



42A06NW0303 2.3888 CARSCALLEN

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TEXASGULF CANADA LTD.
REPORT ON GEOPHYSICAL WORK
BRISTOL, DENTON, CARSCALLEN, THORNLOE TOWNSHIPS

N.T.S. 42 A 5/6

CLAIMS: P 528149 - 175
P 528179 - 208
P 528235 - 241
P 528255 - 272
P 528275 - 313

MAY, 1981

W.A. GASTEIGER

TEXASGULF CANADA LTD.
REPORT ON GEOPHYSICAL WORK
BRISTOL, DENTON, CARSCALLLEN & THORNLOE TOWNSHIPS

INTRODUCTION:

During May, 1981, a combined airborne electromagnetic and magnetic survey was flown over a number of Townships west of Timmins. Within the flying area are a total of 121 claims owned by Texasgulf Canada Ltd. These claims are located in Bristol, Carscallen, Denton and Thornloe Townships.

These claims occur in four groups of contiguous claims. In the northeast corner of Bristol Township, Bristol 66 consists of 38 claims. Bristol 51 and Bristol 41, located along the west boundary of the Township consist of 19 and 7 claims respectively. Bristol 11, which includes claims in the area of the common corner of Bristol, Carscallen, Denton and Thornloe Townships, has a total of 57 claims.

An assortment of geophysical surveys as well as some diamond drilling has previously been done on a number of these claims.

SURVEY DETAILS:

Flight lines traversed all claims in north-south orientations. Line spacing was (1/8) one-eighth mile.

The electromagnetic survey used the Barringer/Questor Mark VI Input (R) System. A Sonotek P.M.H. 5010 Proton Magnetometer was used to record the magnetic values. Both instruments are fully described in the Appendix.

SURVEY RESULTS:

Bristol 66

Conductive zones occur on the northern and southern edges of the claim group. Both Mineral Estates Mines and Hollinger Consolidated Mines have done geophysics and drilling on parts of this

claim group. Mineral Estates drilled the northern conductor on the Godfrey - Bristol boundary and intersected graphite. The magnetic trend is mainly north-south which reflects the orientation of the diabase dikes in this area. The east-west trending magnetic high on claims 528195, 528196, 528156 and 528157 reflects the east-west orientation of the mafic volcanics.

Bristol 51

A conductive zone trends north-westerly through the southern portion of the claim group. This north-westerly trend is confirmed by the magnetics. Again the diabase dikes in this area add a north-south component to the magnetic picture. Previous work by Hollinger Mines consisted of geophysics and drilling of the conductive zone. No economic mineralization was intersected.

Bristol 41

No conductive zones were detected on this seven claim group. Magnetic trends are generally north-south, and as usual this mainly is due to the influence of diabase dikes. There is no record of drilling on this claim group.

Bristol 11

Two main conductive zones appear on this claim group. Both are located in Carscallen Township; one in the north-west corner of the claim group; the other trending northeasterly across the centre of the Carscallen claims. The magnetics confirm this north-easterly trend. Drilling and geophysical surveys have been run over portions of the claim group by Hollinger Mines and Mill Hill Mines. Hollinger's drilling was in the vicinity of the central conductive zone. Graphite was intersected.

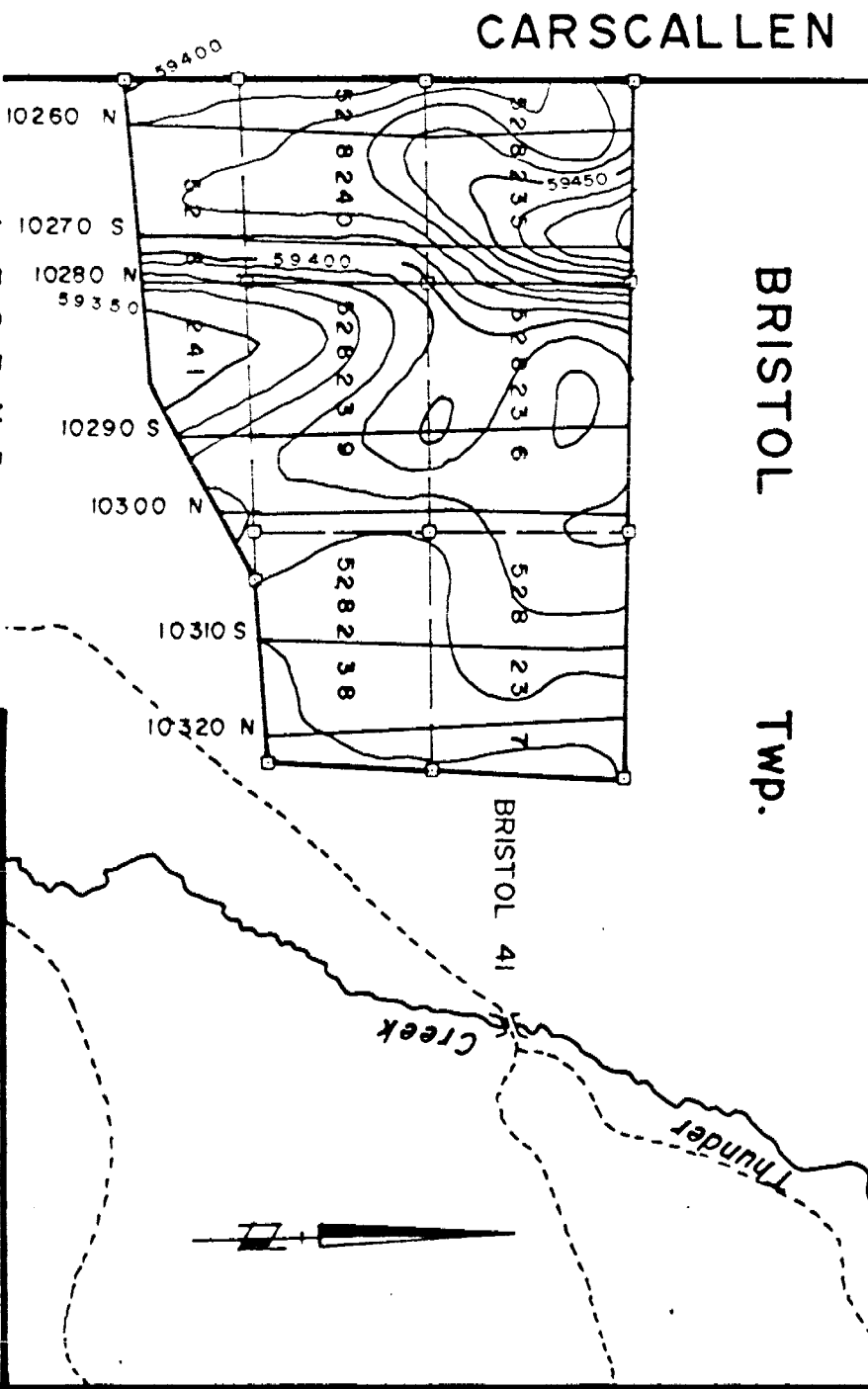
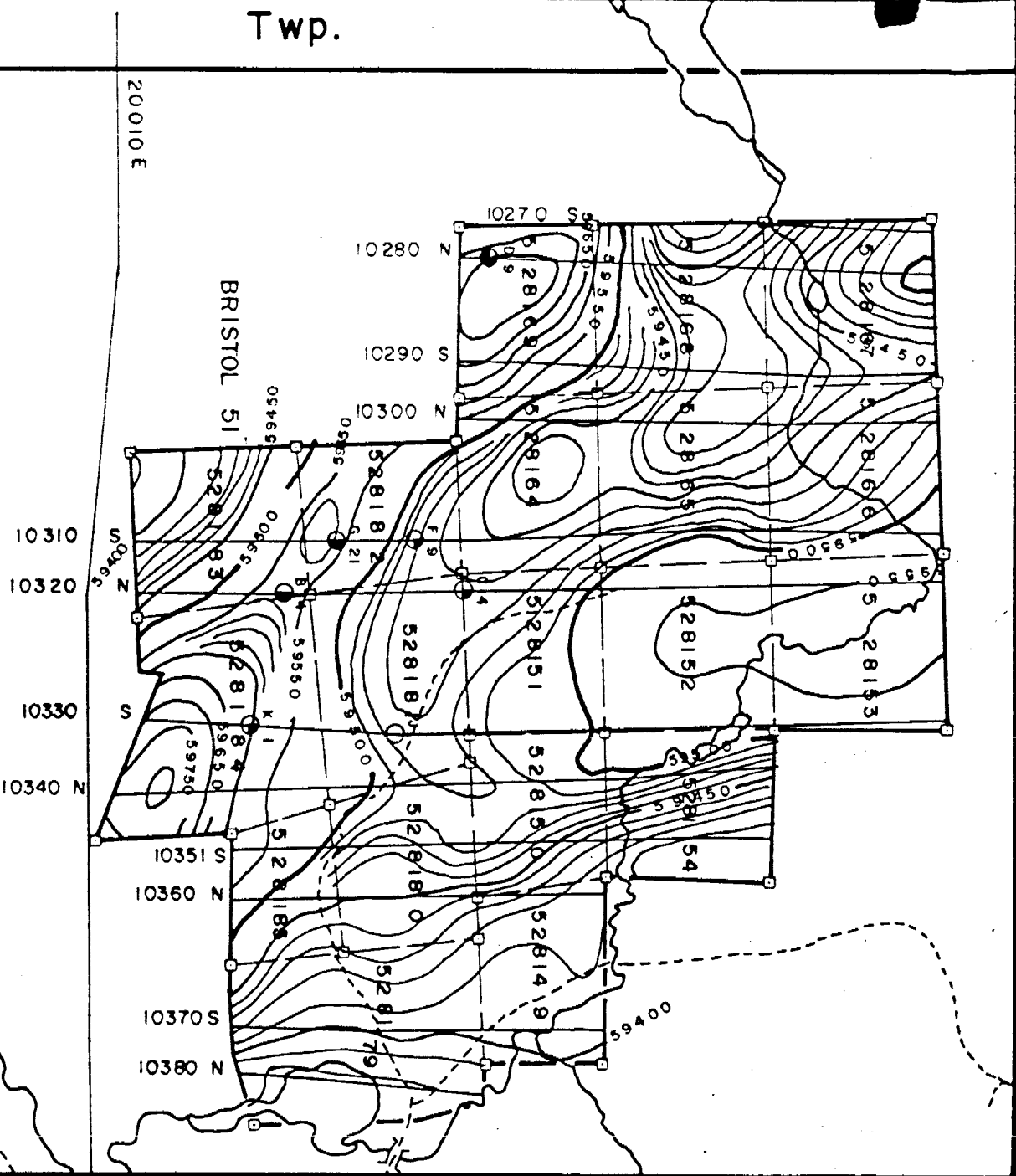
CONCLUSIONS AND RECOMMENDATIONS:

The magnetic features and conductive zones give a good indication of the strike direction of the underlying bedrock. Since

this area generally has very high potential for gold mineralization, a program of overburden drilling based on a geological interpretation of geophysical data should be initiated. This would aid in defining geology as well as providing geochemical results to aid in determining the location of any gold deposits.

Will Gasteiger

WILL GASTEIGER



LEGEND

- 6 Channel Anomaly
 - 5 Channel Anomaly
 - 4 Channel Anomaly
 - 3 Channel Anomaly
 - 2 Channel Anomaly
 - Anomaly letter
 - ⊕ 5-Apparent conductivity - with
-
- Contour Intervals
 - 10 gommos
 - 50 gommos
 - 500 gommos
 - Magnetic depression

Flight altitude 400' above terrain

TEXASGULF Inc.
 Minerals Exploration Division Timmins, ONTARIO

BRISTOL TWP.
AIRBORNE
ELECTROMAGNETIC
MAGNETIC
SURVEY

SCALE : 1" = 1320'

Drawn by DEL Projec No : 79 Date : 05 / 81

do : WAG

CARSCALLEN

Twp.

BRISTOL TWP.

BRISTOL 51

BRISTOL 41

Creek

Thunder



GODFREY

Twp.

LEGEND

- 6 Channel Anomaly
- 5 Channel Anomaly
- 4 Channel Anomaly
- 3 Channel Anomaly
- 2 Channel Anomaly

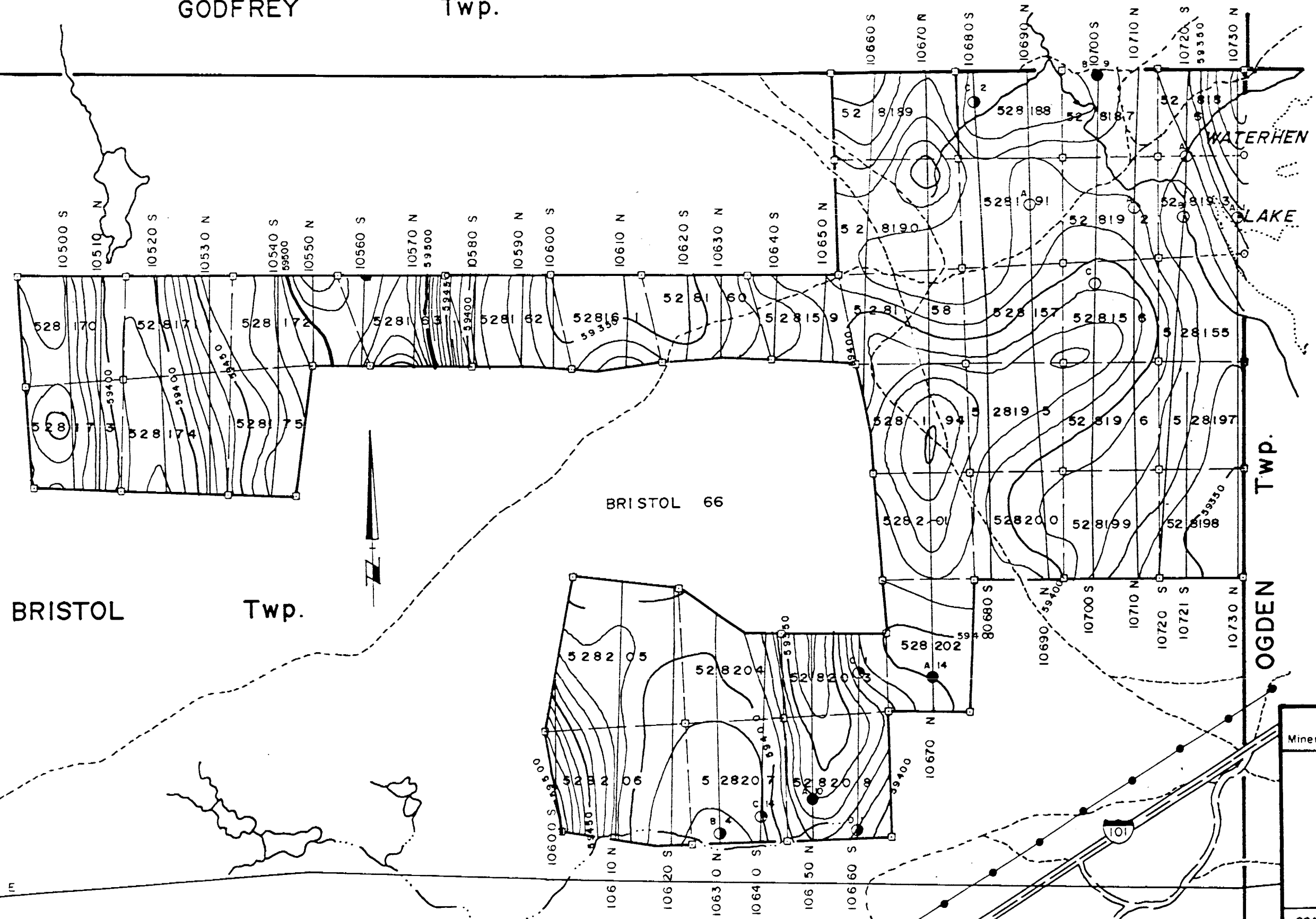
Anomaly letter
 a - Apparent conductivity - width

Flight altitude 400' above terrain

Contour Intervals

- 10 gammas —
- 50 gammas —
- 500 gammas —

Magnetic depression



WATERHEN
 LAKE

BRISTOL 66

BRISTOL

Twp.

TWP.

OGDEN

TEXASGULF Inc.		
Minerals Exploration Division		Timmins, ONTARIO
BRISTOL Twp.		
AIRBORNE ELECTROMAGNETIC MAGNETIC SURVEY		
SCALE : 1" = 1320'	Data : WAG	
Drawn : DEL	Project NO : 79	Date : 05 / 81

200' 0 E

ARSCALLEN

Twp.

BRISTOL

Twp.

LEGEND

- 6 Channel Anomaly
 - 5 Channel Anomaly
 - 4 Channel Anomaly
 - 2 Channel Anomaly
 - 3 Channel Anomaly
 - Anomaly letter
 - Apparent conductivity - width
- Flight altitude 400' above terrain

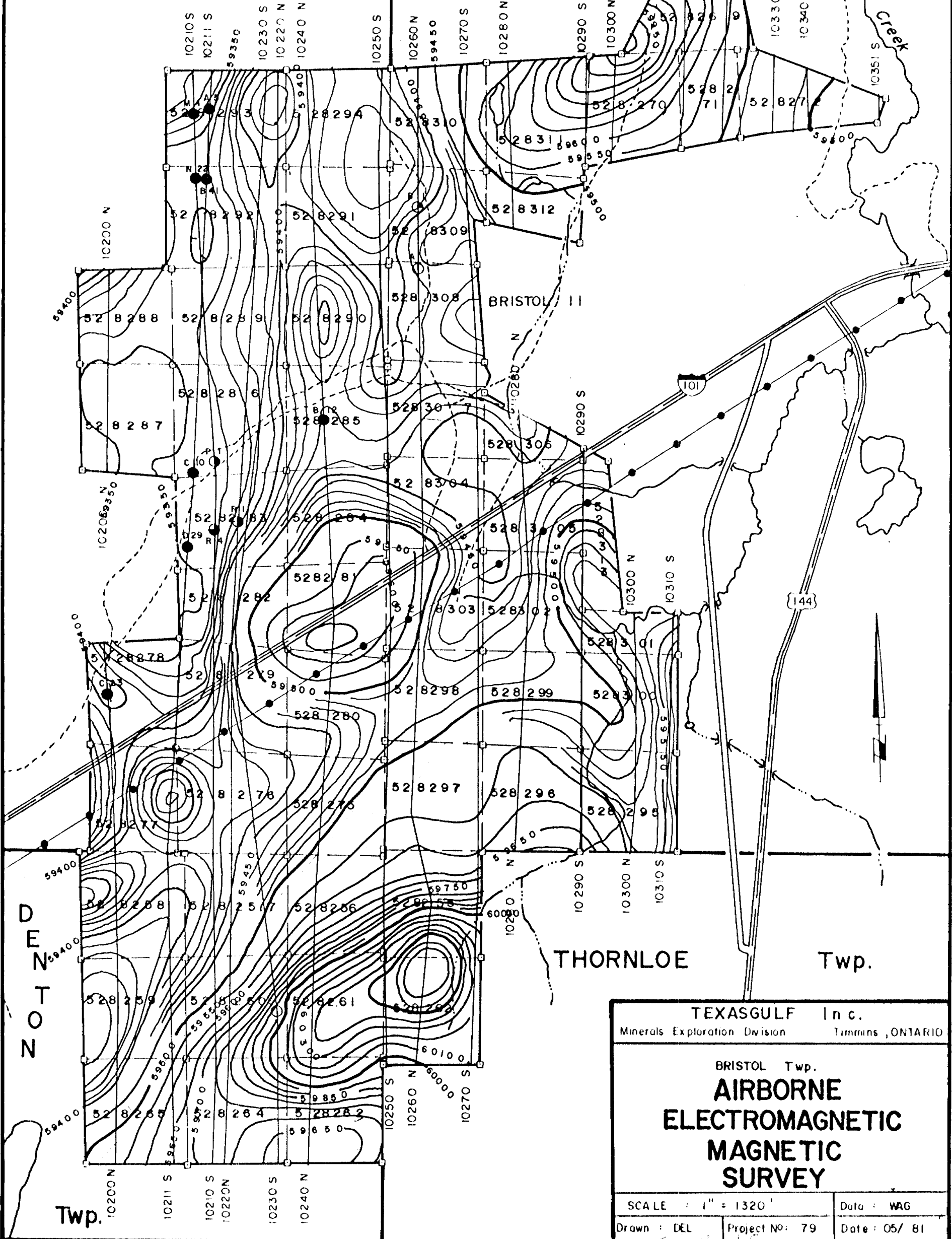
Contour Intervals

10 gammas

50 gammas

500 gammas

Magnetic depression



TEXASGULF Inc.
 Minerals Exploration Division Timmins, ONTARIO

BRISTOL Twp.
**AIRBORNE
 ELECTROMAGNETIC
 MAGNETIC
 SURVEY**

SCALE : 1" = 1320'	Data : WAG
Drawn : DEL	Project NO: 79
	Date : 05/ 81



Ministry of

GEOPHYSICAL - GEO
TECHNICAL I



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900

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) Airborne Geophysical

Township or Area Bristol, Denton, Carscallen, Thornloe

Claim Holder(s) Texasgulf Canada Limited

P.O. Box 1140, 571 Moneta Ave., Timmins, Ontario P4N 7H9

Survey Company Questor Surveys Limited

Author of Report W.A. Gasteiger

Address of Author P.O. Box 1140, Timmins, Ontario

Covering Dates of Survey March 1981 - May 1981
(linecutting to office)

Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

P (prefix)	(number)
P	528149
P	528150
P	528151
P	528152
P	528153
P	528154
P	528155
P	528156
P	528157
P	528158
P	528159
P	528160
P	528161
P	528162
P	528163
P	528164
P	528165
P	528166
P	528167
P	528168
P	528169
P	528170
P	528171
P	528172
P	528173
P	528174
P	528175

If space insufficient, attach list

**SPECIAL PROVISIONS
CREDITS REQUESTED**

DAYS
per claim

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

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

ENTER 20 days for each
additional survey using
same grid.

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

Magnetometer 20 Electromagnetic 20 Radiometric _____
(enter days per claim)

DATE: May 13/81 SIGNATURE: W.A. Gasteiger
Author of Report or Agent

SEE ATTACHED LIST ALSO

Res. Geol. _____ Qualifications 2.1798

Previous Surveys

File No.	Type	Date	Claim Holder

L.O.

TOTAL CLAIMS _____

OFFICE USE ONLY

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 _____

MAGNETIC

Instrument _____

Accuracy -- Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____

Method Time Domain Frequency Domain

Parameters -- On time _____ Frequency _____

-- Off time _____ Range _____

-- Delay time _____

-- Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

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) Magnetic and Electromagnetic

Instrument(s) Sonotek P.M.H. 5010 Proton Magnetometer and Mark VI Input (R) Airborne EM System

Accuracy Magnetic ± 1 Gamma (specify for each type of survey)
E.M. approximately 50 p.p.m. (specify for each type of survey)

Aircraft used Norman Britten Trislander

Sensor altitude 150 feet

Navigation and flight path recovery method Navigation Using Semi-controlled mosaic, flight path recovery by comparing 35mm. film negatives with the mosaic to locate fiducial points

Aircraft altitude 400 feet Line Spacing 660 feet

Miles flown over total area 2000 miles Over claims only 60 miles

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 _____

P-528179	P-528235	P-528255	P-528275
P-528180	P-528236	P-528256	P-528276
P-528181	P-528237	P-528257	P-528277
P-528182	P-528238	P-528258	P-528278
P-528183	P-528239	P-528259	P-528279
P-528184	P-528240	P-528260	P-528280
P-528185	P-528241	P-528261	P-528281
P-528186		P-528262	P-528282
P-528187		P-528263	P-528283
P-528188		P-528264	P-528284
P-528189		P-528265	P-528285
P-528190		P-528266	P-528286
P-528191		P-528267	P-528287
P-528192		P-528268	P-528288
P-528193		P-528269	P-528289
P-528194		P-528270	P-528290
P-528195		P-528271	P-528291
P-528196		P-528272	P-528292
P-528197			P-528293
P-528198			P-528294
P-528199			P-528295
P-528200			P-528296
P-528201			P-528297
P-528202			P-528298
P-528203			P-528299
P-528204			P-528300
P-528205			P-528301
P-528206			P-528302
P-528207			P-528303
P-528208			P-528304
			P-528305
			P-528306
			P-528307
			P-528308
			P-528309
			P-528310
			P-528311
			P-528312
			P-528313

TOTAL NUMBER OF CLAIMS 121