



42B015E0049 2.6980 HORWOOD

010

Geochemical Assessment Report

Report No. 8104 . 5 . 2

Humus Geochemical Sampling  
of the Pine Cone Point Claim Group  
Horwood Township, Ontario

Gold Fields Canadian Mining Ltd.  
335-230 Lakeshore Rd., East  
Mississauga, Ontario  
L5G 1G7

By: W. R. Troup

July 1984

**RECEIVED**

JUL 25 1984

MINING LANDS SECTION



42B01SE0049 2.6980 HORWOOD

010C

TABLE OF CONTENTS

Key Map	Page 5
Claim Map	Page 6
Introduction	Page 7
Location & Access	Page 7
Grid Description	Page 7
Topography & Vegetation	Page 7
Geology	Page 7
Technique & Medium	Page 8
Sample Treatment & Analyses	Page 8
Results & Interpretation	Page 8
Conclusions & Recommendations	Page 8



**GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT**

**TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.**

Type of Survey(s) Geochemical Analyses  
Township or Area Horwood Township  
Claim Holder(s) Darius Gold Mine Inc.  
230 Lakeshore Rd. E. #335 Mississauga  
Survey Company Gold Fields Canadian Mining Ltd.  
Author of Report E. Sawitzky - W. R. Troup  
Address of Author 335-230 Lakeshore Rd. E. Mississauga  
Covering Dates of Survey May 15, 1980 - June 1984  
(linecutting to office)  
Total Miles of Line Cut 42.5

**MINING CLAIMS TRAVERSED  
List numerically**

<small>(prefix)</small>	<small>(number)</small>
P	625933
P	625930
P	625931
P	625932
P	628067
P	628069
P	628072
P	628070
P	628071
P	628073
P	628074
P	628075
P	628076
P	597730
P	597729
P	597728
P	597727
P	597726
P	597723
P	597722

**SPECIAL PROVISIONS  
CREDITS REQUESTED**

**DAYS  
per claim**

ENTER 40 days (includes  
line cutting) for first  
survey.  
ENTER 20 days for each  
additional survey using  
same grid.

Geophysical \_\_\_\_\_  
 -Electromagnetic \_\_\_\_\_  
 -Magnetometer \_\_\_\_\_  
 -Radiometric \_\_\_\_\_  
 -Other \_\_\_\_\_  
 Geological 20  
 Geochemical \_\_\_\_\_

**AIRBORNE CREDITS** (Special provision credits do not apply to airborne surveys)

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: June 21/84 SIGNATURE: William R. Troup  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications \_\_\_\_\_

**Previous Surveys**

File No.	Type	Date	Claim Holder

**TOTAL CLAIMS** 20

If space insufficient, attach list



HUDSON BAY

JAMES BAY

RED LAKE

KENORA

DAYDEN

NIPICOON

THUNDER BAY

LAKE SUPERIOR

SAULT STE MARIE

TIMMINS

SOUTH

SUSBUR

NORTH BAY

MONT

OTTAWA

GEORGIAN BAY

LAKE HURON

LAKE MICHIGAN

TORONTO

LAKE ONTARIO

LAKE ERIE

88°

80°

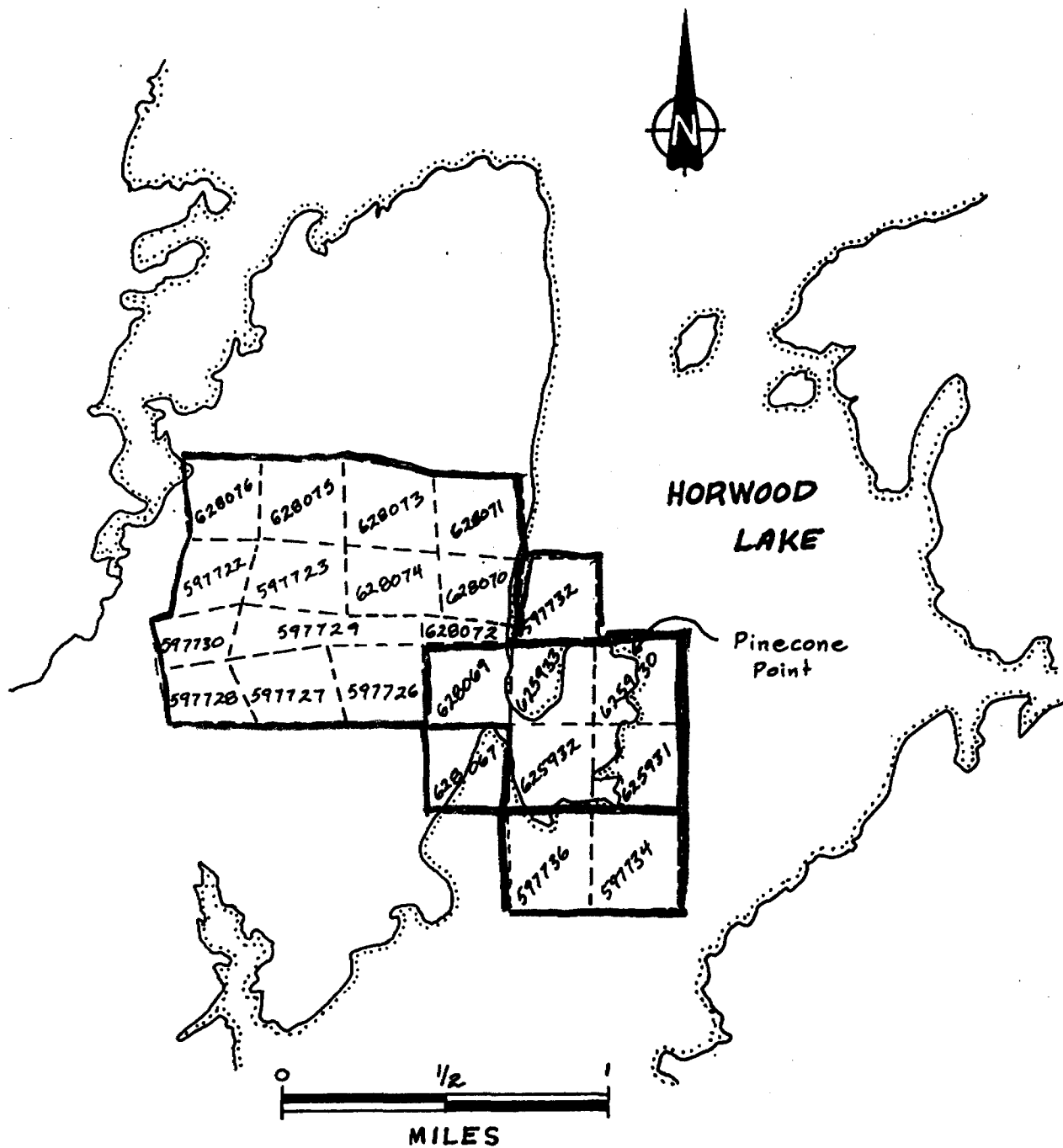
Outline Map of ONTARIO

Scale : 1" = 125 Miles

Survey AREA

*Handwritten scribbles*

\*



LOCATION MAP

- ANALYTICAL CREDITS
- GEOCHEMICAL SAMPLING CREDITS

## INTRODUCTION:

The humus sampling survey was carried out for Gold Fields Canadian Mining Ltd., Mississauga, Ontario by personnel employed by Gold Fields. In total 426 samples were collected and analysed.

The analyses of these samples was carried out by X-Ray Assay Laboratories Limited, Don Mill, Ontario utilizing the services of Nuclear Activation Services Ltd., Hamilton, Ontario.

## LOCATION & ACCESS:

The Pine Cone Point claim group is located on the west shore of Horwood Lake in the Foleyet region (Northeast Ontario), 56 air miles southwest of Timmins. The property is accessible from Timmins via Highway 101 (west) to the Palomar road turn off, go south via Ontario Forests public access road to Wade's Camp, on the northwest shore of Horwood Lake, then lastly, via boat to the claim group.

## GRID DESCRIPTION:

The main base line 0+00 was turned off Azimuth 121 degrees from the Number 4 post of claim KRL 597722. Lines were turned off every 125 meters and chained at 25 m. station intervals.

## TOPOGRAPHY & VEGETATION:

The terrain is "rugged" or hilly on the east portion of the property near Horwood Lake becoming gently undulating to flat, low lying and swampy westward. This corresponds to decreasing rock exposure westward. Except for Horwood Lake, no other lakes or rivers occur on this property. Overburden consists of a basal till overlain by either fine outwash sands or silty clays of varying thickness.

A typical, mixed boreal forest vegetation covers the property consisting of "high ground" poplars, birches, jack pines, mountain maple and "low ground" black spruce, balsam fir, and alder.

## GEOLOGY:

The Pine Cone Point property is underlain by a NE-SW trending sequence of mafic volcanics. Two parallel shear zones trend NW-SE across the property. Dikes of feldspar porphyry and a system of quartz-ankerite veins intrude the shear zones.

## TECHNIQUE AND MEDIUM

The 426 humus samples were taken at 50 meter intervals on picket lines. A small grub hoe was used to remove the poorly decomposed forest litter to expose the more mature portion of the humus layer. Special care was taken to ensure that no inorganic material was included in the sample. The collected lower portion of the A, soil horizon was placed in expandible kraft paper envelope and dried prior shipping to the laboratory for analysis.

## SAMPLE TREATMENT AND ANALYSIS:

The samples were shipped to X-Ray Assay Laboratories Ltd., Don Mills, Ontario where they were maserated, homogenized, and compacted into eight (8) gram circular discs called briquettes. The briquettes were transported to the McMaster University Nuclear facility where they were irradiated. The characteristic emitted gamma radiation for gold and its intensity was read by a gamma ray spectrometer, which has a sensitivity to approximately one part per billion (1 ppb). This analytical method is termed neutron activation, and was carried out by Nuclear Activation Services Ltd. All humus samples were analysed for silver by Plasma Emission spectrometry (sensitivity 0.5ppm).

## RESULTS AND INTERPRETATIONS:

The mull values range from  $<1$  to 17ppb Au with one value of 700ppb recorded over the trenched area at the south west portion of the property. The 700ppb value was obtained from the disturbed area near a zone of known trenching on the S.E. portion of the property. Discounting the isolated 700ppb value as due to contamination, the average gold content of the mull samples collected is 3.4ppb.

Three zones of potential interest are evident. Zones 1 and 2 are parallel zones trending approximately  $120^\circ$  across the east quarter of the property. These two zones connect in the west with the #3 zone, a broad N-S trending zone of anomalous gold values. Zone 3 measures up to 150 meters in width and extends the width of the claim group. Within zone 3, gold values are spotty but the zone does appear slightly anomalous when compared to the average value for the entire property. (ie. the average gold value based on 50 sample points within the zone is 6.3 compared with an average value of 3.4 for the entire property).

## CONCLUSIONS AND RECOMMENDATIONS:

The #1 zone measures 450 meters in length with values of .8 - 17ppb gold. The zone extends westward from an east-west trending exposure of sheared and carbonated mafic volcanics present on the base line between lines 3+75E and 5+00E. Qtz.-tourmaline veins and porphyry dyke were observed within the trench area. There is no outcrop in the area of zone #1. The zone is located on the north flank of a prominent VLF anomaly.

It is recommended a more detailed humous sampling



survey be completed of the area to confirm and delineate this zone.

Zone #2

Zone 2 traverses an area of considerable o/c to the east and it is recommended detail prospecting be undertaken in the area.

Zone #3

The significance of zone 3 will be very difficult to access. It appears to parallel a N-S fault pattern indicated by ground geophysics. Consideration should be given to completing a VLF and Mag survey on east-west lines over select portions of the zone to determine if it relates to any obvious N-S structure.

APPENDIX

Assay Results

Geochemical Map - Pinecone Point, Foleyet, Ontario

X-RAY ASSAY LABORATORIES LIMITED

1885 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4

PHONE 416-445-5755

TELEX 06-986947

CERTIFICATE OF ANALYSIS

TO: GOLD FIELDS MINING CORPORATION  
ATTN: WILLIAM R. TROUP  
230 LAKESHORE ROAD EAST, SUITE 335  
MISSISSAUGA, ONTARIO  
L5G 1G8

CUSTOMER NO. 701

DATE SUBMITTED  
4-AUG-82

REPORT 15701

Pinecone Point

REF. FILE 11262-SR

426 HUMUS

PROJECT: MH-5

WERE ANALYSED AS FOLLOWS:

	METHOD	DETECTION LIMIT
AU PPB	NA	1.000
AG PPM	DCP	0.500

3797.65  
15701

X-RAY ASSAY LABORATORIES LIMITED

DATE 02-SEP-82

CERTIFIED BY *[Signature]*

\*\*\* UNLESS INSTRUCTED OTHERWISE WE WILL DISCARD PULPS AND REJECTS \*\*\*  
90 DAYS FROM DATE OF THIS REPORT

SAMPLE	AU PPB	AG PPM	SAMPLE	AU PPB	AG PPM
1	2	<0.5	57	5	1.0
2	1	<0.5	58	NH	<0.5
3	11	0.5	59	5	0.5
4	2	<0.5	60	6	<0.5
5	<1	<0.5	61	4	0.5
6	8	0.5	62	7	0.5
7	2	<0.5	63	4	<0.5
8	2	<0.5	64	3	<0.5
9	<1	<0.5	65	5	<0.5
10	3	<0.5	66	1	<0.5
11	4	<0.5	67	3	0.5
12	12	0.5	68	<1	<0.5
13	4	<0.5	69	9	<0.5
14	12	0.5	70	8	<0.5
15	5	<0.5	71	7	0.5
16	2	1.0	72	<1	0.5
17	3	0.5	73	2	0.5
18	3	0.5	74	10	0.5
19	<1	0.5	75	5	<0.5
20	6	0.5	76	9	<0.5
21	7	0.5	77	10	<0.5
22	2	<0.5	78	8	0.5
23	7	0.5	79	7	0.5
24	3	<0.5	80	6	0.5
25	8	1.0	81	10	0.5
26	NH	<0.5	82	<1	0.5
27	1	<0.5	83	5	0.5
28	2	<0.5	84	<1	<0.5
29	12	<0.5	85	12	0.5
30	5	<0.5	87	10	<0.5
31	10	<0.5	88	8	<0.5
32	<1	<0.5	89	NH	0.5
33	5	<0.5	90	NH	<0.5
35	3	0.5	91	15	0.5
36	5	0.5	92	8	0.5
37	3	0.5	93	6	0.5
38	3	<0.5	94	1	<0.5
39	7	<0.5	95	2	<0.5
40	4	0.5	96	12	0.5
41	5	0.5	97	3	<0.5
42	6	0.5	98	10	<0.5
43	6	0.5	99	7	<0.5
44	12	<0.5	100	5	0.5
45	NH	<0.5	101	1	<0.5
46	6	0.5	102	11	0.5
47	3	0.5	104	7	0.5
48	12	0.5	105	7	<0.5
49	17	0.5	106	<1	0.5
50	4	0.5	107	3	0.5
51	4	0.5	108	3	1.0
52	4	1.0	109	<1	0.5
53	2	0.5	110	8	0.5
54	2	1.0	111	6	0.5
55	4	0.5	112	3	<0.5
56	<1	<0.5	113	<1	0.5

JAMP	AU PPB	AG PPM	SAMPLE	AU PPB	AG PPM
114	5	2.0	166	3	<0.5
115	4	1.5	167	<1	<0.5
116	1	0.5	168	1	<0.5
117	3	0.5	169	5	<0.5
118	4	<0.5	170	1	0.5
119	2	<0.5	171	5	<0.5
120	<1	<0.5	172	2	<0.5
121	<1	<0.5	173	6	0.5
122	4	<0.5	174	3	<0.5
123	<1	0.5	175	2	<0.5
124	1	<0.5	176	1	<0.5
125	<1	<0.5	177	2	<0.5
126	3	0.5	178	<1	<0.5
127	2	0.5	179	6	<0.5
128	5	0.5	180	6	<0.5
129	1	0.5	181	1	<0.5
130	2	0.5	182	6	<0.5
131	2	<0.5	183	<1	<0.5
132	3	<0.5	184	6	<0.5
133	4	0.5	185	6	<0.5
134	4	0.5	186	5	0.5
135	3	<0.5	187	2	<0.5
136	NH	<0.5	188	3	<0.5
137	2	0.5	189	2	<0.5
138	<1	<0.5	190	<1	<0.5
139	1	<0.5	191	1	<0.5
140	3	<0.5	192	3	<0.5
140A	<1	<0.5	193	2	<0.5
141	1	<0.5	194	2	<0.5
141A	4	<0.5	195	3	<0.5
142	NH	<0.5	196	1	<0.5
142A	NH	<0.5	197	2	<0.5
143	3	<0.5	198	<1	<0.5
144	3	<0.5	199	6	<0.5
145	1	<0.5	200	1	<0.5
146	4	<0.5	201	1	<0.5
147	4	<0.5	202	2	0.5
148	3	<0.5	203	2	<0.5
149	2	<0.5	204	3	<0.5
150	2	<0.5	205	2	<0.5
151	3	<0.5	206	1	<0.5
152	<1	<0.5	207	2	<0.5
153	2	0.5	208	4	<0.5
154	1	<0.5	209	6	<0.5
155	<1	<0.5	210	4	<0.5
156	1	<0.5	211	2	<0.5
157	4	<0.5	212	1	<0.5
158	<1	<0.5	213	2	0.5
159	2	<0.5	214	2	<0.5
160	2	0.5	215	1	<0.5
161	3	0.5	216	2	<0.5
162	3	<0.5	217	<1	0.5
163	NH	<0.5	218	3	0.5
164	1	<0.5	219	2	<0.5
165	3	0.5	220	4	0.5

AMP	AU PPB	AG PPH	SAMPLE	AU PPB	AG PPH
1000	1	<0.5	1055	NH	<0.5
1001	5	<0.5	1056	4	<0.5
1002	2	0.5	1057	3	<0.5
1003	5	<0.5	1058	1	<0.5
1004	3	<0.5	1059	3	0.5
1005	<1	0.5	1060	3	1.0
1006	1	<0.5	1061	<1	0.5
1007	3	<0.5	1062	3	0.5
1008	2	0.5	1063	3	0.5
1009	2	<0.5	1064	3	0.5
1010	3	<0.5	1065	1	0.5
1011	2	0.5	1066	NH	<0.5
1012	4	0.5	1067	NH	<0.5
1013	3	0.5	1068	3	0.5
1014	2	0.5	1069	2	0.5
1015	4	0.5	1070	NH	<0.5
1016	5	0.5	1071	4	<0.5
1017	5	<0.5	1072	3	1.0
1018	9	1.0	1073	2	<0.5
1019	3	0.5	1074	1	0.5
1020	<1	0.5	1075	2	0.5
1021	2	<0.5	1076	4	<0.5
1022	3	<0.5	1077	<1	<0.5
1023	NH	<0.5	1078	5	1.5
1024	<1	<0.5	1079	NH	0.5
1025	2	0.5	1080	4	0.5
1026	2	0.5	1081	NH	<0.5
1027	2	0.5	1082	3	0.5
1028	2	0.5	1083	1	1.0
1029	<1	0.5	1084	2	0.5
1030	NH	0.5	1085	2	0.5
1031	1	0.5	1086	<1	<0.5
1032	2	<0.5	1087	2	<0.5
1033	3	0.5	1088	3	<0.5
1034	2	<0.5	1089	2	0.5
1035	3	0.5	1090	2	0.5
1036	NH	<0.5	1091	5	<0.5
1037	NH	<0.5	2000	1	<0.5
1038	3	0.5	2001	<1	<0.5
1039	7	0.5	2002	2	0.5
1040	NH	<0.5	2003	1	<0.5
1041	2	0.5	2004	4	<0.5
1042	6	<0.5	2005	3	<0.5
1043	1	0.5	2006	1	<0.5
1044	2	<0.5	2007	3	0.5
1045	<1	<0.5	2008	700	0.5
1046	2	<0.5	2009	1	0.5
1047	4	<0.5	2010	3	0.5
1048	1	<0.5	2011	1	0.5
1049	8	0.5	2012	<1	0.5
1050	NH	0.5	2013	1	1.0
1051	5	<0.5	2014	8	1.0
1052	2	0.5	2015	3	0.5
1053	4	<0.5	2016	4	1.0
1054	NH	<0.5	2017	4	0.5

SAMP	AU PPB	AG PPM	SAMPLE	AU PPB	AG PPM
2018	4	1.0	2066	4	<0.5
2019	4	0.5	2067	3	0.5
2020	2	0.5	2068	2	0.5
2021	15 ?	0.5	2069	3	<0.5
2022	2	0.5	2070	1	<0.5
2023	1	0.5	2071	2	<0.5
2024	2	0.5	2072	5	<0.5
2025	1	0.5	2073	4	<0.5
2026	3	<0.5	2074	3	<0.5
2027	5	<0.5	2075	5	0.5
2028	3	<0.5	2076	4	<0.5
2029	2	0.5	2077	4	0.5
2030	2	<0.5	2078	4	<0.5
2031	<1	0.5	2079	2	0.5
2032	3	0.5	2080	1	<0.5
2033	2	<0.5	2081	2	<0.5
2034	1	0.5	2082	2	<0.5
2035	5	<0.5	2083	3	0.5
2036	<1	1.0	2084	2	0.5
2037	1	1.0	2085	<1	<0.5
2038	3	<0.5	2086	4	0.5
2039	4	<0.5	2087	5	<0.5
2040	1	0.5	2088	<1	1.0
2041	2	0.5	2089	<1	<0.5
2042	1	0.5	2090	1	0.5
2043	1	0.5	2091	4	0.5
2044	3	0.5	2092	1	<0.5
2045	1	0.5	2093	<1	<0.5
2046	3	1.0	2094	3	0.5
2047	11	1.0	2095	3	0.5
2048	3	<0.5	2096	3	<0.5
2049	2	<0.5	2097	3	<0.5
2050	2	0.5	2098	3	<0.5
2051	4	1.0	2099	5	<0.5
2052	4	0.5	2100	2	1.0
2053	SMP MISS	0.5	2101	1	0.5
2054	3	1.0	2102	7	<0.5
2055	3	0.5	2103	3	1.0
2056	2	0.5	2104	2	<0.5
2057	4	0.5	2105	3	0.5
2058	4	<0.5	2106	2	<0.5
2059	1	<0.5	2107	<1	0.5
2060	1	0.5	2108	<1	<0.5
2061	2	<0.5	2109	2	0.5
2062	4	<0.5	2110	<1	<0.5
2063	<1	<0.5	2111	7	1.0
2064	1	<0.5	2112	3	<0.5
2065	7	<0.5	2113	2	0.5

NH - NOT HUMUS



42B015E0049 2.6980 HORWOOD

020

**GEOCHEMICAL ASSESSMENT REPORT**

**REPORT NO. 8104.5.3**

**ANALYTICAL CREDITS**

**PINE CONE POINT CLAIM GROUP**

**HORWOOD TOWNSHIP, ONTARIO**

**Gold Fields Canadian Mining Ltd.  
335-230 Lakeshore Rd. East  
Mississauga, Ontario  
L5G 1G7**

**By: W. R. Troup**

**July 1984**

**RECEIVED  
JUL 25 1984  
MINING LANDS SECTION**



TABLE OF CONTENTS



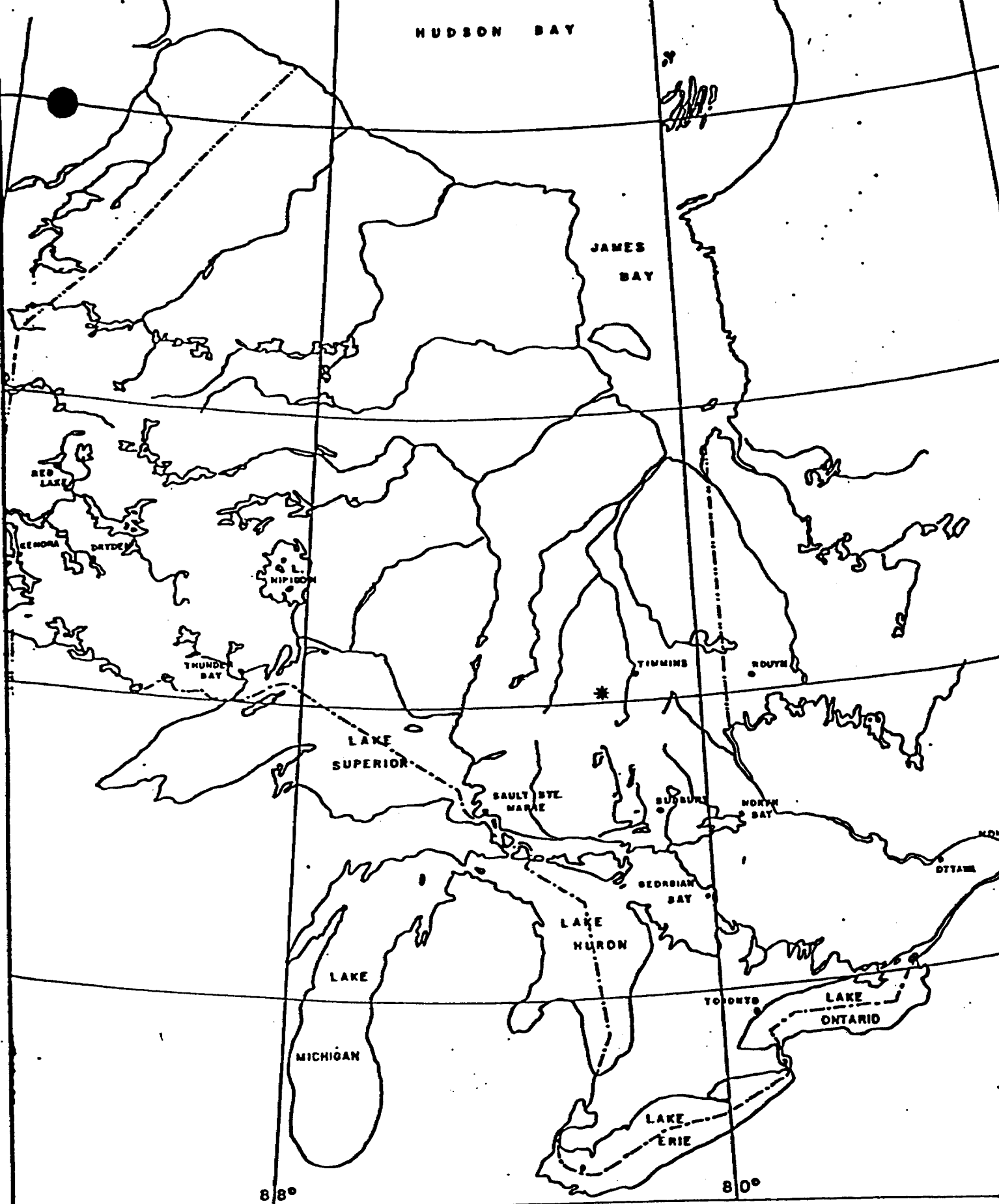
42B01SE0049 2.6980 HORWOOD

020C

I	Key Map	Page 5
II	Claim Map	Page 6
III	Explanation of Procedures	Page 7
IV	Statement of Expenditures	Page 7
V	Analytical Results	Page 8



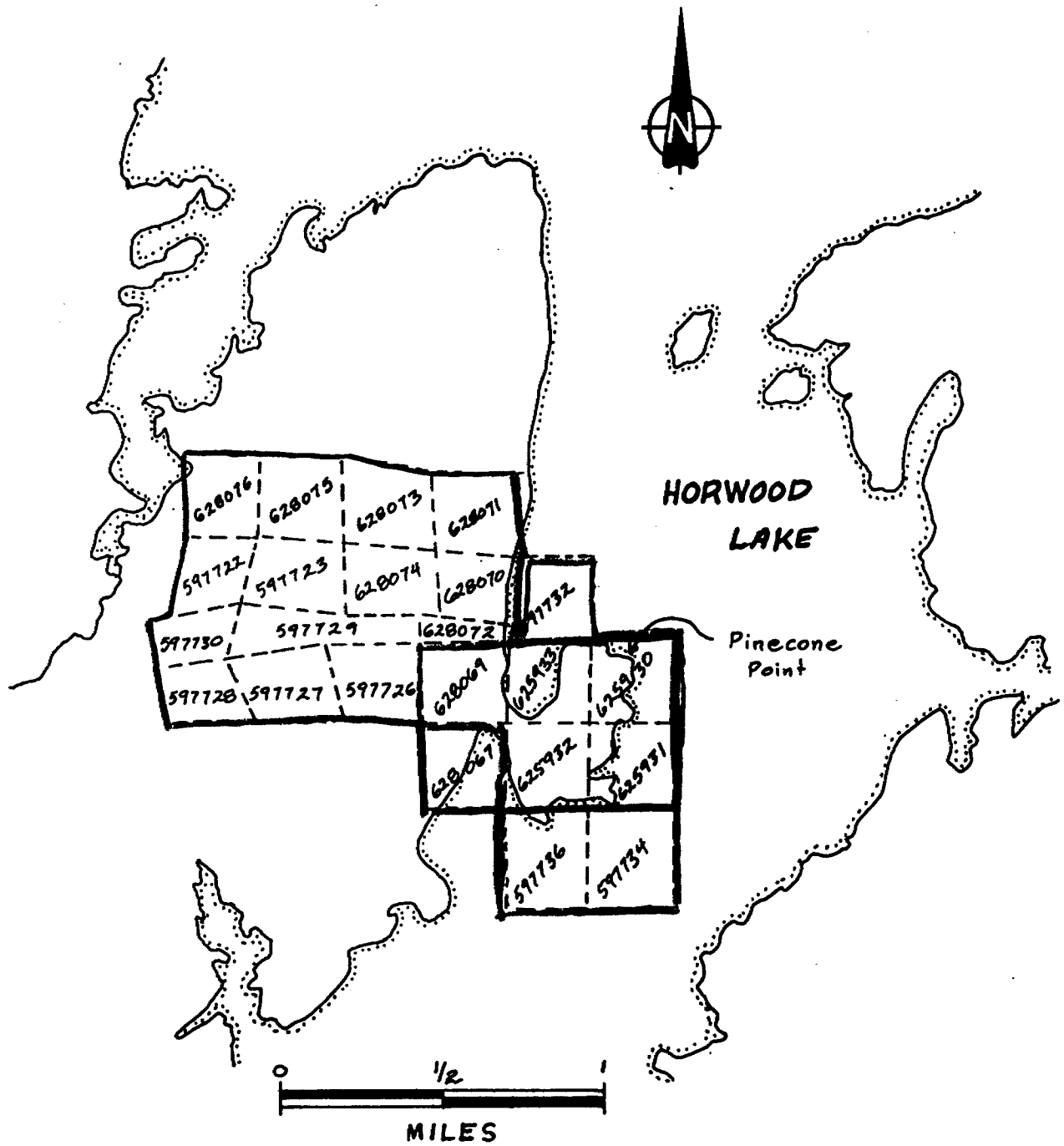




Outline Map of ONTARIO

Scale : 1" = 125 Miles

Survey AREA



LOCATION MAP

- ANALYTICAL CREDITS
- GEOCHEMICAL SAMPLING CREDITS

## EXPLANATION OF PROCEDURE

The Humus sampling survey was carried out by Gold Fields employees. In total 426 samples were collected and analysed.

Samples were shipped to X-Ray Assay Laboratories Ltd., Don Mills, Ontario, where they were maserated, homgenized, and compacted into eight (8) gram circular discs called briquettes. The briquettes were transported to the McMaster University Nuclear facility where they were irradiated.

The characteristic emitted gamma radiation for gold and its intensity was read by a gamma ray spectrometer, which has a sensitivity to approximately one part per billion (1 ppb). This analytical method is termed neutron activation, and was carried out by Nuclear Activation Services Ltd. All humus samples were analysed for silver by Plasma Emission spectrometry (sensitivity 0.5 ppm).

## COST OF ANALYSES

Analytical costs for humus samples submitted totalled \$3,797.65.

Attached is a certified copy of invoice for analytical services; and a copy of assay results.

RECEIVED JUN 19 1984

X-RAY ASSAY LABORATORIES LIMITED

1885 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4

PHONE 416-445-5755

TELEX 06-986947

INV GICE 15701-

REF. FILE 11262-SR

02-SEP-82

TO: GOLD FIELDS MINING CORPORATION  
ATTN: WILLIAM R. TROUP  
230 LAKESHORE ROAD EAST, SUITE 335  
MISSISSAUGA, ONTARIO  
L5G 1G8

CUSTOMER NO. 701

DATE SUBMITTED  
4-AUG-82

426 HUMUS PROJECT: MH-5

WERE ANALYSED.

METHOD	CODE	UNIT COST	AMOUNT
403 AU	NA	2.20	2619.50
426 AG PPM	DCP	7.0	383.40
426 DIGESTION		7.0	532.50
426 PREP. HUMUS OR LEAVES		2.0	255.60
			<hr/>
			\$ 3791.00
SHIPPING/DELIVERY CHARGES			6.65/
			<hr/>
			\$ 3797.65

*This is to certify that payment in full  
has been received for this invoice*

**X-RAY ASSAY LABORATORIES LTD.**

*[Signature]*  
\_\_\_\_\_  
\_\_\_\_\_  
*chief accountant*

*[Signature]*  
*[Signature]*

*[Signature]*

X-RAY ASSAY LABORATORIES LIMITED

1885 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4

PHONE 416-445-5755

TELEX 06-986947

CERTIFICATE OF ANALYSIS

TO: GOLD FIELDS MINING CORPORATION  
ATTN: WILLIAM R. TROUP  
230 LAKESHORE ROAD EAST, SUITE 335  
MISSISSAUGA, ONTARIO  
L5G 1G8

CUSTOMER NO. 701

DATE SUBMITTED  
4-AUG-82

REPORT 15701

Pinecone Point

REF. FILE 11262-SR

426 HUMUS

PROJECT: MH-5

WERE ANALYSED AS FOLLOWS:

	METHOD	DETECTION LIMIT
AU PPB	NA	1.000
AG PPM	DCP	0.500

3797.65  
15701

X-RAY ASSAY LABORATORIES LIMITED

DATE 02-SEP-82

CERTIFIED BY [Signature]

\*\*\* UNLESS INSTRUCTED OTHERWISE WE WILL DISCARD PULPS AND REJECTS \*\*\*  
90 DAYS FROM DATE OF THIS REPORT



JAMP	AU PPB	AG PPM	SAMPLE	AU PPB	AG PPM
1	2	<0.5	57	5	1.0
2	1	<0.5	58	NH	<0.5
3	11	0.5	59	5	0.5
4	2	<0.5	60	6	<0.5
5	<1	<0.5	61	4	0.5
6	8	0.5	62	7	0.5
7	2	<0.5	63	4	<0.5
8	2	<0.5	64	3	<0.5
9	<1	<0.5	65	5	<0.5
10	3	<0.5	66	1	<0.5
11	4	<0.5	67	3	0.5
12	12	0.5	68	<1	<0.5
13	4	<0.5	69	9	<0.5
14	12	0.5	70	8	<0.5
15	5	<0.5	71	7	0.5
16	2	1.0	72	<1	0.5
17	3	0.5	73	2	0.5
18	3	0.5	74	10	0.5
19	<1	0.5	75	5	<0.5
20	6	0.5	76	9	<0.5
21	7	0.5	77	10	<0.5
22	2	<0.5	78	8	0.5
23	7	0.5	79	7	0.5
24	3	<0.5	80	6	0.5
25	8	1.0	81	10	0.5
26	NH	<0.5	82	<1	0.5
27	1	<0.5	83	5	0.5
28	2	<0.5	84	<1	<0.5
29	12	<0.5	85	12	0.5
30	5	<0.5	87	10	<0.5
31	10	<0.5	88	8	<0.5
32	<1	<0.5	89	NH	0.5
33	5	<0.5	90	NH	<0.5
35	3	0.5	91	15	0.5
36	5	0.5	92	8	0.5
37	3	0.5	93	6	0.5
38	3	<0.5	94	1	<0.5
39	7	<0.5	95	2	<0.5
40	4	0.5	96	12	0.5
41	5	0.5	97	3	<0.5
42	6	0.5	98	10	<0.5
43	6	0.5	99	7	<0.5
44	12	<0.5	100	5	0.5
45	NH	<0.5	101	1	<0.5
46	6	0.5	102	11	0.5
47	3	0.5	104	7	0.5
48	12	0.5	105	7	<0.5
49	17	0.5	106	<1	0.5
50	4	0.5	107	3	0.5
51	4	0.5	108	3	1.0
52	4	1.0	109	<1	0.5
53	2	0.5	110	8	0.5
54	2	1.0	111	6	0.5
55	4	0.5	112	3	<0.5
56	<1	<0.5	113	<1	0.5

JAMP	AU PPB	AG PPM	SAMPLE	AU PPB	AG PPM
114	5	2.0	166	3	<0.5
115	4	1.5	167	<1	<0.5
116	1	0.5	168	1	<0.5
117	3	0.5	169	5	<0.5
118	4	<0.5	170	1	0.5
119	2	<0.5	171	5	<0.5
120	<1	<0.5	172	2	<0.5
121	<1	<0.5	173	6	0.5
122	4	<0.5	174	3	<0.5
123	<1	0.5	175	2	<0.5
124	1	<0.5	176	1	<0.5
125	<1	<0.5	177	2	<0.5
126	3	0.5	178	<1	<0.5
127	2	0.5	179	6	<0.5
128	5	0.5	180	6	<0.5
129	1	0.5	181	1	<0.5
130	2	0.5	182	6	<0.5
131	2	<0.5	183	<1	<0.5
132	3	<0.5	184	6	<0.5
133	4	0.5	185	6	<0.5
134	4	0.5	186	5	0.5
135	3	<0.5	187	2	<0.5
136	NH	<0.5	188	3	<0.5
137	2	0.5	189	2	<0.5
138	<1	<0.5	190	<1	<0.5
139	1	<0.5	191	1	<0.5
140	3	<0.5	192	3	<0.5
140A	<1	<0.5	193	2	<0.5
141	1	<0.5	194	2	<0.5
141A	4	<0.5	195	3	<0.5
142	NH	<0.5	196	1	<0.5
142A	NH	<0.5	197	2	<0.5
143	3	<0.5	198	<1	<0.5
144	3	<0.5	199	6	<0.5
145	1	<0.5	200	1	<0.5
146	4	<0.5	201	1	<0.5
147	4	<0.5	202	2	0.5
148	3	<0.5	203	2	<0.5
149	2	<0.5	204	3	<0.5
150	2	<0.5	205	2	<0.5
151	3	<0.5	206	1	<0.5
152	<1	<0.5	207	2	<0.5
153	2	0.5	208	4	<0.5
154	1	<0.5	209	6	<0.5
155	<1	<0.5	210	4	<0.5
156	1	<0.5	211	2	<0.5
157	4	<0.5	212	1	<0.5
158	<1	<0.5	213	2	0.5
159	2	<0.5	214	2	<0.5
160	2	0.5	215	1	<0.5
161	3	0.5	216	2	<0.5
162	3	<0.5	217	<1	0.5
163	NH	<0.5	218	3	0.5
164	1	<0.5	219	2	<0.5
165	3	0.5	220	4	0.5

AMP	AU PPB	AG PPM	SAMPLE	AU PPB	AG PPM
1000	1	<0.5	1055	NH	<0.5
1001	5	<0.5	1056	4	<0.5
1002	2	0.5	1057	3	<0.5
1003	5	<0.5	1058	1	<0.5
1004	3	<0.5	1059	3	0.5
1005	<1	0.5	1060	3	1.0
1006	1	<0.5	1061	<1	0.5
1007	3	<0.5	1062	3	0.5
1008	2	0.5	1063	3	0.5
1009	2	<0.5	1064	3	0.5
1010	3	<0.5	1065	1	0.5
1011	2	0.5	1066	NH	<0.5
1012	4	0.5	1067	NH	<0.5
1013	3	0.5	1068	3	0.5
1014	2	0.5	1069	2	0.5
1015	4	0.5	1070	NH	<0.5
1016	5	0.5	1071	4	<0.5
1017	5	<0.5	1072	3	1.0
1018	9	1.0	1073	2	<0.5
1019	3	0.5	1074	1	0.5
1020	<1	0.5	1075	2	0.5
1021	2	<0.5	1076	4	<0.5
1022	3	<0.5	1077	<1	<0.5
1023	NH	<0.5	1078	5	1.5
1024	<1	<0.5	1079	NH	0.5
1025	2	0.5	1080	4	0.5
1026	2	0.5	1081	NH	<0.5
1027	2	0.5	1082	3	0.5
1028	2	0.5	1083	1	1.0
1029	<1	0.5	1084	2	0.5
1030	NH	0.5	1085	2	0.5
1031	1	0.5	1086	<1	<0.5
1032	2	<0.5	1087	2	<0.5
1033	3	0.5	1088	3	<0.5
1034	2	<0.5	1089	2	0.5
1035	3	0.5	1090	2	0.5
1036	NH	<0.5	1091	5	<0.5
1037	NH	<0.5	2000	1	<0.5
1038	3	0.5	2001	<1	<0.5
1039	7	0.5	2002	2	0.5
1040	NH	<0.5	2003	1	<0.5
1041	2	0.5	2004	4	<0.5
1042	6	<0.5	2005	3	<0.5
1043	1	0.5	2006	1	<0.5
1044	2	<0.5	2007	3	0.5
1045	<1	<0.5	2008	700	0.5
1046	2	<0.5	2009	1	0.5
1047	4	<0.5	2010	3	0.5
1048	1	<0.5	2011	1	0.5
1049	8	0.5	2012	<1	0.5
1050	NH	0.5	2013	1	1.0
1051	5	<0.5	2014	8	1.0
1052	2	0.5	2015	3	0.5
1053	4	<0.5	2016	4	1.0
1054	NH	<0.5	2017	4	0.5

SAMP	AU PPB	AG PPM	SAMPLE	AU PPB	AG PPM
2018	4	1.0	2066	4	<0.5
2019	4	0.5	2067	3	0.5
2020	2	0.5	2068	2	0.5
2021	15 ?	0.5	2069	3	<0.5
2022	2	0.5	2070	1	<0.5
2023	1	0.5	2071	2	<0.5
2024	2	0.5	2072	5	<0.5
2025	1	0.5	2073	4	<0.5
2026	3	<0.5	2074	3	<0.5
2027	5	<0.5	2075	5	0.5
2028	3	<0.5	2076	4	<0.5
2029	2	0.5	2077	4	0.5
2030	2	<0.5	2078	4	<0.5
2031	<1	0.5	2079	2	0.5
2032	3	0.5	2080	1	<0.5
2033	2	<0.5	2081	2	<0.5
2034	1	0.5	2082	2	<0.5
2035	5	<0.5	2083	3	0.5
2036	<1	1.0	2084	2	0.5
2037	1	1.0	2085	<1	<0.5
2038	3	<0.5	2086	4	0.5
2039	4	<0.5	2087	5	<0.5
2040	1	0.5	2088	<1	1.0
2041	2	0.5	2089	<1	<0.5
2042	1	0.5	2090	1	0.5
2043	1	0.5	2091	4	0.5
2044	3	0.5	2092	1	<0.5
2045	1	0.5	2093	<1	<0.5
2046	3	1.0	2094	3	0.5
2047	11	1.0	2095	3	0.5
2048	3	<0.5	2096	3	<0.5
2049	2	<0.5	2097	3	<0.5
2050	2	0.5	2098	3	<0.5
2051	4	1.0	2099	5	<0.5
2052	4	0.5	2100	2	1.0
2053	SMP MISS	0.5	2101	1	0.5
2054	3	1.0	2102	7	<0.5
2055	3	0.5	2103	3	1.0
2056	2	0.5	2104	2	<0.5
2057	4	0.5	2105	3	0.5
2058	4	<0.5	2106	2	<0.5
2059	1	<0.5	2107	<1	0.5
2060	1	0.5	2108	<1	<0.5
2061	2	<0.5	2109	2	0.5
2062	4	<0.5	2110	<1	<0.5
2063	<1	<0.5	2111	7	1.0
2064	1	<0.5	2112	3	<0.5
2065	7	<0.5	2113	2	0.5

NH - NOT HUMUS



Ministry of  
Natural  
Resources

Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

W840600282 W

# 28

The M.



42B015E0049 2.6980 HORWOOD

900

Do not use shaded areas below.

Type of Survey(s) <b>Geochemical Humous Sampling</b>		Township of <b>Horwood</b>	
Claim Holder(s) <b>Darius Gold Mine Inc.</b>		Inspector's Licence No. <b>T 1217</b>	
Address <b>230 Lakeshore Rd. E., Mississauga</b>			
Survey Company <b>Canadian Mining</b>		Date of Survey (from & to) Day   Mo.   Yr.   Day   Mo.   Yr. <b>05   82   06   82</b>	Total Miles of line Cut <b>42.5</b>
Name and Address of Author (of Geo-Technical report) <b>William R. Troup 335-230 Lakeshore Rd. E., Mississauga, Ontario</b>			

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	<b>18</b>
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	625930				
	625931				
	625932				
	625933				
	628067				
	628069				
	628072				
	628070				
	628071				
	628073				
	628074				
	628075				
	628076				
	597722				
	597723				
	597726				
	597727				
	597728				
	597729				
	597730				

RECEIVED

JUL 17 1984

MINING LANDS SECTION

RECORDED

JUL 09 1984

Receipt No. 30

PORCUPINE MINING DIVISION

RECEIVED

JUL 09 1984

A.M. P.M.  
7 8 9 10 11 12 1 2 3 4 5 6

Expenditures (excludes power stripping)

Type of Work Performed  
**Sample Collection**

Performed on Claim(s)  
**20 as listed**

Calculation of Expenditure Days Credits

Total Expenditures	+	15	=	Total Days Credits
\$				

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

Total number of mining claims covered by this report of work.

20

Date  
**June 21st**

Recorded Holder or Agent (Signature)  
*William R. Troup*

For Office Use Only

Total Days Cr. Recorded <b>360</b>	Date Recorded <b>July 9, 1984</b>	Mining Recorder <i>[Signature]</i>
	Date Approved as Recorded <b>07.09.84</b>	Branch Chief <i>[Signature]</i>
		Claiming Officer <i>[Signature]</i>

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying  
**William R. Troup, 230 Lakeshore Rd. E. #335  
Mississauga, Ontario**

Date Certified  
**June 21/84**

Certified by (Signature)  
*William R. Troup*



Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

W840600281 W.R. #

281/84  
2.6980  
The Mining Act

- Instructions: - Please type or print.  
- If number of mining claims traversed exceeds space on this form, attach a list.  
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
- Do not use shaded areas below.

Type of Survey(s) <b>Geochem on Humus Samples</b>	Township or Area <b>Horwood</b>
Claim Holder(s) <b>Darius Gold Mine Inc.</b>	Inspector's Licence No. <b>T-1217</b>
Address <b>230 Lakeshore Rd. E. Mississauga</b>	
Survey Company <b>Gold Fields Canadian Mining</b>	Date of Survey (from & to) Day   Mo.   Yr.   Day   Mo.   Yr. <b>05   82     09   82</b>
Total Miles of line Cut <b>42.5</b>	
Name and Address of Author (of Geo-Technical report) <b>William Troup 335-230 Lakeshore Rd. E. Mississauga, Ontario</b>	

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	597732 ✓	40			
	597734 ✓	40			
	597736 ✓	40			
	628067 ✓	33			
	625930 ✓	25			
	625931 ✓	25			
	625932 ✓	25			
	625933 ✓	25			

**RECEIVED**  
JUL 17 1984  
MINING LANDS SECTION

**RECORDED**  
JUL 09 1984  
Receipt No. 20

PROSPECTION MINING DIVISION  
**RECEIVED**  
JUL 09 1984  
A.M. 7 8 9 10 11 12 | 1 2 3 4 | P.M.

*See Revised Statement*

Total number of mining claims covered by this report of work. **8**

Expenditures (excludes power stripping)

Type of Work Performed (Section 77-19) <b>Analytical Analyses</b>
Performed on Claim(s) <b>8 Claims as listed</b>
Calculation of Expenditure Days Credits
Total Expenditures <b>\$ 3,797.65</b> ÷ <b>15</b> = <b>253</b> Total Days Credits
Instructions Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date <b>June 19th</b>	Prepared Holder or Agent (Signature) <i>William Troup</i>
--------------------------	--

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying <b>William R. Troup 230 Lakeshore Rd. E. #335</b>	Date Certified <b>June 20, 1984</b>	Certifying Agent (Signature) <i>William Troup</i>
<b>Mississauga, Ontario</b>		

For Office Use Only		
Total Days Cr. Recorded <b>253</b>	Date Recorded <b>July 9, 1984</b>	Mining Recorder <i>Stanley</i>
	Date Approved as Recorded	Mining Recorder

Mining Lands Section

File No 2.6980

Control Sheet

TYPE OF SURVEY     GEOPHYSICAL  
                           GEOLOGICAL  
                           GEOCHEMICAL  
                           EXPENDITURE

MINING LANDS COMMENTS:

map not signed

L.D.

J. Hurst

Signature of Assessor

Aug 15/84.

Date

1984 09 17

Your File: 281/84  
Our File: 2.6980

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

RE: Data for Assaying submitted under Section  
77(19) of the Mining Act RSO 1980, on  
Mining Claim P 625930 et al in the Township  
of Horwood

---

The enclosed statement of assessment work credits for  
assaying expenditures has been approved as of the  
above date.

Please inform the recorded holder of these mining  
claims and so indicate on your records.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416) 965-4888

S. Hurst:mc

cc: Darius Gold Mine Inc  
230 Lakeshore Road East  
Suite 335  
Mississauga, Ontario  
L5G 1G8

cc: Resident Geologist  
Timmins, Ontario

Encl.



Recorded Holder	DARIUS GOLD MINE INC
Township or Area	HORWOOD TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days  Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/>  <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	\$3,797.65 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS:  P 597736 628067 625930 to 933 inclusive  253 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 77(19)

**Special credits under section 77 (16) for the following mining claims**

**No credits have been allowed for the following mining claims**

not sufficiently covered by the survey                       Insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77(19)—60:



August 20, 1984

File: 2.6980

Darius Gold Mine Ltd  
#335 230 Lakeshore Road East  
Mississauga, Ontario  
L5G 1G8

Dear Sirs:

RE: Geochemical Survey submitted on Mining Claims  
P 625930 et al in the Township of Horwood

---

Returned herein are the plans, (in duplicate), for the above-mentioned survey. Please have the author of the report sign each copy and return the material to this office quoting file 2.6980.

For further information, please contact Mr. Ray Pichette at (416)965-4888.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone:(416)96504888

S. Hurst:mc

cc: Mining Recorder  
Timmins, Ontario

Encl.

1984 08 02

Your File: 281/84  
Our File: 2.6980

Mr. Bruce Hanley  
Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received Data for Assaying submitted under Section 77(19) of The Mining Act R.S.O. 1980 for Mining Claims P 597732 et al in the Township of Horwood.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-6918

S. Hurst:sc

cc: Darius Gold Mine Inc  
230 Lakeshore Road East  
Mississauga, Ontario  
L5G 1G8

cc: Goldfields Canadian Mining Ltd  
230 Lakeshore Rd East  
Suite 335  
Mississauga, Ontario  
L5G 1G8



**GEOPHYSICAL TECHNICAL DATA**

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations \_\_\_\_\_ Number of Readings \_\_\_\_\_  
Station interval \_\_\_\_\_ Line spacing \_\_\_\_\_  
Profile scale \_\_\_\_\_  
Contour interval \_\_\_\_\_

**MAGNETIC**

Instrument \_\_\_\_\_  
Accuracy – Scale constant \_\_\_\_\_  
Diurnal correction method \_\_\_\_\_  
Base Station check-in interval (hours) \_\_\_\_\_  
Base Station location and value \_\_\_\_\_  
\_\_\_\_\_

**ELECTROMAGNETIC**

Instrument \_\_\_\_\_  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency \_\_\_\_\_  
(specify V.L.F. station)  
Parameters measured \_\_\_\_\_

**GRAVITY**

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
\_\_\_\_\_  
Base station value and location \_\_\_\_\_  
\_\_\_\_\_  
Elevation accuracy \_\_\_\_\_

**INDUCED POLARIZATION  
RESISTIVITY**

Instrument \_\_\_\_\_  
Method  Time Domain  Frequency Domain  
Parameters – On time \_\_\_\_\_ Frequency \_\_\_\_\_  
– Off time \_\_\_\_\_ Range \_\_\_\_\_  
– Delay time \_\_\_\_\_  
– Integration time \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

Instrument(s) \_\_\_\_\_

(specify for each type of survey)

Accuracy \_\_\_\_\_

(specify for each type of survey)

Aircraft used \_\_\_\_\_

Sensor altitude \_\_\_\_\_

Navigation and flight path recovery method \_\_\_\_\_

Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_

Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken \_\_\_\_\_

Total Number of Samples \_\_\_\_\_

Type of Sample \_\_\_\_\_  
(Nature of Material)

Average Sample Weight \_\_\_\_\_

Method of Collection \_\_\_\_\_

Soil Horizon Sampled \_\_\_\_\_

Horizon Development \_\_\_\_\_

Sample Depth \_\_\_\_\_

Terrain \_\_\_\_\_

Drainage Development \_\_\_\_\_

Estimated Range of Overburden Thickness \_\_\_\_\_

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis \_\_\_\_\_

General \_\_\_\_\_

ANALYTICAL METHODS

Values expressed in: per cent   
p. p. m.   
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others \_\_\_\_\_

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory (\_\_\_\_\_ tests)

Name of Laboratory \_\_\_\_\_

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

General \_\_\_\_\_



1984 08 02

Your File: 282/84  
Our File: 2.6980

Mr. Bruce Hanley  
Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received reports and maps for a Geochemical Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 597722 et al in the Township of Horwood.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-6918

S. Hurst:sc

cc: Darius Gold Mine Inc  
230 Lakeshore Road East  
Mississauga, Ontario  
L5G 1G8

cc: Goldfields Canadian Mining Ltd  
230 Lakeshore Rd East  
Suite 335  
Mississauga, Ontario  
L5G 1G8

**GOLD FIELDS CANADIAN MINING, LTD.**

A Consolidated Gold Fields Group Company

230 LAKESHORE ROAD EAST, SUITE 335  
MISSISSAUGA, ONTARIO L5G 1G8  
PHONE: (416) 271-0181  
TELEX 06-960446

July 24, 1984

Mr. M. A. Barr  
Mining Lands Section  
Land Management Branch  
Ministry of Natural Resources  
Room 6643, Whitney Block  
Queens Park  
Toronto, Ontario

Dear Mr. Barr:

Enclosed are two copies each of 3 reports covering Geological, Geochemical and Analytical work completed on 23 claims in Horwood Lake, (Foleyet Area of) Ontario.

The claim group consists of the following:

P 597722 - 597723  
597726 - 597730  
597732  
597734  
597736  
625930 - 625933  
628061  
628069 - 628076

**RECEIVED**

JUL 25 1984

**MINING LANDS SECTION**

Also included are copies of Technical Data sheets, the originals of which were submitted with "report of work" to Mining Recorders Office in Timmins.

Yours truly

*William R. Troup*  
W. R. Troup  
Geologist

WRT/lm

encls.



GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Geochemical Analyses  
Township or Area Horwood Township  
Claim Holder(s) Darius Gold Mine Inc.  
230 Lakeshore Rd. E. #335 Mississauga  
Survey Company Gold Fields Canadian Mining Ltd.  
Author of Report E. Sawitzky - W. R. Troup  
Address of Author 335-230 Lakeshore Rd. E. Mississauga  
Covering Dates of Survey May 15, 1980 - June 1984  
(linecutting to office)  
Total Miles of Line Cut 42.5

MINING CLAIMS TRAVERSED	
List numerically	
(prefix)	(number)
P	625933
P	625930
P	625931
P	625932
P	628067
P	628069
P	628072
P	628070
P	628071
P	628073
P	628074
P	628075
P	628076
P	597730
P	597729
P	597728
P	597727
P	597726
P	597723
P	597722

If space insufficient, attach list

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical -Electromagnetic _____ -Magnetometer _____ -Radiometric _____
ENTER 20 days for each additional survey using same grid.	-Other _____ Geological _____ Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: June 21/84 SIGNATURE: William R. Troup  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications 2.1844

<u>Previous Surveys</u>			
File No.	Type	Date	Claim Holder

PORCUPINE MINING DIVISION  
**RECEIVED**  
JUL 09 1984  
A.M. \_\_\_\_\_ P.M. \_\_\_\_\_  
7 8 9 10 11 12 1 2 3 4 5 6

TOTAL CLAIMS 20

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations \_\_\_\_\_ Number of Readings \_\_\_\_\_

Station interval \_\_\_\_\_ Line spacing \_\_\_\_\_

Profile scale \_\_\_\_\_

Contour interval \_\_\_\_\_

MAGNETIC

Instrument \_\_\_\_\_

Accuracy – Scale constant \_\_\_\_\_

Diurnal correction method \_\_\_\_\_

Base Station check-in interval (hours) \_\_\_\_\_

Base Station location and value \_\_\_\_\_

ELECTROMAGNETIC

Instrument \_\_\_\_\_

Coil configuration \_\_\_\_\_

Coil separation \_\_\_\_\_

Accuracy \_\_\_\_\_

Method:  Fixed transmitter  Shoot back  In line  Parallel line

Frequency \_\_\_\_\_  
(specify V.L.F. station)

Parameters measured \_\_\_\_\_

GRAVITY

Instrument \_\_\_\_\_

Scale constant \_\_\_\_\_

Corrections made \_\_\_\_\_

Base station value and location \_\_\_\_\_

Elevation accuracy \_\_\_\_\_

INDUCED POLARIZATION  
RESISTIVITY

Instrument \_\_\_\_\_

Method  Time Domain  Frequency Domain

Parameters – On time \_\_\_\_\_ Frequency \_\_\_\_\_

– Off time \_\_\_\_\_ Range \_\_\_\_\_

– Delay time \_\_\_\_\_

– Integration time \_\_\_\_\_

Power \_\_\_\_\_

Electrode array \_\_\_\_\_

Electrode spacing \_\_\_\_\_

Type of electrode \_\_\_\_\_

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_

(type, depth -- include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

Instrument(s) \_\_\_\_\_

(specify for each type of survey)

Accuracy \_\_\_\_\_

(specify for each type of survey)

Aircraft used \_\_\_\_\_

Sensor altitude \_\_\_\_\_

Navigation and flight path recovery method \_\_\_\_\_

Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_

Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

**GEOCHEMICAL SURVEY – PROCEDURE RECORD**

Numbers of claims from which samples taken P 625930, 625931, 625932, 625933, 597722,  
597723, 597726, 597727, 597728, 597729, 597730, 628069, 628067, 628076,  
628075, 628073, 628071, 628070, 628074, 628072

Total Number of Samples 426

Type of Sample Humus  
(Nature of Material)

Average Sample Weight 35 gms

Method of Collection Small grub hoe removed  
surface litter and sample collected by  
hand.

Soil Horizon Sampled A1 (Humus)

Horizon Development Generally well developed

Sample Depth 1"-4"

Terrain low, gently rolling

Drainage Development Generally well drained

Estimated Range of Overburden Thickness 0-75'

**SAMPLE PREPARATION**

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis Entire size  
range of the sample minus the inorganics  
is used.

General Sample is dried, mascerated homo-  
genized, and eomputed into 8 gm circular  
discs. (briquettes) by X-ray Assay  
Laboratories.

**ANALYTICAL METHODS**

Values expressed in:            per cent      
    Ag    p. p. m.      
    Au    p. p. b.   

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others Au, Ag

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory (\_\_\_\_\_ tests)

Name of Laboratory Nuclear Activation  
Services

Extraction Method \_\_\_\_\_

Analytical Method Neutron Acitvation (Au)

Reagents Used \_\_\_\_\_

General Briquette was irradiated at the  
McMaster University nuclear reactor.  
Characteristic emitted gamma radiation  
gold and its intensity was read by  
a gamma ray spectrometer, which has  
a sensitivity to approximately 1 ppb  
All samples were analysed for silver  
by plasma emission spectrometing  
(sensitivity 0.5 ppm)



1. Type of Survey Humus sampling survey
2. Township or Area Horwood
3. Numbers of Mining Claims Traversed by Survey 625933, 625930, 625931, 625932,  
628067, 628069, 628072, 628070, 628071, 628073, 628074, 628075, 628076,  
597730, 597729, 597728, 597727, 597726, 597723, 597722,
4. Number of Miles of Line Cut 42.5 Flown \_\_\_\_\_
- \*5. Number of Stations Established \_\_\_\_\_
- \*6. Make and type of Instrument Used \_\_\_\_\_
- \*7. Scale Constant or Sensitivity \_\_\_\_\_
- \*8. Frequency Used and Power Output \_\_\_\_\_
9. Summary of Assessment Credits (details on reverse side)

Total 8 hour Technical Days (Include Consultants, Draughting etc.) \_\_\_\_\_

Total 8 hour Line-Cutting Days \_\_\_\_\_

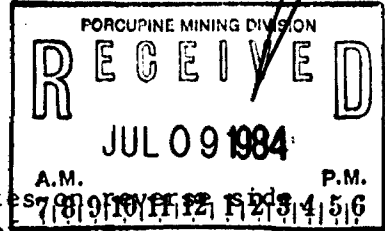
Calculation

$$\frac{42}{\text{Technical}} \times 7 = \frac{365.4}{\text{Line-cutting}} + \frac{0}{\text{Line-cutting}} = \frac{365.4}{\text{Line-cutting}} \div \frac{20}{\text{Number of claims}} = \frac{18}{\text{Assessment credits per claim}}$$

The dates listed on this form represent working time spent entirely within the limits of the above listed claims  Check  
If otherwise, please explain \_\_\_\_\_

Dated: June 21, 1984

Signed: *William R. Tramp*



- Note: (A) \* Complete only if applicable.  
(B) Complete list of names, addresses and dates of survey.  
(C) Submit separate breakdown for each type of survey.  
(D) Submit in duplicate.

## Details of Assessment Work Breakdown

### FIELD WORK

<u>Type of Work</u>	<u>Name &amp; Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
Geochemical Sampling	Ed. Sawitzky	June 1 - July 28, 1982	5
	Ian Reid	June 1 - July 28, 1982	10
	Daniel Joubert	June 5th - July 28, 82	10
	Alain Cotnoir	June 1 - July 28, 1982	10
			35

### CONSULTANTS

<u>Name &amp; Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>

### DRAUGHTSMAN, TYPING, OTHERS (specify)

<u>Name &amp; Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
Ed Sawitzky	Drafting/Report writing		5
Alain Cotnoir	Drafting		2

TOTAL 8 HOUR TECHNICAL DAYS 42

### LINE-CUTTING

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

TOTAL 8 HOUR LINE-CUTTING DAYS \_\_\_\_\_



2.6980

625930 .

✓

628015

✓

31

✓

76

✓

32

✓

5-97722

✓

33

✓

23

✓

628067

✓

26

✓

69

✓

27

✓

72

✓

28

✓

70

✓

29

✓

71

✓

30

✓

73

✓

74

✓