

Comstate Resources Ltd
Geological Report
Cairo Property
Matachewan Area
Larder Lake Mining Division

RECEIVED

FEB 1 1989

MINING LANDS SECTION

Ø10C



Contents

Introduction

Access

Previous Work

Regional Geology

Present Survey

Property Geology

Geochemistry

Conclusions and Recommendations

Geology Map - Scale 1 inch = 400 feet

Comstate Resources Ltd Geological Report Cairo Property

Introduction

This report covers the general geology of 10 claims in Cairo Township, Larder Lake Mining Division, District of Timiskaming. In addition, 5 thin sections of the volcanic rocks from the property were examined, and 14 grab samples were analysed for gold.

The property includes the following claims:

L997490 and L997491 L1027188 - L1027195 inclusive

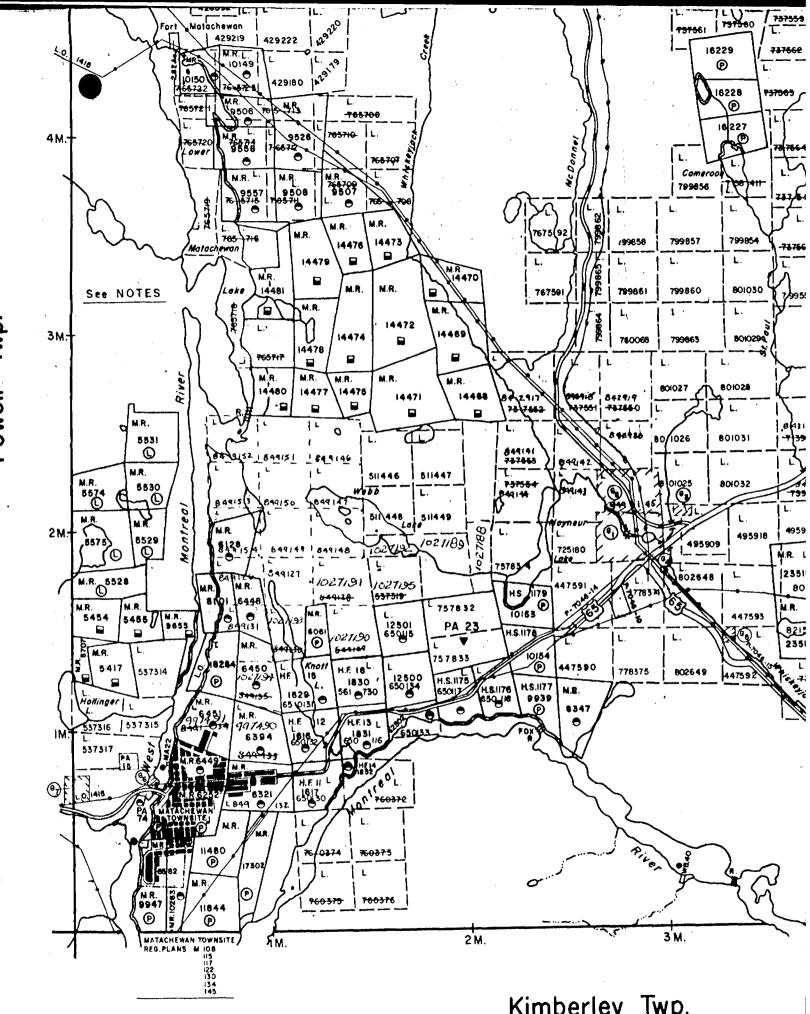
<u>Access</u>

Access to the property is excellent. The SW portion of the claim group extends into the north part of the village of Matachewan. The eastern part of the claim group is traversed by a bush road extending north from Highway 66.

<u>Previous Work</u>

Following the discovery of gold in Matachewan in 1916, the Matachewan area was mapped by Burrows (1918, 1920), Cooke (1919), Dyer (1935) and subsequently by Lovell (1967).

There are virtually no assessment records available for the current property concerning the nature or extent of any exploration work previously undertaken on this property. Presumably much of the original



Kimberley Twp.

exploration was prior to a formalized system of recording and/or retaining assessment records. Nevertheless, signs of old trenching are evident throughtout much of the property.

In 1985-86, Asarco Exploration Co undertook a trenching program on part of a property consisting of 19 contiguous claims east of the Montreal River; five of the claims covered the western portion of the current property. Both till and bedrock samples were taken. Although a few weakly anomalous samples were detected in the tills, no further work was undertaken. The main trenching was near the west boundary of what is now claim L 1027193.

Regional Geology

The Matachewan area borders the NW margin of the Round Lake batholith, and is on the southlimb of a major synclinorium, the axis of which trends westerly approximately 7 miles north of the area (Pyke et al, 1973). A large pluton of syenite, the Cairo stock, underlies the NE portion of Cairo Township. Volcanic rocks of komatilitic, tholeilitic and calcalkalic affinities trend westerd across Cairo and Powell Townships, but have not as yet been mapped in sufficient detail to be accurately delineated. Intercalated with the volcanic rocks are thick sequences of sedimentary rocks. It is the contact zones of the more southerly sedimentary sequence with the underlying volcanics, in association with syenitic intrusions, which has formed the focal point for the known gold mines in the area.

The north trending Matachewan diabase dike swarm intrudes the Early Precambrian (Archean) rocks, and has been dated at 2485 million years (Fahrig and Wanless, 1963)

Flat lying Proterzoic sediments of the Cobalt Group unconformably overlie the Archean rocks.

Present Survey

The present geological survey was done intermittently by D. Pyke, K. Cunnison and B. Raine during the period August 13- November 11, 1988. Claims 1027188-192 inclusive and 1027195 and 997490, were systematically traversed; this included the N-S claim lines and pace and compass traverses at approximately 400 foot intervals between the claim lines. For control, base lines were established along the north and south boundaries of the above claims. Only minor outcrop was examined on the remaining 3 claims - 1027193, 1027194 and 997491. Thin sections of five samples of basalt were examined from claims 1027193, 1027194 and 14 samples of bedrock were analyzed for gold (ppb).

<u>Property Geology</u>

Outcrop on the property is largely confined to the area west of Knott Lake. This portion of the claim group, which is underlain by Archean metavolcanic rocks (Lovell, 1967), will require detailed mapping. Outcrop on the remaining portion of the property is sparse and consists of Proterozoic sediments of the Cobalt Group. Archean metasediments are confined to the area near the east shore of Knott Lake, as shown by Lovell (1967), and were not examined during the present survey.

The Archean - Proterzoic contact trends NE across the property. This contact zone is interpreted to represent a major fault structure (see accompanying map), whereby the linear distribution of the Colbalt sediments reflects a regressive weathering fault zone. This is supported by intense shearing of the volcanic rocks adjacent to the cobalt-volcanic

contact on claims L1027194 and L997491.

The Colbalt Group is largely a polymictic conglomerate with lesser arkose and greywacke. The conglomerate is very poorly sorted and dominated by 5-15 percent subrounded granitic clasts varying from 8 feet to < 1 inch in maximum dimension. Other boulders and pebbles include minor argillite and lesser vein quartz. The matrix is mainly a gritty greywacke or rarely a more quartzose feldspathic arkose. No bedding or other primary sedimentary structures were observed; a strong cleavage is locally developed.

Archean metavolcanic rocks outcrop west of Knott Lake, and are of a basaltic composition. The basalts are medium green weathering, medium to dark green fresh, and vary from being massive - moderately foliated to extremely sheared. Although shearing is most evident in those outcrops proximal to the Proterozoic - Archean contact, intense shearing has occurred at some distance from the contact, as near the NW corner of claim L1027193.

× Three thin sections (P1-3) of sheared, chloritized and carbonatized basalt from the east boundary of claim L1027194 were examined. These consist of an extremely fine recrystallized groundmass of quartz and plagioclase (0.01-0.02mm) with 15% chlorite-rich bands and lenses from 0.2 to 2mm wide imparting a foliation and/or exial planar cleavage to the rock. Carbonate forms 10-35% of the rock as pockets and lenses subparallel to the chlorite fabric. The rocks are highly crenulated with typical wavelengths and amplitudes of 1mm and 0.5mm respectively. One of the slides contains 20% twinned, subhedral albitic metacrysts 0.15-2mm in size and averaging 0.5mm. The metacrysts largely postdate the main fabric of the rock and probably represent a late stage albitization. Opaque minerals form 2-3% of the rock, consisting largely of

pyrite with minor magnetite. Two thin sections of foliated to massive basalt on the west side of claim L1027193 contain 40-55% plagioclase, occurring both as saussuritized grains to 0.5mm and as a fine (0.02mm) recrystallized mosaic with minor associated chlorite. Minor shreddy actinolitic hornblende is largely altered to chlorite and in part carbonate. The finely recrystallized feldspar and associated chlorite impart a weak shear fabric to the basalt.

Diabase dikes are common within the Archean metavolcanics and are massive, orange brown weathering, dark green and locally porphyritic.

<u>Geochemistry</u>

Fourteen samples of bedrock were analysed geochemically for gold (ppb). This included 5 samples of volcanics and 9 samples of the Cobalt sediments. All returned extremely low values.

Conclusions and Recommendations

Because of the proximity of the claim group to the former producing mines in the area (1.5-2.0 miles to the west) and the apparent comparable volcanic and sedimentary stratigraphy (Lovell, 1967), the property is considered to have an excellent gold potential. The possibility of a major fault zone beneath the Cobalt Group near the south margin of the claims is considered to greatly enhance this prospect. Detailed mapping of that part of the property underlain by Archean stratigraphy is recommended as well as a ground magnetic survey of the entire property to help better delineate structural elements.

References

Burrows, A. G.

1918: The Matachewan gold area; Ont, Bureau of Mines, Vol 27,

pt.,1, p. 215-240

1920: Matachewan gold area; Ont. Dept. of Mines, Vol. 29 pt. 3,

p.53-64.

Dyer, W. S.

1935: Geology and ore deposits of the Matachewan-Kenogami area;

Ont. Dept. of Mines, Vol. 44, pt.2, p.1-55.

Fahrig, W, R., and Wanless, R. K.

1963: Age and significance of diabase dike swarms of the

Canadian Shield; Canadian Jour. of Earth Sciences,

Vol.2, No.4, p.278-298.

Lovell, H. L.

1967: Geology of the Matachewan area; Ont. Dept of Mines, GR. 51,

61p.

Pyke, D. R., Ayres, L. D., and Innes, D. G.

1973: Timmins-Kirkland Lake sheet; Ont. Div. of Mines,

Geological Compilation Map 2205, Scale 1 inch to 4 miles.

1362 (81/9)

Natural (Geo	ort of Work physical, Geological, themical and Expendi	i	CUME 8808 The M	. 5	58.	Inst	Note: -	exceeds sp - Only day "Expendition the "E	e or print. of mining clace on this form s credits calcures" section in expend. Days shaded areas be	n, attach a list ulated in the nay be entered Cr." columns
Claim Holder(s) B. RAINE Address	pendituro D. Pyko	· 2	. 1	- K	213	4	Township	AIRO Prospector		
P.O. 390 SC/ Survey Company COMSTATE / Name and Address of Author (or	Resources Geo-Technical report)	PONIO Stal	<u> </u>	,	Date of Sur Day Mo	8 8	O //	5 Thore	ANNIL O	NT ne Cut
	DelAIRC	RES.				<u>On</u>		3121		
Credits Requested per Each C		· · · · · · · · · · · · · · · · · · ·	Min		laims Traverse				ince) ining Claim	Europe
	Geophysical	Days per Claim	Pro	efix	Number		Expend, Days Cr.	Prefix	Number	Expend. Days Cr.
For first survey:	- Electromagnetic			_	9.974.9	9/	17.2			
Enter 40 days. (This includes line cutting)	- Magnetometer				10271	22	17.	73 X	***************************************	
	-		مرين م	برگذار عندها المحمد المحمد	102 113	2]/	11.2			
For each additional survey:	- Radiometric				10271.	94	17.2	******		
Eriter 20 days (for each)	- Other						1			
	Geological									
DEC 8 1988	Geochemical					-+		AT		
Man Days		Davis 222							+	
11 Complete LAND Side SECT	Geophysical	Days per Claim		r magniph naphari ng ng pagnagan				praeson. General con		
and enter total(s) here	ON - Electromagnetic						1	4		
and enter totalis/ here										
CHROEF LIVE HIMME	West Co		40.00							
	Flabil etric		\ \frac{1}{2}	er en fli Gestern						
	· Other									
U U NOV 30 1	200	1						•		
845000	200 biogical	4.6								
~	Geochemica					- 1	<u>}</u>			
Airborne Credits		Days per Claim								
Note: Special provisions	Electromagnetic			İ						
credits do not apply	Ciectionagnetic			ļ	· · · · · · · · · · · · · · · · · · ·	<u> </u>				
to Airborne Surveys.	Magnetometer									
	Radiometric									
Expenditures (excludes power	er stripping)	1	1					1		
Type of Work Performed	10 1		(<u> </u>			-			····	
PETROGIADA	by Sertio	~ 77H	191			- 1	[ļ
Performed on Claim(1		1			1				
L1027193, L	1027194							1 }		
<u> </u>										
Calculation of Expenditure Days	Credits					l_				
Total Expenditures	ו	otal Credits]				
\$ 77500	7 — —	51.6	L					T		
	<u> </u>	,,,0						claims cov	ber of mining ered by this	3
Instructions Total Days Credits may be ap	portioned at the claim h	older's			·. · · · · · · · · · · · · · · · · · ·			report of	work.	<u> </u>
choice. Enter number of days			+	i De	For Office Us		<u>ly</u>	Minier Pr	order C = 1	
in columns at right.			Rec	orded	1 2	30	/44	Mining Re	77	~.N
Date / Rec	orden Holder or Agens (S	Signature)	16	5.	Date Appro	e beve	Recorded	Brance Dir	ector	my_
No 128/88	11-11 he	•	5	iP		,	seve	1 11/	tredo.	mon V
Certification Verifying Report	/10/			` '	· X 16	لسك	المالين المالية	HAR.		
I hereby certify that I have a		nowledge of	the fact	s set f	orth in the Rep	port of	Work ann	exed hereto, t	naving performe	d the work
or witnessed same during and	or after its completion a	and the ann	exed rep	ort is	true.					
Name and Postal Address of Pers	on Certifying 31 DELI		0.		74 -			n	1 27	2002
UK FYKE	31 DELI	4113	LRI	<u>ES</u> ,	INOR	NH	111	Carried	(Signaturely	2M3
					10310 001311	, 1 .	20/00	4	12/1) ,
ı					1,00	110	< X/00	ΔL	7774	

1	<u></u>	Ministry of	Rep	ort of Work	-				i Ins		Please typ		
- (Natural Resources	(Ged	physical, Geologic	cal,	D	OCUME	NT No.			exceeds sp	r of mining cla pace on this form	, attach a lis
(Ontario		Geo	chemical and Expe	enditures)	V	V890 8	3.055.	1	Note: -	Only day	rs credits calcularies" section ma	lated in th
)				10//	•		Minin	a Act	•		in the "	Expend. Days C	r." column
ſ	Type of	Survey(s)		Mind	age on si	٠٠	4			Township		shaded areas bel	ow.
1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , ,	∇	- xpend	Luca	,					AIRO		
ŀ	Claim Ho	older(s)		- NF CILO	Z.Z(<u></u>					Prospecto	r's Licence No.	
١		\mathcal{B}_{\cdot}	RA	WE							MZ	r's Licence No.	
ľ	Address			0	1	•		_					
		0.B	OX	390 Sci	humac	2カ	er Ŧ	ONIGO)				
ľ	Survey C	ompany	A =				•	30' 50	A E	from & tol	II BA	Total Miles of lin	• Cut
ŀ	Name an	d Address of	47E	Resou	RCCS			Day N	10. Y	r. Day	Mo. J YY		
١	. כל			Oed-Technical rep	"".	,		THORNE		0.0	_	r ama	2
۱	redits F			Claim in Columns		7.4		Claims Travers		ist in num			,
-		rovisions	or Edon.	Geophysical	Days per	7		Aining Claim]	Expend.		lining Claim	Expend.
	Ca. C	rst survey:		Geophysical	Claim	-	Prefix	Number		Days Cr.	Prefix	Number	Days Cr.
١	_		Fice .	- Electromagne	1	}	12	1027	292	9.6			
1	inc	nter 40 days (cludes line cui	ling	Maggetometer	,	1	-25						
١			_			1							
	For ea	ach additional the same grid	su¶e®	1989 Radiometric		4	Sale and the						
١	_	nter 20 days (1		- Other		1							
١		MINING L		Ganlogical		1	Tares						
İ		THE L	HIND2			┨	1000	ļ					
ļ				Geochemical		ļ	P4. V	ļ					
l	Man Day	' \$		Geophysical	Days per Claim	1			ļ		1		
1	Comp	olete reverse si		Electromagne	tic	1 .					1		
1	2000	LAND TOTAL		1.44	OFF WE WAND	N.X	3						
1			EME	1 Labolabil		Y /!	<u> </u>						
١	= = <		UUE	Florence	3 (3 (3))	Ψ,	14:11	ļ					
١				و لا اللهاز از ا	EB 8 1	989	1-1-1						-
١		'FEB 🨝	198 9			ipo:							
	1	9.300	シフン	Geological U.30	43	J	777 1						
	ł	<i>نى</i> ر		Geochem cal	w (b)		l k		ļ	İ			
ŀ	A	Cradite	<u>′</u>		Days Da	┿							
ı					Claim	-	į		 .				.
ł	Note:	Special provi		Electromagnetic	i	J]			
1		to Airborne		Magnetometer							•		
1						1							
Ļ				Radiometric		J]						
		tures (exclui		er stripping)		٦ .	ļ	[[1			
- 1		,		Anolyse			1	 					
1	Performe	d on Claim(s)	ICOL	11101130	<u> </u>	┨		}	 				
•				027190								- 10 m marana	
ł	2700	-1102				1			ļ				
	1102	27/94	. 2.	1027193	3] ;		1
f	Calculation	on of Expend	ture Days	Credits	Total	1		<u> </u>					
	Total	Expenditures			Days Credits						L		
	\$ 143.50 ÷ 15 = 9.6									Total nun	nber of mining	<u>;</u>	
Ļ						-						erea by this	/
-[Days Credits		portioned at the clai				For Office U	les O-	ilv	٦ .		
		e. Enter numb umns at right.	er of days	s credits per claim sel	ected		1 otal Day	S Cr. Date Beco		/	Mining Be	corder	

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

D. P. Pyke 31 Delair CRES TRORNIALL ONT LITTONS

Date Gertified Certified by Signature

1362 (81/9)

Ontario

OFFICE USE ONLY

Ministry of Natural Resources

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 Su	rvey(s)	Grod	OGICAL	_
Township of	or Area	CAIR	0	MANAGO A ANG ME AMERICA
Claim Hold	ler(s).	Pyke	O. B. RAINE	MINING CLAIMS TRAVERSED List numerically
	(*)			
Survey Con	nnany (1 11) 112571	THE TRESOURCES	L. 997490
-	-). Pyk		(prefix) (number)
			IR CRES, THORNHUL	- 1027/88
				- <i>1027189</i>
Governing 17	ates of Bury	Cy	(linecutting to office)	1027190
Total Miles	of Line Cu	t		_
	ggun im sa emik irlikoy met, vis jälvis eieko.			1027191
	, PROVISIO		DAYS	1027192
CREDITS	S REQUES	<u>l'ED</u>	Geophysical per claim	1027195
FATED	40 days (inc	dudos	Electromagnetic	102-7700
	ng) for first		-Magnetometer	
survey.			-Radiometric	
ENTER 2	20 days for	each	Other	
	ıl survey usi		Geological	
same grid	l.		Geochemical	
AIRBORNI	F CREDITS	(Special provisi	on credits do not apply to airborne surveys)	
			eticRadiometric	
Wagnetonie)	(enter da	sys per claim)	_
D. 4 MDD (an 26	1990000	man Attition	
DATE:	(A-V)ZZ	727SIGNA	Author of Report of Agent	
				Ì
Res. Gcol		Qualifi	cations	
Previous Su	rveys			
File No.	Туре	Date	Claim Holder	_
		••••••••••••••••••		
		·····		
				TOTAL CLAIMS
		l.		

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	
Instrument	
Diurnal correction method	
-1	
Base Station location and value	
Instrument	
U Coil configuration	
Coil separation	
ار ا	
Method: Fixed transi	mitter
Frequency	(specify V.L.F. station)
Instrument	
Scale constant	
≻	
Base station value and location	
Elevation accuracy	
Instrument	
Method Time Domain	Frequency Domain
Parameters - On time	Frequency
Off time	Range
— Delay time	
- Integration time	
- Delay time - Delay time - Integration time Power	
Electrode spacing	
Type of electrode	

INDUCED POLARIZATION



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 _____ 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	Mary and the second sec	CAL METHOL	<u>DS</u>
Type of Sample (Nature of Material)		per cent p. p. m.	
Average Sample Weight Method of Collection		p. p. b.	
	Cu, Pb, Zn, Ni, Co	Ag, Mo,	As,-(circle)
Soil Horizon Sampled	Others		
Horizon Development	Field Analysis (tests)
Sample Depth	Extraction Method		· · · · · · · · · · · · · · · · · · ·
Terrain	, , , , , , , , , , , , , , , , , , ,		
	Reagents Used		
Drainage Development			
Estimated Range of Overburden Thickness	No. (tests
	Extraction Method		
	Analytical Method		
	Reagents Used		
SAMPLE PREPARATION (Includes drying, screening, crushing, ashing)	Commercial Laboratory (tests
Mesh size of fraction used for analysis	Name of Laboratory_		
West size of fraction used for analysis	Extraction Method		
	Analytical Method		
	Reagents Used		
General	General		

Ontario

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.

Type of Survey(s)	Exper	nditure	_
Township or Area Claim Holder(s)	CA, RI Pyke	B. RAINE	MINING CLAIMS TRAVERSED List numerically
Author of Report 2 Address of Author 31	Delain Delain y Au	GEB — IAN/89. Alinecutting to office)	(prefix) (number)
	EI) Ides Ich S (Special provision lectromagnet	Geophysical Electromagnetic Magnetometer Radiometric Other Geological Geochemical	
Res. GeolPrevious Surveys File No. Type	Qualifica	Claim Holder	* see Assement Broakdown in occompanying rept
			TOTAL CLAIMS

GEOPHYSICAL TECHNICAL DATA

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

00	
)

Ν	Number of Stations		Number o	f Readings	
P	Profile scale				
(Contour interval				
]					
EI	·	nstant			
MAGNETIC		ethod			
Z		interval (hours)			
		and value			
ပ <u>ျ</u>	Instrument				
ELECTROMAGNETIC					
S	Coil separation				· 10.
W(Accuracy				
TRO	Method:	Fixed transmitter		☐ In line	□ Parallel line
CEC	Frequency		('S. N.F. E Add)		
ш					
		The state of the s			
	Instrument				
IIX					
GRAVITY					
8	Base station value and	d location			
	Instrument				
	Method Time D	omain	☐ Fr	equency Domain	
	Parameters On tim	e	Fr	equency	
\geq	Off tim	e	Ra	inge	
VII	– Delay t	ime			
IST	Integra	tion time			
RESISTIVITY	Power				100
	Electrode array				
	Electrode spacing				· · · · · · · · · · · · · · · · · · ·
	Type of electrode				

INDUCED POLARIZATION

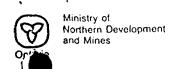


SELF POTENTIAL	
Instrument	Range
Survey Method	
Corrections made	
RADIOMETRIC	
Instrument	
Values measured	
Energy windows (levels)	
Height of instrument	Background Count
Size of detector	
Overburden	
	(type, depth – include outcrop map)
OTHERS (SEISMIC, DRILL WELL LOGG	SING ETC.)
Type of survey	
Instrument	
Accuracy	
Parameters measured	
Additional information (for understanding	results)
AIDDADAN GUDVEVO	
AIRBORNE SURVEYS	
**	
Instrument(s)	(specify for each type of survey)
Accuracy	(specify for each type of survey)
	(specify for each type of safety)
	d
	Line Spacing
Miles flown over total area	Over claims only

GEOCHEMICAL SURVEY - PROCEDURE RECORD



Numbers of claims from which samples taken	7189 21027190, 21027193,
Total Number of Samples / C	ANALYTICAL METHODS
Type of Sample Ziock sample (Nature of Material),	Values expressed in: per cent p. p. m.
Average Sample Weight 1-3 165. Method of Collection Sleage hammer:	p. p. b.
	Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle) Others
Soil Horizon Sampled	·
Horizon Development	Field Analysis (tests) Extraction Method
Sample Depth	
Terrain	Analytical MethodReagents Used
Drainage Development	Field Laboratory Analysis
-	No. (tests)
Estimated Range of Overburden Thickness	Extraction Method
	Analytical Method
	Reagents Used
SAMPLE PREPARATION (Includes drying, screening, crushing, ashing) Mesh size of fraction used for analysis	Commercial Laboratory (M) N - ENtests Name of Laboratory Extraction Method
	Analytical Method
	Reagents Used
General 14 of the somples were Submitted for Geochemical analysis for gold (ppb).	General FIRE ASSEMY & ALOMIC PLOSOFPTION.
5 of the somples Thin	
Sections Were prepared of	
Sections were prepared of	
microscopically.	
- contract of the contract of	



Technical Assessment Work Credits

AMENDED

	File
	2.12134
Date	Mining Recorder's Report of
April 27, 1989	Mining Recorder's Report of Work No. W88C8-558
,,	W8908-055

Recorded Holder	
B. Raine and D. Pyke	
Cairo Township	
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	\$918.50 Spent on Assaying Samples taken from Mining Claims:
Magnetometer days	1 1007102 04
Radiometric days	L 1027193-94
Induced polarizationdays	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological days	
Geochemical days	
Man days 🗍 Airborne 🗌	
Special provision Ground Ground	
Credits have been reduced because of partial coverage of claims.	61.2 Days credit allowed which may be grouped in accordance with section
Credits have been reduced because of corrections to work dates and figures of applicant.	76(6) of the Mining Act R.S.O. 1980.
Special credits under section 77 (16) for the following m	sining claims
No credits have been allowed for the following mining cl	aime
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; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.



Technical Assessment Work Credits

		File
		2.12134
Date		Mining Recorder's Report of
April 27,	1989	Work No. W8808-558

Recorded Holder	
B. Raine and D. Township or Area	Pyke
Cairo Township	
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagneticdays	
Magnetometer days	L 997491
Radiometric days	1027193-94
Induced polarizationdays	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 4.6 days	
Geochemicaldays	
Man days 💢 Airborne 🗌	
Special provision Ground X	
Credits have been reduced because of partial coverage of claims.	
Credits have been reduced because of corrections to work dates and figures of applicant.	
Special credits under section 77 (16) for the following mi	ining claims
No credits have been allowed for the following mining cla	aims
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; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.



Technical Assessment Work Credits

	2.12134
Date	Mining Recorder's Report of
April 27.	1989 Work No. W8808-557

Recorded Holder B. Raine	& D. Pyke
Township or Area Cairo	
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	
Magnetometer days	
Radiometric days	L 997490
Induced polarization days	1027188 to 91 inclusive 1027195
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 20 days	
Geochemicaldays	
Man days Airborne	
Special provision 🔀 Ground 🔀	
Credits have been reduced because of partial coverage of claims.	
Credits have been reduced because of corrections to work dates and figures of applicant.	
Special credits under section 77 (16) for the following n	nining claims
10.	davs
	<u>days</u>
L 10	027192
No credits have been allowed for the following mining c	laims
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; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

Maria Salatan Angar



Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

May 29, 1989

Mining Lands Section 3rd Floor, 880 Bay Street Toronto, Ontario M5S 178

Telephone: (416) 965-4888

Your file: W8908-055.

W8908-557,558

Our file: 2.12134

Mining Recorder Ministry of Northern Development and Mines 4 Government Road East Kirkland Lake, Ontario P2N 1A2

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES **OFFICE**

JUN 5 1989

RECEIVED

Dear Sir:

Re: Notice of Intent dated April 27, 1989 Geological Survey and Assaying submitted on Mining Claims L 997491 et al in the Township of Cairo.

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,

W.R. Cowan

Provincial Manager, Mining Lands

Mines & Minerals Division

D bk:eb Enclosure

> cc: Mr. G.H. Ferguson Mining and Lands Commissioner Toronto, Ontario

> > D.R. Pyke Thornhill, Ontario

Resident Geologist Kirkland Lake, Ontario

B. Raine Schumacher, Ontario

	Jew	1					2.12	13'	4.	
997490.										
	,								-	
1027188.	✓ <u> </u>								-	
90 .	1									-
9/ •	✓ ✓									
92.	1/2									
95	7									
degree and Think										-
									<u> </u>	<u> </u>
1 () () () () () () () () () (<u> </u>	
									<u> </u>	-
事業を				· · · · · · · · · · · · · · · · · · ·					:	
									:	
										
		İ							;	
n Podring										
Reserved.			ļ							
A)								-		
The state of the s				7 7 7						
Security Sec					 					
- Company (see										
Adventure of the state of the s										
Eddingson R .										
The state of the s	•	•	-	·	·	•				

AREAS WITHDRAWN "TOM DISPOSITION

M.R.O. - MINING RIGHTS ONLY S.R.O. - SURFACE RIGHTS ONLY

M.+ S. - MINING AND SURFACE RIGHTS

MINING AND SURFACE RIGHTS NOT OPEN TO STAKING, APPLICATION UNDER SECTION 3(b) JUNE 121987.

- PENDING APLICATION UNDER PUBLIC LANDS ACT

NOTES

AREA WEST OF WEST MONTREAL RIVER CLOSED TO STAKING SUBJECT TO SEC. 38(1) OF THE MINING ACT, 20 SEPT. 1978.



200

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE _____ PLÓNSKI FOREST MANAGEMENT UNIT

AND MAY BE SUBJECT TO FORESTRY OPERATIONS.
THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT: P.O. BOX 129
SWASTIKA, ONT.
POK ITO
705-642-3222

Alma Twp.

I M	2 M	2 3,N	1. \}				/ 5 _, M.			. • .	
\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	asserted to	Mc Oonger	ASSAULE HAZEMAGE	AREA TO	453304	963303	5 7 .	,	042533 1045692	L 842532	<u>!</u>
1 3 A Im	المراجع المراج	as 1981	1047203 1047208 1047208	and the state of		,	`.	ľ			
(NCTTON) LIO48926 LIO48924	L LAND THE	35455 335436	1047200 1047199		[Z]'						
L 1048928 L1048923 L 1L 1L 007704 007709 1867608	The second of th		623	!							
DESNO- DESNO- DESNO- SEGNE	Carlotte Carlotte	1 45	L 302714 L 300								
B92133 B92134 B9214		L 900718	ال ملي	0							
892136 892137 1048926	The Carry	1 (4	1 751	992720	~~~~	``		 	L 7 65246	L 765€55	
3 0.49 Seeszo seeszo			9 Jane	ories Table)		 a			
8 80212])		6220	309422 309422			 	, — — — —	835650 1049548	833864	
880228 L 887055 L 887054	! ! !	441369		882723		048594	1048591	1048586	 	833663	
114 88-10224 L 9 867038	1954.391	31-31	982564 98413.71	2568		801772 104859\$	1048592	700244	633652 1049546	: : : 3 a c 5 (
1680'218 Marochewon 1	Tensing 1	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	982565 982563	982569 1048589	1048588 1048587	1047740	L 859208	L 859207	559204	080240	
SEE NOTES	767591	3 12 12 12 12 12 12 12 12 12 12 12 12 12	982566 982562	L 799552 L 799250	1047742 1047741	79/9250 1047739	059209	659206	659205	05324i	
MA 14472		7-1	982567 982561	962570	Boo	0640 80004			60 104561	 - 52	! !
S. I MA MA	W 9 544 795	104 - 104 -	30363 869362 1802 982560		•	8006 639	38 80 260	8026	80260	843347	
	1971271 J	1471		982571	982259	8024	56 8006	12 80064	3 8026	33.88	!
1014712 1014712 1014713 511446	511447 971268 471270 141	274 97.21	560359 - Ado244	643166	7843164 I	3161 	57 82159	B21592		3349 18	
1014712 1014712 1014713 1014715 1014715 1014715 1014715 1014715 1014715 1014716 1014716 1014716 1014718 1014719 1014	511440 711261 971269	12 97/2/5	982558	51 -	80245	39,602456	3006	3600	843154	150 184	
1014717 1849149 1014718 1014719 1027192	757834 Fee	842977	4959IB	495919 821313	621312	350, M	6024 55	802607		3 IL 8433	
		17591 778374	. 802648	60237 0 82/3 14	82131	843170	843169	843156	843155	L 843 15	
	PA 2 151179	. , , , , , , , , , , , , , , , , , , ,	02649 R	Co. Million Co.	803508 82130	643160	843159	B43157	843156		
537314 1027194 1027190	ABON?	7890		643883	. <u></u>		¥	<u>.</u>	L	<u>'</u>	
537316 1849153 12 12 15 15 15 15 15 15 15 15 15 15 15 15 15	esome	347	13		, in	المستريد		, ~ , ~ .			
537317 550 316 650132 G50 316 G50132	981578	Q)		,	ئى ئىسىنىدىك ئىسىنىدىك	ر در ار م	
1849 182 132	9812301	7		· %			<u> </u>				
1822 GC . Land 481221	1 98 m24					# ^{4 2}			i		
3 20 as 27 as 22	1 98122°	, <u>, ,</u>	- TR		•	* N			ç´		
PLANS TO THE THE TENTON			<u> </u>	, James	·	<u> </u>	5 !	4 .	 .		7,4,7

Kimberley Twp.

HIGHWAY WID ROUTE No.	
THER ROADS	
TRAILS .	
SURVEYED LINES: TOWNSHIPS, BASE LINES, ETC. LOTS, MINING CLAIMS, PARCELS I	ETC.
NSURVEYED LINES: LOT LINES PARCEL BOUNDARY MINING CLAIMS ETC.	managalista paragaman pangangan pangangan dan kalangan pangangan pangangan dan kalangan pangangan dan kalangan
RAILWAY AND RIGHT OF WAY	
UTILIT LINES	·
YON-PERENNIAL STEEAM	والمصابحة ومستنينة والمحيران
- LOODING OR FLOODING RIGHTS	
JBDIVISION OR COMPOSITE PLAN	Acres de la company de la comp
SERVATIONS	
RIGINAL SHORZLINE	*** *****************
MARSH OR MUSKEG	
MINES	5
TRAVERSE MONUMENT	
1	

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	Ø er vi
SUHFACE RECEITS INTY	
" , MINING RIGHTS OF LY	
. EASE, SURFACE & MINING RIGHTS	Oer 🖫
" , SURFACE RIGH 'S CHEY.	
" , MINIF & RIGHTS ONLY	
CICENCE OF DECUPATION	L.ባ. ቍ 🌣
ORDER-IN-COUNCIL	Ox
RESERVATION	
SANCELLED	1
SAND & GRAVEL	

SCALE IN 1971 * 16 CHA	CAL.	E		14.5	۱.	*	16	СH	۵	4
------------------------	------	---	--	------	----	---	----	----	---	---

FET									y y
0		100	000		4 ()		6000	80
		,	-		-	27	•	-	البطاع
2000					m m i			100	
ė	200			000				2200	
METRES				- KM1				(2,	1
									,

TOWNSHIP

CAIRO

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

WINING DIVISION

LARDER LAKE LAND TITLES / REGISTRY DIVISION

TIMISKAMING



Untario

JAN 23 1983

Whiting MECOHDERS

Ministry of Natural Resources Ministry of Northern Development and Mines

ûate

Number

JULY 1986 G-3209

