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MINING LANDS SECTION

COMSTATE RESOURCES LTD.

Geology of Claim

P. 724554

Sewell Township

August, 1985
Timmins, Ontario

D.R. Pyke, Ph.D.

Hyke

HWY 101 SENELLE REEVES TP SEWBLL TO TIMMINS MILES 16 PROPERTY MILES PENHORWOOD KENOGAMING LOCATION MAP REEVES - SEWELL CLAIMS

Geology of Claim
P. 724554
Sewell Township

Location and Access

The claim is very accessible, being located two miles south of Highway 101 in Sewell Township; logging and bush roads lead south and southeast to the claim.

The mining claim, P. 724554, is currently held by Comstate Resources Limited.

Previous Work

The area was previously mapped by Todd (1924) and subsequently by Milne (1972). The area also formed part of a large reconnaissance survey by Thurston, Siragusa and Sage (1977).

In 1971, Card Lake Copper Mines Limited (File T-44*) held this as well as adjacent claims, and during the period 1971 to 1974, drilled twenty diamond drill holes; nine of the holes were drilled in the antimony-arsenic showing area.

In 1979-1980, Texasgulf Canada Ltd. conducted electromagnetic (VLF, horizontal loop), proton magnetometer and geological surveys (200 feet to one inch) over the property.

^{*} Ontario Geological Survey, Assessment Files, Timmins, Ont.

In 1984, Comstate Resources Ltd. did a number of geochemical analyses from the present claim and contiquous claims (File T-2898).

Present Survey

The present survey was conducted over the period May 10 - May 29,1985. The Reeves - Sewell Township boundary was established as a base line, and east-west lines cut every 400 feet and picketed at 100 foot intervals were used for mapping control.

Property Geology

The property is underlain largely by pillowed and massive basaltic flows. The basalts weather dark grey and are dark grey-green on fresh surfaces. Previous analyses of a typical pillowed flow indicate that the basalts are of an iron tholeiitic composition (File T-2898*). Pillows are generally in the order of 3 feet in maximum dimension, and concentric cooling cracks are common. An exceptionally coarse grained (5-6 mm.), knobby weathering massive unit occurs near the north central portion of the claim. This may represent the coarse basal portion of a flow; contacts with the finer grained basalts were not observed.

Two massive, orange-brown weathering diabase dikes

^{*} Ontario Geological Survey, Assesment Files, Timmins, Ont.

intrude the volcanics and trend NNW across the property. A porphyritic texture is locally developed.

Foliations trend in a north to northwest direction and dip steeply east to subvertical. Pillow structures at one outcrop suggests the flows face in a westerly direction; although pillow structures are common, the facing direction is often ambiguous.

Economic Geology

A stibnite - arsenopyrite showing is localized along a five to six foot wide northwest striking shear zone exposed for approximately 200 feet, in pillowed basalts near the north central portion of the claim. Previous analyses of ten grab samples taken by Comstate Resources (File T-2898) on this mineralized zone returned gold values ranging from 340 to 1850 parts per billion. Arsenic and antimony values are in the order of 40,000 and 3000 parts per million, respectively.

Conclusions and Recommendations

The property is underlain by pillowed and massive iron tholeites.

A shear zone in pillow basalt is mineralized with stibnite and arsenopyrite and contains highly anomalous values of gold. Perhaps a few I.P. profiles would be beneficial in outlining a possible strike extension to the mineralized shear.

Legend

ARCHEAN

2 DIABASE

MAFIC METAVOLCANICS (Iron Tholeiites)

la Massive, fine to medium grained

lb Pillowed

lc Massive, coarse grained, possibly intrusive

Symbols

() outcrop area

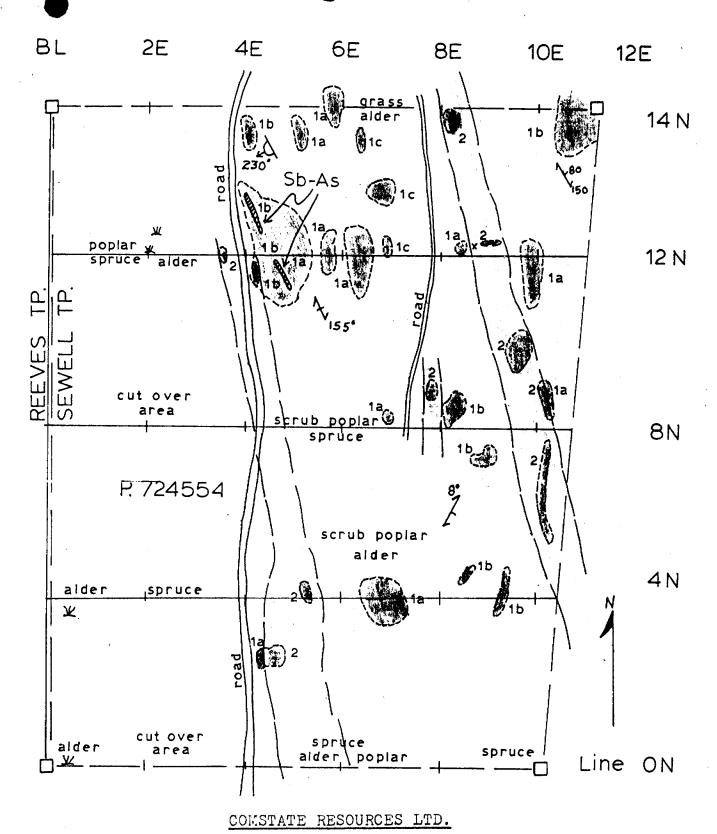
geological contact

Z80 foliation

pillow structure, tops in direction of arrow

Claim post

Sb-As Stibnite - Arsenopyrite mineralized shear



Geology of Clain P. 724554, Sewell Township

Scale: 1 inch to 200 feet.

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REFERENCES

Milne, V.G.

1972: Geology of the Kukatush - Sewell Lake Area, District of Sudbury; Ontario Division of Mines, Geol. Rept. 97, 116 p.

Todd, E.W.

1924: Groundhog River area; Ontario Dept. Mines, Vol. 33, pt. 6, p. 1 - 17.

Thurston, P.C., Siragusa, G.N., and Sage, R.P.

1977: Geology of the Chapleau area, Districts of Algoma, Sudbury and Cochrane; Ontario Division of Mines, Geo. Rept. 157, 293 p.

OFFICE USE ONLY



Ministry of Na



GEOPHYSICAL – GEOLC TECHNICAL DA...

42A04NW0023 2.8366 SEWELL

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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) Geolog	SICA)			
Township or Area SEWE				
Claim Holder(s) Comstr	1-C Passulanes	MINING CLAIMS TRAVERSED		
Claim Holder(s) CO 27/5/7	TE TESOURCES	List numerically		
Survey Company ComsTA	TE RESOURCES	P 724554		
Author of Report D. P. 7	(prefix) (number)			
Address of Author Po. Bo				
7				
Covering Dates of Survey // // /	(linecutting to office)			
Total Miles of Line Cut ///	WE.			
SPECIAL PROVISIONS	DAYS	<u></u>		
CREDITS REQUESTED	Geophysical per claim			
	-Electromagnetic	i		
ENTER 40 days (includes	•			
line cutting) for first	-Magnetometer			
survey.	-Radiometric			
ENTER 20 days for each	-Other			
additional survey using	Geological 40			
same grid.	Geochemical			
AIRBORNE CREDITS (Special provision	on credite do not apply to sirborne supreye)			
Magnetometer Electromagnetic Radiometric				
(1) 1110C				
DATE: SIGNAT	URE: Author of Report for Agent			
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Previous Surveys File No. Type Date	Claim Holder			
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 	••••••	TOTAL CLAIMS		

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	
Base Station location and value	
Instrument	· · · · · · · · · · · · · · · · · · ·
Instrument	
Coil separation	
Accuracy	· · · · · · · · · · · · · · · · · · ·
Method: Fixed transmitt	
Frequency	(energify V.I. F. station)
리 Parameters measured	
Instrument	
Corrections made	
7)	
Elevation accuracy	
Instrument	
Method Time Domain	☐ Frequency Domain
Parameters - On time	Frequency
→ Off time	Range
– Delay time	
— Integration time	
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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	en e
Overburden	
(type,	depth — include outcrop map)
OTHERS (SEISMIC, DRILL WELL LOGGING	ETC.)
Type of survey	
Instrument	
Accuracy	
Parameters measured	
Additional information (for understanding resul	ts)
AIRBORNE SURVEYS	
Type of survey(s)	
Instrument(s)	
(speci	fy for each type of survey)
Accuracy(speci	fy 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

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GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken						
Total Number of Samples	ANALYTICAL METHODS					
Type of Sample(Nature of Material) Average Sample Weight	p. p. m. <u> </u>					
Method of Collection	1 1					
Soil Horizon Sampled	Others					
Horizon Development						
Sample Depth						
Terrain						
	Reagents Used					
Drainage Development	<u> </u>					
Estimated Range of Overburden Thickness	. ,					
Istimated Range of Overbarden Timesmess	Extraction Method					
	Analytical Method					
	Reagents Used					
SAMPLE PREPARATION	Commercial Laboratory (tests					
(Includes drying, screening, crushing, ashing)	Name of Laboratory					
Mesh size of fraction used for analysis	Extraction Method					
	Analytical Method					
	Reagents Used					
General	General					
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or witnessed same during and/or after its completion and the annexed report is true.

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

Mining Lands Section

File No 28366

Control Sheet

TYPE OF SURVEY	GEOPHYSICAL
	GEOLOGICAL
	GEOCHEMICAL
	EXPENDITURE
MINING LANDS COMMENTS:	
	-
	/ 6 10
	Sewell>
Lago,	
	Domiof.
*	Signature of Assessor
	Aug. 26/85

Date