assoc. 77% of calc. assay contributed by two 75x75 micron grains.	Cluster
22	01	1,530	586	4	No (sand)	High	Confirmed	All abraded gold. Check panned 1/4 conc., no V.G., estimate one percent pyrite. INA check analysis = 17 ppb Au.	Nugget
	04	26,130	16,359	3	No	Good	Observed	Pulp and metallics assay, only coarse gold detected. All abraded gold. 98% of calc. assay contributed by one 700x850 micron grain.	Nugget
	06	2,340	1,583	8	Chance	Good	Observed	Pulp and metallics assay, only coarse gold detected. All abraded gold. 67% of calc. assay contributed by one 225x275 gold grain.	Nugget
	07	25	1,799	17	Basal	Low	No	Check panned 1/4 conc., no V.G. but numerous brass filings probably mistaken for V.G. INA check analysis = 27 ppb Au.	No Anomaly
26	03	1,570	NA	0*	No (gravel)	High	Confirmed	Check panned 1/4 conc., found one 25x25 micron gold grain with predicted assay of 7 ppb Au and estimated 1% pyrite. INA check analysis = 48 ppb Au.	Nugget

Table 9 - Heavy Mineral Gold Anomaly Screening

Gold Anomalies		Au Assay (ppb)		Grains V.G. (*Not Panned)	1st Stage Screening (Strat. Cont.)	2nd Stage Screening (Meas. Assay: Calc. Assay)	3rd Stage Screening (Nugget Effect)	Remarks	Anomaly Class
Hole No.	Sample No.	Meas.	Calc.						
LS-87- 29	05	1,460	394	5	No	High	Confirmed	All abraded gold. 95% of calc. assay contributed by one 150x225 micron grain. Check panned 1/4 conc., found 2 abraded gold grains with predicted assay of 31 ppb Au and estimated 3% pyrite. INA check analysis = 64 ppb Au.	Nugget
34	01	10,080	NA	0*	No	High	Confirmed	Check panned 1/4 conc., no V.G., estimated 7% pyrite. INA check analysis = 33 ppb Au.	Nugget
37	04	3,010	1,856	5	No (sand)	Good	Observed	Pulp and metallics assay, only coarse gold detected. All abraded gold, no pathfinder association.	Nugget
38	10	1,155	5	1*	No (sand)	High	Confirmed	Only observed grain is abraded. Check panned 1/4 conc., found 2 abraded grains with predicted assay of 51 ppb. Estimate 3% pyrite. INA check analysis = 130 ppb Au.	Nugget
40	01	1,055	562	5	Basal	Good	Observed	Four of five gold grains abraded, no pathfinder assoc.	Nugget
46	02	3,410	NA	0*	No	High	Confirmed	Check panned 1/4 conc., no V.G., estimate 0.25% pyrite. INA check analysis = 11 ppb Au.	Nugget
51	01	1,690	995	2	No (sand)	Good	Observed	Pulp and metallics assay, only coarse gold detected. All abraded gold, no pathfinder assoc.	Nugget
58	07	1,120	56	1*	No	High	Confirmed	Only observed grain is abraded. Check panned 1/4 conc., no V.G. estimate 1% pyrite. INA check analysis = 20 ppb Au.	Nugget
61	01	1,010	1,019	1*	No	Good	Observed	Pulp and metallics assay, only coarse gold detected. Only observed grain is abraded, no pathfinder assoc.	Nugget
76	01	1,005	209	1*	No	High	Confirmed	Only observed grain is abraded. Check panned 1/4 conc., found one abraded 25x25 micron grain with predicted assay of 4 ppb and 0.5% pyrite. INA check analysis = 32 ppb.	Nugget

Table 9 - Heavy Mineral Gold Anomaly Screening (cont'd)

Gold Anomalies				Grains V.G. (*Not Panned)	1st Stage Screening (Strat. Cont.)	2nd Stage Screening (Meas. Assay: Calc. Assay)	3rd Stage Screening (Nugget Effect)	Remarks	Anomaly Class
Hole No.	Sample No.	Au Assay (ppb)							
		Meas.	Calc.						
LS-87- 78	01	2,235	528	1*	No	High	Confirmed	Only observed grain is abraded. Check panned 1/4 conc., found one 25x25 micron grain with a predicted assay of 4 ppb and 7% pyrite. INA check analysis = 71 ppb Au.	Nugget
80	01	3,770	30	1*	No	High	Confirmed	Only observed grain is abraded. Check panned 1/4 conc., found 2 abraded gold grains with predicted assay of 111,464 ppb Au and 15% pyrite. INA check analysis = 11,000 ppb Au, low because of INA shielding.	Nugget
	03	1,360	1,050	1*	Chance	Good	Observed	Pulp and metallics assay; only coarse gold detected. Only observed grain is abraded, no pathfinder assoc.	Nugget
	04	6,520	NA	0*	Basal	High	Limited	Check panned 1/4 conc., found 1 abraded, 2 irregular and 2 delicate gold grains with predicted assay of 1,388 ppb Au and estimated 10% pyrite. INA check analysis = 1830 ppb Au.	Potentially Significant
86	10	2,033	567	8	No	High	No	Six of eight gold grains are delicate. Check panned 1/4 conc., found 1 abraded and 1 delicate gold grains with predicted assay of 114 ppb, estimate 15% pyrite and 300 grains of arsenopyrite. INA check analysis = 1300 ppb Au.	Potentially Significant
89	01	1,890	1,428	4	No	Good	Observed	Pulp and metallics assay, only coarse gold detected. All abraded gold. 58% of calc. assay contributed by one 100x150x200 micron grain.	Nugget
95	02	2,130	326	1*	No (gravel)	High	Confirmed	Only observed grain is abraded, no pathfinder assoc. Check panned 1/4 conc., found one delicate grain 25x25 microns with predicted assay of 4 ppb Au; estimate 7% pyrite. INA check analysis = 12 ppb Au.	Nugget
99	03	1,290	923	14	No	Good	No	Ten of fourteen gold grains are delicate, estimate 1% pyrite. No pathfinder association.	Potentially Significant

Table 9 - Heavy Mineral Gold Anomaly Screening (cont'd)

The second stage in the screening is used to evaluate those anomalies where sufficient visible gold was observed to explain the measured (Bondar-Clegg) assays. In its simplest form, the calculated (predicted) visible gold assays are compared to the measured assays to eliminate those anomalies in which the 1,000 ppb threshold is no longer met after the contributions of one or two observed nuggets have been subtracted from the total assays. In a sample with observed nuggets and little or no fine visible gold, either a good correlation of the two assays or a low measured assay indicates that essentially all of the gold in the concentrate is in the nuggets and the anomaly is of no significance.

The correlation between a calculated and measured assay is "good" if the calculated assay is not more than twice as high as or 50 percent less than the measured assay; this allows for a doubling or halving of the normal thickness factor for flake gold particles used in the calculation. Of the 28 PN-020 anomalies, 9 with measured and/or calculated assays over 1000 ppb show good assay correlation. Eight of these anomalies are in concentrates that would assay less than 1000 ppb if the contributions of one or two observed nuggets were subtracted from the assays, and also display other properties of nugget anomalies including less than 10 gold grains, predominantly abraded gold, and an absence of pathfinder metals. Five of these anomalies also lack stratigraphic continuity and thus were downgraded by the first stage screening. The ninth anomaly showing good correlation over 1000 ppb, in Sample 99-03, is characterized by delicate gold of the dispersal train type and will be discussed in a forthcoming section.

A low measured assay for a concentrate with observed nuggets and a calculated assay over 1000 ppb indicates nugget retention in our 1/4 library split, in the base metal analytical split of the 3/4 concentrate (normally 1 to 3 grams) or in the unanalyzed portion of the 3/4 concentrate (a 10 gram subsample was generally analyzed for gold. If no other gold is present in the concentrate, the measured assay for the 3/4 concentrate will be below the 1000 ppb anomaly threshold. Only one (Sample 22-07) of the twenty-eight PN-020 anomalies is of this type. The 1/4 concentrate was panned and no nuggets were found but numerous brass filings were identified and may have been mistaken for gold during initial processing. As a final check the 1/4 concentrate was submitted for INA anlaysis and returned a value of 27 ppb gold, confirming that the anomaly is insignificant.

A variation of the second stage of screening pertains to anomalies possessing ten or more gold grains but lacking a calculated or measured assay over 1,000 ppb. The objective here is to eliminate anomalies caused solely by the erratic clustering of fine background gold grains in the till. Unless the anomalies possess other properties of dispersal trains, they are generally not significant. This is especially true if the gold grains are abraded, as we have never succeeded in tracing abraded gold to a bedrock source. If, however, the gold grains are of delicate or irregular morphology and occur in stratigraphically continuous samples, the subanomalous heavy mineral assays could simply indicate that the source has a low grade or narrow subcrop or that the samples were obtained from the margins of a dispersal train.

Of the 28 anomalous samples, 3 are of the above type having 10 or 11 fine gold grains per sample. All of the gold grains in all samples are abraded. All of the anomalies lack vertical stratigraphic continuity and thus were downgraded by the first stage screening.

The second-stage screening is very reliable because it is based on direct observation of the gold grains. This screening has effectively eliminated 12 of the 28 PN-020 gold anomalies at the 100 percent confidence level. Eight of the same anomalies have no stratigraphic continuity and thus were downgraded by the first-stage screening.

The third stage in the screening is used to determine the cause of anomalies occurring in samples for which the measured assays are over 1000 ppb and are too high to be accounted for by the gold grains, if any, observed during processing. High measured assays can be caused by any one of the following:

1. A nugget that was recovered but not sighted during processing.

2. A sighted nugget for which the actual thickness is greater than the assumed thickness (0.1-0.2 X diameter) used in the assay calculation.

3. The difference in weight between the total concentrate on which the calculation is based and the portion of 3/4 concentrate that is assayed (applies only to samples in which a nugget is present, as fine gold would be evenly distributed through the sample).

4. A large number of missed fine gold grains.

5. Gold occluded in pyrite or another heavy mineral.

Unsighted nuggets normally account for about 80 percent of unexpectedly high assays, the thickness and weight factors for 10-20 percent, and fine gold and occluded gold for less than 10 percent. Only the fine gold and occluded gold anomalies are significant.

The third-stage in the screening involves a mineralogical investigation of the retained 1/4 concentrate, principally by panning, to determine the probable cause of the high assay in the 3/4 concentrate. The 3/4 concentrate itself cannot be panned as it is pulped (ground in a shatter-box) and largely consumed (by acid digestion) during analysis unless the analysis is by the non-destructive instrumental neutron activation (INA) method.

An absence or minimal amount of fine visible gold in the 1/4 concentrate precludes the occurrence of fine gold in anomalous concentrations in the 3/4 analytical split, and such anomalies can be assumed to have been caused by a missed or unusually thick nugget or by occluded gold. We have encountered occluded gold only in samples that contain arsenopyrite; however there is a significant potential for occluded gold in samples that contain other pathfinder minerals or more than 10 percent pyrite. To prove that no significant amount of occluded gold is present the 1/4 concentrate is analyzed by the non-destructive INA method. Only if the 1/4 split assay duplicates the 3/4 split assay is the presence of occluded gold suggested. The third stage screening is an indirect method as it employs the 1/4 concentrate rather than the 3/4 concentrate that was analyzed originally. However, it is essentially 100 percent reliable.

Of the 28 PN-020 anomalous samples, 15 unexpectedly gave measured assays that are over 1000 ppb and more than twice as high as the predicted assays and thus require third stage screening. One of these samples -- No. 86-10 -- yielded delicate gold of the dispersal train type during initial processing and another sample -- No. 80-04 -- yielded the same type of gold when its 1/4 concentrate was panned. The other thirteen samples yielded zero to eight grains of visible gold per sample during initial processing and all of these grains were of abraded morphology. Check panning of the 1/4 concentrates of these 13 samples yielded zero to two abraded gold grains per sample. All but one of these abraded grains are so fine that they would contribute no more than 250 ppb gold to the 1/4 concentrate assays. The single coarse grain is a 525 x 300 x 800 micron abraded nugget in Sample 80-01 valued at over 110,000 ppb gold. Pyrite levels in the 13 concentrates range up to 15 percent but the 1/4 concentrate INA check analyses either match or are lower than the visible gold analyses indicating that occluded gold is not present. Twelve of these anomalies also lack stratigraphic continuity and thus were downgraded by the frist stage screening.

In summary the second and third stage screening processes, which are essentially 100 percent reliable, have eliminated 12 and 13 of the 28 PN-020 anomalies, respectively. The first stage screening, which is less reliable, has further downgraded eight of the same anomalies. One anomaly -- in Sample 99-03 -- survived the second stage screening and two more anomalies -- in Samples 80-04 and 86-10 -- survived the third stage screening. All three of these anomalies are characterized by assays over 1000 ppb and by delicate gold of the dispersal train type. They are highlighted on Plan 3 and described in detail in the following sections.

6.2.1 Sample 80-04 Anomaly

Sample 80-04 was not panned during initial processing, but the 3/4 split produced a measured assay of 6,520 ppb. Check panning of the 1/4 concentrate yielded four delicate to irregular gold grains and one abraded gold grain, producing a calculated assay of 1,388 ppb (68 percent contributed by one irregular grain) and a measured assay of 1,830 ppb. The initial 6,520 ppb measured assay is substantially higher than the subsequent assay, and must be due partly to the presence of at least one large gold grain that is not necessarily associated with the delicate and irregular gold.

Sample 80-04 is the last entirely till sample collected in Hole 80 and therefore is assigned basal stratigraphic continuity; however the anomalous till overlies Missinaibi Formation, not bedrock. Neither Sample 80-03 nor Sample 80-05 is geochemically similar to Sample 80-04. Initial processing of Sample 80-03 yielded a single abraded nugget that produced a calculated assay of 1,050 ppb compared to a measured assay of 1,360 ppb. The analysis was by pulp and metallics, and the -150 gave only 190 ppb, precluding the possibility of significant amounts of either fine or occluded gold in the sample. Initial processing of Sample 80-05 yielded no visible gold and the 3/4 concentrate assay only 430 ppb, again precluding the possibility of significant amounts of either fine or occluded gold in the sample.

Prorating the four delicate to irregular gold grains in the 1/4 concentrate of Sample 80-06 to the total concentrate would give sixteen grains -- more than the ten grain minimum for a dispersal train. Perhaps the most attractive feature of the anomaly is its location over the inferred extension of the Lac Shortt Fault. Although the anomaly is weak, the Missinaibi Formation beneath the till could cover most of the source and prevent the development of a strong dispersal train. On the negative side, gold placers are common in the Missinaibi Formation and if the till gold has been recycled from such a placer it would not be significant. However the delicate to irregular morphology of the gold grains is suggestive of a bedrock rather than placer source. In any event the source is probably in the bedrock valley that follows the fault. This valley trends east-northeast or obliquely to the north-northeast up-ice path, which favours a source in the north wall of the valley. The morphology of the gold grains indicates that the source is not more than 100-200 metres up the valley.

6.2.2 Sample 86-10 Anomaly

Sample 86-10 was panned during initial processing and yielded 2 abraded and 6 delicate gold grains which produced a calculated assay of 567 ppb compared to a higher measured assay of 2,033 ppb gold. This anomalous sample is 0.4 metres above the bedrock interface and has vertical stratigraphic continuity with a geochemically similar but subanomalous basal sample, No. 86-11. The basal sample was undersized (4.4 kg). It too was panned yielding 6 delicate gold grains valued at 130 ppb, and a higher measured assay of 775 ppb. Thus the gold in both samples would appear to be mainly of the occluded type. Pyrite concentrations in Samples 86-10 and 11 are 15 and 20 percent, respectively. Both samples also returned elevated to weakly anomalous copper and arsenic values.

Check panning of the 1/4 concentrate of Sample 86-10 revealed one abraded and one delicate gold grain with a calculated assay of 114 ppb. The INA check assay is 1300 ppb which basically confirms the original 2033 ppb 3/4 concentrate assay and the presence of occluded gold. Check panning of the 1/4 concentrate for Sample 86-11 revealed two delicate gold grains with a calculated assay of 229 ppb gold; the INA check assay is still pending.

As with the Sample 80-04 anomaly the anomalous till occurs in a bedrock valley and a source within 100-200 metres up-ice is indicated. The bedrock of Hole 86 is not anomalous in gold, but 50 percent of the sample consists of quartz-calcite veins containing two to three percent finely disseminated pyrite indicating significant hydrothermal alteration in the immediate area.

6.2.3 Sample 99-03 Anomaly

The Sample 99-03 anomaly is similar in many respects to the Sample 86-10 anomaly but is weaker than that anomaly. Sample 99-03 was panned during initial processing and yielded seven delicate, one irregular, and three abraded gold grains. Predicted and measured assays were 923 ppb and 1290 ppb respectively with the two coarsest grains (one irregular and one abraded) accounting for 84 percent of the predicted assay. This sample is one metre above the bedrock interface, and like

Sample 86-10, has vertical stratigraphic continuity with a similar but subanomalous basal sample, No. 99-04. The basal sample was panned during initial processing and yielded three delicate and one irregular gold grain, with calculated and measured assays of 8 and 80 ppb, respectively.

Both Samples 99-03 and 04 consist partly of a sand lens that occurs within the till horizon. Assuming the delicate gold occurs in the till, the presence of the sand would tend to dilute both the observed gold counts and the assay values. For this reason it is difficult to evaluate the significance of the anomaly in terms of the grade of the subcrop source.

Again the predominatnly delicate morphology of the gold grains indicates that the source is within 100-200 metres to the north-northeast. The source area may relate to a southeastward extension of the cross-cutting shear zone indicated in Hole 51 and Holes 53 to 56.

6.3 PN-020 Heavy Mineral Copper, Zinc and Arsenic Anomalies

The heavy mineral anomaly threshold for copper, zinc and arsenic is 800 ppm. Of the 440 PN-020 concentrates only five (41-01, 80-04, 81-10, 83-01 and 86-11) are anomalous in copper (941, 1465, 828, 919 and 989 ppm respectively). None of the concentrates are anomalous in zinc or arsenic . A limited screening process, similar to that previously used for gold anomalies, can be employed to separate background Cu noise from those anomalies which are, or may be, related to significant mineralized sources.

As with gold anomalies, one screening method is to downgrade anomalies which do not have vertical stratigraphic continuity, although no anomalies are eliminated on this basis alone. All five of the PN-020 copper anomalies are in Chibougamau Till; four have basal stratigraphic continuity and one (81-10) has no stratigraphic continuity.

A second screening method is the direct mineralogical examination of anomalous concentrates. The retained 1/4 concentrates were visually examined under a binocular microscope to ascertain the percentages of copper minerals present relative to the percentage of pyrite. In addition, small incorporated rock chips were checked to determine whether the mineralization occurs as banded massive sulphides or less attractive vein-hosted sulphides.

The 1/4 concentrate of Sample 41-01 was found to contain eight large brass filings, indicating that the 941 ppm copper anomaly in the 3/4 concentrate was caused by brass contamination.

The 1/4 concentrate of Sample 80-04 does not contain any visible copper minerals that would account for the 1465 ppm copper value but does contain 10 percent coarse crystalline pyrite, which is the most probable host of the copper, and 0.1 percent coarse crystalline marcasite. Approximately one percent of the pyrite occurs within quartz vein material. As discussed previously Sample 80-04 also yielded a potentially significant gold anomaly.

The 1/4 concentrates of Samples 81-10, 83-01 and 86-11 each contain sufficient amounts of coarse crystalline chalcopyrite to account for the weakly anomalous copper concentrations. Sample 86-11 is also stratigraphically continuous with a potentially significant gold anomaly.

Excluding the brass contamination the above copper anomalies are from four widely separated drill holes, were produced by vein mineralization, and reflect separate bedrock sources. The basal position of most of the anomalies indicates that the sources are near the drill holes and, considering the weakness of the anomalies, are not exploitable for their copper content. Only the gold-associated anomalies in Samples 80-04 and 86-11 are considered significant.

7.0 CONCLUSIONS

The objectives of the PN-020 reverse circulation drilling/heavy mineral geochemical sampling program were firstly to test the overburden for dispersed mineralization indicative of subcropping gold mineralization and secondly to delineate zones of intense bedrock alteration and/or deformation that would indicate a potential for significant mineralization at depth.

With respect to the first objective the drilling was partially successful although its effectiveness was limited by the development of water-laid De Geer moraines which disrupt the till cover in 33 of the 99 drill holes. Most of the overburden gold anomalies that were encountered are nugget or cluster anomalies attributable to a combination of background gold and the sampling procedure and are of no exploration significance. However the three dispersal trains detected in till in Holes 80, 86 and 99, although weak, are encouraging. This is mainly due to the fact that at each till anomaly the drilling fulfilled its second objective by delineating shear zones, or bedrock valleys that are probably shear-controlled.

The Lac Shortt model (bedding parallel shears in syenite contacts) may not be directly applicable to PN-020 as syenite does not appear to be present on the property. Also, the cross-cutting nature of the shear zone related to the Hole 99 till anomaly and the Hole 53 and Hole 56 bedrock anomalies is unusual, although not unique for the area as a similar shear zone hosts the gold mineralization at the Bachelor Lake Mine (Buro, 1984). Even the Lac Shortt Fault in the area of the Hole 86 till anomaly cuts across the volcanic strata at a significant angle. Thus the PN-020 drilling pattern, which was designed to locate long narrow dispersal trains from bedding-parallel sources, could have understated or even missed important dispersion in the till.

8.0 RECOMMENDATIONS

Based on the geological and geochemical interpretation described in this report, the following work program is recommended:

1) An induced polarization geophysical survey to develop diamond drill targets in the potential source areas (Plan 3) for the gold dispersion detected in Holes 80, 86 and 99.

1) Extension of VLF coverage to the southern property boundary between L30+00E and L75+00E with the objective of delineating and developing diamond drill targets on the eastern extension of the Lac Shortt Fault.

3) Diamond drill testing of the inferred cross-cutting shear zone in the vicinity of both Holes 53 and 56.

The cost of the proposed work will depend on the results obtained as the proposed work progresses. Considering the generally negative results obtained from the reverse circulation drilling elsewhere on the property the proposed program will need to produce positive results to justify continued exploration of the property.

* * * * * * * * * *

9.0 CERTIFICATE - THOMAS E. BURNS

I, Thomas E. Burns, residing at 2179 Melfort Street, Ottawa, Ontario hereby certify as follows:

That I attended the University of Western Ontario in London, Ontario and graduated with a B.Sc. (Hons.) in Geology in 1979.

That I have worked continuously in the field of exploration geology since 1979.

That I am a consulting geologist employed by Overburden Drilling Management Limited, 107-15 Capella Court, Nepean, Ontario.

That this technical report is based on data gathered on the subject property by employees of Overburden Drilling Management and interpreted by myself and other employees.

That I have no direct or indirect interest in Falconbridge Ltée.

Thomas E Burns

Thomas E. Burns

Dated at Ottawa, Ontario this 30th day of March, 1988.

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APPENDIX A

LIST OF MINING CLAIMS, PN-020 PROPERTY

Permit	Claim	Township
381191	1 to 2	Gand
381192	1 to 2	Gand
383091	1 to 5	Gand
383092	1 to 5	Gand
384593	1 to 5	Gand
384639	1 to 5	Gand
384640	1 to 5	Gand
384641	1 to 5	Gand
384642	1 to 5	Gand
384643	1 to 5	Gand
384644	1 to 5	Gand
384646	1 to 5	Gand
386273	1 to 5	Gand
386274	1 to 5	Gand
386275	1 to 5	Gand
386276	1 to 5	Gand
386277	1 to 5	Gand
386278	1 to 5	Gand
386279	1 to 5	Gand
386280	1 to 5	Gand
386281	1 to 5	Gand
386282	1 to 5	Gand
386283	1 to 5	Gand
386285	1 to 5	Gand
386286	1 to 5	Gand
386287	1 to 5	Gand
386288	1 to 2	Gand
386292	1 to 5	Gand
386293	1 to 5	Gand
386294	1 to 3	Gand

Appendix A - List of Mining Claims, PN-020 Property
Gand and La Roncière Townships

Permit	Claim	Township
386295	1 to 5	Gand
386296	1 to 3	Gand
387778	2 to 5	Gand
387780	1 to 3	Gand
390290	1 to 5	Gand
395716	1 to 3	Gand
395718	1 to 5	Gand
399094	1 to 5	Gand
399883	1 to 5	Gand
399884	1 to 5	Gand
399885	1 to 5	Gand
419643	1	Gand
427897	1 to 5	Gand
427898	1 and 4	Gand
427899	1 to 5	Gand
427900	1	Gand
388490	1	La Roncière
389211	1 to 5	La Roncière
389212	1 to 5	La Roncière
389213	1 to 5	La Roncière
389335	1 to 5	La Roncière
389336	1 to 5	La Roncière
389337	1 to 5	La Roncière
389338	1 to 5	La Roncière
389339	1 to 5	La Roncière
389340	1 to 5	La Roncière
389341	1 to 5	La Roncière

Appendix A - List of Mining Claims, PN-020 Property
Gand and La Roncière Townships (Cont'd)

APPENDIX B

DRILLING AND SAMPLING STATISTICS

Hole Number	Site Number	Metres Drilled		Hole Depth (metres)	Samples Collected	
		Overburden	Bedrock		Overburden	Bedrock
LS-87- 01	01	11.5	1.1	12.6	4	1
02	03	15.3	1.2	16.5	4	1
03	05	14.5	1.3	15.8	5	1
04	07	14.1	1.5	15.6	6	1
05	09	1.3	1.2	2.5-0	1	
06	25	22.5	1.1	23.6	12	1
07	23	2.2	1.0	3.2-0	1	
08	21	4.0	1.3	5.3	1	1
09	11	18.5	1.0	19.5	10	1
10	13	19.4	1.1	20.5	12	1
11	15	20.8	1.2	22.0	10	1
12	17	10.5	1.0	11.5	1	1
13	19	17.4	1.3	18.7	7	1
14	4	14.4	1.1	15.5	6	1
15	2	7.6	1.4	9.0	2	1
16	6	7.8	1.5	9.3	2	1
17	8	5.3	1.1	6.4	1	1
18	10	7.2	1.3	8.5	4	1
19	12	11.2	1.0	12.2	5	1
20	14	11.5	1.0	12.5	6	1
21	20	8.1	1.3	9.4	5	1
22	18	12.9	1.4	14.3	7	1
23	16	7.5	1.5	9.0	2	1
24	32	9.6	0.9	10.5	6	1
25	34	10.1	1.5	11.6	2	1
26	37	17.5	1.5	19.0	8	1
27	36	4.0	1.5	5.5	2	1
28	27	14.1	0.9	15.0	4	1
29	29	18.0	1.5	19.5	7	1
30	31	5.8	1.5	7.3	2	1

Appendix B - Drilling and Sampling Statistics

Hole Number	Site Number	Metres Drilled		Hole Depth (metres)	Samples Collected	
		Overburden	Bedrock		Overburden	Bedrock
LS-87- 31	33	10.3	1.2	11.5	3	1
32	35	23.8	1.0	24.8	10	1
33	38	7.7	1.5	9.2	1	1
34	39	8.1	1.0	9.1	2	1
35	40	5.1	1.0	6.1	1	1
36	26	5.1	1.0	6.1	3	1
37	24	13.4	1.1	14.5	8	1
38	22	43.5	1.5	45.0	24	1
39	28	11.5	1.1	12.6	6	1
40	30	9.1	1.0	10.1	1	1
41	46	2.0	1.5	3.5	1	1
42	45	24.7	0.8	25.5	16	1
43	41	1.4	1.6	3.0	1	1
44	42	8.0	1.3	9.3	3	1
45	44	5.5	1.0	6.5	2	1
46	43	12.3	1.2	13.5	6	1
47	47	30.6	0.9	31.5	19	1
48	48	7.2	1.1	8.3	1	1
49	49	10.4	1.1	11.5	6	1
50	50	8.2	1.5	9.7	4	1
51	51	4.2	1.3	5.5	2	1
52	52	9.0	1.5	10.5	3	1
53	53	10.3	1.2	11.5	3	1
54	54	8.1	1.4	9.5	4	1
55	55	6.2	1.3	7.5	1	1
56	56	5.1	1.4	6.5	2	1
57	57	13.2	1.0	14.2	7	1
58	58	18.8	1.2	20.0	12	1
59	59	7.5	1.5	9.0	1	1
60	60	7.5	1.0	8.5	3	1

Appendix B - Drilling and Sampling Statistics (cont'd)

Hole Number	Site Number	Metres Drilled		Hole Depth (metres)	Samples Collected	
		Overburden	Bedrock		Overburden	Bedrock
LS-87- 61	61	5.7	1.3	7.0	2	1
62	62	14.6	1.5	16.1	7	1
63	63	5.0	1.5	6.5	1	2
64	64	3.8	1.2	5.0	1	1
65	65	13.5	1.3	14.8	5	1
66	66	45.7	0.8	46.5	15	1
67	67	22.2	1.3	23.5	3	1
68	68	4.0	1.5	5.5	2	1
69	69	14.2	1.5	15.7	4	1
70	70	14.9	1.3	16.2	6	1
71	71	26.9	1.0	27.9	13	1
72	72	9.8	0.8	10.6	2	1
73	73	21.7	0.8	22.5	4	1
74	74	11.5	0.5	12.0	3	1
75	75	7.9	1.5	9.4	1	1
76	76	6.0	1.0	7.0	2	1
77	77	9.8	1.2	11.0	1	1
78	78	16.2	1.5	17.7	4	1
79	79	6.8	1.2	8.0	1	1
80	80	35.2	1.5	36.7	9	1
81	81	31.5	2.5	34.0	15	1
82	82	4.1	1.4	5.5	1	1
83	83	2.2	1.1	3.3	1	1
84	84	2.2	1.0	3.2-0	1	
85	85	12.6	0.9	13.5	2	1
86	86	26.6	1.0	27.6	11	1
87	87	10.0	1.0	11.0	1	1
88	88	0.4	1.1	1.5-0	1	
89	89	13.8	1.5	15.3	2	1
90	90	1.2	0.5	1.7-0	1	

Appendix B - Drilling and Sampling Statistics (cont'd)

Hole Number	Site Number	Metres Drilled		Hole Depth (metres)	Samples Collected	
		Overburden	Bedrock		Overburden	Bedrock
LS-87- 91	95	8.9	1.1	10.0	4	1
92	96	1.2	1.0	2.2-0	1	
93	97	8.0	1.5	9.5	4	1
94	98	9.0	1.0	10.0	2	1
95	99	7.5	1.5	9.0	2	1
96	91	13.8	1.2	15.0	1	1
97	92	4.5	1.0	5.5	1	1
98	93	13.3	1.7	15.0	4	1
99	94	19.0	1.0	20.0	4	1
TOTALS		1167.6	120.6	1288.2	440	99

Appendix B - Drilling and Sampling Statistics (cont'd)

APPENDIX C

REVERSE CIRCULATION DRILL HOLE LOGS

OVERBURDEN DRILLING MANAGEMENT LIMITED

REVERSE CIRCULATION DRILL HOLE LOG

Elevation 315m.

DATE Aug 19 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-01 LOCATION Site 1 Elevation

GEOLOGIST T. Burns DRILLER G. Howg BIT NO. CB69275 BIT FOOTAGE 0 -> 12.6

MOVE TO HOLE 6.45 -> 7.00

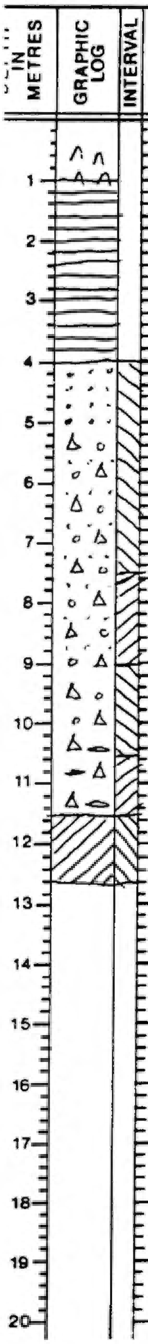
DRILL 7.00 -> 8.00

MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER 6.30 -> 6.45 travel

MOVE TO NEXT HOLE _____



SAMPLE NO.	DESCRIPTIVE LOG	
	0 -> 0.5	No Return
	0.5 -> 1.0	Organics
	1.0 -> 5.0	Ojibway II Sediments
		Clay 1.0 -> 4.0
		dark gray, soft, pure
		Sand 4.0 -> 5.0
01		gray-beige, fine grained
	5.0 -> 11.5	Till (Chibougamau)
		gray-beige, fine sand
02		matrix pebbly clasts 50%
		mafic volcanics and sediments
03		50% granitic
		- partially sorted above 9.2
04		- cobbly below 10.0 to 11.5
05	11.5 -> 12.6	Bedrock Bleached Intermediate Volcanic
		light to medium green
		coarse grained to porphyritic
		grains 1-2 mm, massive
		2-3% disseminated cubic pyrite
		12.6 E.O.H.

Tom Burns

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 315m.

DATE August 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-02 LOCATION Site #3

GEOLOGIST T. Burns DRILLER G. Hovey BIT NO. SB69275 BIT FOOTAGE 12.6 -> 29.1

MOVE TO HOLE 8.00 -> 8.15

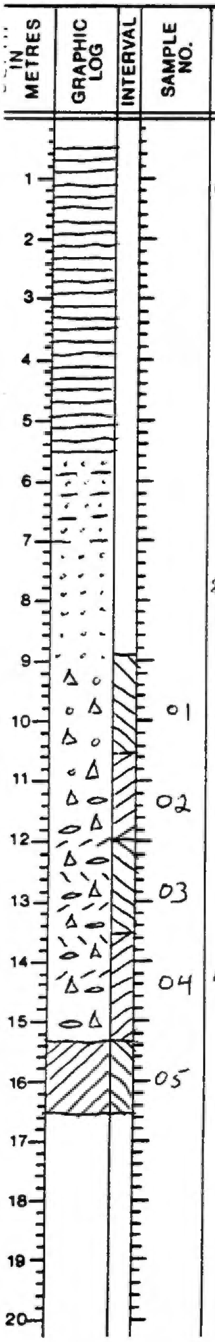
DRILL 8.15 -> 8.45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 -> 0.5 No Return

0.5 -> 8.9 Ojibway II Sediments

clay 0.5 -> 5.5

gray, soft, pure

silt / sand 5.5 -> 7.0

gray-beige very fine grained sand and silt

sand 7.0 -> 8.9

gray-beige, fine grained

8.9 -> 15.3 Till (Chibougamau)

gray-beige, fine sand matrix, pebbly above 10.5 cobbly below 10.5 clasts 60% mafic volcanics and sediments 40% granitic

- gritty gray clay lumps 11.7 -> 14.3

15.3 -> 16.5 Bedrock Mafic Tuff

dark to medium green very fine grained, very well developed foliation, 1-2% calcite veining

16.5 E. O. H.

Tom Burns

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 315m.

DATE Au 12 1987

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LL-87-03 LOCATION Site # 5

GEOLOGIST B Beck DRILLER G. Haw BIT NO. [illegible] BIT FOOTAGE 291-451

MOVE TO HOLE 8:45-9.00

DRILL 9:00-9.45

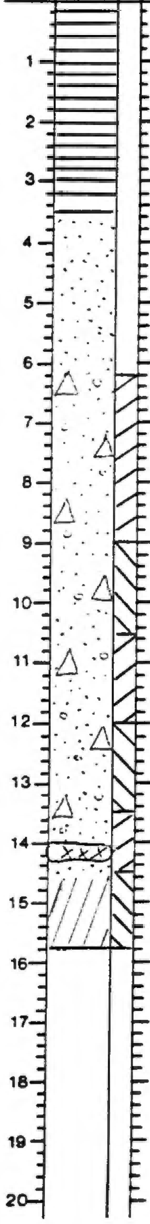
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



01
02
03
04
05
06 Bedrock

0 - 6.2 OJIBWAY II SEDIMENTS

0-3.5 - greyish brown pure clay
· moderately compact

35-62 - pure fine grained grey sand

6.2 - 14.5 Till (Chibougamau)

- fine grained grey-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanics/Sediments
40% granitoid

8.1-9.0 - very sandy till section

12.2 13.5 - matrix similar to 6.2-8.1

- pebbles & cobbles, approximate composition
70% Volcanic/Sediments
30% Granitoid

14.0-14.3 Boulder (diorite)

14.5-15.8 BEDROCK

- light green to grey colour
· fine grained
· very well foliated (schistose)
- predominant mineral is chlorite
- >10% quartz feldspar viens
- Felsic pyroclastic

15.8 E.O.H.

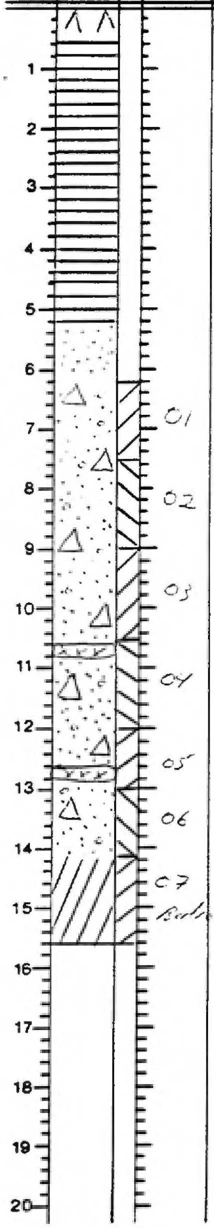
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation · 315m.

DATE Aug. 18 19 87
HOLE NO LS-87-09 LOCATION Site #7
GEOLOGIST B. Bark DRILLER G. Hang BIT NO. CB69237 BIT FOOTAGE 0-15.6
SHIFT HOURS ____ TO ____
MOVE TO HOLE 9:45 -10:10 11:30 11:40
DRILL 11:40 - 12:45
TOTAL HOURS ____
MECHANICAL DOWN TIME 10:10 -11:30 fix drive shaft
DRILLING PROBLEMS
CONTRACT HOURS ____
OTHER
MOVE TO NEXT HOLE

New Bit

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-0.5 Organics

0.5-6.2 OJIBWAY II SEDIMENTS

0.5-2.0 - grayish brown clay
- pure, moderately compact

2.0-5.2 - gray pure clay
- moderately compact
- softens downsection

5.2-6.2 - pure fine grained grey-beige sand.

6.2-14.1 Till (Chibougamau)

- fine grained grey-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% granitoid

10.3-14.1 - till similiar to above
- gray gritty clay lumps

10.6-10.8 Boulder (granite)

12.6-12.8 Boulder (granite)

14.1-15.6 BEDROCK

- light green colour
- fine grained
- well foliated
- predominate mineral is chlorite
- approximately 5% calcite
- Intermediate Volcanic

15.6 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 315m.

DATE Aug 19 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-05 LOCATION Site #9

GEOLOGIST I. Burns DRILLER G. Houg BIT NO. CB69237 BIT FOOTAGE 15.6 -> 18.1

MOVE TO HOLE 12.45 -> 1.00

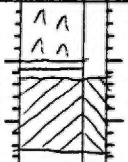
DRILL 1.00 -> 1.30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0 -> 1.0 Organics
			01	1.0 -> 1.3 Ojibway II Sediments clay, beige, pure, mod. compact
				1.3 -> 2.5 Bedrock Mafic Volcanics dark green (chlorite) fine to medium grained generally massive to poorly developed foliation
				2.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 316m.

DATE Aug. 18 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-06 LOCATION Site #25

GEOLOGIST B. Bock DRILLER G. Hong BIT NO. CB69237 / CB67530 BIT FOOTAGE 18.1-39.1 / 0-2.6.

MOVE TO HOLE 1:30-2:30

DRILL 2:30-5:30

MECHANICAL DOWN TIME

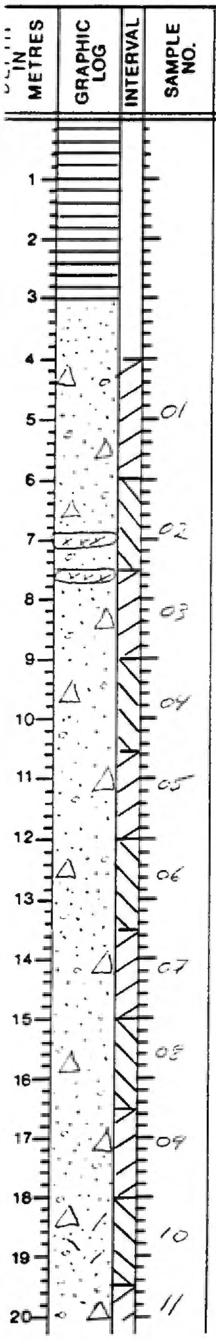
DRILLING PROBLEMS

OTHER Travel 5:30-6:00

MOVE TO NEXT HOLE

page 1 of 2

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-4.0 OJIBWAY II SEDIMENTS

0-3.0 - brown pure clay
- moderately compact

3.0-4.0 - fine grained gray sand

4.0-22.5 Till (Chibougamau)

- fine grained grey-beige sand silt matrix

- pebbles and cobbles, approximate composition 60% Volcanics / Sediments
40% granitoid

6.9-7.1 Boulder (mafic Volcanic)

7.5-7.7 Boulder (gabbro)

18.6-19.2 - Very clay rich till
- fine grained grey sand & silt
- grey gritty clay lumps
- clasts as above

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS 87-06 LOCATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

page 2 of 2

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			11	
21				21.0 - 21.3 Boulder (Gabbro)
22			12	
23			13 Bedrock	22.5 - 23.6 BEDROCK
24				- light green colour
25				- very fine grained - well foliated
6				- predominant mineral is chlorite
7				- Intermediate to mafic Volcanic
8				
9				23.6 E.O.H.
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation · 316m

DATE Aug 20 19 87

HOLE NO LS-87-07 LOCATION Site #23

GEOLOGIST T. Burns DRILLER G. Haag BIT NO. CB4330 BIT FOOTAGE 26.5.8

SHIFT HOURS

MOVE TO HOLE 645-7:00

____ TO ____

DRILL 7:00 · 7:30

TOTAL HOURS

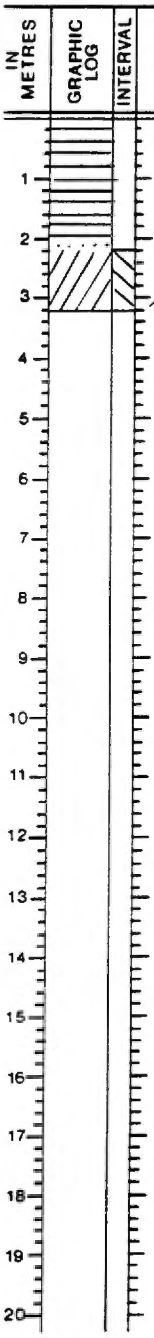
MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER Travel 6:30 · 6:45

MOVE TO NEXT HOLE



SAMPLE NO.	DESCRIPTIVE LOG
	0-0.5 No Return
	0.5-2.2 OJIBWAY II SEDIMENTS
	0.5-1.9 - grey-beige soft pure clay
01 Bedrock	1.9-2.2 - grey-beige fine grained sand
	2.2-3.2 Bedrock
	-dark green Colour
	- medium to coarse grained
	- massive structure
	- predominant mineral is chlorite
	- locally porphyritic
	- Mafic Volcanic

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 320m.

DATE Aug 20 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-08 LOCATION Site #21

GEOLOGIST B. Bork DRILLER G. Hwang BIT NO. CB7330 BIT FOOTAGE 5.8-11.1

MOVE TO HOLE 7:30 - 7:45

DRILL 7:45 - 8:00

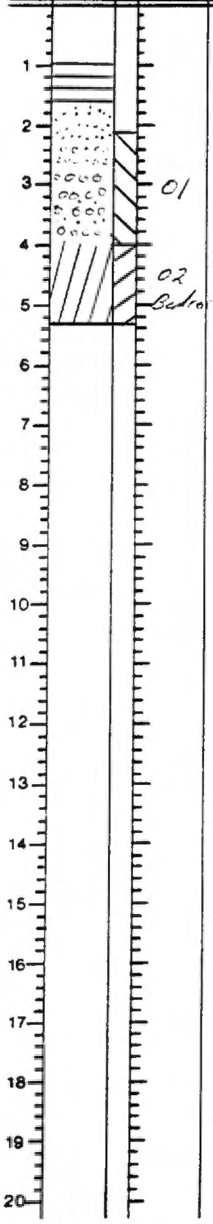
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-1.0 No Return

1.0-2.1 OJIBWAY II SEDIMENTS

1.0-1.6 - grey-beige gritty clay
- moderately compact

1.6-2.1 - fine grained grey sand

2.1-4.0 - medium grained grey-beige sand
- interbeds of coarse sand and high amounts of clasts.
pebbles & cobbles, approximate composition 60% Volcanic/Sediments
40% granitoid

4.0-5.3 Bedrock

- dark green colour
- fine grained
- well foliated
- predominant mineral is chlorite
- <1% disseminated sulphides
- becomes calcite rich downsection
- Mafic Volcanic

5.3 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 316m

DATE Aug 20 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-09 LOCATION Site #11

GEOLOGIST B. Bark DRILLER G. Hang BIT NO. CB69331 BIT FOOTAGE 0-19.5

MOVE TO HOLE 8:00 - 8:15

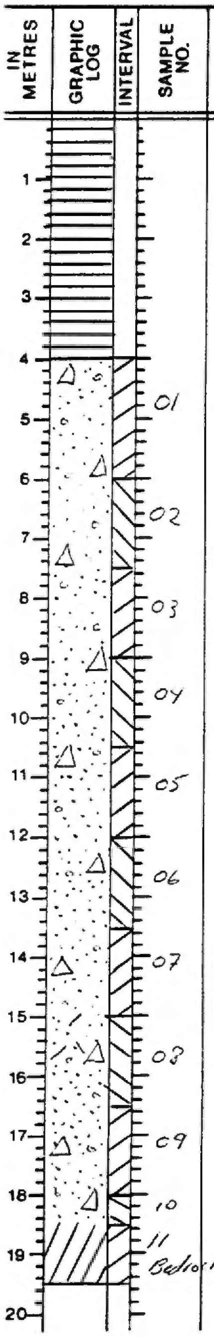
DRILL 8:15 - 9:00 11:30 - 12:45

MECHANICAL DOWN TIME 9:00 - 11:30 repair hydralic pump.

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-4.0 OJIBWAY II SEDIMENTS

0-1.5 - brown pure clay
- moderately compact

1.5-4.0 - grey pure clay
- moderately compact
- softens downsection

4.0-18.5 Till (Chibougamau)

- fine grained gray-beige sand silt matrix.

- pebbles and cobbles, approximate composition 50% Volcanic/Sediments
50% Granitoid

15.0-15.7 - very clay rich section
- grey gritty clay lumps and fine grained grey sand silt matrix
- occassional pebbles and cobbles approximate composition
60% Volcanic/Sediment
40% granitoid

15.7-18.5 - matrix as in 4.0-15.0
- clasts, pebbles and cobbles approximate composition
70% Volcanic/Sediments
30% Granitoid

18.5-19.5 BEDROCK
- light green colour
- fine grained
- moderate to strong foliation
- predominant mineral is chlorite
- <1% calcite
- Intermediate Volcanic

19.5 E.O.H.

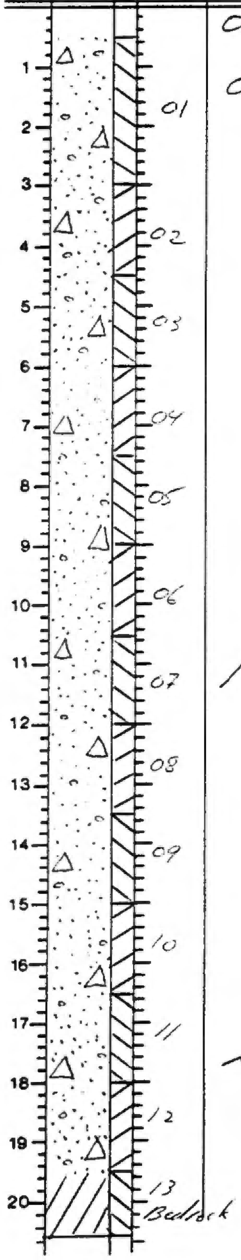
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 316m.

DATE Aug 20 1987
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO LS-87-10 LOCATION Site #13
GEOLOGIST T. Burns DRILLER G. Haug BIT NO. CDE 7331 BIT FOOTAGE 195-40.0
MOVE TO HOLE 12.45-1:00
DRILL 1:00-1.45
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-0.5 No Return

0.5-19.4 Till (Chibougamau)

- fine grained gray-beige sand matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% Granitoid
- high percentage of fine sand partially sorted.
- cobbly below 11.0 m.
- silty sections at 14.8-15.2
  16.2-16.4
  17.7-18.0

19.4-20.5 BEDROCK

- dark green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- 10-15% calcite Veining
- Mafic Volcanic.

20.5 E.O.H.

Note: Examination of the character splits by binocular microscope of samples 01 to 06 indicates that they are pebbly sands consisting of medium grained (100 - 400μ) sorted sand with abundant pebbles coming from thinly bedded gravels within the sand. Samples collected below 11 metres are till as described in Field.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

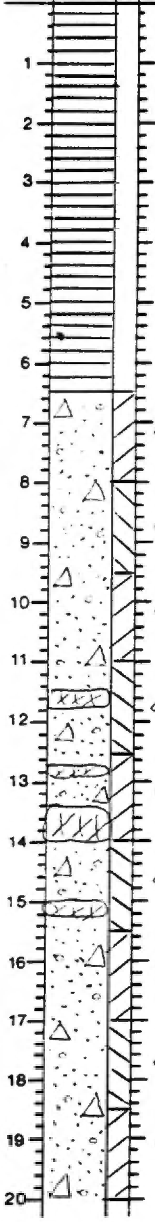
Elevation: 314m.

DATE Aug 20 19 87
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO LS-87-11 LOCATION Site #15
GEOLOGIST B. Bork DRILLER G. Hong BIT NO. CR9332 BIT FOOTAGE 0-22.3
MOVE TO HOLE 1:45 - 2:00
DRILL 2:00 - 4:15
MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____
OTHER _____
MOVE TO NEXT HOLE _____

page 1 of 2

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.:
01
02
03
04
05
06
07
08
09

0-6.5 OJIBWAY II SEDIMENTS
- grey pure clay
- moderately compact
- softens downsection

6.5-20.8 Till (Chibougamau)
- fine grained grey-beige sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sediment
30% Granitoid

11.5-11.8 Boulder (granite)
12.7-12.9 Boulder (gabbro)
13.4-14.0 Boulder (granite)
15.0-15.2 Boulder (granite)

Examination of character split 880314

11-02 Sand beige, medium grained (250-500µ) sorted, <5% +10

11-03 Till as described

TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-11 LOCATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

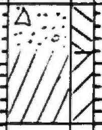
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 2



IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			10	20.8 - 22.0 BEDROCK
1			11 Bedrk	
				- dark green colour
2				
				- fine grained
3				- massive structure
4				- predominant mineral is chlorite
5				- Mafic Volcanic
6				
7				22.0 E.O.H.
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 313m.

DATE Aug. 20 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS 87-12 LOCATION Site #17

GEOLOGIST T. Burns DRILLER G. Hwang BIT NO. CB69333 / 334 BIT FOOTAGE 0-10.5 / 0-11.5

MOVE TO HOLE 4:15 - 4:30

DRILL 4:30 - 5:00 5:15 - 5:45

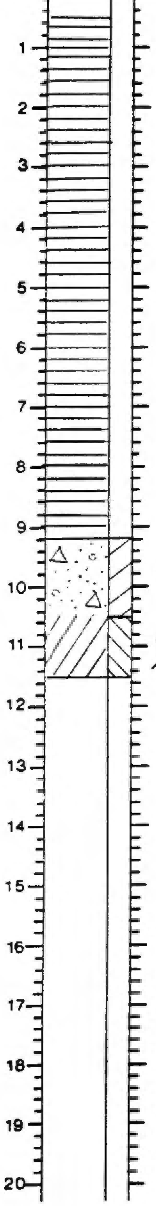
MECHANICAL DOWN TIME 5:00 - 5:15 repair track

DRILLING PROBLEMS lost down hole 1 rod, 1 sub, 1 bit

OTHER 5:45 - 6:15 travel to camp

MOVE TO NEXT HOLE _____

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



c1

02 Bedrock

0-0.5 No Return

0.5-9.2 OJIBWAY II SEDIMENTS

0.5-2.5 - dark brown soft pure clay

2.5-9.2 - grey soft pure clay

9.2-10.5 Till (Chibougamau)

- fine grained grey-beige sand matrix
- pebbles, approximate composition
  50% Volcanic / Sediments
  50% Granitoid

10.5-11.5 BEDROCK

- dark green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

11.5 E.O.H.

Examination of character splits 880314

12-01 Sand gray-beige, pebbly, medium grained (250-500 µ) 15% +10 clasts

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation : 313m

DATE Aug 21 19 87

HOLE NO LS-87-13 LOCATION Site #19

GEOLOGIST B.Bork DRILLER G.Howg BIT NO. CC67334 282 BIT FOOTAGE 11.5-26.3 0-3.7

SHIFT HOURS

____ TO ____

MOVE TO HOLE 7:15 - 7:30

DRILL 7:30 - 8:45

TOTAL HOURS

MECHANICAL DOWN TIME

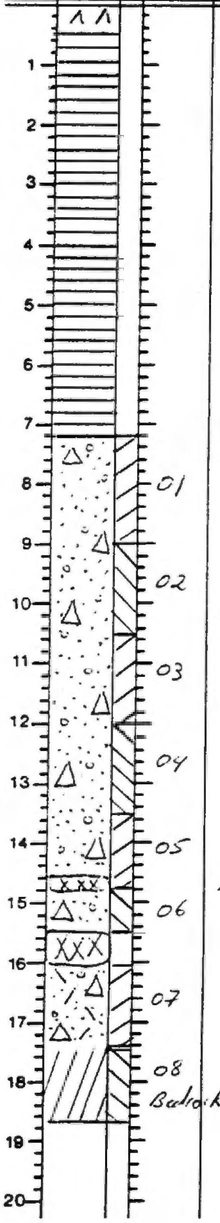
DRILLING PROBLEMS

CONTRACT HOURS

OTHER Travel 6:30 - 7:15

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 0.5 Organics

0.5 - 7.2 OJIBWAY II SEDIMENTS

- grey pure clay
- soft

7.2 - 17.4 Till (Chibougamau)

- fine grained grey-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic / Sediments 40% Granitoid
- below 12.2 clast become very cobbly

14.6-14.8 Boulder (gabbro)

15.5 - 16.0 Boulder (mafic Volcanic)

16.0 - 17.0 - Similar to above

- occassional grey gritty clay lumps

17.0 - 17.4 - becomes very clayrich

- fine grained sand & silt
- grey gritty clay lumps

17.4 - 18.7 BEDROCK

- light green grey colour
- fine grained
- massive structure
- approximately 10% calcite
- Intermediate Volcanic

18.7 E.O.H.

Examination of character split 880314

13-01 Till as described

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 316m

DATE Aug 21 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-14 LOCATION Site #4

GEOLOGIST B.Bart DRILLER G.Hoing BIT NO. CBL4335 BIT FOOTAGE 0->15.5

MOVE TO HOLE 9.45-10:45

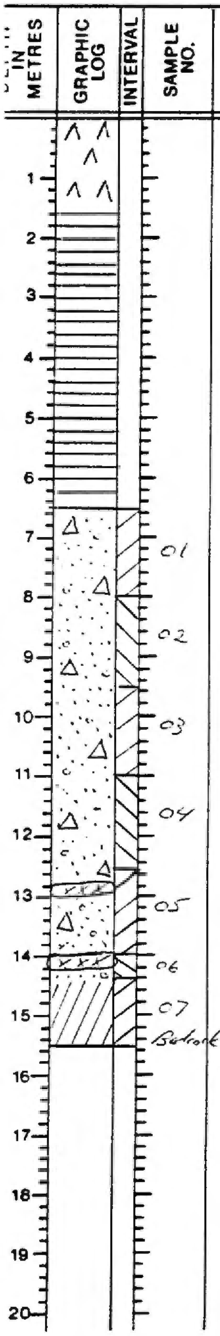
DRILL 10:45-12:45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-1.5 Organics

1.5-6.5 OJIBWAY II SEDIMENTS

- grey pure clay
- slightly compact

6.5-14.4 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sediments
  30% granitoid

9.8 11.2 - partially sorted till

- fine grained sand interbedded with medium to coarse grained sand
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment
  40% granitoid

12.8-13.0 Boulder (granite)

13.9-14.0- Small lense of grey gritty clay

14.0-14.2 Boulder (granite)

14.4-15.5 BEDROCK

- light to medium green colour
- fine to medium grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

15.5 E.O.H.

Examination of character splits 88 03 11

14-03 Sand gray-beige, medium grained (250->500μ) <5% +10 clasts.

14-05 Till as described

Note: contact assumed to be at base of third sample based on field description.

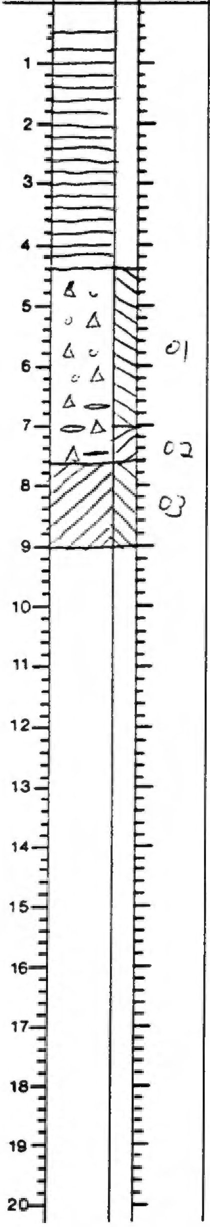
TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 21 19 87
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO LS-87-15 LOCATION Site # 2 Elevation 317m
GEOLOGIST T. Burns DRILLER G. Houg BIT NO. CB69336 BIT FOOTAGE _____
MOVE TO HOLE 12.15 -> 12.30
DRILL 12.30 -> 1.15
MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____
OTHER _____
MOVE TO NEXT HOLE _____

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 0.5 No Return

0.5 -> 4.4 Ojibway II Sediments
clay gray, soft, pure.

4.4 -> 7.6 Till (Chibougamau)
gray - beige, fine sand matrix
pebbly clasts 60% mafic
volcanic and sediments
- cobbly below 6.5 to 7.6

7.6 -> 9.0 Bedrock Intermediate
Volcanic
medium green (chlorite)
medium to coarse grained
locally porphyritic massive
2-3% calcite veining
1-2% disseminated cubic
pyrite.

9.0 E.O.H.

· Examination of character splits 880311

15-02 sand beige, medium grained
sorted, upper size limit

TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 21 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-16 LOCATION Site #6 Elevation 317 m

GEOLOGIST B Bark DRILLER G. Houg BIT NO. CBL9335 BIT FOOTAGE 24.5 -> 33.8

MOVE TO HOLE 1.15 -> 1.30

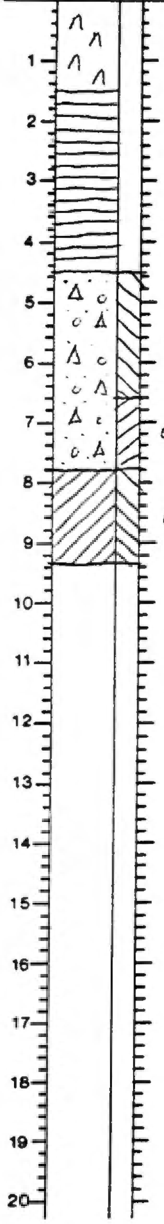
DRILL 1.30 -> 2.00

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______



SAMPLE NO.	DESCRIPTIVE LOG	
	0 -> 1.5 <u>Organics</u>	
	1.5 -> 4.5 <u>Ojibway II Sediments</u> clay gray pure moderately compact.	<u>Examination of Character Splits 080311</u> <u>16-02</u> <u>Sand</u> sorted beige medium grained (250-500 µ) and 30% bedrock cuttings TEB.
01 02	4.5 -> 7.8 <u>Till</u> Chibougamau gray-beige, fine sand matrix pebbly clasts 60% mafic volcanics and sediments	
03	7.8 -> 9.3 <u>Bedrock</u> Intermediate Volcanic light to medium green, fine to medium grained, massive (chlorite), 10% quartz-carbonate veining	
	9.3 E. O. H.	

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 21 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-17 LOCATION Site #8 Elevation 317m

GEOLOGIST B. Bark DRILLER G. Howe BIT NO. CBC9336 BIT FOOTAGE 0->6.4

MOVE TO HOLE 2.00 -> 2.15

DRILL 2.15 -> 3.30

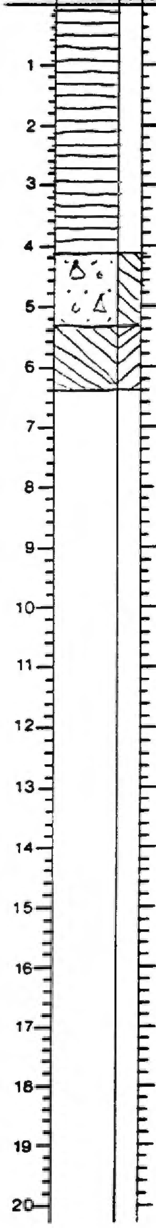
MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.: 01, 02

0->4.1 Ojibway II Sediments
clay gray, slightly gritty
moderately compact.

4.1->5.3 Till (Chibougamau)
gray-beige fine sand/
silt matrix pebbly clasts
60% mafic volcanic and
sediments 40% granitic

5.3->6.4 Bedrock Mafic Volcanic
dark green (chlorite)
medium to coarse grained
massive

6.4 E.O.H.

Check Geochem Character Split 880311

17-01 Sand
sorted, medium grained (300-500μ)
abundant bedrock cuttings, few pebbly
clasts, <10% fine sand (100->250μ)

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 21 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-18 LOCATION Site # 10 Elevation 319m

GEOLOGIST I. Burns DRILLER G Houz BIT NO. CB 9336 BIT FOOTAGE 6.8 -> 15.3

MOVE TO HOLE 3.30 -> 3.45

DRILL 3.45 -> 4.15

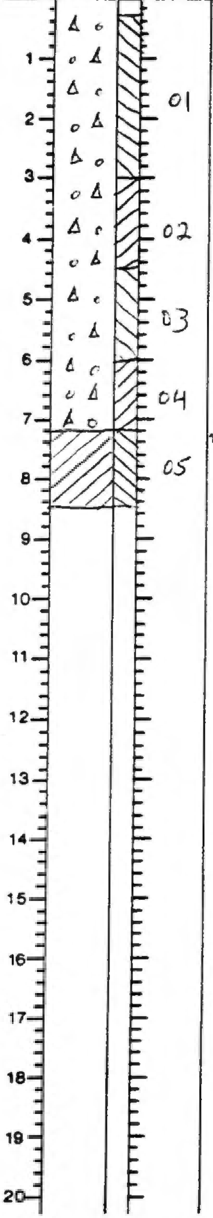
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0 -> 0.3 No Return

0.3 -> 7.2 Till (Chibougamau)
gray. beige. fine sand matrix
pebbly clasts 60% mafic
volcanic and sediment 40%
granitic

- high percentage fine sand and silt
matrix below 3.0 -> 7.2

7.2 -> 8.5 Bedrock Mafic Volcanic
dark green to black (chlorite)
fine to medium grained,
massive, soft easy to drill

8.5 E.O.H.

Note: Binocular Examination of character samples of 01 to 04 indicates that they are not till as logged. Sample 01 is a sorted Fine and medium grained (100 to 400μ) beige sand with no fine silt. Occasional rounded pebble clasts consist of 60% volcanics/sediments 40% granitoid. Sample 02 and 03 are similar to 01 with less clasts, Sample 04 is also a pebbly sand but is coarser grained (200 to 500μ).

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 318m

DATE Aug. 21 1987

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-19 LOCATION Site #12

GEOLOGIST B. Bark DRILLER G. Hung BIT NO. CBB 336 BIT FOOTAGE 15.3-27.9

MOVE TO HOLE 4:15-4:30

DRILL 4:30-5:00

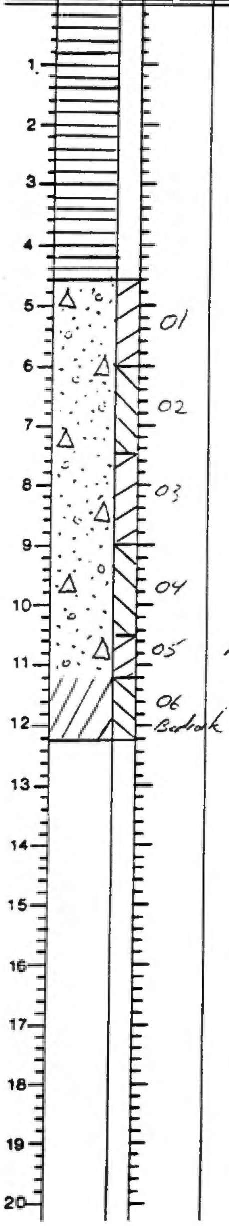
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-4.6 OJIBWAY II SEDIMENTS

0-1.5 - beige pure clay
- moderately compact

1.5-4.6 - grey pure clay
- moderately compact
- softens downsection

4.6-11.2 Till (Chibougamau)

- fine grained grey-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% Granitoid

11.2-12.2 BEDROCK

- dark green colour
- medium grained
- massive structure
- predominant mineral is chlorite
- <1% disseminated pyrite
- Mafic Volcanic

12.2 E.O.H.

Examination of Geochem Character Split

880311

19-01 and
19-02 Sand
sorted, beige, medium grained (250-500μ)
well rounded upper size limit

19-03→05 Till as logged.

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 316m

DATE Aug 22 19 87

SHIFT HOURS

_______ TO _______

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-20 LOCATION Site #14

GEOLOGIST B. Bark DRILLER G. Houg BIT NO. CB69336 BIT FOOTAGE 278-40.3

MOVE TO HOLE 7:00-7:15

DRILL 7:15-8:15

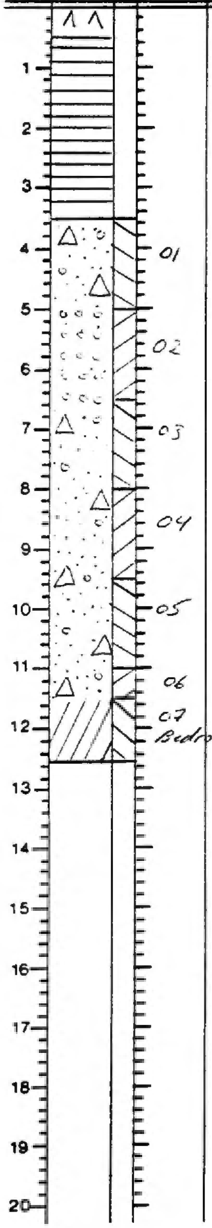
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 6:30-7:00

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-0.5 Organics

0.5-3.5 OJIBWAY II SEDIMENTS
- gray pure clay
- moderately compact

3.5-11.5 Till (Chibougamou)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% Granitoid

5.0-6.5 - interbedded sand and gravel lense
- medium to coarse grained beige sand
- interbeds of gravel with little or no sand
- clast composition 60% Volcanic/Sediments 40% granitoid

11.5-12.5 BEDROCK
- light green to white colour
- fine grained
- massive structure
- predominantly FeMg carbonate
- Mafic Volcanic

12.5 E.O.H.

DH February. 15 1908
Examination of character splits of samples 01 and 02 indicate that they are sorted medium to coarse (200 to 500µ) grained beige sand with pebble clasts from gravel interbeds. Some fine material present from bit grinding on clasts and resulting in rock-flour.
Samples 03 to 06 are till as logged.

OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation 317m.
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 22 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-21 LOCATION Site #20

GEOLOGIST B. Bark DRILLER G. Hoag BIT NO. CB69337 BIT FOOTAGE 0-9.5

MOVE TO HOLE 8:15-8:30

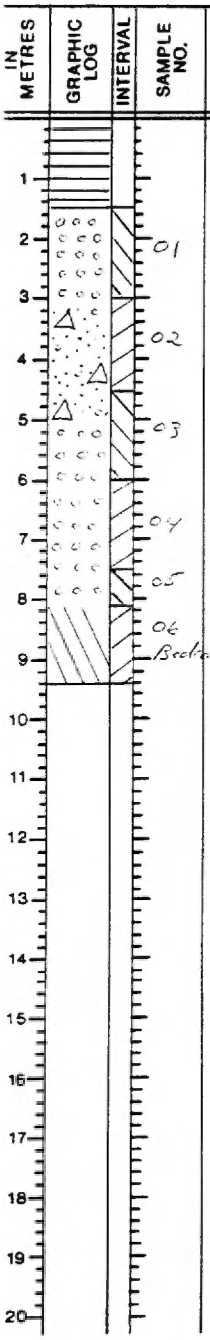
DRILL 8:30-9:15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-3.0 OJIBWAY II SEDIMENTS

0-1.5 - gray pure clay

- moderately compact

1.5-3.0 - medium and coarse grained sand

- high percentage of clasts, approximate composition

60% Volcanic/Sediments

40% granitoid

3.0-8.1 Till? (Chibougamau)

3.0-5.0 - fine grained sand silt matrix

- pebbles and cobbles, approximate composition 60% Volcanic/Sediments

40% granitoid

5.0-8.1 - similiar to 1.5-3.0

8.1-9.4 Bedrock

- light to medium green colour

- medium grained

- massive structure

- approximately 5% quartz, calcite veining

- predominant mineral is chlorite

- Intermediate to Mafic Volcanic

9.4 E.O.H.

DH Feb. 15, 1988

E-xamination of character sample of 21-02 indicates it to be a sorted medium to coarse grained (100 to 500µ) beige sand and not till as originally logged.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 22 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-22 LOCATION Site #18 Elevation 319

GEOLOGIST T. Burns DRILLER G. Houy BIT NO. CB69337 BIT FOOTAGE 9.5 → 23.8

MOVE TO HOLE 9.15 → 9.30

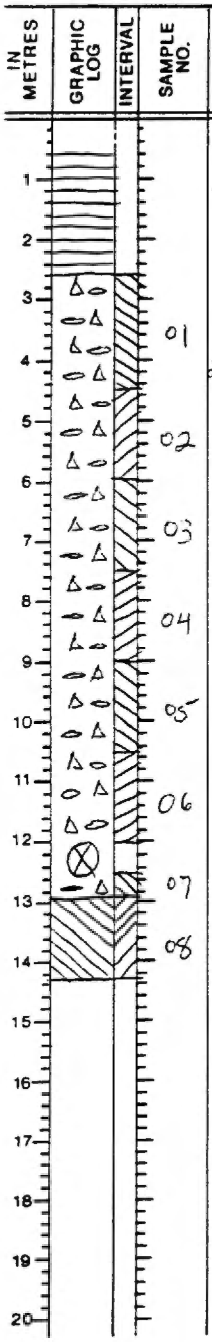
DRILL 9.30 → 10.30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 → 0.5 <u>No Return</u>

0.5 → 2.6 <u>Ojibway II sediments</u>

<u>clay</u> gray - beige above 1.5 gray below, soft, pure

2.6 → 12.9 <u>Till</u> (Chibougamau)

gray - beige, fine sand matrix cobbly clasts 60% mafic volcanic and sediments 40% granitic

- high percentage fine sand matrix 7.6 → 7.9
- increase in percentage of volcanic clasts to 85% below 8.0
- boulder, intermediate volcanic 12.0 → 12.5

12.9 → 14.3 <u>Bedrock</u> Intermediate Volcanic

medium to light green porphyritic, massive possibly tuffaceous locally.

14.3 E. O. H.

<u>Examination of Geochem Character Split 880311</u>

22-02 → 03 <u>Sand</u>

- sorted, beige, medium grained (250-500 μ) well rounded 25% +10 clasts. Assumed 22-01 to be same

22-04 - 07 <u>Till</u> as logged.

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 324m.

DATE Aug. 22 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-23 LOCATION Site #16

GEOLOGIST B. Bock DRILLER G. Houng BIT NO. C669337 BIT FOOTAGE 238-32.8

MOVE TO HOLE 10:30 - 10:45

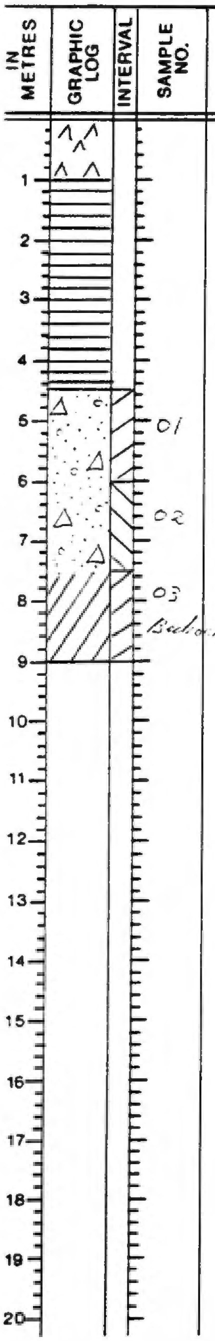
DRILL 10:45 - 11:30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 - 1.0 Organics

1.0 - 4.5 OJIBWAY II SEDIMENTS
- gray pure clay
- moderately compact

4.5 - 7.5 Till (Chibougamau)
- fine grained gray sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic / Sediments 30% granitoid

7.5 - 9.0 BEDROCK
- medium green colour
- medium grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

9.0 E.O.H.

Examination of Geochem character splits

880311

23-02 Gravel

sorted, medium sand matrix (500-750µ) > 40% + 10 clasts

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation . 321m

DATE Aug 22 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-24 LOCATION Site #32

GEOLOGIST B.Bark DRILLER G.Howg BIT NO. CB69358 BIT FOOTAGE 0-10.5

MOVE TO HOLE 11.30-11.45

DRILL 11.45-12.45

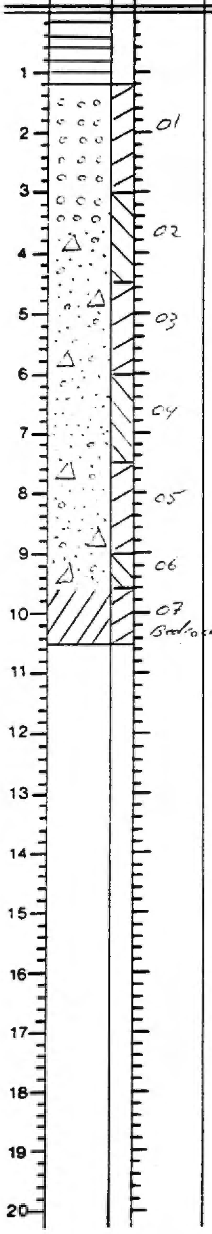
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-3.5 OJIBWAY II SEDIMENTS

0-1.2 - beige gritty clay
- moderately compact

1.2-3.5 - Gravel
- medium and coarse grained sand
- pebbles and cobbles
60% Volcanic / Sediments
40% granitoid

3.5-9.6 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles approximately
60% Volcanic / Sediments
40% Granitoid

6.4-7.0 - sand lense
- medium grained beige sand
- very few Clasts

9.6-10.5 BEDROCK
- dark green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- 1-2% quartz-calcite veins
- Mafic Volcanic

10.5 E.O.H.

Examination of character Splits 880311

24-05 Sand beige, medium grained, (250-500μ) sorted, ∠10% +10 clasts

TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug. 22 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-25 LOCATION Site #34 Elevation 321 m

GEOLOGIST T. Bruns DRILLER G. Houy BIT NO. CB69338 BIT FOOTAGE 10.5 -> 22.1

MOVE TO HOLE 12.45 -> 1.00

DRILL 1.00 -> 1.45

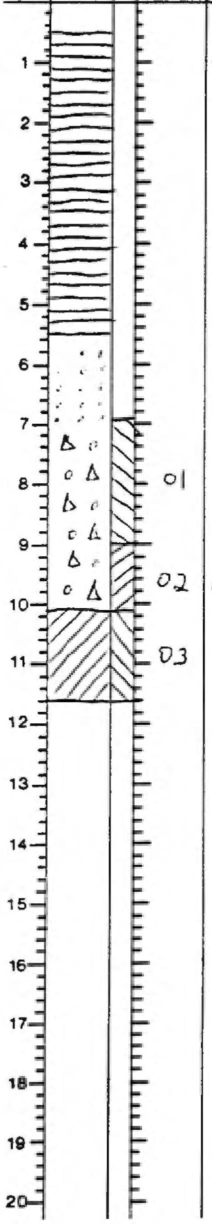
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 0.5 No Return

0.5 -> 6.9 Ojibway II Sediments

clay 0.5 -> 5.5
gray-beige to gray, soft
pure
sand 5.5 -> 6.9

6.9 -> 10.1 Till (Chibougamau)
gray-beige, high percentage
of fine sand matrix, pebbly
clasts 60% mafic volcanic
and sediments 40% granitic
cobbly below 8.7

10.1 -> 11.6 Bedrock Mafic Pyroclastic
dark green (chlorite)
fine grained, ashy texture
some lapelli size
fragments

11.6 E. O. H.

Examination of character splits 880311

25-01 Gravel sorted, rounded clasts, coarse sand matrix (500 -> 1000 μ)

25-02 Till as described

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 321m.

DATE Aug 22 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-26 LOCATION Site # 37

GEOLOGIST B. Bork DRILLER G. Howg BIT NO. CB64338 / CB69339 BIT FOOTAGE 221-346 / 0 - 6.5

MOVE TO HOLE 1:45 - 2:00

DRILL 2:00 - 4:30

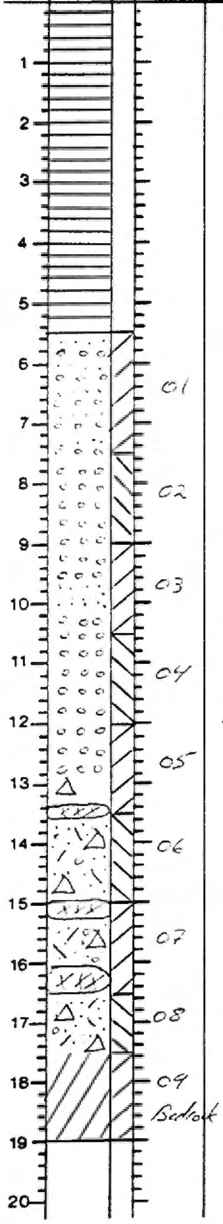
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0- 12.9 OJIBWAY II SEDIMENTS

0-5.5 - pure gray clay
- moderately compact
- Softens downsection

5.5-7.5 - fine grained sand interbedded with gravel

7.5-9.6 - Gravel
- medium and coarse grained sand
- high percentage of pebbles and cobbles, composition 60% Volcanic/Sediments
40% Granitoid

9.6-10.0 - Sand lense
- very coarse beige sand
- very few clasts

10.0-12.9 - gravel similiar to 7.5-9.6

12.9 - 17.5 Till (Chibougomou)
- very clay rich
- fine grained gray-beige sand silt
- grey gritty clay lumps
- occassional clasts
60% Volcanic/Sediments
40% granitoid

13.4-13.6 Boulder (diorite)
15.0-15.3 Boulder (granite)
16.1-16.5 Boulder (granite)

17.5-19.0 BEDROCK
- light green colour
- very fine grained, very well foliated
- predominant mineral is chlorite
- 10% rock flour
- Mafic Volcanic

19.0 E.O.H.

Examination of character splits 880311

26-07 Till as described

TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 325m.

DATE Aug 22 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO LS-87-27 LOCATION Site #36

GEOLOGIST B.Bark DRILLER G.Howg BIT NO. CG67340 BIT FOOTAGE 0-5.5

MOVE TO HOLE 4:30-4:45

DRILL 4:45-5:15

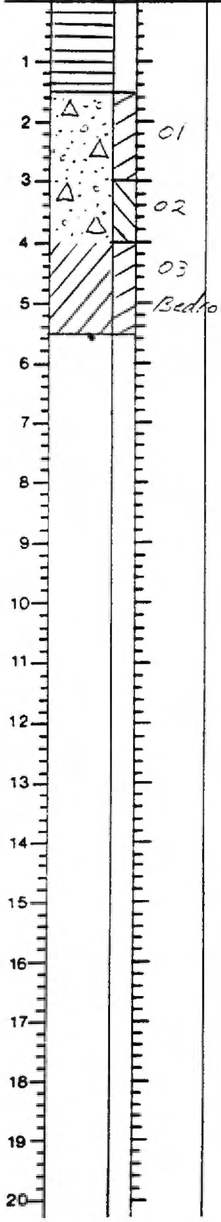
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER Travel 5:15-5:45

MOVE TO NEXT HOLE ______

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-1.5 OJIBWAY II SEDIMENTS
- beige pure clay
- moderately compact

1.5-4.0 Till (Chibougamou)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sediments 30% granitoid

2.5-2.7 Boulder (mafic Volcanic)

4.0-5.5 BEDROCK
- dark green colour
- fine grained
- massive structure
- brown staining along some cleavage plains
- <5% quartz carbonate stringers
- very soft to drill
- Mafic Volcanic

5.5 E.O.H.

Examination of character splits 880311

27-02 Sand beige, sorted medium grained (250-500 u)

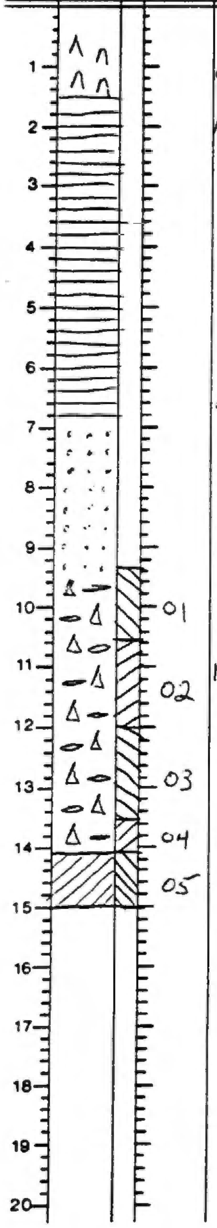
TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 23 19 87
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO LS-87-28 LOCATION Site # 27 Elevation 311m
GEOLOGIST J. Burns DRILLER G. Howg BIT NO. CBL9340 BIT FOOTAGE 5.5 -> 20.5
MOVE TO HOLE 6.45 -> 7.15
DRILL 7.15 ->
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
OTHER 6.30 -> 6.45 travel
MOVE TO NEXT HOLE ______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 0.5 No Return

0.5 -> 1.5 Organics

1.5 -> 9.3 Ojibway II Sediments

clay 1.5 -> 7.8
gray soft pure

sand 7.8 -> 9.3
gray - beige, fine grained

9.3 -> 14.1 Till (Chibougamau)
gray - beige, fine sand matrix
cobbly clasts 60% mafic
volcanics and sediments
40% granitic

14.1 -> 15.0 Bedrock Quartz - feldspar Porphyry
medium green (chlorite)
porphyritic, 70% phenocrysts
of which 20% are quartz and
80% are plagioclase, 1-2 mm
in size, massive, very hard.

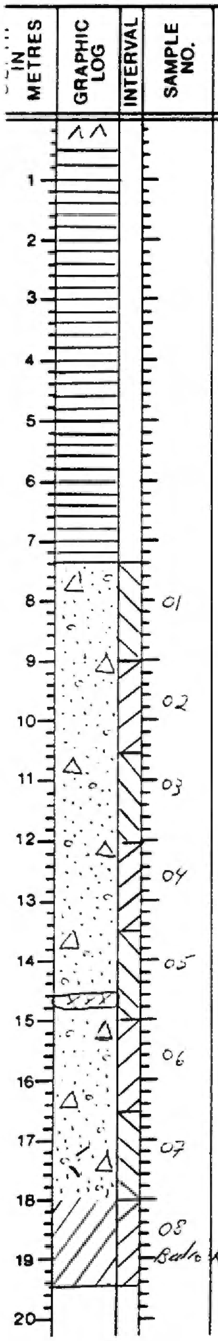
15.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 310m.

DATE Aug 23 19 87
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO LS 87-27 LOCATION Site #29
GEOLOGIST B. Burk DRILLER G. Hany BIT NO. 5669340 BIT FOOTAGE 20.5-40.0
MOVE TO HOLE 8.30-8:45
DRILL 8:45-10:18
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-0.5 Organics

0.5-7.4 OSIBWAY II SEDIMENTS
- gray pure clay
- moderately compact
- softens downsection

7.4-18.0 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% granitoid

14.6-14.8 Boulder (diorite)

17.3-17.7 - till similiar to above
- gray gritty clay lumps

17.7-18.0 - matrix as in 7.4-17.3
- pebbles and cobbles, approximate composition 70% Volcanic/Sediments 30% Granitoid

18.0-19.5 BEDROCK
- medium green colour
- fine to medium grained
- weak foliation to massive structure
- predominant mineral is chlorite
- Mafic Volcanic

19.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation : 312m

REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug. 23 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-30 LOCATION Site #31

GEOLOGIST B. Bark DRILLER G. Howg BIT NO. C069 341 BIT FOOTAGE 0-7.3

MOVE TO HOLE 10:15 - 10:30

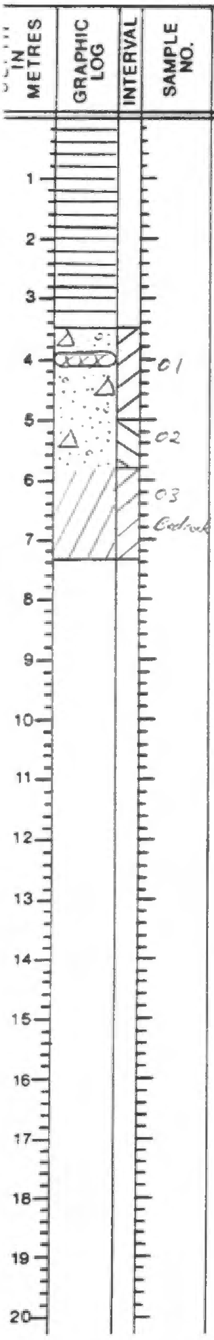
DRILL 10.30 - 11.00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 - 3.5 OJIBWAY II SEDIMENTS
- beige pure clay
- moderately compact

3.5 - 5.8 TILL (CHIBOUGAMAU)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment 40% granitoid

3.9 - 4.1 Boulder (diorite)

5.0 - 5.8 · very coarse till
- medium grained beige sand
- cobbles, approximate composition 60% Volcanic / Sediments 40% Granitoid

5.8 - 7.3 BEDROCK
- medium green colour
- fine grained
well foliated
- predominant mineral is chlorite
- Mafic Volcanic

7.3 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 23 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-31 LOCATION Site #37 Elevation 312m

GEOLOGIST T. Bruns DRILLER G. Houg BIT NO. CB69341 BIT FOOTAGE 7.3 -> 18.8

MOVE TO HOLE 11.00 -> 11.15

DRILL 11.15 -> 12.00

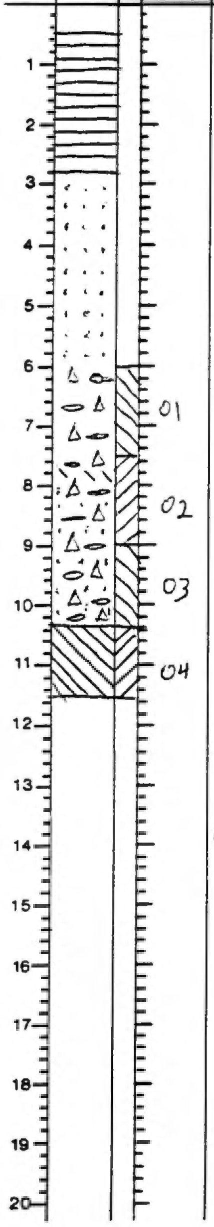
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 0.5 No Return

0.5 -> 6.0 Ojibway II Sediments

clay 0.5 -> 2.8

gray, soft, pure.

sand 2.8 -> 6.0

gray-beige, fine grained interbedded clay seams

6.0 -> 10.3 Till (Chibougamau)

gray-beige, fine sand matrix cobbly clasts 80% mafic volcanic and sediments 20% granitic

- low percentage fine sand matrix above 7.5
- gritty gray clay matrix below 7.6 -> 8.0
- abundant fine sand matrix 8.0 -> 10.3

10.3 -> 11.5 Bedrock Intermediate Volcanic

medium to light green fine grained, moderate to well developed

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 308m

DATE Aug.23 19 87

HOLE NO LS-87-32 LOCATION Site #35

GEOLOGIST B.Bark DRILLER G.Hoang BIT NO. CBL9341 BIT FOOTAGE 18.5 - 42.6

SHIFT HOURS

_____ TO _____

MOVE TO HOLE _____

DRILL _____

TOTAL HOURS _____

MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

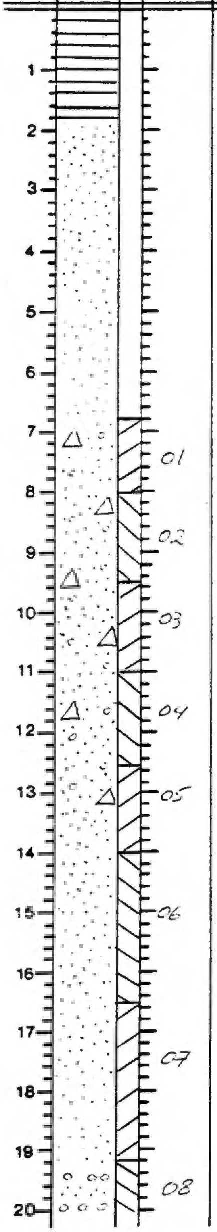
CONTRACT HOURS _____

OTHER _____

MOVE TO NEXT HOLE _____

page 1of2

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-6.8 OJIBWAY II SEDIMENTS

0-1.8 - grey gritty clay
- moderately compact

1.8-6.8. Sand
- fine grained beige sand

6.8-13.3 Till (Chibougamau)

- fine grained grey-beige sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sediments
30% granitoid

13.3-19.2 - Sand
- fine graind grey sand
- occassional interbeds of medium grained gray-beige sand
- very few clasts

19.2-21.0 Interbedded sand and gravel
- Sand is fine to medium grained grey colour
- Gravel. pebbles and cobbles approximate composition
70% Volcanic/Sediments
30% granitoid

DH Feb 1988

Examination of character splits
of samples 01 to 04 by
binocular microscope indicates
that the till-like appearance
is due to samples 01 to 03
consisting of fine interbeds of
sorted fine grained (50 to 150µ)
gray-beige sand with medium
and coarse grained (250 to 500µ)
sand. Pebble clasts due to
thin pebble gravel interbeds.
Sample 04 is similar to 01 to
03 with less fine sand. Mostly
medium and coarse with interbedded
pebble gravel.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-32 LOCATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

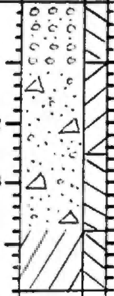
DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21			08	21.0-23.8 Till, similar to 6.8-13.3
22			09	
23			10	23.8 - 24.8 BEDROCK - dark green colour - fine to medium grained - massive structure - hemotite staining along some cleavage plains - predominant mineral is chlorite - Mafic Volcanic
24			11 Bedrock	
25				
6				
7				
8				24.8 E.O.H.
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				



OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 310m

DATE Aug. 23 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-33 LOCATION Site #38

GEOLOGIST B. Bock DRILLER G. Hong BIT NO. LB69283 BIT FOOTAGE 0-92

MOVE TO HOLE 2:15-3:00

DRILL 3:00-3:30

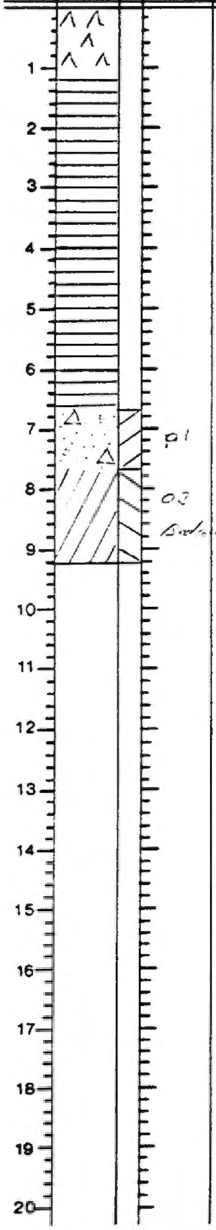
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-1.0 Organics

1.0-6.7 OJIBWAY II SEDIMENTS
- gray pure clay
- moderately compact
- softens downsection

6.7-7.7 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% Granitoid

7.7-9.2 BEDROCK
- light to medium green colour
- fine grained
- moderate foliation
- predominant mineral is chlorite
- Intermediate to Mafic Volcanic

9.2 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 23 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS _____

CONTRACT HOURS _____

HOLE NO LS-87-34 LOCATION Site 39 Elevation 315m

GEOLOGIST T. Burns DRILLER G. Houy BIT NO. CB69283 BIT FOOTAGE 9.3 → 18.3

MOVE TO HOLE 3.30 → 3.45

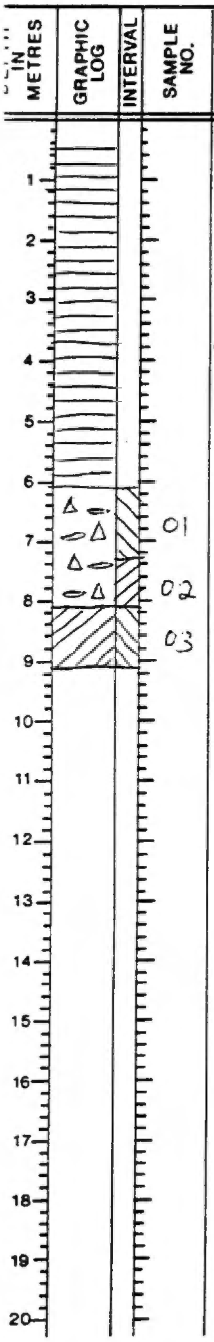
DRILL 3.45 → 4.30

MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____



SAMPLE NO.	DESCRIPTIVE LOG
	0 → 0.5 Organics
	0.5 → 6.1 Ojibway II Sediments clay gray, soft, pure
01	6.1 → 8.1 Till (Chibougamau) gray-beige, fine sand matrix pebbly clasts 70% mafic volcanics and sediments 30% granitic
02	
03	8.1 → 9.1 Bedrock Intermediate Volcanic medium gray-green, fine to medium grained locally porphyritic, massive
	9.1 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 318m

DATE Aug 23 19 87

HOLE NO LS-87-35 LOCATION Site #40

GEOLOGIST B.Bork DRILLER G. Houg BIT NO. CBL9283 BIT FOOTAGE 183-244

SHIFT HOURS

_____ TO _____

MOVE TO HOLE 4:30-4:45

DRILL 4:45-5:15

TOTAL HOURS

MECHANICAL DOWN TIME

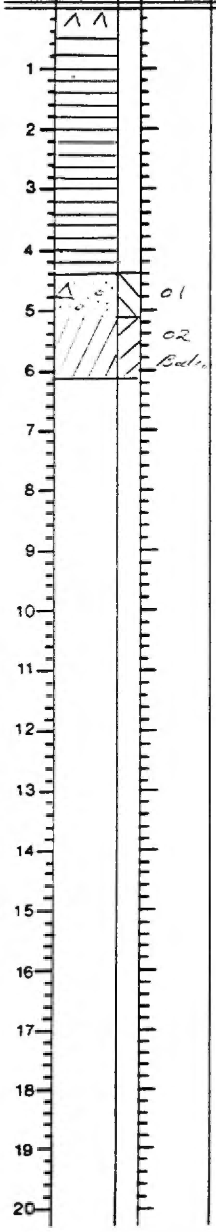
DRILLING PROBLEMS

CONTRACT HOURS

OTHER Travel 5:15-5:45

MOVE TO NEXT HOLE

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0-0.5 Organics

0.5-4.4 OSIBWAY II SEDIMENTS

- gray pure clay
- moderately compact
- Softens downsection

4.4-5.1 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment 40% granitoid

5.1-6.1 BEDROCK

- light green colour
- fine grained
- weak foliation
- predominant mineral is chlorite
- Mafic Volcanic

6.1 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 322m.

DATE Aug. 24 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO LS-87-36 LOCATION Site #26

GEOLOGIST B. Back DRILLER G. Hung BIT NO. CB69283 BIT FOOTAGE 249 · 31.0

MOVE TO HOLE 7:00 · 8:45

DRILL 8:45 - 9:45

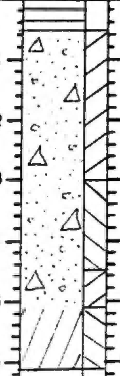
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER Travel 6:30 · 7:00

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



Sample no.:

01

02

03

04

Bedrock

0-0.5 OJIBWAY II SEDIMENTS
- beige gritty clay
- moderately compact

0.5-5.1 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment 40% granitoid

5.1-6.1 BEDROCK
- dark green and white colour
- medium to coarse grained
- massive structure
- predominant minerals are pyroxene and feldspar
- Gabbro

6.1 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 24 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-37 LOCATION Site#24 Elevation 329m

GEOLOGIST I. Burns DRILLER G. Harvey BIT NO. CB69284 BIT FOOTAGE 0->14.5

MOVE TO HOLE 9.45 -> 10.00

DRILL 10.00 -> 11.00

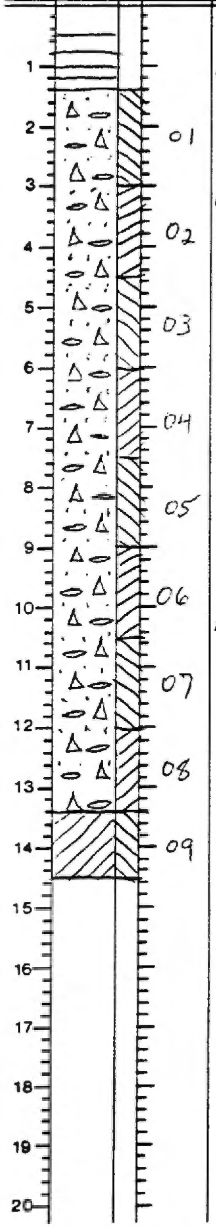
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

0 -> 0.5 No Return

0.5 -> 1.4 Ojibway II Sediments

clay gray, soft, pure

1.4 -> 13.4 Till (Chibougamau)

gray-beige, fine sand matrix
cobbly clasts 65% mafic
volcanic and sediments
35% granitic

- high percentage fine sand matrix above 12.8
- regular percent fine sand matrix below 12.8

13.4 -> 14.5 Bedrock Intermediate Volcanic

medium green, fine to medium grained, locally porphyritic, massive

- veggy limonitic quartz vein at 14.3

14.5 E.O.H.

Note: Check examinations of the character splits of samples 04 and 07 indicate that they are predominantly sorted beige-gray, medium and coarse sand (200 to 700μ). There are also +10 mesh granule and pebble clasts that are rounded to subangular. It is assumed that all the samples from 01 to 07 are sand and pebbly sand.

Sample 08 was also examined by binocular microscope and it was determined that it is a till as originally described in the field consisting of a slightly sorted fine sand matrix (<50 to 250μ) and only a few pebble clasts, probably due to overscreening in the field.

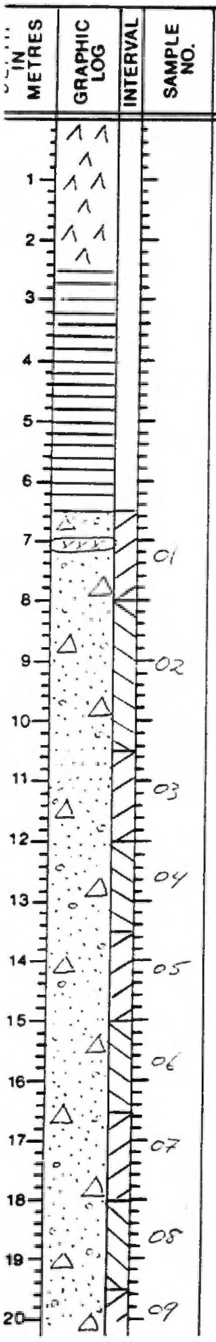
OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation: 320m
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 24 19 87
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO LS 87-38 LOCATION Site #22
GEOLOGIST B. Bork DRILLER G. Howg BIT NO. CB69284 BIT FOOTAGE 145.595
MOVE TO HOLE 11:00-11:15
DRILL 11:15-1:45
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

page 1 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-2.5 Organics

2.5-6.5 OJIBWAY II SEDIMENTS
- gray pure clay
- moderately compact
- softens downsection

6.5-43.5 Till (Chibougomou)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% Granitoid

7.0-7.2 Boulder (diorite)

10.5-11.1 Sand lense
- fine grained gray sand
- occassional pebbles

Note: Check logged character splits of samples 01, 05, 06, 11 15, 16, 23, 24, Feb. 17, 88 P.C. & RM.

#'s 01, 05, 06, 11. These samples are catagorized together since they are very similar. Predominantly beige and beige grey sorted fine grained sand (50µ to 250µ) 40% of sample is medium grained (250µ to 500µ). There are also both rounded & sub angular pebble sized clasts. Therefore, they are reclassified as pebbley sand.

#15. There appears to be a contact between overlying Ojibway II Sediments and the underlying Chibougaman Till 50% of sample is beige sorted medium grained sand (300µ to 600µ) and 50% is unsorted matrix of grey beige fine sand & silt (to 300µ). There are also both subrounded and subangular clasts.

#16, 23, 24. All appear to be till with grey beige, unsorted, fine sand silt matrix. (<50µ to 300µ) Minor grey gritty clay lumps were observed in #'s 23, 24. There are also both subangular and subrounded +10 pebbly clasts.

CONCLUSION: There is a contact between overlying Ojibway II Sediments and underlying Chibougaman Till at approximately 29.5m.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

________ TO ________

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS 87-38 LOCATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

MECHANICAL DOWN TIME ________

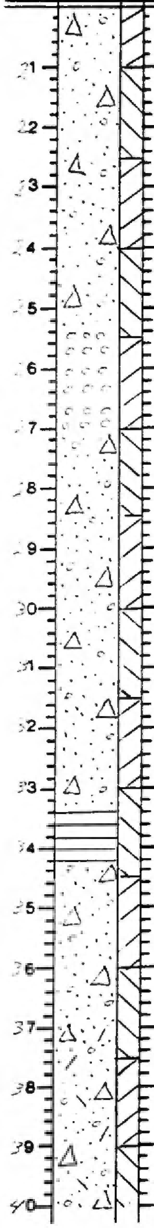
DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

page 2of3

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



SAMPLE NO.	DESCRIPTIVE LOG
09	25.5 - 27.0 Gravel section
10	- medium grained beige sand
	- high percentage of pebbles and cobbles, 60% Volcanic/Sediments 40% granitoid
11	
12	33.4 - 34.2 - clay seam
	- gray pure clay
13	- moderately compact
14	37.2 - 40.2 clay rich till
	- dark gray gritty clay
15	- fine grained gray sand
	- occassional pebbles
16	
17	
18	
19	
20	
21	
22	

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-38 LOCATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

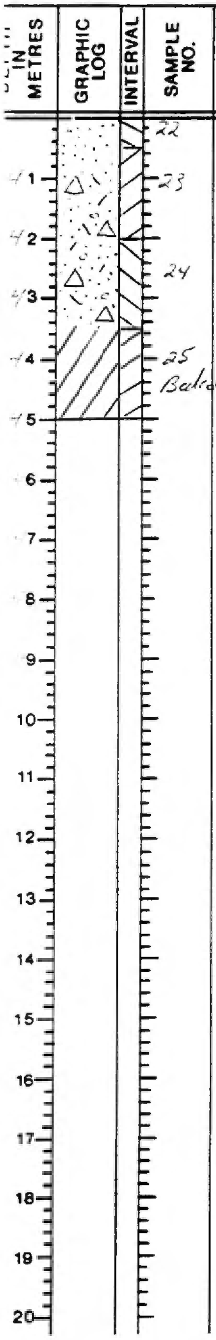
MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

page 3 of 3



DESCRIPTIVE LOG

40.2 - 40.8 Sand lense
- fine grained gray sand
- very few clasts

40.8 - 43.5 - clay rich till
- similar to 37.4 - 40.2

43.5 - 45.0 BEDROCK
- dark green and pink colour
- medium to course grained
- massive structure
- predominant minerals are chlorite and feldspar
- feldspar porphyry

45.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation 321m.
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 24 1987

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-39 LOCATION Site #28

GEOLOGIST B Bork DRILLER G. Howi BIT NO. CB64284 / CB64285 BIT FOOTAGE 595-610 / 0-11.1

MOVE TO HOLE 1:45-2:00

DRILL 2:00-3:30

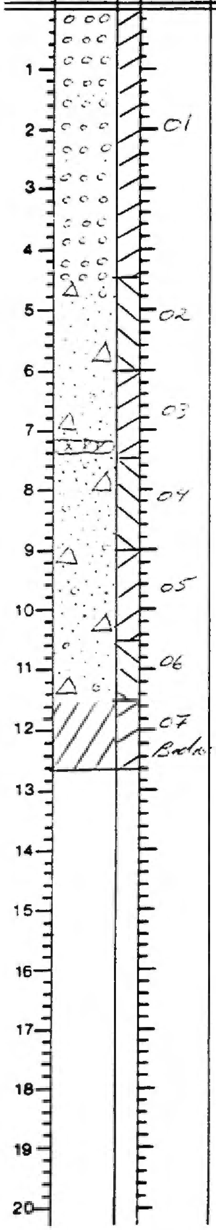
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-6.0 OJIBWAY II SEDIMENTS

0-4.5 Gravel
- medium grained beige sand
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment
40% Granitoid
- occassional interbeds of beige fine sand

4.5-6.0 · beige fine grained sand
- occassional pebbles

6.0-11.5 Till (Chibougamau)
- fine grained gray·beige sand silt matrix
- pebbles and cobbles, approximate composition 75% Volcanic/Sediment
25% granitoid

7.2-7.4 Boulder (mafic Volcanic)

11.5-12.6 BEDROCK
- medium green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

126 E.O.H.

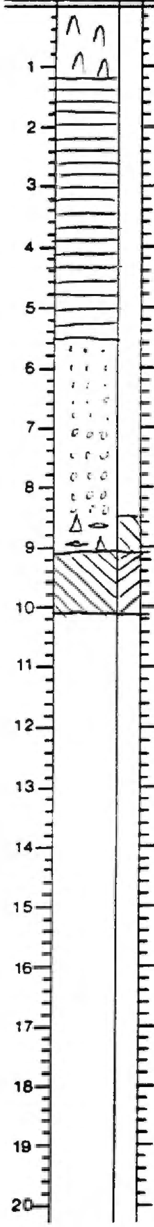
Note: Check examination of the character splits of samples 04 and 06 were done using a binocular microscope. Sample 04 consists of sorted beige-gray fine to medium sand (100 to 600μ) with a few subrounded pebble clasts. Sample 06 is predominantly sorted medium and coarse grained sand (300 to 800μ) with approximately 20% of the sample being sorted fine grained sand (100μ to 300μ) and rounded +10 mesh pebble clasts. It is assumed that the entire section logged as till in the field is in fact pebbly sand and gravel continued from the Ojibway II sediments.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 24 1987
SHIFT HOURS
TO
TOTAL HOURS
CONTRACT HOURS

HOLE NO LS-87-40 LOCATION Site #30 Elevation 322m
GEOLOGIST T. Burns DRILLER G. Houg BIT NO. CBC9285 BIT FOOTAGE 11.5→21.6
MOVE TO HOLE 3.30 → 3.45
DRILL 3.45 → 4.00
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.: 01, 02

0→1.2 Organics

1.2→8.5 Ojibway II sediments
clay 1.2→5.5
gray soft pure
sand 5.5→8.5
gray-beige, fine grained above 7.0 coarse below

8.5→9.1 Till (Chibougamau)
gray-beige, fine sand matrix cobbly clasts
60% mafic volcanics and sediments 40% granitic

9.1→10.1 Bedrock Intermediate Volcanic
medium green (chlorite)
fine grained, massive.

10.1 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 324m.

DATE Aug. 24 19 87

HOLE NO LS-87-41 LOCATION Site # 46

GEOLOGIST B.Bark DRILLER G. Huang BIT NO. CB59285 BIT FOOTAGE 216-25.1

SHIFT HOURS

____ TO ____

MOVE TO HOLE 4:00 - 4:15

DRILL 4:15 - 4:45

TOTAL HOURS

MECHANICAL DOWN TIME

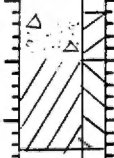
DRILLING PROBLEMS

CONTRACT HOURS

OTHER Travel 5:00 - 5:15

MOVE TO NEXT HOLE 4:45 - 5:00

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



Sample No.: 01, 02, Bedrock

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0-1.2 No Return
(till at surface, poor seal)

1.2-2.0 Till (Chibougamau)
- fine grained gray sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sediment
30% Granitoid

2.0-3.5 BEDROCK
- very weathered above 3.0 m.
- dark green colour
- medium grained
- massive structure
- <5% quartz veining
- <1% sulphides
- Some hematite staining along cleavage plains
- Mafic Volcanic

3.5 E.O.H.

– character sample Examined 88 03 10
correct as logged TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 328m.

DATE Aug.25 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-42 LOCATION Site #45

GEOLOGIST B.Bach DRILLER G.Hawg BIT NO. CB27286 BIT FOOTAGE 0-25.5

MOVE TO HOLE

DRILL 6:45-9:15

MECHANICAL DOWN TIME

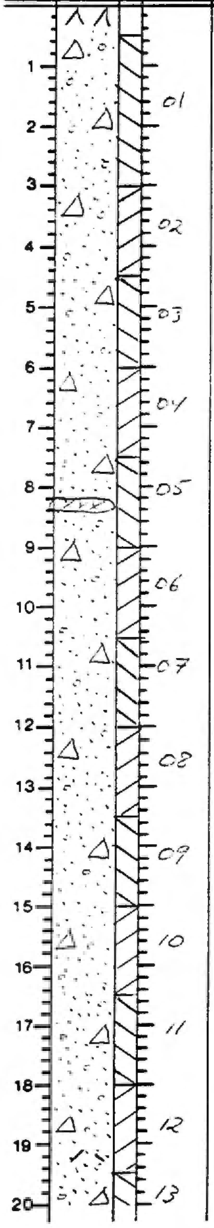
DRILLING PROBLEMS

OTHER Travel 6:30-6:45

MOVE TO NEXT HOLE

page 1of2

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-0.5 Organics

0.5-24.7 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% granitoid

8.2-8.4 Boulder (diorite)

19.0-19.3 till similiar to above
- gray gritty clay lumps.

Examination of character samples

42-05 consists of <50% clasts < 0.5 c.m in a medium to coarse sand matrix (250-500μ), few chips of pure clay (<<0.1%)

42-12 as above.

42-15 60% of sample is sorted medium to coarse grained sand (300μ to 700μ). 40% is sorted fine grained sand (100 to 300μ). Minor +10 pebble clasts.

42-16 Sample consists primarily of rock powder silt artificially created by drill. 20 percent of sample is medium grained sand. (300 to 500μ). Minor +10 pebble clasts

TEB 880310

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO ZS-87-42 LOCATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

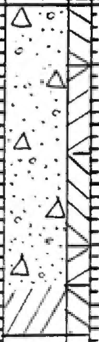
MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

page 2 of 2



DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG							
			13								
1			14	22.0-24.7 - matrix similiar 0.5 24.7							
2				- clast composition							
3			15	70% Volcanic/Sediment 30% granitoid							
4			16								
5			17 Bedrock	24.7-25.5 BEDROCK							
6				- yellowish White Colour							
7				- fine grained							
8				- very well foliated							
9				- high percentage of calcite							
10				- approximately 1-2% rock flour							
11				- sericite carbonate schist							
12											
13				25.5 E.O.H.							
14											
15											
16											
17											
18											
19											
20											

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 25 1987

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-43 LOCATION Site # 41 Elevation 322

GEOLOGIST I. Burns DRILLER G. Houg BIT NO. C1369286 BIT FOOTAGE 25.5->28.5

MOVE TO HOLE 9.15 -> 9.30

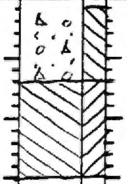
DRILL 9.30 -> 9.45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

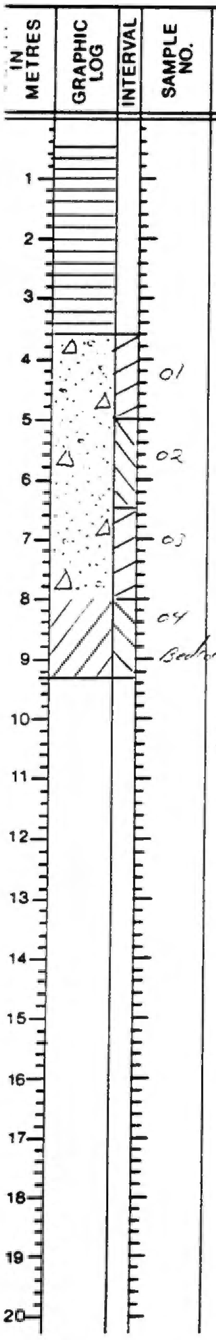


IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0 -> 0.2 No Return (till at surface)
1			01	0.2->1.4 Till (Chébougamau) gray-beige, fine sand matrix, pebbly clasts 60% mafic volcanic and sediments 40% granitic
2			02	1.4->3.0 Bedrock Mafic Volcanic dark green (chlorite) fine grained, very well developed foliation (shearing?) abundant fault gouge from 2.5 -> 2.8
9				3.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation: 320m
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug. 25 19 87
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO LS-87-44 LOCATION Site #42
GEOLOGIST B. Bork DRILLER G. Howg BIT NO. CB67 286 CB69 287 BIT FOOTAGE 28.5-30.0 0-7.7
MOVE TO HOLE 9.45-10.00
DRILL 10:00-10:45
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-0.5 Organics

0.5-3.6 OJIBWAY II SEDIMENTS
- beige gritty clay
- moderately compact
- softens downsection

3.6-8.0 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately
  70% Volcanic/Sediment
  30% granitoid

8.0-9.3 BEDROCK
- dark green colour
- coarse grained
- massive structure
- predominant minerals are pyroxene and feldspar
- Gabbro

9.3 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 318m

DATE Aug. 25 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-45 LOCATION Site #44

GEOLOGIST B. Bork DRILLER G. Howg BIT NO. CB69287 BIT FOOTAGE 77-142

MOVE TO HOLE 10.45-11:00

DRILL 11.00-11.45

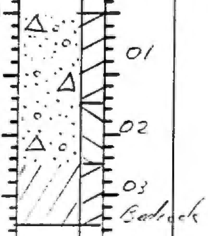
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-3.0 No Return

3.0-5.5 Till (Chibougamau)
- fine grained gray-beige Sand silt matrix
- Very sandy
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment 40% granitoid

5.5-6.5 BEDROCK
- dark green colour
- fine grained
- moderate foliation
- predominant mineral is chlorite
- Mafic Volcanic

6.5 E.O.H.

1
2
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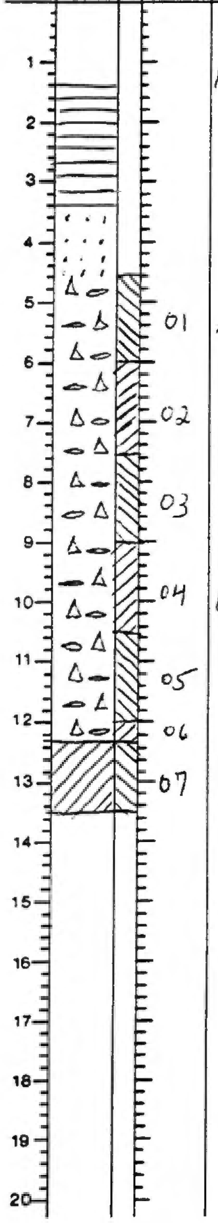
20

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 25 1987
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO LS-87-46 LOCATION Site # 43 Elevation 319 m
GEOLOGIST T. Burns DRILLER G. Houg BIT NO. CB69287 BIT FOOTAGE 14.2 → 27.7
MOVE TO HOLE 11.45 → 12.00
DRILL 12.00 → 1.15
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 → 1.4 Organics

1.4 → 4.6 Ojibway II Sediments
clay 1.4 → 3.4
gray, soft, pure
sand 3.4 → 4.6
gray-beige, fine grained

4.6 → 12.3 Till (Chibougamau)
gray-beige, fine sand matrix
cobbly clasts 50 % mafic
volcanics and sediments
50 % granitic
- vey stoney above 9.5

12.3 → 13.5 Bedrock Mafic Volcanic
medium to dark green (chlorite)
fine grained, very well
developed foliation (sheared)
abundant calcite alteration
10% vein calcite along shear
planes plus 5-10 % disseminated
calcite
- white massive quartz vein
from 13.3 to 13.5

13.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 318m.

DATE Aug 25-26 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS 87-47 LOCATION Site #47

GEOLOGIST B. Bock DRILLER G. Howg BIT NO. CB8 9257 / [illegible] / CB9 343 BIT FOOTAGE 27.9-40.7 / 0-17.0 / 0-1.5

MOVE TO HOLE 1:15-2:00

DRILL Aug 25 2:00-5:15 Aug 26 6:45-8:00

MECHANICAL DOWN TIME

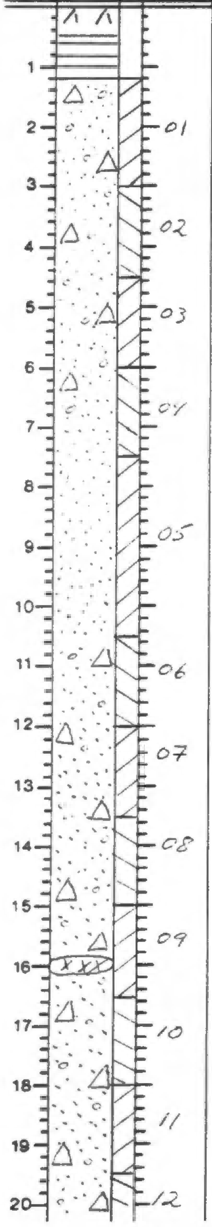
DRILLING PROBLEMS

OTHER Travel Aug 25 5:15-5:30 Travel Aug 26 6:30-6:45

MOVE TO NEXT HOLE

page 1 of 2

DEPTH IN METRES / GRAPHIC LOG / INTERVAL / SAMPLE NO.	DESCRIPTIVE LOG



0-0.5 Organics

0.5-1.2 OJIBWAY II SEDIMENTS

- beige gritty clay
- moderately compact

1.2-30.6 Till (Chibougamou)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sedimentary 30% granitoid

7.0-10.5
- fine grained beige sand lense
- occassional pebbles

15.9-16.1 Boulder (granite)

Note: Examination of the character splits of samples 02, 03, 08, 10, 14, 17, 18 and 19 were done with a binocular microscope. Sample 02 is predominantly sorted beige-gray fine grained sand (100 to 250µ) and medium grained sand (250 to 500µ) with a few rounded to subrounded clasts. Sample 03 is similar to the pebbley sand of 02 with more +10 mesh pebble and cobble cuttings indicating that it is interbedded with gravel.

Samples 08, 10, 14, 17, 18 and 19 were also examined and were determined to be unsorted gray to gray-beige fine sand and silt and gritty clay matrix (<50 to 300µ) with rounded to subangular pebble clasts. Contact between sand and gravel and the till appears to be around 10.5 metres.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO LS-87-47 LOCATION ____________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ____________

DRILL ____________

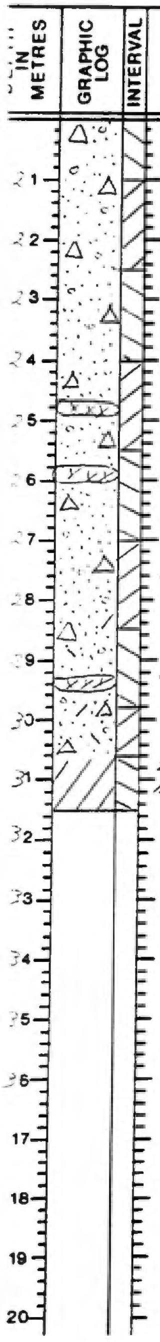
MECHANICAL DOWN TIME ____________

DRILLING PROBLEMS ____________

OTHER ____________

MOVE TO NEXT HOLE ____________

page 2 of 2



SAMPLE NO.	DESCRIPTIVE LOG
12	22.0-28.5 till
13	- fine grained gray beige sand silt matrix
	- gray gritty clay lumps
14	- pebbles and cobbles, approximate composition 80% Volcanic/Sediments 20% granitoid
15	247-249 Boulder (mafic Volcanic)
16	25.8-26.0 Boulder (granite)
17	28.5-30.6 Clay rich till
	- gray gritty clay lumps
18	- fine grained gray sand
19	- occassional pebbles
20 Bedrock	29.3-29.5 Boulder (diorite)
	30.6-31.5 BEDROCK
	- medium green colour
	- medium grained
	- weak foliation to massive structure
	- predominant mineral is chlorite
	- appears sheared
	- Mafic Volcanic
	31.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 318m.

DATE Aug. 26 19 87

HOLE NO LS-87-48 LOCATION Site #48

GEOLOGIST B. Bock DRILLER G. Hwang BIT NO. CBC9343 BIT FOOTAGE 1.5-9.8

SHIFT HOURS

_____ TO _____

MOVE TO HOLE 8:00-8:15

DRILL 8:15-8:45

TOTAL HOURS

MECHANICAL DOWN TIME

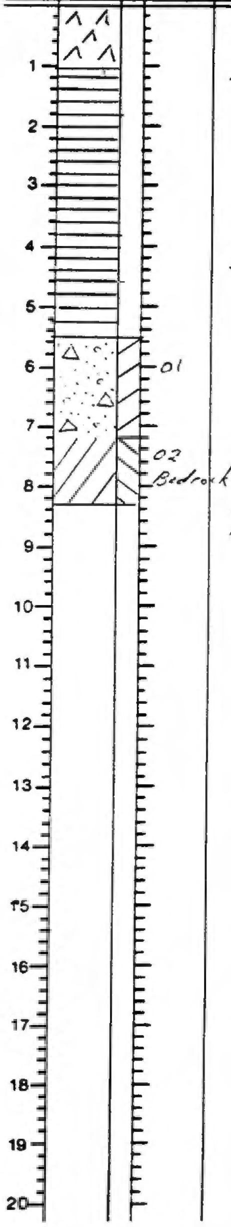
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0-1.0 Organics

1.0-5.5 OJIBWAY II SEDIMENTS
- pure gray clay
- moderately compact
- softens downsection

5.5 Till (Chibougamau)
- fine grained gray sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanics/Sediments
30% granitoid

7.2-8.3 BEDROCK
- dark green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

8.3 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 26 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-49 LOCATION Site # 49 Elevation 318m

GEOLOGIST T. Burns DRILLER G. Houg BIT NO. CB69343 BIT FOOTAGE 9.8 -> 21.3

MOVE TO HOLE 8.45 -> 9.00

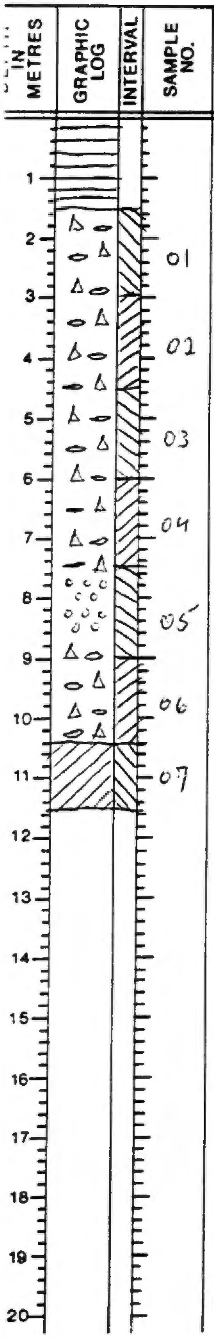
DRILL 9.00 -> 10.00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 -> 0.2 Organics

0.2 -> 1.5 Ojibway II Sediments
gray-beige, soft, pure

1.5 -> 10.4 Till (Chibougamau)
gray-beige, fine sand matrix, cobbly clasts
60% mafic volcanics and sediments 40% granitic
- gravel lense at 7.7 -> 8.5

10.4 -> 11.5 Bedrock Felsic Pyroclastic
medium to dark gray, fine to medium grained, lapelli sized fragments welded together, hard, siliceous

11.5 E.O.H.

Note: Examination of the character split of sample 01 indicates that it is sorted fine beige sand (100 to 200µ) with a Few rounded pebbles from a gravel horizon. Samples 02 to 06 are till as logged in the Field except For 7.7 to 8.5m which is a gravel horizon within the till.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 319m.

DATE Aug 26 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-50 LOCATION Site #50

GEOLOGIST B. Bark DRILLER G. Howg BIT NO. CBE9344 BIT FOOTAGE 0-9.7

MOVE TO HOLE 10:00-10:15

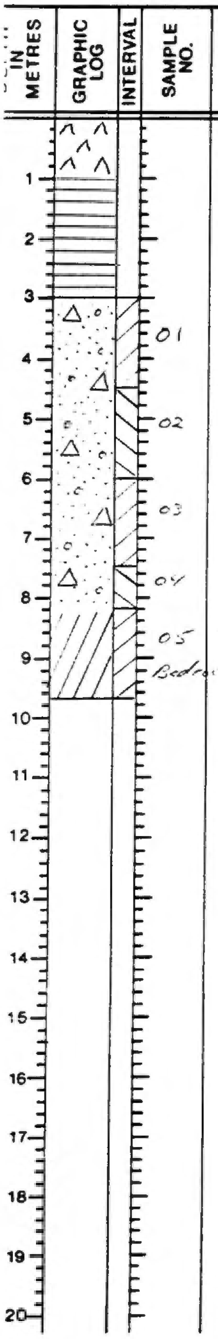
DRILL 10:15 - 10:45

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____



DESCRIPTIVE LOG

0-1.0 Organics

1.0-3.0 Ojibway II Sediments
- gray pure clay
- soft

3.0-8.2 Till (Chibougamau)
- fine grained gray sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sediment
30% granitoid

8.2-9.7 Bedrock
- light green colour
- fine grained
- very well foliated (schistose)
- 20-30% rock flour
- predominant mineral is chlorite
- Intermediate Volcanic

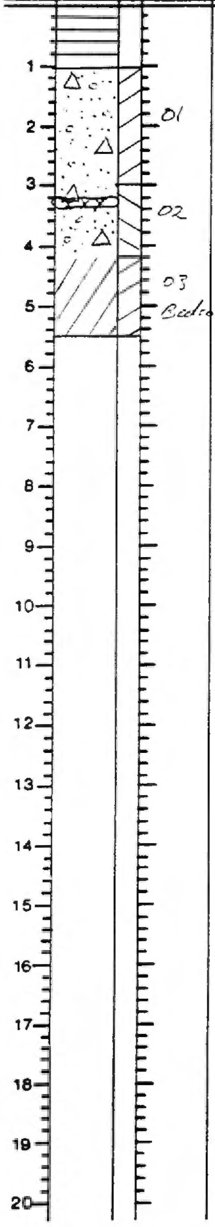
9.7 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation: 321m.
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 26 19 87
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO LS-87-51 LOCATION Site #51
GEOLOGIST B Bark DRILLER G. Hawg BIT NO. CBL9344 BIT FOOTAGE 9.7-15.2
MOVE TO HOLE 10:45-11:00
DRILL 11:00 - 11:45
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-1.0 Ojibway II Sediments
- beige gritty clay
- moderately compact
- softens downsection

1.0-4.2 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment 40% granitoid

3.2-3.4 Boulder (diorite)

4.2-5.5 Bedrock
- dark green colour
- fine grained
- weak foliation to massive structure
- 1-2mm feldspar phenocrysts
- predominant mineral is chlorite
- porphyritic Intermediate Volcanic

5.5 E.O.H.

Note: Examination of the character splits of the two samples indicates that they are not till as originally logged in the Field. Sample 01 consists of beige clay (From above unit) in a predominantly Fine beige sand with medium sand (100-200μ) and (200 to 600μ) with a Few rounded pebbles as well. Sample 02 is predominantly medium sand (300 to 700μ) with a Few subrounded pebbles.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug. 26 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO LS-87-52 LOCATION site # 52 Elevation 321 m

GEOLOGIST T. Bruns DRILLER G. Houz BIT NO. CB69344 BIT FOOTAGE 15.2 → 25.7

MOVE TO HOLE 11.45 → 12.00

DRILL 12.00 → 12.45

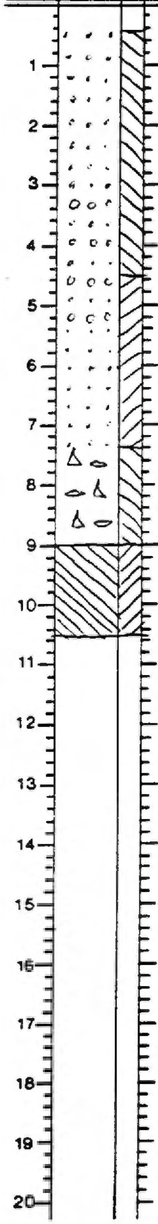
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.: 01, 02, 03, 04

0 → 0.5 No Return

0.5 → 7.4 Ojibway II Sediments

Sand

gray - beige, fine to medium grained

- pebbly beds below 3.0 to 5.4

- coarse grained 5.4 → 6.3

fine grained 6.3 → 7.4

7.4 → 9.0 Till (Chibougamau)

gray - beige, fine sand matrix pebbly clasts 60% mafic volcanic and sediments 40% granitic

9.0 → 10.5 Bedrock Diorite

green - white, coarse grained massive 50% euhedral hornblende, 50% plagioclase

- serpentine bands at 10.0 and 10.3

10.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 322m.

DATE Aug 26 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-53 LOCATION Site # 53

GEOLOGIST B. Bork DRILLER G. Howg BIT NO. CA69344 BIT FOOTAGE 25.5-37.0

MOVE TO HOLE 12:45-1.00

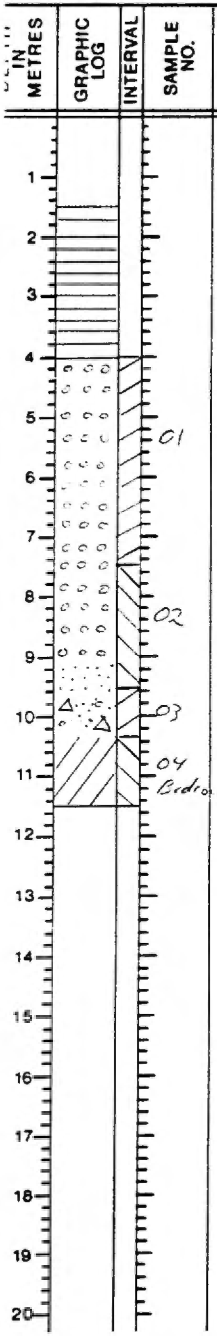
DRILL 1.00-2.00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-1.5 No Return

1.5-9.5 OJIBWAY II SEDIMENTS

1.5-4.0 - gray-beige pure clay
- soft

4.0-9.0 - Sand - coarse grained
gray colour
- occassional pebble

9.0-9.5 - fine grained grey sand

9.5-10.3 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment
40% granitoid

10.3-11.5 BEDROCK

- dark green gray colour
- medium grained
- massive structure
- predominant mineral is chlorite
- Intermediate Volcanic

11.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 322m.

DATE Aug 26 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS 87-54 LOCATION Site #54

GEOLOGIST B. Cork DRILLER G. Hovey BIT NO. F000416 BIT FOOTAGE 0.95

MOVE TO HOLE

DRILL

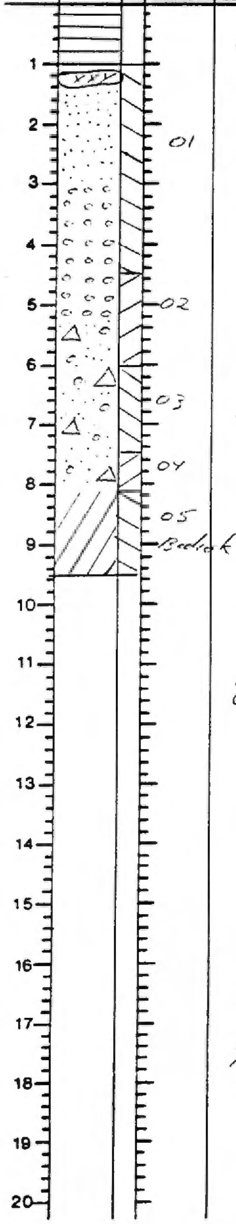
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

0 - 5.2 OJIBWAY II SEDIMENTS

0 - 1.2 - gray-beige pure clay
- moderately compact

1.2-1.4 - Boulder (diorite)

1.4-3.0 - <u>Sand</u> - fine grained beige sand

3.0-5.2 - coarse grained gray-beige sand
- occassional pebbles.

5.2-8.1 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic / Sediment 40% granitoid

8.1-9.5 Bedrock

- medium green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

9.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 26 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-55 LOCATION Site #55 Elevation 323m

GEOLOGIST T. Burns DRILLER G. Houy BIT NO. E000416 BIT FOOTAGE 9.5 -> 17.0

MOVE TO HOLE 2.30 -> 2.45

DRILL 2.45 -> 3.15

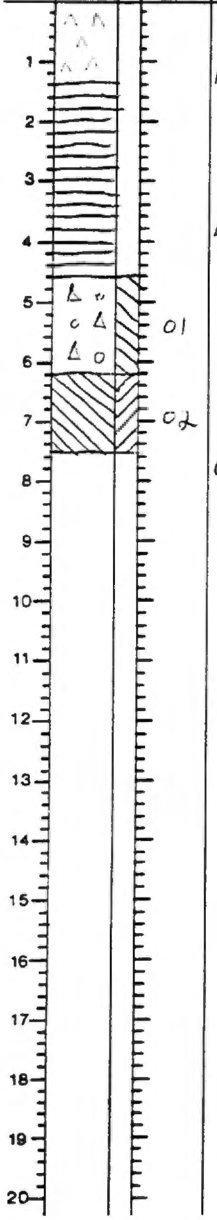
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 1.4 <u>Organics</u>

1.4 -> 4.6 <u>Ojibway II Sediments</u>
<u>Clay</u> 1.4 -> 4.6
gray, soft, pure

4.6 -> 6.2 <u>Till</u> (Chibougamau)
gray-beige, fine sand
matrix pebbly clasts 60%
mafic volcanic and
sediments 40% granitic.

6.2 -> 7.5 <u>Bedrock</u> Mafic Volcanic
dark to medium green
(chlorite) fine grained
well developed foliation
(sheared?)

7.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 320m.

DATE Aug 26 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-56 LOCATION Site #56

GEOLOGIST B.Bock DRILLER G. Howg BIT NO. F000416 BIT FOOTAGE 17.0-23.5

MOVE TO HOLE 3:15-3.25

DRILL 3.25-3:45

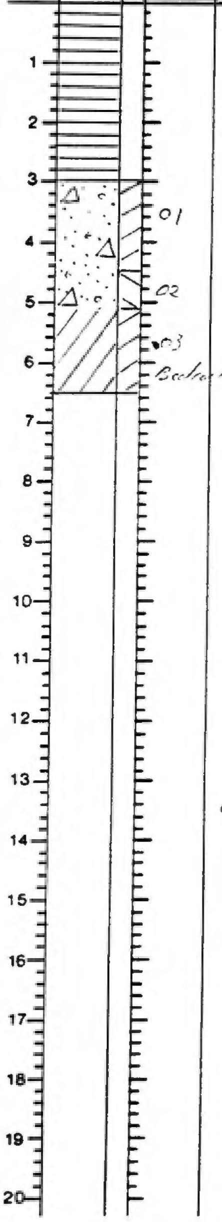
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-3.0 OJIBWAY II SEDIMENTS

- gray pure clay
- soft

3.0-5.1 Till (Chibougamou)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 70% Volcanic/Sediments 30% Granitoid

5.1-6.5 Bedrock

- dark green colour
- fine grained
- well foliated
- predominant mineral is chlorite
- approximately 5% quartz stringers
- Mafic Volcanic

6.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 322m

DATE Aug 26,27 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO 5-87-57 LOCATION Site #57

GEOLOGIST B. Lak DRILLER G. Hung BIT NO. F000416 BIT FOOTAGE 23.5-37.7

MOVE TO HOLE 3:45-4:00

DRILL Aug. 26 4:00-4:45 Aug. 27 7:15-9:00

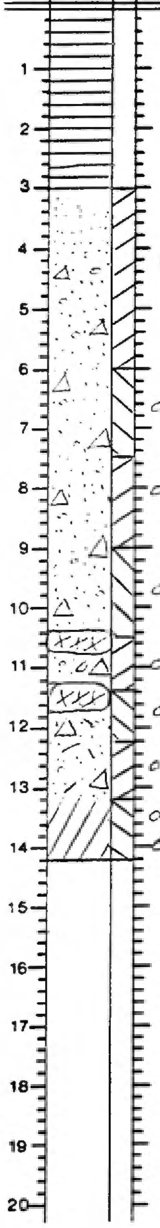
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel Aug 26 4.45-5:30 P.m. Aug. 27 6:30-7:15 a.m.

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.:
01
02
03
04
05
06
07
08
Bedrock

DESCRIPTIVE LOG

0 - 4.1 OJIBWAY II SEDIMENTS

0-3.0 - gray pure clay
- moderately compact

3.0-4.1 - fine grained beige sand

4.1-13.2 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediments 40% granitoid

10.4-10.7 Boulder (gabbro)

11.3 - 11.7 Boulder (gabbro)

11.7- 13.0 - matrix similar to above
- gray gritty clay lumps

13.0-13.2 - clay rich till section
- gray gritty clay balls
- occassional pebbles
- fine grained gray sand silt

13.2-14.2 BEDROCK

- light green colour
- coarse grained
- massive structure
- predominant minerals are pyroxene and feldspar
- Gabbro

14.2 E.O.H.

Note: Examination of character splits of samples 01 to 07 indicates that the section from 30 to 7.5m originally logged as till is determined to be pebbly sand. The samples consist of interbedded fine and medium sand (100-200μ) and (600-800μ) with pebble horizons. Samples 03 to 07 were determined to be till as logged consisting of an unsorted gray to gray-beige sand/silt matrix (<50 to 200μ) with subrounded pebbles and cobble cuttings.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 27 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-58 LOCATION Site #58 Elevation 319 m

GEOLOGIST T. Burns DRILLER G. Houg BIT NO. E000416 BIT FOOTAGE 37.7 -> 57.7

MOVE TO HOLE 9.00 -> 9.15

DRILL 9.15 -> 10.00

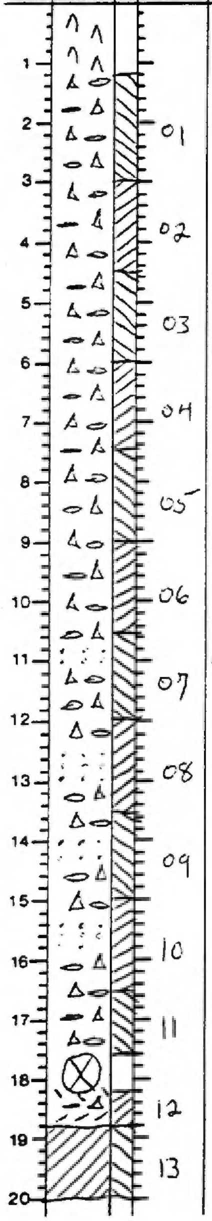
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

0 -> 1.2 No Return (organics)

1.2 -> 18.8 Till (Chibougamau)

gray - beige fine sand matrix
cobbly clasts 60% mafic
volcanics and sediments
40% granitic

- high percentage of fine sand matrix below 8.0

- sand lenses at 10.8 -> 11.0
12.5 -> 12.9
14.0 -> 14.3
15.4 -> 15.8

- boulder, gabbro 17.6 -> 18.2

- gritty gray clay matrix below 18.2

18.8 -> 20.0 Bedrock Intermediate Volcanic

light to medium gray - green locally bleached, medium grained, porphyritic, highly sheared, abundant fault gouge, local cataclastic texture

20.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 319m

DATE Aug 27 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS 87-59 LOCATION Site #59

GEOLOGIST B.Bock DRILLER G. Haug BIT NO. 6000178 BIT FOOTAGE 0-9.0

MOVE TO HOLE 10:00 - 10:15

DRILL 10.15 - 11.00

MECHANICAL DOWN TIME

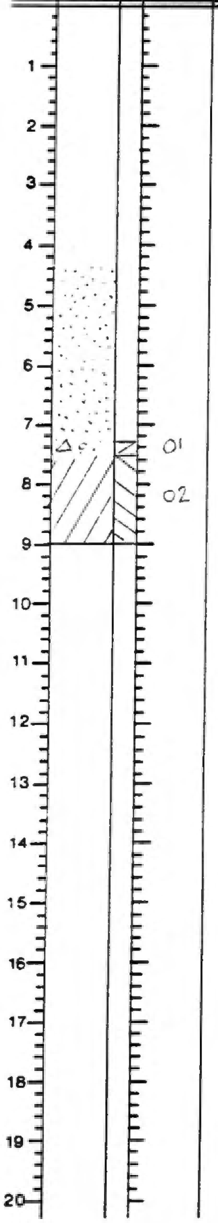
DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

New Sub.

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

0-4.5 No Return (bit plugged)

4.5-7.3 OJIBWAY II SEDIMENTS
- fine grained gray-beige sand
- occassional interbeds of gray clay

7.3-7.5 Till (Chibougamou)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic/Sediment 40% granitoid

7.5-9.0 BEDROCK
- dark green colour
- medium grained
- massive structure
- predominant mineral is chlorite
- 5% quartz-calcite veins
- Mafic Volcanic

9.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 323m

DATE Aug 27 1987

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-60 LOCATION Site #60

GEOLOGIST G Bork DRILLER G. Huog BIT NO. B000-78 BIT FOOTAGE 9.0-17.5

MOVE TO HOLE 11:00 - 11:45

DRILL 11:45 - 1:30

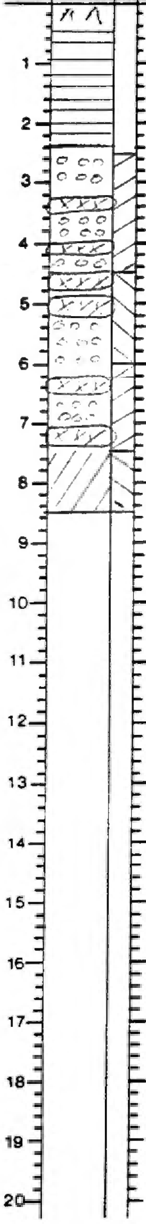
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.:
01
02
03
04 Bedrock

DESCRIPTIVE LOG

0-0.5 Organics

0.5-7.5 OJIBWAY II SEDIMENTS

0.5-2.5 - gray beige clay
- pure
- moderately compact

2.5-7.5 Gravel
- medium to coarse sand
- high percentage of pebbles and cobbles, composition
40% Volcanic/Sediment
60% granitoid

3.3-3.5 Boulder (diorite)
4.0-4.2 Boulder (granite)
4.5-4.8 Boulder (diorite)
4.9-5.2 Boulder (diorite)
6.3-6.5 Boulder (granite)
7.1-7.4 Boulder (granite)

7.5-8.5 BEDROCK
- dark green colour
- medium grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

8.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 27 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-61 LOCATION Site #61 Elevation 321 m

GEOLOGIST T. Burns DRILLER G. Houg BIT NO. B000178 BIT FOOTAGE 17.5 → 24.5

MOVE TO HOLE 1.30 → 1.45

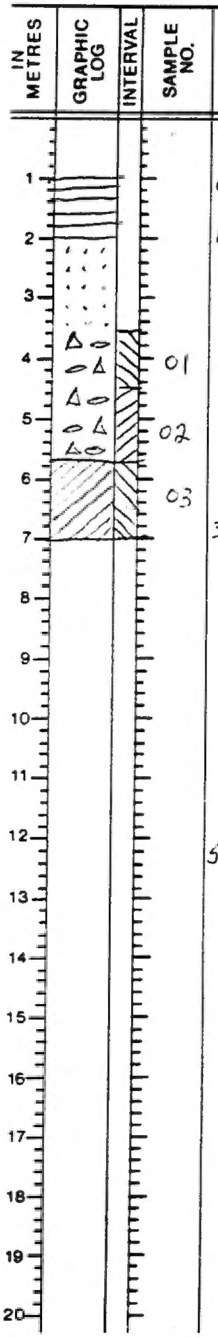
DRILL 1.45 → 2.15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 → 0.3 No Return (organics)

0.3 → 1.0 Organics

1.0 → 3.6 Ojibway II Sediments

clay 1.0 → 2.0
dark brown above 1.4
gray - beige below, soft
pure
sand 2.0 → 3.6
gray - beige, fine grained

3.6 → 5.7 Till (chibougamau)
gray - beige, fine sand
matrix, cobbly clasts
75% mafic volcanics and
sediments 25% granitics
- low percentage fine
sand matrix below 5.3

5.7 → 7.0 Bedrock Intermediate
Volcanics
medium green (chlorite)
fine grained, massive
2-3 percent calcite
veining

7.0 E. O. H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 322m.

DATE Aug 27 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO 15-87-62 LOCATION Site #62

GEOLOGIST B Bock DRILLER G. Hoang BIT NO. B000172 BIT FOOTAGE 245-406

MOVE TO HOLE 2:15-2:30

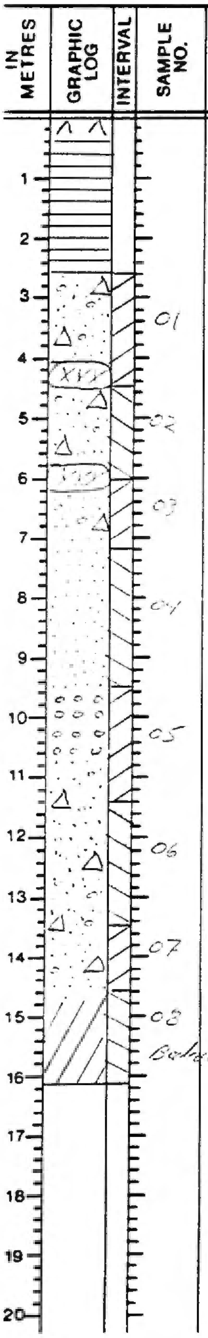
DRILL 2:30-4:30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 5:15-5:30

MOVE TO NEXT HOLE 4:30-5:15



DESCRIPTIVE LOG

0-0.5 Organics

0.5-2.5 Ojibway II Sediments
- beige pure clay
- moderately compact

2.5-6.9 Till (Chibougamau)
- fine grained beige sand silt matrix
- pebbles and cobbles, approximately
  70% Volcanic/Sediments
  30% granitoid

4.1-4.5 Boulder (diorite)

5.8-6.2 Boulder (diorite)

6.9-9.5 - coarse grained beige sand

9.5-10.5 Gravel
- coarse grained beige sand
- high percentage of clasts
  60% Volcanic/Sediments
  40% granitoid

10.5-14.6 Till
- fine grained beige sand silt matrix
- very cobbly, approximately
  80% Volcanic/Sediments
  20% granitoid

14.6-16.1 BEDROCK
- dark green colour
- medium grained
- massive structure
- predominate mineral is chlorite
- approximately 5% quartz veining
- Mafic Volcanic

16.1 E.O.H.

__Note__: Character splits of samples 02, 06 and 07 were examined by binocular microscope. Sample 02 consists predominantly of sorted medium to coarse grained sand (250 to 700µ). Approximately 20% of the sample is very fine to fine grained sand (50 to 250µ). There are also rounded to subrounded granule and pebble clasts. It can be assumed that samples 01, 02, 03 as well as 04, 05 are Ojibway II pebbly sands and gravel.

Samples 06 and 07 consist of a gray-beige fine sand/silt matrix with pebble and cobble cuttings as logged in the field.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 313m.

DATE Aug 28 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-63 LOCATION Site #63

GEOLOGIST B.Bock DRILLER G. Howq. BIT NO. B000118 BIT FOOTAGE 40.6-47.1

MOVE TO HOLE 6:45-7:30

DRILL 7:30-8:00

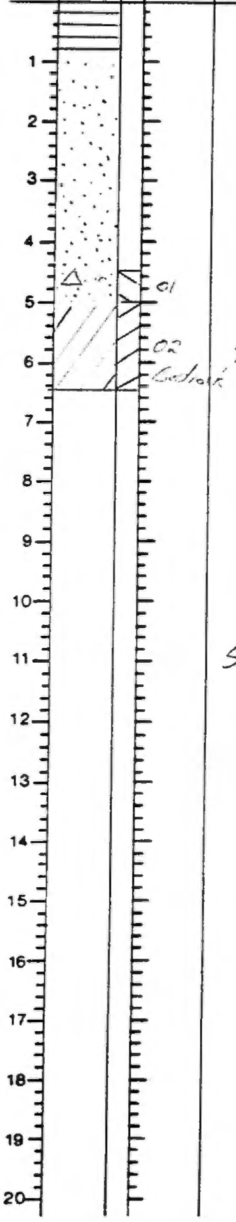
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 6:30-6:45

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 4.5 OJIBWAY II SEDIMENTS

0-0.8 - beige pure clay
- moderately compact

0.8-4.5 - Beige fine grained sand
- occassional interbeds of gray clay

4.5-5.0 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately
60% Volcanic / Sediment
40% granitoid

5.0-6.5 BEDROCK
- dark green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

6.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 28 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-64 LOCATION Site #64 Elevation 310m

GEOLOGIST T. Burns DRILLER G Houg BIT NO. B000178 BIT FOOTAGE 47.1 -> 52.1

MOVE TO HOLE 8.00 -> 8.15

DRILL 8.15 -> 8.30

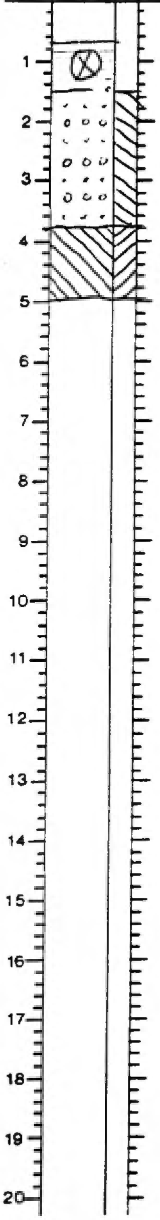
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG						
				0 -> 0.7 <u>No Return</u>						
				0.7 -> 3.8 <u>Ojibway II Sediments</u> <u>clay</u> beige, soft, pure - boulder, gabbro 0.8 -> 1.3 - gritty gray-beige clay 1.3 -> 1.5						
			01	- medium to coarse sand with small pebbly beds 1.5 -> 3.8						
			02	3.8 -> 5.0 <u>Bedrock</u> Mafic Volcanic dark green (chlorite), fine grained, moderate to well developed foliation (sheared?) 1-2% calcite veining - fault gouge at 4.7 -> 4.8						
				5.0 E. O. H.						



OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 321m

DATE Aug. 28 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS 87-65 LOCATION Site #65

GEOLOGIST B. Bark DRILLER G. Hong BIT NO. B000178 BIT FOOTAGE 52.1-67.1

MOVE TO HOLE 8:30-8:45

DRILL 8:45-9:45

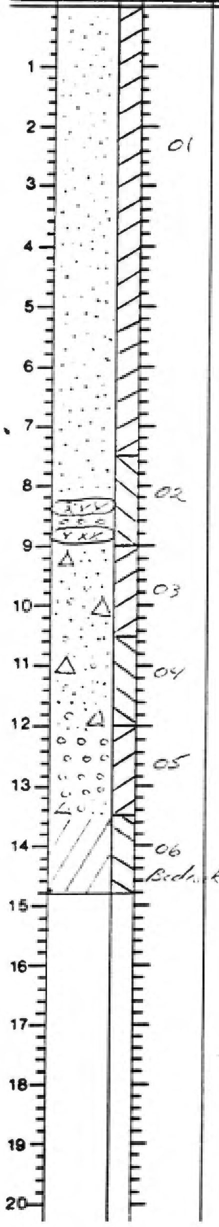
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0- 9.0 OJIBWAY II SEDIMENTS

0-1.8 - fine grained beige sand

1.8-8.3 - medium grained gray-beige sand

8.3-8.5 Boulder (granite)

8.7-8.9 Boulder (diorite)

8.3-9.0 - Gravel

- medium grained beige sand
- lots of clasts, approximate composition 30% Volcanics/Sediments
  70% Granitoid

9.0-13.5 Till (Chibougamau)

- fine grained beige sand silt matrix
- pebbles and cobbles, approximately
  60% Volcanic / Sediment
  40% granitoid

12.2 13.2 - Gravel lense

- coarse grained beige sand
- pebbles and cobbles, approximately
  40% Volcanic / Sediment
  60% Granitoid

13.5-14.8 BEDROCK

- light to medium green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

14.8 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 330m.

DATE Aug. 28 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-66 LOCATION Site #66

GEOLOGIST B. Burk DRILLER G. Howey BIT NO. BDCC 178 / BDCC 179 BIT FOOTAGE 67.1 - 107.6 / 0 - 6.0

MOVE TO HOLE

DRILL

MECHANICAL DOWN TIME

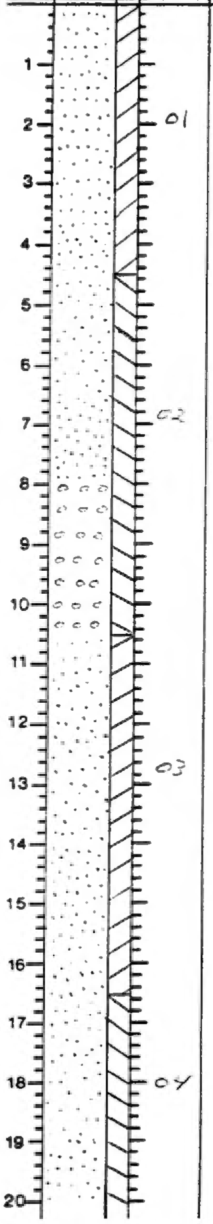
DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

page 1 of 3

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 33.0 OJIBWAY II SEDIMENTS

0-3.2 - fine grained gray-beige sand
- occassional pebbles

3.2-8.0 - medium grained gray-beige sand

8.0-10.5 - <u>Gravel</u> - medium and coarse grained sand
- pebbles and cobbles, approximate composition 40% Volcanic/Sediment
60% Granitoid
- high percentage of clasts

10.5-28.5 - <u>Sand</u> - coarse grained gray-beige colour.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-66 LOCATION ____________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ____________

DRILL ____________

MECHANICAL DOWN TIME ____________

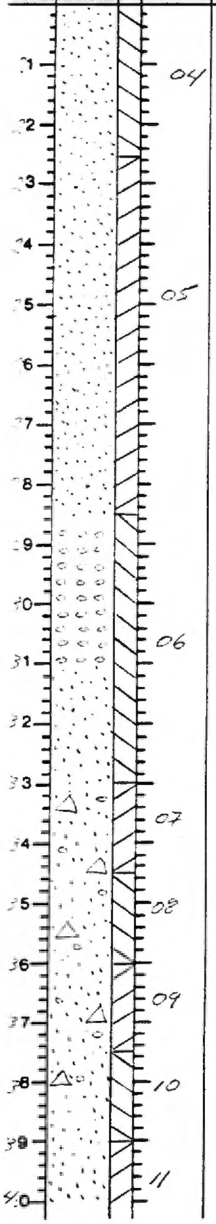
DRILLING PROBLEMS ____________

OTHER ____________

MOVE TO NEXT HOLE ____________

page 2of3

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

28.5 - 31.0 Gravel
- medium grained sand
- beige in colour
- pebbles and cobbles, approximately
50% Volcanic / Sediments
50% granitoid

31.0 - 33.0 - sand, similar to 10.5-28.5

33.0 - 45.7 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately
60% Volcanic / Sediment
40% granitoid

38.2 - 40.1 - fine grained gray-beige sand lense
- occassional pebbles.

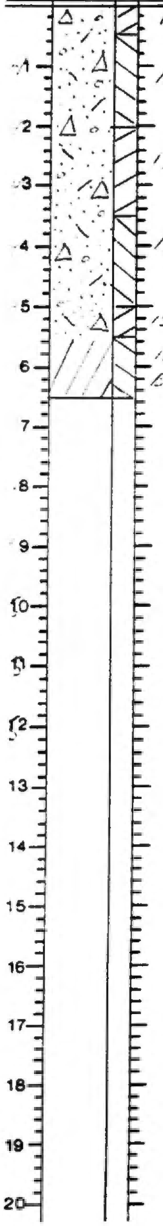
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __
SHIFT HOURS
________ TO ________
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO LS-87-66 LOCATION ________
GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________
MOVE TO HOLE ________
DRILL ________
MECHANICAL DOWN TIME ________
DRILLING PROBLEMS ________
OTHER ________
MOVE TO NEXT HOLE ________

page 3of3

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



11
12
13
14
15
16
Bedrock

41.0-45.7 clay rich till
- gray gritty clay in matrix
- fine grained gray sand
- occassional pebbles.

45.7-46.5 BEDROCK
- medium green colour
- fine grained
- moderately foliated
- predominate mineral is chlorite
- Mafic Volcanic

46.5 E.O.H.

Note: Examination of the character split of sample OB indicates that it consists of 60% beige-gray sorted very fine and fine grained sand (100 to 250μ) and 40% medium grained sand (250 to 500μ). Samples 11, 13 and 14 were also examined by binocular microscope. Samples 13 and 14 consist of unsorted gray-beige fine sand and silt matrix (<50 to 300μ). There are also rounded and subangular pebble clasts.
The contact between Ojibway II sand and the till is thought to be part way through sample 11 at approximately 40.0 metres.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug. 28 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-67 LOCATION Site #67 Elevation 327m

GEOLOGIST T. Burns DRILLER O. Houg BIT NO. B000179 BIT FOOTAGE 6.0 → 29.5

MOVE TO HOLE 2.45 → 3.00

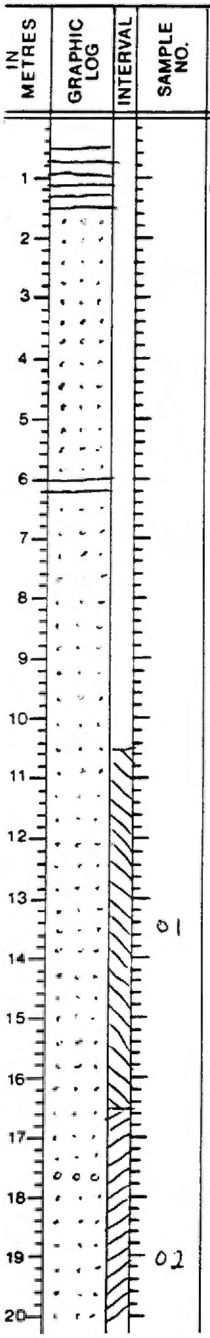
DRILL 3.00 → 4.00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 → 0.5 No Return

0.5 → 20.8 Ojibway II Sediments

Clay 0.5 → 1.5

gray-beige, soft, pure

sand 1.5 → 20.8

gray-beige, fine grained

- clay seam 6.0 → 6.2
- medium grained below 12.0 to 19.0
- pebbly bed at 17.6
- coarse grained below 19.0 → 20.5
- medium grained below 20.5 → 22.2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 28 19 87

HOLE NO LS-87-67 LOCATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

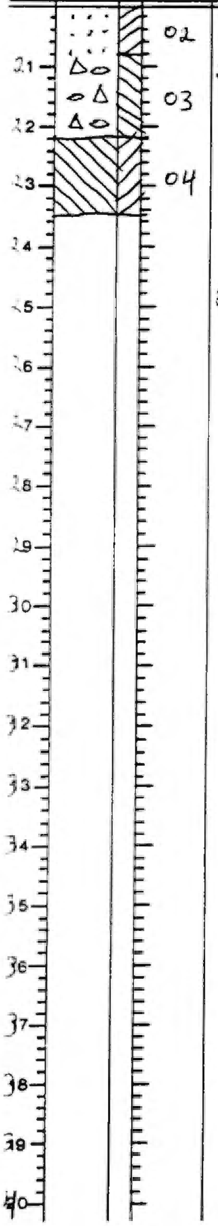
CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

page 2 of 2

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



20.8 → 22.2 Till (Chibougamau) gray-beige, fine sand matrix cobbly clasts 60% mafic volcanic and sediment 40% granitic

22.2 → 23.5 Bedrock Mafic Volcanic dark to medium green (chlorite) fine grained, poor to moderate foliation, 2-3% calcite veining

23.5 E. O. H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 320m

DATE Aug 29 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-68 LOCATION Site #68

GEOLOGIST B.Bock DRILLER G.Howg BIT NO. B000179 BIT FOOTAGE 29.5-35.0

MOVE TO HOLE 4.00-4:45 Aug. 28

DRILL 6:45-7:30 A.m.

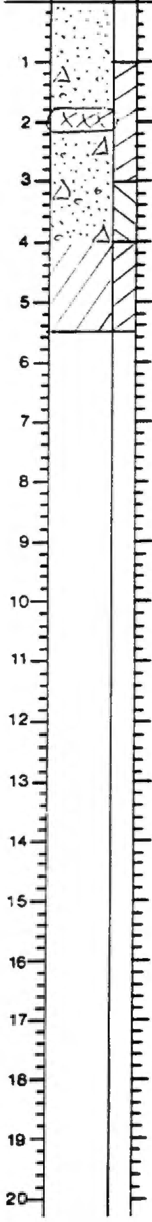
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel Aug 28 4:45-5:15 Aug 29 6:30-6:45 a.m.

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



01

02

03

Bedrock

0-1.0 OJIBWAY II SEDIMENTS

- fine grained gray-beige sand

1.0-4.0 Till (Chibougamou)

- fine grained gray-beige sand silt matrix
- very cobbly, approximate composition
  75% Volcanic/Sediments
  25% granitoid

1.8-2.2 Boulder (mafic Volcanic)

4.0-5.5 BEDROCK

- dark green colour
- fine grained
- moderate foliation
- predominant mineral is chlorite
- Mafic Volcanic

5.5 E.O.H

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 318m.

DATE Aug. 29 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO 15-87-69 LOCATION Site #69

GEOLOGIST B.Bark DRILLER G.Howg BIT NO. B00C179 BIT FOOTAGE 35.0-50.7

MOVE TO HOLE 7:30 - 7:45

DRILL 7:45 - 9:00

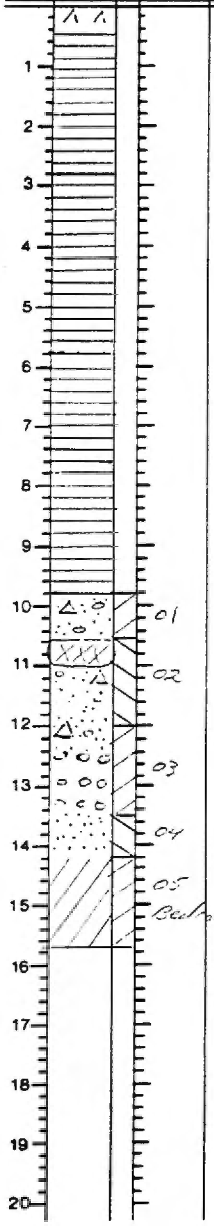
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

0-0.5 Organics

0.5-9.8 OJIBWAY II SEDIMENTS

- gray pure clay
- soft.

9.8-12.5 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately
  60% Volcanic/Sediment
  40% granitoid

10.6-11.0 Boulder (Mafic Volcanic)

12.5-13.5 Gravel - coarse grained sand matrix, pebbles and cobbles; approximately
65% Volcanic/Sediment
35% Granitoid

13.5-14.2 Sand - medium grained
- occassional clasts

14.2-15.7 BEDROCK

- dark green colour
- fine grained
- massive structure
- 10-15% quartz veining
- 1% sulphides along quartz veins
- predominant mineral is chlorite
- Mafic Volcanic

15.7 E.O.H.

Note: Examination of the character split of sample 01 by binocular microscope has determined that it is predominantly sorted medium and coarse grained sand (250 to 700 µ) with approx. 20% Fine silt (<50 to 150 µ) from the drill dust from pebbles and cobbles.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 29 1987

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-70 LOCATION Site #70 Elevation 322m

GEOLOGIST T. Bunn DRILLER G. Houg BIT NO. B000179 BIT FOOTAGE 50.7 -> 66.9

MOVE TO HOLE 9.00 -> 9.15

DRILL 9.15 -> 11.30

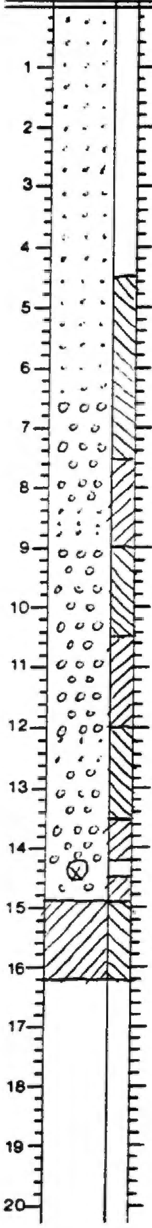
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.	DESCRIPTIVE LOG
	0 -> 0.3 No Return
	0.3 -> 14.9 Ojibway II Sediments
	Sand 0.3 -> 6.6
	gray - beige to beige, fine grained
	- medium to coarse below 3.5 -> 6.6
	Gravel 6.6 -> 14.9
	medium to coarse sand matrix
01	pebbly clasts 50% mafic volcanic and sediments 50% granitic
02	- sporadic return from 7.5 to 10.0
	- coarse sand bed 8.4 -> 8.8
03	- fine sand bed 12.2 -> 12.5
04	- boulder, gabbro 14.2 -> 14.5
05	14.9 -> 16.2 Bedrock Mafic Volcanic dark green (chlorite, epidote)
06	medium to coarse grained locally gabbroic, massive
07	1% epidote veining

16.2 E. O. H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 322m.

DATE Aug 29 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-71 LOCATION Site #71

GEOLOGIST B. Beck DRILLER G. Haug BIT NO. B000174 BIT FOOTAGE 66.9-94.8

MOVE TO HOLE 11.30 - 11.45

DRILL 11.45 - 2.45

MECHANICAL DOWN TIME 1:50 - 2:20 repair hydralic pump

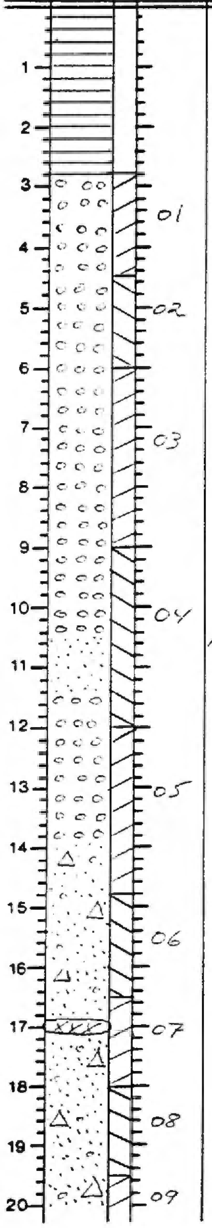
DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

page 1 of 2

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 14.8 OJIBWAY II SEDIMENTS

0-2.8 - pure beige clay
- moderately compact

2.8 - 10.4 Gravel - medium grained sand matrix
- pebbles and cobbles, approximately
60% Volcanic/Sediments
40% granitoid

10.4 - 11.5 Sand - medium grained gray sand
- occassional pebbles

11.5 - 14.8 Gravel - matrix similar to 2.8-10.4
- clasts 80% Volcanic/Sediment
20% granitoid

14.8 - 26.9 Till (Chibougamau)

- fine grained gray-beige sand silt matrix

- pebbles and cobbles, approximately
60% Volcanic/Sediment
40% granitoid

16.9 - 17.1 Boulder (mafic Volcanic)

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

_______ TO _______

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS 87-71 LOCATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

MECHANICAL DOWN TIME ________

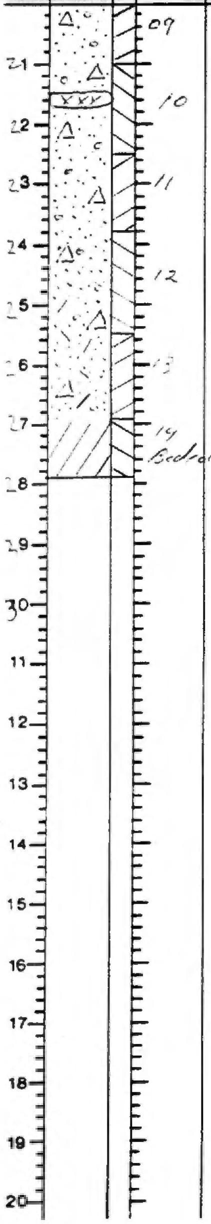
DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

page 2 of 2

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



21.5 - 21.7 Boulder (mafic Volcanic)

24.8 - 26.9 . clay rich till
- gray gritty clay lumps
- fine grained gray sand
- occassional pebbles

26.9 - 27.9 BEDROCK
- light green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- <1% sulphides
- Intermediate Volcanic

27.9 E.O.H.

Character Split Examination 880310

<u>Sample</u> 71-11

Sorted, consists of 65% medium sand beds (250 -> 500μ) and 30% fine sand beds (100 ->250μ) and 5% pebble clasts ∴ pebbly sands remainder of section logged as till infered to be same based on original descrip.

TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 319m

DATE Aug 29 19 87

SHIFT HOURS

_______ TO _______

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-72 LOCATION Site #72

GEOLOGIST B. Bork DRILLER G. Howg BIT NO. B000180 BIT FOOTAGE 0-10.6

MOVE TO HOLE 2.45-3:00

DRILL 3:00-3.30

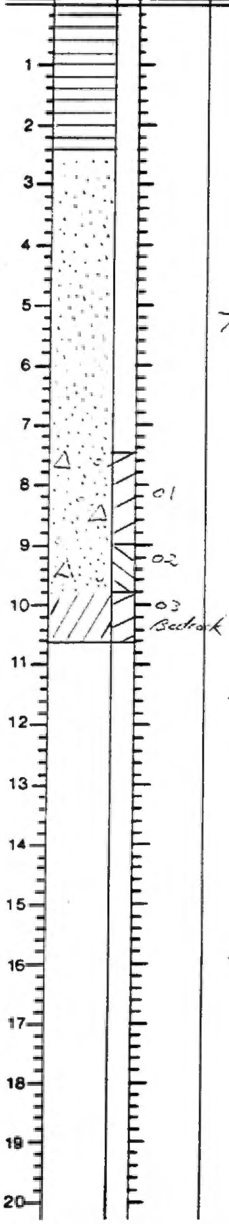
MECHANICAL DOWN TIME _______

DRILLING PROBLEMS _______

OTHER _______

MOVE TO NEXT HOLE _______

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-7.5 OJIBWAY II SEDIMENTS

0-2.4 - gray-beige gritty clay
- moderately compact

2.4-7.5 - beige fine grained sand

7.5-9.8 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately
70% Volcanic/Sediment
30% granitoid

9.0-9.4 Sand lense
- fine grained, beige

9.8-10.6 BEDROCK
- medium green colour
- fine grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

10.6 E.O.H.

Examination of character split 880310

Sample 72-02

Well sorted fine to medium beige sand, no +10 fraction

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 29 1987

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-73 LOCATION Site #73 Elevation 320 m

GEOLOGIST T. Burns DRILLER G. Houy BIT NO. B000180 BIT FOOTAGE 10.6 -> 33.1

MOVE TO HOLE 3.30 -> 3.45

DRILL 3.45 -> 4.30

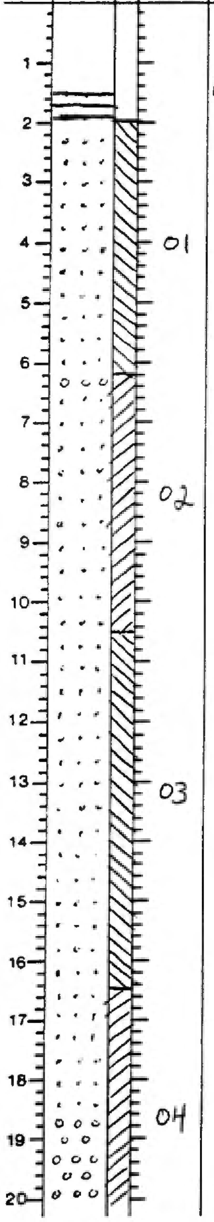
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 1.5 No Return (organics)

1.5 -> 21.7 Ojibway II sediments

Clay 1.5 -> 2.0

gray-beige, soft, pure

Sand 2.0 -> 18.7

gray-beige, fine grained

- pebbly sand 6.2 -> 6.7
- coarse sand 6.7 -> 12.6
- fine sand 12.6 -> 15.0
- coarse sand 15.0 -> 16.0
- fine sand 16.0 -> 18.0
- coarse sand 18.0 -> 18.7

Gravel 18.7 -> 21.7

pebbly, coarse sand matrix
clasts 50% mafic volcanics
and sediments 50% granitic

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug. 29 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-73 LOCATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

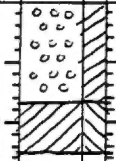
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

pg 2 of 2

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG							
21			04	21.7->22.5 **Bedrock** Mafic Volcanic dark green (chlorite) fine grained, poor to moderate foliation							
22			05								
23											
24				22.5 E.O.H.							
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											

OVERBURDEN DRILLING MANAGEMENT LIMITED

Elevation: 323m

REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 29 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-74 LOCATION Site #74

GEOLOGIST B.Bork DRILLER G. Howa BIT NO. 8000180 BIT FOOTAGE 33.1-45.1

MOVE TO HOLE 4.30-4:45

DRILL 4:45-5.30

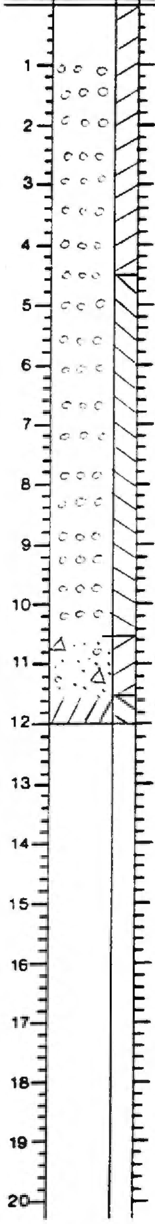
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 5.30-6:00

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



Sample no.:
01
02
03
04 Bedrock

0-1.0 No Return (poor seal at surface)

1.0-10.7 OJIBWAY II SEDIMENTS

- Gravel: medium grained sand matrix
  - pebbles and cobbles, approximately 40% Volcanic/Sediments 60% granitoid

10.7-11.5 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately 70% Volcanic/Sediment 30% granitoid

11.5-12.0 BEDROCK

- dark green and white colour
- fine grained
- massive structure
- predominant mineral is chlorite
- approximately 30% calcite veining above 11.8 m.
- Mafic Volcanic

12.0 E.O.H.

Examination of Character Split

Sample 74-03 Pebbly sand sorted matrix of medium sand (250→500μ) comprising 75% of sample, Pebbly clasts comprise 25% of ~~sample~~. TEB. 880310

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 318m.

DATE Aug 30 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-75 LOCATION Site #75

GEOLOGIST B.Bark DRILLER G.Howg BIT NO. Borr:SC BIT FOOTAGE 45.1-54.5

MOVE TO HOLE 6:45-7:30

DRILL 7:30-8:15

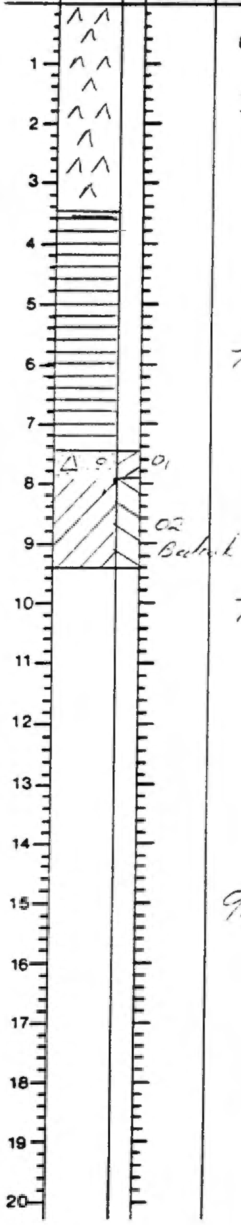
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 6:30-6:45

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-3.5 Organics

3.5-.7.5 OJIBWAY II SEDIMENTS

3.5-6.2 - pure gray clay

- soft

6.2-7.5 - fine grained beige sand

7.5-7.9 Till (Chibougamau)

- fine grained gray-beige sand silt matrix

- pebbles and cobbles, approximately
60% Volcanic/Sediments
40% granitoid

7.9-9.4 BEDROCK

- dark green colour

- fine to medium grained

- massive structure

- predominant mineral is chlorite

- Mafic Volcanic

9.4 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 30 19__

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-76 LOCATION Site #76 Elevation 320m

GEOLOGIST T. Burns DRILLER G. Houg BIT NO. 3000180 BIT FOOTAGE 54.5→61.5

MOVE TO HOLE 8.15→8.30

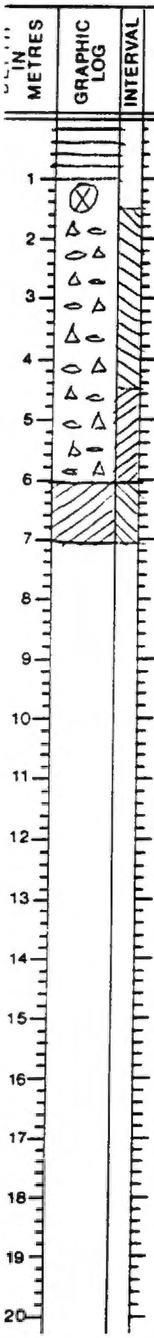
DRILL 8.30 → 9.15

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______



SAMPLE NO.	DESCRIPTIVE LOG		
	0 → 0.2	No Return	
	0.2 → 1.0	Ojibway II Sediments clay gray-beige soft pure	
01	1.0 → 6.0	Till (Chibougamau) gray-beige, fine sand matrix cobbly clasts 60% mafic volcanics and sediments 40% granitic	
02			
03		- boulder, biotite schist 1.1 → 1.5	
	6.0 → 7.0	Bedrock Mafic Volcanic medium to dark green, medium to coarse grained, locally gabbroic, massive - locally sheared with pyrite smeared along shear planes	
	7.0	E.O.H.	

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elev. 318m.

DATE Aug 30 1987

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-77 LOCATION Site # 77

GEOLOGIST B. Bork DRILLER G. Hawn BIT NO. B000180 BIT FOOTAGE 61.5-72.5

MOVE TO HOLE 9.15-9:30

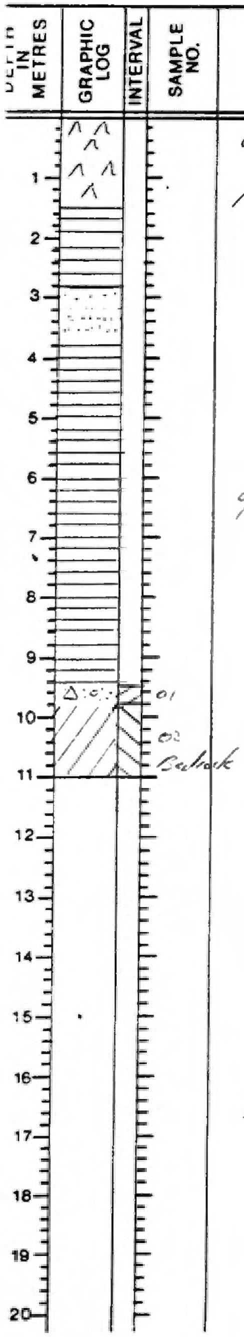
DRILL 9.30-10.00

MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____



DESCRIPTIVE LOG

0-1.5 Organics

1.5-9.5 OJIBWAY II SEDIMENTS

1.5-2.8 - grey pure clay
- soft

3.0-3.5 - grey fine grained sand
- interbedded grey pure clay

3.5-9.5 - clay similar to 1.5-2.8

9.5-9.8 Till (Chibougamau)

- fine grained grey sand silt matrix

- pebbles and cobbles, approximately
60% Volcanic / Sediment
40% Granitoid

9.8-11.0 BEDROCK

- grey green colour
- fine grained
- well foliated
- predominant mineral is chlorite
- Mafic Volcanic

11.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 317m.

DATE Aug 30 19 87

SHIFT HOURS
_____ TO _____

TOTAL HOURS
_____

CONTRACT HOURS
_____

HOLE NO LS-87-78 LOCATION Site #78

GEOLOGIST B. Bach DRILLER G. Haug BIT NO. B000180 BIT FOOTAGE 72.5-90.2

MOVE TO HOLE 10:00-10:15

DRILL 10:15-10:45

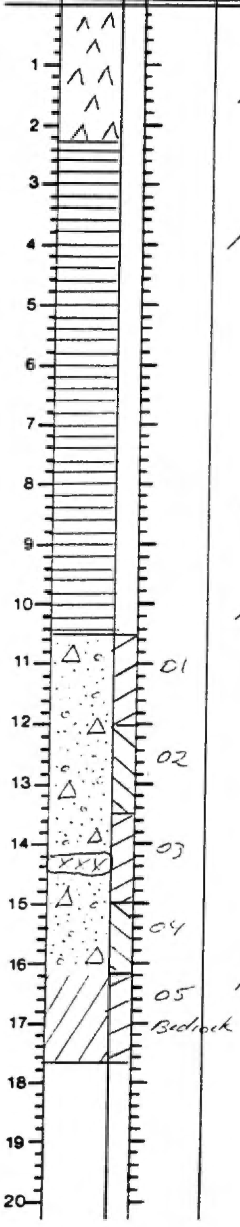
MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-2.2 Organics

2.2-10.4 OJIBWAY II SEDIMENTS
- gray pure clay
- soft

10.4-16.2 Till (Chibougamau)
- fine grained gray sand silt matrix
- pebbles and cobbles, approximately
75% Volcanic/Sediments
25% granitoid

14.2-14.5 Boulder (mafic Volcanic)

16.2-17.7 BEDROCK
- light to medium green colour
- fine grained
- very well foliated (schistose)
- predominant mineral is chlorite
- >10% quartz-calcite veins
- Mafic Volcanic

17.7 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 30 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-79 LOCATION Site #79 Elevation 310 m

GEOLOGIST J. Burns DRILLER G. Houg BIT NO. B000180 BIT FOOTAGE 90.2->98.2

MOVE TO HOLE 10.45 -> 11.00

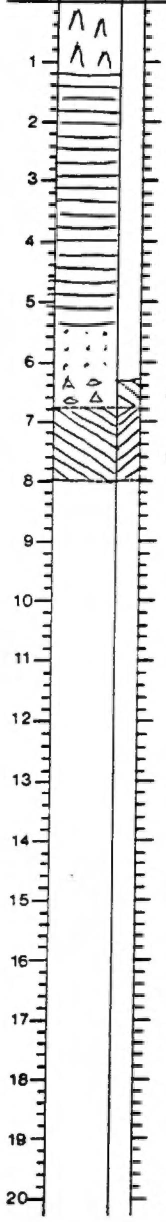
DRILL 11.00 -> 12.15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			01 02	0 -> 1.2 Organics 1.2 -> 6.3 Ojibway II sediments clay 1.2 -> 5.5 gray, soft, pure sand 5.5 -> 6.3 gray - beige, fine grained 6.3 -> 6.8 Till (Chibougamau) gray - beige, fine sand matrix cobbly clasts 60% mafic volcanic and sediment 40% granitic 6.8 -> 8.0 Bedrock Mafic Volcanic dark to medium green (chlorite) fine grained, massive, 5-10% quartz calcite veining, 2-3% epidote veing 1-2% disseminated cubic pyrite 8.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
Elevation: 310 m.
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 30 19 87

SHIFT HOURS
____ TO ____

TOTAL HOURS
____

CONTRACT HOURS
____

HOLE NO LS 87-80 LOCATION Site #80

GEOLOGIST B. Bork DRILLER G. Howe BIT NO. B000181 BIT FOOTAGE 0-36.7

MOVE TO HOLE 12:15-12:45

DRILL 12:45-2:15

MECHANICAL DOWN TIME

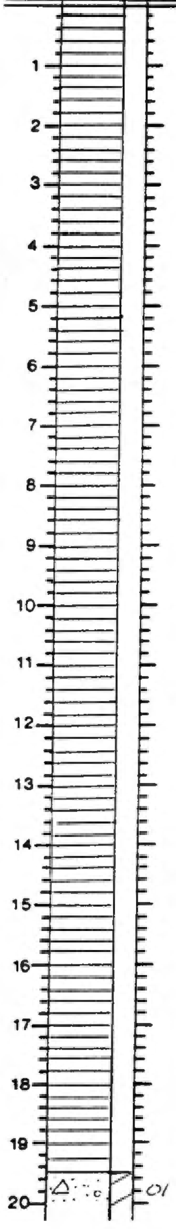
DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

page 1 of 2

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO. 01

0-19.5 OJIBWAY II SEDIMENTS
- gray pure clay
- soft.

19.5-25.9 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately
60% Volcanic/Sediments
40% granitoid

Examination of character splits 880314

Samples 80-02, 03, 04

Till as logged in the field

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS 87-80 LOCATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

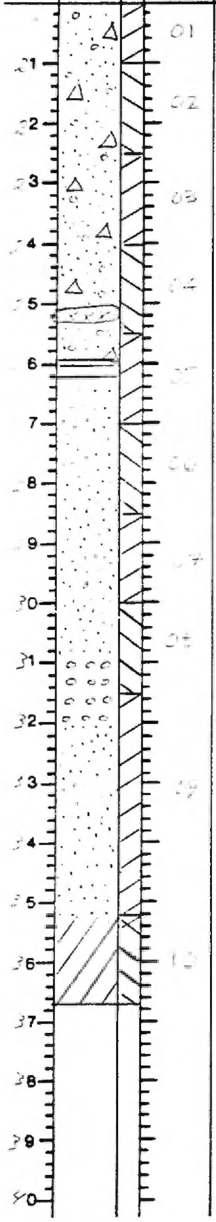
DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 2

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



22.5-25.9 - matrix similar to above
- pebbles and cobbles, approximately
75% Volcanic/Sediments
25% Granitoid

25.1-25.3 Boulder (mafic Volcanic)

25.9-35.2 Missinaibi Sediments

25.9-26.2 - dark brown pure clay and organics

26.2-31.0 - fine grained gray sand
- occassional pebbles

31.0-32.0 - Gravel - medium grained gray sand matrix
- pebbles and cobbles, approximately
50% Volcanic/Sediments
50% granitoid

32.0-35.2 - fine grained gray sand

35.2-36.7 BEDROCK
- dark green colour
- fine grained
- well foliated
- predominant mineral is chlorite
- Mafic Volcanic

36.7 E.O.H.

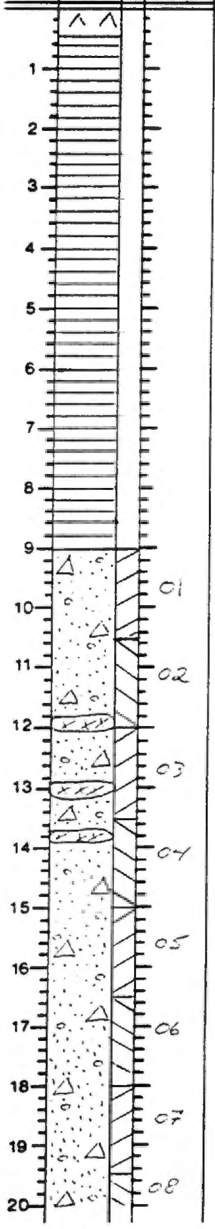
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 318m

DATE Aug 30.31 19 87
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO LS-87-81 LOCATION Site #81
GEOLOGIST B. Bork DRILLER G. Howe BIT NO. B000181 BIT FOOTAGE 36.7-70.7
MOVE TO HOLE 2:15-2:30
DRILL Aug 30 2.30-5:00 Aug 31 7:15-7:45
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER Travel Aug 30 5:00-5:45 Aug 31 6:15-7:15
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-0.5 Organics

0.5-9.0 OJIBWAY II SEDIMENTS
- pure gray clay
- moderately compact
- Softens downsection

9.0-31.5 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles; approximately 60% Volcanic/Sediments 40% Granitoid

11.8-12.0 - Boulder (granodiorite)
12.9-13.1 Boulder (diorite)
13.7-13.9 Boulder (gabbro)

Examination of Character Splits 880314
81-08 and 14 Till as logged in the field
TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO 15-87-81 LOCATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

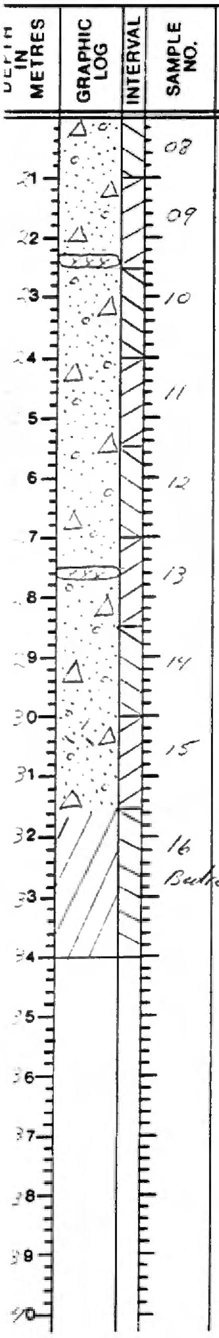
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2of2



DESCRIPTIVE LOG

22.3-22.5 Boulder (granite)

22.5-30.2 - matrix similiar to above
- pebbles and cobbles, approximately
70% Volcanic / Sediments
30% granitoid

27.5-27.7 Boulder (diorite)

30.2-30.5 · Clay rich till
- Gray gritty clay lumps
- fine grained gray sand
- occassional pebbles

31.5-34.0 BEDROCK

31.5-33.0 - greenish ochre colour
- very clayey (rock flour)

33.0-33.5 - less rock flour
- brown staining
- fine grained, green colour
- massive structure

33.5-34.0 - similiar to 31.5-33.0

- Mafic Volcanic

34.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 31 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-82 LOCATION Site #82 Elevation 318m

GEOLOGIST T. Burns DRILLER G. Howg BIT NO. B000181 BIT FOOTAGE 70.7 -> 76.2

MOVE TO HOLE 7.45 -> 8.00

DRILL 8.00 -> 8.30

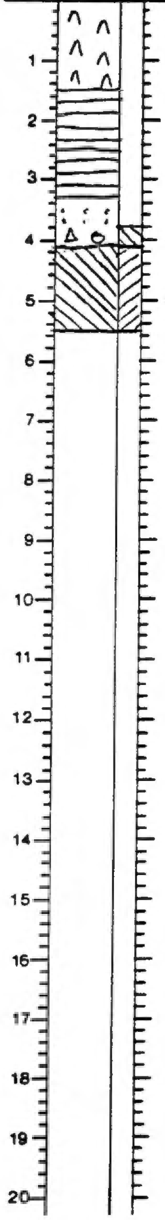
MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.:
01
02

0 -> 1.5 Organics

1.5 -> 3.8 Ojibway II Sediments

clay 1.5 -> 3.5

gray, soft, pure

sand 3.5 -> 3.8

gray to gray-beige, fine grained

3.8 -> 4.1 Till (Chibougamau)

gray-beige, fine sand matrix

pebbly clasts 60% mafic

volcanics and sediments

40% granitic

4.1 -> 5.5 Bedrock Mafic Volcanic

dark green (chlorite), fine

grained, moderate foliation

5% calcite veining

5.5 E.O.H.

Examination of character split 880314

82-01 Till as logged in field

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 318m

DATE Aug. 31 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-83 LOCATION Site #83

GEOLOGIST B.Bork DRILLER G. Hoang BIT NO. B000181 BIT FOOTAGE 76.2-79.7

MOVE TO HOLE 8:30-8:45

DRILL 8:45-9:00

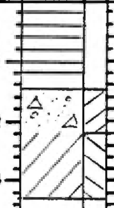
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



01

02

Bedrock

0-0.5 Organics

0.5-1.5 OJIBWAY II SEDIMENTS
- pure gray beige clay

1.5-2.2 Till (Chibougamau)
- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximate composition 60% Volcanic / Sediment 40% granitoid

2.2-3.3 BEDROCK
- dark green colour
- fine to medium grained
- massive structure
- predominant mineral is chlorite
- <10% quartz veining
- Mafic Volcanic

3.3 E.O.H.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

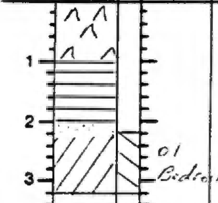
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 318m.

DATE Aug. 31 1987
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO LS-87-84 LOCATION Site #84
GEOLOGIST B. Bark DRILLER G. Howd BIT NO. Boco/51 BIT FOOTAGE 79.5- 82.5
MOVE TO HOLE 9:00- 9.15
DRILL 9:15- 9.45
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



01 Bedrock

0-1.0 Organics

1.0-2.2 OJIBWAY II SEDIMENTS
1.0-2.0 beige pure clay
- moderately compact
2.0-2.2 - fine grained beige sand

2.2-3.2 BEDROCK
- dark to medium green colour
- medium grained
- massive structure
- predominant minerals are epidote and chlorite
- Mafic Volcanic

3.2 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 31 1987

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-85 LOCATION Site 85 Elevation 320 m

GEOLOGIST T. Burns DRILLER G. Houz BIT NO. F000440 BIT FOOTAGE 0 → 13.5

MOVE TO HOLE 9.45 → 10.00

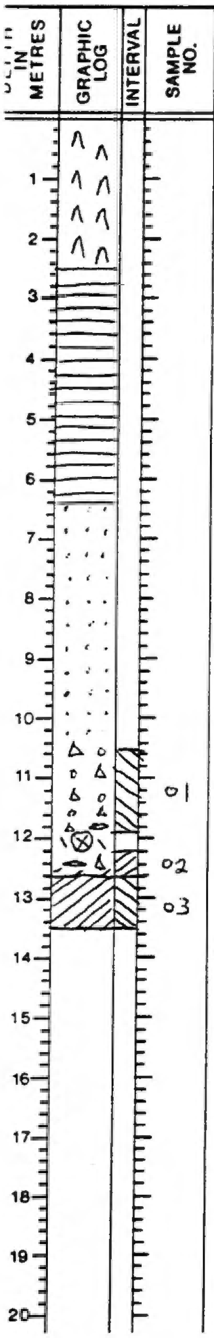
DRILL 10.00 → 10.30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 → 2.5 Organics

2.5 → 10.4 Ojibway II Sediments
clay 2.5 → 6.5
gray, soft, pure
sand 6.5 → 10.4
gray-beige, fine grained
- medium grained below
9.0 to 10.4

10.4 → 12.6 Till (Chibougamau)
gray-beige, fine sand
matrix, pebbly above 11.6
cobbly below, clasts
60 % mafic volcanic and
sediments 40% granitic
- gritty gray-green clay
lumps below 11.6 to 12.6
- boulder, granodiorite
11.9 → 12.2

12.6 → 13.5 Bedrock Intermediate
Volcanic

medium gray-green (chlorite)
fine grained, massive,
5-10 % disseminated calcite
1-2 % disseminated cubic
pyrite, numerous hematite
stained fractures throughout

13.5 E.O.H.

Examination of character split 880314

85-01 Till as logged in field

TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 321m.

DATE Aug. 31 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS 87-86 LOCATION Site #86

GEOLOGIST B.Bak DRILLER G.Ho[illegible] BIT NO. F000440 BIT FOOTAGE 13.5-41.1

MOVE TO HOLE 10:30-10:45

DRILL 10:45-12.30

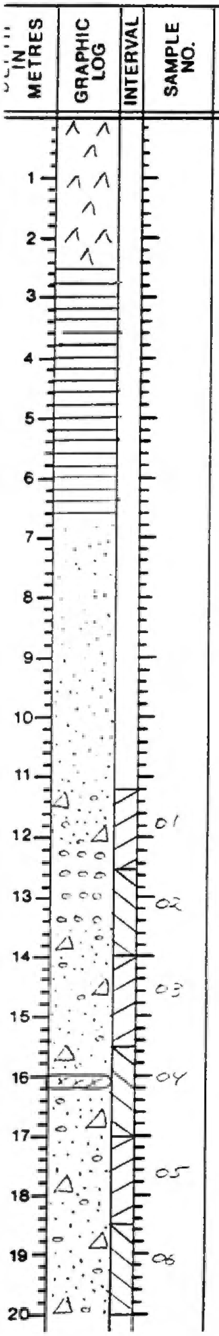
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

page 1 of 2



DESCRIPTIVE LOG

0·2.5 Organics

2.5-11.2 OJIBWAY II SEDIMENTS

2.5-6.8 - gray pure clay
- soft

6.8-11.2 - sand - fine grained gray

11.2-26.6 Till (Chibougamau)
- fine grained gray-beige
Sand silt matrix
- pebbles and cobbles, approximately
75% Volcanic/Sediment
25% granitoid

12.3-13.4 Gravel lense - medium grained sand
- pebbles and cobbles, approximately
60% Volcanic/Sediment
40% granitoid

16.0-16.2 Boulder (diorite)

Examination of Character Splits 880314
86-01, 05, 10 Till as logged in the field
TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-86 LOCATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

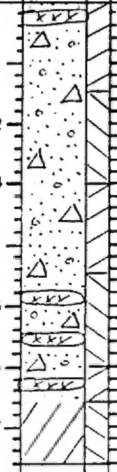
MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

page 2 of 2

METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			07	20.2 - 20.4 Boulder (diorite)
1				
				21.2-23.0 - till becomes very sandy
2			08	
3				24.6 -26.6 - matrix similiar to 11.2-12.3
			09	- pebbles and cobbles, approximately
4				80% Volcanic/Sediments
				20% granitoid
5			10	
6			11	24.8-25.0 Boulder (mafic Volcanic)
7			12 Bedrock	25.5-25.7 Boulder (mafic Volcanic)
8				26.2-26.4 Boulder (diorite)
9				
10				266-276 BEDROCK
11				- light green colour
				- fine grained
12				- well foliated
13				- predominant mineral is chlorite
				- 20% quartz-calcite veins
14				- Intermediate Volcanic
15				
16				27.6 E.O.H.
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 322m

DATE Aug. 31 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-87 LOCATION Site # 87

GEOLOGIST B.Bork DRILLER G.Huag BIT NO. F000440 BIT FOOTAGE 41.1-52.1

MOVE TO HOLE 12:30 - 12:45

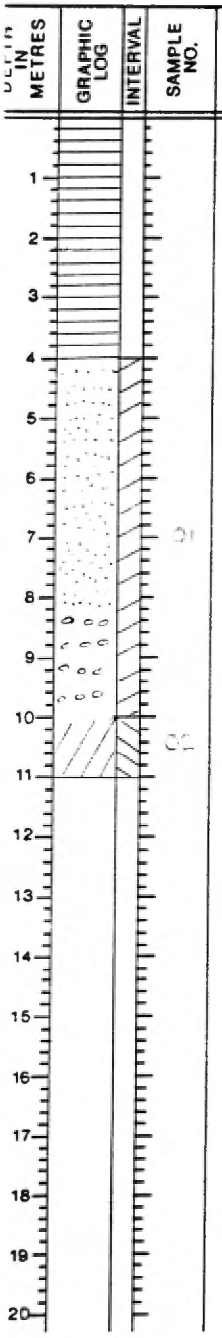
DRILL 12:45-1:30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-10.0 OJIBWAY II SEDIMENTS

0-4.0 -pure beige clay above 1.5
- pure gray clay below 1.5
- soft.

4.0-7.5 fine grained gray sand

7.5-8.5 - coarse grained sand

8.5-10.0 - Gravel - coarse grained sand matrix

- pebbles and cobbles, approximately 70% Volcanic/Sediments 30% granitoid

10.0-11.0 BEDROCK

- dark green colour
- medium grained
- weak foliation to massive structure
- predominant mineral is chlorite
- Mafic Volcanic

11.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 31 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS-87-88 LOCATION Site #88 Elevation 325m

GEOLOGIST T. Burns DRILLER G. Hoag BIT NO. #000440 BIT FOOTAGE 52.1 → 53.6

MOVE TO HOLE 1.30 → 1.45, 2.30 → 3.15

DRILL 3.15 → 3.45

MECHANICAL DOWN TIME 1.45 → 2.30

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG							
	∩ ∩			0 → 0.4 <u>Organics</u>							
1	▨	▨	01	0.4 → 1.5 <u>Bedrock</u> Gabbro medium to dark green (chlorite) coarse grained, massive							
2											
3				1.5 E. O. H.							
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 323m.

DATE Aug 31 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-89 LOCATION Site #89

GEOLOGIST B. Burk DRILLER G. Hwg BIT NO. F000 440 BIT FOOTAGE 53.6-63.7

MOVE TO HOLE 3:45-4:00

DRILL 4:00-4:30

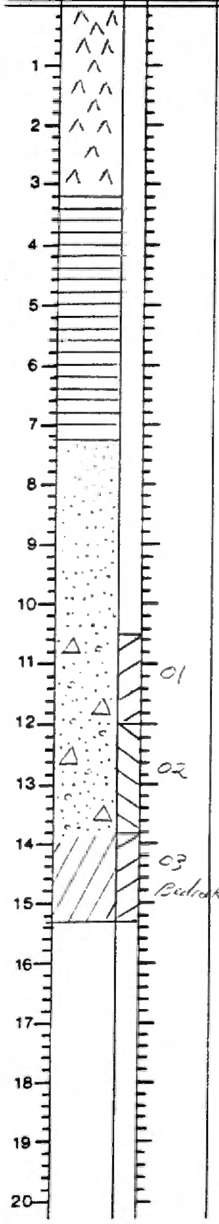
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 5:00-5:30

MOVE TO NEXT HOLE 4:30-5:00

DEPTH IN METRES | **GRAPHIC LOG** | **INTERVAL** | **SAMPLE NO.** | **DESCRIPTIVE LOG**



0-3.0 Organics

3.0-10.5 OJIBWAY II SEDIMENTS

3.0-7.3 - pure gray clay
- soft

7.3-10.5 - fine grained gray sand

10.5-13.8 Till (Chibougamau)

- fine grained gray beige sand silt matrix

- pebbles and cobbles, approximately
60% Volcanic/Sediments
40% granitoid

13.8-15.3 BEDROCK

- dark green colour
- fine grained
- well foliated
- predominant mineral is chlorite
- <5% quartz veins
- Mafic Volcanic

15.3 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 330m

DATE Sept. 1 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS 87-90 LOCATION Site #90

GEOLOGIST B.Cook DRILLER G. Hing BIT NO. Booc 441 BIT FOOTAGE 0-1.7

MOVE TO HOLE 4:30-5:00 Aug. 31st

DRILL 7:00 7:15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Fuel 6:30 - 7:00 a.m.

MOVE TO NEXT HOLE

New bit and Sub.

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG							
	∧ ∧ ∧			0-1.2 Organics							
1	∧ ∧ ////	/	01 Bedrock								
2				1.2-1.7 Bedrock - dark green colour							
3				- fine to medium graind - massive structure							
4				- predominant mineral is chlorite							
5				- Mafic Volcanic							
6				1.7 E.O.H.							
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Sept 1 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-91 LOCATION Site #95 Elevation 326 m

GEOLOGIST T. Burns DRILLER G. Houg BIT NO. E000441 BIT FOOTAGE 1.7 -> 11.7

MOVE TO HOLE 7.15 -> 7.45

DRILL 7.45 -> 8.30

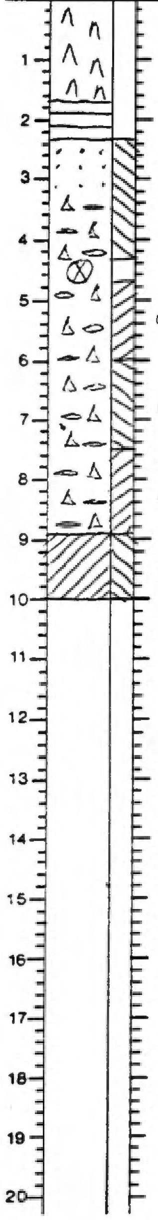
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.	DESCRIPTIVE LOG
	0 -> 1.7 Organics
	1.7 -> 3.3 Ojibway II Sediments clay 1.7 -> 2.5 gray, soft, pure sand 2.5 -> 3.3 gray - beige, fine grained
01	
02	3.3 -> 8.9 Till (Chibougamau) gray - beige, fine sand matrix cobbly clasts 60% mafic volcanic and sediments 40% granitic - boulder, intermediate volcanic 4.3 -> 4.7 - high percentage fine sand matrix from 4.7 -> 7.2 - gritty gray clay lumps below 7.2 -> 8.9
03	
04	
05	8.9 -> 10.0 Bedrock Mafic Volcanic dark green (chlorite) fine to very fine grained, well developed foliation (sheared?) 1% calcite veining
	10.0 E. O. H.

Examination of character splits 880314

91-03 Pebbly sand beige, medium grained (250-500µ) sorted 35% +10 clasts

TEB.

OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation: 326m
REVERSE CIRCULATION DRILL HOLE LOG

DATE Sept. 1 19 87

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO LS-87-92 LOCATION Site #96

GEOLOGIST B. Bork DRILLER G. Hwg BIT NO. F000441 BIT FOOTAGE 16.7-18.9

MOVE TO HOLE 8:30 - 8:45

DRILL 8:45 - 9.00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
	^ ^ ^			0-1.2 Organics
1	^ ^			
	▨	▨	01	1.2-2.2 BEDROCK
2	▨	▨	Bedrock	- medium green colour
				- medium grained
3				- massive structure
				- predominant mineral is chlorite
4				- Mafic Volcanics
5				
6				2.2 E.O.H.
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED Elevation: 324m

REVERSE CIRCULATION DRILL HOLE LOG

DATE Sept. 1 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS-87-93 LOCATION Site #97

GEOLOGIST B Bark DRILLER G Hoag BIT NO. F000441 BIT FOOTAGE 18.9-28.4

MOVE TO HOLE 9:00-9:15

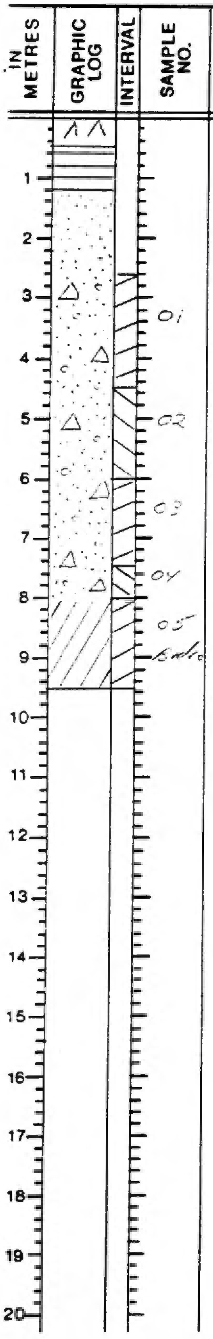
DRILL 9:15-10:00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-0.5 Organics

0.5-2.6 OJIBWAY II SEDIMENTS

0.5-1.2 - pure beige clay, soft

1.2-2.6 - gray fine grained sand

2.6-8.0 Till (Chibougamou)

2.6-5.0 - fine grained gray sand silt matrix

- pebbles and cobbles, approximately
80% Volcanic/Sediment
20% Granitoid

5.0-8.0 - matrix similar to above

- clasts approximately
60% Volcanic/Sediment
40% granitoid

8.0-9.5 BEDROCK

- light green colour
- fine grained
- moderate foliation
- <1% visible sulphides
- approximate 10% calcite
- Intermediate Volcanic

9.5 E.O.H

Examination of Character Splits 880314

93-03 Sand beige, medium grained (250-500 μ), <5% +10 clasts, 15% fine grained (100→250 μ) sand.

TEB

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Sept 1 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS-87-94 LOCATION site #98 Elevation 329m

GEOLOGIST T. Burns DRILLER G. Houz BIT NO. F000441 BIT FOOTAGE 28.4 -> 38.4

MOVE TO HOLE 10.00 -> 10.15

DRILL 10.15 -> 10.45

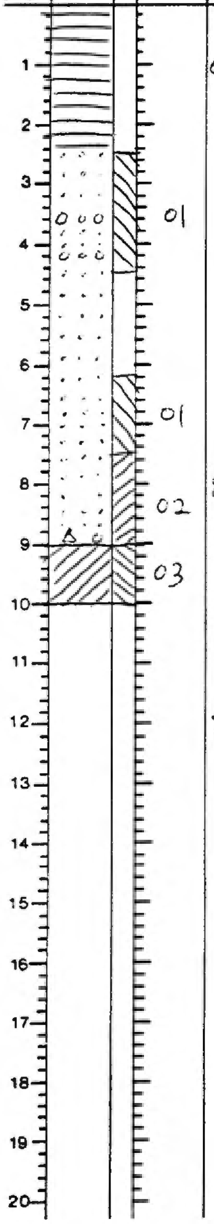
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 0.2 Organics

0.2 -> 8.8 Ojibway II sediments

clay 0.2 -> 2.5

gray-beige above 1.5 gray below, soft, pure

sand 2.5 -> 8.8

gray-beige, fine grained local pebbly beds at 3.6 and 4.2

- coarse sand 6.2 -> 7.0
- fine sand 7.0 -> 8.8

8.8 -> 9.0 Till (Chibougamau)

gray-beige, fine sand matrix, pebbly clasts 60% mafic volcanic and sediments 40% granitic

9.0 -> 10.0 Bedrock Mafic Volcanic

dark green (chlorite), fine to medium grained, moderate to well developed foliation due to shearing

10.0 E.O.H

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 330 m.

DATE Sept. 1 19 87

HOLE NO LS-87-95 LOCATION Site #99

GEOLOGIST B. Bork DRILLER G. Howy. BIT NO. F000741 BIT FOOTAGE 38.1 - 47.1

SHIFT HOURS

____ TO ____

MOVE TO HOLE 10.45 - 11.00

DRILL 11.00 - 12.00

TOTAL HOURS

MECHANICAL DOWN TIME

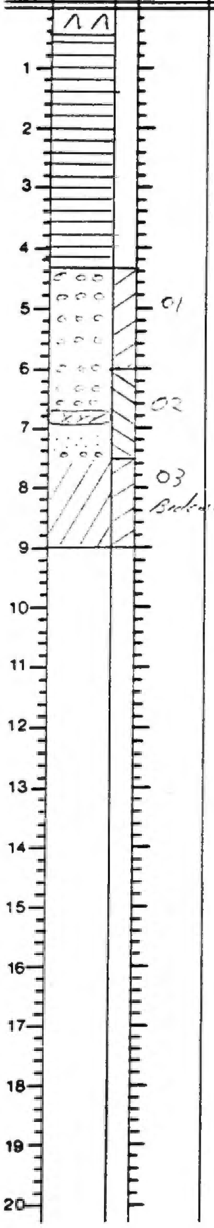
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

0-0.5 Organics

0.5-7.5 OJIBWAY II SEDIMENTS

0.5-4.3 - gray pure clay, soft

4.3-7.2 Gravel - medium grained gray
Sand matrix
- pebbles and cobbles, approximately
80% Volcanic / Sediment
20% Granitoid

6.7-6.9 Boulder (diorite)

7.2-7.4 - fine grained gray sand
lense

7.5-9.0 BEDROCK
- dark green colour
- fine grained
- very well foliated (schistose)
- predominant mineral is chlorite
- Mafic Volcanic

9.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 329m.

DATE Sept. 1 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO LS 87-96 LOCATION Site #91

GEOLOGIST B. Bark DRILLER G. Hwang BIT NO. F000441 BIT FOOTAGE 471-621

MOVE TO HOLE 12.00-12.45

DRILL 12.45-1.15

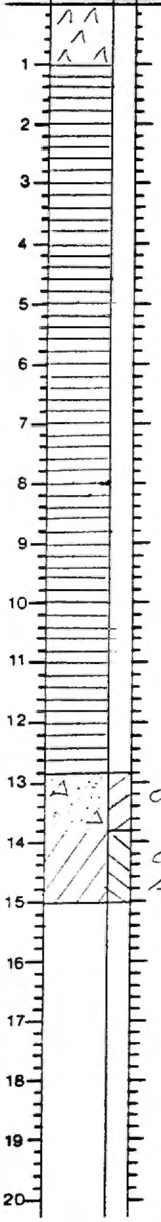
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



01

02 Bedrock

0.1.0 Organics

1.0- 12.8 OJIBWAY II SEDIMENTS
- pure gray clay, soft

12.8 - 13.8 Till (Chibougamau)
- fine grained gray sand silt matrix
- pebbles & cobbles, approximately 70% Volcanic/Sediment 30% granitoid

13.8 -15.0 BEDROCK
- dark green colour
- fine grained
- moderate foliation
- 1% sulphides
- predominant mineral is chlorite
- approximately 5% quartz stringers
. Mafic Volcanic

15.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Sept 1 1987

SHIFT HOURS

____ TO ____

TOTAL HOURS ____

CONTRACT HOURS ____

HOLE NO LS-87-97 LOCATION Site # 92 Elevation 329m

GEOLOGIST I. Burns DRILLER G. Houg BIT NO. F000441 BIT FOOTAGE 62.1 -> 67.6

MOVE TO HOLE 1.15 -> 1.30

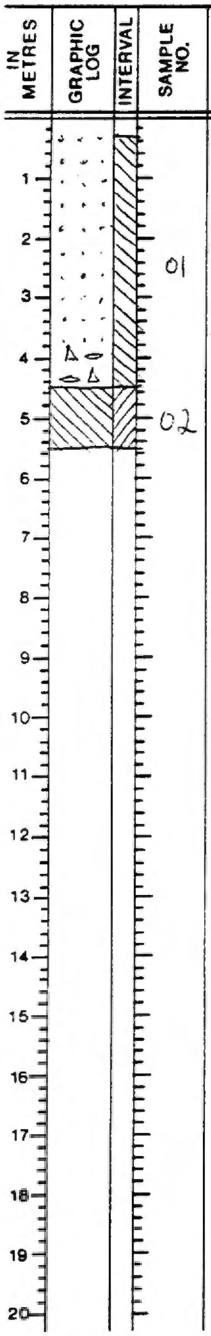
DRILL 1.30 -> 1.45

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____



DESCRIPTIVE LOG

0 -> 0.3 Organics

0.3 -> 3.8 Ojibway II Sediments
sand gray - beige, fine grained

3.8 -> 4.5 Till (Chibougamau)
gray - beige, fine sand matrix cobbly clasts 60% mafic volcanics and sediments 40% granitic

4.5 -> 5.5 Bedrock Mafic Volcanic
dark green (chlorite) medium to coarse grained, locally gabbroic massive.

5.5 E. O. H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation: 332

DATE Sept 1 19 87

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO LS 87-98 LOCATION Site #93

GEOLOGIST B.Bork DRILLER G. Hwng BIT NO. F000441 BIT FOOTAGE 676-826

MOVE TO HOLE 1.45-2:00

DRILL 2:00-3:00

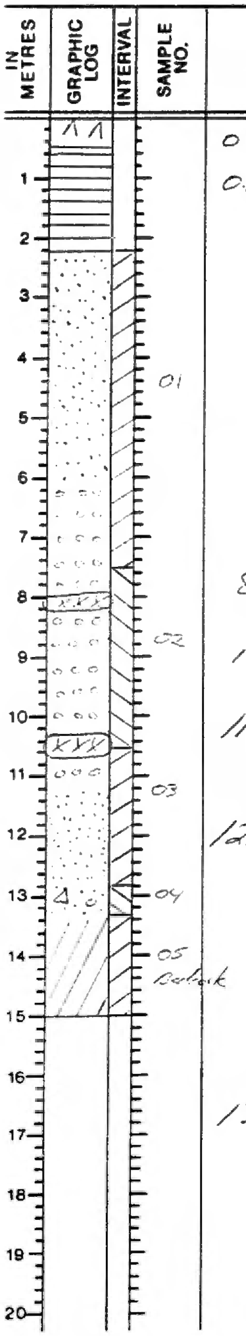
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 0.5 Organics

0.5-12.8 OJIBWAY SEDIMENTS

0.5-2.2 - pure gray soft clay

2.2-4.0 - fine grained gray-beige sand

4.0-6.0 - medium grained beige sand

6.0-11.3 - Gravel - medium grained beige sand matrix.

- pebbles and cobbles, approximately
  70% Volcanic/Sediment
  30% granitoid

8.0-8.2 Boulder (mafic Volcanic)

10.3-10.7 Boulder (diorite)

11.3-12.8 Sand, coarse grained beige Colour

12.8-13.3 Till (Chibougamau)

- fine grained gray-beige sand silt matrix
- pebbles and cobbles, approximately
  70% Volcanic/Sediments
  30% granitoid

13.3-15.0 BEDROCK

- dark green color
- medium grained
- massive structure
- Mafic Volcanic

15.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Elevation 334 m.

DATE Sept. 1 19 87

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO LS 87-99 LOCATION Site #94

GEOLOGIST B. Bork DRILLER G. Hong BIT NO. CB69345 BIT FOOTAGE 0-200

MOVE TO HOLE 3:00-3:15

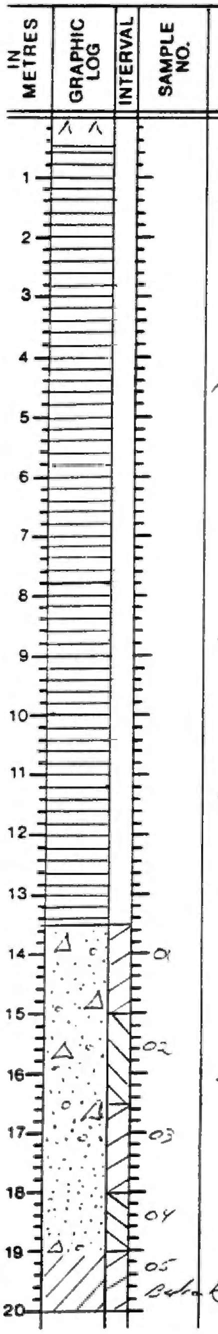
DRILL 3:15-4:00

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER Travel 4:30-5:00

MOVE TO NEXT HOLE 4:00-4:30



DESCRIPTIVE LOG

0-0.5 Organics

0.5-13.5 OJIBWAY II SEDIMENTS
- pure gray clay
- moderately compact
- softens downsection

13.5-19.0 Till (Chibougamau)
- fine grained gray beige sand silt matrix
- pebbles and cobbles, approximately
60% Volcanic/Sediments
40% granitoid

17.5-18.8 - medium grained beige sand lense
- occassional pebble.

19.0-20.0 BEDROCK
- dark green colour
- medium grained
- massive structure
- predominant mineral is chlorite
- Mafic Volcanic

20.0 E.O.H.

APPENDIX D

SAMPLE WEIGHTS - HEAVY MINERAL CIRCUIT

FALS1SEP.WR1
TOTAL # OF SAMPLES IN THIS REPORT = 40

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	DT					SD	CY	
LS-87																						
01-01	8.7	2.9	5.8	143.5	117.8	25.7	17.3	8.4	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	9.5	3.0	6.5	102.0	69.2	32.8	23.4	9.4	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	9.2	1.7	7.5	145.8	118.5	27.3	20.4	6.9	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	9.0	1.9	7.1	212.5	168.8	43.7	33.7	10.0	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
02-01	9.2	2.7	6.5	136.4	98.1	38.3	26.7	11.6	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-02	9.3	1.8	7.5	157.2	103.0	54.2	39.3	14.9	6	322	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.2	1.6	6.6	150.0	106.0	44.0	34.3	9.7	1	11	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	9.0	0.9	8.1	166.9	131.9	35.0	24.7	10.3	11	219	CP	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
03-01	9.3	1.2	8.1	260.7	200.2	60.5	45.7	14.8	7	86	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	9.1	0.9	8.2	295.4	218.1	77.3	54.4	22.9	6	104	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	9.2	1.7	7.5	295.6	226.1	69.5	50.2	19.3	B	207	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	8.8	1.6	7.2	223.2	165.0	58.2	42.7	15.5	1	9	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	8.7	1.4	7.3	310.3	228.6	81.7	53.7	28.0	10	863	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
04-01	8.8	0.6	8.2	235.3	181.7	53.6	38.8	14.8	9	128	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	9.2	0.6	8.6	100.9	49.0	51.9	38.1	13.8	2	164	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	9.2	1.1	8.1	274.4	222.8	51.6	38.4	13.2	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-04	7.9	0.5	7.4	176.6	131.0	45.6	29.0	16.6	1	13	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	8.5	0.5	8.0	238.8	191.2	47.6	25.0	22.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	6.3	0.4	5.9	120.3	97.4	22.9	17.3	5.6	0	NA	PC	95	5	NA	NA	U	Y	Y	Y	GN	GN	TILL
06-01	8.9	0.4	8.5	291.9	237.0	54.9	41.3	13.6	1	5	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	9.2	0.7	8.5	364.2	307.5	56.7	38.8	17.9	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-03	7.0	1.4	5.6	173.5	135.5	38.0	27.7	10.3	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-04	9.3	0.8	8.5	329.0	279.2	49.8	35.0	14.8	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	9.4	0.7	8.7	390.0	335.5	54.5	38.7	15.8	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	9.2	1.1	8.1	315.8	259.1	56.7	38.5	18.2	4	1500	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-07	9.6	2.4	7.2	295.5	248.8	46.7	33.0	13.7	8	253	P	90	10	NA	NA	U	Y	Y	Y	GG	GG	TILL
-08	9.1	0.6	8.5	368.6	298.2	70.4	48.1	22.3	6	144	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-09	9.4	0.5	8.9	324.5	270.2	54.3	37.5	16.8	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-010	9.1	1.6	7.5	222.6	175.1	47.5	36.0	11.5	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-011	9.0	1.4	7.6	194.8	146.1	48.7	34.7	14.0	1	29	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-012	8.9	1.4	7.5	277.1	219.3	57.8	39.6	18.2	8	384	P	90	10	NA	NA	U	Y	Y	Y	GG	GG	TILL
08-01	8.3	0.6	7.7	203.7	163.6	40.1	29.6	10.5	1	167	P	60	40	NA	NA	U	Y	Y	Y	GN	GN	TILL
09-01	9.3	2.5	6.8	316.8	270.6	46.2	33.4	12.8	3	133	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.5	0.8	7.7	165.3	122.8	42.5	29.3	13.2	5	141	P	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.9	0.6	8.3	347.1	291.2	55.9	40.8	15.1	7	298	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	9.1	2.6	6.5	161.7	115.8	45.9	33.5	12.4	1	30	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	9.1	1.4	7.7	351.8	295.6	56.2	40.1	16.1	3	49	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	9.3	1.3	8.0	283.9	237.0	46.9	33.7	13.2	1	845	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-07	9.2	1.1	8.1	331.2	270.0	61.2	43.5	17.7	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
09-08	9.2	1.4	7.8	187.8	131.6	56.2	38.9	17.3	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL

FALS2SEP.WR1
TOTAL # OF SAMPLES IN THIS REPORT = 40

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
LS-87																						
09-09	8.4	0.6	7.8	178.9	125.0	53.9	37.4	16.5	2	345	C	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-010	7.1	1.3	5.8	143.1	120.4	22.7	15.4	7.3	1	24	C	90	10	NA	NA	U	Y	Y	Y	GN	GN	TILL
10-01	8.3	1.5	6.8	199.7	154.5	45.2	31.6	13.6	0	NA	P	60	40	NA	A	U	Y	Y	Y	B	B	TILL
-02	9.3	0.8	8.5	359.2	293.6	65.6	47.7	17.9	8	170	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	7.0	0.4	6.6	168.9	120.8	48.1	34.7	13.4	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	9.5	1.6	7.9	177.2	129.3	47.9	33.6	14.3	1	63	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	8.6	1.2	7.4	126.3	78.0	48.3	33.8	14.5	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	9.3	0.8	8.5	187.9	138.7	49.2	34.0	15.2	1	145	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-07	9.0	1.1	7.9	174.2	118.8	55.4	40.4	15.0	1	16	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-08	8.8	1.2	7.6	153.4	101.9	51.5	37.4	14.1	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-09	8.4	1.4	7.0	186.9	134.9	52.0	37.3	14.7	3	61	P	60	40	NA	NA	U	Y	Y	Y	GG	GG	TILL
-10	8.8	1.5	7.3	170.7	126.6	44.1	31.5	12.6	1	48	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-11	8.3	1.0	7.3	97.8	82.2	15.6	2.4	13.2	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-12	8.8	1.3	7.5	194.3	154.4	39.9	27.6	12.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
11-01	8.6	0.6	8.0	146.2	98.2	48.0	32.8	15.2	1	6	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.5	1.4	7.1	167.3	121.7	45.6	31.9	13.7	1	32	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.8	2.0	6.8	199.8	154.4	45.4	32.1	13.3	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-04	9.0	0.3	8.7	241.4	186.0	55.4	36.8	18.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	8.1	1.1	7.0	147.2	105.6	41.6	28.2	13.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	8.6	0.9	7.7	164.5	106.5	58.0	35.1	22.9	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-07	9.3	2.0	7.3	199.7	138.8	60.9	34.7	26.2	3	96	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-08	8.9	1.2	7.7	263.4	211.0	52.4	33.0	19.4	4	65	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-09	9.0	2.0	7.0	213.1	168.4	44.7	32.6	12.1	4	91	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-010	8.6	1.1	7.5	185.0	143.0	42.0	30.7	11.3	3	127	CP	85	15	NA	NA	U	Y	Y	Y	GN	GN	TILL
12-01	8.7	1.8	6.9	261.4	215.4	46.0	31.8	14.2	1	6	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
13-01	9.2	1.6	7.6	273.0	217.4	55.6	38.3	17.3	1	10	PC	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	9.1	1.0	8.1	432.2	358.4	73.8	48.2	25.6	4	67	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.8	0.8	8.0	359.4	309.8	49.6	33.1	16.5	1	2	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	9.0	1.0	8.0	300.1	248.1	52.0	33.5	18.5	1	30	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	8.7	1.0	7.7	292.4	233.0	59.4	38.9	20.5	0	NA	C	90	10	NA	NA	U	Y	Y	Y	GN	GN	TILL
-06	7.0	0.7	6.3	312.2	265.4	46.8	31.7	15.1	4	155	C	95	5	NA	NA	U	Y	Y	Y	GN	GN	TILL
-07	8.1	0.9	7.2	229.3	191.1	38.2	25.0	13.2	1	60	C	85	15	NA	NA	U	Y	Y	Y	GN	GN	TILL
14-01	8.7	1.4	7.3	273.7	220.1	53.6	37.6	16.0	3	96	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	9.0	2.1	6.9	217.5	164.3	53.2	35.5	17.7	10	261	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.6	1.8	6.8	231.8	199.0	32.8	23.6	9.2	5	71	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	9.2	2.6	6.6	338.1	285.1	53.0	39.1	13.9	4	27	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	8.9	2.4	6.5	290.9	247.5	43.4	29.3	14.1	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	5.7	2.2	3.5	162.8	138.2	24.6	17.2	7.4	0	NA	P	40	60	NA	NA	U	Y	Y	Y	GG	GG	TILL
15-01	9.0	2.4	6.6	240.1	184.1	56.0	39.5	16.5	3	26	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
15-02	8.1	1.5	6.6	196.8	155.6	41.2	29.8	11.4	2	15	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL

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OTAL # OF SAMPLES IN THIS REPORT = 40

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
LS-87																						
16-01	7.7	1.4	6.3	243.8	195.5	48.3	34.9	13.4	3	199	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
16-02	9.0	2.4	6.6	205.2	154.9	50.3	32.3	18.0	2	63	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
17-01	8.8	1.7	7.1	185.5	144.1	41.4	27.8	13.6	5	110	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
18-01	9.6	2.8	6.8	202.5	159.5	43.0	28.6	14.4	1	35	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.9	1.3	7.6	211.6	168.9	42.7	27.6	15.1	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-03	5.2	0.5	4.7	150.4	127.5	22.9	14.8	8.1	1	259	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-04	8.8	1.6	7.2	206.9	155.2	51.7	31.9	19.8	7	427	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
19-01	8.1	1.0	7.1	236.1	185.1	51.0	28.8	22.2	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.8	1.3	7.5	177.2	137.4	39.8	26.6	13.2	1	38	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-03	6.5	0.7	5.8	116.9	90.4	26.5	17.9	8.6	0	NA	P	85	15	NA	NA	U	Y	Y	Y	B	B	TILL
-04	8.6	1.2	7.4	114.4	82.2	32.2	21.4	10.8	1	70	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-05	8.9	1.2	7.7	145.4	116.3	29.1	20.0	9.1	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
20-01	9.6	2.2	7.4	215.7	169.0	46.7	29.1	17.6	1	52	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.6	2.1	6.5	236.4	193.2	43.2	27.5	15.7	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-03	8.2	1.1	7.1	161.8	121.7	40.1	25.9	14.2	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-04	7.6	1.1	6.5	193.7	154.3	39.4	26.4	13.0	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-05	9.2	2.2	7.0	190.7	149.7	41.0	28.3	12.7	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-06	9.0	2.3	6.7	219.8	185.4	34.4	22.0	12.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
21-01	8.8	2.2	6.6	274.9	239.5	35.4	24.0	11.4	5	489	P	85	15	NA	NA	U	Y	Y	Y	B	B	TILL
-02	9.1	1.4	7.7	259.3	189.7	69.6	45.7	23.9	5	56	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-03	8.5	1.9	6.6	233.6	195.5	38.1	25.8	12.3	3	64	P	85	15	NA	NA	U	Y	Y	Y	B	B	TILL
-04	8.7	2.8	5.9	205.0	184.4	20.6	15.1	5.5	4	182	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-05	9.0	1.3	7.7	187.9	142.2	45.7	27.6	18.1	3	263	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
22-01	9.3	1.2	8.1	221.2	170.3	50.9	34.1	16.8	4	586	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.6	1.7	6.9	215.0	171.0	44.0	30.3	13.7	1	50	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-03	9.1	3.2	5.9	175.0	137.2	37.8	25.8	12.0	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-04	8.6	1.4	7.2	217.6	172.5	45.1	28.3	16.8	3	16359	P	85	15	NA	NA	U	Y	Y	Y	GNB	GNB	TILL
-05	8.4	2.2	6.2	168.1	129.6	38.5	22.1	16.4	5	98	C	80	20	NA	NA	U	Y	Y	Y	GNB	GNB	TILL
-06	9.3	2.8	6.5	260.0	221.9	38.1	19.0	19.1	8	1583	C	80	20	NA	NA	U	Y	Y	Y	GNB	GNB	TILL
-07	6.0	0.4	5.6	110.0	94.3	15.7	9.9	5.8	17	1799	P	85	15	NA	NA	U	Y	Y	Y	GN	GN	TILL
23-01	9.2	1.8	7.4	273.2	214.9	58.3	39.7	18.6	1	5	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	9.0	1.8	7.2	220.9	170.2	50.7	33.8	16.9	8	150	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
24-01	9.8	1.6	8.2	244.4	188.8	55.6	34.3	21.3	3	40	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.5	1.2	7.3	200.6	166.8	33.8	18.1	15.7	2	7	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-03	6.5	1.2	5.3	144.1	109.3	34.8	23.8	11.0	1	42	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-04	8.8	0.8	8.0	165.6	130.5	35.1	25.2	9.9	3	36	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-05	9.0	1.8	7.2	200.3	152.0	48.3	32.7	15.6	7	365	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	8.5	1.2	7.3	212.6	163.6	49.0	31.6	17.4	4	149	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
25-01	8.8	1.9	6.9	214.6	167.0	47.6	32.0	15.6	5	177	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
25-02	8.9	1.8	7.1	214.5	167.9	46.6	30.3	16.3	1	12	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL

LS20CT.WR1
TOTAL # OF SAMPLES IN THIS REPORT = 40

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
LS-87																						
26-01	9.2	1.6	7.6	197.7	150.5	47.2	31.9	15.3	1	67	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	8.5	1.6	6.9	252.9	214.8	38.1	27.8	10.3	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	9.0	2.2	6.8	195.2	174.0	21.2	14.2	7.0	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-04	9.0	2.1	6.9	218.2	166.8	51.4	32.0	19.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	9.3	1.6	7.7	258.6	185.1	73.5	40.8	32.7	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	7.5	0.7	6.8	219.1	118.0	101.1	58.6	42.5	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-07	8.8	1.6	7.2	211.0	169.5	41.5	22.1	19.4	1	68	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-08	9.0	0.9	8.1	234.2	177.4	56.8	40.1	16.7	5	27	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
27-01	9.2	2.0	7.2	244.1	199.5	44.6	28.8	15.8	1	22	C	85	15	NA	NA	U	Y	Y	Y	B	B	TILL
-02	5.9	0.9	5.0	144.6	110.1	34.5	23.1	11.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
28-01	8.3	1.2	7.1	187.1	148.9	38.2	25.1	13.1	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	9.0	1.5	6.5	173.7	129.8	43.9	27.8	16.1	6	160	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-03	8.7	1.3	7.4	182.2	136.0	46.2	31.9	14.3	3	322	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	8.9	0.9	8.0	230.5	187.5	43.0	28.7	14.3	5	328	C	90	10	NA	NA	U	Y	Y	Y	GG	GG	TILL
29-01	9.4	1.4	8.0	248.6	198.2	50.4	34.6	15.8	2	73	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	9.0	0.9	8.1	195.9	142.7	53.2	36.9	16.3	3	78	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-03	8.8	1.5	7.3	197.8	154.9	42.9	29.8	13.1	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-04	9.0	1.5	7.5	273.8	228.3	45.5	30.4	15.1	1	6	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	8.5	0.9	7.6	183.5	145.3	38.2	26.4	11.8	5	394	P	65	35	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	8.9	0.9	8.0	218.8	173.0	45.8	30.3	15.5	1	33	P	65	35	NA	NA	U	Y	Y	Y	GG	GG	TILL
-07	9.4	1.5	7.9	190.8	153.8	37.0	26.4	10.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
30-01	9.0	1.3	7.7	197.6	151.2	46.4	29.3	17.1	1	51	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	9.1	2.5	6.6	205.0	166.1	38.9	26.0	12.9	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
31-01	8.7	1.5	7.2	251.9	168.7	83.2	70.6	12.6	2	55	C	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.8	1.5	7.3	164.5	125.9	38.6	27.6	11.0	0	NA	C	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-03	8.6	2.6	6.0	178.1	128.6	49.5	34.9	14.6	8	362	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
32-01	6.8	1.1	5.7	169.4	134.7	34.7	24.3	10.4	1	42	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.8	1.6	7.2	249.1	201.0	48.1	32.5	15.6	1	152	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-03	9.7	3.0	6.7	164.3	132.5	31.8	21.4	10.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-04	8.8	1.8	7.0	242.0	206.0	36.0	25.2	10.8	2	74	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	8.7	0.7	8.0	217.6	159.7	57.9	39.3	18.6	1	9	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	8.9	0.3	8.6	244.0	184.9	59.1	42.7	16.4	1	9	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-07	8.5	0.0	8.5	199.7	138.4	61.3	43.9	17.4	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GY	GY	TILL
-08	8.3	1.3	7.0	166.5	108.8	57.7	39.7	18.0	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-09	9.8	1.6	8.2	153.8	110.5	43.3	28.7	14.6	1	35	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-10	9.9	3.5	6.4	189.2	136.6	52.6	32.6	20.0	1	46	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
33-01	9.3	1.5	7.8	218.7	177.6	41.1	28.8	12.3	1	133	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
34-01	9.2	2.5	6.7	232.6	191.0	41.6	30.0	11.6	0	NA	PC	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.8	2.5	6.3	148.1	114.3	33.8	23.6	10.2	4	129	PC	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
35-01	9.0	1.6	7.4	154.7	114.6	40.1	27.6	12.5	1	77	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL

L83OCT.WR1

OVERBURDEN DRILLING MANAGEMENT LIMITED

TOTAL # OF SAMPLES IN THIS REPORT = 40

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
LS-87																						
36-01	7.8	0.9	6.9	165.6	132.1	33.5	21.0	12.5	3	617	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	9.2	1.0	8.2	285.6	239.4	46.2	30.3	15.9	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	6.6	1.4	5.2	93.2	67.3	25.9	14.9	11.0	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
37-01	9.1	1.6	7.5	178.3	162.8	15.5	9.1	6.4	1	21	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.8	1.4	7.4	173.4	144.9	28.5	18.1	10.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-03	9.2	1.5	7.7	170.4	128.6	41.8	26.1	15.7	5	128	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	9.1	1.4	7.7	129.2	88.0	41.2	24.8	16.4	5	1856	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	8.5	1.4	7.1	165.0	115.2	49.8	33.0	16.8	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	9.9	2.0	7.9	121.5	85.0	36.5	24.4	12.1	2	160	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-07	8.5	1.2	7.3	230.9	183.3	47.6	31.0	16.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-08	8.9	1.4	7.5	239.6	191.7	47.9	33.4	14.5	1	19	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
38-01	8.9	2.1	6.8	146.3	101.2	45.1	26.9	18.2	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	4.6	0.7	3.9	176.9	145.5	31.4	24.3	7.1	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	6.0	0.5	5.5	277.3	235.0	42.3	32.7	9.6	1	46	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	7.4	0.8	6.6	199.3	155.3	44.0	35.6	8.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	8.3	1.0	7.3	188.1	144.9	43.2	31.8	11.4	2	44	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	8.5	0.9	7.6	173.2	128.0	45.2	32.0	13.2	1	47	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-07	8.8	1.8	7.0	276.2	223.1	53.1	39.3	13.8	1	5	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-08	8.9	1.8	7.1	283.0	231.4	51.6	40.4	11.2	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-09	7.8	1.2	6.6	297.1	246.0	51.1	39.5	11.6	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-10	9.1	2.0	7.1	226.9	171.9	55.0	39.5	15.5	1	5	P	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL
-11	7.0	0.9	6.1	162.5	120.0	42.5	30.3	12.2	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-12	9.1	1.4	7.7	246.3	177.5	68.8	51.4	17.4	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-13	9.1	2.0	7.1	286.6	228.7	57.9	41.3	16.6	1	51	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-14	9.4	1.2	8.2	233.7	179.0	54.7	39.1	15.6	1	10	P	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
-15	9.1	1.4	7.7	205.0	151.8	53.2	37.0	16.2	2	226	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-16	9.5	1.4	8.1	272.4	230.7	41.7	26.5	15.2	2	629	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-17	5.0	0.8	4.2	163.0	138.2	24.8	18.2	6.6	1	82	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-18	4.8	0.6	4.2	129.2	104.8	24.4	17.8	6.6	1	11	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-19	6.0	1.2	4.8	236.5	203.5	33.0	24.5	8.5	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-20	8.9	1.0	7.9	196.7	149.1	47.6	33.8	13.8	2	38	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-21	7.6	0.6	7.0	202.8	149.6	53.2	39.1	14.1	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GY	GY	TILL
-22	8.6	1.0	7.6	201.0	171.6	29.4	19.0	10.4	1	10	P	70	30	NA	NA	U	Y	Y	Y	GY	GY	TILL
-23	9.4	1.3	8.1	182.9	141.6	41.3	27.0	14.3	1	24	P	75	25	NA	NA	U	Y	Y	Y	GY	GY	TILL
-24	8.0	1.3	6.7	104.4	72.1	32.3	22.0	10.3	0	NA	P	80	20	NA	A	U	Y	Y	Y	GY	GY	TILL
39-01	8.9	2.2	6.7	169.2	127.9	41.3	27.2	14.1	0	NA	C	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.0	0.4	7.6	185.8	131.0	54.8	38.9	15.9	0	NA	C	90	10	NA	NA	U	Y	Y	Y	B	B	TILL
-03	9.1	2.9	6.2	257.3	220.4	36.9	24.4	12.5	1	8	C	80	20	NA	NA	U	Y	Y	Y	GY	GY	TILL
-04	9.2	1.6	7.6	282.7	230.4	52.3	37.2	15.1	5	160	C	70	30	NA	NA	U	Y	Y	Y	GY	GY	TILL
39-05	9.6	2.7	6.9	126.6	92.7	33.9	22.3	11.6	0	NA	C	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL

_S4OCT.WR1

OVERBURDEN DRILLING MANAGEMENT LIMITED

TAL # OF SAMPLES IN THIS REPORT = 40

LABORATORY SAMPLE LOG

AMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
LS-87																						
39-06	9.5	2.8	6.7	159.6	125.0	34.6	22.0	12.6	0	NA	C	70	30	NA	NA	U	Y	Y	Y	GY	GY	TILL
40-01	8.4	1.5	6.9	191.4	153.9	37.5	25.1	12.4	5	345	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
41-01	2.0	0.4	1.6	78.1	67.3	10.8	6.7	4.1	1	432	P	80	20	NA	NA	U	Y	Y	Y	GN	GN	TILL
42-01	5.1	0.6	4.5	159.0	135.5	23.5	16.4	7.1	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.8	1.1	7.7	197.4	162.0	35.4	22.3	13.1	1	45	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-03	8.4	1.2	7.2	202.4	166.3	36.1	22.5	13.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-04	9.2	2.8	6.4	248.9	211.7	37.2	25.2	12.0	1	8	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-05	9.4	4.0	5.4	200.9	162.5	38.4	22.4	16.0	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	9.0	2.4	6.6	173.7	132.0	41.7	28.5	13.2	1	3	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-07	9.5	2.9	6.6	191.5	163.2	28.3	17.0	11.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-08	9.0	2.5	6.5	128.3	89.7	38.6	25.2	13.4	2	100	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-09	9.4	2.4	7.0	131.2	88.0	43.2	27.8	15.4	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-10	9.5	2.5	7.0	192.0	155.1	36.9	23.9	13.0	4	221	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-11	9.7	2.1	7.6	167.1	119.7	47.4	32.9	14.5	5	562	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-12	8.9	2.3	6.6	154.5	113.6	40.9	28.8	12.1	1	35	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-13	9.4	2.0	7.4	158.6	115.0	43.6	29.0	14.6	1	35	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-14	9.2	0.9	8.3	181.2	139.3	41.9	27.0	14.9	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-15	8.9	1.4	7.5	187.6	148.2	39.4	26.1	13.3	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-16	8.7	0.8	7.9	152.3	123.0	29.3	20.5	8.8	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
43-01	4.2	0.7	3.5	77.1	61.5	15.6	10.8	4.8	0	NA	C	90	10	NA	NA	U	Y	Y	Y	GN	GN	TILL
44-01	9.0	2.4	6.6	139.5	99.4	40.1	27.3	12.8	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	9.2	2.7	6.5	155.7	114.8	40.9	27.3	13.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.1	1.9	6.2	147.8	100.3	47.5	37.5	10.0	0	NA	C	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL
45-01	9.0	1.6	7.4	137.7	99.1	38.6	26.5	12.1	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.6	1.5	7.1	144.4	97.3	47.1	31.3	15.8	3	101	P	80	20	NA	NA	U	Y	Y	Y	GNB	GNB	TILL
46-01	7.4	1.6	5.8	135.3	93.9	41.4	27.8	13.6	1	36	P	80	20	NA	C	U	Y	Y	Y	GNB	GNB	TILL
-02	8.7	2.2	6.5	139.2	92.8	46.4	30.1	16.3	0	NA	PC	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	7.5	1.3	6.2	164.6	124.4	40.2	28.3	11.9	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-04	8.9	2.0	6.9	174.1	128.8	45.3	31.7	13.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-05	7.9	1.6	6.3	161.8	120.7	41.1	27.7	13.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-06	3.8	0.6	3.2	85.4	70.3	15.1	10.9	4.2	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
47-01	8.8	1.4	7.4	146.1	105.5	40.6	26.1	14.5	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-02	9.0	1.0	8.0	207.6	166.8	40.8	29.2	11.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-03	8.8	1.2	7.6	212.9	164.1	48.8	32.3	16.5	8	372	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	8.8	0.8	8.0	274.8	234.4	40.4	28.9	11.5	3	67	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	8.2	0.2	8.0	161.8	122.2	39.6	28.3	11.3	3	52	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	9.0	1.0	8.0	333.8	279.0	54.8	37.4	17.4	7	323	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-07	9.1	1.0	8.1	285.3	234.7	50.6	33.6	17.0	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-08	8.6	1.4	7.2	203.0	157.4	45.6	33.3	12.3	1	6	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
47-09	8.7	1.5	7.2	221.4	173.2	48.2	31.8	16.4	7	83	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL

550CT.WR1
TAL # OF SAMPLES IN THIS REPORT = 40

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

AMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	% V/S	GR	LS	OT	S/U	SD	ST	CY	COLOR SD	CY	
LS-87																						
47-10	9.4	1.6	7.8	210.9	156.8	54.1	39.3	14.8	0	NA	C	90	10	NA	NA	U	Y	Y	Y	GG	GG	TILL
-11	9.2	1.3	7.9	231.8	185.0	46.8	34.3	12.5	1	112	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-12	9.7	2.8	6.9	98.4	58.0	40.4	28.7	11.7	0	NA	C	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-13	9.2	1.7	7.5	133.0	98.5	34.5	23.8	10.7	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-14	5.8	0.9	4.9	108.1	84.6	23.5	15.5	8.0	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-15	15.8	1.1	14.7	185.9	140.6	45.3	26.9	18.4	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-16	8.7	1.0	7.7	187.9	137.6	50.3	34.8	15.5	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-17	9.0	1.2	7.8	168.8	118.1	50.7	32.1	18.6	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-18	6.8	0.8	6.0	107.5	77.6	29.9	19.9	10.0	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-19	7.8	0.8	7.0	110.6	76.6	34.0	24.4	9.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
48-01	9.0	1.1	7.9	244.1	169.6	74.5	41.1	33.4	1	331	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
49-01	8.6	1.4	7.2	195.5	139.9	55.6	41.1	14.5	1	16	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.8	2.1	6.7	140.6	99.7	40.9	28.9	12.0	3	28	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
-03	9.1	1.1	8.0	259.3	207.5	51.8	36.8	15.0	2	85	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
-04	8.6	2.4	6.2	208.4	161.5	46.9	33.8	13.1	3	38	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05	8.9	2.2	6.7	289.8	230.6	59.2	38.0	21.2	1	101	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	8.8	1.2	7.6	185.0	139.6	45.4	32.7	12.7	1	6	P	75	25	NA	NA	U	Y	Y	Y	GY	GY	TILL
50-01	8.6	0.8	7.8	185.7	140.7	45.0	33.7	11.3	4	71	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	7.0	1.0	6.0	199.1	153.4	45.7	33.1	12.6	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	9.3	0.8	8.5	256.9	208.1	48.8	34.2	14.6	2	73	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	7.4	0.7	6.7	131.4	81.5	49.9	38.6	11.3	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
51-01	5.0	0.9	4.1	117.0	91.2	25.8	17.5	8.3	2	995	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
-02	6.6	0.7	5.9	117.5	83.5	34.0	23.3	10.7	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
52-01	8.2	0.7	7.5	226.8	194.1	32.7	24.4	8.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-02	7.5	0.6	6.9	175.2	152.3	22.9	15.7	7.2	0	NA	P	70	30	NA	NA	S	C	Y	Y	B	B	GRAVEL
-03	8.4	1.8	6.6	260.6	206.9	53.7	38.4	15.3	1	26	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
53-01	8.6	1.4	7.2	204.1	184.2	19.9	14.6	5.3	1	44	P	70	30	NA	NA	S	C	Y	Y	B	B	GRAVEL
-02	8.5	0.8	7.7	230.2	199.7	30.5	21.4	9.1	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-03	8.1	1.4	6.7	145.6	98.4	47.2	32.5	14.7	3	117	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
54-01	8.7	1.2	7.5	166.2	139.9	26.3	18.7	7.6	1	4	P	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-02	7.3	2.0	5.3	186.9	150.3	36.6	26.0	10.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-03	9.3	2.0	7.3	219.4	163.3	56.1	39.9	16.2	2	18	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	4.5	0.6	3.9	163.1	131.4	31.7	22.7	9.0	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GN	GN	TILL
55-01	8.7	2.2	6.5	139.0	102.0	37.0	24.4	12.6	1	26	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
56-01	9.0	2.3	6.7	229.5	174.6	54.9	38.2	16.7	4	51	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-02	5.3	1.2	4.1	117.0	83.1	33.9	21.7	12.2	4	60	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
57-01	8.4	1.0	7.4	118.4	86.5	31.9	21.1	10.8	1	30	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.9	2.2	6.7	188.9	154.0	34.9	24.9	10.0	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-03	8.5	1.8	6.7	162.8	124.4	38.4	28.1	10.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
57-04	9.2	2.6	6.6	164.9	124.2	40.7	29.7	11.0	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL

LB6OCT.WR1

OVERBURDEN DRILLING MANAGEMENT LIMITED

OTAL # OF SAMPLES IN THIS REPORT = 40

LABORATORY SAMPLE LOG

AMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
LS-87																						
57-05	8.8	2.4	6.4	156.7	119.8	36.9	26.2	10.7	0	NA	C	50	50	NA	NA	U	Y	Y	Y	B	B	TILL
-06	7.4	4.0	3.4	106.9	70.7	36.2	23.4	12.8	1	211	P	60	40	NA	NA	U	Y	Y	Y	GNB	GNB	TILL
-07	8.9	2.9	6.0	193.6	158.6	35.0	22.3	12.7	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
58-01	6.2	0.9	5.3	147.8	115.8	32.0	22.9	9.1	1	16	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-02	8.0	1.5	6.5	151.1	115.1	36.0	25.4	10.6	1	59	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.5	1.2	7.3	162.8	121.1	41.7	29.8	11.9	6	331	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-04	8.8	1.4	7.4	160.4	124.1	36.3	25.6	10.7	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-05	8.9	1.9	7.0	144.0	104.5	39.5	27.5	12.0	5	299	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-06	8.8	1.4	7.4	220.8	181.0	39.8	28.0	11.8	1	103	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-07	8.7	1.7	7.0	199.1	160.2	38.9	26.8	12.1	1	56	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-08	8.6	1.3	7.3	171.9	134.5	37.4	26.3	11.1	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-09	8.4	1.5	6.9	194.0	152.3	41.7	28.8	12.9	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-10	8.6	1.6	7.0	167.7	127.8	39.9	28.5	11.4	5	255	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-11	8.1	0.9	7.2	168.3	126.7	41.6	30.3	11.3	3	169	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-12	4.5	0.7	3.8	112.9	98.2	14.7	10.3	4.4	0	NA	P	65	35	NA	NA	U	Y	Y	Y	GN	GN	TILL
59-01	8.9	2.0	6.9	104.9	68.0	36.9	23.2	13.7	5	60	P	75	25	NA	NA	U	Y	Y	Y	GN	GN	TILL
60-01	9.5	3.7	5.8	103.0	81.3	21.7	11.6	10.1	1	87	P	60	40	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.8	3.2	5.6	417.4	396.3	21.1	13.5	7.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GY	GN	TILL
-03	8.5	3.4	5.1	113.3	94.3	19.0	8.6	10.4	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GG	GG	TILL
61-01	8.8	1.6	7.2	231.6	186.9	44.7	31.7	13.0	1	1019	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	8.5	1.5	7.0	77.5	52.3	25.2	16.6	8.6	0	NA	C	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
62-01	8.7	0.8	7.9	120.1	75.6	44.5	28.0	16.5	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GG	GG	TILL
-02	10.0	2.4	7.6	306.8	253.3	53.5	33.3	20.2	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	8.3	1.0	7.3	179.7	134.3	45.4	26.6	18.8	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04	8.8	2.5	6.3	314.9	260.8	54.1	31.5	22.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-05	9.6	3.1	6.5	170.0	116.6	53.4	35.0	18.4	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	9.0	2.4	6.6	171.3	135.8	35.5	22.8	12.7	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-07	8.2	1.6	6.6	139.9	108.4	31.5	20.6	10.9	0	NA	CP	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
63-01	3.5	0.8	2.7	113.3	98.9	14.4	10.1	4.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
64-01	9.0	2.5	6.5	360.2	324.0	36.2	25.8	10.4	1	25	P	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
65-01	8.5	0.1	8.4	261.3	210.4	50.9	36.4	14.5	0	NA	P	45	55	NA	NA	S	M	Y	Y	B	B	SAND
-02	9.8	0.5	9.3	219.7	141.3	78.4	52.4	26.0	0	NA	P	60	40	NA	NA	S	M	Y	Y	B	B	SAND
-03	9.0	1.0	8.0	193.4	155.9	37.5	25.7	11.8	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-04	9.5	3.0	6.5	177.9	144.9	33.0	22.7	10.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	B	TILL
-05	9.2	1.8	7.4	215.9	182.2	33.7	19.5	14.2	0	NA	P	70	30	NA	NA	S	C	Y	Y	B	B	GRAVEL
66-01	9.0	0.2	8.8	187.6	141.5	46.1	34.0	12.1	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-02	9.0	0.7	8.3	217.0	178.2	38.8	28.0	10.8	1	176	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-03	9.0	0.3	8.7	300.4	271.0	29.4	22.6	6.8	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-04	9.5	1.4	8.1	213.5	180.4	33.1	25.1	8.0	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
66-05	9.2	0.7	8.5	158.8	119.7	39.1	28.2	10.9	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL

AL31NOV.WR1

OVERBURDEN DRILLING MANAGEMENT LIMITED

TOTAL # OF SAMPLES IN THIS REPORT = 40

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
LS-87																						
66-06	8.9	1.3	7.6	169.0	146.1	22.9	17.2	5.7	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
66-07	9.7	2.4	7.3	114.5	79.8	34.7	23.2	11.5	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GY	GY	TILL
66-08	6.1	0.6	5.5	114.1	79.6	34.5	22.9	11.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GY	GY	TILL
66-09	8.8	0.8	8.0	159.4	117.6	41.8	29.0	12.8	2	26	P	75	25	NA	NA	U	Y	Y	Y	GY	GY	TILL
66-10	5.1	0.4	4.7	100.5	71.5	29.0	21.8	7.2	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
66-11	9.2	0.7	8.5	183.0	133.1	49.9	33.5	16.4	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GY	GY	TILL
66-12	6.0	0.9	5.1	126.6	95.3	31.3	21.2	10.1	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
66-13	7.5	1.5	6.0	102.0	70.6	31.4	21.7	9.7	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
66-14	8.3	0.3	8.0	138.4	96.3	42.1	27.7	14.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
66-15	6.6	0.9	5.7	111.4	78.2	33.2	21.6	11.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
67-01	7.7	0.0	7.7	157.5	113.1	44.4	30.4	14.0	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL
67-02	8.4	0.3	8.1	223.5	186.2	37.3	26.5	10.8	1	144	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
67-03	8.5	1.8	6.7	163.8	117.0	46.8	33.5	13.3	5	214	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
68-01	7.8	0.8	7.0	132.6	99.5	33.1	23.6	9.5	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
68-02	8.1	1.3	6.8	118.2	88.3	29.9	20.9	9.0	0	NA	C	95	5	NA	NA	U	Y	Y	Y	GG	GG	TILL
69-01	8.7	1.2	7.5	247.4	193.2	54.2	38.0	16.2	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
69-02	7.3	0.8	6.5	87.5	55.8	31.7	21.1	10.6	0	NA	C	95	5	NA	NA	U	Y	Y	Y	GG	GG	TILL
69-03	9.3	3.7	5.6	397.0	367.5	29.5	20.7	8.8	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
69-04	8.3	1.8	6.5	283.6	240.2	43.4	31.2	12.2	0	NA	P	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
70-01	8.9	1.8	7.1	150.0	118.0	32.0	22.0	10.0	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
70-02	7.4	2.0	5.4	250.0	227.6	22.4	12.2	10.2	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
70-03	7.5	1.0	5.5	207.1	187.1	20.0	10.2	9.8	0	NA	P	40	60	NA	NA	U	Y	Y	Y	GB	GB	TILL
70-04	7.8	1.2	6.6	163.0	144.0	19.0	9.5	9.5	0	NA	P	45	55	NA	NA	U	Y	Y	Y	GB	GB	TILL
70-05	8.0	1.6	6.4	191.7	163.2	28.5	19.7	8.8	0	NA	P	45	55	NA	NA	U	Y	Y	Y	GB	GB	TILL
70-06	8.8	3.2	5.6	100.9	81.2	19.7	12.9	6.8	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-01	8.9	1.1	7.8	134.1	94.0	40.1	26.0	14.1	0	NA	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
71-02	8.4	0.6	7.8	212.3	146.4	65.9	46.9	19.0	1	133	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
71-03	8.8	1.2	7.6	340.2	311.2	29.0	19.5	9.5	0	NA	P	65	35	NA	NA	U	Y	Y	Y	B	B	TILL
71-04	8.9	2.1	6.8	177.2	137.1	40.1	28.7	11.4	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
71-05	8.4	4.0	4.4	137.4	109.8	27.6	18.8	8.8	1	4	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-06	8.9	2.7	6.2	135.5	93.5	42.0	29.2	12.8	2	107	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
71-07	9.3	1.6	7.7	190.8	150.0	40.8	28.2	12.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-08	9.4	3.2	6.2	170.0	125.2	44.8	30.4	14.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-09	9.7	2.6	7.1	169.4	131.6	37.8	26.0	11.8	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-10	9.8	2.3	7.5	206.7	165.8	40.9	27.9	13.0	3	100	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-11	9.4	1.6	7.8	197.9	158.4	39.5	27.3	12.2	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-12	9.5	0.9	8.6	229.3	191.5	37.8	24.8	13.0	1	154	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
71-13	9.9	2.5	7.4	175.8	138.1	37.7	26.1	11.6	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GG	GG	TILL
72-01	8.4	1.4	7.0	193.2	153.3	39.9	28.9	11.0	1	52	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
72-02	9.0	1.2	7.8	235.2	173.1	62.1	42.5	19.6	1	9	P	65	35	NA	NA	U	Y	Y	Y	GB	GG	TILL

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ALEDNOW.WP1                              OVERBURDEN DRILLING MANAGEMENT LIMITED
TOTAL # OF SAMPLES IN THIS REPORT =      40
                                                 LABORATORY SAMPLE LOG

SAMPLE  WEIGHT (KG.WET)      WEIGHT (GRAMS  DRY)                  AU                    DESCRIPTION                          CLASS
 NO.    =================  ============================== ========== ========================================== =========
                                     M. I. CONC                          CLAST                MATRIX
                                   ===============              ================== ===================
         TABLE +10  TABLE  TABLE   M.I.  CONC.  NON          NO.  CALC  SIZE     %          S/U SD   ST CY COLOR
         SPLIT CHIPS FEED  CONC   LIGHTS TOTAL  MAG    MAG  V.G.  PPB        ==============               =====
                                                                             V/S GR  LS  OT                  SD  CY
        _________________  _____________  _________________ __________ __________________ ____________________ _____

 LE-87
 73-01   7.8   0.0   7.8   135.1   92.9  42.2  28.7  13.5   1      1  TR  NA  NA  NA  NA  S  M    Y  Y  B   B   SAND
 73-02   8.5   1.0   7.5   136.2  110.8  27.4  18.6   8.8   0     NA   F  65  35  NA  NA  U  Y    Y  Y  B   B   TILL
 73-03   7.9   0.0   7.9   156.2  119.1  37.1  25.6  11.5   0     NA  TR  NA  NA  NA  NA  S  FC   Y  Y  B   B   SAND
 73-04   8.2   1.8   6.4   198.1  173.5  24.6  17.2   7.4   0     NA   F  65  35  NA  NA  U  Y    Y  Y  B   B   TILL
 74-01   9.0   2.7   6.3   109.0   84.1  24.9  16.4   8.5   0     NA   F  60  40  NA  NA  U  Y    Y  Y  B   B   TILL
 74-02   9.4   3.8   5.6   287.5  249.7  37.8  24.8  13.0   0     NA   F  60  40  NA  NA  U  Y    Y  Y  B   B   TILL
 74-03   9.1   3.4   5.7   142.0  110.4  31.6  20.7  10.9   0     NA   F  70  30  NA  NA  U  Y    Y  Y  B   B   TILL
 75-01   7.2   1.8   5.4   141.5  109.9  31.9  20.6  11.3   1    140   F  60  40  NA  NA  U  Y    Y  Y  B   B   TILL
 76-01   8.6   1.6   7.0   216.7  180.3  36.4  23.6  12.8   1    209   F  70  30  NA  NA  U  Y    Y  Y  B   B   TILL
 76-02   7.4   1.6   5.8   149.5  110.1  39.4  26.6  12.8   0     NA   F  60  40  NA  NA  U  Y    Y  Y  B   B   TILL
 77-01   6.0   1.3   4.7    98.8   78.5  20.3  13.5   6.8   0     NA   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 78-01   9.3   2.4   6.9    74.6   40.1  34.5  21.6  12.9   1    528   F  75  25  NA  NA  U  Y    Y  Y  GB  GB  TILL
 78-02   8.6   2.4   6.2   177.1  139.3  37.8  26.0  11.8   1     39   F  70  30  NA  NA  U  Y    Y  Y  B   B   TILL
 78-03   9.4   1.2   8.2   216.1  170.2  45.9  31.0  14.9   0     NA   F  75  25  NA  NA  U  Y    Y  Y  GB  GG  TILL
 78-04   8.7   1.6   7.1   221.8  177.0  44.8  29.9  14.9   0     NA   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 79-01   8.7   1.0   7.7   134.1  107.2  26.9  17.4   9.5   1     86   F  60  40  NA  NA  U  Y    Y  Y  GG  GG  TILL
 80-01   9.0   3.0   6.0   178.6  126.7  51.9  34.2  17.7   1     30   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 80-02   9.2   3.2   6.0   208.7  160.6  48.1  32.4  15.7   0     NA   F  65  35  NA  NA  U  Y    Y  Y  GB  GB  TILL
 80-03   9.3   3.0   6.3   173.7  134.4  39.3  27.1  12.2   1   1050   F  70  30  NA  NA  U  Y    Y  Y  GY  GY  TILL
 80-04   9.3   3.5   5.8   214.8  172.3  42.5  30.5  12.0   0     NA   F  60  40  NA  NA  U  Y    Y  Y  GG  GB  TILL
 80-05   9.6   3.0   6.6   213.5  174.1  39.4  28.3  11.1   0     NA   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 80-06   8.7   2.2   6.5   194.8  158.0  36.8  26.5  10.3   1    144   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 80-07   8.4   0.5   7.9   244.9  196.9  48.0  34.4  13.6   0     NA   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 80-08   9.1   2.1   7.0   161.7   91.2  70.5  41.2  29.3   8    207   F  70  30  NA  NA  U  Y    Y  Y  GY  GY  TILL
 80-09   9.6   1.9   7.7   235.4  170.7  64.7  34.7  30.0   1     63   F  60  40  NA  NA  U  Y    Y  Y  GG  GG  TILL
 81-01   8.8   1.2   7.6   181.9  136.6  45.3  31.0  14.3   0     NA   F  65  35  NA  NA  U  Y    Y  Y  GB  GB  TILL
 81-02   8.4   1.3   7.1   198.1  160.1  38.0  27.6  10.4   1     37   F  65  35  NA  NA  U  Y    Y  Y  GG  GG  TILL
 81-03   9.0   1.7   7.3   217.3  176.1  41.2  29.6  11.6   0     NA   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 81-04   9.0   1.6   7.4   260.6  216.7  43.9  31.7  12.2   1     32   F  70  30  NA  NA  U  Y    Y  Y  GB  GB  TILL
 81-05   9.0   1.7   7.3   296.4  256.9  39.5  23.7  15.8   0     NA   F  70  30  NA  NA  U  Y    Y  Y  GG  GG  TILL
 81-06   9.4   3.1   6.3   227.0  182.1  44.9  29.1  15.8   0     NA   F  75  25  NA  NA  U  Y    Y  Y  GG  GB  TILL
 81-07   9.2   2.1   7.1   165.8  132.1  33.7  23.7  10.0   0     NA   F  75  25  NA  NA  U  Y    Y  Y  GB  GB  TILL
 81-08   9.3   2.4   6.9   296.5  250.8  45.7  31.4  14.3   0     NA   F  75  25  NA  NA  U  Y    Y  Y  GB  GG  TILL
 81-09   9.4   1.4   8.0   153.3  107.2  46.1  30.2  15.9   0     NA   F  75  25  NA  NA  U  Y    Y  Y  GB  GB  TILL
 81-10   9.0   0.8   8.2   180.4  128.0  52.4  35.4  17.0   1     42   F  75  25  NA  NA  U  Y    Y  Y  GB  GB  TILL
 81-11   9.2   2.0   7.2   204.2  159.7  44.5  28.8  15.7   8     94  FC  80  20  NA  NA  U  Y    Y  Y  GB  GB  TILL
 81-12   8.9   1.0   7.9   189.5  140.0  49.5  31.8  17.7   1    196  FC  80  20  NA  NA  U  Y    Y  Y  GG  GB  TILL
 81-13   9.0   1.2   7.8   295.3  257.7  37.6  23.6  14.0   0     NA   C  80  20  NA  NA  U  Y    Y  Y  GB  GB  TILL
 81-14   9.3   2.7   6.6   152.6  112.0  40.6  27.8  12.8   0     NA  FC  80  20  NA  NA  U  Y    Y  Y  GG  GG  TILL
 81-15   9.3   1.2   8.1   161.2  124.7  36.5  25.2  11.3   0     NA  FC  80  20  NA  NA  U  Y    Y  Y  GG  GG  TILL
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N1s3no.,wk1

TOTAL # OF SAMPLES IN THIS REPORT = 40

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						N. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	N.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
L3-87																						
82-01	9.1	2.0	7.1	155.9	123.9	32.0	21.2	10.8	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
83-01	9.1	1.7	7.4	243.2	202.3	40.9	28.7	12.2	2	8	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
85-01	8.6	2.2	6.4	172.4	122.7	49.7	30.8	18.9	4	155	P	80	20	NA	NA	U	Y	Y	Y	GG	GG	TILL
85-02	4.7	1.0	3.7	112.8	87.6	25.2	15.8	9.4	0	NA	P	55	45	NA	NA	U	Y	Y	Y	GG	GG	TILL
86-01	9.2	2.4	6.8	255.5	199.7	55.8	39.6	16.2	8	256	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-02	9.3	3.0	6.3	155.0	107.8	47.2	36.3	10.9	1	41	P	55	45	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-03	9.3	2.4	6.9	166.1	130.7	35.4	23.8	11.6	1	161	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-04	9.2	1.9	7.3	155.8	96.0	59.8	48.3	11.5	1	31	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-05	9.4	2.0	7.4	204.6	163.0	41.6	27.8	13.8	3	126	P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-06	9.5	2.0	7.5	201.0	160.6	40.4	27.8	12.6	3	74	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-07	9.3	1.7	7.6	176.4	135.4	41.0	28.5	12.5	1	13	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-08	9.4	1.4	8.0	255.4	207.1	48.3	33.5	14.8	0	NA	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-09	9.1	1.4	7.7	163.6	122.7	40.9	28.5	12.4	3	176	P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
86-10	9.7	4.0	5.7	184.1	149.8	34.3	21.1	13.2	8	567	P	75	25	NA	NA	U	Y	Y	Y	GG	GG	TILL
86-11	9.4	5.2	4.2	97.8	82.3	15.5	11.6	3.9	6	130	P	90	10	NA	NA	U	Y	Y	Y	GY	GB	TILL&BDR
87-01	9.1	2.7	6.4	220.8	190.3	30.5	25.9	4.6	2	97	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
89-01	9.4	3.7	5.7	197.9	153.6	44.3	27.8	16.5	4	1428	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
89-02	9.4	0.9	8.5	202.8	155.2	47.6	33.0	14.6	5	121	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
91-01	8.8	1.4	7.4	185.0	144.6	40.4	27.7	12.7	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
91-02	8.6	1.4	7.2	228.3	182.5	45.8	29.8	16.0	1	97	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
91-03	9.0	2.2	6.8	209.8	165.8	44.0	30.9	13.1	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
91-04	8.6	1.9	6.7	172.2	131.8	40.4	25.3	15.1	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
93-01	9.3	1.8	7.5	284.7	241.0	43.7	28.8	14.9	4	261	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
93-02	9.0	1.5	7.5	311.8	264.1	47.7	30.8	16.9	1	33	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
93-03	9.3	2.5	6.8	173.7	127.6	46.1	30.6	15.5	8	203	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
93-04	7.6	1.6	6.0	178.3	129.0	49.3	33.1	16.2	9	57	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
94-01	8.6	0.8	7.8	167.7	131.2	36.5	25.6	10.9	1	3	P	65	35	NA	NA	U	Y	Y	Y	B	B	TILL
94-02	8.5	1.4	7.1	159.7	121.4	38.3	24.1	14.2	9	872	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
95-01	8.9	1.6	7.3	285.7	237.9	47.8	32.7	15.1	0	NA	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
95-02	8.9	1.6	7.3	185.0	142.5	42.5	29.0	13.5	1	326	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
96-01	8.8	2.2	6.6	163.2	124.8	38.4	25.8	12.6	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
97-01	8.7	1.3	7.4	173.7	129.5	44.2	30.1	14.1	0	NA	P	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
98-01	8.9	2.0	6.9	160.1	133.0	27.1	16.2	10.9	0	NA	P	75	25	NA	NA	U	Y	Y	Y	BN	B	TILL
98-02	9.3	2.3	7.0	133.9	116.3	17.6	10.3	7.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	GBN	BN	TILL
98-03	9.3	2.2	7.1	181.3	162.5	18.8	11.4	7.4	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
98-04	9.6	3.0	6.6	148.2	116.8	31.4	21.7	9.7	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
99-01	9.2	3.0	6.2	200.5	171.4	29.1	20.4	8.7	1	379	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
99-02	9.0	3.0	6.0	200.6	172.8	27.8	18.4	9.4	1	35	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
99-03	9.7	3.1	6.6	209.7	169.2	40.5	26.2	14.3	14	923	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
99-04	9.4	2.0	7.4	193.4	145.2	48.2	32.0	16.2	4	8	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL

APPENDIX E

GOLD GRAIN COUNTS AND CALCULATED VISIBLE GOLD ASSAYS

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS1SEP.WR1

TOTAL # OF PANNINGS 16

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
01-01	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
02-01	N	NO VISIBLE GOLD											
-02	Y	25 X 50	8 C		1					1			EST. 2% PYRITE
		50 X 50	10 C		1					1			
		100 X 100	20 C	1						1			
		100 X 125	22 C		1					1			
		125 X 150	27 C	1						1			
		150 X 150	29 C	1						1			
										6	39.3	322	
-03	N	50 X 75	13 C	1						1			
										1	34.3	11	
-04	Y	25 X 25	5 C		2		1			3			EST. 1% PYRITE
		25 X 50	8 C		4					4			
		50 X 75	13 C		1					1			
		75 X 100	18 C	1						1			
		75 X 125	20 C		1					1			
		100 X 125	22 C	1						1			
										11	24.7	219	
03-01	Y	25 X 25	5 C		2					2			EST. 0.5% PYRITE
		25 X 50	8 C		1					1			
		50 X 100	15 C		1					1			
		75 X 75	15 C		1					1			
		75 X 100	18 C	1						1			
		75 X 125	20 C	1						1			
										7	45.7	86	
-02	Y	50 X 50	10 C		2					2			EST. 0.5% PYRITE
		75 X 75	15 C	1						1			
		75 X 100	18 C	1						1			
		100 X 100	20 C	1						1			
		100 X 125	22 C	1						1			

GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS1SEP.WR1
TOTAL # OF PANNINGS 16

NUMBER OF GRAINS

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	ABRADED		IRREGULAR		DELICATE		TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
				T	P	T	P	T	P				
LS-87													
										6	54.4	104	
-03	Y	25 X 25	5 C		1					1			EST. 3% PYRITE
		25 X 50	8 C						1	1			
		50 X 50	10 C		1					1			
		50 X 75	13 C	1	1					2			
		75 X 100	18 C	1						1			
		75 X 250	31 C	1						1			
		100 X 125	22 C		1					1			
										8	50.2	207	
-04	N	50 X 75	13 C	1						1			
										1	42.7	9	
-05	Y	25 X 50	8 C		1					1			EST. 2% PYRITE
		25 X 75	10 C		1					1			
		50 X 50	10 C		2					2			
		50 X 75	13 C		2					2			
		75 X 75	15 C	1						1			
		100 X 150	25 C		1					1			
		150 X 150	29 C	1						1			
		275 X 325	54 C	1						1			
										10	53.7	863	
04-01	Y	25 X 25	5 C		2					2			EST. 0.5% PYRITE
		25 X 50	8 C		1					1			
		50 X 50	10 C	1	2					3			
		75 X 75	15 C		1					1			
		75 X 125	20 C		1					1			
		75 X 150	22 C	1						1			
										9	38.8	128	
-02	Y	25 X 25	5 C		1					1			EST. 3% PYRITE
		100 X 225	31 C					1		1			
										2	38.1	164	
-03	N	NO VISIBLE GOLD											
-04	N	50 X 75	13 C	1						1			
										1	29.0	13	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS1SEP.WR1

TOTAL # OF PANNINGS 16

NUMBER OF GRAINS

SAMPLE #	PANNED			ABRADED		IRREGULAR		DELICATE		TOTAL	NON MAG	CALC V.G. ASSAY	
	Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
LS-87													
-05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
06-01	N	50 X 50	10 C	1						1			
										1	41.3	5	
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
-05	N	NO VISIBLE GOLD											
-06	Y	50 X 50	10 C		1					1			EST. 1% PYRITE
		50 X 100	15 C		1					1			
		200 X 250	42 C	1						1			
		275 X 350	56 C	1						1			
										4	38.5	1500	
-07	Y	25 X 25	5 C		1					1			EST. 1% PYRITE
		25 X 50	8 C		3					3			
		50 X 75	13 C		1					1			
		75 X 75	15 C		1					1			
		75 X 150	22 C	1						1			
		100 X 200	29 C	1						1			
										8	33.0	253	
-08	Y	25 X 50	8 C		1					1			EST. 1% PYRITE
		50 X 50	10 C	1						1			
		50 X 100	15 C		1					1			
		75 X 100	18 C	1						1			
		100 X 125	22 C		1					1			
		100 X 150	25 C		1					1			
										6	48.1	144	
-09	N	NO VISIBLE GOLD											
-010	N	NO VISIBLE GOLD											
-011	N	75 X 100	18 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS1SEP.WR1
TOTAL # OF PANNINGS 16

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	P	IRREGULAR T	P	DELICATE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
										1	34.7	29	
-012	Y	25 X 25	5 C						1	1			EST. 1% PYRITE
		25 X 75	10 C	1						1			
		50 X 75	13 C		3					3			
		100 X 175	27 C		1					1			
		125 X 150	27 C					1		1			
		150 X 175	31 C	1						1			
										8	39.6	384	
08-01	N	125 X 175	29 C	1						1			
										1	29.6	167	
09-01	Y	50 X 50	10 C	1						1			NO SULPHIDES
		100 X 125	22 C	2						2			
										3	33.4	133	
-02	Y	25 X 25	5 C		1					1			NO SULPHIDES
		50 X 50	10 C	1						1			NATIVE COPPER GRAIN (50 X 75)
		50 X 75	13 C		1					1			
		75 X 75	15 C	1						1			
		100 X 150	25 C	1						1			
										5	29.3	141	
-03	Y	25 X 25	5 C		1					1			NO SULPHIDES
		50 X 75	13 C	1	3					4			
		100 X 150	25 C	1						1			
		150 X 200	34 C	1						1			
										7	40.8	298	
-04	N	50 X 125	18 C	1						1			
										1	33.5	30	
-05	Y	25 X 50	8 C		1					1			EST. 0.25% PYRITE
		50 X 75	13 C	1						1			
		75 X 125	20 C	1						1			
										3	40.1	49	
-06	N	200 X 350	50 C	1						1			

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GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS1SEP.WR1                                    NUMBER OF GRAINS
TOTAL # OF PANNINGS       16           ------------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON   CALC V.G.
SAMPLE #  PANNED                       ========  =========  ======== ===== MAG     ASSAY
           Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P       GMS     PPB    REMARKS

   LS-87
                                                                        1   33.7      845

     -07   N   NO VISIBLE GOLD

   09-08   N   NO VISIBLE GOLD
```

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS2SEP.WR1

TOTAL # OF PANNINGS 15

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	P	IRREGULAR T	P	DELICATE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
09-09	Y	75 X 125	20 C	1						1			EST. 1% PYRITE
		150 X 250	38 C	1						1			
										2	37.4	345	
-010	N	50 X 75	13 C	1						1			
										1	15.4	24	
10-01	N	NO VISIBLE GOLD											
-02	Y	25 X 25	5 C				1			1			EST. 20 GRAINS PYRITE
		25 X 50	8 C		1		1			2			
		50 X 50	10 C		1					1			
		50 X 100	15 C		1					1			
		75 X 75	15 C	1						1			
		75 X 125	20 C		1					1			
		100 X 200	29 C	1						1			
										8	47.7	170	
-03	N	NO VISIBLE GOLD											
-04	N	75 X 150	22 C	1						1			
										1	33.6	63	
-05	N	NO VISIBLE GOLD											
-06	N	125 X 175	29 C	1						1			
										1	34.0	145	
-07	N	50 X 100	15 C	1						1			
										1	40.4	16	
-08	N	NO VISIBLE GOLD											
-09	Y	50 X 125	18 C	1						1			EST. 3% PYRITE
		75 X 75	15 C	1	1					2			
										3	37.3	61	
-10	N	100 X 100	20 C	1						1			
										1	31.5	48	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS25EP.WR1
TOTAL # OF PANNINGS 15

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS									
				ABRADED		IRREGULAR		DELICATE		TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
				T	P	T	P	T	P				
LS-87													
-11	N	NO VISIBLE GOLD											
-12	N	NO VISIBLE GOLD											
11-01	N	50 X 50	10 C	1						1			
										1	32.8	6	
-02	N	75 X 100	18 C	1						1			
										1	31.9	32	
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
-05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
-07	Y	50 X 50	10 C		1					1			EST. 2% PYRITE
		75 X 100	18 C	1						1			
		100 X 125	22 C	1						1			
										3	34.7	96	
-08	Y	25 X 50	8 C	1						1			EST. 2% PYRITE
		50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
		100 X 100	20 C	1						1			
										4	33.0	65	
-09	Y	25 X 50	8 C		1					1			EST. 1% PYRITE
		50 X 75	13 C	1						1			
		75 X 100	18 C	1						1			
		100 X 100	20 C	1						1			
										4	32.6	91	
-010	Y	50 X 75	13 C	1						1			EST. 2% PYRITE
		50 X 100	15 C	1						1			
		100 X 150	25 C	1						1			
										3	30.7	127	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS25EP.WR1

TOTAL # OF PANNINGS 15

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	P	IRREGULAR T	P	DELICATE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
12-01	N	50 X 50	10 C	1						1			
										1	31.8	6	
13-01	N	50 X 75	13 C	1						1			
										1	38.3	10	
-02	Y	25 X 50	8 C		1					1			EST. 2% PYRITE
		50 X 75	13 C	1						1			
		75 X 75	15 C		1					1			
		100 X 125	22 C	1						1			
										4	48.2	67	
-03	N	25 X 50	8 C	1						1			
										1	33.1	2	
-04	N	75 X 100	18 C	1						1			
										1	33.5	30	
-05	N	NO VISIBLE GOLD											
-06	Y	25 X 50	8 C						1	1			EST. 1% PYRITE
		50 X 75	13 C		1					1			
		50 X 100	15 C	1						1			
		100 X 175	27 C	1						1			
										4	31.7	155	
-07	N	100 X 100	20 C	1						1			
										1	25.0	60	
14-01	Y	25 X 50	8 C	1						1			EST. 1% PYRITE
		75 X 75	15 C	1						1			
		100 X 150	25 C		1					1			
										3	37.6	96	
-02	Y	25 X 25	5 C		1					1			EST. 1% PYRITE
		25 X 50	8 C		1					1			
		50 X 75	13 C	1						1			
		50 X 100	15 C		1					1			
		75 X 75	15 C	1	1					2			

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GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS2SEP.WR1                                    NUMBER OF GRAINS
TOTAL # OF PANNINGS       15           -----------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON      CALC V.G.
SAMPLE #  PANNED                       ========  =========  ======== ===== MAG        ASSAY
           Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P        GMS        PPB    REMARKS

   LS-87
                   75 X  100     18 C     1    2                         3
                  125 X  150     27 C     1                              1
                                                                      --------------------
                                                                        10   35.5      261

    -03     Y      50 X   50     10 C          1                         1                   EST. 30 GRAINS PYRITE
                   50 X   75     13 C     2    2                         4
                                                                      --------------------
                                                                         5   23.6       71

    -04     Y      25 X   25      5 C          2                         2                   EST. 1% PYRITE
                   50 X   75     13 C     1                              1
                   75 X   75     15 C     1                              1
                                                                      --------------------
                                                                         4   39.1       27

    -05     N   NO VISIBLE GOLD

    -06     N   NO VISIBLE GOLD

   15-01    Y      50 X   50     10 C     1    1                         2                   EST. 2% PYRITE
                   75 X   75     15 C     1                              1
                                                                      --------------------
                                                                         3   39.5       26

   15-02    Y      25 X   50      8 C     1                              1                   EST. 2% PYRITE
                   50 X   75     13 C     1                              1
                                                                      --------------------
                                                                         2   29.8       15
```

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS10CT.WR1

TOTAL # OF PANNINGS 21

SAMPLE #	PANNED			ABRADED		IRREGULAR		DELICATE		TOTAL	NON MAG	CALC V.G. ASSAY	
	Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
LS-87													
16-01	Y	25 X 50	8 C		1					1			EST. 2% PYRITE
		75 X 75	15 C	1						1			5000 GRAINS MARCASITE
		125 X 200	31 C	1						1			
										3	34.9	199	
-02	Y	75 X 100	18 C	2						2			EST. 1% PYRITE
										2	32.3	63	
17-01	Y	25 X 25	5 C		1					1			EST. 0.5% PYRITE
		25 X 50	8 C		1					1			
		50 X 50	10 C	1						1			
		50 X 100	15 C		1					1			
		100 X 125	22 C	1						1			
										5	27.8	110	
18-01	N	75 X 100	18 C	1						1			
										1	28.6	35	
-02	N	NO VISIBLE GOLD											
-03	N	125 X 150	27 C	1						1			
										1	14.8	259	
-04	Y	25 X 25	5 C						1	1			EST. 2% PYRITE
		25 X 50	8 C						1	1			
		50 X 75	13 C		1				2	3			
		75 X 100	18 C	1						1			
		175 X 225	38 C			1				1			
										7	31.9	427	
19-01	N	NO VISIBLE GOLD											
-02	N	75 X 100	18 C	1						1			
										1	26.6	38	
-03	N	NO VISIBLE GOLD											
-04	N	75 X 125	20 C	1						1			
										1	21.4	70	

OLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS1OCT.WR1
TOTAL # OF PANNINGS 21

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T		IRREGULAR T		DELICATE T		TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
				T	P	T	P	T	P				
LS-87													
-05	N	NO VISIBLE GOLD											
20-01	N	75 X 125	20 C	1						1			
										1	29.1	52	
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
-05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
21-01	Y	25 X 25	5 C		1					1			EST. 0.5% PYRITE
		25 X 50	8 C		1					1			
		75 X 100	18 C		1					1			
		125 X 125	25 C	1						1			
		150 X 200	34 C	1						1			
										5	24.0	489	
-02	Y	25 X 50	8 C	1	1					2			NO SULPHIDES
		50 X 75	10 C	1						1			
		75 X 100	18 C	1	1					2			
										5	45.7	56	
-03	Y	50 X 75	13 C	1						1			NO SULPHIDES
		50 X 100	15 C	1	1					2			
										3	25.8	64	
-04	Y	25 X 50	8 C						1	1			NO SULPHIDES
		25 X 150	18 C					1		1			
		75 X 75	15 C	1						1			
		75 X 100	18 C		1					1			
										4	15.1	182	
-05	Y	25 X 25	5 C		1					1			EST. 20 GRAINS PYRITE
		75 X 100	18 C	1						1			
		125 X 200	31 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS10CT.WR1

TOTAL # OF PANNINGS 21

NUMBER OF GRAINS

				ABRADED		IRREGULAR		DELICATE		TOTAL	NON MAG	CALC V.G. ASSAY	
SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
LS-87													
										3	27.6	263	
22-01	Y	25 X 50	8 C		1					1			EST. 20 GRAINS PYRITE
		50 X 50	10 C		1					1			
		75 X 100	18 C	1						1			
		200 X 275	44 C	1						1			
										4	34.1	586	
-02	N	100 X 100	20 C	1						1			
										1	30.3	50	
-03	N	NO VISIBLE GOLD											
-04	Y	25 X 25	5 C						1	1			EST. 30 GRAINS PYRITE
		50 X 75	13 C	1						1			
		700 X 850	103 C	1						1			
										3	28.3	16359	
-05	Y	25 X 25	5 C		1					1			EST. 0.25% PYRITE
		25 X 50	8 C		1					1			
		50 X 50	10 C						1	1			
		50 X 75	13 C	1						1			
		100 X 100	20 C	1						1			
										5	22.1	98	
-06	Y	25 X 25	5 C						2	2			EST. 1% PYRITE
		50 X 50	10 C		1					1			
		75 X 100	18 C	1						1			
		100 X 125	22 C	2						2			
		100 X 150	25 C		1					1			
		225 X 275	46 C	1						1			
										8	19.0	1583	
-07	Y	25 X 50	8 C	1	1					2			NO SULPHIDES
		25 X 75	10 C	1						1			PHOTO MICROGRAPH AVAILABLE
		50 X 50	10 C	1	1					2			FILM REFERENCE #09
		50 X 75	13 C		2					2			
		50 X 100	15 C		2					2			
		50 X 125	18 C		1					1			
		75 X 75	15 C		2					2			
		75 X 100	18 C		1					1			
		100 X 125	22 C		1					1			

OLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS10CT.WR1
TOTAL # OF PANNINGS 21

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	P	IRREGULAR T	P	DELICATE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
		100 X 150	25 C	1	1					2			
		125 X 150	27 C		1					1			
										17	9.9	1799	
23-01	N	50 X 50	10 C	1						1			
										1	39.7	5	
-02	Y	25 X 25	5 C		2					2			EST. 1% PYRITE
		25 X 50	8 C		1					1			
		50 X 50	10 C	1	1					2			
		50 X 100	15 C		1					1			
		75 X 100	18 C	1						1			
		125 X 125	25 C		1					1			
										8	33.8	150	
24-01	Y	25 X 50	8 C	1						1			EST. 0.25% PYRITE
		50 X 100	15 C		1					1			
		75 X 75	15 C	1						1			
										3	34.3	40	
-02	Y	25 X 50	8 C	1						1			EST. 20 GRAINS PYRITE
		50 X 10	6 C	1						1			
										2	18.1	7	
-03	N	75 X 100	18 C	1						1			
										1	23.8	42	
-04	Y	25 X 50	8 C		1					1			EST. 10 GRAINS PYRITE
		50 X 50	10 C	1						1			
		50 X 100	15 C	1						1			
										3	25.2	36	
-05	Y	25 X 25	5 C		1					1			EST. 0.5% PYRITE
		25 X 50	8 C		1				1	2			
		50 X 50	10 C		1					1			
		50 X 75	13 C	1						1			
		125 X 175	29 C	1						1			
		150 X 175	31 C	1						1			
										7	32.7	365	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS10CT.WR1

TOTAL # OF PANNINGS 21

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	P	IRREGULAR T	P	DELICATE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
-06	Y	25 X 50	8 C		1					1			EST. 20 GRAINS PYRITE
		75 X 100	18 C	1						1			
		75 X 125	20 C	1						1			
		100 X 125	22 C	1						1			
										4	31.6	149	
25-01	Y	25 X 25	5 C		1					1			EST. 20 GRAINS PYRITE
		75 X 100	18 C	2						2			
		100 X 100	20 C	1						1			
		100 X 125	22 C	1						1			
										5	32.0	177	
25-02	N	50 X 75	13 C	1						1			
										1	30.3	12	

LD CLASSIFICATION

ISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS2OCT.WR1
TOTAL # OF PANNINGS 11

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	P	IRREGULAR T	P	DELICATE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
26-01	N	100 X 125	22 C	1						1			
										1	31.9	67	
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
-05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
-07	N	75 X 125	20 C	1						1			
										1	22.1	68	
-08	Y	25 X 50	8 C		2					2			EST. 20% PYRITE
		50 X 50	10 C		1					1			
		50 X 75	13 C		1		1			2			
										5	40.1	27	
27-01	N	75 X 75	15 C	1						1			
										1	28.8	22	
-02	N	NO VISIBLE GOLD											
28-01	N	NO VISIBLE GOLD											
-02	Y	25 X 50	8 C		1					1			EST. 0.5% PYRITE
		25 X 75	10 C	1						1			
		50 X 50	10 C		1					1			
		50 X 75	13 C		1					1			
		100 X 100	20 C		1					1			
		100 X 125	22 C	1						1			
										6	27.8	160	
-03	Y	100 X 100	20 C	1						1			EST. 1% PYRITE
		125 X 150	27 C	1						1			
		150 X 150	29 C		1					1			
										3	31.9	322	

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OLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS20CT.WR1                                        NUMBER OF GRAINS
TOTAL # OF PANNINGS      11               -----------------------------------
                                          ABRADED  IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                          ======== =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS      T    P    T    P    T    P       GMS      PPB    REMARKS

   LS-87
     -04    Y      25 X  25       5 C           1                         1                   EST. 2% PYRITE
                   25 X  50       8 C           1                         1
                   50 X  50      10 C           1                         1
                  100 X 150      25 C      1                              1
                  125 X 200      31 C      1                              1
                                                                        ----------------------
                                                                          5    28.7       328

   29-01    Y      75 X 100      18 C      1                              1                   EST. 10% PYRITE
                  100 X 100      20 C      1                              1
                                                                        ----------------------
                                                                          2    34.6        73

     -02    Y      50 X  75      13 C      1                              1                   EST. 5% PYRITE
                   75 X 100      18 C      1                              1
                  100 X 100      20 C      1                              1
                                                                        ----------------------
                                                                          3    36.9        78

     -03    N   NO VISIBLE GOLD

     -04    N      50 X  50      10 C      1                              1
                                                                        ----------------------
                                                                          1    30.4         6

     -05    Y      25 X  25       5 C           1                         1                   EST. 1% PYRITE
                   25 X  50       8 C           1                         1
                   50 X  50      10 C      1                              1
                   75 X  75      15 C           1                         1
                  150 X 225      36 C      1                              1
                                                                        ----------------------
                                                                          5    26.4       394

     -06    N      75 X 100      18 C      1                              1
                                                                        ----------------------
                                                                          1    30.3        33

     -07    N   NO VISIBLE GOLD

   30-01    N      75 X 125      20 C      1                              1
                                                                        ----------------------
                                                                          1    29.3        51

     -02    N   NO VISIBLE GOLD

   31-01    Y      75 X 100      18 C      1                              1                   EST. 3% PYRITE
                  100 X 150      25 C      1                              1
```

```
LD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS2OCT.WR1                                    NUMBER OF GRAINS
TOTAL # OF PANNINGS      11              ------------------------------------
                                         ABRADED  IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                         ======== =========  ======== ===== MAG     ASSAY
          Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P        GMS      PPB    REMARKS

  LS-87
                                                                     ---------------------
                                                                       2   70.6      55

   -02    N   NO VISIBLE GOLD

   -03    Y      25 X  50        8 C          2                        2                   EST. 5% PYRITE
                 25 X  75       10 C          1                        1
                 50 X  75       13 C          1                        1
                 75 X 100       18 C     1                             1
                100 X 125       22 C          1                        1
                125 X 150       27 C     1                             1
                125 X 175       29 C          1                        1
                                                                     ---------------------
                                                                       8   34.9     362

  32-01   N      75 X 100       18 C     1                             1
                                                                     ---------------------
                                                                       1   24.3      42

   -02    N     125 X 175       29 C     1                             1
                                                                     ---------------------
                                                                       1   32.5     152

   -03    N   NO VISIBLE GOLD

   -04    Y      50 X  75       13 C     1                             1                   EST. 1% PYRITE
                100 X 100       20 C     1                             1
                                                                     ---------------------
                                                                       2   25.2      74

   -05    N      50 X  75       13 C     1                             1
                                                                     ---------------------
                                                                       1   39.3       9

   -06    N      50 X  75       13 C     1                             1
                                                                     ---------------------
                                                                       1   42.7       9

   -07    N   NO VISIBLE GOLD

   -08    N   NO VISIBLE GOLD

   -09    N      75 X 100       18 C     1                             1
                                                                     ---------------------
                                                                       1   28.7      35

   -10    N     100 X 100       20 C     1                             1
```

```
LD CLASSIFICATION
===================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS2OCT.WR1                                         NUMBER OF GRAINS
OTAL # OF PANNINGS       11              ------------------------------------
                                         ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                          ========  =========  ======== ===== MAG     ASSAY
          Y/N    DIAMETER   THICKNESS     T    P    T    P     T    P        GMS      PPB    REMARKS

  LS-87
                                                                        -------------------
                                                                            1   32.6      46

  33-01    N     100 X  175     27 C      1                                 1
                                                                        -------------------
                                                                            1   28.8     133

  34-01    N   NO VISIBLE GOLD

    -02    Y      50 X   75     13 C           1                            1                EST. 1% PYRITE
                  50 X  100     15 C      1                                 1
                  75 X  100     18 C      1    1                            2
                                                                        -------------------
                                                                            4   23.6     129

  35-01    N      75 X  150     22 C      1                                 1
                                                                        -------------------
                                                                            1   27.6      77
```

```
AGE 1                                                              FALCONBRIDGE                                                   10/19/87


LD CLASSIFICATION
==================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS3OCT.WR1                                     NUMBER OF GRAINS
OTAL # OF PANNINGS        13            -----------------------------------
                                        ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                         ========  =========  ======== ===== MAG      ASSAY
           Y/N    DIAMETER  THICKNESS     T    P    T    P    T    P        GMS      PPB    REMARKS

   LS-87
   36-01    Y     100 X  150     25 C     1                                1                 EST. 10 GRAINS PYRITE
                  125 X  150     27 C          1                           1
                  150 X  175     31 C     1                                1
                                                                       ____________________
                                                                           3   21.0       617

     -02    N   NO VISIBLE GOLD

     -03    N   NO VISIBLE GOLD

   37-01    N      50 X   50     10 C     1                                1
                                                                       ____________________
                                                                           1    9.1        21

     -02    N   NO VISIBLE GOLD

     -03    Y      25 X   50      8 C          2                   1       3                 EST. 1% PYRITE
                   50 X   50     10 C     1                                1
                  100 X  150     25 C     1                                1
                                                                       ____________________
                                                                           5   26.1       128

     -04    Y      25 X   50      8 C          1                           1                 EST. 1% PYRITE
                   50 X   50     10 C          1                           1
                   75 X  100     18 C     1                                1
                  100 X  175     27 C     1                                1
                  275 X  350     56 C     1                                1
                                                                       ____________________
                                                                           5   24.8      1856

     -05    N   NO VISIBLE GOLD

     -06    Y      75 X  100     18 C     1                                1                 EST. 2% PYRITE
                  100 X  150     25 C     1                                1
                                                                       ____________________
                                                                           2   24.4       160

     -07    N   NO VISIBLE GOLD

     -08    N      75 X   75     15 C     1                                1
                                                                       ____________________
                                                                           1   33.4        19

   38-01    N   NO VISIBLE GOLD

     -02    N   NO VISIBLE GOLD
```

```
D CLASSIFICATION
===================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS3OCT.WR1                                     NUMBER OF GRAINS
OTAL # OF PANNINGS       13          ------------------------------------
                                     ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                      ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS   T    P    T    P    T    P        GMS      PPB    REMARKS

  LS-87
   -03     N      75 X  125     20 C    1                                1

                                                                    1   32.7        46

   -04     N    NO VISIBLE GOLD

   -05     Y      50 X   75     13 C    1                                1                  EST. 1% PYRITE
                  75 X  100     18 C    1                                1

                                                                    2   31.8        44

   -06     N     100 X  100     20 C    1                                1

                                                                    1   32.0        47

   -07     Y      25 X   75     10 C         1                           1                  EST. 10% PYRITE

                                                                    1   39.3         5

   -08     N    NO VISIBLE GOLD

   -09     N    NO VISIBLE GOLD

   -10     N      50 X   50     10 C    1                                1

                                                                    1   39.5         5

   -11     N    NO VISIBLE GOLD

   -12     N    NO VISIBLE GOLD

   -13     N     100 X  125     22 C    1                                1

                                                                    1   41.3        51

   -14     N      50 X   75     13 C    1                                1

                                                                    1   39.1        10

   -15     Y      75 X   75     15 C              1                      1                  EST. 2% PYRITE
                 100 X  250     34 C    1                                1

                                                                    2   37.0       226

   -16     Y      75 X   75     15 C    1                                1                  EST. 1% PYRITE
                 175 X  275     42 C    1                                1
```

```
  LD CLASSIFICATION
===================
 ISIBLE GOLD FROM SHAKING TABLE AND PANNING

 ALS3OCT.WR1                                    NUMBER OF GRAINS
 OTAL # OF PANNINGS       13             -----------------------------------
                                         ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
 AMPLE #  PANNED                         ========  =========  ======== ===== MAG     ASSAY
          Y/N    DIAMETER   THICKNESS     T    P    T    P    T    P        GMS      PPB    REMARKS

   LS-87

                                                                         2   26.5     629

     -17    N     100 X  100      20 C    1                              1
                                                                     --------------------
                                                                         1   18.2      82

     -18    N      50 X   50      10 C    1                              1
                                                                     --------------------
                                                                         1   17.8      11

     -19    N   NO VISIBLE GOLD

     -20    Y      50 X  100      15 C    2                              2              EST. 2% PYRITE
                                                                     --------------------
                                                                         2   33.8      38

     -21    Y   NO VISIBLE GOLD                                                         EST. 7% PYRITE

     -22    N      50 X   50      10 C    1                              1
                                                                     --------------------
                                                                         1   19.0      10

     -23    N      50 X  100      15 C    1                              1
                                                                     --------------------
                                                                         1   27.0      24

     -24    Y   NO VISIBLE GOLD                                                         EST. 5% PYRITE

  39-01     N   NO VISIBLE GOLD

     -02    N   NO VISIBLE GOLD

     -03    N      50 X   50      10 C    1                              1
                                                                     --------------------
                                                                         1   24.4       8

     -04    Y      50 X   50      10 C    1                              1              EST. 1% PYRITE
                   50 X  100      15 C         1                         1
                   50 X  150      20 C         1                         1
                   75 X  125      20 C              1                    1
                   75 X  150      22 C         1                         1
                                                                     --------------------
                                                                         5   37.2     160

  39-05     Y   NO VISIBLE GOLD                                                         EST. 3% PYRITE
```

```
AGE 1                                                      FALCONBRIDGE                                                    10/23/87

LD CLASSIFICATION
==================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS4OCT.WR1                                    NUMBER OF GRAINS
OTAL # OF PANNINGS       10           -----------------------------------
                                      ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                       ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS     T    P    T    P    T    P      GMS      PPB    REMARKS

  LS-87
  39-06    N   NO VISIBLE GOLD

  40-01    Y      25 X  50        8 C                              1     1                EST. 1% PYRITE
                  50 X  75       13 C     2                              2
                 100 X  200      29 C     1                              1
                 125 X  125      25 C     1                              1
                                                                     --------------------
                                                                         5  25.1      345

  41-01    N     125 X  125      25 C     1                              1
                                                                     --------------------
                                                                         1   6.7      432

  42-01    N   NO VISIBLE GOLD

   -02     N      75 X  100      18 C     1                              1
                                                                     --------------------
                                                                         1  22.3       45

   -03     N   NO VISIBLE GOLD

   -04     N      25 X  75       10 C     1                              1
                                                                     --------------------
                                                                         1  25.2        8

   -05     N   NO VISIBLE GOLD

   -06     N      25 X  50        8 C     1                              1
                                                                     --------------------
                                                                         1  28.5        3

   -07     N   NO VISIBLE GOLD

   -08     Y      75 X  100      18 C     1                              1                EST. 1% PYRITE
                 100 X  100      20 C     1                              1
                                                                     --------------------
                                                                         2  25.2      100

   -09     N   NO VISIBLE GOLD

   -10     Y      25 X  50        8 C          1                         1                EST. 1% PYRITE
                  50 X  75       13 C          1                         1
                  50 X  125      18 C     1                              1
                 100 X  175      27 C     1                              1
                                                                     --------------------
                                                                         4  23.9      221
```

```
LD CLASSIFICATION
==================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS4OCT.WR1                                         NUMBER OF GRAINS
OTAL # OF PANNINGS        10           ------------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON     CALC V.G.
AMPLE #  PANNED                        ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P        GMS      PPB     REMARKS

  LS-87
   -11     Y      50 X   50     10 C          1                          1                  EST. 0.5% PYRITE
                  50 X  100     15 C          1                          1
                  75 X   75     15 C               1                     1
                  75 X  100     18 C          1                          1
                 175 X  275     42 C     1                               1
                                                                    ----------------------
                                                                         5   32.9       562

   -12     N      75 X  100     18 C     1                               1
                                                                    ----------------------
                                                                         1   28.8        35

   -13     N      75 X  100     18 C     1                               1
                                                                    ----------------------
                                                                         1   29.0        35

   -14     N    NO VISIBLE GOLD

   -15     N    NO VISIBLE GOLD

   -16     N    NO VISIBLE GOLD

  43-01    N    NO VISIBLE GOLD

  44-01    N    NO VISIBLE GOLD

   -02     N    NO VISIBLE GOLD

   -03     N    NO VISIBLE GOLD

  45-01    N    NO VISIBLE GOLD

   -02     Y      25 X   25      5 C                              1      1                  EST. 20 GRAINS PYRITE
                  75 X  100     18 C     1                               1
                 100 X  125     22 C     1                               1
                                                                    ----------------------
                                                                         3   31.3       101

  46-01    N      75 X  100     18 C     1                               1
                                                                    ----------------------
                                                                         1   27.8        36

   -02     N    NO VISIBLE GOLD

   -03     N    NO VISIBLE GOLD

   -04     N    NO VISIBLE GOLD
```

LD CLASSIFICATION
==================

ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS4OCT.WR1

OTAL # OF PANNINGS 10

AMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
LS-87													
-05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
47-01	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
-03	Y	25 X 50	8 C		1					1			EST. 2% PYRITE
		50 X 75	13 C		2					2			
		75 X 100	18 C	1	1					2			
		100 X 100	20 C	1						1			
		125 X 150	27 C	1	1					2			
										8	32.3	372	
-04	Y	50 X 100	15 C	1						1			EST. 0.25% PYRITE
		75 X 75	15 C	2						2			
										3	28.9	67	
-05	Y	50 X 50	10 C	1						1			EST. 0.25% PYRITE
		50 X 100	15 C	1			1			2			
										3	28.3	52	
-06	Y	25 X 50	8 C				1			1			EST. 1% PYRITE
		50 X 75	13 C		3					3			
		100 X 125	22 C		1					1			
		100 X 175	27 C	1						1			
		125 X 175	29 C	1						1			
										7	37.4	323	
-07	N	NO VISIBLE GOLD											
-08	N	50 X 50	10 C	1						1			
										1	33.3	6	
47-09	Y	25 X 25	5 C		1					1			EST. 0.5% PYRITE
		50 X 50	10 C	2	1					3			
		50 X 75	13 C		1					1			
		75 X 75	15 C	1						1			
		75 X 100	18 C	1						1			

```
LD CLASSIFICATION
==================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS4OCT.WR1                                   NUMBER OF GRAINS
OTAL # OF PANNINGS       10              -----------------------------------
                                          ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                           ========  =========  ======== ===== MAG      ASSAY
         Y/N    DIAMETER   THICKNESS     T    P     T    P     T    P         GMS      PPB    REMARKS

 LS-87
                                                                            7   31.8       83
```

```
LD CLASSIFICATION
==================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS50CT.WR1                                         NUMBER OF GRAINS
OTAL # OF PANNINGS       11                -----------------------------------
                                           ABRADED  IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                            ======== ========= ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS      T    P    T    P    T    P        GMS      PPB    REMARKS

  LS-87
  47-10    N   NO VISIBLE GOLD

    -11    N     125 X  150      27 C      1                             1
                                                                       ------------------
                                                                         1   34.3      112

    -12    N   NO VISIBLE GOLD

    -13    N   NO VISIBLE GOLD

    -14    N   NO VISIBLE GOLD

    -15    N   NO VISIBLE GOLD

    -16    N   NO VISIBLE GOLD

    -17    N   NO VISIBLE GOLD

    -18    N   NO VISIBLE GOLD

    -19    N   NO VISIBLE GOLD

  48-01    N     150 X  275      40 C      1                             1
                                                                       ------------------
                                                                         1   41.1      331

  49-01    N      75 X   75      15 C      1                             1
                                                                       ------------------
                                                                         1   41.1       16

    -02    Y      25 X   50       8 C      1    1                        2                  EST. 2% PYRITE
                  50 X  100      15 C      1                             1
                                                                       ------------------
                                                                         3   28.9       28

    -03    Y      75 X  100      18 C      1                             1                  EST. 1% PYRITE
                 100 X  125      22 C      1                             1
                                                                       ------------------
                                                                         2   36.8       85

    -04    Y      25 X   50       8 C      1                             1                  EST. 1% PYRITE
                  50 X   50      10 C           1                        1
                  75 X  100      18 C      1                             1
                                                                       ------------------
                                                                         3   33.8       38

    -05    N     100 X  175      27 C      1                             1
```

```
LD CLASSIFICATION
==================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS5OCT.WR1                                    NUMBER OF GRAINS
OTAL # OF PANNINGS       11           -----------------------------------
                                      ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                       ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P       GMS      PPB    REMARKS

  LB-67

                                                                     --------------------
                                                                        1   38.0       101

    -06    N      50 X   50      10 C     1                             1

                                                                     --------------------
                                                                        1   32.7         6

  50-01    Y      50 X   50      10 C     2                             2                 EST. 1% PYRITE
                  75 X  100      18 C     1    1                        2

                                                                     --------------------
                                                                        4   33.7        71

    -02    N   NO VISIBLE GOLD

    -03    Y      50 X   75      13 C     1                             1                 EST. 1% PYRITE
                 100 X  125      22 C     1                             1

                                                                     --------------------
                                                                        2   34.2        73

    -04    Y   NO VISIBLE GOLD                                                            EST. 40% PYRITE

  51-01    Y     125 X  150      27 C     1                             1                 EST. 3% PYRITE
                 125 X  300      40 C               1                   1

                                                                     --------------------
                                                                        2   17.5       995

    -02    N   NO VISIBLE GOLD

  52-01    N   NO VISIBLE GOLD

    -02    N   NO VISIBLE GOLD

    -03    N      75 X  100      18 C     1                             1

                                                                     --------------------
                                                                        1   38.4        26

  53-01    N      50 X  100      15 C     1                             1

                                                                     --------------------
                                                                        1   14.6        44

    -02    N   NO VISIBLE GOLD

    -03    Y      50 X   50      10 C          1                        1                 EST. 2% PYRITE
                 100 X  100      20 C     1                             1
                 100 X  125      22 C     1                             1

                                                                     --------------------
                                                                        3   32.5       117
```

```
LD CLASSIFICATION
==================
ISIBLE GOLD FROM SHAKING TABLE AND PANNING

ALS5OCT.WR1                                   NUMBER OF GRAINS
OTAL # OF PANNINGS       11           ----------------------------------
                                      ABRADED  IRREGULAR  DELICATE TOTAL NON    CALC V.G.
AMPLE #  PANNED                       ======== =========  ======== ===== MAG     ASSAY
          Y/N    DIAMETER   THICKNESS   T    P    T    P    T    P        GMS      PPB     REMARKS

  LS-87

  54-01    N      25 X  50       8 C   1                             1

                                                                    --------------------
                                                                       1  18.7        4

    -02    N   NO VISIBLE GOLD

    -03    Y      25 X  50       8 C   1                             1                 EST. 1% PYRITE
                  75 X  75      15 C                    1            1
                                                                    --------------------
                                                                       2  39.9       18

  54-04    N   NO VISIBLE GOLD

  55-01    N      50 X 100      15 C   1                             1
                                                                    --------------------
                                                                       1  24.4       26

  56-01    Y      25 X  75      10 C       1                         1                 EST. 1% PYRITE
                  50 X  75      13 C   2                             2
                  75 X 100      18 C   1                             1
                                                                    --------------------
                                                                       4  38.2       51

    -02    Y      50 X  50      10 C       1                         1                 EST. 1% PYRITE
                  50 X  75      13 C   2   1                         3
                                                                    --------------------
                                                                       4  21.7       60

  57-01    N      50 X 100      15 C   1                             1
                                                                    --------------------
                                                                       1  21.1       30

    -02    N   NO VISIBLE GOLD

    -03    N   NO VISIBLE GOLD

  57-04    N   NO VISIBLE GOLD
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FAL86OCT.WR1                                    NUMBER OF GRAINS
TOTAL # OF PANNINGS         6          ------------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON     CALC V.G.
SAMPLE #  PANNED                       ========  =========  ======== ===== MAG       ASSAY
           Y/N    DIAMETER   THICKNESS     T    P    T    P    T    P      GMS       PPB    REMARKS

   L6-87
   57-05    N   NO VISIBLE GOLD

     -06    N     150 X  150      29 C     1                              1
                                                                       --------------------
                                                                          1   23.4      211

     -07    N   NO VISIBLE GOLD

   58-01    N      50 X   75      13 C     1                              1
                                                                       --------------------
                                                                          1   22.9       16

     -02    N      75 X  125      20 C     1                              1
                                                                       --------------------
                                                                          1   25.4       59

     -03    Y      25 X   25       5 C          1                         1                 EST. 20 GRAINS ARSENOPYRITE
                   50 X  100      15 C          1                         1
                   75 X   75      15 C          1                         1
                  100 X  100      20 C                    1               1
                  100 X  125      22 C     1                              1
                  125 X  175      29 C               1                    1
                                                                       --------------------
                                                                          6   29.8      331

     -04    N   NO VISIBLE GOLD

     -05    Y      25 X   50       8 C          1                         1                 EST. 5 GRAINS ARSENOPYRITE
                   50 X   50      10 C          1                         1
                   50 X  150      20 C          1                         1
                   75 X  125      20 C     1                              1
                  150 X  150      29 C     1                              1
                                                                       --------------------
                                                                          5   27.5      299

     -06    N     100 X  150      25 C     1                              1
                                                                       --------------------
                                                                          1   28.0      103

     -07    N      75 X  125      20 C     1                              1
                                                                       --------------------
                                                                          1   26.8       56

     -08    N   NO VISIBLE GOLD

     -09    N   NO VISIBLE GOLD
```

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS6OCT.WR1

TOTAL # OF PANNINGS 6

				NUMBER OF GRAINS									
				ABRADED		IRREGULAR		DELICATE		TOTAL	NON MAG	CALC V.G. ASSAY	
SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
LS-87													
-10	Y	25 X 25	5 C						1	1			NO SULFHIDES
		75 X 75	15 C		2					2			
		100 X 125	22 C	1						1			
		125 X 150	27 C	1						1			
										5	28.5	255	
-11	Y	75 X 125	20 C	1	1					2			2 GRAINS PYRITE
		100 X 125	22 C	1						1			
										3	30.3	169	
-12	N	NO VISIBLE GOLD											
59-01	Y	25 X 50	8 C		1					1			EST. 0.5% PYRITE
		50 X 50	10 C		1					1			
		50 X 75	13 C	2	1					3			
										5	23.2	60	
60-01	N	75 X 100	18 C	1						1			
										1	11.6	87	
-02	Y	NO VISIBLE GOLD											EST. 10% PYRITE
-03	N	NO VISIBLE GOLD											
61-01	N	250 X 325	52 C	1						1			
										1	31.7	1019	
-02	N	NO VISIBLE GOLD											
62-01	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
-05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
-07	N	NO VISIBLE GOLD											

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FAL86OCT.WR1                                   NUMBER OF GRAINS
TOTAL # OF PANNINGS        6          ----------------------------------
                                      ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                      ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS   T    P    T    P    T    P       GMS      PPB    REMARKS

  L6-87

  63-01    N   NO VISIBLE GOLD

  64-01    N      50 X  100      15 C   1                            1
                                                                  ________________
                                                                     1   25.8      25

  65-01    N   NO VISIBLE GOLD

    -02    N   NO VISIBLE GOLD

    -03    N   NO VISIBLE GOLD

    -04    N   NO VISIBLE GOLD

    -05    N   NO VISIBLE GOLD

  66-01    N   NO VISIBLE GOLD

    -02    N     150 X  150      29 C   1                            1
                                                                  ________________
                                                                     1   28.0     176

    -03    N   NO VISIBLE GOLD

    -04    N   NO VISIBLE GOLD

  66-05    N   NO VISIBLE GOLD
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALSINOV.WR1                                    NUMBER OF GRAINS
TOTAL # OF PANNINGS        4           ------------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                       ========  =========  ======== ===== MAG      ASSAY
           Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P        GMS      PPB    REMARKS

   LS-87
   66-06   N   NO VISIBLE GOLD

   66-07   N   NO VISIBLE GOLD

   66-08   N   NO VISIBLE GOLD

   66-09   Y      50 X   75      13 C     2                              2                 EST. 1% PYRITE
                                                                      --------------------
                                                                         2   29.0       26

   66-10   N   NO VISIBLE GOLD

   66-11   N   NO VISIBLE GOLD

   66-12   N   NO VISIBLE GOLD

   66-13   N   NO VISIBLE GOLD

   66-14   N   NO VISIBLE GOLD

   66-15   N   NO VISIBLE GOLD

   67-01   N   NO VISIBLE GOLD

   67-02   N     125 X  150      27 C     1                              1
                                                                      --------------------
                                                                         1   26.5      144

   67-03   Y      50 X   50      10 C          1                         1                 EST. 2% PYRITE
                  50 X   75      13 C                             1      1                      100 GRAINS ARSENOPYRITE
                  75 X   75      15 C     1                              1
                 100 X  125      22 C     1                              1
                 100 X  175      27 C          1                         1
                                                                      --------------------
                                                                         5   33.5      214

   68-01   N   NO VISIBLE GOLD

   68-02   N   NO VISIBLE GOLD

   69-01   N   NO VISIBLE GOLD

   69-02   N   NO VISIBLE GOLD

   69-03   N   NO VISIBLE GOLD

   69-04   N   NO VISIBLE GOLD
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALS1NOV.WR1                                          NUMBER OF GRAINS
TOTAL # OF PANNINGS        4           -----------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                       ========  =========  ======== ===== MAG      ASSAY
            Y/N   DIAMETER   THICKNESS    T    P    T    P    T    P       GMS      PPB    REMARKS

   LS-87

   70-01    N   NO VISIBLE GOLD

   70-02    N   NO VISIBLE GOLD

   70-03    N   NO VISIBLE GOLD

   70-04    N   NO VISIBLE GOLD

   70-05    N   NO VISIBLE GOLD

   70-06    N   NO VISIBLE GOLD

   71-01    N   NO VISIBLE GOLD

   71-02    N     125 X  200      31 C    1                              1
                                                                      --------------------
                                                                         1   46.9      133

   71-03    N   NO VISIBLE GOLD

   71-04    N   NO VISIBLE GOLD

   71-05    N      25 X   50       8 C         1                         1                 EST. 5% PYRITE
                                                                                                100 GRAINS ARSENOPYRITE
                                                                      --------------------
                                                                         1   18.8        4      500 GRAINS MARCASITE

   71-06    Y      75 X  100      18 C    1                              1                 EST. 2% PYRITE
                  100 X  125      22 C    1                              1
                                                                      --------------------
                                                                         2   29.2      107

   71-07    N   NO VISIBLE GOLD

   71-08    N   NO VISIBLE GOLD

   71-09    N   NO VISIBLE GOLD

   71-10    Y      25 X   25       5 C         1                         1                 EST. 2% PYRITE
                   75 X   75      15 C    1                              1                      100 GRAINS ARSENOPYRITE
                  100 X  125      22 C    1                              1
                                                                      --------------------
                                                                         3   27.9      100

   71-11    N   NO VISIBLE GOLD

   71-12    N     125 X  150      27 C    1                              1
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FAL81NOV.WR1                                  NUMBER OF GRAINS
TOTAL # OF PANNINGS        4           ------------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                       ======== =========  ======== ===== MAG     ASSAY
          Y/N    DIAMETER   THICKNESS   T    P    T    P    T    P       GMS      PPB    REMARKS

  L8-87
                                                                    -------------------
                                                                       1  24.8       154

  71-13   N   NO VISIBLE GOLD

  72-01   N      75 X  125      20 C    1                              1
                                                                    -------------------
                                                                       1  28.9        52

  72-02   N      50 X   75      13 C    1                              1
                                                                    -------------------
                                                                       1  42.5         9
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALB2NOV.WP1                                      NUMBER OF GRAINS
TOTAL # OF PANNINGS        2               -------------------------------------
                                           ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                           ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS    T     P    T     P    T     P         GMS      PPB    REMARKS

  LB-87
  73-01    N       25 X   25        5 C   1                                1
                                                                          ------------------
                                                                           1   28.7         1

  73-02    N   NO VISIBLE GOLD

  73-03    N   NO VISIBLE GOLD

  73-04    N   NO VISIBLE GOLD

  74-01    N   NO VISIBLE GOLD

  74-02    N   NO VISIBLE GOLD

  74-03    N   NO VISIBLE GOLD

  75-01    N     100 X  150        25 C   1                                1
                                                                          ------------------
                                                                           1   20.6       140

  76-01    N     125 X  175        29 C   1                                1
                                                                          ------------------
                                                                           1   23.6       209

  76-02    N   NO VISIBLE GOLD

  77-01    N   NO VISIBLE GOLD

  78-01    N     150 X  250        35 C   1                                1
                                                                          ------------------
                                                                           1   21.6       528

  78-02    N      75 X  100        18 C   1                                1
                                                                          ------------------
                                                                           1   26.0        39

  78-03    N   NO VISIBLE GOLD

  78-04    N   NO VISIBLE GOLD

  79-01    N     100 X  100        20 C   1                                1
                                                                          ------------------
                                                                           1   17.4        86

  80-01    N      75 X  100        18 C   1                                1
                                                                          ------------------
                                                                           1   34.2        30
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALB2NOV.WR1                                      NUMBER OF GRAINS
TOTAL # OF PANNINGS        2              ------------------------------------
                                          ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                          ========  =========  ======== ===== MAG      ASSAY
            Y/N    DIAMETER    THICKNESS    T    P    T    P    T    P        GMS      PPB    REM

   LB-87

   80-02    N   NO VISIBLE GOLD

   80-03    N     250 X  300      50 C    1                              1
                                                                      ------------------
                                                                         1   27.1      1050

   80-04    N   NO VISIBLE GOLD

   80-05    N   NO VISIBLE GOLD

   80-06    N     100 X  175      27 C    1                              1
                                                                      ------------------
                                                                         1   26.5       144

   80-07    N   NO VISIBLE GOLD

   80-08    Y      25 X   25       5 C         1                         1                EST. 1% PYRITE
                   25 X   75      10 C         1                         1                     50 GRAINS MARCASITE
                   50 X   50      10 C         3                         3
                   75 X  100      15 C         1                         1
                  100 X  175      27 C    1                              1
                  125 X  125      25 C    1                              1
                                                                      ------------------
                                                                         8   41.2       207

   80-09    N      75 X  175      25 C    1                              1
                                                                      ------------------
                                                                         1   34.7        83

   81-01    N   NO VISIBLE GOLD

   81-02    N      75 X  100      18 C    1                              1
                                                                      ------------------
                                                                         1   27.6        37

   81-03    N   NO VISIBLE GOLD

   81-04    N      75 X  100      18 C    1                              1
                                                                      ------------------
                                                                         1   31.7        32

   81-05    N   NO VISIBLE GOLD

   81-06    N   NO VISIBLE GOLD

   81-07    N   NO VISIBLE GOLD
```

```
                                                      FALCONBRIDGE                                          11/06/87


GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

FALBIND2.WK1                                       NUMBER OF GRAINS      .
TOTAL # OF PANNINGS        2               ------------------------------------
                                           ABRADED   IRREGULAR  DELICATE TOTAL NON     CALC V.G.
SAMPLE #  PANNED                           ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER    THICKNESS     T    P    T    P     T    P         GMS      PPB    REMARKS

  LS-87

  81-08    N   NO VISIBLE GOLD

  81-09    N   NO VISIBLE GOLD

  81-10    N      75 X  125      20 C    1                                1
                                                                         ------------------
                                                                          1   35.4       42

  81-11    N      25 X   25       5 C         1                           1                EST. 1% PYRITE
                  25 X   50       8 C         1                           1
                  25 X   75      10 C         1                           1
                  50 X   50      10 C         2                           2
                  50 X   75      13 C    1                                1
                  50 X  125      18 C         1                           1
                  75 X   75      15 C    1                                1
                                                                         ------------------
                                                                          8   28.8       54

  81-12    N     125 X  200      31 C    1                                1
                                                                         ------------------
                                                                          1   31.8      196

  81-13    N   NO VISIBLE GOLD

  81-14    N   NO VISIBLE GOLD

  81-15    N   NO VISIBLE GOLD
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

fals3nov.wri                                    NUMBER OF GRAINS
TOTAL # OF PANNINGS       17           -----------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                       ========  =========  ======== ===== MAG      ASSAY
           Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P       GMS      PPB    REMARKS

   LS-87
   82-01    N   NO VISIBLE GOLD

   83-01    Y      25 X  25         5 C   1                              1                 EST. 1% PYRITE
                   50 X  50        10 C   1                              1
                                                                      -------------------
                                                                         2   28.7       8

   85-01    Y      50 X  50        10 C                       1          1                 EST. 1% PYRITE
                   50 X  75        13 C   1    1                         2
                  100 X 175        27 C   1                              1
                                                                      -------------------
                                                                         4   30.8     155

     -02    N   NO VISIBLE GOLD

   86-01    Y      25 X  25         5 C        2                         2                 EST. 1% PYRITE
                   50 X  50        10 C        1                         1
                   50 X  75        13 C   1    2                         3
                  100 X 200        29 C   1                              1
                  125 X 150        27 C   1                              1
                                                                      -------------------
                                                                         8   39.6     256

     -02    N      75 X 125        20 C             1                    1
                                                                      -------------------
                                                                         1   36.3      41

     -03    N     100 X 175        27 C   1                              1
                                                                      -------------------
                                                                         1   23.8     161

     -04    N     100 X 100        20 C   1                              1
                                                                      -------------------
                                                                         1   46.3      31

     -05    Y      50 X  75        13 C   1                              1                 EST. 1% PYRITE
                   75 X 100        18 C   1                              1
                  100 X 125        22 C   1                              1
                                                                      -------------------
                                                                         3   27.8     126

     -06    Y      50 X  50        10 C                  1               1                 EST. 2% PYRITE
                   50 X  75        13 C             1                    1
                  100 X 100        20 C   1                              1
                                                                      -------------------
                                                                         3   27.8      74
```

```
OLD CLASSIFICATION
==================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

gols3nov.wr1                                NUMBER OF GRAINS
TOTAL # OF PANNINGS       17           ------------------------------------
                                       ABRADED  IRREGULAR  DELICATE TOTAL NON   CALC V.G.
SAMPLE #  PANNED                       ======== =========  ======== ===== MAG     ASSAY
          Y/N   DIAMETER   THICKNESS    T    P    T    P    T    P        GMS     PPB   REMARKS

  LS-87
   -07     N    50 X  75     13 C      1                              1
                                                                   --------------------
                                                                      1  28.5      13

   -08     N  NO VISIBLE GOLD

   -09     Y    50 X  50     10 C      1                              1                 EST. 2% PYRITE
                75 X 100     18 C      1                              1
               100 X 175     27 C      1                              1
                                                                   --------------------
                                                                      3  28.5     176

   -10     Y    25 X  25      5 C           1                         1                 EST. 5% PYRITE
                25 X  50      8 C                             2       2                      1000 GRAINS ARSENOPYRITE
                50 X 100     15 C           1                         1
                75 X  75     15 C                             2       2
                75 X 150     22 C                             1       1
        [illegible] X [illegible]     24 C                             1       1
                                                                   --------------------
                                                                      8  21.1     557

   -11     Y    25 X  25      5 C                             1       1                 EST. 20% PYRITE
                25 X  50      8 C                             1       1                      500 GRAINS ARSENOPYRITE
                25 X  75     10 C           1                 1       2
                50 X  75     13 C                             1       1
                75 X  75     15 C                             1       1
                                                                   --------------------
                                                                      6  11.6     130

  ST-01    Y    75 X 100     18 C      1                              1                 EST. 1% PYRITE
               100 X 100     20 C      1                              1                      2% MARCASITE
                                                                   --------------------      0.5% CHALCOPYRITE
                                                                      2  25.9      97

  SS-01    Y    75 X 100     18 C      1                              1                 EST. 0.5% PYRITE
               100 X 125     22 C      1                              1
               100 X 325     40 C      1                              1
               150 X 200    100 M      1                              1
                                                                   --------------------
                                                                      4  27.8    1428

   -02     Y    25 X  50      8 C                             1       1                 EST. 10 GRAINS PYRITE
                50 X  75     13 C      1                              1
                75 X 100     18 C      1    1                         2
               100 X 100     20 C      1                              1
                                                                   --------------------
                                                                      5  33.0     121
```

LD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

fals3nov.wk1
TOTAL # OF PANNINGS 17

				NUMBER OF GRAINS									
				ABRADED		IRREGULAR		DELICATE		TOTAL	NON MAG	CALC V.G. ASSAY	
SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
LS-67													
P1-01	N	NO VISIBLE GOLD											
-02	N	125 X 125	25 C	1						1			
										1	29.8	97	
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
P3-01	Y	25 X 50	8 C		1					1			EST. 20 GRAINS ARSENOPYRITE (FINE)
		75 X 100	18 C	1						1			
		75 X 125	20 C	1						1			
		150 X 150	25 C	1						1			
										4	25.6	261	
-02	N	75 X 100	18 C	1						1			
										1	30.8	33	
-03	Y	25 X 50	8 C	1	1					2			EST. 20 GRAINS ARSENOPYRITE (FINE)
		50 X 50	10 C	1						1			
		50 X 75	13 C	1					1	2			
		75 X 125	20 C				1			1			
		100 X 100	20 C	1						1			
		100 X 125	22 C	1						1			
										8	30.6	203	
-04	Y	25 X 25	5 C						1	1			EST. 20% PYRITE
		25 X 25	5 C		2			1	1	4			
		50 X 50	10 C		1					1			
		50 X 100	15 C		1					1			
		10 X 125	14 C	2						2			
										9	33.1	57	
P4-01	N	25 X 50	8 C					1		1			
										1	25.6	3	
-02	Y	25 X 50	8 C		2					2			EST. 2% PYRITE
		50 X 50	10 C		1					1			
		50 X 100	15 C	1						1			
		75 X 75	15 C	2						2			

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

falc2nov.wr1                                     NUMBER OF GRAINS
TOTAL # OF PANNINGS       17           ----------------------------------------
                                       ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                       ========  =========  ======== ===== MAG      ASSAY
          Y/N    DIAMETER   THICKNESS   T    P    T    P    T    P        GMS      PPB     REMARKS

  LS-57
                 100 X  100       20 C   1                              1
                 100 X  125      100 M        1                         1
                 100 X  250       34 C   1                              1
                                                                      ___________________
                                                                        9   24.1       872

  95-01    N   NO VISIBLE GOLD

    -02    N     175 X  200       36 C   1                              1
                                                                      ___________________
                                                                        1   29.0       326

  96-01    N   NO VISIBLE GOLD

  97-01    N   NO VISIBLE GOLD

  98-01    N   NO VISIBLE GOLD

    -02    N   NO VISIBLE GOLD

    -03    N   NO VISIBLE GOLD

    -04    N   NO VISIBLE GOLD

  99-01    N     150 X  200       34 C   1                              1
                                                                      ___________________
                                                                        1   20.4       379

    -02    N      50 X  100       15 C   1                              1
                                                                      ___________________
                                                                        1   18.4        35

    -03    Y      25 X   25        5 C                             6    6               EST. 1% PYRITE
                  25 X   50        8 C                             1    1                    PHOTO MICROGRAPH AVAILABLE
                  25 X   75       10 C                             1    1                    FILM REFERENCE #12
                  50 X   50       10 C        1                         1
                  50 X  100       15 C                             1    1
                  75 X  100       18 C                             1    1
                 100 X  100       20 C   1                              1
                 100 X  175      100 M        1                         1
                 125 X  200       31 C             1                    1
                                                                      ___________________
                                                                       14   26.2       923

  99-04    Y      25 X   25        5 C                             1    1               EST. 1% PYRITE
                  25 X   50        8 C   1                   1     1    3
                                                                      ___________________
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

fals3nov.wk1                                      NUMBER OF GRAINS
TOTAL # OF PANNINGS      17              -----------------------------------
                                         ABRADED   IRREGULAR  DELICATE TOTAL NON    CALC V.G.
SAMPLE #  PANNED                         ========  =========  ======== ===== MAG      ASSAY
          Y/N   DIAMETER   THICKNESS     T    P    T    P     T    P        GMS      PPB    REMARKS

  LB-87
                                                                         4   32.0       8
```

APPENDIX H

BINOCULAR LOGS - BEDROCK CHIP SAMPLES

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
LS-87 01-05	gray-green to gray	Generally massive weak foliation, poorly developed bedding	Matrix: aphanitic to 2.0 mm Fragments: minimum of 2.0 mm.	Fragmental texture, blocks with ash matrix Blocks comprise 50-60% of rock 75% are aphanitic 20% are porphyritic andesite 5% are fine grained andes. 15% of blocks have amph. pheno's	Matrix comprises 40-50% of rock 75% of which is aphanitic lithics 15% plag crystals 10% amphibole crystals	1-2% diss Fe-Mg carb.	0.5% disseminated cubic pyrite		Intermediate Pyroclastic (Blocky Tuff)
02-05	medium green	well developed foliation to schistose with crenulation cross-cleavage	present size 0.05→0.1 mm	sugary, original texture obscured by deformation	undifferentiated chlorite and plag	5-10% diss calcite	nil		Intermediate Volcanic (Sheared Andesite)
03-06	red-gray to medium green	well developed foliation to locally schistose with well developed crenulation cross-cleavage	presently less than 0.05 mm	sub-sugary, original volcanic texture preserved between shear planes.	30-35% green chlorite 50-60% undifferentiated quartz + plag sugar 5-10% silicified patches	10% dissemenated Fe-Mg carb.	nil	2-3% hematite staining	Intermediate Volcanic (Sheared Andesite)
04-07	medium to light green	massive, locally sheared (< 5%)	0.1→0.15 mm	porphyritic	20% green chlorite 50-60% plag. 5% dark green chl. assoc with cal veining	5-10% diss calcite 1-2% calc veining	< 0.1% diss pyrite		Mafic Volcanic (Basalt)
05-01	dark green to black	moderate to well developed foliation	0.2→0.3 mm	hypidiomorphic equigranular texture	55% dark green chlorite 30-35% saussurite 0.5% quartz	< 0.5% diss Fe-Mg carb	2-3% diss py.	5-10% magnetite - trace hematite staining	Gabbro

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
06-13	medium green	well developed foliation to locally schistose	phenos: 0.3 → 0.4 groundmass: aphanitic to 0.05 mm	porphyritic	30-40% phenos 98% of which are gray-white plag 1-2% quartz phenos 60-70% groundmass 50% saussurite 50% chlorite	nil	nil		Intermediate Volcanic (Andesite)
07-01	dark green to black	moderate to well foliated, locally massive	0.5 mm	hypidiomorphic equigranular intrusive	35-40% plag 15-20% epidote 30-35% pyroxene 0.5% quartz	trace diss Fe-Mg carb	0.5% diss cubic pyrite	1-2% leucoxene	Gabbro
08-02	dark green to black	schistose highly deformed	originally 0.5 mm presently < 0.1 mm	equigranular locally (poorly preserved)	55-60% chlorite 30-40% gray-white plag	5-10% diss calcite	1% diss cubic pyrite trace chalco trace arseno	2-3% leucoxene	Gabbro (sheared)
09-11	light green to white	well developed foliation to schistose	phenos: 0.15 → 0.3 groundmass: 0.05 → 0.10	porphyritic	45% plag phenos 0.5% qtz phenos 40% chlorite 1-2% sericite 3-5% silicification	nil	nil		Intermediate Volcanic (Sheared Andesite)
10-13	dark green	well developed foliation to locally schistose	Originally phenos: 0.25 → 0.30 groundmass: 0.05 → 0.10	obscured by deformation	55% dark green chlorite 35-40% plag 1-2% quartz 0.5% sericite	10% diss calc	trace diss pyrite		Mafic Volcanic (Sheared Basalt)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
11- 11	dark green to black	massive, poorly developed foliation	either 0.5 mm o 0.1 mm	hypidiomorphic equigranular intrusive texture	55-60% dark green chlorite 5% dark green pyroxene 35% gray-white plag	1% calcite veining 1% diss Fe-Mg carb.	1-2% diss cubic pyrite	5% leucoxene	Gabbro
12- 02	medium to dark green	generally massive to poorly developed foliation	0.1 mm	equigranular volcanic	55-60% gray-white plag 30-35% chlorite	2-3% diss Fe-Mg carb 0.5% calcite veining	5% finely diss pyrrhotite trace chalco trace sphalerite 1-2% diss pyrit		Mafic Volcanic (Basalt)
13- 08	medium to light gray	generally massive locally well developed flow foliation	phenos: 0.2 -> 0.75 groundmass aphanitic	porphyritic, phenos comprise 45-50% of rock	50-60% aphanitic quartzofeldspathic 40% plag phenos 10% qtz "	trace calcite veining 5-10% diss Fe-Mg carb	<0.1% diss pyrite		Intermediate Volcanic (Dacite)
14- 07	medium green	generally massive	phenos: 0.5 -> 0.75 groundmass: 0.10 -> 0.15	porphyritic with rubbly flow-breccia texture, phenos comprise 70-80% of rock	70% plag phenos 5% qtz phenos 15-20% undifferentiated sub-aphanitic qtz and plag 10-15% chlorite	5% diss Fe-Mg carb 0.5% vein Fe-Mg carb	nil		Intermediate Volcanic (Andesite)
15-03	medium to light green	massive	phenos: 0.3 -> 0.5 groundmass 0.15 -> 0.20	porphyritic phenos comprise 20-25% of rock	20% white plag pheno 5% chloritized pyrox 15-20% chlorite 1-2% quartz 30-35 groundmass plag	0.5 -> 1.0% diss Fe-Mg carb 0.1% vein Fe-Mg carb	nil		Intermediate Volcanic (Andesite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
16-03	dark to medium green	massive	0.1-0.15 mm	locally porphyritic with rubbly flow-breccia texture	20-30% green chl. 20-25% plag phenos 35-40% groundmass plag 1-2% qtz phenos	5% calcite veining 1-2% diss Fe-Mg carb	0.5% diss cubic pyrite		Intermediate Volcanic (Andesite)
17-02	dark green-white	massive to poorly foliated	0.4→0.6	hypidiomorphic equigranular	50-55% chl. pyrox 5% pyroxene 25-30% epidote 5% plag 1% quartz	trace diss Fe-Mg carb	trace diss pyrite	2-3% leucoxene	Gabbro
18-05	dark green to black	massive	0.2→0.5 mm	generally hypidiomorphic equigranular to diabasic in finer grained sections	35-40% chlorite 40-45% epidote 15-20% plag	0.5% diss Fe-Mg carb in coarser grained sections and along some fracture surfaces	nil	5-10% magnetite	Gabbro
19-06	dark green to black	well developed foliation to schistose	presently 0.1→0.25 originally 0.4→0.5	obscured due to deformation.	35-40% chlorite 25-30% epidote 30-35% plag	1% diss Fe-Mg carb.	0.5% diss cubic pyrite	2-3% leucoxene	Gabbro (sheared)
20-07	medium to dark green	bedded	Matrix: 0.15→2.0 mm (ash) Fragments: minimum 2.0 mm avg 4.0 m.m	Fragmental texture, lapilli size fragments, scoriaceous texture in some fragments	Matrix: 75% of rock 80-90% of which is andesite lithics 10% feldspar crystals Frags: 25% of rock 85% of frags are aphan. andesite, 15% are f.g. andesite.	2-3% diss Fe-Mg carb. trace vein calcite	trace diss. pyrite in coarse ash sections		Intermediate Pyroclastic (Lapilli Tuff)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
21-06	medium green	bedded, shown by changes in size of matrix lithics	Matrix: 0.05 -> 2.0 mm ave. 0.2 -> 0.5 Fragments: minimum of 2.0 mm	Fragmental "ashy" texture	Matrix: 25% of rock 50% of which is andesite lithics, 45% plag cryst. 3-4% qtz crystals Frags: 75% of rock 100% porphyritic andes	5% diss Fe-Mg carb. trace Fe-Mg veining	0.2 -> 0.3% diss cubic pyrite		Intermediate Pyroclastic (Blocky Tuff)
22-08	medium green	bedded, shown by changes in size of matrix lithics	Matrix: 0.05 -> 2.0 mm average 0.3 -> 0.4 Fragments: minimum of 2.0 mm	Fragmental "ashy" texture	Matrix: 25% of rock 50% of which is andesite lithics, 45% plag crystals 3-4% qtz. crystals Frags: 75% of rock 100% porphyritic ande.	< 0.5% diss Fe-Mg carb in finer ash sections	nil		Intermediate Pyroclastic (Blocky Tuff)
23-03	medium to dark green	generally massive with poorly to mod foliation, locally with coarse crystal segregation	generally 0.05 -> 0.1 locally 0.2 -> 0.25	equigranular volcanic texture	50-60% chlorite 30-35% plag	2-3% diss Fe-Mg carb 1-2% diss calcite 0.5% calc. veins	< 0.5% diss pyrite		Mafic Volcanic (Basalt)
24-07	dark green to black	well developed foliation to locally schistose	originally 0.5 mm shown by preserved magnetite grains	generally obscured by deformation, hypidiomorphic equigranular texture locally preserved	25-30% chlorite 40-45% epidote 10-15% plag	3-5% diss calc. 0.5% diss Fe-Mg carb.	1-2% diss cubic pyrite	1% leucoxene 3-5% magnetite	Gabbro (sheared)
25-03	medium green	bedded as shown by variations in size and percentage of matrix ash	Matrix: 0.05 -> 0.25 averages 0.1 (fine ash) Frags: minimum of 0.5 mm	Fragmental "ashy" texture	Matrix: 50 -> 80% of rock 80-90% andesite lithics 10-20% plag crystals 1-2% qtz crystals Frags 20-50% of rock 100% dark green aphanitic (andesite	3-4% diss Fe-Mg carb 0.5% vein calcite	< 0.1% diss pyrite		Intermediate Pyroclastic (Lapilli Tuff)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
26 - 09	gray-green to gray	bedded, well developed foliation due to deformation	aphanitic to 0.1mm	fragmental texture due to deformation, ashy texture in non-deform sections	20-25% chert beds 5-10% chlorite 5 % sericite 45% undifferentiated quartz + plag.	15-20% diss calcite	20-25% pyrite in chert beds (5-10% of rock) colloform syngenetic		Felsic Pyroclastic (Felsic Tuff)
27 - 03	red- gray	massive, no deformation	phenos: 0.15 → 0.75 groundmass: aph. → 0.05	porphyritic	pheno's: 50% of rock 90% fresh biotite groundmass: 50% of rock aph. qtz + feldspar	2-3 % diss Fe-Mg carb	trace diss pyrite		Lamprophyre and Andesite
	dark green	moderate to well developed foliation	0.05 → 0.1	equigranular volcanic	20-25% dark green chlorite 75-80% plag	1-2 % calcite veining	trace diss pyrite		
28 - 05	dark green	bedded as shown by variations in size and percentage of lithic fragments	matrix: 0.1 → 0.15 (fine ash) Frags: minimum size of 1.5	fragmental "ashy" texture	Matrix: 60-70% of rock 70% andesite lithics 20% plag crystals 10% chloritized amph. Frags: 30-40% of rock 80% dark green aphan. 15% and. 5% diorite	0.5% vein Fe-Mg carb.	< 0.5 % finely disseminated "stinger" pyrite		Intermediate Pyroclastic (Lapilli Tuff)
29-08	medium green	bedded, as shown by variations in size and percentage of matrix ash	Matrix: 0.1 → 0.2 (ash) Frags: minimum size 0.5mm	fragmental "ashy" texture	matrix: 60-70% 80% aphanitic ande. 10% chl. amph cry 10% plag crystals Frags: 30-40% of rock 95% aph to f.g ande 5% porphyritic ande	nil	nil		Intermediate Pyroclastic (Lapilli Tuff)
30 - 03	medium to dark green	well developed foliation, locally schistose and sheared	Groundmass aphanitic Phenos: 0.3 → 0.6 mm	porphyritic texture, locally with rubbly flow-fabric texture	Groundmass: 50-60% aph. quartzofeldspathic material Phenos: 40-50% 98% anhedral plag 2% " qtz.	5-10 % diss calcite	nil		Intermediate Volcanic (Andesite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
31-04	medium green	well developed foliation, locally massive	0.05→0.1 5% phenos 0.2→0.25 mm	equigranular interlocking locally porphyritic	50-60% plag 5% plag phenos 20-25% chlorite 1-2% quartz	10% diss calcite 1-2% vein calcite	nil		Intermediate Volcanic (Andesite)
32-11	medium green to pink	well developed crystal orientation to phenocrysts	phenos: 0.2→1.5 mm groundmass aph to 0.15	porphyritic, generally obscured by deformation silicification and hematite staining	20-30% plag phenos 3-5% chl. pyrox phenos. 20-30% silicification 20-30% undifferentia qtz + feldspar.	3-5% diss Fe-Mg carb.	nil	0.5% pervasive hematite stain	Intermediate Volcanic (Andesite)
33-02	medium green	generally massive to poorly developed foliation	phenos: 0.2→0.6 groundmass aphanitic to 0.1	equigranular interlocking locally porphyritic and locally with rubbly flow-fabric texture	60% groundmass plag 15% plag phenos 20% chlorite 2% qtz	5% diss Fe-Mg carb.	nil		Intermediate Volcanic (Andesite)
34-03	medium green	massive	phenos: 0.3→0.6 groundmass 0.05→0.15	porphyritic texture	50% plag phenos 30% plag in groundmass 15-20% chlorite 1% quartz	3-5% diss Fe-Mg carb 1-2% Fe-Mg carb veining	nil		Intermediate Volcanic (Andesite)
35-02	medium green	well developed foliation, weakly sheared (defined by chlorite seams)	0.1→0.2	equigranular interlocking texture locally preserved generally deformed by shearing	60-65% plag 20-25% chlorite 1% quartz	5-8% diss Fe-Mg carb 1-2% vein Fe-Mg carb	trace diss pyrite		Intermediate Volcanic (Andesite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
36-04	medium green-white	massive	1.0 → 1.5 mm	hypiodiomorphic equigranular	40% chlorite 20% pyroxene (green) 40% plag	<0.5% diss Fe-Mg carb	trace diss pyrite	1-2% leucoxene	Gabbro.
37-09	medium green	well developed foliation	phenos: 1.0 → 1.25 mm groundmass aphanitic → 0.10 mm	porphyritic texture locally preserved generally obscured by deformation.	45-50% plag phenos 20-25% chlorite 15-20% groundmass plag 1% quartz	10-15% diss Fe-Mg carb.	nil		Intermediate Volcanic (Andesite)
38-25	green-white to pink (due to hematite staining)	highly fractured and vuggy with intervening massive sections	phenos: 0.5 → 0.75 groundmass obscured by alter + stain	porphyritic texture locally preserved	30-40% plag phenos 10-15% chlorite 1-2% quartz phenos 1-2% chalcedony 50% groundmass plagioclase	<0.5% diss Fe-Mg carb.	nil	5% pore space 1-2% hematite stain 3-4% specular hematite	Intermediate Volcanic (Fract + Silic. Andesite)
39-07	medium green	well developed foliation, locally sheared.	phenos: 0.75 → 1.0 groundmass 0.10 mm	porphyritic texture	30-35% plag phenos 3-5% qtz phenos 15-20% chlorite 45% groundmass plag 2-3% silicification	3-5% diss calcite	0.5% diss pyrite	1-2% hematite staining	Intermediate Volcanic (Sheared Porp. Andesite)
40-02	medium green	poor to moderate foliation	generally 0.1 → 0.3 locally porphyritic phenos (10%) 0.5 → 0.6	equigranular generally locally porphyritic	60% groundmass plag 10% plag phenos 20% chlorite 2-3% quartz	5-10% diss Fe-Mg carb	1-2% diss pyrite		Intermediate Volcanic (Andesite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
41-02	dark green to black	poor to moderate foliation, generally massive	0.5→0.75 mm.	hypidiomorphic equigranular	40% pyroxene (dark green) 20% chlorite 30% plag 10% epidote	0.5% diss Fe-Mg carb trace calcite veining	1% diss cubic pyrite	0.5% leucoxene	Gabbro
42-17	light yellowish-green	schistose, very finely bedded	aphanitic	hard, siliceous aphanitic	65% undifferentiated quartzofeldspathic material	5% calcite veining 10% diss calc. 20% diss Fe-Mg carb	nil		Felsic Pyroclastic (Sericite schist)
43-02	medium to dark green	well developed foliation to locally schistose	0.1→0.15	equigranular volcanic texture locally preserved in less deformed sections	50-60% plag 25-30% chlorite 1-2% quartz	3-5% diss Fe-Mg carb trace diss calcite	nil		Intermediate Volcanic (Sheared Andesite)
44-04	mottled brown-white	massive, no deformation at all	1.0→2.0 mm	diabasic texture	50-60% green-white plag 5-10% pink white plag 15-20% pyroxene	nil	0.5% diss pyrite	10% magnetite	Diabase
45-03	medium to dark green	well developed foliation to locally schistose	phenos; 0.7→1.35 groundmass 0.05→0.1	porphyritic texture locally obscured by deformation	50-60% plag 20-30% ground plag 10-15% chlorite	nil	nil		Intermediate Volcanic (Andesite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
46-07	medium green	well developed foliation to schistose (shearing)	aphanitic to 0.15 mm	equigranular volcanic texture locally preserved, generally obscured by deformation	10-15% groundmass chlorite 5-10% dk. green chl shears. 50% plagioclase 1-2% quartz	15-20% calcite veining 3-5% diss Fe-Mg carb	nil		Intermediate Volcanic (Sheared Andesite)
47-20	medium green	well developed foliation, locally schistose	phenos: 0.5→0.75 groundmass aph. to 0.05	porphyritic in non-deformed sections.	pheno's: 50-60% 95% subhedral plag 5% anhedral qtz groundmass: 40-50% 30-40% chlorite 50-60% plag 5% qtz 0.6% qtz vein	5% calcite veining 1-2% diss Fe-Mg carb	trace diss pyrite (assoc. with quartz veining)		Intermediate Volcanic (Andesite)
48-02	dark green	generally massive poor to moderate foliation	0.25→0.5	hypidiomorphic equigranular	30% dark green chlorite 20% chl. pyroxene 35% plag	10% diss calcite	<0.5% diss pyrite rare trace chalcopyrite	5% magnetite	Gabbro
49-07	dark gray green	well developed foliation, sheared	phenos: 1.0→1.5 mm groundmass obscured by deformation	porphyritic texture locally preserved.	phenos: 60% of rock 85% plag 15% qtz. groundmass: 30% of rock 25% chlorite 75% undiff sericite, qtz + plag	10% calcite veining	nil	0.5% hematite staining	Intermediate Volcanic (Sheared Dacite)
50-05	yellowish-green	well developed foliation to schistose bedded (defined by chert horizons)	aphanitic	hard, siliceous beds, aphanitic	75-80% undifferentiated quartz + sericite 1-2% chlorite	15% diss Fe-Mg carb.	3-5% diss. cubic pyrite		Felsic Pyroclastic

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
51-03	pinkish-gray	well developed foliation to locally schistose due to shearing	phenos! 0.3→0.75 groundmass aph to 0.1 gen. obsc. by defor	porphyritic texture	phenos: 50% of rock 95% plag, 5% qtz groundmass: 50% 90% undiff qtz+plag 10% dark green chl along shear planes.	2-3% diss Fe-Mg carb	nil	1% pervasive hematite stain	Intmediate Volcanic (Sheared Andesite)
52-04	mottled green-white	massive no deform. at all	1.0→2.0 mm	diabasic texture	50-60% green-white plag 5-10% pink-white plag 15-20% pyroxene	nil	0.5% diss pyrite	10% magnetite	Diabase
53-04	pinkish green	well developed foliation, locally schistose highly sheared	phenos: 0.5→0.75 groundmass aph to 0.1 gen. obsc. by deform.	porphyritic texture	phenos: 50-60% of rx 95% plag 5% qtz groundmass: 40-50% 80% undif qtz+plag 15-20% green chl along shear planes.	2-3% diss Fe-Mg carb	nil	1-2% pervasive hematite stain.	Intermediate Volcanic (Sheared Andesite)
54-05	medium to light gray-green	well developed foliation, locally schistose, highly sheared.	fragments: 0.3→1.0 Matrix: aph →0.1 obsc. by deformation	fragmental texture but generally obscured by deformation	frags: 30% of rock 95% aphanitic volcanics 5% quartz crystals matrix: 70% of rock 90% aph. chl + qtz+plag 10% chlorite along shears.	1-2% dissem. Fe-Mg carb.	nil		Intermediate Pyroclastic (Sheared dacitic tuff)
55-02	medium green	well developed fol locally schistose with crenulation cleavage.	aph → 0.15 gen. obsc. by deform	locally porphyritic, generally obscured by deformation	60% undiff. qtz + plag 15% chlorite 5% chlorite shears. 1-2% qtz phenos 5-10% plag phenos. 5% sericite	0.5% vein Fe-Mg carb	nil		Intermediate Volcanic (Sheared Andesite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
56-03	medium green	well developed foliation, locally schistose with crenulation cleavage highly sheared	0.05→0.3	locally porphyritic where preserved	60-65% undiff qtz + plag 15-20% chlorite 5% chlorite shears 5-10% sericite shears	10% calcite veining	1% diss cubic pyrite		Intermediate Volcanic (Sheared Andesite)
57-08	mottled green-white	generally massive to poorly developed foliation	1.0→1.5 mm	diabasic texture	60-70% plag 20-25% chlorite 0.5% leucoxene	0.5% diss Fe-Mg carb 1% calcite veining	trace diss pyrite		Gabbro (leucocratic)
58-13	yellowish-green	highly fractured poor to moderate foliation	0.1→0.2	equigranular volcanic texture.	70-75% chlorite 15% plagioclase	5% diss. Fe-Mg carb.	nil		Mafic Volcanic (Basalt)
59-02	dark green	massive to poorly developed foliation	0.5	equigranular, ophitic texture	55-60% dk green chlorite 15-20% plag 15% epidote 2-3% leucoxene	2-3% vein calcite	trace diss pyrite		Gabbro
60-04	medium green	generally massive to poorly developed foliation	0.1→0.15	equigranular	40-45% plag 20-25% chlorite 15-20% epidote 1-2% quartz	1-2% diss Fe-Mg carb	trace diss pyrite		Mafic Volcanic (Basalt)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
LS-87 61-03	medium green	generally massive to poorly developed foliation, minor shearing	0.15 mm	equigranular, locally porphyritic	2-3% quartz 15-20% chlorite 70-75% plag	1-2% calcite veining 3-5% diss Fe-Mg carb.	trace diss pyrite		Intermediate Volcanic (Andesite)
62-08	dark green	generally massive to poorly developed foliation, highly fractured	0.05 → 0.15 mm	equigranular, volcanic texture, locally vuggy	15-20% plagioclase 70-75% dark green chlorite	10% diss Fe-Mg carb	nil		Mafic Volcanic (Basalt)
63-02	medium green	well developed foliation to schistose locally sheared	0.05 → 0.1 mm	equigranular volcanic texture	15-20% chlorite 75-80% plag 1-2% quartz	5% calcite veining 5% diss Fe-Mg carb	nil	trace hematite stain along some fracture surfaces.	Intermediate Volcanic (Andesite)
64-02	medium to dark green	well developed foliation to schistose locally sheared	0.10 → 0.15	obscured by deformation	15-20% chlorite 70-75% plag 1-2% quartz	1-2% calcite veining 2-3% diss Fe-Mg carb	nil		Intermediate Volcanic (Andesite)
65-06	medium to dark green	well developed foliation, locally fractured	0.15 → 0.3	generally equigranular locally porphyritic	55-60% plag 20-25% chlorite 1-2% quartz	5-10% diss Fe-Mg carb 1-2% calcite veining	nil		Intermediate Volcanic (Andesite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
66-16	medium to dark green	well developed foliation to schistose	0.1→0.15	equigranular texture locally preserved generally obscured by deformation.	60-65% plag 20-25% chlorite 1-2% quartz	2-3% diss Fe-Mg carb 5% calcite veining	nil		Intermediate Volcanic (Andesite)
67-04	medium to dark green	well developed foliation to schistose highly veined (25% of rock)	0.05→0.1	texture obscured by deformation	45-50% plag 15-20% chlorite 1-2% quartz	25% calcite veining	5% finely diss pyrite within calcite veins		Intermediate Volcanic (Andesite)
68-03	medium green	well developed foliation	phenos: 0.3→0.75 groundmass 0.05→0.1	porphyritic texture	phenos: 50% of rock 95% white anh plag 5 anhedral qtz groundmass: 50% of rk 70% plag 5% qtz 20% chlorite	1% calcite veining 3-5% diss Fe-Mg carb.	nil		Intermediate Volcanic (Andesite)
69-05	dark green to black	highly veined, massive between veins	0.5mm	hypidiomorphic equigranular	40-45% plag 10-15% dk gr. vein chlorite 15% quartz veining 20-25% med. to light green chlorite	10% calcite veining 0.5% diss Fe-Mg carb	0.5% diss pyrite		Gabbro
70-07	medium to dark green	generally massive locally fractured and veined	0.5mm	hypidiomorphic equigranular	45% saussuritized plag 50% chlorite 1% diss leucoxene	2-3% calcite veining 0.5→1.0% diss Fe-Mg carb.	0.5% diss pyrite		Gabbro

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
71-14	medium to dark green	massive, locally fractured and veined non - chilled	0.15→ 0.25	equigranular	50% plag 50% chlorite 1% quartz veining	0.5→1% diss Fe-Mg carb.	2% diss. pyrite		Mafic Volcanic (Basalt)
72-03	dark green	well developed foliation, local amygdules sharp chill margin	0.05→ 0.10	equigranular hyaloclastite	55-60% chlorite dark green 30-35% plag 2-3% qtz filled vesicules	5-10% diss calcite	0.1% diss pyrite		Mafic Volcanic (Basalt)
73-03	dark green	well developed foliation, locally vesicular gradational chill	0.05→ 0.10	equigranular pillowed flow	55-60% chlorite dark green 30-35% plag 2-3% qtz filled vesicules	5-10% diss calcite	0.1% diss pyrite	trace hematite staining in vesicules	Mafic Volcanic (Basalt)
74-04	medium to dark green	generally massive local brecciated fragments and veined sharp chill margin	0.1 mm	equigranular hyaloclastite	45-50% med. green chl. 10-15% dark green chlorite 25-30% plag	3-5% diss calcite 5-10% calcite veins	0.5% diss pyrite		Mafic Volcanic (Basalt)
75-02	medium green	generally massive locally fractured	0.4→0.6	hypidiomorphic equigranular	50-60% chlorite 30-35% plag 2-3% quartz veining 0.5% diss leucoxene	0.5% diss calcite	trace diss pyrite		Gabbro

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
76-03	medium to dark green	generally massive locally fractured	0.5→0.7	hypidiomorphic equigranular	50-60% chlorite 30-35% plag 0.5 % quartz 0.5% diss leucoxene	0.5 % calcite veining 0.5% diss Fe-Mg carb	1% diss pyrite		Gabbro
77-02	dark green	well developed foliation to schistose non-chilled	0.05→0.1	texture obscured by deformation	50-55 % chlorite 30-35 % plag 1% quartz veining	5% calcite veining	0.5% diss pyrite assoc with quartz veining		Mafic Volcanic (Basalt)
78-05	medium to dark green	well developed foliation to schistose gradational chill	0.05→0.10	equigranular volcanic texture locally preserved generally obscured by deformation	50% chlorite 15% plag 5 % quartz veining	30% calcite veining 0.5% diss Fe-Mg carb.	5% very finely diss pyrite assoc. with qtz-carb veins		Mafic Volcanic (Basalt)
79-02	medium to dark green	generally massive, poorly developed foliation locally	0.05→0.10	equigranular volcanic texture	50-60% chlorite 35-40% plag	nil	nil		Mafic Volcanic (Basalt)
80-10	medium to dark green	well developed foliation to schistose with crenulation cross-cleavage non-chilled	0.05→0.10	equigranular volcanic texture locally preserved generally obscured by deformation	55-60% chlorite 35-40% plag	0.5% diss Fe-Mg carb	nil		Mafic Volcanic (Basalt)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
81-16	medium to dark green 50% chips hematite stained	massive to poorly developed foliation non-chilled	0.1->0.3	equigranular volcanic texture	50% med green chl. 10% dark " chl. 30% plag	2-3% diss calcite	Trace diss pyrite	2-3% specular hematite and limonite staining	Mafic Volcanic (Basalt)
82-02	medium to dark green	well developed foliation to schistose with crenulation cross-cleavage gradational chill	0.05->0.1	equigranular volcanic texture locally preserved generally obscured by deformation	60-65% chlorite 20-25% plag	3-5% calcite veining 1-2% diss calcite	nil		Mafic Volcanic (Basalt)
83-02	dark green to black	massive to poorly developed foliation quartz-amphibole veins	0.3->0.6	hypidiomorphic equigranular	35-40% med green chlorite 5-10% dark green amphibole 25-30% plag 3-5% quartz veins	15% calcite veins	nil		Gabbro
84-01	mottled green-white	massive to poorly developed foliation	1.0mm	hypidiomorphic equigranular	25-30% chl. pyroxene 20-25% chlorite 30% plagioclase trace diss leucoxene	1% diss calcite	trace diss pyrite and chalcopyrite		Gabbro
85-03	beige to gray-green	well developed foliation, veined non-chilled	0.1mm	equigranular texture locally preserved generally obscured by intense alteration	25-30% green chlorite 5-10% sericite 40-50% plag 2-3% quartz veins	3-5% diss Fe-Mg carb	nil	1-2% hematite staining	Mafic Volcanic (Basalt)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
86-12	medium to dark green	well developed foliation to schistose sharp chill	0.05mm	texture obscured by alteration and veining hyaloclastite	40-45% dark green chlorite 30-35% plag 5% quartz veining	15-20% diss calcite 45% calcite veins	2-3% very finely diss pyrite assoc. with qtz-carb veins	50% 50%	Mafic Volc (Basalt) and Qtz-Carbonate Veins
87-02	medium to dark green	massive to poorly developed foliation	phenos: 0.3->0.6 groundmass 0.05->0.10	porphyritic texture	phenos: 45% of rock 97% gray-white plag 2-3% quartz groundmass: 55% 60% plag 40% chlorite	nil	nil		Intermediate Volcanic (Andesite)
88-01	dark green	schistose gradational chill	0.05-> 0.10	equigranular volcanic texture pillowed flow	50% chlorite 45% plag	5% diss calcite	0.5% diss pyrite		Mafic Volcanic (Basalt)
89-03	dark green	massive	1.5->2.0 mm	hypidiomorphic equigranular	35-40% dark green chlorite 20-25% pyroxene 15-20% epidote 10-15% plag	0.5% diss calcite	0.5% diss pyrite	0.5% diss leucoxene	Gabbro
90-01	medium to dark green	massive non-chilled	0.2->0.3 mm	equigranular volcanic texture	45-50% chlorite 20-25% plag 10-15% epidote	5% diss calcite	nil	3-5% magnetite	Mafic Volcanic (Basalt)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
91-05	medium green	well developed foliation to schistose	0.05 → 0.1	equigranular volcanic texture	20-25 % chlorite 65 % plag 1 % sericite	2-3% diss calcite 1-2% calcite veining	nil		Intermediate Volcanic (Andesite)
92-01	medium to light green	moderate to well developed foliation	0.05 → 0.2	locally porphyritic	65% plag 20% chlorite 1-2% quartz	2-3% diss Fe-Mg carb	1% diss pyrite		Intermediate Volcanic (Andesite)
93-05	light green to yellow	well developed foliation to schistose	aphanitic to 0.05	aphanitic, hard silic	75-80% undiff qtz + plag 10% chlorite 1-2% sericite	2-3% calcite veining 1-2% diss Fe-Mg carb.	5% diss cubic pyrite		Intermediate Volcanic (Sheared Andesite)
94-03	medium to dark green	well developed foliation, sheared	0.1 to aphanitic	aphanitic in silicified sections, texture generally obscured by alteration and deformati	70-75% plag 10-15% chlorite 2-3% quartz	5-10% diss calcite 1-2% diss Fe-Mg carb	1% diss pyrite		Intermediate Volcanic (Sheared Andesite)
95-03	dark green	well developed foliation non - chilled	0.05 → 0.10	generally equigranular locally porphyritic	60-65% chlorite 25-30% plag	5% diss calcite 1-2% calcite veining	nil		Mafic Volcanic (Basalt)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
96-02	dark green	generally massive to poorly developed foliation locally veined, non-chilled	0.1-> 0.15	generally equigranular locally porphyritic	55-60% chlorite 25-30% plag 5% diss leucoxene	5-10% diss calcite 2-3% calcite veins	2-3% diss cubic pyrite assoc. with qtz-carb veins		Mafic Volcanic (Basalt)
97-02	dark green	moderate to well developed foliation	0.5-> 0.6	hypediomorphic equigranular	50% plag 40% chlorite 10% dk green pyroxene 2-3% leucoxene	1-2% diss Fe-Mg carb	nil		Gabbro
98-05	dark green	well developed foliation non-chilled	0.05-> 0.10	generally equigranular locally porphyritic	65% chlorite 25% plag	10% diss calcite	nil		Mafic Volcanic (Basalt)
99-05	dark green	well developed foliation non-chilled	0.1-> 0.15	equigranular volcanic texture	50% chlorite 45% plag 1% quartz	1-2% diss Fe-Mg carb	0.5 diss pyrite		Mafic Volcanic (Basalt)

APPENDIX 4

BEDROCK WHOLE ROCK ANALYSIS

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BONDAR-CLEGG

Geochemical Lab Report

REPORT: 017-4509

PROJECT: LAC SHORT

SAMPLE NUMBER	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
LS-87-01-05B		58.00	0.71	16.00	6.99	0.11	4.05	5.65	3.52	1.82	0.39	2.00
DUPLICATE		57.40	0.79	15.90	7.03	0.12	4.00	5.74	3.50	2.01	0.41	2.00
LS-87-02-05B		48.40	0.07	12.70	7.20	0.14	3.93	12.60	0.26	2.22	0.18	12.35
LS-87-03-06B		62.90	0.24	16.50	4.66	0.07	1.90	4.42	4.15	2.22	0.11	3.45
LS-87-04-07B		48.30	1.96	13.80	14.80	0.26	4.42	8.05	2.65	0.42	0.41	3.85
LS-87-05-01B		47.30	2.23	12.90	17.90	0.22	3.70	6.74	3.59	1.01	0.44	3.00
LS-87-06-13B		61.80	0.52	15.40	5.41	0.08	2.85	3.72	4.14	1.46	0.18	1.80
LS-87-07-01B		50.00	1.36	15.30	14.10	0.19	4.94	7.95	2.34	0.24	0.12	2.55
LS-87-08-02B		46.90	1.52	10.90	15.10	0.22	4.31	7.93	2.18	0.15	0.19	8.10
LS-87-09-11B		68.30	0.47	16.00	2.97	0.04	1.56	1.20	4.79	2.33	0.12	1.80
LS-87-10-13B		51.60	0.56	12.80	5.65	0.09	7.53	8.58	2.44	1.24	0.39	8.50
DUPLICATE		52.30	0.50	12.70	5.44	0.08	7.28	8.68	2.50	1.19	0.37	8.55
LS-87-11-11B		49.10	1.90	14.20	17.50	0.23	4.86	7.77	3.01	0.53	0.25	2.05
LS-87-12-02B		47.00	1.93	14.00	17.50	0.28	5.31	7.96	2.22	0.54	0.22	2.35
LS-87-13-08B		62.60	0.56	16.20	5.45	0.07	2.60	3.61	4.58	1.62	0.08	2.35
LS-87-14-07B		62.40	0.50	16.30	4.74	0.11	2.29	3.57	5.19	1.20	0.19	1.40
LS-87-15-03B		61.00	0.55	16.30	5.83	0.08	3.28	5.61	4.37	1.49	0.06	1.45
LS-87-16-03B		60.30	0.53	16.10	5.52	0.08	2.64	5.74	5.02	1.40	0.08	3.55
LS-87-17-02B		48.50	1.47	15.30	14.90	0.20	4.80	8.46	3.29	0.61	0.22	1.60
LS-87-18-05B		49.70	2.35	13.00	21.60	0.29	2.13	4.01	3.48	0.27	1.04	1.85
DUPLICATE		50.20	2.21	12.80	21.00	0.27	1.97	3.95	3.45	0.25	1.11	1.95
LS-87-19-06B		52.60	1.50	15.00	12.90	0.16	3.88	6.98	3.16	0.84	0.17	1.55
LS-87-20-02B		63.00	0.61	15.30	4.75	0.05	2.06	3.55	4.15	1.79	0.25	2.10
LS-87-21-06B		61.80	0.59	15.40	4.99	0.07	2.31	3.46	4.86	1.26	0.24	2.90
LS-87-22-08B		62.90	0.67	15.80	5.91	0.10	2.52	2.86	4.20	1.09	0.36	1.65
LS-87-23-03B		45.80	1.93	14.60	17.10	0.23	4.10	10.60	1.29	0.20	0.30	3.90
LS-87-24-07B		45.60	0.44	11.50	16.90	0.26	3.60	8.45	2.08	0.54	0.39	9.85
LS-87-25-03B		53.80	0.70	16.00	6.14	0.02	3.03	6.71	2.33	1.74	0.37	6.25
LS-87-26-09B		55.00	0.13	12.50	8.83	0.02	0.82	12.40	0.49	1.38	0.18	8.10
LS-87-27-03B		41.50	0.80	12.60	9.78	0.14	8.92	8.69	1.85	1.91	1.34	10.15
LS-87-28-05B		55.20	0.72	15.70	7.83	0.11	4.64	6.60	3.70	1.66	0.61	1.65
LS-87-29-08B		58.10	0.69	15.80	7.39	0.10	4.22	3.93	3.99	1.03	0.35	2.35
LS-87-30-03B		61.10	0.12	13.00	4.47	0.08	2.84	6.00	3.42	1.84	0.18	5.10
LS-87-31-04B		58.00	0.39	16.00	5.15	0.02	2.25	5.39	2.10	2.26	0.19	5.70
LS-87-32-11B		58.70	0.55	15.90	5.72	0.08	3.44	4.33	4.77	1.63	0.19	4.30
LS-87-33-02B		61.90	0.44	16.80	4.64	0.01	1.95	5.00	2.24	2.52	0.14	2.35
LS-87-34-03B		58.30	0.54	15.50	5.88	0.09	3.61	5.00	4.75	0.85	0.32	2.65
LS-87-35-02B		46.60	0.94	15.20	12.70	0.16	6.60	9.89	2.16	0.46	0.12	2.35
DUPLICATE		47.00	0.86	15.00	12.50	0.17	6.54	9.83	1.94	0.42	0.18	2.55
LS-87-36-04B		49.00	0.98	15.90	13.00	0.20	6.89	10.20	2.28	0.50	0.31	1.60

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Geochemical Lab Report

REPORT: 017-4509

PROJECT: LAC SHORT PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
LS-87-01-05B		99.24	50	51	15	<5
DUPLICATE			47	54	16	
LS-87-02-05B		100.05	47	76	<2	<5
LS-87-03-06B		100.62	27	46	2	<5
LS-87-04-07B		98.93	91	109	5	<5
LS-87-05-01B		99.03	65	93	<2	<5
LS-87-06-13B		97.36	31	42	2	<5
LS-87-07-01B		99.09	87	81	13	<5
LS-87-08-02B		97.50	76	115	<2	<5
LS-87-09-11B		99.58	26	39	<2	<5
LS-87-10-13B		99.38	47	59	2	<5
DUPLICATE			48	57	2	
LS-87-11-11B		101.41	90	81	2	<5
LS-87-12-02B		99.30	83	380	3	<5
LS-87-13-08B		99.71	36	52	2	<5
LS-87-14-07B		97.90	40	124	2	<5
LS-87-15-03B		100.02	40	45	2	<5
LS-87-16-03B		100.96	20	59	<2	<5
LS-87-17-02B		99.35	27	50	<2	<5
LS-87-18-05B		99.71	6	100	2	<5
DUPLICATE			6	96	2	
LS-87-19-06B		98.74	68	63	2	<5
LS-87-20-02B		97.60	41	67	2	<5
LS-87-21-06B		97.89	34	92	3	<5
LS-87-22-08B		98.07	28	68	<2	<5
LS-87-23-03B		100.05	80	108	2	<5
LS-87-24-07B		99.61	150	145	<2	<5
LS-87-25-03B		97.09	38	67	<2	<5
LS-87-26-09B		99.85	69	65	21	25
LS-87-27-03B		97.69	28	115	6	5
LS-87-28-05B		98.41	53	54	2	<5
LS-87-29-08B		97.94	36	73	2	<5
LS-87-30-03B		98.15	24	54	<2	<5
LS-87-31-04B		97.44	45	128	<2	<5
LS-87-32-11B		99.60	27	61	2	15
LS-87-33-02B		98.00	33	54	<2	<5
LS-87-34-03B		97.49	74	60	2	<5
LS-87-35-02B		97.18	30	51	2	<5
DUPLICATE			28	54	2	
LS-87-36-04B		100.85	92	36	4	<5

REPORT: 017-4509

PROJECT: LAC SHORT

SAMPLE NUMBER	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
LS-87-37-09B		62.00	0.18	15.30	5.41	0.01	1.59	4.64	2.62	1.46	0.18	4.40
LS-87-38-25B		63.20	0.12	16.80	5.46	0.04	2.61	1.98	5.09	1.01	0.50	1.75
LS-87-39-07B		63.40	0.12	16.10	6.58	0.02	1.69	4.53	2.41	1.42	0.13	4.35
LS-87-40-02B		68.60	0.19	14.50	4.00	0.01	1.54	2.22	3.07	0.84	0.12	2.15
LS-87-41-02B		54.20	1.80	14.10	15.80	0.03	3.19	4.87	0.47	0.06	0.17	3.60
LS-87-42-17B		59.90	0.11	13.10	1.49	0.09	0.53	9.81	3.52	1.34	0.19	8.30
LS-87-43-02B		60.80	0.58	17.00	6.84	0.03	3.06	1.79	2.59	1.26	0.23	3.25
LS-87-44-04B		45.60	2.65	17.50	14.00	0.18	4.47	7.63	3.30	1.67	0.33	1.90
DUPLICATE		46.20	2.53	17.40	13.80	0.18	4.24	7.48	3.21	1.61	0.26	2.00
LS-87-45-03B		52.40	0.88	17.80	8.52	0.13	4.76	3.65	4.73	1.61	0.83	2.55
LS-87-46-07B		50.60	0.04	14.00	4.47	0.11	2.62	12.90	1.37	1.54	0.30	12.45
LS-87-47-20B		61.30	0.21	15.30	5.98	0.02	2.09	5.29	1.51	1.53	0.08	6.20
LS-87-48-02B		48.80	0.13	13.70	19.00	0.18	4.15	3.94	3.17	0.26	0.06	4.85

REPORT: 017-4509

PROJECT: LAC SHORT PAGE 2B

SAMPLE NUMBER	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
LS-87-37-09B		97.79	57	39	2	<5
LS-87-38-25B		98.56	15	51	<2	<5
LS-87-39-07B		100.75	33	53	<2	<5
LS-87-40-02B		97.24	15	34	<2	<5
LS-87-41-02B		98.29	126	114	4	<5
LS-87-42-17B		98.38	38	16	2	<5
LS-87-43-02B		97.43	36	52	2	<5
LS-87-44-04B		99.23	42	44	2	<5
DUPLICATE			43	45	<2	
LS-87-45-03B		97.86	23	89	2	10
LS-87-46-07B		100.40	21	51	2	<5
LS-87-47-20B		99.51	29	55	2	<5
LS-87-48-02B		98.24	74	105	<2	<5

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Geochemical Lab Report

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OCT 21 1987
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REPORT: 017-4667 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORT

SUBMITTED BY: ODM
DATE PRINTED: 19-OCT-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	SiO2	Silica (SiO2)	51	0.01 PCT	Borate Fusion	DC Plasma
2	TiO2	Titanium (TiO2)	51	0.01 PCT	Borate Fusion	DC Plasma
3	Al2O3	Alumina (Al2O3)	51	0.01 PCT	Borate Fusion	DC Plasma
4	Fe2O3*	Total Iron (Fe2O3*)	51	0.01 PCT	Borate Fusion	DC Plasma
5	MnO	Manganese (MnO)	51	0.01 PCT	Borate Fusion	DC Plasma
6	MgO	Magnesium (MgO)	51	0.01 PCT	Borate Fusion	DC Plasma
7	CaO	Calcium (CaO)	51	0.01 PCT	Borate Fusion	DC Plasma
8	Na2O	Sodium (Na2O)	51	0.01 PCT	Borate Fusion	DC Plasma
9	K2O	Potassium (K2O)	51	0.01 PCT	Borate Fusion	DC Plasma
10	P2O5	Phosphorous (P2O5)	51	0.01 PCT	Borate Fusion	DC Plasma
11	LOI	Loss on Ignition	51	0.01 PCT		Gravimetric
12	Total	Whole Rock Total	51	0.01 PCT		
13	Cu	Copper	51	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
14	Zn	Zinc	51	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
15	As	Arsenic	51	2 PPM	HNO3-HClO4	Colourimetric
16	Au	Gold	51	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BIOGEOCHEMICAL	51	-200	51	PULVERIZE -200	51

REMARKS: < MEANS LESS THAN.

REPORT COPIES TO: OVERBURDEN DRILLING
J.P. CLOUTIER

INVOICE TO: J.P. CLOUTIER

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Geochemical Lab Report

REPORT: 017-4667

PROJECT: LAC SHORT PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
LS87-49-07-B		54.90	0.19	14.60	5.54	0.09	2.89	6.39	3.64	1.23	0.10	8.45
DUPLICATE		55.50	0.22	14.50	5.30	0.08	2.67	6.29	3.54	1.11	0.30	8.40
LS87-50-05-B		58.80	0.06	12.90	7.38	0.20	2.75	6.96	1.29	1.07	0.22	6.85
LS87-51-03-B		59.90	0.15	17.10	4.99	0.08	3.04	4.02	4.52	1.66	0.03	3.90
LS87-52-04-B		44.50	2.92	18.50	16.00	0.22	4.76	6.76	3.21	1.64	0.24	2.20
LS87-53-04-B		62.80	0.47	17.10	4.79	0.07	2.29	4.11	4.74	1.25	0.07	2.35
LS87-54-05-B		63.80	0.38	16.50	4.81	0.06	2.80	2.57	4.44	1.56	0.30	2.80
LS87-55-02-B		62.80	0.56	16.80	5.59	0.07	3.01	1.74	2.80	2.74	0.24	2.25
LS87-56-03-B		61.80	0.14	15.80	4.10	0.07	2.55	4.31	4.01	1.11	0.08	4.75
LS87-57-08-B		50.10	0.55	16.90	11.20	0.16	6.05	8.60	2.57	0.18	0.05	1.90
LS87-58-13-B		47.50	0.31	19.80	9.24	0.13	9.41	6.52	0.69	0.08	0.19	5.00
DUPLICATE		48.30	0.36	19.70	9.21	0.14	9.33	6.58	0.71	0.10	0.18	5.45
LS87-59-02-B		48.30	1.29	14.20	14.30	0.17	3.97	8.51	1.42	0.11	0.25	5.85
LS87-60-04-B		44.50	0.56	14.90	11.20	0.17	7.00	8.12	1.42	0.88	0.12	10.70
LS87-61-03-B		61.20	0.09	16.80	4.19	0.06	1.38	4.00	3.49	1.60	<0.01	5.10
LS87-62-08-B		47.80	0.06	15.10	8.91	0.13	6.27	7.81	1.09	0.62	0.34	10.40
LS87-63-02-B		55.00	0.63	13.90	6.70	0.10	5.29	5.69	2.04	1.99	0.36	7.60
LS87-64-02-B		58.70	0.25	11.70	4.96	0.12	2.74	6.81	1.31	2.11	0.24	8.30
LS87-65-06-B		59.00	0.51	14.50	4.87	0.08	2.74	4.78	4.77	0.62	0.03	5.75
LS87-66-16-B		52.60	0.16	16.10	6.25	0.09	4.39	6.41	1.36	2.30	0.24	8.90
DUPLICATE		53.80	0.12	15.90	6.41	0.09	4.28	6.30	1.25	2.10	0.26	8.85
LS87-67-04-B		45.10	0.11	15.50	7.53	0.16	2.47	12.70	0.60	2.64	<0.01	12.85
LS87-68-03-B		60.20	0.58	16.80	5.54	0.08	3.66	3.87	4.35	1.44	0.47	0.85
LS87-69-05-B		47.00	0.41	10.60	13.10	0.23	1.84	12.20	1.28	0.69	<0.01	12.60
LS87-70-07-B		52.90	0.99	14.30	12.50	0.17	4.30	7.15	2.54	0.53	0.07	2.80
LS87-71-14-B		53.80	0.81	14.90	9.94	0.17	4.61	6.20	3.99	0.51	0.19	2.50
LS87-72-03-B		46.80	0.36	14.60	11.30	0.20	5.11	8.56	2.50	0.75	<0.01	9.00
LS87-73-05-B		48.20	0.21	16.90	12.20	0.14	3.86	5.81	1.48	1.84	0.26	7.30
LS87-74-04-B		46.30	1.33	14.00	13.30	0.16	3.88	11.20	2.12	0.16	0.35	6.30
LS87-75-02-B		47.20	1.37	16.70	15.00	0.20	5.55	6.98	1.93	0.32	0.05	3.40
LS87-76-03-B		47.70	1.52	14.80	15.50	0.22	5.33	7.64	1.85	0.05	0.10	3.10
LS87-77-02-B		51.00	0.64	12.60	10.90	0.19	2.31	7.70	3.26	0.50	0.41	8.50
LS87-78-05-B		41.40	0.17	10.40	13.10	0.30	3.19	10.70	1.49	0.49	0.20	16.15
LS87-79-02-B		51.20	0.83	15.90	11.20	0.19	5.37	8.23	3.39	0.26	0.15	2.35
LS87-80-10-B		55.20	0.20	16.80	11.80	0.16	5.38	0.27	0.15	2.57	0.08	4.75
LS87-81-16-B		50.80	0.17	13.40	11.10	0.19	4.27	6.72	2.11	0.68	0.16	9.55
LS87-82-02-B		50.20	0.24	15.30	12.40	0.18	2.96	7.62	1.18	1.72	<0.01	7.95
LS87-83-02-B		49.30	0.40	12.20	13.40	0.30	3.55	10.00	1.15	0.93	<0.01	10.00
DUPLICATE		49.80	0.36	12.00	13.20	0.27	3.75	9.85	0.94	0.86	0.15	10.15
LS87-84-01-B		50.50	0.79	15.80	12.10	0.18	5.09	9.23	2.91	0.74	<0.01	2.80

REPORT: 017-4667

PROJECT: LAC SHORT PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
LS87-49-07-B		98.02	7	86	<2	<5
DUPLICATE			7	88	<2	
LS87-50-05-B		99.48	68	698	2	10
LS87-51-03-B		99.40	3	55	<2	<5
LS87-52-04-B		100.94	55	54	<2	<5
LS87-53-04-B		100.04	13	40	<2	20
LS87-54-05-B		100.01	32	62	<2	<5
LS87-55-02-B		98.60	33	54	<2	<5
LS87-56-03-B		98.72	21	61	<2	25
LS87-57-08-B		98.27	128	37	8	<5
LS87-58-13-B		98.88	59	43	2	5
DUPLICATE			62	49	2	
LS87-59-02-B		98.37	103	53	<2	<5
LS87-60-04-B		99.57	93	65	<2	<5
LS87-61-03-B		97.91	29	126	4	<5
LS87-62-08-B		98.52	39	45	<2	<5
LS87-63-02-B		99.30	36	71	<2	<5
LS87-64-02-B		97.23	15	66	<2	<5
LS87-65-06-B		97.65	74	80	<2	<5
LS87-66-16-B		98.81	53	69	<2	<5
DUPLICATE			50	70	<2	
LS87-67-04-B		99.65	97	62	<2	1885
LS87-68-03-B		97.84	5	70	2	<5
LS87-69-05-B		99.96	305	94	19	<5
LS87-70-07-B		98.26	108	66	3	5
LS87-71-14-B		97.61	110	57	<2	<5
LS87-72-03-B		99.18	79	72	<2	<5
LS87-73-05-B		98.20	84	92	<2	<5
LS87-74-04-B		99.10	67	79	20	<5
LS87-75-02-B		98.70	77	94	23	<5
LS87-76-03-B		97.82	96	69	3	<5
LS87-77-02-B		98.01	85	104	4	<5
LS87-78-05-B		97.59	84	98	3	10
LS87-79-02-B		99.07	102	91	37	<5
LS87-80-10-B		97.36	50	94	<2	<5
LS87-81-16-B		99.15	102	75	14	<5
LS87-82-02-B		99.75	80	101	<2	<5
LS87-83-02-B		101.23	20	95	3	<5
DUPLICATE			20	103	2	
LS87-84-01-B		100.14	145	33	25	<5

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Geochemical Lab Report

REPORT: 017-4667

PROJECT: LAC SHORT

SAMPLE NUMBER	ELEMENT UNITS	SiO_2 PCT	TiO_2 PCT	Al_2O_3 PCT	Fe_2O_3* PCT	MnO PCT	MgO PCT	CaO PCT	Na_2O PCT	K_2O PCT	P_2O_5 PCT	LOI PCT
LS87-85-03-B		41.20	0.19	11.80	12.70	0.23	3.21	9.03	1.94	0.27	<0.01	17.30
LS87-86-12-B		45.30	0.09	10.20	5.81	0.16	2.05	15.70	1.22	0.22	0.09	17.10
LS87-87-02-B		60.90	0.17	16.80	5.02	0.06	1.73	3.05	4.23	1.22	0.02	4.10
LS87-88-01-B		38.90	0.96	12.50	14.30	0.26	5.95	8.05	2.43	0.22	0.16	17.10
LS87-89-03-B		49.80	1.48	14.90	13.20	0.27	3.53	6.07	3.04	0.27	0.10	6.45
LS87-90-01-B		48.70	0.87	14.80	11.50	0.18	4.39	9.61	2.08	0.04	<0.01	8.35
LS87-91-05-B		63.20	0.34	15.80	4.09	0.09	2.20	3.06	4.88	1.14	0.13	3.30
LS87-92-01-B		62.90	0.40	16.60	4.47	0.05	2.09	3.78	4.89	1.26	<0.01	2.45
DUPLICATE		64.30	0.41	16.40	4.44	0.05	2.21	3.80	4.95	1.28	0.16	2.40
LS87-93-05-B		58.20	0.04	15.90	4.46	0.05	2.16	4.93	4.28	2.16	<0.01	6.70
LS87-94-03-B		57.60	0.73	17.30	7.33	0.10	3.73	4.84	5.21	0.43	<0.01	3.85
LS87-95-03-B		42.40	1.29	11.50	14.90	0.26	2.55	13.40	2.20	0.01	<0.01	12.20
LS87-96-02-B		53.60	0.59	18.10	6.62	0.12	2.31	6.14	3.74	2.04	0.56	5.85
LS87-97-02-B		46.20	1.60	16.40	15.40	0.21	5.77	9.18	2.80	0.08	<0.01	3.45
LS87-98-05-B		47.10	0.17	12.80	12.20	0.17	6.43	9.10	1.58	0.22	0.01	10.25
LS87-99-05-B		55.00	0.78	15.90	10.60	0.14	5.60	3.17	3.30	0.58	<0.01	4.15

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Geochemical Lab Report

REPORT: 017-4667

PROJECT: LAC SHORT PAGE 2B

SAMPLE NUMBER	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
LS87-85-03-B		97.87	103	91	9	10
LS87-86-12-B		97.94	15	65	18	<5
LS87-87-02-B		97.30	173	72	3	<5
LS87-88-01-B		100.83	72	97	2	<5
LS87-89-03-B		99.10	80	93	7	10
LS87-90-01-B		100.52	96	46	<2	<5
LS87-91-05-B		98.23	50	96	<2	<5
LS87-92-01-B		98.89	7	41	<2	<5
DUPLICATE			5	43	2	
LS87-93-05-B		98.88	21	22	2	10
LS87-94-03-B		101.13	37	52	<2	<5
LS87-95-03-B		100.71	59	134	10	80
LS87-96-02-B		99.67	9	89	<2	<5
LS87-97-02-B		101.10	145	81	3	<5
LS87-98-05-B		100.04	112	77	<2	<5
LS87-99-05-B		99.22	97	69	2	<5

REPORT: 017-4667

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
BCC SOIL PULP STD 86												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												
CANMET SO-1 REF STD		53.60	0.84	16.50	8.36	0.12	3.60	2.14	2.64	2.90	0.16	
		52.00	1.28	14.20	8.40	0.09	0.83	2.44	2.44	3.01	0.76	
Number of Analyses		2	2	2	2	2	2	2	2	2	2	0
Mean Value		52.800	1.058	15.350	8.380	0.105	2.214	2.290	2.540	2.955	0.460	
Standard Deviation		1.1315	0.3140	1.6263	0.0279	0.0148	1.9601	0.2121	0.1414	0.0778	0.4299	
Lowest Value		52.00	0.84	14.20	8.36	0.09	0.83	2.14	2.44	2.90	0.16	
Highest Value		53.60	1.28	16.50	8.40	0.12	3.60	2.44	2.64	3.01	0.76	
BCC CHEMICAL BLANK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Number of Analyses		2	2	2	2	2	2	2	2	2	2	0
Mean Value		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
Standard Deviation		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Lowest Value		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Highest Value		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	

REPORT: 017-4667

PROJECT: LAC SHORT PAGE 3B

STANDARD NAME	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
BCC SOIL PULP STD 86			26	81	5	
			27	80	4	
Number of Analyses		0	2	2	2	0
Mean Value			26.5	80.5	4.5	
Standard Deviation			0.71	0.71	0.71	
Lowest Value			26	80	4	
Highest Value			27	81	5	
CANMET SO-1 REF STD		90.85				
		85.46				
Number of Analyses		2	0	0	0	0
Mean Value		88.152				
Standard Deviation		3.8120				
Lowest Value		85.46				
Highest Value		90.85				
BCC CHEMICAL BLANK			<1	<1	<2	<5
			<1	<1	<2	<5
						<5
Number of Analyses		0	2	2	2	3
Mean Value			0.5	0.5	1.0	2.5
Standard Deviation			0.00	0.00	0.00	0.00
Lowest Value			1	1	2	5
Highest Value			1	1	2	5

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Geochemical Lab Report

REPORT: 017-4667

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
BCC 10 PPB AU STD												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												
BCC ROCK PULP STD 86												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												
CANMET SO-3 REF STD		34.40	0.23	6.12	2.61	0.07	8.70	20.10	1.19	1.64	<0.01	
		64.80	0.55	10.50	3.59	0.08	0.87	1.43	1.29	2.13	0.11	
Number of Analyses		2	2	2	2	2	2	2	2	2	2	0
Mean Value		49.600	0.391	8.310	3.100	0.075	4.785	10.765	1.240	1.885	0.058	
Standard Deviation		21.4961	0.2256	3.0971	0.6930	0.0025	5.5366	13.2017	0.0707	0.3465	0.0742	
Lowest Value		34.40	0.23	6.12	2.61	0.07	0.87	1.43	1.19	1.64	0.01	
Highest Value		64.80	0.55	10.50	3.59	0.08	8.70	20.10	1.29	2.13	0.11	

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REPORT: 017-4667

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
BCC 10 PPB AU STD						130
						120
						125
Number of Analyses		0	0	0	0	3
Mean Value						125.0
Standard Deviation						5.00
Lowest Value						120
Highest Value						130
BCC ROCK PULP STD 86			269	1305		
			255	1330		
Number of Analyses		0	2	2	0	0
Mean Value			262.0	1317.5		
Standard Deviation			9.90	17.68		
Lowest Value			255	1305		
Highest Value			269	1330		
CANMET SO-3 REF STD		75.06				
		85.35				
Number of Analyses		2	0	0	0	0
Mean Value		80.206				
Standard Deviation		7.2708				
Lowest Value		75.06				
Highest Value		85.35				

REPORT: 017-4667

PROJECT: LAC SHORT PAGE 5A

STANDARD NAME	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
BCC AS STD 1986												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												

REPORT: 017-4667

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
BCC AS STD 1986					81	
					85	
Number of Analyses		0	0	0	2	0
Mean Value					83.0	
Standard Deviation					2.83	
Lowest Value					81	
Highest Value					85	

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Geochemical Lab Report

REPORT: 117-4667

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au-150 PPM	Au+150 PPM	Au Av PPM	-150Wt gms	+150Wt gms
1367-95-03 R		0.04	0.05	0.05	2.75	17.77

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REPORT: 417-6407

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	+150WT gms	Au-150 OPT	Au+150 OPT	Au Ave OPT	-150WT gms
LS87-26-09B		2.71	0.001	<0.001	<0.001	34.06
LS87-32-11B		1.96	0.001	<0.001	<0.001	71.26
LS87-53-04B		8.56	0.008	<0.001	0.008	241.86
LS87-56-03B		2.80	0.002	<0.001	0.002	216.18
LS87-95-03B		7.69	<0.001	<0.001	<0.001	208.94

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Geochemical Lab Report

2nd Subsample of LS-87-67-04

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Certificate of Analysis

REPORT: 417-6358

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	+150WT gms	AU-150 OPT	AU+150 OPT	AU AV OPT	-150WT gms
LS-CC-8 DUPLICATE		10.40	0.001	0.001	<0.001	232.92

3rd subsample of 67-04

Chief Chemist

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Geochemical Lab Report

REPORT: 017-4509 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORT

SUBMITTED BY: ODM
DATE PRINTED: 19-OCT-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Si02	Silica (Si02)	48	0.01 PCT	Borate Fusion	DC Plasma
2	Ti02	Titanium (Ti02)	48	0.01 PCT	Borate Fusion	DC Plasma
3	Al203	Alumina (Al203)	48	0.01 PCT	Borate Fusion	DC Plasma
4	Fe203*	Total Iron (Fe203*)	48	0.01 PCT	Borate Fusion	DC Plasma
5	Mn0	Manganese (Mn0)	48	0.01 PCT	Borate Fusion	DC Plasma
6	Mg0	Magnesium (Mg0)	48	0.01 PCT	Borate Fusion	DC Plasma
7	Ca0	Calcium (Ca0)	48	0.01 PCT	Borate Fusion	DC Plasma
8	Na20	Sodium (Na20)	48	0.01 PCT	Borate Fusion	DC Plasma
9	K20	Potassium (K20)	48	0.01 PCT	Borate Fusion	DC Plasma
10	P205	Phosphorous (P205)	48	0.01 PCT	Borate Fusion	DC Plasma
11	LOI	Loss on Ignition	48	0.01 PCT		Gravimetric
12	Total	Whole Rock Total	48	0.01 PCT		
13	Cu	Copper	48	1 PPM	HCl-HN03, (1:3)	Atomic Absorption
14	Zn	Zinc	48	1 PPM	HCl-HN03, (1:3)	Atomic Absorption
15	As	Arsenic	48	2 PPM	HN03-HCl04	Colourimetric
16	Au	Gold	48	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BEDROCK	48	-200	48	PULVERIZE -200	48

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REPORT: 017-4509

PROJECT: LAC SHORT PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Si02 PCT	Ti02 PCT	Al203 PCT	Fe203* PCT	Mn0 PCT	Mg0 PCT	Ca0 PCT	Na20 PCT	K20 PCT	P205 PCT	LOI PCT
LS-87-01-05B		58.00	0.71	16.00	6.99	0.11	4.05	5.65	3.52	1.82	0.39	2.00
DUPLICATE		57.40	0.79	15.90	7.03	0.12	4.00	5.74	3.50	2.01	0.41	2.00
LS-87-02-05B		48.40	0.07	12.70	7.20	0.14	3.93	12.60	0.26	2.22	0.18	12.35
LS-87-03-06B		62.90	0.24	16.50	4.66	0.07	1.90	4.42	4.15	2.22	0.11	3.45
LS-87-04-07B		48.30	1.96	13.80	14.80	0.26	4.42	8.05	2.65	0.42	0.41	3.85
LS-87-05-01B		47.30	2.23	12.90	17.90	0.22	3.70	6.74	3.59	1.01	0.44	3.00
LS-87-06-13B		61.80	0.52	15.40	5.41	0.08	2.85	3.72	4.14	1.46	0.18	1.80
LS-87-07-01B		50.00	1.36	15.30	14.10	0.19	4.94	7.95	2.34	0.24	0.12	2.55
LS-87-08-02B		46.90	1.52	10.90	15.10	0.22	4.31	7.93	2.18	0.15	0.19	8.10
LS-87-09-11B		68.30	0.47	16.00	2.97	0.04	1.56	1.20	4.79	2.33	0.12	1.80
LS-87-10-13B		51.60	0.56	12.80	5.65	0.09	7.53	8.58	2.44	1.24	0.39	8.50
DUPLICATE		52.30	0.50	12.70	5.44	0.08	7.28	8.68	2.50	1.19	0.37	8.55
LS-87-11-11B		49.10	1.90	14.20	17.50	0.23	4.86	7.77	3.01	0.53	0.25	2.05
LS-87-12-02B		47.00	1.93	14.00	17.50	0.28	5.31	7.96	2.22	0.54	0.22	2.35
LS-87-13-08B		62.60	0.56	16.20	5.45	0.07	2.60	3.61	4.58	1.62	0.08	2.35
LS-87-14-07B		62.40	0.50	16.30	4.74	0.11	2.29	3.57	5.19	1.20	0.19	1.40
LS-87-15-03B		61.00	0.55	16.30	5.83	0.08	3.28	5.61	4.37	1.49	0.06	1.45
LS-87-16-03B		60.30	0.53	16.10	5.52	0.08	2.64	5.74	5.02	1.40	0.08	3.55
LS-87-17-02B		48.50	1.47	15.30	14.90	0.20	4.80	8.46	3.29	0.61	0.22	1.60
LS-87-18-05B		49.70	2.35	13.00	21.60	0.29	2.13	4.01	3.48	0.27	1.04	1.85
DUPLICATE		50.20	2.21	12.80	21.00	0.27	1.97	3.95	3.45	0.25	1.11	1.95
LS-87-19-06B		52.60	1.50	15.00	12.90	0.16	3.88	6.98	3.16	0.84	0.17	1.55
LS-87-20-02B		63.00	0.61	15.30	4.75	0.05	2.06	3.55	4.15	1.79	0.25	2.10
LS-87-21-06B		61.80	0.59	15.40	4.99	0.07	2.31	3.46	4.86	1.26	0.24	2.90
LS-87-22-08B		62.90	0.67	15.80	5.91	0.10	2.52	2.86	4.20	1.09	0.36	1.65
LS-87-23-03B		45.80	1.93	14.60	17.10	0.23	4.10	10.60	1.29	0.20	0.30	3.90
LS-87-24-07B		45.60	0.44	11.50	16.90	0.26	3.60	8.45	2.08	0.54	0.39	9.85
LS-87-25-03B		53.80	0.70	16.00	6.14	0.02	3.03	6.71	2.33	1.74	0.37	6.25
LS-87-26-09B		55.00	0.13	12.50	8.83	0.02	0.82	12.40	0.49	1.38	0.18	8.10
LS-87-27-03B		41.50	0.80	12.60	9.78	0.14	8.92	8.69	1.85	1.91	1.34	10.15
LS-87-28-05B		55.20	0.72	15.70	7.83	0.11	4.64	6.60	3.70	1.66	0.61	1.65
LS-87-29-08B		58.10	0.69	15.80	7.39	0.10	4.22	3.93	3.99	1.03	0.35	2.35
LS-87-30-03B		61.10	0.12	13.00	4.47	0.08	2.84	6.00	3.42	1.84	0.18	5.10
LS-87-31-04B		58.00	0.39	16.00	5.15	0.02	2.25	5.39	2.10	2.26	0.19	5.70
LS-87-32-11B		58.70	0.55	15.90	5.72	0.08	3.44	4.33	4.77	1.63	0.19	4.30
LS-87-33-02B		61.90	0.44	16.80	4.64	0.01	1.95	5.00	2.24	2.52	0.14	2.35
LS-87-34-03B		58.30	0.54	15.50	5.88	0.09	3.61	5.00	4.75	0.85	0.32	2.65
LS-87-35-02B		46.60	0.94	15.20	12.70	0.16	6.60	9.89	2.16	0.46	0.12	2.35
DUPLICATE		47.00	0.86	15.00	12.50	0.17	6.54	9.83	1.94	0.42	0.18	2.55
LS-87-36-04B		49.00	0.98	15.90	13.00	0.20	6.89	10.20	2.28	0.50	0.31	1.60

REPORT: 017-4509

PROJECT: LAC SHORT

SAMPLE NUMBER	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
LS-87-01-05B		99.24	50	51	15	<5
DUPLICATE			47	54	16	
LS-87-02-05B		100.05	47	76	<2	<5
LS-87-03-06B		100.62	27	46	2	<5
LS-87-04-07B		98.93	91	109	5	<5
LS-87-05-01B		99.03	65	93	<2	<5
LS-87-06-13B		97.36	31	42	2	<5
LS-87-07-01B		99.09	87	81	13	<5
LS-87-08-02B		97.50	76	115	<2	<5
LS-87-09-11B		99.58	26	39	<2	<5
LS-87-10-13B		99.38	47	59	2	<5
DUPLICATE			48	57	2	
LS-87-11-11B		101.41	90	81	2	<5
LS-87-12-02B		99.30	83	380	3	<5
LS-87-13-08B		99.71	36	52	2	<5
LS-87-14-07B		97.90	40	124	2	<5
LS-87-15-03B		100.02	40	45	2	<5
LS-87-16-03B		100.96	20	59	<2	<5
LS-87-17-02B		99.35	27	50	<2	<5
LS-87-18-05B		99.71	6	100	2	<5
DUPLICATE			6	96	2	
LS-87-19-06B		98.74	68	63	2	<5
LS-87-20-02B		97.60	41	67	2	<5
LS-87-21-06B		97.89	34	92	3	<5
LS-87-22-08B		98.07	28	68	<2	<5
LS-87-23-03B		100.05	80	108	2	<5
LS-87-24-07B		99.61	150	145	<2	<5
LS-87-25-03B		97.09	38	67	<2	<5
LS-87-26-09B		99.85	69	65	21	25
LS-87-27-03B		97.69	28	115	6	5
LS-87-28-05B		98.41	53	54	2	<5
LS-87-29-08B		97.94	36	73	2	<5
LS-87-30-03B		98.15	24	54	<2	<5
LS-87-31-04B		97.44	45	128	<2	<5
LS-87-32-11B		99.60	27	61	2	15
LS-87-33-02B		98.00	33	54	<2	<5
LS-87-34-03B		97.49	74	60	2	<5
LS-87-35-02B		97.18	30	51	2	<5
DUPLICATE			28	54	2	
LS-87-36-04B		100.85	92	36	4	<5

REPORT: 017-4509

PROJECT: LAC SHORT PAGE 2A

SAMPLE NUMBER	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
LS-87-37-09B		62.00	0.18	15.30	5.41	0.01	1.59	4.64	2.62	1.46	0.18	4.40
LS-87-38-25B		63.20	0.12	16.80	5.46	0.04	2.61	1.98	5.09	1.01	0.50	1.75
LS-87-39-07B		63.40	0.12	16.10	6.58	0.02	1.69	4.53	2.41	1.42	0.13	4.35
LS-87-40-02B		68.60	0.19	14.50	4.00	0.01	1.54	2.22	3.07	0.84	0.12	2.15
LS-87-41-02B		54.20	1.80	14.10	15.80	0.03	3.19	4.87	0.47	0.06	0.17	3.60
LS-87-42-17B		59.90	0.11	13.10	1.49	0.09	0.53	9.81	3.52	1.34	0.19	8.30
LS-87-43-02B		60.80	0.58	17.00	6.84	0.03	3.06	1.79	2.59	1.26	0.23	3.25
LS-87-44-04B		45.60	2.65	17.50	14.00	0.18	4.47	7.63	3.30	1.67	0.33	1.90
DUPLICATE		46.20	2.53	17.40	13.80	0.18	4.24	7.48	3.21	1.61	0.26	2.00
LS-87-45-03B		52.40	0.88	17.80	8.52	0.13	4.76	3.65	4.73	1.61	0.83	2.55
LS-87-46-07B		50.60	0.04	14.00	4.47	0.11	2.62	12.90	1.37	1.54	0.30	12.45
LS-87-47-20B		61.30	0.21	15.30	5.98	0.02	2.09	5.29	1.51	1.53	0.08	6.20
LS-87-48-02B		48.80	0.13	13.70	19.00	0.18	4.15	3.94	3.17	0.26	0.06	4.85

REPORT: 017-4509

PROJECT: LAC SHORT PAGE 2B

SAMPLE NUMBER	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
LS-87-37-09B		97.79	57	39	2	<5
LS-87-38-25B		98.56	15	51	<2	<5
LS-87-39-07B		100.75	33	53	<2	<5
LS-87-40-02B		97.24	15	34	<2	<5
LS-87-41-02B		98.29	126	114	4	<5
LS-87-42-17B		98.38	38	16	2	<5
LS-87-43-02B		97.43	36	52	2	<5
LS-87-44-04B		99.23	42	44	2	<5
DUPLICATE			43	45	<2	
LS-87-45-03B		97.86	23	89	2	10
LS-87-46-07B		100.40	21	51	2	<5
LS-87-47-20B		99.51	29	55	2	<5
LS-87-48-02B		98.24	74	105	<2	<5

REPORT: 017-4509

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
BCC SOIL PULP STD 86												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												
CANMET SO-1 REF STD		51.40	0.92	16.60	8.44	0.12	3.83	2.39	2.84	3.12	0.13	
		52.30	1.41	15.20	8.06	0.11	0.88	2.48	2.46	3.06	0.77	
Number of Analyses		2	2	2	2	2	2	2	2	2	2	0
Mean Value		51.850	1.165	15.900	8.250	0.115	2.355	2.435	2.650	3.090	0.450	
Standard Deviation		0.6362	0.3465	0.9899	0.2687	0.0071	2.0860	0.0636	0.2687	0.0424	0.4525	
Lowest Value		51.40	0.92	15.20	8.06	0.11	0.88	2.39	2.46	3.06	0.13	
Highest Value		52.30	1.41	16.60	8.44	0.12	3.83	2.48	2.84	3.12	0.77	
BCC CHEMICAL BLANK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Number of Analyses		2	2	2	2	2	2	2	2	2	2	0
Mean Value		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
Standard Deviation		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Lowest Value		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Highest Value		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	

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REPORT: 017-4509

PROJECT: LAC SHORT PAGE 3B

STANDARD NAME	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
BCC SOIL PULP STD 86			27	85	5	
			26	81	5	
Number of Analyses		0	2	2	2	0
Mean Value			26.5	83.0	5.0	
Standard Deviation			0.71	2.83	0.00	
Lowest Value			26	81	5	
Highest Value			27	85	5	
CANMET SO-1 REF STD		89.79				
		86.73				
Number of Analyses		2	0	0	0	0
Mean Value		88.260				
Standard Deviation		2.1637				
Lowest Value		86.73				
Highest Value		89.79				
BCC CHEMICAL BLANK			<1	<1	<2	<5
			<1	<1	<2	<5
						<5
Number of Analyses		0	2	2	2	3
Mean Value			0.5	0.5	1.0	2.5
Standard Deviation			0.00	0.00	0.00	0.00
Lowest Value			1	1	2	5
Highest Value			1	1	2	5

REPORT: 017-4509

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	Si02 PCT	Ti02 PCT	Al203 PCT	Fe203* PCT	MnO PCT	MgO PCT	CaO PCT	Na20 PCT	K20 PCT	P205 PCT	LOI PCT
BCC 10 PPB AU STD												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												
BCC ROCK PULP STD 86												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												
CANMET SO-3 REF STD		33.10	0.23	6.13	2.18	0.07	7.88	20.20	0.95	1.49	0.20	
		63.60	0.38	11.00	3.46	0.08	0.90	1.45	1.31	2.13	0.24	
Number of Analyses		2	2	2	2	2	2	2	2	2	2	0
Mean Value		48.350	0.305	8.565	2.820	0.073	4.390	10.825	1.132	1.810	0.220	
Standard Deviation		21.5668	0.1068	3.4436	0.9051	0.0095	4.9356	13.2583	0.2510	0.4525	0.0283	
Lowest Value		33.10	0.23	6.13	2.18	0.07	0.90	1.45	0.95	1.49	0.20	
Highest Value		63.60	0.38	11.00	3.46	0.08	7.88	20.20	1.31	2.13	0.24	

REPORT: 017-4509

PROJECT: LAC SHORT PAGE 4B

STANDARD NAME	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
BCC 10 PPB AU STD						<5
						120
						100
Number of Analyses		0	0	0	0	3
Mean Value						74.2
Standard Deviation						62.87
Lowest Value						5
Highest Value						120
BCC ROCK PULP STD 86			270	1285		
			245	1240		
Number of Analyses		0	2	2	0	0
Mean Value			257.5	1262.5		
Standard Deviation			17.68	31.82		
Lowest Value			245	1240		
Highest Value			270	1285		
CANMET SO-3 REF STD		72.43				
		84.55				
Number of Analyses		2	0	0	0	0
Mean Value		78.490				
Standard Deviation		8.5698				
Lowest Value		72.43				
Highest Value		84.55				

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REPORT: 017-4509

PROJECT: LAC SHORT PAGE 5A

STANDARD NAME	ELEMENT UNITS	SiO_2 PCT	TiO_2 PCT	Al_2O_3 PCT	Fe_2O_3* PCT	MnO PCT	MgO PCT	CaO PCT	Na_2O PCT	K_2O PCT	P_2O_5 PCT	LOI PCT
BCC AS STD 1986												
Number of Analyses		0	0	0	0	0	0	0	0	0	0	0
Mean Value												
Standard Deviation												
Lowest Value												
Highest Value												

REPORT: 017-4509

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	Total PCT	Cu PPM	Zn PPM	As PPM	Au PPB
BCC AS STD 1986					82	
					91	
Number of Analyses		0	0	0	2	0
Mean Value					86.5	
Standard Deviation					6.36	
Lowest Value					82	
Highest Value					91	

APPENDIX 5

HEAVY MINERAL CONCENTRATES ANALYSIS

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Geochemical Lab Report

OCT 29 1987
Par.........................

REPORT: 017-5295 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 26-OCT-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	79	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	79	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	79	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	79	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	24	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	79	-200	79	CRUSH,PULVERIZE -200	79

REMARKS: < MEANS LESS THAN

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Geochemical Lab Report

REPORT: 017-5295

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-01-01-3/4		70	18	<2	<10	9.00
DUPLICATE		67	20	<2		
DUPLICATE						
LS87-01-02-3/4		114	21	22	50	9.00
LS87-01-03-3/4		83	27	57	20	9.00
LS87-01-04-3/4		73	23	27	15	9.00
LS87-02-01-3/4		62	18	9	335	9.00
LS87-02-02-3/4		102	26	32	80	9.00
LS87-02-03-3/4		83	25	17	30	9.00
LS87-02-04-3/4		126	46	24	235	9.00
LS87-03-01-3/4		116	30	28	230	9.00
LS87-03-02-3/4		123	31	30	1135	9.00
DUPLICATE		128	32	38		
DUPLICATE						
LS87-03-03-3/4		132	31	47	300	9.00
LS87-03-04-3/4		120	24	31	10	9.00
LS87-03-05-3/4		60	26	21	260	9.00
LS87-04-01-3/4		162	25	64	45	9.00
LS87-04-02-3/4		120	36	23	20	9.00
LS87-04-03-3/4		137	38	54	105	9.00
LS87-04-04-3/4		143	30	56	10	9.00
LS87-04-05-3/4		333	40	70	30	9.00
DUPLICATE		336	43	72		
DUPLICATE						
LS87-04-06-3/4		397	43	106	30	9.00
LS87-06-01-3/4		22	16	<2	45	9.00
LS87-06-02-3/4		123	30	30	15	9.00
LS87-06-03-3/4		73	21	10	35	9.00
LS87-06-04-3/4		207	34	25	10	
LS87-06-05-3/4		124	36	33	5	
LS87-06-07-3/4		219	45	35	150	
LS87-06-08-3/4		138	36	42	135	
LS87-06-09-3/4		129	44	26	10	
LS87-06-10-3/4		121	34	23	35	
LS87-06-11-3/4		116	35	30	25	
LS87-06-12-3/4		113	42	50	1080	
LS87-08-01-3/4		77	19	5	50	
LS87-09-01-3/4		28	18	2	50	
LS87-09-02-3/4		67	24	11	5	
LS87-09-03-3/4		73	23	15	80	

REPORT: 017-5295

PROJECT: LAC SHORTT

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-09-04-3/4		87	22	20	210	
DUPLICATE		92	25	15		
DUPLICATE						
LS87-09-05-3/4		116	23	23	20	
LS87-09-06-3/4		114	26	12	25	
LS87-09-07-3/4		110	29	20	55	
LS87-09-08-3/4		154	44	47	85	
LS87-09-09-3/4		132	40	40	730	
LS87-09-10-3/4		75	39	15	40	7.00
LS87-10-01-3/4		66	24	<2	50	
LS87-10-02-3/4		101	26	19	30	
LS87-10-03-3/4		118	23	16	105	
DUPLICATE		146	26	9		
DUPLICATE						
LS87-10-04-3/4		56	28	27	435	
LS87-10-05-3/4		71	26	25	20	
LS87-10-06-3/4		78	35	21	185	
LS87-10-07-3/4		108	29	13	10	
LS87-10-08-3/4		89	28	19	130	
LS87-10-09-3/4		99	31	15	50	
LS87-10-10-3/4		66	38	11	150	
LS87-10-11-3/4		46	20	4	115	
DUPLICATE		72	21	5		
DUPLICATE						
LS87-10-12-3/4		85	19	<2	5	
LS87-11-01-3/4		72	24	33	670	
LS87-11-02-3/4		60	34	23	165	
LS87-11-03-3/4		72	21	30	30	
LS87-11-04-3/4		128	25	32	45	
LS87-11-05-3/4		84	25	28	270	
LS87-11-06-3/4		121	26	33	10	
LS87-11-07-3/4		167	31	20	15	
LS87-11-08-3/4		95	31	43	40	
LS87-11-09-3/4		68	28	11	165	
LS87-11-10-3/4		158	25	37	140	
LS87-12-01-3/4		111	177	30	55	
LS87-13-01-3/4		116	62	38	30	
LS87-13-02-3/4		168	32	17	280	6.00
LS87-13-03-3/4		180	24	22	80	
LS87-13-04-3/4		132	36	28	180	

REPORT: 017-5295

PROJECT: LAC SHORTT PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-13-05-3/4		133	29	16	75	
DUPLICATE		137	30	17		
DUPLICATE						
LS87-13-06-3/4		126	30	26	110	
LS87-13-07-3/4		136	40	42	75	
LS87-14-01-3/4		129	34	25	105	
LS87-14-02-3/4		118	22	28	310	
LS87-14-03-3/4		118	25	12	290	
LS87-14-04-3/4		103	28	12	35	
LS87-14-05-3/4		119	30	45	20	
LS87-14-06-3/4		87	23	5	5	
LS87-15-01-3/4		75	22	38	465	
DUPLICATE		78	23	39		
DUPLICATE						
LS87-15-02-3/4		78	34	12	5	

REPORT: 017-5295

PROJECT: LAC SHORTT PAGE 4

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		26	79	5		
		28	84	4		
		24	75	3		
Number of Analyses		3	3	3	0	0
Mean Value		26.0	79.3	4.0		
Standard Deviation		2.00	4.51	1.00		
Lowest Value		24	75	3		
Highest Value		28	84	5		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
		<1	<1	<2	<5	
					<5	
Number of Analyses		3	3	3	4	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	

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REPORT: 017-5295

PROJECT: LAC SHORTT PAGE 5

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC 10 PPB AU STD					50	
					110	
					90	
					105	
Number of Analyses		0	0	0	4	0
Mean Value					88.8	
Standard Deviation					27.20	
Lowest Value					50	
Highest Value					110	
BCC ROCK PULP STD 86		284	1430			
		301	1440			
		285	1410			
Number of Analyses		3	3	0	0	0
Mean Value		290.0	1426.7			
Standard Deviation		9.54	15.28			
Lowest Value		284	1410			
Highest Value		301	1440			
BCC AS STD 1986				109		
				121		
				113		
Number of Analyses		0	0	3	0	0
Mean Value				114.3		
Standard Deviation				6.11		
Lowest Value				109		
Highest Value				121		

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REPORT: 017-5296 (COMPLETE)
REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHURTT
SUBMITTED BY: ODM
DATE PRINTED: 26-OCT-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	1	2 PPM	HNO3-HClO4	Colourimetric
4	Au-150	Gold -150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150	Gold +150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au Av	Gold Weight Average	1	0.01 PPM	AQUA REGIA	Fire Assay AA
7	TestWt	Au Test Weight -150	1	0.01 gms		
8	-150Wt	Weight -150 Obtained	1	0.01 gms		
9	+150Wt	Weight +150 Obtained	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	1	+150/-150	1	METALLICS +150/-150	1

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Geochemical Lab Report

REPORT: 017-5296

PROJECT: LAC SHORTT

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
LS87-06-06-3/4		150	44	58	0.06	54.26	3.86	20.00	25.23	1.90
DUPLICATE		153	47	61						

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Geochemical Lab Report

RECU
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REPORT: 017-5515 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 26-OCT-87

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	38	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	38	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	38	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	38	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	4	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	38	-200	38	PULVERIZE -200	38

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Geochemical Lab Report

REPORT: 017-5515

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-16-01-3/4		126	31	47	10	
DUPLICATE		123	32	41		
DUPLICATE						
LS87-16-02-3/4		92	29	39	115	
LS87-17-01-3/4		39	21	2	265	
LS87-18-01-3/4		31	21	<2	135	
LS87-18-02-3/4		20	17	2	30	
LS87-18-03-3/4		18	18	<2	<10	7.00
LS87-18-04-3/4		34	24	9	185	
LS87-19-01-3/4		13	12	<2	40	
LS87-19-02-3/4		142	374	6	15	
LS87-19-03-3/4		25	16	<2	135	
DUPLICATE		22	18	2		
DUPLICATE						
LS87-19-04-3/4		35	20	<2	110	
LS87-19-05-3/4		144	23	8	25	
LS87-20-01-3/4		32	18	<2	10	
LS87-20-02-3/4		34	18	<2	125	
LS87-20-03-3/4		25	19	<2	<5	
LS87-20-04-3/4		24	18	<2	130	
LS87-20-05-3/4		22	14	<2	45	
LS87-20-06-3/4		33	20	<2	20	
DUPLICATE		32	20	<2		
DUPLICATE						
LS87-21-01-3/4		57	18	<2	430	
LS87-21-02-3/4		33	13	<2	<5	
LS87-21-03-3/4		24	13	<2	<10	6.00
LS87-21-04-3/4		33	18	3	870	8.00
LS87-21-05-3/4		56	16	15	700	
LS87-22-01-3/4		27	13	5	1530	
LS87-22-02-3/4		26	13	3	20	
LS87-22-03-3/4		20	12	<2	20	
LS87-22-05-3/4		41	18	2	280	
LS87-22-07-3/4		80	24	9	25	4.00
LS87-23-01-3/4		109	26	37	10	
LS87-23-02-3/4		107	54	44	230	
LS87-24-01-3/4		67	17	2	<5	
LS87-24-02-3/4		56	14	<2	220	
LS87-24-03-3/4		32	14	2	95	
LS87-24-04-3/4		37	15	7	130	

REPORT: 017-5515

PROJECT: LAC SHORTT

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-24-05-3/4		36	16	3	645	
DUPLICATE		38	16	2		
DUPLICATE						
LS87-24-06-3/4		71	13	4	20	
LS87-25-01-3/4		64	15	2	210	
LS87-25-02-3/4		83	13	3	165	

REPORT: 017-5515

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		23	79	6		
		24	82	5		
Number of Analyses		2	2	2	0	0
Mean Value		23.5	80.5	5.5		
Standard Deviation		0.71	2.12	0.71		
Lowest Value		23	79	5		
Highest Value		24	82	6		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					100	
					100	

REPORT: 017-5515

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
Number of Analyses		0	0	0	2	0
Mean Value					100.0	
Standard Deviation					0.00	
Lowest Value					100	
Highest Value					100	
BCC ROCK PULP STD 86		260	1392			
		270	1490			
Number of Analyses		2	2	0	0	0
Mean Value		265.0	1441.0			
Standard Deviation		7.07	69.30			
Lowest Value		260	1392			
Highest Value		270	1490			
BCC AS STD 1986				117		
				120		
Number of Analyses		0	0	2	0	0
Mean Value				118.5		
Standard Deviation				2.12		
Lowest Value				117		
Highest Value				120		

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REPORT: 017-5516

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
LS87-22-04-3/4		28	13	<2	0.43	329.87	26.13	14.00	18.08	1.53
DUPLICATE		30	14	<2						
LS87-22-06-3/4		100	18	8	0.78	33.28	2.34	10.00	12.70	0.64

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Geochemical Lab Report

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REPORT: 017-5767 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: IODM
DATE PRINTED: 3-NOV-87

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	40	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	40	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	40	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	40	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	5	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	40	-200	40	PULVERIZE -200	40

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REPORT: 017-5767

PROJECT: LAC SHORTT

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS-87-26-01-3/4		35	15	<2	190	
DUPLICATE		35	17	<2		
DUPLICATE						
LS-87-26-02-3/4		32	18	2	5	
LS-87-26-03-3/4		68	23	25	1570	7.00
LS-87-26-04-3/4		100	24	14	10	
LS-87-26-05-3/4		127	55	36	75	
LS-87-26-06-3/4		68	54	11	10	
LS-87-26-07-3/4		109	31	23	220	
LS-87-26-08-3/4		213	34	53	80	
LS-87-27-01-3/4		34	21	2	95	
LS-87-27-02-3/4		24	17	<2	20	
DUPLICATE		23	18	<2		
DUPLICATE						
LS-87-28-01-3/4		27	18	<2	140	
LS-87-28-02-3/4		35	16	<2	40	
LS-87-28-03-3/4		89	34	15	585	
LS-87-28-04-3/4		136	25	17	55	5.00
LS-87-29-01-3/4		155	53	54	25	
LS-87-29-02-3/4		120	33	36	60	
LS-87-29-03-3/4		86	29	36	40	
LS-87-29-04-3/4		130	32	23	10	
DUPLICATE		133	29	24		
DUPLICATE						
LS-87-29-05-3/4		76	28	23	1460	4.00
LS-87-29-06-3/4		109	35	34	15	9.00
LS-87-29-07-3/4		94	31	31	310	5.00
LS-87-30-01-3/4		35	15	<2	180	
LS-87-30-02-3/4		70	23	2	<5	
LS-87-31-01-3/4		61	56	11	<5	
LS-87-31-02-3/4		118	31	33	165	
LS-87-31-03-3/4		148	40	34	750	
LS-87-32-01-3/4		165	142	35	130	
LS-87-32-02-3/4		44	20	4	130	
LS-87-32-03-3/4		138	33	15	90	
LS-87-32-04-3/4		53	24	4	5	
LS-87-32-05-3/4		157	49	35	55	
LS-87-32-06-3/4		166	47	33	135	
LS-87-32-07-3/4		157	46	55	35	
LS-87-32-08-3/4		192	57	59	215	

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Geochemical Lab Report

REPORT: 017-5767

PROJECT: LAC SHORTT PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS-87-32-09-3/4		172	71	48	130	
DUPLICATE		166	72	53		
DUPLICATE						
LS-87-32-10-3/4		438	55	53	190	
LS-87-33-01-3/4		41	16	10	380	
LS-87-34-01-3/4		188	45	58	10080	
LS-87-34-02-3/4		124	26	20	80	
LS-87-35-01-3/4		322	16	6	185	

REPORT: 017-5767

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		31	94	3		
		25	77	7		
Number of Analyses		2	2	2	0	0
Mean Value		28.0	85.5	5.0		
Standard Deviation		4.24	12.02	2.83		
Lowest Value		25	77	3		
Highest Value		31	94	7		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					100	
					110	

REPORT: 017-5767

PROJECT: LAC SHORTT PAGE 4

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
Number of Analyses		0	0	0	2	0
Mean Value					105.0	
Standard Deviation					7.07	
Lowest Value					100	
Highest Value					110	
BCC ROCK PULP STD 86		301	1550			
		262	1380			
Number of Analyses		2	2	0	0	0
Mean Value		281.5	1465.0			
Standard Deviation		27.58	120.21			
Lowest Value		262	1380			
Highest Value		301	1550			
1987 ARSENIC STD				99		
				104		
Number of Analyses		0	0	2	0	0
Mean Value				101.5		
Standard Deviation				3.54		
Lowest Value				99		
Highest Value				104		

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Geochemical Lab Report

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REPORT: 017-5848 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 6-NOV-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As Arsenic	39	2 PPM	HNO3-HClO4	Colourimetric
4	Au Gold	39	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt Fire Assay Test Wt.	4	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	39	-200	39	PULVERIZE -200	39

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Geochemical Lab Report

REPORT: 017-5848

PROJECT: LAC SHORTT PAGE 1

SAMPLE	ELEMENT	Cu	Zn	As	Au	Testwt
NUMBER	UNITS	PPM	PPM	PPM	PPB	gms
LS87-36-01-3/4		52	18	2	50	
DUPLICATE		48	18	2		
DUPLICATE						
LS87-36-02-3/4		18	15	<2	40	
LS87-36-03-3/4		55	20	6	85	7.00
LS87-37-01-3/4		107	24	41	30	4.00
LS87-37-02-3/4		108	27	55	55	9.00
LS87-37-03-3/4		108	24	85	650	
LS87-37-05-3/4		64	25	38	90	
LS87-37-06-3/4		74	23	53	555	
LS87-37-07-3/4		79	23	40	190	
LS87-37-08-3/4		77	18	44	170	
DUPLICATE		78	19	52		
DUPLICATE						
LS87-38-01-3/4		108	35	34	10	
LS87-38-02-3/4		85	26	30	40	
LS87-38-03-3/4		86	24	25	20	
LS87-38-04-3/4		83	22	19	50	
LS87-38-05-3/4		90	28	27	35	
LS87-38-06-3/4		113	29	39	20	
LS87-38-07-3/4		98	34	40	20	
LS87-38-08-3/4		95	32	32	25	
DUPLICATE		102	32	30		
DUPLICATE						
LS87-38-09-3/4		83	26	34	10	
LS87-38-10-3/4		103	31	30	1155	
LS87-38-11-3/4		96	32	38	30	
LS87-38-12-3/4		99	28	27	<5	
LS87-38-13-3/4		119	43	46	105	
LS87-38-14-3/4		110	32	51	5	
LS87-38-15-3/4		115	31	45	900	
LS87-38-16-3/4		111	41	45	15	
LS87-38-17-3/4		84	26	30	<10	9.00
LS87-38-18-3/4		91	24	31	60	
LS87-38-19-3/4		97	32	37	125	
LS87-38-20-3/4		97	28	29	20	
LS87-38-21-3/4		203	65	53	90	
LS87-38-22-3/4		202	81	49	75	
LS87-38-23-3/4		204	95	57	25	
LS87-38-24-3/4		197	102	57	70	

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Geochemical Lab Report

REPORT: 017-5848

PROJECT: LAC SHORTT   PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-39-01-3/4		53	15	<2	<5	
DUPLICATE		62	17	<2		
DUPLICATE						
LS87-39-02-3/4		60	14	<2	<5	
LS87-39-03-3/4		98	19	13	30	
LS87-39-04-3/4		113	35	40	10	
LS87-39-05-3/4		106	34	108	15	

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Geochemical Lab Report

REPORT: 017-5848

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		23	78	5		
		23	77	5		
Number of Analyses		2	2	2	0	0
Mean Value		23.0	77.5	5.0		
Standard Deviation		0.00	0.71	0.00		
Lowest Value		23	77	5		
Highest Value		23	78	5		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					90	
					90	

REPORT: 017-5848

PROJECT: LAC SHORTT PAGE 4

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
Number of Analyses		0	0	0	2	0
Mean Value					90.0	
Standard Deviation					0.00	
Lowest Value					90	
Highest Value					90	
BCC ROCK PULP STD 86		216	1280			
		251	1270			
Number of Analyses		2	2	0	0	0
Mean Value		233.5	1275.0			
Standard Deviation		24.75	7.07			
Lowest Value		216	1270			
Highest Value		251	1280			
1987 ARSENIC STD				119		
				117		
Number of Analyses		0	0	2	0	0
Mean Value				118.0		
Standard Deviation				1.41		
Lowest Value				117		
Highest Value				119		

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Geochemical Lab Report

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REPORT: 017-5849 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 6-NOV-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	1	2 PPM	HNO3-HClO4	Colourimetric
4	Au-150	Gold -150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150	Gold +150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au Av	Gold Weight Average	1	0.01 PPM	AQUA REGIA	Fire Assay AA
7	TestWt	Au Test Weight -150	1	0.01 gms		
8	-150Wt	Weight -150 Obtained	1	0.01 gms		
9	+150Wt	Weight +150 Obtained	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	1	+150/-150	1	METALLICS +150/-150	1

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Geochemical Lab Report

REPORT: 017-5849

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
LS87-37-04-3/4		110	37	83	0.53	9.83	3.01	10.00	13.59	4.95
DUPLICATE		110	37	90						

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Geochemical Lab Report

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REPORT: 017-6005 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT project 020

SUBMITTED BY: ODM
DATE PRINTED: 6-NOV-87

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	40	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	40	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	40	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	40	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	3	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	40	-200	40	PULVERIZE -200	40

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Geochemical Lab Report

REPORT: 017-6005

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-39-06-3/4		211	32	44	30	
DUPLICATE		253	34	42		
DUPLICATE						
LS87-40-01-3/4		153	45	45	1055	
LS87-41-01-3/4		941	66	80	280	3.75
LS87-42-01-3/4		75	37	2	15	
LS87-42-02-3/4		36	23	<2	390	
LS87-42-03-3/4		70	29	<2	60	
LS87-42-04-3/4		89	21	3	60	
LS87-42-05-3/4		131	25	6	25	
LS87-42-06-3/4		54	21	5	130	
LS87-42-07-3/4		112	33	20	10	
DUPLICATE		112	35	19		
DUPLICATE						
LS87-42-08-3/4		93	28	29	345	
LS87-42-09-3/4		97	29	33	25	
LS87-42-10-3/4		117	32	47	590	
LS87-42-11-3/4		165	28	31	150	
LS87-42-12-3/4		115	40	33	210	
LS87-42-13-3/4		115	40	29	10	
LS87-42-14-3/4		95	36	24	60	
LS87-42-15-3/4		233	195	29	100	
DUPLICATE		258	199	31		
DUPLICATE						
LS87-42-16-3/4		699	47	21	10	
LS87-43-01-3/4		791	53	3	15	5.00
LS87-44-01-3/4		58	23	<2	<5	
LS87-44-02-3/4		37	27	<2	20	
LS87-44-03-3/4		32	21	<2	110	
LS87-45-01-3/4		34	24	2	75	
LS87-45-02-3/4		52	17	6	10	
LS87-46-01-3/4		154	45	46	100	
LS87-46-02-3/4		112	32	24	3410	
LS87-46-03-3/4		114	38	18	30	
LS87-46-04-3/4		89	37	21	45	
LS87-46-05-3/4		136	56	22	135	
LS87-46-06-3/4		191	61	27	20	5.00
LS87-47-01-3/4		36	22	<2	95	
LS87-47-02-3/4		87	29	51	355	
LS87-47-03-3/4		121	35	38	700	

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REPORT: 017-6005

PROJECT: LAC SHORTT PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-47-04-3/4		119	25	23	35	
DUPLICATE		129	26	19		
DUPLICATE						
LS87-47-05-3/4		101	37	21	30	
LS87-47-06-3/4		120	35	44	120	
LS87-47-07-3/4		129	42	26	15	
LS87-47-08-3/4		90	32	22	15	
LS87-47-09-3/4		128	39	16	125	

REPORT: 017-6005

PROJECT: LAC SHORTT PAGE 3

STANDARD	ELEMENT	Cu	Zn	As	Au	Testwt
NAME	UNITS	PPM	PPM	PPM	PPB	gms
BCC SOIL PULP STD 86		28	84	5		
		26	81	5		
Number of Analyses		2	2	2	0	0
Mean Value		27.0	82.5	5.0		
Standard Deviation		1.41	2.12	0.00		
Lowest Value		26	81	5		
Highest Value		28	84	5		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					100	
					105	

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REPORT: 017-6005

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
Number of Analyses		0	0	0	2	0
Mean Value					102.5	
Standard Deviation					3.54	
Lowest Value					100	
Highest Value					105	
BCC ROCK PULP STD 86		268	1450			
		273	1430			
Number of Analyses		2	2	0	0	0
Mean Value		270.5	1440.0			
Standard Deviation		3.54	14.14			
Lowest Value		268	1430			
Highest Value		273	1450			
1987 ARSENIC STD				110		
				107		
Number of Analyses		0	0	2	0	0
Mean Value				108.5		
Standard Deviation				2.12		
Lowest Value				107		
Highest Value				110		

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Geochemical Lab Report

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REPORT: 017-6059 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 11-NOV-87

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	39	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	39	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	39	-200	39	PULVERIZE -200	39

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Geochemical Lab Report

REPORT: 017-6059

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-47-10-3/4		105	33	43	5	
DUPLICATE		105	30	41		
DUPLICATE						
LS87-47-11-3/4		95	25	360	305	
LS87-47-12-3/4		95	47	30	430	
LS87-47-13-3/4		76	30	20	370	
LS87-47-14-3/4		83	19	7	50	
LS87-47-15-3/4		241	38	60	10	
LS87-47-16-3/4		94	34	53	110	
LS87-47-17-3/4		230	55	53	230	
LS87-47-18-3/4		257	69	51	55	
LS87-47-19-3/4		194	35	25	30	
DUPLICATE		193	35	25		
DUPLICATE						
LS87-48-01-3/4		198	27	40	40	
LS87-49-01-3/4		194	27	44	10	
LS87-49-02-3/4		96	25	43	60	
LS87-49-03-3/4		107	31	14	115	
LS87-49-04-3/4		86	37	47	15	
LS87-49-05-3/4		109	35	39	445	
LS87-49-06-3/4		82	36	34	15	
LS87-50-01-3/4		94	30	34	20	
DUPLICATE		96	31	33		
DUPLICATE						
LS87-50-02-3/4		105	28	46	40	
LS87-50-03-3/4		80	25	43	65	
LS87-50-04-3/4		293	705	37	120	
LS87-51-02-3/4		36	55	4	90	
LS87-52-01-3/4		36	18	2	<5	
LS87-52-02-3/4		39	18	3	<5	
LS87-52-03-3/4		50	17	3	<5	
LS87-53-01-3/4		70	21	2	<10	7.00
LS87-53-02-3/4		88	21	8	30	
LS87-53-03-3/4		126	28	45	145	
LS87-54-01-3/4		43	18	4	310	
LS87-54-02-3/4		143	21	4	305	
LS87-54-03-3/4		189	21	27	45	
LS87-54-04-3/4		199	29	40	202	
LS87-55-01-3/4		43	21	4	20	
LS87-56-01-3/4		68	26	29	215	

REPORT: 017-6059

PROJECT: LAC SHORTT

SAMPLE	ELEMENT	Cu	Zn	As	Au	Testwt
NUMBER	UNITS	PPM	PPM	PPM	PPB	gms
LS87-56-02-3/4		72	33	21	120	
DUPLICATE		76	33	19		
DUPLICATE						
LS87-57-01-3/4		25	16	2	90	
LS87-57-02-3/4		24	17	<2	80	
LS87-57-03-3/4		23	15	<2	<5	
LS87-57-04-3/4		30	17	5	<5	

REPORT: 017-6059

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		26	84	8		
		27	81	5		
Number of Analyses		2	2	2	0	0
Mean Value		26.5	82.5	6.5		
Standard Deviation		0.71	2.12	2.12		
Lowest Value		26	81	5		
Highest Value		27	84	8		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					100	
					100	

REPORT: 017-6059

PROJECT: LAC SHORTT PAGE 4

STANDARD	ELEMENT	Cu	Zn	As	Au	Testwt
NAME	UNITS	PPM	PPM	PPM	PPB	gms
Number of Analyses		0	0	0	2	0
Mean Value					100.0	
Standard Deviation					0.00	
Lowest Value					100	
Highest Value					100	
BCC ROCK PULP STD 86		284	1290			
		291	1290			
Number of Analyses		2	2	0	0	0
Mean Value		287.5	1290.0			
Standard Deviation		4.95	0.00			
Lowest Value		284	1290			
Highest Value		291	1290			
1987 ARSENIC STD				100		
				98		
Number of Analyses		0	0	2	0	0
Mean Value				99.0		
Standard Deviation				1.41		
Lowest Value				98		
Highest Value				100		

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Geochemical Lab Report

REPORT: 017-6060

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
L587-51-01-3/4		87	155	36	0.30	14.68	1.69	9.00	11.63	1.24
DUPLICATE		39	151	39						

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Geochemical Lab Report

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NOV 23 1987
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REPORT: 017-6178 (COMPLETE)

EFERENCE INFO: ODMDATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

BMITTED BY: ODM
DATE PRINTED: 18-NOV-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	39	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	39	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	7	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	39	-200	39	PULVERIZE -200	39

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Geochemical Lab Report

REPORT: 017-6178

PROJECT: LAC SHORTT

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-57-05-1/4		73	18	11	185	4.88
DUPLICATE		70	17	12		
DUPLICATE						
LS87-57-06-3/4		262	17	24	20	
LS87-57-07-3/4		96	14	16	10	
LS87-58-01-3/4		93	14	4	180	
LS87-58-02-3/4		68	17	<2	140	
LS87-58-03-3/4		49	16	<2	590	
LS87-58-04-3/4		19	12	<2	120	
LS87-58-05-3/4		22	13	5	95	
LS87-58-06-3/4		24	13	<2	60	
LS87-58-07-3/4		18	12	2	1120	
DUPLICATE		18	14	<2		
DUPLICATE						
LS87-58-08-3/4		15	13	<2	25	
LS87-58-09-3/4		21	13	<2	70	
LS87-58-10-3/4		21	13	2	30	
LS87-58-11-3/4		25	14	8	50	
LS87-58-12-3/4		117	19	27	50	5.00
LS87-59-01-3/4		34	13	2	345	
LS87-60-01-3/4		126	26	30	215	6.00
LS87-60-02-3/4		269	28	4	15	7.00
DUPLICATE		274	28	4		
DUPLICATE						
LS87-60-03-3/4		143	28	8	30	4.00
LS87-61-02-3/4		149	19	10	70	9.00
LS87-62-01-3/4		24	15	<2	60	
LS87-62-02-3/4		73	15	2	70	
LS87-62-03-3/4		124	15	<2	25	
LS87-62-04-3/4		52	19	2	<5	
LS87-62-05-3/4		71	19	10	5	
LS87-62-06-3/4		75	20	5	115	
LS87-62-07-3/4		160	16	7	310	
LS87-63-01-3/4		36	19	<2	<10	5.00
LS87-64-01-3/4		35	14	<2	15	
LS87-65-01-3/4		17	14	<2	<5	
LS87-65-02-3/4		96	17	2	<5	
LS87-65-03-3/4		65	19	3	310	
LS87-65-04-3/4		69	17	<2	<5	
LS87-65-05-3/4		141	29	4	40	

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Geochemical Lab Report

REPORT: 017-6178

PROJECT: LAC SHORTT PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-66-01-3/4		13	14	3	45	
DUPLICATE		14	12	3		
DUPLICATE						
LS87-66-02-3/4		45	16	8	590	
LS87-66-03-3/4		64	19	7	<5	
LS87-66-04-3/4		61	15	6	<5	
LS87-66-05-3/4		34	16	3	40	

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Geochemical Lab Report

REPORT: 017-6178

PROJECT: LAC SHORTT PAGE 3

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		23	77	5		
		24	74	7		
Number of Analyses		2	2	2	0	0
Mean Value		23.5	75.5	6.0		
Standard Deviation		0.71	2.12	1.41		
Lowest Value		23	74	5		
Highest Value		24	77	7		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.5	2.5	
Standard Deviation		0.00	0.00	0.71	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					70	
					85	

REPORT: 017-6178

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
Number of Analyses		0	0	0	2	0
Mean Value					77.5	
Standard Deviation					10.61	
Lowest Value					70	
Highest Value					85	
BCC ROCK PULP STD 86		256	1340			
		310	1310			
Number of Analyses		2	2	0	0	0
Mean Value		283.0	1325.0			
Standard Deviation		38.18	21.21			
Lowest Value		256	1310			
Highest Value		310	1340			
1987 ARSENIC STD				105		
				98		
Number of Analyses		0	0	2	0	0
Mean Value				101.5		
Standard Deviation				4.95		
Lowest Value				98		
Highest Value				105		

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NOV 20 [illegible]
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REPORT: 017-6179 (COMPLETE)

REFERENCE INFO: UDM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: UDM
DATE PRINTED: 16-NOV-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	1	2 PPM	HNO3-HClO4	Colourimetric
4	Au-150	Gold -150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150	Gold +150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au Av	Gold Weight Average	1	0.01 PPM	AQUA REGIA	Fire Assay AA
7	TestWt	Au Test Weight -150	1	0.01 gms		
8	-150Wt	Weight -150 Obtained	1	0.01 gms		
9	+150Wt	Weight +150 Obtained	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	1	+150/-150	1	METALLICS +150/-150	1

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REPORT: 017-6179

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
LS87-61-01-3/4		85	13	2	0.23	14.01	1.01	18.00	30.44	1.82
DUPLICATE		84	13	2						

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Geochemical Lab Report

NOV 23 1987
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REPORT: 017-6239 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT 620.

SUBMITTED BY: ODM
DATE PRINTED: 18-NOV-87

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	40	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	40	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	40	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	40	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	4	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	40	-200	40	PULVERIZE -200	40

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REPORT: 017-6239

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-66-06-3/4		66	27	10	30	
DUPLICATE		60	26	10		
DUPLICATE						
LS87-66-07-3/4		124	35	49	20	
LS87-66-08-3/4		146	22	18	430	
LS87-66-09-3/4		248	34	22	80	
LS87-66-10-3/4		463	38	22	20	
LS87-66-11-3/4		156	32	44	90	
LS87-66-12-3/4		161	58	45	60	
LS87-66-13-3/4		193	50	54	70	
LS87-66-14-3/4		169	74	56	45	
LS87-66-15-3/4		170	57	43	40	
DUPLICATE		172	63	40		
DUPLICATE						
LS87-67-01-3/4		20	21	<2	85	
LS87-67-02-3/4		16	13	2	515	
LS87-67-03-3/4		97	32	50	920	
LS87-68-01-3/4		101	20	2	20	
LS87-68-02-3/4		53	21	<2	5	
LS87-69-01-3/4		219	49	64	90	
LS87-69-02-3/4		369	41	53	40	
LS87-69-03-3/4		136	41	46	550	
DUPLICATE		135	41	50		
DUPLICATE						
LS87-69-04-3/4		286	42	65	80	
LS87-70-01-3/4		45	19	2	5	
LS87-70-02-3/4		87	29	6	20	7.00
LS87-70-03-3/4		77	28	3	10	5.00
LS87-70-04-3/4		117	26	3	10	5.00
LS87-70-05-3/4		56	21	6	20	
LS87-70-06-3/4		187	43	45	30	6.00
LS87-71-01-3/4		14	17	<2	5	
LS87-71-02-3/4		12	15	4	45	
LS87-71-03-3/4		77	29	15	15	
LS87-71-04-3/4		122	41	41	35	
LS87-71-05-3/4		286	77	135	170	
LS87-71-06-3/4		114	41	51	150	
LS87-71-07-3/4		150	48	59	40	
LS87-71-08-3/4		138	36	35	80	
LS87-71-09-3/4		154	64	46	50	

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PROJECT: LAC SHORTT PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-71-10-3/4		181	66	62	85	
DUPLICATE		184	67	58		
DUPLICATE						
LS87-71-11-3/4		146	59	41	125	
LS87-71-12-3/4		260	95	48	280	
LS87-71-13-3/4		163	54	46	110	
LS87-72-01-3/4		110	36	39	40	
LS87-72-02-3/4		136	31	54	50	

Geochemical Lab Report

REPORT: 017-6239

PROJECT: LAC SHORTT PAGE 3

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		26	79	6		
		20	80	5		
Number of Analyses		2	2	2	0	0
Mean Value		23.0	79.5	5.5		
Standard Deviation		4.24	0.71	0.71		
Lowest Value		20	79	5		
Highest Value		26	80	6		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					100	
					110	

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STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
Number of Analyses		0	0	0	2	0
Mean Value					105.0	
Standard Deviation					7.07	
Lowest Value					100	
Highest Value					110	
BCC ROCK PULP STD 86		252	1400			
		245	1330			
Number of Analyses		2	2	0	0	0
Mean Value		248.5	1365.0			
Standard Deviation		4.95	49.50			
Lowest Value		245	1330			
Highest Value		252	1400			
1987 ARSENIC STD				95		
				109		
Number of Analyses		0	0	2	0	0
Mean Value				102.0		
Standard Deviation				9.90		
Lowest Value				95		
Highest Value				109		

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T: 017-6303 (COMPLETE)

REFERENCE INFO: ODM DATA

T: FALCONBRIDGE LTD.
CT: LAC SHORTT

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SUBMITTED BY: ODM
DATE PRINTED: 23-NOV-87

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	39	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	39	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	39	-200	39	PULVERIZE -200	39

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Geochemical Lab Report

RT: 017-6303

PROJECT: LAC SHORTT

LE ER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB
S87-73-01-3/4		16	18	<2	25
UPLICATE		17	20	<2	
S87-73-02-3/4		39	24	3	10
S87-73-03-3/4		17	21	<2	30
S87-73-04-3/4		69	26	2	160
S87-74-01-3/4		43	26	7	40
S87-74-02-3/4		55	32	10	120
S87-74-03-3/4		32	19	7	30
S87-75-01-3/4		77	23	35	775
S87-76-01-3/4		77	21	2	1005
S87-76-02-3/4		84	20	9	505
UPLICATE		84	21	8	
S87-77-01-3/4		262	52	136	55
S87-78-01-3/4		142	40	64	2235
S87-78-02-3/4		229	56	46	175
S87-78-03-3/4		194	52	41	105
S87-78-04-3/4		176	36	33	300
S87-79-01-3/4		225	33	64	320
S87-80-01-3/4		190	43	78	3770
S87-80-02-3/4		216	43	104	170
UPLICATE		222	44	116	
S87-80-04-3/4		1465	44	53	6520
S87-80-05-3/4		223	37	42	430
S87-80-06-3/4		163	115	27	75
S87-80-07-3/4		146	32	35	115
S87-80-08-3/4		132	29	24	250
S87-80-09-3/4		160	33	32	640
S87-81-01-3/4		113	31	39	60
S87-81-02-3/4		112	32	31	60
S87-81-03-3/4		109	41	30	165
S87-81-04-3/4		140	44	31	180
S87-81-05-3/4		143	41	51	85
S87-81-06-3/4		146	45	31	55
S87-81-07-3/4		115	37	28	70
S87-81-08-3/4		174	43	42	180
S87-81-09-3/4		150	51	29	25
LS87-81-10-3/4		828	51	45	50
S87-81-11-3/4		220	57	49	105
UPLICATE		226	57	52	
LS87-81-12-3/4		217	51	32	65
SAMPLE NUMBER	**ELEMENT UNITS**	**Cu PPM**	**Zn PPM**	**As PPM**	**Au PPB**
LS87-81-13-3/4		275	70	56	290
LS87-81-14-3/4		273	100	53	500
LS87-81-15-3/4		327	83	116	160

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REPORT: 017-6303

PROJECT: LAC SHORTT PAGE 2

ANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB
C SOIL PULP STD 86		26	82	6							
		26	84	6							
mber of Analyses		2	2	2	0	BCC ROCK PULP STD 86		268	1360		
an Value		26.0	83.0	6.0				264	1370		
Standard Deviation		0.00	1.41	0.00							
Lowest Value		26	82	6							
ghest Value		26	84	6							
						Number of Analyses		2	2	0	0
						Mean Value		266.0	1365.0		
						Standard Deviation		2.83	7.07		
						Lowest Value		264	1360		
						Highest Value		268	1370		
BCC CHEMICAL BLANK		<1	<1	<2	<5						
		<1	<1	2	<5						
mber of Analyses		2	2	2	2	1987 ARSENIC STD				121	
Mean Value		0.5	0.5	1.5	2.5					106	
Standard Deviation		0.00	0.00	0.71	0.00						
west Value		1	1	2	5						
ghest Value		1	1	2	5						
						Number of Analyses		0	0	2	0
						Mean Value				113.5	
						Standard Deviation				10.61	
						Lowest Value				106	
						Highest Value				121	
BCC 10 PPB AU STD					85						
					90						
Number of Analyses		0	0	0	2						
Mean Value					87.5						
andard Deviation					3.54						
Lowest Value					85						
Highest Value					90						

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REPORT: 017-6304 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 20-NOV-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	1	2 PPM	HNO3-HClO4	Colourimetric
4	Au-150	Gold -150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150	Gold +150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au Av	Gold Weight Average	1	0.01 PPM	AQUA REGIA	Fire Assay AA
7	TestWt	Au Test Weight -150	1	0.01 gms		
8	-150Wt	Weight -150 Obtained	1	0.01 gms		
9	+150Wt	Weight +150 Obtained	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	1	+150/-150	1	METALLICS +150/-150	1

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REPORT: 017-6304

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
LS87-80-03-3/4		158	40	73	0.19	3.32	1.36	10.01	11.79	7.01
DUPLICATE		157	35	78						

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REPORT: 017-6350 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 23-NOV-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	39	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	39	2 PPM	HNO3-HClO4	Colourimetric
4	Au	Gold	39	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
5	Testwt	Fire Assay Test Wt.	5	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	39	-200	39	PULVERIZE -200	39

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REPORT: 017-6350

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-82-01-3/4		119	22	102	230	
DUPLICATE		116	22	116		
DUPLICATE						
LS87-83-01-3/4		919	16	6	80	
LS87-85-01-3/4		93	41	30	95	
LS87-85-02-3/4		318	43	90	50	8.00
LS87-86-01-3/4		203	29	68	225	
LS87-86-02-3/4		110	29	40	40	
LS87-86-03-3/4		106	33	52	340	
LS87-86-04-3/4		65	22	23	40	
LS87-86-05-3/4		94	20	47	210	
LS87-86-06-3/4		115	27	59	70	
DUPLICATE		122	28	60		
DUPLICATE						
LS87-86-07-3/4		127	34	51	75	
LS87-86-08-3/4		129	32	48	60	
LS87-86-09-3/4		135	32	55	180	
LS87-86-10-3/4		≥618	63	282	2033	
LS87-86-11-3/4		989	59	372	775	6.00
LS87-87-01-3/4		163	37	300	550	
LS87-89-02-3/4		68	22	41	90	
LS87-91-01-3/4		52	24	6	30	
DUPLICATE		51	45	6		
DUPLICATE						
LS87-91-02-3/4		94	25	27	365	
LS87-91-03-3/4		48	34	5	<5	
LS87-91-04-3/4		170	35	50	5	
LS87-93-01-3/4		23	20	<2	10	
LS87-93-02-3/4		24	23	<2	20	
LS87-93-03-3/4		29	20	<2	100	
LS87-93-04-3/4		103	19	13	315	
LS87-94-01-3/4		15	22	<2	15	
LS87-94-02-3/4		49	19	5	495	
LS87-95-01-3/4		180	26	38	40	
LS87-95-02-3/4		229	29	24	2130	
LS87-96-01-3/4		151	39	45	85	
LS87-97-01-3/4		33	20	2	90	
LS87-98-01-3/4		43	30	52	290	9.00
LS87-98-02-3/4		133	33	11	40	5.00
LS87-98-03-3/4		64	39	2	20	6.00

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REPORT: 017-6350

PROJECT: LAC SHORTT PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
LS87-98-04-3/4		165	32	4	10	
DUPLICATE		163	39	3		
DUPLICATE						
LS87-99-01-3/4		41	20	2	110	
LS87-99-02-3/4		37	22	5	290	
LS87-99-03-3/4		43	23	4	1290	
LS87-99-04-3/4		56	21	5	80	

REPORT: 017-6350

PROJECT: LAC SHORTT PAGE 3

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
BCC SOIL PULP STD 86		27	78	6		
		27	78	6		
Number of Analyses		2	2	2	0	0
Mean Value		27.0	78.0	6.0		
Standard Deviation		0.00	0.00	0.00		
Lowest Value		27	78	6		
Highest Value		27	78	6		
BCC CHEMICAL BLANK		<1	<1	<2	<5	
		<1	<1	<2	<5	
Number of Analyses		2	2	2	2	0
Mean Value		0.5	0.5	1.0	2.5	
Standard Deviation		0.00	0.00	0.00	0.00	
Lowest Value		1	1	2	5	
Highest Value		1	1	2	5	
BCC 10 PPB AU STD					105	
					90	

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STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	Testwt gms
Number of Analyses		0	0	0	2	0
Mean Value					97.5	
Standard Deviation					10.61	
Lowest Value					90	
Highest Value					105	
BCC ROCK PULP STD 86		270	1480			
		300	1430			
Number of Analyses		2	2	0	0	0
Mean Value		285.0	1455.0			
Standard Deviation		21.21	35.36			
Lowest Value		270	1430			
Highest Value		300	1480			
1987 ARSENIC STD				107		
				94		
Number of Analyses		0	0	2	0	0
Mean Value				100.5		
Standard Deviation				9.19		
Lowest Value				94		
Highest Value				107		

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Geochemical Lab Report

NOV 30 1987
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REPORT: 017-6351 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT 020

SUBMITTED BY: ODM
DATE PRINTED: 24-NOV-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	1	2 PPM	HNO3-HClO4	Colourimetric
4	Au-150	Gold -150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150	Gold +150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au Av	Gold Weight Average	1	0.01 PPM	AQUA REGIA	Fire Assay AA
7	TestWt	Au Test Weight -150	1	0.01 gms		
8	-150Wt	Weight -150 Obtained	1	0.01 gms		
9	+150Wt	Weight +150 Obtained	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	1	+150/-150	1	METALLICS +150/-150	1

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Geochemical Lab Report

REPORT: 017-6351

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
LS87-89-01-3/4		82	18	5	0.17	5.16	1.89	10.00	12.71	6.66
DUPLICATE		88	17	5						

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REPORT: 088-00193.0

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	WT g
LS87-06-06-1/4		55	7.63
LS87-06-12-1/4		440	10.45
LS87-22-01-1/4		<17	8.61
LS87-22-07-1/4		<27	2.35
LS87-26-03-1/4		48	3.70
LS87-29-05-1/4		64	6.86
LS87-34-01-1/4		33	7.16
LS87-38-10-1/4		130	8.98
LS87-46-02-1/4		<11	7.27
LS87-58-07-1/4		20	6.69
LS87-76-01-1/4		32	6.10
LS87-78-01-1/4		71	6.04
LS87-80-01-1/4		11100	9.56
LS87-80-04-1/4		1830	8.20
LS87-86-10-1/4		1300	5.83
LS87-95-02-1/4		<12	8.22

APPENDIX 6

CHECK ANALYSIS

- bedrock Au
- -150, +150 Fraction

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Geochemical Lab Report

REPORT: 017-5797 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORT

SUBMITTED BY: ODM
DATE PRINTED: 22-OCT-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	1	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BEDROCK	1	-200	1	PULVERIZE -200	1

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Geochemical Lab Report

REPORT: 017-5797

PROJECT: LAC SHORT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
LS-AB		<5

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REPORT: 017-5797

PROJECT: LAC SHORT

STANDARD NAME	ELEMENT UNITS	Au PPB
BCC CHEMICAL BLANK		<5
Number of Analyses		1
Mean Value		2.5
Standard Deviation		
Lowest Value		5
Highest Value		5
BCC 10 PPB AU STD		95
Number of Analyses		1
Mean Value		95.0
Standard Deviation		
Lowest Value		95
Highest Value		95

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NOV 0 2 1987
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REPORT: 017-5809 (COMPLETE)

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORT

Project 020.
overburden Drilling.
Assay

REFERENCE INFO: ... DATA
SUBMITTED BY: ODM
DATE PRINTED: 29-OCT-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold	1	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BEDROCK	1	-200	1	PULVERIZE -200	1

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REPORT: 017-6889

PROJECT: LAC SHORT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
LS-88		<5

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Geochemical Lab Report

REPORT: 017-5885

PROJECT: LAC SHORT PAGE 2

STANDARD NAME	ELEMENT UNITS	Au PPB
BCC CHEMICAL BLANK		<5

Number of Analyses	1
Mean Value	2.5
Standard Deviation	
Lowest Value	5
Highest Value	5

BCC 10 PPB AU STD	110

Number of Analyses	1
Mean Value	110.0
Standard Deviation	
Lowest Value	110
Highest Value	110

REPORT: 017-5849

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC SOIL PULP STD 86		27	85	7						
Number of Analyses		1	1	1	0	0	0	0	0	0
Mean Value		27.0	85.0	7.0						
Standard Deviation										
Lowest Value		27	85	7						
Highest Value		27	85	7						
BCC CHEMICAL BLANK		<1	<1	<2	<0.01					
Number of Analyses		1	1	1	1	0	0	0	0	0
Mean Value		0.5	0.5	1.0	0.005					
Standard Deviation										
Lowest Value		1	1	2	0.01					
Highest Value		1	1	2	0.01					
BCC 10 PPB AU STD					0.39					
Number of Analyses		0	0	0	1	0	0	0	0	0
Mean Value					0.390					
Standard Deviation										
Lowest Value					0.39					
Highest Value					0.39					

REPORT: 017-5849

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC ROCK PULP STD 86		280	1400							
Number of Analyses		I	I	0	0	0	0	0	0	0
Mean Value		280.0	1400.0							
Standard Deviation										
Lowest Value		280	1400							
Highest Value		280	1400							
1987 ARSENIC STD				105						
Number of Analyses		0	0	1	0	0	0	0	0	0
Mean Value				105.0						
Standard Deviation										
Lowest Value				105						
Highest Value				105						

REPORT: 017-6179

PROJECT: LAC SHORTT PAGE 2

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC SOIL PULP STD 86		27	82	6						
Number of Analyses		1	1	1	0	0	0	0	0	0
Mean Value		27.0	82.0	6.0						
Standard Deviation										
Lowest Value		27	82	6						
Highest Value		27	82	6						
BCC CHEMICAL BLANK		<1	<1	<2	<0.01	<0.01				
Number of Analyses		1	1	1	1	1	0	0	0	0
Mean Value		0.5	0.5	1.0	0.005	0.005				
Standard Deviation										
Lowest Value		1	1	2	0.01	0.01				
Highest Value		1	1	2	0.01	0.01				
BCC 10 PPB AU STD					0.97	0.75				
Number of Analyses		0	0	0	1	1	0	0	0	0
Mean Value					0.970	0.750				
Standard Deviation										
Lowest Value					0.97	0.75				
Highest Value					0.97	0.75				

REPORT: 017-6179

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC ROCK PULP STD 86		270	1300							
Number of Analyses		1	1	0	0	0	0	0	0	0
Mean Value		270.0	1300.0							
Standard Deviation										
Lowest Value		270	1300							
Highest Value		270	1300							
1987 ARSENIC STD				112						
Number of Analyses		0	0	1	0	0	0	0	0	0
Mean Value				112.0						
Standard Deviation										
Lowest Value				112						
Highest Value				112						

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REPORT: 417-6358 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 17-NOV-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	+150WT Weight +150 Obtained	1	0.01 gms		
2	AU-150 Gold -150 Fraction	1	0.001 OPT		
3	AU+150 Gold +150 Fraction	1	0.001 OPT		
4	AU AV Gold Weight Average	1	0.001 OPT		
5	-150WT Weight -150 Obtained	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BEDROCK	1	+150/-150	1	Sample Preparation	1

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REPORT: 417-6358

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	+150WT gms	AU-150 OPT	AU+150 OPT	AU AV OPT	-150WT gms
LS-CC-8 DUPLICATE		10.40	0.001	0.001	<0.001	232.92

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PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	+150WT gms	AU-150 OPT	AU+150 OPT	AU AV OPT	-150WT gms
BCC CHEMICAL BLANK						
Number of Analyses		0	0	0	0	0
Mean Value						
Standard Deviation						
Lowest Value						
Highest Value						
Number of Analyses		0	0	0	0	0
Mean Value						
Standard Deviation						
Lowest Value						
Highest Value						

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REPORT: 417-6407 (COMPLETE)

REFERENCE INFO:

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT 020

SUBMITTED BY: ODM
DATE PRINTED: 19-NOV-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	+150WT Weight +150 Obtained	5	0.01 gms		
2	AU-150 Gold -150 Fraction	5	0.001 OPT		
3	AU+150 Gold +150 Fraction	5	0.001 OPT		
4	AU AV Gold Weight Average	5	0.001 OPT		
5	-150WT Weight -150 Obtained	5	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BEDROCK	5	+150/-150	5	Sample Preparation	5

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REPORT: 417-6407

PROJECT: LAC SHORTT PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	+150WT gms	AU-150 OPT	AU+150 OPT	AU AV OPT	-150WT gms
LS87-26-09B		2.71	0.001	<0.001	<0.001	34.06
LS87-32-11B		1.96	0.001	<0.001	<0.001	71.26
LS87-53-04B		8.56	0.008	<0.001	0.008	241.86
LS87-56-03B		2.80	0.002	<0.001	0.002	216.18
LS87-95-03B		7.69	<0.001	<0.001	<0.001	208.94

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REPORT: 017-5516 (COMPLETE)

REFERENCE INFO: DDM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: DDM
DATE PRINTED: 26-OCT-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	2	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	2	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	2	2 PPM	HNO3-HClO4	Colourimetric
4	Au-150	Gold -150 Fraction	2	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150	Gold +150 Fraction	2	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au Av	Gold Weight Average	2	0.01 PPM	AQUA REGIA	Fire Assay AA
7	TestWt	Au Test Weight -150	2	0.01 gms		
8	-150Wt	Weight -150 Obtained	2	0.01 gms		
9	+150Wt	Weight +150 Obtained	2	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	2	+150/-150	2	METALLICS +150/-150	2

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Geochemical Lab Report

REPORT: 017-5516

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC SOIL PULP STD 86		24	75	4						
Number of Analyses		1	1	1	0	0	0	0	0	0
Mean Value		24.0	75.0	4.0						
Standard Deviation										
Lowest Value		24	75	4						
Highest Value		24	75	4						
BCC CHEMICAL BLANK		<1	<1	<2		<0.01				
Number of Analyses		1	1	1	0	1	0	0	0	0
Mean Value		0.5	0.5	1.0		0.005				
Standard Deviation										
Lowest Value		1	1	2		0.01				
Highest Value		1	1	2		0.01				
BCC 10 PPB AU STD						0.61				
Number of Analyses		0	0	0	0	1	0	0	0	0
Mean Value						0.610				
Standard Deviation										
Lowest Value						0.61				
Highest Value						0.61				

REPORT: 017-5516

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC ROCK PULP STD 86		280	1410							
Number of Analyses		1	1	0	0	0	0	0	0	0
Mean Value		280.0	1410.0							
Standard Deviation										
Lowest Value		280	1410							
Highest Value		280	1410							
BCC AS STD 1986				107						
Number of Analyses		0	0	1	0	0	0	0	0	0
Mean Value				107.0						
Standard Deviation										
Lowest Value				107						
Highest Value				107						

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REPORT: 017-6060 (COMPLETE)

REFERENCE INFO: ODM DATA

CLIENT: FALCONBRIDGE LTD.
PROJECT: LAC SHORTT

SUBMITTED BY: ODM
DATE PRINTED: 11-NOV-87

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu	Copper	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn	Zinc	1	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	As	Arsenic	1	2 PPM	HNO3-HClO4	Colourimetric
4	Au-150	Gold -150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150	Gold +150 Fraction	1	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au Av	Gold Weight Average	1	0.01 PPM	AQUA REGIA	Fire Assay AA
7	TestWt	Au Test Weight -150	1	0.01 gms		
8	-150Wt	Weight -150 Obtained	1	0.01 gms		
9	+150Wt	Weight +150 Obtained	1	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	1	+150/-150	1	METALLICS +150/-150	1

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PROJECT: LAC SHORTT PAGE 2

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC SOIL PULP STD 86		24	73	7						
Number of Analyses		1	1	1	0	0	0	0	0	0
Mean Value		24.0	73.0	7.0						
Standard Deviation										
Lowest Value		24	73	7						
Highest Value		24	73	7						
BCC CHEMICAL BLANK		<1	<1	<2		<0.01				
Number of Analyses		1	1	1	0	1	0	0	0	0
Mean Value		0.5	0.5	1.0		0.005				
Standard Deviation										
Lowest Value		1	1	2		0.01				
Highest Value		1	1	2		0.01				
BCC 10 PPB AU STD						0.96				
Number of Analyses		0	0	0	0	1	0	0	0	0
Mean Value						0.960				
Standard Deviation										
Lowest Value						0.96				
Highest Value						0.96				

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Geochemical Lab Report

REPORT: 017-6060

PROJECT: LAC SHORTT PAGE 3

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC ROCK PULP STD 86		300	1360							
Number of Analyses		1	1	0	0	0	0	0	0	0
Mean Value		300.0	1360.0							
Standard Deviation										
Lowest Value		300	1360							
Highest Value		300	1360							
1987 ARSENIC STD				110						
Number of Analyses		0	0	1	0	0	0	0	0	0
Mean Value				110.0						
Standard Deviation										
Lowest Value				110						
Highest Value				110						

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Geochemical Lab Report

REPORT: 017-6351

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC SOIL PULP STD 86		26	80	6						
Number of Analyses		1	1	1	0	0	0	0	0	0
Mean Value		26.0	80.0	6.0						
Standard Deviation										
Lowest Value		26	80	6						
Highest Value		26	80	6						
BCC CHEMICAL BLANK		<1	<1	<2		<0.01				
Number of Analyses		1	1	1	0	1	0	0	0	0
Mean Value		0.5	0.5	1.0		0.005				
Standard Deviation										
Lowest Value		1	1	2		0.01				
Highest Value		1	1	2		0.01				
BCC 10 PPB AU STD						0.81				
Number of Analyses		0	0	0	0	1	0	0	0	0
Mean Value						0.810				
Standard Deviation										
Lowest Value						0.81				
Highest Value						0.81				

REPORT: 017-6351

PROJECT: LAC SHORTT PAGE 3

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC ROCK PULP STD 86		320	1440							
Number of Analyses		1	1	0	0	0	0	0	0	0
Mean Value		320.0	1440.0							
Standard Deviation										
Lowest Value		320	1440							
Highest Value		320	1440							
1987 ARSENIC STD				103						
Number of Analyses		0	0	1	0	0	0	0	0	0
Mean Value				103.0						
Standard Deviation										
Lowest Value				103						
Highest Value				103						

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REPORT: 017-6304

PROJECT: LAC SHORTT PAGE 2

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC SOIL PULP STD 86		25	79	7						
Number of Analyses		1	1	1	0	0	0	0	0	0
Mean Value		25.0	79.0	7.0						
Standard Deviation										
Lowest Value		25	79	7						
Highest Value		25	79	7						
BCC CHEMICAL BLANK		<1	<1	2		<0.01				
Number of Analyses		1	1	1	0	1	0	0	0	0
Mean Value		0.5	0.5	2.0		0.005				
Standard Deviation										
Lowest Value		1	1	2		0.01				
Highest Value		1	1	2		0.01				
BCC 10 PPB AU STD						0.92				
Number of Analyses		0	0	0	0	1	0	0	0	0
Mean Value						0.920				
Standard Deviation										
Lowest Value						0.92				
Highest Value						0.92				

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REPORT: 017-6304

PROJECT: LAC SHORTT PAGE 3

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC ROCK PULP STD 86		310	1340							
Number of Analyses		1	1	0	0	0	0	0	0	0
Mean Value		310.0	1340.0							
Standard Deviation										
Lowest Value		310	1340							
Highest Value		310	1340							
1987 ARSENIC STD				118						
Number of Analyses		0	0	1	0	0	0	0	0	0
Mean Value				118.0						
Standard Deviation										
Lowest Value				118						
Highest Value				118						

REPORT: 017-5296

PROJECT: LAC SHORTT

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC SOIL PULP STD 86		26	83	6						
Number of Analyses		1	1	1	0	0	0	0	0	0
Mean Value		26.0	83.0	6.0						
Standard Deviation										
Lowest Value		26	83	6						
Highest Value		26	83	6						
BCC CHEMICAL BLANK		<1	<1	<2	<0.01					
Number of Analyses		1	1	1	1	0	0	0	0	0
Mean Value		0.5	0.5	1.0	0.005					
Standard Deviation										
Lowest Value		1	1	2	0.01					
Highest Value		1	1	2	0.01					
BCC 10 PPB AU STD					0.86					
Number of Analyses		0	0	0	1	0	0	0	0	0
Mean Value					0.860					
Standard Deviation										
Lowest Value					0.86					
Highest Value					0.86					

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REPORT: 017-5296

PROJECT: LAC SHORTT PAGE 3

STANDARD NAME	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au-150 PPM	Au+150 PPM	Au Av PPM	TestWt gms	-150Wt gms	+150Wt gms
BCC ROCK PULP STD 86		305	1480							
Number of Analyses		1	1	0	0	0	0	0	0	0
Mean Value		305.0	1480.0							
Standard Deviation										
Lowest Value		305	1480							
Highest Value		305	1480							
BCC AS STD 1986				116						
Number of Analyses		0	0	1	0	0	0	0	0	0
Mean Value				116.0						
Standard Deviation										
Lowest Value				116						
Highest Value				116						