

42A05NE8462 2.9436 BRISTOL

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### GEOPHYSICAL REPORT

BRISTOL TOWNSHIP Northwest Quadrant

FOR

RALPH ALLERSTON

# RECEIVED

UCT U 1 1986

MINING LANDS SECTION

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Prepared by:

مت أ

John C. Grant, CET, AFGAC EXSICS EXPLORATION LIMITED May 14, 1986



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TECHNICAL DATA STATEMENT

## p. 1

#### INTRODUCTION

The block of claims under discussion forms one contiguous group consisting of 8 unpatented mining claims.

The claim block is located in the Northwest corner of Bristol Township, District of Cochrane, Porcupine Mining Division, Northeastern Ontario. (Figures 1,2).

The claims numbers are as follows:

| LOCATION         | CLAIM NUMBER |
|------------------|--------------|
| Bristol Township | 725351       |
| "                | 725352       |
| "                | 725353       |
|                  | 725354       |
| "                | 725355       |
| 11               | 725356       |
| 11               | 725357       |
| 11               | 725358       |
|                  |              |

(refer to Claim Group Sketch, Figure 3)





|        |             |        | an a |        | p.4  |
|--------|-------------|--------|--|--------|--|
|        |             |        |  |        |  |
|        |             |        |  |        |  |
|        |             | Godf   | rey Twp                                  |        |  |
|        | 23M         | Toursh | ip Line                                  | T      | 22.M   |
|        | 72.53 58    | 725355 | 725354                                   | 725351 |  |
|        | 725357      | 725356 | 725353                                   | 725352 |  |
|        |             | Bristo | ,1 Twp.                                  |        |  |
|        |             |        |  |        |  |
|        |             |        |  |        |  |
|        | ·           |        |  |        | R. ALLERSTON                                     |
| FXSICS | ΓΧΡΙ ΠΡΔΤΙΓ |        | n.                                       |        | FIGURE 3<br>CLAIM BLOCK<br>SCALE: 1 inch=1/4 mil |

#### LOCATION

The property is located 13 miles West, Southwest of the city of Timmins.

More specifically it is situated such that the Northwest corner of the block is 1 mile East of the corner posts of Bristol, Godfrey, Turnbull and Carscallen Townships, and the North boundary of the block follows Malletts Lumber road which also represents the township line between Bristol and Godfrey Township.

#### ACCESS

Access to the property is ideal. If one travels West from the City of Timmins along Highway 101 to Mallette's Lumber operation and then West along their lumber road, constructed along the township line between Ogden and Mountjoy and Bristol and Godfrey, for approximately 6 miles, you will reach the Northeast corner of the block. (refer to sketches 2 & 3).

#### LINECUTTING PROGRAM

A detailed grid was established to cover the entire claim block. A baseline was established at 250 and cut from L0+00 to L5400' West. Cross lines were turned off at 400' intervals from L0+00 to L5400W and cut to the North and South boundaries of the claim group. All of the cross lines and baseline were chained and picketed at 100' intervals. A total of 8 miles of grid and baselines were cut. (refer to figure 4).



#### GEOPHYSICAL PROGRAM

Exsics Exploration Limited was contracted to perform detailed magnetic and EM-MaxMin II surveys over the entire grid. All of the grid lines were read at 100' intervals.

#### SURVEY PROCEDURES

#### Magnetometer Survey

The magnetic survey was completed on 8 miles of grid lines using a Scintrex, MP-2, portable proton magnetometer. A total of 465 readings were collected.

This collected data was then plotted on a base map using a scale of 1" to 200' and contoured at 50 and 100 gamma intervals wherever possible. For convenience in plotting the magnetic data, a base level of 58,000 gammas was removed from all the readings. This base map can be found in the back packet of this report.

The specifications for the Scintrex, MP-2, Proton Magnetometer can be found as Appendix A of this report.

#### EM Survey

The EM survey was completed over the entire grid using the MaxMin II, Horizontal loop, system, manufactured by Apex.

A coil seperation of 410 feet was used and the two frequencies recorded were the  $1777H_Z$  and  $444H_Z$ .

The collected data was then plotted on two base maps, one map for the 1777Hz frequency and one map for the 444Hz frequency. A scale of 1" to 20% was used in plotting the values. These base maps can be found in the back packet of this report. Specifications of the MaxMinII system can be found as Appendix B of this report.

#### SURVEY RESULTS

The magnetic data was successful in locating and detailing the diabase dike, noted on the geology map, figure  $5^1$ , which parallels Line 3800W of the survey grid.

Another area of interest is located Southwest of the dike betweeen lines 3800W and 5000W. The Southern flank of this magnetic feature may in fact represent the geological contact between the intrusive quartz-porphyry and the felsic volcanics. Also of interest in this feature is the isolated lows North of the baseline between lines 5000W and 4600W, which may relate to a possible alteration zone.

Another area of interest is located, paralleling the baseline between lines 1800W to 600W.

This feature possibly relates to the volcanic outcrops coming out of the swamp in the area. The outcrops are mapped as massive lavas flows.

The MaxMin surveys outlined two questionable responses, generally noted only on the 1777Hz or high frequency channel.

The weak 400' zone between lines 1000W and 1400W may relate to topography. Interpretations show a weak 3 - 3.5 mho source at a depth of 200 - 220 feet.

A second single line response was noted on L2600W, 100' South of the baseline. Interpretations show a 7 mho response at a 200' depth.

There does not appear to be any definite magnetic correlation with either response.

<sup>1</sup>Bristol Township, Map No. 1957-7, scale 1" to 1000'.





### RECOMMENDATIONS AND CONCLUSIONS

Although the EM response was discouraging, the magnetics show at least two areas of interest. Both of these areas should have detailed, geological surveys done to determine if the magnetic lows are related to alteration zones.

If these alteration zones are encountered, stripping and trenching may be considered.

#### CERTIFICATE

- I, John C. Grant, hereby certify that:
- 1) I am a graduate geophysicist (1975) of the three year program in Geological Technology at Cambrian College of Applied Arts and Technology, Sudbury Campus. I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited, (5 years), North Bay Office, and as exploration manager and Geophysicist for Exsics Exploration Limited, from 1980 to the present.
- 2) I am a Member of the Certified Engineering Technologist Association since 1984.
- 3) I am an Associate Member of the Geological Association of Canada.
- 4) I have been actively engaged in my profession for the last eleven (11) years, including all aspects of exploration studies, surveys and interpretations.
- 5) I have no specific or special interest in the described property. I have been retained as a Consulting Geophysicist for property appraisal.

John Charles Grant, CET, AFGAC, Consulting Geophisicist Exsics Exploration Limited.



# Proton Precession Magnetometer for Portable or Base Station Use

# MP - 2features < 1 gamma sensitivity and accuracy over range of 20,000 to 100,000 gammas. Operates in very high gradients, to 5000 gammas per metre. Ultra small size and weight. Up to 25,000 readings from only 8 D cells. **Battery** pack isolated from electronics for corrosion protection. Battery pack easily extended for winter USO. Light-emitting diode digital display. with complete test feature. Unique no-glare polarized reflector permits easy reading in bright sunlight. Indicator light warning of excessive gradient, ambient noise or electronic failure. Digital readout of battery voltage. ≻ Rugged all metal housing for rough field use at all temperatures. Automatic recycling or external trigger features permit ready conversion to base station use. Short reading time. Broad operating temperature range.

SCINTREX

earth science division

The MP-2 is a portable one gamma proton precession magnetometer for field survey or base station use. The optimized design of sensor and circuitry using the latest CMOS components has resulted in a very light weight, low power consumption, rugged and reliable magnetometer.

Light emitting diodes coupled with an ingenious optically polarized reflector combine solid state reliability with easy reading even in bright sunlight.

A standard automatic recycling feature allows ready use of the MP-2, with suitable (optional) interfacing, as a base station recorder in analogue or ditigal form. Alternatively, a remote trigger can be used.

The noise-cancelling dual-coll sensor and electronics have been so designed as to effectively eliminate reading problems due to virtually all magnetic gradients which may be encountered in field survey conditions.



# TECHNICAL DESCRIPTION OF MP-2 MAGNETOMETER



| RESOLUTION                   | 1 Gamma.  |
|------------------------------|---|
| TOTAL FIELD ACCURACY         | ± 1 Gamma over full operating range.  |
| RANGE                        | 20,000 to 100,000 gammas in 25 overlapping steps.   |
| INTERNAL MEASURING PROGRAMME | Single reading — 3.7 seconds. Recyc.<br>feature permits automatic repetitive readings<br>3.7 seconds intervals.   |
| EXTERNAL TRIGGER             | External trigger input permits use of sampling intervals longer than 3.7 seconds.   |
| DISPLAY                      | 5 digit LED (Light Emitting Diode) readout dis-<br>playing total magnetic field in gammas or nor-<br>malized battery voltage.   |
| RECORDER OUTPUT (Optional)   | Multiplied precession frequency and gate time<br>outputs for interfacing with incremental tape<br>recorders (eg. Increlogger) for digital recor-<br>ding. As an additional option a digital to<br>analogue convertor is available for use with<br>analogue recorders. |
| GRADIENT TOLERANCE           | Up to 5000 gammas/metre.  |
| POWER SOURCE                 | 8 alkaline "D" cells provice up to 25,000<br>readings at 25° C under reasonable<br>signal/noise conditions (less at lower<br>temperatures). Premium carbon-zinc cells<br>provide about 40% of this number.  |
| SENSOR                       | Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.   |
| HARNESS                      | Complete for operation with staff or back pack sensor.  |
| OPERATING TEMPERATURE TANGE  | -35°C to +60°C.   |
| SIZE                         | Console, with batteries: 80 x 160 x 250mm.<br>Sensor: 80 x 150mm.<br>Staff: 30 x 1550mm. (extended)<br>30 x 600 mm. (collapsed)   |
| WEIGHTS                      | Console, with batteries: 1.8kg.<br>Sensor: 1.3kg.<br>Staff: 0.6kg.  |
|                              | SCINTREX LIMITED<br>222 Snidercroft Road,<br>Concord, Ontario, Canada L4K 1B5<br>ICLEMPONE (416) 669-2209, TELEX 66-964570  |



MAXMIN II PORTABLE EM

- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coll separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- \* Reliable data from depths of up to 180m (600 ft).
- Built-in voice communication circuitry with cable.
- a Tilt meters to control coll orientation.





Cables: APEXPARA TORONTO

Telex: D6-966773 NORDVIK TOR



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.

| Township or Area Bristol 'l'ownship                                   | MINING CLAIMS TRAVERSED |
|---|-------------------------|
| Claim Holder(s).Mr. Ralph E. Allerston                                | List numerically        |
| 543 Pine Street, North,   | Timmins,Ont.            |
| Survey Company Exsics Exploration Lim                                 | L                       |
| Author of Report John C. Grant  |                         |
| Address of Author P.O.Box 1880, Timmins                               | , Ontario               |
| Covering Dates of Survey April 16-19/86, M<br>(linecutting to office) | ay 11-12,86             |
| Total Miles of Line Cut8.0 miles                                      |                         |
|   | 725355                  |
| SPECIAL PROVISIONS  | DAVS                    |
| CREDITS REQUESTED Geophysical   | per claim 725356        |
|   | tic 40                  |
| ENTER 40 days (includes Magnetometer                                  | r 20 725259             |
| line cutting) for first   |                         |
| survey. –Radiometric  |                         |
| Additional survey using   |                         |
| same grid.  |                         |
|   |                         |
| AIRBORNE CREDITS (Special provision credits do not apply              | to airborne surveys)    |
| Magnetometer Electromagnetic Radi<br>(enter days per claim)           | ometric                 |
| DATE: May 14, 1986 SIGNATURE:   | Report or Agent         |
| V   |                         |
| Res. GeolQualifications   |                         |
| Previous Surveys  |                         |
| File No. Type Date Claim H  | older                   |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
|   | <u> </u>                |
|   | TOTAL CLAIMS8           |

837 (5/79)

OF T US NLY

# GEOPHYSICAL TECHNICAL DATA

| <u>(</u> | GROUND SURVEYS - If more than one survey, specify data for e  | ach type of survey                     | y 🔴                                    |  |  |  |  |  |  |  |  |  |
|----------|---|--|--|--|--|--|--|--|--|--|--|--|
| N        | mag. 465<br>Number of Stations <u>MaxMin. 460</u> Number of StationsNumber of StationsN | mber of Readings                       | mag. 465<br>MaxMin. 1840               |  |  |  |  |  |  |  |  |  |
| S        | Station interval <u>100 foot</u> Lin  | e spacing <u>4</u>                     | 00 foot                                |  |  |  |  |  |  |  |  |  |
| P        | Profile scale 1" = 20%  |  |  |  |  |  |  |  |  |  |  |  |
| C        | Contour interval 25, 50, 100 gamma interval   |  |  |  |  |  |  |  |  |  |  |  |
|          |   |  |  |  |  |  |  |  |  |  |  |  |
| r si     | Instrument <u>Scintrex</u> , MP-2 Portable Proton Magnetometer  |  |  |  |  |  |  |  |  |  |  |  |
| Ĭ        | Accuracy – Scale constant <u>± 1 gamma</u>  |  |  |  |  |  |  |  |  |  |  |  |
| NO       | Diurnal correction method <u>loop method</u> , various be   | asestations                            | on the grid                            |  |  |  |  |  |  |  |  |  |
| MA       | Base Station check-in interval (hours)2_hours   |  |  |  |  |  |  |  |  |  |  |  |
|          | Base Station location and value Lefloure / 18   | 001- (58                               | 3800).                                 |  |  |  |  |  |  |  |  |  |
|          |   |  |  |  |  |  |  |  |  |  |  |  |
|          |   |  |  |  |  |  |  |  |  |  |  |  |
| <u>U</u> | Instrument <u>Apex, MaxMin II System</u>  |  |  |  |  |  |  |  |  |  |  |  |
| ETI      | Coil configuration Horizontal Loop  | ······································ |  |  |  |  |  |  |  |  |  |  |
| CON      | Coil separation 150 meter, 410 feet   |  |  |  |  |  |  |  |  |  |  |  |
| MA       | Accuracy $\pm 0.5$ %  |  |  |  |  |  |  |  |  |  |  |  |
| IRO      | Method:   | ack 🛛 In li                            | ne 🖂 Parallel line                     |  |  |  |  |  |  |  |  |  |
| EC       | Frequency 1777 and 444 hz   |  |  |  |  |  |  |  |  |  |  |  |
| E        | (specify V.L.F. sta   | tion}                                  |  |  |  |  |  |  |  |  |  |  |
|          | Parameters measuredInphase and Quadracture  |  |  |  |  |  |  |  |  |  |  |  |
|          | The extension of the  |  |  |  |  |  |  |  |  |  |  |  |
|          | Instrument  |  |  |  |  |  |  |  |  |  |  |  |
| 건        | Scale constant  |  |  |  |  |  |  |  |  |  |  |  |
|          | Corrections made  |  |  |  |  |  |  |  |  |  |  |  |
| GRA      | Description of the section  | ······                                 |  |  |  |  |  |  |  |  |  |  |
| Ú,       | Base station value and location   |  |  |  |  |  |  |  |  |  |  |  |
|          |   |  |  |  |  |  |  |  |  |  |  |  |
|          | Elevation accuracy  |  |  |  |  |  |  |  |  |  |  |  |
|          | To down and   |  |  |  |  |  |  |  |  |  |  |  |
| l        | Instrument  | E Frequency Do                         | omain                                  |  |  |  |  |  |  |  |  |  |
|          | Method I filme Domain   | Erequency in                           | Jinam                                  |  |  |  |  |  |  |  |  |  |
|          | Parameters – On time  | Prequency                              |  |  |  |  |  |  |  |  |  |  |
| X II     | - Off time  |  | ······································ |  |  |  |  |  |  |  |  |  |
| TIV      | - Delay time  |  |  |  |  |  |  |  |  |  |  |  |
| SIS      | - Integration time  |  |  |  |  |  |  |  |  |  |  |  |
| RE       | Power   | <b>.</b>                               |  |  |  |  |  |  |  |  |  |  |
|          | Electrode array   |  |  |  |  |  |  |  |  |  |  |  |
| J        | Electrode spacing   | <u></u>                                |  |  |  |  |  |  |  |  |  |  |
|          | 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,  | aepth 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                             | (v for each type of survey)  |
| Accuracy  | .,                           |
| (speci  | ify for each type of survey) |
| Sensor altitude                                 |                              |
| Newigation and flight both recovery method      |                              |
| wavigation and hight path recovery method       |                              |
| Aircraft altitude                               | Line Spacing                 |
| Miles flown over total area                     | Over claims only             |
| miles nowit over total alea                     |                              |

### **GEOCHEMICAL SURVEY – PROCEDURE RECORD**

Numbers of claims from which samples taken\_\_\_\_\_

.

| Total Number of Samples                       | ANALYTICAL METHODS                       |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|
| Гуре of Sample<br>(Nature of Material)        | Values expressed in: per cent            |  |  |  |  |  |  |  |  |
| Average Sample Weight                         | $$ p. p. m. $\Box$                       |  |  |  |  |  |  |  |  |
| Method of Collection                          | Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle) |  |  |  |  |  |  |  |  |
| Soil Horizon Sampled                          | Others                                   |  |  |  |  |  |  |  |  |
| Horizon Development                           | Field Analysis (tests)                   |  |  |  |  |  |  |  |  |
| Sample Depth                                  | Extraction Method                        |  |  |  |  |  |  |  |  |
| Terrain                                       | Analytical Method                        |  |  |  |  |  |  |  |  |
|   | Reagents Used                            |  |  |  |  |  |  |  |  |
| Drainage Development                          | Field Laboratory Analysis                |  |  |  |  |  |  |  |  |
| Estimated Range of Overburden Thickness       | No. (tests)                              |  |  |  |  |  |  |  |  |
|   | Extraction Method                        |  |  |  |  |  |  |  |  |
|   | Analytical Method                        |  |  |  |  |  |  |  |  |
|   | Reagents Used                            |  |  |  |  |  |  |  |  |
| SAMPLE PREPARATION                            | Commercial Laboratory (tests)            |  |  |  |  |  |  |  |  |
| (Includes drying, screening, crushing, asing) | Name of Laboratory                       |  |  |  |  |  |  |  |  |
| Mesh size of fraction used for analysis       | Extraction Method                        |  |  |  |  |  |  |  |  |
|   | Analytical Method                        |  |  |  |  |  |  |  |  |
|   | Reagents Used                            |  |  |  |  |  |  |  |  |
|   | General                                  |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |
|   | ······                                   |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |

| Ministry of<br>Northern Affairs<br>and Mines                    | Report of Work<br>(Geophysical, Géolog<br>Geochemical and Exp<br><b>301</b> 8.1 | jical,<br>penditures | Minin  | 42A05NE8462 2.9                       | 1436 BRISTOL             |                         |   | 900                     |
|---|---|----------------------|--|---------------------------------------|--------------------------|-------------------------|---|-------------------------|
| Type of Survay(s)   |   |                      |  |                                       | Township o               | or Area                 |   |                         |
| Magnetic an   | nd MaxMin_II  | surve                | eys  |                                       | Bris                     | tol To                  | wnship  |                         |
| <u>Mr. R.E. A</u>   | llerston, 54  | 3.Pine               |  | rth,_Timm                             | ins,Ont                  |                         |   | 4 Mar - L L L L L L L L |
| Same_as_abo   | ove   | ited                 |  | Date of Survey<br>b6,   ND.4          | (from & to)<br>8,6 19, 1 | Q4  86                  | Fotal Miles of Iir<br>8 . 0                   | in Cut                  |
| J.C. Grant 1  | P.O. Box 1880   | . Timm               | ins. On  | tario. P4                             | 12 א 7                   |                         |   |                         |
| Credits Requested per Each (                                    | Claim in Columns at r   | ight                 | Mining Cla   | aims Traversed (                      | List in nume             | rical seque             | nce)  |                         |
| Special Provisions  | Geophysical   | Days per<br>Claim    | Prefix   | Number                                | Expend.<br>Days Cr.      | Prefix Mi               | Number  | Days Cr.                |
| For first survey:<br>Enter 40 days, (This                       | - Electromagnetic   | 40                   | Р  | 725351                                |                          |                         | -   |                         |
| includes line cutting)  | - Magnetometer  | 20                   |  | 725352                                |                          |                         |   |                         |
| For each additional survey:                                     | - Radiometric   |                      | 1.2.2  | 725353                                |                          |                         | , and - 16, in which which are an array which |                         |
| using the same grid:  | - Other   |                      |  | 725354                                |                          |                         |   |                         |
| Enter 20 days (for each)  | Geological  |                      |  | 725255                                |                          |                         |   |                         |
|   | Geochemical   |                      |  | 725252                                |                          |                         |   |                         |
| Man Days  | Geophysical   | Days per             | · · · · · · · · · · · · · · · · · · ·  | 125356                                |                          |                         |   |                         |
| Complete reverse side   | Electromenatio  | Claim                |  | 725357                                |                          |                         |   |                         |
| and enter total(s) here   | · Electromagnetic   |                      | -  | 725358                                |                          |                         |   |                         |
|   | Magnetometer  |                      |  |                                       |                          | · -                     |   |                         |
| RE  | CERVED  |                      |  |                                       |                          |                         |   |                         |
|   | - Other   |                      |  | REC                                   | <u>[]</u>                | 7                       |   |                         |
|   | Georgich 80   |                      |  |                                       |                          |                         |   |                         |
| Airborne Credits MINING   | Geochemical   | Days per<br>Claim    |  | SEP                                   | 2 1_7_198                | 6                       |   |                         |
| Note: Special provisions  | Electromagnetic   |                      |  |                                       |                          |                         |   |                         |
| credits do not apply<br>to Airborne Surveys.                    | Magnetometer  |                      |  |                                       |                          |                         |   |                         |
|   | Radiometric   |                      |  |                                       |                          |                         |   |                         |
| Expenditures (excludes powe                                     | er stripping)   |                      |  |                                       |                          | -                       |   |                         |
| Type of Work Performed  |   |                      |  | -6-6-1-V-                             | 6                        |                         |   |                         |
| Performed on Claim(s)   |   |                      |  |                                       |                          |                         |   |                         |
|   |   |                      | S  | <u>EP-1-7-198</u>                     | <sup>sp</sup>            |                         |   |                         |
|   |   |                      | 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -<br>1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - |                                       |                          |                         |   |                         |
| Calculation of Expenditure Days                                 | s Credits   | Fotal                | 6  |                                       |                          |                         |   |                         |
| Total Expenditures  |   | s Credits            |  |                                       |                          |                         |   |                         |
| \$  | ÷15 =   |                      |  |                                       |                          | Total num<br>claims cov | ber of mining<br>ered by this                 | 0                       |
| Instructions<br>Total Days Credits may be an                    | portioned at the claim h  | older's              | <b></b>  |                                       |                          | report of v             | vork.   | <u> </u>                |
| choice. Enter number of days                                    | s credits per claim selecte   | ed                   | Total Days   | For Office Use C<br>Cr. Date Recorded | Dnly<br>, /              | Mining                  | st-n  |                         |
|   |   |                      | Recorded   | with /                                | 7/56                     | .0                      | Janley  | <u>A</u>                |
| Date Roo  | corded Holder or Agent (  | Signo(uro)           | 1450   | Date Amproved                         | as Recorded              | Branch                  | et por  |                         |
| Certification Verifying Repo                                    | TH OF WORK  | /                    | L_!  | 100.70                                |                          |                         | <u> </u>                                      | f                       |
| I hereby certify that I have a                                  | personal and intimate ki  | nowledge of          | the facts set fo   | orth in the Report                    | of Work annex            | ed hereto, h            | aving performen                               | the work                |
| or witnessed same during and<br>Name and Postal Address of Pers | i/or after its completion<br>son Certifying                                     | and the ann          | iexed réport is t  | rue.                                  |                          |                         |   |                         |
| I C Grant   | P 0 Roy 1000  | ) ጥነም                | mine   | <u>ז <del>ו</del>ויייי</u> ם          | <u>/</u>                 |                         |   |                         |
|   | 1.0.DOV 1000  | n tru                | mii 115 / 101  | Date Curtified                        | . 1/20                   | Constants               |   |                         |

| MAP SYMBOLOGY<br>Aerfoi Cebleway Pipeline<br>interesting<br>Reitrood<br>tinge fiese                     |  |                                      |  |  | 1   |                   |  |  |   |                                  |                               |
|---|--|--------------------------------------|--|--|---|-------------------|--|--|---|----------------------------------|-------------------------------|
| A Reported J. Toomship  | and a second s |                                      |  | <u>د</u>   | P   | 10                | 23M  |  | 1 <b>*</b> 0  |                                  | ,22M                          |
| Rood Anglering County   |  |                                      | 1148   | .1147  | 687682                                      | 687881            | 725354                                     | 7253                                     | P<br>72,5 354<br>-500 60  | P<br>735341<br>500004            | P<br>691(<br><del>699</del> 6 |
| Beilding (  |  | P<br>68                              | 18889  | P<br>688888  | P<br>687683                                 | P i<br>687684     | 7357                                       | P  |   | 7-52                             | P<br> 69901                   |
| Chimney 2001 0 Repids<br>Cliff, Pit, Pile   |  | 686                                  | 8890 /6  | ₽ ►  | 688886                                      | 9<br>687685       | P<br>924138                                | P<br>924/37                              | <del>500703</del><br>P<br>924/34  | 501202                           | P                             |
| Australiante Australiante repide Australiante Australiante Australiante Australiante Australiante       | •  | P<br>688                             | 1<br>3891 1  | 79.5014  | P _ 0<br>1 ~ ~ 1<br>1783 006 1<br>1599166 1 | 781395            | 608066<br>19848195<br>1777-478             | 1  | 724038<br>098963<br>P   | 724735<br>79-1035<br>608950<br>P | <br>! 51614<br>+ F            |
| Culvert   | •  | 5M-                                  |  |  |   | P                 | 610983<br>+ + + + + +<br> 848/96           | 924/41                                   | 124037<br>609062  | 924/39<br>=224036<br>598964<br>P | 51614<br>MCD<br>51614         |
| Feile Spot Elevation<br>Deuble fine oper<br>Funce, Hed Je Ipwer E E                                     | à  | 6 <b>88</b><br>P                     | 892 -5<br>P  | 793007   | 183005<br><del>(528)65</del><br>  P         | <del>528152</del> | 1 <del>520164</del><br>1 <del>520164</del> | 040114<br>77 <b>95</b> 00<br>610984<br>1 | 525769  | 525966                           | 6990                          |
| Festure Dutline<br>(Linetryction festures)<br>ore 3<br>Flooded Land Fride<br>Tunnel<br>Tunnel<br>Tunnel | 。<br>1994<br>1994  | 92<br>631<br>730                     |  | 78300 8<br>528160  | 783004                                      | 1781377           | 781378                                     | 78/397                                   | 525968  | P<br> <br>  525167               | P<br> <br>  6110.54           |
| Marsk or Swamp + Utility Poles -<br>Mest p Wherl, Dock, Pier  |  | 1 929<br>831<br>760                  | 40669  | 724064<br>1-9204<br>758142   | 78 300                                      | 3 78300<br>52000  | ۲۹306 م<br>1930 م<br>1 <u>52019</u>        | H-11-7814                                |   | 1<br>1<br>1<br>1<br>1            | P                             |
| Outeree Contraction Contraction   |  | 92 4<br>939<br>758                   | 4067<br>H <b>302</b> -<br>H <del>302</del> -<br>H <del>302</del> - | 0  <br>9 <sup>1</sup> 2 4 0 63<br><del>- 1 83 6 8 1</del><br><del>75 6 1 4 3</del> | P<br>90024<br>525103                        | 1 8062            | 13 -528-181                                | <u>528174</u><br>  P                     |   | 444496<br>                       | 44449                         |
| AREAS WITHDRAWN FROM DISPOSITION<br>M.R.O MINING RIGHTS ONLY  | <b>د</b><br>جر   | 4M-P<br>92<br>938                    | 4268 1<br>1201 1   | <br>P<br>934062<br>#34300-   | 92 4.0 5                                    | + P. 800          | 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1    |  | 145400  | 0 479503                         | P                             |
| M.+ S MINING AND SURFACE RIGHTS<br>Description Order No. Date Disposition File                          |  | - <del>750</del><br><br><br><br><br> | 1949<br>   | -750144<br>P<br>F39295-  | 1 758+44<br>P<br>1 73828<br>1 7240          | 4803              |  | 04 4539                                  | 99 145154   | 848458<br>379994                 | 152591                        |
| (2) S.R.D 164584<br>(R2) SECT. 36<br>SCT. 36<br>S.R.D 164584<br>NRW 39/85<br>M.+S. NRW 39/85            | U<br>T   | 7585<br>P                            |  | 750746<br>P  |   |                   | +  |  | P<br> <br>  | 1 P <u>0 1</u><br>1<br>1451543   | 45154                         |
|   | Ч×   |                                      |  |  |   | 479<br>           |  | 44448                                    | 45154<br>P<br>1<br>9<br>444488  | 2 L                              | 1<br>1<br>1<br>1<br>1<br>4515 |
|   | н<br>И<br>Ша   |                                      | L  |  |   | 479               | 508 479                                    | 506 L-T                                  | P<br>9<br>1652553   | 1P<br>1 752201<br>1 652552       | <br>  95<br>  65              |
|   | SALL ,   | P                                    | 5282441  |  | 185   | 47.91<br>•        | 715  | 493 + +<br>                              | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 1 75220                          | 2 10                          |
|   | ARS(   |                                      | 26067  | •  |   | 521               | 87166                                      | A 1779515<br>1653943<br>                 | 1<br>- 1p   |                                  |                               |
|   | C  | PZ                                   | 1772   | 21773  | a   | P                 | 1793<br>1653<br>8267                       | 13 653940<br>941 P                       | 152205  | 64242                            | ·+·                           |
|   |  | ) 2<br>                              | 1777   | P 21   | 776   | 269               | 24552                                      | 24551                                    | 550   | TTRS /                           | 0 47<br> P                    |
|   | 21   | 21<br>M                              | 778<br>  | 2177   | · · · · ·                                   | 528271            | •  | · · · · · · · · · · · · · · · · · · ·    | 24549 P   | 24548                            | 559                           |
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|   |  | P<br>528301                          | 9  | 526312   | 26403 Z                                     | 6394              | 26392<br>P<br>26393                        | P<br>18751<br>+999238                    |   | P 18749                          | 1P<br>95<br>18                |
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|   |  | • <b>22</b> ,50                      | P<br>P   | 26400  |   | P<br>T 26396      | 84777<br>825437                            |  | •<br>•  | •<br>•<br>•<br>•<br>•            | •                             |
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|   | •,   | 528298<br>                           |  | 28299  <br>  | 528300  <br>                                | 649967<br>        | 1<br>649965<br>1<br>1<br>                  | 553051<br>P                              | P   | <br>P<br>583234                  | P 101                         |
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|---------------|------------------------------------|--|---------------------------------------|---|--|--|-----------------------|-----------------------|-----------------------------------|---|---------------------------------------|--------------------------------------|---|---|---|---------------------------------|
| 24            | 691070<br>699070                   | 19<br>699071<br>699076   | P<br>699074                           | 1 699675<br>1 699675                                | P<br>880844  | 880865                                 | р<br>712839<br>549607 | P<br>712842<br>549604 | 19<br>1792845<br>1549005          | P<br>772846<br>542500                       | 1792848<br>1549599-                   | P<br>772773<br>519590                | 738197  | 738196  |   | 13879<br>528106                 |
| 52            | P<br>619069<br><del>890060</del>   | 691072   | H                                     | 1   | P<br>699077  | 657080                                 | 1                     | P<br>792843<br>549005 | 792844<br>549602                  | 792847                                      | 1792849<br>549590-                    | ר                                    | P73 8J 7  | P<br>738199<br>                                       | 738 2.01<br>52003   | 13 2013                         |
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|               | P 2018                             | 5-6147<br>P<br>6970 58   | <u>516148</u>                         | 695062  | 1 699063   | - ago (6                               | P P                   | 53601<br>F            | 8531                              | 8591  | •P<br>480312                          | P<br>480313                          | P<br>738213<br>520201   | 73821:<br>520100                                      | 1<br>1<br>17382/)<br>1<br>520199                          | P<br>73821<br>520190            |
|               |                                    | P  <br> | 699659-<br>P                          | P   | P<br>699063  | 6416                                   | 99067 66              | 9906B                 | P                                 | P<br>778256                                 | P<br>738255<br>528204                 | P<br>738254<br><del>528203</del>     | P<br>731214   | 1<br>1<br>738215<br><del>549610</del>                 | 1<br>1<br>7382/6<br>1 <del>549617</del>                   | 73821                           |
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| 26 1          | 444494<br>P<br>8480                | P  | R2 4132,52                            | 413423<br>  | 1 (R2)<br>1 (R2)<br>1 (P)<br>1 (5)<br>1 (5)<br>1 (2)<br>1 (2) | L/L L L<br>1P<br>92/757                | 45/535                | 1 P83570              | 4 948505<br>9 9835910<br>7 752210 | E35911                                      | 1 835912                              | <del>528288</del><br><br>P<br>738260 | P<br>738222   |   | +   | 1                               |
| 503           | P                                  | 363448   | 63445                                 | 522040/<br>522040/<br>                              | P  | 1,<br>2<br>1                           | 451532                | 83591                 | 45:030<br>                        | 835914                                      | 451033                                | 549623<br>P                          | <del>543624</del>   | 549625  | P   | 1549627                         |
| 994<br>       | P                                  | • 28   | 0<br>863446<br>363446                 | 522043<br>522043                                    | 522042   |  | 451531                | 43102                 |                                   |   | P                                     | 7382G<br>549662                      | <del>54563+</del><br>P  | A9630   | 549689  | P                               |
| 543           | 451 <b>544</b>                     | L P<br>  451545  | 921758                                | 517082<br>517082                                    | 3  | 517005                                 |                       |                       | - 752709-<br>549633<br>3 756541   | 266715                                      | 738,263                               | 1738262<br>1549636                   | 7382 30   | 73828'P   | ن <u>د وده پر از </u> | 73823<br>-549640                |
| 7             | 1 451546<br>1 P<br>1 1<br>1 952200 | 1 252197   | 752196                                | P<br>517083<br>517083<br>1 517083<br>1 517083       | 1 51708  | 5/708<br>517084<br>7                   | 87166<br>P            | 756 5                 | 142 846747                        | 1 844711 1<br>1 844711 1<br>1 F             | 549008 738264                         | P<br>1738239                         |   | 738236  | 738235<br>549642  | 738234<br>54964+<br>P<br>738243 |
| <del>52</del> | 175219                             | 752195<br>1 9 52195  | 1 752195                              | 740868  | 7408<br>P  | 7795                                   |                       | - TP8-                |                                   | 551079                                      | 731265                                | 553077                               | 731247  | P<br>38244  | 553074 2 4  | 553073+<br>4                    |
| 1202          |                                    | 17408  | 71 740870                             | 740865  |  |  | P \ AN                | 521                   | 1252 T                            |   | <del>575081</del>                     |                                      | <del>549300 -</del><br>Р Р  | <del>549099 -</del>                                   | <del>549000-</del><br>•P                                  | /38244<br><del>54:092</del>     |
| 4087          | 3 04242<br>                        | 1 72458  | 7 / 724588                            | 1 724589  | -/ <del>- 24 590</del><br>, <del>560004</del><br>, 72457,<br>7   |  | 179457                | 79459                 | GROUND                            | 731268<br>********<br>*<br>*                | 73\$2.67                              | 7382.49<br>500000                    | 949954<br>7382 50 7<br>P P  | 49958   | 649952-<br>738252-7                                       | 549964<br>1382 53               |
| 79510         | 979511<br>P                        | m. T. c.<br>Pit.<br>1330   |                                       | te t  | 18946 M  | 79461                                  | 79460                 | P                     | 9529-4                            | 948346                                      | 48345<br>153255<br>553138             | 948338<br><b>953258</b>              | 949337 9<br>949337 9<br>934346 9  | 21734<br>34347  | 921735<br>921735  | 121728                          |
|               | 55906                              | 55905  | 33 904<br>P                           | 26746<br>P  | 32084<br>P<br>27416  | ************************************** | 25619                 | 2561B<br>•            | 948348                            | F<br><del>\$53253</del><br>~23126<br>Q=9347 | <u>753256</u><br>553129<br>948344     | 1948339<br>153857<br>553-52          | <del>553135</del><br>948336<br>834356 - 4<br>834356 - 8                           | <del>53 # 70</del><br>53138-<br>9 <del>4 5 50</del> 8 | 953246-<br>553246-<br>1 <mark>34349</mark>                | 921729                          |
| 33            | 55903                              | 559.02<br>P  | 26745 ·                               | P<br>4492   | • • •  | 453                                    | 05965                 | 25094                 | 24754 .                           | 24755                                       | 948343<br>F                           | 94 8340<br>P                         | 9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9<br>9 | 48332  <br>   | 921733 9<br>53245- 5                                      | 72/736<br>53244<br>             |
| 49<br>934     | 9581<br>18391                      | 9391   | c<br>P3389                            | •••   |  | · · · · · · · · · · · · ·              | · · · · ·             |                       | P<br>26428                        | 26429                                       | 948342                                | 948341                               | <del>563137</del> 5 <del>1</del><br>948334 94                                     | 8333 9  | <del>53242</del> - 59<br>2173 <b>2</b>                    | - +                             |
| 614<br>4040   | TC 613<br>P 4039                   | 9 P 42   | 2<br>27<br>•                          | 24807<br>• 1<br>• 2<br>• 2<br>• 2<br>• 2<br>• 2     | 050 \ <sup>2</sup>   | 4530                                   | 1                     |                       |                                   | Sucar                                       | •                                     |                                      |   | · · · ·   | · .   |                                 |
| 958)<br>177   | 958                                | 6  | 19098                                 | ingener X   | × • 1 22.0   | 23965<br>79                            |                       | Red                   | 7                                 | •   | •                                     |                                      | Placer  | • .<br>• .  |   | X                               |
|               | P<br>1893                          | / 190<br>/P  | •                                     | 24851 24<br>10<br>2397                              | 7  | 3972                                   | •                     |                       |                                   |   |                                       | •                                    |   |   | •••   |                                 |
|               | P<br>10920                         | P<br>19676   | • • • • • • • • • • • • • • • • • • • | g ? 239   | 73 23  | 971 P                                  |                       |                       |                                   |   |                                       | •                                    | · .   |   | . • <del>.</del>  |                                 |
|               | 18914<br>P<br>10921                | 93078  | 950                                   | 93  | 0789 P   | + .4 250<br>• • !                      | •                     |                       |                                   |   |                                       |                                      | •   | •••••   | •.  | -                               |
| •             | [8915                              | -7124<br>44000<br>-9236  | 19 1930<br>19                         |   | 23<br>2447   | 1970<br>239                            | •••                   | ····                  |                                   |   | · · · · · · · · · · · · · · · · · · · |                                      |   |   | •   | •<br>• •                        |
| 41            | vi                                 |  | ,                                     | 3M  | -  |  |                       | 2                     | M                                 |   |                                       | •                                    | A   | •   | <del>- <u>-</u> </del>                                    |                                 |

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