

PLACER DEVELOPMENT, LIMITED

Assessment Report

of ·

Geochemical Survey

Cody Township Property

Cody Township, Porcupine Mining Division, Ontario

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MINING LANDS SECTION

December 3, 1981

Toronto, Ontario

D.R. Pyke, Ph.D.



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Map A: Humus Sample Locations

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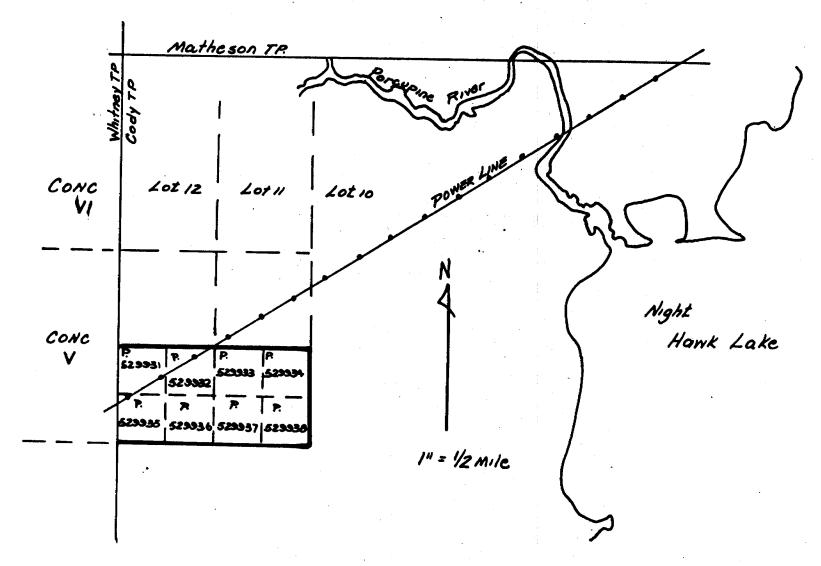


Figure la - Location of Cody Township property.

Introduction

This report covers a geochemical survey carried out over a claim group located in northwest Cody Township,

Porcupine Mining Division (Figure 1). The claim group is referred to as the Cody Township Property. The claim numbers and their corresponding locations are tabulated below:

Claim Numbers

P.	529931	NW ‡,	s.	₹,	Lot	12,	Concession	V .,	Cody Twp.
P.	529932	NE 4,	s.	$\frac{1}{2}$,	Lot	12,	Concession	٧,	Cody Twp.

P. 529933 NW $\frac{1}{2}$, S. $\frac{1}{2}$, Lot 11, Concession V, Cody Twp.

P. 529934 NE $\frac{1}{4}$, S. $\frac{1}{2}$, Lot 11, Concession V, Cody Twp.

P. 529935 SW $\frac{1}{4}$, S. $\frac{1}{2}$, Lot 12, Concession V, Cody Twp.

P. 529936 SE $\frac{1}{4}$, S. $\frac{1}{2}$, Lot 12, Concession V, Cody Twp.

P. 529937 SW $\frac{1}{4}$, S. $\frac{1}{2}$, Lot 11, Concession V, Cody Twp.

P. 529938 SE $\frac{1}{2}$, S. $\frac{1}{2}$, Lot 11, Concession V, Cody Twp.

The claims are currently held by Placer Development Limited, 401 Bay Street, Simpson Tower, Suite 2600, Toronto, Ontario.

Access

The property may be reached by walking the right of way for a power transmission line which extends from the Porcupine River southwest to the claim group, a distance of two miles.

Previous Work

The area was previously mapped by Hurst (1939). Berry (1940) and more recently by Leahy (1971).

To the writer's knowledge, the only exploration work done on the property is that reported by Leahy (1971). In 1936, Wineva Gold Mines Limited drilled three holes totalling 1,954 feet; assays for gold ranged from nil to 0.26 ounces per ton. The exact location of the holes is unknown, but Leahy indicates that they were probably drilled in the northeast part of the claim group. In addition, J.W. Young reportedly did some test pitting (1938-1940?); assays for gold ranged from trace to 0.12 ounces per ton.

Topography and Drainage

The property is characterized by low relief, the maximum variation in elevation being only about 20 feet.

With the exception of claim P. 529936, the western half of the area surveyed is largely covered by muskeg, containing sparse to moderate growths of black spruce, cedar and lesser tamarack trees. The eastern half of claim P. 529937 is also largely covered by muskeg. The remaining property area is essentially dry and wooded with black spruce and poplar trees.

Glacial Geology

Glacial material of Pleistocene age covers over eighty percent of the area surveyed and consists of a sequence of glaciolacustrine clays and silts (Lee, 1979).

The depth of overburden on the property in areas where no outcrop occurs has been tested only through the Wineva Gold Mines diamond drilling. The drilling indicated an overburden depth of twelve feet in this region. The average depth of overburden ac ross the remaining property area is not known.

However, as areas of outcrop occur intermittently on the western three-quarters of the property, it is probable that the depth of overburden covering the area does not exceed 20-30 feet.

General Geology

The area is immediately south of the Destor-Porcupine Fault, and is one where a thick wedge of sediments, intercalated with mafic volcanics, have been folded into a broad anticline, the axis of which trends northeast across part of Cody and Whitney Townships (Hogg, 1951)(Figure 2). The mafic volcanics form part of the Lower Tisdale Group rocks. Deloro Group volcanics of felsic tuff and lapilli-tuff from the main core of the anticline in Whitney Township.

Property Geology

The claims straddle the axial trace of a northeast plunging anticline (Figure 2), and are underlain mainly by poorly sorted sediments consisting of greywacke, siltstone and lesser intercalated tuffs. Mafic volcanics outcrop in the southwest corner of the claims, and a number of north trending diabase dikes traverse the property.

Present Survey

The survey completed by Comstate Resources Limited was carried out during the period August 14 - 18, 1981. The work was performed by James Roberts (presently residing at Stanley Mission, Saskatchewan), under the supervision of D.R. Pyke.

The survey entailed sampling of the humus (AO) horizon.

This horizon was variably developed over the property. On the

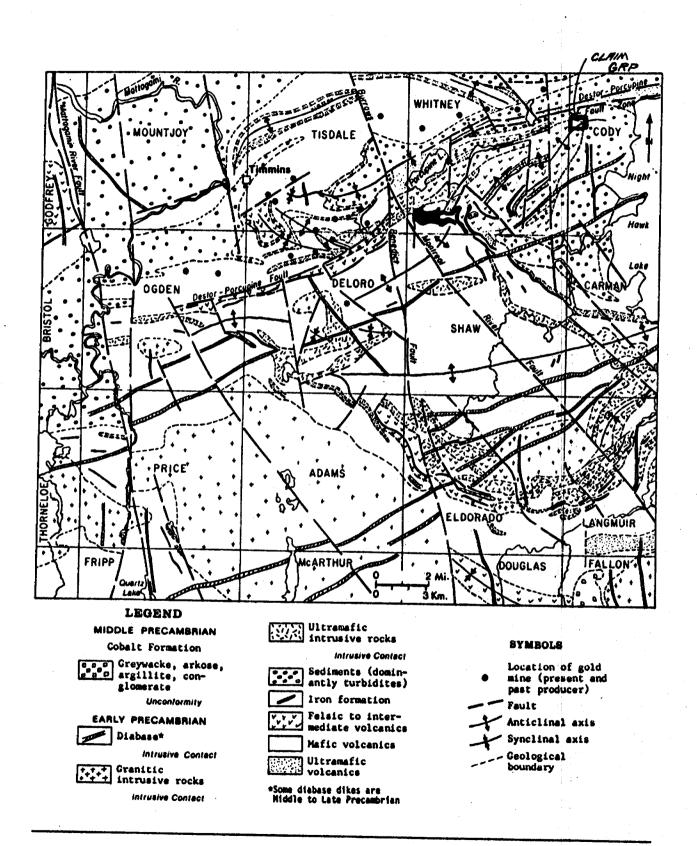


Figure 1. Geological sketch map of the Timmins area (after Pyke 1974a).

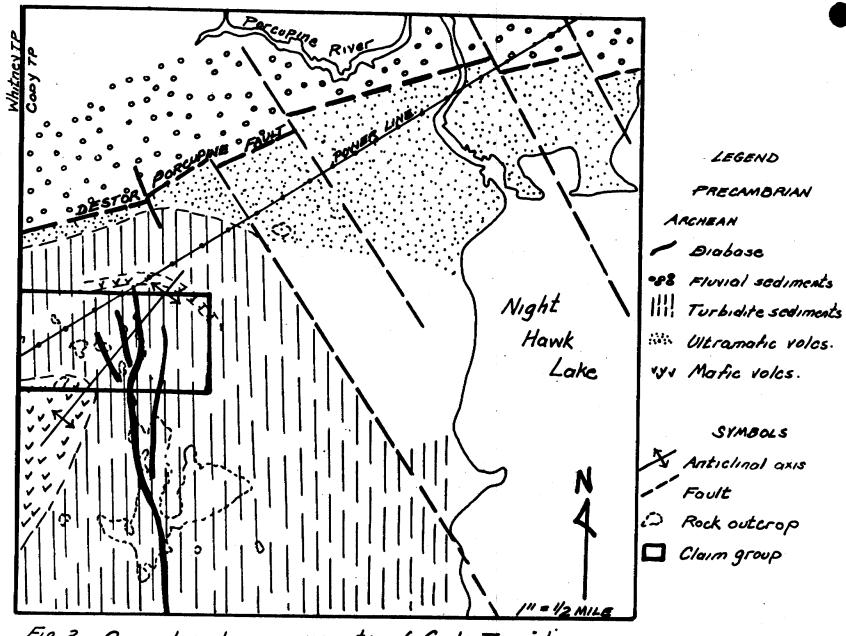


Fig. 2 General geology in vicinity of Gody Township property. Geology modified after Leahy, 1971.

western portion of the claim group, which is largely covered by muskeg, the humus layer ranged from 1 to 4 inches thick, and was found to be extremely damp and dark brown to black in color. In the drier wooded areas, the best development of humus material was often found proximal to the base of larger spruce and poplar trees, with the material often displaying a spongy texture.

Sample location sites are plotted on Map A accompanying this report. Samples were collected at 100 foot intervals along fourteen north-south lines (spaced 400 feet apart) traversing the property.

A total of 378 samples were obtained from the property.

The samples were subsequently hang-dried and submitted to

X-Ray Assay Laboratories for geochemical analysis.

374 samples were analyzed for gold (parts per billion) and

arsenic (parts per million). The remaining samples were found

to lack sufficient humic content and were not analyzed.

Survey Results

The survey results are plotted on Maps B and C accompanying this report and are also displayed in Appendix A. The survey method is described in Appendix B.

Gold Content in Humus - Map B

Gold values obtained from humus samples collected on the property ranged from less than one part per billion up to 46 parts per billion. Background gold content in the humus horizon appears to be less than 20 parts per billion.

The survey outlined five (5) major areas of anomalous gold concentration in the humus horizon (Areas 'A' -'F'):

- Area 'A' comprises three sample stations yielding gold values ranging from 28 to 33 parts per billion. The area trends roughly north-south, lying between sample stations 12 N and 7 N on line 4E.
- Area 'B' is located approximately 300 feet southeast of Area 'A' and is defined by seven sample stations yielding gold values between 20 and 34 parts per billion. Area 'B' trends east-west for a distance of 800 feet.
- Area 'C' is centered upon the intersection of the Base Line and Line OE. The area comprises five sample stations yielding gold values ranging from 20 to 46 parts per billion, and trends roughly east-west for a distance of 400-500 feet.
- Area 'D' trends east-west and comprises two sample stations yielding gold values of 30 and 33 parts per billion, located at sample stations 75,0E and 75,4E.
- Area 'E' the largest of all the major anomalies, Area 'E' is defined by 13 sample stations yielding gold values ranging from 22 to 38 parts per billion. Located in the north-central portion of the area surveyed and lying between lines 20E and 28E, Area 'E' is of irregular outline and displays a vague east to northeast trend.
- Area 'F' comprises five sample stations yielding gold values between 20 and 44 parts per billion, located approximately 400 feet southeast of Area 'E', between lines 28E and 32E.

In addition to the major areas mentioned above, a number of weaker (20-29 parts per billion), east-west trending anomalies occur intermittently throughout the area surveyed. On claim P. 529938, covering the southeast corner of the property, four such anomalies occur which may represent the easterly extension of Area 'E'.

Arsenic Content in Humus - Map C

The survey outlined only one major area of anomalous arsenic concentration in the humus horizon:

Area 'a' - comprises five sample stations yielding arsenic values ranging from 18 to 29 parts per million. Area 'a' is coincident with gold anomaly 'B' and extends westward to the immediate south border of gold anomaly 'A'.

A number of minor (1-3 sample station) arsenic anomalies were also detected on the area surveyed.

Most of these anomalies display an east to northeast trend. Gold anomaly 'E' coincides with one of the three sample-station arsenic anomalies.

Conclusions and Recommendations

Lack of continuity of the major anomalous areas plus the relatively low gold and arsenic values found in these areas indicate that the geochemical anomalies detected are weak and may not reflect a bedrock source for the gold and arsenic. However, the stratigraphy of the underlying bedrock trends in an easterly to northeasterly direction, which is the trend displayed by a great number of the geochemical anomalies detected.

It is recommended that follow-up work consist of geophysical (V.L.F. and magnetometer) surveys to aid in delineation of the structure and stratigraphy of the area. More detailed humus sampling followed by overburden drilling in the vicinity of coincident geophysical and geochemical anomalies (should they occur) would perhaps best serve to further evaluate the mineral potential of the property.

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Lee, H.A.

Northern Ontario Engineering Geology Terrain Study, Data Base Map, Timmins; Ont. Geol. Survey, Map 5029. scale 1:100,000

APPENDIX A

Humus Sample Analytical Results - Cody Township Property

SAMPLE	AU PPB	AS PPM	SAMPLE		AU PPB	AS PPM
C52-11N	5	11	C44-10N		6	5
C52-10N	12	8	C44-9N		18	14
C52-9N	15	12	C44-8N		17	14
C52-8N	3	8	C44-7N		9	6
C52-7N	11	8	C44-6N		8	10
C52-6N	14	14	C44-5N		8	7 3
C52-5N	15	13	C44-4N		7	
C52-4N	11	9	C44-3N		18	14
C52-3N	12	10	C44-2N		11	10
C52-2N	9	13	C44-1N	•	9	15
C52-1N	10	12	C44-BL	•	28 8	11
C52-BL	9	9	C44-1S			
C52-1S	11	10	C44-2S		13	15 11
C52-25	11	10	C44-3S		9	10
C52-3S	3	6	C44-4S		17	12
C52-4S	14	. 8	C44-5S		23	11
C52-5S	25	14	C44-6S		26	14
C52-6S	17	10	C44-7S	•	11	13
C52-7S	17	9	C44-8S		14	12
C52-8S	22	11 10	C44-9S C44-10S	•	10	12
C52-9S	11	10	C44-115		21	11
C52-10S	12		C44-12S		23	13
C52-11S	14	10	C44-13S		14	12
C52-12S	20	10	C40-13N		16	8
C52-13\$	13 11	12 15	C40-12N		5	, 8
C48-13N	26	13	C40-11N		16	· 9
C48-12N	13	17	C40-10N		11	á
C48-11N	13	15	C40-9N		. 8	13
C48-10N	17	11	C40-8N		11	9
C48-9N C48-8N	13	77	C40-7N		10	11
	15	9	C40-6N		18	14
C48-7N	20	16	C40-5N		19	13
C48-6N	12	16	C40-4N		7	8
C48-5N C48-4N	17	16	C40-3N		13	10
·	27	13	C40-2N		16	9
C48-3N C48-2N	24	ii	C40-1N		6	4
C48-1N	19	16	C40-8L		20	- 10
C48-BL	23	8	C40-1S		2	5
	16	10	C40-2S		6	4
C48-1S	18	10	C40-35		9	. 12
C48-25		11	C40-4S		6	12
C48-3S	21	12	C40-5S		13	5
C48-4S	15	11	C40-6S		6	6
C48-5S	23				9	. 6
C48-6S	15	8	C40-7S	•	10	9
C48-7S	21	11	C40-8S		4	9
C48-85	17	8	C40-95		13	5 5
C48-95	23	15 9	C40-10S		8	8
C48-10S	12	11	C40-11S		11	12
C48-11S	25		C40-12S			
C48-12S	29	10	C40-13S		14	4
C48-13S	15	18	C36-13N		8	2
C44-13N	21	13	C36-12N		13	4
C44-12N	12	9	C36-11N		19	5
C44-11N	10	9	C36-10N		3	3
C5 2-13N	7					
C52-12N	. 7	8				
	14	8				

SAMPLE	AU PPB	AS PPM	SAMPLE		AU PPB	AS PPM
C36-9N	5	7	C28-8N		26	19
C36-8N	23	8	C28-7N		2	2
C36-7N	NH	NH	C28-6N	•	11	10
C36-6N	6	3	C28-5N		8	, 8
C36-5N	NH	NН	C28-4N		10	5
C36-4N	<1	3	C28-3N		5	7
C36-3N	13	9	C28-2N	T	8	5
C36-2N	6	8	C28-1N		6	. 5
C36-1N	15	7	C28-BL		11	11
C36-BL	28	11	C28-1S		16	10
C36-1S	13	. 9	C28-2S		13 10	9
C36-2S	2	9	C28-3S C28-4S		24	11
C36-3S C36-4S	10 25	15 14	C28-5S		22	12
C36-5S	10	14	C28-6S		14	10
C36~6\$	13	*7	C28-7S		14	12
C36-7S	10	6	C28-8S		17	12
C36-8S	6	7	C28-9S	1 2	17	11
C36-9S	13	10	C28-10S		NH	NH
C36-10S	8	8	C28-11S		18	5
C36-11S	4	4	C28-12S		23	10
C36-12S	4	4	C28-13S		9	. 3
C36-13S	12	7	C24-13N		. 9	. 6
C32-13N	7	5	C24-12N		14	5
C32-12N	6	6	C24-11N		16	21
C32-11N	6		C24-10N		9	5
C3 2-10N	13	11	C24-9N		21	13
C32-9N	9	3	C24-8N		12	11
C32-8N	10	10	C24-7N		8	6
C32-7N	2	8	C24-6N C24-5N		7 9	6
C32-6N C32-5N	6	14 5	C24-4N		16	5 8
C32-4N	7	7	C24-3N		11	8
C32-3N	8	10	C24-2N		13	9
C32-2N	5		C24-1N		12	7
C32-1N	2	5	C24-BL	·	34	12
C32-BL	8	8	C24-15		28	13
C32-1S	16	11	C24-2S		17	12
C32-2S	12	4	C24-3S		25	12
C32+3S	9	9	C24-45		- 32	13
C32-4S	6	7	C24-5S		23	12
C32-5S	7	10	C24-6S		22	13
C32-6S	12	10	C24-75	,	17	11
C32-7S	25	14	C24-85		30	17
C32-8S	20	14	C24-9S	•	38	16
C32-9S	NH '	NH	C24-10S		19	13
C32-10S	44	13	C24-11S	•	19	13
C32-11S	14	9	C24-12S		35	17
C32-12S C32-13S	29 14	13	C24-13S		12 28	6
C28-13N	2	7	C20-13N C20-12N		28 9	18 12
C28-12N	14	6	C20-12N		13	12
C28-11N	13	9	C20-10N		11	12
C28-10N	10	15	C20-9N		30	13
C28-9N	16	5	C20-8N		9	13
					-	- -

SAMPLE	AU PPB	AS PPM	SAMPLE		AU PPB	AS PPM
C20-7N	14	11	C12-6N		16	. 10
C20-6N	18	11	C12-5N		11	7
C20-5N	6	5	C12-4N		23	14
C20-4N	6	9	C12-3N		21	11
C20-3N	11	11	C12-2N		. 15	9
C20-2N	4	5	C12-1N	_	10	- 8
C20-1N	5	3	C12-BL	<i>f</i>	14	14
C20-8L	7	9	C12-1S		16	6
C20-1S	10	7	C12-25		14	15
C20-2S	25	14	C12-3S		. 5	10
C?0-3S	20	11	C12-4S		. 8	10
C20-4S	9	10	C12-5\$		16	9
C20-5S	8	9	C12-65		21	13
C20-6S	14	11	C12-7S		6	6
C20-7S	29	16	C12-8S		5	9
C20-85	32	13	C12-9S		3	10
C20-9S	26	13	C12-10S		9	10
C20-10S	15	13	C12-11S		12	16
C20-11S	6	11	C12-12S	•	9	10
C20-12S	21	6	C12-13S		14.	12
C20-13S	13	20	C8-13N		28	. 19
C16-13N	13	7	C8-12N		11	11
C16-12N	12	16	C8-11N C8-10N		15 14	13 . 12
C16-11N C16-10N	4 8	13	C8-9N		14	9
C16-9N	16	16	C8-8N		16	- 11
C16-8N	10	14	C8-7N		18	9
C16-7N	15	В	C8-6N		29	24
C16-6N	14	6	C8-5N		33	18
C16-5N	ii	9	C8-4N		23	26
C16-4N	22	17	C8-3N		30	18
C16-3N	15	11	C8-2N		15	12
C16-2N	15	17	C8-1N		16	15
C16-1N	9	13	C8-BL		13	13
C16-BL	22	15	C8-15		19	13.
C16-1S	6	10	C8-25		12	6
C16-2S	6	6	C8-35		12	8
C16-3S	7	9	C8-45		17	11
C16-4S	8	9	C8-5S	•	11	9
C16-5S	20	4	C8-6S		17	15
C16-6S	15	11	C8-75		11	9
C16-7S	10	13	C8-8S		5	5
C16-8S	10	5	C8-95		15	11
C16-9S	9	5	C8-10S	4	14	8
C16-10S	10	11	C8-11S		12	15
C16-11S	12	7.	C8-12S		19	8
C16-12S	14	9	C8-13S	•	11	6
C16-13S	9	5	C4-13N		14	13
C12-13N	10	6	C4-12N		16	12
C12-12N	9	8	C4-11N		29	14
C12-11N	11	14	C4-10N		28	11
C12-10N	14	5	C4-9N	•	19	17
C12-9N	9	6	C4-8N		33	14
C12-8N	18	8	C4-7N		11	29
C12-7N	14	9	C4-6N		20	11

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SAMPLE	AU PPB	AS PPM	SAMPLE	AU PPB AS PPM
C4-5N	13	6	CO-4N	10 11
C4-4N	4	2	CO-3N	16 8
C4-3N	15	9	CO-2N	25 10
C4-2N	18	12	CO-1N	32 13
C4-1N	15	12	CO-BL	9 14
C4-BL	20	14	CO-1S	3 8
C4-1S	46	16	CO-2S	26 11
C4-2S	14	7	CO-3S	5 4
C4-3S	15	12	CO-4S	10 11
C4-4S	17	10	CO-5S	15 10
C4-5S	19	13	C0-6S	19 11
C4-6S	20	ii	CO-7S	30 10
C4-7S	33	16	CO-8S	18 9
C4-8S	15	10	CO-9S	7 7
C4-9S	17	4	CO-10S	8 12
C4-10S	18	9	CO-11S	
C4-11S	16	8	CO-12S	32 11 18 8
C4-12S	12	9	CO-13S	•-
C4-13S	8	7	00 133	
CO-13N	24	14		
CO-12N	10	9		
CO-11N	15	16		
CO-10N	8	12		
C0-9N	19	9		
CO-8N	12	ģ		
CO-7N	9	ģ		
CO-6N	10	12		
CO-5N	26	8		
NH - NOT HUMUS		•		

APPENDIX B Survey Method

Procedure

During the survey, humus samples were obtained either by hand or by exposing deeper levels of the humus layer with a grub hoe.

After hang-drying, the samples were shipped to X-Ray Assay Laboratories, 1885 Leslie Street, Don Mills, Ontario, for analysis. 374 samples were analyzed by neutron activation method for gold and arsenic.

Sample preparation entailed thoroughily blending each sample in a blender to homogenize the material, followed by hydrolic compression of a portion of the sample to form a pellet weighing eight grams, which was used in the neutron activation process.

Humus as a sample medium

Gleeson (1979), Lakin et al (1974), Curtin et al (1968) and others have documented the successful use of humus (mull) as a sample medium for detection of auriferous bedrock zones in areas covered by 3 to 130 feet of glacial material. Gleeson (1979) has found that anomalies in the humus generally occur directly over the subcrop of the auriferous zones, and their dispersion patterns are little effected by glacial transport.

The humus layer sampled consists of the partly decomposed plant debree found under trees or shrubs, and usually occurs as dark brown or black, humus-rich pads mixed with varying

amounts of mineral matter.

A summary of the geochemical processes involved in the accumulation of gold in the humus horizon is presented by Lakin et al (1974):

"....ample hydrogen cyanide is formed in the soil by hydrolysis of cyanogenic plants, animals and fungi to result in solution of gold in an oxygenated environment. The gold cyanide thus formed is absorbed by plants, but they do not use it as a nutrient. It is therefore found accumulating as a reject in the woody parts of a plant. The decomposition of plant debree results in the reduction of gold in the plant material and gold accumulation in the humus horizon of the soil."

Boyle and Dass (1976), through their work in the Cobalt area, have demonstrated that concentrations of such elements as arsenic, zinc, copper and lead also occur in the humus layers occurring over known veins containing anomalous quantities of these elements.

Certificate

- I, D.R. Pyke, submit this document to certify that the following statements are, to the best of my knowledge, true and correct.
- 1. That I supervised the geochemical survey conducted on the Cody Township Property claims during the period August 14 18, 1981.
- 2. That I am the author of the corresponding assessment report entitled "Assessment Report of Geochemical Survey, Cody Township Property, Cody Township, Porcupine Mining Division, Ontario".
- 3. That I have received the following university degrees in geology:

B.Sc.	University of Saskatchewan	1959
M.Sc.	University of Saskatchewan	1961
Ph.D.	McGill University. Quebec	1967

4. That I have been working as a geologist in the general Timmins area for 15 years, and I am familiar with the geology of the area under consideration.

Respectfully,

D.R. Pyke

Assessment Work Breakdown

1.	Expenditure Credits for Geochemical Survey. (see Technical Data Statement)	
	374 geochemical (humus) samples analyzed for gold and arsenic, costing \$7.50 per sample	\$ 2,805.00
	Assessment credits - one day's work for each \$15 expended. Total number of assessment work credits obtained for chemical analyses	187 days
	Number of credits credited per claim, eight claims to be credited	23.3 days
2.	Assessment Credits earned for total 8-hour technical days (see Assessment Work Breakdown Statement-II)	
	48.0 hours total technical, or 6.0 8-hour days, X seven assessment credit days per 8-hour day	42.0 days
	Number of credits credited per claim, eight claims to be credited	5.3 days
	Total number of assessment credits per claim earned from this survey work	28.6 days total per claim
•		

Submitted by D.R. Pyke for the purpose of obtaining assessment work credits for mining claims P. 529931.

P. 529932, P. 529933, P. 529934, P. 529935, P. 529936,

P. 529937, P. 529938, comprising the Cody Township

Property, Cody Township, Porcupine Mining Division, Ontario.

Signature:

Assessment Work Breakdown-II

FIELD WORK

Type of Work:

Geochemical (humus) sampling

Name and Address:

James Roberts

Stanley Mission, Saskatchewan

Dates Worked:

August 14, 16, 17-18, 1981

No. 8-hr. days:

4.0 8-hour days total

DRAUGHTSMAN, TYPING, OTHERS

Type of Work:

Draughting

Name and Address:

Kimberly M. Cunnison

180 Kennedy Street West, Aurora, Ontario

Dates Worked:

November 30, 1981, December 1, 1981

No. 8-hr. days:

1.5 8-hour days

Type of Work:

Typing

Name and Address:

Kimberly M. Cunnison

180 Kennedy Street West, Aurora, Ontario

Date Worked:

December 3, 1981

No. 8-hour days:

0.5 8-hour days

Total number of technical days earned from this work:

6.0 8-hour technical days total

X 7 assessment credit days per 8-hour day 42.0 credit days total

X-RAY ASSAY LABORATORIES LIMITED .

1885 LESLIE STREET. DON MILLS. ONTARIO M38 3J4

PHONE 416-445-5755

TELEX 06-986947

INVOICE 13408 REF. FILE 9064-SR

17-NOV-81

- 401 V-Co 004

TO: D.R. PYKE & ASSOCIATES 157 BURBANK DR.,

CUSTOMER NO. 754

WILLOWDALE DNT., M2K 1N9

DATE SUBMITTED

21-OCT-81

606 HUMUS

WERE ANALYSED.

		METHOD	CODE	UNIT COST	AMOUNT
578	AU+A S	NA	14. 0	7.00	4046.00
606	PREP. HUMUS O	R LEAVES	2. 0	0.50	\$ 4046.00 303.00
					\$ 4349.00

INVOICE PLEASE PAY THIS AMOUNT

NEGOTIABLE WITHOUT CHARGE AT

AL BANK OF CANADA

CKNIGHT BOULEVARD

T BLVD. & 12TH ST. N.E. BRANCH

RANCH OF THE ROYAL BANK OF CANADA IN CANADA (FAR NO!

N BRANCHES EXCEPTED)

COMSTATE Resources Ltd.

901, 1015 - 4TH STREET 5 W

Nº

071

..... DA

January 25, 1982

125 4349 Dats 00 CIS

\$ *4,349.00*

X-Ray Assay Laboratories Limited 1885 Leslie Street Don Mills, Ontario M3B 3J4

COMSTATE Resources Ltd.

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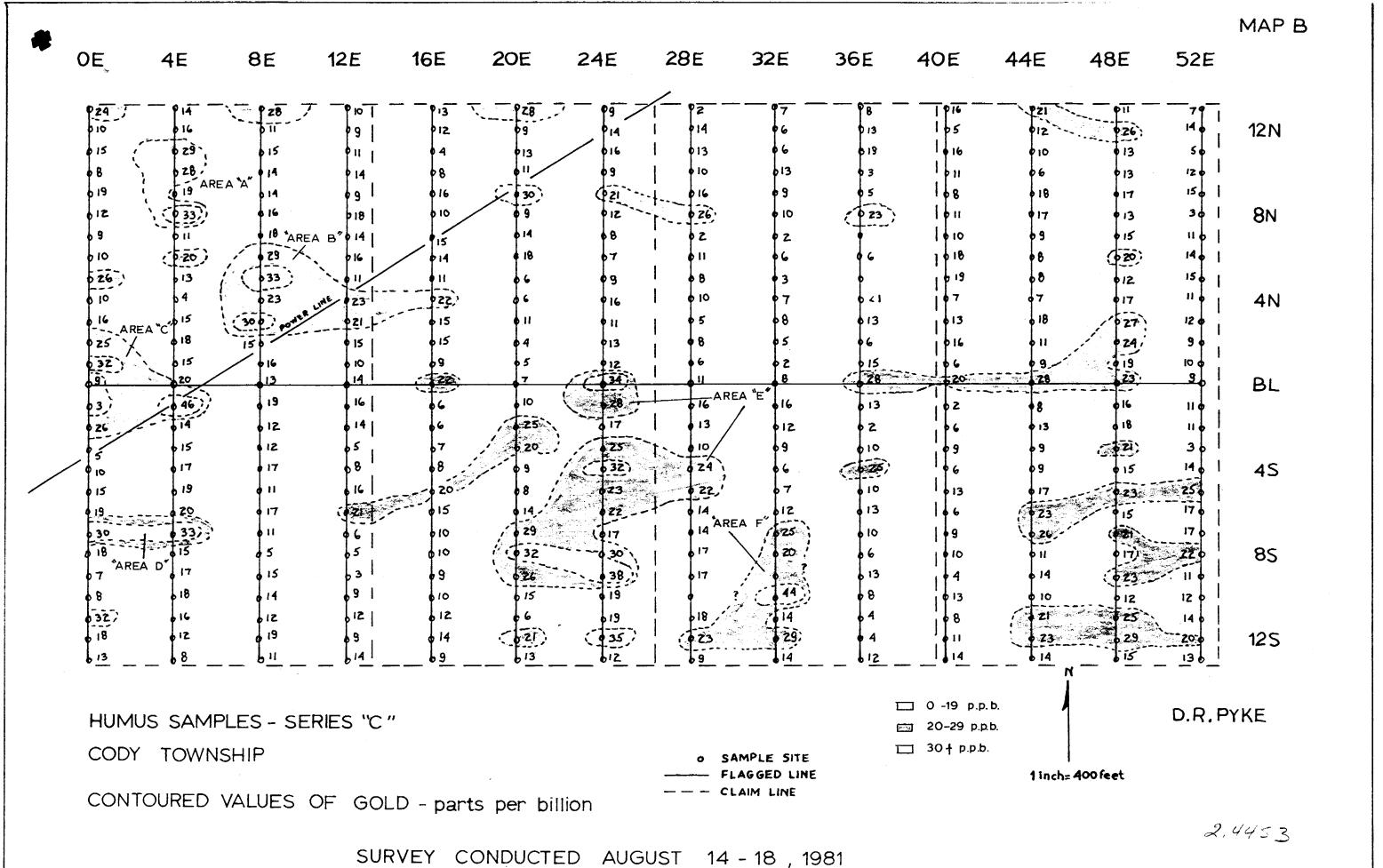
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X-RAY ASSAY LABORATORIES LIDE

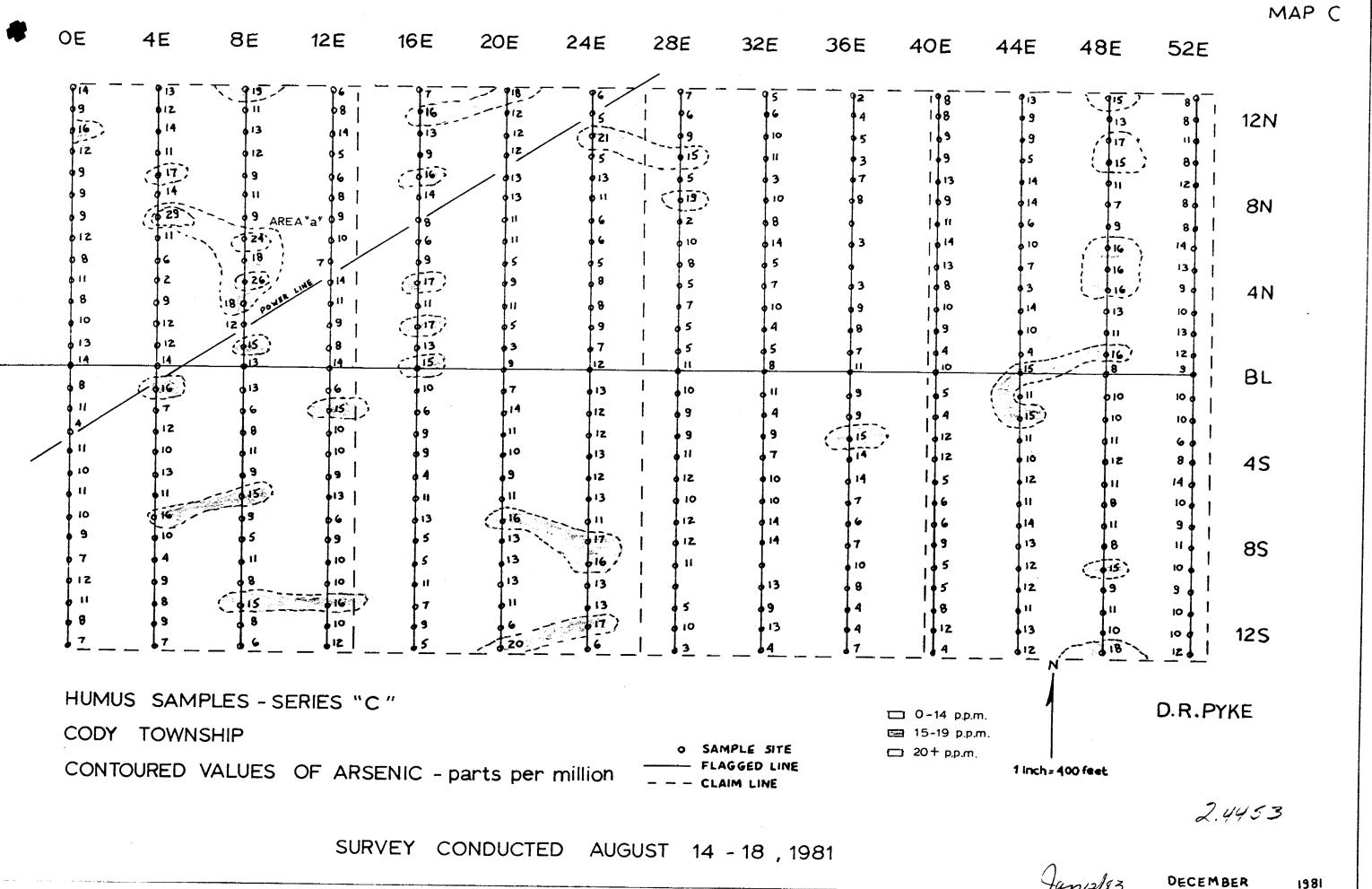
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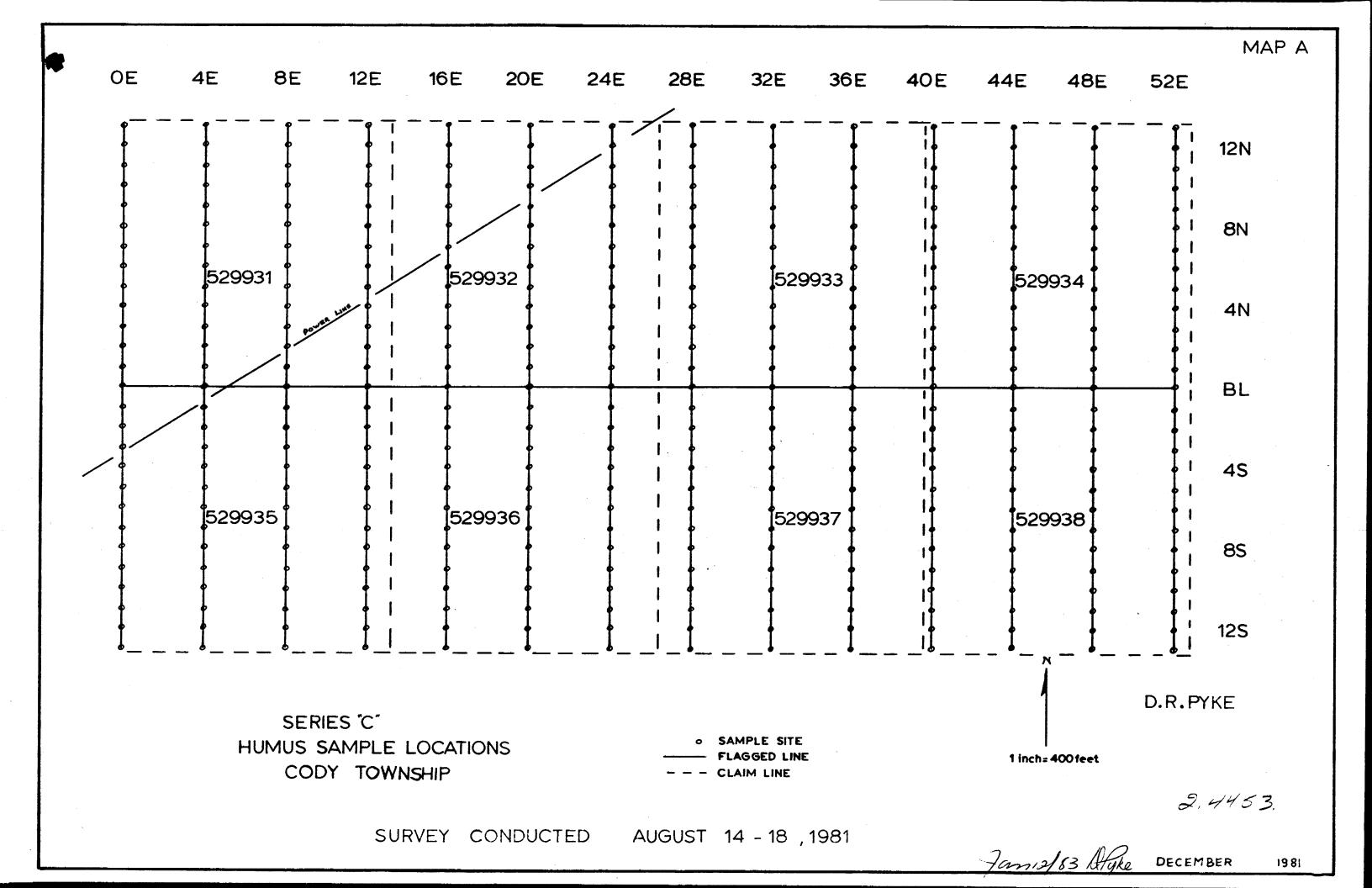
O6852 - OO3
THE ROYAL BANK OF CANADA
664 YORK MILLS ROAD BR.
TORONTO, ONTARIO
O6862 - COO



Jan 183 Digle DECEMBER

1981





Report of Work

(Geophysical, Geological,
Geochemical and Expenditures)



900

	W8106-5	වච	The Mining	ACI 2.41	150 -	- Do not use	shaded areas belo	ow.
Type of Survey(s)		(13.	IM. IT		Township			
Claim Holder(s)	MEMICAL.	(176.	111105		100	DDY Prospector	r's Licence No.	
Place	DEVEL	SOME	TAIT L	シアク			837	
Address	472,12,20	7,	70 /	1 /	2			
SIMPSON	TOWER,	4011	BAYDA	reet, Jo	VITE,	2600	TURONTO	CUT
Survey Company	~ 7		/				Total Miles of lin	• Cut
Name and Address of Author (o	f Geo-Technical report)	KCES	S KID	Day Mo.	Yr. Day	Mo. Yr.		· · · · · · · · · · · · · · · · · · ·
DR PYKE	157 BURBA	WK'J	R. 10%	220MBA	IF O	NT.	MZKIN	9
Credits Requested per Each (ims Traversed (L				
Special Provisions	Geophysical	Days per Claim	Mi Prefix	ning Claim Number	Expend. Days Cr.	Prefix	lining Claim Number	Expend. Days Cr.
For first survey:	- Electromagnetic				 	V. 6.1.1		
Enter 40 days. (This includes line cutting)	- Magnetometer		2018 1982 Selection	··	33.50	经 基金数		
	- Magnarometer			<u>529932</u>	23.50		•	
For each additional survey:	- Radiometric			<u>529933</u>	23.20		***	
using the same grid: Enter 20 days (for each)	- Other			529934	23.50			
	Geological		444	529935				
	Geochemical				T			
Man Days		Days per	2 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	52 9 936			W	
Complete vermes side	Geophysical	Claim		529937	23.50	Biblio and the		其
Complete reverse side and enter total(s) here	- Electromagnetic		*****	5 <i>299</i> 38	23.50			<u> </u>
	- Magnetometer				1 1		۳.,	U X
	- Radiometric						> 중	25.5
	- Other						ili —	2
	- Other					Š.	<u> </u>	-
	Geological							9
	Geochemical							Ž
Airborne Credits		Days per Claim					·	\$
Note: Special provisions	Electromagnetic				 			4
credits do not apply						4.1		
to Airborne Surveys.	Magnetometer							
	Radiometric						•	
Expenditures (excludes power		77-19					ORDE	
	umus SAMPI	e 1						-11
Performed on Claim(s)		29934	_	· · · · · · · · · · · · · · · · · · ·	 		C 4 1981	
P529931 P529				· · · · · · · · · · · · · · · · · · ·	 		.007	
7	750000					BELL	Vo	···········
P529935, P529936 Calculation of Expenditure Days		2938						-
Total Expenditures	•	Total s Credits						
\$ 282000	- + 15 =	88				Total nur	nber of mining	
		<u> </u>					vered by this	
Instructions Total Days Credits may be as	portioned at the claim i	nolder's		Car Office Has O	Amilia.	_ =		Jord
choice. Enter number of days in columns at right.	s credits per claim select	ed	Total Days	For Office Use O Cr. Date Recorded	niy	Mining Re	eorder	
			Recorded	Dec.	4 81	CRE	olenal Mining R	900 r#8 r
Date Rec	corded Holden or Agent	S/gnature)	188	Data Approved	as Necoraed	Bryton	SARA C	Z.
OCCUPING MINING	MT UR	2	J L	13:01	. 21	yer	790	<u> </u>
Certification Venitying Repo				UF	of Work ar-	avanta i	having partares	the work
or with deserting that I have be	personal and intimate k lor after its completion	nowledge o and the an	tine tacts set the nexed report is	orth in the Report (true.	OT MACK BUL	iekeu me reto,	naving performed	I LIIO WOLK
Name and Postal Address of Par	son Certifying						6 11	720 000
J. Mary yre	13/000	15/0/1	NUK WI	P. WILL Date Certified	OWD	Cartifian	W (Stoneyate)	<u> 2X /XY</u>
7,8,9,10,11,12,1,2	3456			1000	3/21	11/	KKAN	ָ
1362 (81/9)					-101		<u>, , , , , , , , , , , , , , , , , , , </u>	

OFFICE USE ONLY



Ministry of Natural Resources

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.

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<u>K</u>		$\tilde{\Xi}$

Type of Survey(s) Geochemi	cal (humus sampling)	
Township or Area (Cody To	MINING OF ADAMS TO A TO	
Claim Holder(s) Placer Dev	MINING CLAIMS TRAVERSED List numerically	
, <i>,</i>	Bay St., Suite 2600, Tor	onto
Survey Company Comstate Re	esources Ltd. Ontario.	- 529931
Author of Report D.R. Pyke		(prefix) (number)
Address of Author Willowdal		P 529932
	st 14 - December 3, 1981	P529933
·	(linecutting to office)	
Total Miles of Line Cut		P529934
T		P529935
SPECIAL PROVISIONS CREDITS REQUESTED	DAYS Per claim	P 529936
	Geophysical	P529937
ENTER 40 days (includes	Electromagnetic	
line cutting) for first	-Magnetometer	£529938
survey.	–Radiometric	(1844)
ENTER 20 days for each	-Other	·
additional survey using same grid.	Geological	•••••••••••••••••••••••••••••••••••••••
B.:	Geochemical	••••••
AIRBORNE CREDITS (Special provi	sion credits do not apply to airborne surveys)	
MagnetometerElectromagn		-
(A) a let	days per claim)	•••••••••••••••••••••••••••••••••••••••
DATE: 4 SIGNA	ATURE: W/YRe	
,	Author of Peport or Agent	
		••••••
Res. Geol. Qualif	fications 2.3899	-
Previous Surveys		
File No. Type Date	Claim Holder	¬
ļ	•••••••••••••••••••••••••••••••••••••••	
	•••••••••••••••••••••••••••••••••••••••	••••••
	•••••	

		TOTAL CLAIMS 8

GEOPHYSICAL TECHNICAL DATA

Number of Stations	Number o	f Readings	
Station interval	Line spaci	ng	
rofile scale			
Contour interval			
		$\mathcal{F}_{i} = \{ 1, \dots, n \} \in \mathcal{F}_{i} $	
Instrument			
Accuracy — Scale constant			
Diurnal correction method			4.1
Base Station check-in interval (hours)			· · · · · · · · · · · · · · · · · · ·
Base Station location and value	₹ F 4		
**************************************	· .	· · · · · · · · · · · · · · · · · · ·	
	$\mathbf{e}_{i} = e_{i} \cdot \mathbf{e}_{i}$		
Instrument	an v pro & un		
Coil configuration			
Coil separation			
Accuracy		· · · · · · · · · · · · · · · · · · ·	
Method: Fixed transmitter	☐ Shoot back	☐ In line	☐ Parallel line
Frequency	(specify V.L.F. station)		
Parameters measured			
Instrument			
Scale constant			
Corrections made		·	
Base station value and location		· · · · · · · · · · · · · · · · · · ·	
Elevation accuracy			
·			
Instrument			
Method Time Domain	☐ Fr	equency Domain	
Parameters – On time	Fr	equency	
- Off time	Ra	nge	
- Delay time			
- Integration time			
Power			
Electrode array			
Electrode spacing			
Type of electrode			· · · · · · · · · · · · · · · · · · ·

INDUCED POLARIZATION



SELF POTENTIAL	
Instrument	Range
Survey Method	
Corrections made	
RADIOMETRIC	
Instrument	and the second s
Values measured	
Energy windows (levels)	and the second s
Height of instrument	Background Count
Size of detector	
Overburden	the state of the s
(type, depth —	include outcrop map)
OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)	
Type of survey	
Instrument	
Accuracy	
Parameters measured	
Additional information (for understanding results)	
AIDBODNE CUDVEVC	
AIRBORNE SURVEYS Type of survey(s)	
Instrument(s)	
(specify for ea	ch type of survey)
Accuracy(specify for ea	ch 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

	529931. P. 529932. P. 529933. 29936. P. 529937. P. 529938.
1 / 2 × 2/2 = man	10H) V V V V V V V V V V V V V V V V V V V
Total Number of Samples 378 taken. 374 analys	zed <u>ANALYTICAL METHODS</u>
Type of Sample <u>soil sample - humus</u> (Nature of Material)	Values expressed in: per cent
Average Sample Weight 8 grams	p.p.m.
Method of Collection sampled by hand-grub hoe	p. p. b.
	Cu, Pb, Zn, Ni, Co, Ag, Mo, As (circle)
Soil Horizon Sampled humus - AO	Others Gold (Au)-parts per billion
Horizon Development variable: 1-5 inches.	Field Analysis (total) ewolune +p tests
Sample Depth usually 1-5 inches.	Extraction Method
Terrain Generally low relief: intermitter	The state of the second control of the secon
outcrop: overburden glacial clays-silts	B. Reagents Used
Drainage Development moderate: western 1 of area largely muskes covered. Estimated Range of Overburden Thickness	Field Laboratory Analysis
Estimated Range of Overburden Thickness	No. (tests
Average overburden thickness poorly	Extraction Method
known, but thought to be less than	Analytical Method
30 feet.	Reagents Used
SAMPLE PREPARATION	374 samples tester for
(Includes drying, screening, crushing, ashing)	Commercial Laboratory (Au and As tests
Mesh size of fraction used for analysis	Name of Laboratory X-Ray Assay Labs. Extraction Method
Not applicable	the state of the s
	Analytical Method Neutron Activation
	Reagents Used
	and the second s
General Samples were blended in a	General A total of 378 samples
blending machine for homogeneity	were obtained from the property.
of material. All samples were	4 of which were found to contain
thoroughily dried before	insufficinet humus content and
blending. Blended sample	therefore were not analyzed.
material was hydrolically	
compressed to form a pellet	and the profession of the state
weighing 8 grams.	And the second of the second o
	the same of the sa



1593 (81/10)

Geotechnical Report Approval

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Mining Lands Comments			
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ornago max sieg	700		
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		/	
To: Geophysics			
Comments			
Approved Wish to see again with corrections	Date	Signature	
To: Geology - Expenditures			
	Date	Signature	
Approved Wish to see again with corrections			
To: Geochemistry In Themsen	*	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
Comments			
/ ~			
			
			
	Deel 4th	Signatity	
_	1454	I STATE OF THE PARTY OF THE PAR	

Placer Development Limited Simpson Tower 401 Bay Street Suite 2600 Toronto, Ontario M5H 2Y4

Dear Sirs:

Enclosed are geochemical survey plans covering Mining Claims P 529931 to 38 inclusive in Cody Township. Please have Mr. D.R. Pyke date and sign these plans and return them to this office.

I note that you have requested assessment work credits for assaying for the amount of \$2,805.00. Please provide a receipt from X-Ray Assay Laboratories.

Yours very truly,

E.F. Anderson Director Land Management BRanch

Whitney Block, Room 6450 Queen's Park Toronto, Ontario M7A 1W3 Phone: 416/965-1380

F.W. Matthews:sc

cc: Mining Recorder Timmins, Ontario

Encls:

For further information, if required, please contact Mr. F.W. Matthews at 416/965-1380.

Office of the Mining Recorder Ministry of Natural Resources 60 Wilson Avenue Timmins, Ontario P4N 287

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.529931 et al, in the Townshipoof Cody.

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

Yours very truly,

E.F. Anderson Director Land Management Branch

Whitney Block, Room 6450 Queen's Park Toronto, Ontario M7A 1W3 Phone: 416/965-1380

J. Skura/bk

cc: Placer Development Limited Toronto, Ontario

cc: D.R. Pyke
Willowdale, Ontario

D.R. Pyke and Associates Inc.

157 Burbank Drive Willowdale, Ontario M2K 1N9 Telephone (416) 221-6210

DIRECTOR
LAND MANAGEMENT BRANCH
ROOM 6450
Whitney Block
Queen's PARK
TORONTO MIA IW3

RECEIVE Land Management B CINGULATE COMMENTS PLEASE RY	
JAN 14198	3
E. F. ANDERSON	
J. R. MORTON	
J. C. SMITH	
G. SHERMAN	
J. M. SMALL	
RETURN TO R. 64!	50

Jan 12/83

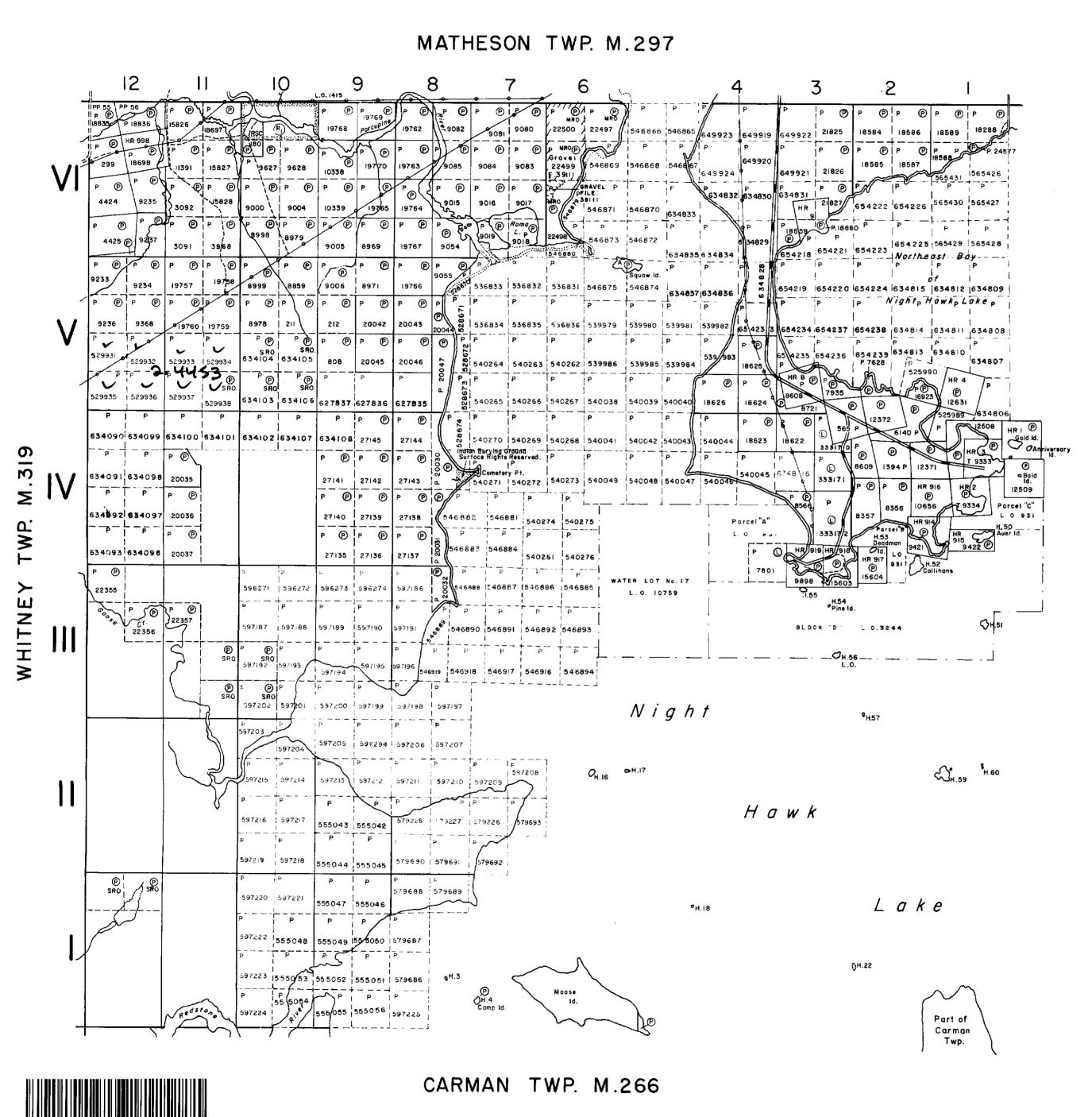
Re: File 2. 4453, Copy Township

As peryour request of December 31, 1983, enclosed please find the following:

(11 Signed and dated copies of geochemical Survey plans

(2) Copy of invoice and concelled cheque for 4,349.00, covering cost of analyses.

Sincerely W. Afyke.



THE TOWNSHIP OF

CODY

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH - 40 CHAINS

LEGEND

PATENTED LAND	P
CROWN LAND SALE	C.S.
LEASES	(C)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L. O .
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	-
POWER LINES	
MARSH OR MUSKEG	1 * . * . * . * . * . * . * . * . * . *
MINES	★
CANCELLED	C.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

The whole of Moose Island is attached to the Township of Cody. File 23642.

This Township lies within the Municipality of The city of Timmins

Reserve flooding rights to, Ont. Hydro to elevation 903.5' T8 NO Railway datum on Niight Howk take and that portion of the river between Night Howk lake and Frederick House Lake.

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

45. No. File Date Disposition

(R) w.53/76

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ACKLEM

6 16539

10/9/76

Disposition s.R.o.

DATE OF ISSUE

BEC 20 1982

Ministry of Natural Resources TORONTO

PLAN NO.

M 270

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH