

REPORT ON  
MAGNETOMETER SURVEY  
OF THE LANA AND CALI CLAIMS,  
LILLOOET M.D., B.C.

Claims: Lana 1198(1) (12 units)  
Cali 1197(1) (12 units)

Mining Division: Lillooet

NTS Location: 50°43' N, 122°45' W 92 J / 10

Owner: Hillside Energy Corporation

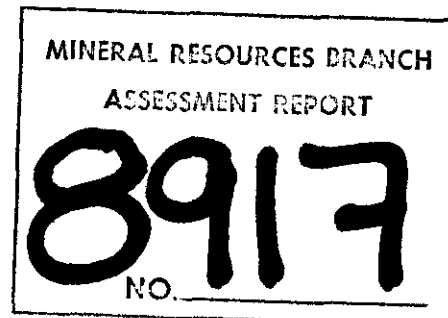
Consultant: Premier Geophysics Inc.

Author: Greg Shore, Geophysicist

Dates work done: January 9, 10, 1981

Date of Report: February 5, 1981

Date submitted for Assessment Credit: \_\_\_\_\_



Summary

A total field magnetometer survey was conducted over an overburden-covered portion of the Lana and Cali claims. Three areas of moderately anomalous magnetic intensity were defined. These features appear to represent local accumulations of transported debris from the surrounding slopes; no evidence of major structural features within the bedrock can be seen in the present survey data. The underlying bedrock is interpreted as being relatively undisturbed serpentine of undetermined age.

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## 1.0 INTRODUCTION

### 1.1 Terms of Reference

Premier Geophysics Inc. has been retained by Hillside Energy Corporation to conduct a magnetometer survey and prepare a report on a portion of Hillside's Lana and Cali claims in the Bralorne area of B.C. Premier conducted the survey operations on January 10, 1981, and submits this report of their findings.

### 1.2 Property

The Lana and Cali claims are wholly owned by Hillside Energy Corporation, and consist of a total of 24 units as follows:

Lana, record number 1198(1), 12 units  
Cali, record number 1197(1), 12 units

### 1.3 Location and Access

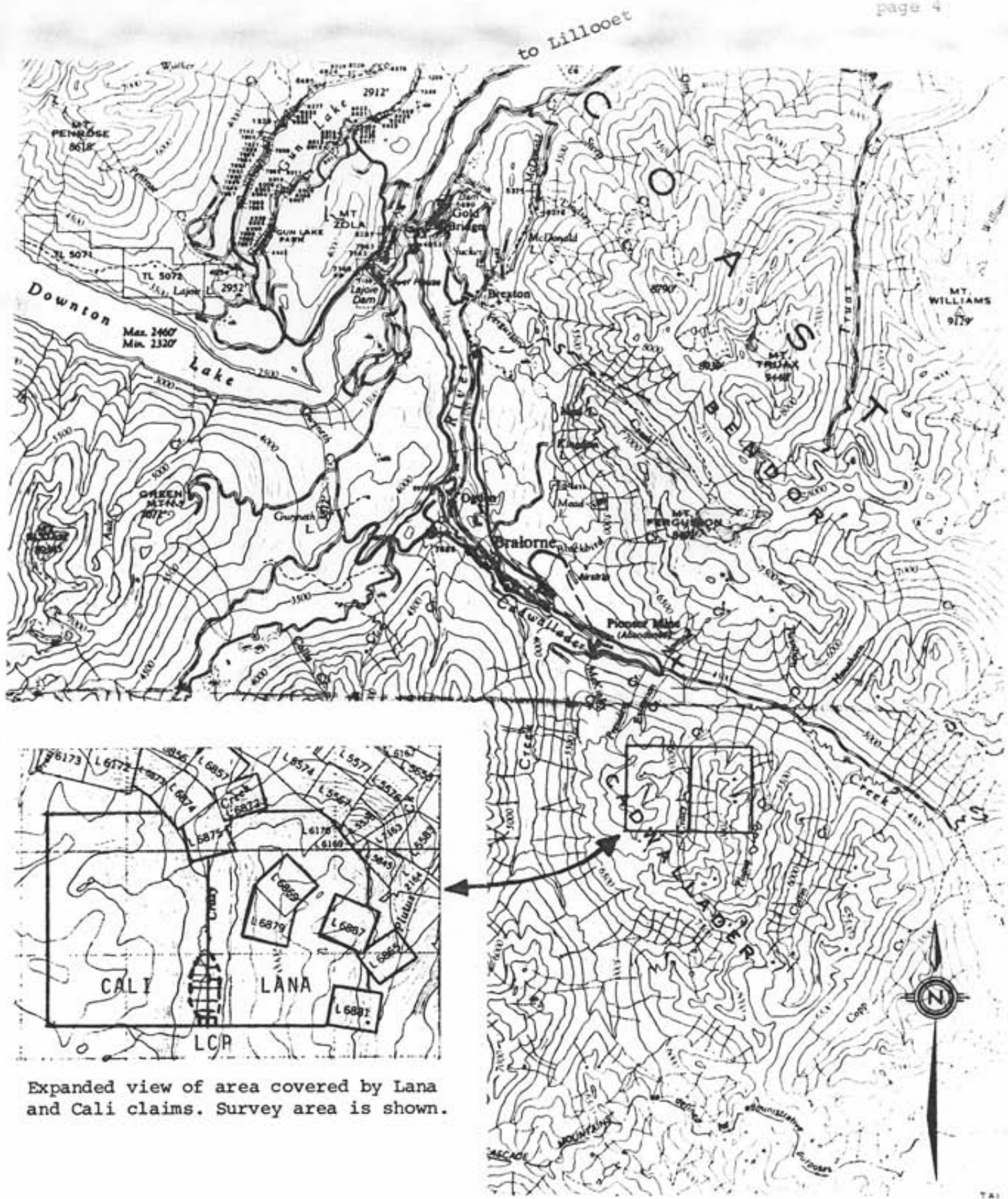
The property is located at 50°43' north latitude, 122°45' west longitude, in the Cadwallader Mountains approximately 3 miles southeast of the town of Bralorne, B.C.

Access is by helicopter from bases in Pemberton, Alta Lake or Vancouver, although the property may also be access by a half-day hike uphill from a trail which runs down Cadwallader Creek valley to Bralorne.

The common boundary between the Lana and Cali claims is roughly marked by the upper portion of Crazy Creek. The NTS map of the area is 92J-10, at 1:50 000 scale.

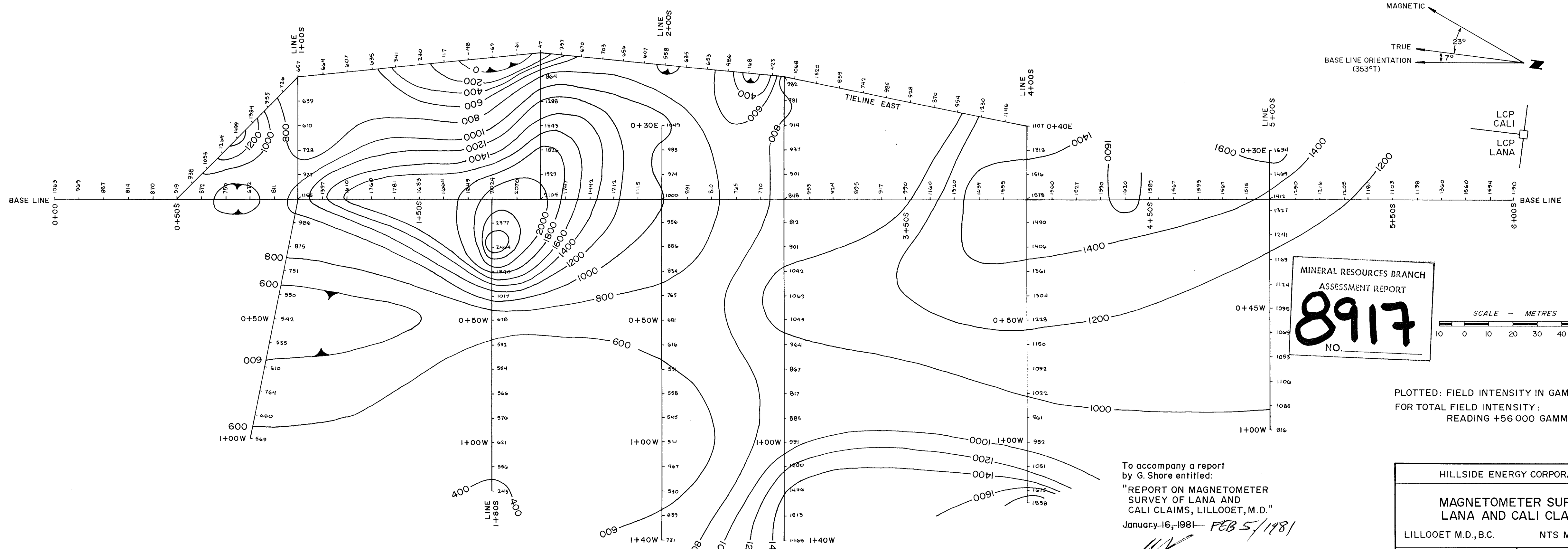
### 1.4 Terrain

The common boundary between the Lana and Cali claims lies in a high (1700 metres) perched valley, out of which runs Crazy Creek, a tributary of Cadwallader Creek. The terrain surrounding this flat central area is moderate to steep sidehill on the west, south and east sides, with the north side dropping down in forested slope toward Cadwallader Creek. Much of the upper terrain is treeless.



Expanded view of area covered by Lana and Cali claims. Survey area is shown.

Dwg. 1 Location of Lana and Cali Claims. From NTS 92J NE/4 1" = 2 miles.



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8917**  
NO.

PLOTTED: FIELD INTENSITY IN GAMMAS  
FOR TOTAL FIELD INTENSITY:  
READING +56 000 GAMMAS

To accompany a report  
by G. Shore entitled:  
"REPORT ON MAGNETOMETER  
SURVEY OF LANA AND  
CALI CLAIMS, LILLOOET, M.D."  
January 16, 1981 *FEB 5/1981*

*[Signature]*

HILLSIDE ENERGY CORPORATION	
MAGNETOMETER SURVEY LANA AND CALI CLAIMS	
LILLOOET M.D., B.C.	NTS MAP 92J/15W
DRAWING N° 2	SCALE 1:1000
Survey by PREMIER GEOPHYSICS INC. Vancouver, B.C. JANUARY 1981	

## 2.0 GEOLOGY

The Lana and Cali claims are underlain by a sequence of Triassic volcanics and volcanogenic sedimentary rocks, represented principally by the Pioneer and Noel formations. The survey area is covered by extensive colluvial and glacial overburden, but appears to be underlain in part by the volcanogenic sediments of the Noel formation and in part by an elongate serpentinite body of undetermined age.

## 3.0 GEOPHYSICAL SURVEY

### 3.1 Magnetometer

The instrument used was a Geometrics G-816 proton precession magnetometer with 1 gamma resolution, measuring the total field.

### 3.2 Grid

A survey grid was laid out in the survey area using a topofil for chainage and compass (Suunto pocket transit) for orientation. The grid is shown in drawing 2.

### 3.3 Diurnal Control

Base stations were established at seven points on the baseline, and diurnal control was effected by reference to these points at intervals not exceeding one hour. Total diurnal variation during the survey period did not exceed sixty gammas; all data have been corrected for observed drift.

### 3.4 Results

Three areas of moderate magnetic anomaly are defined in drawing 2, representing total intensity excursions of 800 to 1200 gammas above apparent background. These values are unlikely to indicate presence of deep seated segments of Noel formation rocks within the inferred serpentinite, but would more likely represent accumulations or slumps of Noel or Pioneer rocks which comprise the upper slopes to the east of the survey.

There is some observed physical evidence of substantial slumping onto the valley floor.

### 3.5 Conclusions

The anomalous values recorded in the survey area are tentatively ascribed to accumulations of debris originating in the surrounding upper slopes.

No clear indications of geological structure or contact can be derived from the present data.

Any possibly economic implications related to the magnetic anomalies would be dependant upon completion of geological mapping of the outcrop surrounding the survey area, and completion of some background magnetic survey over the surrounding rock units.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'G. Shore', with a long horizontal flourish extending to the right.

Greg A. Shore

Premier Geophysics Inc.

February 5, 1981



APPENDIX A

Personnel involved in magnetometer survey of Lana and Cali claims:

<u>Person</u>	<u>Days worked</u>	<u>Activity</u>
Geophysicist: Greg A. Shore	1	preparation equipment and emergency shelter pack
1184 Forge Walk Vancouver.	1	survey
Grid installer, assistant: Bryan Pielak	1	preparations
c/o 501-134 Abbott St. Vancouver.	1	grid layout, survey
Total:	<hr/> 4 man-days	

APPENDIX B

Itemized expenditures: Cali-Lana-Paymaster Group:

Magnetometer Survey      January 9th and 10th, 1981

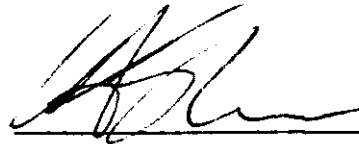
Itemized Costs:

Mobilization	\$ 275.00
Operating Fees ( 2 men)	550.00
Helicopter (4.1 hours)	1733.00
Miscellaneous Field Expenses	13.00
Report Preparation	851.00
Drafting, Typing, Reproductions	<u>225.00</u>
TOTAL	<u>\$ 3647.00</u>

Statement of Qualification

I, Greg A. Shore, hereby certify that:

1. My office address is suite 501-134 Abbott Street, Vancouver, B.C., my residence address is 1184 Forge Walk, Vancouver, B.C., and that I am a Geophysicist by occupation.
2. I am a graduate at technologist level of Radio College of Canada, Toronto, RCA Institute, Montreal, and P.I.A.A.T., Toronto.
3. I have worked continuously since 1966 in the field of geophysics as a field electronics engineer, geophysical survey program manager and geophysicist.
4. I conducted the geophysical work described in this report.



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Greg A. Shore, Geophysicist



### "Hands-free" Back Pack Sensor

Based upon the principle of nuclear precession (proton) the G-816 offers absolute drift-free measurements of the total field directly in gammas. (The proton precession method is the officially recognized standard for measurement of the earth's magnetic field.) Operation is worldwide with one gamma sensitivity and repeatability maintained throughout the range. There is no temperature drift, no set-up or leveling required, and no adjustment for orientation, field polarity, or arbitrary reference levels. Operation is very simple with no prior training required. Only 6 seconds are required to obtain a measurement which is always correct to one gamma, regardless of operator experience. Only the Proton Magnetometer offers such repeatability—an important consideration even for 10 gamma survey resolution.



### Complete Field Portable System

The Model G-816 comes complete, ready for portable field operation and consists of:

1. Electronics console with internally mounted and easily replaced "D" cell battery pack.
2. Proton sensor and signal cable for attachment to carrying harness or staff.
3. Adjustable carrying harness.
4. 8 foot collapsible aluminum staff.
5. Instruction manual, complete set of spare batteries, applications manual, and rugged field suitcase.

Price and lease rates on the G-816 magnetometer are available upon request.

## SPECIFICATIONS

<b>Sensitivity:</b>	±1 gamma throughout range
<b>Range:</b>	20,000 to 100,000 gammas (worldwide)
<b>Tuning:</b>	Multi-position switch with signal amplitude indicator light on display
<b>Gradient Tolerance:</b>	Exceeds 800 gammas/ft
<b>Sampling Rate:</b>	Manual push-button, one reading each 6 seconds
<b>Output:</b>	5 digit numeric display with readout directly in gammas
<b>Power Requirements:</b>	Twelve self-contained 1.5 volt "D" cell, universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.

Battery Type	Number of Readings
Alkaline	over 10,000
Premium Carbon Zinc	over 4,000
Standard Flashlight	over 1,500

*NOTE: Battery life decreases with low temperature operation.*

<b>Temperature Range:</b>	Console and sensor: -40° to +85°C															
	Battery Pack: 0° to +50°C (limited use to -15°C; lower temperature battery belt operation—optional)															
<b>Accuracy (Total Field):</b>	±1 gamma through 0° to +50°C temperature range															
<b>Sensor:</b>	High signal, noise cancelling, interchangeably mounted on separate staff or attached to carrying harness															
<b>Size:</b>	Console: 3.5 x 7 x 10.5 inches (9 x 18 x 27 cm) Sensor: 3.5 x 5 inches (9 x 13 cm) Staff: 1 inch diameter x 8 ft length (3 cm x 2.44 m)															
<b>Weight:</b>	<table> <thead> <tr> <th></th> <th>Lbs.</th> <th>Kgs.</th> </tr> </thead> <tbody> <tr> <td>Console (w/batteries):</td> <td>5.5</td> <td>2.5</td> </tr> <tr> <td>Sensor &amp; signal cable:</td> <td>4</td> <td>1.8</td> </tr> <tr> <td>Aluminum staff:</td> <td>2</td> <td>0.9</td> </tr> <tr> <td><b>Total:</b></td> <td><b>11.5</b></td> <td><b>5.2</b></td> </tr> </tbody> </table>		Lbs.	Kgs.	Console (w/batteries):	5.5	2.5	Sensor & signal cable:	4	1.8	Aluminum staff:	2	0.9	<b>Total:</b>	<b>11.5</b>	<b>5.2</b>
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Aluminum staff:	2	0.9														
<b>Total:</b>	<b>11.5</b>	<b>5.2</b>														

*All magnetometers and parts are covered by a one year warranty beginning with the date of receipt but not to exceed fifteen months from the shipping date.*

**geoMetrics**

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80 ALFRED ST., MILSON'S POINT  
SYDNEY NSW 2061 PHONE: 929-9942

**Exploranium**

DIVISION OF geoMetrics LIMITED, CANADA, LTD

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