

REPORT ON A MAGNETOMETER SURVEY

OF R. ALLERSTON'S PROPERTY

LOCATED IN EASTERN BOWMAN TOWNSHIP,

LARDER LAKE MINING DIVISION, ONTARIO

BY

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CONSULTING GEOLOGIST

RECEIVED

JUL 1 6 1987

MINING LANDS SECTION

DURHAM GEOLOGICAL SERVICES INC.

BOX 734

TIMMINS, ONTARIO

P4N 7G2

JULY 11, 1987



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FIGURE 1 - Property Location	1	:	7,603,200
FIGURE 2 - Claim Location	1	:	$\frac{1}{2}$ mile
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#### PROPERTY, LOCATION AND ACCESS

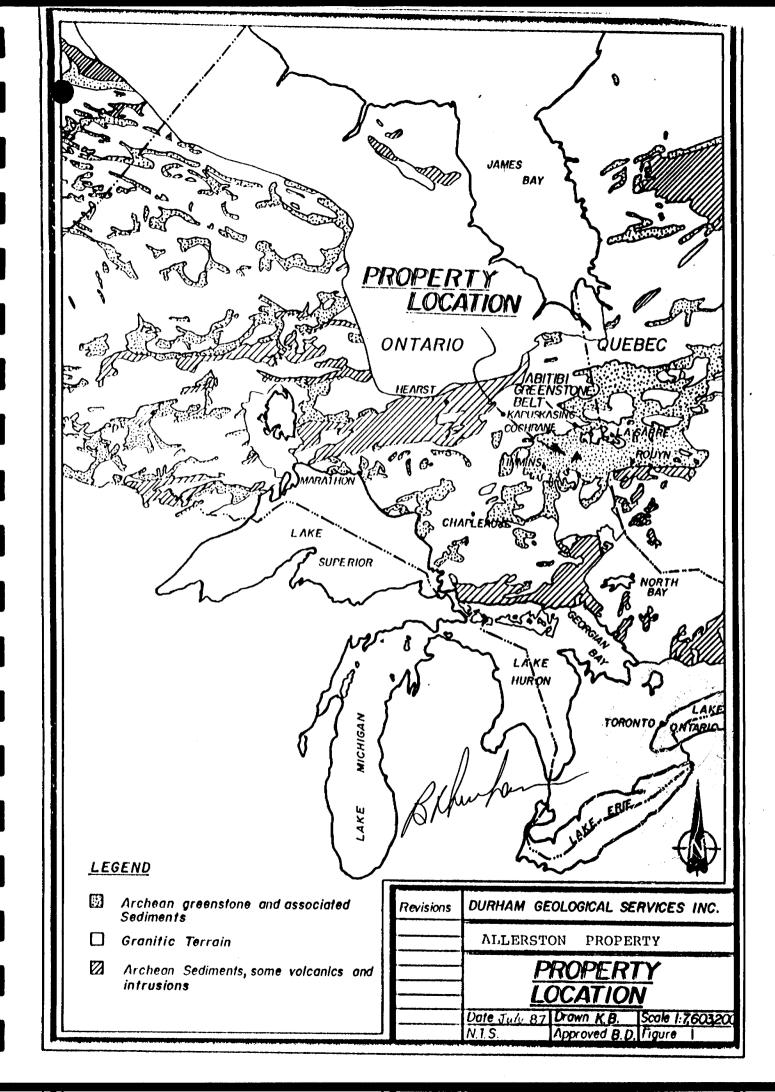
Mr. R. Allerston, prospector of Timmins, Ontario, holds a group of eight unpatented contiguous mineral claims situated in the south half of concession III of Bowman Township. The claims cover lot 1 and lot 2, as shown in figure 2.

The property is located in east-central Bowman Township, 6.5 kilometers south of the town of Matheson. Highway 11, which cuts through the northeast part of this property, provides excellent access. Municipal access roads parallel the west and south boundaries of the property.

#### PREVIOUS WORK

The only previous work reported on the claims by Leahy (1965) is as follows:

"The outcrops in the south half of lot 2, concession III, also contain narrow quartz veins and signs of previous prospecting. Fourteen samples of vein material and wallrock taken from this area by the author's senior assistant showed only low values in gold when assayed, the highest assay being 0.04 ounces of gold per ton."



Pits indicated on Leahy's geological map are proof that some work has been carried out on the property in the past.

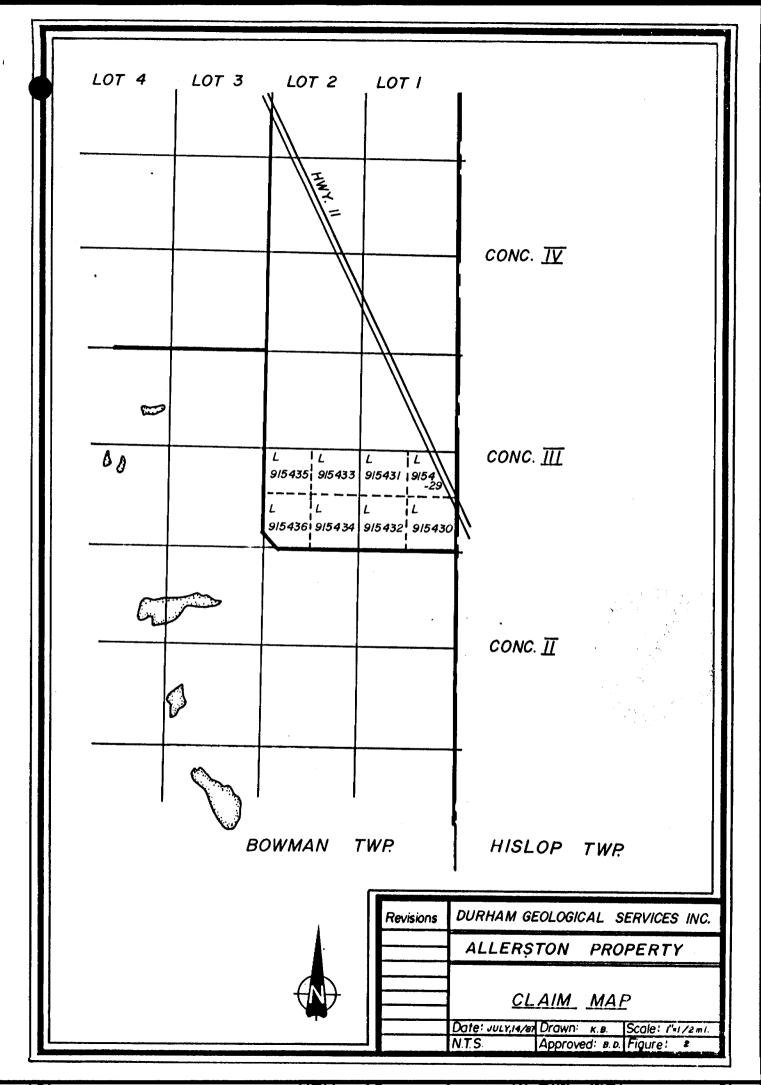
#### **GEOLOGY**

The property lies approximately 10 kilometers south of the Destor Porcupine Fault, a major east trending structure near which many of the gold deposits of the Porcupine Camp are assoicated. Because of poor outcrop exposure and lack of intensive exploration, the geology of the area is poorly understood. Most of the rocks on the property appear to be of mafic composition and consist of massive to pillowed flows and their tuffaceous equivalents. Late stage diabase dikes also outcrop on the property.

As indicated in the previous work section, prospecting has shown the presence of low gold values associated with narrow quartz veins cutting mafic volcanic rocks. Leahy (1965) indicates that samples collected by his party for the Ontario Department of Mines returned assays as high as 0.04 ounces of gold from grab samples of the veins and wallrock.

#### GEOPHYSICAL SURVEY

A magnetic survey was carried out over the eight claim



property by A. Maskevich between the dates of May 4 and May 11, 1987. A total of 14.3 kilometers of linecutting was completed and 1126 magnetometer readings were taken.

The survey was completed by Mr. Maskevich on behalf of Mr. R. Allerston, using a scintrex MF-1 flux gate magnetometer, specifications of which are included in the appendix. The data was gathered, corrected for drift, plotted, and contoured by Mr. Maskevich and the plan maps (fig. 3) were presented to the author on July 2, 1987.

The base station to which all data was corrected was located at BL-O and 17+20. This location was assigned a value of 3420 grammas. Diurnal drift was assumed to be uniform and traverses were closed at intervals of less than one hour.

The contoured magnetic data, as presented to the author, is shown in figure 3.

The most prominent feature outlined by the survey is a moderately well defined magnetic trend that crosses the entire property in an east-northeasterly direction. This zone of

weak to moderate positive magnetic relief is typically 100 meters or more in width. Fifty to 100 meter left-hand displacements occur between lines 4 and 5E and lines 11E and 12 E. The features of this magnetic trend are typical of massive magnetic basalt flows.

 $\Lambda$  second, crudely parallel, narrower zone of similar magnetic intensity occurs near the south boundary of the property.

The highest magnetic relief on the property was found on line 15E just south of BL-O. Here a poorly defined strong magnetic feature trends to the east. Its cause is unknown.

The survey fails to define any of the north trending diabase dikes known to occur in the western part of the property.

# CONCLUSIONS AND RECOMMENDATIONS

In light of the fact that gold mineralization is known to occur on the property and that this gold mineralization is associated with pyrite mineralization and carbonate alteration, further exploration of the property should include detailed

geological mapping, mechanical stripping, and an induced polarization survey. Zones exhibiting favorable alteration, and IP anomalies defined by this work should then be drill tested.

Respectfully Submitted,

R. Bruce Durham, Bsc. FGAC

Consulting Geologist

#### SELECTED REFERENCES

Laird, E.J.

1931:

German-Currie area, District of Cochrane, Ontario Department of Mines, 1931, Vol. XL, pt. 3, pp. 1-22.

Leahy, E.J.

1965:

Geology of Currie and Bowman Townships, Ontario Department of Mines Geological Report No. 40.

OGS

1984:

Airborne Electromagnetic and Total Intensity Magnetic Survey, Matheson-Black River Area, Bowman Township, District of Cochrane; by Questor Surveys Limited for the Ontario Geological Survey, Map 80594 Geophysical/Geochemical Series, Scale 1:20,000, Survey and Compilation March to July, 1983.

#### CERTIFICATION

- 1, R. Bruce Durham of 1176 Delnite Road, Timmins, Ontario, certify as follows concerning my July 11, 1987 report on R. Allerston's Property, Eastern Bowman Township, located in Ontario.
  - 1. I am a graduate of the Unviersity of Western Ontario, having obtained a Bachelor of Science Degree in Geology in 1976.
  - 2. I have been practising my profession, primarily in Canada, since 1975.
  - 3. I have no direct or indirect interest in the properties, of Mr. R. Allerston, nor do I expect to receive any.
  - 4. I am a fellow of the Geological Association of Canada.

Dated at Timmins this 11th day of July, 1987

R. Bruce Durham, Bsc. FGAC Consulting Geologist

# SPECIFICATIONS OF FLUXGATE MAGNETOMETER MODEL MF-1

Plus or minus ---Ranges: 1,000 gammas f. sc. 3,000 10,000 30,000 100,000 Sensitivity 20 gammas/div. 50 200 500 2,000 Taut-band suspension Meter: 1000 gammas scale 11/4" long — 50 div. 3000 gammas scale 1 11/16" long — 60 div. 1000 to 10,000 gamma ranges  $\pm$  0.5% of full scale Accuracy: 30,000 and 100,0000 gamma ranges  $\pm$  1% of full scale -40°C to +40°C Operating Temperature: -40°F to +100°F Less than 2 gammas per °C (1 gamma /°F) Temperature Stability: Total 1 gamma P-P Noise Level: ± 1 gamma for 24 hours at constant temperature Long Term Stability: 10,000 to 75,000 gammas by 9 steps of approximately 8,000 gammas and fine control by 10 turn potentiometer. Convertible for **Bucking Adjustments:** (Latitude) southern hemisphere or ± 30,000 gammas equatorial. 1.7 ma per oersted for 1000 to 100,000 gamma ranges with Recording Output: maximum termination of 15,000 ohms. DC to 5 cps (3db down) Response: Amphenol 91-MC3F1 Connector: 12 x 1.5V-flashlight batteries "C" cell type) Batteries: (AC Power supply available) 50 milliamperes Consumption: Instrument - 61/2" x 31/2" x 121/2" Dimensions: 165 x 90 x 320 mm Battery pack - 4" x 2" x 7" 100 x 50 x 180 mm Shipping Container - 10" dia x 16" 254 mm dia. x 410 mm



Instrument — 5 lbs. 12 oz.

Battery Pack - 2 lbs. 4 oz.

Shipping — 13 lbs.

Weights:

SCINTREX LIMITED

2.6 kg.

1.0 kg.

6.0 kg.

79 Mortin Ross Avenue, Downsview, Ontario, Canada

R.E. Allerston

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Prospector's Licence No.

M-13613

Mining

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Ministry of Northern Development and Mines

# Geophysical-Geological-Geochemical Technical Data Statement

File		

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.

Address of Author	)
Claim Holder(s) Relph E. Allerston  543 Fine St. N. Timmins, P4N 6L9  Survey Company Adam Maskevich  Author of Report L-915430  Address of Author	)
Survey Company Adam Maskevich  Author of Report	)
Author of Report	)
Address of Author	
7 0-51	umber)
Covering Dates of Survey May 4, 5, 6, 7 and 11th 1987 L-915431 (linecutting to office)	
Total Miles of Line Cut 9.5 Miles	
L-915433	
SPECIAL PROVISIONS DAYS L-915434	
CREDITS REQUESTED Geophysical per claim 1-915435	
ENTER 40 days (includes  -Electromagnetic 40  L-915436	
line cutting) for first Magnetometer Radiometric Radiometric	
survey. —Radiometric  ENTER 20 days for each —Other	
additional survey using Geological	
same grid.  Geochemical	
AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)	• • • • • • • • • • • • • • • • • • •
Magnetometer Electromagnetic Radiometric (enter days per claim)	
DATE: July 11st 1987 SIGNATURE: Defluction	
Author of Report or Agent RECEIVED	)
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Previous Surveys File No. Type Date Claim Holder	
File No. Type Date Claim Holder	••••••
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TOTAL CLAIMS	)

## GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number	of Stations 6/2	Number	of Readings	1126
Station i	nterval 12.5 meters, 25 M.	Line spa	cing100_	<u>M</u>
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Contour	interval 500 Gammas			
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Instru	ment MF 1 (as data shown)			
Accur Diurn Base S	acy — Scale constant			
Diurn	al correction method			
Base S	station check-in interval (hours) 45 Min	•		
Base S	tation location and value <u>Stn 0400</u>	1720 <b>E</b> =	3420 +/-	15
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INDUCED POLARIZATION

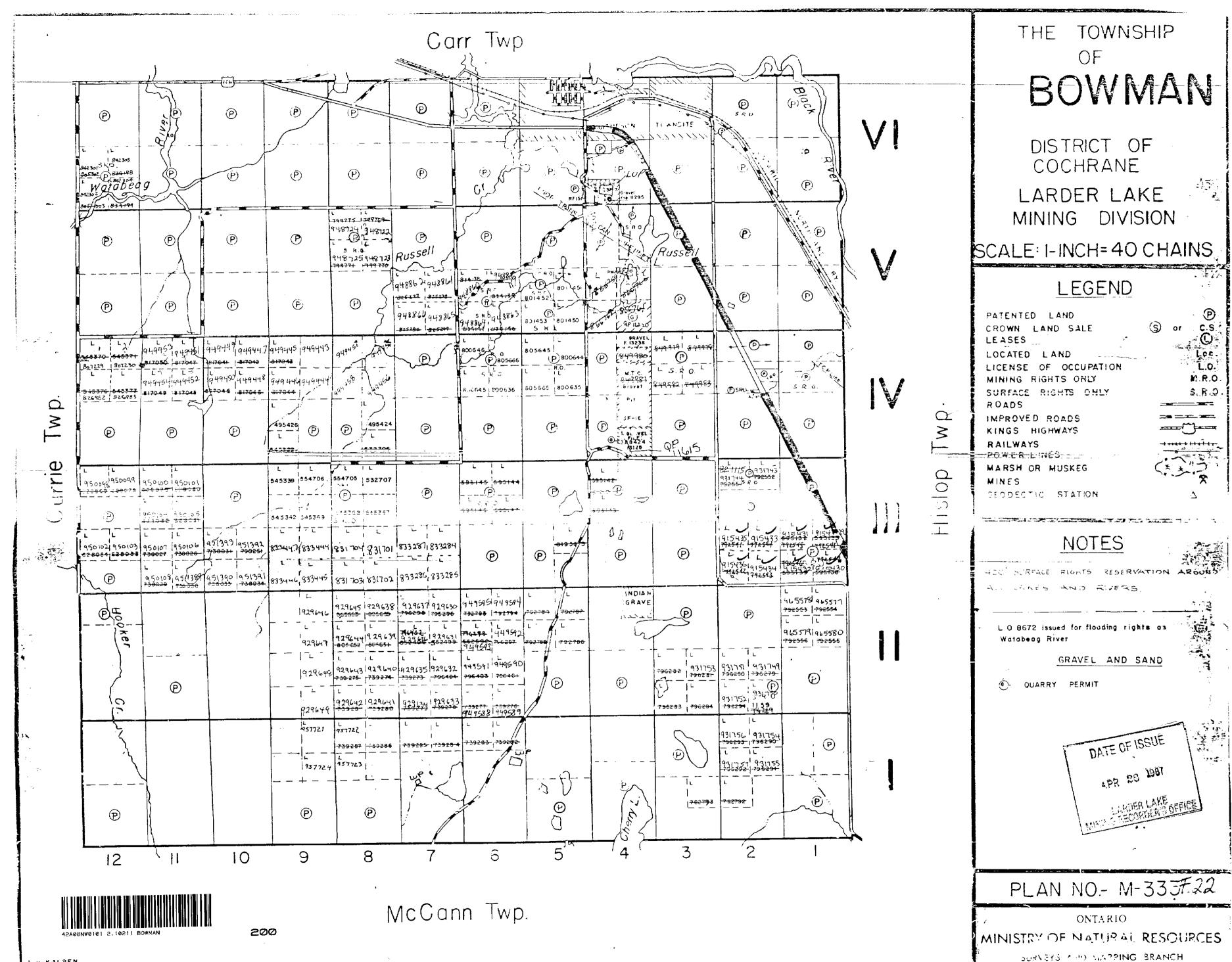
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Survey Method	
Corrections made	
RADIOMETRIC	
Instrument	
Values measured	
Energy windows (levels)	
	Background Count
Size of detector	
Overburden	
(type, depth –	include outcrop map)
OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)	
Type of survey	
Instrument	
Accuracy	
Parameters measured	
Additional information (for understanding results)	
AIRBORNE SURVEYS	
Type of survey(s)	
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(specify for ea	ch type of survey)
Aircraft used	
Sensor altitude	
Navigation and flight path recovery method	
Aircraft altitude	Line Spacing
	Over claims only

## GEOCHEMICAL SURVEY - PROCEDURE RECORD

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