



42A04NW0023 2.8366 SEWELL

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AUG 9 1985

MINING LANDS SECTION

COMSTATE RESOURCES LTD.

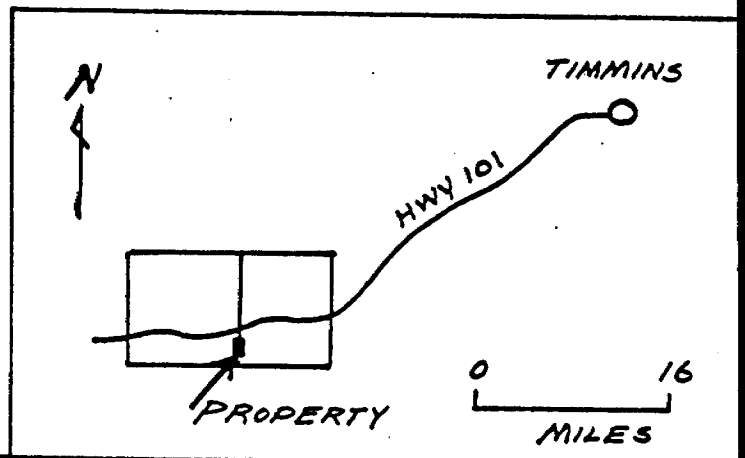
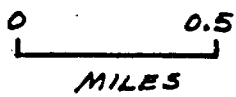
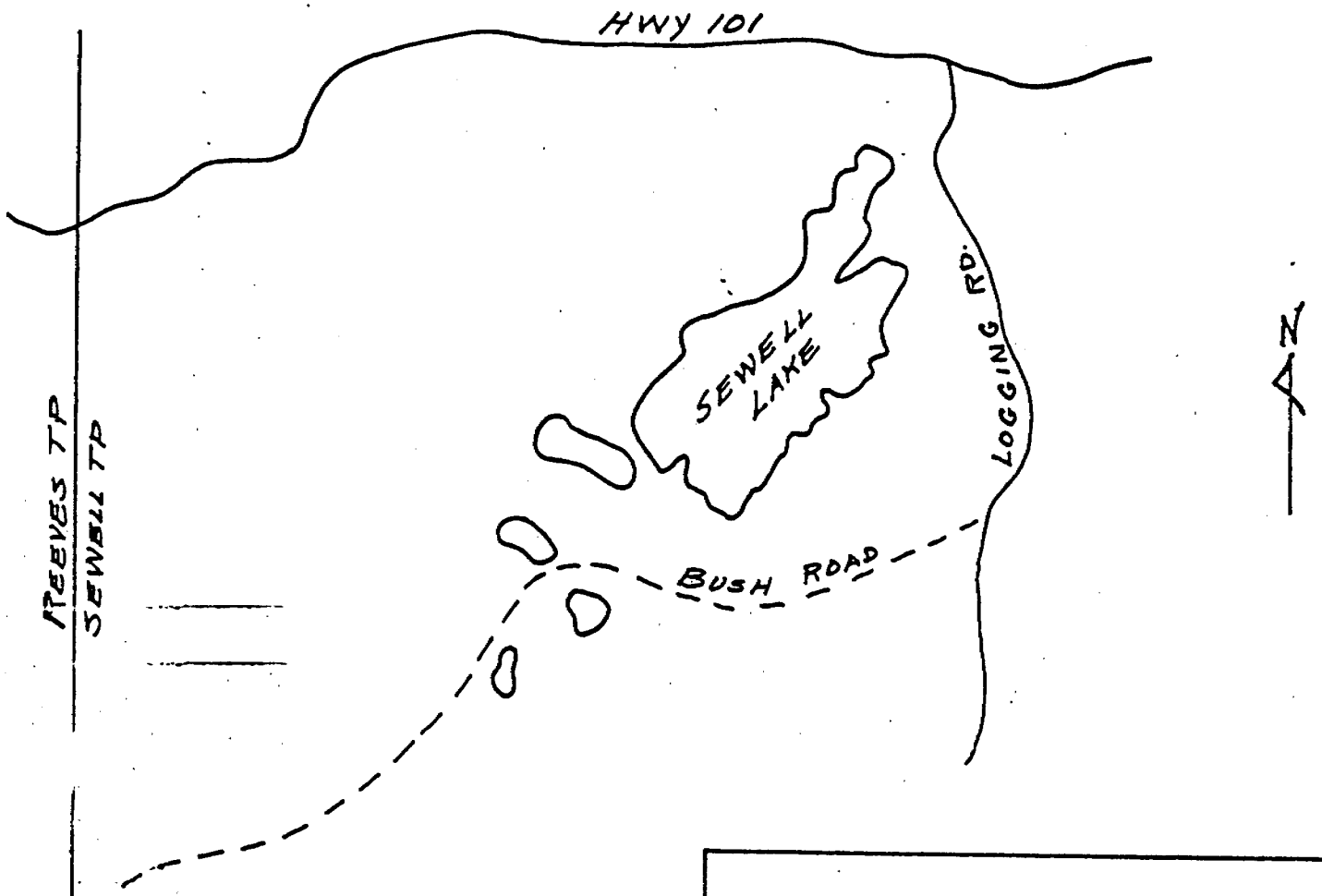
Geology of Claim

P. 724554

Sewell Township

August, 1985
Timmins, Ontario

D.R. Pyke, Ph.D.



PENHORWOOD
KENGAMING

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 contiguous 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 tholeiites.

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.








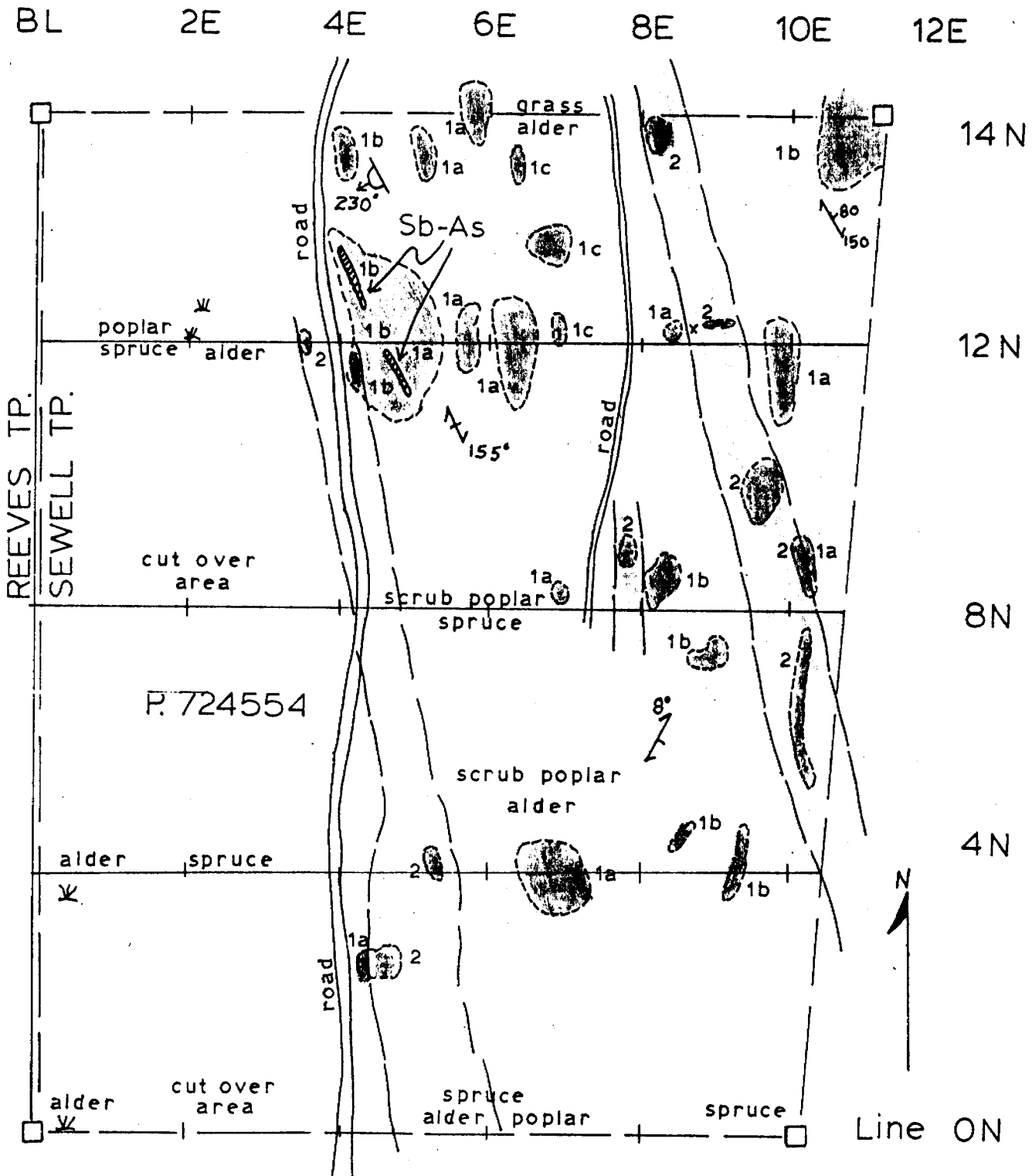
Legend

ARCHEAN

- 2 DIABASE
- 1 MAFIC METAVOLCANICS (Iron Tholeiites)
- la Massive, fine to medium grained
 - lb Pillowed
 - lc Massive, coarse grained, possibly intrusive

Symbols

-  outcrop area
-  geological contact
-  foliation
-  pillow structure, tops in direction of arrow
-  claim post
- Sb-As Stibnite - Arsenopyrite mineralized shear



COMSTATE RESOURCES LTD.

Geology of Claim P. 724554, Sewell Township

Scale: 1 inch to 200 feet.

Handwritten signature

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.



Ministry of Natural Resources

GEOPHYSICAL - GEOL
TECHNICAL DATA



42A04NW0023 2.8366 SEWELL

300

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) Geological
Township or Area SEWELL
Claim Holder(s) COMSTATE Resources
Survey Company COMSTATE Resources
Author of Report D. R. PYKE
Address of Author P.O. Box 1142 TIMMINS
Covering Dates of Survey MAY 10 - AUG 16/85
(linecutting to office)
Total Miles of Line Cut 1 MILE

MINING CLAIMS TRAVERSED
List numerically

P 724554
(prefix) (number)

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

Geophysical
--Electromagnetic _____
--Magnetometer _____
--Radiometric _____
--Other _____
Geological 40
Geochemical _____

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

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Aug 16/85 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications 23899

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 1

If space insufficient, attach list

OFFICE USE ONLY

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

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

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

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

Mining Lands Section

File No 28366

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

< Sewell >

L.S.

D. Smith
Signature of Assessor

Aug. 26/85
Date