2.17566

ASSESSMENT REPORT

ON THE

FALL 1996

REVERSE CIRCULATION DRILL PROGRAM

SUDBURY CONTACT MINES LTD.

COMMODORE MOOSE CROSSING PROPERTY

GAUTHIER TOWNSHIP

LARDER LAKE MINING DIVISION

PREPARED BY:

Jens T. Paterson, M.Sc. and Raymond J. Knowles, B.Sc.

JULY 29, 1997

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W.A. HUBACHECK CONSULTANTS LTD.

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SUMMARY

Sudbury Contact Mines Ltd. is involved in the exploration of several groups of claims known as the Commodore Project, located in Lebel and Gauthier Townships, Larder Lake Mining Division. Nine of the claims comprising 144 hectares form a contiguous group referred to as the Moose Crossing property and are the focus of this report. Current exploration is oriented towards diamond and gold.

A reverse circulation drill program was conducted from November 16 to November 21, 1996 by W.A. Hubacheck Consultants Ltd., on behalf of Sudbury Contact Mines Ltd. This program consisted of five holes which were drilled approximately 400 metres apart along an east-northeast/west-southwest transect in the south-central portion of Gauthier Township. A second east-west transect was drilled on the Sudbury Contact Mines Ltd. McElroy property just to the south, and is discussed in a separate report (Paterson and Knowles, 1997). These two transects were placed to maximize the east-west coverage and possibly obtain cut-off values or increased values for the kimberlite indicator mineral dispersal trains identified by previous drill programs. In this way the company might determine whether the source or sources are within the current properties or off property to the north as previously identified kimberlite pipes. This transect would also test the potential for the property to host gold mineralization since it lies just south of the 'Kirkland lake-Larder Lake Break'.

A total of 14 samples were obtained during the drill program; 12 loose sandy till (gravel?) and 2 compact sandy till samples. Results indicate generally moderate numbers of kimberlite indicator minerals (KIMs) across the transect, with a decrease from **8.67 KIM's/kg** to **4.31 KIM's/kg** in a westerly direction along the transect. As a result of the continued northerly extent of the kimberlite indicator mineral dispersal trains, it is probable that the source(s) are not within the claim group. A cut-off was not achieved.

Gold grain counts were low to moderate, ranging from 7 to 25 total gold grains per sample, with two occurrences of 2 pristine gold grains per sample. This may indicate the presence of a distal gold source. No significant gold mineralization is indicated within the property. The gold deposits 3 to 4 km to the north do not appear to be reflected in the results.

A compilation of KLIP and inhouse pit and reverse circulation drill hole samples, should be conducted and closely examined to determine the probable direction and extent of the kimberlite indicator mineral dispersal train(s). Probe work on pyropes should be conducted.

W.A. HUBACHECK CONSULTANTS LTD.

INTRODUCTION

The Sudbury Contact Mines Ltd. Commodore Project consists of a number of claim groups within the townships of Lebel and Gauthier. This report discusses work performed on the Moose Crossing Property of the Commodore Project. It comprises 9 contiguous claims covering 144 hectares in Gauthier Township, within the Larder Lake Mining Division.

Four previous phases of reverse circulation drilling (totalling 34 holes) conducted south and southwest of this property have identified at least two significant anomalous kimberlite indicator mineral glacial trains on the properties. For details of these programs the reader is referred to reports previously submitted for assessment which are listed in the bibliography. It has become important at this stage to determine if the results to date are from possible targets within the property. To this end, the current program was devised to conduct a traverse of five holes east-west across the south edge of the property at approximately 400m spacing. Either a ' cut-off ', a significant drop in the number of indicator minerals, would be obtained indicating the source or sources are within the property, or a significant increase in the number of indicator minerals would be obtained indicating the source or sources to be off the property to the north probably reflecting the known kimberlite pipes. The second purpose of the program was to test the possibility of the presence of gold mineralization on the property since the 'Kirkland Lake-Larder Lake Break' trends immediately north of the property.

Five holes were drilled November 16 to November 21, 1996. A second, 2-phase east-west transect of 6 holes was drilled on the Sudbury Contact Mines Ltd. McElroy property immediately to the south and southeast (results of which are discussed in a separate report, Paterson and Knowles, 1997) in conjunction with this program.

Samples of till and ice-contact gravel were taken. Processing to recover sand and silt-size gold and kimberlite indicator minerals from these samples was performed by Overburden Drilling Management Ltd.

The coordination and implementation of the various technical tasks was conducted by W.A. Hubacheck Consultants Ltd. under the supervision of P. Hubacheck, D. Christie, R. Knowles and J. Paterson.

PROPERTY AND PROJECT AREA DESCRIPTION

The Moose Crossing Property of the Commodore Project area discussed in this report consists of 9 contiguous claims totalling 144 hectares in the Larder Lake Mining Division.

CLAIM NUMBER	DATE RECORDED	TOWNSHIP	AREA (UNITS)	AREA (HECTARES)
548785	80/01/28	Gauthier	1	16
548835	80/01/28	Gauthier	1	16
548836	80/01/28	Gauthier	1	16
550008	80/01/28	Gauthier	1	16
550009	80/01/28	Gauthier	1	16
550010	80/01/28	Gauthier	1	16
550011	80/01/28	Gauthier	1	16
550012	80/01/28	Gauthier	1	16
550013	80/01/28	Gauthier	1	16
		Totals	9	144

LOCATION AND ACCESS

The claims are located in south-central Gauthier Township (Figs. 1, 2 and 3). Access to the claims is via Highway 66, with additional access provided by the Yost Road, and a constructed trail which opened up an old road parallel to Highway 66.

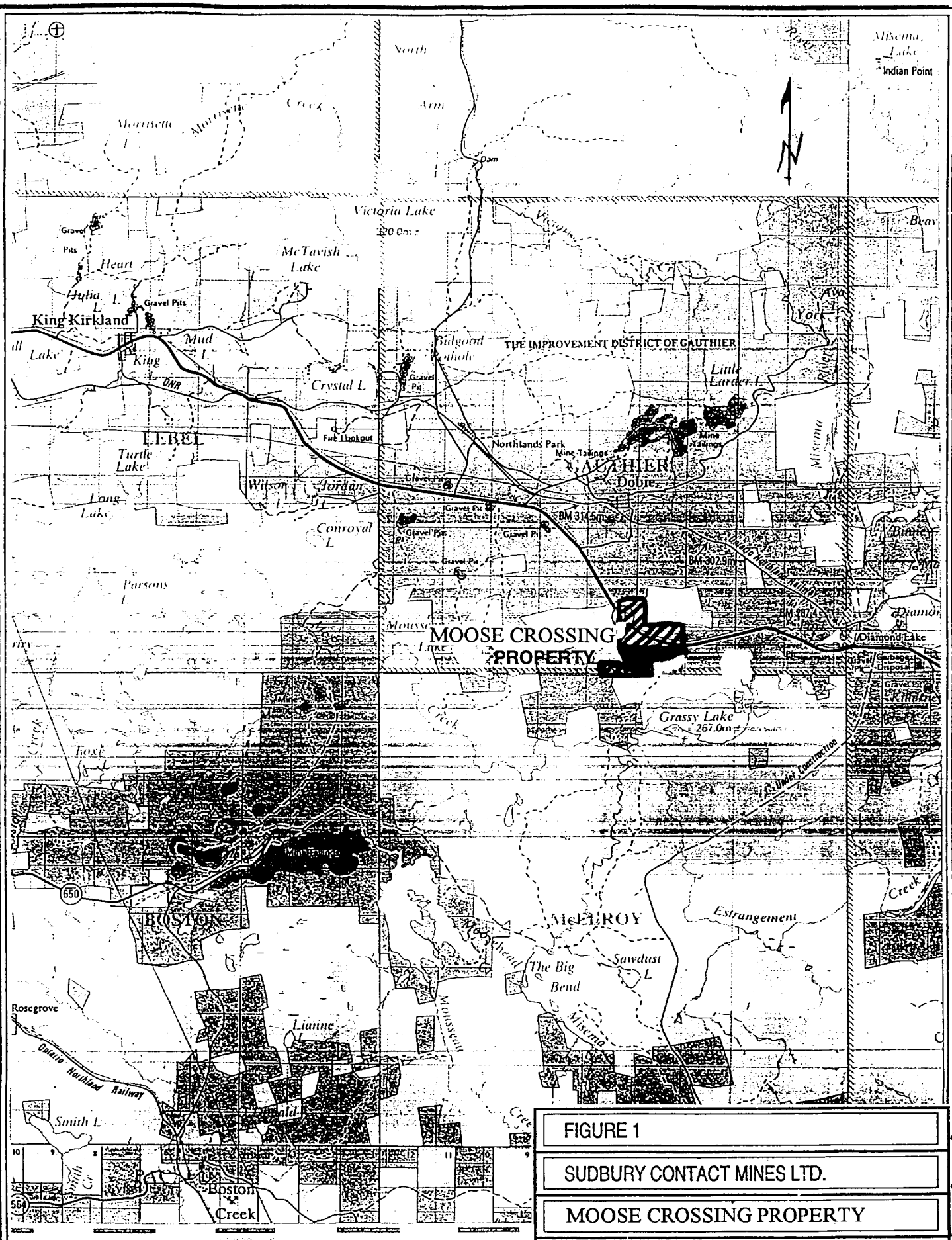

FIGURE 1

SUDBURY CONTACT MINES LTD.

MOOSE CROSSING PROPERTY

LOCATION MAP

NOVEMBER 1996 | 1: 100 000

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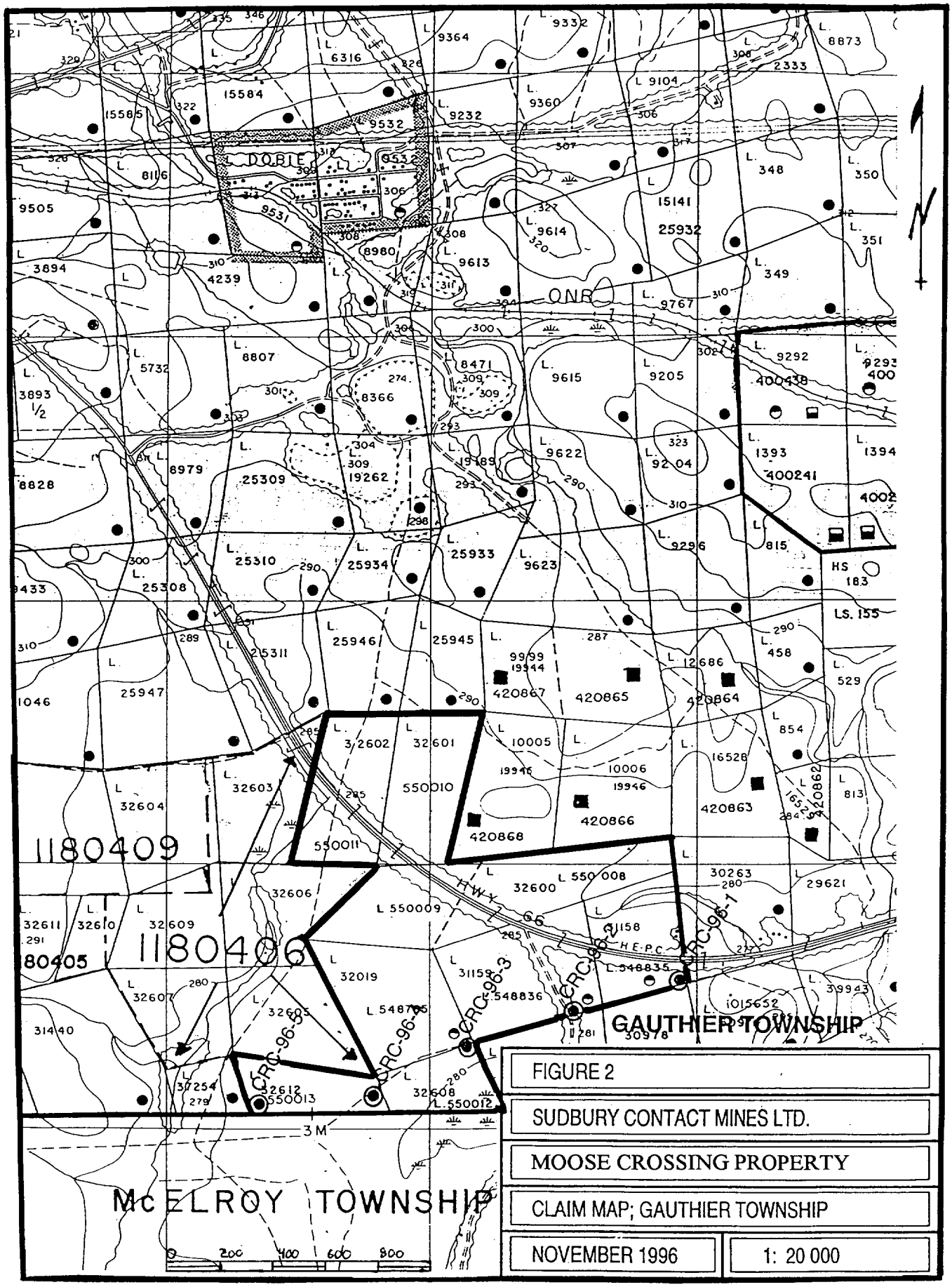


W.A. HUBACHECK CONSULTANTS LTD.

285

588000

589000

5329000

HWY 66

285

280

CRC-96-1

CRC-96-2

CRC-96-3

281

280

279

CRC-96-4

CRC-96-5

GAUTHIER TOWNSHIP

McELROY TOWNSHIP

279

5328000

0 50 100 200 m

FIGURE 3
SUDBURY CONTACT MINES LTD.
MOOSE CROSSING PROPERTY
DRILL HOLE LOCATION MAP
NOVEMBER 1996 | 1: 5 000

W.A. HUBACHECK CONSULTANTS LTD.

LOGISTICS

Technical Consultants:	W.A. Hubacheck Consultants Ltd. 365 Bay St., Suite 807, Toronto, Ontario, M5H 2V1
Reverse Circulation Drilling:	Heath and Sherwood Drilling Ltd., Kirkland Lake, Ontario.
Mineral Processing:	Overburden Drilling Management Ltd., Nepean, Ontario.
Senior Geologist:	Peter C. Hubacheck, P. Geol., 2401 Pyramid Cres., Mississauga, Ontario, L5K 1E1
Project Geologist:	David W. Christie, B.Sc., 104 Douglas Ave., Toronto, Ontario, M5M 1G6
Contract Project Geologist:	Raymond J. Knowles, B.Sc., 79-13th St., Etobicoke, Ontario, M8V 3H5
Contract Geologist:	Jens Paterson, M.Sc., 6 Hampstead Place, St. Catharines, Ontario, L2R 6P5
Sampler:	Robert Peever, Kirkland Lake, Ontario.

REGIONAL GEOLOGY

The area is underlain by the McElroy, Larder Lake and Hearst assemblages (Fig. 4).

The McElroy assemblage is dominated by massive mafic volcanic flows with minor felsic fragmental units. Medium to coarse-grained hornblende gabbro, gabbro, leucogabbro and plagioclase-glomoporphyritic gabbro are intimately associated with the fine to medium-grained mafic flows. The McElroy assemblage is distinct from the Larder Lake assemblage in the lack of pillowed flows and a distinct contact marked by the Lincoln-Nipissing shear zone and peridotite and Manor shear zone (Jackson and Fyon, 1991).

The Larder Lake assemblage is comprised of massive to pillowed tholeiitic basalt, komatiitic basalt and ultramafic komatiite (Jensen, 1983). The assemblage is intruded by numerous small bodies of quartz and quartz-feldspar porphyry as well as larger syenitic bodies such as the McElroy stock. Metasedimentary rocks in the area are interpreted to be in structural unconformity with the Larder Lake assemblage and are recognized as the Hearst assemblage (Jackson and Fyon, 1991).

The Hearst assemblage is comprised of resedimented turbidites and matrix-supported conglomerates that are spatially associated with metavolcanic rocks of the Larder Lake assemblage. Conglomerate clasts include green mica-bearing komatiite, rhyolite, chert, iron formation and carbonate fragments (Jensen, 1983). The relationship between the Hearst and Timiskaming sedimentary assemblages is still a matter of debate.

Intrusive rocks related to the McElroy stock range from pink massive granites and syenite to black gabbro, hornblendite and pyroxenite.

The Kirkland lake-Larder Lake Break trends east-west north of the property area, and is typified by a wide zone of moderate to highly strained Timiskaming and Larder Lake assemblage rocks. Archean lode gold and silver deposits occur along the 'Break' and related structures.

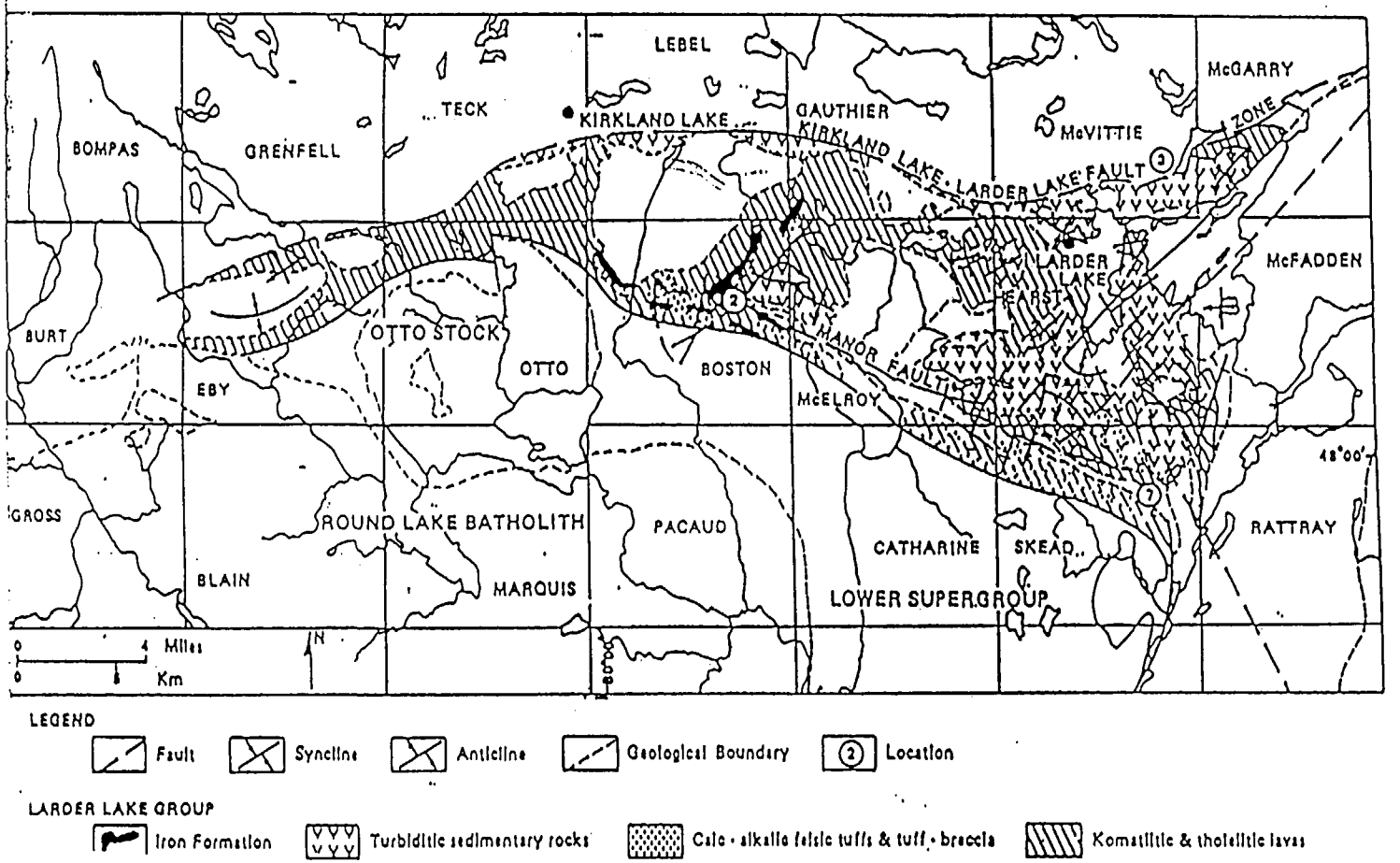


Figure 4. Kirkland Lake Area Geology
(after Jensen and Langford, 1985)

QUATERNARY GEOLOGY

The most pronounced surficial feature in the study area is the Munro Esker, which cuts across the Sudbury Contact Mines Ltd. Commodore property in a north-south orientation.

Most of the study area is covered by shallow water glaciolacustrine sands. These sands may have been deposited at the distal margin of fans and/or deltas originating from the Munro Esker, or may have resulted from washing material off the esker as post-glacial lakes receded (Baker and Storrison, 1979).

The eastern part of the study area contains sporadic bedrock exposures, with glacial till preserved in swamps or stream valleys, or draped on outcrop ridges. The striae record of the latest ice advance over the study area indicates a shift from an early southwesterly ice flow, to a south-southwesterly ice flow, and a latest ice flow towards the south-southeast.

REVERSE CIRCULATION DRILLING

METHODOLOGY

The purpose of sampling specific types of glacigenic sediments is to obtain a geochemical signature of subcropping ore bodies which have been eroded by glacial action and distributed in a "dispersal train" down-ice of the ore body. Reverse-circulation drilling permits a cost-effective method of sampling these sediments (Figs 4 and 5).

Glacial action has reduced much of the material to sand and silt size, and it is grains of this size fraction which are examined in a laboratory for gold, sulphides and other minerals indicative of potentially economic deposits (Fig. 6). Coarser material (gravel and boulder chips) can be examined and described at the drill by a geologist.

Case histories, Quaternary geological studies and examination of the local glacial record provide a data base which can be used to interpret the mineralogical results from a reverse circulation drill program.

The most important material to sample during a reverse circulation program is commonly termed till. Till is poorly sorted debris which is normally transported directly down-ice from its point of entrainment, remaining at or near the base of the glacier until it is deposited (smeared) along bedrock surfaces, filling depressions and valleys. Basal till is found lying directly on bedrock. Minerals found in this material can normally be traced by their relative abundance and morphology directly back up-ice to their source.

Till can also be reworked or redeposited by water and a number of other mechanisms including rafted ice flows, and caused to move along paleoslopes, causing misinterpretations. Therefore, a large database is necessary for defining patterns based on numerous data points rather than isolated anomalous values.

Samples of till and gravel were taken and sent to Overburden Drilling Management Ltd. for processing to recover sand and silt size gold grains and kimberlite indicator minerals. A clay-silt size fraction split (-63 micron) and the heavy mineral concentrate (HMC) were then sent to Activation Laboratories for multi-element analysis using ICP and/or INAA to obtain a geochemical signature and to determine the fine fraction and HMC content of desired elements.

In addition to glacial material, chips of bedrock are obtained at each drill hole, making this a valuable mapping/prospecting tool in areas of poor bedrock exposure.

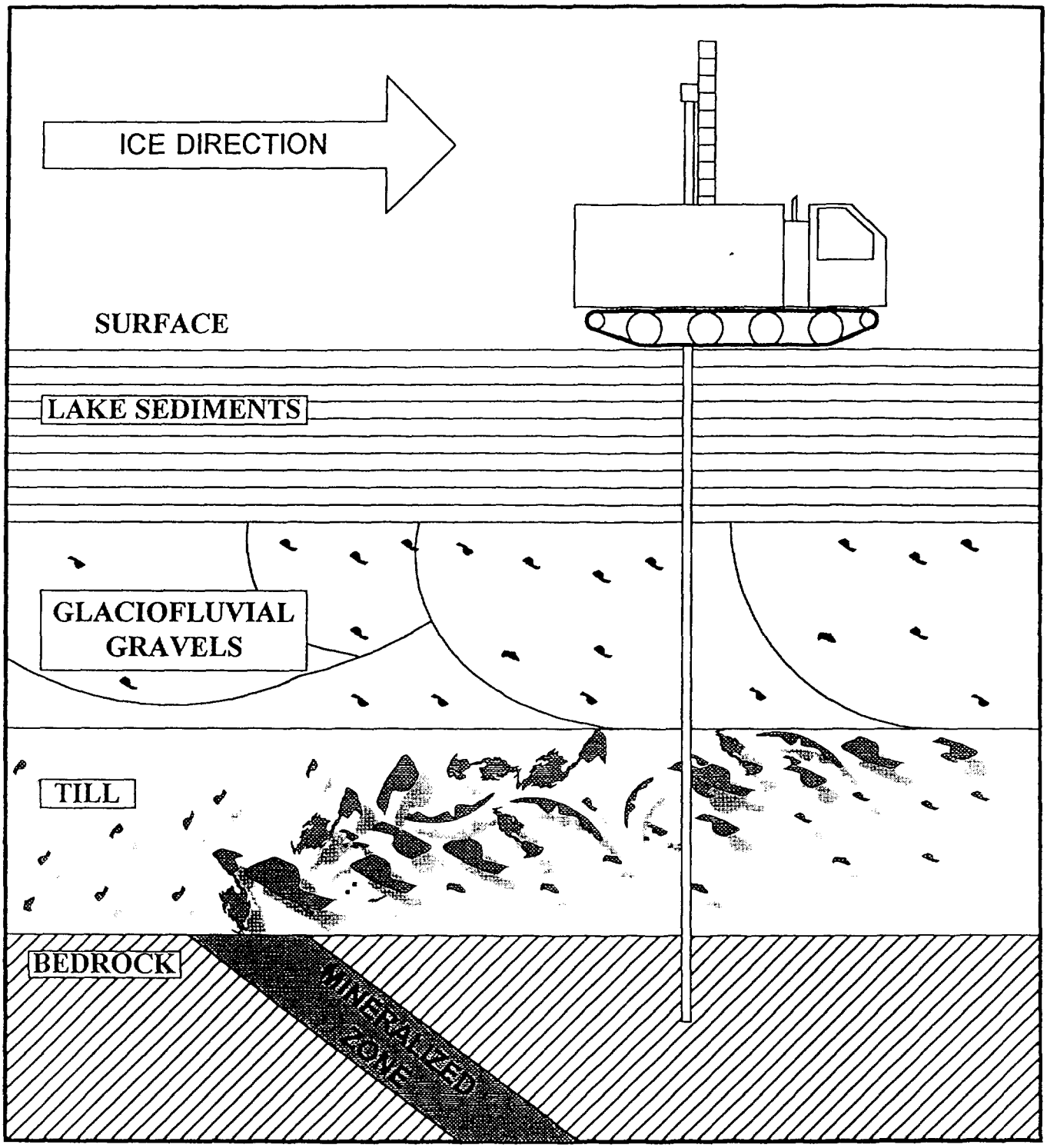


Figure 5. Idealized conceptual model illustrating the use of basal till as a prospecting medium in glacial terrain, using reverse circulation drilling as a sampling technique.

Figure 6. SCHEMATIC OF RC DRILLING METHOD

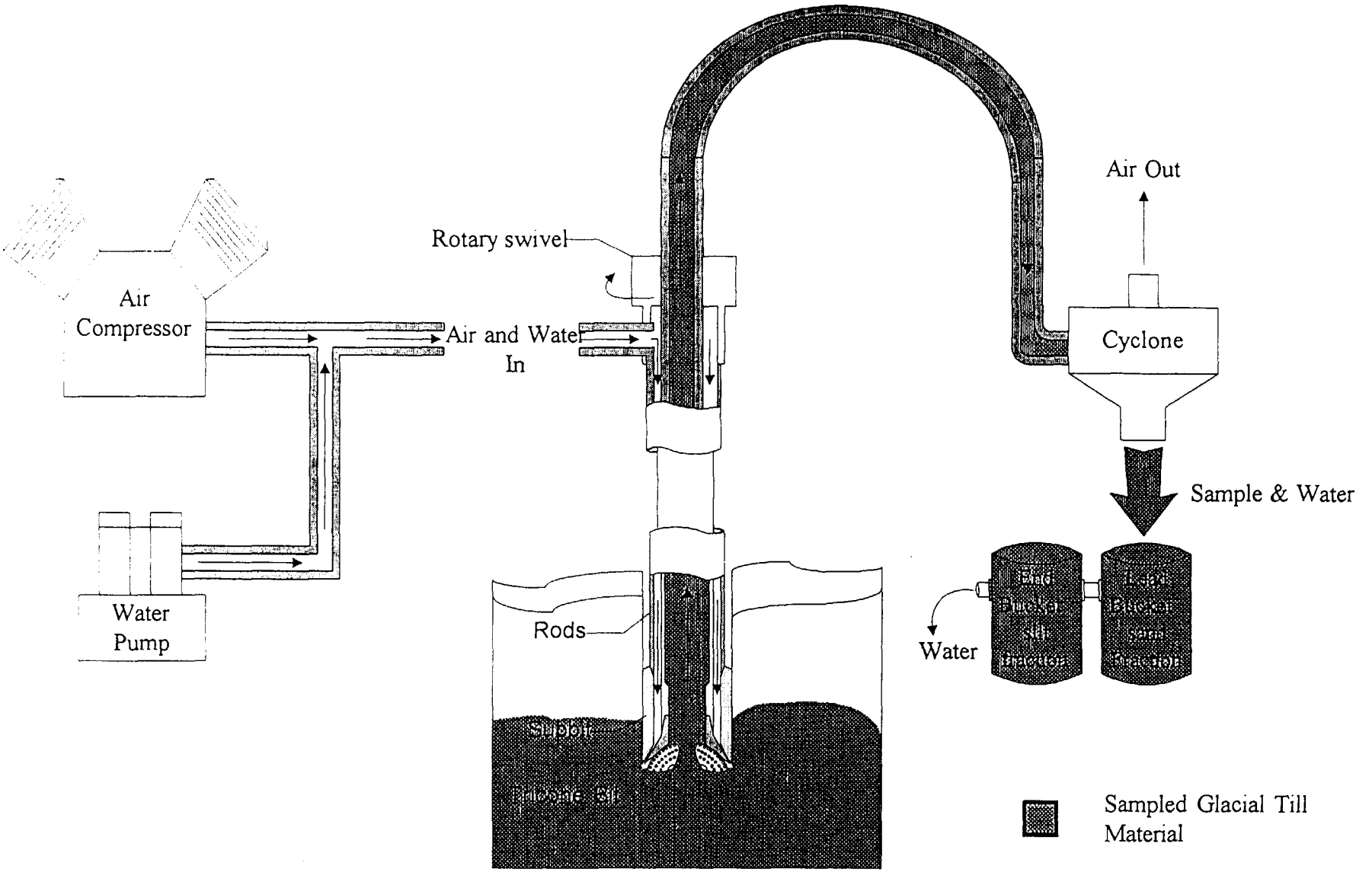
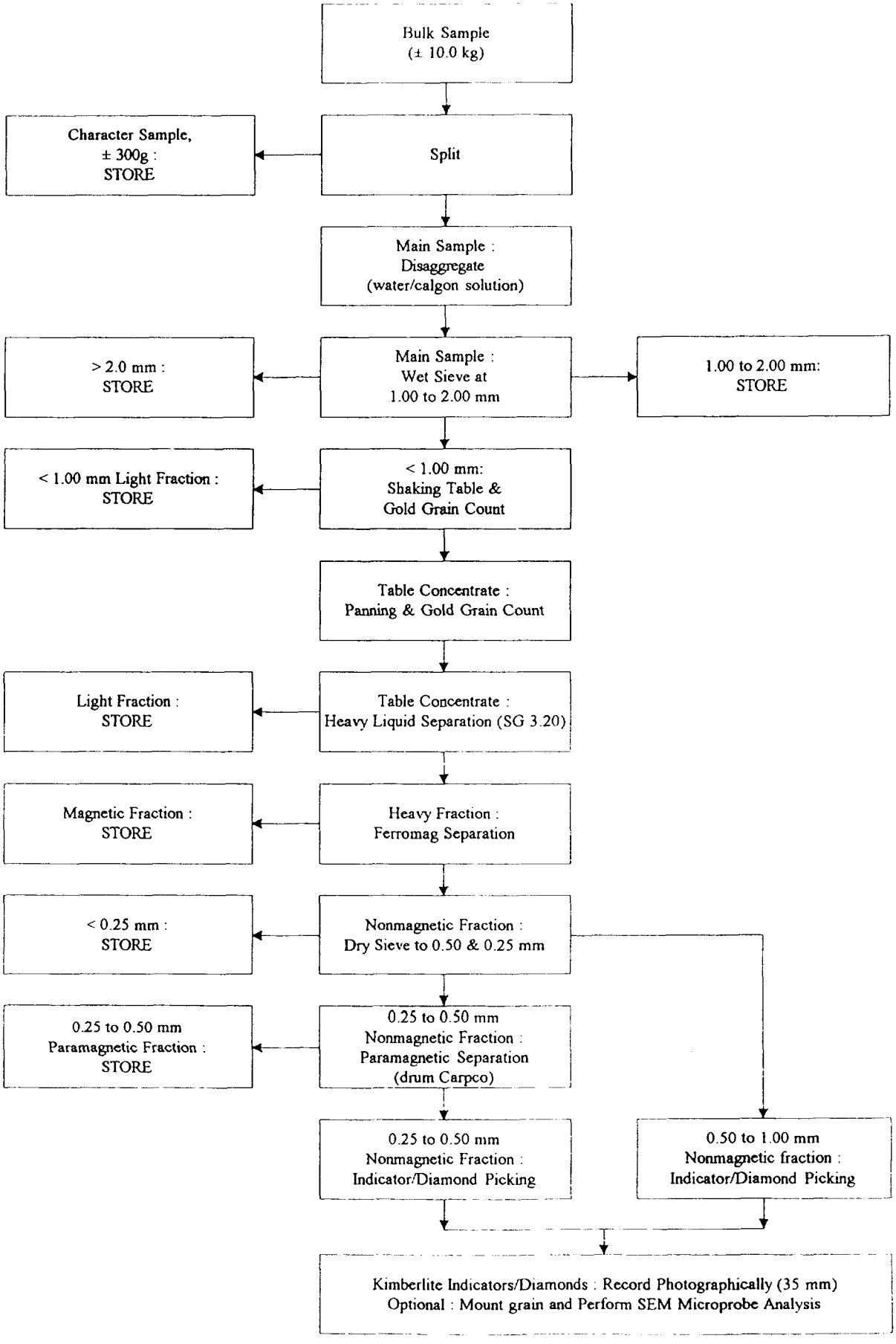


Figure 7. **FLOW SHEET UNWEATHERED TILL**



SAMPLING RESULTS

A brief description of the hole stratigraphy is given below. In general, only material interpreted to be till or esker (proximal, ice-contact) gravel was sampled during these programs. Material weights and grain counts indicate the amount of sample processed and subsequent recovery of gold and kimberlite indicator mineral grains. To allow for easy comparison, the data was normalized to provide the average count of total kimberlite indicator minerals (KIMs) in all samples per hole per kilogram of processed sample (table feed weight); **(KIM's/kg)**. Also presented are the total counts of pyrope, chrome diopside and ilmenite grains per hole. Individual sample results are found in the processing data sheet appendix and a brief summary is presented in Table 1. Stratigraphic correlations are presented in Figure 8.

CRC-96-01

A 2.9 m thickness of very loose, moderately sorted sandy gravel (till?) occurs beneath 15.8 m of glaciofluvial sand, 36.5 m of glaciolacustrine sand, silt and clay and 3.0 m of glaciofluvial and/or coarse glaciolacustrine pebbly sand. One and a half metres of syenite bedrock was intersected at the base of the hole. Thirteen re-shaped gold grains were recovered from two samples (16.15 kg of table feed). A total of 109 pyrope and 30 chrome diopside grains were recovered **(8.67 KIM's/kg)**, which suggests a medial position within a kimberlite indicator mineral dispersal train.

CRC-96-02

A 4.2 m thickness of very loose, moderately sorted sandy gravel (till?) occurs beneath 8.8 m of glaciofluvial pebbly sand and 19 m of glaciolacustrine sand, silt and clay, and overlies 1.8 m of glaciofluvial/coarse glaciolacustrine pebbly sand and 0.5 m of compact sandy till (basal gravel). One and a half metres of syenite bedrock was intersected at the base of the hole. No differentiation is possible between the upper two samples within the gravel and the basal till, based on analytical results. This may be a result of contamination of the lower sample with the overlying pebbly sand during the sample washing process to insure a sufficiently sized sample or that the basal till is in fact a related basal gravel unit to the overlying unit. One pristine, 1 modified and 38 re-shaped gold grains were recovered from three samples (35.85 kg of table feed). A total of 211 pyrope, 43 chrome diopside, 4 chromite and 22 ilmenite grains were recovered **(7.92 KIM's/kg)**, which suggests a medial position within a kimberlite indicator mineral dispersal train, and is correlative with the results from CRC-96-01.

CRC-96-03

A 3.4 m thickness of very loose, moderately sorted sandy till (gravel?) occurs beneath 11.8 m of glaciofluvial sand and 24.8 m of glaciolacustrine sand, silt and clay. One and a half metres of syenite bedrock was intersected at the base of the hole. Six modified and 47 re-shaped gold grains were recovered from three samples (34.75 kg of table feed). A total of 194 pyrope, 44 chrome diopside and 12 ilmenite grains were recovered **(6.62 KIM's/kg)**, which suggests a medial position within a kimberlite indicator mineral dispersal train, correlative with CRC-96-01 and 02.

CRC-96-04

A 5.7 m thickness of very loose, moderately sorted sandy gravel (some of which could be till like?) occurs beneath 9.8 m of glaciofluvial sand, 51.6 m of glaciolacustrine sand, silt and clay and 0.4 m of glaciofluvial pebbly sand. One and a half metres of syenite bedrock was intersected at the base of the hole. Five pristine, 13 modified and 58 re-shaped gold grains were recovered from four samples (52.05 kg of table feed). A total of 171 pyrope, 68 chrome diopside, 1 ilmenite and 1 chromite grain was recovered **(4.69 KIM's/kg)**, which suggests a medial, increasingly marginal position within a kimberlite indicator mineral dispersal train when correlated with CRC-96-01, 02 and 03.

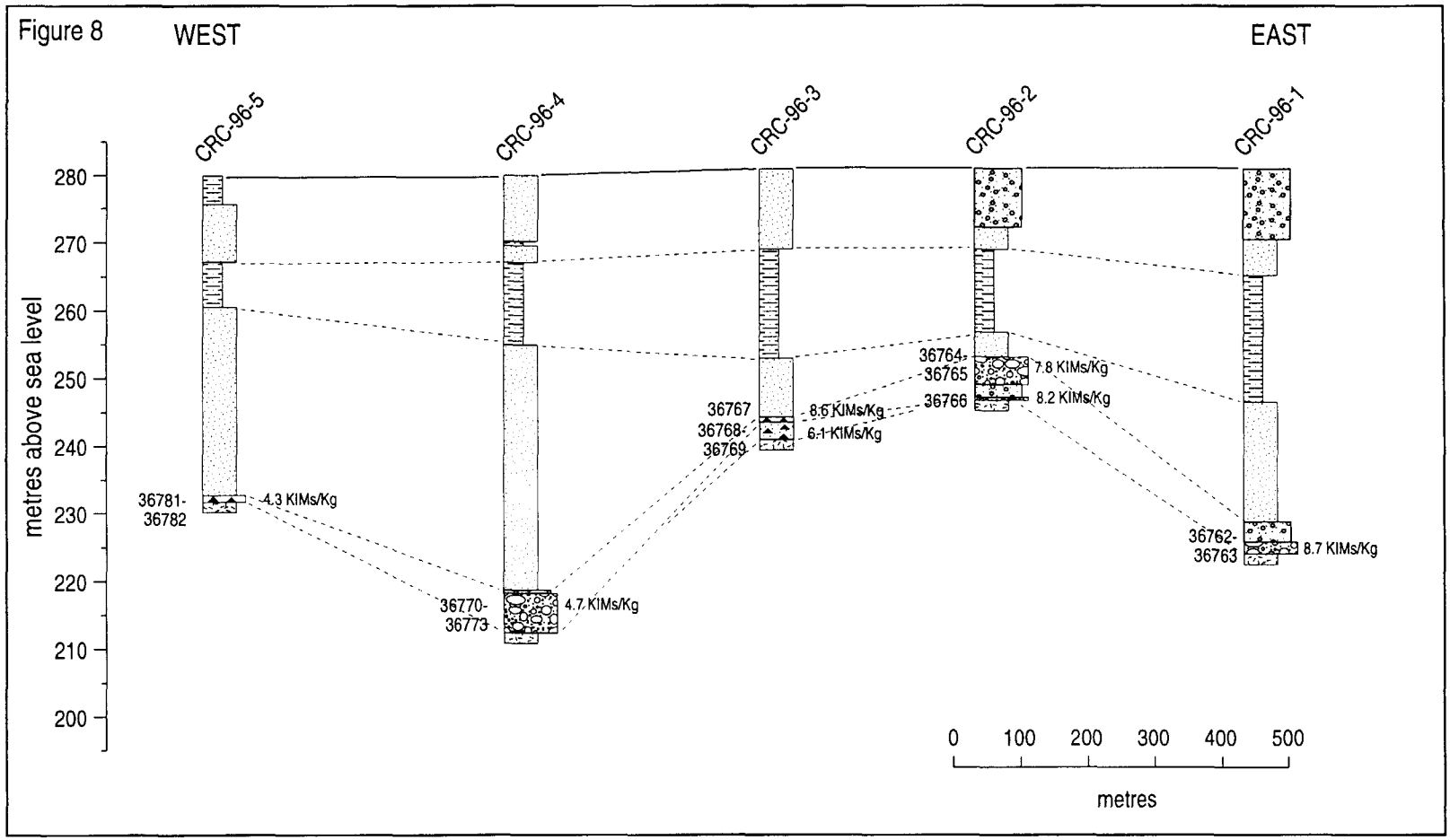
CRC-96-05

A 1.0 m thickness of silty sandy till occurs beneath 29.2 m of glaciolacustrine sand, silt and clay and 18.1 m of glaciofluvial/glaciolacustrine sand. One and a half metres of syenite bedrock was intersected at the base of the hole. One pristine, 8 modified and 38 re-shaped gold grains were recovered from two samples (24.35 kg of table feed). A total of 66 pyrope, 27 chrome diopside, 1 ilmenite and 8 chromite grains were recovered **(4.31 KIM's/kg)**, which suggests a medial, increasingly marginal position within a kimberlite indicator mineral dispersal train when correlated with CRC-96-01, 02, 03 and 04.

TABLE 1. SUMMARY OF RESULTS FROM THE NOVEMBER 1996 REVERSE CIRCULATION DRILLING PROGRAM

Hole #	Sample Material	No. of Samples	Total Table Weight (kg)	Total KIM's	Total KIM's/kg	Total Pyropes	Pyropes per kg	Total Cr-diop.	Cr-diopside per kg	Total Ilmenite	Ilmenites per kg	Total Au Grains	Total Prist. Au Grains	Total Mod. Au Grains	Total Reshpd Au Grains	Prist. +Mod per kg
CRC-96-1	till	2	16.15	140	8.67	109	6.75	30	1.86	0	0.00	13	0	0	13	0.00
CRC-96-2	gravel	2	23.05	179	7.77	139	6.03	21	0.91	14	0.61	25	1	1	23	0.09
	till	1	12.80	105	8.20	72	5.63	22	1.72	8	0.63	15	0	0	15	0.00
CRC-96-3	reworked till (gravel?)	1	7.55	65	8.61	49	6.49	10	1.32	6	0.79	15	0	3	12	0.40
	till	2	27.20	165	6.07	124	4.56	34	1.25	6	0.22	38	0	3	35	0.11
CRC-96-4	till	4	52.05	244	4.69	171	3.29	68	1.31	1	0.02	77	5	14	58	0.37
CRC-96-5	till	2	24.35	105	4.31	66	2.71	27	1.11	1	0.04	47	1	8	38	0.37

Figure 8: Stratigraphic Cross-section



CONCLUSIONS

1) Total kimberlite indicator mineral concentrations decrease from **8.67 KIM's/kg** to **4.31 KIM's/kg** in a westerly direction along the transect. The gravel units of holes CRC-96-1, 2, and 4 are probably glacialfluvial deposits (two of which occupy physical depressions) and samples have roughly half the concentrations levels of kimberlite indicator minerals (KIM's) as samples from the nearby Munro esker complex. This may either indicate a reworking of the locally deposited till to concentrate the KIM's and/or a medial dilution of the Munro coarse sediments. Hole CRC-96-3 possibly demonstrates the former, in that it exhibits a similar KIM concentration in the top sample as the gravels in holes CRC-96-1 and 2. It contains less local clasts and is probably the result of a fluvial reworking of a later less local till. The two lower samples of till contain abundant local clasts and a 30% decrease in the KIM concentrations. Hole CRC-96-4 sampled a gravel with a 45% decrease in KIM concentrations with respect to the more easterly intersected gravels. Hole CRC-96-5 intersected a till with a near identical drop in KIM's. The gravel KIM concentrations appear to reflect the till results. The overall results indicate that the holes are located within the medial portion of a kimberlite indicator mineral dispersal train which has its western margin west of hole CRC-96-05.

2) The kimberlite indicator mineral dispersal trains identified by earlier drill programs appear to continue their northerly trend and it is probable that the source(s) occur north of the claim group.

3) Gold grain counts were generally low to moderate from this program, and probably suggest a medial to distal source north of the study area.

RECOMMENDATIONS

1) A compilation of the KLIP data, inhouse till pit and reverse circulation drill hole sample results should be closely examined to determine the probable direction and extent of the kimberlite indicator mineral dispersal train(s).

2) Probe work should be conducted on the pyrope population in order to ascertain the validity of pursuing the source or sources of these dispersal train(s).

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Plasse, M. 1995. Assessment Report on the 1995 Reverse Circulation Drilling Program, Legacy Misema Property, Larder Lake Mining Division. W.A. Hubacheck Consultants Ltd.

CERTIFICATE

I, Jens Paterson, of the City of St. Catharines, in the Province of Ontario, Canada, do hereby certify that:

1) I am an Exploration Geologist, residing at 6 Hampstead Place, St. Catharines, Ontario, contracted to W.A. Hubacheck Consultants Ltd., 141 Adelaide St. West, Suite 1401, Toronto, Ontario.

2) I am a graduate of Queen's University, where I received by Bachelor of Science degree in Geological Sciences in 1991, and of Brock University, where I received my Master of Science degree in Earth Sciences in 1995, and I have been practicing my profession as an Exploration Geologist continuously since graduation.

3) I am a member of the Geological Association of Canada, the Geological Society of America and the Prospectors and Developers Association of Canada.

4) This report is based on personal examination of the property in November 1996.

5) I have no direct interest in the properties or securities of Sudbury Contact Mines Ltd.

Toronto, Ontario

July 28, 1997

Jens Paterson, M.Sc.

W.A. HUBACHECK CONSULTANTS LTD.

Certificate of Qualifications

I, Raymond J. Knowles, of the City of Etobicoke, in the Province of Ontario, Canada, do hereby certify that:

1) I am an Exploration Geologist, residing at 79 Thirteenth Street, Etobicoke, Ontario, M8V 3H5, under contract to W. A. Hubacheck Consultants Ltd., 141 Adelaide St. West, Suite 1401, Toronto, Ontario.

2) I am a graduate of the University of Toronto where I received my Bachelor of Science degree in Geology in 1985 and have been practising my profession as an Exploration Geologist continuously since graduation.

3) I am a Fellow of the Geological Association of Canada, a member of the Canadian Institute of Mining and Metallurgy and the Prospectors and Developers Association of Canada.

4) This report is based on personal examination of the property in 1996.

5) I have no direct interest in the properties or securities of Sudbury Contact Mines Ltd..

Dated at Toronto, Ontario
This 28th day of July, 1997

Raymond J. Knowles, B.Sc.

W.A. HUBACHECK CONSULTANTS LTD.

APPENDIX A

CERTIFICATE OF EXPENDITURES

W.A. HUBACHECK CONSULTANTS LTD.

PROJECT 218 REVERSE CIRCULATION DRILLING PROGRAM

(NOVEMBER, 1996)

Geologist wages (includes Senior, Project and Contract Geologists)		2 319.85
Technician wages		733.11
Drill Contractor (31.75 hrs)		10 264.50
Road Preparation		1 106.08
Management/Administration		963.38
Food and Lodging		570.90
Field Expenses		314.83
Truck		210.00
Gas		487.04
Reproduction		50.00
TOTAL COST OF DRILLING		**17 019.69**
COST OF DRILLING PER HOUR (17 019.69/31.75 hrs)		536.05
SAMPLES (TOTAL = 14)		
Sample pails	2.50 each	35.00
Shipping	16.00 each	224.00
Sample Processing	193.30 each	2 706.20
Geochemistry	44.50 each	623.00
TOTAL COST PER SAMPLE	256.30 each	
TOTAL COST FOR ALL SAMPLES		3 588.20
TOTAL COST FOR NOVEMBER 1996 PROGRAM		**20 607.89**

Certified by:

Date: July 29/97

W.A. HUBACHECK CONSULTANTS LTD.

APPENDIX B

REVERSE CIRCULATION OVERBURDEN DRILL LOGS

W.A. HUBACHECK CONSULTANTS LTD.

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY SUDBURY CONTACT MINES LTD HOLE No. CRC-96-1 588900E 5328550N

CONTRACTOR HEATH + SHERWOOD LOCATION GAUTHIER TNSHP, CLAIM 548835, elev. 281 m

DRILLER JIM HOWG BIT No. same bit BIT FOOTAGE 0→59.7+27.5=8

MOVE TO HOLE NOV 15 FLOAT 10-1:30; SET UP; GET WATER 1:30-4:, NOV 16 WACK 7-7:30

DRILL 7:30 - 1:15 MECHANICAL DOWN TIME

DRILLING PROBLEMS DATE NOV 16/96

OTHER SHIFT 7a.m. TO 5 p.m.

MOVE TO NEXT HOLE 1:15 - 1:45 TO CRC-96-2 TOTAL HOURS

GEOLOGIST JENS PATERSON SAMPLER ROBERT PEEVER CONTRACT HOURS 6.75

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
0			0-0.5 peat
1			0.5-3 pebbly med-coarse sand
2			
3			3-3.2 fine sand
4			3.2-4.3 pebbly med-coarse sand.
5			4.3-4.4 silt 4.4-4.6 pebbly med-coarse sand
6			
7			
8			4.5-10.5 slightly pebbly med-coarse sand with beds of fine sand
9			
10			10.5-11.5 fine to very fine sand.
11			
12			11.5-15.8 thin fining-upward sequence from fine sand to silt (rare clay)
13			
14			
15			
16			15.8-25.5 laminated silt+clay
17			
18			
19			
20			
21			
22			
23			

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. CRC-96-1

CONTRACTOR _____ LOCATION _____

DRILLER _____ BIT No. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

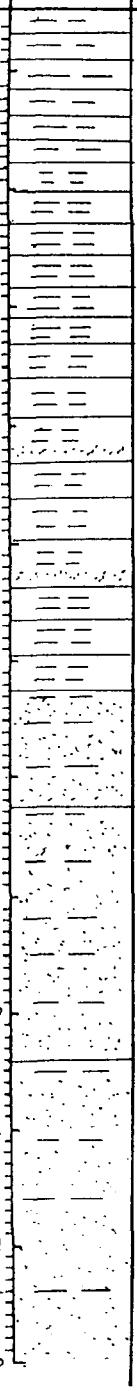
DRILL _____ MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____ DATE Nov 16/96

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE _____ TOTAL HOURS _____

GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
24			15.8 - 25.5 laminated silt ± clay
25			
26			25.5 - 28.5 laminated silt (70) + clay (30) rhythmites up to 0.2 m thick; 15-19 cm silt
27			
28			28.5 - 34.5 laminated silt (70) ± clay (30) with rare fine sand laminae
29			
30			
31			
32			
33			
34			
35			34.5 - 37.5 thicker fining upward sequences (up to 0.5 m thick) from fine sand to silt
36			
37			
38			
39			37.5 - 43.5 laminated very fine sand ± silt with rare clay laminae
40			
41			
42			
43			43.5 - 46.5 laminated fine ± very fine sand with rare silt laminae
44			
45			
46			

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TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. CRC-96-1

CONTRACTOR _____ LOCATION _____

DRILLER _____ BIT No. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____ MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____ DATE NOV 16/96

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE _____ TOTAL HOURS _____

GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
47			46.5 - 52.3 laminated fine to very fine sand with rare beds of med - coarse sand, rare silt laminae (coarsen fining upward sequences)
48			
49			
50			
51			
52			52.3 - 52.4 pebbly med - coarse sand 52.4 - 52.5 fine sand 52.5 - 55.3 pebbly fine to medium sand
53			
54			
55			
56		36762	55.3 - 57 sandy pebble to boulder gravel. very loose drilling - lots of return moderately sorted matrix fine to coarse sand matrix - rich, sandy beds subrounded clasts (some) clasts 70-80% 70 mv. 15 syenite 5 granite, 10 gabbro
57		36763	
58			
59			57 - 58.2 interbedded sandy pebble - cobble gravel and pebbly med - coarse sand 58.2 - 59.7 bedrock syenite trace pyrite.
60	EOH		59.7 EOH

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY SUDBURY CONTACT MINES LTD. HOLE No. CRC-96-2, 588500 E, 5328450N

CONTRACTOR HEATH + SHERWOOD LOCATION GAUTHIER TNSHP; CLAIM 548836; elev. 281 m

DRILLER JIM HOWE BIT No. same bit BIT FOOTAGE 0 → 35.8 + 87.2 = 12

MOVE TO HOLE 1:15 - 1:45 FROM CRC-96-1

DRILL 1:45 - 4:15 MECHANICAL DOWN TIME

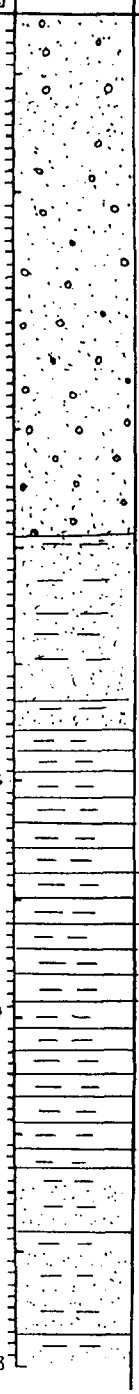
DRILLING PROBLEMS DATE NOV 16/96

OTHER SHIFT 7 a.m. TO 5 p.m.

MOVE TO NEXT HOLE 4:15 - 5 clean mud tanks; NOV 17 7 - 7:30 to CRC-96-3 TOTAL HOURS

GEOLOGIST JENS PATERSON SAMPLER ROBERT PEEVER CONTRACT HOURS 3.75

Jens Pat

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
1–23			0–1.5 slightly pebbly fine to medium sand 1.5–2 fine sand 2–8.8 pebbly fine to medium / medium to coarse sand 8.8–12 laminated very fine sand to silt (core clay) (thin fining upward sequences?) 12–16.5 laminated silt + clay (sooty) 16.5 – 19.5 laminated silt+clay (firm) 19.5 – 24.2 laminated sand, silt + clay

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. CRC-96-2

CONTRACTOR _____ LOCATION _____

DRILLER _____ BIT No. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____ MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____ DATE Nov 16/96

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE _____ TOTAL HOURS _____

GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
24			24 - 24.1 thin pebbly bed
25			24.1 - 27.8 fining upward sequences from very fine sand to silt.
26			
27			
28			27.8
29		36764	27.8 - 32 sandy pebble to cobble gravel moderately to well sorted matrix fine to coarse sand clasts 70% 60 m.v., 15 granite, 10 syenite, 10 sediments, 5 qtz.
30			30
31		36765	
32			32 32 - 32.1 fine sand + silt 32.1 - 33 pebbly med to coarse sand
33			33 - 33.8 slightly pebbly fine to med sand.
34		36766	33.8 34.3 33.8 - 34.3 till? (harder drilling) ? still lots of matrix clasts 60-70% 75 m.v. 10 granite, 10 syenite 5 qtz had to wash to get sample ∴ contaminated with overlying gravel?
35			34.3 - 35.8 bedrock syenite?
36	EOH		35.8 EOH

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY SUDBURY CONTACT MINES LTD. HOLE No. CRC-96-3 588180E, 5328300N

CONTRACTOR HEATH + SHERWOOD LOCATION GAUTHIER TNSHP, CLAIM550012, elev. 281m

DRILLER JIM HOWE BIT No. same bit BIT FOOTAGE 0 → 41.5 + 124 = 16

MOVE TO HOLE 7-7:30 FROM CRC-96-2

DRILL 7:30 - 10:45 MECHANICAL DOWN TIME

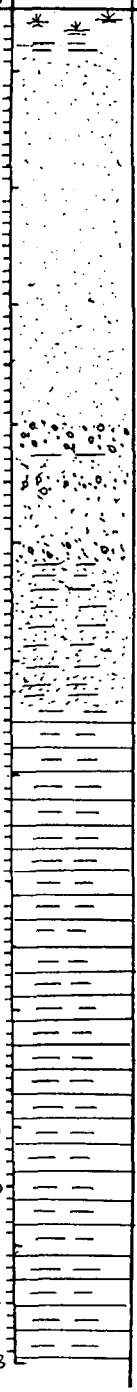
DRILLING PROBLEMS DATE NOV 17/96

OTHER SHIFT 7 a.m. TO 5 p.m.

MOVE TO NEXT HOLE 10:45 - 11 TO CRC-96-4 TOTAL HOURS

GEOLOGIST JENS PATERSON SAMPLER ROBERT PEEVER CONTRACT HOURS 3.5

Jens Pat

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
1–23			0-0.5 peat 0.5-0.6 silt 0.6-7 fine sand 7-7.4 slightly pebbly med-coarse sand 7.4-7.5 gritty silt 7.5-9.3 beds of fine to medium / pebbly med-coarse sand 9.3-11.8 thin fining upward sequences from fine sand to silt (0.05-0.2 m thick) 11.8-23 laminated silt (60) r clay (soupy)

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TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. CRC-96-3

CONTRACTOR _____ LOCATION _____

DRILLER _____ BIT No. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

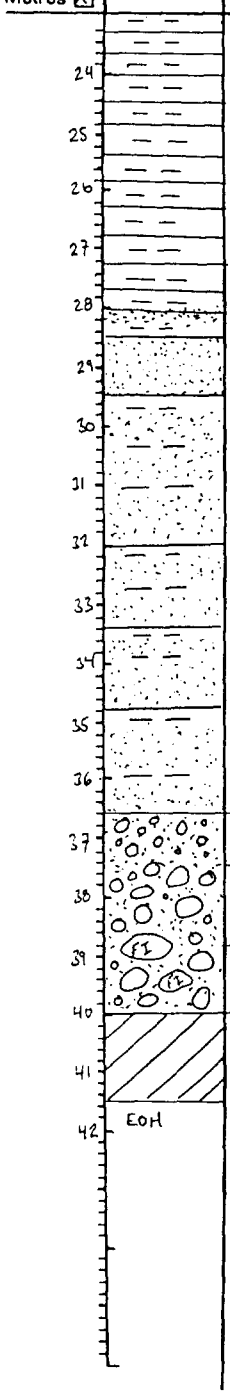
DRILL _____ MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____ DATE Nov 17/96

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE _____ TOTAL HOURS _____

GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____



23 - 28 laminated silt (50) + clay (50)

28 - 28.2 fine sand
28.2 - 28.5 laminated silt/clay
28.5 - 29.4 fine + very fine sand

29.4 - 36.6 fining-upward sequence from fine sand to silt (core clay)

36.6 - 37.5 gravel (till?)
moderately dense + compact
harder than gravels in other holes nearby
36.6
moderately sorted
matrix very fine to med sand
clasts 60/70% 60 m.v. 25 f.i., 10 m.i., 5 q.tz.
37.5

37.5 - 40 sandy cobble to boulder gravel
loose drilling; much more matrix return
38.8
matrix fine to coarse sand
moderately sorted
clasts larger, many sub-rounded, change in lithologies (±50%) 70 f.i., 20 m.v., 5 m.i., 5 q.tz
40

40 - 40.5 bedrock?
syenite
still get matrix, but fractures or fill-in from above

40.5 - 41.5 bedrock
syenite
(bedrock chips sample 40.5-41.5)

41.5 EOH

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY SUDBURY CONTACT MINES LTD. HOLE No. CRC-96-4 587800E 5328150N

CONTRACTOR HEATH + SHERWOOD LOCATION GAUTHIER TNSHP; CLAIM 550013; elev. 280m

DRILLER JIM HOUG BIT No. new bit+sub (new CB71252) CB71257 BIT FOOTAGE 64→69.2 = 5.2 (0→64)

MOVE TO HOLE 10:45 - 11 FROM CRC-96-3

DRILL 11-3:45; NOV 18 7:30 - 3:45 MECHANICAL DOWN TIME

DRILLING PROBLEMS NOV17 2:45 - 3:45 (RODS BY-PASSING) DRILL TO 64 PULL BACK TO 63, TRIP OUT FROM 63 (WORN INNER TUBE ON 13th ROD). NOV18 RE-DRILL 7:30 - 10:15. DATE NOV 17, 18/96

OTHER DRILL 10:15 - 10:30; RODS BY PASSING AGAIN (BAD 'O-RING'), TRIP OUT 10:45 - 11:30 RE-DRILL 11:30 - 1:30; DRILL 1:30 - 3:45 SHIFT 7 a.m TO 5 p.m

MOVE TO NEXT HOLE NOV19 7:30 - 815 TO MRC-96-1 TOTAL HOURS

GEOLOGIST JENS PATERSON SAMPLER ROBERT PEEVER CONTRACT HOURS 13.25

JP

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
0			0-0.5 peat
1			
2			0.5 - 6.5 fine sand.
3			
4			
5			
6			6.5-9.8 slightly pebbly fine to med sand
7			
8			
9			9-9.8 fine sand
10			9.8-10.5 laminated silt+clay (soupy)
11			10.5-13.2 very fine sand + silt. (trace clay)
12			
13			
14			
15			13.2 - 25 laminated silt (50) + clay (50)
16			
17			
23			
24			
25			25-25.5 fine sand
26			25.5 - 28.5 fining upward sequences from fine sand to clay (0.5-0.75 m thick)
27			

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TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. CRC-96-4

CONTRACTOR _____ LOCATION _____

DRILLER _____ BIT No. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____ MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____ DATE Nov 17, 18/96

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE _____ TOTAL HOURS _____

GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
28			
29			
30			
31			
32			
33			28.5 - 46.5 fine to very fine sand with rare silt laminae.
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			(dropstones @ 44m)
45			
46			
47			46.6 - 56.4 fining upward sequences from fine sand to clay (a2-0.4m thick)
48			
49			
50			

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. CRC-96-4

CONTRACTOR _____ LOCATION _____

DRILLER _____ BIT No. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____ MECHANICAL DOWN TIME _____

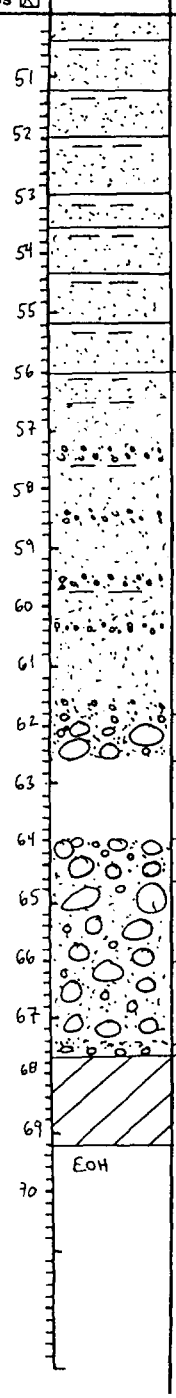
DRILLING PROBLEMS _____ DATE Nov 17, 18/96

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE _____ TOTAL HOURS _____

GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet ☐ Metres ☒ | GRAPHIC LOG | SAMPLE No. | DESCRIPTIVE LOG



36770

POOR RETURN

36771

36772

36773

56.4 - 61.4 fining upward sequence from slightly pbly fine sand to silt

61.4 - 61.8 pebbly fine to medium sand.

61.8 - 62.6 sandy pebble to cobble gravel
matrix fine to coarse sand
moderately sorted
clasts 60% 70 m.v. 20 fi, 10 mi
loose drilling - lots of return (1/2 pail)

62.6 - 64 rods blocked - no matrix return (trip out)

62.6 - 64 (re-drill) more gravel (not sampled)

64 - 64.7 sandy gravel (drill more like till)
matrix very fine to med. sand
moderately dense + compact
clasts ± 60%; 45 m.v., 25 syenite, 10 Hur. sed, 10 granite, 5 mi, 5 qtz
some fall-in?

64.7 - broken seal ∴ previous sample may be contaminated by increasing matrix return (poor clast return)
- some thin beds of gritty silty clay?
- trip out.

64.7 - 67.5 sandy pebble to cobble gravel
both clast-poor zones + bouldery concentrations
moderately sorted; matrix fine to med. sand.
clasts ± 50% (same lithologies as above)
too much return for till

67.5 - 67.6 slightly pebbly fine to med. sand.

67.6 - 67.7 sandy gravel

67.7 - 69.2 bedrock
syenite
(chip sample contains some clasts fallen from above)

69.2 EOH

W.A.H.UBACHECK CONSULTANTS LTD.

TORONTO, ONTARIO, CANADA

P1/2

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY SUDBURY CONTACT MINES LTD. HOLE No. CRC-96-5 587350 E, 5328100 N

CONTRACTOR HEATH + SHERWOOD LOCATION GAUTHIER TNSHP; CLAIM 550013; elev. 280m.

DRILLER JIM HOWG BIT No. same bit BIT FOOTAGE 0→49.8+56=105

MOVE TO HOLE NOV 20 1:30-4 FROM MRC-96-2

DRILL 7:30 - 12 MECHANICAL DOWN TIME

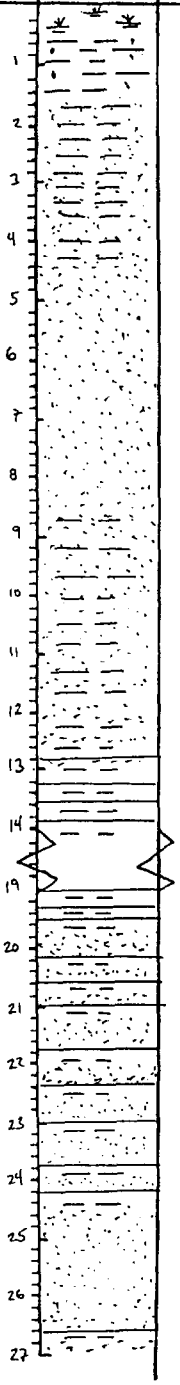
DRILLING PROBLEMS USED DRILLING MUD. DATE NOV 21/96

OTHER SHIFT 7a.m. TO 5 p.m

MOVE TO NEXT HOLE 12-1 MOVE TO RD, GET READY FOR TRANSPORT BACK TO SHOP TOTAL HOURS

GEOLOGIST JENS PATERSON FLOAT 1-2 SAMPLER ROBERT PEEVER CONTRACT HOURS 4.5

Jens Pat

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
1–27			0-0.5 peat 0.5-1.5 gritty silt 1.5-4.5 yellow brown silt + very fine sand 4.5-8.5 fine sand 8.5-10 fine sand with rare silt laminae 10-12.8 thin fining upward sequences fine sand to silt 12.8-19.5 laminated silt+clay 19.5-24.6 thin fining upward sequences from fine sand to clay 24.6-26.6 fine sand

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TORONTO, ONTARIO, CANADA

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. CRC-96-5

CONTRACTOR _____ LOCATION _____

DRILLER _____ BIT No. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____ MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____ DATE Nov 21/96

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE _____ TOTAL HOURS _____

GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet ☐ Metres ☒	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG
28			26.6 - 29.2 fining upward sequences from fine sand to silt to clay
29			29.2 - 30 fine to med. sand
30			30 - 30.1 clay 30.1 - 30.2 silt 30.2 - 30.6 fine to med. sand 30.6 - 31 med. sand
31			31 - 31.5 fine sand 31.5 - 31.8 fine to med sand 31.8 - 34 med sand
32			
33			
34			34 - 34.2 med - coarse sand 34.2 - 35.5 fine to med. sand.
35			35.5 - 35.6 clay to silt 35.6 - 36.8 fine to med. sand 36.8 - 37.4 med to coarse sand.
36			
37			37.4 - 37.5 fine sand 37.5 - 38.5 med. sand. 38.5 - 39.2 fine sand
38			
39			39.2 - 39.25 silt 39.25 - 39.6 fine sand 39.6 - 39.8 med to coarse sand 39.8 - 42.4 fine to med sand
40			
41			
42			
43			42.4 - 47.3 thinm fining upward sequences med sand to silt
44			
45			47.3 - 47.8 sandy gravel very loose drilling; lots of return matrix fine to med sand clasts ≥ 60% 50 m.v.; 30 f.i; 10 m.i. 10 Tim sed.
46			47.8 - 48 syenite boulder.
47			
48		36781 36782	47.3 48 - 48.3 thin till? 47.8 moderately dense + compact 48 moderately sorted clasts ≥ 80% (because of poor matrix return?) 48.3 mainly small, angular fragments 50 m.b., 30 f., 10 m., 10 f.sed washed 5 times to get sample (contaminated with overlying gravel?)
49			48.3 - 49.8 bedrock : syenite trace pyrite
50	EOH		

49.8 EOH

APPENDIX C

OVERBURDEN DRILLING MANAGEMENT RESULTS

W.A. HUBACHECK CONSULTANTS LTD.

OVERBURDEN DRILLING MANAGEMENT LIMITED
107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1
TELEPHONE: (613) 226-1771/1774
FAX NO.: (613) 226-8753

DATA TRANSMITTAL REPORT

DATE: 12-Dec-96

ATTENTION: MSSRS. DAVID CHRISTIE & RAY KNOWLES

CLIENT: W.A. HUBACHECK CONSULTANTS LTD.
141 ADELAIDE STREET WEST
SUITE 1401
TORONTO ONT.
M5H 3L5
FAX NO.: (416) 364-5384 (office)
(705) 643-2393 (field)

NO. OF PAGES: 9

PROJECT: 218 36762 to 36773
36781 to 36782

FILE NO: H2181DEK.WR1

NO. OF SAMPLES: 13

THESE SAMPLES WERE PROCESSED FOR: VISIBLE GOLD GRAINS
KIMBERLITE INDICATORS

SPECIFICATIONS:
HEAVY LIQUID SEPARATION SPECIFIC GRAVITY: 3.20
ALL GOLD GRAINS ISOLATED IN CONICAL VIALS.
ALL -250 MICRON HMC SENT FOR ANALYSIS.
ALL SAMPLES PICKED FOR INDICATOR MINERAL GRAINS.
ALL OTHER SAMPLE FRACTIONS ARE PRESENTLY STORED.

REMARKS: -250µ HMC and -63µ clay silt fraction submitted for analysis -

Rémy Huneault
Laboratory Manager

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

12/17/96
PROJECT: 218
TOTAL OF 13 SAMPLES.
FILENAME: H2181DEK.WR1

SAMPLE DESCRIPTION

SAMPLE NUMBER	WEIGHT (KILOGRAMS) BULK RECEIVED	TABLE SPLIT	CLASTS >2.0 mm +2 mm CLASTS	1-2 mm CLASTS	TABLE FEED	SIZE	PERCENTAGE V/S	GR	LS	OT	MATRIX <1.0 mm GRAIN SIZE DISTRIBUTION G/U	SD	ST	CY	COLOUR SAND	CLAY	ORG.	CLASS
218																		
36762	14.75	14.75	4.20	2.40	8.15	C	90	10	0	0	U	+	Y	-	GB	GB		SANDY TILL
36763	9.15	9.15	0.65	0.50	8.00	C	90	10	0	0	U	+	Y	-	GB	GB		TILL
36764	21.20	17.30	2.60	1.80	12.90	C	80	20	0	0	U	+	Y	-	GB	GB		SANDY TILL
36765	12.85	12.85	1.75	0.95	10.15	C	70	30	0	0	U	+	Y	-	GB	GB		TILL
36766	19.05	17.55	2.85	1.90	12.80	C	80	20	0	0	U	+	Y	-	GB	GB		SANDY TILL
36767	10.25	10.25	1.45	1.25	7.55	C	70	30	0	0	U	+	Y	-	GB	GB		SANDY TILL
36768	23.20	18.90	3.85	1.40	13.65	C	40	60	0	0	U	+	Y	-	GB	GB		SANDY TILL
36769	21.25	17.85	2.70	1.60	13.55	C	20	80	0	0	U	+	Y	-	GB	GB		SANDY TILL
36770	18.40	18.40	4.30	1.75	12.35	C	80	20	0	0	U	+	Y	-	GB	GB		SANDY TILL
36771	18.25	18.25	1.45	0.85	15.95	C	90	10	0	0	S	F,M	+	-	GB	GY		SAND
36772	13.65	13.65	1.90	1.15	10.60	C	80	20	0	0	S	F,M	Y	-	GB	GB		SAND
36773	16.55	16.55	2.55	0.85	13.15	C	70	30	0	0	U	+	Y	-	GB	GB		SANDY TILL
36781	14.00	14.00	2.30	1.20	10.50	C	60	40	0	0	U	Y	Y	Y	GY	GY		TILL
36782	15.35	15.35	0.75	0.75	13.85	C	50	50	0	0	U	Y	+	Y	GY	GY		TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

HUBACHEK\H2181DEC.WR2

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
218									
36762	7	7	0	0	82.1	370	370	0	0
36763	6	6	0	0	87.4	4	4	0	0
36764	10	9	1	0	147.3	42	41	1	0
36765	15	14	0	1	102.3	75	74	0	1
36766	15	15	0	0	138.6	133	133	0	0
36767	15	12	3	0	98.7	153	143	11	0
36768	14	11	3	0	161.7	107	88	20	0
36769	24	24	0	0	155.1	166	166	0	0
36770	25	18	5	2	153.9	200	194	4	2
36771	18	14	4	0	116.1	71	65	6	0
36772	13	9	3	1	138.6	13	12	1	0
36773	21	17	2	2	146.7	70	56	11	3
36781	23	20	3	0	77.3	66	63	3	0
39782	24	18	5	1	94.1	99	87	1	11

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

HUBACHEX\H2181DEC.WR2

TOTAL # OF PANNINGS 14

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
218													
36762	Y	25 X 25	5 C	2						2			15% pyrite
		25 X 50	8 C	1						1			
		25 X 100	13 C	1						1			
		50 X 75	13 C	1						1			
		50 X 125	18 C		1					1			
		150 X 400	50 C	1						1			
										7	82.1	370	
36763	Y	25 X 25	5 C	2						2			20% pyrite
		25 X 50	8 C	4						4			
										6	87.4	4	
36764	Y	25 X 50	8 C	1	1	1				3			25% pyrite
		25 X 75	10 C	2						2			
		50 X 75	13 C	1						1			
		50 X 100	15 C	2						2			
		50 X 125	18 C	1						1			
		100 X 150	25 C	1						1			
										10	147.3	42	
36765	Y	15 X 15	3 C	1						1			15% pyrite
		15 X 25	4 C	2						2			
		15 X 50	7 C	1				1		2			
		25 X 25	5 C	1						1			
		25 X 50	8 C	1						1			
		25 X 75	10 C		1					1			
		50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
		75 X 125	20 C	3	1					4			
										15	102.3	75	
36766	Y	15 X 15	3 C	1						1			10% pyrite
		25 X 25	5 C	2	1					3			
		25 X 50	8 C	2						2			
		25 X 75	10 C	1						1			
		50 X 75	13 C	2	1					3			
		75 X 75	15 C	1						1			
		75 X 125	20 C	1	1					2			
		125 X 150	27 C	1						1			
		150 X 225	36 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

HUBACHEK\H218IDEC.WR2 NUMBER OF GRAINS

TOTAL # OF PANNINGS 14

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
218													
										15	138.6	133	
36767	Y	15 X 25	4 C	3						3			15% pyrite
		25 X 25	5 C	2		2				4			
		25 X 75	10 C	2						2			
		50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
		50 X 125	18 C				1			1			
		75 X 75	15 C		1					1			
		75 X 100	18 C	1						1			
		150 X 250	38 C	1						1			
										15	98.7	153	
36768	Y	15 X 50	7 C	1		1				2			7% pyrite
		25 X 25	5 C	1						1			
		25 X 50	8 C	3						3			
		50 X 75	13 C	1						1			
		50 X 100	15 C	2	1					3			
		75 X 100	18 C			1				1			
		75 X 150	22 C	1						1			
		100 X 125	22 C			1				1			
		175 X 200	36 C		1					1			
										14	161.7	107	
36769	Y	15 X 25	4 C	4						4			10% pyrite
		15 X 50	7 C	1						1			
		25 X 25	5 C	5						5			
		25 X 50	8 C	2						2			
		25 X 75	10 C	2	2					4			
		50 X 50	10 C	1						1			
		50 X 75	13 C		2					2			
		50 X 100	15 C	1						1			
		75 X 75	15 C		1					1			
		75 X 125	20 C	1						1			
		100 X 125	22 C	1						1			
		175 X 300	44 C	1						1			
										24	155.1	166	
36770	Y	15 X 15	3 C			1				1			25% pyrite
		25 X 25	5 C	2		1				3			
		25 X 50	8 C	4		2				6			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

HUBACHEK\H2181DEC.WK2

TOTAL # OF PANNINGS 14

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
218													
		25 X 75	10 C	1	2			2		5			
		50 X 50	10 C		1					1			
		50 X 75	13 C	1		1				2			
		75 X 100	18 C	2						2			
		75 X 100	75 M		1					1			
		100 X 150	25 C	1						1			
		100 X 175	27 C		1					1			
		125 X 150	27 C		1					1			
		175 X 225	38 C		1					1			
										25	153.9	200	
36771	Y	15 X 25	4 C			2				2			10% pyrite
		15 X 50	7 C	2						2			
		25 X 25	5 C	1		1				2			
		25 X 50	8 C	1						1			
		25 X 100	13 C	1						1			
		50 X 50	10 C	1						1			
		50 X 75	13 C	3	1					4			
		50 X 100	15 C	1		1				2			
		75 X 100	18 C	1						1			
		75 X 125	20 C	1						1			
		100 X 125	22 C		1					1			
										18	116.1	71	
36772	Y	15 X 15	3 C	1		1				2			10% pyrite
		15 X 25	4 C	1				1		2			
		15 X 50	7 C	1						1			
		25 X 25	5 C	1		1				2			
		25 X 50	8 C	2	1	1				4			
		50 X 75	13 C	1						1			
		75 X 100	18 C	1						1			
										13	138.6	13	
36773	Y	15 X 25	4 C	1				1		2			10% pyrite
		25 X 25	5 C	1						1			
		25 X 50	8 C	5						5			
		25 X 75	10 C	2						2			
		50 X 50	10 C	1						1			
		50 X 75	13 C	3	1			1		5			
		50 X 100	15 C	1						1			
		75 X 75	15 C			1				1			
		75 X 100	18 C				1			1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

HUBACHEK\H218IDEC.WR2 NUMBER OF GRAINS

TOTAL # OF PANNINGS 14

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
218													
		75 X 175	25 C	1						1			
		100 X 125	22 C	1						1			
										21	146.7	70	
36781	Y	15 X 15	3 C	3						3			7% pyrite
		25 X 25	5 C	1						1			
		25 X 50	8 C	6		3				9			
		25 X 75	10 C	2						2			
		50 X 50	10 C	3	1					4			
		50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
		75 X 75	15 C		1					1			
		75 X 125	20 C	1						1			
										23	77.3	66	
39782	Y	15 X 15	3 C			2				2			3% pyrite
		25 X 25	5 C	3		3				6			
		25 X 50	8 C	6						6			
		25 X 75	10 C	2						2			
		50 X 50	10 C	1	1					2			
		50 X 75	13 C	1						1			
		50 X 100	25 M		1			1		2			
		50 X 125	18 C		1					1			
		50 X 125	50 M	1						1			
		75 X 125	20 C	1						1			
										24	94.1	99	

OVERBURDEN DRILLING MANAGEMENT LIMITED.
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

12/17/96
PROJECT: 218
TOTAL OF 13 SAMPLES

	TABLE CONCENTRATE (1.0 mm (grams)								KIM COUNT							T
			M.I. SEPARATION S.G 3.20											0.25 TO		O
SAMPLE		-0.25							0.5 TO 1 mm					0.5 mm		T A
NUMBER	TOTAL	mm	M.I. LIGHTS	TOTAL MAG	TOTAL NON-MAG	-0.25 mm	0.25 TO 0.5 mm	0.5 TO 1.0 mm	GP	GO	DC	IM	CR	GP	DC	L KIMs
218																
36762	831.9	NA	731.5	18.3	82.1	61.4	15.3	5.4	14	1	4	0	0	71	19	109
36763	523.7	NA	419.8	16.5	87.4	80.7	5.4	1.3	1	0	0	0	0	23	7	31
36764	744.6	NA	561.1	36.2	147.3	122.7	16.2	8.4	18	0	4	13	2	79	7	123
36765	575.6	NA	448.7	24.6	102.3	89.8	9.1	3.4	6	1	0	1	2	36	10	56
36766	762.0	NA	594.3	29.1	138.6	120.8	13.7	4.1	8	3	2	8	0	64	20	105
36767	576.6	NA	453.4	24.5	98.7	80.1	12.6	6.0	9	0	2	6	0	40	8	65
36768	849.7	NA	650.8	37.2	161.7	147.8	10.3	3.6	12	1	0	2	0	52	14	81
36769	603.8	NA	394.7	54.0	155.1	138.1	11.5	5.5	11	0	4	4	0	49	16	84
36770	684.7	NA	491.4	39.4	153.9	129.5	15.7	8.7	5	3	1	0	0	61	15	85
36771	606.3	NA	463.7	26.5	116.1	104.7	7.8	3.6	6	0	3	0	0	22	16	47
36772	785.7	NA	620.2	26.9	138.6	118.3	10.1	10.2	2	0	2	1	1	29	7	42
36773	801.3	NA	623.2	31.4	146.7	130.3	12.0	4.4	7	0	2	0	0	39	22	70
36781	542.8	NA	447.9	17.6	77.3	59.3	12.3	5.7	7	2	2	1	7	38	12	69
36782	459.5	NA	345.1	20.3	94.1	80.8	9.6	3.7	5	1	0	0	1	16	13	36

KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES:

SAMPLE NO: PROJECT: 218	REMARKS
36762	One of the 14 GP in the 0.5-1.0 mm fraction has crystal faces and 2 have kelyphite coatings. SEM check from 0.5-1.0 mm fraction: 1 of 5 IM candidates = 1 crustal ilmenite. Also picked 2 emerald green andradite and 1 pale emerald green low-Cr diopside from 0.5-1.0 mm fraction, and 9 low-Cr diopside from 0.25-0.5 mm fraction.
36763	Also picked 1 emerald green andradite from 0.5-1.0 mm fraction.
36764	Also picked 1 pale emerald green low-Cr diopside from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction.
36765	SEM checks from 0.5-1.0 mm fraction: 2 chromite candidates = 2 CR; and 2 marginal IM candidates = 1 IM and 1 crustal ilmenite. Also picked 2 pale emerald green low-Cr diopside from 0.25-0.5 mm fraction.
36766	Also picked 2 pale emerald green low-Cr diopside from 0.5-1.0 mm fraction and 4 from 0.25-0.5 mm fraction.
36767	Also picked 1 emerald green andradite from 0.5-1.0 mm fraction and 1 pale emerald green low-Cr diopside from 0.25-0.5 mm fraction.
36768	Also picked 1 pale emerald green low-Cr diopside from 0.5-1.0 mm fraction and 7 from 0.25-0.5 mm fraction.
36769	Also picked 10 pale emerald green low-Cr diopside from 0.25-0.5 mm fraction.
36770	Also picked 4 pale emerald green low-Cr diopside from 0.5-1.0 mm fraction and 7 from 0.25-0.5 mm fraction.
36772	Also picked 2 pale emerald green low-Cr diopside and 1 300X1000X200 micron reshaped gold grain from 0.25-0.5 mm fraction.
36781	Also picked 3 pale emerald green low-Cr diopside from 0.25-0.5 mm fraction.

APPENDIX D

ACTLABS GEOCHEMICAL ANALYSIS RESULTS

W.A. HUBACHECK CONSULTANTS LTD.

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 12105
Work Order: 12184
Invoice Date: 23-JAN-97
Date Submitted: 13-DEC-96
Your Reference: 218, 196
Account Number: 444

W.A HUBACHECK CONSULTANTS LTD
141 ADELAIDE ST WEST, SUITE 1401
TORONTO, ONT
M5H 3L5

ATT:DAVE CHRISTIE

CERTIFICATE OF ANALYSIS

21 SAMPLES were submitted for analyis.

The following analytical packages were requested. Please see our current fee schedule for elements and detection limits.

REPORT 12105 PKG 3A-HMC-INAA
REPORT 12105 B PKG 3C-AQUA REGIA ICP

CERTIFIED BY :

DR. E. L. HOFFMAN

Sample description HMC	AU PPB	AG PPM	AS PPM	BA PPM	BR PPM	CA %	CO PPM	CR PPM	CS PPM	FE %	HF PPM	HG PPM	IR PPB	MO PPM	NA PPM	NI PPM	RB PPM	SB PPM	SC PPM	SE PPM	SR %	TA PPM	TH PPM	U PPM
36762	73	<5	32	<200	<5	7	51	530	<2	10.8	53	<5	<50	<20	3170	<200	<50	1.1	55	<20	<0.2	6	26	2.0
36763	57	<5	13	<200	<5	8	50	490	<2	10.6	58	<5	<50	<20	2930	<200	<50	0.3	52	<20	<0.2	5	28	6.9
36764	160	<5	62	<200	<5	8	61	550	<2	11.2	52	<5	<50	<20	3350	<200	<50	<0.2	55	<20	<0.2	5	29	7.4
36765	113	<5	44	<200	<5	8	49	480	<2	9.67	55	<5	<50	<20	3000	<200	<50	0.9	49	<20	<0.2	5	30	5.6
36766	95	<5	30	<200	<5	9	56	500	<2	10.5	54	<5	<50	<20	3240	<200	<50	1.0	56	<20	<0.2	6	31	5.5
36767	126	17	52	470	<5	8	59	550	<2	11.2	48	<5	<50	<20	3680	<200	<50	<0.2	56	<20	<0.2	5	25	3.0
36768	43	<5	23	810	<5	9	40	430	<2	8.65	46	<5	<50	<20	3110	<200	<50	<0.2	48	<20	<0.2	4	25	6.6
36769	50	<5	30	1100	<5	11	48	440	<2	9.28	61	<5	<50	<20	3400	<200	<50	0.7	50	<20	<0.2	6	39	9.7
36770	142	<5	59	<200	<5	<2	62	530	<2	11.4	66	<5	<50	<20	3680	<200	<50	1.4	56	<20	<0.2	4	28	4.7
36771	84	<5	39	<200	<5	10	51	530	<2	11.0	86	<5	<50	<20	3990	<200	<50	1.2	56	<20	<0.2	5	45	2.0
36772	97	<5	30	<200	<5	9	47	430	<2	10.1	58	<5	<50	24	3620	<200	<50	<0.2	54	<20	<0.2	5	33	2.0
36773	121	<5	40	820	<5	10	49	540	<2	10.9	65	<5	<50	<20	3690	<200	<50	1.0	56	<20	<0.2	3	37	7.6
36781	87	<5	53	<200	<5	<2	63	630	<2	12.3	81	<5	<50	<20	3740	<200	<50	<0.2	58	<20	<0.2	7	39	7.8
36782	65	<5	35	570	<5	7	48	530	<2	10.9	81	<5	<50	<20	4160	<200	<50	<0.2	56	<20	<0.2	9	47	14

Sample description HMC	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
36762	<4	<200	86	180	60	15	3.9	<2	12.1	2.1	58.00
36763	<4	<200	88	180	64	15	4.3	3	11.8	1.7	61.00
36764	<4	<200	100	210	77	16	4.7	4	13.3	2.1	61.00
36765	<4	<200	100	200	72	16	4.4	3	11.4	2.0	61.00
36766	<4	<200	100	210	81	17	5.1	<2	12.6	2.0	61.00
36767	<4	<200	97	200	76	16	4.9	<2	12.9	2.1	61.00
36768	<4	<200	110	220	79	17	4.8	3	11.2	1.8	61.00
36769	<4	<200	170	330	130	25	7.1	4	14.9	2.3	61.00
36770	24	<200	100	200	69	16	4.4	3	12.1	2.1	61.00
36771	<4	203	130	260	73	21	5.4	4	13.0	2.3	61.00
36772	<4	<200	110	220	92	17	4.7	<2	11.8	2.0	61.00
36773	<4	<200	120	240	83	19	4.8	3	12.4	2.1	61.00
36781	<4	217	130	270	99	20	5.6	3	14.2	2.3	56.00
36782	<4	295	150	290	120	22	5.5	<2	13.6	2.3	61.00

ACTLABS **ACTIVATION LABORATORIES LTD**

Invoice No.: 12155
Work Order: 12230
Invoice Date: 23-JAN-97
Date Submitted: 20-DEC-96
Your Reference: 218, 196
Account Number: 444

W.A HUBACHECK CONSULTANTS LTD
141 ADELAIDE ST WEST, SUITE 1401
TORONTO, ONT
M5H 3L5

ATT:DAVE CHRISTIE

CERTIFICATE OF ANALYSIS

21 SAMPLES were submitted for analyis.

The following analytical packages were requested. Please see our current fee schedule for elements and detection limits.

REPORT 12155 PKG 1H-INAA
REPORT 12155 B TOTAL DIGESTION ICP

CERTIFIED BY :

DR. E. L. HOFFMAN

Sample description - 63 µ	AU PPB	AG PPM	AS PPM	BA PPM	BR PPM	CA %	CO PPM	CR PPM	CS PPM	FE %	HF PPM	HG PPM	IR PPB	MO PPM	NA %	NI PPM	RB PPM	SB PPM	SC PPM	SE PPM	SN %	SR %	TA PPM	TH PPM
218-36762	5	<5	1.7	350	1.0	4	7	87	1	2.01	7	<1	<5	<1	2.39	<20	47	<0.1	9.1	<3	<0.01	<0.05	<0.5	3.3
218-36763	<2	<5	1.8	410	1.1	3	7	110	<1	2.21	10	<1	<5	<1	2.39	<20	47	0.2	9.5	<3	<0.01	<0.05	1.0	4.5
218-36764	13	<5	3.1	420	<0.5	4	8	120	<1	2.43	10	<1	<5	<1	2.42	<20	36	0.2	9.8	<3	<0.01	<0.05	<0.5	4.8
218-36765	9	<5	2.9	430	1.8	3	8	110	<1	2.29	9	<1	<5	<1	2.37	<20	38	0.2	9.4	<3	<0.01	<0.05	1.1	4.0
218-36766	23	<5	3.4	490	1.3	3	8	110	<1	2.34	10	<1	<5	<1	2.47	37	44	0.2	9.8	<3	<0.01	<0.05	<0.5	4.8
218-36767	<2	<5	3.3	390	<0.5	4	8	120	<1	2.27	9	<1	<5	<1	2.46	<20	41	0.2	9.4	<3	<0.01	<0.05	<0.5	3.8
218-36768	9	<5	2.8	590	<0.5	3	9	140	<1	2.64	12	<1	<5	<1	2.45	<20	30	<0.1	9.7	<3	<0.01	<0.05	<0.5	5.0
218-36769	8	<5	2.2	720	<0.5	3	8	120	<1	2.40	10	<1	<5	<1	2.53	<20	30	<0.1	8.6	<3	<0.01	0.08	<0.5	4.6
218-36770	14	<5	4.3	480	<0.5	3	9	140	<1	2.57	9	<1	<5	1	2.44	<20	33	0.2	10	<3	<0.01	<0.05	0.9	4.5
218-36771	6	<5	2.7	360	<0.5	3	6	75	<1	1.74	7	<1	<5	<1	1.91	<20	34	<0.1	7.6	<3	<0.01	0.05	<0.5	2.8
218-36772	6	<5	2.3	390	<0.5	4	9	110	<1	2.31	10	<1	<5	<1	2.37	<20	56	0.2	9.9	<3	<0.01	<0.05	<0.5	5.0
218-36773	21	<5	2.8	380	<0.5	4	8	120	<1	2.39	10	<1	<5	<1	2.35	<20	28	<0.1	10	<3	<0.01	0.08	<0.5	5.2
218-36781	10	<5	1.3	480	<0.5	3	7	88	<1	1.82	6	<1	<5	<1	2.35	<20	30	0.2	8.4	<3	<0.01	<0.05	0.9	3.2
218-36782	<2	<5	1.5	460	0.7	4	8	91	<1	2.04	7	<1	<5	<1	2.34	<20	45	0.2	8.9	<3	<0.01	<0.05	<0.5	3.7

Sample description -63u	U PPM	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
218-36762	1.1	<1	<50	16	29	12	2.6	0.8	<0.5	1.4	0.21	30.10
218-36763	1.2	<1	<50	18	34	14	2.8	0.9	<0.5	1.6	0.26	31.20
218-36764	1.1	<1	<50	19	36	14	3.0	0.9	<0.5	1.5	0.28	30.80
218-36765	1.3	<1	<50	18	34	14	2.9	0.9	0.5	1.4	0.23	32.10
218-36766	1.3	<1	<50	19	36	15	3.0	0.9	<0.5	1.6	0.26	30.20
218-36767	1.2	<1	<50	17	31	13	2.8	0.9	<0.5	1.5	0.25	32.70
218-36768	1.4	<1	<50	23	45	19	3.4	1.0	0.7	1.6	0.28	31.30
218-36769	1.4	<1	<50	21	39	17	3.1	0.9	<0.5	1.5	0.22	31.60
218-36770	1.0	<1	<50	18	35	15	3.0	0.9	0.5	1.6	0.26	30.80
218-36771	<0.5	<1	<50	14	23	11	2.2	0.7	<0.5	1.2	0.22	43.30
218-36772	<0.5	<1	<50	19	37	15	3.1	0.9	<0.5	1.6	0.25	31.50
218-36773	1.5	<1	<50	19	35	17	3.0	0.9	<0.5	1.6	0.26	31.10
218-36781	2.1	1	<50	15	28	14	2.4	0.8	<0.5	1.3	0.20	33.70
218-36782	1.7	2	<50	16	32	14	2.5	0.8	<0.5	1.4	0.23	32.80

Sample description -63µ	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	MN PPM	SR PPM	CD PPM	SB PPM	V PPM	CA %	P %	MG %	TI %	AL %	K %	Y PPM	BE PPM
218-36762	<2.	19.	<5.	31.	<0.4	31.	425.	332.	<0.5	<5.	57.	3.73	0.055	1.37	0.24	5.60	1.39	12.	2.
218-36763	<2.	20.	6.	27.	0.4	28.	456.	343.	<0.5	<5.	62.	3.46	0.057	1.22	0.26	5.62	1.35	13.	2.
218-36764	<2.	17.	<5.	26.	0.5	26.	424.	327.	<0.5	<5.	59.	3.25	0.055	1.13	0.25	4.93	1.29	12.	2.
218-36765	<2.	13.	9.	25.	0.5	26.	458.	355.	<0.5	<5.	63.	3.35	0.064	1.12	0.27	5.56	1.35	13.	2.
218-36766	<2.	15.	5.	26.	<0.4	27.	454.	331.	<0.5	<5.	61.	3.24	0.056	1.09	0.27	5.36	1.32	12.	2.
218-36767	<2.	11.	8.	25.	<0.4	26.	439.	337.	<0.5	<5.	59.	3.13	0.055	1.06	0.24	5.24	1.31	11.	2.
218-36768	<2.	13.	5.	30.	<0.4	26.	515.	354.	<0.5	<5.	70.	3.03	0.068	1.01	0.30	5.51	1.29	14.	2.
218-36769	<2.	11.	8.	29.	<0.4	25.	471.	363.	<0.5	<5.	64.	2.87	0.067	0.98	0.26	5.53	1.36	13.	2.
218-36770	<2.	17.	5.	29.	0.4	33.	508.	360.	<0.5	<5.	68.	3.49	0.065	1.25	0.27	5.71	1.36	13.	2.
218-36771	<2.	14.	<5.	23.	<0.4	26.	426.	350.	<0.5	<5.	56.	3.25	0.058	1.06	0.25	5.65	1.37	12.	2.
218-36772	<2.	18.	7.	27.	0.6	34.	483.	336.	<0.5	<5.	62.	3.57	0.061	1.28	0.28	5.59	1.35	13.	2.
218-36773	<2.	15.	<5.	26.	<0.4	32.	489.	340.	<0.5	<5.	63.	3.62	0.059	1.32	0.28	5.66	1.36	13.	2.
218-36781	<2.	13.	5.	21.	<0.4	26.	391.	323.	<0.5	<5.	49.	3.19	0.049	1.15	0.20	5.15	1.32	10.	2.
218-36782	<2.	16.	8.	27.	<0.4	34.	458.	341.	<0.5	<5.	58.	3.48	0.052	1.35	0.23	5.61	1.38	11.	2.

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use): W9780.00778
Assessment Files Research Imaging

Personal information
Mining Act, the inforr
Questions about th
933 Ramsey Lake R

d 66(3) of the Mining Act. Under section 8 of the
work and correspond with the mining land holder.
Northern Development and Mines, 6th Floor,

900

Instructions: - For work performed on ... n, use form 0240
- Please type or print in ink.

2.17566

1. Recorded holder(s) (Attach a list if necessary)

Name	Client Number
HILDA EGG,	129099
Address	**Telephone Number**
5306 MISSISSAUGA RD.,	905-826-0022
MISSISSAUGA, ONTARIO, L5M 3M2	**Fax Number**
Name	**Client Number**
Address	**Telephone Number**
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

☐ Geotechnical: prospecting, surveys, assays and work under section 18 (regs)
☒ Physical: drilling, stripping, trenching and associated assays
☐ Rehabilitation

Work Type	Office Use
reverse circulation drilling	Commodity
	Total $ Value of Work Claimed: 20,608
Dates Work Performed From: 16 (Day) 11 (Month) 1996 (Year) To: 21 (Day) 11 (Month) 1996 (Year)	NTS Reference
Global Positioning System Data (if available) — Township/Area: GAUTHIER TWP.	Mining Division: Larder Lake
M or G-Plan Number: G-3211	Resident Geologist District: Kirkland Lake

Please remember to:
- obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name	Telephone Number
J. PATERSON, R. KNUCKLES, W.A. HUBACHECK CONSULTANTS LTD.,	416-364-2895
Address	**Fax Number**
#807-365 BAY ST., TORONTO, ONT., M5H 2V1	416-364-5384
Name	**Telephone Number**
Address	**Fax Number**
Name	**Telephone Number**
Address	**Fax Number**

RECEIVED
10:00 am
AUG 12 1997
GEOSCIENCE ASSESSMENT OFFICE

4. Certification by Recorded Holder or Agent

I, DAVID W. CHRISTIE (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent		Date
		Aug 5/97
Agent's Address	**Telephone Number**	**Fax Number**
W.A. Hubacheck Consultants Ltd., #807 365 Bay St., Toronto, Ontario M5H 2V1	416-364-2895	416-364-5384

Deemed Rec'd 08/07

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

	Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg	TB 7827	16 ha	$26, 825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8, 892	$ 4,000	0	$4,892
1	548785	1 unit	0	800	0	0
2	548835	1	4131	800	0	3331
3	548836	1	2779	800	0	1979
4	550008	1	0	800	0	0
5	550009	1	0	800	0	0
6	550010	1	0	800	0	0
7	550011	1	0	800	0	0
8	550012	1	2645	800	0	1845
9	550013	1	11053	800	~~4800~~	~~6253~~
10						
11						
12						
13			2.17566			
14						
15					4000	13408
		Column Totals	20608	7200	~~4800~~	~~12608~~

I, DAVID G. CHRISTIE (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: David Christie — Date: Aug 5/97

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- [X] 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- [ ] 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- [ ] 3. Credits are to be cut back equally over all claims listed in this declaration; or
- [ ] 4. Credits are to be cut back as prioritized ~~on the attached appendix or as~~ follows (describe):

RECEIVED
10:00 AM
AUG 12 1997
GEOSCIENCE ASSESSMENT OFFICE

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0241 (02/96)

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W9780.00728

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2.17566

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Drill Contractor	31.75 hrs.		10,264.50
Geologists (Senior Proj. Contract)			2319.85
Technician			733.11
Road Preparation			1106.08
Administration			963.38
Sample Processing	14 samples	@ 193.30	2706.20
Geochemistry	14 samples	@ 44.50	623.00
Associated Costs (e.g. supplies, mobilization and demobilization).			
Sample pails (14)		@ 2.50/ea	35.00
Reproduction		-	50.00
Transportation Costs Truck Rental			210.00
Gas			487.04
Sample Shipping		@ 16.00/sample	224.00
Food and Lodging Costs			570.90
Field Expenses			314.83
	Total Value of Assessment Work		20,607.89

RECEIVED
10:00 AM
AUG 12 1997
GEOSCIENCE ASSESSMENT OFFICE

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, DAVID W. CHRISTIE (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as PROJECT GEOLOGIST (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature	Date
	Aug 5/97

0212 (02/96)

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (705) 670-5863

October 17, 1997

HILDA EGG
5306 MISSISSAUGA ROAD
MISSISSAUGA, ONTARIO
L5M-2M2

Dear Sir or Madam:

Submission Number: 2.17566

Subject: Transaction Number(s):		**Status**
	W9780.00778	Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at jerome_l@torv05.ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 11457
Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.17566

Date Correspondence Sent: October 17, 1997 **Assessor:** Lucille Jerome

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9780.00778	548835	GAUTHIER	Deemed Approval	October 16, 1997

Section:
16 Drilling POVERB

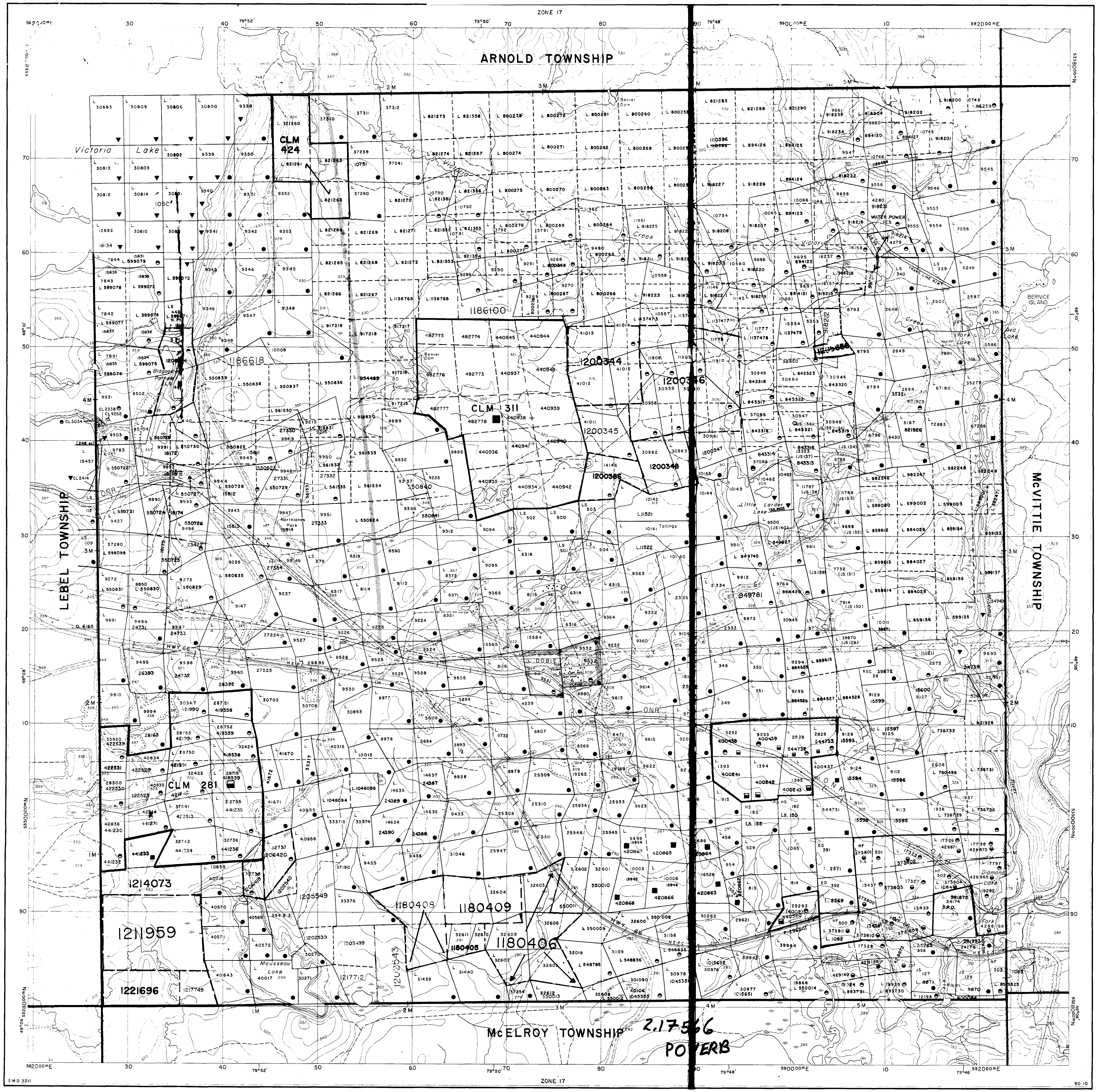
Correspondence to:
Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
David W. Christie
TORONTO, ONTARIO, CANADA

HILDA EGG
MISSISSAUGA, ONTARIO

Correspondence ID: 11457



Ministry of Natural Resources
Ministry of Northern Development and Mines
Ontario

32D04SW0122 2.17566 GAUTHIER

200

INDEX TO LAND DISPOSITION

PLAN

G-3211

TOWNSHIP

GAUTHIER

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

MINING DIVISION

LARDER LAKE

LAND TITLES/REGISTRY DIVISION

TIMISKAMING

2.17566

Scale 1:20 000

Metres 1000 0 1000 2000 Metres

Feet 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Feet

Contour Interval 10 Metres

SYMBOLS

Boundary
- Township, Meridian, Baseline
- Road allowance; surveyed
- shoreline
- Lot/Concession; surveyed
- unsurveyed
- Parcel; surveyed
- unsurveyed
- Right-of-way; road
- railway
- utility
- Reservation
- Cliff, Pit, Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway; single track
- double track
- abandoned
- Road; highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File

TOWNSITE STAKING RESTRICTED S.S. 30(B) MINING ACT

BARRICK POWER LINE
(APPLICATION PENDING UNDER PUBLIC LANDS ACT)

DISPOSITION OF CROWN LANDS

Patent
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

Lease
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

- Licence of Occupation
- Order-in-Council — OC
- Cancelled
- Reservation
- Sand & Gravel

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE TIMISKAMING MANAGEMENT UNIT AND MAY BE SUBJECT TO FORESTRY OPERATIONS. THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT:

P.O. BOX 129
SWASTIKA, ONT.
P0K 1T0
705-642-3222

ARCHIVED JULY 25, 1995

CIRCULATED JANUARY 25, 1995 ML

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.