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# **GOLD DIAMET RESOURCES LTD.**

**Spectrometer  
Survey  
Over the**

**CABO PROPERTY  
Lorrain Township, Ontario**

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## 1. SURVEY DETAILS

### 1.1 PROJECT NAME

This project is known as the **Cabo Property**.

### 1.2 CLIENT

Gold Diamet Resources Ltd.

RR#1 #14778

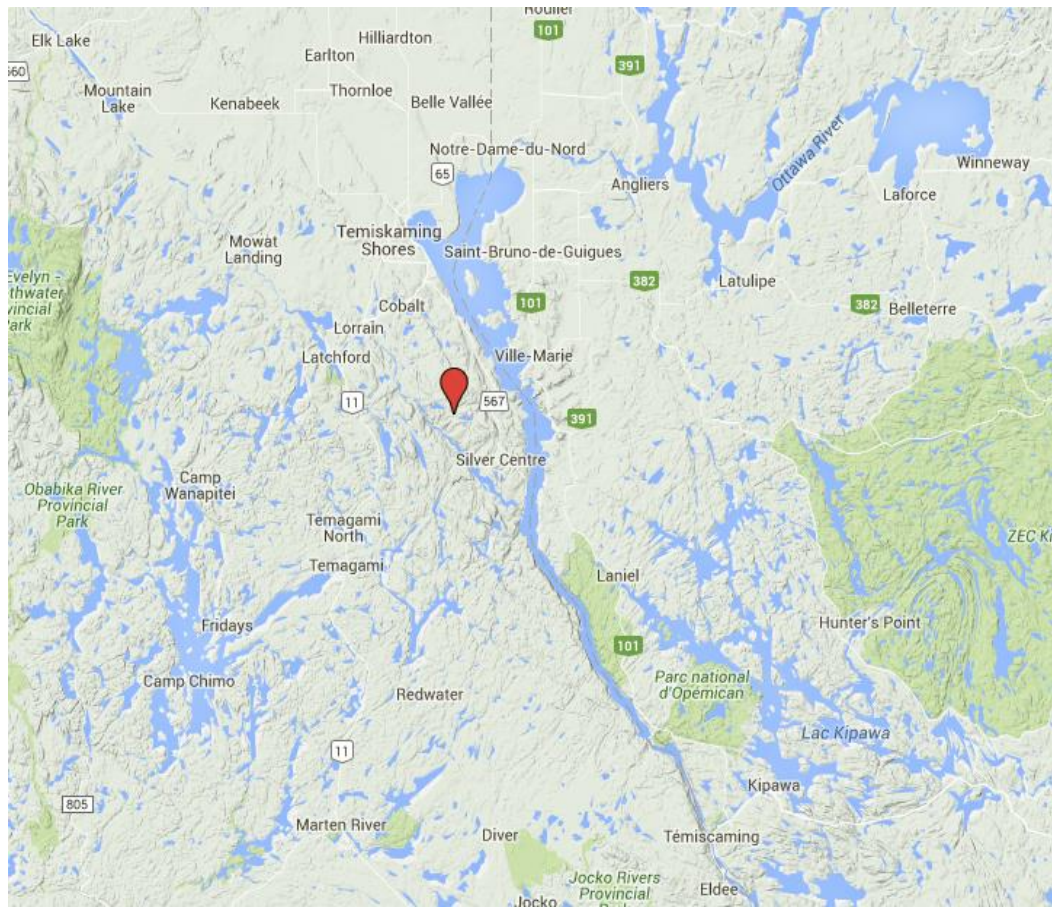
Niagara Parkway

Niagara on the Lake, Ontario

LOS 1J0

### 1.3 LOCATION

The Cabo Property is located in Lorrain Township approximately 16 km southeast of Cobalt, Ontario. The traverse area covers a portion of claim numbered 4225513 located in Lorrain Township, within the Larder Lake Mining Division.



**Figure 1: Location of Cabo Property**

#### **1.4 ACCESS**

Access to the property was attained with a 4x4 truck via the access to Hound Chutes Generating Station, south of Cobalt Ontario. This access road is travelled for a distance of 19 km. From here a side road extends north an additional 3.5 km to the Cabo Property.

#### **1.5 SURVEY AREA**

The survey area was designed to be a reconnaissance survey over the claim with some readings being taken at the historic work areas. A traverse was targeted to cover the Lamprophyre and any other historic areas located.

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## 2. SURVEY WORK UNDERTAKEN

### 2.1 SURVEY LOG

Date	Description	Line	Min Ex- tent	Max Ex- tent	Total Survey (km)
June 12, 2015	Locate survey area and conduct survey.				4.1

***Table 1: Survey Log***

### 1.1 PERSONNEL

Jason Ploeger of Larder Lake, Ontario operated the spectrometer along with the navigation using a GPS.

### 1.2 SURVEY SPECIFICATIONS

The survey was conducted with a Radiation Solutions RS-230 – BGO SUPER-SPEC spectrometer. The operator traversed the outlined block until the unit detected a cps above background. Once this was detected, the operator backtracked 50m, a GPS waypoint was taken with a corresponding 60 second stacked Spectrometer assay for K%, U ppm and Th ppm. At this point the operator took a sample every 25m until the anomalous region was traversed. Otherwise the operator took an assay and GPS reading every 100m. All data was both electronically noted and written in a notebook.

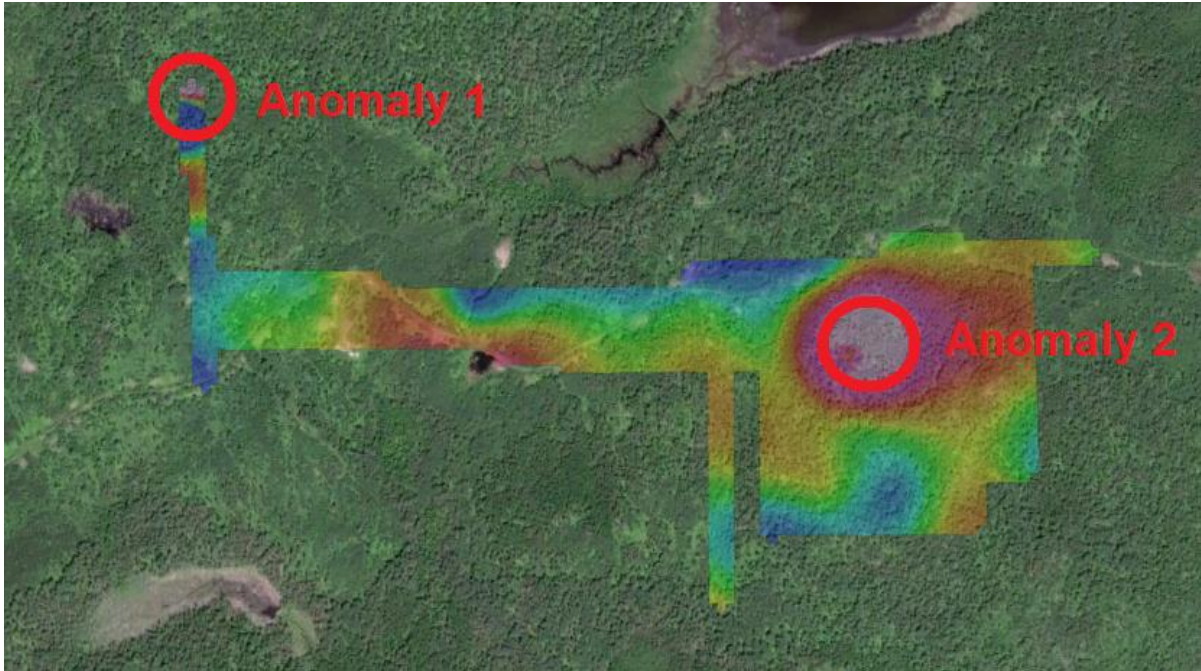
The background of the instrument was automatically set during the auto-calibration process and it was around 50nGy/h. The device was set to emit an audible alarm if the background was exceeded by two times the level. This was considered by the operator to be anomalous and at this point the operator increased the sample density.

A total of 4.1 kilometers of no grid spectrometer survey was on June 12, 2015. This consisted of 34 K, U and Th samples taken.

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## 2. OVERVIEW OF SURVEY RESULTS

### 2.1 SUMMARY



**Figure 2: Anomalies and Thorium Response on Google Earth**

Two anomalous regions were highlighted with the spectrometer survey.

The first of these anomalies was located in the northwest corner of the property and within site of claim post number 3. This region indicated a strong total counts with the audible alarm being sounded. The total counts appeared to increase 2 to 3 times the background with an increase in uranium, thorium and potassium. This anomaly appeared to be continuous to the claim line and most likely represents a geologic change in bedrock.

The second anomaly was again located when the audible alarm sounded. Again this in a strong total counts with an increase of 2 to 3 times the background. This anomaly was localized and appeared to be related to a boulder and not bedrock. This boulder appears to exhibit a similar response to that of anomaly 1. The distance to the east of the anomaly indicates that this most likely originated from the same geologic unit and this unit extends east of anomaly 1.

I would recommend prospecting these areas.

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## APPENDIX A

### STATEMENT OF QUALIFICATIONS

I, C. Jason Ploeger, hereby declare that:

1. I am a professional geophysicist with residence in Larder Lake, Ontario and am presently employed as a Geophysicist and Geophysical Manager of Canadian Exploration Services Ltd. of Larder Lake, Ontario.
2. I am a Practising Member of the Association of Professional Geoscientists, with membership number 2172.
3. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.
4. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.
5. I am a member of the Ontario Prospectors Association, a Director of the Northern Prospectors Association and a member of the Society of Exploration Geophysicists.
6. I do have an interest in the properties and securities of **Gold Diamet Resources Limited**.
7. I am responsible for the final processing and validation of the survey results and the compilation of the presentation of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.



C. Jason Ploeger, P.Geo., B.Sc.  
Geophysical Manager  
Canadian Exploration Services Ltd.

Larder Lake, ON  
April 1, 2017



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## APPENDIX B

### THEORETICAL BASIS AND SURVEY PROCEDURES

**Gamma-Ray Spectrometry (GRS)** provides a direct measurement of the surface of the earth, with no significant depth of penetration. This at-surface characteristic allows us to reliably relate the measured radioelement contrasts to mapped bedrock and surficial geology, and alteration associated with mineral deposits. All rocks, and materials derived from them are radioactive, containing detectable amounts of a variety of radioactive elements. A gamma-ray spectrometer is designed to detect the gamma rays associated with these radioactive elements and to accurately sort the detected gamma rays by their respective energies. It is this sorting ability that distinguishes the spectrometer from instruments that measure only total radioactivity.

#### Why do we need to know about K, U, and Th?

Potassium (K), uranium (U) and thorium (Th) are the three most abundant, naturally occurring radioactive elements. K is a major constituent of most rocks and is the predominant alteration element in most mineral deposits. Uranium and thorium are present in trace amounts, as mobile and immobile elements, respectively. As the concentration of these different radio elements varies between different rock types, we can use the information provided by a gamma-ray spectrometer to map the rocks. Where the 'normal' radioelement signature of the rocks is disrupted by a mineralizing system, corresponding radioelement anomalies provide direct exploration guidance.

Ground surveys do not require a corresponding airborne survey. They are easily conducted by one person as a reconnaissance survey or more formally using a series of grid lines. The resulting geochemical information provides an important additional layer of information significantly improving bedrock and surficial mapping and ore vectoring.

#### The Gamma-ray Energy Spectrum

The primary acquisition data set is a multichannel gamma-ray energy spectrum. The area from 0 to 0.4 MeV is not used and consists of counts created by Compton scattering. For geological mapping, the  $K^{40}$  (potassium),  $Bi^{214}$  (uranium) &  $Tl^{208}$  (thorium) peaks are of interest. During the aerial survey, the full spectrum of counts is recorded once per second, using a 256-channel histogram. During post-flight data processing, the counts for the radio elements of interest ( $K^{40}$ ,  $Bi^{214}$ ,  $Tl^{208}$ ) are accumulated. The summation includes the counts for a range of energies (a 'window' or 'region of interest') centred on each peak.

The accumulated count rates are then converted to **equivalent** ground concentrations of **potassium, uranium & thorium** using a set of calibration constants that are a characteristic of each spectrometer system.

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## APPENDIX C

### RS-230 BGO Super Spec Gamma Spectrometer Handheld Gamma-Ray Spectrometer



#### Specifications

##### Memory:

- Internal Data Storage memory
- Assay + 1024 channel Spectra: 128 samples

##### Data Input / Output:

(Using supplied RS-Analyst software)

- USB
- Bluetooth
- GPS link via Bluetooth

##### Temperature Range:

- 20 to +50 degrees Celsius

##### Control:

- Single one button, Thumb activated

##### Alarm:

- Audio via miniature speaker
- Variable audio threshold set point
- Audio proportional to count rate

##### Weight:

- 4.5 lb (2.04 kg) including batteries

### **RS-230 Size & Package Style**

- 10.2" x 3.2" x 3.8" (259 mm x 81. mm x 96 mm)
- 1 mm aluminum outer case
- In a flashlight configuration with side support strap and handle

### **Display:**

- 128 x 64 pixels, 1 1/8 x 2 3/8"
- Graphic LCD display with white backlight and automatic dimming

### **Readout:**

- Search Mode: Counts in CPS from 0 to 65,535 and Histogram chart
- Assay Mode: Display in %K, ppm of U & Th

### **Energy Response:**

30 keV – 3000 keV

### **Internal Sampling:**

20 readings per second

### **Batteries:**

- Internal battery pack module (4xAA) easily replaceable
- Rechargeable or Alkaline (optional)
- Life: 8 + hours at 20 degrees C

The performance of the 6.3 in<sup>3</sup> (103 cm<sup>3</sup>) higher density Bismuth Germanate (BGO) detector is an equivalent of a 21 in<sup>3</sup> (390 cm<sup>3</sup>) Sodium Iodide (NaI) commonly used with larger portable units and approximately more than 3 times the same size NaI crystal.

The spectrometer is auto-stabilizing on the naturally occurring (K, U, & Th) radioactivity and does not require any test sources.

## APPENDIX C

### GARMIN GPS MAP 62S



Physical & Performance:	
Unit dimensions, WxHxD:	2.4" x 6.3" x 1.4" (6.1 x 16.0 x 3.6 cm)
Display size, WxH:	1.43" x 2.15" (3.6 x 5.5 cm); 2.6" diag (6.6 cm)
Display resolution, WxH:	160 x 240 pixels
Display type:	transflective, 65-K color TFT
Weight:	9.2 oz (260.1 g) with batteries
Battery:	2 AA batteries (not included); NiMH or Lithium recommended
Battery life:	20 hours
Waterproof:	yes (IPX7)
Floats:	no
High-sensitivity receiver:	yes

Interface:	high-speed USB and NMEA 0183 compatible
<b>Maps &amp; Memory:</b>	
Basemap:	yes
Preloaded maps:	no
Ability to add maps:	yes
Built-in memory:	1.7 GB
Accepts data cards:	microSD™ card (not included)
Waypoints/favorites/locations:	2000
Routes:	200
Track log:	10,000 points, 200 saved tracks
<b>Features &amp; Benefits:</b>	
Automatic routing (turn by turn routing on roads):	yes (with optional mapping for detailed roads)
Electronic compass:	yes (tilt-compensated, 3-axis)
Touchscreen:	no
Barometric altimeter:	yes
Camera:	no
<u>Geocaching-friendly:</u>	yes (paperless)
<u>Custom maps compatible:</u>	yes
Photo navigation (navigate to geotagged photos):	yes
Outdoor GPS games:	no
Hunt/fish calendar:	yes
Sun and moon information:	yes
Tide tables:	yes

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Area calculation:	yes
Custom POIs (ability to add additional points of interest):	yes
Unit-to-unit transfer (shares data wirelessly with similar units):	yes
Picture viewer:	yes
Garmin Connect™ compatible (online community where you analyze, categorize and share data):	yes

- *Specifications obtained from [www.garmin.com](http://www.garmin.com)*

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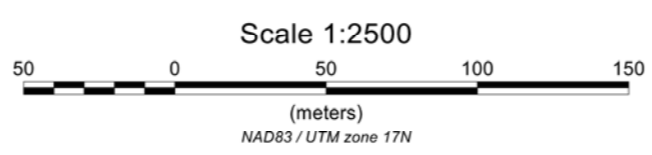
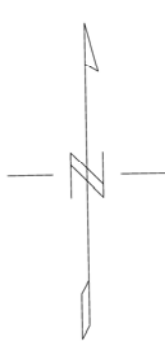
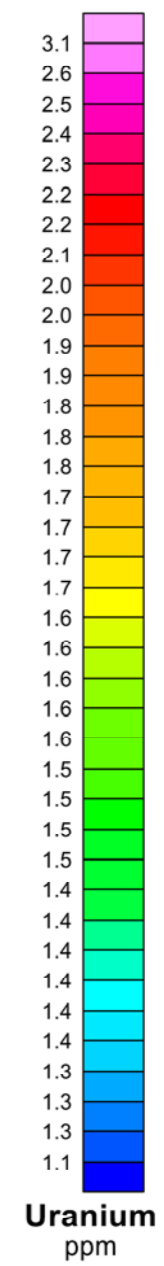
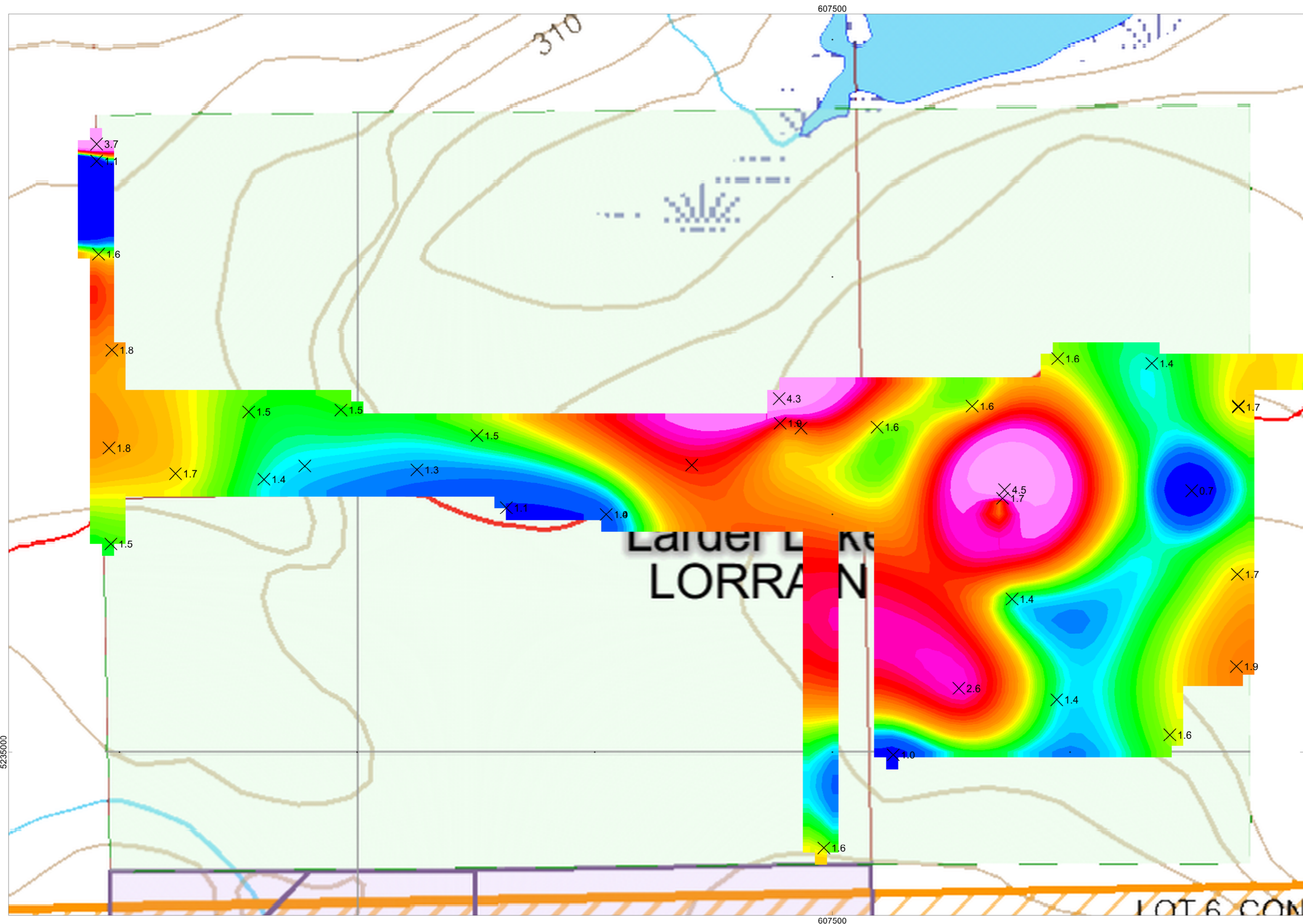
## APPENDIX D

### LIST OF MAPS (IN MAP POCKET)

Posted Color Contour Maps (1:2500)

- 1) GOLD DIAMET-CABO-SPECT-U
- 2) GOLD DIAMET-CABO-SPECT-Th
- 3) GOLD DIAMET-CABO-SPECT-K
- 4) GOLD DIAMET-CABO-SPECT-OUTCROP

**TOTAL MAPS=4**



**Gold Diamet Resources Ltd.**

**CABO PROPERTY**  
Lorrain Township, Ontario

URANIUM CONTOURED PLAN MAP  
Readings Taken On Ground

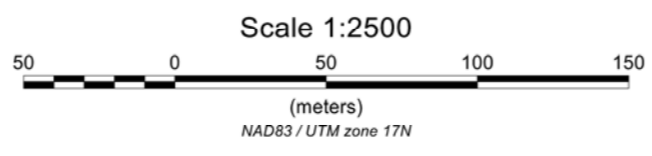
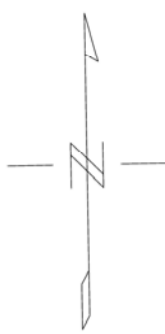
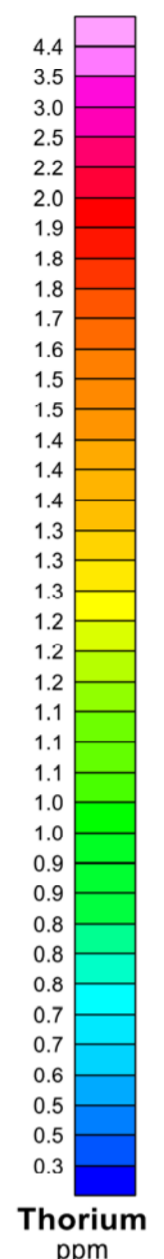
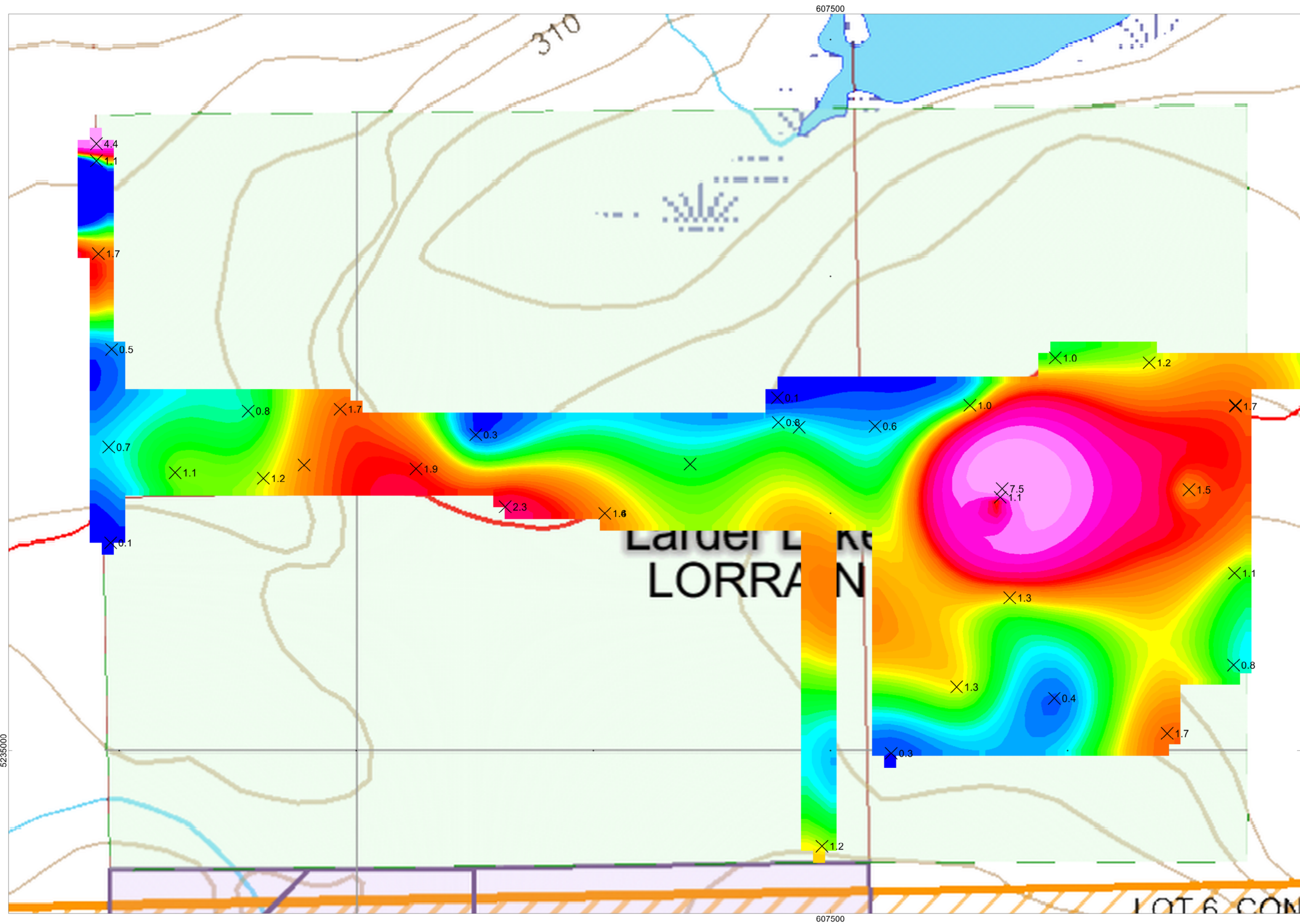
Posting Level: 0 ppm  
Station Separation: varies during GPS traverse  
U Contours: 0 ppm

RS-230 BGO SUPER SPECTROMETER

Operated By: C Jason Ploeger, B.Sc.  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: C Jason Ploeger, B.Sc.  
April 2017

*Drawing: GOLD DIAMET-CABO-SPECT-U*





**Gold Diamet Resources Ltd.**

**CABO PROPERTY**  
Lorrain Township, Ontario

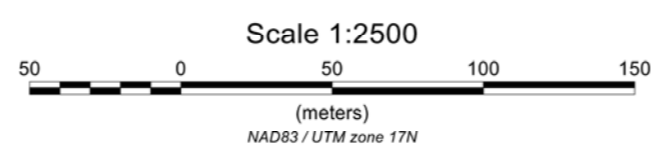
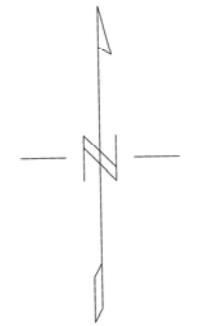
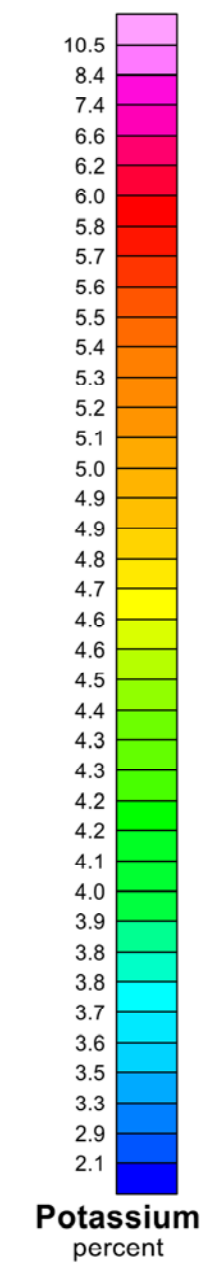
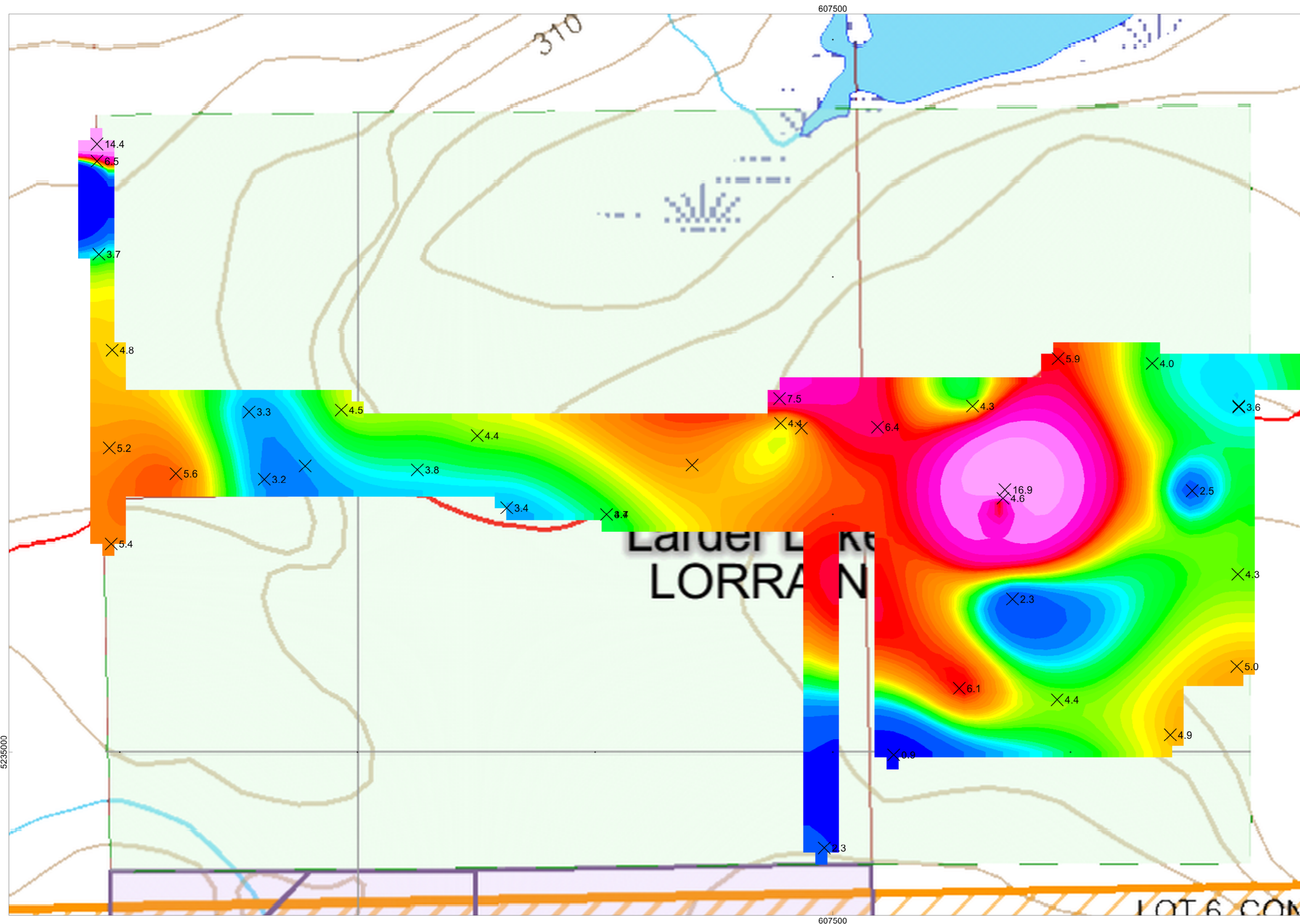
THORIUM CONTOURED PLAN MAP  
Readings Taken On Ground

Posting Level: 0 ppm  
Station Separation: varies during GPS traverse  
Th Contours: 0 ppm

RS-230 BGO SUPER SPECTROMETER

Operated By: C Jason Ploeger, B.Sc.  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: C Jason Ploeger, B.Sc.  
April 2017

Drawing: GOLD DIAMET-CABO-SPECT-Th



**Gold Diamet Resources Ltd.**

**CABO PROPERTY**  
Lorrain Township, Ontario

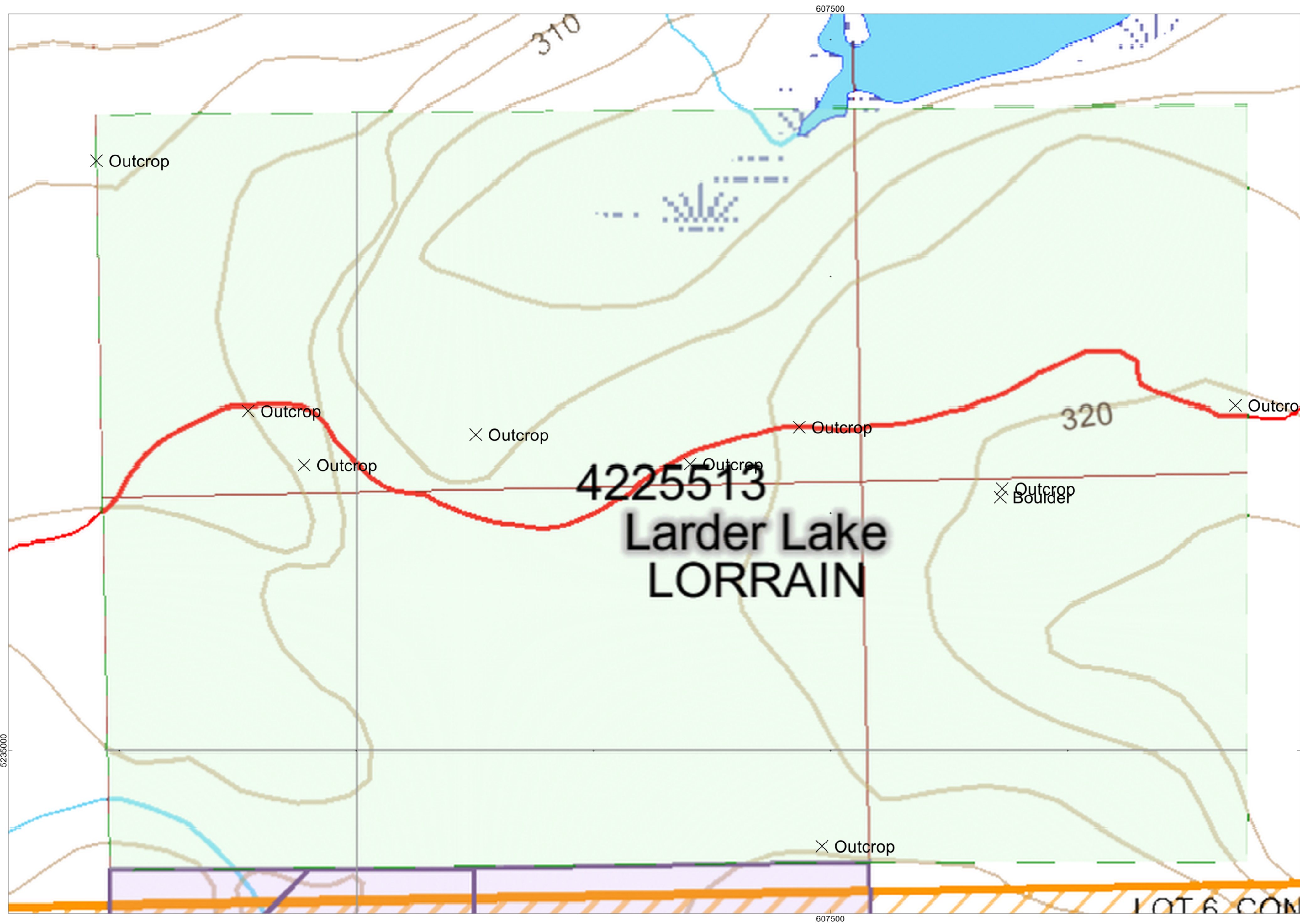
POTASSIUM CONTOURED PLAN MAP  
Readings Taken On Ground

Posting Level: 0 %  
Station Separation: varies during GPS traverse  
K Contours: 0 %

RS-230 BGO SUPER SPECTROMETER

Operated By: C Jason Ploeger, B.Sc.  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: C Jason Ploeger, B.Sc.  
April 2017

*Drawing: GOLD DIAMET-CABO-SPECT-K*



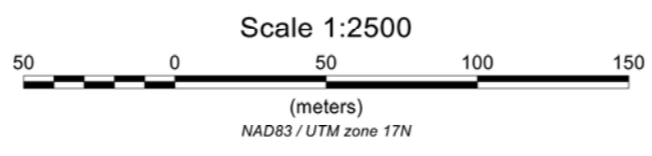
5235000

5235000

607500

607500

4225513  
Larder Lake  
LORRAIN



**Gold Diamet Resources Ltd.**

**CABO PROPERTY**  
Lorrain Township, Ontario

OUTCROP LOCATION MAP

RS-230 BGO SUPER SPECTROMETER

Operated By: C Jason Ploeger, B.Sc.  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: C Jason Ploeger, B.Sc.  
April 2017

Drawing: GOLD DIAMET-CABO-SPECT-OUTCROP

LOT 6 CON