REPORT ON THE GEOCHEMICAL SAMPLING AND GEOLOGICAL MAPPING OF AN ORTHOQUARTZITE DEPOSIT IN McAUSLAN TOWNSHIP SUDBURY MINING DIVISION ONTARIO

REPORT ON WORK PERFORMED UNDER O.P.A.P. GRANT

October, 1990

William A. Hogg

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REPORT ON THE GEOCHEMICAL SAMPLING AND GEOLOGICAL MAPPING OF AN ORTHOQUARTZITE SILICA DEPOSIT IN MCAUSLAN TOWNSHIP, SUDBURY MINING DIVISION, ONTARIO REPORT ON WORK PERFORMED UNDER O.P.A.P. GRANT

INTRODUCTION

The property was staked in June, 1988 and recorded in the Sudbury Mining Division under the author's name, William A. Hogg, 22 Maxome Avenue, Willowdale, Ontario, and who also undertook the geological mapping and geochemical sampling of the rock outcrop on the property.

The claims covered by the survey total 6 in number, are contiguous and are numbered S1017435 to S1017440 inclusive.

The property is largely forest covered and underlain by a fine glacial sand, boulders and high ridges of orthoquartzite. The prospecting and geological survey was completed during August-September, 1990. This work was supported by a grant under the Ontario Prospectors Assistance Program 1990-91. The main purpose was to locate and sample the deposit surface exposures uniformly to determine the average grade and suitability for an economic industrial mineral deposit.

Five stripped and trenched sites occur along the west side of the deposit on claims S1017436 and S1017438. They were first described in a report and sketch map presented to O.P.A.P. in January, 1990.

The geological map presented with this report shows the stripping and trenching completed in December, 1989. During August and September, 1990, these locations were re-examined and sampled since they are possible sites for bulk testing.

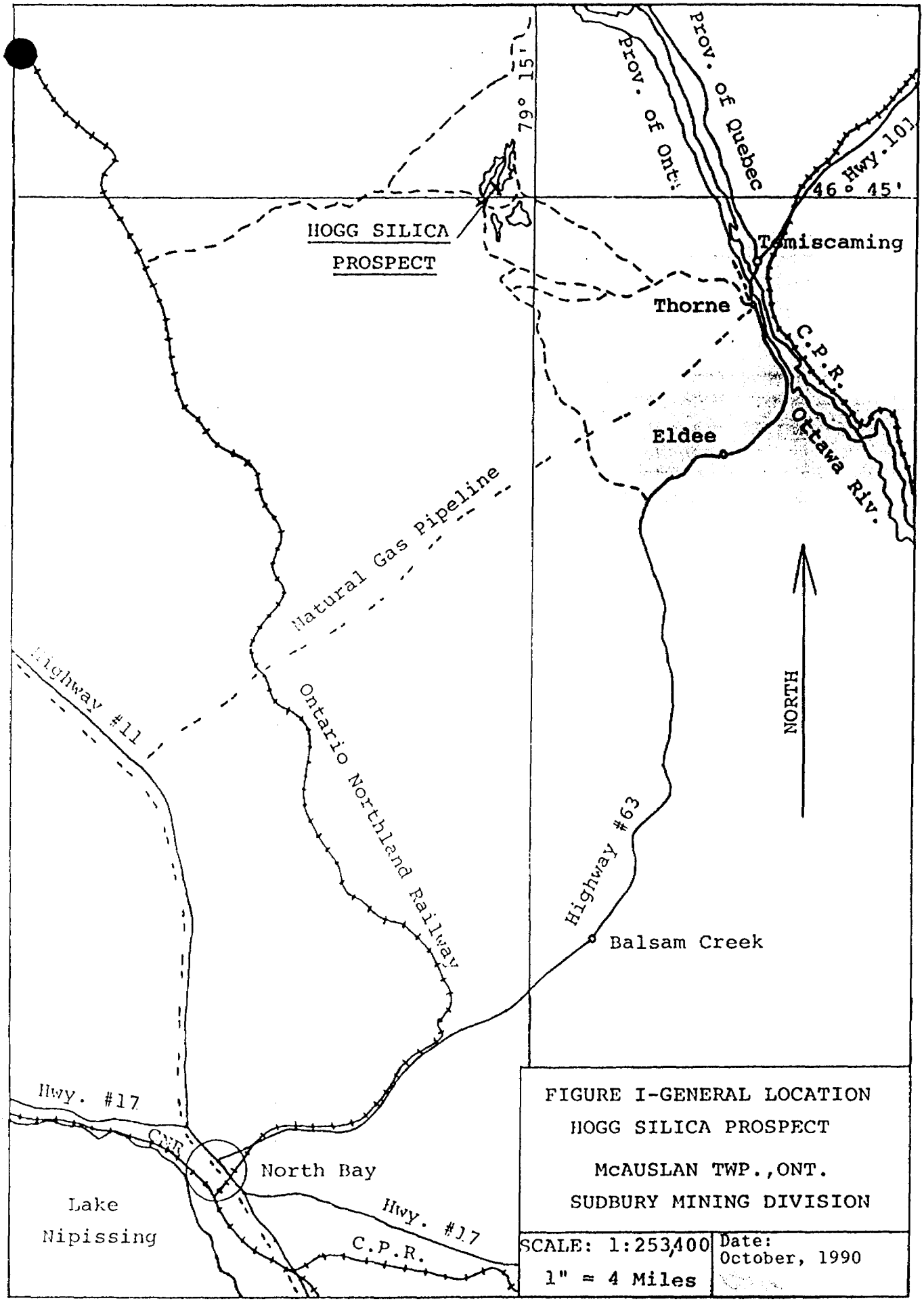

FIGURE I-GENERAL LOCATION
HOGG SILICA PROSPECT
McAUSLAN TWP.,ONT.
SUDBURY MINING DIVISION

SCALE: 1:253,400 1" = 4 Miles	Date: October, 1990

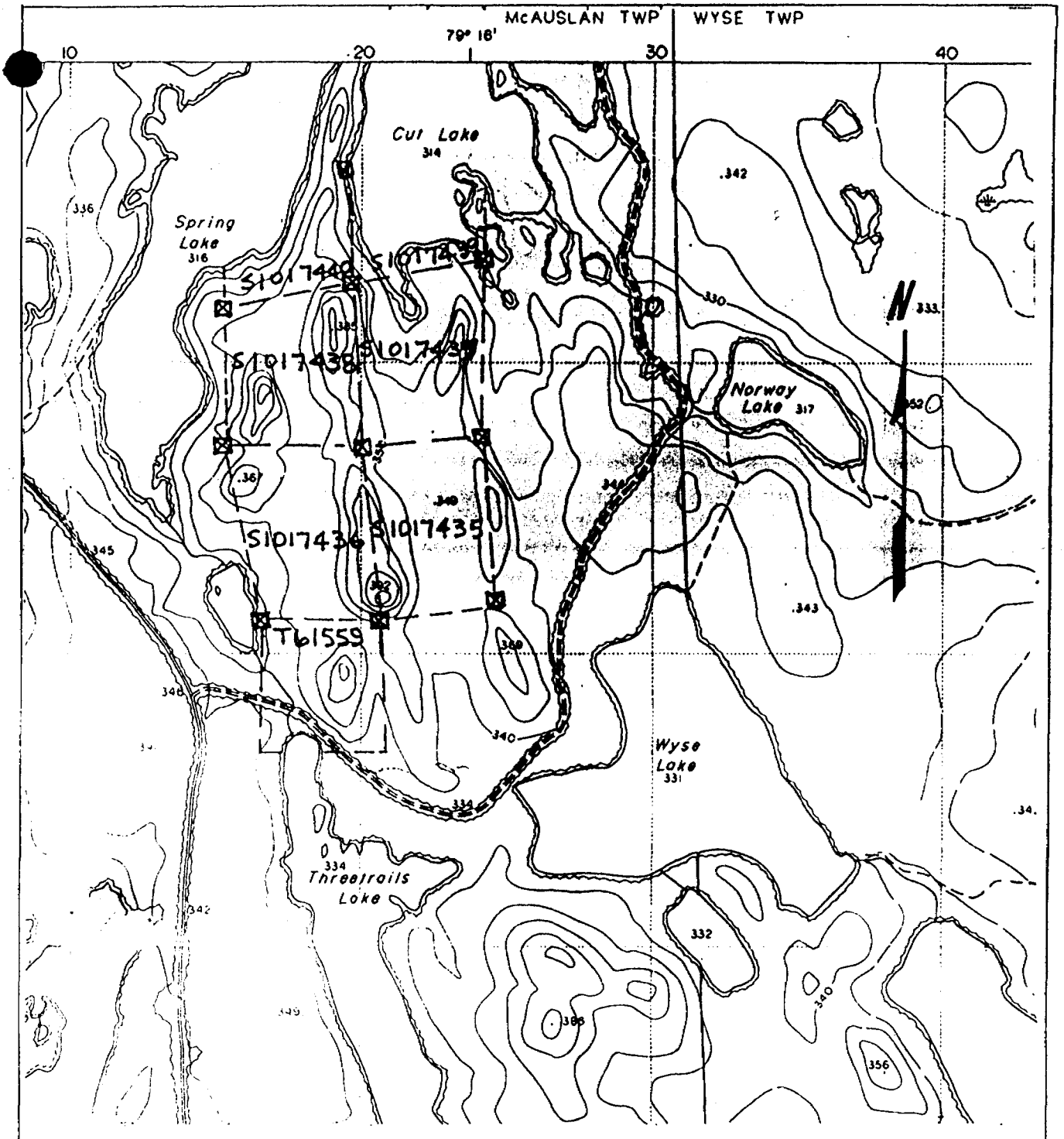

FIGURE II - CLAIMS LOCATION

HOGG SILICA PROSPECT

McAUSLAN TWP.,ONT.

SUDBURY MINING DIVISION

SCALE: 1:20,000 or 1" = 1,667 Feet	DATE: October, 1990

LOCATION AND ACCESS

The property is situated approximately 50 kilometers north of North Bay, Ontario and can be reached from North Bay by highway 63, a distance of 64 kilometers along a paved road and thence by a gravel forest access road to the property, a distance of 33 kilometers. This forest access road then leads westward to a spur on the Ontario Northland Railway, a distance of approximately 20 kilometers. The Canadian Pacific Railway at Temiskaming, a distance of 47 kilometers is also accessible.

GEOLOGY

The exposed outcrops on the claims are, with the exception of a narrow diabase dyke, all quartzite composed of interlocking grains of quartz together with subordinate sericite and iron oxide.

A chemical analysis of the quartzite may average silica 95-99, iron oxide 0.02-0.8, alumina 0.4-1-29, calcium oxide 0.01-0.02, magnesium oxide 0.01-0.02, sodium oxide 0.01-0.03, potassium oxide 0.07-0.18, titanium oxide 0.11 percent.

This silica-cemented quartz sand is an orthoquartzite, a metamorphosed member of a clastic sequence of siliceous meta-sediments of Middle Precambrian age. Loosely packed quartz pebbles can be recognized and in places rare bluish grey and rose colored quartz pebbles and boulders have been observed.

The strike of the quartzite beds is from north to 10 degrees west of north and dips are from 40 to 45 degrees west.

Visual examination of the rock outcrops in the field and a close viewing of samples collected confirm the presence of a widespread occurrence of a high silica orthoquartzite.

A diabase dyke exposed by trenching on the east part of the large outcrop (Reference Area 2 on claim S-1017438) is 15 feet wide and dips near vertical.

The strike is north 10 degrees west. It is a quartz diabase and is composed of silica and hornblende with minor biotite.

STRUCTURE

Although the bedding of this clastic quartzite has been metamorphosed almost beyond recognition, tight folding has been recognized in places by the light and dark banded quartzite and the presence of distorted boulders. The outcrop situated in the northwest part of claim S1017438 has these features.

The bedding in most of the outcrops has a north strike and a west dip of 40 to 50 degrees.

Along the east flank of the three large outcrops are vertical dipping fault escarpments striking north to north 10 degrees west. The fault escarpment is steep and in places the drop-off is greater than 100 feet. This probably indicates the presence of block faulted structures.

GEOCHEMISTRY

One hundred and forty seven rock geochemical samples were collected on grids over the outcrops and are shown on the sample location map included with this report.

The large southern outcrop located astride claims S1017435 and S1017436 has been sampled in greater detail. The samples numbered 501-605 have been assayed for silica by fusion and a 24 element total digestion package. This provides quantitative analysis of all major elements except silica, as well as many of the important trace elements.

The certificate of analysis (A9022592) by Chemex Labs Ltd. for the above samples are included as part of this report.

Samples 607-647 inclusive. collected from the northern outcrop in claims S1017437 to S1017440 are being held for future analyses.

Three samples from a trench 200 feet north on the base line from claim post S1017435-1 and S1017436-2 analysed by Assayers Ontario Laboratories are included. Another analysis by Chemex Labs Ltd., Vancouver, from the same trench and submitted to Brenda Exploration is also included.

SPECIFICATIONS AND USES OF SILICA

SILICA FLUX

7/8 sand and 1/8 fine quartzite. 96% SiO_2. It is crushed to minus 3/4 inch.

FERROSILICON

3/4 to 5 inch in diameter. 97.5% or over, average is 98 to 99%. 1% Al, .5% Iron, 0.2 to .4% MgO, less than 0.2% CaO. No arsenic.

SILICON CARBIDE

Content 99.25%, no Lime, Magnesia or Phosphorous. Iron and Alumina below 0.10%. A.F.A. mesh number 35.

SILICA BRICK

96 to 98% SiO_2 (Silica) or greater, Alumina less than 1.0%, Iron Oxides less than 1.0%, combined Iron and Alumina under 1.5%. Alkalis, Magnesia and Lime should be low.

GLASS SAND

20 mesh, not more than 3% should pass 80 mesh. Moisture not more than 2.5%, Chromium not over 6 parts per million, Cobalt not over 2 parts per million. SiO_2-99.85%, Al_2O_3-0.02%, Fe_2O_3-0.22%, TiO_2-0.01%, CaO-0.02%, MgO-0.01%, CO_2-0.078%, Cr-0.0002%.

QUALITY

	SiO_2	Al_2O_3	Fe_2O_3	Ca + MgO
First quality, optical glass	99.8%	0.1%	0.02%	0.1%
Second quality, flint glass	98.5	0.5	0.035	0.2
Third quality, flint glass	95.0	4.0	0.035	0.2
Fourth quality, sheet glass	98.5	4.0	0.035	0.5
Fifth quality, sheet glass	95.0	4.0	0.06	0.5
Sixth quality, green glass	98.0	0.5	0.3	0.5
Seventh quality, green glass	95.0	4.0	0.3	0.5
Eighth quality, amber glass	98.0	0.5	1.0	0.5
Ninth quality, amber glass	95.0	4.0	1.0	0.5

ENAMELS

Iron less than 0.2%, Alumina less than 0.5%, Silica more than 97.5%.

SODIUM SILICATE

99% silica, less than 0.05% iron, below 0.05% titania. below 0.5% lumina, below 0.1% magnesia and lime. Sized from 20+ to 100 mesh.

USES

Portland Cement, Pottery Flint, Paint Filler, Autoclaved Concrete Blocks, Sand-Lime Bricks, Fiberglass, Rock Wool, Scouring and Cleansing Powders, Matches, Roofing Paper, Fertilizer Filler.

CONCLUSIONS AND RECOMMENDATIONS

A prospecting, sampling and geological program was completed during August and September, 1990, on claims S1017435 to S101740 inclusive, in McAuslan township of the Sudbury Mining Division.

A sample location map, assay results and a geological plan and report have been completed.

The large southern outcrop on claims S1017436 and S1017435 sampled in detail has assays that confirm the presence of a large occurrence of a high silica quartzite. Sites have been defined where additional trenching, drilling and bulk sampling may be warranted.

The work completed represents a documented record of a potential industrial mineral deposit suitable for option discussion with interested parties and this approach is in progress.

Using the geochemical data, it is recommended that zones of higher than average silica be selected and bulk sampled for tests on removal of the minor impurities, such as muscovite, mica and iron oxides. Evaluation of various silica deposits by CANMET Mineral Processing Laboratories in Ottawa (1987) shows the potential for this approach to upgrade silica content to specifications for many industrial uses.

REFERENCES

1963	D. F. Hewitt	Silica in Ontario Industrial mineral report No. 9 Ontario Department of Mines
1971	S. B. Lumbers	Preliminary Map P679 Geological Series Compilation TOMIKA AREA (east half) Scale 1 inch to 1 mile District of Nipissing NTS Reference 31 L/11
1987	P. R. A. Andrews and R. K. Collings	CANADIAN SILICA RESOURCES C.I.M.M. Bulletin, Volume 76 No. 900, April 1987

CERTIFICATE TO ACCOMPANY REPORT DATED OCTOBER 10,1990, ON THE McAUSLAN TOWNSHIP CLAIMS, SUDBURY MINING DIVISION, ONTARIO.

I, WILLIAM A. HOGG, OF WILLOWDALE, ONTARIO CERTIFY THAT:

I am a Professional Engineer and Consulting Geologist and reside at 22 Maxome Avenue, Willowdale, in the Province of Ontario.

I am a graduate of Acadia University, Dalhousie University and McGill University and hold the degrees of B.Sc. (1950), M.Sc. (1954) and Ph.D. (1959), respectively.

I am a Member of the Association of Professional Engineers of the Province of Ontario.

I have been practising my profession in Canada, and occasionally in the United States, Cyprus, United Arab Emirates and Saudi Arabia since 1950.

The accompanying report is based on a knowledge gained from a review of published geological reports, maps and technical data on file in the Assessment Branch of the Ontario Geological Survey, Toronto.

This report covers claims S1017435 to S1017440 inclusive.

All inclusive, being all the claims referred to in the accompanying report.

Willowdale, Ontario
October, 10, 1990

William A. Hogg

William A. Hogg, Ph.D., P. Eng.

APPENDIX I

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

INVOICE NUMBER I 9 0 2 2 5 9 2

BILLING INFORMATION

Date: 27-SEP-90
Project:
P.O. No.:
Account: IPN

Comments:

Billing: For analysis performed on Certificate I9022592

Terms: Payment due on receipt of invoice
1.5% per month (18% per annum) charged on overdue accounts

Please Remit Payments to:

CHEMEX LABS LTD.
212 Brooksbank Ave.,
North Vancouver, B.C.
Canada V7J-2C1

CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYSED	UNIT PRICE	AMOUNT
378 -	SiO2 % fusion			
G24 -	G-24 24 EL. ICP	106	23.50	2491.00
	Sample preparation and other charges.			
208 -	Assay - RING	106	1.75	185.50
294 -	Crush and split	106	2.25	238.50
			Total Cost $	2915.00
			TOTAL PAYABLE (CDN) $	**2915.00**

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

A9022592

Comments:

CERTIFICATE A9022592

HOGG, WILLIAM A.

Project:
P.O. # :

Samples submitted to our lab in Mississauga, ON.
This report was printed on 27-SEP-90.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	106	Assay ring to approx 150 mesh
294	106	Crush and split (0-10 pounds)
232	106	PERCHLORIC-NITRIC-HYDROFLUORIC D

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
378	106	SiO2 %: Carbonate fusion	GRAVIMETRIC	0.01	100.00
578	106	Ag ppm: 24 element, rock & core	AAS	0.5	200
573	106	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	106	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	106	Be ppm: 24 element, rock & core	ICP-AES	0.5	10000
561	106	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	106	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	106	Cd ppm: 24 element, rock & core	ICP-AES	0.5	10000
563	106	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	106	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	106	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	106	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	106	K %: 24 element, rock & core	ICP-AES	0.01	20.0
570	106	Mg %: 24 element, rock & core	ICP-AES	0.01	20.0
568	106	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	106	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	106	Na %: 24 element, rock & core	ICP-AES	0.01	5.00
564	106	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	106	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	106	Pb ppm: 24 element, rock & core	ICP-AES	2	10000
582	106	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	106	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	106	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	106	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	106	Zn ppm: 24 element, rock & core	ICP-AES	2	10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : A9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		SiO2 % fusion	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)
294501	208	294	92.23	< 0.5	0.79	50	< 0.5	< 2	0.26	< 0.5	1	192	8	0.71	0.24	0.09
294502	208	294	90.46	< 0.5	0.57	10	< 0.5	< 2	0.07	< 0.5	1	169	9	0.48	0.15	0.03
294503	208	294	93.57	< 0.5	0.29	< 10	< 0.5	< 2	0.01	< 0.5	< 1	135	1	0.37	0.07	< 0.01
294504	208	294	94.28	< 0.5	0.38	10	< 0.5	< 2	0.01	< 0.5	< 1	108	1	0.46	0.11	< 0.01
294505	208	294	92.82	< 0.5	0.41	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	127	2	0.40	0.07	< 0.01
294506	208	294	94.12	< 0.5	0.34	< 10	< 0.5	< 2	0.02	< 0.5	2	164	5	0.34	0.06	< 0.01
294507	208	294	93.08	< 0.5	0.37	10	< 0.5	< 2	< 0.01	< 0.5	< 1	140	2	0.30	0.08	< 0.01
294508	208	294	92.66	< 0.5	1.73	90	0.5	< 2	0.01	< 0.5	2	318	2	0.55	0.70	0.02
294509	208	294	92.41	< 0.5	0.83	20	< 0.5	< 2	< 0.01	< 0.5	< 1	276	1	0.45	0.24	< 0.01
294510	208	294	92.28	< 0.5	0.89	80	< 0.5	< 2	< 0.01	< 0.5	< 1	193	1	0.59	0.30	< 0.01
294511	208	294	92.41	< 0.5	2.00	140	< 0.5	< 2	< 0.01	< 0.5	3	263	2	0.52	0.84	0.01
294512	208	294	71.91	< 0.5	6.95	1310	2.0	2	0.04	< 0.5	16	239	1	2.36	3.63	0.87
294513	208	294	93.75	< 0.5	1.25	180	< 0.5	< 2	< 0.01	< 0.5	1	272	3	0.57	0.51	0.01
294514	208	294	91.21	< 0.5	1.19	110	< 0.5	< 2	< 0.01	< 0.5	1	258	3	0.57	0.45	0.01
294515	208	294	94.06	< 0.5	0.56	20	< 0.5	< 2	< 0.01	< 0.5	< 1	155	1	0.32	0.20	< 0.01
294516	208	294	93.58	< 0.5	0.53	40	< 0.5	< 2	< 0.01	< 0.5	1	187	1	0.37	0.18	< 0.01
294517	208	294	94.91	< 0.5	0.34	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	178	1	0.30	0.10	< 0.01
294518	208	294	89.68	< 0.5	0.75	80	0.5	< 2	< 0.01	< 0.5	< 1	345	2	0.64	0.21	< 0.01
294519	208	294	92.43	< 0.5	0.43	20	< 0.5	< 2	< 0.01	< 0.5	< 1	281	1	0.77	0.12	< 0.01
294520	208	294	88.97	< 0.5	0.46	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	306	4	0.40	0.09	< 0.01
294521	208	294	93.98	< 0.5	0.49	10	< 0.5	< 2	< 0.01	< 0.5	< 1	194	4	0.37	0.13	< 0.01
294522	208	294	94.58	< 0.5	0.79	40	< 0.5	< 2	< 0.01	< 0.5	1	229	2	0.39	0.26	< 0.01
294523	208	294	94.15	< 0.5	1.50	120	0.5	< 2	< 0.01	< 0.5	1	222	1	0.42	0.63	0.01
294524	208	294	96.33	< 0.5	0.93	110	< 0.5	< 2	< 0.01	< 0.5	< 1	252	1	0.47	0.41	< 0.01
294525	208	294	91.66	< 0.5	0.66	60	< 0.5	< 2	< 0.01	< 0.5	1	270	2	0.61	0.23	< 0.01
294526	208	294	96.54	< 0.5	0.18	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	264	1	0.36	0.04	< 0.01
294527	208	294	91.76	< 0.5	0.49	50	< 0.5	< 2	< 0.01	< 0.5	< 1	282	3	0.53	0.14	< 0.01
294528	208	294	96.52	< 0.5	0.11	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	261	1	0.34	< 0.01	< 0.01
294529	208	294	93.89	< 0.5	0.40	60	< 0.5	< 2	< 0.01	< 0.5	< 1	221	1	0.50	0.12	< 0.01
294530	208	294	94.49	< 0.5	0.55	50	0.5	< 2	< 0.01	< 0.5	1	417	1	0.64	0.16	< 0.01
294531	208	294	92.45	< 0.5	0.27	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	264	3	0.47	0.02	< 0.01
294532	208	294	93.95	< 0.5	0.58	10	< 0.5	< 2	< 0.01	< 0.5	< 1	177	1	0.40	0.17	< 0.01
294533	208	294	97.05	< 0.5	0.83	40	< 0.5	< 2	< 0.01	< 0.5	< 1	302	2	0.42	0.34	< 0.01
294534	208	294	90.80	< 0.5	2.38	140	0.5	< 2	< 0.01	< 0.5	2	299	1	0.65	0.97	0.02
294535	208	294	92.97	< 0.5	0.86	60	< 0.5	< 2	< 0.01	< 0.5	1	230	1	0.42	0.32	< 0.01
294536	208	294	91.34	< 0.5	1.03	50	< 0.5	< 2	< 0.01	< 0.5	2	278	1	0.67	0.38	0.01
294537	208	294	93.94	< 0.5	0.36	40	< 0.5	< 2	< 0.01	< 0.5	< 1	269	2	0.38	0.09	< 0.01
294538	208	294	95.04	< 0.5	0.17	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	226	< 1	0.31	0.02	< 0.01
294539	208	294	90.93	< 0.5	0.37	20	< 0.5	< 2	< 0.01	< 0.5	< 1	222	1	0.42	0.08	< 0.01
294540	208	294	92.21	< 0.5	0.35	10	< 0.5	< 2	< 0.01	< 0.5	1	217	2	0.51	0.07	< 0.01

CERTIFICATION: B. Caghi

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
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To: HOGG, WILLIAM A.

22 MAXOME AVE.
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Project :
Comments:

Invoice Date: 27-SEP-90
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P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE	Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
294501	208 294	95	< 1	0.05	6	40	2	26	0.03	14	< 10	14			
294502	208 294	55	< 1	0.02	5	30	8	16	0.01	5	< 10	10			
294503	208 294	20	< 1	0.01	3	30	8	20	0.01	2	< 10	6			
294504	208 294	25	< 1	0.01	3	20	4	13	0.01	2	< 10	2			
294505	208 294	20	< 1	0.01	2	30	4	24	0.01	2	< 10	4			
294506	208 294	25	< 1	0.01	4	70	4	17	< 0.01	2	< 10	2			
294507	208 294	75	< 1	0.01	3	20	4	17	< 0.01	2	< 10	2			
294508	208 294	30	< 1	0.08	7	40	4	52	0.04	6	< 10	12			
294509	208 294	25	< 1	0.02	4	20	< 2	16	0.02	2	< 10	6			
294510	208 294	40	< 1	0.03	4	20	2	21	0.02	2	< 10	4			
294511	208 294	25	< 1	0.09	6	30	2	34	0.03	4	< 10	6			
294512	208 294	1775	< 1	0.28	24	180	2	33	0.28	57	< 10	122			
294513	208 294	170	1	0.05	5	50	< 2	25	0.03	8	< 10	2			
294514	208 294	20	< 1	0.05	4	50	< 2	26	0.03	6	< 10	4			
294515	208 294	15	< 1	0.02	4	20	< 2	18	0.01	3	< 10	2			
294516	208 294	20	< 1	0.02	3	30	< 2	16	0.01	4	< 10	2			
294517	208 294	15	< 1	0.01	3	30	< 2	29	0.01	2	< 10	10			
294518	208 294	25	< 1	0.03	4	50	< 2	33	0.02	4	< 10	6			
294519	208 294	50	< 1	0.01	6	40	< 2	25	0.02	3	< 10	4			
294520	208 294	30	< 1	0.01	4	30	< 2	18	0.01	2	< 10	6			
294521	208 294	30	< 1	0.02	4	30	< 2	21	0.01	2	< 10	6			
294522	208 294	30	< 1	0.03	3	50	2	22	0.01	2	< 10	6			
294523	208 294	20	< 1	0.07	5	20	4	29	0.02	3	< 10	4			
294524	208 294	15	< 1	0.04	3	30	< 2	11	0.02	6	< 10	4			
294525	208 294	20	< 1	0.02	4	40	< 2	16	0.02	6	< 10	6			
294526	208 294	15	< 1	0.01	4	30	< 2	23	< 0.01	2	< 10	6			
294527	208 294	30	< 1	0.01	4	70	< 2	36	0.01	3	< 10	6			
294528	208 294	20	< 1	< 0.01	3	10	4	11	< 0.01	1	< 10	14			
294529	208 294	20	< 1	0.01	4	50	2	26	0.01	2	< 10	6			
294530	208 294	30	< 1	0.02	5	30	2	18	0.01	4	< 10	10			
294531	208 294	35	< 1	0.01	5	40	4	24	0.01	2	< 10	6			
294532	208 294	30	< 1	0.02	3	30	< 2	30	0.01	2	< 10	6			
294533	208 294	25	1	0.04	5	20	< 2	25	0.01	4	< 10	8			
294534	208 294	20	< 1	0.12	6	30	< 2	41	0.05	4	< 10	4			
294535	208 294	20	< 1	0.04	3	40	< 2	29	0.02	2	< 10	4			
294536	208 294	30	< 1	0.05	4	40	< 2	27	0.03	4	< 10	4			
294537	208 294	25	< 1	0.01	3	30	< 2	19	0.01	1	< 10	6			
294538	208 294	20	< 1	< 0.01	3	20	< 2	15	< 0.01	1	< 10	4			
294539	208 294	20	< 1	0.01	5	40	< 2	19	0.01	2	< 10	4			
294540	208 294	25	< 1	0.01	4	40	< 2	19	0.01	3	< 10	4			

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
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PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : A9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		SiO2 % fusion	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)
294541	208	294	94.89	< 0.5	0.35	40	< 0.5	< 2	< 0.01	< 0.5	< 1	156	2	0.33	0.10	< 0.01
294542	208	294	92.74	< 0.5	0.73	40	< 0.5	< 2	< 0.01	< 0.5	< 1	246	2	0.39	0.26	< 0.01
294543	208	294	94.71	< 0.5	0.60	70	< 0.5	< 2	< 0.01	< 0.5	1	182	2	0.42	0.24	< 0.01
294544	208	294	95.39	< 0.5	0.36	170	< 0.5	< 2	< 0.01	< 0.5	< 1	214	1	0.39	0.12	< 0.01
294545	208	294	95.25	< 0.5	1.37	50	< 0.5	< 2	< 0.01	< 0.5	1	197	< 1	0.38	0.62	< 0.01
294546	208	294	90.88	< 0.5	2.60	210	< 0.5	< 2	0.01	< 0.5	4	252	< 1	0.87	1.27	0.01
294547	208	294	92.15	< 0.5	2.14	300	< 0.5	< 2	< 0.01	< 0.5	< 1	209	1	0.58	0.93	0.01
294548	208	294	93.77	< 0.5	0.57	40	< 0.5	< 2	< 0.01	< 0.5	< 1	191	1	0.82	0.20	< 0.01
294549	208	294	94.57	< 0.5	0.50	50	< 0.5	< 2	< 0.01	< 0.5	< 1	163	2	0.44	0.16	< 0.01
294550	208	294	93.10	< 0.5	0.31	10	< 0.5	< 2	< 0.01	< 0.5	< 1	179	< 1	0.38	0.09	< 0.01
294601	208	294	93.84	< 0.5	0.47	10	< 0.5	< 2	< 0.01	< 0.5	< 1	156	2	0.39	0.12	< 0.01
294602	208	294	92.56	< 0.5	0.51	40	< 0.5	< 2	< 0.01	< 0.5	1	150	1	0.52	0.15	< 0.01
294603	208	294	93.22	< 0.5	0.48	10	< 0.5	< 2	< 0.01	< 0.5	< 1	162	1	0.62	0.17	< 0.01
294604	208	294	93.82	< 0.5	0.42	20	< 0.5	< 2	< 0.01	< 0.5	< 1	260	1	0.60	0.12	< 0.01
294605	208	294	95.43	< 0.5	1.42	40	< 0.5	< 2	< 0.01	< 0.5	< 1	227	1	0.45	0.63	< 0.01
294606	208	294	98.58	< 0.5	0.20	50	< 0.5	< 2	< 0.01	< 0.5	< 1	293	< 1	0.29	0.08	< 0.01
294651	208	294	92.40	< 0.5	0.49	10	< 0.5	< 2	< 0.01	< 0.5	< 1	286	1	0.67	0.17	< 0.01
294652	208	294	96.14	< 0.5	0.36	10	< 0.5	< 2	< 0.01	< 0.5	< 1	200	1	0.30	0.11	< 0.01
294653	208	294	94.13	< 0.5	0.33	20	< 0.5	< 2	< 0.01	< 0.5	< 1	200	1	0.36	0.08	< 0.01
294654	208	294	92.15	< 0.5	0.59	30	< 0.5	< 2	< 0.01	< 0.5	1	107	2	0.38	0.19	< 0.01
294655	208	294	95.79	< 0.5	0.57	30	< 0.5	< 2	0.01	< 0.5	1	199	1	0.44	0.13	< 0.01
294656	208	294	93.62	< 0.5	1.77	100	0.5	< 2	< 0.01	< 0.5	2	174	4	0.59	0.78	0.01
294657	208	294	86.69	< 0.5	4.05	260	1.0	< 2	0.03	< 0.5	5	274	< 1	1.38	1.74	0.04
294658	208	294	89.21	< 0.5	3.26	160	1.0	< 2	< 0.01	< 0.5	3	237	< 1	0.66	1.40	0.02
294659	208	294	96.47	< 0.5	0.48	10	< 0.5	< 2	< 0.01	< 0.5	1	206	1	0.36	0.17	< 0.01
294660	208	294	91.86	< 0.5	0.84	50	< 0.5	2	< 0.01	< 0.5	< 1	161	< 1	0.51	0.28	< 0.01
294661	208	294	88.73	< 0.5	0.98	70	0.5	< 2	< 0.01	< 0.5	1	183	1	0.72	0.35	0.01
294662	208	294	94.80	< 0.5	0.16	< 10	< 0.5	< 2	< 0.01	< 0.5	1	184	1	0.36	< 0.01	< 0.01
294663	208	294	94.17	< 0.5	0.29	< 10	< 0.5	< 2	< 0.01	< 0.5	1	167	2	0.50	0.06	< 0.01
294664	208	294	96.00	< 0.5	0.32	10	< 0.5	< 2	< 0.01	< 0.5	2	183	2	0.36	0.08	< 0.01
294665	208	294	95.93	< 0.5	0.44	30	< 0.5	< 2	< 0.01	< 0.5	1	213	3	0.38	0.14	< 0.01
294666	208	294	96.20	< 0.5	0.28	10	< 0.5	< 2	< 0.01	< 0.5	1	190	2	0.34	0.08	< 0.01
294667	208	294	94.99	< 0.5	0.67	70	< 0.5	< 2	< 0.01	< 0.5	1	272	2	0.50	0.25	< 0.01
294668	208	294	97.81	< 0.5	0.38	20	< 0.5	< 2	0.01	< 0.5	2	337	4	0.40	0.12	< 0.01
294669	208	294	98.20	< 0.5	0.25	20	< 0.5	< 2	0.01	< 0.5	1	165	3	0.22	0.10	< 0.01
294670	208	294	92.00	< 0.5	0.69	40	< 0.5	< 2	0.01	< 0.5	2	342	4	0.60	0.18	< 0.01
294671	208	294	92.35	< 0.5	0.58	40	< 0.5	< 2	0.01	< 0.5	3	376	4	0.73	0.14	< 0.01
294672	208	294	78.11	< 0.5	1.13	50	< 0.5	< 2	0.01	< 0.5	9	499	1	3.12	0.24	0.01
294673	208	294	93.67	< 0.5	0.43	30	< 0.5	< 2	< 0.01	< 0.5	1	165	3	0.40	0.12	< 0.01
294674	208	294	98.39	< 0.5	0.06	< 10	< 0.5	< 2	0.02	< 0.5	1	344	5	0.41	< 0.01	< 0.01

CERTIFICATION: B. Caughlin

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PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Page Number : 2-B
Total Pages : 3
Invoice Date: 27-SEP-90
Invoice No. : A9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE	Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
294541	208 294	20	< 1	0.01	4	40	< 2	22	0.01	2	< 10	6			
294542	208 294	30	< 1	0.03	4	50	< 2	14	0.01	3	< 10	4			
294543	208 294	15	< 1	0.02	4	30	< 2	8	0.02	6	< 10	2			
294544	208 294	10	< 1	0.01	3	20	< 2	9	0.01	4	< 10	4			
294545	208 294	10	< 1	0.06	3	20	< 2	14	0.02	8	< 10	2			
294546	208 294	20	< 1	0.11	6	50	< 2	22	0.09	12	< 10	4			
294547	208 294	15	< 1	0.10	4	80	< 2	25	0.05	25	< 10	4			
294548	208 294	15	< 1	0.02	3	50	< 2	29	0.02	6	< 10	2			
294549	208 294	15	< 1	0.01	4	20	< 2	9	0.02	5	< 10	4			
294550	208 294	15	< 1	0.01	1	20	< 2	9	0.01	1	< 10	4			
294601	208 294	15	< 1	0.02	3	30	< 2	21	0.01	3	< 10	6			
294602	208 294	20	< 1	0.01	3	40	< 2	16	0.01	10	< 10	8			
294603	208 294	60	< 1	0.01	5	30	< 2	22	0.02	6	< 10	4			
294604	208 294	15	< 1	0.01	4	50	< 2	33	0.02	4	< 10	6			
294605	208 294	20	< 1	0.06	4	20	< 2	25	0.03	5	< 10	4			
294606	208 294	20	< 1	0.01	4	10	2	2	< 0.01	2	< 10	4			
294651	208 294	25	< 1	0.01	5	20	< 2	14	0.02	3	< 10	6			
294652	208 294	20	< 1	0.01	3	10	< 2	9	< 0.01	2	< 10	< 2			
294653	208 294	25	< 1	0.01	4	20	4	15	0.01	2	< 10	6			
294654	208 294	35	< 1	0.02	4	40	< 2	23	0.01	2	< 10	2			
294655	208 294	25	< 1	0.02	5	40	2	25	0.01	2	< 10	6			
294656	208 294	20	< 1	0.08	3	50	2	38	0.04	4	< 10	4			
294657	208 294	30	< 1	0.22	9	90	4	73	0.14	17	< 10	8			
294658	208 294	15	1	0.17	6	40	2	48	0.05	10	< 10	2			
294659	208 294	30	< 1	0.02	4	50	< 2	25	0.01	2	< 10	2			
294660	208 294	25	< 1	0.03	3	40	< 2	29	0.03	2	< 10	2			
294661	208 294	105	< 1	0.03	7	60	4	50	0.03	4	< 10	4			
294662	208 294	25	< 1	< 0.01	4	30	2	10	< 0.01	< 1	< 10	6			
294663	208 294	25	< 1	0.01	4	30	2	12	0.01	2	< 10	2			
294664	208 294	20	< 1	0.01	3	40	< 2	7	0.01	2	< 10	4			
294665	208 294	20	< 1	0.01	5	30	< 2	6	0.01	5	< 10	4			
294666	208 294	15	< 1	0.01	3	30	< 2	6	0.01	3	< 10	6			
294667	208 294	20	< 1	0.02	5	40	< 2	17	0.02	6	< 10	8			
294668	208 294	20	< 1	0.01	3	60	< 2	35	< 0.01	4	< 10	6			
294669	208 294	40	< 1	0.01	3	30	< 2	10	< 0.01	2	< 10	8			
294670	208 294	30	< 1	0.02	7	60	< 2	28	0.02	4	< 10	6			
294671	208 294	40	< 1	0.02	10	50	< 2	20	0.02	4	< 10	4			
294672	208 294	150	< 1	0.03	17	100	< 2	31	0.22	10	< 10	14			
294673	208 294	30	< 1	0.02	3	40	< 2	11	0.01	1	< 10	2			
294674	208 294	60	< 1	< 0.01	8	90	< 2	14	< 0.01	2	< 10	10			

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : A9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		SiO2 % fusion	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)
294675	208	294	91.17	< 0.5	2.31	130	1.0	< 2	0.01	< 0.5	4	392	3	0.82	0.82	0.02
294676	208	294	96.66	< 0.5	0.76	80	< 0.5	< 2	0.01	< 0.5	2	428	3	0.45	0.31	0.01
294677	208	294	91.65	< 0.5	0.86	40	< 0.5	< 2	< 0.01	< 0.5	2	133	1	0.61	0.32	< 0.01
294678	208	294	91.42	< 0.5	1.09	50	< 0.5	< 2	< 0.01	< 0.5	3	384	2	1.05	0.35	< 0.01
294679	208	294	95.29	< 0.5	0.39	10	< 0.5	< 2	< 0.01	< 0.5	1	158	2	0.30	0.11	< 0.01
294680	208	294	96.35	< 0.5	0.54	< 10	< 0.5	< 2	< 0.01	< 0.5	1	307	3	0.39	0.03	< 0.01
294681	208	294	92.97	< 0.5	0.43	30	< 0.5	< 2	< 0.01	< 0.5	1	150	3	0.68	0.09	< 0.01
294682	208	294	94.69	< 0.5	0.42	20	< 0.5	< 2	0.01	< 0.5	3	190	3	0.41	0.10	< 0.01
294683	208	294	92.38	< 0.5	0.45	60	< 0.5	< 2	< 0.01	< 0.5	1	130	4	0.28	0.14	< 0.01
294684	208	294	93.57	< 0.5	0.93	100	< 0.5	< 2	0.01	< 0.5	2	400	4	0.52	0.32	0.01
294685	208	294	97.57	< 0.5	0.57	20	< 0.5	< 2	0.02	< 0.5	1	158	11	0.21	0.07	0.02
294686	208	294	94.99	< 0.5	0.77	40	< 0.5	< 2	0.02	< 0.5	2	426	8	0.49	0.20	0.01
294687	208	294	94.90	< 0.5	0.69	10	< 0.5	< 2	< 0.01	< 0.5	< 1	137	2	0.35	0.27	< 0.01
294688	208	294	95.62	< 0.5	0.34	< 10	< 0.5	< 2	< 0.01	< 0.5	2	310	3	0.53	0.09	< 0.01
294689	208	294	93.90	< 0.5	0.47	10	< 0.5	< 2	< 0.01	< 0.5	2	113	3	0.33	0.16	< 0.01
294690	208	294	95.43	< 0.5	0.31	30	< 0.5	< 2	< 0.01	< 0.5	1	278	4	0.44	0.06	< 0.01
294691	208	294	93.78	< 0.5	0.44	50	< 0.5	< 2	< 0.01	< 0.5	1	117	5	0.27	0.13	< 0.01
294692	208	294	90.32	< 0.5	0.51	20	< 0.5	< 2	0.01	< 0.5	3	338	4	0.94	0.07	< 0.01
294693	208	294	91.03	< 0.5	1.24	30	0.5	< 2	0.01	< 0.5	3	584	7	0.85	0.26	0.01
294694	208	294	95.59	< 0.5	0.32	10	< 0.5	< 2	< 0.01	< 0.5	1	225	3	0.51	0.06	< 0.01
294695	208	294	95.00	< 0.5	1.01	130	< 0.5	< 2	< 0.01	< 0.5	1	140	2	0.29	0.40	0.01
294696	208	294	79.52	< 0.5	1.84	170	0.5	< 2	0.01	< 0.5	5	234	2	1.39	0.61	0.01
294697	208	294	90.33	< 0.5	1.35	110	0.5	< 2	0.01	0.5	3	268	3	0.78	0.50	0.01
294698	208	294	92.34	< 0.5	0.61	40	< 0.5	< 2	0.01	< 0.5	3	382	4	0.71	0.12	< 0.01
294699	208	294	94.30	< 0.5	0.39	20	< 0.5	< 2	< 0.01	< 0.5	2	250	4	0.55	0.08	< 0.01
294700	208	294	94.17	< 0.5	0.92	60	0.5	< 2	< 0.01	< 0.5	2	233	5	0.50	0.29	< 0.01

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

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PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
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CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
294675	208	294	40	< 1	0.11	9	80	2	57	0.06	8	< 10	6			
294676	208	294	25	< 1	0.03	8	30	< 2	21	0.01	8	< 10	10			
294677	208	294	20	< 1	0.03	5	60	< 2	25	0.04	5	< 10	6			
294678	208	294	30	< 1	0.04	7	60	< 2	28	0.07	8	< 10	6			
294679	208	294	25	< 1	0.01	4	30	4	17	0.01	3	< 10	2			
294680	208	294	20	< 1	0.01	5	40	< 2	36	< 0.01	2	< 10	4			
294681	208	294	30	< 1	0.01	4	30	< 2	12	0.01	2	< 10	10			
294682	208	294	20	< 1	0.01	3	40	< 2	12	0.01	3	< 10	2			
294683	208	294	25	< 1	0.02	2	50	< 2	24	0.01	2	< 10	2			
294684	208	294	30	< 1	0.04	7	50	< 2	14	0.02	5	< 10	4			
294685	208	294	10	< 1	0.02	4	30	< 2	16	< 0.01	1	< 10	4			
294686	208	294	30	< 1	0.03	7	80	< 2	33	0.01	4	< 10	12			
294687	208	294	15	< 1	0.02	3	40	< 2	18	0.01	5	< 10	< 2			
294688	208	294	20	< 1	0.01	4	60	< 2	26	0.01	4	< 10	4			
294689	208	294	15	< 1	0.02	4	60	< 2	25	0.01	4	< 10	< 2			
294690	208	294	20	< 1	0.01	5	60	< 2	34	< 0.01	3	< 10	4			
294691	208	294	10	< 1	0.01	3	50	< 2	17	0.01	4	< 10	2			
294692	208	294	40	< 1	0.01	7	80	< 2	37	0.02	3	< 10	6			
294693	208	294	65	1	0.05	10	70	< 2	41	0.03	5	< 10	10			
294694	208	294	40	< 1	0.01	6	30	< 2	9	0.01	3	< 10	4			
294695	208	294	15	< 1	0.05	3	40	< 2	30	0.02	3	< 10	4			
294696	208	294	35	< 1	0.07	12	90	< 2	63	0.07	7	< 10	6			
294697	208	294	20	< 1	0.05	8	80	< 2	34	0.04	6	< 10	6			
294698	208	294	45	< 1	0.02	9	50	< 2	19	0.02	4	< 10	10			
294699	208	294	30	< 1	0.01	6	30	< 2	16	0.01	5	< 10	6			
294700	208	294	25	< 1	0.04	6	50	< 2	17	0.02	13	< 10	8			

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: BRENDA EXPLORATION
DIVISION OF BRENDA MINES LTD.
2281 HUNTER RD.
KELOWNA, BC
V1X 7C5

INVOICE NUMBER I 9 0 2 2 5 5 2

BILLING INFORMATION

Date: 23-SEP-90
Project:
P.O. No.: NONE
Account: UOA

Comments:

Billing: For analysis performed on Certificate I9022552

Terms: Payment due on receipt of invoice
1.5% per month (18% per annum) charged on overdue accounts

Please Remit Payments to:

CHEMEX LABS LTD.
212 Brooksbank Ave.,
North Vancouver, B.C.
Canada V7J-2C1

CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYSED	UNIT PRICE	AMOUNT
8 -	Ni ppm			
9 -	Co ppm			
12 -	Cr ppm			
27 -	Li ppm			
G1 -	A-12 W.R.A. ICP	1	26.00	26.00
	Sample preparation and other charges.			
208 -	Assay - RING	1	1.75	1.75
294 -	Crush and split	1	2.25	2.25
			Total Cost $	30.00
			TOTAL PAYABLE (CDN) $	**30.00**

RECD SEP 26

DATE RECEIVED .....

FILE NO. 108-78-00 H.

INITIALS: .....

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: BRENDA EXPLORATION
DIVISION OF BRENDA MINES LTD.
2281 HUNTER RD.
KELOWNA, BC
V1X 7C5

A9022552

Comments:

CERTIFICATE A9022552

BRENDA EXPLORATION

Project:
P.O. # : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 23-SEP-90.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	1	Assay ring to approx 150 mesh
294	1	Crush and split (0-10 pounds)
200	1	Whole rock fusion
* NOTE	1:	

Code 1000 is used for repeat gold analyses
It shows typical sample variability due to coarse gold effects. Each value is correct for its particular subsample.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
594	1	Al2O3 %: Whole rock	ICP-AES	0.01	99.00
542	1	BaO %: Whole rock	ICP-AES	0.01	99.00
588	1	CaO %: Whole rock	ICP-AES	0.01	99.00
586	1	Fe2O3(total) %: Whole rock	ICP-AES	0.01	99.00
821	1	K2O %: Whole rock	ICP-AES	0.01	99.0
593	1	MgO %: Whole rock	ICP-AES	0.01	99.00
596	1	MnO %: Whole rock	ICP-AES	0.01	99.00
599	1	Na2O %: Whole rock	ICP-AES	0.01	99.00
597	1	P2O5 %: Whole rock	ICP-AES	0.01	99.00
592	1	SiO2 %: Whole rock	ICP-AES	0.01	99.00
595	1	TiO2 %: Whole rock	ICP-AES	0.01	99.00
475	1	L.O.I. %: Loss on ignition	FURNACE	0.01	99.00
540	1	Total %	CALCULATION	0.01	N/A
8	1	Ni ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000
9	1	Co ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000
12	1	Cr ppm: HClO4-HNO3-HF digest	AAS	2	10000
27	1	Li ppm: HClO4-HNO3-HF digestion	AAS	1	1000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

BRENDA EXPLORATION
DIVISION OF BRENDA MINES LTD.
2281 HUNTER RD.
KELOWNA, BC
V1X 7C5

Project :
Comments:

Page Number : 1
Total Pages : 1
Invoice Date: 23-SEP-90
Invoice No. : I-9022552
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A9022552

SAMPLE DESCRIPTION	PREP CODE		Al2O3 %	BaO %	CaO %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Ni ppm	Co ppm	Cr ppm	Li ppm
SILICA	208	294	0.80	0.01	0.31	0.81	0.21	0.15	< 0.01	0.09	0.06	98.13	0.03	< 0.03	100.65	5	1	580	1

CERTIFICATION: B. Caughlin

ASSAYERS ONTARIO LABORATORIES
A DIVISION OF ASSAYERS CORPORATION LTD.
33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527
FAX (416) 239-4012

Certificate of Analysis

Certificate No. MI-2799 Date: February 28, 1990

Received _____ Samples of Rocks

Submitted by Mr. William A. Hogg

WHOLE ROCK ANALYSIS

	A	C	E
%			
SiO_2	94.91	96.26	94.47
Al_2O_3	2.27	2.97	3.59
Fe_2O_3	1.44	1.45	.81
CaO	.42	.16	.06
MgO	.18	.04	.04
Na_2O	.02	.02	.02
K_2O	.06	.03	.03
TiO_2	.11	.11	.11
MnO	.01	.01	.01
P_2O_5	.18	.18	.31
	.01	.01	.52
ppm			
Ba	<10	<10	<10
Cr	<10	<10	<10
Nb	<10	<10	<10
Sr	<10	<10	<10
Y	<10	<10	<10
Zr	<10	<10	<10

ASSAYERS ONTARIO LABORATORIES

Per _____

J. van Engelen Mgr.

Chemex Labs Ltd.

Analytical Chemists *Geochemists* *Registered Assayers*

5175 Timberlea Blvd.
Mississauga, Ontario
Canada L4W 2S3
Telephone: (416) 624-2806
FAX: (416) 624-6163

October 24, 1990

Dr. William A. Hogg
22 Maxome Ave.
Willowdale, Ontario
M2M 3J9

Dear Mr. Hogg:

As per our telephone conversation we did a hi SiO2 on the sample that Brenda Exploration submitted on W/O # A9022552, which we did as a whole rock.

The Original Results	Re-Run
98.13% SiO2	97.82%

The standard we used is a high grade SiO2 (99.96%)

If you require further information, please do not hesitate to contact me at (416) 624-2806.

Yours truly,

Adriana Alexandru
Analytical Lab Manager
AA:kjh

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

INVOICE NUMBER I9024981

BILLING INFORMATION

Date: 21-OCT-90
Project:
P.O. No.:
Account: IPN

Comments:

Billing: For analysis performed on Certificate I9024981

Terms: Payment due on receipt of invoice
1.5% per month (18% per annum) charged on overdue accounts

Please Remit Payments to:

CHEMEX LABS LTD.
212 Brooksbank Ave.,
North Vancouver, B.C.
Canada V7J-2C1

CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYSED	UNIT PRICE	AMOUNT
G1	- A-12 W.R.A. ICP	3	20.00	60.00
	Sample preparation and other charges.			
214	- Received as pulp	3	0.00	0.00
			Total Cost $	60.00
			TOTAL PAYABLE (CDN) $	60.00

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

A9024981

Comments:

CERTIFICATE A9024981

HOGG, WILLIAM A.

Project:
P.O. # :

Samples submitted to our lab in Mississauga, ON.
This report was printed on 21-OCT-90.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
214	3	Received sample as pulp
200	3	Whole rock fusion

* NOTE 1:

Code 1000 is used for repeat gold analyses
It shows typical sample variability due to
coarse gold effects. Each value is
correct for its particular subsample.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
594	3	Al2O3 %: Whole rock	ICP-AES	0.01	99.99
542	3	BaO %: Whole rock	ICP-AES	0.01	99.99
588	3	CaO %: Whole rock	ICP-AES	0.01	99.99
586	3	Fe2O3(total) %: Whole rock	ICP-AES	0.01	99.99
821	3	K2O %: Whole rock	ICP-AES	0.01	99.99
593	3	MgO %: Whole rock	ICP-AES	0.01	99.99
596	3	MnO %: Whole rock	ICP-AES	0.01	99.99
599	3	Na2O %: Whole rock	ICP-AES	0.01	99.99
597	3	P2O5 %: Whole rock	ICP-AES	0.01	99.99
592	3	SiO2 %: Whole rock	ICP-AES	0.01	99.99
595	3	TiO2 %: Whole rock	ICP-AES	0.01	99.99
475	3	L.O.I. %: Loss on ignition	FURNACE	0.01	99.99
540	3	Total %	CALCULATION	0.01	N/A

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A. **

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Page Number : 1
Total Pages : 1
Invoice Date: 21-OCT-90
Invoice No. : A9024981
P.O. Number

CERTIFICATE OF ANALYSIS A9024981

SAMPLE DESCRIPTION	PREP CODE	Al2O3 %	BaO %	CaO %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %
294528	214 200	1.72	0.08	0.20	0.74	0.06	0.06	< 0.01	0.11	0.02	94.87	0.04	0.20	98.11
294669	214 200	1.09	0.02	0.19	0.36	0.18	0.05	< 0.01	0.12	0.03	97.61	0.02	< 0.01	99.70
294685	214 200	1.43	< 0.01	0.20	0.44	0.11	0.06	< 0.01	0.14	0.03	96.99	0.03	0.03	99.47

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists *Geochemists* *Registered Assayers*

5175 Timberlea Blvd.
Mississauga, Ontario
Canada L4W 2S3
Telephone: (416) 624-2806
FAX: (416) 624-6163

SiO2 - (378)

--0.2 gram sample is taken to dryness twice with HF (Perchloric-nitric-Hydrofluoric digestion)

--It is ignited at 800 C for 30 minutes

--Sample is cooled and weighed

--The loss in weight is equal to the SiO2 content

APPENDIX II


1


LARGE QUARTZITE OUTCROPS
SOUTH CLAIMS
S1017436-S1017435

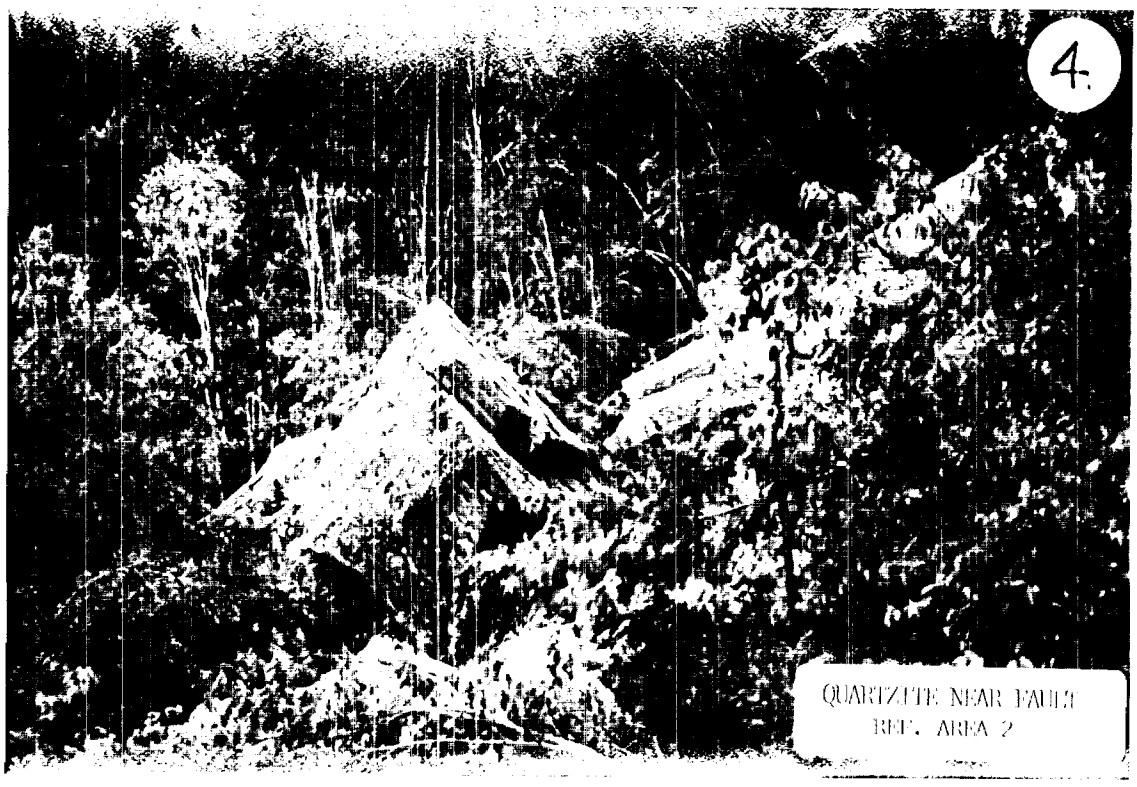
LARGE QUARTZITE OUTCROPS
SOUTH CLAIMS

ROCK TRENCH 1
SOUTH PART OF CLAIMS

QUARTZITE OUTCROP
SOUTH PART OF CLAIMS


BLASTED QUARTZITE
FRAGMENT TRENCH - E


TRENCH DRILLED & BLASTED
WINTER 1989



QUARTZITE NEAR FAULT
REF. AREA 2

QUARTZITE NEAR
FAULT ESCARPMENT
REF. AREA 2

QUARTZITE NEAR FAULT
REF. AREA 2

QUARTZITE EXPOSURE
REF. AREA 2

QUARTZITE EXPOSURE NEAR
FAULT ESCARPMENT
REF. AREA 2

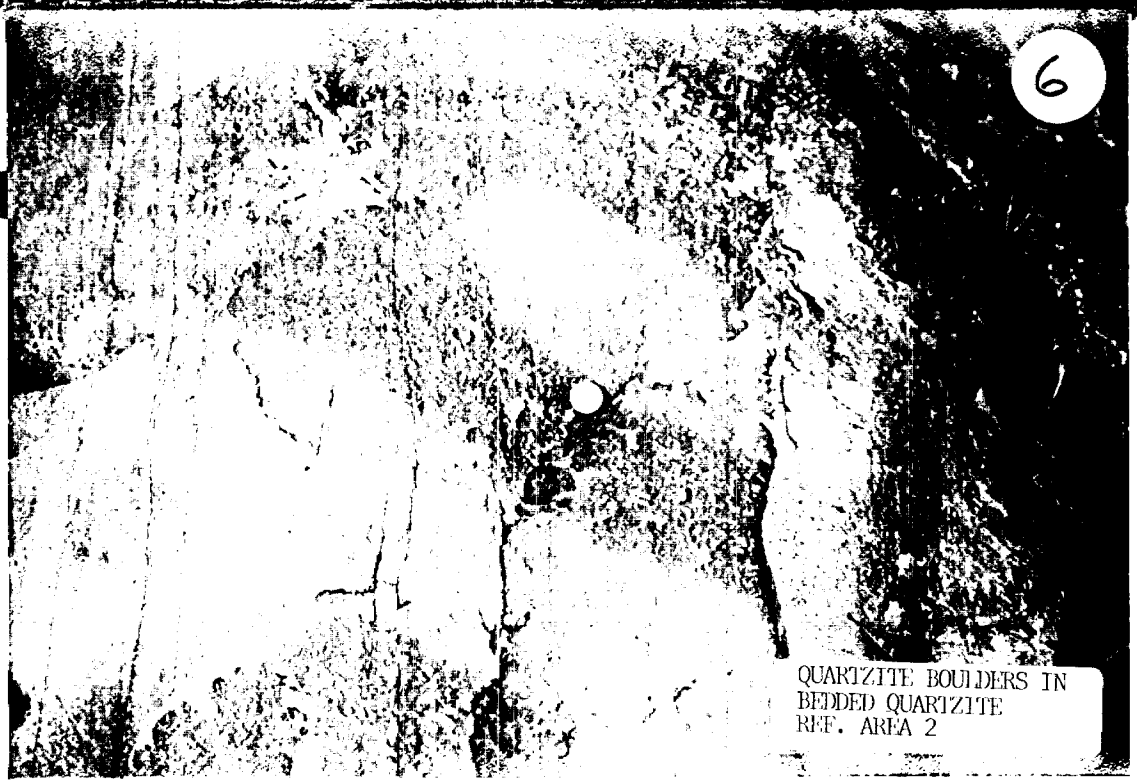
GLACIATED QUARTZITE
OUTCROP
REF. AREA 2

ROSE COLORED BOULDER OF
QUARTZITE IN BEDDING

QUARTZITE
FEEBLY BEDDED
REF. AREA 3

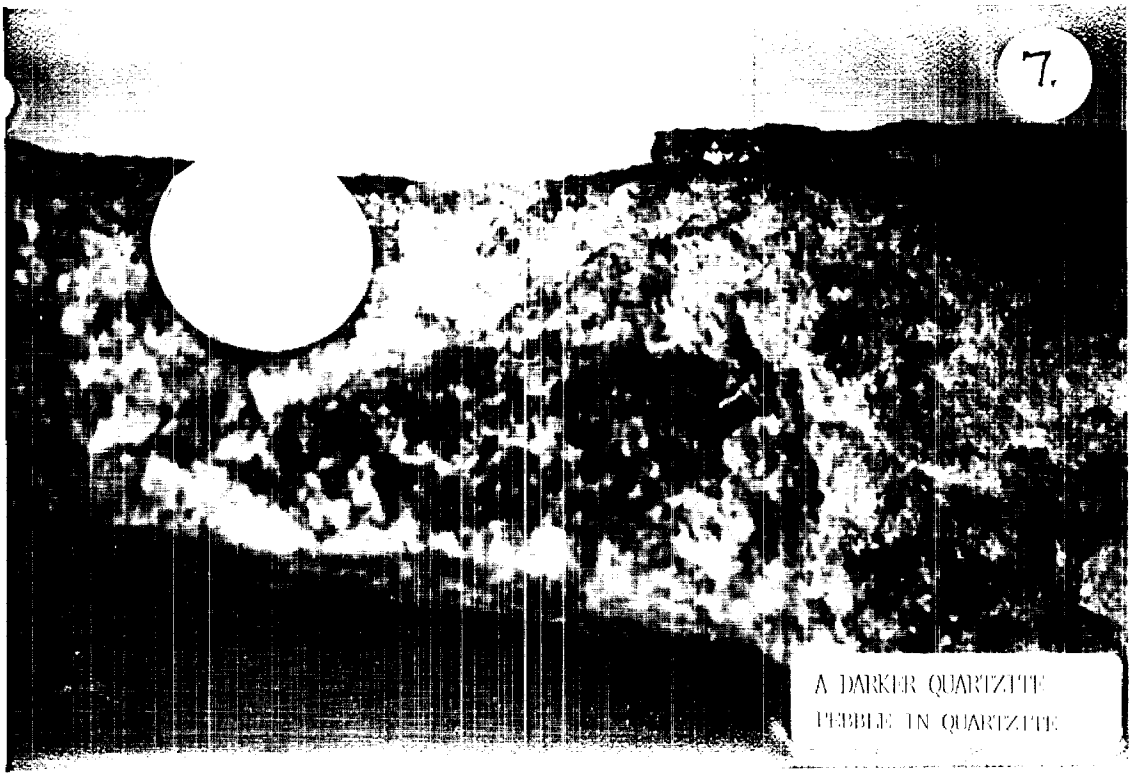
BEDDING IN QUARTZITE
NEAR BASELINE 6 + OON

WHITE QUARTZ STRINGERS
CROSS CUTTING QUARTZITE
BEDS

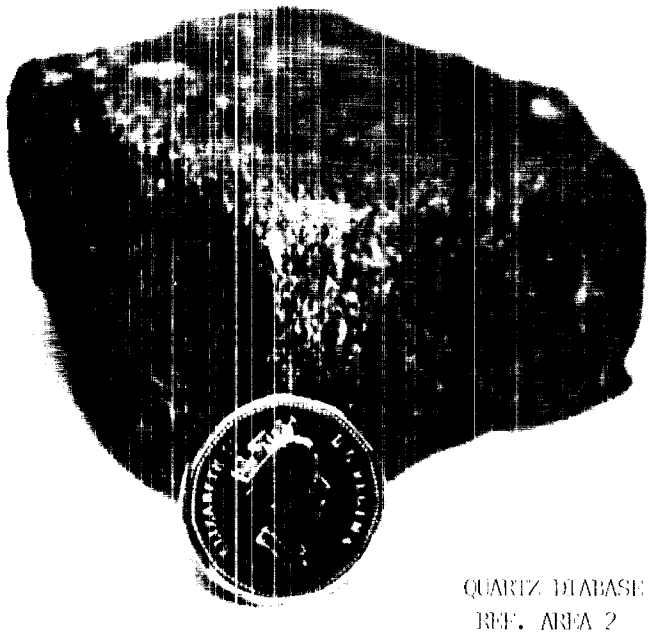


6

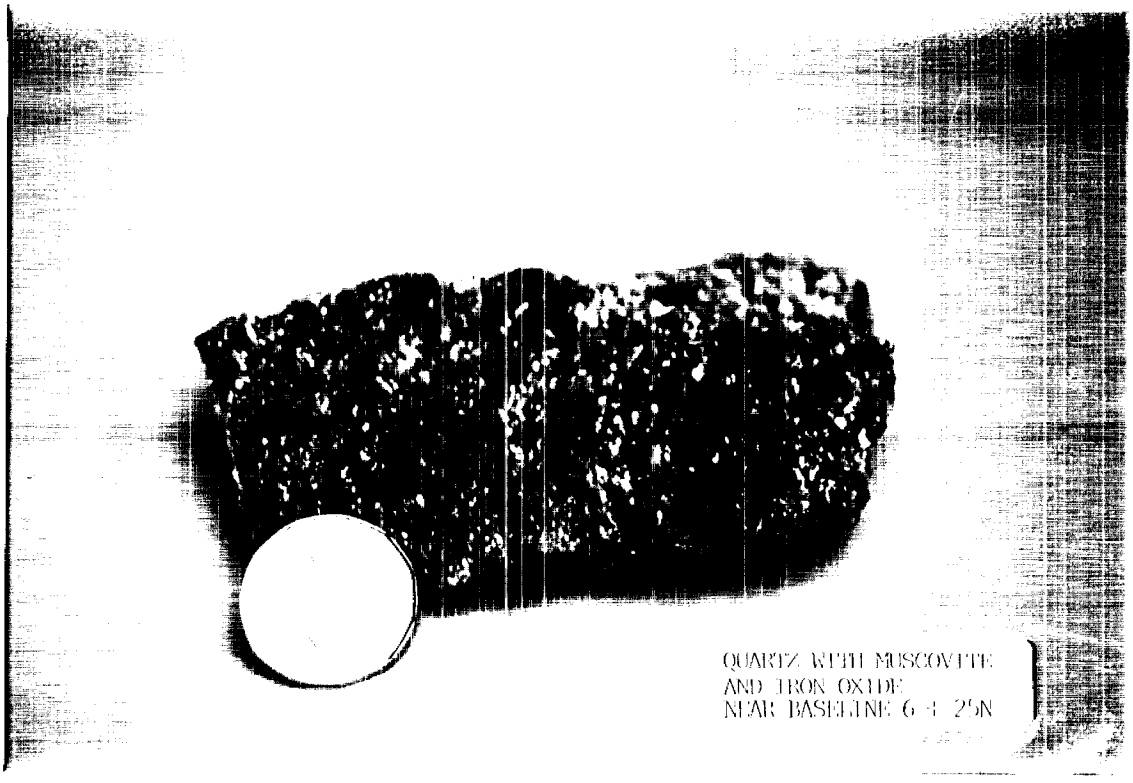
QUARTZITE BOULDERS IN
BEDDED QUARTZITE
REF. AREA 2



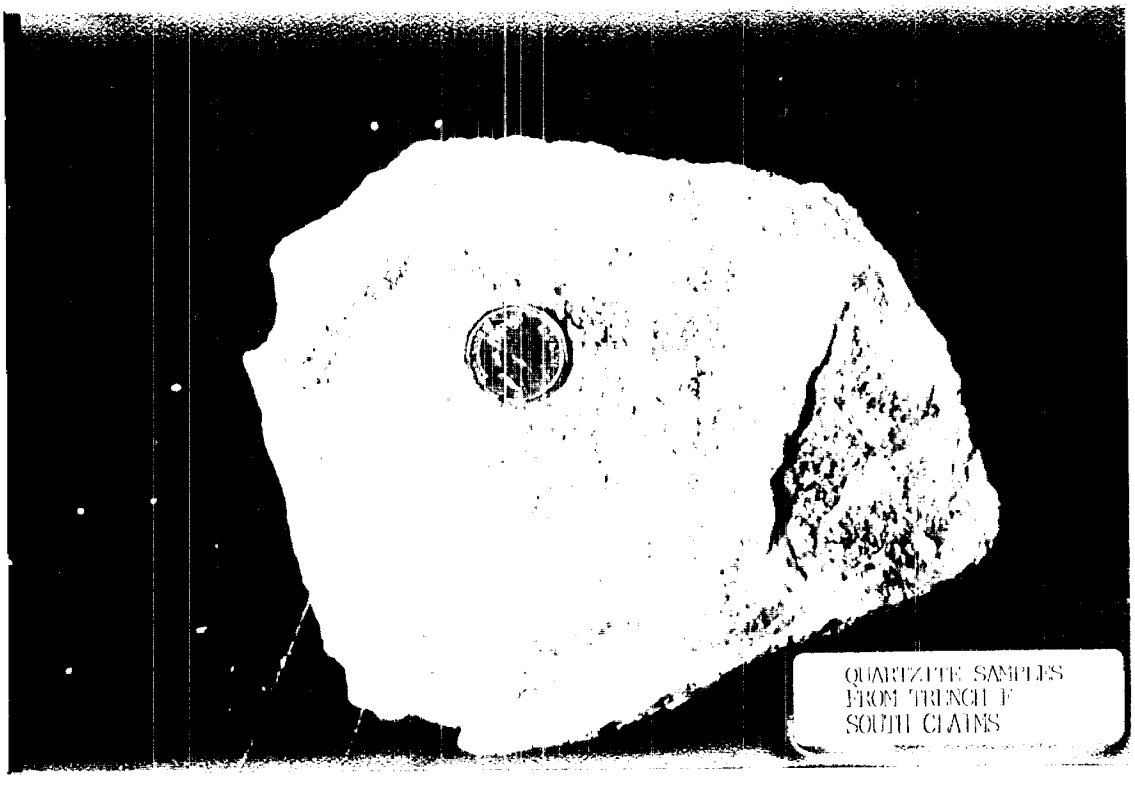
A DARKER QUARTZITE
PEBBLE IN QUARTZITE



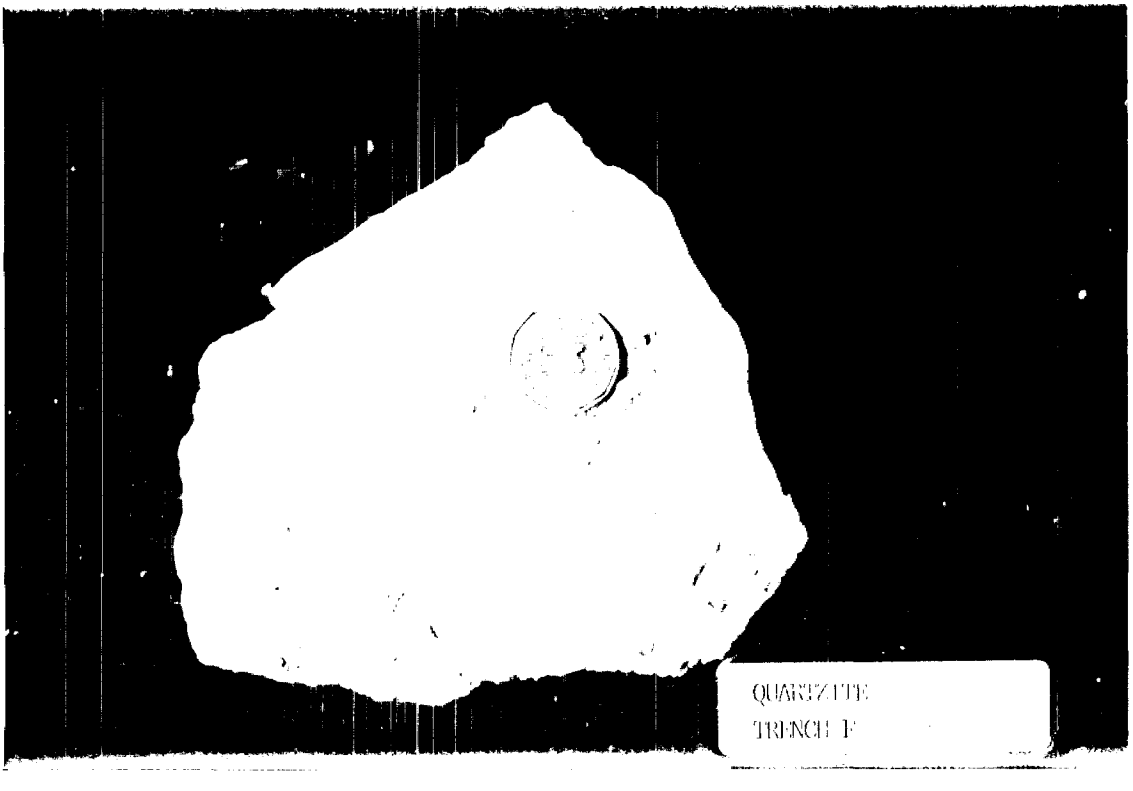
QUARTZ DIABASE
REF. AREA 2



QUARTZ WITH MUSCOVITE
AND IRON OXIDE
NEAR BASELINE 6 + 25N



QUARTZITE SAMPLES
FROM TRENCH F
SOUTH CLAIMS



QUARTZITE
TRENCH F

EXPENDITURES

EQUIPMENT RENTAL & SUPPLIES

RENTAL TRUCK TO HANDLE BULK ROCK SAMPLES AND GEOLOGICAL, GEOCHEMICAL SAMPLES - 10 days — $74.20

SUPPLIES & EQUIPMENT, SLEDGES, AXES, MARKERS, SAMPLE RIBBONS, AXES — 50.00

ASSAY COSTS

ASSAYERS ONTARIO LABS — $4.80

CHEMEX LABS LTD — 2915.00

CHEMEX LABS LTD — 60.00

MICROSCOPIC SLIDES FOR MINE GEOLOGICAL STUDY. Postal & Handling. — 11.85

TOTAL — $3128.05

WILLIAM A HOGG
22 MAXOME AVE
WILLOWDALE ONT
M2M 3J9
Tel (416) 221-1428

Wm Hogg

Chemex Labs

- *Analytical Chemists*
- *Geochemists*
- *Registered Assayers*

North Vancouver, B.C.
Mississauga, Ontario
Rouyn, Quebec
Pasadena, Nfld.

Sparks, Nevada
Elko, Nevada
Butte, Montana
Boise, Idaho
Anchorage, Alaska

HOGG, WILLIAM G.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

**

DAY	MO.	YR.
30	SEP	90

CODE	PAGE
HPN	1

PLEASE REMIT TO:
Chemex Labs Ltd.
212 Brooksbank Avenue
North Vancouver B.C.
Canada, V7J 2C1

Chemex Labs

- *Analytical Chemists*
- *Geochemists*
- *Registered Assayers*

DAY	MO.	YR.
30	SEP	90

CODE	PAGE
HPN	1

STATEMENT OF ACCOUNT

DAY	MO.	YR.	TRANSACTION	INVOICE NUMBER	DEBIT	CREDIT	BALANCE
01	SEP	90	BALANCE FWD				.00
27	SEP	90	INVOICE	190225192	2915.00		2915.00

Please examine this statement carefully. If incorrect communicate directly with our auditors:

MARSH & MARSH
CHARTERED ACCOUNTANTS
747 East Broadway
Vancouver, B.C. V5T 1X8

If there is no communication with our auditors, they will assume you consider this statement correct.

CURRENT	30 DAYS	60 DAYS	OVER 90 DAYS
2915.00	.00	.00	.00

BALANCE DUE $ 2915.00

CDN DOLLAR ACCOUNT

TERMS:
1.5% per month 18.0% per annum

CHECK INVOICES BEING PAID

DAY	MO.	YR.	INVOICE NUMBER	AMOUNT
01	SEP	90	BALANCE	.00
27	SEP	90	190225192	2915.00

BALANCE DUE $ 2915.00

CDN DOLLAR ACCOUNT

PLEASE ENCLOSE THIS PART OF YOUR STATEMENT WITH YOUR REMITTANCE

ASSAYERS ONTARIO LABORATORIES

33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z7
TELEPHONE (416) 239-3527 • FAX (416) 239-4012

DAY | DAY MONTH | YEAR | DATE DUE

1.5% LATE CHARGE OVER 30 DAYS (ANNUAL RATE 18%)

NET 30 DAYS

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT

INVOICE

No. 340

SALESPERSON | DATE OF INVOICE

TO:

SHIP TO

ACCOUNT NO.	DATE SHIPPED	SHIPPED VIA	F.O.B. POINT	TERMS	YOUR ORDER NUMBER

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT

Thank You

TOTAL

R. PALKO
CONTRACTING

DATE Sept 22nd 19 90
NAME W.A. HOGG
ADDRESS 22 MAYOME AVE WILLOWDALE ONT M2M3G4

SOLD BY	C.O.D.	CHARGE	ON ACCT.	ACCT. FWD.

1	NORTH BAY SILICA PROJECT MACHINE WORK		
2			
3	TRUCK RENTAL & ROCK HANDLING SEPT 18-22		
4	5 days @ 37.42	187	10
5			
6	GEOLOGICAL ASSISTANT		
7	CHAINING & ROCK SAMPLING		
8	5 day @ 100/day	500	00
9	TOTAL	687	10
10			
11			
12			
6	SIGNATURE Ron Palko	TAX	

3SCA-2

R. PALKO
CONTRACTING

DATE Sept 3rd 19 90
NAME W. A HOGG
ADDRESS 22 MAYOME AVE WILLOWDALE ONT M2M3G4

SOLD BY	C.O.D.	CHARGE	ON ACCT.	ACCT. FWD.

1	NORTH BAY SILICA PROJECT MACHINE WORK		
2			
3	Truck rental & Rock		
4	handling Aug 29-31 Sept 1-2		
5	5 day @ 37.42	187	10
6			
7	CLEAN OUT BASELINE AND ESTABLISH		
8	CROSS LINES CHAINING AND ROCK		
9	SAMPLING total LOG SAMPLES		
10	5 day @ 100/day	500	00
11	TOTAL	687	10
12			
5	SIGNATURE Ron Palko	TAX	

3SCA-2

CANADIAN IMPERIAL
BANK OF COMMERCE
YONGE AND FINCH
TORONTO, ONTARIO

PAY TO THE ORDER OF

Sept 24 19 90

R Palko | $ 1374 20/100

One Thousand Three Hundred & Seventy four 20/100 DOLLARS

RE Contracting

William C Hoff

⑈01812⑈010⑈ 06⑈45435⑈ ⑈00001374 20⑈

CANADIAN IMPERIAL
BANK OF COMMERCE
YONGE AND FINCH
TORONTO, ONTARIO

PAY TO THE ORDER OF

Oct 1st 19 90

CHEMEX LABS LTD | $ 2915 15

Two Thousand - Nine Hundred & Fifteen 15/100 DOLLARS

RE Assays

William C Hoff

⑈01812⑈010⑈ 06⑈45435⑈ ⑈00002915 00⑈

CANADIAN IMPERIAL
BANK OF COMMERCE
YONGE AND FINCH
TORONTO, ONTARIO

PAY TO THE ORDER OF

March 19 19 90

Assayers Ontario Laboratories | $ 84 XX/100

Eighty-four XX/100 DOLLARS

RE assays
~~Invoice~~ # A-0525

William C Hoff

⑈01812⑈010⑈ 06⑈45435⑈ ⑈00000084 00⑈

2484

SE '90 25
C.I.B.C.
DATA CENTRE
TOR. ONT.

DEPOSIT TO THE CREDIT OF
CHEMEX LABS. LTD.

OT '90 05
ROYAL BANK
BRITISH
COLUMBIA
PC

OT '90 05
C.I.B.C.
DATA CENTRE
VANC B.C.

DEPOSIT ONLY TO THE CREDIT OF
ASSAYERS ONTARIO LABORATORIES
TR. #19282-004 ACC. #0613-0325443

CN:03904 TRN1728 DATE MR/21/90
MR '90 21
TORONTO DOMINION BANK
TORONTO DATA CENTRE
TORONTO, ONTARIO

TORONTO, ONTARIO
0267-146

MR '90 21
I.A. CENTRE
TOR. ONT.

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: HOGG, WILLIAM A. **

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

INVOICE NUMBER I 9 0 2 2 5 9 2

BILLING INFORMATION

Date: 27-SEP-90
Project:
P.O. No.:
Account: IPN

Comments:

Billing: For analysis performed on Certificate I9022592

Terms: Payment due on receipt of invoice 1.5% per month (18% per annum) charged on overdue accounts

Please Remit Payments to:

CHEMEX LABS LTD.
212 Brooksbank Ave.,
North Vancouver, B.C.
Canada V7J-2C1

CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYSED	UNIT PRICE	AMOUNT
378 -	SiO2 % fusion			
G24 -	G-24 24 EL. ICP	106	23.50	2491.00
	Sample preparation and other charges.			
208 -	Assay - RING	106	1.75	185.50
294 -	Crush and split	106	2.25	238.50
			Total Cost $	2915.00
			TOTAL PAYABLE (CDN) $	2915.00

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : I-9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE	SiO2 % fusion	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)
294501	208 294	92.23	< 0.5	0.79	50	< 0.5	< 2	0.26	< 0.5	1	192	8	0.71	0.24	0.09
294502	208 294	90.46	< 0.5	0.57	10	< 0.5	< 2	0.07	< 0.5	1	169	9	0.48	0.15	0.03
294503	208 294	93.57	< 0.5	0.29	< 10	< 0.5	< 2	0.01	< 0.5	< 1	135	1	0.37	0.07	< 0.01
294504	208 294	94.28	< 0.5	0.38	10	< 0.5	< 2	0.01	< 0.5	< 1	108	1	0.46	0.11	< 0.01
294505	208 294	92.82	< 0.5	0.41	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	127	2	0.40	0.07	< 0.01
294506	208 294	94.12	< 0.5	0.34	< 10	< 0.5	< 2	0.02	< 0.5	2	164	5	0.34	0.06	< 0.01
294507	208 294	93.08	< 0.5	0.37	10	< 0.5	< 2	< 0.01	< 0.5	< 1	140	2	0.30	0.08	< 0.01
294508	208 294	92.66	< 0.5	1.73	90	0.5	< 2	0.01	< 0.5	2	318	2	0.55	0.70	0.02
294509	208 294	92.41	< 0.5	0.83	20	< 0.5	< 2	< 0.01	< 0.5	< 1	276	1	0.45	0.24	< 0.01
294510	208 294	92.28	< 0.5	0.89	80	< 0.5	< 2	< 0.01	< 0.5	< 1	193	1	0.59	0.30	< 0.01
294511	208 294	92.41	< 0.5	2.00	140	< 0.5	< 2	< 0.01	< 0.5	3	263	2	0.52	0.84	0.01
294512	208 294	71.91	< 0.5	6.95	1310	2.0	2	0.04	< 0.5	16	239	1	2.36	3.63	0.87
294513	208 294	93.75	< 0.5	1.25	180	< 0.5	< 2	< 0.01	< 0.5	1	272	3	0.57	0.51	0.01
294514	208 294	91.21	< 0.5	1.19	110	< 0.5	< 2	< 0.01	< 0.5	1	258	3	0.57	0.45	0.01
294515	208 294	94.06	< 0.5	0.56	20	< 0.5	< 2	< 0.01	< 0.5	< 1	155	1	0.32	0.20	< 0.01
294516	208 294	93.58	< 0.5	0.53	40	< 0.5	< 2	< 0.01	< 0.5	1	187	1	0.37	0.18	< 0.01
294517	208 294	94.91	< 0.5	0.34	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	178	1	0.30	0.10	< 0.01
294518	208 294	89.68	< 0.5	0.75	80	0.5	< 2	< 0.01	< 0.5	< 1	345	2	0.64	0.21	< 0.01
294519	208 294	92.43	< 0.5	0.43	20	< 0.5	< 2	< 0.01	< 0.5	< 1	281	1	0.77	0.12	< 0.01
294520	208 294	88.97	< 0.5	0.46	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	306	4	0.40	0.09	< 0.01
294521	208 294	93.98	< 0.5	0.49	10	< 0.5	< 2	< 0.01	< 0.5	< 1	194	4	0.37	0.13	< 0.01
294522	208 294	94.58	< 0.5	0.79	40	< 0.5	< 2	< 0.01	< 0.5	1	229	2	0.39	0.26	< 0.01
294523	208 294	94.15	< 0.5	1.50	120	0.5	< 2	< 0.01	< 0.5	1	222	1	0.42	0.63	0.01
294524	208 294	96.33	< 0.5	0.93	110	< 0.5	< 2	< 0.01	< 0.5	< 1	252	1	0.47	0.41	< 0.01
294525	208 294	91.66	< 0.5	0.66	60	< 0.5	< 2	< 0.01	< 0.5	1	270	2	0.61	0.23	< 0.01
294526	208 294	96.54	< 0.5	0.18	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	264	1	0.36	0.04	< 0.01
294527	208 294	91.76	< 0.5	0.49	50	< 0.5	< 2	< 0.01	< 0.5	< 1	282	3	0.53	0.14	< 0.01
294528	208 294	96.52	< 0.5	0.1	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	261	1	0.34	< 0.01	< 0.01
294529	208 294	93.89	< 0.5	0.4	60	< 0.5	< 2	< 0.01	< 0.5	< 1	221	1	0.50	0.12	< 0.01
294530	208 294	94.49	< 0.5	0.55	50	0.5	< 2	< 0.01	< 0.5	1	417	1	0.64	0.16	< 0.01
294531	208 294	92.45	< 0.5	0.27	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	264	3	0.47	0.02	< 0.01
294532	208 294	93.95	< 0.5	0.58	10	< 0.5	< 2	< 0.01	< 0.5	< 1	177	1	0.40	0.17	< 0.01
294533	208 294	97.05	< 0.5	0.83	40	< 0.5	< 2	< 0.01	< 0.5	< 1	302	2	0.42	0.34	< 0.01
294534	208 294	90.80	< 0.5	2.38	140	0.5	< 2	< 0.01	< 0.5	2	299	1	0.65	0.97	0.02
294535	208 294	92.97	< 0.5	0.86	60	< 0.5	< 2	< 0.01	< 0.5	1	230	1	0.42	0.32	< 0.01
294536	208 294	91.34	< 0.5	1.03	50	< 0.5	< 2	< 0.01	< 0.5	2	278	1	0.67	0.38	0.01
294537	208 294	93.94	< 0.5	0.36	40	< 0.5	< 2	< 0.01	< 0.5	< 1	269	2	0.38	0.09	< 0.01
294538	208 294	95.04	< 0.5	0.17	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	226	< 1	0.31	0.02	< 0.01
294539	208 294	90.93	< 0.5	0.37	20	< 0.5	< 2	< 0.01	< 0.5	< 1	222	1	0.42	0.08	< 0.01
294540	208 294	92.21	< 0.5	0.35	10	< 0.5	< 2	< 0.01	< 0.5	1	217	2	0.51	0.07	< 0.01

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberloa Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A. **

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Page Number : 1-B
Total Pages : 3
Invoice Date: 27-SEP-90
Invoice No. : I-9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
294501	208	294	95	< 1	0.05	6	40	2	26	0.03	14	< 10	14			
294502	208	294	55	< 1	0.02	5	30	8	16	0.01	5	< 10	10			
294503	208	294	20	< 1	0.01	3	30	8	20	0.01	2	< 10	6			
294504	208	294	25	< 1	0.01	3	20	4	13	0.01	2	< 10	2			
294505	208	294	20	< 1	0.01	2	30	4	24	0.01	2	< 10	4			
294506	208	294	25	< 1	0.01	4	70	4	17	< 0.01	2	< 10	2			
294507	208	294	75	< 1	0.01	3	20	4	17	< 0.01	2	< 10	2			
294508	208	294	30	< 1	0.08	7	40	4	52	0.04	6	< 10	12			
294509	208	294	25	< 1	0.02	4	20	< 2	16	0.02	2	< 10	6			
294510	208	294	40	< 1	0.03	4	20	2	21	0.02	2	< 10	4			
294511	208	294	25	< 1	0.09	6	30	2	34	0.03	4	< 10	6			
294512	208	294	1775	< 1	0.28	24	180	2	33	0.28	57	< 10	122			
294513	208	294	170	1	0.05	5	50	< 2	25	0.03	8	< 10	2			
294514	208	294	20	< 1	0.05	4	50	< 2	26	0.03	6	< 10	4			
294515	208	294	15	< 1	0.02	4	20	< 2	18	0.01	3	< 10	2			
294516	208	294	20	< 1	0.02	3	30	< 2	16	0.01	4	< 10	2			
294517	208	294	15	< 1	0.01	3	30	< 2	29	0.01	2	< 10	10			
294518	208	294	25	< 1	0.03	4	50	< 2	33	0.02	4	< 10	6			
294519	208	294	50	< 1	0.01	6	40	< 2	25	0.02	3	< 10	4			
294520	208	294	30	< 1	0.01	4	30	< 2	18	0.01	2	< 10	6			
294521	208	294	30	< 1	0.02	4	30	< 2	21	0.01	2	< 10	6			
294522	208	294	30	< 1	0.03	3	50	2	22	0.01	2	< 10	6			
294523	208	294	20	< 1	0.07	5	20	4	29	0.02	3	< 10	4			
294524	208	294	15	< 1	0.04	3	30	< 2	11	0.02	6	< 10	4			
294525	208	294	20	< 1	0.02	4	40	< 2	16	0.02	6	< 10	6			
294526	208	294	15	< 1	0.01	4	30	< 2	23	< 0.01	2	< 10	6			
294527	208	294	30	< 1	0.01	4	70	< 2	36	0.01	3	< 10	6			
294528	208	294	20	< 1	< 0.01	3	10	4	11	< 0.01	1	< 10	14			
294529	208	294	20	< 1	0.01	4	50	2	26	0.01	2	< 10	6			
294530	208	294	30	< 1	0.02	5	30	2	18	0.01	4	< 10	10			
294531	208	294	35	< 1	0.01	5	40	4	24	0.01	2	< 10	6			
294532	208	294	30	< 1	0.02	3	30	< 2	30	0.01	2	< 10	6			
294533	208	294	25	1	0.04	5	20	< 2	25	0.01	4	< 10	8			
294534	208	294	20	< 1	0.12	6	30	< 2	41	0.05	4	< 10	4			
294535	208	294	20	< 1	0.04	3	40	< 2	29	0.02	2	< 10	4			
294536	208	294	30	< 1	0.05	4	40	< 2	27	0.03	4	< 10	4			
294537	208	294	25	< 1	0.01	3	30	< 2	19	0.01	1	< 10	6			
294538	208	294	20	< 1	< 0.01	3	20	< 2	15	< 0.01	1	< 10	4			
294539	208	294	20	< 1	0.01	5	40	< 2	19	0.01	2	< 10	4			
294540	208	294	25	< 1	0.01	4	40	< 2	19	0.01	3	< 10	4			

CERTIFICATION: _____

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To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : I-9022592
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CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		SiO2 % fusion	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)
294541	208	294	94.89	< 0.5	0.35	40	< 0.5	< 2	< 0.01	< 0.5	< 1	156	2	0.33	0.10	< 0.01
294542	208	294	92.74	< 0.5	0.73	40	< 0.5	< 2	< 0.01	< 0.5	< 1	246	2	0.39	0.26	< 0.01
294543	208	294	94.71	< 0.5	0.60	70	< 0.5	< 2	< 0.01	< 0.5	1	182	2	0.42	0.24	< 0.01
294544	208	294	95.39	< 0.5	0.36	170	< 0.5	< 2	< 0.01	< 0.5	< 1	214	1	0.39	0.12	< 0.01
294545	208	294	95.25	< 0.5	1.37	50	< 0.5	< 2	< 0.01	< 0.5	1	197	< 1	0.38	0.62	< 0.01
294546	208	294	90.88	< 0.5	2.60	210	< 0.5	< 2	0.01	< 0.5	4	252	< 1	0.87	1.27	0.01
294547	208	294	92.15	< 0.5	2.14	300	< 0.5	< 2	< 0.01	< 0.5	< 1	209	1	0.58	0.93	0.01
294548	208	294	93.77	< 0.5	0.57	40	< 0.5	< 2	< 0.01	< 0.5	< 1	191	1	0.82	0.20	< 0.01
294549	208	294	94.57	< 0.5	0.50	50	< 0.5	< 2	< 0.01	< 0.5	< 1	163	2	0.44	0.16	< 0.01
294550	208	294	93.10	< 0.5	0.31	10	< 0.5	< 2	< 0.01	< 0.5	< 1	179	< 1	0.38	0.09	< 0.01
294601	208	294	93.84	< 0.5	0.47	10	< 0.5	< 2	< 0.01	< 0.5	< 1	156	2	0.39	0.12	< 0.01
294602	208	294	92.56	< 0.5	0.51	40	< 0.5	< 2	< 0.01	< 0.5	1	150	1	0.52	0.15	< 0.01
294603	208	294	93.22	< 0.5	0.48	10	< 0.5	< 2	< 0.01	< 0.5	< 1	162	1	0.62	0.17	< 0.01
294604	208	294	93.82	< 0.5	0.42	20	< 0.5	< 2	< 0.01	< 0.5	< 1	260	1	0.60	0.12	< 0.01
294605	208	294	95.43	< 0.5	1.42	40	< 0.5	< 2	< 0.01	< 0.5	< 1	227	1	0.45	0.63	< 0.01
294606	208	294	98.58	< 0.5	0.20	50	< 0.5	< 2	< 0.01	< 0.5	< 1	293	< 1	0.29	0.08	< 0.01
294651	208	294	92.40	< 0.5	0.49	10	< 0.5	< 2	< 0.01	< 0.5	< 1	286	1	0.67	0.17	< 0.01
294652	208	294	96.14	< 0.5	0.36	10	< 0.5	< 2	< 0.01	< 0.5	< 1	200	1	0.30	0.11	< 0.01
294653	208	294	94.13	< 0.5	0.33	20	< 0.5	< 2	< 0.01	< 0.5	< 1	200	1	0.36	0.08	< 0.01
294654	208	294	92.15	< 0.5	0.59	30	< 0.5	< 2	< 0.01	< 0.5	1	107	2	0.38	0.19	< 0.01
294655	208	294	95.79	< 0.5	0.57	30	< 0.5	< 2	0.01	< 0.5	1	199	1	0.44	0.13	< 0.01
294656	208	294	93.62	< 0.5	1.77	100	0.5	< 2	< 0.01	< 0.5	2	174	4	0.59	0.78	0.01
294657	208	294	86.69	< 0.5	4.05	260	1.0	< 2	0.03	< 0.5	5	274	< 1	1.38	1.74	0.04
294658	208	294	89.21	< 0.5	3.26	160	1.0	< 2	< 0.01	< 0.5	3	237	< 1	0.66	1.40	0.02
294659	208	294	96.47	< 0.5	0.48	10	< 0.5	< 2	< 0.01	< 0.5	1	206	1	0.36	0.17	< 0.01
294660	208	294	91.86	< 0.5	0.84	50	< 0.5	2	< 0.01	< 0.5	< 1	161	< 1	0.51	0.28	< 0.01
294661	208	294	88.73	< 0.5	0.98	70	0.5	< 2	< 0.01	< 0.5	1	183	1	0.72	0.35	0.01
294662	208	294	94.80	< 0.5	0.16	< 10	< 0.5	< 2	< 0.01	< 0.5	1	184	1	0.36	< 0.01	< 0.01
294663	208	294	94.17	< 0.5	0.29	< 10	< 0.5	< 2	< 0.01	< 0.5	1	167	2	0.50	0.06	< 0.01
294664	208	294	96.00	< 0.5	0.32	10	< 0.5	< 2	< 0.01	< 0.5	2	183	2	0.36	0.08	< 0.01
294665	208	294	95.93	< 0.5	0.44	30	< 0.5	< 2	< 0.01	< 0.5	1	213	3	0.38	0.14	< 0.01
294666	208	294	96.20	< 0.5	0.28	10	< 0.5	< 2	< 0.01	< 0.5	1	190	2	0.34	0.08	< 0.01
294667	208	294	94.99	< 0.5	0.67	70	< 0.5	< 2	< 0.01	< 0.5	1	272	2	0.50	0.25	< 0.01
294668	208	294	97.81	< 0.5	0.38	20	< 0.5	< 2	0.01	< 0.5	2	337	4	0.40	0.12	< 0.01
294669	208	294	98.20	< 0.5	0.25	20	< 0.5	< 2	0.01	< 0.5	1	165	3	0.22	0.10	< 0.01
294670	208	294	92.00	< 0.5	0.69	40	< 0.5	< 2	0.01	< 0.5	2	342	4	0.60	0.18	< 0.01
294671	208	294	92.35	< 0.5	0.58	40	< 0.5	< 2	0.01	< 0.5	3	376	4	0.73	0.14	< 0.01
294672	208	294	78.11	< 0.5	1.13	50	< 0.5	< 2	0.01	< 0.5	9	499	1	3.12	0.24	0.01
294673	208	294	93.67	< 0.5	0.43	30	< 0.5	< 2	< 0.01	< 0.5	1	165	3	0.40	0.12	< 0.01
294674	208	294	98.39	< 0.5	0.06	< 10	< 0.5	< 2	0.02	< 0.5	1	344	5	0.41	< 0.01	< 0.01

CERTIFICATION:

Chemex Labs Ltd.

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PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : I-9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
294541	208	294	20	< 1	0	4	40	< 2	22	0.01	2	< 10	6			
294542	208	294	30	< 1	0.[illegible]	4	50	< 2	14	0.01	3	< 10	4			
294543	208	294	15	< 1	0.02	4	30	< 2	8	0.02	6	< 10	2			
294544	208	294	10	< 1	0.01	3	20	< 2	9	0.01	4	< 10	4			
294545	208	294	10	< 1	0.06	3	20	< 2	14	0.02	8	< 10	2			
294546	208	294	20	< 1	0.11	6	50	< 2	22	0.09	12	< 10	4			
294547	208	294	15	< 1	0.10	4	80	< 2	25	0.05	25	< 10	4			
294548	208	294	15	< 1	0.02	3	50	< 2	29	0.02	6	< 10	2			
294549	208	294	15	< 1	0.01	4	20	< 2	9	0.02	5	< 10	4			
294550	208	294	15	< 1	0.01	1	20	< 2	9	0.01	1	< 10	4			
294601	208	294	15	< 1	0.02	3	30	< 2	21	0.01	3	< 10	6			
294602	208	294	20	< 1	0.01	3	40	< 2	16	0.01	10	< 10	8			
294603	208	294	60	< 1	0.01	5	30	< 2	22	0.02	6	< 10	4			
294604	208	294	15	< 1	0.01	4	50	< 2	33	0.02	4	< 10	6			
294605	208	294	20	< 1	0.06	4	20	< 2	25	0.03	5	< 10	4			
294606	208	294	20	< 1	0.01	4	10	2	2	< 0.01	2	< 10	4			
294651	208	294	25	< 1	0.01	5	20	< 2	14	0.02	3	< 10	6			
294652	208	294	20	< 1	0.01	3	10	< 2	9	< 0.01	2	< 10	< 2			
294653	208	294	25	< 1	0.01	4	20	4	15	0.01	2	< 10	6			
294654	208	294	35	< 1	0.02	4	40	< 2	23	0.01	2	< 10	2			
294655	208	294	25	< 1	0.02	5	40	2	25	0.01	2	< 10	6			
294656	208	294	20	< 1	0.08	3	50	2	38	0.04	4	< 10	4			
294657	208	294	30	< 1	0.22	9	90	4	73	0.14	17	< 10	8			
294658	208	294	15	1	0.17	6	40	2	48	0.05	10	< 10	2			
294659	208	294	30	< 1	0.02	4	50	< 2	25	0.01	2	< 10	2			
294660	208	294	25	< 1	0.03	3	40	< 2	29	0.03	2	< 10	2			
294661	208	294	105	< 1	0.03	7	60	4	50	0.03	4	< 10	4			
294662	208	294	25	< 1	< 0.01	4	30	2	10	< 0.01	< 1	< 10	6			
294663	208	294	25	< 1	0.01	4	30	2	12	0.01	2	< 10	2			
294664	208	294	20	< 1	0.01	3	40	< 2	7	0.01	2	< 10	4			
294665	208	294	20	< 1	0.01	5	30	< 2	6	0.01	5	< 10	4			
294666	208	294	15	< 1	0.01	3	30	< 2	6	0.01	3	< 10	6			
294667	208	294	20	< 1	0.02	5	40	< 2	17	0.02	6	< 10	8			
294668	208	294	20	< 1	0.01	3	60	< 2	35	< 0.01	4	< 10	6			
294669	208	294	40	< 1	0.01	3	30	< 2	10	< 0.01	2	< 10	8			
294670	208	294	30	< 1	0.02	7	60	< 2	28	0.02	4	< 10	6			
294671	208	294	40	< 1	0.02	10	50	< 2	20	0.02	4	< 10	4			
294672	208	294	150	< 1	0.03	17	100	< 2	31	0.22	10	< 10	14			
294673	208	294	30	< 1	0.02	3	40	< 2	11	0.01	1	< 10	2			
294674	208	294	60	< 1	< 0.01	8	90	< 2	14	< 0.01	2	< 10	10			

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberloa Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A. **

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : I-9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		SiO2 % fusion	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)
294675	208	294	91.17	< 0.5	2.31	130	1.0	< 2	0.01	< 0.5	4	392	3	0.82	0.82	0.02
294676	208	294	96.66	< 0.5	0.76	80	< 0.5	< 2	0.01	< 0.5	2	428	3	0.45	0.31	0.01
294677	208	294	91.65	< 0.5	0.86	40	< 0.5	< 2	< 0.01	< 0.5	2	133	1	0.61	0.32	< 0.01
294678	208	294	91.42	< 0.5	1.09	50	< 0.5	< 2	< 0.01	< 0.5	3	384	2	1.05	0.35	< 0.01
294679	208	294	95.29	< 0.5	0.39	10	< 0.5	< 2	< 0.01	< 0.5	1	158	2	0.30	0.11	< 0.01
294680	208	294	96.35	< 0.5	0.54	< 10	< 0.5	< 2	< 0.01	< 0.5	1	307	3	0.39	0.03	< 0.01
294681	208	294	92.97	< 0.5	0.43	30	< 0.5	< 2	< 0.01	< 0.5	1	150	3	0.68	0.09	< 0.01
294682	208	294	94.69	< 0.5	0.42	20	< 0.5	< 2	0.01	< 0.5	3	190	3	0.41	0.10	< 0.01
294683	208	294	92.38	< 0.5	0.45	60	< 0.5	< 2	< 0.01	< 0.5	1	130	4	0.28	0.14	< 0.01
294684	208	294	93.57	< 0.5	0.93	100	< 0.5	< 2	0.01	< 0.5	2	400	4	0.52	0.32	0.01
294685	208	294	97.57	< 0.5	0.57	20	< 0.5	< 2	0.02	< 0.5	1	158	11	0.21	0.07	0.02
294686	208	294	94.99	< 0.5	0.77	40	< 0.5	< 2	0.02	< 0.5	2	426	8	0.49	0.20	0.01
294687	208	294	94.90	< 0.5	0.69	10	< 0.5	< 2	< 0.01	< 0.5	< 1	137	2	0.35	0.27	< 0.01
294688	208	294	95.62	< 0.5	0.34	< 10	< 0.5	< 2	< 0.01	< 0.5	2	310	3	0.53	0.09	< 0.01
294689	208	294	93.90	< 0.5	0.47	10	< 0.5	< 2	< 0.01	< 0.5	2	113	3	0.33	0.16	< 0.01
294690	208	294	95.43	< 0.5	0.31	30	< 0.5	< 2	< 0.01	< 0.5	1	278	4	0.44	0.06	< 0.01
294691	208	294	93.78	< 0.5	0.44	50	< 0.5	< 2	< 0.01	< 0.5	1	117	5	0.27	0.13	< 0.01
294692	208	294	90.32	< 0.5	0.51	20	< 0.5	< 2	0.01	< 0.5	3	338	4	0.94	0.07	< 0.01
294693	208	294	91.03	< 0.5	1.24	30	0.5	< 2	0.01	< 0.5	3	584	7	0.85	0.26	0.01
294694	208	294	95.59	< 0.5	0.32	10	< 0.5	< 2	< 0.01	< 0.5	1	225	3	0.51	0.06	< 0.01
294695	208	294	95.00	< 0.5	1.01	130	< 0.5	< 2	< 0.01	< 0.5	1	140	2	0.29	0.40	0.01
294696	208	294	79.52	< 0.5	1.84	170	0.5	< 2	0.01	< 0.5	5	234	2	1.39	0.61	0.01
294697	208	294	90.33	< 0.5	1.35	110	0.5	< 2	0.01	0.5	3	268	3	0.78	0.50	0.01
294698	208	294	92.34	< 0.5	[illegible]	40	< 0.5	< 2	0.01	< 0.5	3	382	4	0.71	0.12	< 0.01
294699	208	294	94.30	< 0.5	[illegible]	20	< 0.5	< 2	< 0.01	< 0.5	2	250	4	0.55	0.08	< 0.01
294700	208	294	94.17	< 0.5	0.92	60	0.5	< 2	< 0.01	< 0.5	2	233	5	0.50	0.29	< 0.01

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: HOGG, WILLIAM A.

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

Project :
Comments:

Invoice Date: 27-SEP-90
Invoice No. : I-9022592
P.O. Number :

CERTIFICATE OF ANALYSIS A9022592

SAMPLE DESCRIPTION	PREP CODE		Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm (ICP)	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
294675	208	294	40	< 1	0.11	9	80	2	57	0.06	8	< 10	6			
294676	208	294	25	< 1	0.03	8	30	< 2	21	0.01	8	< 10	10			
294677	208	294	20	< 1	0.03	5	60	< 2	25	0.04	5	< 10	6			
294678	208	294	30	< 1	0.04	7	60	< 2	28	0.07	8	< 10	6			
294679	208	294	25	< 1	0.01	4	30	4	17	0.01	3	< 10	2			
294680	208	294	20	< 1	0.01	5	40	< 2	36	< 0.01	2	< 10	4			
294681	208	294	30	< 1	0.01	4	30	< 2	12	0.01	2	< 10	10			
294682	208	294	20	< 1	0.01	3	40	< 2	12	0.01	3	< 10	2			
294683	208	294	25	< 1	0.02	2	50	< 2	24	0.01	2	< 10	2			
294684	208	294	30	< 1	0.04	7	50	< 2	14	0.02	5	< 10	4			
294685	208	294	10	< 1	0.02	4	30	< 2	16	< 0.01	1	< 10	4			
294686	208	294	30	< 1	0.03	7	80	< 2	33	0.01	4	< 10	12			
294687	208	294	15	< 1	0.02	3	40	< 2	18	0.01	5	< 10	< 2			
294688	208	294	20	< 1	0.01	4	60	< 2	26	0.01	4	< 10	4			
294689	208	294	15	< 1	0.02	4	60	< 2	25	0.01	4	< 10	< 2			
294690	208	294	20	< 1	0.01	5	60	< 2	34	< 0.01	3	< 10	4			
294691	208	294	10	< 1	0.01	3	50	< 2	17	0.01	4	< 10	2			
294692	208	294	40	< 1	0.01	7	80	< 2	37	0.02	3	< 10	6			
294693	208	294	65	1	0.05	10	70	< 2	41	0.03	5	< 10	10			
294694	208	294	40	< 1	0.01	6	30	< 2	9	0.01	3	< 10	4			
294695	208	294	15	< 1	0.05	3	40	< 2	30	0.02	3	< 10	4			
294696	208	294	35	< 1	0.07	12	90	< 2	63	0.07	7	< 10	6			
294697	208	294	20	< 1	0.05	8	80	< 2	34	0.04	6	< 10	6			
294698	208	294	45	< 1	0.02	9	50	< 2	19	0.02	4	< 10	10			
294699	208	294	30	< 1	0.01	6	30	< 2	16	0.01	5	< 10	6			
294700	208	294	25	< 1	0.04	6	50	< 2	17	0.02	13	< 10	8			

CERTIFICATION: _____

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

W.00

31L11NW0006 2.13635 MCAUSLAN

900

W9007-00294

Type of Survey(s)

GEOLOGICAL & GEOCHEMICAL

Township or Area

MCAUSLAN TWP (G-1630)

Claim Holder(s)

WILLIAM A. HOGG

Prospector's Licence No.

A50344

Address

22 MAXOME AVE

WILLOWDALE ONT M2M 3J9

Survey Company

..

Date of Survey (from & to)

Day	Mo.	Yr.	Day	Mo.	Yr.
03	08	90	10	10	90

Total Miles of line Cut

—

Name and Address of Author (of Geo-Technical report)

WILLIAM A. HOGG 22 MAXOME AVE WILLOWDALE, ONT M2M 3J9

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	29
	Geochemical	29

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

ASSESSMENT OFFICE

JAN 14 1991

RECEIVED

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
S	1017435	
	1017436	
	1017437	
	1017438	
	1017439	
	1017440	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

SUDBURY MINING DIV.

RECEIVED

OCT 29 1990

A.M. P.M.

Total number of mining claims covered by this report of work: 6

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions

Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
348	Oct. 29/90	V. C. Miller
	Date Approved as Recorded	Branch Director
	Jan 8/91	

Date	Recorded Holder or Agent (Signature)
Oct. 29/90	

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

WILLIAM A. HOGG
22 MAXOME AVE
WILLOWDALE ONT M2M 3J9

416-221-7428.

Date Certified	Certified by (Signature)
Oct 29 1990	

Ministry of Northern Development and Mines

Ontario

W. 9007. 00295

Mining Act

Report of Work
(Expenditures, Subsection 77(19))

2.13635

Instructions
- Please type or print.
- Refer to Subsection 77(19), the Mining Act for assessment work requirements and maximum credits allowed under this Subsection.
- Technical Reports, maps and proof of expenditures in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Type of Work Performed	Mining Division	Township or Area
GEOLOGICAL & ROCK GEOCHEMISTRY	SUDBURY	MC AUSLAN (G-1630)

Recorded Holder	Prospector's Licence No.
WILLIAM A HOGG	A 50344
Address 22 MAXOME AVE WILLOWDALE ONT M2M3J9	**Telephone No.** 416-221-7428
Work Performed By WILLIAM A. HOGG	
Name and Address of Author (of Submission) 22 MAXOME AVE WILLOWDALE ONT M2M 3J9	**Date When Work was Performed** From: 03 Day AUG Mo. 90 Yr. To: 10 Day OCT Mo. 90 Yr.

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. *See Note No. 1 on reverse side

Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days
S1017435	10	S1017436	10	S1017437	8	S1017438	8	S1017439	2	S1017440	2

Instructions
Total days credits may be distributed at claim holder's choice. Enter number of days credits per claim in the expenditure days credit column (below).

Calculation of Expenditure Days Credits: Total Expenditures $ 3528.05 ÷ 15 = Total Days Credits 235

Total Number of Mining Claims Covered by this Report of Work: 6

Mining Claims (List in numerical sequence). If space is insufficient, attach schedules with required information

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
S	1017435	39									
S	1017436	39									
S	1017437	39									
S	1017438	39									
S	1017439	39									
S	1017440	39									

Total Number of Days Performed	Total Number of Days Claimed	Total Number of Days to be Claimed at a Future Date
235	235	

Certification of Beneficial Interest *See Note No. 2 on reverse side

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.

Date: Oct 29th 1990

Recorded Holder or Agent (Signature): William A. Hogg

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Address of Person Certifying: WILLIAM A. HOGG 22 MAXOME AVE, WILLOWDALE, ONT. M2M 3J9

Telephone No. 416-221-7428

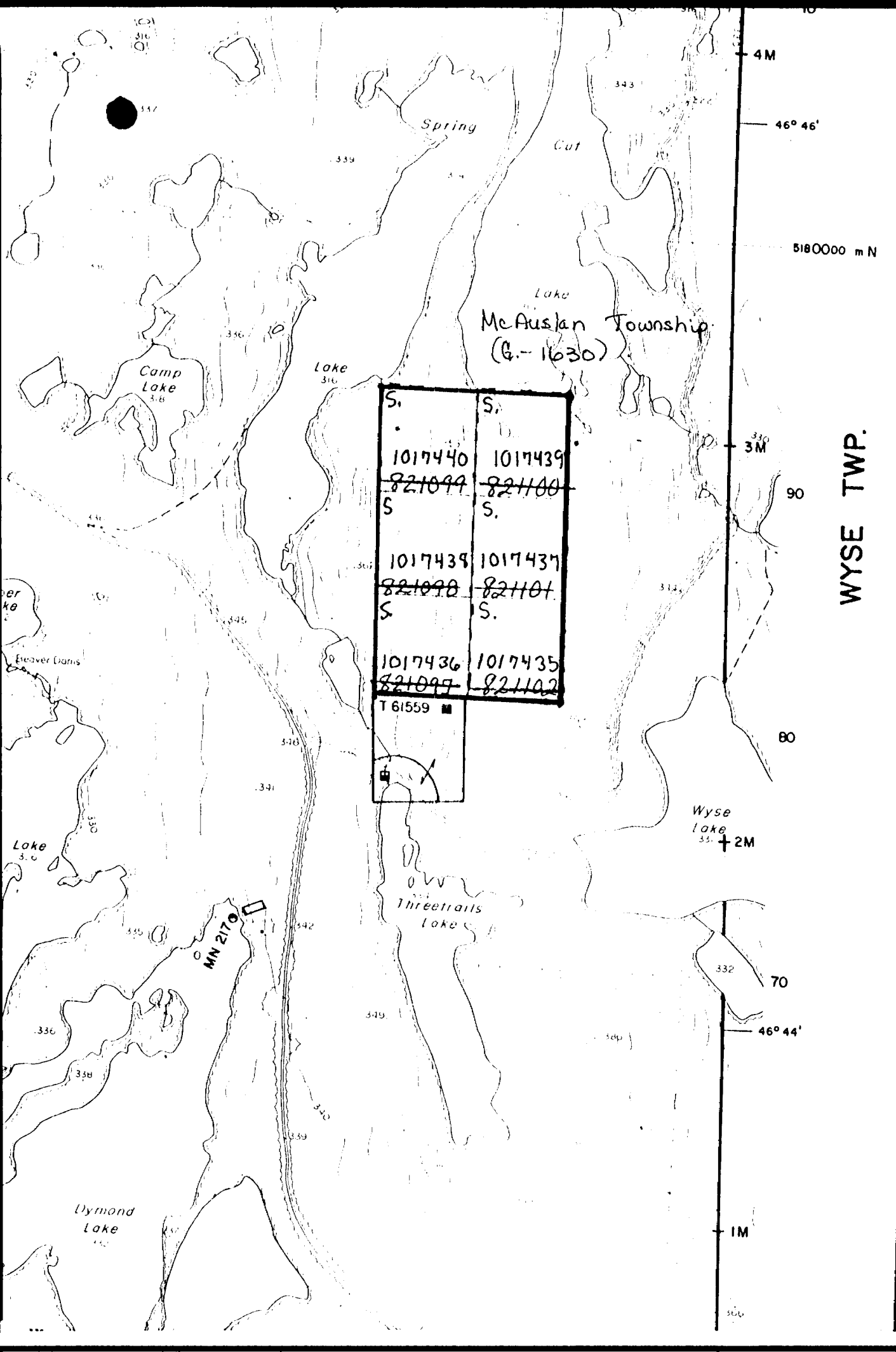
Date: Oct 29th 1990

Certified By (Signature): William A. Hogg

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
234	Oct. 29/90.	V.C. Wilkes
	Date Approved as Recorded	**Provincial Manager, Mining Lands**
	Jan 8/91	Ron C Gashinski

Received Stamp: MINING LANDS SECTION RECEIVED OCT 29 1990 12:00 noon



NOTE: MIN
191
LA

500
Metres

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Chains

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Feet

0.2/83

THE INFOR
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ON THE STA
LANDS SHOW

TOWNSHIP

MCA

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: HOGG, WILLIAM A. **

22 MAXOME AVE.
WILLOWDALE, ON
M2M 3J9

INVOICE NUMBER I9024981

BILLING INFORMATION

Date: 21-OCT-90
Project:
P.O. No.:
Account: IPN

Comments:

Billing: For analysis performed on Certificate I9024981

Terms: Payment due on receipt of invoice 1.5% per month (18% per annum) charged on overdue accounts

Please Remit Payments to:

CHEMEX LABS LTD.
212 Brooksbank Ave.,
North Vancouver, B.C.
Canada V7J-2C1

CHEMEX CODE	ANALYSIS DESCRIPTION	SAMPLES ANALYSED	UNIT PRICE	AMOUNT
G1	- A-12 W.R.A. ICP	3	20.00	60.00
	Sample preparation and other charges.			
214	- Received as pulp	3	0.00	0.00
			Total Cost $	60.00
			TOTAL PAYABLE (CDN) $	**60.00**

PAID PK

MAP SYMBOLOGY

Aerial Cableway
Boundary
Bridge
Building
Culvert
Falls
Fence, Hedge, Wall
Feature Outline (Construction features, etc.)
Flooded Land
Lock
Marsh or Swamp
Mast
Mine Head Frame
Outcrop
Pipeline (above ground)
Railroad
Road
Rapids
River, Stream, Canal
Rock
Shoal
Spot Elevation
Tower
Transmission Line
Poles
Pylons
Tunnel
Utility Poles
Wharf, Dock, Pier
Wooded Area

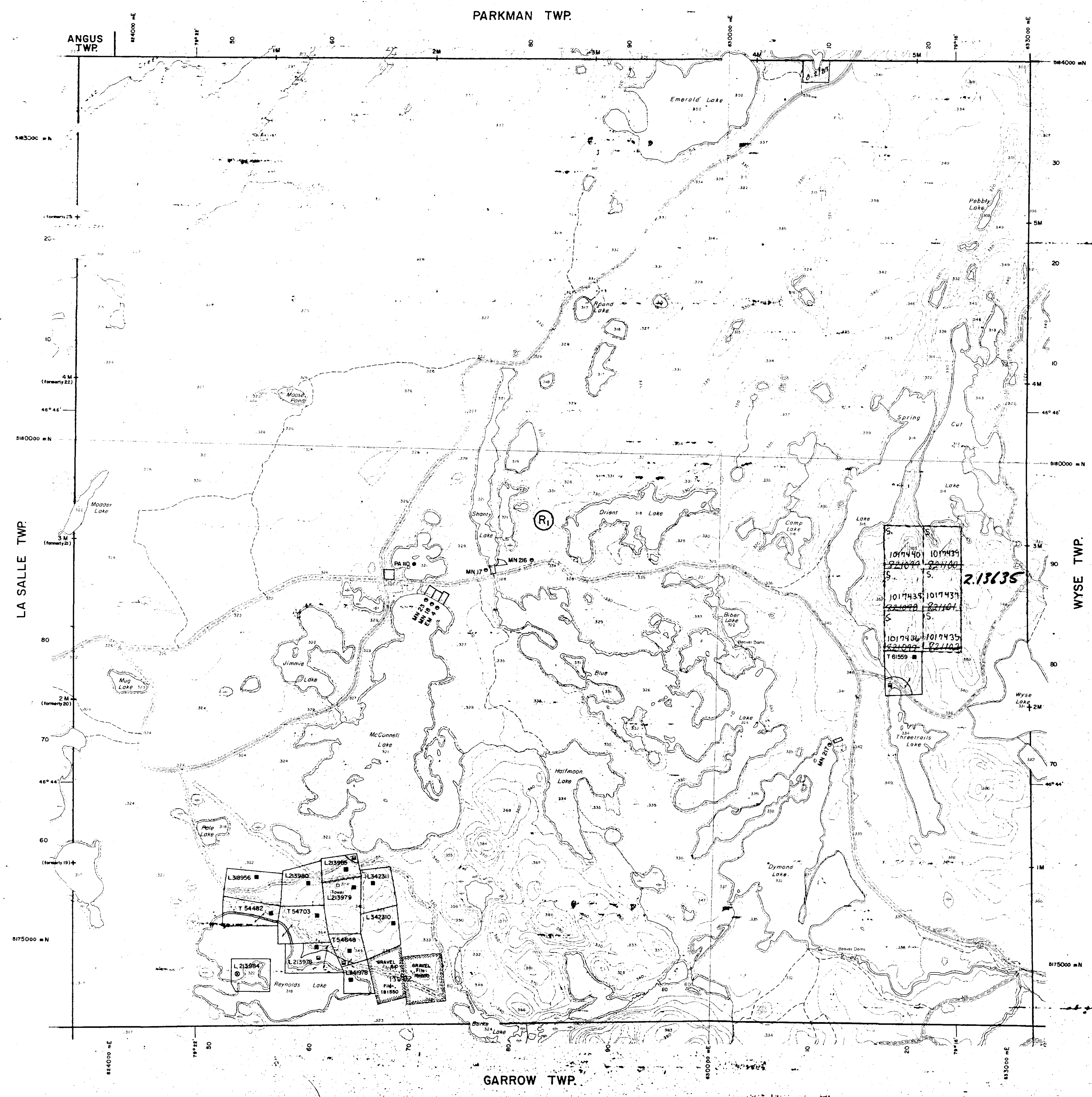
AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(R1) SEC. 43 (R.S.O. '70)	W.18/74	26/04/74	ENTIRE TWP. S.R.O.	160707 x 4

31L11NW0026 2.13635 MCAUSLAN

200



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

Metres 500 0 1000 Metres
Chains 10 0 10 20 30 40 50 60 70 Chains
Feet 500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000
GRID ZONE: 17

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

TOWNSHIP

McAUSLAN

M.N.R. ADMINISTRATIVE DISTRICT

NORTH BAY

MINING DIVISION

SUDBURY

LAND TITLES / REGISTRY DIVISION

NIPISSING

Ministry of Natural Resources — Land Management Branch

Ontario

G-1630

Original Compilation: NOV. 1984

Number

GLACIAL ESKER DEPOSIT

CUT LAKE

GLACIAL SAND AND GRAVEL

PINE BIRCH SOME POPLAR

S1017440

S1017439

PINE AND BIRCH

GLACIAL ESKER DEPOSIT

GLACIAL BOULDERS

GLACIAL SAND AND GRAVEL

10+75N (M)

PINE AND BIRCH COVER

FAULT ESCARPMENT

QUARTZITE

PINE BIRCH AND POPLAR FOREST COVER

REFERENCE AREA 3

SWAMPY

SAND

PINE AND BIRCH FOREST COVER

SPRING LAKE

QUARTZITE

DIABASE

9+75N (M)

GLACIAL FINE SAND AND BOULDERS

REFERENCE AREA 2

S1017438

S1017437

PINE AND BIRCH FOREST COVER

SAND

340° AZ.

REFERENCE AREA 1

GLACIAL BOULDERS

GLACIAL OUTWASH SAND AND GRAVEL

PINE AND BIRCH SOME POPLAR

SAND

6+25N (M)

SAND AND GRAVEL

PINE BIRCH AND POPLAR FOREST COVER

FINE GLACIAL SAND AND GRAVEL

TRACTOR TRAIL

BASE LINE

PINE AND BIRCH COVER

GLACIAL OUTWASH SAND AND GRAVEL

OLD BUSH ROAD

S1017436

SAND

TRACTOR TRAIL

FAULT ESCARPMENT

PINE AND BIRCH SOME POPLAR AND MAPLE

PINE AND BIRCH SOME POPLAR

QUARTZITE

GLACIAL SAND AND GRAVEL

S1017435

POND

FINE GLACIAL SAND AND GRAVEL

CLAIM BOUNDARY

TRACTOR TRAIL

PINE AND BIRCH COVER

TRAIL

GEOLOGY MAP

SILICA PROSPECT

Mc AUSLAN TWP.

SUDBURY MINING DIVISION, ONTARIO

100 50 0 100 200 300 400

SCALE IN FEET

LEGEND

2.13635

CENOZOIC

PLEISTOCENE AND RECENT

MIDDLE TO LATE PRECAMBRIAN

CLASTIC SILICEOUS METASEDIMENTS

ORTHOQUARTZITE with minor muscovite

DIABASE DIKES
quartz diabase INTRUSIVE CONTACT

STRIPPED AREA

ROCK TRENCH

FAULT ESCARPMENT

BASE LINE

ROCK OUTCROP BOUNDARY

CLAIM LINE

CLAIM POST

GLACIAL STRIAE

William A. Hays

FIGURE 3

CUT LAKE

S1017439

S1017440

SPRING LAKE

S1017438

S1017437

S1017436

S1017435

POND

N

SAMPLE LOCATION MAP
SILICA PROSPECT
Mc AUSLAN TWP.
SUDBURY MINING DIVISION, ONTARIO

100 50 0 100 200 300
Scale in feet

William Q. Hoop

FIGURE 4.

2.13635