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2.45775

Report On Sampling
Diamond Drill Core
Hearst Township
Larder Lake Area
Ontario

By

R.A. MacGregor, P. Eng.

July 30, 2010

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Summary

Drill core from holes SC84-8, SC84-10 and SC84-13 previously drilled in Hearst Township were sampled and analysed for a range of elements including gold.

The sampling is a continuation of previous sampling to check for mineralization which might have been missed in previous sampling and to provide a lithogeochemical data base for potential pathfinder elements in the area. Sampling in holes SC84-8 and SC84-10 was to follow-up on widespread anomalous copper values. Sampling in SC84-13 was for indications of anomalous gold and elevated arsenic and antimony as possible gold pathfinders.

Sampling is largely complete in holes SC84-8 and SC84-10. Further sampling will be carried out in hole SC84-13.

Introduction

During 2008 to 2010 drill core from holes SC84-8, SC84-10 and SC84-13 was sampled. The core from the previously drilled hole was recovered from storage, examined and split or sawed to obtain a sample for analysis. The samples were analysed for gold and / or a suite of potential pathfinder elements by various ICP methods using aqua regia or four acid dissolution.

Sampling Method

The drill log and previous assay results were reviewed. A work sheet with possible assay sections, brief lithology, previously assayed samples with any anomalous or interesting result written in was prepared. Sample numbers from previous analysis were marked in the left hand margin to facilitate rechecking of analytical results. Sampling was targeted to obtain at least one sample from each lithological section, and sample adjacent sections to those which had previously returned anomalous results. Much of the core is old and cross piled without any order as to hole number or location in the hole. As well the core has been moved several times with subsequent loss due to upset or rotted boxes. Many of the boxes were marked only with black marker and are now illegible making it difficult and /or impossible to locate desired samples . In spite of this missing boxes turn up in unexpected places. The individual hole work sheets are a means of keeping track of the sampling, and indicating areas for additional sampling. Using the prepared list, and modifying the list after a visual inspection of the core, either split, whole core or whole core that was split using a diamond saw was placed in plastic bags, tagged and sent to a commercial lab for preparation and analysis by ICP-ES or ICP-MS with aqua regia or four acid dissolution more fully described under Analysis.

Pulps and rejects were retrieved from the lab and have been stored. Pulps are stored in 40 dram plastic vials, which in turn are stored in wooden boxes constructed to hold 91 vials each. Rejects were screened on a 6 mesh stainless steel screen. The +6 mesh portion was washed to remove fines and dust, dried and stored in 14 dram plastic vials. The vials in turn are stored in wooden boxes constructed to hold 153 vials each.

Storage of pulps will allow further analysis, either to check previous analysis, or to analyse for other elements. Storage of +6 mesh rejects will allow mineralogical study should the drill cores become lost or destroyed.

Analysis

Samples analysed for gold were assayed by conventional fire assay methods at the laboratory where the sample preparation was carried out. Samples not to be assayed for gold were sent for sample preparation without analysis. A portion of the sample pulp retrieved from the laboratory was then placed in a heavy paper envelope marked with a number prefixed by a letter designation for the type of analysis.

The designation IAR indicates analysis of a 0.5 gram sample by ICP-ES after aqua regia dissolution for 30 elements. This method is accurate for base metals and arsenic, and is relatively inexpensive. Disadvantages are that the aqua regia fails to completely solubalize a number of elements, and as well detection limits are both too high, and possibly unreliable at low levels for Sb and Bi which are potential indicator elements. It also, until recently did not include an analysis for S.

The designation IAD indicates analysis of a 0.5 gram sample by ICP-MS after aqua regia dissolution for 36 elements including Au and S. Mass spectrometry provides much lower detection limits and a few more elements at an increase in cost. It still suffers from the possible lower solubility of aqua regia dissolution. Gold values are

questionable with only a 0.5 gram sample. The designation IAX indicates the same sample analysis and dissolution as IAD but with a 15 gram sample to obtain greater accuracy for Au analysis.

The designation IMA indicates analysis of a 0.25 gram sample by ICP-MS after a 4-acid dissolution for 41 elements. This method provides accurate analysis for many elements in silicate minerals which are not solubalized by aqua regia particularly Na, K. It still does not completely dissolve all of the oxide minerals, and provides inaccurate results for As and Sb due to volatilization. The designation IMU is the same as IMA with the addition of Rare Earth Elements (REE).

The designation WR indicates a whole rock analysis. A 0.1 gram sample is analysed by ICP-ES following a lithium metaborate / tetraborate fusion and nitric acid digestion. The analysis provides a total for major rock forming oxides particularly Si.

The designation INA indicates analysis by neutron activation. Some 34 elements are determined by gamma ray analysis after nuclear irradiation of a 30 gram sample. The method does not require dissolution of the sample, and provides accurate analysis for Au, As, Sb and a number of other important elements. Disadvantage is that it does not provide analysis for base metals or S.

Results

Sample descriptions are listed in Appendix I with analytical results in Appendix II. Anomalous values were arbitrarily determined as being equal to or greater than values listed below.

Ag	1.0 ppm	Cu	200 ppm	Pb	100 ppm
As	75 ppm	Fe_2O_3	15%	P_2O_5	0.5%
Au	75 ppb	K_2O	5%	Se	10 ppm
B	10 ppm	La	100 ppm	Sm	10 ppm
Ba	1000 ppm	Mg O	15%	Th	10 ppm
Ca O	15%	Mo	10 ppm	U	5 ppm
Ce	100 ppm	Na_2O	6%	V	350 ppm
Co	50 ppm	Nd	50 ppm	W	10 ppm
Cr	1000 ppm	Ni	350 ppm	Zn	300 ppm

As well, anomalous values were arbitrarily set for Bi and Sb as 1.0 ppm for analysis by ICP-MS and 4 ppm for analysis by ICP-ES.

Anomalous results are as follows :

Drill Hole SC84-13 668 – 673 feet
Bi 4 ppm

Drill Hole SC84-13 892 – 8097 feet
Bi 3ppm

Drill Hole SC84-13 1107 – 112 feet
Bi 6 ppm

Drill Hole SC84-13 Bi 7 ppm	988 – 993 feet
Drill Hole SC84-13 As 111 ppm	1237 – 1242 feet
Drill Hole SC84-13 Bi 5 ppm	1346 – 1351 feet
Drill Hole SC84-13 P_2O_5 0.62%	456 – 461 feet
Drill Hole SC84-13 Ni 445.8 ppm Sb 2.0 ppm Ba 2236 ppm Ce 127 ppm	787 – 793 feet
Drill Hole SC84-8 Cu 962 jppm Bi 7 ppm P_2O_5 0.61%	1513 – 1518 feet
Drill Hole SC84-8 Cu 1139 ppm Bi 10 ppm P_2O_5 0.58%	1518 – 1523 feet

Drill Hole SC84-8	1487 – 1492 feet
Cu 604 ppm	
Bi 4 ppm	
Drill Hole SC84-8	1508 – 1513 feet
Cu 8259 ppm	
Bi 12 ppm	
P_2O_5 0.68%	
Drill Hole SC84-13	446 – 451 feet
P_2O_5 0.73%	
Drill Hole SC84-13	1044 – 1050 feet
P_2O_5 0.53%	
Drill Hole SC84-8	1229 – 1235 feet
Cu 387 ppm	
Drill Hole SC84-8	1154 – 1160 feet
Cr 1023 ppm	
Th 19 ppm	
P_2O_5 1.55%	
La 115 ppm	
Drill Hole SC84-8	1160 – 1165 feet
Th 15 ppm	
La 105 ppm	
Cr 1002 ppm	
P_2O_5 1.58%	

Drill Hole SC84-10	530 – 536 feet
Cu 517 ppm	
Drill Hole SC84-8	1165 – 1171 feet
Th 13 ppm	
Cr 1140 ppm	
P_2O_5 1.44%	
Drill Hole SC84-8	1235 – 1240 feet
Cu 288 ppm	
Drill Hole SC84-8	1240 – 1245 feet
Cu 296 ppm	
Drill Hole SC84-8	1245 – 1250 feet
Cu 259 ppm	
Drill Hole SC84-8	1171 – 1176 feet
Co 50 ppm	
Th 13 ppm	
P_2O_5 1.28%	
Cr 1012 ppm	
Drill Hole SC84-13	1308 – 1314 feet
Sb 6 ppm	

Assessment of Results To Date

Analysis for holes SC84-8 and SC84-10 is largely completed. The work shows widespread anomalous copper in sedimentary rocks; bedded chloritic greywacke with graphitic beds. Chalcopyrite occurs as thread veins, blebs and replacing pyrite. Sulphides are not abundant except for a few places with semi massive chalcopyrite. The low sulphur values in a few samples with relatively high copper suggests fine chalcocite may be present, but difficult to spot in the dark coloured sediment. Replacement of cubical pyrite by chalopyrite was noted. Analysis for sulphur is missing for many samples. There are a few high grade sections with up to 4% across 5 feet in hole SC84-8. Lower values are present over significant widths. In hole SC84-8 core from 653 to 858 feet averaged 1540 ppm Cu; from 909 to 1108 feet averaged 5782 ppm Cu and from 1346 to 1523 feet averaged 2529 ppm Cu. In hole SC84-10 core from 715 to 1096 feet averaged 3043 ppm Cu. Gold values appear to be trace levels or absent.

Hole SC84-13 had only 14 samples taken previously in 2327 feet of core. One sample returned 240 ppb, the remainder nil or trace. The core appears to be altered and sericitized in places, so further sampling was indicated. Only two samples to date have returned assays > 100 ppb; one at 143 ppb and one at 212 ppb (average) both in the same cherty tuff or mudstone unit which gave the initial assay. The unit also contains elevated As values > 75 ppb which appear to be a gold indicator in this area. Further sampling is planned to check for Arsenic in the cherty tuffs and also areas previously not sampled.

Respectfully submitted,

July 30, 2010

R.A. MacGregor, P. Eng.

Appendix I

Sample Descriptions

Sample No. IAR 2238, 9338

Location — Drill Hole SC84-13 — Lease 107774

1050 – 1055 ft.

Mudstone / Argillite, grey, fine grained, bedded, chloritic as wispy fragments, 1% sulphide

Sample No. IAR 2279, 9336

Location — Drill Hole SC84-13 — Lease 107774

808 – 813 ft.

Argillite, greenish black, fine grained, silt laminated with silt beds 1-3 mm, a few calcite veinlets, trace to ½ % sulphide

Sample No. IAR 2280, 9362

Location — Drill Hole SC84-13 — Lease 107774

1346 – 1351 ft.

Tuff / mudstone, yellowish green, fine to aphanitic texture, trace fuchsite, cherty, a few smokey quartz veinlets 1% fine disseminated pyrite

Sample No. IAR 2351, 9343

Location — Drill Hole SC84-13 — Lease 107774

224 – 229 ft.

Mudstone, yellowish-grey, fine grained massively bedded, a few quartz-calcite veins, no sulphides

Sample No. IAR 2274, 9346

Location — Drill Hole SC84-13 — Lease 107774

892 – 897 ft.

Argillite, greenish black, fine grained, thinly bedded with laminae from 1 to 3 mm

1% pyrite in calcite veinlets

Sample No. IAR 2275, 9358

Location — Drill Hole SC84-13 — Lease 107774

1107 – 1112 ft.

Argillite / siltstone, bleached looking buff fine grained bedded, beds from 2-5 cm, weakly silicified, 2% sulphide

Sample No. IAR 2276, 9356

Location — Drill Hole SC84-13 — Lease 107774

988 – 993 ft.

Argillite, greenish black, fine grained laminated, chloritic, ½ % sulphide

Sample No. IAR 2277, 9353

Location — Drill Hole SC84-13 — Lease 107774

1237 – 1242 ft.

Tuff / mudstone, yellowish green, fine grained, cherty, weakly bedded with 5% quartz veinlets, 1% sulphide

Sample No. IAR 2281, 9342

Location — Drill Hole SC84-13 — Lease 107774

219 – 224 ft.

Mudstone, yellowish grey, fine grained thickly bedded cut by quartz-calcite veins, ½ % sulphide

Sample No. IAR 2282, 9347

Location — Drill Hole SC84-13 — Lease 107774

312 – 317 ft.

Argillite, greenish black, fine grained laminated, calcite on cleavage slips 2-3 % pyrite and pyrrhotite as laminations and blebs

Sample No. IAR 2283, 9339

Location — Drill Hole SC84-13 — Lease 107774

456 – 461 ft.

Argillite / mudstone, greenish grey, fine grained bedded carbonatized 1% pyrite as disseminations and blebs

Sample No. IAR 2284, 9350

Location — Drill Hole SC84-13 — Lease 107774

1222 – 1227 ft.

Argillite / mudstone, yellowish cream bleached, fine grained, bedded 2% sulphide as disseminations and on quartz veinlets

Sample No. IAR 2273, 9344

Location — Drill Hole SC84-13 — Lease 107774

668 – 673 feet

Argillite, dark greenish black, fine grained chloritized, laminated with calcite on lamination slips, no sulphides

Sample No. IAR 2328, 62899

Location — Drill Hole SC84-8 — Lease 107774

1487 – 1492 ft.

Argillite / siltstone, grey to blackish grey, fine to medium grained, laminated with chlorite slips ½ % sulphide

Sample No. IAR 2329, 62900

Location — Drill Hole SC84-8 — Lease 107774

1508 – 1513 ft.

Sandstone / tuff, grey to balckish grey, fine to medium grained, laminated with graphite on lamination planes biotite rich with a little quartz-carbonate veining, 2-3% pyrite-chalcopyrite

Sample No. IAR 2321, 9145

Location — Drill Hole SC84-8 — Lease 107774

1518 – 1523 ft.

Sandstone / tuff, grey to blackish grey fine to medium grained, laminated with graphite on lamination planes biotite rich with a little quartz-carbonate veining, 1% pyrite-chalcopyrite

Sample No. IAR 2352, 9348

Location — Drill Hole SC84-13 — Lease 107774

1013 – 1018 ft.

Argillite, greenish black , fine grained

laminated chloritic bedding planes

trace sulphide

Sample No. IAR 2353, 9340

Location — Drill Hole SC84-13 — Lease 107774

446 – 451 ft.

Mudstone / argillite / carbonate , greenish

grey fine grained thick carbonate beds

to 10 cm, no sulphides

Sample No. IAR 2354, 9337

Location — Drill Hole SC84-13 — Lease 107774

1044 – 1050 ft.

Mudstone / argillite , grey , fine grained

massive, interbedded mudstone / argillite

beds with wisy chloritic fragments

no sulphide

Sample No. IAR 2355

Location — Drill Hole SC84-8 — Lease 107774

1229 – 1235 ft.

Argillite / siltstone , dark grey argillite

and lighter grey siltstone interlaminated

trace to ½ % sulphide

Sample No. IAR 2356

Location — Drill Hole SC84-8 — Lease 107774

1219 – 1224 ft.

Argillite / siltstone, dark grey argillite and lighter grey siltstone interlaminated

1-2 % pyrite

Sample No. IAR 2357

Location — Drill Hole SC84-8 — Lease 107774

1508 – 1513 ft.

Sandstone / siltstone interbedded grey fine grained, dark grey argillite laminations

1% sulphide

Sample No. IAR 2358

Location — Drill Hole SC84-8 — Lease 107774

1154 – 1160 ft.

Sandstone, grey , fine to medium grained calcareous, no sulphides

Sample No. IAR 2359

Location — Drill Hole SC84-8 — Lease 107774

1160 – 1165 ft.

Sandstone, grey, fine grained calcareous, no sulphides

Sample No. IAR 2360

Location — Drill Hole SC84-10 — Lease 107774

530 – 536 ft.

Siltstone / argillite , grey to blackish grey, fine grained, contorted brecciated bedding with graphite on argillite laminations

½ % sulphide

Sample No. IAR 2361

Location — Drill Hole SC84-8 — Lease 107774

1250 – 1255 ft.

Argillite / siltstone , dark grey argillite and grey siltstone interlaminated

trace sulphide

Sample No. IAR 2362

Location — Drill Hole SC84-8 — Lease 107774

1214 – 1219 ft.

Argillite / siltstone, dark grey argillite and grey siltstone interlaminated

1-2% sulphide

Sample No. IAR 2363

Location — Drill Hole SC84-8 — Lease 107774

1165 – 1171 ft.

Sandstone, grey , fine to medium grained calcareous, no sulphides

Sample No. IAR 2364

Location — Drill Hole SC84-8 — Lease 107774

1235 – 1240 ft.

Argillite / siltstone, dark grey argillite and grey siltstone interlaminated

½ % sulphide

Sample No. IAR 2365

Location — Drill Hole SC84-8 — Lease 107774

1255 – 1260 ft.

Argillite / siltstone , dark grey argillite and grey siltstone interlaminated

no sulphides

Sample No. IAR 2366

Location — Drill Hole SC84-8 — Lease 107774

1240 – 1245 ft.

Argillite / siltstone , dark grey argillite and grey siltstone interlaminated

trace sulphide

Sample No. IAR 2367

Location — Drill Hole SC84-8 — Lease 107774

1224 – 1229 ft.

Argillite / siltstone, dark grey argillite and grey siltstone interlaminated

½ to 1 % sulphide

Sample No. IAR 2368

Location — Drill Hole SC84-8 — Lease 107774

1245 – 1250 ft.

Argillite / siltstone, dark grey argillite
and grey siltstone interlaminated
½ % sulphide

Sample No. IAR 2369

Location — Drill SC84-8 — Lease 107774

1171 – 1176 ft.

Sandstone, grey, fine to medium grained
calcareous, no sulphides

Sample No. IAR 2370, 85837

Location — Drill Hole SC84-13 — Lease 107774

1308 – 1314 ft.

Cherty tuffaceous mudstone, yellowish-green
fine grained laminated to thinly bedded,
fuchsitic in places, 5% smokey quartz
veinlets, 1% sulphide

Sample No. IAR 2320, 9144

Location — Drill Hole SC84-8 — Lease 107774

1513 – 1518 ft.

Sandstone / tuff, grey to blackish grey
fine to medium grained , laminated
with graphite on lamination planes
biotite rich with a little quartz-carbonate
veining, 1% pyrite-chalcopyrite

Appendix II

Certificate of Analysis

AcmeLabs
Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **R. MACGREGOR**
28 FORD ST
Sault Ste Marie ON P6A4N4 Canada

Submitted By: R. MacGregor
Receiving Lab: Canada-Vancouver
Received: April 01, 2010
Report Date: April 07, 2010
Page: 1 of 3

CERTIFICATE OF ANALYSIS VAN10001295.1

CLIENT JOB INFORMATION

roject:	None Given
hipment ID:	
.O. Number	
umber of Samples:	55

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
No Prep	55	Sorting of samples on arrival and labeling			VAN
1D01	55	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed	VAN

SAMPLE DISPOSAL

ISP-PLP Dispose of Pulp After 90 days

ADDITIONAL COMMENTS

cme does not accept responsibility for samples left at the laboratory after 90 ays without prior written instructions for sample storage or return.

nvoice To: R. MACGREGOR
28 FORD ST
Sault Ste Marie ON P6A4N4
Canada

:C:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

is report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
l results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.
' asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
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Client: **R. MACGREGOR**
28 FORD ST
Sault Ste Marie ON P6A4N4 Canada

Project: None Given
Report Date: April 07, 2010

CERTIFICATE OF ANALYSIS VAN10001295.1

Method		1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
Analyte		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
MDL		1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
IAR 2316	Rock Pulp	<1	8	9	81	<0.3	523	48	1158	5.18	<2	<2	2	417	0.8	<3	<3	201	3.87	0.063	12
IAR 2317	Rock Pulp	2	60	5	65	<0.3	138	33	1039	4.33	<2	<2	3	438	<0.5	<3	3	149	4.59	0.165	11
IAR 2318	Rock Pulp	<1	92	4	75	<0.3	99	40	1221	4.62	<2	<2	<2	41	0.5	<3	5	211	3.65	0.037	2
IAR 2319	Rock Pulp	<1	10	<3	8	<0.3	7	2	167	0.64	<2	<2	3	102	<0.5	<3	<3	3	0.85	0.033	14
IAR 2320	Rock Pulp	3	962	8	67	<0.3	111	30	1194	5.17	10	<2	3	270	0.9	<3	7	191	9.04	0.267	14
IAR 2321	Rock Pulp	2	1139	5	38	<0.3	92	16	913	3.25	<2	<2	5	236	<0.5	<3	10	140	8.14	0.252	20
IAR 2322	Rock Pulp	<1	27	<3	25	<0.3	975	72	1033	4.52	812	<2	<2	228	<0.5	6	<3	22	5.03	0.007	2
IAR 2323	Rock Pulp	1	34	<3	15	<0.3	14	7	248	1.24	<2	<2	5	77	<0.5	<3	3	3	1.40	0.078	18
IAR 2324	Rock Pulp	<1	61	<3	15	<0.3	19	9	247	1.29	<2	<2	<2	6	<0.5	<3	4	27	1.41	0.013	<1
IAR 2325	Rock Pulp	2	149	7	99	<0.3	21	71	319	6.10	12	<2	7	2	<0.5	<3	5	39	0.09	0.018	18
IAR 2326	Rock Pulp	1	75	3	41	<0.3	9	13	85	3.87	360	<2	4	1	<0.5	<3	3	6	0.06	0.022	12
IAR 2327	Rock Pulp	<1	23	7	96	<0.3	26	18	4131	15.17	<2	<2	<2	21	0.9	<3	11	154	9.42	0.014	2
IAR 2328	Rock Pulp	<1	604	5	55	<0.3	63	15	470	4.07	<2	<2	<2	109	<0.5	<3	4	115	3.30	0.109	12
IAR 2329	Rock Pulp	1	8259	11	75	0.5	40	22	899	4.84	5	<2	<2	234	0.8	<3	12	190	5.57	0.295	11
IAR 2330	Rock Pulp	<1	<1	<3	6	<0.3	213	21	605	2.23	<2	<2	<2	135	<0.5	<3	<3	12	1.92	<0.001	1
IAR 2331	Rock Pulp	<1	66	3	60	<0.3	68	35	1055	3.82	<2	<2	<2	206	0.5	<3	<3	99	4.06	0.126	8
IAR 2332	Rock Pulp	<1	55	6	31	<0.3	3	14	759	3.20	<2	<2	2	150	<0.5	<3	<3	5	2.47	0.150	9
IAR 2333	Rock Pulp	<1	4	4	6	<0.3	3	2	126	0.57	<2	<2	3	65	<0.5	<3	<3	1	0.80	0.029	12
IAR 2334	Rock Pulp	2	6	<3	6	<0.3	3	2	120	0.48	<2	<2	3	36	<0.5	<3	<3	1	0.55	0.028	12
IAR 2335	Rock Pulp	<1	54	<3	68	<0.3	517	50	1488	2.46	54	<2	<2	55	<0.5	<3	4	34	10.87	0.011	1
IAR 2336	Rock Pulp	11	24	4	40	<0.3	41	14	352	2.21	<2	<2	7	273	<0.5	<3	<3	57	1.90	0.159	39
IAR 2337	Rock Pulp	<1	53	4	77	<0.3	212	29	620	3.83	<2	<2	<2	45	<0.5	<3	<3	51	0.81	0.041	9
IAR 2338	Rock Pulp	10	55	47	60	0.3	92	22	646	3.42	<2	<2	5	208	<0.5	<3	7	91	2.79	0.212	36
IAR 2339	Rock Pulp	<1	110	21	88	<0.3	72	26	771	4.40	<2	<2	12	523	<0.5	<3	4	137	3.22	0.249	55
IAR 2340	Rock Pulp	<1	8	6	7	<0.3	1203	59	1029	2.91	<2	<2	<2	507	<0.5	<3	5	9	9.57	0.002	2
IAR 2341	Rock Pulp	1	20	<3	58	<0.3	63	19	457	2.74	<2	<2	2	68	<0.5	<3	5	78	3.16	0.102	5
IAR 2342	Rock Pulp	<1	50	15	59	<0.3	107	21	759	3.67	<2	<2	4	138	<0.5	<3	3	78	2.06	0.142	13
IAR 2343	Rock Pulp	2	9	<3	27	<0.3	5	6	280	0.64	<2	<2	<2	29	<0.5	<3	<3	1	1.81	0.035	9
IAR 2344	Rock Pulp	<1	14	<3	18	<0.3	174	15	756	1.45	<2	<2	<2	74	<0.5	<3	<3	34	7.02	0.028	6
IAR 2345	Rock Pulp	<1	28	<3	32	<0.3	504	57	1674	5.44	<2	<2	<2	241	0.7	<3	<3	135	5.78	0.012	2

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
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Client: **R. MACGREGOR**
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Project: None Given
Report Date: April 07, 2010

CERTIFICATE OF ANALYSIS VAN10001295.1

Method		1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
Analyte		Cr	Mg	Ba	Tl	B	Al	Na	K	W	S	Sc	Ga
Unit		ppm	%	ppm	%	ppm	%	%	%	ppm	%	ppm	ppm
MDL		1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	5	5
IAR 2316	Rock Pulp	1382	7.65	31	0.186	<20	3.68	<0.01	1.77	<2	<0.05	21	11
IAR 2317	Rock Pulp	493	4.88	333	0.183	<20	1.95	0.03	1.58	<2	0.31	19	8
IAR 2318	Rock Pulp	122	1.84	15	0.350	<20	2.44	0.04	0.03	<2	0.29	12	8
IAR 2319	Rock Pulp	72	0.32	559	0.002	<20	0.29	0.06	0.20	<2	0.36	<5	<5
IAR 2320	Rock Pulp	560	5.31	11	0.008	<20	4.02	0.01	<0.01	<2	0.36	25	11
IAR 2321	Rock Pulp	552	3.88	79	0.006	<20	2.74	0.03	0.01	<2	0.20	18	8
IAR 2322	Rock Pulp	410	9.96	16	<0.001	<20	0.42	<0.01	0.07	<2	<0.05	13	<5
IAR 2323	Rock Pulp	47	0.71	340	0.001	<20	0.28	0.03	0.14	<2	0.59	<5	<5
IAR 2324	Rock Pulp	104	0.56	6	0.032	<20	0.68	0.03	0.01	<2	<0.05	<5	<5
IAR 2325	Rock Pulp	53	0.91	11	0.046	<20	1.43	0.03	0.05	<2	3.69	6	7
IAR 2326	Rock Pulp	45	0.25	16	0.007	<20	0.59	0.03	0.07	<2	2.39	<5	<5
IAR 2327	Rock Pulp	18	3.69	2	0.005	<20	2.69	<0.01	<0.01	<2	<0.05	35	6
IAR 2328	Rock Pulp	216	3.76	6	0.005	<20	3.05	0.01	0.01	<2	0.23	14	10
IAR 2329	Rock Pulp	183	3.84	5	0.006	<20	2.96	0.02	<0.01	<2	0.89	20	11
IAR 2330	Rock Pulp	429	7.42	46	<0.001	<20	0.23	<0.01	<0.01	<2	<0.05	<5	<5
IAR 2331	Rock Pulp	258	4.64	431	0.010	<20	2.03	0.02	0.08	<2	0.29	17	8
IAR 2332	Rock Pulp	28	0.92	83	0.002	<20	0.26	0.01	0.22	<2	2.69	<5	<5
IAR 2333	Rock Pulp	41	0.21	497	<0.001	<20	0.15	0.03	0.12	<2	0.41	<5	<5
IAR 2334	Rock Pulp	29	0.25	327	<0.001	<20	0.16	0.03	0.12	<2	0.25	<5	<5
IAR 2335	Rock Pulp	743	1.41	4	0.027	<20	1.50	<0.01	0.02	<2	0.34	<5	<5
IAR 2336	Rock Pulp	201	1.45	261	0.143	<20	1.03	0.04	0.85	<2	0.18	<5	8
IAR 2337	Rock Pulp	398	1.84	31	0.108	<20	2.13	0.02	0.08	<2	0.29	<5	<5
IAR 2338	Rock Pulp	378	2.87	1040	0.173	<20	2.15	0.02	1.73	<2	0.25	6	9
IAR 2339	Rock Pulp	323	2.53	1210	0.188	<20	1.96	0.02	1.51	<2	0.09	<5	10
IAR 2340	Rock Pulp	235	10.66	367	<0.001	<20	0.15	<0.01	0.01	<2	<0.05	<5	<5
IAR 2341	Rock Pulp	200	2.09	90	0.008	<20	1.69	0.03	0.02	<2	0.28	8	9
IAR 2342	Rock Pulp	163	4.11	118	0.016	<20	1.83	0.02	0.25	<2	0.40	10	6
IAR 2343	Rock Pulp	57	0.48	29	<0.001	<20	0.19	0.02	0.15	<2	0.35	<5	<5
IAR 2344	Rock Pulp	335	1.47	34	0.055	<20	1.10	0.02	0.04	<2	0.05	<5	5
IAR 2345	Rock Pulp	1256	8.70	39	0.009	<20	3.88	<0.01	0.01	<2	<0.05	23	7

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Project: None Given
Report Date: April 07, 2010

CERTIFICATE OF ANALYSIS VAN10001295.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
IAR 2346	Rock Pulp	1	5	<3	6	<0.3	4	2	125	0.49	3	<2	3	48	<0.5	<3	<3	1	0.59	0.026	13
IAR 2347	Rock Pulp	<1	36	<3	30	<0.3	135	22	2033	2.72	<2	<2	<2	83	<0.5	<3	<3	76	10.76	0.034	4
IAR 2348	Rock Pulp	<1	9	<3	117	<0.3	244	71	1147	8.04	<2	<2	<2	7	<0.5	<3	<3	355	0.21	0.037	2
IAR 2349	Rock Pulp	2	7	<3	117	<0.3	206	76	1403	10.27	<2	<2	<2	7	<0.5	<3	<3	319	0.18	0.047	2
IAR 2350	Rock Pulp	<1	43	<3	45	<0.3	293	29	1245	3.58	<2	<2	<2	830	<0.5	<3	<3	110	5.54	0.063	8
IAR 2351	Rock Pulp	5	67	7	62	<0.3	45	25	1172	4.60	23	<2	<2	448	0.6	<3	<3	51	5.06	0.120	10
IAR 2352	Rock Pulp	2	59	6	79	<0.3	140	29	642	7.82	<2	<2	3	98	<0.5	<3	<3	45	1.55	0.086	16
IAR 2353	Rock Pulp	1	53	5	54	<0.3	160	38	1321	5.55	57	<2	7	842	0.9	<3	<3	40	7.72	0.319	45
IAR 2354	Rock Pulp	<1	63	8	59	<0.3	123	34	1198	4.69	<2	<2	3	548	1.0	<3	<3	79	6.51	0.231	17
IAR 2355	Rock Pulp	<1	387	<3	79	0.3	221	22	428	5.73	<2	<2	<2	10	<0.5	<3	<3	153	0.13	0.048	11
IAR 2356	Rock Pulp	<1	64	3	85	<0.3	197	34	655	5.50	10	<2	<2	129	0.5	<3	<3	166	2.09	0.048	5
IAR 2357	Rock Pulp	<1	92	<3	89	<0.3	143	41	232	8.86	4	<2	3	12	<0.5	<3	<3	129	0.20	0.085	15
IAR 2358	Rock Pulp	<1	52	9	53	<0.3	274	43	1527	4.82	26	<2	19	1042	0.9	<3	<3	151	8.78	0.675	115
IAR 2359	Rock Pulp	<1	39	17	55	<0.3	251	42	1456	4.61	38	<2	15	1016	0.5	<3	<3	131	9.01	0.688	105
IAR 2360	Rock Pulp	3	517	<3	73	0.3	154	29	213	5.39	<2	<2	8	12	<0.5	<3	<3	84	0.15	0.057	16
IAR 2361	Rock Pulp	<1	25	<3	78	<0.3	228	17	386	5.71	<2	<2	2	11	<0.5	<3	<3	104	0.12	0.050	13
IAR 2362	Rock Pulp	2	7	6	89	<0.3	93	41	421	6.58	5	<2	<2	65	<0.5	<3	<3	229	1.02	0.122	9
IAR 2363	Rock Pulp	<1	27	8	58	<0.3	250	43	1405	4.21	43	<2	13	1078	0.8	<3	<3	87	8.69	0.629	96
IAR 2364	Rock Pulp	<1	288	<3	82	<0.3	219	25	461	6.58	5	<2	<2	10	<0.5	<3	<3	139	0.12	0.053	12
IAR 2365	Rock Pulp	<1	3	<3	77	<0.3	218	20	398	5.74	<2	<2	<2	13	<0.5	<3	<3	128	0.16	0.055	14
IAR 2366	Rock Pulp	<1	296	<3	80	0.3	213	19	443	6.16	<2	<2	<2	11	<0.5	<3	<3	132	0.12	0.053	14
IAR 2367	Rock Pulp	<1	39	<3	86	<0.3	216	30	422	5.61	10	<2	<2	10	<0.5	<3	<3	159	0.12	0.051	8
IAR 2368	Rock Pulp	<1	259	<3	77	0.3	191	20	397	5.81	2	<2	<2	11	<0.5	<3	<3	128	0.12	0.053	12
IAR 2369	Rock Pulp	<1	102	13	53	<0.3	331	50	1476	4.71	38	<2	13	1030	0.9	<3	<3	157	10.01	0.560	86
IAR 2370	Rock Pulp	<1	72	<3	171	<0.3	80	28	789	4.27	68	<2	4	171	<0.5	6	<3	7	2.10	0.060	11

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Project: None Given
Report Date: April 07, 2010

CERTIFICATE OF ANALYSIS VAN10001295.1

Method		1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
Analyte		Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Sc	Ga
Unit		ppm	%	ppm	%	ppm	%	%	%	ppm	%	ppm	ppm
MDL		1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	5	5
IAR 2346	Rock Pulp	45	0.28	795	<0.001	<20	0.17	0.03	0.11	<2	0.27	<5	<5
IAR 2347	Rock Pulp	346	1.71	17	0.126	<20	1.52	0.03	0.10	<2	0.06	<5	6
IAR 2348	Rock Pulp	303	7.84	5	0.031	<20	5.57	<0.01	0.01	<2	0.45	23	19
IAR 2349	Rock Pulp	347	11.25	5	0.038	<20	7.51	<0.01	<0.01	<2	0.46	33	22
IAR 2350	Rock Pulp	771	4.95	1934	0.120	<20	3.07	<0.01	1.00	<2	0.10	13	7
IAR 2351	Rock Pulp	223	2.95	55	0.003	<20	1.75	0.01	0.15	<2	0.08	7	7
IAR 2352	Rock Pulp	182	1.97	67	0.005	<20	3.42	<0.01	0.19	<2	0.15	<5	10
IAR 2353	Rock Pulp	312	4.21	73	0.004	<20	1.80	<0.01	0.16	<2	0.07	8	5
IAR 2354	Rock Pulp	556	5.00	25	0.004	<20	2.28	<0.01	0.05	<2	<0.05	13	7
IAR 2355	Rock Pulp	433	4.11	5	0.007	<20	3.66	0.01	0.01	<2	0.16	15	14
IAR 2356	Rock Pulp	464	3.36	2	0.008	<20	3.20	0.02	<0.01	<2	0.57	19	13
IAR 2357	Rock Pulp	231	3.57	6	0.006	<20	4.89	<0.01	0.02	<2	0.52	13	17
IAR 2358	Rock Pulp	1023	7.98	69	0.018	<20	3.05	<0.01	0.07	<2	<0.05	24	9
IAR 2359	Rock Pulp	1002	7.73	72	0.016	<20	2.93	<0.01	0.06	<2	<0.05	24	9
IAR 2360	Rock Pulp	131	4.18	20	0.003	<20	3.90	<0.01	0.05	<2	0.20	8	12
IAR 2361	Rock Pulp	357	3.53	21	0.007	<20	3.52	0.01	0.08	<2	0.08	8	12
IAR 2362	Rock Pulp	235	5.46	2	0.011	<20	4.26	<0.01	<0.01	<2	0.90	30	14
IAR 2363	Rock Pulp	1140	7.52	31	0.009	<20	2.63	<0.01	0.03	<2	<0.05	21	9
IAR 2364	Rock Pulp	416	4.53	10	0.008	<20	4.13	0.01	0.03	<2	0.23	13	15
IAR 2365	Rock Pulp	440	3.70	21	0.008	<20	3.59	0.01	0.06	<2	<0.05	11	13
IAR 2366	Rock Pulp	405	4.52	11	0.008	<20	3.99	<0.01	0.03	<2	0.12	12	14
IAR 2367	Rock Pulp	440	3.89	4	0.008	<20	3.54	0.01	<0.01	<2	0.26	15	15
IAR 2368	Rock Pulp	374	3.97	9	0.007	<20	3.64	0.01	0.03	<2	0.19	12	14
IAR 2369	Rock Pulp	1012	7.24	71	0.017	<20	3.34	<0.01	0.07	<2	<0.05	22	9
IAR 2370	Rock Pulp	12	1.81	44	<0.001	<20	0.22	0.01	0.15	<2	0.37	<5	<5

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Project: None Given
Report Date: April 07, 2010

QUALITY CONTROL REPORT VAN10001295.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
Pulp Duplicates																					
IAR 2317	Rock Pulp	2	60	5	65	<0.3	138	33	1039	4.33	<2	<2	3	438	<0.5	<3	3	149	4.59	0.165	11
REP IAR 2317	QC	1	61	5	64	<0.3	139	34	1048	4.38	<2	<2	2	453	<0.5	<3	5	149	4.52	0.166	11
IAR 2358	Rock Pulp	<1	52	9	53	<0.3	274	43	1527	4.82	26	<2	19	1042	0.9	<3	<3	151	8.78	0.675	115
REP IAR 2358	QC	<1	52	11	52	<0.3	268	43	1516	4.77	25	<2	18	1028	0.8	<3	<3	150	8.87	0.691	114
Reference Materials																					
STD DS7	Standard	20	98	68	402	0.7	55	9	627	2.31	47	<2	5	71	6.2	4	8	79	0.92	0.077	12
STD DS7	Standard	20	103	63	407	1.0	54	9	628	2.37	48	<2	5	73	6.0	4	3	83	0.97	0.075	13
STD OREAS45PA	Standard	<1	588	19	124	<0.3	287	107	1125	15.78	<2	<2	7	12	<0.5	<3	<3	224	0.24	0.036	15
STD OREAS45PA	Standard	<1	591	13	123	0.4	290	108	1137	16.12	<2	<2	7	13	<0.5	<3	<3	231	0.25	0.035	16
STD DS7 Expected		21	109	71	411	0.9	56	10	627	2.39	48	0.07	4	68	6.4	5	5	84	0.93	0.08	13
STD OREAS45PA Expected		0.9	600	19	119	0.3	281	104	1130	16.559	4.2	0.043	6	14	0.09	0.13	0.18	221	0.2411	0.034	16.2
BLK	Blank	<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001	<1
BLK	Blank	<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001	<1

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Project: None Given
Report Date: April 07, 2010

QUALITY CONTROL REPORT VAN10001295.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S	Sc	Ga
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	%	ppm	ppm
	MDL	1	0.01	1	0.001	20	0.01	0.01	0.01	2	0.05	5	5
Pulp Duplicates													
IAR 2317	Rock Pulp	493	4.88	333	0.183	<20	1.95	0.03	1.58	<2	0.31	19	8
REP IAR 2317	QC	491	4.94	344	0.187	<20	1.99	0.02	1.58	<2	0.32	19	8
IAR 2358	Rock Pulp	1023	7.98	69	0.018	<20	3.05	<0.01	0.07	<2	<0.05	24	9
REP IAR 2358	QC	1005	7.74	66	0.018	<20	3.02	<0.01	0.06	<2	<0.05	24	8
Reference Materials													
STD DS7	Standard	187	1.06	425	0.115	38	1.02	0.09	0.47	5	0.20	<5	<5
STD DS7	Standard	191	1.06	432	0.117	38	1.04	0.09	0.47	3	0.19	<5	6
STD OREAS45PA	Standard	820	0.09	185	0.134	<20	3.20	<0.01	0.07	<2	<0.05	54	16
STD OREAS45PA	Standard	834	0.10	187	0.132	<20	3.26	<0.01	0.07	<2	<0.05	52	17
STD DS7 Expected		179	1.05	370	0.124	39	0.959	0.073	0.44	4	0.19		
STD OREAS45PA Expected		873	0.095	187	0.124		3.34	0.011	0.0665	0.011	0.03		
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<0.05	<5	<5
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<0.05	<5	<5

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Submitted By: R.A. MacGregor
Receiving Lab: Canada-Vancouver
Received: February 16, 2010
Report Date: February 25, 2010
Page: 1 of 5

CERTIFICATE OF ANALYSIS VAN10000621.1

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 106

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
No Prep	106	Sorting of samples on arrival and labeling			VAN
1D	106	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed	VAN

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: MacGregor, R.A.
28 Ford St.
Sault Ste. Marie ON P6A 4N4
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Project: None Given
Report Date: February 25, 2010

CERTIFICATE OF ANALYSIS VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
IAR2210	Rock Pulp	2	16	5	16	<0.3	441	32	1576	2.35	<2	<2	<2	524	<0.5	<3	3	21	11.67	0.011	2
IAR2211	Rock Pulp	1	92	<3	80	<0.3	80	34	1082	5.16	<2	<2	<2	72	<0.5	<3	3	185	2.48	0.153	8
IAR2212	Rock Pulp	2	28	7	30	<0.3	887	53	1785	2.73	<2	<2	<2	157	<0.5	<3	5	19	7.71	0.020	3
IAR2213	Rock Pulp	<1	12	3	8	<0.3	305	44	786	2.76	<2	<2	<2	90	<0.5	<3	4	20	5.35	0.003	1
IAR2214	Rock Pulp	<1	21	<3	28	<0.3	1514	83	2443	2.90	<2	<2	<2	219	0.5	<3	5	31	12.15	0.009	2
IAR2215	Rock Pulp	<1	18	<3	12	<0.3	374	34	874	3.32	<2	<2	<2	363	<0.5	<3	<3	44	5.74	0.010	2
IAR2216	Rock Pulp	2	24	7	14	<0.3	663	53	819	2.67	<2	<2	<2	174	<0.5	<3	<3	19	4.27	0.004	2
IAR2217	Rock Pulp	1	18	5	25	0.4	1285	65	2124	2.93	<2	<2	<2	232	0.6	<3	4	12	12.75	0.013	2
IAR2218	Rock Pulp	<1	89	14	73	<0.3	68	28	976	4.58	<2	<2	5	553	<0.5	<3	<3	143	4.70	0.244	21
IAR2219	Rock Pulp	<1	73	<3	64	<0.3	197	40	1155	4.57	<2	<2	2	205	<0.5	<3	4	136	5.96	0.161	13
IAR2220	Rock Pulp	1	42	4	63	<0.3	303	43	1180	4.73	<2	<2	<2	209	<0.5	<3	6	147	6.10	0.101	4
IAR2221	Rock Pulp	1	6	3	21	<0.3	28	7	235	1.05	<2	<2	2	34	<0.5	<3	<3	11	1.99	0.047	9
IAR2222	Rock Pulp	<1	56	<3	50	0.4	248	38	2180	3.98	<2	<2	<2	186	<0.5	<3	4	115	11.65	0.037	7
IAR2223	Rock Pulp	5	6	<3	76	<0.3	155	39	1529	5.25	<2	<2	<2	210	0.5	<3	4	144	4.96	0.124	10
IAR2224	Rock Pulp	<1	29	<3	11	<0.3	417	38	1052	2.94	<2	<2	<2	172	<0.5	<3	4	39	4.10	0.005	1
IAR2225	Rock Pulp	1	63	<3	52	<0.3	149	45	1117	6.26	<2	<2	<2	142	<0.5	<3	<3	192	3.82	0.031	2
IAR2226	Rock Pulp	3	62	5	96	<0.3	56	24	1221	4.94	<2	<2	3	146	<0.5	<3	<3	133	2.60	0.127	18
IAR2227	Rock Pulp	3	45	7	70	<0.3	56	26	781	4.44	<2	<2	<2	180	<0.5	<3	<3	129	3.72	0.121	13
IAR2228	Rock Pulp	6	34	4	34	<0.3	126	24	858	4.04	105	<2	<2	442	<0.5	5	4	6	2.73	0.051	8
IAR2229	Rock Pulp	4	26	6	34	<0.3	127	21	598	3.06	23	<2	<2	529	<0.5	<3	4	9	2.54	0.051	12
IAR2230	Rock Pulp	3	42	4	35	<0.3	118	21	592	2.42	191	<2	<2	391	<0.5	3	<3	6	2.81	0.051	12
IAR2231	Rock Pulp	2	89	5	99	<0.3	254	44	706	5.92	5	<2	<2	47	<0.5	<3	<3	64	1.29	0.032	5
IAR2232	Rock Pulp	<1	23	4	10	<0.3	731	84	841	3.55	4	<2	<2	227	<0.5	<3	<3	19	2.94	0.006	1
IAR2233	Rock Pulp	<1	72	5	22	<0.3	720	60	719	5.03	<2	<2	<2	98	<0.5	<3	<3	91	4.18	0.009	2
IAR2234	Rock Pulp	1	5	<3	31	<0.3	2327	90	561	4.16	4	2	<2	82	0.8	<3	<3	24	2.12	<0.001	3
IAR2235	Rock Pulp	4	72	5	97	<0.3	55	34	1203	5.53	<2	<2	<2	135	<0.5	<3	<3	192	3.60	0.076	12
IAR2236	Rock Pulp	2	76	3	66	<0.3	786	59	494	3.31	3	<2	<2	30	<0.5	<3	<3	29	1.51	0.010	2
IAR2237	Rock Pulp	5	63	<3	57	<0.3	799	54	588	2.98	<2	<2	<2	89	<0.5	<3	5	29	3.98	0.027	4
IAR2238	Rock Pulp	1	63	6	79	<0.3	116	30	820	6.36	5	<2	<2	257	<0.5	<3	3	113	3.43	0.152	7
IAR2239	Rock Pulp	2	62	7	64	0.4	550	51	1444	4.69	37	<2	<2	293	0.6	<3	6	98	8.21	0.051	3

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Project: None Given
Report Date: February 25, 2010

CERTIFICATE OF ANALYSIS VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	%
	MDL	1	0.01	1	0.01	20	0.01	0.01	0.01	2	0.05
IAR2210	Rock Pulp	469	6.78	1681	<0.01	<20	0.76	<0.01	0.02	<2	0.06
IAR2211	Rock Pulp	279	5.08	760	0.29	<20	3.09	0.02	2.95	<2	0.36
IAR2212	Rock Pulp	377	4.18	32	<0.01	<20	0.76	0.02	0.07	<2	0.15
IAR2213	Rock Pulp	454	6.18	20	<0.01	<20	0.63	<0.01	<0.01	<2	0.17
IAR2214	Rock Pulp	846	5.95	53	<0.01	<20	1.08	<0.01	0.03	<2	0.18
IAR2215	Rock Pulp	596	5.57	129	<0.01	<20	1.34	<0.01	<0.01	<2	<0.05
IAR2216	Rock Pulp	779	8.80	175	<0.01	<20	0.51	<0.01	0.05	<2	0.10
IAR2217	Rock Pulp	309	5.93	258	<0.01	<20	0.46	<0.01	0.08	<2	0.08
IAR2218	Rock Pulp	337	3.26	1642	0.26	<20	2.42	0.02	2.51	<2	0.20
IAR2219	Rock Pulp	757	4.93	881	0.06	<20	2.17	0.01	0.54	<2	0.10
IAR2220	Rock Pulp	766	6.50	436	0.05	<20	2.82	<0.01	0.41	<2	0.14
IAR2221	Rock Pulp	86	0.57	22	<0.01	<20	0.58	0.04	0.09	<2	0.16
IAR2222	Rock Pulp	452	2.59	173	0.14	<20	2.41	0.01	0.96	<2	0.32
IAR2223	Rock Pulp	376	6.13	61	0.02	<20	2.95	<0.01	0.22	<2	0.27
IAR2224	Rock Pulp	457	5.73	8	<0.01	<20	1.43	<0.01	<0.01	<2	0.05
IAR2225	Rock Pulp	263	5.00	75	0.22	<20	3.87	<0.01	1.54	<2	0.14
IAR2226	Rock Pulp	152	2.07	35	0.18	<20	2.02	0.04	0.24	<2	0.17
IAR2227	Rock Pulp	264	3.03	407	0.03	<20	2.39	0.04	0.22	<2	0.16
IAR2228	Rock Pulp	49	2.06	52	<0.01	<20	0.28	0.03	0.16	<2	0.62
IAR2229	Rock Pulp	75	2.14	83	<0.01	<20	0.41	0.04	0.16	<2	0.22
IAR2230	Rock Pulp	45	1.60	53	<0.01	<20	0.25	0.03	0.15	<2	0.37
IAR2231	Rock Pulp	376	2.77	23	<0.01	<20	3.14	<0.01	0.14	<2	0.27
IAR2232	Rock Pulp	505	6.67	11	<0.01	<20	0.63	<0.01	<0.01	<2	1.22
IAR2233	Rock Pulp	754	7.71	5	0.01	<20	2.94	<0.01	<0.01	<2	<0.05
IAR2234	Rock Pulp	1039	18.00	3	0.01	134	0.43	<0.01	<0.01	<2	<0.05
IAR2235	Rock Pulp	131	1.80	115	0.23	<20	1.86	0.03	0.48	<2	0.86
IAR2236	Rock Pulp	930	2.41	22	0.06	<20	1.93	<0.01	0.18	<2	0.88
IAR2237	Rock Pulp	880	2.14	44	0.06	<20	1.80	<0.01	0.41	<2	0.78
IAR2238	Rock Pulp	278	3.73	16	<0.01	<20	2.96	0.01	0.02	<2	0.37
IAR2239	Rock Pulp	1114	6.88	<1	<0.01	<20	2.67	<0.01	<0.01	<2	0.21

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Project: None Given
Report Date: February 25, 2010

CERTIFICATE OF ANALYSIS VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
IAR2240	Rock Pulp	3	79	4	68	<0.3	162	31	579	4.27	5	<2	<2	45	<0.5	<3	5	52	1.25	0.031	4
IAR2241	Rock Pulp	2	56	5	63	<0.3	292	34	526	3.51	4	<2	<2	69	<0.5	<3	<3	32	2.32	0.029	4
IAR2242	Rock Pulp	<1	49	9	57	<0.3	29	23	1185	3.45	<2	<2	<2	274	<0.5	<3	3	20	5.04	0.117	12
IAR2243	Rock Pulp	<1	32	6	37	<0.3	16	13	640	2.26	<2	<2	2	308	<0.5	<3	4	11	2.75	0.104	9
IAR2244	Rock Pulp	2	35	<3	17	<0.3	8	6	217	1.11	<2	<2	3	11	<0.5	<3	<3	25	0.48	0.039	11
IAR2245	Rock Pulp	<1	24	<3	33	<0.3	632	42	1582	2.48	<2	<2	<2	231	<0.5	<3	<3	41	12.91	0.015	4
IAR2246	Rock Pulp	1	14	<3	25	<0.3	5	5	306	0.65	<2	<2	<2	37	<0.5	<3	<3	2	2.17	0.035	9
IAR2247	Rock Pulp	<1	<1	<3	32	<0.3	831	48	1185	4.04	<2	<2	<2	324	<0.5	<3	<3	101	4.13	<0.001	1
IAR2248	Rock Pulp	<1	13	11	14	<0.3	215	19	1806	2.56	<2	<2	<2	1279	<0.5	<3	<3	55	8.08	0.014	3
IAR2249	Rock Pulp	<1	60	9	30	<0.3	70	17	699	2.25	<2	<2	4	194	<0.5	<3	<3	21	2.68	0.142	21
IAR2250	Rock Pulp	3	52	<3	59	<0.3	108	36	885	4.56	<2	<2	5	384	<0.5	<3	<3	128	2.56	0.231	29
IAR2251	Rock Pulp	<1	69	<3	28	<0.3	415	48	1208	5.28	<2	<2	<2	169	<0.5	<3	4	141	5.42	0.059	6
IAR2252	Rock Pulp	<1	15	<3	4	<0.3	242	36	1024	3.21	<2	<2	<2	124	<0.5	<3	<3	37	3.38	0.006	1
IAR2253	Rock Pulp	2	27	6	17	<0.3	14	5	194	0.95	<2	<2	5	95	<0.5	<3	<3	6	1.05	0.054	17
IAR2254	Rock Pulp	13	57	11	60	<0.3	216	38	1131	4.51	<2	<2	2	229	<0.5	<3	4	123	6.46	0.161	19
IAR2255	Rock Pulp	<1	11	<3	15	<0.3	53	9	313	1.24	<2	<2	3	143	<0.5	<3	<3	10	1.83	0.034	10
IAR2256	Rock Pulp	3	5	4	25	<0.3	260	16	381	1.60	5	<2	6	362	<0.5	<3	<3	10	2.10	0.004	24
IAR2257	Rock Pulp	<1	15	<3	6	<0.3	21	3	130	0.55	<2	<2	4	62	<0.5	<3	<3	2	0.58	0.033	14
IAR2258	Rock Pulp	<1	<1	<3	<1	<0.3	195	30	641	1.68	<2	<2	<2	25	<0.5	<3	<3	3	0.50	0.001	2
IAR2259	Rock Pulp	1	12	11	15	<0.3	13	4	160	0.93	<2	<2	5	99	<0.5	<3	<3	3	0.90	0.046	19
IAR2260	Rock Pulp	<1	8	6	14	<0.3	9	3	134	0.65	<2	<2	4	57	<0.5	<3	<3	5	0.95	0.028	13
IAR2261	Rock Pulp	3	14	12	11	0.4	54	7	369	1.40	<2	<2	3	189	<0.5	<3	5	2	1.89	0.012	13
IAR2262	Rock Pulp	3	45	<3	18	<0.3	340	27	1199	3.29	<2	<2	3	273	<0.5	<3	4	30	7.72	0.130	12
IAR2263	Rock Pulp	<1	3	<3	<1	<0.3	210	19	1229	1.84	<2	<2	<2	121	<0.5	<3	<3	7	9.92	<0.001	1
IAR2264	Rock Pulp	<1	14	<3	13	<0.3	25	4	174	0.77	<2	<2	4	82	<0.5	<3	<3	4	0.82	0.034	15
IAR2265	Rock Pulp	<1	80	5	32	<0.3	72	31	1518	4.90	<2	<2	<2	212	<0.5	<3	5	172	5.91	0.166	7
IAR2266	Rock Pulp	3	34	3	56	<0.3	122	26	1183	4.00	<2	<2	<2	151	<0.5	<3	5	25	4.60	0.072	6
IAR2267	Rock Pulp	<1	48	4	67	<0.3	164	28	625	5.52	68	<2	3	165	<0.5	<3	<3	29	1.74	0.072	17
IAR2268	Rock Pulp	1	56	<3	56	<0.3	139	28	641	4.40	84	<2	4	141	<0.5	<3	<3	15	1.78	0.065	18
IAR2269	Rock Pulp	<1	21	<3	65	<0.3	101	25	956	4.11	<2	<2	4	754	<0.5	<3	<3	59	5.34	0.142	18

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Project: None Given
Report Date: February 25, 2010

CERTIFICATE OF ANALYSIS VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	%
	MDL	1	0.01	1	0.01	20	0.01	0.01	0.01	2	0.05
IAR2240	Rock Pulp	225	1.91	22	<0.01	<20	2.46	0.02	0.09	<2	0.26
IAR2241	Rock Pulp	262	1.66	20	<0.01	<20	2.11	0.02	0.11	<2	0.25
IAR2242	Rock Pulp	77	2.68	245	<0.01	<20	0.97	0.01	0.19	<2	0.15
IAR2243	Rock Pulp	16	1.39	221	<0.01	<20	0.35	0.03	0.13	<2	0.94
IAR2244	Rock Pulp	8	1.21	122	0.02	<20	0.62	0.05	0.18	<2	0.10
IAR2245	Rock Pulp	1117	2.77	30	0.07	<20	2.12	<0.01	0.03	<2	<0.05
IAR2246	Rock Pulp	2	0.58	30	<0.01	<20	0.28	0.02	0.16	<2	0.23
IAR2247	Rock Pulp	2428	7.34	69	<0.01	<20	3.20	<0.01	<0.01	<2	<0.05
IAR2248	Rock Pulp	445	6.52	3406	<0.01	<20	1.52	<0.01	0.02	<2	0.07
IAR2249	Rock Pulp	48	2.15	566	0.01	<20	0.61	0.03	0.20	<2	0.20
IAR2250	Rock Pulp	224	6.23	1778	0.03	<20	2.48	0.02	0.29	<2	0.14
IAR2251	Rock Pulp	910	7.52	117	0.17	<20	3.47	<0.01	1.64	<2	<0.05
IAR2252	Rock Pulp	666	6.18	103	<0.01	<20	1.31	<0.01	<0.01	<2	0.10
IAR2253	Rock Pulp	65	0.65	379	<0.01	<20	0.28	0.04	0.10	<2	0.43
IAR2254	Rock Pulp	716	6.81	323	0.09	<20	2.54	<0.01	0.95	<2	<0.05
IAR2255	Rock Pulp	120	1.22	118	<0.01	<20	0.46	0.03	0.14	<2	0.61
IAR2256	Rock Pulp	110	3.39	870	<0.01	<20	0.39	0.04	0.12	<2	<0.05
IAR2257	Rock Pulp	57	0.46	370	<0.01	<20	0.26	0.04	0.12	<2	0.38
IAR2258	Rock Pulp	283	12.14	27	<0.01	<20	0.08	<0.01	<0.01	<2	<0.05
IAR2259	Rock Pulp	70	0.54	303	<0.01	<20	0.23	0.04	0.12	<2	0.61
IAR2260	Rock Pulp	71	0.27	77	<0.01	<20	0.36	0.05	0.14	<2	0.26
IAR2261	Rock Pulp	48	1.03	37	<0.01	<20	0.12	0.03	0.07	<2	1.27
IAR2262	Rock Pulp	136	5.34	318	<0.01	<20	1.50	<0.01	0.13	<2	0.27
IAR2263	Rock Pulp	618	5.85	87	<0.01	<20	0.22	<0.01	<0.01	<2	<0.05
IAR2264	Rock Pulp	68	0.55	315	<0.01	<20	0.31	0.04	0.12	<2	0.35
IAR2265	Rock Pulp	412	4.60	246	0.24	<20	1.75	0.02	1.88	<2	0.94
IAR2266	Rock Pulp	160	2.76	41	<0.01	<20	1.27	0.01	0.12	<2	0.26
IAR2267	Rock Pulp	130	2.14	18	<0.01	<20	1.86	<0.01	0.07	<2	0.11
IAR2268	Rock Pulp	81	1.98	21	<0.01	<20	0.95	0.01	0.10	<2	0.17
IAR2269	Rock Pulp	259	3.60	147	<0.01	<20	1.64	0.02	0.07	<2	0.05

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CERTIFICATE OF ANALYSIS VAN10000621.1

Method		1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
Analyte		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
MDL		1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
IAR2270	Rock Pulp	<1	46	<3	28	<0.3	76	19	572	3.12	127	<2	3	390	<0.5	3	4	6	2.67	0.058	13
IAR2271	Rock Pulp	1	31	<3	39	<0.3	68	18	487	2.70	110	<2	3	343	<0.5	<3	<3	4	2.74	0.060	15
IAR2272	Rock Pulp	<1	25	<3	33	<0.3	62	15	417	2.48	98	<2	4	303	<0.5	<3	<3	4	2.67	0.057	21
IAR2273	Rock Pulp	1	71	3	88	<0.3	177	38	665	9.16	61	<2	<2	74	<0.5	<3	4	71	1.26	0.096	12
IAR2274	Rock Pulp	2	57	10	85	<0.3	190	40	730	7.01	4	<2	3	335	<0.5	<3	3	112	3.76	0.181	22
IAR2275	Rock Pulp	2	52	<3	73	<0.3	155	32	823	5.47	5	<2	2	288	<0.5	<3	6	30	2.90	0.064	10
IAR2276	Rock Pulp	1	70	4	83	<0.3	128	31	493	6.65	4	<2	3	62	<0.5	<3	7	39	1.03	0.084	15
IAR2277	Rock Pulp	4	59	6	33	<0.3	76	25	908	5.38	111	<2	3	334	<0.5	<3	<3	9	3.43	0.090	12
IAR2278	Rock Pulp	1	14	<3	14	<0.3	18	9	417	1.82	<2	<2	2	140	<0.5	<3	<3	3	1.75	0.084	9
IAR2279	Rock Pulp	2	61	<3	71	<0.3	147	29	644	8.13	12	<2	<2	140	<0.5	<3	<3	65	1.65	0.077	9
IAR2280	Rock Pulp	2	61	7	83	<0.3	124	31	628	5.84	58	<2	3	80	<0.5	<3	5	12	0.95	0.062	15
IAR2281	Rock Pulp	3	52	9	46	<0.3	37	22	1107	4.25	21	<2	<2	479	<0.5	<3	3	38	5.06	0.118	7
IAR2282	Rock Pulp	2	53	<3	68	0.4	120	23	964	13.81	6	2	<2	242	<0.5	<3	<3	92	2.83	0.113	7
IAR2283	Rock Pulp	3	99	22	65	0.4	45	27	1275	4.41	36	<2	4	720	<0.5	<3	3	20	7.65	0.271	24
IAR2284	Rock Pulp	2	58	5	76	0.3	133	31	632	5.16	22	<2	3	207	<0.5	<3	<3	25	1.68	0.092	14
IAR2285	Rock Pulp	<1	108	12	193	0.5	85	50	1810	6.04	4	<2	<2	23	0.8	<3	<3	173	4.11	0.033	2
IAR2286	Rock Pulp	3	41	5	43	0.4	20	10	321	2.38	<2	<2	<2	79	<0.5	<3	<3	41	1.78	0.052	10
IAR2287	Rock Pulp	3	43	9	29	0.5	749	56	916	4.03	<2	<2	<2	670	0.7	<3	4	38	7.30	0.032	4
IAR2288	Rock Pulp	<1	32	<3	63	<0.3	87	27	904	3.73	<2	<2	<2	137	<0.5	<3	<3	98	4.05	0.154	16
IAR2289	Rock Pulp	7	32	7	29	0.7	10	4	197	1.24	<2	<2	4	55	<0.5	3	<3	7	0.76	0.049	21
IAR2290	Rock Pulp	9	36	<3	29	0.4	14	5	221	1.39	2	<2	4	66	<0.5	4	<3	7	0.74	0.047	17
IAR2291	Rock Pulp	2	6	6	60	0.6	22	30	1163	4.82	4	<2	2	255	0.5	<3	7	17	5.38	0.183	5
IAR2292	Rock Pulp	7	32	<3	31	0.3	11	7	298	1.56	<2	<2	4	87	<0.5	4	<3	5	1.26	0.059	20
IAR2293	Rock Pulp	1	34	5	55	0.5	20	25	1213	3.74	3	<2	<2	310	<0.5	<3	<3	19	6.07	0.151	10
IAR2294	Rock Pulp	<1	42	4	57	0.4	23	29	1147	3.93	<2	2	<2	290	<0.5	<3	<3	21	5.82	0.164	12
IAR2295	Rock Pulp	12	17	3	16	<0.3	11	6	261	1.26	3	<2	4	81	<0.5	<3	<3	4	1.09	0.054	18
IAR2296	Rock Pulp	<1	70	19	91	0.5	73	29	1108	5.04	<2	<2	6	1268	0.6	<3	<3	160	4.85	0.258	40
IAR2297	Rock Pulp	2	75	7	58	<0.3	226	37	1170	4.86	<2	<2	<2	388	<0.5	<3	<3	139	5.15	0.132	21
IAR2298	Rock Pulp	77	20	18	25	0.6	18	16	612	2.32	<2	<2	<2	337	<0.5	<3	8	4	2.82	0.103	5
IAR2299	Rock Pulp	<1	38	4	27	0.4	487	37	2720	2.25	<2	<2	<2	613	0.6	<3	<3	41	21.84	0.007	2

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Project: None Given
Report Date: February 25, 2010

CERTIFICATE OF ANALYSIS VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	%
	MDL	1	0.01	1	0.01	20	0.01	0.01	0.01	2	0.05
IAR2270	Rock Pulp	60	1.61	23	<0.01	<20	0.46	0.02	0.10	<2	0.43
IAR2271	Rock Pulp	53	1.25	25	<0.01	<20	0.31	0.01	0.12	<2	0.20
IAR2272	Rock Pulp	55	1.24	24	<0.01	<20	0.39	0.01	0.12	<2	0.08
IAR2273	Rock Pulp	208	2.17	43	<0.01	<20	3.87	<0.01	0.17	<2	<0.05
IAR2274	Rock Pulp	420	3.84	36	<0.01	<20	4.04	<0.01	0.07	<2	0.29
IAR2275	Rock Pulp	139	1.78	55	<0.01	<20	1.80	0.02	0.19	<2	0.61
IAR2276	Rock Pulp	156	1.98	62	<0.01	<20	3.09	<0.01	0.22	<2	0.21
IAR2277	Rock Pulp	84	2.20	51	<0.01	<20	0.24	0.02	0.16	<2	0.41
IAR2278	Rock Pulp	101	0.85	108	<0.01	<20	0.24	0.02	0.18	<2	1.63
IAR2279	Rock Pulp	214	2.05	56	0.01	<20	3.47	<0.01	0.15	<2	0.16
IAR2280	Rock Pulp	86	2.09	57	<0.01	<20	0.54	0.02	0.19	<2	0.40
IAR2281	Rock Pulp	187	2.53	57	<0.01	<20	1.24	0.01	0.17	<2	0.21
IAR2282	Rock Pulp	196	2.01	227	0.02	<20	4.33	0.02	0.15	<2	0.97
IAR2283	Rock Pulp	150	2.67	108	<0.01	<20	0.71	0.01	0.18	<2	0.41
IAR2284	Rock Pulp	142	2.27	62	<0.01	<20	1.77	0.01	0.16	<2	0.59
IAR2285	Rock Pulp	117	2.15	7	0.25	<20	3.20	0.02	0.04	<2	0.47
IAR2286	Rock Pulp	77	0.65	77	0.09	<20	0.67	0.03	0.25	<2	1.15
IAR2287	Rock Pulp	404	8.35	107	<0.01	<20	1.32	<0.01	0.06	<2	2.08
IAR2288	Rock Pulp	246	3.80	444	0.06	<20	2.29	<0.01	0.63	<2	<0.05
IAR2289	Rock Pulp	41	0.36	314	<0.01	<20	0.26	0.02	0.06	<2	0.27
IAR2290	Rock Pulp	60	0.45	813	<0.01	<20	0.67	0.09	0.34	<2	0.29
IAR2291	Rock Pulp	19	2.20	80	<0.01	<20	0.94	<0.01	0.57	<2	3.45
IAR2292	Rock Pulp	49	0.56	371	<0.01	<20	0.29	0.03	0.14	<2	0.42
IAR2293	Rock Pulp	32	2.73	91	<0.01	<20	0.91	<0.01	0.47	<2	1.27
IAR2294	Rock Pulp	32	2.73	97	0.01	<20	1.17	<0.01	0.55	<2	1.17
IAR2295	Rock Pulp	47	0.43	430	<0.01	<20	0.38	0.05	0.24	<2	0.46
IAR2296	Rock Pulp	409	3.29	1618	0.27	<20	2.47	0.01	2.36	<2	0.21
IAR2297	Rock Pulp	870	4.93	1041	0.16	<20	3.56	<0.01	1.26	<2	<0.05
IAR2298	Rock Pulp	27	1.37	164	<0.01	<20	0.17	0.02	0.13	<2	1.28
IAR2299	Rock Pulp	952	2.04	17	0.05	<20	1.66	<0.01	0.05	<2	0.07

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Project: None Given
Report Date: February 25, 2010

CERTIFICATE OF ANALYSIS VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
IAR2300	Rock Pulp	<1	34	5	39	<0.3	925	57	3189	2.40	<2	<2	<2	333	0.6	<3	<3	50	20.90	0.008	1
IAR2301	Rock Pulp	<1	139	5	74	<0.3	91	34	1057	5.58	<2	<2	<2	195	<0.5	<3	<3	180	4.87	0.145	16
IAR2302	Rock Pulp	<1	42	<3	52	0.4	65	26	1300	4.08	<2	<2	<2	99	<0.5	<3	<3	103	6.18	0.093	14
IAR2303	Rock Pulp	<1	24	<3	38	<0.3	654	50	967	3.39	<2	<2	<2	72	<0.5	<3	<3	52	5.04	0.017	4
IAR2304	Rock Pulp	<1	37	<3	14	<0.3	624	53	1000	3.99	3	<2	<2	148	<0.5	<3	<3	60	4.27	0.026	2
IAR2305	Rock Pulp	5	46	4	23	<0.3	238	23	937	3.44	<2	<2	<2	156	<0.5	<3	<3	21	4.01	0.087	9
IAR2306	Rock Pulp	1	20	3	23	<0.3	5	4	454	0.76	3	<2	<2	95	<0.5	<3	<3	1	3.08	0.031	11
IAR2307	Rock Pulp	1	47	7	69	0.3	113	41	1147	5.78	<2	<2	<2	171	<0.5	<3	<3	166	5.34	0.077	11
IAR2308	Rock Pulp	<1	42	<3	36	0.4	208	26	2399	2.78	4	<2	<2	87	<0.5	<3	<3	66	13.75	0.038	4
IAR2309	Rock Pulp	5	10	3	35	<0.3	45	13	269	2.52	4	<2	<2	46	<0.5	<3	<3	23	1.56	0.049	7
IAR2310	Rock Pulp	<1	37	<3	41	0.4	246	24	2919	2.41	<2	<2	<2	143	<0.5	<3	<3	64	17.39	0.040	8
IAR2311	Rock Pulp	<1	58	3	73	<0.3	111	35	1163	4.61	<2	<2	<2	242	<0.5	<3	<3	94	5.13	0.104	9
IAR2312	Rock Pulp	<1	27	<3	30	<0.3	673	49	891	2.14	36	<2	<2	118	<0.5	<3	<3	40	7.88	0.008	3
IAR2313	Rock Pulp	1	85	4	75	0.3	49	34	1305	5.72	<2	<2	<2	266	<0.5	<3	6	194	6.58	0.124	8
IAR2314	Rock Pulp	1	28	<3	14	<0.3	444	54	998	3.23	8	<2	<2	192	<0.5	<3	<3	52	8.66	0.009	3
IAR2315	Rock Pulp	28	38	14	35	0.8	100	28	1530	3.42	3	<2	<2	200	<0.5	<3	12	79	8.99	0.083	8

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Report Date: February 25, 2010

CERTIFICATE OF ANALYSIS VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	%
	MDL	1	0.01	1	0.01	20	0.01	0.01	0.01	2	0.05
IAR2300	Rock Pulp	1169	1.61	37	0.05	<20	1.55	<0.01	0.04	<2	0.12
IAR2301	Rock Pulp	312	3.62	174	0.24	<20	2.87	0.02	2.13	<2	0.27
IAR2302	Rock Pulp	244	2.27	79	0.09	<20	2.12	0.01	0.35	<2	0.95
IAR2303	Rock Pulp	1782	5.32	4	0.10	<20	3.19	<0.01	0.23	<2	<0.05
IAR2304	Rock Pulp	647	7.66	1	<0.01	<20	1.81	<0.01	<0.01	<2	0.19
IAR2305	Rock Pulp	141	3.10	72	<0.01	<20	1.44	0.01	0.14	<2	0.40
IAR2306	Rock Pulp	63	0.35	30	<0.01	<20	0.18	0.02	0.14	<2	0.20
IAR2307	Rock Pulp	946	4.16	192	0.18	<20	3.27	0.02	1.29	<2	0.10
IAR2308	Rock Pulp	363	1.44	3	0.11	<20	1.43	0.02	0.04	<2	0.30
IAR2309	Rock Pulp	108	0.89	137	<0.01	<20	0.90	0.04	0.04	<2	1.26
IAR2310	Rock Pulp	374	1.32	9	0.11	<20	1.33	0.01	0.12	<2	0.15
IAR2311	Rock Pulp	413	4.27	291	<0.01	<20	1.97	0.02	0.09	<2	0.09
IAR2312	Rock Pulp	1614	2.78	2	0.05	<20	1.74	<0.01	0.04	<2	<0.05
IAR2313	Rock Pulp	201	3.40	595	0.03	<20	2.67	0.02	0.24	<2	0.34
IAR2314	Rock Pulp	678	4.80	3	0.01	<20	2.23	<0.01	<0.01	<2	0.49
IAR2315	Rock Pulp	203	1.66	152	0.11	<20	1.47	0.01	0.39	<2	1.29

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Report Date: February 25, 2010

QUALITY CONTROL REPORT VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
Pulp Duplicates																					
IAR2236	Rock Pulp	2	76	3	66	<0.3	786	59	494	3.31	3	<2	<2	30	<0.5	<3	<3	29	1.51	0.010	2
REP IAR2236	QC	2	72	<3	60	0.4	752	57	454	3.13	3	<2	<2	28	<0.5	<3	3	27	1.44	0.010	2
IAR2248	Rock Pulp	<1	13	11	14	<0.3	215	19	1806	2.56	<2	<2	<2	1279	<0.5	<3	<3	55	8.08	0.014	3
REP IAR2248	QC	<1	12	10	13	<0.3	199	18	1768	2.44	<2	<2	<2	1162	<0.5	<3	<3	50	7.74	0.013	3
IAR2310	Rock Pulp	<1	37	<3	41	0.4	246	24	2919	2.41	<2	<2	<2	143	<0.5	<3	<3	64	17.39	0.040	8
REP IAR2310	QC	<1	39	3	40	<0.3	250	24	2928	2.39	<2	<2	<2	143	<0.5	<3	<3	63	17.46	0.040	9
Reference Materials																					
STD DS7	Standard	20	104	67	403	0.9	55	9	630	2.39	54	<2	4	69	5.8	7	7	82	0.94	0.075	12
STD DS7	Standard	20	107	66	407	0.7	56	9	632	2.42	47	<2	5	74	5.6	5	4	84	0.94	0.076	12
STD DS7	Standard	21	117	69	418	0.9	55	9	632	2.38	51	<2	5	69	5.9	3	6	82	0.95	0.076	12
STD OREAS45PA	Standard	<1	595	16	124	0.6	297	111	1101	16.20	3	2	7	13	<0.5	<3	<3	218	0.24	0.034	16
STD OREAS45PA	Standard	<1	629	17	122	0.4	306	112	1184	16.91	<2	<2	6	14	<0.5	<3	<3	234	0.25	0.036	17
STD OREAS45PA	Standard	1	612	19	137	0.3	309	114	1126	16.70	3	<2	7	13	<0.5	<3	<3	221	0.25	0.035	17
STD DS7 Expected		21	109	71	411	0.9	56	10	627	2.39	48	0.07	4	68	6.4	5	5	84	0.93	0.08	13
STD OREAS45PA Expected		0.9	600	19	119	0.3	281	104	1130	16.559	4.2	0.043	6	14	0.09	0.13	0.18	221	0.2411	0.034	16.2
BLK	Blank	<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001	<1
BLK	Blank	<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001	<1
BLK	Blank	<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001	<1

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QUALITY CONTROL REPORT VAN10000621.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	S
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	%
	MDL	1	0.01	1	0.01	20	0.01	0.01	0.01	2	0.05
Pulp Duplicates											
IAR2236	Rock Pulp	930	2.41	22	0.06	<20	1.93	<0.01	0.18	<2	0.88
REP IAR2236	QC	856	2.20	21	0.05	<20	1.76	<0.01	0.18	<2	0.87
IAR2248	Rock Pulp	445	6.52	3406	<0.01	<20	1.52	<0.01	0.02	<2	0.07
REP IAR2248	QC	414	6.12	3216	<0.01	<20	1.42	<0.01	0.02	<2	0.06
IAR2310	Rock Pulp	374	1.32	9	0.11	<20	1.33	0.01	0.12	<2	0.15
REP IAR2310	QC	369	1.30	9	0.11	<20	1.32	0.02	0.12	<2	0.14
Reference Materials											
STD DS7	Standard	192	1.05	426	0.11	38	1.01	0.09	0.46	3	0.20
STD DS7	Standard	195	1.07	432	0.12	36	1.06	0.09	0.46	4	0.21
STD DS7	Standard	190	1.05	425	0.12	40	1.02	0.09	0.46	2	0.20
STD OREAS45PA	Standard	832	0.09	183	0.13	<20	3.25	<0.01	0.07	<2	<0.05
STD OREAS45PA	Standard	848	0.10	192	0.14	<20	3.43	<0.01	0.07	<2	<0.05
STD OREAS45PA	Standard	863	0.09	185	0.13	<20	3.49	<0.01	0.07	<2	<0.05
STD DS7 Expected		179	1.05	370	0.124	39	0.959	0.073	0.44	4	0.19
STD OREAS45PA Expected		873	0.095	187	0.124		3.34	0.011	0.0665	0.011	0.03
BLK	Blank	<1	<0.01	<1	<0.01	<20	<0.01	<0.01	<0.01	<2	<0.05
BLK	Blank	<1	<0.01	<1	<0.01	<20	<0.01	<0.01	<0.01	<2	<0.05
BLK	Blank	<1	<0.01	<1	<0.01	<20	<0.01	<0.01	<0.01	<2	<0.05

Swastika Laboratories Ltd

Established 1928

Assaying - Consulting - Representation

Geochemical Analysis Certificate

9W-2517-RG1

Company: **R. MacGREGOR** Date: SEP-03-09

Project:

Attn: R. MacGREGOR

We hereby certify the following Geochemical Analysis of 15 REJECT samples submitted AUG-28-09 by .

Sample Number	Au ppb	Au Check ppb
24142	9	-
24259	3	-
24260	21	-
24261	1227	1275
24262	34	-
24263	199	-
24341	NIL	-
2755	3	-
2756	NIL	-
2757	NIL	-
)144	34	-
9145	14	-
9473	10	-
9474	19	-
9475	7	-

Certified by Dennis Christos

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244 Fax (705) 642-3300

Swastika Laboratories Ltd

Established 1928

Assaying - Consulting - Representation

Geochemical Analysis Certificate

9W-2500-RG1

Company: **R.A. MacGREGOR**

Date: SEP-02-09

Project:

Attn: ROBERT Mac GREGOR

We hereby certify the following Geochemical Analysis of 25 ROCK samples submitted AUG-27-09 by .

Sample Number	Au ppb	Au Check ppb
51335	NIL	-
51336	NIL	-
51337	NIL	NIL
51338	NIL	-
51339	50	-
51340	22	-
51341	31	-
51342	29	-
51343	58	-
51344	10	-
51345	1611	1567
51346	NIL	-
51347	15	-
51348	NIL	-
51349	5	-
51350	19	-
62893	NIL	-
62894	NIL	-
62895	NIL	-
62896	15	-
62897	NIL	-
62898	7	-
62899	5	-
62900	29	-
62871	10	NIL
BLANK	3	-
STD OxH66	1287	-

Certified by Denis Chester

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244 Fax (705) 642-3300

PolyMet Laboratories

Client: R. MacGregor
Job No. 0-171

CERTIFICATE **# 5880**

Date:
July 15 / 09

Splits

Sample #	**Au Oz/ton**	**Au g/tonne**
9336	<.001	<.03
9337	<.001	<.03
9339	<.001	<.03
9340	<.001	<.03
9341	<.001	<.03
9342	<.001	<.03
9343	<.001	<.03
9344	<.001	<.03
9345	<.001	<.03
9346	<.001	<.03
9347	<.001	<.03
9348	<.001	<.03
9349	<.001	<.03
9350	<.001	<.03
9351	<.001	<.03
9352	<.001	<.03

16 splits

Std Oxl 63 0.174 5.966

Certified Assayer:

PolyMet Laboratories

Client: R. MacGregor
Job No. 0-171

CERTIFICATE **# 5881**

Date:
July 15 / 09

Splits

Sample #	Au Oz/ton	Au g/tonne
9353	<.001	<.03
9354	<.001	<.03
9355	<.001	<.03
9356	<.001	<.03
9357	<.001	<.03
9358	<.001	<.03
9359	<.001	<.03
9360	<.001	<.03
9361	<.001	<.03
9362	<.001	<.03
9363	<.001	<.03
9364	<.001	<.03
9365	<.001	<.03
228779	<.001	<.03
62983	<.001	<.03
62984	<.001	<.03

16 Splits

Std Oxl 63 0.174 5.966

Certified Assayer:

Laboratoire Expert Inc.

*** Certificate of analysis ***

127, Boulevard Industriel
Rouyn-Noranda, Québec
Canada, J9X 6P2
Telephone : (819) 762-7100, Fax : (819) 762-7510

Date : 2009/ /2

Client : **R.A. MacGregor**

Addressee : **R.A. MacGregor**

28 Ford Street
Sault Ste-Marie
Ontario
P6A 4N4

Telephone : (705) 949-4250
Fax : (705) 949-2427

Folder : **23922**
Your order number :
Project :

Total number of samples : **49**

Designation	Au FA-GEO ppb 5	Au-Dup FA-GEO ppb 5
62962	9	8
62963	14	
62964	7	
62972	8	
62973	24	
62974	21	
85839	28	
85840	143	
85841	14	
85842	29	
85843	12	
85844	19	
85834	214	209
85835	41	
85836	21	
85837	8	
85838	35	
49001	6	
49002	<5	
49003	5	

Joe Landers, Manager

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East
Vancouver, BC Canada V6A 4A3
Phone 604 253 3158 Fax 604 253 1716
GST # 843013921 RT

Bill To: R. MACGREGOR
28 FORD ST
Sault Ste Marie, ON P6A4N4
Canada

Invoice Date: April 7, 2010
Invoice Number: **VANI043706**
Submitted by: R. MacGregor
Job Number: VAN10001295
Order Number:
Project Code: None Given
Shipment ID:
Quote Number:

Item	Package	Description	Sample No.	Unit Price	Amount
1	G1D01	0.5g Aqua Regia Digestion ICP-ES	55	$8.50	$467.50
2	DIS-PLP	Warehouse disposition of pulps	55	$0.10	$5.50
			Net Total		$473.00
			Canadian GST		$23.65
			Grand Total	**CAD**	**$496.65**

Invoice Stated In Canadian Dollars

April 19/10

Payment Terms:

This is a professional service. Payment due upon receipt. Please pay the last amount shown on the invoice.

For cheque payments, please remit payment to the above address, made payable to: Acme Analytical Laboratories (Vancouver) Ltd.
Please specify Acme invoice number on cheque remittance.

Skeard 1039

For electronic payments, please wire funds to one of the following accounts:

For payment in Canadian Funds:
Acme Analytical Laboratories (Vancouver) Ltd.
The Royal Bank of Canada
400 Main Street
Vancouver, BC Canada V6A 2T5
Account # 1034123
Bank Transit # 07120-003
Swift Code: ROYCCAT2

For payment in US Funds:
Acme Analytical Laboratories (Vancouver) Ltd.
The Royal Bank of Canada
400 Main Street
Vancouver, BC Canada V6A 2T5
Account # 4001533
Bank Transit # 07120-003
Swift Code: ROYCCAT2

Please specify Acme invoice number for reference on transfer forms when making payment.

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East
Vancouver, BC Canada V6A 4A3
Phone 604 253 3158 Fax 604 253 1716
GST # 843013921 RT

Bill To: MacGregor, R.A.
28 Ford St.
Sault Ste. Marie, ON P6A 4N4
Canada

Invoice Date: March 1, 2010
Invoice Number: **VANI041012**
Submitted by: R.A. MacGregor
Job Number: VAN10000621
Order Number:
Project Code: None Given
Shipment ID:
Quote Number:

Item	Package	Description	Sample No.	Unit Price	Amount
1	G1D	0.5g Aqua Regia Digestion ICP-ES	106	$8.50	$901.00
2	DIS-PLP	Warehouse disposition of pulps	106	$0.10	$10.60
			Net Total		$911.60
			Canadian GST		$45.58
			Grand Total	**CAD**	**$957.18**

Invoice Stated In Canadian Dollars

Marek 15/10
Read 1033

Payment Terms:

This is a professional service. Payment due upon receipt. Please pay the last amount shown on the invoice.

For cheque payments, please remit payment to the above address, made payable to: Acme Analytical Laboratories (Vancouver) Ltd.
Please specify Acme invoice number on cheque remittance.

For electronic payments, please wire funds to one of the following accounts:

For payment in Canadian Funds:
Acme Analytical Laboratories (Vancouver) Ltd.
The Royal Bank of Canada
400 Main Street
Vancouver, BC Canada V6A 2T5
Account # 1034123
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For payment in US Funds:
Acme Analytical Laboratories (Vancouver) Ltd.
The Royal Bank of Canada
400 Main Street
Vancouver, BC Canada V6A 2T5
Account # 4001533
Bank Transit # 07120-003
Swift Code: ROYCCAT2

Please specify Acme invoice number for reference on transfer forms when making payment.

Swastika Laboratories (2008) Ltd

Box 10, 1 Cameron Ave
Swastika, ON
P0K 1T0

Invoice

Date	Invoice #
9/4/2009	5313

Invoice To
MACGREGOR R 28 FORD ST. SAULT STE MARIE, ON P6A 4N4

P.O. No.	Terms
	Due on receipt

Qty	Description	Cert #	Rate	Amount
15	GOLD ASSAY	9W-2517-RG1	10.00	150.00
15	SAMPLE PREPARATION		5.00	75.00
	GST 5% on sales		5.00%	11.25

Sent 11/09
Read 0979

Thank you for your business.

GST Tax Total	$11.25
Total	$236.25

GST/HST No. 883022329

Swastika Laboratories (2008) Ltd

Box 10, 1 Cameron Ave
Swastika, ON
P0K 1T0

Invoice

Date	Invoice #
9/3/2009	5303

Invoice To
MACGREGOR R 28 FORD ST. SAULT STE MARIE, ON P6A 4N4

P.O. No.	Terms
	Due on receipt

Qty	Description	Cert #	Rate	Amount
25	GOLD ASSAY	9W-2500-RG1	10.00	250.00
25	SAMPLE PREPARATION		5.00	125.00
	GST 5% on sales		5.00%	18.75

Sept. 11/09

Thank you for your business.

Skead 0979

GST Tax Total $18.75

Total $393.75

GST/HST No. 883022329

INVOICE

PolyMet Resources Inc.
1 Presley St. P.OI. Box 699
Cobalt, ON
POJ 1CO

Invoice #: 00001880
Date: 7/15/2009

GST Registration #:89107 9824 RT0001

Page: 1

Bill To:

R. MacGregor
28 Ford Street
Sault Ste. Marie ON P6A 4N4

Ship To:

R. MacGregor
28 Ford Street
Sault Ste. Marie ON P6A 4N4

Description	Amount	Tax
Assay Certificates #'s 5880 & 5881 - Split Core Samples	$128.00	G5%
32 Sample Preps @ $4 ea.		
32 Fire Assays for Gold @ $10.50 ea.	$336.00	G5%
36 samples for pulverizing only @ $6 ea.	$216.00	G5%

Note: All invoices are due and payable in 15 days
2% finance fees will be added to invoices not paid in 15 days.

Please make cheques payable to PolyMet Resources Inc.

Memo: CODE	RATE	TAX
G5%	5%	$34.00

Job No. Job 0-171

SALE AMOUNT	$680.00
GST:	$34.00
Total Amount:	$714.00
Amount Applied:	$0.00
Balance Due:	$714.00

July 24/09
Skead 0976.

Laboratoire Expert Inc.
127 Boul. Industriel
Rouyn-Noranda, Québec J9X 6P2
Canada
Tel: (819) 762-7100 Fax: (819) 762-7510

FACTURE

No. Facture: **9695**
Date: 13-janv.-2009
Page: 1

Vendu à:

R.A. MacGregor
28 Ford Street
Sault Ste-Marie, Ontario P6A 4N4

Expédié à:

R.A. MacGregor
28 Ford Street
Sault Ste-Marie, Ontario P6A 4N4

N d'entreprise: 14479 1217 RT0001

Article	Quantité	Unité	Description	Taxe(s)	Prix unit.	Montant
			Folders 23921 & 23922			
	14		Preparations	F	3.00	42.00
	49		Analyses for Au & prep	F	12.00	588.00
			Sous-total:			630.00
			F - TPS @ 5%			
			TPS			31.50

Jan. 19/09
Skead 0958.

boratoire Expert Inc. TPS: #144791217

arques / Comments

Payable sur réception / Payable upon receipt

Transport	0.00
Montant total	661.50

Appendix III

Plan and Section of Hole

1400
1200W
1000W
800W
600W
400W
600N
500N
400N
300N
Lease 103927
LEROY BAY FAULT
LEROY I
S-84-8
S-84-10
S-84-12
L-93-1A
L-93-2
M-1
LARMONT 19
S-84-2
S-84-3
S-83-2
S-83-1
CPY
L-93-1
ENRIGHT POINT CPY
THIB GOLD ZONE
silicified wacke? diorite
LARDER LAKE SHEAR ZONE
86-47
18
LARMONT 20
S-84-13
LARMONT 17
LARMONT 12
LARMONT 16
LARMONT 14
LARMONT 13
LARMONT 15
S-84-14
THIB10
THIB9
THIB4
THIB2
THIB7
LARMONT 18
S-80-2
S-80-3
S-80-1
3
1
SCALE
0 100 200 300 400
METRES

LARDER PROJECT

J.H. J.H.	Drawn by: J.H.		
ta	Revised by:	Date	
/1/93			
6/93			

PLAN
GEOLOGICAL COMPILATION MAP

Scale: 1:5000 | Date: December 1992 | Plate: 3

Drill Hole		Dip	Azimuth
CJM-1	collar	57	337
SC84-8	collar	46	190
	200 ft.	46	
	400 ft.	44.5	
	600 ft.	43.5	
	800 ft.	41	
	1000 ft.	40	
	1200 ft.	38.5	
	1400 ft.	37.5	
	1600 ft.	36	
	1800 ft.	34.5	
SC84-10	collar	44	145
	200 ft.	42	
	400 ft.	41	
	600 ft.	38.5	
	800 ft.	36.5	
	1000 ft.	34	
93-1A	collar	60	192
	27.4 m	60	192
	34 m	60	192
	82 m	60	192
	132 m	60	192
	182 m	60	192
	253 m	60	192
	304 m	60	192
	354 m	60	192
	382 m	56	192

Drill Hole		Dip	Azimuth
SC84-13	collar	60	190
	50 ft.	59	
	150 ft.	58	193.5
	250 ft.	57	192
	500 ft.	54	
	700 ft.	50.5	
	900 ft.	48	
	1100 ft.	44	
	1300 ft.	38	
	1500 ft.	33	
	1700 ft.	29	
	1900 ft.	27	
SC84-14	collar	60	188
	50 ft.	62	
	300 ft.	58.5	
	500 ft.	57	
	700 ft.	52.5	
	900 ft.	52.5	
	1100 ft.	48	
	1300 ft.	46.5	
	1500 ft.	42.5	
	1700 ft.	37.5	
	1900 ft.	36.5	
	2100 ft.	34.5	
	2300 ft.	32	
	2500 ft.	28	

Appendix IV

Analysis Work Sheets

PROPERTY Gold Dollar - Leroy Bay LL-13+

Sample Type Drill Core Page 1

SC84-8

	Sample No.	P	R	S	Analysis	
				c		6-11 Sandst - Silts 5% Argill
				c		11-16
				c		16-21
				c		21-26
				c		26-32
				c		32-37
				c		37-42
				c		42-47
440	2969B	✓		½c	(IAD)⁻ S 34	47-52
442	2970B	✓		½c	(IAD)⁻ S 22	52-57
				c		57-62
				c		62-68
				c		68-73
				c		73-78
				c		78-83
IAD 613 cm	9994B	✓		X	16 (Au) (IAD) As 18 4 S 40⁻	83-88
				c		88-93
				c		93-98
				c		98-103
				c		103-108
443	2971B	✓		½c	(IAD)⁻ S 44	108-113
				c		113-118
				c		118-123
				c		123-128
				c		128-133 Sands - Silts 5% Arg. II

PROPERTY Gold Dollar - Leroy Bay LL-13F

Sample Type Drill Core Page 2

SC84-8

	Sample No.	P	R	S	Analysis	
				c		133-138 Sandst-S.Hst 5% Argill
586	9979B	✓		x	(IAD) S-37	138-143
1101	2397B	✓	x	½c	P2O5 .55 (AR) (Au) Cu 526	143-148 .05/1.5
439	2968B	✓		x	(IAD) Cu 245 Ni 377 S-1.8	148-153
517	45983D			x	(IAD) Cu 917.5 S-.77	153-158 .09/1.5
565	9980B	✓		x	(IAD) S-.17	158-163
				c		163-168
				c		168-173
				c		173-178
				c		178-183
436	2972B	✓		½c	(IAD) S<.05	183-188
				c		188-194
				c		194-199
				c		199-204
				c		204-209
				c		209-214
				c		214-219
				c		219-224
				c		224-229
				c		229-234
IAD 612 on	9995B	✓		c	(Au) (IAD) S-.28	234-240
				c		240-245
				c		245-250
				c		250-255
				c		255-260 Sandst-S.Hst 5% Argill.

PROPERTY Gold Dollar - Leroy Bay LL-137

Sample Type Drill Core Page 3

SC 84-8

	Sample No.	P	R	S	Analysis	
						260-265 Sandst-Siltst 5% Argill
						265-270 Sandst.-Siltst 5% Argill
						270-275 Sandst-Siltst. 40% Argill
						275-280
IAP 614 on	9996B	✓			17 Cu 186-5 (Au) (IAD) S-31	280-286
						286-291
						291-296
						296-301
						301-306
						306-311
						311-316
						316-321
						321-326
IAP 615 on	9997B	✓			9 (Au) (IAD) S-13	326-331
						331-336
						336-341
						341-347
						347-352
						352-357
						357-362
						362-367
						367-372
						372-377
454	45985D			×	(IMA) S-1 W2-1	377-382
450	2985B			×	(IAD) W60-4 S-43	382-388 Sandst.-Siltst. 40% Argill.

PROPERTY Gold Dollar - Leroy Bay LL-134

Sample Type Drill Core Page 4

SC 84-8

	Sample No.	P	R	S	Analysis	
452	45986			x	(IMA) S-1 W 2.5	388-393 Sandst.-Siltst 40% Argill
						393-398
IAR 1100	2398	✓✓	x	½ c	(Au) (IAR) S64	398-403
				c		403-408
				c		408-413
				c		413-418
				c		418-423
				e		423-428
				e		428-433
				c		433-438
				c		438-443
						443-448
437	2973	✓			(IAD) S-28	448-453
						453-458
						458-463
						463-468
						468-473
						473-478
						478-483
						483-488
						488-493
IAD 616 on	9998	✓			21 (Au) (IAD) S-17	493-498
						498-503
						503-508
						508-513 Sandst.-Siltst 40% Argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 5

SC84-8

	Sample No.	P	R	S	Analysis	
						513-518 Sandst-Siltst 40% Argill
						518-523
1146	85833			c	Au 1.7 S.15 (IAD) Cu 370.5	523-528
1013	237044$_E$			c	<.5 S.20 (Au)(IAD) Cu 891.9	528-533 .09/1.5
1014	237045$_E$			c	.5 S.16 (Au)(IAD)	533-538
IAD 617 on	9999$_B$	✓		c	19 (Au)(IAD) S.11	538-543
				c		543-548
				c		548-553
				c		553-558
				c		558-563
				c		563-568
				c		568-573
				c		573-578
						578-583
438	2974$_B$	✓			(IAD) S.10	583-588
						588-593
						593-598
						598-603
567	9972$_B$	✓		x	(IAD) As 13.8 S.20	603-608
433	2975$_B$	✓			(IAD) Cu 359 S.29	608-613
561	9973$_B$	✓		x	(IAD) S.11	613-618
						618-623
						623-628
						628-633
						633-638 Sandst-Siltst 40% Argill.

PROPERTY Gold Dollar - Leroy Bay LL-137

Sample Type Drill Core Page 6

SC84-8

	Sample No.	P	R	S	Analysis		
						638-643 Sandst.-Siltst. 40% Argill	
1004	3350				25 S·27 (Au)(IAD)	643-648	
IAD 837 on	24180D				<5 Cu 288·9 S 0·14 (Au)(IAD)	648-653	
545	9964B	✓			(IAD) Cu 3226·3 S·50	653-658	·32/1·5
549	9965B	✓			(IAD) Cu 597·0 S·44	658-663	·18/6·1
IAR 1099	2399	✓	×		(Au)(IAR) Cu 2230	663-668	·22/1·5
IAR 1098	2400	✓	×		(Au)(IAR) Cu 950	668-673	
448	2988				(IAD) S·51	673-678	
447	2989	✓			(IAD) Cu 2260 S·62	678-683	·23/1·5
413	45984D			×	(IAD) Cu 348·2 S·25	683-688	
510	45987D			×	(IAD) Cu 292·6 S·46	688-693	
520	45988D	✓		×	(IAD) S·26	693-698	
451	2984B	✓			(IAD) Cu 1422 S·76	698-703	·14/1·5
569	45989D			×	(IAD) Cu 256·8 S·50	703-708	
IAD(2) 620 IAD 511	45995D			×	(IAD) Cu 1445 S·44 (IAD) Cu 1367·3 S·41	708-713	·13/1·5
IAD(2) 624 IAD 507	45996D			×	(IAD) Cu 324·2 S·50 (IAD) Cu 316·9 S·52	713-718	
452	2983				(IAD) Cu 293 S·62	718-723	
IAD(2) 626 IAD 412	45993D			×	(IAD) Cu 470·8 S·34 (IAD) Cu 473 S·40	723-728	
IAD(2) 622 IAD 508	45994D			×	(IAD) Cu 136·8 S·50 (IAD) Cu 1297·6 S·53	1332·8 728-733	
515	45992D			×	(IAD) Cu 566·4 S·54	733-738	·11/4·6
434	2976B	✓			(IAD) Cu 1323 S·33	738-743	
506	45991D			×	(IAD) S·58	743-748	
991	3347			c	9 S·31 (Au)(IAD)	748-753	
993	3348			c	57 S·36 (Au)(IAD) Cu 511·8	753-758	
882	24187D	✓		×	Au 9·8 S·99 (IAD) Cu 760·2 As 11·2	758-763	Sandst.-Siltst. 40% Argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 1

SC84-10

Sample No.	P	R	S	Analysis	
					10-15 Siltstone
					15-20
					20-25
					25-30
					30-35
					35-40
					40-45
					45-50
					50-55
					55-60
					60-65
					65-70
					70-75
					75-80
					80-85
					85-90
					90-95
					95-99.5 Siltstone
					99.5-105 Sandstone
					105-110
					110-115
					115-120
					120-126
					126-131
					131-136 Sandstone

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 2

SC 84-10

Sample No.	P	R	S	Analysis	
					136-142 Sandstone
					142-147
					147-152
					152-157 Sandstone
					157-162 Siltstone
					162-167
					167-173
					173-178
					178-183
					183-188
					188-193
					193-198
					198-204
					204-209
					209-214
					214-219
~~76849~~					219-224
~~76850~~					224-229
					229-234
					234-240
					240-245
					245-250
					250-255
					255-260 Siltstone
					260-265 Sitts-Argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 3

SC 84-10

	Sample No.	P	R	S	Analysis	
						265-270 Silts - Argill
						270-275
						275-280
						280-285
						285-290
						290-295
						295-300
						300-305
						305-310
						310-315
						315-320
						320-325
						325-330
883	24188$_D$	✓			Au 16.6 (IAD) As 3.1 S.14	330-335
598	45967	✓		×	(IAD) Cu 435.8 S 1.30	335-340
884	24189$_D$	✓			Au 5.3 S.23 (IAD) Cu 201.6 As 3.7	340-345
IAD Au 1031 on	24327				<5 S.37 (Au) (IAD)	345-350
						350-355
						355-360
						360-365
						365-370
						370-375
IAD 607 on	24153$_D$	✓			16 Cu 187.5 (Au) (IAD) S.16	375-380
576	9984$_B$	✓		×	(IAD) Cu 212.3 S.17	380-385.5
446	2986	✓			(IAD) Cu 1135* S.21	385.5-387 Silts - Argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 4

SC 84-10

	Sample No.	P	R	S	Analysis	
574	9985B	✓		×	(IAD) Cu 365-7 S·38	387-392 Silts-Argill
IAD 608 on	24152	✓			59 Cu 185-1 (Au) (IAD) S·10	392-397
						397-402
						402-407
						407-412
						412-418
						418-423
						423-428
						428-433
						433-438
						438-443
						443-448
						448-454
						454-459
IAD 605 on	24155D	✓			8 (Au) (IAD) S·24	459-464
						464-469
						469-474
						474-480
						480-485
						485-490
						490-495
						495-500
	62986					500-505
IAD 603 on	24157D	✓			9 (Au) (IAD) S·49	505-510
						510-515 Silts-Argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 5

SC 84-10

	Sample No.	P	R	S	Analysis	
1152	62969				(IAD) Cu 241·3 S·19	515-520 Silts - Argill
1153	62968				(IAD) Cu 71·3 S·69	520-525 Silts - Argill
1154	62967				(IAD) Mo 14 Cu 1273 S·71	525-530
2360	9160$_{NH}$	✓			(IAR) Cu 517 S·20	530-536
986	24137				8 S·60 As 14·7 (Au) (IAD) Cu 419·8	536-541
1006	24138				<5 S·30 Mo 7·4 (Au) (IAD) Cu 683·4	541-546
886	24191$_D$	✓			As 2·5 Au 5·9 B: 1·0 S·21 (IAD) Mo 21 Cu 1457	546-552
IAD 604 cn	24156$_D$	✓			6 S·38 (Au) (IAD) Cu 1384·2 S·35	552-557
885	24190$_D$	✓			Au 5·1 S·55 (IAD) Cu 425·3 As 9·8	557-562
1008	51100$_F$				<5 S (Au) (IAD) Cu 285·7	562-568
	cut					568-573
1156	62965				(IAD) Cu 1052 S·33	573-578
1155	62966				(IAD) Cu 1351 S·47	579-583
						583-588
						588-593
						593-598
IAD(2) IAD 621 518	46000$_D$			×	(IAD) Cu 68·3 S·72 (IAD) S·69	598-603
1106	19797	✓	×		Cu·040% Ni 496 Th 19 B: 6 P_2O_5 3·6% La 178 Ce 1412 (Au) (Cu) (IAR) Cu 448	603-608
	19798	✓	×		Cu·550% (Au) (Cu)	608-615 .55/2·1
187	19799	✓	×		Cu·051% (Au) (Cu) (IM) Cu 275	615-620
459	46849$_B$	✓			S<·05 Th 9·2 (IAD) P_2O_5 1·28% Cu 109%	620-625 P_2O_5 1.44 1/4-3
460	46850$_B$	✓			Th 22·9 (IAD) P_2O_5 1·07% La 111	625-630
458	85900$_E$	✓			S·44 Th 17·7 (IAD) Cu 1132 P_2O_5 1·96%	630-635
IAD IMA 625 453	45998$_D$			×	(IAD) Cu 72·0 S·19 (IMA) Li 119·5 S·2	635-640
IAD(2) IAD 623 519	45999$_D$			×	S·73 (IAD) Cu 313·3 S·72 (IAD) Cu 313·3	640-645 Silts - Argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 6

SC84-10

	Sample No.	P	R	S	Analysis	
1146	62970				(IAD) Cu 356·5 S·45	645-650 Silts-Argill
1150	62971				S·82 (IAD) Cu 353·7 Co 60·5	650-655
						655-660
						660-665
						665-670 Silts-Argill
IMA A 25 on	24175	✓			8 P_2O_5 0·91 Li 122·8 Zr 228·9 (Au) (IMA) Ni 479·6 S·17	670-675 Bte carb-tuff
IAD WRR 627 13	45997D			×	Fe2O3 15·91 MgO 20·88 TiO2 1·36 P_2O_5 1·30 L.O.I 10·4 S·39 Ce 306·8 Pr 39·61 Nd 161·2 Sm 26·43 Eu 3·3 S·34 (IAD) (WRR) SiO_2 28·62	675-680 Th 16·3 U 6·2 W 6·4 Zr 377·6 La 135·6
435	2992	✓×		×	(IAD) S 1·44	680-682
IMA Au 591 on	24315				<5 Cu 210·4 Ni 395·2 (Au) (IMA) Th 22 U 3·6	CaO 19·1 P_2O_5 2·22 La 243·8 S·2 Y 39·6 682-688 Cu 1121 Zr 353·3 Ce 805
WR Au 320 on	24316				<5 S·26 L.O.I 21·2 MgO 16·8 CaO 19·05 P_2O_5 2·69 Ni 481 (Au) (WR) SiO_2 17·57	688-693·5 Bte carb-tuff
985	24141				<5 S·60 (Au) (IAD)	693·5-699 Silts/Argill
1000	24140				<5 S1·01 (Au) (IAD) Cu 463·7	699-704
1009	24139				<5 S·26 (Au) (IAD) Cu 242·3	704-710
887	24192D	✓			Au 4·3 S·18 (IAD) Cu 273·8 As 2·3	710-715
IAD 609 on	24151D	✓			13 S1·48 (Au) (IAD) Cu 3241·9	715-720
576	9986B	✓		×	Mo 11·5 (IAD) Cu 1027·3 S·43	720-725
463	4595AD	✓		½c	(IAD) Cu 557·3 S·50	725-731
461	45953D	✓		×	(IAD) Cu 1099 S·55	731-736
462	45952D	✓	8	×	S·27 P_2O_5 1·09 (IAD) Mo 12·1 Cu 3922	736-741 Silts/Argill
464	2999B	✓			Ni 561·5 Bi 1·2 S·34 (IAD) Mo 25·5 Cu 1866	741-746 Graph-silic-argill 19/1·5
469	2998B	✓			(IAD) S·30	746-752
471	2997B	✓			Bi 1·1 S·30 (IAD) Mo 13 Cu 1031·9	752-757 13/3·0
470	2995B	✓			(IAD) Cu 1572·9 S·47	757-762
466	2994B	✓			(IAD) S·26	762-768
445	2987B	✓			(IAD) Cu 811 S·51	768-773 Graph-silic-argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 7

SC84-10

	Sample No.	P	R	S	Analysis	
444	2990$_B$	✓			(IAD) Cu 1960 S·54	773-778. Graph-silic-argill
441	2991$_B$	✓			(IAD) B: 1·0 Cu 1858 S·32	778-784
472	2993$_B$	✓			(IAD) Cu 969·3 S·15	784-789
465	2996$_B$	✓			(IAD) Cu 1404·4 S·38	789-794
468	3000$_B$	✓			(IAD) Cu 827·1 S·36	794-800
467	45951$_D$	✓		×	(IAD) Cu 1029·5 S·24	800-805
487	45976$_D$			×	(IAD) B: 1·3 S·43 Mo 12·7 Cu 1267·1	805-810
490	45977$_D$	✓		×	(IAD) B: 2·9 S·54 Mo 22·4 Cu 3350·4	810-815
489	45978$_D$	✓		×	(IAD) B: 2·3 S·54 Mo 20·3 Cu 3058·9	815-820
498	45979	✓		×	(IAD) S·32 Mo 20·2 Cu 1580·1	820-825
	19794	✓	×		(Au) (Cu) ·570%	825-830
	19795	✓	×		(Au) (Cu) ·420%	830-835
1183	19796	✓	×		(Au) (Cu) ·310% (IAR) Cu 3173	835-840
497	45980$_D$	✓		×	(IAD) Cu 494·7 S·20	840-845
596	45969$_D$	✓		×	(IAD) Cu 758·6 S·27	845-850
597	45968$_D$	✓		×	(IAD) Mo 11·0 Cu 1648·0 S·37	850-855
595	45970$_D$	✓		×	(IAD) Cu 458·5 S·49	855-860
594	45971$_D$	✓		×	(IAD) B: 1·6 Cu 1006·7 S·30	860-865
593	45972$_D$	✓			(IAD) Cu 1013·9 S·33	865-870
592	45973$_D$	✓			(IAD) Cu 887·6 S·32	870-875
599	45974$_D$	✓			(IAD) B: 1·4, Mo 11·0 Cu 1411·1 S·24	875-880
600	45975$_D$	✓			(IAD) Mo 23·7 B: 2·9 Cu 2006·5 S·34	880-885
495	45981$_D$	✓		×	(IAD) S·17	885-890
514	45982$_D$			×	(IAD) B: 3·3 S·30 Mo 14·2 Cu 1053·2	890-894
1152	2956$_B$	✓			(IAR) Cu 1175	894-898 Graph.-silic.-argill

PROPERTY Gold Dollar - Leroy Bay LL-13f

Sample Type Drill Core Page 8

SC84-10

	Sample No.	P	R	S	Analysis	
1151	2955B	✓			(AR) Bi 6 Mo 28 Cu 1413 Ag 1.6	898-902 Graph.-silic.-argill
1150	2954B	✓			(AR) Cu 1008	902-906
1149	2953B	✓			(AR) Cu 9249 Ag 2.6	906-910
1148	2952B	✓			(Au)(Cu) Ag 79 Bi 11 Cu 0.97% (AR) Cu 9800 Ag 2.7	910-914.5
1147	2951B	✓			(AR) Bi 5 Mo 24 Cu 3774 Ag 2.6	914.5-920
1060	8241Y				(AR) Cu 1415	920-925
o.n. 1128	8245Y				Ag 2.9 (Cu)(Au) 1.19% 130 Au (AB) Cu 11859 Bi 7	925-930
o.n. 1143	8247Y				Ag 2.9 (Cu)(Au) Cu 1.28 (AR) Mo 19 Cu 12775	930-934
o.n. 1144	8248Y	✓			Ag 3.4 Bi 9 (Cu)(Au) Cu 0.95 (AB) Mo 148 Cu 10261	934-938
o.n. 1145	8249Y	✓			Ag 2.5 (Cu)(Au) Cu 1.15 (AB) Mo 26 Cu 11423	938-942 Graph.-silic-argill
1146	8250Y	✓			(AB) Cu 614	942-945 Cryst. carb tuff
	19789	✓	x		(Au)(Cu) .225%	945-950
	19788	✓	x		(Au)(Cu) .415%	950-955
	19787	✓	x		(Au)(Cu) .315%	955-960
	19782	✓	x		(Au)(Cu) 1.70%	960-965
	19783	✓	x		(Au)(Cu) 2.96%	965-970
	19784	✓	x		(Au)(Cu) .106%	970-975
	19785	✓	x		(Au)(Cu) .182%	975-980
	19786	✓	x		(Au)(Cu) .265%	980-985
	45958D	✓		x	(AD) Cu 493.5 S 49	985-990
481	45959D	✓		x	(AD) As 73.1	990-995
479	45961D	✓		x	S .83 (AD) Cu 581 As 74.3	995-1000
477	45960D	✓		x	S 1.47 (AD) Cu 1655.1 As 69.3	1000-1005
1092	19790	✓			As 80 P_2O_5 .51 (Au)(AR) Mo 12 Cu 1954	1005-1010
1184	19791	✓			(Au)(AB)	1010-1015 Cryst carb tuff

PROPERTY Gold Dollar - Leroy Bay LL-13(f)

Sample Type Drill Core Page 9

SC84-10

Sample No.	P	R	S	Analysis	
19792	✓	x		Au⁻ TAR⁻	1015-1020 Cryst carb. tuff
19793	✓	x		Au .058oz TAR As 81 Mo 12 Cu 1485	1020-1025
19891	✓	x		Au⁻ TAR Cu 302	1025-1030
19812	✓	x		Au⁻ TAR⁻	1030-1035
19813	✓	x		Au⁻ TAR⁻	1035-1039.5
2960				TAR Cu 4537	1039.5-1045
2959				TAR Ag 1.7 Mo 25 Cu 7575	1045-1050
2966				TAR Mo 18 Cu 1190	1050-1054.5
2965				TAR⁻	1054.5-1056 qtz vein
2964				TAR P_2O_5 1.23%	1056-1059
2963				TAR⁻	1059-1061 qtz vein
2962				TAR⁻	1061-1064.5
2961				TAR Cu 352	1064.5-1070
19800	✓			Au⁻ Cu 1.70	1070-1075
19801	✓			Au⁻ Cu .375 TAR Cu 3779 Mo 38	1075-1080
2958				TAR Cu 2426	1080-1085
2957				LL 12 TAR P_2O_5 .73% Mo 12 Cu 3572	1085-1090
8246				TAR Ag 1.0 Bi 6 Mo 79 Cu 3572	1090-1096
8242				TAR Mo 142	1096-1102 Cryst. carb tuff

PROPERTY Gold Dollar - Leroy Bay LL-13(f)

Sample Type Drill Core Page 1

BQ

SC84-10 Sudbury Contact

Sample No.	P	R	S	Analysis	feet
					10-603
19797				Au, Cu .040	603-608
19798				Au, Cu .550	608-615
19799				Au, Cu .031	615-620
					620-825
19794				Au, Cu .573	825-830
19795				tr Au, Cu .420	830-835
19796				Au, Cu .310	835-840
					840-945
19789				Au, Cu .225	945-950
19788				Au, Cu .415	950-955
19787				Au, Cu .315	955-960
19782				Au, Cu 1.70	960-965
19783				Au, Cu 2.96	965-970
19784				tr Au, Cu .106	970-975
19785				tr Au, Cu .182	975-980
19786				Au, Cu .265	980-985
					985-1005
19790				Au	1005-1010
19791				Au	1010-1015
19792				Au	1015-1020
19793				Au .058oz	1020-1025
19811				Au	1025-1030
19812				Au	1030-1035
19813				Au	1035-1039.5

PROPERTY Gold Dollar - Leroy Bay LL-13(f)

Sample Type Drill Core BQ Page 2

SC84-10 Sudbury Contact

Sample No.	P	R	S	Analysis	feet
					1039.5 - 1070
19800				Au Cu 1.70%	1070 - 1075
19801				Au Cu 0.375%	1075 - 1080
					1080 - 1102

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 1

SC 84-13

Sample No.	P	R	S	Analysis	feet
					6-11 silt^3-argil.
					11-16
					16-21
					21-26
					26-31
					31-36
					36-41
					41-46
					46-51
					51-56
					56-61
					61-66
					66-71
					71-76
					76-82
IAD Au 1145 on 49004				8 Au IAD As 9.8 S-32	82-87
					87-92
					92-97
					97-102
					102-107
					107-112
					112-117
					117-122
					122-127
IAD Au 1129 on 49005				5 Au IAD SC-5 As 29.3	127-132 silt^2-argil.

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 2

SC 84-13

Sample No.	P	R	S	Analysis	feet
					132-137 silt^s - argil.
					137-142
					142-147
					147-152
					152-157
					157-162 silt^s - argil.
					162-167 carb mud^s argil.
					167-172
					172-178
					178-183
1AD Au 1144 on 49003				5 Au (AD) As 21·7 S·32	183-188 carb mud^s argil.
					188-193 chl. carb mud^s
					193-198
					198-204
					204-209
					209-214
815 9341				<.03 Au IMA	214-219
2281 9342				<.03 Au (AR) S·21	219-224
2351 9343				<.03 Au (AR) S·08 As 23	224-229
					229-234
					234-239
					239-243
					243-247
					247-254
					254-260 chl. carb mud^s

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 3

SC84-13

	Sample No.	P	R	S	Analysis	feet
						260-267 cht carb mud^s
						267-272 argillite
						272-277
IAD Au 1130 oz	49006				^{6}Au, (IAD) As 11.0 S-25	277-282
						282-287
						287-292
						292-297
						297-302
						302-307
						307-312
2282	9347				<.03 Au 2ppm S-97 (Au) (IAR) Fe, O, 19.46	312-317
						317-322
						322-327
						327-332
						332-337
						337-342
						342-347
						347-352
						352-357
						357-362
						362-367
						367-372
						372-377
						377-382
						382-387 argillite

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 4

SC84-13

	Sample No.	P	R	S	Analysis	feet	
						387-392	argillite
						392-397	
						397-402	
						402-406	
						406-411	
IAD Au 1041 ox	9327				<5 5.62 Au IAD	411-416	argillite
IAD Au 1045 ox	9326				6 5.75 Au IAD As 29.5	416-421	argil/carb mud^s
						421-426	
						426-431	
						431-436	
						436-441	
						441-446	
2353	9340				<.03 P_2O_5 0.73% Au IAR As 57 S .07	446-451	
IAD Au 1139 ox	49001				6 Sb 1.2 S .25 P_2O_5 .71 Au IAD As 50.4	451-456	
2283	9339$_{NM}$				<.03 As 36 S .41 Au IAR P_2O_5 0.62%	456-461	
	[redacted]					461-466	
						466-471	
						471-476	
						476-481	
						481-486.5	
						486.5-492	
IMA Au 592 ox	9328				<5 56 4.6 Au IMA S .3	492-497	
						497-502	
						502-507	
						507-512	argil/carb. mud^s

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 5

SC84-13

Sample No.	P	R	S	Analysis	feet	
					512-517	argil/carb. mud^{s}
					517-522	
IAD Au 1036 ppb 9325				<5 S-14 Au IAD As 101.0 Sb 1.0	522-527	argil./carb. mud^{s}
IAD Au 1038 ppb 9324				7 S-91 Au IAD As 98.4	527-532	carb. mud^{s}/argil.
					532-537	
					537-542	
					542-547	
					547-552	
					552-557	
					557-562	
IAD Au 1143 ppb 49010				7 Sb 1.4 S-17 Au IAD As 46.3	562-567	
					567-572	
					572-578	
					578-583	
					583-588	
					588-594	carb mud^{s}/argil.
					594-599	chl. argillite
					599-604	
					604-609	
					609-614	
IAD Au 1047 ppb 9329				7 S-08 Au IAD As 59.7	614-619	
					619-624	
					624-629	
					629-634	
					634-639	chl. argillite

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 6

SC84-13

	Sample No.	P	R	S	Analysis	feet	
						639-644	chl. argillite
						644-648	
						648-653	
						653-658	
						658-663	
						663-668	
2273	9344				<.03 As 61 (Au) (IAR) B: 4 S < .05	668-673	
						673-678	
						678-683	
						683-688	
						688-693	
						693-698	
						698-703	
						703-708	
						708-713	
						713-718	chl. argillite
						718-724	qtz. lapilli tuff
IAD Au 1046 on	9320				12 S-19 (Au) (IAD) As 34.4	724-729	
						729-735	qtz lapilli tuff
						735-740	chl. argillite
						740-745	
						745-750	
						750-755	
						755-760	
						760-765	chl. argillite

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 7

SC84-13

	Sample No.	P	R	S	Analysis	feet	
						765-770	chl. argillite
						770-776	chl. bte sands
						776-782	
						782-787	
779	9345 vn				<.03 Au 2236 Ce 127 S.2 (Au) (IMA) N: 4458 S62.0	787-793	chl. bte. sands
						793-798	chl. argillite
						798-803	
						803-808	
2279	9336				<.03 (Au) (IAR) S.16	808-813	
						813-818	
						818-823	
						823-828	
						828-833	
						833-838	
						838-343	
IAD Au 1042 on	9319				<5 S.79 (Au) (IAD)	843-848	
						848-853	
						853-857	
IMA Au 594 on	9330				6005 (Au) (IMA) S.2	857-862	
						862-867	
						867-872	
						872-877	
						877-882	
						882-887	
						887-892	chl. argillite

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 8

SC84-13

	Sample No.	P	R	S	Analysis	feet	
2274	9346 NM				<.03 Au (IAR) B:3 S:29	892-897	chl. argillite
						897-902	
						902-907	
						907-912	
						912-917	
						917-922	
						922-927	
						927-932	chl. argillite
						932-937	chl. mud^s/argil.
						937-942	
						942-947	
IAD Au 1131 oz	49007				14 Au (IAD) S:71	947-952	
						952-958	
						958-963	
						963-968	chl. mud^s/argil.
						968-973	chl. argillite
						973-978	
						978-983	
						983-988	
2276	9356 NM				<.03 Au (IAR) B:7 S:21	988-993	
						993-998	
						998-1003	
						1003-1008	
						1008-1013	
2352	9348 NM				<.03 Au (IAR) S:15	1013-1018	chl. argillite

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 9

SC84-13

	Sample No.	P	R	S	Analysis	feet	
						1018-1024	chl. argillite
						1024-1029	
						1029-1034	
						1034-1039	
						1039-1044	chl. argillite
2354	9337				<.03 Au (AR) P_2O_5 0.53% S<.05	1044-1050	chl. mud^{s}/argil.
2238	9338				(AR) S .37	1050-1055	
						1055-1060	
						1060-1066	
						1066-1072	chl. mud^{s}/argil.
						1072-1077	
						1077-1082	
IAD Au 1142 on	49009				7 Au (IAD) S .17	1082-1087	
						1087-1092	
						1092-1097	
						1097-1102	
						1102-1107	
2275	9358 NM				<.03 Au (AR) Bi 6 S .61	1107-1112	
						1112-1117	chl. mud^{s}/argil.
						1117-1123	dolo. silt/argil.
						1123-1129	
						1129-1135	
IAD Au 1040 on	9318				11 S .84 Au (IAD)	1138-1142	
						1141-1147	
						1147-1153	dolo silt/argil.

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 10

SC 84-13

Sample No.	P	R	S	Analysis	feet	
					1153-1159	dolo silt/argil.
					1159-1165	dolo silt/argil.
					1165-1171	argil mud^{s}
					1171-1176	
					1176-1182	
IAD Au 1138 cn 49008				1(12) Au IAD S-72	1182-1187	
					1187-1192	
					1192-1197	
					1197-1202	
					1202-1207	
					1207-1212	
					1212-1217	
814 9349_{NM}				<.03 Au IMA	1217-122	
2284 9350_{NM}				<.03 As 22 Au IAR S-59	1222-1227	
2377 9351_{NM}				<.03 Au IAR	1227-1232	argil mud^{s}
2378 9352_{NM}				<.03 Au IAR	1232-1237	chert tuff mud^{s}
2277 9353_{NM}				<.03 Au IAR As 111 S-41	1237-1242	
823 ~~9354~~ 9354_{NM}				<.03 Au IMA	1242-1247	
2379 9355_{NM}				<.03 Au IAR	1247-1252	
					1252-1257	
1129 55870				IAR As 90 S65 ✓	1257-1261	
143 55871				WR S-59 Na_2O 5.34 ✓ SiO_2 44.77	1261-1266	
1130 55872				IAR As 101 S65 ✓	1266-1272	
					1272-1277	
					1277-1282	chert tuff mud^{s}

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 11

SC84-13

	Sample No.	P	R	S	Analysis	feet	
						1282-1287	chert tuff mud^s
						1287-1292	
IAD Au 1140 oz	85839				28 Au, IAD As 132.0 S.26	1292-1298	
483	85838				35 Au, 60 INA As 71 Ba 1100 Sb 2.6	1298-1303	
	85840				143 Au IMA	1303-1308	
2370	85837				8 Au IAR S.37 As 68 Sb 6	1308-1314	
	85834				214 (209) Au IAR	1314-1320	
484	85835				41 Au, 82 INA As 99 Sb 1.9	1320-1325	
IAD Au 1137 oz	85836				21 Au, IAD As 80.5 S.23	1325-1330	
2380	9359 NM				<.03 Au IAR	1330-1335	
	9360 NM				<.03 Au	1335-1341	
	9361 NM				<.03 Au	1341-1346	
2280	9362 NM				<.03 Au IAR As 58 Bi 5 S.40	1346-1351	
	9363 NM				<.03 Au	1351-1356.5	
	9364 NM				<.03 Au	1356.5-1362	
2381	9365 NM				<.03 Au IAR	1362-1367	
	9366 NM					1367-1372	
142	55866				IAR WR SiO_2 48.46 S.20 ✓	1372-1377	
56	55867				Au 13.9 S.95 IAD As 13.1 Sb 1.2 ✓	1377-1382	
1132	55868				IAR As 31 ✓	1382-1387	chert tuff mud^s
1133	55869				IAR As 38 ✓	1387-1392	chert carb. mud^s
						1392-1397	
						1397-1402	
						1402-1407	
						1407-1412	chert carb mud^s

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 12

SC84-13

Sample No.	P	R	S	Analysis	feet
					1412-1417 chert carb mvd^s
					1417-1422
					1422-1427
					1427-1432
					1432-1438
					1438-1443
					1443-1448
					1448-1453
					1453-1458
					1458-1463
					1463-1468
					1468-1473
					1473-1479
					1478-1483
					1483-1488
					1488-1490
					1490-1495
					1495-1500
					1500-1505 cherty carb mvd^s
					1505-1510 mvd^s/argil.
					1510-1515
					1515-1520
					1520-1525
IAD Au 1059 on	9314			Aw (<5) IAD (S-12) As 64-8	1525-1530
IAD Au 1061 on	9315			Aw (<5) IAD (S-12) As 56-8	1530-1535 mvd^s/argil.

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 13

SC84-13

	Sample No.	P	R	S	Analysis	feet	
IAD Au 1056 on	9316				<5 5.14 (Au) (IAD) As 480	1535-1540	mud^s/argil.
IAD Au 1060 on	9317				<5 5.17 (Au) (IAD) As 55.5	1540-1545	
IAD Au 1035 on	9310				12 (16) 5i.04 (Au) (IAD) As 82.6 Sb 5.4	1545-1549	mud^s/argil.
INA Au 477 on	9311				33 52 Co 54 Th 13.7 W 14 Ce 150 Nd 73 Sm 13.1 (Au) (INA) As 164 Sb 3.3	1549-1553	cherty carb debris flow
INA Au 478 on	9312				<5 10 Ni 530 Nd 54 (Au) (INA) As 112 Sb 1.6	1553-1557	
INA Au 479 on	9313				<5 9 Ni 1280 Cr 1790 W 9 (Au) (INA) As 306 Sb 4.3	1557-1562	
1223	9301				(TAR) As 53 W 4 ✓	1562-1567	
215	9302				(WR) SiO_2 41.61 S 0.03 ✓	1567-1572	
1222	9303				(TAR) As 57 ✓	1572-1577	
1771	9304				(TAR) As 43 Sb 8 ✓	1577-1582	
						1582-1587	
						1587-1592	
						1592-1597	
						1597-1602	cherty carb debris flow
						1602-1607	bte carb tuff
						1607-1612	
						1612-1618	
						1618-1623	
						1623-1628	
						1628-1634	
						1634-1639	
						1639-1644	
						1644-1649	
						1649-1654	
						1654-1659	bte carb. tuff

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 14

SC84-13

Sample No.	P	R	S	Analysis	feet
					1659-1665 btc carb. tuff silic
					1665-1670
					1670-1675
					1675-1681
					1681-1686
					1686-1691
					1691-1696
					1696-1701
					1701-1706 btc carb tuff
					1706-1711 ?-c calcite
9367					1711-1716
					1716-1722
					1722-1727
					1727-1732
					1732-1737
					1737-1742
					1742-1747
					1747-1752
					1752-1757
					1757-1762
					1762-1767
					1767-1772
					1772-1777
					1777-1782
					1782-1787

PROPERTY Gold Dollar (Enright Point) LL-13(d)

Sample Type Drill Core Page 1
BQ

SC 84-13 Sudbury Contact

Sample No.	P	R	S	Analysis	feet
					6-234
153				-	234-239
					239-247
154				-	247-254
					254-1257
157				240	1257-1261 .24/1.22
155				-	1261-1266
156				-	1266-1272
					1272-1372
158				-	1372-1377
159				-	1377-1382
160				-	1382-1387
161				-	1387-1392
					1392-1562
162				-	1562-1567
163				-	1567-1572
164				-	1572-1577
165				-	1577-1582
166				-	1582-1587
					1587-2327

Appendix V

Drill Logs

JOURNAL DE SONDAGES

No S-84-8

Projet: Sudbury Contact Boundary of L319206+L319207 | Ligne: | Ord.: WP 3-319206 Az 339° - 39' measured from | Profondeur: 200 400 600 800 1000 1200 1400 1600 1800 | Couronne

Claim: | Section: | Ord.: | Plongée: 46 44.5 43.5 41 40 38.5 37.5 36 34.5 | AX: EX:

Canton: | Lat.: | Long.: | Azimut: | AQ:

Rang: | Elévation Orifice: 308m (955') | Commencé le: Jan. 19/84

Lot: | Azimut: 190° at - 46 | Terminé le: Jan. 31/84

N.T.S.: | Niveau: | Entrepreneur: Barron Drilling

Feuille No 1 de 11

De _____ à _____

Profondeur totale: 1843'

Journal: Stephen Medd

Date: January 21/84

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	% cpy
0	6	Overburden									
6	270	Interbedded sandstone/siltstone with 5-10% argillite laminations									
		- sandstone is fine grained to silty									
		- light grey									
		- argillite is dark grey									
		- plane parallel bedding surfaces with localized contorted									
		bedding (soft sediment deformation?) ball and pillow structures.									
		- pebble-size angular fragments of argillite scattered in some									
		sandstone/siltstone units-appear to be primary rip up clasts or									
		slump-breccia fragments									
		0-138' - 1-2% py as large partially-corroded cubes (up to 1 cm)									
		- trace cpy in fracture veinlets									
		138'-148 - 5-7% qtz/carbonate fracture	2397	143	148	5	1		nil		
		veining; avg c.a. 55°									
		-qtz/carbonate veining also forms irregular patterns around									
		brecciated fragments.									
		- 1% cpy as irregular blebs and as disseminations along veins.									
		- veins 1mm - 7mm wide.									
		168-178 - ball + pillow slump structures (contorted laminations)									
		148-270 - 1-2% py as large partially corroded cubes (up to 1cm)									
		and as laminations of tiny disseminated cubes in sandy units.									
		- 1% cpy in fracture veinlets and with py along laminations.									
270	848	interbedded sandstone/siltstone with 40%	2398	398	403	5	1-2		tr		1
		argillite laminations.									

LF C-4782

JOURNAL DE SONDAGES

No S-84-8

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 8 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	% cpy
		1539-1555 coarser grained with large (up to 4mm) grains of									
		smokey qtz.									
		- more biotite; biotite appears to replace some dark volcanic?									
		shards									
		- only trace sulfides									
1555	1602	talc-chlorite flow breccia									
		- dark greenish black with 30% white calcite fracture veinlets									
		- very soft but core recovery is good (90%)									
		- no sulfides									
1602	1645	biotite-rich crystal carbonate tuff									
		- dark grey to blackish with a purple tint									
		- up to 35% biotite platelets up to 5mm									
		- biotite shows no preferred orientation									
		- biotite may replace clastic shards									
		- coarse grained									
		1602-1605 - bleached, silicified slightly	2428	1602	1606.5	4.5	tr		nil		tr
		- 10% biotites (1mm)	2429	1606.5	1609.5	3	tr		.017		tr
		- trace fuchsite along edges of	2430	1609.5	1613	3.5	1		nil		tr
		calcite veining (3%)	2431	1613	1618	5	1		nil		
		- trace cpy along calcite veining									
		1605-1605.5 biotite-rich, talc-chlorite bed									
		- friable									
		1605.5-1606.5 - bleached, silicified slightly									
		- trace fuschite; trace cpy									

LF C 4782

JOURNAL DE SONDAGES

No S-84-8

Projet : Sudbury Contact Ligne : _____ Ord. : _____ Profondeur : _____ Couronne

Claim : _____ Section : _____ Ord. : _____ Plongée : _____ AX: EX:

Canton : _____ Lat. : _____ Long. : _____ Azimut : _____ AQ:

Rang : _____ Elévation Orifice: _____ Commencé le : _____

Lot : _____ Azimut: _____ Terminé le : _____

N.T.S. : _____ Niveau: _____ Entrepreneur : _____

Feuille No 9 de _____

De _____ à _____

Profondeur totale: _____

Journal: _____

Date: _____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
		1606.5-1609.5 - blackish, unbleached									
		1609.5-1611.5 - bleached, silicified slightly									
		- trace fuschite; trace cpy									
		1611.5-1618 - blackish, unbleached									
		- 1% py as fine grained disseminated cubes (1mm) and in									
		veinlets associated with calcite and trace fuschite									
		1618-1645 blackish, unbleached biotite-rich crystal carbonate tuff									
		- trace cpy; trace fuschite									
		- very weakly magnetic locally due to fine grained pyrrhotite(1%)									
1645	1647	talc-chlorite flow breccia									
		- no sulfides									
		- calcareous locally									
1647	1679.5	biotite-rich crystal carbonate tuff									
		-blackish, unbleached									
		1647-1671.5 - coarse grained									
		- trace cpy; trace py									
		- very weakly magnetic locally due to fine grained disseminated									
		pyrrhotite (<1%)									
		1671.5-1676 - fine grained									
		- slightly chloritic									
		1676-1679.5 - coarse grained									
		- trace py									
		- slightly chloritic									

LF C-4782

JOURNAL DE SONDAGES

No S-84-8

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ ____ ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ ____ ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ ____ ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 10 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
1679.5	1684	Talc-chlorite flow breccia									
		- no sulphides									
		- locally calcareous									
1684	1691	biotite-rich crystal carbonate tuff									
		- blackish, unbleached									
		- slightly chloritic									
		- coarse grained									
1691	1776	crystal carbonate tuff with minor biotite									
		- up to 10% biotite									
		- bleached zone									
		1691-1714 - slight bleaching									
		- 3% calcite veining with trace fuchsite along edges.									
		- trace cpy, py									
		1714 - 1754 - strongly bleached zone	2432	1714	1718	4	Tr		tr		
		- light grey with a greenish	2433	1718	1723	5			nil		
		(fuchsite?) tint on broken space	2434	1723	1728	5			nil		
			2435	1728	1733	5			nil		
		- sucrosic, coarse grained texture	2436	1733	1738	5		1	nil		
		- less biotite (<3%)	2437	1738	1743	5			nil		
		- dark angular shards scattered	2438	1743	1748	5			nil		
		throughout	2439	1748	1753	5			nil		
		- trace py, cpy as very fine grained disseminations									
		- 1% fine grained disseminated pyrrhotite from 1740-1742'									
		- only very weakly calcareous but can be scratched therefore it may be dolomitic.									

LF C-4782

JOURNAL DE SONDAGES

No S-84-8

Projet : Sudbury Contact | Ligne : | Ord. : | Profondeur : | Couronne

Claim : | Section : | Ord. : | Plongée : | AX: EX:

Canton : | Lat. : | Long. : | Azimut : | AQ:

Rang : | Elévation Orifice: | Commencé le :

Lot : | Azimut: | Terminé le :

N.T.S. : | Niveau: | Entrepreneur :

Feuille No 11 de

De à

Profondeur totale:

Journal:

Date:

DE	À	GÉOLOGIE	ÉCHANTILLON No:	De	À	Long.	ANALYSES % Py est.	% po. est	Au. oz. T	Vérif.
		- weakly silicified								
		- core recovery 70-75% from 1723-1760'								
		1754-1776 - slight local bleaching								
		- up to 10% + biotite								
		- locally slightly chloritic								
1776	1843	talc-chlorite flow breccia								
	TD	- very friable; core recovery 93%								
		- dark greenish black with talc-carbonate veinlets								
		- no sulfides visible.								
		CORE ANGLES OF BEDDING								
	20	7° 726 30°								
	45	10 756 45								
	~~58~~	~~15 808 45~~								
	72	15 836 45								
	104	5 842 40								
	~~124~~	~~15 870 40~~								
	150	20 942 55								
	198	5 1006 40								
	~~236~~	~~20 1086 30~~								
	272	40 1142 25								
	308	20 1179 30								
	~~340~~	~~15 1220 40~~								
	378	20 1265 40								
	416	25 1306 35								
	~~460~~	~~35 1385 45~~								
	498	35 1452 45								
	540	30 1503 45								
	~~578~~	~~35 1550 35~~								
	616	20								
	646	20								
	~~662~~	~~45~~								
	678	65								

LF C-4782

JOURNAL DE SONDAGES

No S-84-10

Projet : Sudbury Contact | Ligne : Az 340° from #3 WP Dtc +30' to collar | Profondeur : 200' 400' 600' 800' 1000' 1200' | Couronne

Claim : L 319207 | Section : (319206) | Ord. : | Plongée : 42° 41° 38.5 36.5 34° | AX: EX:

Canton : M°Vittie | Lat. : | Long. : | Azimut : | AQ:

Rang : | Elévation Orifice: 308 (955') | Commencé le : Feb. 9/84

Lot : | Azimut: 145' at -44° | Terminé le : Feb. 16/84

N.T.S. : | Niveau: 14' Casing | Entrepreneur : Barron Drilling

Feuille No 1 de 5

De à

Profondeur totale: 1102'

Journal: Steve Medd

Date: Feb. 21/84

DE	A	GÉOLOGIE	ÉCHANTILLON No:	De	À	Long.	ANALYSES % Py est.	% po. est.	Au. oz. T	Vérif.	
0	10	overburden								%Cu	%cpy
10	99.5	siltstone - massive, medium grey, 5-10% dark grey argillite									
		laminations with local soft sediment rip-up clasts, 1% large py									
		cubes (up to 5mm)									
99.5	157	sandstone - massive, fine grained, medium grey, 1% large py									
		cube and blebs (up to 5mm), gradational upper boundary with above									
		qtz-carbonate macrovein 6" wide at 146'									
157	260	siltstone - massive, medium grey, 5-10% dark grey argillite									
		laminations, tightly brecciated; mosaic texture, siltstone/									
		argillite contacts are convoluted (soft sediment deformation?)									
		2% qtz / carbonate veining									
		1% py as large disseminated cubes and as blebs and cubes in									
		white calcite blebs.									
260	520	siltstone - intercalated with 30-35% laminated argillite,									
		siltstone beds are massive from 15 cm to 3 m wide,									
		silty bedding laminations are from 3mm to 1 cm wide									
		locally contorted (soft sediment deformation?), qtz-carbonate									
		macrovein from 385.5 -387, 1% py as large dissemenated cubes,									
		1% cpy as irregular blebs									
520	670	siltstone/argillite - interlaminated with contorted, brecciated									
		bedding, locally graphitic within argillite laminations,									
		1% cpy overall, 1% py as cubes (up to 2mm) along laminations	19797	603	608	5	1		nil	.040	1
		608-615: 2% cpy as irregular blebs	19798	608	615	7	1		nil	.550	2
			19799	615	620	5	1+		nil	.031	1

LF C-4782

JOURNAL DE SONDAGES

No S-84-10

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ ____ ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ ____ ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ ____ ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 2 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
										%Cu	%Cpy
670	693.5	biotite, crystalline carbonate tuff - 670-680 dark grey, chloritic									
		aphanitic matrix with large biotite flakes (up to 5mm), matrix									
		locally graphitic, 680-682: silicified crystal carbonate tuff									
		highly brecciated, 1-2% py as fine grained disseminated cubes									
		<1% in fracture veinlets									
		682-693.5: strongly calcareous crystal carbonate tuff with fine									
		grained biotite, coarse grained, locally brecciated, mottled									
		appearance - 1% py, 1% cpy									
693.5	741	interlaminated siltstone/argillite - locally brecciated,									
		locally graphitic, 1% cpy, 1% py as large cubes									
741	942	graphitic, siliceous argillite - light + dark, with silt laminations									
		and interbeds of massive siltstone									
		741-840 black laminated graphitic units with few small beds of									
		dark grey siltstone (2.5cm - 25cm)									
		741-760 70-75% core recovery									
		753.5-760 muddy fault gouge									
		760-777.5 10% qtz-carbonate fracture veinlets + macroveins	19794	825	830	5			nil	.570	1-3
		825-830 1-3% cpy as irregular veinlets and blebs	19795	830	835	5			tr	.420	1
		830-835 1% cpy	19796	835	840	5			nil	.310	1-3
		835-840 1-3% cpy									
		840-893 massive siltstone - medium to dark grey; slightly									
		graphitic, beds from 20cm to 1m wide separated by strongly									
		graphitic laminations									

LF C-4782

JOURNAL DE SONDAGES

No S-84-10

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 3 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
		3-5% qtz carbonate veining , 1% py as large cubes (up to 3mm)								%Cu	%Cpy
		1% cpy									
		893-915 silt laminated, graphitic siliceous argillite - laminations									
		are 1-5mm wide , strongly graphitic , siltstone laminations are									
		calcareous , 60-65% core recovery from 893-907 , 1% cpy									
		915-925 massive calcareous siltstone - dark grey; slightly									
		graphitic , 1% py as large cubes (up to 3mm)									
		925-926 silt laminated graphitic siliceous argillite									
		926-927 massive siltstone									
		927-942 silt laminated, graphitic, siliceous argillite - 1% cpy									
942	1102	crystalline carbonate tuff - interbedded with units of	19789	945	950	5	1		nil	.225	1
	EOH	silt-laminated graphitic siliceous argillite -	19788	950	955	5	1		nil	.415	1+
		942-960 crystal carbonate tuff-with biotite locally,	19787	955	960	5	1		nil	.315	1
		coarse to fine grained mottled texture	19782	960	965	5			nil	1.70	3-4
		contains elongate angular shards and rounded clasts locally	19783	965	970	5			nil	2.96	3-4
		- locally calcareous	19784	970	975	5	1		tr	.106	1
		- quite graphitic in spots	19785	975	980	5	1		tr	.182	1
		945-950 1% cpy, 1% py as cubes	19786	980	985	5	1		nil	.265	1
		950-955 1%+cpy, 1% py									
		955-960 1% cpy, 1% py									
		960-970.5 silt laminated graphitic siliceous argillite -									
		3-4% cpy as irregular blebs + veinlets									
		970.5-976.5 crystal carbonate tuff - mottled, tightly brecciated									
		appearance , contains shards and rounded clasts									

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JOURNAL DE SONDAGES

No S-84-10

Projet : Sudbury Contact | Ligne : ____ | Ord. : ____ | Profondeur : ____ | Couronne

Claim : ____ | Section : ____ | Ord. : ____ | Plongée : ____ | AX: EX:

Canton : ____ | Lat. : ____ | Long. : ____ | Azimut : ____ | AQ:

Rang : ____ | Elévation Orifice: ____ | Commencé le : ____

Lot : ____ | Azimut: ____ | Terminé le : ____

N.T.S. : ____ | Niveau: ____ | Entrepreneur : ____

Feuille No 4 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON No:	De	À	Long.	ANALYSES Cu ppm % Py est.	% po. est.	Au. oz. T	Vérif.	
		1% cpy, 1% py, locally graphitic									
		976.5-990 silt laminated graphitic siliceous argillite -									
		brecciated, qtz-carbonate macrovein from 986-988									
		1% cpy, 1% py									
		1004.5-1024: massive siltstone with few graphitic argillite	19790	1005	1010	5	1		nil	1661	
		laminations, locally brecciated	19791	1010	1015	5	1		nil		
		locally bleached and silicified	19792	1015	1020	5	1		nil		
		1% py as disseminated cubes (2mm) and veinlets	19793	1020	1025	5	1		.058	1485	
		trace cpy	19811	1025	1030	5	1		nil		
			19812	1030	1035	5	1		nil		
			19813	1035	1039.5	4.5	1		nil		
		1012-1014 qtz macrovein									
		1024-1039.5 crystal carbonate tuff with 3-5% biotite - locally									
		graphitic and chloritic; calcareous, mottled texture									
		1% py as cubes (up to 2mm)									
		1039.5-1102 dominantly crystal carbonate tuffs - few									
		interbedded units of interlaminated graphitic argillite and									
		siltstone, tuff beds are 1-3m wide, some tuffs have a coarse									
		grained mottled and brecciated texture									
		1039.5-1042 biotite/ chlorite lapilli tuff -dark grey matrix with									
		angular and rounded, bleached clasts (up to 1cm) with dark alteration									
		rims, trace cpy									
		1028-1028.5 qtz macrovein									
		1054.5-1056 qtz carbonate macrovein									
		1059-1061 qtz-carbonate macrovein									

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JOURNAL DE SONDAGES

No S-84-10

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ ____ ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ ____ ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ ____ ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 5 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
		1070=1080 slightly silicified in spots	19800	1070	1075	5	1		nil	%Cu 1.70	%Cpy 1
		1% cpy as blebs	19801	1075	1080	5	1		nil	.375	1
		1% py as large cubes (up to 4mm)									
		1090-1102 highly brecciated interlaminated argillite and									
		siltstone with some bleached calcareous clasts and a graphitic									
		matrix, 1% cpy, 1% py as cubes									
		Core Axis to Bedding Angles									
0	153	0-10°									
	160	15									
	272	25									
	363	25									
	375	15									
	454	30									
	618	40									
	657	30									
	702	35									
	735	30									
	793	35									
	825	35									
	844	45									
	885	40									
	1003	35									

LF C-4782

JOURNAL DE SONDAGES

1300 1500 1700 1900
38 33 29 27

No S-84-13

Projet : Sudbury Contact Ligne 540' at Az 332 from #2CP283254 Profondeur : 50 150 | 250 500 700 900 1100 Couronne

Claim : 283254 Section : Ord. : Plongée : -59 -58 | -57 -54 -50 -48 -44 AX: EX:

Canton : McVittie Lat. : Long. : Azimut : 193.5 | 192 AQ:

Rang : Elévation Orifice: 80' (24.4 m) above lake level Commencé le : July 23, 1984

Lot : Azimut: Terminé le : Aug. 11, 1984

N.T.S. : Niveau: 11' casing Entrepreneur : Barron Drilling

Feuille No 1 de

De à

Profondeur totale: 2327

Journal: Peter C. Hubacheck

Date: July 26, 1984

DE	À	GÉOLOGIE	ÉCHANTILLON No:	De	À	Long.	ANALYSES % Py est.	% po. est	Au. oz. T	Vérif.	
0	6	Overburden									
6	162	silt laminated argillite - dark grey, moderate fissility									
		silt laminations range from 22mm - 5mm, plane parallel									
		laminae are very consistent minor carbonate rich beds are									
		present; 2% quartz microveinlets are distributed evenly,									
		local brecciation									
162	188	carbonate mudstone/argillite - carbonate beds (up to .5m)									
		intercalated with argillite, carbonate beds are yellowish									
		grey with mottled texture on polished surface, crystalline									
		texture on broken surface, (volcanic derived turbidite?)									
		soft sediment deformation at 176.									
188	267	chloritic carbonate mudstone-massively bedded sequence composed	153	234	239	5			nil		
		of several thick beds highly disrupted by macroveins of qtz/	154	247	254	7			nil		
		calcite, mottled, yellowish grey,									
		220-254 macroquartz veins 30%, minor constituent minerals in									
		veins are trace cpy, galena; pyrrhotite, sericite, calcite and									
		fuchsite 5% - sulphide minerals occur as blebs or patches,									
		pyrite commonly coats vein walls. Moderate bleaching borders									
		veins, orientation of veining appears to be subparallel									
		to bedding, cpy, gal from 247-254									
267	416	laminated argillite - greenish black, highly fissile weakly									
		chloritic, thinly laminated calcite filling cleavage slips									
		parallel to bedding, plane parallel laminations are consistent,									
		pyrite and pyrrhotite (up to 1%) commonly occur as laminations									

LF C-4782

JOURNAL DE SONDAGES

No S-84-13

Projet : Sudbury Contact | Ligne : | Ord. : | Profondeur : | Couronne

Claim : | Section : | Ord. : | Plongée : | AX: EX:

Canton : | Lat. : | Long. : | Azimut : | AQ:

Rang : | Elévation Orifice: | Commencé le :

Lot : | Azimut: | Terminé le :

N.T.S. : | Niveau: | Entrepreneur :

Feuille No 2 de

De à

Profondeur totale:

Journal:

Date:

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
		or patches on cleavage slips; local contorted bedding									
		calcite laminations and veinlets pervasive -2%									
416	527	argillite/carbonate mudstone sequence - intercalated light									
		greenish grey carbonate beds comprise 20% of unit mvg. bedding									
		thickness 5 to 10cm - max thickness .5m weak laminations									
		preserved in carbonate beds, up to 1% pyrite as disseminations									
		and blebs in mudstone units - fine calcite crackling									
		pervasive in black laminated argillite									
527	594	carbonate mudstone/argillite - approx. 50% greenish grey									
		mudstone laminations and beds, carbonate beds contain wispy									
		fuchsite (platy texture) thinly laminated argillite and									
		mudstone show light and dark banding, strong fissility on									
		bedding planes, contorted laminations common.									
		567-583 qtz macroveins 15%, .2m to .5m thick, veining sub-									
		parallel to bedding, calcite 5% fuchsite/sericite 1%, tr galena									
594	718	laminated chlorite argillite - dark greenish black, silty									
		laminations 5-10%, poor fissility, silt content slightly									
		higher than other units, calcite laminations on parting slips.									
718	735	quartz lapilli tuff - med. grey, mottled, sucrosic and fused									
		texture due to yellowish white dolomite rhombs groundmass is									
		highly siliceous, fused textures due to chloritic shards									
		producing wispy laminations in cross-section, chloritic platy									
		wisps show weak bedding foliation, qtz/calcite/sericite									
		veining 2% (possible pyroclastic origin)									

LF C-4702

JOURNAL DE SONDAGES

No S-84-13

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 3 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON No:	De	À	Long.	ANALYSES % Py est.	% po. est	Au. oz. T	Vérif.
735	770	laminated chloritic argillité - as above 737-742 badly broken								
		20% core loss								
770	793	chlorite/biotite sandstone - laminated brownish grey, moderate								
		fissility, fine-med grained biotite rich sandstone at base of								
		interval 782-793 unit fine upward to mottled chloritic mudstone/								
		tuff unit sandy lower portion exhibits crude grading upwards to								
		fine mottled light coloured mudstone units (possible volcano-								
		genic derivative)								
793	932	silt laminated chloritic argillite - greenish black, moderate								
		to strong bedding fissility, silt laminae vary from 1 to 3 mm,								
		occasional interbeds of chloritic mudstone-tuff comprise 5%								
		of unit, mudstone interbeds are highly variable from 5cm to .5m								
		thickness 1% calcite microveinlets, dissem pyrite confined to								
		calcite veinlets, plane parallel laminae predominate local								
		contorted bedding confined to silt bands 2 cm - 5cm thickness.								
932	968	chloritic mudstone/argillite - interbedded sequence with								
		four fragmental mudstone units intercalated with laminated								
		argillite, tuff beds average .5m thick, very sharp bedding								
		contacts, flattened ripups average .5mm to 1cm in length.								
		932-937 laminated argillite with 2% pink calcite veins,								
		strongly magnetic, 2% coarse py dissem throughout, chalcopyrite								
		patches confined to calcite veins								
		* chloritic fragments in light coloured units appear similar								
		to rip-up clasts in coarser turbidite units derived from								

LF C-4782

JOURNAL DE SONDAGES

No S-84-13

Sudbury Contact

Projet : _____ Ligne : _____ Ord. : _____ Profondeur : _____ Couronne

Claim : _____ Section : _____ Ord. : _____ Plongée : _____ AX: EX:

Canton : _____ Lat. : _____ Long. : _____ Azimut : _____ AQ:

Rang : _____ Elévation Orifice: _____ Commencé le : _____

Lot : _____ Azimut: _____ Terminé le : _____

N.T.S. : _____ Niveau: _____ Entrepreneur : _____

Feuille No 4 de _____

De _____ à _____

Profondeur totale: _____

Journal: _____

Date: _____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
		argillite interbeds, these beds and other sequences appearing									
		upsection likely represent transported volcangenically									
		derived debris deposited by mass gravity submarine processes.									
968	1044	laminated chloritic argillite - greenish black, 5% silt									
		laminations.									
1044	1072	chloritic mudstone/argillite - interbedded sequence of four									
		light grey coloured mudstone beds - coarsening uphole, bedding									
		thickness ranges from .5m to 1.5m, plane parallel bedding									
		contacts with intercalated argillite units, mudstone beds									
		characterized by mottled sucrosic texture, wispy chloritic									
		fragments are platy, possibly rip-up clasts,									
1072	1117	chloritic argillite/siltstone - 10% bleached siltstone beds									
		2 cm - 5cm, local salt and pepper texture, some siltstone beds									
		exhibit contorted bedding, moderately silicified, approx 50%									
		bleaching									
1117	1165	massive dolomitic siltstone/argillite - massively bedded									
		siltstone 80%/20% argillite; competent bedding, wavy									
		convolulted bedding texture pervasive, sucrosic texture									
		exhibits crystalline fabric									
1165	1232	argillite mudstone - 20% bleached mudstone bands, bleaching									
		pervasive, bedding laminations are well preserved, characteristic									
		yellowish cream bleaching colour, 1% quartz veining, locally									
		disturbed bedding tr to 1% py as dissem. and coating on qtz									
		microveinlets.									

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JOURNAL DE SONDAGES

No S-84-13

Projet : Sudbury Contact | Ligne : | Ord. : | Profondeur :

Claim : | Section : | Ord. : | Plongée :

Canton : | Lat. : | Long. : | Azimut :

Rang : | Elévation Orifice: | Commencé le :

Lot : | Azimut: | Terminé le :

N.T.S. : | Niveau: | Entrepreneur :

Couronne AX: EX: AQ:

Feuille No 5 de

De à

Profondeur totale:

Journal:

Date:

DE	A	GÉOLOGIE	ÉCHANTILLON No:	De	A	Long.	ANALYSES % Py est.	% po. est.	Au. oz. T	Vérif.
1232	1292	cherty tuffaceous mudstone sequence - light grey at base of	155	1261	1266	5			tr	
		unit grading to yellowish green near top of interval,	156	1266	1272	6			tr	
		1261-1292 chert carbonate tuff - mottled texture 5% smoky	157	1257	1261	4			.007	
		quartz crackle brecciation, 1261-1266 pyritic cherty tuff,								
		intense qtz crackle brecciation, 1% pyrite 1232-1261 -								
		yellowish green, aphanitic texture, crudely laminated								
		5% to 10% drusy qtz veinlets subparallel to bedding, trace py								
		cubes.								
1292	1387.5	cherty tuffaceous mudstone sequence - 1292-1356.5 yellowish	158	1372	1377	5			nil	
		green aphanitic texture, locally (upper unit) fuchsitic, 5%	159	1377	1382	5			nil	
		smoky qtz veinlets, laminated to thinly bedded moderate	160	1382	1387	5			tr	
		mosaic brecciation disrupts bedding, tr cubic pyrite.	161	1387	1392	5			tr	
		1356.5 - 1387.5 lower unit - cherty crystalline								
		texture dark greenish grey, wispy chloritic laminae common.								
		1382-1387.5 pyritic chert, up to 5% dissem. fine py								
1387.5	1427	cherty carbonate mudstone sequence - similar to above								
		sequence - less cherty at base of sequence, greater crystalline								
		carbonate content at base.								
1427	1458	cherty carbonate mudstone sequence - 1427-1447 upper unit;								
		creamy yellowish grey, aphanitic brecciated texture, 5%								
		smoky qtz veinlets, 1% dissem py; 1447-1458 lower unit -								
		massive sucrosic texture, crystalline siliceous.								
1458	1505	cherty carbonate mudstone sequence - yellowish; greenish grey								
		1458-1488 upper unit - mainly laminated aphanatic texture								

LF C-4702

JOURNAL DE SONDAGES

No S-84-13

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 6 de ____

De ____ à ____

Profondeur totale: ____

Journal: ____

Date: ____

DE	À	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	À	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
		1488-1505 lower unit - massive, mottled texture - more									
		siliceous, 5-10% drusy qtz veining, wispy fuchsitic plates									
		common, 1-2% dissem py throughout.									
1505	1549	mudstone/argillite - creamy grey bands, laminated to bedded									
		bedding fabric, 60% mudstone beds, 40% argillite, plane									
		parallel laminations common, local contorted bedding, cubic									
		py 1% confined to mudstone bands 5 cm - 15 cm thick									
1549	1602	cherty/carbonate debris flow - mottled dk grey siliceous zones	162	1562	1567				nil		
		contain intraclasts of aphanitic interbed mudstones	163	1567	1572				nil		
		1577-1589 strongly siliceous, 1-2% fn py and cubic py in	164	1572	1577				nil		
		qtz veinlets 1589-1602 - chlorite/biotite content increasing.	165	1577	1582				nil		
1602	1706	biotite carbonate tuff sequence - variegated sequence of	166	1582	1587				nil		
		tuffaceous interbeds alternating from crystalline									
		textured beds and fine crystalline biotite rich beds, biotite									
		rich beds are brownish green in colour, 5% quartz veining									
		distributed throughout bedding thickness varies from .3m									
		to 1.5m thick sharp plane parallel bedding contacts are common									
1654	1675	moderate to strong silicification surrounding qtz veins									
1675	1686	local cherty silicified bleached zones									
1706	1757	talc/chlorite/calcite crackle breccia - intense brecciation									
		pervasive calcite crackle breccia filling 5-10% vol, greenish									
		black fragments surrounded by talcy yellowish brown matrix,									
		moderately magnetic, local bleaching, no pillowrims observed,									
		massive texture, weakly magnetic									

LF C-4702

JOURNAL DE SONDAGES

No S-84-13

Projet : Sudbury Contact Ligne : ____ Ord. : ____ Profondeur : ____ Couronne

Claim : ____ Section : ____ Ord. : ____ Plongée : ____ AX: EX:

Canton : ____ Lat. : ____ Long. : ____ Azimut : ____ AQ:

Rang : ____ Elévation Orifice: ____ Commencé le : ____

Lot : ____ Azimut: ____ Terminé le : ____

N.T.S. : ____ Niveau: ____ Entrepreneur : ____

Feuille No 7 de ____

De ____ à ____

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Date: ____

DE	A	GÉOLOGIE	ÉCHANTILLON				ANALYSES				
			No:	De	A	Long.	% Py est.	% po. est.	Au. oz. T	Vérif.	
1757	1807	talc/chlorite, flow breccia - very friable, crumbly poorly									
		competent core from 1787 to 1807, 5% calcite breccia fillings,									
		talcy breccia matrix pervasive									
		1752-1757 serpentinized fault gouge - friable soft muddy									
		mylonite matrix,strongly magnetic									
1807	2012	chlorite/calcite crackly breccia - massive texture, calcite									
		crackle brecciation pervasive throughout unit, 5-10% calcite									
		breccia filling, local bleached intervals, weakly magnetic									
2012	2112	talc/chlorite flow breccia - talcy breccia matrix pervasive									
		up to 20% by volume, bleached breccia clasts surrounded by									
		talcy matrix common, 1% calcite veining, strongly magnetic									
		2017-2019 fault gouge									
2112	2134	talc/chloric flow top breccia - similar as above, distinct									
		boundary with lower massive pillow flow, bleached pillow rims									
		surrounded by talcy matrix									
2134	2161	serpentinized pillow flow - olive greenish black, massive									
		texture, spinifex texture pervasive									
2161	2192	talc/chlorite flow top breccia - bleached breccia clasts									
		comprise 20% of unit									
2192	2232	serpentinized pillow flow - olive greenish black, massive									
		texture spinifex texture pervasive									
2232	2269	talc/chlorite flow top breccia - as above									
2269	2307	serpentinized pillow flow - as above, spinifex polysuturing									
		well preserved									

LF C-4782

JOURNAL DE SONDAGES

No S-84-13

Projet : Sudbury Contact | Ligne : | Ord. : | Profondeur : | Couronne

Claim : | Section : | Ord. : | Plongée : | AX: EX:

Canton : | Lat. : | Long. : | Azimut : | AQ:

Rang : | Elévation Orifice: | Commencé le :

Lot : | Azimut: | Terminé le :

N.T.S. : | Niveau: | Entrepreneur :

Feuille No 8 de

De à

Profondeur totale:

Journal:

Date:

DE	À	GÉOLOGIE	ÉCHANTILLON No:	De	À	Long.	ANALYSES % Py est.	% po. est.	Au. oz. T	Vérif.
2307	2327	talc/chlorite flow top breccia - as above								
	EOH	Comments - drill hole abandoned at 2327- core tube failed								
		to lock, tripped out rods to clear out piece of rock, run								
		rods to 2000' unable to penetrate;blockage also suspected								
		near 1700' depth.								
		Core Axis to bedding Angles								
24		45° 927-45°								
37		45 945-45								
~~57~~		~~40 967-50~~								
74		40 996-55								
107		40 1042-55								
~~127~~		~~40 1097-60~~								
177		40 1117-60								
267		36 1202-60 Tro - Pari Surveys Aug.?								
~~292~~		~~34 1257-55~~								
327		35 1307-45								
357		30 1512-55 Depth Dip Mag Az True Az								
~~397~~		~~40 1606-50~~ 1600 31 204.5 192.5								
427		40 1652-40								
477		35 1682-40 1200 42 280?								
~~527~~		~~35~~ 800 54? 342?								
~~572~~		~~40~~								
607		50 250 57 204 192								
667		45 150 58 203.5 193.5								
~~702~~		~~40~~								
747		35 ? Tro-Pari Surveys are unreliable								
797		40 due to malfunction of locking mechanism								
~~847~~		~~40~~								
887		40								

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Appendix VI

Daily Log of Work Hours

Daily Log of Work Hours.

Date	Activity	Days.
Nov 8/08	Sampling, Logging St Joseph's.	1 day
April 17-18/09	Sampling, Logging Sander Lake	2 days.
Feb 10/10	Sample shipping	1 hr
March 29/10	Sample shipping	1 hr.
July 24/10	Storing samples.	3/4 day.
July 29-30/10	Report	2 days.
	Total	6 days.