TEXASGULF

REPORT ON GEOPHYSICAL WORK

BRISTOL TOWNSHIP

N.T.S.: 42-A-5/6

CLAIMS:

ALLERSTON OPTION:

P-451027 - 034; P-451529 - 533
P-451541 - 548; P-480308 - 313
P-480315 - 318;
P-451399 - 400; P-479504 - 508; P-479715
P-517082 - 087; P-522040 - 043; P-525965

BRISTOL 66:

P-528155 - 163; P-528170 - 175;
P-528186 - 208

OCTOBER, 1981

W. A. GASTEIGER

TEXASGULF CANADA LTD.

REPORT ON GEOPHYSICAL WORK

BRISTOL TOWNSHIP

N.T.S.: 42-A-5/6

INTRODUCTION

During May 1981, a combined airborne electromagnetic and magnetic survey was flown by Texasgulf Inc. over a number of Townships west of Timmins. Two contiguous groups of claims situated in northern Bristol Township were traversed by both east-west and north-south flight lines. One group, the Allerston Option contains 81 claims; the Bristol 66 claim group, wholly owned by Texasgulf Canada Ltd., contains 38 contiguous claims.

Access to the claim groups can be achieved by a four-wheel drive vehicle at most times of the year.

SURVEY DETAILS:

Flight lines traversed the claims in both north-south and east-west orientations. Line spacing in both directions 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:

Only the east-west flying has been filed for this property as the north-south survey was filed previously. As with the north-south flying, this survey indicates a conductive zone on the southern edge of the property trending from the south-west to

the north-east. This zone is of moderate conductivity and appears to be lying on the contact between higher magnetic susceptibility rocks to the north (probably mafic volcanics) and lower susceptibility sediments or felsic volcanics to the south.

The magnetic pattern shows two major trends on this property; the north-south trends due to diabase dikes and the more or less east-west trends due to the volcanic stratigraphy.

ALLERSTON OPTION:

Both the north-south and east-west flying are filed for this block; however, the east-west flying extends only over the north half of the claim group.

A great deal of previous work has been done on this property including ground geophysics, geochemistry trenching, overburden drilling, and diamond drilling. There have been hints of gold mineralization but no substantial continuous zones have been detected.

The conductive zone dectected on Bristol 66 extends into the eastern end of this claim block. No other conductors were detected. The magnetic pattern is dominated by north-south trending diabase dikes. The government geologic mapping indicates that a major geologic break runs east-west through this property. The airborne magnetics shows no obvious indication of such a structure.

CONCLUSIONS AND RECOMMENDATIONS:

Low values of gold mineralization in trenching and drilling, especially on the Allerston property suggests favourable conditions for the discovery of gold deposits. A program of overburden drilling to detect geochemical indications in basal till samples may be helpful in locating the source areas of gold deposits.

Will Gasteiger

WILL GASTEIGER

APPENDIX

EQUIPMENT

The aircraft is equipped with a Mark VI INPUT (R) airborne E.M. system and Sonotek P.M.H. 5010 Proton Magnetometer. Radar altimeters are used for vertical control. The outputs of these instruments together with fiducial timing marks are recorded by means of galvanometer type recorders using light sensitive paper. Thirty-five millimeter continuous strip cameras are used to record the actual flight path.

(I) BARRINGER/QUESTOR MARK VI INPUT (R) SYSTEM

The Induced Pulse Transient (INPUT) system is particularly well suited to the problems of overburden penetration. Currents are induced into the ground by means of a pulsed primary electromagnetic field which is generated in a transmitting loop around the aircraft. By using half sine wave current pulses and a loop of large turns-area, the high output power needed for deep penetration is achieved.

The induced current in a conductor produces a secondary electromagnetic field which is detected and measured after the termination of each primary pulse. Detection is accomplished by means of a receiving coil towed behind the aircraft on four hundred feet of cable,

and the received signal is processed and recorded by equipment in the aircraft. Since the measurements are in the time domain rather than the frequency domain common to continuous wave systems, interference effects of the primary transmitted field are eliminated. The secondary field is in the form of a decaying voltage transient originating in time at the termination of the transmitted pulse. The amplitude of the transient is, of course, proportional to the amount of current induced into the conductor and, in turn, this current is proportional to the dimensions, the conductivity and the depth beneath the aircraft.

The rate of decay of the transient is inversely proportional to conductivity. By sampling the decay curve at six different time intervals, and recording the amplitude of each sample, an estimate of the relative conductivity can be obtained. By this means, it is possible to discriminate between the effects due to conductive near-surface materials such as swamps and lake bottom silts, and those due to genuine bedrock sources. The transients due to strong conductors such as sulphides exhibit long decay curves and are therefore commonly recorded on all six channels. Sheet-like surface materials, on the other hand, have short decay curves and will normally only show a response in the first two or three channels.

The samples, or gates, are positioned at 310, 490, 760, 1120, 1570 and 2110 micro-seconds after the cessation of the pulse. The widths of the gates are 180, 180, 360, 360, 540, and 540 micro-seconds respectively.

For homogeneous conditions, the transient decay will be exponential and the time constant of decay is equal to the time difference at two successive sampling points divided by the log ratio of the amplitudes at these points.

(II) SONOTEK P.M.H. 5010 PROTON MAGNETOMETER

The magnetometers which measure the total magnetic field have a sensitivity of 1 gamma and a range from 20,000 gammas to 100,000 gammas.

Because of the high intensity field produced by the INPUT transmitter, the magnetometer results are recorded on a time-sharing basis. The magnetometer head is energized while the transmitter is on, but the read-out is obtained during a short period when the transmitter is off. Using this technique, the head is energized for 0.83 seconds while the precession frequency is being recorded and converted to gammas. Thus a magnetic reading is taken every 1.13 second.

For this survey, a lag factor has been applied to the data. Magnetic data recorded on the analogue records at fiducial 10.00 for example would be plotted at fiducial 9.95 on the mosaics.

DATA PRESENTATION

The symbols used to designate the anomalies are shown in the legend on each map sheet, and the anomalies on each line are lettered in alphabetical order in the direction of flight. Their locations are plotted with reference to the fiducial numbers on the analog record.

A sample record is included to indicate the method used for correcting the position of the E.M. Bird and to identify the parameters that are recorded.

All the anomaly locations, magnetic correlations, conductivity-thickness values and the amplitudes of channel number 2 are listed on the data sheets accompanying the final maps.

GENERAL INTERPRETATION

The INPUT system will respond to conductive overburden and near-surface horizontal conducting layers in addition to bedrock conductors. Differentiation is based on the rate of transient decay, magnetic correlation and the anomaly shape together with the conductor pattern and topography.

Power lines sometimes produce spurious anomalies but these can be identified by reference to the monitor channel.

Railroad and pipeline responses are recognized by studying the film strips.

Graphite or carbonaceous material exhibits a wide range of conductivity. When long conductors without magnetic correlation are located on or parallel to known faults or photographic linears, graphite is most likely the cause.

Contact zones can often be predicted when anomaly trends coincide with the lines of maximum gradient along a flanking magnetic anomaly. It is unfortunate that graphite can also occur as relatively short conductors and produce attractive looking anomalies. With no other information than the airborne results, these must be examined on the ground.

Serpentinized peridotites often produce anomalies with a character that is fairly easy to recognize. The conductivity which is probably caused in part by magnetite, is fairly low so that the anomalies often have fairly large response on channel #1; they decay rapidly, and they have strong magnetic correlation. INPUT E.M. anomalies over massive magnetites show a relationship to the total Fe content. Below 25 - 30%, very little or no response at all is obtained, but as the percentage increases the anomalies become quite strong with a characteristic rate of decay which is usually greater than that produced by massive sulphides.

Commercial sulphide ore bodies are rare, and those that respond to airborne survey methods usually have medium to high conductivity. Limited lateral dimensions are to be expected and many have magnetic correlation caused by magnetite or pyrrhotite. Provided that the ore bodies do not occur within formational conductive zones as mentioned above, the anomalies caused by them will usually be recognized on an E.M. map as priority targets.

December 14, 1981 2.4323

Office of the Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for an Airborne Geophysical (Electromagnetic and Magnetometer) Survey on Mining Claims P.451027 et al, in the Township of Bristol.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

J. Skura/bk

cc: Texasgulf Canada Ltd.
Timmins, Ontario
Attention: W.A. Gastieger

Ontario

Ministry of Natural Resources

File _____

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) Geophysical (Airborne)

Township or Area Bristol Township

Claim Holder(s) Texasgulf Canada Ltd.

P.O. Box 1140, Timmins, Ontario P4N 7H9

Survey Company Questor Surveys

Author of Report W. A. Gastieger

Address of Author P.O. Box 1140, Timmins, Ontario P4N 7H9

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

Total Miles of Line Cut _____

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

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

Magnetometer 40 Electromagnetic 40 Radiometric _____
(enter days per claim)

DATE: Nov. 18/81 SIGNATURE: Wil Gastieger
Author of Report or Agent

Res. Geol. _____ Qualifications 2.1798

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	451027
P	451028
P	451029
P	451030
P	451031
P	451032
P	451033
P	451034
P	451541
P	451542
P	451543
P	451544
P	451545
P	451546
P	451547
P	451548
P	451529
P	451530
P	451531
P	451532
P	451533

(See Attached List)

TOTAL CLAIMS 81

If space insufficient, attach list

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) Mag: Sonotek P.M.H. 5010 Proton Magnetometer

(specify for each type of survey) E.M. Barringer (Questor Mark III

Accuracy Mag: ± 1 gamma E.M.: 30 p.p.m. Input (R) System

(specify for each type of survey)

Aircraft used Britten-Norman Trislander

Sensor altitude ≃ 45 metres above ground

Navigation and flight path recovery method S-pattern flight path using ½ mile turns. Recovery accomplished by comparison of 35mm film with mosiac to locate fiducial points.

Aircraft altitude 122 metres Line Spacing 200 metres

Miles flown over total area 3605 miles Over claims only ≃ 80 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-451399
P-451400
P-479504
P-479505
P-479506
P-479507
P-479508
P-479715
P-480315
P-480316
P-480317
P-480318
P-517082
P-517083
P-517084
P-517085
P-517086
P-517087

P-522040
P-522041
P-522042
P-522043
P-525965
P-480308
P-480309
P-480310
P-480311
P-480312
P-480313

Bristol

P-528155
P-528156
P-528157
P-528158
P-528159
P-528160
P-528161
P-528162
P-528163
P-528170
P-528171
P-528172
P-528173
P-528174
P-528175
P-528186
P-528187
P-528188
P-528189
P-528190
P-528191
P-528192
P-528193
P-528194
P-528195
P-528196
P-528197
P-528198
P-528199
P-528200

P-528201
P-528202
P-528203
P-528204
P-528205
P-528206
P-528207
P-528208

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

The Mining Act

#429 2.4323 2.4323

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
Airborne Geophysical	Bristol

Claim Holder(s)	Prospector's Licence No.
Texasgulf Canada Ltd.	T-1

Survey Company	Survey Dates (linecutting to office)	Total Miles of line Cut
Questor Surveys	01 06 80 (Day Mo. Yr.) 07 10 81 (Day Mo. Yr.)	

Name and Address of Author (of Geo-Technical report)
W. A. Gasteiger, P.O. Box 1140, 571 Moneta Ave., Timmins, Ontario P4N 7H9

Special Provisions Credits Requested

Instructions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Man Days

Instructions		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

RECEIVED NOV - 2 1981 MINING LANDS SECTION

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed: Airborne Mag and E.M.

Performed on Claim(s): ALL

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

RECORDED OCT 15 1981 PORCUPINE MINING DIVISION

Report Completed: Oct. 6/81

Date of Report: Oct. 6/81

Recorded Holder or Agent (Signature): Receipt Mail... Bill Gasteiger

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	479503 (E.M.)	18
	451027 (E.M.)	40
	451028 (E.M.)	40
	451029 (E.M.)	40
	451030 (E.M.)	40
	451031 (E.M.)	40
	451032 (E.M.)	40
	451033 (E.M.)	40
	451034 (E.M.)	40
	480308 (E.M.)	40
	480309 (E.M.)	40
	480310 (E.M.)	40
	480311 (E.M.)	40
	480312 (E.M.)	40
	480313 (E.M.)	40
	480315 (E.M.)	40
	480316 (E.M.)	40
	480317 (E.M.)	40
	480318 (E.M.)	18
	451541 (E.M.)	18
	451542 (E.M.)	18
	451543 (E.M.)	18
	451544 (E.M.)	18
	451545 (E.M.)	18
	451546 (E.M.)	18

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	451547 (E.M.)	18
	517082 (E.M.)	80
	517083 (E.M.)	80
	517084 (E.M.)	80
	517085 (E.M.)	80
	517086 (E.M.)	80
	517087 (E.M.)	80
	451548 (E.M.)	18
	453999 (E.M.)	18
	454000 (E.M.)	18
	479504 (E.M.)	18
	479505 (E.M.)	18
	479506 (E.M.)	18
	479507 (E.M.)	40
	479508 (E.M.)	40
	479715 (E.M.)	40
	522040 (E.M.)	80
	522041 (E.M.)	80
	522042 (E.M.)	80
	522043 (E.M.)	80
	525965 (E.M.)	80
	451529 (E.M.)	40
	451530 (E.M.)	40
	451531 (E.M.)	18
	451532 (E.M.)	18
	451533 (E.M.)	18

Total number of mining claims covered by this report of work: 51

For Office Use Only

Total Days Cr. Recorded: 2084

Date Recorded: RECEIVED Oct 15/81

Mining Recorder

Date Approved as Recorded: 81.01.25

Branch Director

Certification Verifying Report of Work

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
W.A. Gasteiger
571 Moneta Ave., P.O. Box 1140, Timmins, Ontario

Date Certified: Oct. 6/81

Certified by (Signature): Bill Gasteiger

1362 (81/2)

Bristol Twp.

P 528155

Ministry of Natural Resources

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

#427

The Mining Act 2.4323

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
Airborne Geophysical	Bristol
Claim Holder(s)	**Prospector's Licence No.**
Texasgulf Canada Ltd.	T-1
Survey Company	**Survey Dates (linecutting to office)** Day / Mo. / Yr. — Day / Mo. / Yr.	**Total Miles of line Cut**
Questor Surveys	01 / 06 / 81 — 13 / 10 / 81	
Name and Address of Author (of Geo-Technical report)		
W.A. Gasteiger, P.O. Box 1140, 571 Moneta Ave., Timmins, Ontario P4N 7H9		

Special Provisions Credits Requested

Instructions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Man Days

Instructions		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.	Airborne	Days per Claim
	Electromagnetic (EM)	20
	Magnetometer (Mag)	20
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits — Total Expenditures $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Receipt No.

RECEIVED
OCT 13 1981
TIMMINS, ONTARIO
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

RECORDED
OCT 15 1981

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	528155	40
	528156	40
	528157	40
	528158	40
	528159	40
	528160	40
	528161	40
	528162	40
	528163	40
	528170	40
	528171	40
	528172	40
	528173	40
	528174	40
	528175	40
	528186	40
	528187	40
	528188	40
	528189	40
	528190	40
	528191	40
	528192	40
	528193	40
	528194	40
	528195	40

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	528196	40
	528197	40
	528198	40
	528199	40
	528200	40
	528201	40
	528202	40
	528203	40
	528204	40
	528205	40
	528206	40
	528207	40
	528208	40

RECEIVED
OCT 2 2 1981
MINING LANDS SECTION

Total number of mining claims covered by this report of work. 38

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1520	Oct 15/81	
	Date Approved as Recorded	Provincial Director
	83.01.25	

Report Completed

Date of Report	Recorded Holder or Agent (Signature)
Oct. 13/81	

Certification Verifying Report of Work

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

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

Date Certified	Certified by (Signature)
Oct. 13/81	

1362 (81/2)

Ministry of Natural Resources
Ontario

Geotechnical Report Approval

File 2.4323

Mining Lands Comments

[x] To: Geophysics Mr Barlow.

Comments

[x] Approved [ ] Wish to see again with corrections | Date Jan 4/83 | Signature

[ ] To: Geology - Expenditures

Comments

[ ] Approved [ ] Wish to see again with corrections | Date | Signature

[ ] To: Geochemistry

Comments

[ ] Approved [ ] Wish to see again with corrections | Date | Signature

[ ] To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1593 (81/10)

2.4323

Ontario Approval

Mining Lands Comments

☑ To: Geophysics Mr. Barlow.

Comments

- Key map needed
- Locate claim posts or other topographic features

☐ Approved ☑ Wish to see again with corrections | Date Oct 30/82 | Signature

☐ To: Geology - Expenditures

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Geochemistry

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1295 (81/10)

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

The Mining Act

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
Airborne Geophysical	Bristol

Claim Holder(s)	Prospector's Licence No.
Texasgulf Canada Ltd.	T-1

Survey Company	Survey Dates (linecutting to office)	Total Miles of line Cut
Questor Surveys	01 (Day) 06 (Mo.) 80 (Yr.) to 07 (Day) 10 (Mo.) 81 (Yr.)	

Name and Address of Author (of Geo-Technical report)
W. A. Gasteiger, P.O. Box 1140, 571 Moneta Ave., Timmins, Ontario P4N 7H9

Special Provisions Credits Requested

Instructions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days

Instructions		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

RECEIVED NOV - 2 1981 MINING LANDS SECTION

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	40
	Magnetometer	40
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed
Airborne Mag and E.M.

Performed on Claim(s)
ALL

Calculation of Expenditure Days Credits

Total Expenditures			Total Days Credits
$	÷ 15	=	

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

RECORDED OCT 15 1981 PORCUPINE MINING DIVISION

Report Completed OCT 15 1981

Date of Report	Recorded Holder or Agent (Signature)
Oct. 6/81	Receipt No. 2084 Neil Gasteiger

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	479503	18
	451027	40
	451028	40
	451029	40
	451030	40
	451031	40
	451032	40
	451033	40
	451034	40
	480308	40
	480309	40
	480310	40
	480311	40
	480312	40
	480313	40
	480315	40
	480316	40
	480317	40
	480318	18
	451541	18
	451542	18
	451543	18
	451544	18
	451545	18
	451546	18

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	451547	18
	517082	80
	517083	80
	517084	80
	517085	80
	517086	80
	517087	80
	451548	18
	453999	18
	454000	18
	479504	18
	479505	18
	479506	18
	479507	40
	479508	40
	479715	40
	522040	80
	522041	80
	522042	80
	522043	80
	525965	80
	451529	40
	451530	40
	451531	18
	451532	18
	451533	18

Total number of mining claims covered by this report of work: 51

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
2084	RECEIVED Oct 15/81	
	Date Approved as Recorded: OCT 07 1981	Regional/Branch Director

AM 7 8 9 10 11 12 1 2 3 4 5 PM

Certification Verifying Report of Work

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
W.A. Gasteiger
571 Moneta Ave., P.O. Box 1140, Timmins, Ontario

Date Certified: Oct. 6/81

Certified by (Signature): Neil Gasteiger

1362 (81/2)

Ministry of Natural Resources — Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

#427

The Mining Act

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
Airborne Geophysical	Bristol

Claim Holder(s)	Prospector's Licence No.
Texasgulf Canada Ltd.	T-]

Survey Company	Survey Dates (linecutting to office)	Total Miles of line Cut
Questor Surveys	01 06 81 (Day Mo. Yr.) 13 10 81 (Day Mo. Yr.)	

Name and Address of Author (of Geo-Technical report)
W.A. Gasteiger, P.O. Box 1140, 571 Moneta Ave., Timmins, Ontario P4N 7H9

Special Provisions Credits Requested

Instructions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Man Days

Instructions		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
Airborne	Electromagnetic (EM)	20
	Magnetometer (Mag)	20
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits — Total Expenditures $ ____ ÷ 15 = ____ Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

RECEIVED
PORCUPINE MINING DIVISION
OCT 15 1981
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

RECORDED
OCT 15 1981
Receipt No. ____

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	528155	40
	528156	40
	528157	40
	528158	40
	528159	40
	528160	40
	528161	40
	528162	40
	528163	40
	528170	40
	528171	40
	528172	40
	528173	40
	528174	40
	528175	40
	528186	40
	528187	40
	528188	40
	528189	40
	528190	40
	528191	40
	528192	40
	528193	40
	528194	40
	528195	40

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	528196	40
	528197	40
	528198	40
	528199	40
	528200	40
	528201	40
	528202	40
	528203	40
	528204	40
	528205	40
	528206	40
	528207	40
	528208	40

RECEIVED
OCT 2 2 1981
MINING LANDS SECTION

Total number of mining claims covered by this report of work. 38

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1520	Oct 15/81	
	Date Approved as Recorded	Regional/Branch Director

Report Completed

Date of Report	Recorded Holder or Agent (Signature)
Oct. 13/81	

Certification Verifying Report of Work

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

Date Certified	Certified by (Signature)
22 13/81	

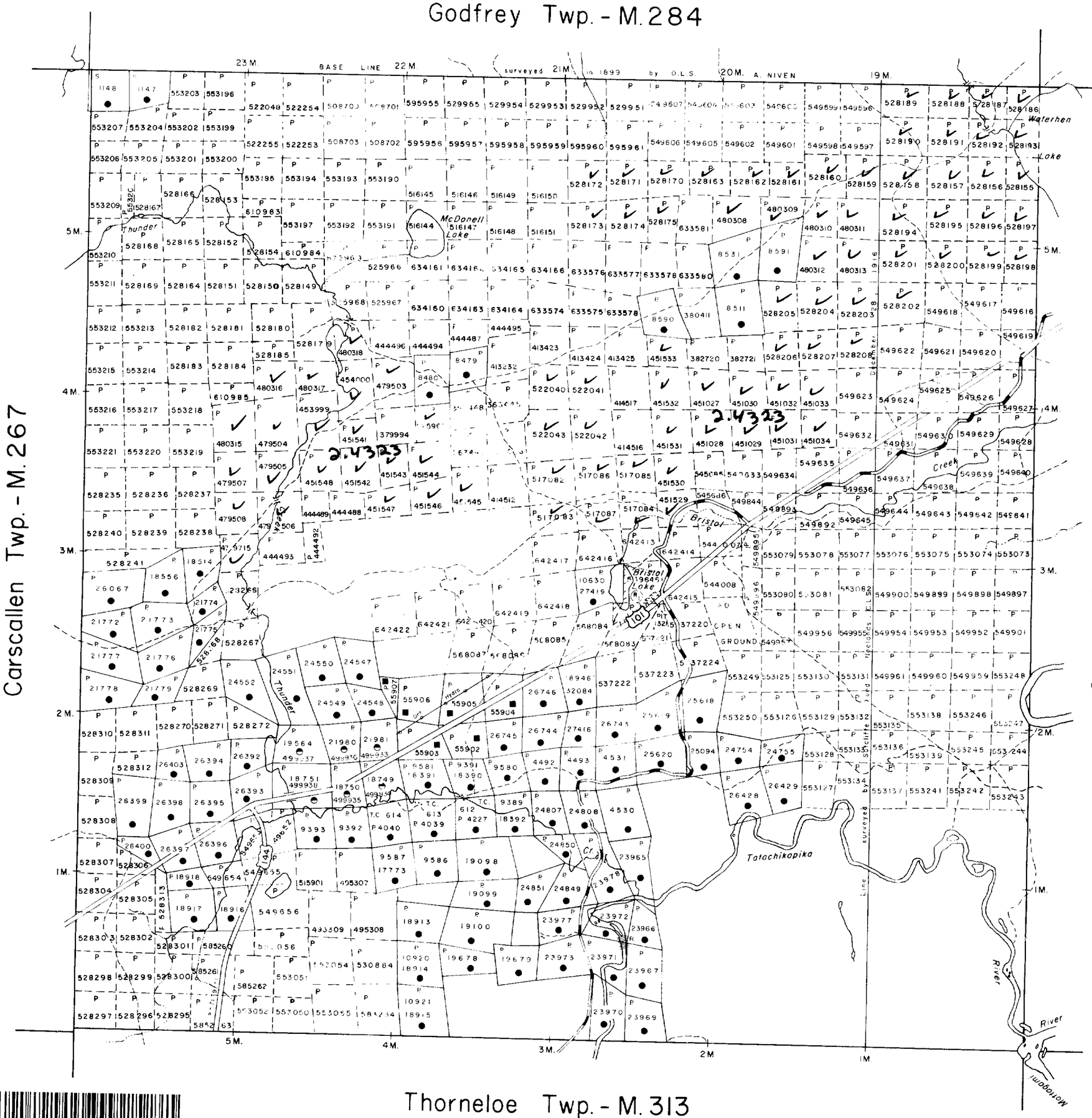
1362 (81/2)

Godfrey Twp. - M.284

Carscallen Twp. - M.267

Ogden Twp. - M.305

Thorneloe Twp. - M.313



THE TOWNSHIP OF

BRISTOL

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

DISPOSITION OF CROWN LANDS

PATENT,	SURFACE AND MINING RIGHTS	●
" ,	SURFACE RIGHTS ONLY	◒
" ,	MINING RIGHTS ONLY	◓
LEASE,	SURFACE AND MINING RIGHTS	■
" ,	SURFACE RIGHTS ONLY	◪
" ,	MINING RIGHTS ONLY	◩
LICENCE OF OCCUPATION		▼

ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	⚒
CANCELLED	C.

NOTES

400' Surface Rights Reservation along the shores of all lakes & rivers

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition
(R)	164584		Surface Rights Only.

DATE OF ISSUE
DEC - 6 1982
Ministry of Natural Resources
TORONTO

This township lies within the Municipality of the CITY of TIMMINS.

PLAN NO. M-264

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

42A06NW8486 2.4323 BRISTOL

ALLERSTON OPTION

LEGEND

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

Anomaly letter $\frac{B}{\oplus}{}^{b}$ — Apparent conductivity

10 Gamma Contour Line

50 Gamma Contour Line

500 Gamma Contour Line

Magnetic Depression

Flight Altitude 120 m Above Terrain

Mean Flight Line Spacing 200 m

TEXASGULF Inc.

Minerals Exploration Division — Timmins, Ontario

ALLERSTON OPTION

BRISTOL Twp.

AIRBORNE GEOPHYSICS

N-S LINES

SCALE: 1:15840

Date: October 1981	Survey by: Questor Survey
Drawn by: Gaboury	N.T.S.: 42-A-5/6

BRISTOL 66

ALLERSTON OPTION

TOWNSHIP 66

LEGEND

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

Anomaly letter — Apparent conductivity-width

10 Gamma Contour Line

50 Gamma Contour Line

500 Gamma Contour Line

Magnetic Depression

Flight Altitude 120 m Above Terrain

Mean Flight Line Spacing 200 m

TEXASGULF Inc.

Minerals Exploration Division — Timmins, Ontario

ALLERSTON OPTION

BRISTOL Twp.

AIRBORNE GEOPHYSICS

E-W LINES

SCALE: 1:15840

Date: October 1981	Survey by: Questor Survey
Drawn by: Gaboury	N.T.S.: 42-A-5/6