



31M12SW0012 W9680.00598 LUNDY

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**ASSESSMENT REPORT
ON THE
MARCH 1995
REVERSE CIRCULATION DRILLING PROGRAM
THE SUDBURY CONTACT MINES LTD.
MONTREAL RIVER "A" PROPERTY**

**LUNDY TOWNSHIP
LARDER LAKE MINING DIVISION**

PREPARED BY:

**Ray Knowles, B.Sc. and Jens T. Paterson, M.Sc.
W.A. HUBACHECK CONSULTANTS LTD.**

October 15, 1996

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TABLE OF CONTENTS

SUMMARY	1
INTRODUCTION	2
PROPERTY AND PROJECT AREA DESCRIPTION	3
LOCATION AND ACCESS	3
LOGISTICS	7
LOCAL BEDROCK GEOLOGY	8
QUATERNARY GEOLOGY	8
REVERSE CIRCULATION DRILLING	9
METHODOLOGY	9
REVERSE CIRCULATION DRILLING SAMPLING RESULTS	13
CONCLUSIONS	17
RECOMMENDATIONS	18
BIBLIOGRAPHY	19
CERTIFICATES	20
APPENDIX A: CERTIFICATE OF EXPENDITURES	
APPENDIX B: REVERSE CIRCULATION OVERBURDEN DRILL LOGS	
APPENDIX C: OVERBURDEN DRILLING MANAGEMENT RESULTS	
APPENDIX D: ACTLABS GEOCHEMISTRY RESULTS	



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LIST OF FIGURES

Figure 1. Project Area Location Map, scale 1:100 000	4
Figure 2. Claim Map, scale 1: 20 000	5
Figure 3. Reverse Circulation Drill Hole Location Map, scale 1:10 000	6
Figure 3a. Reverse Circulation Drill Hole Location Map, scale 1:5 000 ... back pocket	
Figure 4. Generalized Interpretation Model	10
Figure 5. Schematic of Reverse Circulation Drilling Method	11
Figure 6. Flow Sheet, Unweathered Till	12

SUMMARY

This report concerns work conducted on a portion of the Sudbury Contact Mines Ltd. Montreal River "A" Property. This portion consists of four contiguous claims covering approximately 704 hectares in Lundy Township, within the Larder Lake Mining Division.

A reverse circulation drilling program geochemical survey was conducted on the property from March 11 to March 15, 1995 by W.A. Hubacheck Consultants, Ltd., on behalf of Sudbury Contact Mines Ltd. This program consisted of nine holes, five of which were drilled above two significant geophysical targets, and four which were distributed across the claims as part of a continued reconnaissance-level exploration program.

A total of 53 samples were obtained during the drilling program; 50 till samples, 2 gravel samples and 1 combined till and gravel sample. Two geophysical targets were tested during this program, with positive results. Of the five holes which were drilled above these targets, three intersected kimberlite bedrock. Results of the samples from the four holes not drilled above geophysical targets indicate low counts of kimberlite indicator minerals, and probably reflect background levels in this anomalous region. Gold grain counts may indicate the presence of a small, medial to distal source.

A more detailed ground magnetic survey, followed by 500 to 750 metres of diamond drilling in 2 to 3 holes is recommended for the "west kimberlite". Similarly, 500 to 750 metres of diamond drilling in 3 holes is recommended for the "east kimberlite". Mini-bulk samples for both kimerlites should be sent for diamond and kimberlite indicator mineral analysis. Limited till pit sampling and reverse circulation drilling is recommended to follow up anomalous values and search for additional kimberlite pipes.

INTRODUCTION

Sudbury Contact Mines Ltd. is involved in the exploration of a group of claims in Lundy Township which constitutes a portion of their Montreal River Project "A". This report discusses work performed on four contiguous claims covering approximately 704 hectares in Lundy Township, as part of this regional project. The current exploration is oriented towards the commodities diamond and gold.

Three separate geophysical grids were established to cover significant airborne magnetic anomalies. Five of the nine holes discussed in this report were drilled into two of these geophysical targets (Lu-95-2, 3, 4 and Lu-95-8,9). The remaining four holes were drilled to test more ambiguous targets (Lu-95-1 and 7) and to obtain results at the south end of the property (Lu-95-5 and 6).

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, and R. Knowles.

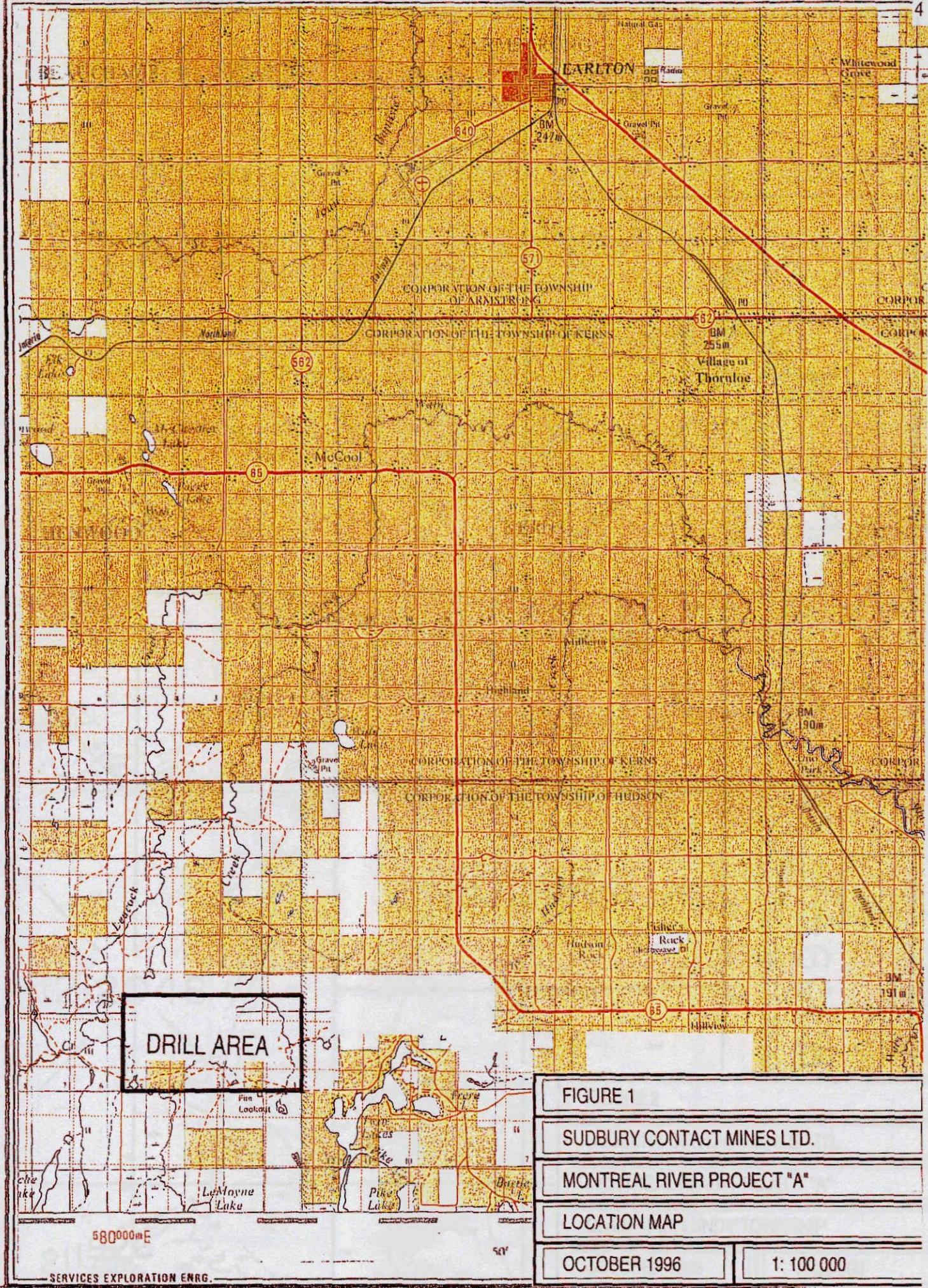
PROPERTY AND PROJECT AREA DESCRIPTION

The portion of the Sudbury Contact Mines Ltd. property on which drilling took place consists of the following four contiguous claims, totalling approximately 704 hectares within the Larder Lake Mining Division:

CLAIM NUMBER	DATE RECORDED	TOWNSHIP	AREA (UNITS)	AREA (HECTARES)
1202721	94/12/13	Lundy	16	256
1202722	94/12/18	Lundy	16	256
1202723	94/12/18	Lundy	86	128.96
1202724	94/12/13	Lundy	4	64
TOTAL 4 CLAIMS			² 44 units	⁷⁰⁴ 672 hectares

LOCATION AND ACCESS

The claim is located in southeastern Lundy Township, Lot 1, Concession III, Lot 2 Concession III and Lot 4 Concession IV (Figs. 1 and 2). Access to the claims is possible via Highway 65 from New Liskeard, and west along the Twin Lakes Road "C". A bush road was constructed along an existing trail network to get direct access to the claims.



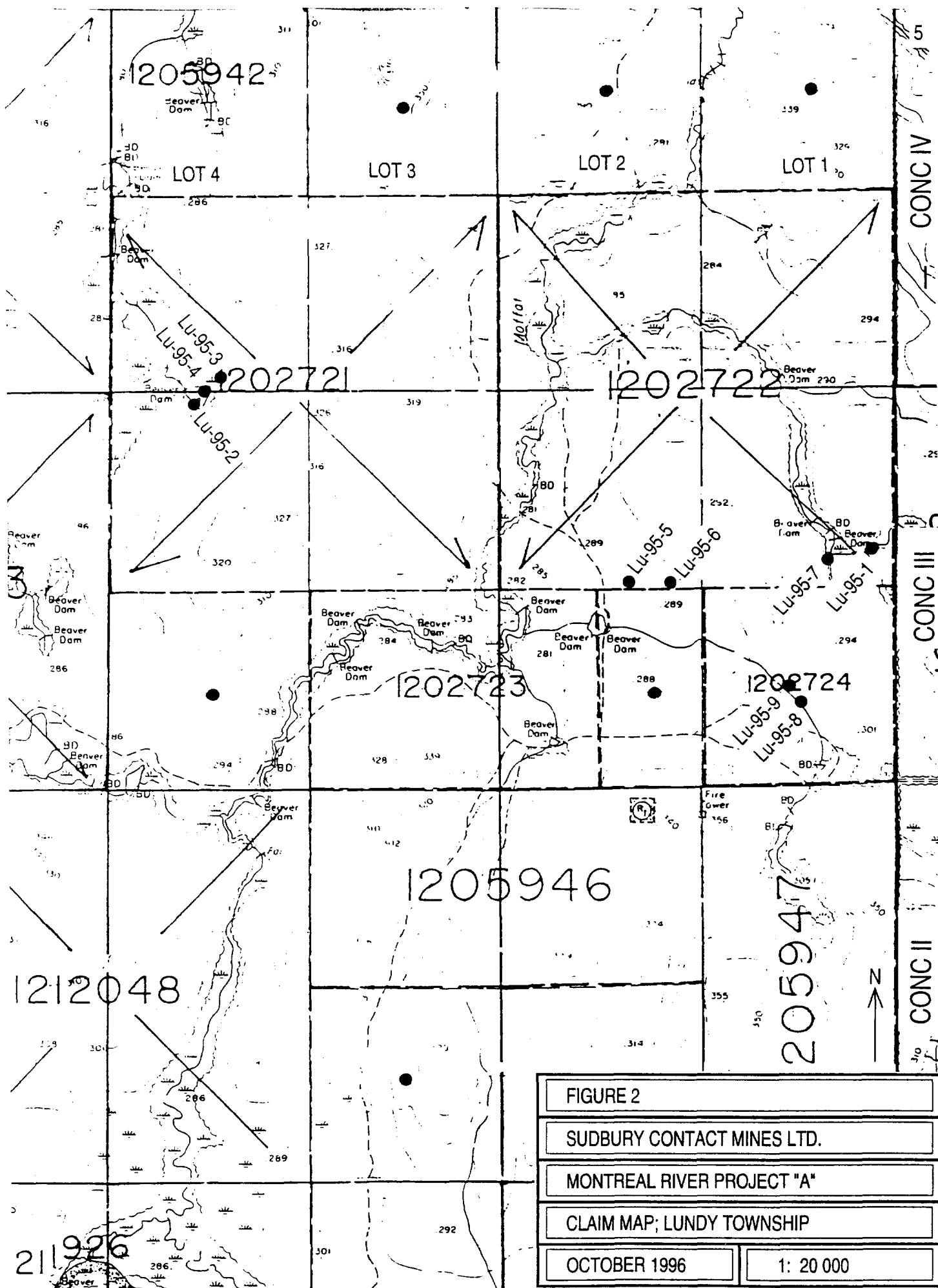


FIGURE 2

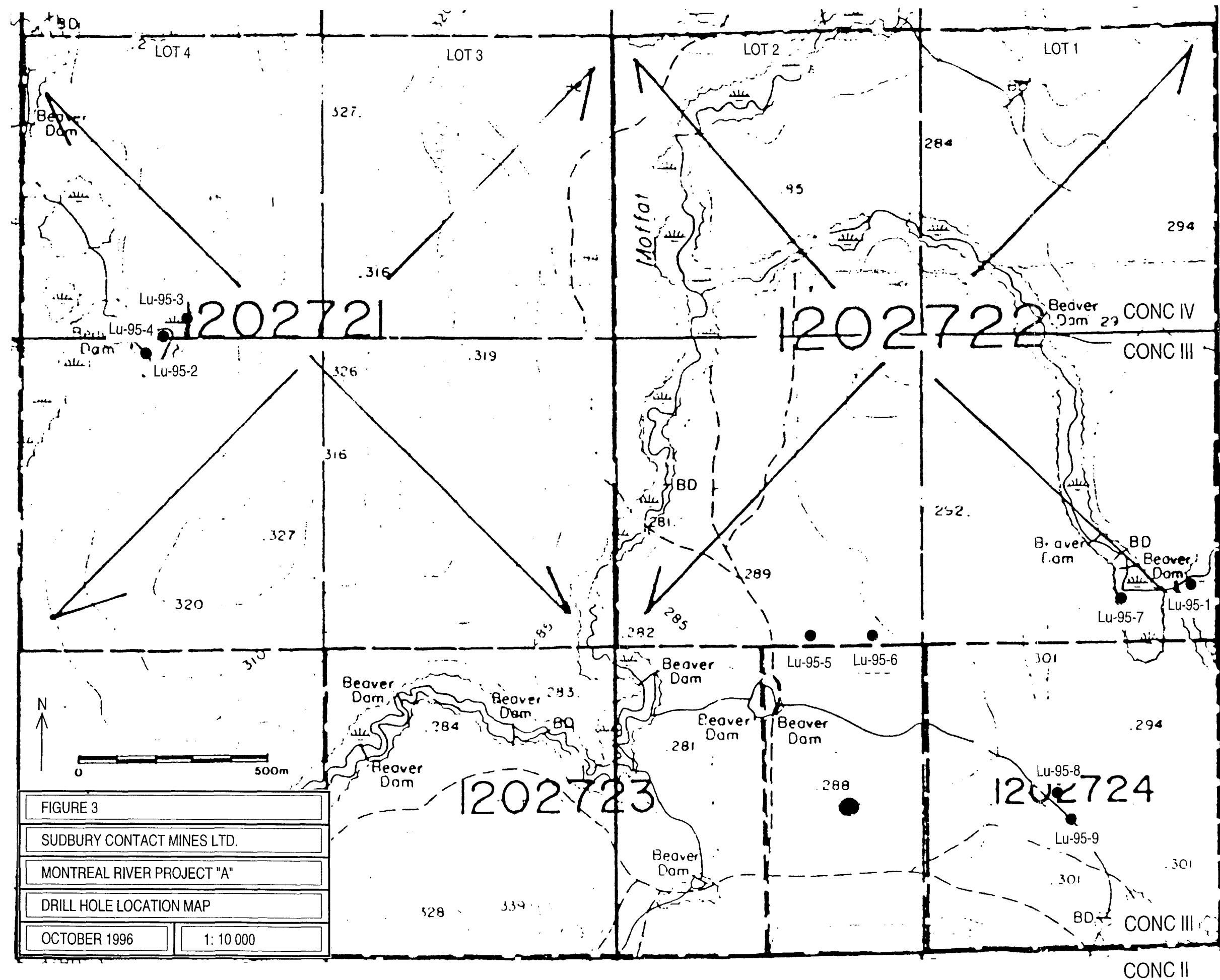
SUDBURY CONTACT MINES LTD.

MONTREAL RIVER PROJECT "A"

CLAIM MAP; LUNDY TOWNSHIP

OCTOBER 1996

1: 20 000



LOGISTICS

Technical Consultants:	W.A. Hubacheck Consultants Ltd. 141 Adelaide St. W., Suite 1401 Toronto, Ontario M5H 3L5
Reverse Circulation Drilling:	Heath and Sherwood Drilling Kirkland Lake, Ontario
Mineral Processing:	Overburden Drilling Management Nepean, Ontario
Geochemical Processing:	Activation Laboratories Ltd. 1336 Sandhill Drive Ancaster, 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:	Ray 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:	Mark Davis Kirkland Lake, Ontario

LOCAL BEDROCK GEOLOGY

The claims are underlain by argillites of the Firstbrook Member of the Huronian aged Gowganda Formation. This argillite is generally a well bedded mudstone, with reddish or pale grey coarser grained quartzose bases of beds, grading upwards into greenish grey thinner argillaceous upper portions of beds.

The Nipissing Diabase occurs as a series of cone-shaped intrusions which produce circular to oval outcrop patterns, and dyke and sill complexes. Numerous facies of the Nipissing Diabase have been recognized, including the chilled margin facies comprised of quartz "diabase" (quartz diorite), a fine-grained dense green-black rock to a medium-grained greyish black rock.

QUATERNARY GEOLOGY

The southwestern portion of the entire project area is dominated by an upland composed of bedrock knobs and a large glaciofluvial system. Very few exposures of till occur at surface in this area of sporadic bedrock exposure and glaciofluvial sediment cover. The striae record of the latest ice advance over the study area indicates a shift from an early southwesterly ice flow, to a latest southerly ice flow (Veillette and McClenaghan, 1996).

The most pronounced surficial feature is the Twin Lakes Esker which trends south-southwest along the western boundary of Hammond Lake (Twin Lakes). Numerous kettles and kettle lakes line the flanks of the esker. During ice retreat, a large proglacial outwash plain consisting of sand and gravel was deposited. The three drill holes discussed in this report are located on a shallow swamp perched above these sediments in the bedrock upland. Drainage and sediment input towards the outwash plain was controlled by the main esker conduit and other point sources, including the drainage paths indicated by 3 small deltas which feed this system (Averill, 1996). These laterally coalescing deltas, together with other similar features near the project area, indicate an ice marginal position which some workers have documented as an esker (Veillette and McClenaghan, 1996).

The northwestern two-thirds of the project area is covered by glaciolacustrine silt and clay rhythmites which extend up to 60 m deep. Numerous swamps and marshes exist on this poorly drained glaciolacustrine plain.

Following drainage of the glaciolacustrine lake basin at approximately 8 ka, eolian re-working of the outwash plain produced numerous small dune fields.

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 up to a depth of 100 m (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) are 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 drilling 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.

However, till can also be reworked or redeposited by water and a number of other mechanisms, including rafted ice flows and re-mobilization along paleoslopes, which may lead to 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 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 location, making this a valuable mapping/prospecting tool in areas of poor bedrock exposure.

Potential kimberlite bedrock samples are sent to a lab set up to examine the kimberlite indicator mineral and diamond content of the sample.

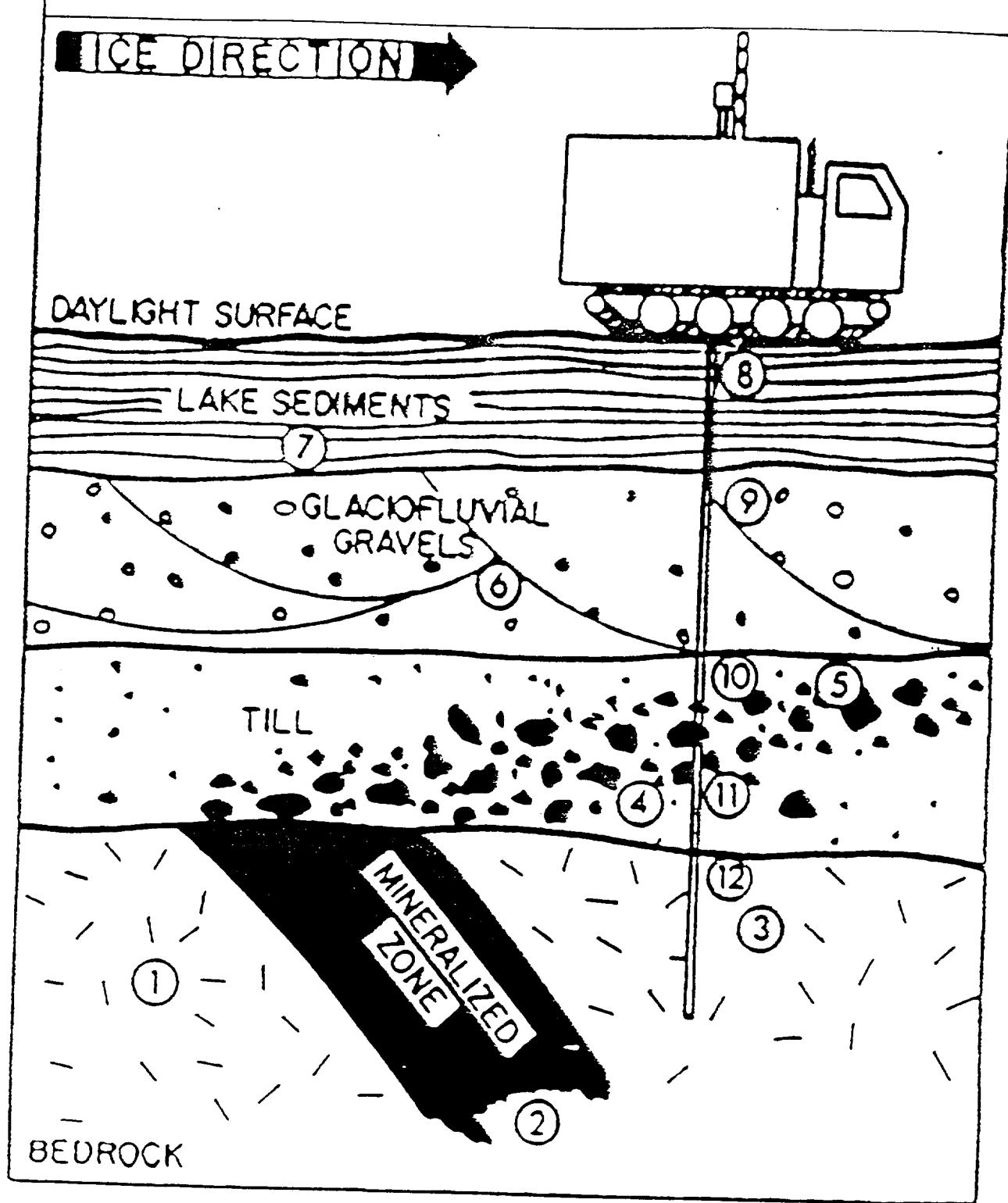


FIGURE 4 Idealized conceptual model illustrating the use of basal till as a prospecting medium in glacial terrain, using reverse circulation drilling as a sampling technique.

FIGURE 5 SCHEMATIC OF R. C. DRILLING METHOD

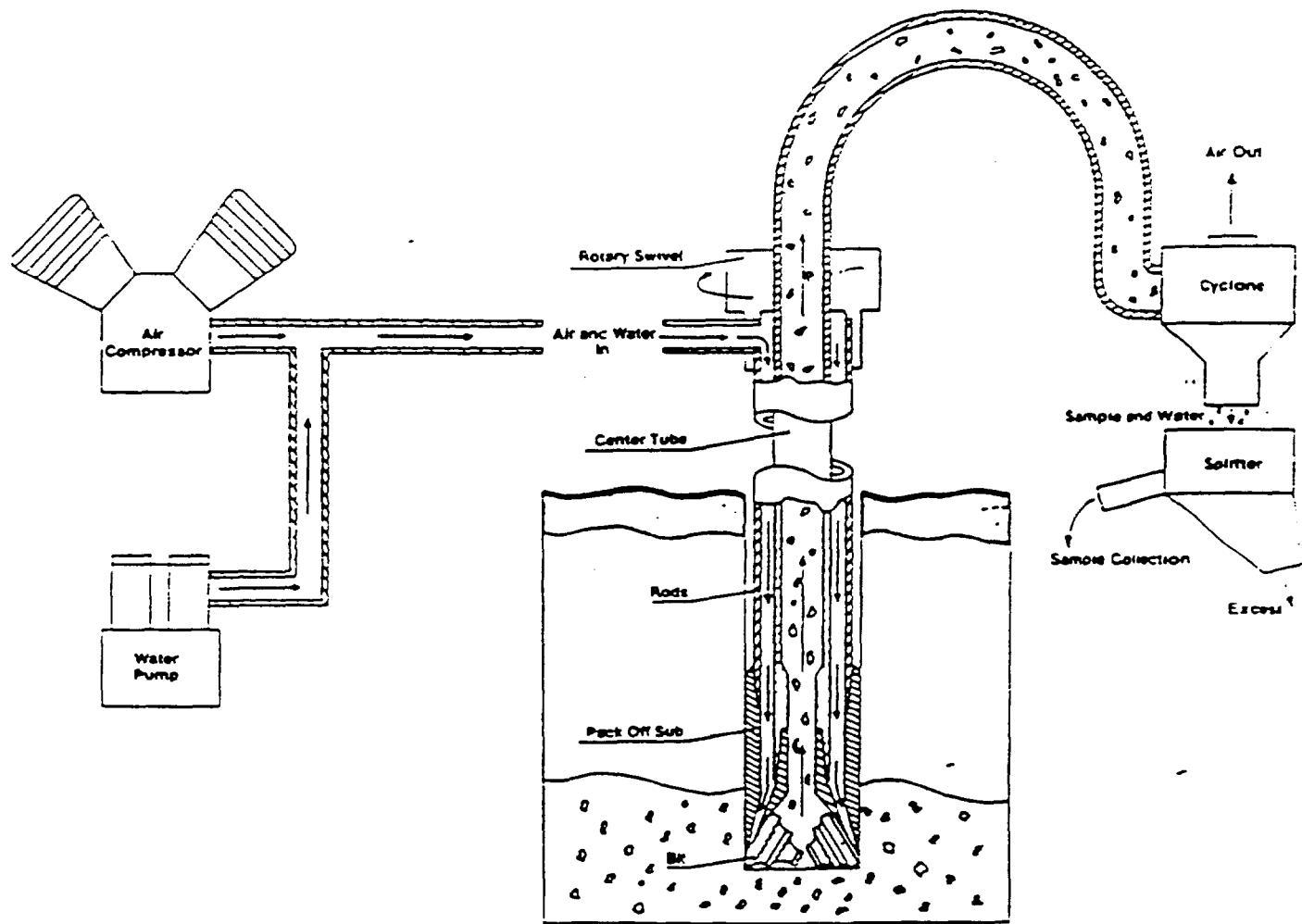
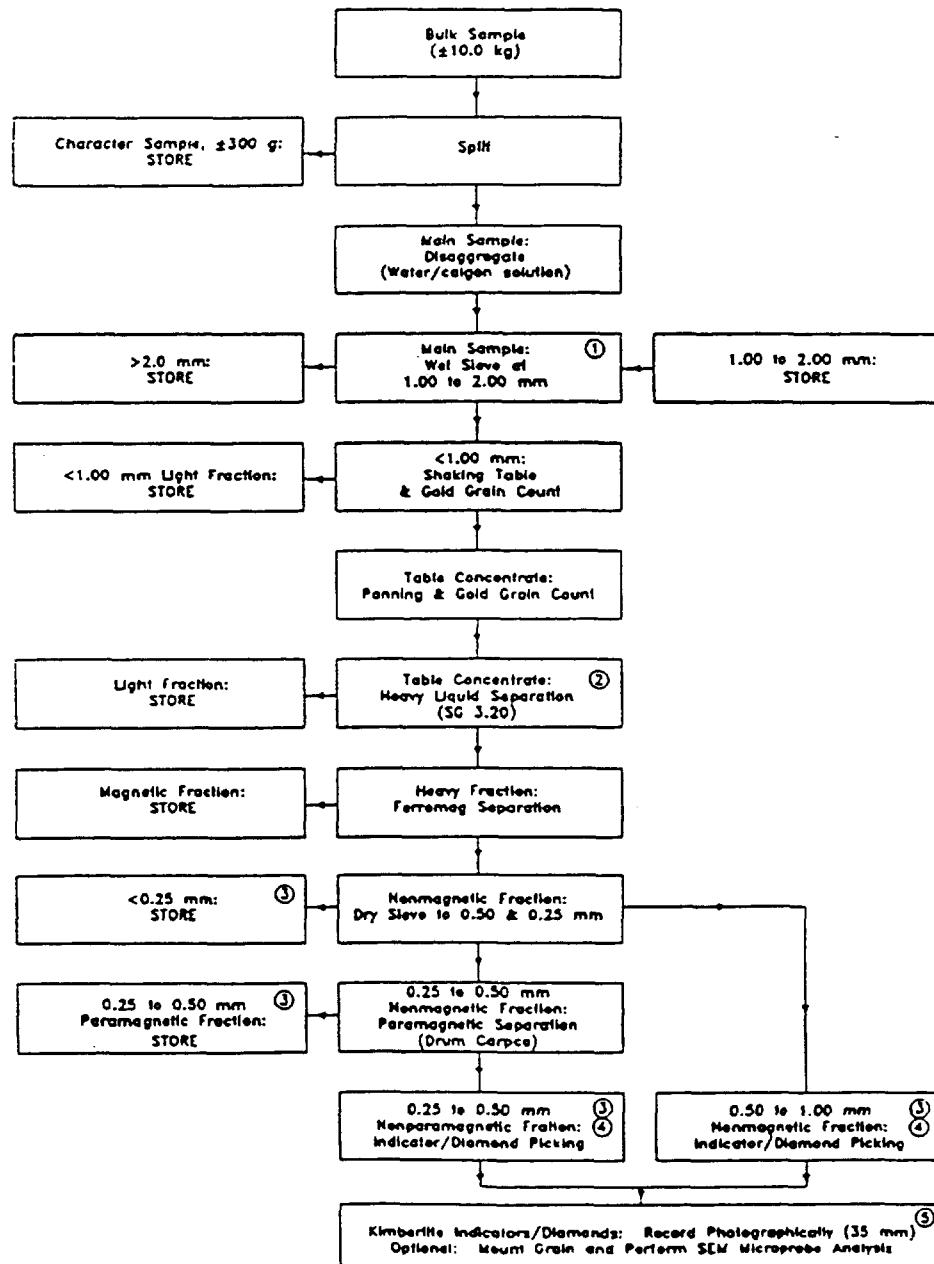


FIGURE 6 FLOW SHEET UNWEATHERED TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED
 FLOW SHEET 1
 UNWEATHERED TILL:
 DIAMOND PLUS GOLD EXPLORATION PACKAGE



Footnotes: Optional Procedures

Footnote 1 May also wet sieve at 0.50 mm followed by direct heavy liquid separation on 0.50 to 1.00 mm fraction.
 The <0.50 mm is tabled.

Footnote 2 Methylene iodide may be diluted to customer specification to obtain any specific gravity <3.32.

Footnote 3 These fractions may be recombined after Indicator picking and submitted for gold analysis.

Footnote 4 Indicator minerals to be picked out: Cr-diopside
 purple peridotic pyrope garnet
 orange peridotic and eclogitic garnet
 picramite
 chromite } >0.50 mm fraction only

Footnote 5 SEM and probe work performed at extra cost.

REVERSE CIRCULATION DRILLING 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 were 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 manipulated 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. Where multiple samples were encountered, ranges were also presented. Individual sample results are found in the processing data sheet appendix.

LU-95-01

A 7.5 m thickness of clayey, silty, sandy till overlies 1.7 m of intersected grey siltstone bedrock, and occurs beneath 14 m of glaciolacustrine sand, silt and clay, 1.4 m of glaciofluvial sand and 2.3 m of glaciofluvial gravel. A total of 1 pristine, 13 modified and 31 reshaped gold grains were recovered from 2 gravel sample (13.35 kg of table feed) and 5 till samples (30.4 kg of table feed). Eight pyropes, 2 chrome diopsides and 0 ilmenites were recovered from the gravel samples (**0.82 KIM's/kg**); seven pyropes, 2 chrome diopsides and 1 ilmenites were recovered from the till samples (**0.36 KIM's/kg**). Both values are considered a weak response, and suggest this hole is located in a distal margin of a kimberlite indicator mineral dispersal train, and may reflect background levels in this anomalous area. The basal till heavy mineral concentrate (HMC) contains up to 8% pyrite and 2% chalcopyrite, and returned an assay of 1093 ppm Cu. Other samples within the till profile also contained significant HMC grain concentrations of chalcopyrite.

LU-95-02

A 14.8 m thickness of till occurs beneath 1.1 m of glaciolacustrine silt and clay and 1.7 m of boulder lag, and overlies an intersected thickness of 12.7 m of kimberlite. The till can be texturally divided into a lower 2.8 m of clayey silty sandy till, overlain by 12 m of silty sandy till. This textural difference was not reflected in the KIM count or geochemical signature. Four pristine, 15 modified and 42 reshaped gold grains were recovered from 9 till samples (62.95 kg of table feed). A noticeable peak in gold grains was obtained in the middle of this till unit, where individual samples contained 8, 11, 14, 12 and 9 total gold grains, respectively. The 1 till sample directly overlying the kimberlite bedrock produced 2 pyropes, 0 chrome diopsides and 56 ilmenites (**17.61 KIM's/kg**); 22 pyropes, 8 chrome diopsides and 0 ilmenites were recovered from the other 8 samples (**0.57 KIM's/kg**). There are elevated values in the till directly overlying the kimberlite bedrock, but the overlying till unit produced a weak response, and suggests this hole is in the distal margin of a second kimberlite source to the north, but may reflect background KIM levels in this anomalous region. A total of 80.06 kg of bedrock sample

was sent to a lab for kimberlite indicator mineral and diamond processing. A detailed discussion of these results will be given in a second report. Many of the till samples had significant HMC concentrations of pyrite, chalcopyrite and galena. HMC samples 4614 returned elevated lead values and HMC sample 4621 returned elevated lead and barium values.

LU-95-03

A 2.9 m thickness of till occurs at surface, above 1.5 m of intersected reddish clay and siltstone bedrock. Twelve reshaped gold grains were recovered from 2 till samples (10.25 kg of table feed). A total of 2 pyropes, 1 chrome diopside and 1 ilmenite grain were recovered (**0.39 KIM's/kg**), which is a very weak response, and probably reflects background KIM levels in this anomalous region.

LU-95-04

A 0.3 m thickness of till overlies 2.2 m of intersected siltstone bedrock, and underlies 2.7 m of glaciofluvial gravel and 0.7 m of glaciolacustrine clay. No gold grains or kimberlite indicator minerals were recovered from 1 sample, which combined both the gravel and till. This hole is obviously outside the influence of a kimberlite indicator mineral dispersal train.

LU-95-05

A 12.1 m thickness of till overlies 1.9 m of intersected siltstone bedrock, and occurs beneath 18.5 m of glaciolacustrine sand, silt and clay. An upper unit of silty sandy till, 9.7 m thick, overlies a basal clayey silty sandy till unit 2.4 m thick. This textural difference is not reflected in the KIM counts or geochemical signature. One pristine, 6 modified and 26 reshaped gold grains were recovered from 8 samples (58.75 kg of table feed). A total of 8 pyropes, 8 chrome diopsides and 2 ilmenites were recovered (**0.56 KIM's/kg**). This is a weak response, and suggests this hole is located at the distal margin of a kimberlite indicator mineral dispersal train, or may reflect background levels in this anomalous area. Pyrope counts ranged from 0 to 7 per sample, chrome diopsides ranged from 0 to 3, and ilmenite grain counts ranged from 0 to 1 per sample.

LU-95-06

A basal clayey, silty sandy till unit 9.4 m thick overlies 1.3 m of intersected siltstone bedrock, and is overlain by a 4.8 m thickness of silty sandy till, 24.2 m of glaciolacustrine sand, silt and clay and 2.8 m of eolian sand. Eight modified and 55 reshaped gold grains were recovered from 8 samples (70.65 kg of table feed). A total of 14 pyropes, 4 chrome diopsides and 1 ilmenite were recovered (**0.27 KIM's/kg**). This is a very weak response, and probably reflects background KIM levels in this anomalous area. Pyrope counts ranged from 0 to 3, chrome diopsides from 0 to 2, and ilmenites from 0 to 1 per sample. The three basal till samples have

HMC results ranging from 3% to 15% pyrite, up to 100 galena grains, minor chalcopyrite and 3-4% sphalerite. The returned assay for HMC sample 4641 was 2722 ppm Zn.

LU-95-07

A 1.1 m thickness of silty sandy till overlies 2 m of intersected siltstone bedrock, and occurs beneath 15 m of sandy glaciofluvial outwash and 2 m of glaciolacustrine silt and clay. One modified and 10 reshaped gold grains were recovered from 1 sample (7.2 kg of table feed). Four pyropes, 2 chrome diopsides and 0 ilmenites were recovered (**0.97 KIM's/kg**). This is a weak to moderate response, and suggests this hole is located at the distal to medial margin of a kimberlite indicator mineral dispersal train.

LU-95-08

An 11.8 m thickness of silty sandy till overlies 5.2 m of intersected kimberlite bedrock, and occurs beneath 40 m of glaciolacustrine sand and silt, and sandy outwash. Twenty modified and 69 reshaped gold grains were recovered from 9 till samples (73.15 kg of table feed). The 1 till sample directly overlying the kimberlite bedrock produced 296 pyropes, 75 chrome diopsides and 10 ilmenites (**77.52 KIM's/kg**); 32 pyropes, 10 chrome diopsides and 1 ilmenite were recovered from the other 8 samples (**0.68 KIM's/kg**). There are elevated values in the till directly overlying the kimberlite bedrock, but the overlying till unit produced a weak response, and suggests this hole is in the distal margin of a second kimberlite source to the north, but may reflect background KIM levels in this anomalous region. This response is very similar to hole LU-95-02 and LU-95-09. A total of 39.22 kg of bedrock sample was combined with Lu-95-9 and sent to a lab for kimbeline indicator mineral and diamond analysis. A detailed discussion of these results will be given in a second report. The HMC results for many of the till samples are elevated in pyrite and galena grains, although geochemistry results show no significant increase in lead.

LU-95-09

A 15.7 m thickness of silty sandy till and a basal unit of clayey silty sandy till 1.3 m thick overlies kimberlite bedrock, and occurs beneath 32 m of glaciolacustrine silt and clay and sandy glaciofluvial outwash. Twenty-one modified and 74 reshaped gold grains were recovered from 9 samples (67.45 kg of table feed). The 1 till sample directly overlying the kimberlite bedrock produced 121 pyropes, 59 chrome diopsides and 32 ilmenites (**33.0 KIM's/kg**); 10 pyropes, 6 chrome diopsides and 0 ilmenites were recovered from the other 8 samples (**0.30 KIM's/kg**). There are elevated values in the till directly overlying the kimberlite bedrock, but the overlying till unit produced a weak response, and suggests this hole is in the distal margin of a second kimberlite source to the north, but may reflect background KIM levels in this anomalous region. This response is very similar to hole LU-95-02 and LU-95-08. A total of 38.92 kg of bedrock sample was combined with Lu-95-9 and sent to C.F. Minerals Research Ltd. for kimberlite

indicator mineral and diamond analysis. A detailed discussion of these results will be given in a second report. The HMC results for many of the till samples are elevated in pyrite and galena grains, although the geochemistry results show no significant increase in lead.

CONCLUSIONS

- 1) Holes Lu-95-2, 3 and 4 were drilled to test a significant ground truthed geophysical magnetic anomaly. Hole Lu-95-2 successfully intersected kimberlite, which therefore explained the anomaly. Holes Lu-95-3 and 4 failed to intersect a cause for the anomaly, possibly because the actual shape of the anomaly was not completely defined.
- 2) Holes Lu-95-8 and 9 both intersected kimberlite, successfully explaining the second ground truthed geophysical magnetic anomaly.
- 3) Till samples other than those directly overlying kimberlite bedrock exhibited low kimberlite indicator mineral concentrations, ranging up to **0.97 KIM's/kg**, and probably reflect background levels in this anomalous area.
- 4) Gold grain counts were low to moderate, with slight elevations in holes Lu-95-1, 2, 6, 8 and 9, and suggest the presence of a small distal to medial gold source.
- 5) Heavy mineral concentrates for many of the holes exhibited elevated levels of pyrite, chalcopyrite and galena. Elevated sphalerite levels were found in one of the holes. These numbers were partially reflected in the geochemistry results of the HMC but not in the clay fraction. Locally, there are several exposures of chalcopyrite - pyrite mineralization associated with the intrusive contact of Nipissing quartz diabase and Huronian sandstone (Lorraine Fm). There are other examples in the region of narrow, discontinuous vein and stringer mineralization containing sphalerite, chalcopyrite and galena. Either of these could explain the elevated grain concentrations of base metals. The absence of elevated Cu, Pb and Zn values in the clay fraction of the samples could possibly result from a more distal position from the source of sources (> 1 to 2 km)

RECOMMENDATIONS

1) West Kimberlite

The shape of this pipe intersected by Hole Lu-95-02, is poorly defined. A 50 metre line spacing with additional geophysics to infill the current grid and magnetic data is therefore recommended to properly define the shape and provide a drillable target. This should be followed by 500 to 750 metres of diamond drilling in 2 to 3 holes in order to properly identify the kimberlite and to obtain a mini bulk sample for diamond and kimberlite indicator mineral analysis.

2) East Kimberlite

The shape of this pipe, intersected by Holes Lu-95-8 and 9, is more clearly defined and therefore 500 to 750 metres of diamond drilling is recommended in 3 holes in order to properly identify the kimberlite and to obtain a mini bulk sample for diamond and kimberlite indicator mineral analysis

- 3) Hole Lu-95-07 contains twice the background level of KIMs and therefore is more significant. Followup till and esker pit sampling, where possible, is recommended north / up ice of this hole as well as in the general area in order to define the strength and thus the relative proximity to source of this anomaly as well as any others encountered.
- 4) Gold values reflect typical responses for the region and therefore no follow-up work should be conducted towards this end.
- 5) Base metal concentrations referred to in conclusion 5 should be further investigated.

BIBLIOGRAPHY

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- Veillette, J.J. 1986. Surficial Geology, New Liskeard, Ontario-Quebec. Geological Survey of Canada, Map 1639A, scale 1:100 000.
- Veillette, J.J. and McClenaghan, M.B. 1996. Sequence of glacial ice flows in Abitibi-Timiskaming; Implications for mineral exploration and dispersal of calcareous rocks from Hudson Bay Basin, Quebec and Ontario. Geological Survey of Canada, Open File Report 3033, map 1:500 000.
- Lovell, H.L. and Frey, E.D. 1976. Geology of the New Liskeard Area, District of Timiskaming. Ontario Department of Mines Geological Report 144, 34 p. Accompanied by Maps 2300 and 2301, scale 1 inch to 1/2 mile (1:31 680).

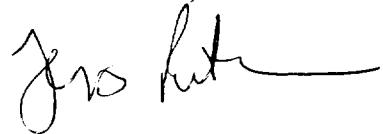
CERTIFICATE

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 my 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, and the Geological Society of America.
- 4) This report is based on personal examination of the data in October 1996.
- 5) I have no direct interest in the properties or securities of Sudbury Contact Mines Ltd.

Toronto, Ontario
October 15, 1996

Jens Paterson, M.Sc.



CERTIFICATE

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 and 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.
- (4) This report is based on personal examination of the property March 1995.
- (5) I have no direct interest in the properties or securities of Sudbury Contact Mines Ltd..

Toronto, Ontario
October 23, 1996



Raymond J Knowles, B. Sc.

APPENDIX A

CERTIFICATE OF EXPENDITURES

W.A. HUBACHECK CONSULTANTS LTD.

194 REVERSE CIRCULATION DRILLING PROGRAM

(MARCH, 1995)

Total wages/salaries	4 410.50	
Drill Contractor (42.25 hrs)	20289.62	
Management/Administration	964.11	
Field Expenses (includes room and board, supplies, etc.)	1 341.62	
Truck	1 404.38	
Gas	<u>161.80</u>	
 COST OF DRILLING	28 572.03	
COST OF DRILLING PER HOUR (28 572.03/42.25 hrs)	676.26	
 SAMPLES (TOTAL = 54)		
Sample pails/shipping	18.50 each	999.00
Sample Processing	193.30 each	10 438.20
Geochemistry	<u>44.50 each</u>	<u>2 403.00</u>
TOTAL COST PER SAMPLE	256.30 each	
TOTAL COST FOR ALL SAMPLES	13 840.20	
 TOTAL COST THIS REPORT	42 412.23	

Certified by:

Date:

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. LU-95-01, LU Grid 2, L 100W/1+665
 CONTRACTOR Heath and Sherwood LOCATION E583580 N5264600, Flav. 291°, CL#120272E
 DRILLER Denis La Fleur BIT NO. CB 70954 BIT FOOTAGE 0-27+50.2=77.2
 MOVE TO HOLE 7:00 - 8:15 (from Twin Lakes)
 DRILL 8:15 - 11:45 MECHANICAL DOWN TIME 11:45-12:15 breaker GI/hydraulic hose on bit
 DRILLING PROBLEMS 9:15-10:55 blocked rods, blew water line at swivel DATE March 11/95
 OTHER replace line pull rod clear rods. SHIFT TO
 MOVE TO NEXT HOLE 12:15 - 3:00 (to LU 2) TOTAL HOURS 8
 GEOLOGIST Raymond J Knowles SAMPLER Mark A Davis CONTRACT HOURS
R. J. Knowles

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
0			0 - 1.0 Organics				
1.0			1.0 - 1.1 clay - bits				
1.1			1.1 - 3.0 Sand - fine to medium with minor fine gravel, grey				
3.0			3.0 - 4.0 Repeating thin units of clay/silt grading to fine than medium sand with minor fine pebbles				
4.0			4.0 - 12.0 Silt (80-85%) with clay (15-20%) - trace pebbles				
5.0			12.0 - 14.0 silt (70%) clay 30%				
6.0			14.0 - 15.4 Sand - fine to medium				
7.0			15.4 - 17.7 Sandy gravel - minor cobbles 50% clasts - 60% Huronian brown and grey siltstones - 15% granite, 20% mafic intrusive - 5% limestone, trace volcanic with trace pyrite				
8.0			Poorly sorted, loose compaction bucket filled after 1 m until 17.0				
9.0			17.0 - 17.7 very stoney, less sand 70% clasts - gravel to small cobbles				
10.0			17.7 - 17.8 clay/silt bed				
11.0			17.8 - 19.2 T:II				
12.0			17.8 - 19.2 clayey silt, sandy stony till poorly sorted, moderate firm compaction				
13.0			70% clasts - 50% Huronian brown and grey siltstone - 30% diorite, 10% granite, 5% limestone, 5% others				
14.0			gritty silt/clay coatings on clasts.				
15.0			19.2 - 19.5 Boulder - diorite - sand and pepper texture				
16.0		4606	19.5 - 19.8 Clayey silty sandy till moderately compact, poorly sorted gritty clay/silt balls (trace - 5%)				
17.0		4607	70% clasts - 60% Huronian siltstone - 30% diorite, 10% granite, limestone etc.				
18.0		4608	19.8 - 23.5 Till as above but matrix alternating clay silt rich, clay poor and 30 - 40%				
19.0		4609	20.5 - 22.0 5% gritty clay/silt balls 70% clasts				
20.0		4610	> 21.0 - 21.2 Granite boulders				
21.0		4611	22.0 - 22.4 sandy silt, till - 40% matrix				
22.0			22.4 - 23.5 10% clay/silt gritty balls.				
23.0							

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P2 of 2

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. LU-95-01
CONTRACTOR _____ LOCATION _____
DRILLER _____ BIT No. _____ BIT FOOTAGE _____
MOVE TO HOLE _____
DRILL _____ MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____ DATE March 11/95
OTHER _____ SHIFT _____ TO _____
MOVE TO NEXT HOLE _____ TOTAL HOURS _____
GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
0.0 - 24.0		4611	23.5 - 24.0 80% grtly clay/silt with fine metasediment clasts Plugged bit, grey colour				
24.0 - 25.0		4612	24.0 - 25.0 no grtly clay silt balls 5-10% sandy stony till (clast) note blue dioprite, serpentine like alteration emerald green, trace py				
25.0 - 27.0			25.0 - 25.3 abundant grtly silt balls and clast coatings, beige colouration				
27.0 - 29.0	EOH		25.3 - 27.0 Bedrock Siltstone - grey, fine grained large flat chips - is flat lying trace pyrite with black lensing				
29.0 - 30.0			27.0 ECH				

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Pg 1 of 2

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY Sudbury Contract Mines Ltd. HOLE NO. L4-95-02, LU Grid 1 L2+95E/0+20S
 CONTRACTOR Heath and Sherwood LOCATION E 580 E 00 N 5265200, Elev. 285 m, CL # 120272
 DRILLER Denis Lafleur BIT NO. C 370954 BIT FOOTAGE 0 → 31.5 + 77.2 = 108.7
 MOVE TO HOLE 12:15 - 3:00
 DRILL 3:00 - 5:45 pm, 8:00 - 9:45 AM MECHANICAL DOWN TIME _____
 DRILLING PROBLEMS _____ DATE March 11, 1995
 OTHER _____ SHIFT _____ TO _____
 MOVE TO NEXT HOLE 9:45 - 10:15 TOTAL HOURS 5
 GEOLOGIST Raymond J Knowles SAMPLER Mark A Davis CONTRACT HOURS _____
Raymond J Knowles

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
0	*		0-0.6 Organics				
0.6			0.6 clay unit				
0.6 - 1.2			1.2-1.8 sandy fine gravel				
1.2 - 2.3			Clay/silt - 5% pebbles, no grit				
2.3 - 4.0			2.3-4.0 Boulders (3) separated by clay				
4.0			5.1tstone - brown				
4.0 - 18.8			2.3-2.7, 2.9-3.2, 3.3-4.0				
4.0			Till				
4.0			4.0 - 10.4 Silt, sandy stony Till				
4.0			poorly sorted, moderately compact				
5		4613	gritty silt balls variable but trace - 3%				
6			also as clast coatings				
6		6.0	50-60% clasts - gravel to boulders				
7		4614	70% Huronian - brown and grey siltstone,				
7			grey/dark green quartzite meta arenose				
7.5			5-10% diorite, 5% granite, 5% limestone				
7.5			up to 10%				
8		4615	4.5-7.5 bouldery - alternating boulders				
8			and large cobbles of Huronian siltstone				
9		4616	green quartzite sand mudstone?				
9		9.7	1 bubble of blue diorite				
10	Diorite	NS	9.0 trace py				
10		4616	9.6-10.2 Boulder - altered diorite				
10		10.5	medium green with 10% biotite spots				
11			medium grained greyed look.				
11			hard				
12		4617	10.4-16.8 Silt, sandy, moderately stony Till				
12			similar to above but				
13		13	40-50% clasts - gravel to cobbles (minor)				
13			13.0-13.5 Boulders of Huronian and granite				
14		4618	13.5-16.0 Minor boulders of Limestone,				
14			brown siltstone and granite				
15		15	still silt-sand gritballs and coatings				
15			16.0-18.8 Clayey silt, sandy Till				
16		4619	poorly sorted, moderately compact				
16		16.3	70% gritty clay silt sand balls				
17		4620	30% clasts mostly gravel size				
17		17.8	17.7-18.0 Boulder diorite				
18	Diorite	4621	18.5-18.6 Kimberlite clasts, halos rims etc				
18		18.6	18.6 - 31.5 Kimberlite				
18		18.6	medium to dark grey matrix, medium to fine				
19	hand	18.6	grained				
19		18.6	20-40% angular clasts of black siltstone,				
20	soft	4622	limestone and red siltstone?, some				
20		4622	lighter green (volcanic?)				
21	hand	4622	taupyrite associated with clasts				
21		4622	18.6 - 19.3 hard returns as chips				
22	soft	4622	19.3 - 20.7 soft gritty sticky clay balls				
22		4623	20.7-21.2 hard, 21.2-21.8 soft, 21.8-22.0 Hand				

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REVERSE CIRCULATION DRILL HOLE LOG

COMPANY Sudbury Contact Miner Ltd. HOLE NO. LH-95-03, Grid 1 L4+00E/1+00NCONTRACTOR Heath and Sherwood LOCATION E580 890 N 5265270, Elev. 286m, CL#120272DRILLER Denis LaFleur BIT NO. CB71010 BIT FOOTAGE 0→7.5MOVE TO HOLE 9:45 - 10:15 (sum LH 2)DRILL 10:15 - 11:15 MECHANICAL DOWN TIME _____DRILLING PROBLEMS _____ DATE March 12/95

OTHER _____ SHIFT _____ TO _____

MOVE TO NEXT HOLE 11:15 - 11:30 (LH LH 4) TOTAL HOURS 1.25GEOLOGIST Raymond J Knowles SAMPLER Mark A. Davis CONTRACT HOURS _____RJ Knowles

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
?			0 - 1.0 no return boulder - no seal				
1.0 - 2.0		4625	0.8 - 3.7 T:11 0.6 - 3.4 Clayey silty sandy moderately stoney T:11 moderate to well compact, poorly sorted				
2.0 - 3.0		4626	3.2 oxidized to 1.2 m then grey beige 40-50% clasts - gravel to minor cobbles				
3.0 - 4.0			70% Huronian brown and black siltstone, green quartzite				
4.0 - 5.0			20% Mafic Intrusive and Volcanics 10% granite, 5% limestone				
5.0 - 6.0			40-50% gritty clay (silt balls)				
6.0 - 7.0			3.4 - 3.7 clay rich (recycled clay?) still gritty and with clasts				
7.0 - 8.0			3.7 - 5.2 Clay - smooth, hard, no grit trace stones				
8.0 - 9.0			5.2 - 5.4 Boulder - Brown siltstone 5.4 - 5.6 Fine sandy silt				
9.0 - 10.0			5.6 - 7.5 Bedrock 5.14 stone - grey brown, flat chips				
10.0 - 11.0			Limonite on fracture planes				
11.0 - 11.5			6.6 Fault 10cm clay gouge and breccia (in situ)				
11.5 - 12.0			7.5 EOH				

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REVERSE CIRCULATION DRILL HOLE LOG

COMPANY Sudbury Contact Mines Ltd. HOLE NO. 1K-95-04, Grid 1 L 3+50F / 0+35N
 CONTRACTOR Heartland Sherwood LOCATION E 580850 N 5265230, Elev 285', CL #12027
 DRILLER Denis La Fleur BIT NO. C 871010 BIT FOOTAGE 0+6.5+7.5 = 14.0'
 MOVE TO HOLE 11:15 - 11:30 (Crown Ln 3)
 DRILL 11:30 - 12:30 MECHANICAL DOWNTIME 2:00 - 2:45 clutch repair
 DRILLING PROBLEMS _____ DATE March 12/95
 OTHER _____ SHIFT _____ TO _____
 MOVE TO NEXT HOLE 12:30 - 2:00, 2:45 - 3:30 (In Ln 5) TOTAL HOURS 4
 GEOLOGIST Raymond J Knowles SAMPLER Mark A Davis CONTRACT HOURS _____
Raymond J. Knowles

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
	*		0 - 0.3 Organic				
	*/***/		0.3 - 0.6 Leached clay				
1	|||||||		0.6 - 1.0 Oxidized clay				
2	.....		1.0 - 1.3 Boulder - green sandstone.				
3	.....	4627	1.3 - 4.0 5-15% sandy gravel poor return moderate to weak compaction, very silty poorly sorted oxidized				
4	.....		4.4 30-40% clasts with till like coatings 3.3-3.4 Boulder - brown siltstone				
5	.....		4.0-4.3 Clayey very silty sandy till				
6	.....		40% clay 5-15 grit balls				
7	E.O.H.		40% clasts - 80% Huronian - siltstone - quartzite - 10% mafic Intrusive - 10% others				
8			4.3 - 6.5 grey Bedrock				
			5: Itstone - grey/brown - flat chips				
			6.5 E.O.H.				
			Note: Sample 4627 small sample				

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Pg 1 of 2

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY Sudbury Contact Mines Ltd HOLE NO. LU-95-05
 CONTRACTOR Heath and Sherwood LOCATION E 552600 N 5264460, Elevation 289 m, CL#120272
 DRILLER Denis Lafleur BIT NO. C371010 BIT FOOTAGE 0 → 32.5 + 14 = 46.5
 MOVE TO HOLE 12:30 - 2:00
2:45 - 3:30 (from 04)
 DRILL 3:30 - 5:30 p.m., 7:00 - 8:30 AM MECHANICAL DOWNTIME 2:00 - 2:45 clutch
 DRILLING PROBLEMS _____ DATE March 12, 13 / 95
 OTHER _____ SHIFT _____ TO _____
 MOVE TO NEXT HOLE 8:30 - 8:30 (to 06) TOTAL HOURS 3.5
 GEOLOGIST Raymond J Knowles SAMPLER Mark A. Davis CONTRACT HOURS _____
Raymond J. Knowles

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG					
0			0-1.0 clayey silty sand to silty sand balls &ts of clay/silt beige return water					
1			1.0-12.0 5:1t - minor sand and clay after 4.0 non oxidized - grey white					
2			12.0-15.0 Very fine silty sand 5% clay beds, units of fine sandy silt to medium sand, some clay clumps					
3			15.0-18.5 Fine to medium sand with silt					
4	nor oxy		18.5-30.6 Till					
5			18.5-19.3 Silty sandy gravel (Diamict) poorly sorted, moderately compact, fast some f.11 like coatings on clasts					
6			50% clasts - 50% Huronian - black and brown calcareous greenish red sandstone					
7			20% mafic & intrusive - gabbro/diorite diabase, ultramafic - serpentine, trace pyrite					
8			20% granite, 5% limestone 5% quartz, others (tuff?)					
9			19.3-27.5 S.H. sandy gravel rich Till poorly sorted, moderately to well compact abundant clasts, some f.11 odd gritty s:H ball, trace clay.					
10			21.5-21.7 Boulder - gabbro/diorite - dark green					
11			21.7-21.8 Cobble granite					
12			clast size gravel → cobble, minor boulders of every type above described 40-60% variable clast content					
13			Some sandier sections with less clasts					
14			26.5-27.5 Some clay rich areas 5-10 cm of matrix clayey s:H gritty bits and balls, roll					
15		18.5	27.5-28.2 S.H. sandy stony till 40% of matrix, sand rich					
16		4628						
17								
18								
19								
20								
21								
22		4629						
23		4630						

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REVERSE CIRCULATION DRILL HOLE LOG

Pg 2 of 2

COMPANY _____ HOLE No. Lu-95-05
CONTRACTOR _____ LOCATION _____
DRILLER _____ BIT No. _____ BIT FOOTAGE _____
MOVE TO HOLE _____
DRILL _____ MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____ DATE March 12/13/95.
OTHER _____ SHIFT _____ TO _____
MOVE TO NEXT HOLE _____ TOTAL HOURS _____
GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

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REVERSE CIRCULATION DRILL HOLE LOG

Pg 2 of 2

COMPANY _____ HOLE No. L-U-95-06
 CONTRACTOR _____ LOCATION _____
 DRILLER _____ BIT NO. _____ BIT FOOTAGE _____
 MOVE TO HOLE _____
 DRILL _____ MECHANICAL DOWN TIME _____
 DRILLING PROBLEMS _____ DATE March 13/95
 OTHER _____ SHIFT _____ TO _____
 MOVE TO NEXT HOLE _____ TOTAL HOURS _____
 GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
24			27.0 - 31.6 Till / washed till / diamictite / flow till 5:11g sandy moderately stoney Till / Sandy gravel - poorly sorted, moderately compact - some poorly defined stratigraphy noted in very silty sandy sections alternating with stoney sections				
25			- extra medium size sand produced by cutting rotted sandstone clasts				
26		4636 (4637) (see note)	- 50% clasts - 65% Huronian Sediments - 50% brown siltstone, 50% sandstone sandstone-greenish, reddish - 20% Mafic Intrusive - gabbro, diorite - 10% granite, 5% Limestone				
27		4638					
28			31.5 Note @ 29.5-29.5 no return pull rods clear and re-drilled 31.9 sample 27.0-28.5 retaken, 2nd number 32.4 @ large samples				
29			31.8 - 32.4 Boulder - Huronian reddish sandstone arkose, hard to start.				
30		4639	32.4 - 41.2 Till 32.4-33.1 Clayey silty sandy stoney Till moderate to well compact				
31		N S	30% clast (mostly Huronian) 20% of clay/glass/balls				
32		4640	33.1-33.2 Wacke - deep red fine grained 33.2-34.0 clayey silty sandy Till very compact, silty sandy minor clay matrix 40% clasts - 80% Huronian-grey siltstone, - 10% granite, 10% volcanic and mafic intrusives, trace limestone				
33			34.0-34.6 70% clasts in silt, minor grit 34.6-35.1 Boulder-Diorite				
34		4641					
35			35.1-35.6 Clayey silty minor sandy Till 60% clasts - 60% Huronian, 10% granite 20% diorite plus other darks, trace limestone 5% volcanic gritty clay balls				
36		4642	35.6-35.6 Boulder-diorite				
37			35.6 - 41.2 5:11g sandy Till with clayey sections 60% clasts - 60% Huronian, 10% granite 20% mafic intrusive and volcanic, 5% limestone				
38		4643	moderately compact, poorly sorted				
39			36.4-36.7 Boulder-gabbro, gabbro, 10% matrix				
40			38.2-39.2 clayey silty section with 5-10% gritty clay/silt balls				
41			41.2-42.5 Bedrock - Siltstone grey, platy, large flat chips which block tube				
42			42.5 EOH				
43							
44							
45							

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REVERSE CIRCULATION DRILL HOLE LOG

COMPANY Sudbury Contact Mines Ltd HOLE NO. LU-95-07, Grid 2 L 3100E / 2+20S
CONTRACTOR Health and Sherwood LOCATION E 58 3380 N 5264 530, Elev. 291", CL#1202722
DRILLER Denis Lafleur BIT NO. C B 710 11 BIT FOOTAGE 0 → 21
MOVE TO HOLE 1:30 - 2:45 (from LU-06)
DRILL 2:45 - 4:00 MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____ DATE March 13 / 95
OTHER _____ SHIFT _____ TO _____
MOVE TO NEXT HOLE 4:00 - 4:30 (Lu-08) TOTAL HOURS 1.75
GEOLOGIST Raymond J Knowles SAMPLER Mark A. Davis CONTRACT HOURS _____
RJL 13/1

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG		
1			0 - 0.1 Organics 0.1 - 1.0 Sand- oxygenized, silty balls 1.0 - 3.0 Silt-clayey, grey 3.0 - 7.4 Sand - coarse grained, minor pebbles, well sorted. 7.4 - 11.3 Sand - fine grained, trace stones 11.3 - 12.2 Sand - Coarse		
4	C		12.2 - 14.0 Sand - medium grained, fining downward. 13.0 - 14.0 Fine sand.		
6	C		14.0 - 16.0 Sand - alternating fine and coarse units, possibly fining downwards sets (deltic [outwash])		
8	F		18.0 - 19.0 Silt-gravelly gravelly rich Till poorly sorted, moderately compact colour change from brown of sands to white of silt minor gritty silt coatings on clasts 60% clasts - gravel to small cobbles - 55% Huronian - grey and red siltstone arkose, etc - 20% mafic intrusive, 10% granite, loose volcanics, 5% limestone		
13	F		19.0 - 21.0 Bedrock Siltstone - grey, very fine grained - large flat chips - massive.		
18	A	4644	16.0		
19			14.1		
21	EDH		20		
22					
23					

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Pg 1 of 3

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY Sudbury Contact Mine, Ltd. HOLE No. LU-95-08, Grid 3 - L 4700E / 0+50S
 CONTRACTOR Heath and Sherwood LOCATION E 583280 N 5263990, Elev 298, CL 1202724

- DRILLER Denis La Fleur BIT NO. CB 71011 BIT FOOTAGE 0 → 57 + 21 = 78

MOVE TO HOLE 4:00 - 4:30 (from Lu-07)

DRILL 4:30 - 5:45 pm, 7:00 - 1:15 pm MECHANICAL DOWN TIME 1:15 - 2:00 Fix wheel

DRILLING PROBLEMS sanded in rods, blocked return 26.5, pull rods clear DATE March 13, 14, 1995

OTHER went back down with mud SHIFT TO

MOVE TO NEXT HOLE 2:00 - 2:15 (to Lu-09) TOTAL HOURS 8.5

GEOLOGIST Raymond J Knowles SAMPLER Mark A. Davis CONTRACT HOURS

Raymond J. Knowles

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
0			0 - 3.0 sand - eolian, silty sand oxidized				
1							
2			3.0 - 8.6 sand - medium to coarse - 5-10% pebbles - oxidized, trace clay chips				
3							
4	M		8.6 - 8.9 Clay - gritty				
5			8.9 - 9.9 sand - medium grained, minor pebbles, trace clay/silt chips				
6			9.9 - 10.1 clay				
7	C		10.1 - 12.0 Sand - medium grained - minor pebbles, trace -5% chips				
8							
9	m		12.0 - clay layer				
10			12.0 - 18.0 abundant clay and silt chips in sand				
11	M		18.0 - clay layer				
12			18.0 - 20.5 Sand. Fine to medium grained - 5-10% clay/silt chips				
13	M		20.5-20.7 Thick massive silt unit - gritty				
14			20.7 - 26.9 Sand - fine				
15	m						
16							
17							
18							
19	F						
20	to						
21	M						
22							
23	F						
24							

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Pg 2 of 3

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____	HOLE No. <u>LH-95-08</u>	
CONTRACTOR _____	LOCATION _____	
DRILLER _____	BIT No. _____	BIT FOOTAGE _____
MOVE TO HOLE _____		
DRILL _____	MECHANICAL DOWN TIME _____	
DRILLING PROBLEMS _____	DATE <u>March 13, 14 / 95</u>	
OTHER _____	SHIFT _____	TO _____
MOVE TO NEXT HOLE _____	TOTAL HOURS _____	
GEOLOGIST _____	SAMPLER _____	CONTRACT HOURS _____

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
24	F		26.9 - 27.4 Sand - medium grained - trace chips				
25			27.4 - 32.5 Sand - coarse grained with medium grained sections - trace fine pebbles				
26	F		32.5 - 33.0 Silt - gritty				
27	M/E		33.0 - 35.7 Sand - fine grained with trace pebbles, and trace wood chips				
28	M/E		35.7 - 36.6 Sand - coarse with gravel - 5% gritty silt bits				
29			36.0 quit with mud drill with clean water				
30			36.6 - 40.6 Sand - fine silty				
31	M/C		40.0 - 51.8 T:11				
32			40.0 - 45.4 Silty sandy gravel rich till poorly sorted, moderately compact 50% clasts - gravel to small cobbles - 55% Huronian - brown and grey siltstone - 20% Diorite, 10-15% granite - 5% limestone, 5% volcanics and others				
33			Very silty silty sandy matrix, returns white				
34	F		Some narrow zones of no matrix, clear return, just gravel				
35			Notes: 4646 large sample due to bounce on diorite boulder contaminated with material from above.				
36			45.4 - 45.6 Boulder diorite, hard to drill				
37			45.8 - 51.4 Silty sandy moderately stony till moderately compact, poorly sorted gritty silt coatings on clasts				
38	- F		50-60% clasts - gravel to large cobbles 70% small to medium pebbles				
39			55% Huronian - brown and grey siltstone - 25% diorite, 10% granite, 5% limestone 5% volcanic				
40	NS	46.45	40.0 - 40.5 Moderately compact, poorly sorted gritty silt coatings on clasts				
41		46.46	40.5 - 42.0 50-60% clasts - gravel to large cobbles 70% small to medium pebbles				
42		46.47	42.0 - 44.5 55% Huronian - brown and grey siltstone - 25% diorite, 10% granite, 5% limestone 5% volcanic				
43		46.48	44.5 - 45.2 Note: ② 40-40.5 left not sampled due to contamination from above fine sands				
44		46.49	45.2 - 45.5				
45			45.5 - 46.0				
46			46.0 - 46.5				

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Pg 3 of 3

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____ HOLE No. LU-95-06
CONTRACTOR _____ LOCATION _____
DRILLER _____ BIT No. _____ BIT FOOTAGE _____
MOVE TO HOLE _____
DRILL _____ MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____ DATE March 14 / 95
OTHER _____ SHIFT _____ TO _____
MOVE TO NEXT HOLE _____ TOTAL HOURS _____
GEOLOGIST _____ SAMPLER _____ CONTRACT HOURS _____

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
		4649	465 51.8-51.4 matrix - sand section				
- 47	o o o	4650	51.4-51.8 clayey silty sandy matrix tr-10% gritty clay/silt balls				
48	o o o	4651	460 51.8 - 57.0 Bedrock Kimberlite				
49	o o o		49.5 Abrupt change of colour from light grey of above white to blue				
50	o o o	4652	50.6 grey large balls of gritty clay.				
51	o o o	4653	- medium green grey with (mm) size white and black bits / chips of limestone? and siltstone? altered, serpentine?				
52			51.8 51.8-52.5 2 good dark wine red garnets picked and saved, see chrome diopside?				
53	gt	4654	A and B				
54	abundant gt + ilmenite		Some clasts are pelletal in shape some limestone chips have solid kimberlite attached.				
55	gt	Buckets 50-60kg	52.5-53.7 see small chips of garnets 53.7-54.2 abundant garnet chips, ilmenite and 1 good cr diopside				
56	gt		54.2-55.0 1 or 2 garnet chips every screen, 1-2 cr diopside/m seen				
57	gt		55.0-57.0 becomes more compact still as large clayey balls but dryer harder clasts are harder, see relic classic kimberlite textures. good garnet chips and trace chrome diopside, also see brown mica (phlogopite?)				
	EOH		57.0 EOH				

W.A.H.UBACHECK CONSULTANTS LTD.
TORONTO, ONTARIO, CANADA

Pg 1 of 3

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY Sudbury Contact Mines Ltd. HOLE NO. LU-95-09, Grid 3 B 0+00/4+57W
 CONTRACTOR Heathland Shearwood LOCATION E 583240 N 52 64010, Eleu. 296m CL#1202724
 DRILLER Denis LaFlleur BIT No. C B 71042 BIT FOOTAGE 0-54.5 m
 MOVE TO HOLE 2:00 - 2:15
 DRILL 2:15 - 5:15 pm, 7:00 - 10:00 AM MECHANICAL DOWN TIME 1:15 - 2:00 change steel
 DRILLING PROBLEMS _____ DATE March 14, 15 / 95
 OTHER use mud through sand, stop for night at 43.5m SHIFT _____ TO _____
 MOVE TO NEXT HOLE 10:00 - 11:00 move to float, 11:00 - 12:00 wait for float TOTAL HOURS 8
 GEOLOGIST Raymond J Knowles SAMPLER Mark A. Davis CONTRACT HOURS _____
Raymond J. Knowles

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
0			0 - 2.0 sand - clayey, silty, oxidized beige gritty clay/silt chips and balls, trace pebbles				
2			2.0 - 6.4 Sand - medium to fine grained, trace fine gravel, silty with a moderate clay content as thin clay beds				
4			6.4 - 6.5 clay				
5			6.5 - 7.4 Silt grading to coarse sand				
6			7.4 - 7.5 clay bed				
7			7.5 - 11.0 Several units of clay bed grading to silt grading to fine to coarse sand. - some very thin clay seams seen as chips. - trace frozen pebbles				
8			11.0 - 13.0 Repeat units as above at 30-40cm intervals with the clay and silt representing 10-20 cm.				
9			13.0 - 16.0 Sand - 80% very fine silty, 20% medium to coarse grained. trace clay chips				
10			16.0 - 19.0 sand - coarse to fine grained with clay bottom reverse grading?				
11			19.0 - 23.0 Fine to medium grained Sand.				
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W.A.H.UBACHECK CONSULTANTS LTD.
TORONTO, ONTARIO, CANADA

Pg 3 of 3

REVERSE CIRCULATION DRILL HOLE LOG

COMPANY _____	HOLE No. <u>LU-95-09</u>	
CONTRACTOR _____	LOCATION _____	
DRILLER _____	BIT No. _____	BIT FOOTAGE _____
MOVE TO HOLE _____		
DRILL _____	MECHANICAL DOWN TIME _____	
DRILLING PROBLEMS _____	DATE <u>March 14/95</u>	
OTHER _____	SHIFT _____	TO _____
MOVE TO NEXT HOLE _____	TOTAL HOURS _____	
GEOLOGIST _____	SAMPLER _____	CONTRACT HOURS _____

DEPTH Feet Metres	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG				
589.00 A		4662	46.3 - 46.7 Boulder - diorite, hard				
470.00			46.5 47.4 - 47.7 Boulder - siltstone				
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APPENDIX C

OVERBURDEN DRILLING MANAGEMENT RESULTS

W.A. HUBACHECK CONSULTANTS LTD.



OVERBURDEN DRILLING MANAGEMENT LIMITED

May 2, 1996

Mr. Ray Knowles
W.A. HUBACHECK CONSULTANTS LTD.
141 Adelaide Street West
Suite 603
Toronto, Ontario
M5H 3L5

Fax 416-364-5384

Dear Mr. Knowles:

Re: Sulphide Minerals and Kimberlite Indicators in Samples 194LU - 4608 to 4630

Enclosed please find KIM count for the above batch of 20 samples. I would like to point out several features regarding the counts and remarks.

Sample 4621 contained ~60 indicator minerals, mostly picroilmenite, in the 0.50-1.0 mm fraction. Compatible picroilmenite contents also occur in the 0.25-0.50 mm fraction, but the grains were not picked. The pyrope content of the concentrate is negligible. Most of the picroilmenite grains in the sample are rounded with few fresh, broken surfaces, have a rough granular ilmenite + Fe-oxide skin, and are often attached to grey carbonate and Mg-Fe silicate (serpentine) probably representing altered kimberlite matrix. Another unusual feature is that many of the grains have fine pyrite cubes or octahedra attached to them or within the kimberlite rind. We have never seen this pyrite-kimberlite association before. Based on the "delicate" condition of the grains it appears your drilling intersected either: a) a kimberlite clast in overburden, or b) kimberlite bedrock.

Throughout your winter program we have been seeing elevated pyrite and chalcopyrite levels in your samples. Samples 4612 and 4613 are quite anomalous, however, containing upwards of 1% chalcopyrite in the 0.5-1.0 mm fractions and 1-2% chalcopyrite in the +1.0 amp of the <0.5 mm. The chalcopyrite (+pyrite) in these samples is often associated with grey carbonate + quartz or carbonatized rock chips [basalt(?) in 4613]. The occurrence suggest vein mineralization or stringer type alteration. Possible you are aware of the source of this mineralization but I thought I should mention these two samples in a more "formal" manner.

Please feel free to call if you have any questions or comments.

Yours sincerely,

Kenzie MacNeill
Kenzie MacNeill
Senior Geologist

Mines
Are
Where WE
Find Them.

107-15 Capella Court Nepean, Ontario K2E 7X1 Tel. 613-226-1771 FAX 613-226-8753

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

DATA TRANSMITTAL REPORT

DATE: 01-May-95

ATTENTION: MSSRS. CHRISTIE, KNOWLES & JAMIESON

CLIENT: W.A. HUBACHECK CONSULTANTS LIMITED
141 Adelaide Street West, Suite 1401
Toronto, Ont.
M5H 3L5

FAX NO.: 416 364-5384 10P.

PROJECT: 194 LU 4608 to 1630

FILE NO: H94LUMYK.WR1 / H4LU1MAY.WR1

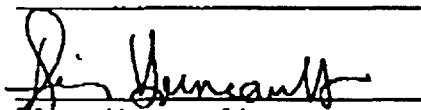
NO. OF SAMPLES: 20

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: _____


Remy Huneault
Laboratory Manager

OVERBURDEN DRILLING MANAGEMENT LIMITED - LABORATORY SAMPLE LOG: ABBREVIATIONS TABLE

DATA LOG

Clast:

Size of Clast:
 G: Granules
 P: Pebbles
 C: Cobbles
 BL: Boulder Chips
 BK: Bedrock Chips

% Clast Composition:
 V/S: Volcanics and Sediments
 GR: Granitics
 LS: Limestone
 OT: Other Lithologies
 (Refer to Footnotes)
 TR: Only Trace Present
 NA: NOT APPLICABLE
 OX: Oxidized

Matrix:

SI: Sorted or Unsorted	F: Fine
SD: Sand	M: Medium
ST: Silt	C: Coarse
CT: Clay	
OR: Organics	

Y: Fraction Present	
T: Fraction relatively more abundant	
-: Fraction relatively less abundant	
N: Fraction Not Present	
L: Lumps Present	

Colour:

B: Beige	PP: Purple
GY: Grey	PK: Pink
GB: Grey Beige	OC: Ochre
GN: Green	
GG: Grey Green	L: Light
BK: Brown	M: Medium
BK: Black	D: Dark

GOLD LOG

Number of Grains:

T: Number Found on Shaking Table
 P: Number Found by Panning

Remarks:

% Percentage of HMC (estimate
 from panning of table
 concentrate)

Thickness:

C: Calculated Thickness of
 Grain (in microns)
 M: Actual Measured Thickness
 of Grain (in microns)

gr. Grains (estimated number)

um Microns (1/1000 mm)

py.	Pyrite
cpx.	Chalcocite
asp.	Arsenopyrite
sarc.	Marcasite
L/G	Limonite/Goethite
sid.	Siderite

KIM LOG

GP: Purple garnet (G9/G10 chrome pyrope)
 GO: Orange mantle garnet; includes both eclogitic (G3) and Cr-poor segregate (G1/G2)
 varieties; in some samples, may include a few grains of common crustal garnet
 (G5) lacking diagnostic inclusions or crystal faces.
 DC: Chrome diopside, emerald green; paler green low-Cr diopside picked separately.
 IL: Picrolilennite; in some samples, may include a few grains of common crustal
 ilmenite lacking diagnostic inclusions or crystal faces.
 CR: Chromite

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

05/01/95

PROJECT: 194 LU

TOTAL OF 20 SAMPLES

FILENAME: 194LU.WRI / HALUMAY.WRI

SAMPLE DESCRIPTION

SAMPLE NUMBER	WEIGHT (KILOGRAMS)						CLASTS >2.0 mm		MATRIX (1.0 ->						GRAIN SIZE			
	BULK		TABLE		>2 mm	1-2 mm	TABLE	S	I	PERCENTAGE	DISTRIBUTION	COLOUR	R	S	G	G	O	
	REC'D	SPLIT	CLASTS	CLASTS	FEED	C	V/S	GR	LS	DT	E	U	Y	Y	Y	DGY	GY	NA
												S/U	SD	ST	CY	SAND CLAY	CLASS	
194 LU																		
4608	6.55	6.55	0.55	0.80	5.20	C	65	35	0	0	U	Y	Y	Y	DGY	GY	NA	TILL
4609	12.95	10.00	1.40	1.25	7.35	C	75	25	0	0	U	Y	Y	Y	DGY	GY	NA	TILL
4610	7.80	7.80	1.10	1.00	5.70	C	80	20	0	0	U	Y	Y	Y	DGY	GY	NA	TILL
4611	15.15	10.00	1.00	0.75	8.25	C	90	10	0	0	U	Y	Y	Y	DGY	B	NA	TILL
4612	5.45	5.45	0.90	0.65	3.90	C	85	15	TR	0	U	Y	Y	Y	DGY	GY	NA	TILL
4613	9.05	9.05	0.85	0.55	7.65	C	80	20	TR	0	U	Y	Y	Y	GY/PK	GY/PK	NA	TILL
4614	8.55	8.55	1.00	0.85	6.70	C	80	20	TR	0	U	+	-	-	GB	GB	NA	TILL
4615	9.65	9.65	0.95	0.90	7.80	C	75	20	5	0	U	+	-	-	B	B	NA	TILL
4616	9.50	9.50	1.30	0.95	7.25	C	55	40	5	0	S	F,M	-	-	B	B	NA	TILL
4617	13.55	10.00	1.00	0.80	8.20	C	50	40	10	0	S	F,M	-	-	NA	B	B	TILL
4618	9.20	9.20	0.85	0.80	7.55	C	55	40	5	0	S	F,M	-	-	NA	B	B	TILL
4619	10.00	10.00	1.25	0.75	8.00	C	60	35	5	0	U	+	-	-	B	B	NA	TILL
4620	8.35	8.35	1.10	0.80	6.45	C	20	80	TR	0	U	Y	Y	Y	GB	GB	NA	TILL
4621	4.25	4.25	0.40	0.50	3.35	C	55	50	TR	0	U	+	Y	-	RD/GY	RD/GY	NA	TILL
4625	8.35	8.35	1.50	1.05	5.80	C	60	40	0	0	U	Y	Y	Y	B	B	NA	TILL
4626	5.60	5.60	0.70	0.45	4.45	C	60	40	TR	0	U	Y	Y	+	B	B	NA	TILL
4627	5.15	5.15	0.45	0.40	4.30	C	70	30	TR	0	U	Y	Y	+	RD/B	RD/B	NA	TILL
4628	10.35	10.35	1.15	0.80	8.40	C	70	30	TR	0	U	Y	Y	Y	GB	B	NA	TILL
4629	8.95	8.95	0.85	1.30	6.80	C	30	70	0	0	U	Y	Y	Y	BB	B	NA	TILL
4630	8.35	8.35	0.85	1.00	6.50	C	50	50	0	0	U	Y	Y	Y	GB	B	NA	TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

05/01/95

PROJECT: 194 LU
TOTAL OF 20 SAMPLES

SAMPLE NUMBER	TOTAL #	TABLE CONCENTRATE (1.0 mm (grains))						KIM COUNT						T O R L KIMs		
		M.I. SEPARATION S.6 3.20						0.5 TO 1 mm			10.5 mm					
		-0.25 #	M.I. LIGHTS	TOTAL NON-MAG	0.5 TO 1.0 mm	0.25 TO 0.5 mm	-0.25 #	TOTAL MAG	SP	60	DC	IN	CR	SP	DC	
194 LU																
4608	106.4	NR	48.8	48.0	1.3	7.6	39.1	9.6	0	0	0	1	0	3	0	4
4609	119.1	NR	53.5	49.3	1.5	8.6	39.2	16.3	0	0	0	0	0	0	11	1
4610	139.2	NR	52.3	62.7	2.2	7.8	52.7	24.2	0	0	0	0	0	1	0	1
4611	89.2	NR	49.2	30.0	0.9	3.4	25.7	10.0	0	0	0	0	0	1	1	2
4612	107.2	NR	75.9	24.0	1.0	4.6	18.4	7.3	0	1	0	0	0	2	0	3
4613	306.8	NR	274.1	25.7	2.3	5.1	18.3	8.2	0	0	0	0	0	3	11	4
4614	155.1	NR	115.4	31.6	2.7	5.7	23.2	8.1	0	0	0	0	0	0	0	0
4615	304.3	NR	225.2	60.1	3.5	8.8	47.8	19.0	0	1	0	0	1	3	21	7
4616	101.7	NR	52.0	37.7	2.2	6.1	23.4	12.0	0	0	0	0	0	1	11	2
4617	195.0	NR	151.0	34.0	1.5	5.2	27.3	10.0	1	1	0	0	0	6	11	9
4618	224.6	NR	169.1	43.7	2.4	5.6	35.7	11.8	0	0	0	0	1	3	0	3
4619	245.7	NR	197.1	37.2	2.3	4.6	30.3	11.4	0	0	0	0	1	1	21	3
4620	375.0	NR	310.0	52.8	2.9	8.4	41.5	12.2	0	1	0	0	0	4	11	6
4621	186.5	NR	164.3	17.6	1.3	2.9	13.4	4.6	2	0	0	56	1	0	0	59
4625	316.6	NR	253.1	47.2	3.0	7.6	36.6	16.3	0	0	0	1	0	2	11	4
4626	211.5	NR	185.5	20.3	1.7	4.0	14.6	5.7	0	0	0	0	0	0	0	0
4627	278.0	NR	264.3	10.7	0.5	1.6	8.6	3.0	0	0	0	0	0	0	0	0
4628	406.9	NR	341.1	53.6	2.5	7.2	43.9	12.2	0	0	0	0	1	5	0	6
4629	494.8	NR	435.7	47.1	6.2	10.9	30.0	12.0	0	0	0	1	0	1	0	2
4630	477.3	NR	378.8	74.2	7.7	12.8	53.7	24.3	1	0	0	0	0	1	0	2

KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES:

SAMPLE NO: REMARKS
 PROJECT: 194 LU

- 4608 Abundant gabbroic/diabasic rock chips in >0.50 mm; 10% pyrite and ~5 chalcopyrite grains in +1.0 amp of <0.50 mm. Picked 1 CR, 4 pale emerald green low/very low Cr-diopside from <0.50 mm. Also picked 1 blue-grey spinel from <0.50 mm.
- 4609 Abundant gabbroic/diabasic rock chips in >0.50 mm; 10% pyrite and 5 chalcopyrite grains in >0.50 mm; 10-15% and ~15 grains chalcopyrite in +1.0 amp of <0.50 mm.
- 4610 Abundant gabbroic/diabasic rock chips in >0.50 mm; 10% pyrite and ~5 chalcopyrite grains in >0.50 mm; 10% pyrite and ~10 grains chalcopyrite in +1.0 amp of <0.50 mm. Picked 1 CR from <0.50 mm.
- 4611 10% pyrite and several grains chalcopyrite in >0.50 mm; ~8% pyrite and 20 grains chalcopyrite in +0.6 amp of <0.50 mm. SEM check of 1 deep red GP candidate from >0.50 mm = Fe-bearing spessartine. Picked 1 probable GO from <0.50 mm.
- 4612 8-10% pyrite and ~1% chalcopyrite, often associated with pyrite-carbonate-quartz, in >0.50 mm; 8% pyrite, ~2% chalcopyrite in +0.6 amp of <0.50 mm. SEM check of 1 black red-orange GP candidate from >0.50 mm = almandine; 1 pale orange GO candidate from >0.50 mm = possible GO; and 1 splendid IM candidate from >0.50 mm = crustal ilmenite. Picked 2 low/very low Cr-diopside from >0.50 mm.
- 4613 10% pyrite and 0.5% chalcopyrite in >0.50 mm (sulphides often tarnished - chalcopyrite % uncertain); 12% pyrite and ~1% chalcopyrite in +1.0 amp of <0.50 mm. Picked 1 CR from <0.50 mm.
- 4614 10% pyrite, ~5 grains chalcopyrite, and several grains galena in >0.50 mm; 15% pyrite, ~100 grains chalcopyrite, and ~100 grains galena, in +1.0 amp of <0.50 mm.
- 4615 15% pyrite, ~10 grains chalcopyrite in >0.50 mm; 20% pyrite and 50(+) grains chalcopyrite in +1.0 amp of <0.50 mm. SEM check 1 pale orange GO candidate from >0.50 mm = possible GO(+), and 1 splendid black CR candidate from >0.50 mm = CR. Picked 1 CR from <0.50 mm.
- 4616 Common gabbroic/diabasic rock chips in >0.50 mm; 20% pyrite and several grains chalcopyrite in >0.50 mm; 20% pyrite and several grains chalcopyrite in +1.0 amp of <0.50 mm. Picked 1 low/very low Cr-diopside from <0.50 mm.

- 4617 15% pyrite and several chalcopyrite grains in >0.50 mm; 25% pyrite and several chalcopyrite grains in +1.0 amp of <0.50 mm. SEM check of 2 pale orange GO candidates from >0.50 mm = 1 possible GO(*), 1 Mn-almandine. Picked 3 pale orange GO candidates from <0.50 mm.
- 4618 20% pyrite and several chalcopyrite grains in >0.50 mm; 25% pyrite, ~25 grains chalcopyrite, and several grains galena in +1.0 amp of <0.50 mm. Picked 1 CR from <0.50 mm.
- 4619 25% pyrite, 5-10 grains chalcopyrite, and several grains sphalerite in >0.50 mm; 25% pyrite and ~25 grains chalcopyrite in +1.0 amp of <0.50 mm. SEM check of 2 cloudy, pale emerald green grains from >0.50 mm = both Cr-andradite.
- 4620 10% pyrite and 5-10% chalcopyrite grains in >0.50 mm; 20% pyrite and ~25 chalcopyrite grains in +1.0 amp of <0.50 mm. GO from >0.50 mm possibly crustal. Picked 3 pale orange possible GO from <0.50 mm.
- 4621 20-25% pyrite and several grains chalcopyrite in >0.50 mm — some grains possibly associated with altered kimberlite; 25% pyrite and 25(+) grains chalcopyrite in +1.0 amp of <0.50 mm — pyrite often occurs as twinned octahedra. SEM check of 1 grey sulphide grain from <0.50 mm = galena, and 2 sulphide octa- hedra from <0.50 mm = 2 pyrite. SEM check of 10 (of 57) black, rounded CR or IM with a rough surface texture, some with grey kimberlite/silicate rind and some with attached pyrite octahedra or cubes = 10 IM but poor spectra due to lack of fresh surfaces. Fine granular rind on IM appears to be a mixture of Cr- and Mn-bearing ilmenite and/or Fe-oxide. Gray kimberlite/silicate rind is mostly carbonate with Si, Mg, Fe, and K — mostly serpentine(?). Picked 1 pale emerald green low/very low Cr-diopside from >0.50 mm. Common IM in <0.50 mm.
- 4625 5% pyrite and several grains chalcopyrite in >0.50 mm; ~8% pyrite and 15-20 grains chalcopyrite in +1.0 amp of <0.50 mm. SEM check of 1 black splendid grain from >0.50 mm = IM, and 1 dull black grain with silicate rind from >0.50 mm = crustal ilmenite. Picked 1 CR from <0.50 mm.
- 4626 5% pyrite and several chalcopyrite grains in >0.50 mm; 5% pyrite and 10-15 chalcopyrite grains in +0.6 amp of <0.50 mm.
- 4627 10% pyrite and several chalcopyrite grains in >0.50 mm; 8% pyrite and 15-20 chalcopyrite grains in +0.6 amp of <0.50 mm.
- 4628 SEM check of 1 splendid black grain from >0.50 mm = CR. ~10% pyrite and 10 grains chalcopyrite in +1.0 amp of <0.50 mm. Picked 3 CR, 1 CR-andradite, and 1 grey-blue spinel from <0.50 mm.

4629

5% pyrite and several chalcopyrite grains in >0.50 mm; 8% pyrite and ~25 chalcopyrite grains in +1.0 amp of (0.50 mm. SEM check of 2 black splendid IM candidates from >0.50 mm = 1 IM, 1 crustal ilmenite. Picked 1 pale emerald green low/very low CR-diopside from (0.50 mm.

4630

>0.50 mm fraction mainly drill cuttings of basalt (bedrock?). 7% pyrite in +1.0 amp of (0.50 mm. Also picked 1 pale emerald green low/very low CR-diopside from >0.50 mm.

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

HALUIMAY.WR2

Sample No.	Number of Visible Gold Grains			Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified		Pristine	Total	Reshaped	Modified
194LU								
4608	4	3	1	0	48.0	46	38	8
4609	3	2	1	0	49.3	58	45	13
4610	9	6	2	1	62.7	46	40	4
4611	3	1	2	0	30.0	24	3	22
4612	4	3	1	0	24.0	330	329	1
4613	2	2	0	0	25.7	29	29	0
4614	1	1	0	0	31.6	1	1	0
4615	8	8	0	0	60.1	117	117	0
4616	11	9	2	0	37.7	32	22	11
4617	14	3	7	4	34.0	48	16	29
4618	12	11	1	0	43.7	173	171	2
4619	9	7	2	0	37.2	63	45	18
4620	0	0	0	0	52.8	0	0	0
4621	4	1	3	0	17.6	31	21	10
4625	8	8	0	0	47.2	112	112	0
4626	4	4	0	0	20.3	9	9	0
4627	0	0	0	0	10.7	0	0	0
4628	3	3	0	0	53.6	112	112	0
4629	4	4	0	0	47.1	59	59	0
4630	4	2	1	1	74.2	7	6	0

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

				NUMBER OF GRAINS										
				RESHAPED		MODIFIED		PRISTINE		TOTAL		NON	CALC V.G.	
SAMPLE #	PANNED	Y/M	DIAMETER	THICKNESS	T	P	T	P	T	P	GGS	PPB	ASSAY	REMARKS
194LU														
4608	M	50 X	50	10 C	1					1				
		50 X	75	13 C		1				1				
		50 X	100	15 C	1					1				
		50 X	125	18 C	1					1				
											4	48.0	46	
4609	M	25 X	50	8 C	1					1				
		50 X	100	13 C		1				1				
		75 X	150	22 C	1					1				
											3	49.3	58	
4610	Y	25 X	25	5 C	2				1	1	2			10% pyrite.
		25 X	50	8 C					1		2			
		50 X	50	10 C	1		1				2			
		50 X	100	15 C	1						1			
		50 X	125	18 C	1						1			
		75 X	75	15 C	1						1			
											9	62.7	46	
4611	M	15 X	15	3 C		1				1				
		25 X	50	8 C	1					1				
		50 X	100	15 C		1				1				
											3	30.0	24	
4612	M	25 X	25	5 C		1				1				
		25 X	50	8 C	2					2				
		175 X	175	34 C	1					1				
											4	24.0	330	
4613	M	50 X	75	13 C	2					2				
											2	25.7	29	
4614	M	25 X	25	5 C	1					1				
											1	31.6	1	
4615	Y	25 X	25	5 C	1					1				
		25 X	50	8 C	1					1				
		50 X	50	10 C	2	1				3				15% pyrite.

GOLD CLASSIFICATION

XXXXXXXXXXXXXX

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

BALUINAY.WB2

TOTAL # OF PANNINGS 9

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS							
				RESHAPED		MODIFIED		PRISTINE		TOTAL	NON METAL
				T	P	T	P	T	P		
19410		50 X	75	13 C	1					1	
		50 X	125	18 C		1				1	
		150 X	150	29 C		1				1	
										8	60.1
											117
4616	Y	15 X	15	3 C	1					1	
		25 X	25	5 C	1		1			2	
		25 X	50	8 C	2	3				5	
		50 X	50	10 C	1	1				2	
		50 X	75	13 C		1				1	
										11	37.7
											32
4617	Y	15 X	15	3 C				1		1	
		15 X	25	4 C		1		2		3	
		25 X	25	5 C		3				3	
		25 X	50	8 C	2	1		1		4	
		50 X	50	10 C			1			1	
		50 X	75	13 C		1				1	
		50 X	100	15 C			1			1	
										14	34.0
											44
4618	Y	15 X	15	3 C	3	1				4	
		25 X	25	5 C	2					2	
		25 X	50	8 C	1		1			2	
		50 X	75	13 C	1					1	
		50 X	125	18 C		1				1	
		75 X	100	18 C	1					1	
		150 X	150	29 C		1				1	
										12	43.7
											173
4619	Y	25 X	25	5 C	1			1		2	
		25 X	50	8 C	3					3	
		25 X	75	10 C		1				1	
		50 X	50	10 C	1					1	
		50 X	100	15 C			1			1	
		75 X	100	18 C	1					1	
										9	37.2
											63
4620	X	NO VISIBLE GOLD									

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

				NUMBER OF GRAINS							
TOTAL # OF PANINGS 9				RESHAPED	MODIFIED	PRESTINE	TOTAL	BW	CALC V.G.		
SAMPLE #	PANNED	Y/M	DIAMETER	THICKNESS	T	P	T	P	T	P	ASSAY
											REMARKS
1941J											
4621	Y	15 X	25	4 C		1			1		82 pyrite.
		25 X	50	8 C		2			2		
		50 X	75	13 C	1				1		
									4	17.6	31
4625	Y	15 X	25	4 C	1				1		41 pyrite.
		25 X	100	13 C	1				1		
		50 X	75	13 C	2				2		
		50 X	100	15 C	1				1		
		50 X	125	18 C	2				2		
		75 X	125	20 C	1				1		
									8	47.2	112
4626	N	15 X	15	3 C	1				1		
		25 X	25	5 C	1				1		
		50 X	50	8 C	2				2		
									4	20.3	9
4627	N	NO VISIBLE GOLD									
4628	Y	25 X	50	8 C	1				1		
		50 X	125	18 C	1				1		
		75 X	225	29 C	1				1		
									3	53.6	112
4629	N	15 X	50	7 C	1				1		
		25 X	75	10 C	1				1		
		75 X	100	18 C	1				1		
		75 X	125	20 C	1				1		
									4	47.1	59
4630	N	15 X	25	4 C		1			1		
		25 X	25	5 C			1		1		
		25 X	50	8 C	1				1		
		50 X	75	13 C	1				1		
									4	74.2	7



OVERBURDEN DRILLING MANAGEMENT LIMITED

May 5, 1995

Mr. Ray Knowles
W.A. HUBACHECK CONSULTANTS LTD.
141 Adelaide Street West
Suite 603
Toronto, Ontario
M5H 3L5

Fax 416-364-5384

Dear Mr. Knowles:

Re: Sulphide Minerals, Samples 194LU - 4641, 4642, 4644, 4647

Enclosed please find KIM data for sample series 4631 to 4607.

You will note from the Remarks column that several samples have anomalous base metal sulphide contents, particularly in the +1.0 amp, 0.25-0.5 mm fractions. Specifically, Sample 4641 contains 3-4% sphalerite, Sample 4642 contains about 0.25% sphalerite, and Samples 4644 and 4647 contain 0.25-0.50% chalcopyrite.

Samples 4641 and 4642 contain minor chalcopyrite, often intergrown with the sphalerite, and are probably from one hole. Chalcopyrite in 4644 is sometimes intergrown with galena although galena is much less abundant than chalcopyrite. Alteration minerals (sillimanite, garnet, gahnite, etc.) that could be associated with sulphide mineralization were not noted in the samples. The mineralization may be similar to that in Pense Township where sphalerite, chalcopyrite and galena occur in association with pyrite and pyrrhotite in upper greenschist to amphibolite grade sediments and flows (Pontiac Group?) displaying limited albite and chlorite alteration (OGS Summary of Field Work, 1993; p. 100, 101).

I hope these comments prove useful.

Yours truly

Kenzie MacNeil
Kenzie MacNeil
Senior Geologist

Mines
Are
Where WE
Find Them.

107-15 Capella Court Nepean, Ontario K2E 7X1 Tel. 613-226-1771 FAX 613-226-8753

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

D A T A T R A N S M I T T A L R E P O R T

DATE: 08-May-95

ATTENTION: MSSRS. CHRISTIE, KNOWLES & JAMIESON

CLIENT: W.A. HUBACHECK CONSULTANTS LIMITED
141 Adelaide Street West, Suite 1401
Toronto, Ont.
MSH 3L5

FAX NO.: 416 364-5384

PROJECT: 194 LU 4631 to 4663; 4606, 4607

FILE NO: H94LU1MYK.WR1 / H4LU1MAY.WR1

NO. OF SAMPLES: 34 15 p.

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: _____


Remy Huneault
Laboratory Manager

OVERBURDEN DRILLING MANAGEMENT LIMITED - LABORATORY SAMPLE LOG: ABBREVIATIONS TABLE

DATA LOG

Clast:

Size of Clast:
 G: Granules
 P: Pebbles
 C: Cobbles
 BL: Boulder Chips
 BK: Bedrock Chips

X Clast Composition:
 V/S: Volcanics and Sediments
 GR: Granitics
 LS: Limestone
 OT: Other Lithologies
 (Refer to Footnotes)
 TR: Only Trace Present
 NA: NOT APPLICABLE
 OX: Oxidized

Matrix:

S/U: Sorted or Unsorted
 SD: Sand | F: Fine
 ST: Silt | M: Medium
 CY: Clay | C: Coarse
 OR: Organics

Y: Fraction Present
 +: Fraction relatively more abundant
 -: Fraction relatively less abundant
 N: Fraction Not Present
 L: Lumps Present

Colour:

B: Beige PP: Purple
 GY: Grey PK: Pink
 GB: Grey Beige OC: Ochre
 GN: Green
 GG: Grey Green L: Light
 BN: Brown M: Medium
 BK: Black D: Dark

GOLD LOG

Number of Grains:

T: Number Found on Shaking Table
 P: Number Found by Panning

Remarks:

% Percentage of HMC (estimate
 from panning of table
 concentrate)

Thickness:

C: Calculated Thickness of
 Grain (in microns)
 M: Actual Measured Thickness
 of Grain (in microns)

gr. Grains (estimated number)

uM Microns (1/1000 mm)

py. Pyrite

cpy. Chalcopyrite

asp. Arsenopyrite

marc. Marcasite

L/G Limonite/Goethite

sid. Siderite

KIM LOG

GP: Purple garnet (G9/G10 chrome pyrope)

GO: Orange mantle garnet; includes both eclogitic (G3) and Cr-poor megacryst (G1/G2) varieties; in some samples, may include a few grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces.

DC: Chrome diopside, emerald green; paler green low-Cr diopside picked separately.

IL: Picrolilmenite; in some samples, may include a few grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces.

CR: Chromite

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

05/08/95

PROJECT: 194 LU

TOTAL OF 34 SAMPLES.

FILENAME: H94LU1MYK.WR1 / HALU1MAY.WR1

SAMPLE DESCRIPTION

SAMPLE NUMBER	WEIGHT (KILOGRAMS)						CLASTS >2.0 mm				MATRIX (1.0 mm)				CLASS			
	BULK RECEIVED	TABLE SPLIT	+2 mm		1-2 mm		PERCENTAGE				GRAIN SIZE DISTRIBUTION		COLOUR					
			C	S	C	S	E	V/S	GR	LS	OT	S/U	SD	ST	CY	SAND CLAY		
194 LU																		
4631	10.55	10.55	0.90	1.25	8.40	C	50	50	0	0	U	Y	Y	Y	GY	GY	NA	TILL
4632	14.75	10.00	0.50	1.35	8.15	C	70	30	0	0	U	Y	Y	Y	GY	GY	NA	TILL
4633	15.25	10.00	1.25	1.15	7.60	C	70	30	0	0	U	Y	Y	Y	GY	GY	NA	TILL
4634	9.85	9.85	1.00	0.80	8.05	C	35	60	5	0	U	Y	Y	Y	GY	GY	NA	TILL
4635	5.60	5.60	0.30	0.45	4.85	C	90	10	TR	0	U	Y	Y	Y	GY	GY	NA	TILL
4636	17.65	10.00	1.55	0.55	7.90	C	50	50	TR	0	U	Y	Y	Y	GY	GY	NA	TILL
4637	10.70	10.70	1.05	0.50	9.15	C	40	60	0	0	U	Y	Y	Y	GY	GY	NA	TILL
4638	16.50	16.50	1.10	0.35	15.05	C	25	75	TR	0	U	Y	Y	Y	GY	GY	NA	TILL
4639	10.50	10.50	0.35	0.60	9.55	C	70	30	TR	0	U	Y	Y	Y	GY	GY	NA	TILL
4640	20.20	10.90	0.65	0.70	9.55	C	50	50	0	0	U	Y	Y	Y	GY	GY	NA	TILL
4641	17.70	10.00	0.75	1.55	7.70	C	40	60	0	0	U	Y	Y	Y	GY	GY	NA	TILL
4642	19.30	10.00	0.50	1.65	7.85	C	50	50	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4643	5.30	5.30	0.45	0.95	3.90	C	70	30	0	0	U	Y	Y	Y	DGY	DGY	NA	TILL
4644	14.05	10.00	1.45	1.35	7.20	C	49	49	2	0	U	Y	Y	Y	GB	GB	NA	TILL
4645	17.55	10.00	0.70	0.45	8.85	C	85	15	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4646	13.90	10.00	0.35	0.95	8.70	C	75	25	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4647	16.50	10.00	0.80	0.95	8.25	C	80	18	2	0	U	Y	Y	Y	GB	GB	NA	TILL
4648	13.70	13.70	1.25	0.60	11.85	C	49	49	2	0	U	Y	Y	Y	GB	GB	NA	TILL
4649	7.05	7.05	0.70	0.55	5.80	C	85	10	5	0	U	Y	Y	Y	GB	GB	NA	TILL
4650	16.25	10.00	1.15	0.85	8.00	C	65	35	TR	0	U	Y	Y	Y	GB	GB	NA	TILL
4651	16.90	10.00	0.85	0.90	8.25	C	50	45	5	0	U	Y	Y	Y	GB	GB	NA	TILL
4652	12.05	10.00	0.90	1.30	7.80	C	50	45	5	0	U	Y	Y	Y	GB	GB	NA	TILL
4653	7.10	7.10	0.60	0.85	5.65	C	50	50	TR	0	U	Y	Y	Y	GB	GB	NA	TILL
4655	17.05	10.00	1.15	0.75	8.10	C	55	45	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4656	14.85	10.00	2.20	1.00	6.80	C	50	50	TR	0	U	Y	Y	Y	GB	GB	NA	TILL
4657	13.35	10.00	0.60	1.00	8.40	C	60	40	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4658	15.80	10.00	0.85	0.60	8.55	C	45	55	5	0	U	Y	Y	Y	GB	GB	NA	TILL
4659	14.45	10.00	1.65	1.15	7.20	C	50	50	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4660	8.25	8.25	0.80	1.25	6.20	C	60	40	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4661	13.60	10.00	0.85	1.60	7.55	C	65	35	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4662	13.20	10.00	1.55	1.40	7.05	C	60	40	0	0	U	Y	Y	Y	GB	GB	NA	TILL
4663	11.55	10.00	1.30	1.10	7.60	C	50	50	TR	0	U	Y	Y	Y	GB	GB	NA	TILL
4666	13.75	10.00	1.65	0.75	7.60	C	58	40	2	0	S	M	-	NA	B	NA	NA	SAND
4607	8.15	8.15	1.55	0.85	5.75	C	55	45	0	0	U	Y	Y	Y	GB	GB	NA	TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

H4LU2MAY.WR2

Sample No.	Number of Visible Gold Grains			Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine	Total	Reshaped	Modified	Pristine

194 LU									
4631	2	2	0	0	66.5	45	,45	0	0
4632	10	10	0	0	48.9	36	36	0	0
4633	4	3	1	0	69.4	184	181	3	0
4634	3	2	1	0	92.7	90	90	0	0
4635	3	0	3	0	27.6	18	0	18	0
4636	8	8	0	0	48.4	71	71	0	0
4637	8	5	3	0	60.6	21	19	2	0
4638	9	7	2	0	62.7	32	27	4	0
4639	8	8	0	0	66.4	73	73	0	0
4640	1	1	0	0	51.0	7	7	0	0
4641	10	10	0	0	61.9	16	16	0	0
4642	7	6	1	0	132.9	13	13	0	0
4643	12	10	2	0	28.8	155	129	26	0
4644	11	10	1	0	77.9	13	12	1	0
4645	16	8	8	0	74.2	64	56	8	0
4646	18	15	3	0	109.6	60	57	3	0
4647	3	3	0	0	83.7	12	12	0	0
4648	7	7	0	0	70.4	28	28	0	0
4649	11	11	0	0	64.2	57	57	0	0
4650	6	4	2	0	80.3	16	12	3	0
4651	7	7	0	0	85.1	21	21	0	0
4652	13	6	7	0	84.6	19	15	4	0
4653	8	8	0	0	50.4	12	12	0	0
4655	22	21	1	0	65.9	63	62	0	0
4656	14	14	0	0	61.6	39	39	0	0
4657	6	6	0	0	54.1	9	9	0	0
4658	7	1	6	0	60.8	11	6	4	0
4659	6	5	1	0	56.3	8	7	1	0
4660	5	5	0	0	67.5	17	17	0	0
4661	6	6	0	0	81.0	24	24	0	0
4662	5	5	0	0	98.6	17	17	0	0
4663	24	11	13	0	76.9	115	42	73	0
4606	13	11	2	0	92.6	193	160	33	0
4607	9	5	4	0	61.2	185	173	13	0

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

H4LU2NAY.WR2										NUMBER OF GRAINS			
TOTAL # OF PANNEYS			19										
SAMPLE #	PANNED	MEASUREMENT (MICRONS)		RESHAPED	MODIFIED	PRISTINE	TOTAL	NON	CALC	V.G.	ASSAY	REMARKS	
		Y/M	DIAMETER			T	P	T	P	T	P	GMS	PPB
194 LU													
4631	Y	25 X	50	8 C	1					1			2% pyrite.
		100 X	150	25 C		1				1			
										2	66.5	45	
4632	Y	25 X	25	5 C	4					4			2% pyrite.
		25 X	50	8 C	1					1			
		25 X	75	10 C	1					1			Note: the four 25x25 grains could not be recovered.
		25 X	100	13 C		1				1			
		50 X	50	10 C	2					2			
		75 X	75	15 C	1					1			
										10	48.9	36	
4633	M	50 X	50	10 C		1				1			
		50 X	125	18 C	1					1			
		75 X	150	22 C	1					1			
		125 X	250	36 C	1					1			
										4	69.4	184	
4634	M	25 X	25	5 C		1				1			
		75 X	150	22 C	1					1			
		150 X	175	31 C	1					1			
										3	92.7	90	
4635	Y	15 X	50	7 C		1				1			0.5% pyrite.
		25 X	50	8 C			1			1			
		50 X	75	13 C		1				1			
										3	27.6	18	
4636	Y	15 X	25	4 C	1					1			0.5% pyrite.
		25 X	50	8 C	2					2			
		25 X	100	13 C	1	2				3			
		50 X	100	15 C	1					1			
		75 X	125	20 C	1					1			
										8	48.4	71	
4637	Y	25 X	25	5 C	1	2				3			0.5% pyrite.
		25 X	50	8 C		1				1			
		25 X	75	10 C	1					1			
		50 X	50	10 C	1					1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

H4LU2NAY.WR2			NUMBER OF GRAINS									
TOTAL # OF PANNEYS 19			RESHAPED MODIFIED PRISTINE TOTAL N.W. CALC V.G.									
SAMPLE #	PANNED	MEASUREMENT (MICRONS)	T	P	T	P	T	P	MAG	ASSAY	REMARKS	
Y/N	DIAMETER	THICKNESS							GMS	PPB		
194 LU												
	50 X	75	13 C	1	1				2			
									8	60.6	21	
4638 Y	25 X	50	8 C	4	1				5		0.5% pyrite.	
	25 X	75	10 C		1				1			
	50 X	75	13 C	2					2			
	75 X	75	15 C		1				1			
									9	62.7	32	
4639 Y	15 X	25	4 C	1					1		0.5% pyrite.	
	25 X	25	5 C	2					2			
	25 X	75	10 C	1					1			
	50 X	50	10 C	2					2			
	50 X	75	13 C	1					1			
	75 X	200	27 C	1					1			
									8	66.4	73	
4640 M	50 X	75	13 C	1					1			
									1	51.0	7	
4641 Y	15 X	15	3 C	1					1		6% pyrite; ~100 grains galena;	
	25 X	25	5 C	2	3				5		1 grain chalcopyrite.	
	25 X	50	8 C	3					3			
	75 X	75	15 C	1					1			
									10	61.9	16	
4642 Y	15 X	50	7 C	1					1		3% pyrite; ~30 grains galena.	
	25 X	25	5 C	1	1				2			
	50 X	50	10 C	2					2			
	50 X	100	15 C		1				1			
	75 X	75	15 C	1					1			
									7	132.9	13	
4643 Y	25 X	25	5 C	2					2		0.5% pyrite.	
	25 X	75	10 C	3					3			
	25 X	100	13 C	1	1				2			
	50 X	50	10 C	1					1			
	50 X	75	13 C	1	1				2			
	50 X	100	15 C	1					1			

Activation Laboratories Ltd. **Work Order: 8126** **Report: 8046D**

SAMPLE #	Ag PPM	Cu PPM	Ni PPM	Zn PPM	Cd PPM	Mn PPM	Pb PPM
4608 HMC	<0.2	162	42	50	<0.5	194	38
4609	<0.2	276	45	78	<0.5	250	20
4610	0.4	165	43	54	<0.5	254	16
4611	<0.2	288	51	67	<0.5	320	20
4612	<0.2	1093	272	108	0.5	300	18
4613	<0.2	615	80	74	0.5	510	20
4614	<0.2	531	82	53	<0.5	220	310
4615	<0.2	267	54	47	<0.5	254	18
4616	<0.2	174	61	62	<0.5	340	22
4617	<0.2	174	63	73	<0.5	416	48
4618	<0.2	134	48	40	<0.5	302	38
4619	<0.2	165	52	43	<0.5	264	76
4620	<0.2	294	52	59	<0.5	250	40
4621	1.6	337	156	65	7.0	322	216
4625	0.4	344	47	47	<0.5	298	38
4626	<0.2	531	48	148	<0.5	308	44
4627	<0.2	263	60	47	<0.5	290	24
4628	<0.2	334	37	131	0.5	274	20
4629	<0.2	377	57	102	0.5	302	36
4630	<0.2	206	39	97	0.5	236	34
4631	<0.2	264	56	100	0.5	282	18
4632	<0.2	297	52	110	0.5	266	26
4633	<0.2	180	39	87	<0.5	206	26
4634	<0.2	213	37	77	<0.5	142	16
4635	<0.2	323	61	164	1.0	332	30
4636	<0.2	178	29	94	0.5	270	16
4637	<0.2	162	29	59	<0.5	258	14
4638	<0.2	198	27	86	0.5	274	14
4639	<0.2	176	30	77	<0.5	256	18
4640	<0.2	244	34	67	<0.5	258	18
4641	<0.2	267	57	2722	6.5	214	40
4642	<0.2	187	43	426	1.0	144	16
4643	<0.2	391	54	63	0.5	296	36
4644	<0.2	234	42	59	<0.5	198	28
4645 HMC	<0.2	123	26	35	<0.5	180	16

GOLD CLASSIFICATION

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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

H4LU2MAY.WR2				NUMBER OF GRAINS								
TOTAL # OF PANNINGS 19												
SAMPLE #	PANNED	MEASUREMENT (MICRONS)		RESHAPED	MODIFIED	PRISTINE	TOTAL	NON	CALC V.G.	MAG	ASSAY	REMARKS
		Y/M	DIAMETER									
194 LU		75 X	125	20 C	1			1				
										12	28.8	155
4644	X	15 X	25	4 C	3			3				
		25 X	25	5 C	4			4				
		25 X	50	8 C	1	1		2				
		50 X	75	13 C	2			2				
										11	77.9	13
4645	Y	15 X	15	3 C		4		4				0.3% pyrite; ~10 grains galena.
		25 X	25	5 C	2			2				
		25 X	50	8 C	2	2		4				
		25 X	75	10 C		1		1				
		25 X	125	15 C	1			1				
		50 X	50	10 C	1	1		2				
		50 X	125	18 C	1			1				
		100 X	125	22 C	1			1				
										16	74.2	64
4646	Y	10 X	10	2 C		1		1				3% pyrite; ~100 grains galena.
		15 X	15	3 C	3			3				
		15 X	25	4 C	1			1				
		25 X	25	5 C	3	1		4				
		25 X	50	8 C	1	1		2				
		25 X	75	10 C	3	1		4				
		50 X	50	10 C		1		1				
		50 X	75	13 C	1			1				
		125 X	175	29 C	1			1				
										18	109.6	60
4647	X	25 X	25	5 C	1			1				
		50 X	75	13 C	1			1				
		50 X	100	15 C	1			1				
										3	83.7	12
4648	X	15 X	25	4 C	2			2				~100 grains galena.
		25 X	50	8 C	1			1				
		25 X	75	10 C	1			1				
		25 X	100	13 C	1			1				
		50 X	100	15 C	1			1				

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNEING

H4LU2NAY.WR2				NUMBER OF GRAINS								
TOTAL # OF PANNEINGS 19				-----								
SAMPLE #	PANNED	MEASUREMENT (MICRONS)		RESHAPED -----	MODIFIED -----	PRISTINE -----	TOTAL -----	MON -----	CALC V.G. -----	MAG -----	ASSAY -----	REMARKS
		Y/N	DIAMETER	THICKNESS	T	P	T	P	T	GMS	PPB	
194	LJ											
		75 X	75	15 C	1				1			
										7	70.4	28
4649	Y	15 X	15	3 C	1				1			0.7% pyrite.
		15 X	25	4 C		1						
		25 X	25	5 C		1						
		25 X	50	8 C	1							
		50 X	50	10 C	2							
		50 X	75	13 C	3							
		50 X	125	18 C	1							
		75 X	100	18 C	1							
										11	64.2	57
4650	M	15 X	15	3 C	1				1			
		15 X	75	9 C	1				1			
		25 X	125	15 C	1				1			
		25 X	50	8 C		1			1			
		50 X	50	10 C	1		1		2			
										6	80.3	16
4651	M	25 X	25	5 C	2				2			
		25 X	75	10 C	1				1			
		25 X	125	15 C	1				1			
		50 X	50	10 C	1				1			
		50 X	75	13 C	2				2			
										7	85.1	21
4652	M	25 X	25	5 C		3	1		4			
		25 X	50	8 C	2	1	2	1	6			
		25 X	75	10 C	1				1			
		50 X	50	10 C	1				1			
		75 X	75	15 C	1				1			
										13	84.6	19
4653	Y	15 X	15	3 C	1				1			2% pyrite.
		25 X	25	5 C	3				3			
		25 X	50	8 C	2				2			
		25 X	75	10 C	1	1			2			
										8	50.4	12

Note: the table grains were misplaced and are not in gold vial.

GOLD CLASSIFICATION

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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

H4LU2MAY.WR2				NUMBER OF GRAINS							
TOTAL # OF PANNINGS			19								
SAMPLE #	PANNED	MEASUREMENT (MICRONS)		RESHAPED	MODIFIED	PRISTINE	TOTAL	NON GRAMS	CALC V.G. PPB	ASSAY	REMARKS
		Y/M	DIAETER	THICKNESS	T	P	T	P			
194 LU											
4655	Y	15 X	15	3 C	3				3		0.7% pyrite; ~20 grains galena.
		15 X	25	4 C	3				3		
		25 X	25	5 C	4	1			5		
		25 X	50	8 C	3				3		
		25 X	75	10 C	3				3		
		25 X	100	13 C	1				1		
		50 X	75	13 C	1	1			2		
		50 X	125	18 C	2				2		
									22	65.9	63
4656	Y	15 X	25	4 C	1	1			2		0.3% pyrite; ~20 grains galena.
		25 X	25	5 C	3				3		
		25 X	50	8 C	2				2		
		25 X	75	10 C	2				2		
		50 X	50	10 C	2				2		
		50 X	75	13 C	2				2		
		50 X	100	15 C	1				1		
									14	61.6	39
4657	N	15 X	15	3 C	2				2		"10 grains galena.
		15 X	25	4 C	1				1		
		25 X	50	8 C	1				1		
		50 X	50	10 C	2				2		
									6	54.1	9
4658	N	15 X	15	3 C		4			4		"10 grains galena.
		15 X	50	7 C		1			1		
		50 X	50	10 C		1			1		
		50 X	75	13 C	1				1		
									7	60.8	11
4659	N	15 X	15	3 C	1				1		
		15 X	25	4 C	1				1		
		25 X	50	8 C	2	1			3		
		50 X	50	10 C	1				1		
									6	56.3	8
4660	N	15 X	15	3 C	1				1		"10 grains galena.
		25 X	25	5 C	1				1		

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

H4LU2MAY.WR2

NUMBER OF GRAINS

TOTAL # OF PANNINGS 19

SAMPLE #	PANNED	Y/N	DIAMETER	THICKNESS	MEASUREMENT (MICRONS)	NUMBER OF GRAINS						NON MAG GMS	CALC ASSAY PPB	V.G. REMARKS	
						RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL			
194 LU			50 X	75	13 C	3						3			
													5	67.5	17
4661	N		15 X	25	4 C	1						1			
			25 X	25	5 C	2						2			
			25 X	75	10 C	1						1			
			75 X	75	15 C	1						1			
			75 X	100	18 C	1						1			
													6	81.0	24
4662	N		25 X	25	5 C	3						3			
			50 X	100	15 C	1						1			
			50 X	125	18 C	1						1			
													5	98.6	17
4663	Y		15 X	15	3 C		1					1		0.4% pyrite.	
			15 X	50	7 C		1					1			
			25 X	25	5 C		1					1			
			25 X	50	8 C	6	2					8			
			25 X	75	10 C		1					1			
			25 X	125	15 C	1						1			
			50 X	50	10 C	3	3					6			
			50 X	75	13 C		1					1			
			75 X	75	15 C		1					1			
			75 X	125	20 C	1	1					2			
			100 X	125	22 C		1					1			
													24	76.9	115
4606	Y		25 X	75	10 C	1	1					2		0.1% pyrite.	
			50 X	50	10 C		1					1			
			50 X	75	13 C	1						1			
			50 X	100	15 C	1						1			
			75 X	75	15 C	1						1			
			75 X	100	18 C	2						2			
			75 X	125	20 C	3						3			
			75 X	175	25 C		1					1			
			125 X	200	31 C	1						1			
													13	92.6	193
4607	Y		15 X	25	4 C		2					2		0.5% pyrite.	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

H4LU2MAY.WR2

NUMBER OF GRAINS

TOTAL # OF PANNINGS 19

SAMPLE #	PANNED	Y/N	DIAMETER	THICKNESS	MEASUREMENT (MICRONS)						NON	CALC V.G.	
					RESHAPED	MODIFIED	PRISTINE	TOTAL	MAG	ASSAY			
T	P	T	P	T	P	GMS	PPB	REMARKS					
194 LU													
	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		2			2					
	50 X	100	15 C	1				1					
	150 X	225	36 C	1				1					
								9 61.2 185					

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

05/08/95

PROJECT: 194 LU
TOTAL OF 34 SAMPLES

SAMPLE NUMBER	TABLE CONCENTRATE (1.0 mm (grams))							KIM COUNT						T		
	M.I. SEPARATION S.G 3.20							0.5 TO 1 mm			10.25 TO 10.5 mm			T		
	TOTAL	-0.25	M.I.	TOTAL	0.5 TO 1.0 mm	0.25 TO 0.5 mm	-0.25	TOTAL	MAG	GP	60° DC	IM	CR	GP	DC	L
			LIGHTS	NON-MAG												
194 LU																
4631	168.7	NA	79.1	66.5	4.2	12.1	50.2	23.1	1 0	2	0	0	0	0	2	4
4632	123.4	NA	56.4	48.9	2.4	7.7	38.8	18.1	1 0	0	0	1	0	1	0	2
4633	405.4	NA	323.7	69.4	1.9	10.6	56.9	12.3	1 0	0	0	0	0	1	2	6
4634	488.4	NA	381.4	92.7	3.6	12.3	76.8	14.3	1 1	0	0	0	0	1	6	31
4635	128.4	NA	94.9	27.6	1.0	4.1	22.5	5.9	1 0	0	0	0	0	1	0	1
4636	211.8	NA	152.1	48.4	1.5	4.8	42.1	11.3	1 0	0	0	0	0	1	0	1
4637	268.3	NA	192.6	60.6	1.8	6.0	52.8	15.1	1 0	0	0	0	0	1	0	1
4638	197.9	NA	120.2	62.7	0.9	4.3	57.5	15.0	1 0	0	0	0	0	1	0	1
4639	200.0	NA	117.2	66.4	1.8	5.1	59.5	16.4	1 0	0	0	0	0	2	0	2
4640	230.7	NA	166.8	51.0	1.8	3.7	45.5	12.9	1 0	0	0	0	0	3	0	3
4641	475.9	NA	401.7	61.9	2.5	10.4	49.0	12.3	1 0	0	0	0	0	2	1	3
4642	662.2	NA	505.2	132.9	13.2	27.8	91.9	24.1	1 1	0	0	0	0	1	2	4
4643	292.8	NA	256.6	28.8	1.7	4.3	22.8	7.4	1 0	0	0	1	0	2	1	4
4644	433.4	NA	338.6	77.9	5.2	11.8	60.9	16.9	1 0	1	0	0	0	4	2	7
4645	472.8	NA	380.0	74.2	2.8	6.4	65.0	18.6	1 0	0	0	0	0	10	0	10
4646	562.5	NA	432.9	109.6	6.7	13.9	89.0	20.0	1 1	0	0	0	0	2	0	3
4647	348.9	NA	249.2	83.7	5.0	12.0	66.7	16.0	1 1	0	0	1	1	2	1	6
4648	422.7	NA	337.3	70.4	3.6	7.0	59.8	15.0	1 0	0	0	0	0	1	2	0
4649	374.3	NA	298.7	64.2	2.6	10.1	51.5	11.4	1 0	0	0	0	0	2	3	5
4650	387.1	NA	292.4	80.3	3.3	12.6	64.4	14.4	1 0	0	0	0	0	2	1	3
4651	367.2	NA	261.0	85.1	7.9	17.7	59.5	21.1	1 2	0	0	0	0	2	2	6
4652	564.2	NA	461.3	84.6	9.7	19.5	55.4	18.3	1 1	1	1	0	0	5	2	10
4653	350.6	NA	290.0	50.4	3.7	8.6	38.1	10.2	1 56	25	7	10	32	240	68	438
4655	342.4	NA	259.8	65.9	4.3	10.6	51.0	16.7	1 0	0	0	0	1	2	1	4
4656	408.3	NA	334.8	61.6	4.5	11.4	45.7	11.9	1 0	0	0	0	0	1	1	2
4657	408.2	NA	341.9	54.1	3.7	8.7	41.7	12.2	1 0	0	0	0	0	0	0	0
4658	456.6	NA	384.2	60.8	3.4	9.3	48.1	11.6	1 0	0	0	0	0	1	0	1
4659	400.4	NA	333.4	56.3	3.7	9.8	42.8	10.7	1 0	0	0	0	0	0	1	1
4660	324.8	NA	240.2	67.5	5.3	13.1	49.1	17.1	1 0	0	0	0	0	3	2	5
4661	355.7	NA	245.9	81.0	5.8	12.7	62.5	28.8	1 0	0	0	0	0	0	0	0
4662	479.4	NA	360.9	98.6	10.2	18.4	70.0	19.9	1 0	1	0	0	0	3	1	5
4663	326.6	NA	235.9	76.9	3.1	9.9	63.9	13.8	1 40	22	10	32	17	81	49	251
4666	438.0	NA	312.7	92.6	4.1	12.1	76.4	32.7	1 0	0	0	0	0	6	0	6
4667	313.6	NA	237.9	61.2	4.4	8.1	48.7	14.5	1 0	1	0	0	0	2	2	5

KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES:

SAMPLE NO: REMARKS
 PROJECT: 194 LU

- 4631 80% grey pyroxene-rich gabbroic/diabasic rock chips in >0.50 mm; 10% pyrite in >0.50 mm; ~15% pyrite and several chalcopyrite grains in +1.0 amp of <0.50 mm. SEM check of 2 pale GO candidates from >0.50 mm = both probable GO(*).
- 4632 12% pyrite and possibly several grains tarnished chalcopyrite in >0.50 mm; 15% pyrite and ~10 chalcopyrite grains in +1.0 amp of <0.50 (sulphides very tarnished). SEM check of 1 splendid black IM candidate from >0.50 mm = IM.
- 4633 ~8% pyrite and several chalcopyrite grains in >0.50 mm; 10% pyrite and ~20 chalcopyrite grains in <0.50 mm.
- 4634 <5% pyrite and ~5 chalcopyrite grains in >0.50 mm; 8-10% pyrite and ~15 chalcopyrite grains in +1.0 amp of <0.50 mm.
- 4635 10% pyrite in >0.50 mm; 10% pyrite and ~20 chalcopyrite grains in +0.6 amp of <0.50 mm. Picked 1 IM from <0.50 mm.
- 4639 <5% pyrite and ~15 chalcopyrite grains in +1.0 amp of <0.50 mm. Picked 1 pale emerald green low/very low Cr-diopside from <0.50 mm.
- 4640 5% pyrite and several chalcopyrite grains in >0.50 mm; 6-8% pyrite and ~20 chalcopyrite grains in +1.0 amp of <0.50 mm.
- 4641 10% pyrite, ~10 chalcopyrite grains and ~25 sphalerite grains, sometimes intergrown with chalcopyrite, in >0.50 mm; 20% pyrite, 3-4% sphalerite (see accompanying letter) and 50-100 chalcopyrite grains, sometimes intergrown with sphalerite, in +1.0 amp of <0.50 mm.
- 4642 5% pyrite, ~15 chalcopyrite grains and ~25 sphalerite grains in >0.50 mm; 20% pyrite, 25 chalcopyrite grains and 0.25% sphalerite in +1.0 amp of <0.50 mm.
- 4643 ~10% pyrite in >0.50 mm; 10-15% pyrite and ~25 chalcopyrite grains in +0.6 amp of <0.50 mm. Picked 1 CR and 1 possible GO from <0.50 mm.
- 4644 ~8% pyrite and ~10 chalcopyrite grains, 1/2 with associated galena, in >0.50 mm; 15% pyrite, 0.25% chalcopyrite (a few grains with associated galena) in +1.0 amp of <0.50 mm. SEM check of 1 pale GO candidate from >0.50 mm = GO (probable Cr-poor megacryst).
- 4645 Abundant diabasic/gabbroic rock chips in >0.50 mm; ~8% pyrite and ~15 chalcopyrite grains in +1.0 amp of <0.50 mm.
- 4646 5% pyrite and 45 chalcopyrite grains in +1.0 amp of >0.50 mm.

KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES:

<u>SAMPLE NO.</u>	<u>REMARKS</u>
PROJECT: 194 LU	
4647	~5 pyrite and 10 chalcopyrite grains in >0.50 mm; 30% pyrite and 0.5% chalcopyrite in +1.0 amp of <0.50 mm.
4648	25% pyrite and 5 grains chalcopyrite in +1.0 amp of <0.50 mm. SEM check 1 black CR candidate from >0.50 mm = CR (high Ti).
4649	<5% pyrite and ~10 chalcopyrite grains in >0.50 mm; 20% pyrite and ~25 chalcopyrite grains in +1.0 amp of <0.50 mm.
4650	15% pyrite and ~5 chalcopyrite grains in +1.0 amp of <0.50 mm.
4651	Trace pyrite and several chalcopyrite grains in >05.0 mm; 15% pyrite and ~20 chalcopyrite grains in +1.0 amp of <0.50 mm.
4652	5-8% pyrite and 5-10 chalcopyrite grains in >0.50 mm; 30% pyrite and ~15% chalcopyrite grains in +1.0 amp of <0.50 mm. SEM check of rounded black CR candidate from >0.50 mm = andradite/grossular. Picked 1 CR and 2 probable GO from <0.50 mm.
4653	Definitive identification of IM versus CR not always possible. 5% pyrite in >0.50 mm; 20% pyrite and several chalcopyrite grains in +1.0 amp of <0.50 mm. Also picked 50 GO, 27 CR and 1 IM from <0.50 mm.
4656	20% pyrite and 15-20 chalcopyrite grains in +1.0 amp of <0.50 mm. Also picked 1 blue-green gahnite from <0.50 mm.
4657	25% pyrite and ~10 chalcopyrite grains in +1.0 amp of <0.50 mm.
4658	20% pyrite and ~10 chalcopyrite grains in +1.0 amp of <0.50 mm.
4659	25% pyrite and ~5 chalcopyrite grains in +1.0 amp of <0.50 mm.
4660	30% pyrite and 5-10 chalcopyrite grains in +1.0 amp of <0.50 mm. Picked 1 possible GO from <0.50 mm.
4661	5% pyrite in >0.50 mm; 20% pyrite and ~10 chalcopyrite grains in +1.0 amp of <0.50 mm.
4662	40% pyrite (associated with altered basalt?) in >0.50 mm; 60% pyrite in +1.0 amp of <0.50 mm. Sulphides are tarnished but chalcopyrite is negligible. Picked 1 CR from <0.50 mm.
4663	10% pyrite and several chalcopyrite grains in >0.50 mm; 30% pyrite and ~15 chalcopyrite grains in +1.0 amp of <0.50 mm. Many KIMs have kimberlite rind. IM count may include some CR lacking diagnostic crystal shape. SEM check of 5 GP from >0.50 mm to check chemistry = all appear to be G9; SEM check

KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES:

SAMPLE NO: REMARKS
PROJECT: 194 LU

of 3 red-orange garnet from >0.50 mm = 3 MgCaFe almandine, probably crustal but with similar features as kimberlitic pyrope; SEM check of 3 pink-orange garnet from >0.50 mm = 1 Mg-almandine, 2 possible GO (not included in GO count); all red-orange and pink-orange grains retained.

4606 SEM check of 1 clear, flawless octahedral grain from <0.50 mm = spinel.

4607 25% pyrite and 5-10 chalcopyrite grains in +1.0 amp of <0.50 mm. Picked 1 CR and 1 possible GO from <0.50 mm. SEM check of 1 flawless orange garnet from >0.50 mm = possible GO(*) .

APPENDIX D

ACTLABS GEOCHEMISTRY RESULTS

W.A. HUBACHECK CONSULTANTS LTD.

ACTLABS**ACTIVATION
LABORATORIES LTD**

Invoice No.: 8129
Work Order: 8203
Invoice Date: 20-JUN-95
Date Submitted: 15-MAY-95
Your Reference: 194LV
Account Number: 452

W.A HUBACHECK CONSULTANTS LTD
141 ADELAIDE ST WEST, SUITE 603
TORONTO, ONT
M5H 3L5

ATT:DAVE CHRISTIE

CERTIFICATE OF ANALYSIS

INAA package, elements and detection limits:

AU	2.	PPB	AG	5.	PPM	AS	0.5	PPM	BA	50.	PPM
BR	0.5	PPM	CA	1.	%	CO	1.	PPM	CR	5.	PPM
CS	1.	PPM	FE	0.01	%	HF	1.	PPM	HG	1.	PPM
IR	5.	PPB	MO	1.	PPM	NA	0.01	%	NI	20.	PPM
RB	5.	PPM	SB	0.1	PPM	SC	0.1	PPM	SE	5.	PPM
SN	100.	PPM	SR	500.	PPM	TA	0.5	PPM	TH	0.2	PPM
U	0.5	PPM	W	1.	PPM	ZN	50.	PPM	LA	0.5	PPM
CE	3.	PPM	ND	5.	PPM	SM	0.1	PPM	EU	0.2	PPM
TB	0.5	PPM	YB	0.2	PPM	LU	0.05	PPM			

REPORT 8129B - TOTAL DIGESTION - ICP
8129C - PKG 3A - INAA
8129D - AQUA REGIA - ICP

CERTIFIED BY :

L. Hoffman
for DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. Work Order: 8203 Report: 8129

Sample description	AU	AG	AS	BA	BR	CA	CO	CR	CS	FE	Hf	Hg	IR	Mo	NA	NI	Rb	SB	SC	SE	SN	SR	TA	TH
	PPB	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	%	PPM	PPM	PPB	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
194LV 4606CLAY SILT	219	<5	1.9	450	<0.5	4	13	170	1	3.46	17	<1	<5	<1	2.22	<23	44	0.2	11	<3	<100	<500	1.2	10
194LV 4607CLAY SILT	2	<5	3.4	390	<0.5	3	9	120	1	2.51	11	<1	<5	<1	1.70	<20	29	0.3	9.8	<3	<100	<500	<0.5	6.0
194LV 4640CLAY SILT	5	<5	3.2	470	<0.5	3	8	110	<1	2.50	12	<1	<5	9	2.10	<20	45	0.3	9.7	<3	<100	800	<0.5	7.2
194LV 4641CLAY SILT	9	<5	4.9	320	<0.5	3	10	110	<1	2.30	7	<1	<5	<1	1.59	<20	46	0.2	9.7	<3	<100	<500	<0.5	4.7
194LV 4642CLAY SILT	4	<5	2.1	330	0.7	3	8	94	<1	2.24	6	<1	<5	<1	1.50	65	28	0.2	9.0	<3	<100	850	<0.5	4.6
194LV 4643CLAY SILT	9	<5	6.7	470	<0.5	3	26	120	2	3.41	6	<1	<5	3	1.36	<20	43	0.7	11	<3	<100	<500	<0.5	8.6
194LV 4644CLAY SILT	<2	<5	3.8	340	1.1	3	9	130	1	2.49	11	<1	<5	<1	1.62	<20	39	0.3	9.7	<3	<100	<500	0.9	6.1
194LV 4645CLAY SILT	<2	<5	2.1	380	1.3	3	7	100	<1	2.22	11	<1	<5	<1	1.66	93	<15	<0.1	8.5	<3	<100	<500	0.9	6.2
194LV 4646CLAY SILT	8	<5	3.5	390	<0.5	3	7	130	<1	2.37	12	<1	<5	<1	1.92	<20	<15	0.2	9.6	<3	<100	<500	<0.5	5.5
194LV 4647CLAY SILT	<2	<5	2.6	350	<0.5	3	7	100	1	2.07	9	<1	<5	2	1.57	<20	37	0.2	8.5	<3	<100	<500	<0.5	5.1
194LV 4648CLAY SILT	6	<5	3.8	390	1.1	3	8	120	<1	2.46	11	<1	<5	<1	2.05	<20	50	0.3	10	<3	<100	<500	<0.5	5.3
194LV 4649CLAY SILT	14	<5	3.3	420	1.3	3	7	110	1	2.26	11	<1	<5	<1	1.97	<20	43	0.2	9.5	<3	<100	<500	<0.5	5.6
194LV 4650CLAY-SILT	18	<5	1.5	450	1.1	3	9	110	1	2.15	12	<1	<5	<1	1.88	<20	30	0.2	9.2	<3	<100	<500	<0.5	5.3
194LV 4651CLAY-SILT	12	<5	1.7	430	1.2	3	9	98	<1	2.25	11	<1	<5	<1	1.88	66	24	0.2	9.7	<3	<100	<500	<0.5	5.0
194LV 4652CLAY-SILT	2	<5	2.3	380	0.9	4	9	100	<1	2.21	9	<1	<5	<1	1.75	<20	40	0.3	9.4	<3	<100	<500	<0.5	4.7
194LV 4653CLAY-SILT	5	<5	1.5	380	1.2	3	10	99	<1	2.18	9	<1	<5	<1	1.76	92	41	0.2	8.9	<3	<100	<500	<0.5	4.8
194LV 4655CLAY-SILT	15	<5	1.8	450	<0.5	3	7	110	<1	2.17	12	<1	<5	<1	1.83	<20	40	0.2	9.0	<3	<100	<500	<0.5	5.3
194LV 4656CLAY-SILT	<2	<5	1.5	400	1.0	3	9	100	<1	2.19	11	<1	<5	2	1.98	<20	36	0.2	9.2	<3	<100	<500	<0.5	5.0
194LV 4657CLAY-SILT	8	<5	1.4	390	<0.5	3	8	98	<1	2.05	9	<1	<5	3	1.76	<20	37	0.3	8.4	<3	<100	<500	<0.5	4.2
194LV 4658CLAY-SILT	4	<5	1.8	380	0.9	3	8	81	1	2.02	9	<1	<5	3	1.76	<20	45	0.2	8.4	<3	<100	<500	<0.5	4.0
194LV 4659CLAY-SILT	16	<5	2.6	380	0.6	2	9	100	<1	2.18	10	<1	<5	<1	1.81	<20	52	0.3	9.1	<3	<100	<500	0.8	4.8
194LV 4660CLAY-SILT	<2	<5	2.4	390	0.9	4	13	100	<1	2.91	9	<1	<5	2	1.88	<20	40	0.3	11	<3	<100	<500	<0.5	4.9
194LV 4661CLAY-SILT	5	<5	1.9	310	1.1	4	15	98	<1	2.66	5	<1	<5	5	1.87	64	40	0.2	10	<3	<100	<500	<0.5	4.4
194LV 4662CLAY-SILT	<2	<5	2.4	330	<0.5	3	15	130	<1	3.00	7	<1	<5	2	1.63	<20	41	0.3	12	<3	<100	<500	<0.5	4.0
194LV 4663CLAY-SILT	11	<5	5.9	370	<0.5	5	16	150	<1	3.07	7	<1	<5	4	1.39	<20	35	0.5	13	<3	<100	<500	1.0	4.9

Activation Laboratories Ltd. Work Order: 8203 Report: 8129

Sample description	U PPM	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
194LV 4606CLAY SILT	2.7	<1	<50	30	63	18	5.1	1.1	<0.5	2.0	0.34	8.100
194LV 4607CLAY SILT	1.8	<1	<50	22	49	20	3.7	1.0	<0.5	1.7	0.27	27.60
194LV 4640CLAY SILT	<0.5	<1	<50	28	57	23	3.8	1.2	<0.5	1.8	0.33	34.70
194LV 4641CLAY SILT	1.2	<1	127	18	34	14	2.8	0.8	<0.5	1.3	0.24	35.80
194LV 4642CLAY SILT	1.1	1	<50	17	34	13	2.8	0.8	<0.5	1.4	0.23	37.90
194LV 4643CLAY SILT	2.7	59	77	28	58	22	4.1	1.0	<0.5	1.8	0.30	31.40
194LV 4644CLAY SILT	1.6	<1	<50	22	45	17	3.6	1.0	0.9	1.7	0.29	33.50
194LV 4645CLAY SILT	0.9	<1	<50	21	45	18	3.6	1.0	<0.5	1.7	0.28	32.10
194LV 4646CLAY SILT	1.3	<1	<50	21	45	15	3.0	1.0	<0.5	1.7	0.26	41.70
194LV 4647CLAY SILT	1.2	<1	<50	19	39	16	3.1	0.9	<0.5	1.5	0.25	38.80
194LV 4648CLAY SILT	1.5	<1	75	20	42	18	3.0	1.0	<0.5	1.6	0.28	40.80
194LV 4649CLAY SILT	1.6	<1	53	19	43	17	2.9	0.9	<0.5	1.5	0.28	39.70
194LV 4650CLAY-SILT	1.4	<1	<50	20	44	17	3.1	1.0	<0.5	1.9	0.30	38.20
194LV 4651CLAY-SILT	1.3	2	<50	18	40	14	3.0	1.0	<0.5	1.7	0.30	40.10
194LV 4652CLAY-SILT	1.4	<1	<50	17	36	14	2.7	0.9	<0.5	1.5	0.26	40.40
194LV 4653CLAY-SILT	1.4	<1	<50	18	41	13	2.8	0.9	<0.5	1.6	0.26	38.20
194LV 4655CLAY-SILT	0.9	<1	<50	20	45	18	3.2	1.0	<0.5	1.8	0.28	37.00
194LV 4656CLAY-SILT	1.3	<1	<50	18	41	14	3.0	1.0	<0.5	1.6	0.28	39.50
194LV 4657CLAY-SILT	1.1	<1	<50	15	34	14	2.5	0.8	<0.5	1.5	0.25	40.60
194LV 4658CLAY-SILT	1.2	<1	<50	15	34	14	2.5	0.9	<0.5	1.5	0.26	40.70
194LV 4659CLAY-SILT	1.7	<1	<50	17	39	16	2.8	1.0	<0.5	1.6	0.28	39.20
194LV 4660CLAY-SILT	1.4	<1	<50	18	40	14	2.9	1.0	0.6	1.7	0.30	36.40
194LV 4661CLAY-SILT	0.6	20	<50	17	37	12	2.6	0.8	<0.5	1.4	0.24	37.30
194LV 4662CLAY-SILT	1.3	5	77	17	39	14	2.7	0.9	<0.5	1.5	0.26	39.50
194LV 4663CLAY-SILT	1.7	4	<50	18	40	13	2.8	0.9	0.5	1.8	0.28	37.10

Activation Laboratories Ltd. Work Order: 8203 Report: 8129B

Sample description	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	MN PPM	SR PPM	CD PPM	BI PPM	V PPM	CA %	P %	MG %	TI %	AL %	K %	Y PPM	BE PPM
194LV4606(CLAY-SILT)	25.	11.	37.	0.5	33.	546.	348.	<0.5	<5.	80.	3.91	0.069	1.45	0.39	6.04	1.51	18.	<2.
194LV4607(CLAY-SILT)	19.	15.	31.	0.5	32.	483.	343.	<0.5	<5.	69.	4.08	0.061	1.47	0.33	6.23	1.63	16.	<2.
194LV4640(CLAY-SILT)	16.	9.	32.	0.5	28.	446.	376.	<0.5	<5.	60.	4.10	0.077	1.49	0.30	6.07	1.69	16.	<2.
194LV4641(CLAY-SILT)	27.	10.	123.	<0.4	36.	481.	295.	0.7	<5.	63.	3.84	0.053	1.64	0.27	6.00	1.53	13.	<2.
194LV4642(CLAY-SILT)	23.	10.	32.	0.4	35.	477.	321.	<0.5	<5.	68.	4.04	0.057	1.58	0.29	6.08	1.59	13.	<2.
194LV4643(CLAY-SILT)	33.	13.	57.	<0.4	53.	1277.	270.	<0.5	<5.	78.	3.52	0.065	1.67	0.31	6.97	1.78	17.	<2.
194LV4644(CLAY-SILT)	20.	11.	28.	0.5	29.	561.	348.	<0.5	<5.	75.	3.92	0.068	1.42	0.39	6.26	1.59	17.	<2.
194LV4645(CLAY-SILT)	13.	15.	26.	0.4	26.	464.	373.	<0.5	<5.	63.	3.70	0.066	1.28	0.33	6.04	1.62	16.	<2.
194LV4646(CLAY-SILT)	18.	10.	30.	<0.4	26.	469.	344.	<0.5	<5.	63.	3.64	0.060	1.26	0.32	5.94	1.53	14.	<2.
194LV4647(CLAY-SILT)	17.	15.	28.	0.7	27.	463.	349.	<0.5	<5.	64.	3.75	0.060	1.32	0.32	6.13	1.59	14.	<2.
194LV4648(CLAY-SILT)	16.	13.	25.	<0.4	27.	436.	347.	0.5	<5.	62.	3.73	0.059	1.32	0.30	6.01	1.55	14.	<2.
194LV4649(CLAY-SILT)	13.	16.	25.	0.6	25.	425.	336.	<0.5	<5.	55.	3.59	0.056	1.24	0.29	5.79	1.54	14.	<2.
194LV4650(CLAY-SILT)	16.	17.	26.	0.5	24.	461.	354.	<0.5	<5.	62.	3.71	0.061	1.30	0.31	6.10	1.60	14.	<2.
194LV4651(CLAY-SILT)	18.	13.	28.	0.4	26.	456.	330.	<0.5	<5.	62.	3.61	0.054	1.31	0.29	5.93	1.55	13.	<2.
194LV4652(CLAY-SILT)	18.	13.	21.	<0.4	34.	436.	305.	<0.5	<5.	63.	3.39	0.050	1.38	0.29	5.77	1.48	13.	<2.
194LV4653(CLAY-SILT)	19.	11.	31.	0.8	39.	447.	334.	<0.5	<5.	61.	3.59	0.055	1.50	0.29	6.03	1.59	13.	<2.
194LV4655(CLAY-SILT)	17.	15.	23.	0.4	22.	432.	341.	<0.5	<5.	59.	3.65	0.057	1.26	0.31	5.82	1.53	14.	<2.
194LV4656(CLAY-SILT)	15.	13.	24.	0.9	28.	419.	333.	<0.5	<5.	58.	3.38	0.054	1.25	0.28	5.98	1.55	13.	<2.
194LV4657(CLAY-SILT)	13.	13.	22.	0.4	33.	430.	317.	<0.5	<5.	60.	3.39	0.055	1.38	0.30	5.79	1.47	13.	<2.
194LV4658(CLAY-SILT)	20.	7.	22.	<0.4	30.	428.	320.	<0.5	<5.	61.	3.50	0.052	1.28	0.26	5.82	1.52	13.	<2.
194LV4659(CLAY-SILT)	17.	14.	24.	0.6	28.	447.	316.	<0.5	<5.	61.	3.51	0.052	1.32	0.30	5.92	1.52	14.	<2.
194LV4660(CLAY-SILT)	30.	5.	34.	<0.4	38.	549.	307.	<0.5	<5.	77.	3.83	0.052	1.53	0.32	5.98	1.43	14.	<2.
194LV4661(CLAY-SILT)	36.	12.	25.	0.6	53.	463.	230.	<0.5	<5.	69.	3.15	0.041	1.56	0.26	5.69	1.15	12.	<2.
194LV4662(CLAY-SILT)	32.	12.	38.	0.7	48.	599.	287.	<0.5	<5.	87.	4.07	0.054	1.73	0.35	5.88	1.33	14.	<2.
194LV4663(CLAY-SILT)	35.	15.	37.	<0.4	55.	779.	281.	<0.5	<5.	81.	5.33	0.053	2.24	0.30	6.07	1.48	14.	<2.

Activation Laboratories Ltd. Work Order: 8203 Report: 8129C

Sample description	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
194LV 4646(HMC)	25	<5	19	730	<5	9	53	480	<2	10.5	73	<5	<50	<20	4070	<200	<50	0.9	63	<20	<0.2	5	35	6.8
194LV 4647(HMC)	<6	<5	28	<200	<5	11	56	520	3	11.4	89	<5	<50	<20	3820	<200	<50	0.8	65	<20	<0.2	6	40	10
194LV 4648(HMC)	41	<5	27	<200	<5	10	61	550	<2	11.7	110	<5	<50	<20	3650	<200	<50	<0.2	64	<20	<0.2	<1	52	8.8
194LV 4649(HMC)	16	<5	15	<200	<5	8	49	480	4	10.6	90	<5	<50	<20	4080	<200	<50	<0.2	62	<20	<0.2	5	36	13
194LV 4650(HMC)	6	<5	14	<200	<5	9	55	520	<2	11.1	83	<5	<50	<20	3880	<200	<50	<0.2	65	<20	<0.2	3	39	6.0
194LV 4651(HMC)	28	<5	26	<200	<5	11	72	500	<2	12.1	100	<5	<50	<20	3590	<200	<50	<0.2	67	<20	<0.2	<1	41	15
194LV 4652(HMC)	<5	<5	18	<200	<5	6	67	450	<2	10.4	63	<5	<50	<20	3510	<200	<50	0.8	58	<20	<0.2	5	27	1.5
194LV 4653(HMC)	<5	<5	24	<200	<5	9	68	740	<2	11.8	89	<5	<50	<20	3830	<200	<50	1.6	67	<20	<0.2	9	44	9.8
194LV 4655(HMC)	75	<5	22	<200	<5	9	71	650	<2	14.0	120	<5	<50	<20	4330	<200	<50	1.2	72	<20	<0.2	7	61	14
194LV 4656(HMC)	41	<5	25	<200	<5	11	64	540	<2	12.2	130	<5	<50	<20	4390	<200	<50	1.3	66	<20	<0.2	3	52	15
194LV 4657(HMC)	28	<5	33	<200	<5	14	76	590	<2	12.8	110	<5	<50	<20	4380	420	63	1.6	68	<20	<0.2	7	49	12
194LV 4658(HMC)	34	<5	25	<200	<5	14	65	520	<2	12.5	97	<5	<50	<20	4400	<200	<50	0.8	68	<20	<0.2	6	38	14
194LV 4659(HMC)	64	<5	28	<200	<5	11	79	560	<2	13.0	91	<5	<50	<20	4070	<200	<50	1.3	71	<20	<0.2	6	39	8.2
194LV 4660(HMC)	22	<5	32	<200	<5	11	88	460	<2	12.2	68	<5	<50	<20	4190	<200	<50	1.2	65	<20	<0.2	5	30	4.8
194LV 4661(HMC)	20	<5	14	<200	<5	10	60	380	<2	9.29	59	<5	<50	<20	3630	<200	<50	0.8	58	<20	<0.2	4	22	8.8
194LV 4662(HMC)	76	<5	19	<200	<5	9	89	470	<2	11.4	49	<5	<50	<20	3830	<200	<50	0.7	57	<20	<0.2	4	21	1.9
194LV 4663(HMC)	84	<5	21	<200	<5	9	57	670	<2	10.3	71	<5	<50	<20	3560	<200	<50	0.9	59	<20	<0.2	4	31	6.5
194LV 4666(HMC)	17	<5	7	<200	<5	7	32	520	<2	11.7	74	<5	<50	<20	3600	<200	<50	0.6	61	<20	<0.2	7	63	12
194LV 4667(HMC)	27	<5	32	<200	<5	10	60	540	<2	11.8	77	<5	<50	<20	3750	<200	<50	0.6	66	<20	<0.2	7	41	8.5

Activation Laboratories Ltd. Work Order: 8203 Report: 8129C

Sample description	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
194LV 4646(HMC)	<4	246	110	230	96	16	5.2	3	12.6	2.4	65.00
194LV 4647(HMC)	<4	246	120	260	100	17	5.2	4	14.0	2.5	61.00
194LV 4648(HMC)	<4	304	140	310	110	20	6.1	5	15.7	2.8	57.00
194LV 4649(HMC)	<4	<200	130	250	100	18	5.6	2	14.5	2.5	49.00
194LV 4650(HMC)	<4	<200	120	250	82	17	5.3	4	14.1	2.5	60.00
194LV 4651(HMC)	<4	<200	120	240	110	17	5.2	5	14.6	2.7	57.00
194LV 4652(HMC)	<4	<200	86	180	68	13	4.1	<2	11.0	1.8	62.00
194LV 4653(HMC)	<4	338	120	260	88	18	5.5	<2	14.0	2.4	35.00
194LV 4655(HMC)	<4	306	170	330	120	22	6.4	5	18.7	3.1	48.00
194LV 4656(HMC)	<4	216	150	320	110	22	7.1	<2	17.3	3.3	43.00
194LV 4657(HMC)	<4	309	140	300	100	21	6.5	<2	17.5	3.1	38.00
194LV 4658(HMC)	<4	309	120	250	98	19	6.0	<2	15.3	2.6	45.00
194LV 4659(HMC)	<4	<200	120	260	93	18	5.7	<2	14.5	2.5	40.00
194LV 4660(HMC)	<4	<200	98	210	68	16	4.7	<2	13.1	2.2	46.00
194LV 4661(HMC)	<4	223	71	150	57	11	3.3	2	8.7	1.6	60.00
194LV 4662(HMC)	<4	<200	78	160	62	12	3.7	2	9.2	1.6	64.00
194LV 4663(HMC)	<4	240	100	210	74	14	4.0	2	11.3	2.0	61.00
194LV 4606(HMC)	<4	<200	160	310	130	21	5.3	4	16.0	2.9	66.00
194LV 4607(HMC)	<4	<200	130	270	90	19	5.5	4	14.7	2.3	46.00

Activation Laboratories Ltd. Work Order: 8203 Report: 8129D

SAMPLE #	Ag PPM	Cu PPM	Ni PPM	Zn PPM	Cd PPM	Mn PPM	Pb PPM
194LV 4646 HMC	<0.2	91	29	40	<0.5	170	22
194LV 4647 HMC	<0.2	87	34	56	0.5	240	22
194LV 4648 HMC	<0.2	118	36	72	0.5	331	20
194LV 4649 HMC	<0.2	64	33	47	0.5	294	20
194LV 4650 HMC	<0.2	71	34	60	<0.5	278	30
194LV 4651 HMC	<0.2	181	46	52	<0.5	342	16
194LV 4652 HMC	<0.2	146	45	32	<0.5	260	16
194LV 4653 HMC	<0.2	166	44	68	<0.5	278	14
194LV 4655 HMC	<0.2	111	42	89	<0.5	330	30
194LV 4656 HMC	<0.2	152	39	64	<0.5	310	22
194LV 4657 HMC	<0.2	164	45	64	<0.5	276	18
194LV 4658 HMC	<0.2	133	38	57	<0.5	258	32
194LV 4659 HMC	<0.2	206	54	59	<0.5	290	22
194LV 4660 HMC	<0.2	257	63	62	<0.5	318	28
194LV 4661 HMC	<0.2	260	56	47	<0.5	254	30
194LV 4662 HMC	0.4	207	82	62	0.5	230	14
194LV 4663 HMC	<0.2	188	51	66	<0.5	272	16
194LV 4606 HMC	<0.2	94	22	37	<0.5	308	8
194LV 4607 HMC	<0.2	174	36	60	<0.5	312	10

ACTLABS**ACTIVATION
LABORATORIES LTD**

Invoice No.: 8046
Work Order: 8126
Invoice Date: 30-MAY-95
Date Submitted: 03-MAY-95
Your Reference: 523 Z/6
Account Number: 906

W.A. HUBACHECK CONSULTANTS
141 ADELAIDE STREET WEST
SUITE 603
TORONTO, ONTARIO
M5H 3L5
ATTENTION: DAVID HUBACHECK

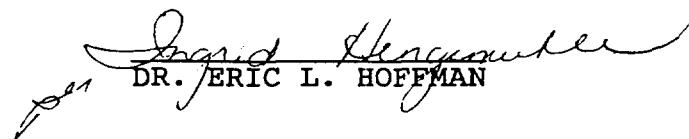
CERTIFICATE OF ANALYSIS

INAA package, elements and detection limits:

AU	2.	PPB	AG	5.	PPM	AS	0.5	PPM	BA	50.	PPM
BR	0.5	PPM	CA	1.	%	CO	1.	PPM	CR	5.	PPM
CS	1.	PPM	FE	0.01	%	HF	1.	PPM	HG	1.	PPM
IR	5.	PPB	MO	1.	PPM	NA	0.01	%	NI	20.	PPM
RB	5.	PPM	SB	0.1	PPM	SC	0.1	PPM	SE	5.	PPM
SN	100.	PPM	SR	500.	PPM	TA	0.5	PPM	TH	0.2	PPM
U	0.5	PPM	W	1.	PPM	ZN	50.	PPM	LA	0.5	PPM
CE	3.	PPM	ND	5.	PPM	SM	0.1	PPM	EU	0.2	PPM
TB	0.5	PPM	YB	0.2	PPM	LU	0.05	PPM			

REPORT 8046B - TOTAL DIGESTION - ICP
8046C - HMC
8046D - AQUA REGIA - ICP

CERTIFIED BY :



DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. **Work Order:** 8126 **Report:** 8046

Sample description	AU	AG	AS	BA	BR	CA	CO	CR	CS	FE	Hf	Hg	IR	MO	NA	NI	RB	SB	SC	SE	SN	SR	TA	TH	
	PPB	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	%	PPM	PPB	PPB	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
4608	Clay-s.1†	<2	<5	2.3	350	<0.5	5	13	160	<1	3.03	8	<1	<5	<1	2.04	<23	51	0.3	14	<3	<100	<500	<0.5	5.3
4609		10	<5	3.1	370	<0.5	3	15	150	<1	3.36	8	<1	<5	<1	<0.01	<21	40	0.3	13	<3	<100	<500	<0.5	6.1
4610		58	<5	2.1	360	<0.5	3	16	170	<1	3.67	9	<1	<5	<1	<0.01	<21	47	0.3	14	<3	<100	<500	<0.5	6.4
4611		6	<5	1.7	440	<0.5	4	11	110	<1	2.61	6	<1	<5	<1	<0.01	<20	36	0.4	10	<3	<100	<500	<0.5	5.3
4612		5	<5	2.8	390	<0.5	3	14	160	<1	3.00	8	<1	<5	<1	1.85	110	37	0.3	11	<3	<100	<500	<0.5	6.0
4613		<2	<5	1.2	460	<0.5	3	7	77	<1	1.83	8	<1	<5	<1	<0.01	<20	40	0.2	8.0	<3	<100	<500	<0.5	4.4
4614		4	<5	1.4	410	<0.5	5	9	100	<1	2.14	7	<1	<5	<1	<0.01	<20	40	0.2	8.7	<3	<100	<500	<0.5	4.3
4615		<2	<5	2.3	390	<0.5	4	11	120	<1	2.23	9	<1	<5	<1	<0.01	<20	38	0.3	9.1	<3	<100	<500	<0.5	5.1
4616		5	<5	1.7	440	1.4	5	12	150	1	2.80	9	<1	<5	<1	<0.01	<20	31	0.2	12	<3	<100	<500	<0.5	4.6
4617		25	<5	1.9	400	<0.5	6	8	130	<1	2.23	11	<1	<5	<1	<0.01	<20	<15	0.2	9.1	<3	<100	<500	<0.5	5.7
4618		4	<5	1.5	320	1.0	5	9	120	1	2.25	11	<1	<5	<1	<0.01	<20	45	0.2	8.7	<3	<100	<500	0.8	5.5
4619		9	<5	2.0	390	1.4	6	8	130	<1	2.12	10	<1	<5	<1	<0.01	<20	36	0.2	8.7	<3	<100	<500	<0.5	5.8
4620		4	<5	2.2	410	1.5	7	10	110	1	2.33	7	<1	<5	<1	<0.01	<20	<15	0.2	9.4	<3	<100	<500	<0.5	5.1
4621		<2	<5	5.0	1000	<0.5	8	18	200	2	3.41	8	<1	<5	<1	<0.01	<27	62	0.6	14	<3	<100	<500	5.6	17
4625		<2	<5	3.6	490	<0.5	6	14	120	1	2.78	6	<1	<5	<1	<0.01	<20	55	0.3	11	<3	<100	<500	1.6	8.0
4626		<2	<5	2.8	430	<0.5	5	14	110	2	2.97	5	<1	<5	<1	<0.01	<20	46	0.4	11	<3	<100	<500	<0.5	5.7
4627		<2	<5	1.2	390	<0.5	3	7	78	<1	1.75	7	<1	<5	<1	<0.01	87	<15	0.2	7.6	<3	<100	<500	<0.5	4.9
4628		14	<5	1.0	330	<0.5	3	7	89	<1	1.85	9	<1	<5	<1	<0.01	<20	35	0.2	8.2	<3	<100	<500	<0.5	4.6
4629		10	<5	5.3	310	1.1	4	14	95	<1	2.80	8	<1	<5	<1	<0.01	<20	50	0.3	11	<3	<100	<500	1.0	5.0
4630		5	<5	3.6	460	1.4	4	11	120	<1	2.58	9	<1	<5	<1	<0.01	<20	<15	0.3	10	<3	<100	<500	<0.5	5.6
4631		5	<5	3.6	360	<0.5	4	12	110	<1	2.78	8	<1	<5	<1	<0.01	<20	<15	0.4	11	<3	<100	<500	0.8	5.7
4632		<2	<5	2.4	440	1.3	3	12	120	1	2.89	10	<1	<5	<1	<0.01	<20	<15	0.4	11	<3	<100	<500	<0.5	7.3
4633		6	<5	2.9	470	1.3	4	10	150	1	2.59	11	<1	<5	<1	<0.01	<21	50	0.5	11	<3	<100	<500	<0.5	6.2
4634		25	<5	2.6	410	1.1	5	10	140	<1	2.59	10	<1	<5	<1	<0.01	<22	<15	0.3	11	<3	<100	<500	<0.5	5.8
4635		8	<5	4.2	470	1.2	<1	10	130	1	2.59	9	<1	<5	<1	<0.01	<21	36	0.3	11	<3	<100	<500	<0.5	5.8
4636		17	<5	<0.5	460	<0.5	4	7	100	<1	2.15	12	<1	<5	<1	<0.01	<20	40	0.2	9.1	<3	<100	<500	<0.5	6.6
4637		6	<5	1.6	430	<0.5	3	7	100	<1	2.17	13	<1	<5	<1	<0.01	<20	<15	<0.1	9.2	<3	<100	<500	<0.5	6.4
4638		18	<5	1.2	430	2.2	4	9	120	1	2.39	13	<1	<5	<1	<0.01	<20	34	<0.1	9.7	<3	<100	<500	1.5	7.5
4639	Clay-s.1†	9	<5	2.1	510	<0.5	2	9	120	<1	2.55	15	<1	<5	<1	<0.01	<20	36	0.2	10	<3	<100	<500	<0.5	8.4

Activation Laboratories Ltd. Work Order: 8126 Report: 8046

Sample description	U PPM	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
4608 C1u ₂ ->17	1.9	4	<50	20	41	15	3.2	1.0	<0.5	1.8	0.28	25.00
4609	2.2	3	<50	24	45	17	3.4	1.0	<0.5	1.6	0.25	30.00
4610	1.8	4	57	21	41	16	3.3	1.0	<0.5	1.7	0.25	30.00
4611	1.7	<1	<50	20	38	15	2.9	0.9	0.5	1.5	0.22	30.00
4612	1.6	3	<50	23	42	17	3.4	1.0	<0.5	1.7	0.27	30.00
4613	1.4	<1	<50	17	34	16	2.7	0.9	<0.5	1.5	0.22	30.00
4614	1.7	6	<50	17	32	14	2.5	0.8	0.6	1.5	0.23	30.00
4615	1.9	4	<50	18	36	16	2.9	0.9	0.5	1.5	0.26	30.00
4616	1.1	<1	<50	17	35	15	2.9	0.9	0.6	1.8	0.29	30.00
4617	1.1	<1	<50	21	42	18	3.3	1.0	<0.5	1.8	0.25	30.00
4618	1.9	4	<50	20	38	16	3.0	0.9	<0.5	1.7	0.27	30.00
4619	1.3	<1	<50	21	41	15	3.1	0.9	<0.5	1.6	0.26	30.00
4620	1.8	<1	<50	21	39	15	2.9	0.9	<0.5	1.6	0.24	30.00
4621	6.2	<1	<50	120	190	66	8.7	2.6	0.7	1.9	0.28	19.00
4625	1.5	2	58	41	73	26	4.2	1.2	<0.5	1.4	0.23	30.00
4626	1.8	<1	<50	20	40	13	2.9	0.8	<0.5	1.5	0.24	30.00
4627	1.8	4	<50	25	45	17	2.9	0.9	<0.5	1.3	0.20	30.00
4628	1.3	<1	<50	19	37	17	2.8	0.9	<0.5	1.5	0.23	30.00
4629	1.7	5	<50	20	38	15	2.9	0.9	<0.5	1.6	0.26	30.00
4630	1.5	5	<50	22	41	17	3.1	1.0	<0.5	1.7	0.28	30.00
4631	1.2	<1	<50	21	40	16	3.0	0.9	<0.5	1.6	0.25	30.00
4632	2.2	3	<50	23	44	16	3.2	1.0	0.5	1.8	0.27	30.00
4633	1.8	<1	<50	22	44	20	3.4	1.1	<0.5	1.9	0.29	30.00
4634	2.2	<1	<50	22	44	16	3.4	1.1	<0.5	1.9	0.30	28.00
4635	1.4	<1	<50	22	42	19	3.3	1.0	<0.5	1.8	0.29	30.00
4636	1.7	<1	56	23	44	19	3.5	1.0	<0.5	1.7	0.27	30.00
4637	1.5	<1	56	23	46	22	3.6	1.1	<0.5	1.7	0.30	30.00
4638	2.0	<1	59	25	51	22	3.7	1.1	<0.5	1.8	0.31	30.00
4639 C1u ₂ ->17	2.3	<1	<50	28	55	23	4.0	1.1	<0.5	1.9	0.30	30.00

Activation Laboratories Ltd. Work Order: 8126 Report: 8046B

Sample description	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	MN PPM	SR PPM	CD PPM	BI PPM	V PPM	CA %	P %	MG %	TI %	AL %	X PPM	Y PPM	BE PPM
4608 (CLAY-SILT)	27.	15.	29.	<0.4	39.	568.	312.	<0.5	<5.	75.	4.31	0.058	1.77	0.34	6.52	1.55	14.	<2.
4609 (CLAY-SILT)	35.	13.	36.	<0.4	38.	578.	287.	<0.5	<5.	80.	3.75	0.059	1.68	0.34	6.71	1.63	16.	<2.
4610 (CLAY-SILT)	32.	10.	32.	<0.4	46.	621.	290.	<0.5	<5.	86.	3.81	0.059	1.72	0.37	6.27	1.44	14.	<2.
4611 (CLAY-SILT)	27.	14.	37.	<0.4	43.	561.	310.	<0.5	<5.	68.	4.57	0.062	1.90	0.30	6.79	1.87	16.	<2.
4612 (CLAY-SILT)	35.	14.	29.	<0.4	109.	533.	281.	<0.5	<5.	62.	4.05	0.058	2.06	0.29	6.08	1.64	14.	<2.
4613 (CLAY-SILT)	16.	15.	17.	<0.4	17.	331.	291.	<0.5	<5.	41.	3.32	0.047	1.13	0.22	5.51	1.76	11.	<2.
4614 (CLAY-SILT)	35.	19.	18.	<0.4	25.	386.	249.	<0.5	<5.	49.	3.85	0.042	1.40	0.21	5.42	1.73	11.	<2.
4615 (CLAY-SILT)	23.	15.	19.	<0.4	27.	444.	294.	<0.5	<5.	53.	4.64	0.049	1.49	0.26	5.49	1.72	13.	<2.
4616 (CLAY-SILT)	23.	12.	21.	<0.4	34.	528.	293.	<0.5	<5.	67.	5.37	0.049	1.97	0.29	5.69	1.58	13.	<2.
4617 (CLAY-SILT)	15.	9.	23.	<0.4	25.	456.	317.	<0.5	<5.	51.	5.59	0.057	1.85	0.27	5.33	1.70	14.	<2.
4618 (CLAY-SILT)	18.	12.	23.	<0.4	28.	414.	307.	<0.5	<5.	49.	4.60	0.054	1.51	0.26	5.61	1.74	13.	<2.
4619 (CLAY-SILT)	11.	6.	19.	<0.4	23.	414.	300.	<0.5	<5.	46.	5.36	0.052	1.63	0.25	5.14	1.74	13.	<2.
4620 (CLAY-SILT)	26.	15.	29.	<0.4	36.	453.	283.	<0.5	<5.	54.	7.19	0.053	2.21	0.24	5.16	1.93	13.	<2.
4621 (CLAY-SILT)	39.	34.	39.	0.4	53.	742.	690.	<0.5	<5.	79.	8.42	0.203	3.38	0.40	4.78	2.06	19.	2.
4625 (CLAY-SILT)	46.	16.	40.	<0.4	50.	598.	355.	0.6	<5.	74.	6.48	0.099	2.29	0.30	5.51	1.99	16.	<2.
4626 (CLAY-SILT)	45.	11.	43.	<0.4	55.	528.	256.	<0.5	<5.	72.	6.05	0.052	2.20	0.26	6.01	2.01	13.	<2.
4627 (CLAY-SILT)	12.	12.	18.	<0.4	24.	353.	325.	<0.5	<5.	42.	3.42	0.062	1.19	0.22	5.49	1.82	11.	<2.
4628 (CLAY-SILT)	12.	8.	21.	<0.4	18.	343.	304.	<0.5	<5.	43.	3.40	0.050	1.12	0.22	5.23	1.57	11.	<2.
4629 (CLAY-SILT)	23.	11.	33.	<0.4	30.	511.	275.	<0.5	<5.	84.	3.51	0.051	1.39	0.31	5.46	1.54	13.	<2.
4630 (CLAY-SILT)	24.	12.	27.	<0.4	33.	433.	266.	<0.5	<5.	57.	3.52	0.048	1.32	0.26	5.36	1.57	13.	<2.
4631 (CLAY-SILT)	28.	6.	28.	<0.4	37.	484.	276.	<0.5	<5.	70.	4.12	0.051	1.58	0.28	5.78	1.63	13.	<2.
4632 (CLAY-SILT)	30.	10.	27.	<0.4	32.	467.	254.	<0.5	<5.	65.	3.44	0.050	1.39	0.28	5.74	1.62	14.	<2.
4633 (CLAY-SILT)	32.	12.	32.	0.4	35.	504.	267.	<0.5	<5.	65.	3.82	0.056	1.56	0.29	6.05	1.71	14.	<2.
4634 (CLAY-SILT)	20.	11.	26.	<0.4	27.	446.	301.	<0.5	<5.	55.	4.05	0.053	1.39	0.27	5.55	1.63	13.	<2.
4635 (CLAY-SILT)	23.	8.	28.	<0.4	26.	579.	291.	<0.5	<5.	54.	3.95	0.053	1.41	0.25	5.62	1.63	13.	<2.
4636 (CLAY-SILT)	14.	13.	22.	<0.4	18.	407.	349.	<0.5	6.	50.	3.60	0.060	1.17	0.28	5.64	1.67	14.	<2.
4637 (CLAY-SILT)	12.	10.	25.	<0.4	20.	406.	352.	<0.5	<5.	50.	3.57	0.060	1.16	0.29	5.64	1.66	13.	<2.
4638 (CLAY-SILT)	16.	17.	30.	<0.4	23.	458.	358.	<0.5	6.	55.	4.01	0.062	1.39	0.31	5.89	1.72	16.	<2.
4639 (CLAY-SILT)	17.	10.	36.	<0.4	28.	495.	371.	<0.5	<5.	60.	4.20	0.071	1.47	0.33	5.94	1.70	16.	<2.

Activation Laboratories Ltd. Work Order: 8126 Report: 8046C

Sample description	AU PPB	AG PPM	AS PPM	BA PPM	BR PPM	CA %	CO PPM	CR PPM	CS PPM	FE %	HF PPM	HG PPM	IR PPB	HO PPM	NA PPM	NI PPM	RB PPM	SB PPM	SC PPM	SE PPM	SR %	TA PPM	TH PPM	U PPM
4608(HMC)	11	<5	24	<200	<5	12	74	670	<2	12.6	48	<5	<50	<20	3410	<200	<50	1.2	75	<20	<0.2	<1	25	5.1
4609(HMC)	12	<5	32	<200	<5	9	82	600	<2	12.9	64	<5	<50	<20	3370	<200	<50	<0.2	72	<20	<0.2	2	36	12
4610(HMC)	15	<5	20	<200	<5	10	60	560	<2	12.3	69	<5	<50	<20	3300	<200	<50	1.1	64	<20	<0.2	6	42	10
4611(HMC)	30	<5	43	<200	<5	9	79	680	<2	13.8	94	<5	<50	<20	3190	<200	<50	1.2	72	<20	<0.2	7	48	10
4612(HMC)	47	<5	39	<200	<5	14	120	740	<2	15.2	110	<5	<50	<20	5490	250	<50	1.2	78	<20	<0.2	5	49	15
4613(HMC)	76	<5	39	1000	<5	10	140	760	<2	18.8	190	<5	<50	<20	4620	<200	<50	1.9	72	<20	<0.2	9	78	18
4614(HMC)	108	<5	28	<200	<5	11	180	640	<2	15.7	160	<5	<50	<20	4410	<200	<50	1.5	64	<20	<0.2	9	65	19
4615(HMC)	34	<5	24	<200	<5	8	150	460	<2	11.4	99	<5	<50	<20	4660	<200	<50	<0.2	53	<20	<0.2	3	47	8.5
4616(HMC)	37	<5	29	<200	<5	12	100	760	<2	14.8	160	<5	<50	<20	3740	<200	<50	1.6	70	<20	<0.2	6	69	21
4617(HMC)	185	<5	34	<200	<5	<2	93	720	<2	16.1	160	<5	<50	<20	3700	<200	<50	1.3	67	<20	<0.2	10	88	18
4618(HMC)	28	<5	29	<200	<5	13	72	630	<2	14.5	140	<5	<50	<20	4470	<200	<50	1.0	67	<20	<0.2	9	70	15
4619(HMC)	59	<5	35	<200	<5	<2	87	750	<2	16.2	160	<5	<50	<20	3970	<200	<50	<0.2	71	<20	<0.2	9	84	17
4620(HMC)	41	<5	29	<200	<5	10	71	490	<2	13.3	97	<5	<50	<20	3790	<200	<50	0.6	63	<20	<0.2	6	47	10
4621(HMC)	80	<5	66	4800	<5	11	190	880	<2	24.3	91	<5	<50	<20	4380	200	<50	6.5	65	<20	<0.2	18	56	12
4625(HMC)	45	<5	20	380	<5	7	84	490	<2	13.5	92	<5	<50	<20	3670	<200	<50	0.7	61	<20	<0.2	7	45	11
4626(HMC)	42	<5	43	<200	<5	13	98	580	<2	16.0	100	<5	<50	<20	5490	<200	<50	1.5	75	<20	<0.2	5	45	13
4627(HMC)	273	<6	20	900	<5	7	100	790	7	20.6	180	<5	<50	<20	7620	<200	<50	1.9	78	<20	<0.2	8	80	22
4628(HMC)	55	<5	29	<200	<5	10	60	550	<2	12.2	130	<5	<50	<20	4170	<200	<50	1.4	61	<20	<0.2	5	57	13
4629(HMC)	83	<5	96	<200	<5	10	140	530	<2	13.3	110	<5	<50	<20	4040	<200	<50	2.3	61	<20	<0.2	6	58	16
4630(HMC)	27	<5	25	<200	<5	10	61	450	<2	10.9	86	<5	<50	<20	4790	<200	<50	0.9	58	23	<0.2	7	37	12
4631(HMC)	64	<5	32	<200	<5	11	78	460	<2	12.6	88	<5	<50	<20	3430	<200	<50	1.1	66	<20	<0.2	5	36	12
4632(HMC)	68	<5	31	<200	<5	10	84	590	<2	13.6	97	<5	<50	<20	3800	<200	<50	1.5	64	<20	<0.2	4	48	10
4633 (HMC)	37	<5	20	<200	<5	9	61	470	5	11.1	57	<5	<50	<20	3890	<200	<50	1.3	60	<20	<0.2	4	29	9.2
4634 (HMC)	24	<5	13	<200	<5	6	36	310	<2	7.16	44	<5	<50	<20	2950	<200	<50	0.6	40	<20	<0.2	4	22	5.3
4635 (HMC)	16	<5	35	<200	<5	11	81	720	<2	14.0	120	<5	<50	<20	3860	<200	<50	1.2	71	<20	<0.2	5	55	8.3
4636 (HMC)	37	<5	11	480	<5	8	45	520	<2	12.4	130	<5	<50	<20	3520	<200	<50	<0.2	63	<20	<0.2	9	68	18
4637 (HMC)	35	<5	9	<200	<5	9	45	480	<2	11.9	140	<5	<50	<20	3940	<200	<50	<0.2	63	<20	<0.2	7	73	15
4638 (HMC)	23	<5	11	<200	<5	7	48	500	<2	12.3	120	<5	<50	<20	3630	<200	<50	0.8	62	<20	<0.2	7	69	14
4639 (HMC)	65	<5	7	<200	<5	8	41	450	<2	11.3	120	<5	<50	<20	3540	<200	<50	1.2	59	<20	<0.2	6	68	14
4640 (HMC)	33	<5	14	<200	<5	10	55	550	<2	13.2	200	<5	<50	<20	3470	<200	<50	<0.2	66	<20	<0.2	7	96	20
4641 (HMC)	95	<5	65	<200	<5	8	97	560	<2	12.1	82	<5	<50	<20	3580	<200	<50	2.0	65	<20	<0.2	5	37	9.6
4642 (HMC)	49	<5	22	<200	<5	10	62	420	<2	10.5	58	<5	<50	<20	3490	<200	<50	0.8	61	<20	<0.2	3	26	8.1
4643 (HMC)	67	<5	71	520	<5	12	140	580	<2	13.4	86	<5	<50	<20	4840	<200	<50	3.1	72	<20	<0.2	9	45	14
4644 (HMC)	76	<5	57	<200	<5	10	47	490	<2	12.1	94	<5	<50	<20	3760	<200	<50	4.7	66	<20	<0.2	7	61	14
4645 (HMC)	52	<5	63	<200	<5	7	77	510	<2	11.0	78	<5	<50	<20	3490	<200	<50	2.0	62	<20	<0.2	5	35	11

Activation Laboratories Ltd. Work Order: 8126 Report: 8046C

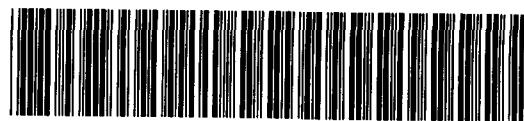
Sample description	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
4608(HMC)	<4	248	79	190	80	14	3.9	2	10.9	1.7	35.00
4609(HMC)	<4	220	110	220	110	17	5.5	<2	13.5	2.3	36.00
4610(HMC)	<4	<200	110	240	96	17	4.7	3	14.4	2.3	49.00
4611(HMC)	22	<200	140	330	160	22	5.8	4	16.0	2.8	24.00
4612(HMC)	<4	<200	170	390	150	28	8.2	4	18.7	3.5	17.00
4613(HMC)	<4	238	180	410	180	30	8.1	<2	25.0	4.3	17.00
4614(HMC)	<4	<200	170	400	140	27	7.4	5	21.8	3.8	20.00
4615(HMC)	<4	222	130	>270	84	19	5.3	4	16.1	2.7	44.00
4616(HMC)	<4	<200	180	390	170	25	6.7	5	22.4	3.7	28.00
4617(HMC)	<4	365	210	470	190	30	7.5	4	23.6	4.0	26.00
4618(HMC)	<4	332	190	420	160	28	7.7	5	22.3	3.8	32.00
4619(HMC)	<4	<200	220	480	180	31	7.6	<2	25.6	4.3	27.00
4620(HMC)	<4	224	140	290	110	20	5.4	2	16.8	2.8	38.00
4621(HMC)	<4	348	160	370	150	24	7.0	4	15.4	2.6	12.00
4625(HMC)	<4	210	130	290	120	21	5.6	3	14.9	2.7	33.00
4626(HMC)	<4	415	120	300	100	21	6.5	<2	17.7	2.7	13.00
4627(HMC)	<7	338	190	460	230	33	8.8	<2	25.3	4.0	7.000
4628(HMC)	<4	297	160	330	120	22	6.2	4	18.0	3.1	40.00
4629(HMC)	<4	246	140	310	120	23	6.3	4	18.6	3.2	27.00
4630(HMC)	<4	246	110	220	82	16	4.9	4	13.8	2.2	50.00
4631(HMC)	<4	279	100	210	80	15	4.7	<2	13.9	2.4	47.00
4632(HMC)	<4	313	120	260	98	19	4.9	3	16.9	2.8	35.00
4633 (HMC)	<4	254	93	190	78	14	4.3	3	11.4	2.0	53.00
4634 (HMC)	<4	<200	71	150	61	11	3.3	3	8.2	1.5	55.00
4635 (HMC)	<4	383	150	350	150	25	6.6	4	19.8	3.4	21.00
4636 (HMC)	<4	291	170	360	140	25	6.7	4	19.9	3.4	38.00
4637 (HMC)	<4	222	190	380	140	26	6.9	4	19.3	3.3	49.00
4638 (HMC)	<4	<200	180	360	150	24	6.4	4	19.5	3.3	54.00
4639 (HMC)	<4	277	180	360	130	24	6.1	4	17.8	3.2	56.00
4640 (HMC)	<4	221	250	500	180	33	8.0	6	23.2	4.0	42.00
4641 (HMC)	<4	2670	110	220	74	15	4.8	3	12.7	2.4	45.00
4642 (HMC)	<4	430	88	180	73	13	4.2	3	10.8	1.9	55.00
4643 (HMC)	160	253	140	330	130	25	6.7	3	17.6	2.9	21.00
4644 (HMC)	<4	232	160	330	120	23	6.3	4	17.6	2.9	54.00
4645 (HMC)	<4	252	120	230	91	17	4.9	3	14.1	2.3	55.00

OntarioMinistry 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)
W 9680.00598
Assessment Files Research Imaging

Personal information collected on this form
Mining Act, the information is a public record.
Questions about this collection should be directed to:
933 Ramsey Lake Road, Sudbury, Ontario P3E 2M9



31M12SW0012 W9680.00598 LUNDY

Act. Under section 8 of the
Mining Act, the information is a public record.
Questions about this collection should be directed to:
Ministry of Northern Development and Mines, 6th Floor,

Instructions: - For work performed.
- Please type or print in ink.

900

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

Name	Client Number
SUDBURY CONTACT MINES LTD.,	198617
Address	Telephone Number
#2302-401 BAY ST.,	416-947-1212
TORONTO, ONTARIO, M5H 2Y4	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
	Commodity
REVERSE CIRCULATION DRILLING	Total \$ Value of Work Claimed Applied 16,800 Reversed 35613
Dates Work Performed From 11 03 95 To 15 03 95	NTS Reference
Global Positioning System Data (If available) - see logs for details	Mining Division Larder Lake
Township/Area LUNDY TP.	Resident Geologist District Cobalt
M or G-Plan Number G-3439	

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 R. KNOLES, J. PATERSON for W. A. HUBACHECK CONSULTANTS LTD.	Telephone Number 416-364-2895
Address #1401-141 ADELAIDE ST. W., TORONTO, ONT., M5H 3L5	Fax Number 416-364-5384
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number
	RECEIVED LARDER LAKE MINING DIVISION

4. Certification by Recorded Holder or Agent

DEC 5 1996 10:45Z

I, DAVID W. CHRISTIE, 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 Dec 4/96
Agent's Address #1401-141 ADELAIDE ST. W., TORONTO, ONT., M5H 3L5	Telephone Number 416-364-2895 Fax Number 416-364-5384

~~to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to mining land where work was performed; at the time work was performed. A map showing the contiguous link~~ 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	1202721	16	7046	6400	0	646
2	1202722	16	19595	6400	0	13,195
3	1202724	4	15772	1600	2400	11,772
4	1202723	6	0	2400	0	0
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
Column Totals			42,413	16,800	2400	25,613

I, DAVID W. CHRISTIE, 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

Date

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:

- 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):

10.30x

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
97 March 5	
Date Approved	Total Value of Credit Approved
97 March 4	12413.
Approved for Recording by Mining Recorder (Signature)	
<i>John D. Bonner</i>	

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Transaction No./N° de transaction

Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the **Mining Act**. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la **Loi sur les mines** et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

I. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'œuvre		
	Field Supervision Supervision sur le terrain	4410.50	4410.50
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type DRILL CONTRACTOR	20,289.62	
	W.A. HUBACHECK CONS. MANAGEMENT & ADMINISTRATION	964.11	
	SAMPLE PROCESSING	12,841.20	34,094.93
Supplies Used Fournitures utilisées	Type PAILO	270.00	
		270.00	
Equipment Rental Location de matériel	Type		
		10.00	
Total Direct Costs Total des coûts directs		36,36.80	

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

2. Indirect Costs/Coûts indirects

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type TRUCK RENTAL	1404.38	
	GAS	161.80	
	FREIGHT	729.02	
			2,295.18
Food and Lodging Nourriture et hébergement	Room & BOARD FIELD EXPENSES	1341.62	1,341.62
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partie des coûts indirects			36.36.80
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			36.36.80
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)		Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)	42,412.23

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Billing Discounts

Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.

Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
x 0.50 =	

Certification Verifying Statement of Costs

I hereby certify:

that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

I, as PROJECT GEOLOGIST, I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
x 0.50 =	

Attestation de l'état des coûts

J'atteste par la présente :

que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature		Date
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Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

