

42A06NW0176 2.7036 DELORO

010

COMSTATE RESOURCES LIMITED

Geochemical Survey

Northwest Deloro Township

Claim P. 591264

Porcupine Mining Division, Ontario



July 31, 1984 Timmins, Ontario

D.R. Pyke, Ph.D.





42A06NW0176 2.7036 DELORG

Ø10C

Table of Contents

Location

Access

Present Survey

Previous Work

Figures la and lb - location of claim.

Topography

Property Geology

Survey Methods

Survey Results

Conclusions and Recommendations

References

Assessment Work Breakdown

Appendix A - Survey Method

Appendix B - Analytical Results

Maps A, B and C

Location

The property is located in northwest Deloro Township, District of Cochrane, Porcupine Mining Division (Fig. 1). The property consists of one claim - P. 591264.

Access

The claim is readily accessible, being only four miles south of the Timmins City Centre. A logging road extends across the southern part of the claim and intersects Pine Street South, 1.25 miles to the west, which forms the Deloro - Ogden Township boundary.

Present Survey

The claim is currently held in the name of D.R. Pyke, of 31 Delair Cres., Thornhill, Ontario. The survey was conducted by K. M. Cunnison on behalf of Comstate Resources, on May 31, 1984. Sampling was largely confined to the northern boundary and northwest portion of the claim.

Previous Work

The geology of the claim and surrounding area has been mapped by Burrows (1924), Hurst (1939) and later by Carlson (1967).

The only recorded assessment work on the claim is that of Comstate Resources Ltd., who, in 1981, conducted a magnetic and electromagnetic (VLF) survey on the claim, followed by a geological survey in 1983 (File T-2420, Ont. Geol. Surv.,

-1-





Assessment Files Office, Timmins, Ont.). Magnetically, the property was found to be quite flat. One VLF anomaly was outlined which would be best explained by an area of swamp and a small lake in the northwest part of the claim (Map A).

Topography

The general topography is illustrated on Map A. Two dominant features are a beaver pond in the northwest portion of the claim and a sandy east-southeast trending esker near the centre of the claim. Relief is low to moderate, approximately 10 feet in the outcrop area and up to 25 feet in the vicinity of the esker.

Property Geology

Outcrop is confined to the northwest corner of the claim, and consists of a massive, fine-to-medium grained, light greengrey magnesium rich tholeiitic basalt. Lack of obvious volcanic structures suggests the outcrops form part of a silllike intrusion rather than a volcanic flow.

The exact positioning of the Destor-Porcupine Fault (DPF) in this part of the Timmins camp is uncertain. However, the fact the the outcrop area in the northwest corner of the claim is tholeiitic in composition rather than calc-alkaline suggests that at least the northern portion of the claim is more akin to the Tisdale Group volcanic rocks than the Deloro Group volcanics. In this part of the Timmins area, the westerly trending DPF zone structurally separates the Tisdale and Deloro Groups (Hogg, 1950), and is therefore interpreted to pass somewhere through the mid - to southern portion of the claim.

-4-

Survey Method

The survey method is described in detail in Appendix A. The survey entailed sampling of the humus (A^{O}) horizon. The degree of development of the humus horizon within the area sampled is extremely variable, ranging in thickness from one or two inches to greater than one foot.

A total of 64 humus samples were obtained from the property. The samples were collected at roughly 100 foot intervals along north-south lines spaced 150 feet apart (Map A).

The samples were subsequently hang dried and submitted to X-Ray Assay Laboratories for geochemical analysis. A total of 62 out of 64 samples were analyzed for gold and arsenic; the remaining two samples were found to be composed of nonhumus material and were therefore not analyzed.

For comparative purposes, eight B horizon soil samples were also obtained from the property (Map A). Samples were taken from areas where this horizon appeared to be well developed. B horizon soil samples were analyzed solely for gold.

Survey Results

The analytical results of the survey are tabulated in Appendix B. Contoured values of gold and arsenic are presented on Maps B and C, respectively.

Gold Content in Humus - Map B

Nearly all of the samples analyzed returned values of gold equal to or greater than 20 parts per billion. The highest value obtained was 300 parts per billion. This is

-5-

unusual for the Timmins area, where background gold contents in the humus are generally in the order of five parts per billion.

The results are generally inconclusive. An anomalous area, centred on line 6E, station 7S, occurs along the southern margin of the area sampled. It is not known at the present time how far the anomaly extends to the west of line 6E, as sampling was not conducted in this region.

A large number of anomalous areas yielding gold values from 20 to 120 parts per billion occur throughout the area sampled.

Gold Content in B Horizon Soil Samples - Map B

All of the B horizon soil samples collected yielded gold values of less than two parts per billion (tower detection limit), even in areas where gold in the humus ran as high as 120 parts per billion.

Arsenic Content in Humus - Map C

Arsenic values obtained from the property ranged from two to fifty parts per million. Background arsenic values were in the order of ten parts per million.

Anomalous areas of very limited extent, being defined by one to two sample sites only, occur occassionally within the area sampled. Values found within such anomalous areas are moderately low, relative to anomalies obtained on other properties sampled in the Timmins area.

-6-

Conclusions and Recommendations

Results obtained from the present survey are inconclusive. Further humus sampling on the property, in the southwest quarter, is recommended to determine the western extent of the gold anomaly centered on line ¢E at station 7S.

Further recommendations are withheld, pending results of the above follow-up survey.

Z)e

References

Burrows, A.G.

1924: The Porcupine gold area; Fourth Report; Ont. Dept. of Mines, Vol. 33, pt. 2, 112p. (Published 1925, reprinted 1933). Accompanied by Map 33, Scale 1 inch to 2,000 feet.

Carlson, H.D.

1967: Geology of Ogden, Deloro and Shaw Townships; Ont. Dept. of Mines, Open File Report 5012, 117p. Accompanied by Maps p.341 to p. 343. Scale one inch to ¹/₄ mile.

Curtin, G.C., Lakin, H.W., Neuerberg, G.J. and Hubert, A.E.

1968: Utilization of humus rich forest mull in geochemical exploration for gold; U. S. Geol. Surv. Circ 562, llp.

Gleeson, C.F.

1979: Consider geochemistry when seeking gold; The Northern Miner, Exploration Issue, March 8, 1979.

Hogg, N.

1950: The Porcupine Gold area; Canadian Mining Journal, Vol. 71, no. 11, p. 102-106

Hurst, M.E.

1939: Porcupine area, District of Cochrane; Ont. Dept. of Mines, Map 47a, scale 1 inch to 2000 feet.

Lakin, H.W., Curtin, G.C., Hubert, A.E., Shacklette, H.T., and Doxtader, K.G.

1974: Geochemistry of gold in the weathering cycle: U. S. Geol. Sur. Bull, 1330, 80p.

ASSESSMENT WORK BREAKDOWN

1. Expenditure Credits for Geochemical Survey

6 A	2 sam u,As	ples o: , @ \$ {	f humu 8.40 e	s analy ach	zed f	`or •	••	\$	493.40
8	soil	sample	es ana	lyzed i	for Au	,			
@	7.70	each	• •	••	••	• •	••	\$	61.60
Т	otal]	Expendi	iture	• •	••	••	••	\$	555.00
Asses \$15.0	sment 0 expe	Credit ended.	ts - on Total	ne days number	s work of a	for	each ment		
creal	ts .	• ••	••	••	••	• •	••	37	7 days

2. Assessment Cretis for 8 Hour Technical Days

Field Work - K. Cunnison - 1 day (May 31, 1984) Draughting - K. Cunnison - 1 day (July 10, 1984) Typing - K. Cunnison - 0.5 day (July 31, 1984)

Total Technical Days Earned 2.5 days Assessment Credits for Technical Days (2.5 x 7) 17.5 days

-9-

<u>APPENDIX A</u> - 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. 62 humus samples were analyzed by neutron activation method for gold and arsenic. Eight soil samples were analyzed for gold by fire assay - direct current plasma method.

Sample preparation of the humus samples 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 <u>et al</u> (1974), Curtin <u>et al</u> (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 120 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 <u>et al</u> (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 the 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.

APPENDIX B



X-RAY ASSAY LABORATORIES LIMITED

ter and the second s

1885 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4

PHONE 416-445-5755 TELEX 06-986947

CERTIFICATE OF ANALYSIS

TO: D.R. PYKE & ASSOCIATES ATTN: D.R. PYKE P.O. BOX 1142 TIMMINS, ONTARIO P4N 7H9

CUSTOMER NO. 75

DATE SUBMITTED 13-JUN-84

REPORT 21472

REF. FILE 17046-J2

8 SDIL+62 HUMUS

WERE ANALYSED AS FOLLOWS:

	METHOD	DETECTION LIMIT
AU PPB	FADCP	2.000
AU PPB	NA	1.000
AS PPM	NA	1.000

X-RAY ASSAY LABORATORIES LIMITE CERTIFIED BY

DATE 05-JUL-84

•

X-RAY SSAY LABORATORIES 05-JUL-84 REPORT 21472 REF.FILE 17046-J2 PAGE 2 DF

.

SAMPLE	AU PPB	AS PPM
NWDLDE;OS-HUMUS	 NH	NH
NWDLOE;1S-HUMUS	30	8
NWDLOE;2S-HUMUS	86	12
NWDL0+50E;0S-HUMUS	58	10
NWDL1E;0S-HUMUS	55	8
NWDL1E;1S-HUMUS	68	10
NWDL1+50E;0S-HUMUS	60	8
NWDL2E;0S-HUMUS	42	8
NWDL2E:1S-HUMUS	43	8
NWDL2E;1+30S-HUMUS	28	10
NWDL2+50E:0S-HUMUS	34	5
NWDL3E; OS-HUMUS	74	17
	40	8
	54	12
	(5	20
NWDL4C+13-RUMUS	41	15
	7J	13
	24	13
NWDL 5+50F: 0S-HUMUS	41	5 16
NWDL 6F: 1+55S-HUMUS	64	8
NWDL6E;0S-HUMUS	78	50
NWDL6E;1S-HUMUS	40	12
NWDL6E;4+25S-HUMUS	39	7
NWDL SE; 55-HUMUS	45	8
NHOL6E;65-HUMUS	110	18
NWDL6E:75-HUMUS	300	8
NWDL6E;8S-HUMUS	[.] 84	11
NWDL7E:0S-HUMUS	41	6
NWDL7+50E; OS-HUMUS	58	12
NWDL7+50E:1S-HUMUS	52	7
NVDL7+50E;2S-HUMUS	20	50
NWDL 7+50E; 3S-HUMUS	22	10
	45	15
	NH	NH
	100	8
NUDE 7+50E+85-HUMUS	28	12
	71	9
NWDL9E:0S-HUMUS	20	5
NWDL9E;1S-HUMUS	35	12
NWDI 9F:2S-HUMUS	32	24
NWDL9E;3S-HUMUS	29	17
NHDL9E:45-HUMUS	120	7
NWDL 9E;55-HUMUS	42	25
NWDL9E:65-HUMUS	4	3
NWDL9E:7S-HUMUS	3	2
NWDL10+50E:0S-HUMUS	55	11
NWDL10+50E:1S-HUMUS	8	3
NVDL10+50E;2S-HUMUS	55	8

NH - NOT HUMUS X-RAY SSAY LABORATORIES 05-JUL-84 REPORT 21472 REF.FILE 17046-J2 PAGE 3 DF

SAMPLE	AU PPB	AS PPM	
NHUL 10+5CE;3S-HUMUS	45	5	
NWOL10+50E;4S-HUMUS	36	8	
NVOL10+503;5S-HUMUS	82	21	
NWOL10+50E:5S-HUMUS	3	4	
NNDL11E;05-HUMUS	120	9	
NRDL12E:05-HUMUS	2	2	
NWDL12E:1S-HUMUS	44	7	
NWDL12E;2S-HUMUS	3	3	
NWDL12E;3S-HUMUS	28	10	
NWDL12E:4S-HUMUS	50	12	
NUDL12E;5S-HUMUS	70	12	
NWDL12E:65-HUMUS	3	3	

SAMPLE	AU PPB
NWDL7+50E:6S-A-SOIL	<2
NWD9E;OS-A-SOIL	<2
NVDL10+50F:3S-A-SDIL	<2
NMDL10+5CE;4S-A-SOIL	<2
NWDL10+5CE;5S-A-SOIL	<2
NWDL11E;0S-A-SOIL	<2
NNDL 12 E+43 -4-301 C	<2

INVOICE TO: D. R. PYKE & ASSOCIATES ATTN: D. R. PYKE P. O. BOX 1142 TIMMINS, ONTARIO P4N 7H9	1885 LESLIE STREET COPY TO:	• DON MILLS ON	LIMITED TARIO M3B 3J4 • (416)	445-5755
		CUSTON	er NO. 754	
ATTN: D.R. PYKE P.O. BOY 1142	214	72 05-JU	L-84 17045	13-JUN
TIMMINS, ONTARIO P4N 7H9	TERMS 1.5% P	NET 30 DAYS ER MONTH INTEREST	TERMS	DAYS
CUENTS P.O. NO.	HUMUS SOIL	TED		
1 BOX PUROLATOR	WAY-BIL NO.		TANK THE AND A SHIPPED FROM	
QUANTITY DESCRIPTION METHOD	2 10			AMOUN
2. 60 AU, AS, BIOGEOCHEMISTRY, REGULAR DETECTION LI 3. 8 SOIL, DRYING & SCREENING 4. 62 HUMUS, DRYING & BLENDING	INIT 13, 2 99, 2 99, 2	, 7, 0, 0, 0 ,20, 0, 0, 0 , 0, 0, 0, 0 , 0, 0, 0, 0	7, 50 7, 50 0, 70 0, 70	56. 450. 5. 43.
			•	
				anda se r ordan a anta a ta anta
			# :	
1			SUB-TOTAL	\$ 555.00
MISC. CHARGES		Minimu Surchi	M CHARGES	

Ministry of Natural	Report of Work	W.P	~
Ontario Resources	(Geophysical, Geological, Geochemical and Expenditures)		
-	\$224		
Type of Survey(s)		The Min 42A06NW0176 2.7036 DELORO	300
Claim Holder(s)	chemical (Exp	DRAD, turp) Towning or Area	
D.R.	Duka	Month DELORD	
Adaress 31 Da	T- Ca	K19126	
Survey Company	law Cres	Thorshill On 137 2m2	
Name and Address of Author	yke I HSSOC	C.S. Date of Survey (from & to) Date of Survey (from & to) Day 1905 84 31,05 84 Total Miles of line Cur	1
D.R.P	U/C, 31 D	Main Cip	
Credits Requested per Each Special Provisions	Claim in Columns at right	Mining Claims Traversed (List in pure Shill Onl	
For first survey	Geophysical Days pe Claim	Prefix Number 20 Prefix	
Enter 40 days. (This	- Electromagnetic	Prefix Number Days Cr. Prefix Number Di	xpend. ays Cr.
includes line cutting)	- Magnetometer	7/207 396	
For each additional survey: using the same orid:	- Radiometric		
Enter 20 days (for each)	- Other		
	Geological	RECEIVED	
Man Dave	Geochemical		
Complete revenue in	Geophysical Days per Claim		
and enter total(s) here	- Electromagnetic	MINING LANDS SEC	
	- Magnetometer	- SEUTION	
	- Radiometric		
	- Other	RECORDED	
	Geological		
Airbonn O	Geochemical 21		
Credits	Days per Claim	Receipt No.	
Note: Special provisions credits do not apply	Electromagnetic		
to Airborne Surveys.	Magnetometer		
[Radiometric		
Type of Work Performed	stripping)		
HUMUS Y SO	JSAMOLINA	JUN 4 1984	
$\frac{1}{2} = \frac{1}{2} \frac{1}{2} \frac{1}{2}$	d	A.M. 7(8)91011119119	
1120		<u> </u>	
Calculation of Expenditure Days (Credite		
Total Expenditures	Total Days Credits		
\$ 594	\div 15 = 396		
Instructions Total Days Credits may be apport		Total number of mining claims covered by this	
choice. Enter number of days cr in columns at right.	edits per claim selected	For Office Use Only	
Date		l otal Days Cr. Date Recorded Mining Correct ??	
Lans/184 Record	ded Holder of Agent (Signature)	60.6 Date Approved as Recorded Bransh Director	
Certification Verifying Report	of Work	see revised statement	
or witnessed same during and/or	sonal and intimate knowledge of the	re facts set forth in the Report of Work annexed bergt	
Name and Postal Address of Person	Certifying	ed report is true.	
FUR	P.O. Boy	1147, 11,000	-1

Total Number of Samples -72 taikent. 70 analyzed ANALYTICAL METHODS Type of Sample - 62 humurs. B h horizon soil ANALYTICAL METHODS Type of Sample - 62 humurs. B horizon Analyzed Average Sample Weight. B - 62 humurs. B horizon B horizon Method of Collection Analyzed Method of Collection Analyzed Method of Collection Analyzed Sample Weight. B - 62 humurs. B horizon B norizon Boil Horizon Sample Weight. B - 100 humas. Analysis Others Sample Development Humuls - good. B - variable humus. Analysis Others Sample Development moderate - 900 humas. B horizons Nalytical Method Analytical Method Analytical Method Respens Used Analytical Method Methoires No. (fill Laboratory Analysis Britmate Range of Overburden Thickness No. (fill Laboratory X-FERY ASATION Methoire analysis No. (fill Laboratory V analysis Britmate Range of Overburden Trickness No. (fill Laboratory V analysis Britmate Range of Overburden Trickness No. (fill Laboratory V analysis Respens Used No. (fill Laboratory V analysis Respense Used No. (fill Laboratory V analysis	Numbers of claims from which samples taken <u>P 59126</u>	1
Total Number of Sample. 62 humuts. 8. horrizon soil Values expressed in: MAINTIGALMETHODS Type of Sample. 62 humuts. 8. horrizon soil Values expressed in: p. p. n. B Average Sample weight 8 granus Anterior Sample (2, humuts. 8. horizon soil Values expressed in: B P. m. B Average Sample weight 8 granus Extraction Method Collers Gold (Au) - P. P. b. Collers		
Soil Horizon Sampled Humus. B horizon Ohers_Gold (Au) - P.P.D. Horizon Development. Humus - good, B - variabřeld Analysis (Sample Deph. Sample Deph. J.S 17 inches Terrain Iow-mod. relief. esker regions Analytical Method Terrain Iow-mod. relief. esker regions Analytical Method Terrain Iow-mod. relief. esker regions Analytical Method Terrain Jow-mod. relief. esker regions Analytical Method Drainage peropherent Interres. No. (Drainage of Overburden Thickness. No. (0 - 50 feet (probable) Reagents Used Mesh size of fraction used for analysis. No. (Mesh size of fraction used for analysis. Name of Laboratory (Most applicable Name of Laboratory (Method Name of Laboratory (Method Name of Laboratory (Method Not applicable Method Name of Laboratory (Method Name of Laboratory (Method Not applicable Method Not applicable Method Not applicable Method Not (Reagents Used D.O. Soils - Hol and Soils - Hol and Soi	Total Number of Samples <u>72 taken: 70 analyz</u> ed Type of Sample <u>62 humus, 8 B horizon soi</u> l (Nature of Material) Average Sample Weight <u>8 grams</u> Method of Collection <u>hand/grub hoe</u>	ANALYTICAL METHODS Values expressed in: per cent p. p. m. X p. p. b. Cu, Pb, Zn, Ni, Co, Ag, Mo, (As)(circle)
v. dry. other regions damp Kagents Used Drainage Development moderate - boor Field Laboratory Analysis Estimated Range of Overburden Thickness No. (Estimated Range of Overburden Thickness No. (Estimated Range of Overburden Thickness No. (SAMPLE PREPARATION No. (Mesh size of fraction used for analysis Reagents Used Mesh size of fraction used for analysis Commercial Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory X-FRAY ASSAY Ia' Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of fraction used for analysis Name of Laboratory (Mesh size of f	Soil Horizon Sampled <u>Humus, B horizon</u> Horizon Development <u>Humus - good, B - var</u> is Sample Depth <u>1.5 - 17 inches</u> Terrain <u>Low-mod. relief, esker regions</u>	Others <u>Gold (Au) - p. p. b.</u> b FR ld Analysis (tests) Extraction Methodtests) Analytical Method
SAMPLE PREPARATION (Includes drying, screening, cumbing, screening, cumbing, screening, cumbing, screening, cumbing, screening, commercial Laboratory (v. dry, other regions damp Drainage Development moderate - poor Estimated Range of Overburden Thickness	Keagents Used
General Samples were blended in a blendingerral. 62. humus samples were a for humus samples were a f	SAMPLE PREPARATION (Includes drying, screening, crushing, ashing) Mesh size of fraction used for analysis Not. applicable	Commercial Laboratory (
	General Samples were blended in a blend machine for homogeneity of material. All samples were thoroughily dried before b;ending.	ingereral -62 humus samples were analyze for Au and As by neutron activation 8 B horizon soil samples were analyzed by fire-assay-direct current plasma method, perfomed aft sieving to -200 mesh.

ANALYTICAL METHODS sed in: per cent p. p. m. [X] p. p. b. Mo, As}(circle)
fold (Au) - p.p.b. (
ory Analysis tests) Methodtests Method
aboratory (<u>tests</u>) aboratory <u>X-Ray Assay Laborato</u>) Method <u>Soils - Hcl and nitr</u> ic Method <u>humus-neutron act</u> sed <u>soils - fire assay an</u>
humus samples were analyze nd As by neutron activation zon soil samples were by fire-assay-direct plasma method, perfomed aft to -200 mesh.



5. 8

Ministry of Natural Resources

File_

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT

CONCLUSIONS ETC.	MINING CLAIMS TRAVERSED List numcrically	P 5912.64 (preñx) (number)		Porcurs a marka sveraci A.W. 7, 8, 9, 10, 11, 12, 12	TOTAL CLAIMS 1
TECHNICAL REPORT MUST CONTAIN INTERPRETATION	Type of Survey(s) <u>Geochemical (Humus)</u> Township or Area <u>Deloro</u> Claim Holder(s) <u>D.R. Pyke, 31 Delair Cres.</u>	Thornhill, Ont. LJT 2M3 Survey Company D.R. Pyke and Associates Author of Report D.R. Pyke	Address of Author <u>31 Delair Cres., Thornhill, Ont.</u> Covering Dates of Survey <u>May 31, 1984 - July 31, 1984</u> (<u>linecuting to office</u>) Total Miles of Line Cut	SPECIAL PROVISIONS DAYS CREDITS REQUESTED Geophysical ENTER 40 days (includes -Electromagnetic ENTER 40 days for first -Electromagnetic Ine cutting) for first -Electromagnetic survey. -Electromagnetic ENTER 20 days for each -Other additional survey using Geological additional survey using Geological additional survey using Geochemical AIRBORNE CREDITS (special provision credits do not apply to aithorne survey) Magnetometer Electromagnetic ARBORNE CREDITS (special provision credits do not apply to aithorne survey) Magnetometer Electromagnetic DATE: Augu J 1/6f Res. Geol Qualifications Previous Surveys Claim Holder File No. Type Date Claim Holder	
		–		OFFICE USE ONLY	·
	HODS	X	p.b.	tests) tests) tests) ssay Laboratorie Hcl and nitric a tire assay and D.C.P. s were analyzed con activation. les were perfomed after perfomed after	

837 (5/79)

GE
Q
H
IS.
CA.
E
FE
CHI
NIC
A
D
AT
₽

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

	<u>IN</u>]	NDUCED POLARIZATION RESISTIVITY						<u>D POLARIZATION</u> <u>GRAVITY</u> <u>GRAVITY</u>								<u>EL</u>	. <u>ECT</u>	<u>'RO</u>	MAG	NE	<u>TIC</u>		MA	AGN	ETI	C	0	P	S	zı
Type of electrode	Electrode spacing	Electrode array	Power	– Integration time	- Delay time	- Off time	Parameters – On time	Method 🗍 Time Domain	Instrument	Elevation accuracy	Base station value and location	Corrections made	Scale constant	Instrument	rarameters measured	specify V.L.F.	Frequency	Method. Trived transmitter Shoot	Coil separation	Coil configuration	Instrument	Base Station location and value	Base Station check-in interval (hours)	Diurnal correction method	Accuracy – Scale constant	Instrument	Contour interval	Profile scale	Station interval L	Number of StationsN
						Kange	Frequency	Frequency Domain								station)		hack In line Darallel line											ine spacing	umber of Readings

•••

Over claims only	Miles flown over total area
Line Spacing	Aircraft altitude
•	
	Navisation and flight path recovery method
	Sensor altitude
	Aircraft used
y for each type of survey)	(speci
y for each type of survey)	Accuracy (speci
	Instrument(s)
	Type of survey(s)
	<u>AIRBORNE SURVEYS</u>
s)	Additional information (for understanding result
	Parameters measured
	Accuracy
	nstrument
	Type of survey
ETC.)	OTHERS (SEISMIC, DRILL WELL LOGGING
depth — include outcrop map)	(type,
	Overburden
	Size of detector
Background Count	Height of instrument
	Energy windows (levels)
	Values measured
	Instrument
	RADIOMETRIC
	Corrections made
nange	Instrument
Dana	SELF POTENTIAL

Mining Lands Section

File No 2.7036

Control Sheet



MINING LANDS COMMENTS:

- missing receipt -Sce report breakdoron

Signature of Assessor

11/84

Date

1984 11 27

Your File: 224/84 Our File: 2.7036

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

Dear Sir:

RE: Notice of Intent dated November 9, 1984 Geochemical Survey and Data for Assaying on Mining Claims P 591264 et al in the Township of Deloro

The assessment work credits, as listed with the above-mentioned Notice of Intent, have 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

D. Isherwood:mc

- cc: D.R. Pyke 31 Delair Crescent Thornhill, Ontario L3T 2M3
- cc: D.R. Pyke P.O. Box 1142 Timmins, Ontario

- cc: Mr. G.H. Ferguson Mining & Lands Commissioner Toronto, Ontario
- cc: Resident Geologist Timmins, Ontario

6		2
1	Y	1
~	<u> </u>	
On	tar	io

Ministry of

Resources

Natural

Technical Assessment Work Credits

Date 1984 11 09 Mining Recorder's Report of Work No. 224/84

2.7036

File

1	1984		9	110/ K 110.	
-		-			

Recorded Holder	DAKE	
Township or Area DELO	RO TOWNSHIP	
Type of survey and numb Assessment days credit per	er of r claim	Mining Claims Assessed
Geophysical		
Electromagnetic	days	
Magnetometer	days	
Radiometric	days	
Induced polarization	days	P 591264
Other		\$555.00 SPENT ON ASSAYS OF SAMPLES COLLECTED ON THE ABOVE CLAIM.
Section 77 (19) See "Mining Claims /	Assessed" column	37.0 ASSESSMENT DAYS WORK CREDIT ALLOWED
Geological	days	
Geochemical	17.5 days	
Man days 🗌	Airborne 🗖	
Special provision	Ground	
Credits have been reduced coverage of claims.	because of partial	

No credits have been allowed for the following mining claims

Credits have been reduced because of corrections to work dates and figures of applicant.

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

not sufficiently covered by the survey

Insufficient technical data filed



Ministry of Natural Resources

nov. 23/84

Your File: 224/84 Our File: 2.7036

1984 11 08

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

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

L

Ś.Ĕ. Yundt

Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3

 \mathcal{K}^{ρ} D. Isherwood:mc Encls.

cc: D.R. Pyke 31 Delair Crescent Thornhill, Ontario L3T 2M3

cc: D.R. Pyke P.O. Box 1142 Timmins, Ontario P4N 7H9 cc: Mr. G.H. Ferguson Mining & Lands Commissioner Toronto, Ontario



Ministry of Natural Resources Notice of Intent for Technical Reports

1984 11 09

2.7036/224/84

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

REGISTERED

October 9, 1984

File: 2.7036

D.R. Pyke 31 Delair Crescent Thornhill, Ontario L3T 2M3

Dear Sir:

RE: Geochemical Survey and Data for Assaying submitted on Mining Claims P 591264 et al in the Township of Deloro

Enclosed is a copy of our letter dated August 30, 1984 requesting additional information for the above-messioned survey.

Unless you can provide the required data by October 19, 1984 the mining recorder will be directed to cancel the work credits recorded on June 4. 1984.

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

Yours sincerely,

mette Junt Called June Junt - 10 - 15 4 June Mart - 10 - 340 4 Mart - 10 - 340 4

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: Mining Recorder Timmins, Ontario cc: D.R. Pyke P.O. Box 1142 Timmins, Ontario P4N 7H9

Encl.

ATTN: D.R. PYNE P.O. BOX 1142 TIMUNS: ONTARIO PAN 7H9 UBANITED TO: D.R. PYNE & ASSOCIATES ATTN: D.R. PYNE P.O. BOX 1142 TIMUNS: ONTARIO PAN 7H9 TERMS MI SOL: 1 BOX PURCLATOR OCANITY 1 8 AU. PPB 2 40 AU. S. DIOGEDCHEMISTRY, REDULAR DETECTION LIMIT 3 8 AU. PPB 4. 42 HUNES, DRYING & BLEWDING SOL: DRYING & BLEWDING AUXAL AND A SCREENING AUXAL AND A A A A A A A A A A A A A A A A A A	CUSTOMER NO CUSTOMER NO INVOICE DATE 05-JUL-84 T 30 DAYS MONTH INTEREST ON	2 • 70 3 • • 754 • WORK ORDER NO. • 17045 • TERMS	DATE SUBMIT
P. U. BUX 1142 TIMURS, ONTARIO PAN 7N9 UBMITTED TO: D.R. PYKE & ASSOCIATES ATTN: D.R. PYKE P. 0. BOX 1142 TIMURS, ONTARIO PAN 7N9 TENS N 1. 5X PE TOWNER AND AND A SOLUTION NETWOO 1. 8 AU, PPB A. 42 HURLS, DRVING & BLENDING X-RAY ASSAY LABORATORIES ! Paid in full Accountor Reservotion Oct :	CUSTOMER NO INVOICE DATE 05-JUL-84 T 30 DAYS MONTH INTEREST ON). 754 WORK ORDER NO. 17045 TERMS	DATE SUBMIT
PAR /HY BNITTED TO: BNITTED TO: ATTR: D.R. PYNCE P. D. BOX 1142 TIMMINS. ONTARIO PAN 7H9 TERMS N 1 BOX PURDLATOR OUANTINY OUANTINY PURDLATOR OUANTINY PURDLATOR OUANTINY OUANTINY </th <th>CUSTOMER NO INVOICE DATE 05-JUL-84 T 30 DAYS NONTH INTEREST ON</th> <th>NORK ORDER NO. 17045 TERMS</th> <th>DATE SUBMIT</th>	CUSTOMER NO INVOICE DATE 05-JUL-84 T 30 DAYS NONTH INTEREST ON	NORK ORDER NO. 17045 TERMS	DATE SUBMIT
BAITTED TO: D. R. PMAE & ASSOCIATES ATTA: D. R. PMAE P. O. BOX 1142 TIMMINS, ONTARIO PAN 7H9 TERMS M 1. SX FR 1. SX FR	CUSTONER NO INVOICE DATE 05-JUL-84 T 30 DAYS NONTH INTEREST ON	2. 754 WORK ORDER NO. 17045 TERMS	DATE SUBMIT
ATTR: 11.R. PYRE P. 0. BOX 1142 TIWINS, ONTARIO PAN 7H9 TERMS M 1. 5X PE I DEC E AMPLES MUNICIPAL PURCLATOR DANIELY 1. 8 AU. PPB AU. AS, BIOGEDCHEMISTRY, REDULAR DETECTION LIMIT 3. 8 SOIL DRYING & SCREENING 4. 42 HUMUS, DRYING & BLENDING X.RAY ASSAY LABORATORIES I Parid. in full Accountor Rescentration Oct :	05-JUL-84 T 30 DAYS MONTH INTEREST ON	17046 TERMS	13-JUN-8
TIMINS, ONTARIO PAN 7H9 TERNS N 1. 53 PE TERNS N 1. 53 PE	t 30 days Nonth interest on		<u> </u>
I BOX PURCLATOR UANITY OESCHIPTION METHOD XX 1 8 AU, PPB AU, AS, BIOGEDCHEMISTRY, REDULAR DETECTION LIMIT 3 8 SOIL, DRYING & SCREENING 4 42 HUMUS, DRYING & BLENDING X.RAY ASSAY LABORATORIES ! Paid in full Accounts Reseivable MUS DCT :		ACCOUNT OVER 30 DAY	18
1 BOX VANALL HOT Z 1 BOX VANALL HOT Z VANALL HOT Z VA			
UANTITY DESCRIPTION METHOD X 1. 8 AU, PPB 2. 60 AU, AS, BIOGEDCHEMISTRY, REDULAR DETECTION LINIT 3. 8 SOIL, DRYING & SCREENING 4. 42 HUNDS, DRYING & BLENDING X-RAY ASSAY LABORATORIES Paid in full Accounts. Reservable Dot :	*	CENTREL VACUES	internet in the second of t
1. 8 AU, PPB 2. 60 AU, AS, BIOGEDCHEMISTRY, REDULAR DETECTION LIMIT 3. 8 SOIL DRYING & SCREENING 4. 42 HUMUS, DRYING & BLENDING X-RAY ASSAY LABORATORIES ! Paid in full Accountar Reseivable Data Oct :	AL CODE	UNIT COST	AMOUNT
X-RAY ASSAY LABORATORIES! Paid in full <u>Accounts</u> <u>Receivable</u> Ind Dot:	7, 0, 0, 0 0, 0, 0, 0 0, 0, 0, 0 0, 0, 0, 0	7. 00 7. 50 0. 70 0. 70	56, 09 450, 00 5, 60 43, 40
X-RAY ASSAY LABORATORIES! Paid in full <u>Accounts</u> <u>Resenvalle</u> Dot			· · · · · · · · · · · · · · · · · · ·
XIRAY ASSAY LABORATORIES! Paid in full <u>Accounts</u> <u>Reseivable</u> Dat		· · · · ·	•
XIRAY ASSAY LABORATORIES! Paid in full <u>Accounts</u> Reservable Mot		2. 2.	1
X-RAY ASSAY LABORATORIES Paid in full <u>Accounts</u> <u>Receivable</u> Dot			•
Paid in full <u>Accounts</u> Reservable Dot	.TD.		; ,
accounter Reservance Dia	minitions		
Oct :	Hen		
Øσ	The seal		ີ. ເປັນສະຫະລັບ
	25, 1704		
	and the second se		,
	·		
			n
	terne	SUB-TOTAL	\$ 555.00
MISC. IARGES			
		nan-waran kanalar karang balan dan karang balan karang balan karang balan karang balan karang balan karang bala	

The second second

Home In Alter In 1923

August 30, 1984

File: 2.7036

D.R. Pyke 31 Delair Crescent Thornhill, Ontario L3T 2M3

Dear Sir:

RE: Geochemical Survey and Data for Assaying submitted under Section 77(19) of the Mining Act RSO 1980 on Mining Claim P 591264 in the Township of Deloro

In order to complete your submission for expenditure credits, a signed receipt or cancelled cheque, in duplicate, is required.

Please forward the above information to this office quoting file 2,7036.

For further information, please contact Mr. Doug Isherwood at (416)965-4888.

Yours sincerely,

S.E. Yundt Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario

Whiteherwood:mc

cc: Mining Recorder Timmins, Ontario 1984 08 21

. –

Your File: 224 Our File: 2.7036

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 on Mining Claim P 591264 in the Township of Deloro.

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

A. Barr:sc

cc: Dr. D.R. Pyke 31 Delair Crescent Thornhill, Ontario L3T 2M3





42A06NW0176 2.7036 DELORO	200	N
• P 591264		
DELORO TWP.	N N 1 0,000	

COMSTATE RESOURCES LTD.
GEOCHEMICAL (HUMUS) SURVEY
MAPA
TOPOGRAPHY AND SAMPLE LOCATION
SITES Alyle
NORTHWEST DELORO TWP. JUNE 1, 1984
TIMMINS, ONTARIO DRAWN BY: D.R. PYKE
Scale: 1" = 200' 0 200' 400'



-

