

GROUND GEOPHYSICAL SURVEY
OF WARNE OPTION CLAIM GROUP, WHITNEY TOWNSHIP
DISTRICT OF COCHRANE

63.2402

The following geophysical report refers to Mining Claims P-94488, P-94489, P-94613, P-94614, P-94615 and P-94616, in the Township of Whitney, Porcupine Mining Division. These claims are under option by Texas Gulf Sulphur Company, Miner's Licence A34861, Suite 3604, Toronto Dominion Centre, Toronto 1, Ontario, from F. Warne, Miner's Licence M-15843, 111 Lyall Street, South Porcupine, Ontario. The geophysical assessment work is being submitted by the Texas Gulf Sulphur Company.

These claims are located in Lots 11 and 12 of Concession I in Whitney Township. Access to the property is via a road south along the township line between Whitney township and Tisdale Township from the town of South Porcupine.

No previous work has been carried out by Texas Gulf Sulphur Company, however prior owners of the property have done some diamond drilling on the claims



D. Watson

GROUND GEOPHYSICAL SURVEY
OF WARNE OPTION CLAIM GROUP, WHITNEY TOWNSHIP
DISTRICT OF COCHRANE

A group of six claims in the southwest corner of Whitney Township, constituting what is known as the Warne Option, have been surveyed by horizontal loop E-M and magnetic methods. The E-M survey disclosed no anomalies of significance; the magnetic survey outlined two magnetic highs corresponding to a diabase dike in the southwest portion of the claims group and iron formation along the north.

The surveys were carried out on a cut grid, with lines at 300 foot intervals, and covering the entire claim group area. The work was done during the month of August, 1968 by a two man crew comprising of a technician and helper. Periodic supervision was provided by the writer and Mr. David Watson, a geophysicist with Texas Gulf. The E-M survey was done with a McPhar Horizontal Loop E-M unit with a coil spacing of 200 feet; a McPhar M-500 flux-gate magnetometer was used for the magnetic survey. The two surveys required approximately six field days and one and one-half days in the office to reduce and prepare the results.

HORIZONTAL LOOP E-M SURVEY

Approximately 5.7 miles of line were run with the horizontal loop equipment. Station spacing was normally 100 feet but was reduced to 50 feet or less whenever there was a

suggestion of a possible anomaly. The instrument used can be operated at two frequencies (i.e. 400 and 1,600 Hz) but only the higher frequency was used. One significant anomalous trend was recorded but this fell directly along an overhead power line and the conductor is undoubtedly the power line. Unfortunately, it was not possible to get readings directly beneath the power line. Throughout the rest of the grid, the readings were quite flat, showing only minor variations which are attributed to topographic effects.

MAGNETIC SURVEY

Slightly more than 6.1 miles of magnetic profiles were recorded. Again, station spacing was 100 feet with smaller intervals in the vicinity of anomalous readings. Two significant magnetic zones were outlined.

The westernmost anomaly strikes diagonally from the north end of Line 3E to the south end of Line 18E with a maximum magnetic relief of about 1,200 gammas. This is attributed to a diabase dike underlying the area of the anomaly. The second zone, lying along the north boundary of the claims between lines 27E to 42E, corresponds to a zone of iron formation. Total maximum magnetic relief is of the order of 1,200 to 1,500 gammas, indicating relatively moderate to low magnetic susceptibility. The regional strike appears to be roughly East-West but folding and faulting of the


formations have complicated the local picture.

CONCLUSIONS AND SUMMARY

No E-M anomalies of significance were detected in the area of the claim group. The two magnetic anomalies outlined by this survey have been attributed to a diabase dike in the southwest corner and iron formation near the north boundary.

Number of crew days E-M and Mag.	6
Number of office days for compilation	1.5
Number of miles E-M	5.7 miles
Number of miles Mag.	6.1 "
Field personnel - C. Gelbke L. Smith	

October 9, 1968


George Podolsky
Senior Geophysicist,
Texas Gulf Sulphur Company



HOYLE TWP. M-287








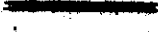








THE TOWNSHIP OF
OF
WHITNEY

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

- PATENTED LAND 
- CROWN LAND SALE 
- LEASES 
- LOCATED LAND 
- LICENSE OF OCCUPATION 
- MINING RIGHTS ONLY 
- SURFACE RIGHTS ONLY 
- ROADS 
- IMPROVED ROADS 
- KING'S HIGHWAYS 
- RAILWAYS 
- POWER LINES 
- MARSH OR MUSKEG 
- MINES 
- CANCELLED 
- S.R.O. PATENTED 

NOTES

400' Surface rights reservation around all lakes and rivers.

No disposition of sand & gravel on lands lying north of the O.N.R., from May 8th 1964 until further notice. D.O.M. file: 550.13.

Any restakings in area within stippling "Subject to rights and privileges granted to Pamour Porcupine Mines Limited" for tailings disposal.

DATE OF ISSUE

JAN 14 1969

ONTARIO DEPT. OF MINES
MINING LANDS BR.

THIS MAP FOR CHECKING PURPOSES ONLY - MUST NOT BE SOLD.

PLAN NO. **M-319**

DEPARTMENT OF MINES

— ONTARIO —

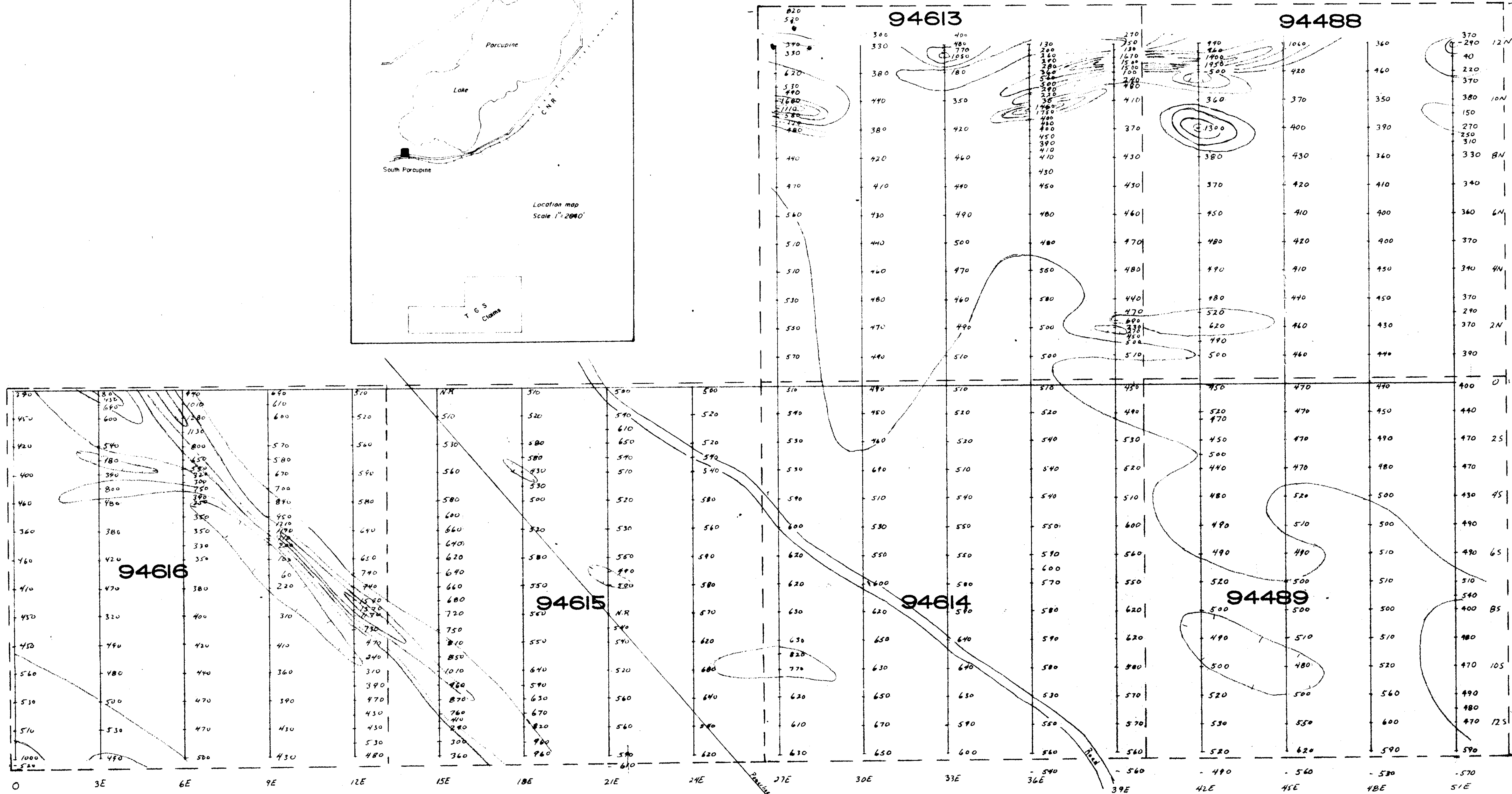
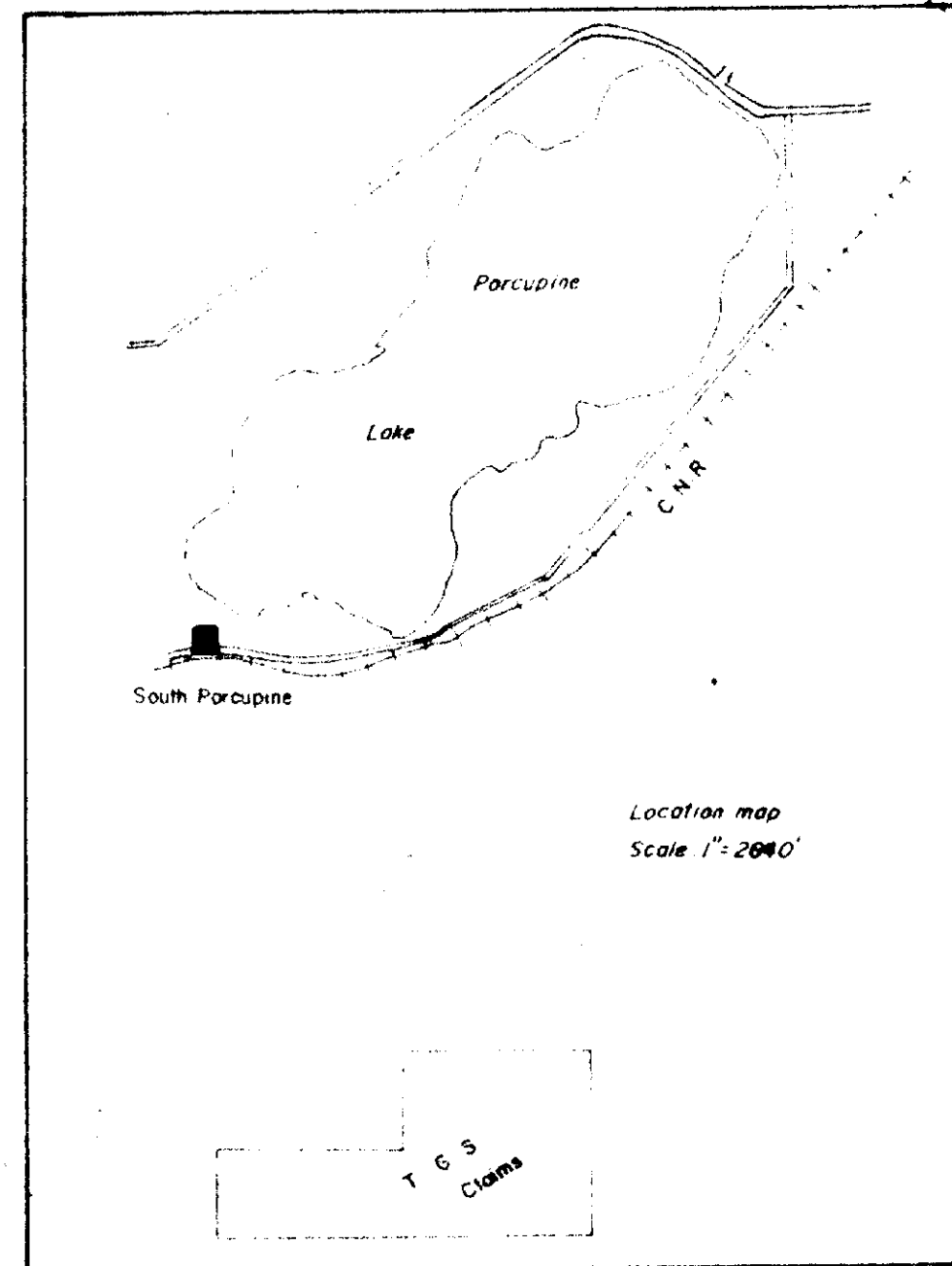
WISDALE TWP. M-315

CODY TWP. M-270

SHAW TWP. M-311



42A6NE0211 63.2492 WHITNEY



210

Contour interval 250 feet

*David West
Geophysicist
T.G.S.*

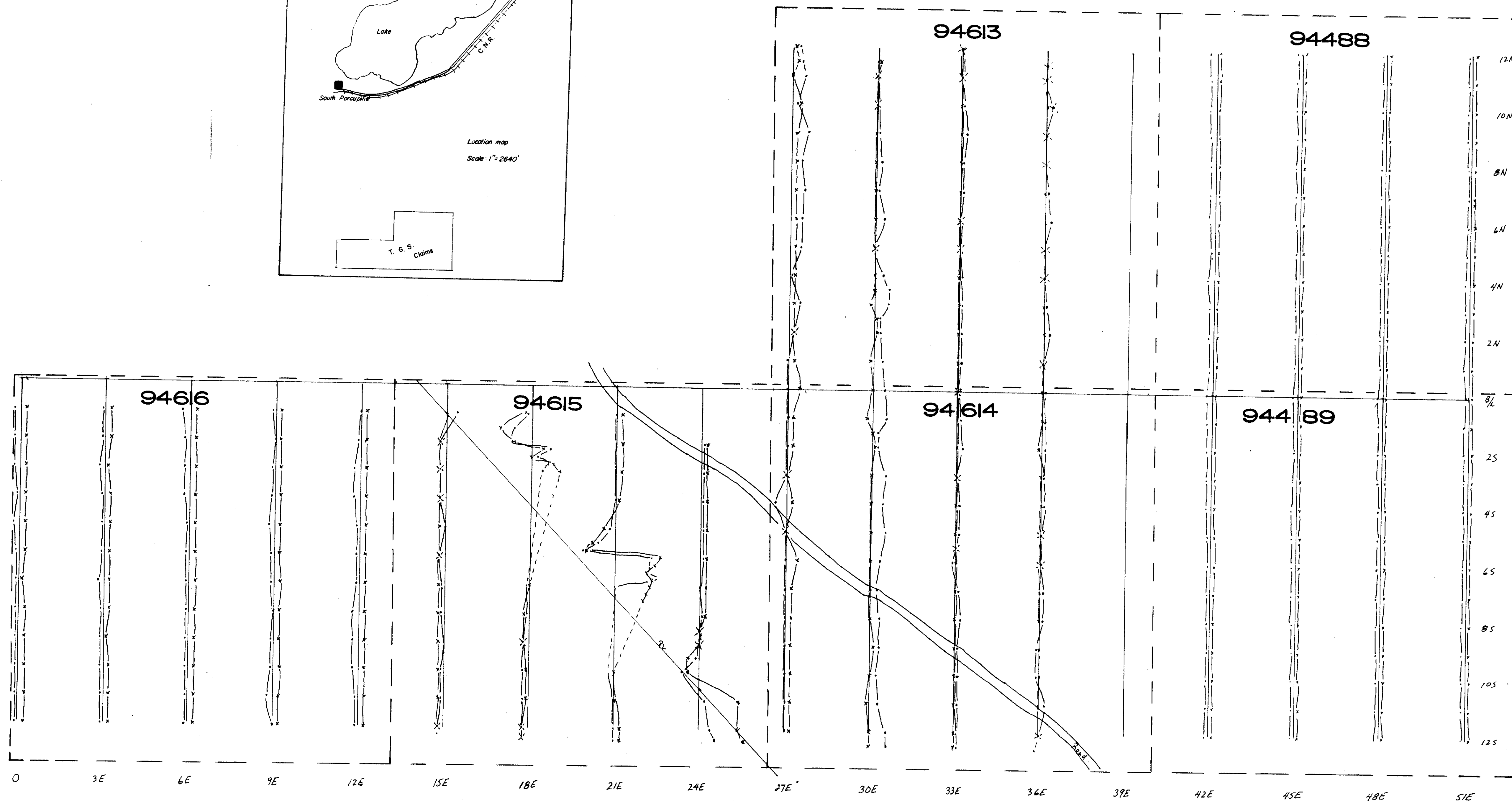
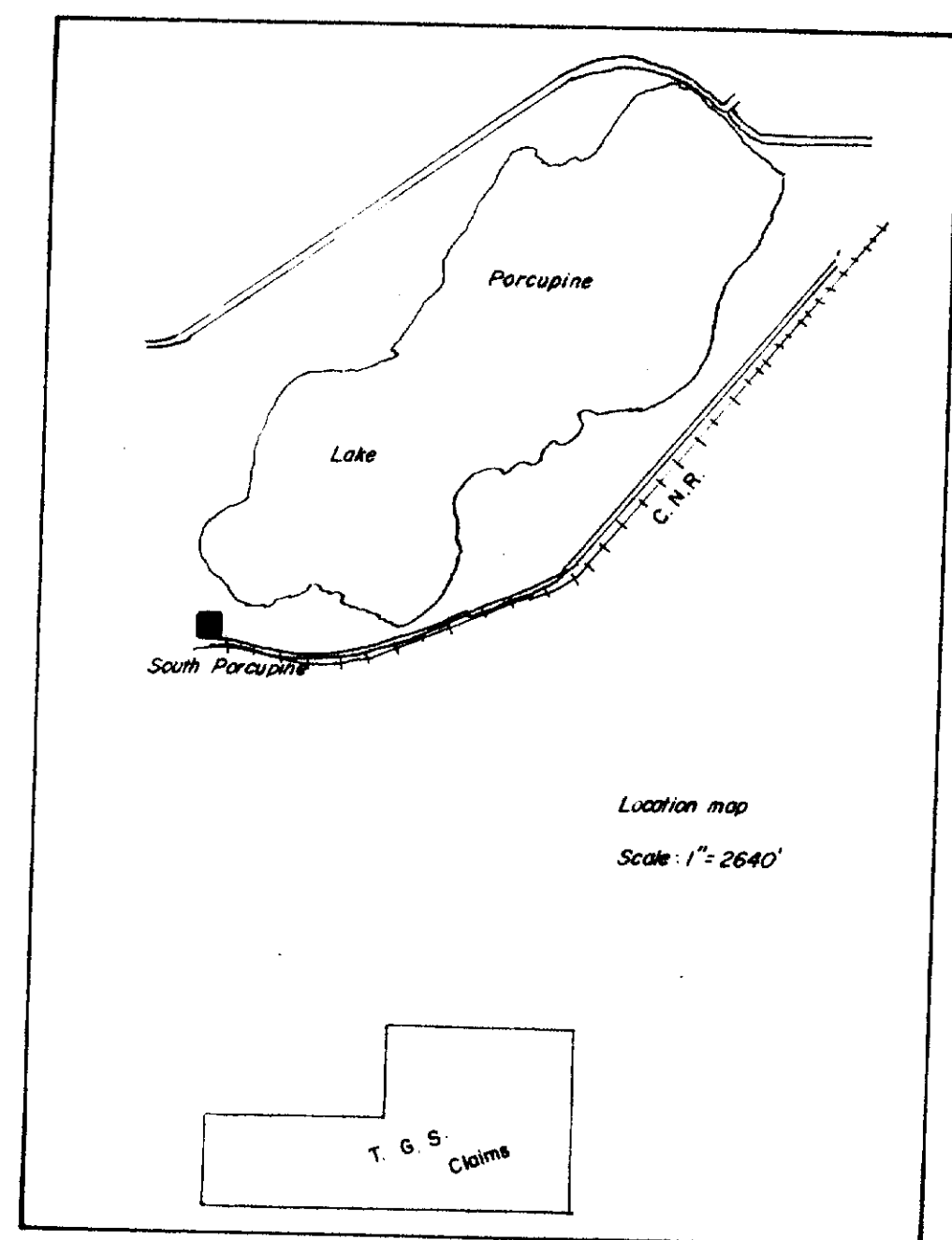
SCALE: ONE INCH = 200'

TEXAS GULF SULPHUR CO.

MAGNETOMETER SURVEY
WARNE OPTION
WHITNEY TOWNSHIP

WORK BY	DRAWN BY	DATE
L.S./C.G.	C.G.	Aug. 1968

63.2402



SCALE: ONE INCH = 200'

Coil separation 200'
Frequency 1600 Hz
Inphase —
Out of phase x—x
Scale: 1" = 30%

David Weston
Geophysicist T.G.S.

TEXAS GULF SULPHUR CO.		
HORIZONTAL E.M. SURVEY		
WARNE OPTION		
WHITNEY TOWNSHIP		
WORK BY	DRAWN BY	DATE
L.S./C.G.		Aug. 1960

63.2402

