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Assessment Report  
Drone Magnetic Survey

Bishop Nipissing Diamond Project

Lorrain Township  
Larder Lake Mining Division

Prepared for:  
RJK Explorations Ltd.

March 23, 2020

Prepared by:  
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## Summary

All mining claims within the Property known as the Bishop Nipissing Diamond Project are located in Lorrain Township, Larder Lake Mining Division and are held by Brian Bishop, Cobalt Power Group Inc., and Cobalt Industries of Canada Inc. and have been optioned to RJK Explorations Ltd. for purposes of exploring for diamond-bearing kimberlite pipes in the Cobalt-Kirkland Lake area situated 31 km south of Haileybury, Ontario. The seven surveyed grids and associated mining claims may be accessed via Ontario Road 567 and logging roads west of Ontario Road 567.

A survey using a Geometrics MFAM magnetometer mounted on a DJI M600 drone was conducted by Zen Geomap of Timmins over forty-nine claims wholly or partly within seven flight grids in Lorrain Township between May 29, 2018 and December 28, 2019.

The flight grids on the property totaled 154 line kilometers. The flight grid information is presented in Table 2, including direction of grid lines, tie lines and spacing of grid lines. Results, conclusions and recommendations are provided in Section 8.0 and 9.0 of this report.

## 1.0 Introduction

Drone magnetic surveys were conducted on seven grids (see Figure 2), Mining claims included in each grid are listed in Table 1, and are located in Lorrain township, Larder Lake Mining Division.

A general location and access map is presented as *Figure 1*.

A detailed claim location map is presented as *Figure 2* and *Figure 3*.

Between May 29, 2018 and December 28, 2019, (see Table 2) the mining claims listed in Table 1 were surveyed using a Geometrics MFAM magnetometer mounted on a DJI M600 drone. Zen Geomap Ltd. of Timmins, Ontario, carried out the magnetic survey on a contract basis for the client. The survey was performed in order to evaluate the potential for kimberlite pipes within these claims.

Data processing and maps were completed between May 29, 2018 and December 28, 2019 and the Assessment report was prepared between March 13-20, 2020.

Invoices shown in *Appendix IV* have been paid in full by RJK Explorations Ltd.

<b>Bishop Nipissing Diamond Project</b>					
<b>Mining Claim Area Table</b>					
Grid	Claim #	Claimholder	Grid	Claim #	Claimholder
Grid 1	259882	Cobalt Power Group Inc.	Grid T2	326551	Cobalt Power Group Inc.
Grid 1	269300	Brian Bishop	Grid T2	191674	Cobalt Power Group Inc.
Grid 1	277041	Brian Bishop	Grid T2	300383	Cobalt Power Group Inc.
Grid 1	191673	Brian Bishop	Grid T2	277043	Cobalt Power Group Inc.
Grid 1	131127	Brian Bishop	Grid T2	307616	Cobalt Power Group Inc.
Grid 1	277042	Brian Bishop	Grid T2	269300	Brian Bishop
Grid 1	139060	Brian Bishop	Grid T2	214520	Cobalt Industries of Canada Inc.
Grid 1	339261	Cobalt Industries of Canada Inc.	Grid T2	301841	Cobalt Industries of Canada Inc.
Grid 1	329881	Brian Bishop	Grid T2	131127	Brian Bishop
Grid 1	247076	Brian Bishop			
Grid T1	247076	Brian Bishop	Nicol North & West	214520	Cobalt Industries of Canada Inc.
Grid T1	317154	Cobalt Industries of Canada Inc.	Nicol North & West	301841	Cobalt Industries of Canada Inc.
Grid T1	131742	Cobalt Industries of Canada Inc.	Nicol North & West	131127	Brian Bishop
Grid T1	258580	Brian Bishop	Nicol North & West	111760	Cobalt Industries of Canada Inc.
Grid T1	341583	Brian Bishop	Nicol North & West	317177	Brian Bishop
Grid T1	234633	Brian Bishop	Nicol North & West	245678	Cobalt Industries of Canada Inc.
			Nicol North & West	196494	Cobalt Industries of Canada Inc.
Grid 2	341583	Brian Bishop	Nicol North & West	265306	Cobalt Industries of Canada Inc.
Grid 2	234633	Brian Bishop	Nicol North & West	329925	Cobalt Industries of Canada Inc.
Grid 2	302849	Brian Bishop	Nicol North & West	319733	Cobalt Industries of Canada Inc.
Grid 2	187189	Cobalt Industries of Canada Inc.	North Grid	155683	Brian Bishop
Grid 2	199542	Brian Bishop	North Grid	150827	Brian Bishop
Grid 2	302829	Brian Bishop	North Grid	330989	Brian Bishop
Grid 2	187190	Cobalt Industries of Canada Inc.	North Grid	172334	Brian Bishop
Grid 2	254147	Brian Bishop	North Grid	143090	Brian Bishop
Grid 2	106280	Brian Bishop	North Grid	283212	Brian Bishop
Grid 2	186844	Brian Bishop			
Grid 2	199568	Brian Bishop	South Grid	175091	Brian Bishop
Grid 2	155683	Brian Bishop	South Grid	343852	Brian Bishop
Grid 2	150827	Brian Bishop	South Grid	155684	Brian Bishop
			South Grid	126017	Brian Bishop

Table 1: Mining Claims surveyed listed by Grid ID

Grid Name	Date Surveyed	Line Direction	Line Spacing	Tie Line Direction	Tie Line Spacing	Total Line Kilometers
		Azimuth/Degrees	Meters	Azimuth/Degrees	Meters	
1	23-Mar-19	38	40	128	190	19.4
T1	31-Aug-19	0	40	90	250	13.6
2	23-Mar-19	49	40	139	335	37.4
T2	31-Aug-19	0	40	90	250	13.7
Nicol North & West	28-Dec-19	90	50	0	250/150	26.3
North Grid	29-May-18	0	25	90	25	20.8
South Grid	29-May-18 and 23-Mar-19	90	50	0	50	22.8

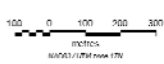
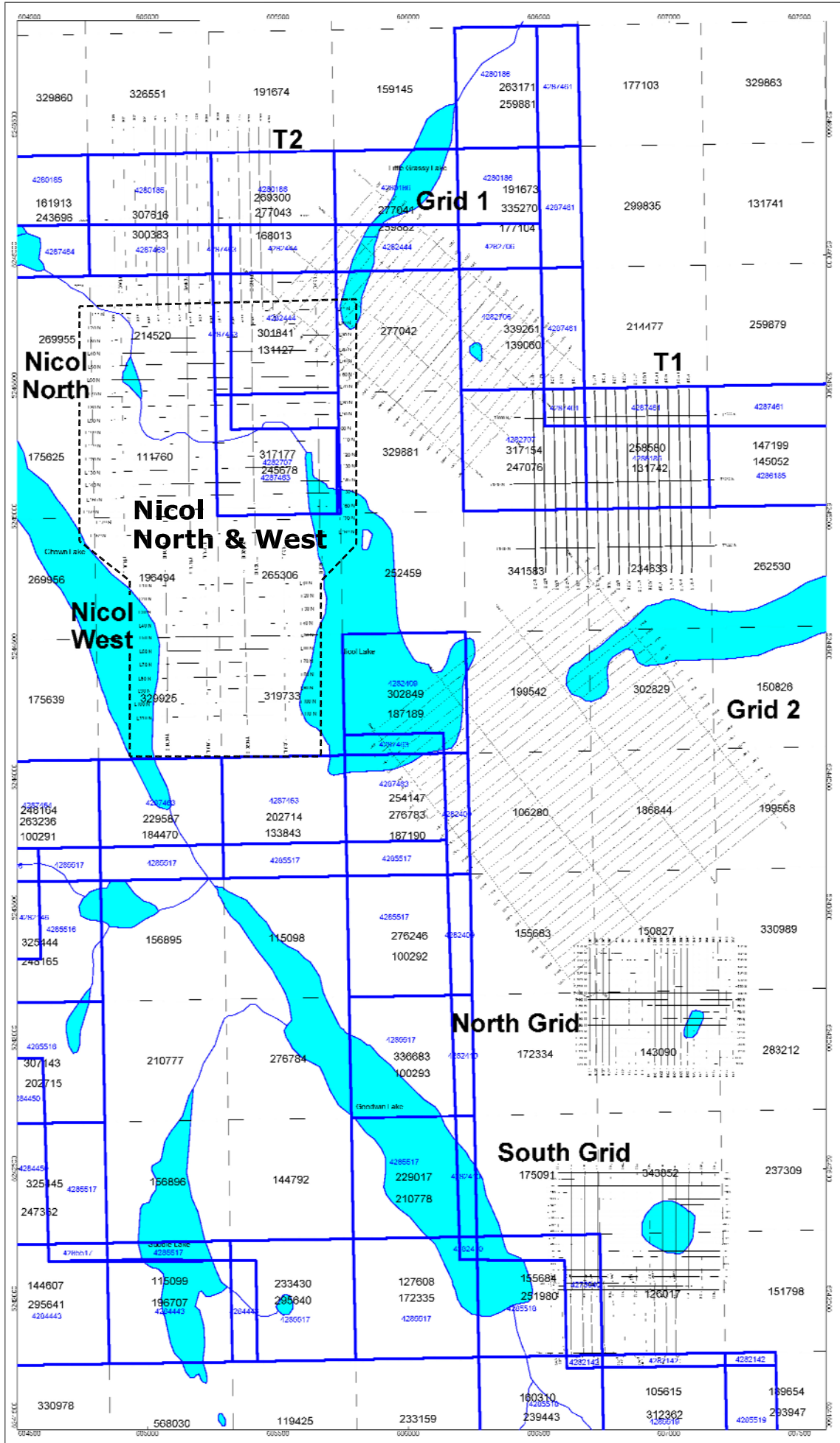
Table 2: Grid Information

## 2.0 Location and Access

The seven grids surveyed are located approximately 242 kilometers southeast of Timmins, Ontario and 165 kilometers north of North Bay, Ontario, via road access. The field crews accessed the surveyed grids in Lorrain Township, Larder Lake Mining Division, via road access from Timmins, Ontario. Travelling 223 kilometers east of Timmins on Ontario Highway 101 and Trans-Canada Highway/ON-11 S to Ontario Highway 11B North to the community of North Cobalt and turning south onto Ontario Road 567 for 3.5 kilometres to a gravel logging road on the right. Turning southwest on a gravel road toward Nicol Lake.



*Figure 1* – Location and Access to surveyed grid locations. Yellow lines are 10 kilometers UTM gridlines and thin green lines represent 1 kilometer gridlines.



RJK EXPLORATIONS LTD.  
LORRAINE TOWNSHIP GRIDS  
LOCATION MAP

**Figure 2**

### **3.0 Regional and Local Geology**

#### **3.1 Regional Geology**

The information provided in the Regional Geology section of this report is a compilation from various sources. The reader is directed to the references for further reading.

The region is largely underlain by Precambrian rocks.<sup>i</sup> The Archean basement consists of volcanic and interbedded sedimentary units, which make up the southern most portion of the western Abitibi Subprovince within the Superior Province.<sup>ii</sup> The Early Precambrian rocks include andesitic and basaltic lavas, diabase intrusions, and intrusions of granite hornblende syenite, and associated lamprophyre and syenite dikes and quartz monzonite.<sup>iii</sup>

Middle Precambrian rocks are represented by sedimentary rocks of the Huronian Super group, Cobalt Group, Gowganda and Lorrain Formations, and by Nipissing Diabase. The Gowganda Formation consists of greywackes, siltstones, and lenses of conglomerate. The Lorrain Formation is represented by medium to coarse-grained arkose which occurs as massive and weakly bedded units and crossbedded units with a few pebbly bands. The Nipissing Diabase, intrudes into all the older rocks, is a massive, relatively unaltered rock.<sup>iv</sup>

The Pleistocene and Recent deposits consist of sand, gravel, varved clay, and till.<sup>v</sup>

The rationale of exploring for diamonds in the Temagami region is the diamond-bearing kimberlite pipes and dykes. The Lake Temiskaming Structural Zone is expressed as large-scale normal movement along northwest-trending faults, including the Montreal River and Cross Lake fault systems. Nipissing diabase and gabbro intrusives likely were funnelled through conduits created by this rifting event and kimberlite magmatism is likely to have exploited these same features.<sup>vi</sup>

Kimberlites in northern and eastern Ontario occur along a trend at approximately 325°. The Lake Timiskaming Structural Zone in eastern Ontario has a northwest trend, and a subordinate northeast trend in the Cobalt and New Liskeard, Ontario areas.<sup>vii</sup>

#### **3.2 Local Geology**

The claims associated with the grids surveyed are located approximately between 5,242,000N and 5,246,500N and between 605,000E and 607,500E. The claims are situated within the Lake Temiskaming Structural Zone (LTSZ) which is known to host a number of diamond projects. The Northwest trending Lake Timiskaming West Shore Fault is located to the east along the shore of Lake Timiskaming. The Cross Lake Fault lies approximately 14 kilometers to the west, trending roughly parallel to the Lake Timiskaming West Shore Fault. The McKenzie Fault lies closer to the project area, 1-2 kilometers, also trending northwest and is proximal to other kimberlite pipes to the north i.e. Peddie, Gravel and Bucke. Locally over a dozen kimberlite pipes and lamprophyres, many diamondiferous, have been found mainly by testing magnetic anomalies.

Overlaying the claim locations on the Ontario Geological Survey map Grids 1 and 2 are underlain by mafic and related intrusive rocks and Nipissing mafic dykes and sills (2219 Ma): and related granophyre. Grid T1 is underlain by a roughly circular massive to foliated granite to granodiorite surrounded by mafic and related intrusive rocks and Nipissing mafic dykes and sills

(2219 Ma): and related granophyre. The western portion of Lightning Lake was surveyed as part of Grid 2 – “Lightning Lake sits in a rocky escarpment which can be inferred to be a cross fault.”<sup>viii</sup>

North and South grids underlain by foliated to massive granodiorite to granite rock that underlays most of the claim area. To the east are quartz sandstone, minor conglomerates, siltstone of the Huronian Supergroup (2.2 Ga to 2450 Ma), Cobalt Group and Lorrain Formation.<sup>ix</sup> To the west are mafic and related intrusive rocks and Nipissing mafic dykes and sills (2219 Ma): and related granophyre.

### **3.3 Structural Geology**

The information compiled in this section regarding the structural geology of the area where the magnetometer surveys were conducted is sourced from Sage, R.P. 2000. Kimberlites of the Lake Timiskaming structural zone: supplement; Ontario Geological Survey, Open File Report 6018, 123p.

The Lake Timiskaming Structural Zone kimberlites occur at intersections between the regional northwest trend and more local lineaments, faults and lithologic boundaries. While regionally the distribution of kimberlites follows a northwest pattern, in detail, local clusters of kimberlite pipes may reflect a distribution oblique to the northwest trend and influenced by cross structures.

Along the Lake Timiskaming Structural Zone, faults and lineaments display groupings into north-south, northeast and northwest trends and these intersecting patterns have broken the crustal rocks into polygonal blocks. Kimberlite intrusions display a preference at being emplaced at intersection points along these structural trends. In the Cobalt – New Liskeard area, kimberlites occur on both flanks of the Lake Timiskaming Structural Zone. Lineament trends intersect at or close to the site of emplacement.

Near Cobalt and New Liskeard, numerous kimberlite pipes occur where more conspicuous northwest-trending faults are intersected by local northeast-trending cross faults. Mapping by Thomson (1956, 1960) and Russell (1984) suggests that the bedrock in this region is broken into many blocks defined by these two trends.<sup>x</sup>

#### 4.0 Type of Mineral Deposit / Commodity

The client is exploring for diamondiferous kimberlite pipes in a region known for past discoveries of kimberlite pipes. Magnetometer is an effective tool for kimberlite exploration, as the host rock surrounding the emplaced pipe often has different magnetic properties than the pipe itself.

The reader is encouraged to refer to Sage (1996) for a discussion of the geophysical expression of kimberlite pipes in this region. In summary, within the Cobalt – New Liskeard area four kimberlite intrusions have a negative magnetic response. The geochronology suggests that kimberlite emplacement spanned approximately 30 Ma and straddled a magnetic polar reversal in the earth's magnetic field.<sup>xi</sup> The kimberlite intrusions commonly display oval to circular isomagnetic contour patterns and some appear to be highly elongated.<sup>xii</sup>

#### 5.0 Property History

The property known as the Bishop Nipissing Diamond Project is composed of several mining claims listed in Table 3, along with history of the claims as identified in claim abstracts.

Work completed to date includes grass roots prospecting, a research component, till sampling, screening, concentrating, sorting and examining potential kimberlite indicator minerals (KIMs), and microphotography. Refer to filed Assessment reports:

- (South Grid) Bishop, T., June 6, 2018: Assessment Work Report Claim L 4282142
- (Grid 1) Bishop, T., June 18, 2018: Assessment Work Report for Cell Claims 277042, 277041, 131127, and 329881
- (Grid T1, 2) Bishop, T., November 27, 2017: Assessment Work Report L 4281431 and L 4282409
- (South Grid) Bishop, T., October 3, 2016: Assessment Work Report Claim L 4273040

#### 6.0 Summary of 2018-2019 Drone Magnetic Survey

The program consisted of drone magnetic surveys carried out on seven (7) grids from the north near Little Grassy Lake to the south overlapping Paradis Pond. The grids are named Grid 1, Grid T1, Grid 2, Grid T2, Nicol North & West Grid, North Grid and South Grid, and are shown in Figure 3. Given the proximity of Nicol North Grid and Nicol West Grid, the maps and interpretation of these grids are discussed together.

Total line kilometers: Listed in Table 2: Grid Information  
 Altitude: 30m above ground level  
 Ground Speed: 50km/hr (14m/second)

A Geometrics MFAM magnetometer mounted on a DJI M600 Pro hexacopter drone was used to survey all grid lines. A Geometrics G856AX proton procession magnetometer was operated as a base station throughout the survey to provide diurnal monitoring of the local magnetic field variations. Equipment specifications are provided in Appendix I, II and III.



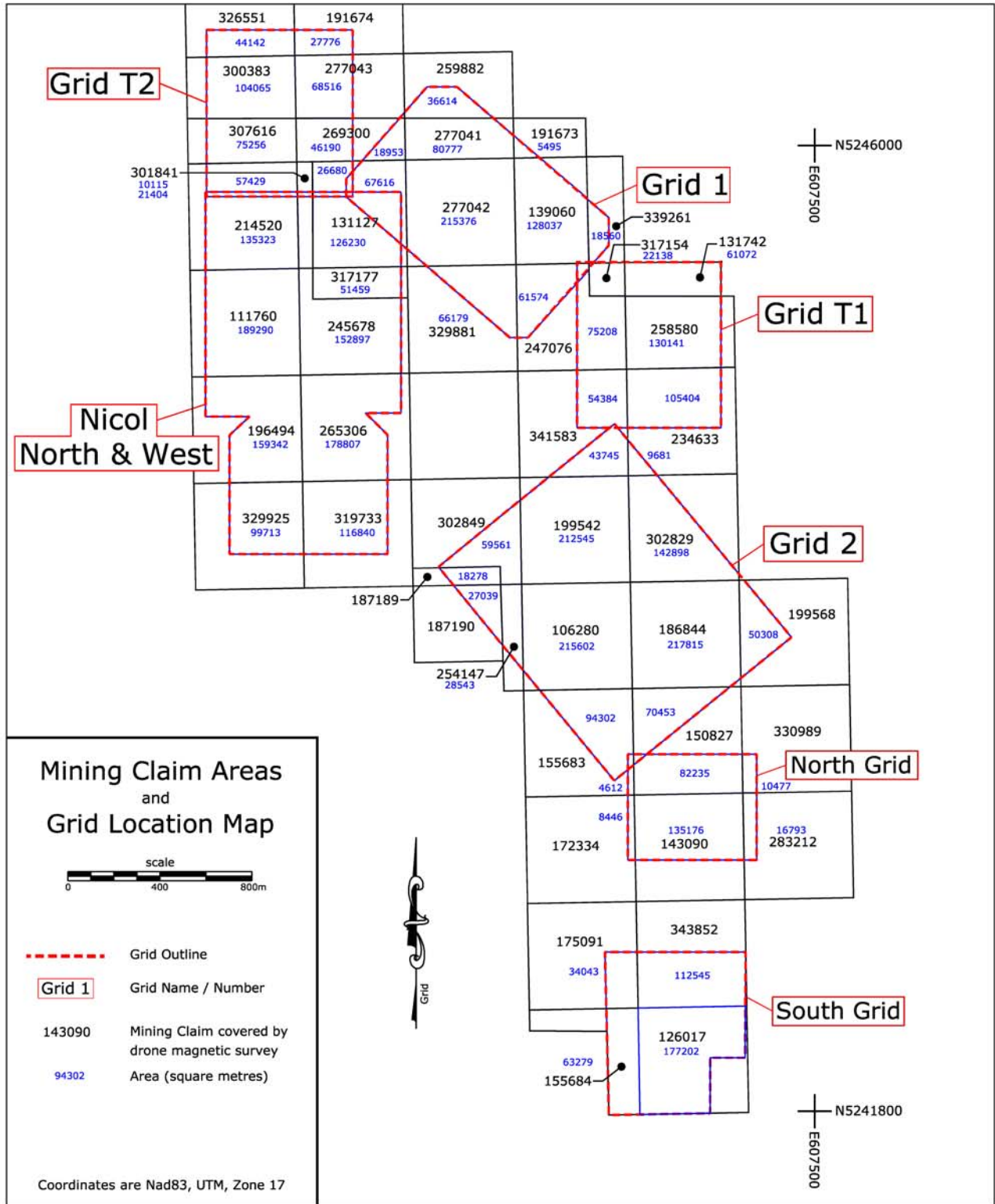


Figure 3 – Claim Location Map



*Grid 1*

The grid was designed to cover individual magnetic targets that were identified on Ontario Geological Survey maps, as a result the flight grid covers portions of the claim cell grid boundaries and are not aligned with the boundaries. Portions of claim cells 131127, 139060, 191673, 247076, 259882, 269300, 277041, 277042, 329881, and 339261 are covered by the flight grid. The base station was located at UTM coordinate E606050 / N5245545 (NAD83, UTM, Zone 17).

The total survey cost (\$5,789.50 pre-hst) will be directed to each claim as follows;

Claim #	% of Area	Dollar Value
131127	9.7%	\$559.89
139060	18.3%	\$1,060.20
191673	0.8%	\$45.50
247076	8.8%	\$509.86
259882	5.2%	\$303.18
269300	2.7%	\$156.94
277041	11.6%	\$668.87
277042	30.8%	\$1,783.40
329881	9.5%	\$547.99
339261	2.7%	\$153.68
		\$5,789.50

Figure 3 shows survey coverage on a per-claim basis. Supporting Invoices are included in Appendix IV.

*Grid T1*

The grid was designed to cover individual magnetic targets that were identified on Ontario Geological Survey maps, the flight grid covers portions of the claim cell grid boundaries and are aligned parallel with the boundaries. Portions of claim cells 131742, 234633, 247076, 258580, 317154, and 341583 are covered by the flight grid. The base station was located at UTM coordinate E606698 / N5245824 (NAD83, UTM, Zone 17).

The total survey cost (\$3,798.00 pre-hst) will be directed to each claim as follows;

Claim #	% of Area	Dollar Value
131742	13.6%	\$517.35
234633	23.5%	\$892.89
247076	16.8%	\$637.10
258580	29.0%	\$1,102.44
317154	4.9%	\$187.53
341583	12.1%	\$460.69
		\$3,798.00

Figure 3 shows survey coverage on a per-claim basis. Supporting Invoices are included in Appendix IV.

### Grid 2

The grid was designed to cover individual magnetic targets that were identified on Ontario Geological Survey maps, as a result the flight grid covers portions of the claim cell grid boundaries and are not aligned with the claim boundaries. Portions of claim cells 106280, 150827, 155683, 186844, 187189, 187190, 199542, 199568, 234633, 254147, 302829, 302849, and 341583 are covered by the flight grid. The base station was located at UTM coordinate E606700 / N5244940 (NAD83, UTM, Zone 17).

The total survey cost (\$5,789.50 pre-hst) will be directed to each claim as follows;

Claim #	% of Area	Dollar Value
106280	18.1%	\$1,048.25
150827	5.9%	\$342.54
155683	7.9%	\$458.49
186844	18.3%	\$1,059.01
187189	1.5%	\$88.87
187190	2.3%	\$131.46
199542	17.8%	\$1,033.39
199568	4.2%	\$244.60
234633	0.8%	\$47.07
254147	2.4%	\$138.78
302829	12.0%	\$694.77
302849	5.0%	\$289.58
341583	3.7%	\$212.69
		<u>\$5,789.50</u>

Figure 3 shows survey coverage on a per-claim basis. Supporting Invoices are included in Appendix IV.

### Grid T2

The grid was designed to cover individual magnetic targets that were identified on Ontario Geological Survey maps, the flight grid covers portions of the claim cell grid boundaries and are aligned parallel with the boundaries. Portions of claim cells 131127, 191674, 214520, 269300, 277043, 300383, 301841, 307616, and 326551 are covered by the flight grid. The base station was located at UTM coordinate E605220 / N5246247 (NAD83, UTM, Zone 17).

The total survey cost (\$3,798.00 pre-hst) will be directed to each claim as follows;

Claim #	% of Area	Dollar Value
131127	5.8%	\$220.20
191674	6.0%	\$229.25
214520	12.5%	\$473.99
269300	10.0%	\$381.23
277043	14.9%	\$565.50
300383	22.6%	\$858.90
301841	2.2%	\$83.48
307616	16.4%	\$621.12
326551	9.6%	\$364.33
		\$3,798.00

Figure 3 shows survey coverage on a per-claim basis. Supporting Invoices are included in Appendix IV.

#### *Nicol North/West Grids*

The grid was designed to cover individual magnetic targets that were identified on Ontario Geological Survey maps, the flight grid covers portions of the claim cell grid boundaries and are aligned parallel with the boundaries. Portions of claim cells 111760, 131127, 196494, 214520, 245678, 265306, 301841, 317177, 319733, and 329925 are covered by the flight grid.

Nicol North Grid: The base station was located at UTM coordinate E605067 / N5245582 (NAD83, UTM, Zone 17).

Nicol West Grid: The base station was located at UTM coordinate E605324/ N5244536 (NAD83, UTM, Zone 17).

The total survey cost (\$6,882.50 pre-hst) will be directed to each claim as follows;

Claim #	% of Area	Dollar Value
111760	15.4%	\$1,058.06
131127	10.3%	\$705.57
196494	12.9%	\$890.66
214520	11.0%	\$756.40
245678	12.4%	\$854.63
265306	14.5%	\$999.46
301841	1.7%	\$119.64
317177	4.2%	\$287.64
319733	9.5%	\$653.09
329925	8.1%	\$557.36
		\$6,882.50

Figure 3 shows survey coverage on a per-claim basis. Supporting Invoices are included in Appendix IV.

### *North Grid*

The grid was designed to cover individual magnetic targets that were identified on Ontario Geological Survey maps, the flight grid covers portions of the claim cell grid boundaries and are aligned parallel with the boundaries. Portions of claim cells 143090, 150827, 155683, 172334, 283212 and 330989 are covered by the flight grid. The base station was located at UTM coordinate E606971 / N5243119 (NAD83, UTM, Zone 17).

The total survey cost (\$3,593.50 pre-hst) will be directed to each claim as follows;

Claim #	% of Area	Dollar Value
143090	52.4%	\$1,884.68
150827	31.9%	\$1,146.55
155683	1.8%	\$64.30
172334	3.3%	\$117.76
283212	6.5%	\$234.13
330989	4.1%	\$146.07
		\$3,593.50

*Figure 3* shows survey coverage on a per-claim basis. Supporting Invoices are included in *Appendix IV*.

### *South Grid*

The grid was designed to cover individual magnetic targets that were identified on Ontario Geological Survey maps, the flight grid covers portions of the claim cell grid boundaries and are aligned parallel with the boundaries. Portions of claim cells 126017, 155684, 175091, and 343852 are covered by the flight grid.

The base station was located at UTM coordinate E607310 / N5242511 (NAD83, UTM, Zone 17).

The total survey cost (\$5,593.50 pre-hst) will be directed to each claim as follows;

Claim #	% of Area	Dollar Value
126017	45.8%	\$2,560.73
155684	16.3%	\$914.44
175091	8.8%	\$491.95
343852	29.1%	\$1,626.38
		\$5,593.50

*Figure 3* shows survey coverage on a per-claim basis. Supporting Invoices are included in *Appendix IV*.

## 7.0 Processing

Magnetometer data was collected on 2 Geometrics MFAM sensors operating at 1000hz. The data was processed through a custom program operating in Python. This converts raw data from Geometrics MFAM into a format compatible with Geosoft Oasis Montaj.

Customized import templates were used within Geosoft, to identify and separate magnetic readings into organized grid and tie lines. This step eliminates extraneous magnetic data collected as the drone travels to and from the grid.

Grid and tie line data were corrected to remove heading error and lag. Corrected grid data was then leveled based on tie lines.

## 8.0 Discussion of Results

For Grid 1, a TMI (total mag intensity) colourized contour map is included at full-scale (Figure 4: Grid 1 Interpreted Map).

The survey covered a magnetic value range of approximately 100nT.

There is a closed mag-high anomaly in the central grid area this feature may represent a kimberlite pipe, expressed as a magnetic-high anomaly. This feature is marked as MH1 on Interpretive Map.

There are 2 mag-low anomalies within the survey grid, marked as ML1 and ML2 on Interpretive map. These 2 anomalies may represent kimberlite pipes.

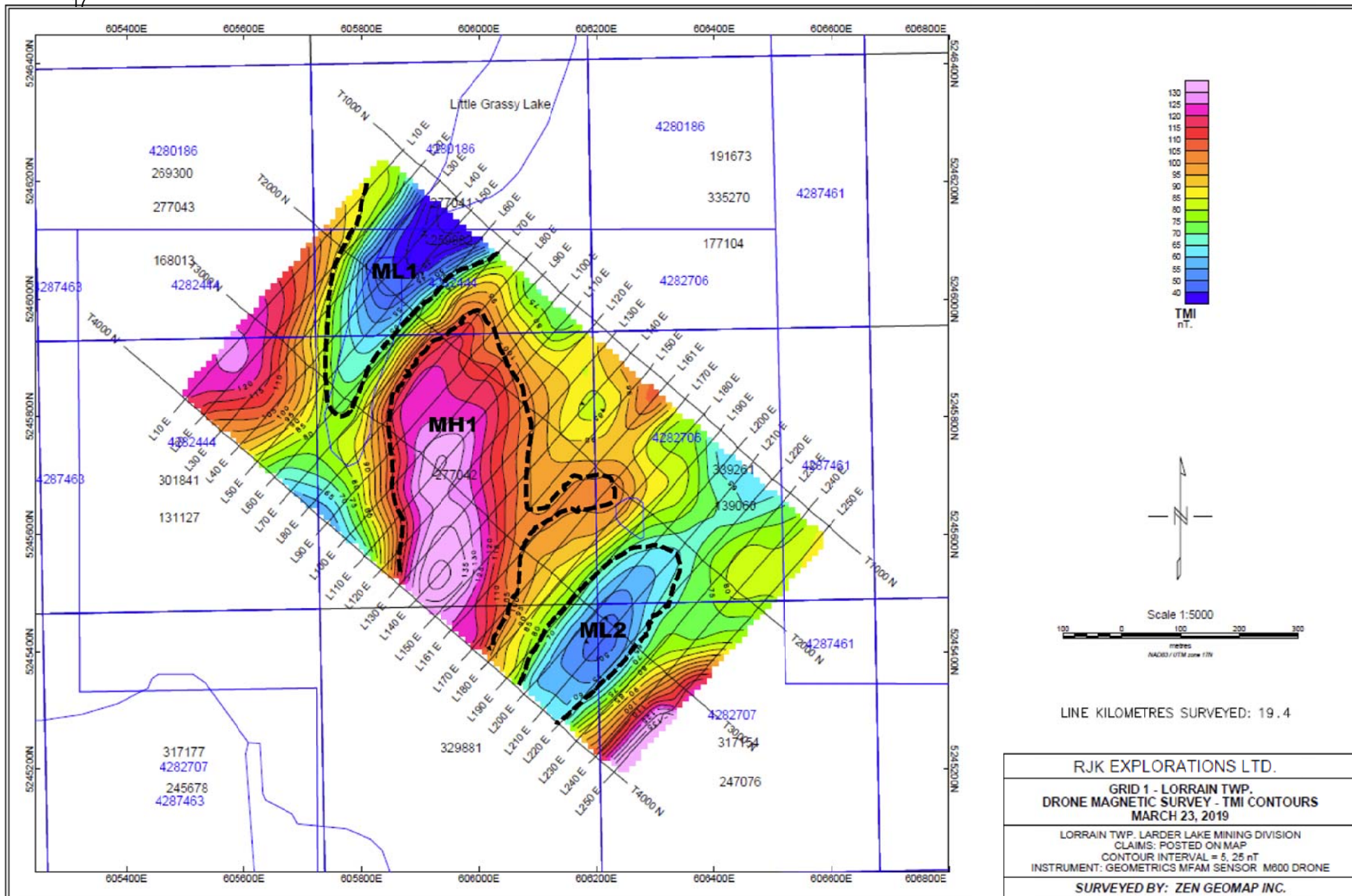


Figure 4: Grid 1 Interpreted Map

**For Grid T1**, a TMI (total mag intensity) colourized contour map is included at full-scale (Figure 5: Grid T1 Interpreted Map).

The survey covered a magnetic value range of approximately 100nT.

There is a closed mag-high anomaly in the central grid area this feature may represent a kimberlite pipe, expressed as a magnetic-high anomaly. This feature is marked as MH1 on Interpretive Map.

**For Grid 2**, a TMI (total mag intensity) colourized contour map is included at full-scale (Figure 6: Grid 2 Interpreted Map).

The survey covered a magnetic value range of approximately 260nT.

There is a closed mag-low anomaly in the central grid area this feature may represent a kimberlite pipe, expressed as a magnetic-low anomaly. This feature is marked as ML1 on Interpretive Map.

Along the southern edge of Lightning Lake has been interpreted as a possible cross fault.

**For Grid T2**, a TMI (total mag intensity) colourized contour map is included at full-scale (Figure 7: Grid T2 Interpreted Map).

The survey covered a magnetic value range of approximately 175nT.

There are two closed mag-high anomalies in the central and lower grid area these features may each represent a kimberlite pipe, expressed as a magnetic-high anomaly. These features are marked as MH1, and MH2, respectively on Interpretive Map.

**For Grid Nicol North/West**, a TMI (total mag intensity) colourized contour map is included at full-scale (Figure 8: Grid Nicol North/West Interpreted Map).

The survey covered a magnetic value range of approximately 255nT.

There is a closed mag-high anomaly in the central grid area of the Nicol West Grid and a closed mag-low anomaly to the north on the Nicol North Grid. These features may represent kimberlite pipes, expressed as a magnetic-high anomaly and a magnetic-low anomaly depending on timing of deposition. This feature is marked as MH1 and ML1, respectively on Interpretive Map.



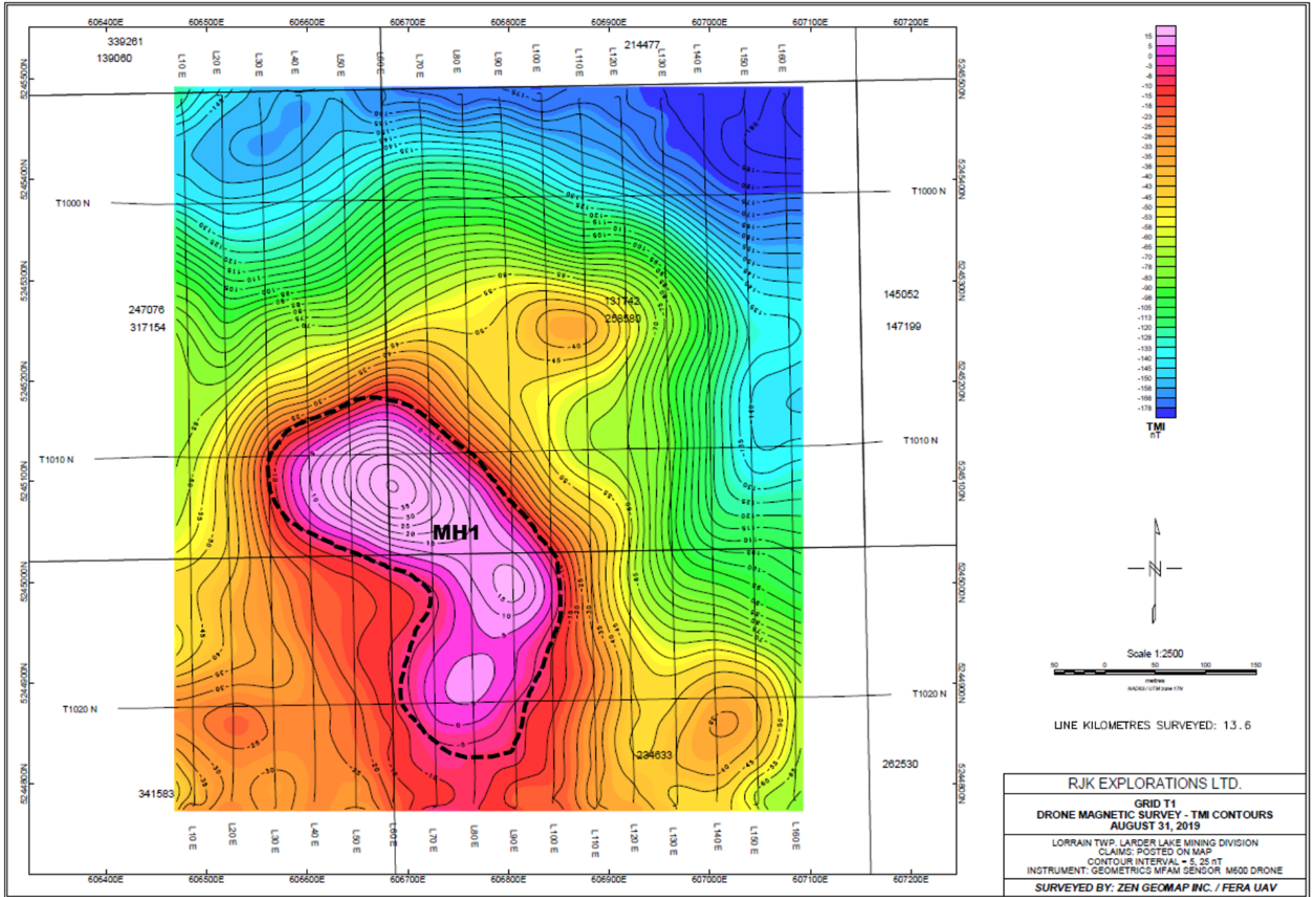


Figure 5: Grid T1 Interpreted Map



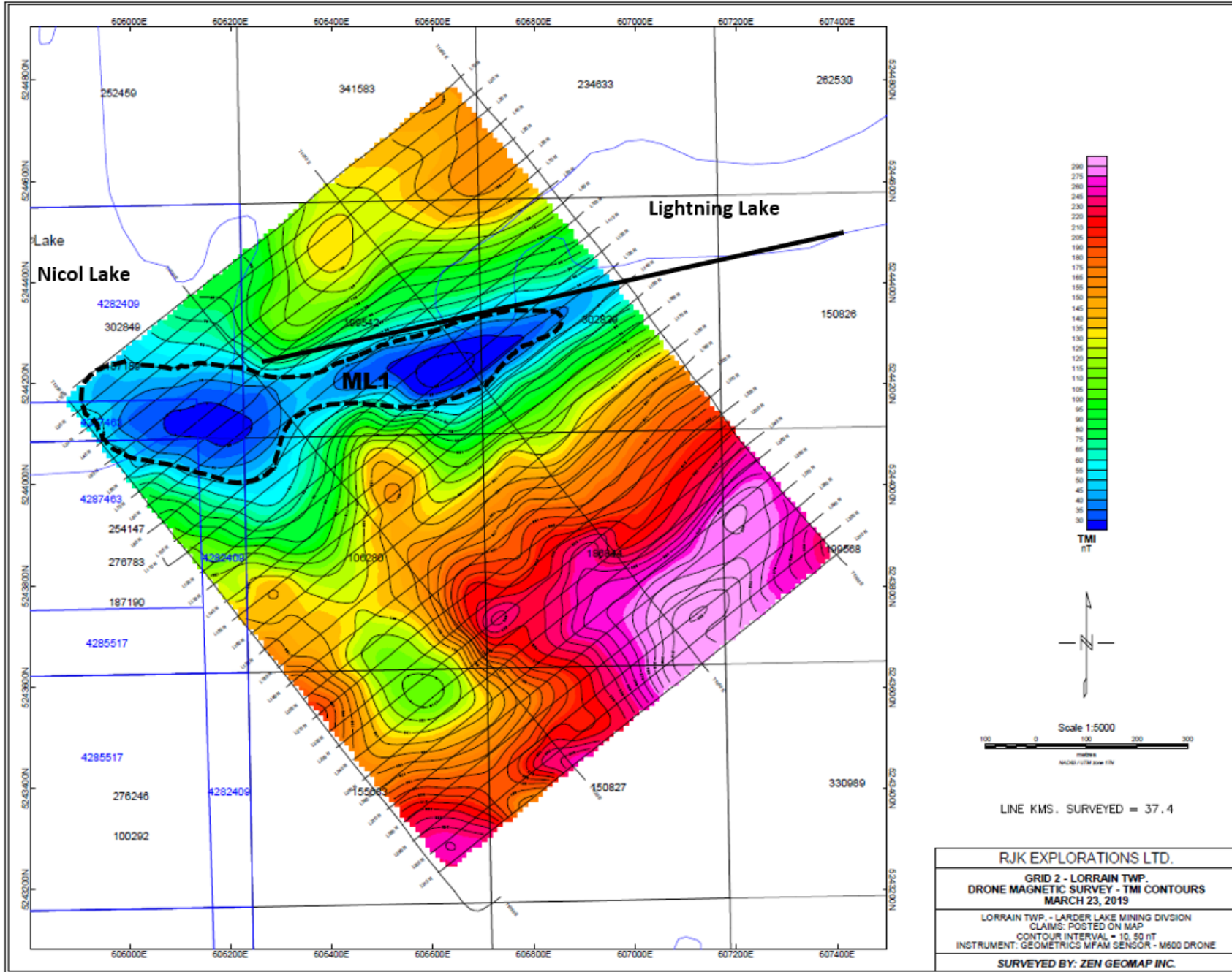


Figure 6: Grid 2 Interpreted Map

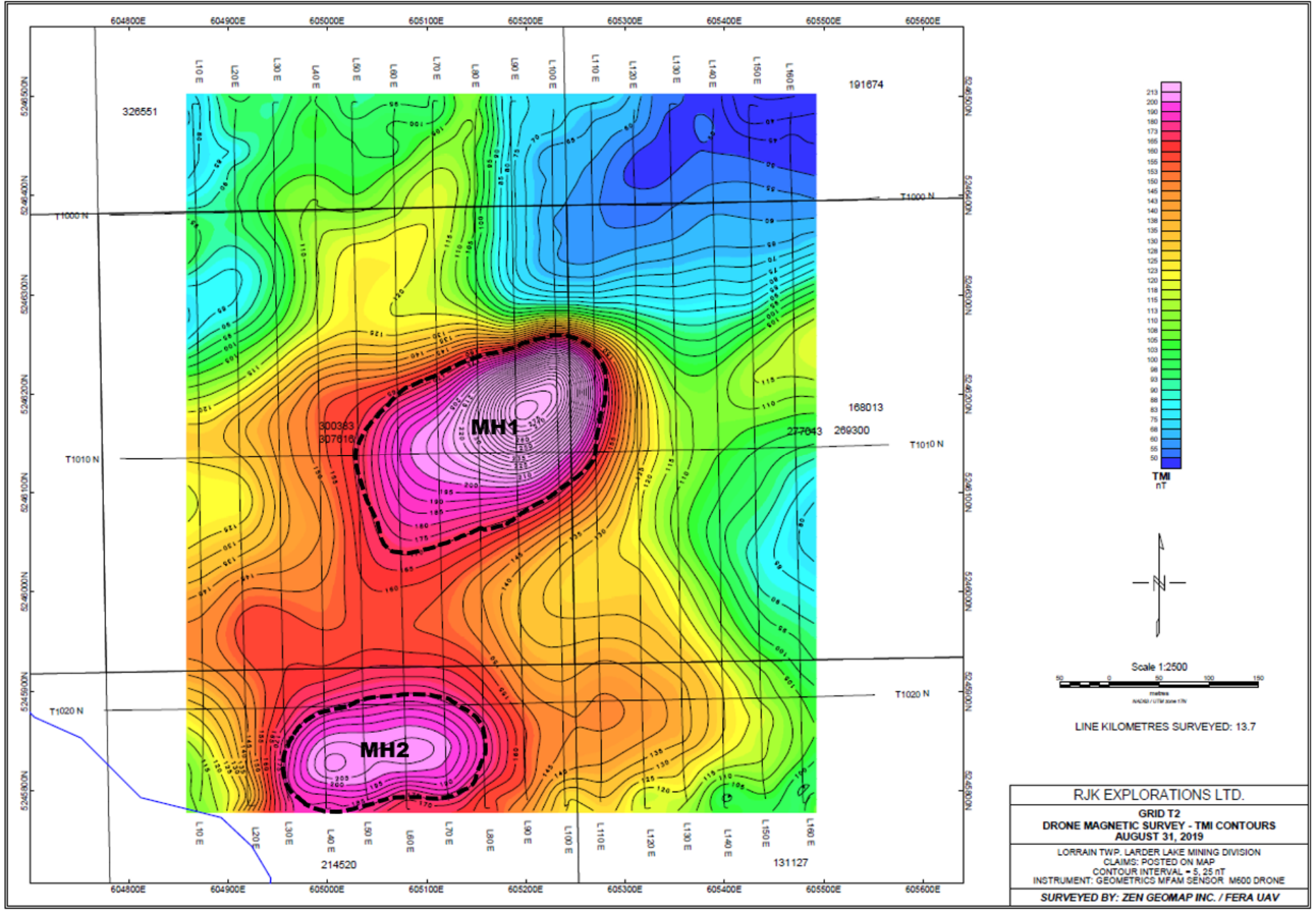


Figure 7: Grid T2 Interpreted Map

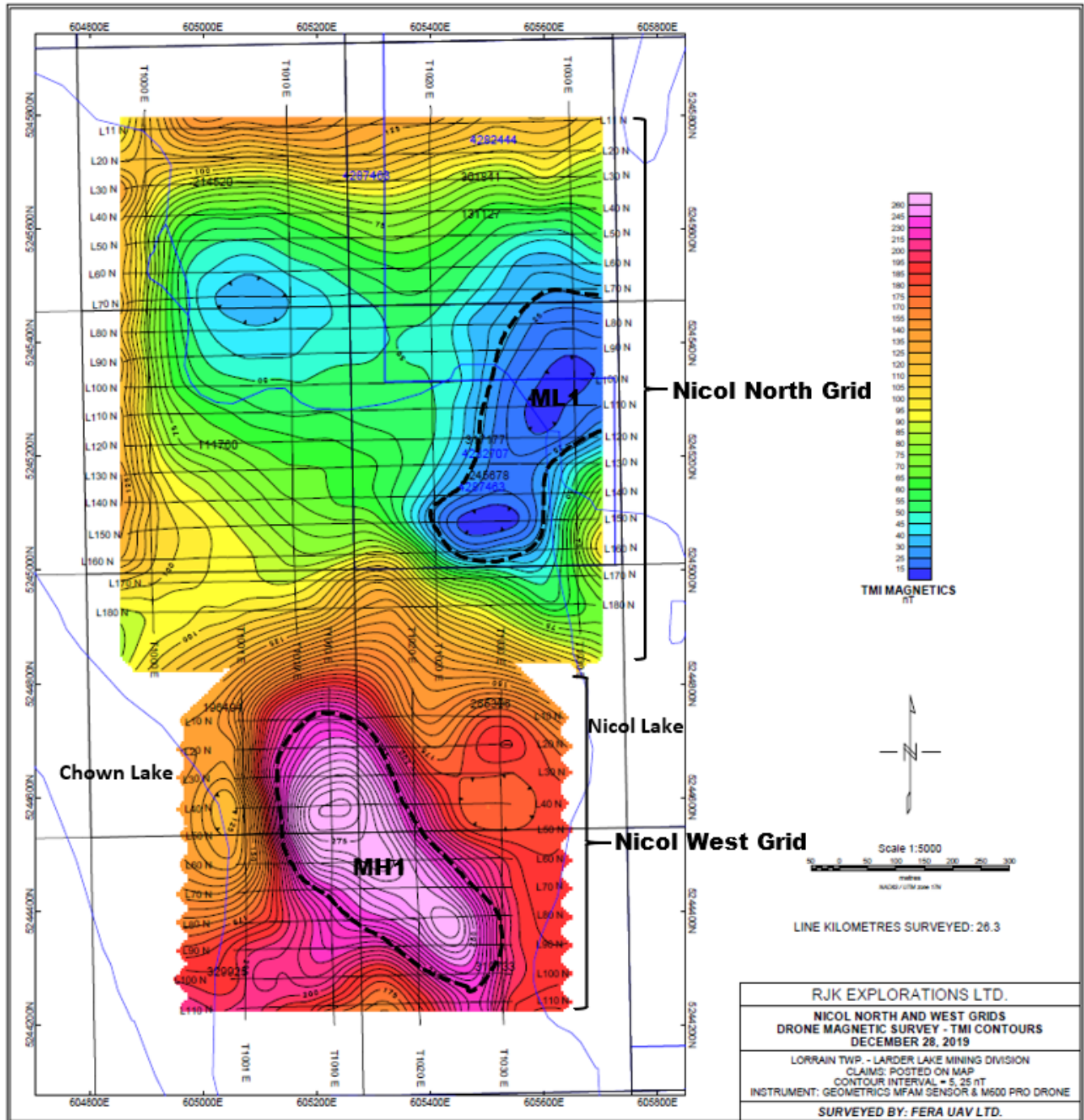


Figure 8: Grid Nicol North/West Interpreted Map

For Grid North, a TMI (total mag intensity) colorized contour map is included at full-scale (Figure 9: Grid North Interpreted Map). The survey covered a magnetic value range of approximately 190nT.

There is a closed mag-low anomaly in the lower-central grid area this feature may represent a kimberlite pipe, expressed as a magnetic-low anomaly. This feature is marked as ML1 on Interpretive Map.

**For Grid South**, a TMI (total mag intensity) colourized contour map is included at full-scale (Figure 10: Grid South Interpreted Map). The survey covered a magnetic value range of approximately 230nT.

There is neither a mag-low or mag-high circular or elliptical anomaly featured within the grid area.



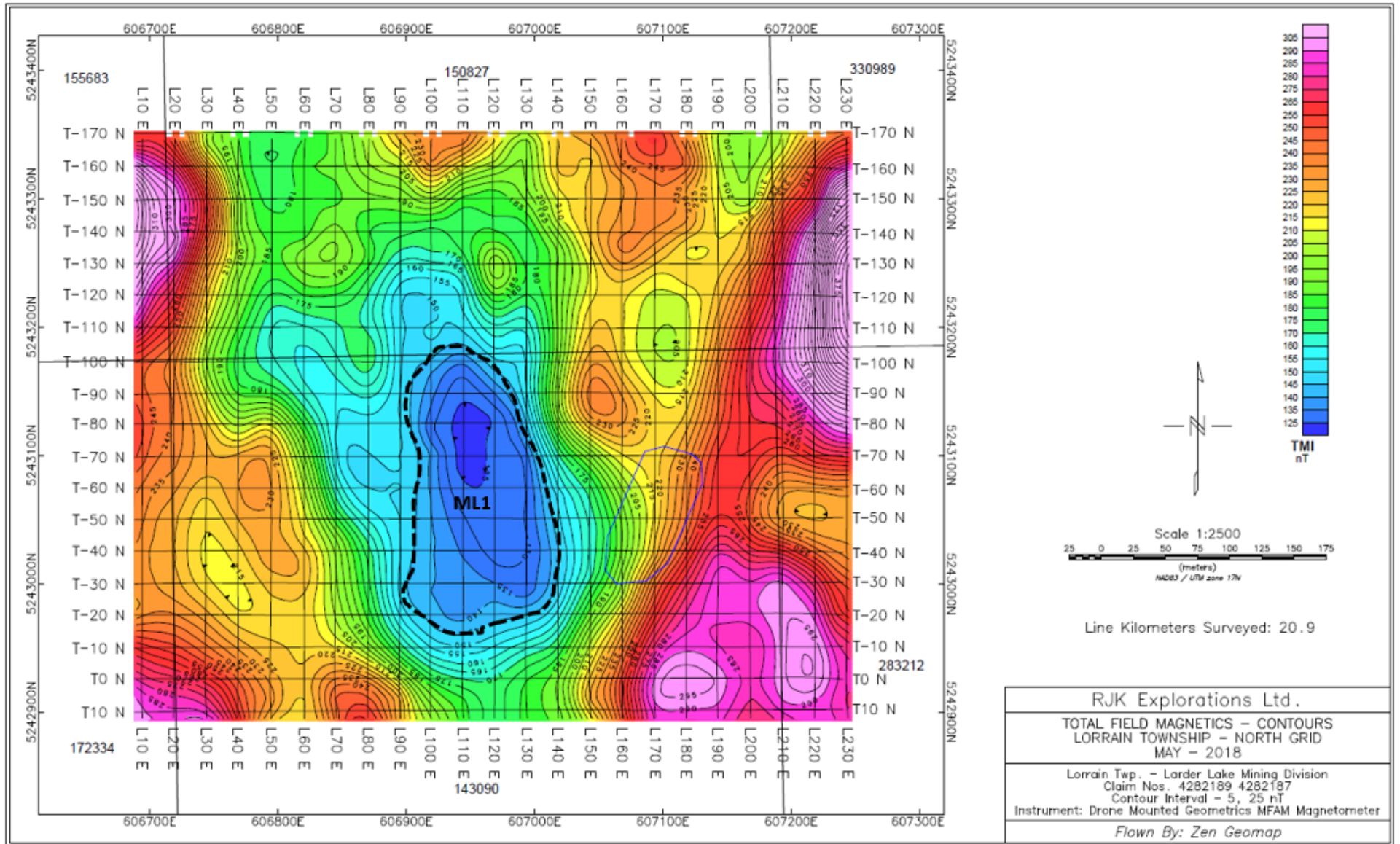


Figure 9: Grid North Interpreted Map

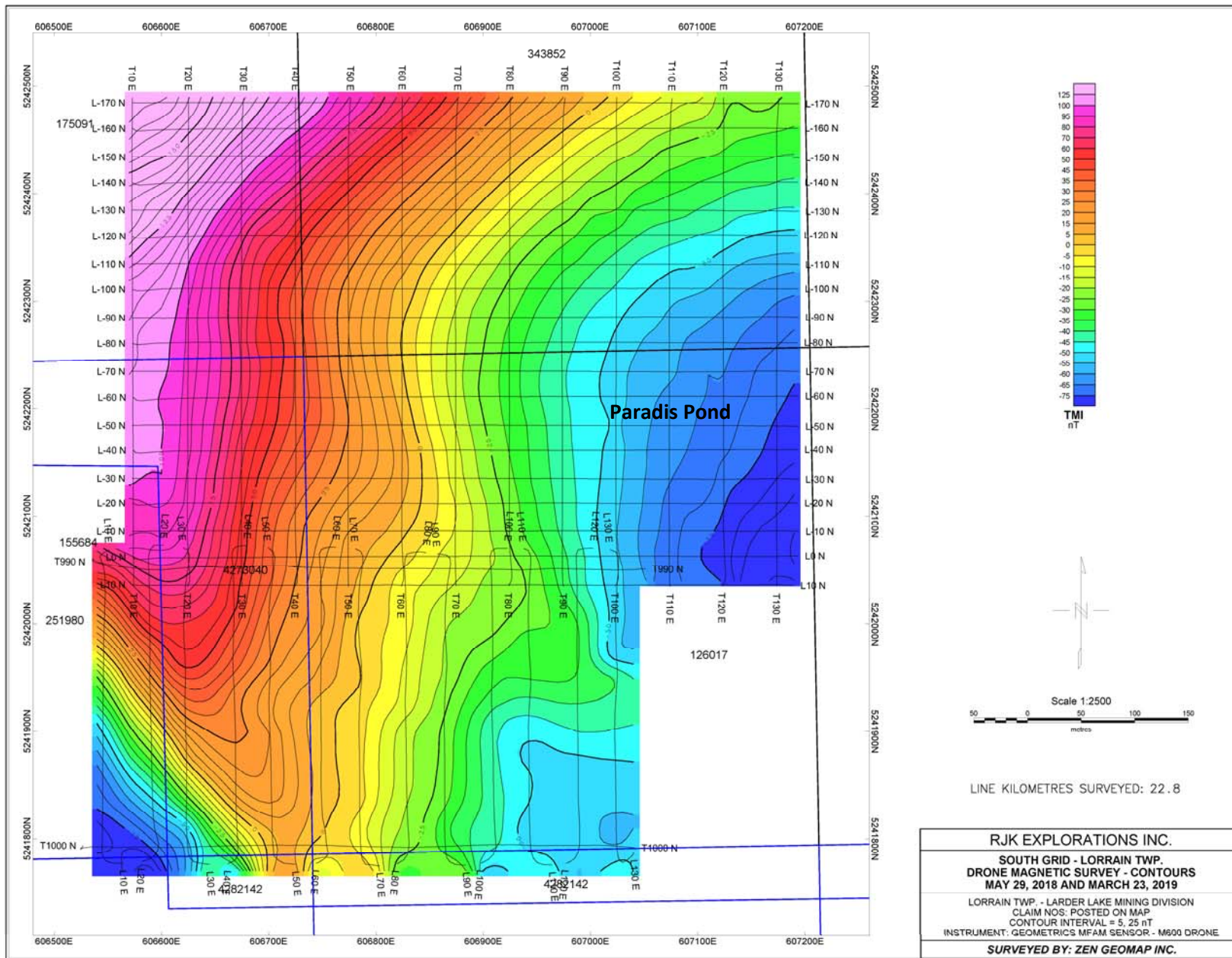


Figure 10: Grid South Interpreted Map

## 9.0 Conclusions and Recommendations

The surveys were successful at identifying up to five (5) possible magnetic-low kimberlite pipe targets and five (5) possible magnetic-high targets.

Drone magnetometer survey provided greater detail than the previously available, published government magnetic data in this area.

Future exploration could include the following;

- 1) Till sampling and/or trenching across magnetic anomalies identified in these surveys,
- 2) Diamond drilling or reverse circulation drilling the high and low magnetic anomalies,
- 3) Detailed magnetometer survey at 25m or lesser line spacing across targets,
- 4) 3D inversion modeling of 10 targets.

## **Certificate of Qualifications**

I, Rochelle Collins, of the City of Timmins, Province of Ontario, do hereby certify that:

I am a professional Geologist, residing at 287 Lois Crescent, Timmins Ontario, P4P 1G6.

I hold a B.Sc. Honours degree in Geology and Geography (1997) from McMaster University of Hamilton, Ontario and an EMBA from Queen's University of Kingston, Ontario (2020).

I am a registered professional geoscientist with the Professional Geoscientists of Ontario (#1412)

This report is based on my observations and interpretation of the geological and geophysical data as prepared on the incorporated maps and figures.

I have no personal interest in the property covered by this report.

Permission is granted for the use of this report, in whole or in part, for assessment and qualification requirements but not for advertising purposes.

# **Rochelle Collins**

Rochelle Collins, P. Geo., B.Sc.

Dated at Timmins, Ontario

This 20th day of March, 2020.



## Acknowledgements

To the following individuals who provided geological, technical, historical, and other important information for this report: Kevin Cool, Matt Johnson, Pat Fera, the staff of the Timmins MENDM and Gary Grabowski.

## End Notes/References

<sup>i</sup> White, S.E. 2019. Structure and stratigraphy of Archean basement near Cobalt, Ontario; in Summary of Field Work and Other Activities, 2019, Ontario Geological Survey, Open File Report 6360, p.29-1 to 29.9

<sup>ii</sup> White, S.E. 2019. Structure and stratigraphy of Archean basement near Cobalt, Ontario; in Summary of Field Work and Other Activities, 2019, Ontario Geological Survey, Open File Report 6360, p.29-1 to 29.9

<sup>iii</sup> Lovell, H.L., and de Grijs, J.W. 1976: Lorrain Township, Southern Part, Concessions I to VI, District of Timiskaming; Ontario Div. Mines, MP51, 16p. Accompanied by Chart A, scale 1:15,840 or 1 inch to 1A mile.

<sup>iv</sup> Lovell, H.L., and de Grijs, J.W. 1976: Lorrain Township, Southern Part, Concessions I to VI, District of Timiskaming; Ontario Div. Mines, MP51, 16p. Accompanied by Chart A, scale 1:15,840 or 1 inch to 1A mile.

<sup>v</sup> Lovell, H.L., and de Grijs, J.W. 1976: Lorrain Township, Southern Part, Concessions I to VI, District of Timiskaming; Ontario Div. Mines, MP51, 16p. Accompanied by Chart A, scale 1:15,840 or 1 inch to 1A mile.

<sup>vi</sup> Potter, E., and Rees, K., 2008: Temex Resources Corp., Report on the 2008 Diamond Drilling Program, Latchford Diamond Project.

<sup>vii</sup> Sage, R.P. 2000. Kimberlites of the Lake Timiskaming structural zone: supplement; Ontario Geological Survey, Open File Report 6018, 123p.

<sup>viii</sup> Bishop, B.A. (Tony). 2017: Assessment Work Report Claims L 4281431 and L 4282409 Township of Lorrain, Larder Lake Mining Division, p.3

<sup>ix</sup> <https://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearch> Bedrock Geology Data, accessed June 2019

<sup>x</sup> Sage, R.P. 1996. Kimberlites of the Lake Timiskaming Structural Zone; Ontario Geological Survey, Open File Report 5937, 435p.

<sup>xi</sup> Sage, R.P. 1996. Kimberlites of the Lake Timiskaming Structural Zone; Ontario Geological Survey, Open File Report 5937, 435p.

<sup>xii</sup> Sage, R.P. 2000. Kimberlites of the Lake Timiskaming structural zone: supplement; Ontario Geological Survey, Open File Report 6018, 123p.

# Appendix I

## Geometrics MFAM Magnetometer Specifications

### System Basics

- System utilizes 2 MFAM sensors
- Sensors are controlled by 1 sensor module
- Sensor module communicates with a Texas Instruments main board
- Sensitivity: 0.00003nT
- Sensors operate at 1000Hz (collect 1000 readings per second on both sensors)

### Technical Specifications

#### **SPECIFICATIONS:**

##### Mechanical:

Enclosure Dimensions: 9" x 6 5/8" x 1 3/16"

Sensor Cable length (Development box to Sensor): 20.5 inches

##### Power:

AC adapter: 13.5 to 16 Volts DC at 1.0A

Battery Pack: 12 volt 1800 mA-Hour Lithium Polymer

#### **FEATURES:**

- 1) **TIVA TM4C1294NCPDT Micro controller:** This is a 32 bit ARM Cortex-MF4 based microcontroller running at up to 120 MHz. It has 1024K of flash, with 256K bytes of RAM, and 6 KBytes of EEPROM.
- 2) **USB 2.0 Micro Connector:** USB functionality is provided by the TIVA microcontroller and TIVAWare support libraries.
- 3) **Four User LEDs:** Four user controlled LEDs are wired to TIVA microcontroller GPIO pins PK0, PK1, PN0, and PN1.
- 4) **Two User Switches:** Two user read switches are wired to the microcontroller pins PK6 and PJ1.
- 5) **One Microcontroller Reset Switch:** This switch is used to reset the microcontroller.
- 6) **Wi-Fi port for TI CC3100 Wi-Fi Booster Pack:** The Development board layout allows a TI CC3100 Wi-Fi Booster pack to be directly plugged in. Using TIVAWare libraries, software can be developed to allow Wi-Fi communication between the Development board and a computer.
- 7) **USB XDS110 Port for Firmware Downloading and Debugging:** This second USB port is used as a debug/firmware download interface between the TI Code Composer Studio development suite and the Development Kit.

- 8) **Two RS-232 Serial Ports with RJ-45 Connectors:** Two general purpose serial ports are available to the user. The first serial port is wired to TIVA microcontroller UART4, and supports RTS and CTS handshaking. The second serial port is wired to TIVA microcontroller UART5. This port supports only TxD and RxD. Both of these ports use +/- 8 volt voltage swings, and support baud rates up to 920 KBaud. Note that these two ports are wired as Data Terminal Equipment (DTE) Thus to connect either of these two ports to a computer it would need to connect through a null modem. .

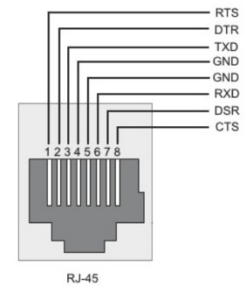
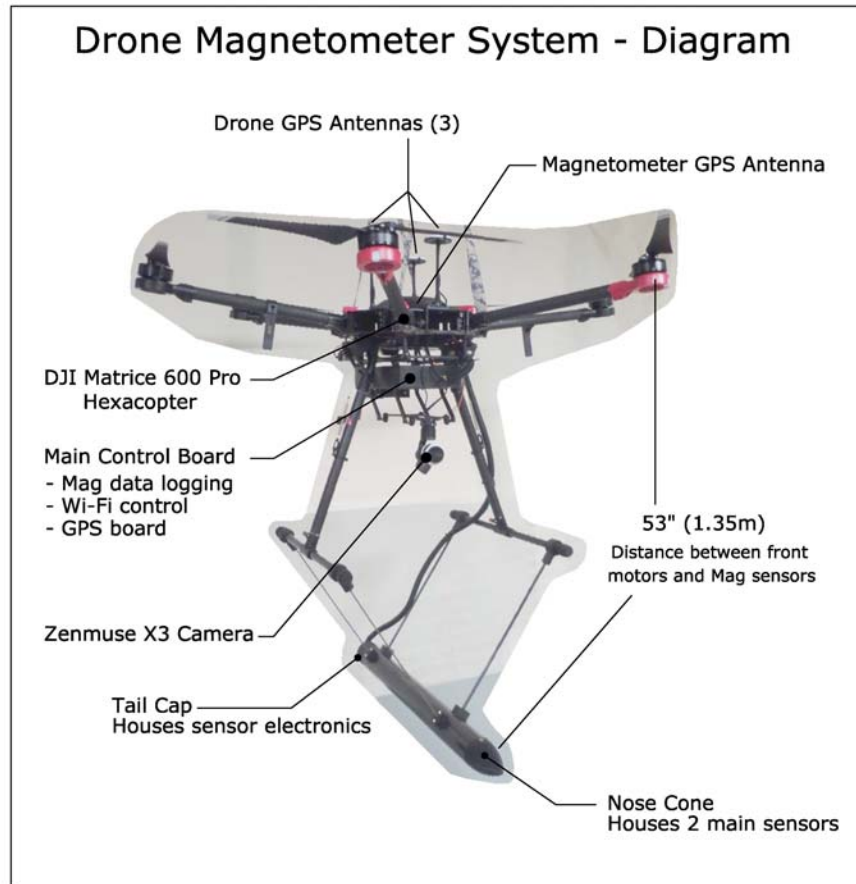


Figure 3: Serial Port Pinout

- 9) **On Board GPS Module:** An Adafruit GPS module is included with the Development Kit. It features 66 channels, -165 dBm sensitivity, and 3 Meter accuracy. An external GPS antenna is included so that signals can be received inside the box even with the cover in place. By default the GPS powers up to 9600 baud with several GPS sentences being output. The firmware that comes with the Development kit reconfigures the GPS to output only an RMC sentence at 115200 baud. This RMC string is sent with the output TCP data packet as described in the “Ethernet Data Format” section. The GPS is wired to UART7 on the TIVA microcontroller using 0-3.3 volt logic swings.

The 1PPS pulse from this GPS goes to the MFAM development module and disciplines the cycle rate to exactly 1 kiloSamples per second.

- 10) **Micro SD Card Slot for Storing Data Locally:** A micro SD card slot is available for the user to read and write data using a SPI interface. It is connected to SPI port 1 of the TIVA microcontroller.
- 11) **10 MHZ Timing Reference Input Port:** This input port takes a 10 MHz reference signal from a GPS disciplined reference oscillator, buffers and squares it up, and sends it to the MFAM module. The purpose of this signal is to lock the MFAM clocking system to this reference signal so that the Larmor frequency can be measured to an absolute standard. At this time, the MFAM does not support this feature. This function will be implemented in the future.
- 12) **Ethernet port with Power over Ethernet Compatibility:** The Tiva microcontroller contains a fully integrated Ethernet MAC and PHY. In addition, the Ethernet port can power the Development Kit via Power over Ethernet (PoE) using an Ethernet power injector.
- 13) **1.8 Amp-Hour Battery pack:** Three on board lithium/polymer batteries can power the system for 2 hours. A switch on the Development board allows the battery to be turned on/off. In addition, if the battery voltage falls below 8 volts the MFAM module will automatically shut down while keeping the microcontroller alive.
- 14) **Integrated Battery Charging system:** A lithium/polymer battery charging system is on board. If the battery switch is turned on, and the AC power adapter is plugged in, the batteries will be charged.
- 15) **Four Differential Analog Input Channels:** There are four differential analog inputs available for use. Channels 0 and 1 are +/- 2.5 volts full scale, while channels 2 and 3 are 0 to +5 volts full scale. In the firmware supplied with the Development kit (which sends MFAM/GPS data to the MFAMConsole program on the computer), all four channels are sampled synchronously with the MFAM data input to the Tiva are included in the data stream.
- 16) **On board Power/Status LEDs:** Several Status and Power LEDs are arranged along the front edge of the board. They include the four user LEDs, Power status LEDs (which power source is powering the board, and whether the battery is charging or the voltage low). They are listed in the Front and Back Panel Connection and Indicator section below.



### Description and Location of components

The Geometrics MFAM magnetometer “main board” is attached directly below the central body of the DJI Matrice 600 Pro hexacopter drone. This box contains a small, Texas Instruments computer that collects and stores magnetometer readings on a micro-SD card. It also houses a 66 channel Adafruit GPS module, which operates independent of the (3) internal drone GPS modules. The Adafruit GPS collects and stores “GPS readings” (Lat / Long / Altitude / Time ). The GPS readings are assigned to each mag reading, as the drone navigates along grid lines. A Wi-Fi module is attached to the Texas Instruments computer, which allows the operator to start and stop the magnetometer at a distance.

The Geometrics MFAM magnetometer operates using 2 separate mag sensors, attached to a “sensor module” with a flexible circuit board. The sensor module and 2 sensors are housed in a carbon graphite tube, which is mounted (suspended) 53 inches (1.35m) below the 2 front motors of the drone.

Magnetic shielding (mu-metal) is installed at 6 locations around the drone body, to provide additional shielding between drone components and the 2 mag sensors.

The magnetometer GPS antenna (for the internal Adafruit GPS) is mounted on top the drone body, to allow for clear signal. The vertical distance between this antenna and the 2 mag sensors, is 1.20m. This value is considered when reporting “mean terrain clearance”, by subtracting 1.2m from the elevation assigned to each mag reading.

## Appendix II

Geometrics G856AX  
Proton procession magnetometer specifications

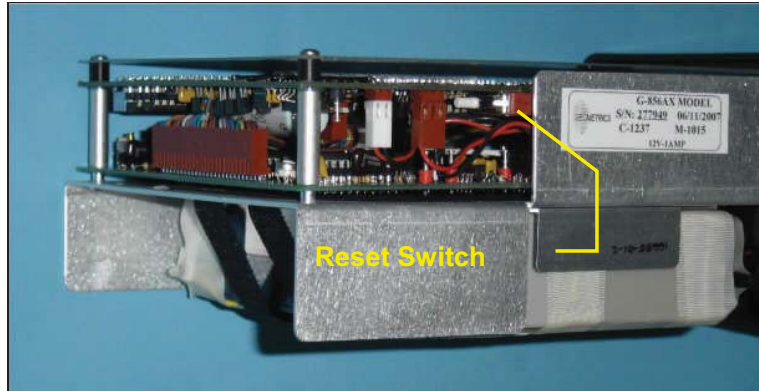


Figure 23. Internal reset switch.

## Specifications

- Displays - Six digit display of magnetic field to resolution of 0.1 gamma or time to nearest second. Additional three-digit display of station, day of year, and line number.
- Resolution - Typically 0.1 gamma in average conditions. May degrade to lower resolution in weak fields, noisy conditions or high gradients.
- Absolute accuracy - One gamma, limited by remnant magnetism in sensor and crystal oscillator accuracy.
- Clock - Julian clock with stability of 5 seconds per month at room temperature and 5 seconds per day over the temperature range of -20 to +50 degrees Celsius.
- Tuning - Push button tuning from keyboard with current value displayed on request. Tuning range 20 to 90  $\mu$ T.
- Gradient - Tolerates gradients to 1800 gammas/meter. When high Tolerance gradients truncate count interval, maintains partial reading to an accuracy consistent with data.
- Cycle Time - Complete field measurement in three seconds in normal operation. Internal switch selection for faster cycle (1.5 seconds) at reduced resolution or longer cycles for increased resolution.
- Manual Read - Takes reading on command. Will store data in memory on command.
- Memory - Stores more than 5700 readings in survey mode, keeping track of

time, station number, line number day and magnetic field reading. In base station operation, computes for retrieval but does not store time of recording designated by sample interval, allowing storage of up to 12,000 readings.

- Output - Plays data out in standard RS-232 format at selectable baud rates. Also outputs data in real time byte parallel, character serial BCD for use with digital recorders.
- Inputs - Will accept an external sample command.
- Special - An internal switch allows:
  - adjustment of Functions polarization time and count time to improve performance in marginal areas or to improve resolution or speed operation
  - three count averaging
  - choice of lighted displays in auto mode.
- Physical -
  - Instrument console: 7 x 10 ½ x 3 ½ inches (18 x 27 x 9 cm), 6 LB (2.7 kg)
  - Sensor: 3 1/2 x 5 inches (9 x 13 cm), 4 LB (1.8 kg)
  - Staff: 1 inch x 8 feet (3cm x 2.5m), 2 LB (1kg)
- Environmental: Meets specifications from 1 to 40°C. Operates satisfactorily from -20 to 50°C.
- Power - Depending on version, operates from internal rechargeable Gel-cells or 9 D-cell flashlight batteries . May be operated from external power ranging from 12 to 18 volts external power. Power failure or replacement of batteries will not cause loss of data stored in memory.
- Standard system (P/N 16600-02) components:
  - Sensor (P/N 16076-01) and sensor cable (P/N 16134-01)
  - Console (P/N 16601-01)
  - Staff, one top section (P/N 16535-01), two middle sections (P/N 16536-01) and 1 bottom section (P/N 16537-01)
  - Carry harness (P/N 16002-02)
  - Two sets of rechargeable batteries (P/N 16697-01) and battery charger (P/N 16699-01)
  - Carrying case (P/N 16003-01)
  - Download cable (P/N 16492-01)
  - Hardcopy operation manual (P/N 18101-02)
  - Magnetometer CD (P/N 26648-01)
- Optional accessories:
  - Tripod kit for base-station operation (P/N 16708-02)
  - Gradiometer kit (P/N 166651-01)
  - Gradiometer carry/storage case (16003-01)



## Specifications

### • Aircraft

Diagonal Wheelbase	1133 mm
Dimensions	1668 mm × 1518 mm × 727 mm with propellers, frame arms and GPS mount unfolded (including landing gear) 437 mm × 402 mm × 553 mm with propellers, frame arms and GPS mount folded (excluding landing gear)
Weight (with six TB47S batteries)	9.5 kg
Weight (with six TB48S batteries)	10 kg
Max Takeoff Weight Recommended	15.5 kg
Hovering Accuracy (P-GPS)	Vertical: ±0.5 m, Horizontal: ±1.5 m
Max Angular Velocity	Pitch: 300°/s, Yaw: 150°/s
Max Pitch Angle	25°
Max Wind Resistance	8 m/s
Max Ascent Speed	5 m/s
Max Descent Speed	3 m/s
Max Speed	40 mph / 65 kph (no wind)
Max Service Ceiling Above Sea Level	2170 propellers: 2500 m, 2195 propellers: 4500 m
Hovering Time* (with six TB47S batteries)	No payload: 32 min, 6 kg payload: 16 min
Hovering Time* (with six TB48S batteries)	No payload: 38 min, 5.5 kg payload: 18 min
Flight Control System	A3 Pro
Supported DJI Gimbals	Ronin-MX; ZENMUSE™ Z30, Zenmuse X5/X5R, Zenmuse X3, Zenmuse XT, Zenmuse Z15 Series HD Gimbal: Z15-A7, Z15-BMPCC, Z15-5D III, Z15-GH4
Retractable Landing Gear	Standard
Operating Temperature	14° to 104° F (-10° to 40° C)

### • Remote Controller

Operating Frequency	920.6 MHz to 928 MHz (Japan); 5.725 GHz to 5.825 GHz, 2.400 GHz to 2.483 GHz
Max Transmission Distance	FCC Compliant: 3.1 mi (5 km), CE Compliant: 2.2 mi (3.5 km) (Unobstructed, free of interference)
Transmitter Power (EIRP)	10 dBm @ 900M, 13 dBm @ 5.8G, 20 dBm @ 2.4G
Video Output Port	HDMI, SDI, USB
Operating Temperature	14° to 104° F (-10° to 40° C)
Battery	6000 mAh LiPo 2S

### • Charger (Model: MC6S600)

Voltage Output	26.1 V
Rated Power	600 W
Single Battery Port Output Power	100 W



### • Standard Battery (Model: TB47S)

Capacity	4500 mAh
Voltage	22.2 V
Battery Type	LiPo 6S
Energy	99.9 Wh
Net Weight	595 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	180 W

### • Optional Battery (Model: TB48S)

Capacity	5700 mAh
Voltage	22.8 V
Battery Type	LiPo 6S
Energy	129.96 Wh
Net Weight	680 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	180 W

\* Hovering time is based on flying at 10 meters above sea level in a no-wind environment and landing with a 10% battery level.

**CE1313**  **RoHS** 

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference, and  
(2) this device must accept any interference received, including interference that may cause undesired operation.

**HDMI™**  
HIGH-DEFINITION MULTIMEDIA INTERFACE

DJI incorporates HDMI™ technology. The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

### **Drone Operation and Ground Control Methods**

The DJI Matrice 600 Pro drone is programmed to fly an automated flight path (the survey grid lines and tie lines), using software that is available and ready to use on a wide variety of drones. Zen Geomap uses UgCS software, Drone Deploy and Pix4D software;

- Drone Deploy and Pix4D, on simple grids that do not require advanced control with regards to following complex terrain (example – flying in relatively flat ground, using Google Earth or other simple elevation model).
- UgCS, in rugged terrain, where we obtain a detailed 3D terrain model (DEM or DTM) using photogrammetric drone prior to magnetic survey. In this case we upload our own, custom DEM into UgCS software and the DJI M600 drone will follow the terrain at a fixed offset.

### **Using a Drape**

The automated flight path will always use (follow) a “drape” in one form or another.

- On simple grids in flat terrain, the drape is generated as an offset of a simple DEM, such as Google Earth or other coarse elevation model such as DEMs available on-line through USGS.
- In complex terrain, the drape is generated as an offset of our own, custom DEM.

All of our piloting software is capable of following a drape at a fixed offset. We typically program the drone to fly 50m above coarse DEMs, such as Google Earth, or USGS. When a custom DEM is available, we typically fly 25-30m above DEM.

The actual / final “height above terrain” (or mean terrain clearance), is determined in the field by our crews. They visually inspect and look for obstacles such as hills, trees, buildings and towers.

The height above terrain (or mean terrain clearance) is included in the logistical and assessment reports we prepare for our clients.

### **Ground Control Methods**

The DJI M600 drone uses a combination of 3 separate GPS receivers and 3 separate barometers. This system developed by DJI is called the A3 Controller.

The A3 controller is designed to maintain a stable altitude, relative to the take-off point. Over a 5 year period (2014 to current), we have found the A3 controller to be reliable to sub-metre accuracy, when it comes to maintaining stable altitude over a typical 20 to 30 minute flight.

Based on this long-term record, we rely on the A3 controller to navigate the drone at a pre-programmed, fixed offset above DEM. Over the same 5 year period, we have observed consistent and accurate agreement between the A3 GPS locations and the Adafruit (Magnetometer) GPS locations. When plotted in plan view, the A3 GPS tracks have always agreed with the Adafruit tracks to approximately 1 metre accuracy.

The author of this report has been an active surveyor since 1990 and is familiar with real-time (RTK) GPS and post-processed GPS methods.

# Appendix IV

## Project Costs

Receipt 2019-62 – Zen Geomap Inc.



70C Mountjoy St. N.  
SUITE 204  
Timmins, ON  
P4N 4V7

**Receipt - 2019-62**

To:  
RJK Explorations Ltd.  
4 Al Wende Avenue  
P.O. Box 546  
Kirkland Lake, ON  
P2N 3J5

March 1, 2020

Between the dates of May 29, 2018 and March 20, 2020  
Zen Geomap Inc. completed drone magnetic survey on 7 grids for RJK  
Explorations Ltd., on the Bishop Nipissing Diamond Project.

This receipt is a summary of project costs, which have been paid for in  
full by RJK Explorations Ltd.

Project Costs - Bishop Nipissing Diamond Project						
<i>Grid Name</i>	<i>Description</i>	<i>Date from</i>	<i>Date to</i>	<i>Unit</i>	<i>Rate</i>	<i>Amount</i>
North Grid	Travel (Mobe and Demobe)	29-May-18	29-May-18	227 km	0.50	113.50
North Grid	Drone Flights	29-May-18	29-May-18	2 flights	1000.00	2000.00
North Grid	Data Processing and Maps	29-May-18	15-Jun-18	7.5 hours	80.00	600.00
North Grid	Report Preparation	29-May-18	20-Mar-20	11 hours	80.00	880.00
						<b>3593.50 Total - North Grid</b>
South Grid	Travel (Mobe and Demobe)	29-May-18	29-May-18	227 km	0.50	113.50
South Grid	Drone Flights	29-May-18	29-May-18	2 flights	1000.00	2000.00
South Grid	Drone Flights	23-Mar-19	23-Mar-19	2 flights	1000.00	2000.00
South Grid	Data Processing and Maps	29-May-18	15-Jun-18	7.5 hours	80.00	600.00
South Grid	Report Preparation	29-May-18	20-Mar-20	11 hours	80.00	880.00
						<b>5593.50 Total - South Grid</b>
Grid 1	Travel (Mobe and Demobe)	23-Mar-19	23-Mar-19	219 km	0.50	109.50
Grid 1	Drone Flights	23-Mar-19	23-Mar-19	4 flights	1000.00	4000.00
Grid 1	Data Processing and Maps	23-Mar-19	30-Mar-19	9 hours	80.00	720.00
Grid 1	Report Preparation	23-Mar-19	20-Mar-20	12 hours	80.00	960.00
						<b>5789.50 Total - Grid 1</b>
Grid 2	Travel (Mobe and Demobe)	23-Mar-19	23-Mar-19	219 km	0.50	109.50
Grid 2	Drone Flights	23-Mar-19	23-Mar-19	4 flights	1000.00	4000.00
Grid 2	Data Processing and Maps	23-Mar-19	30-Mar-19	9 hours	80.00	720.00
Grid 2	Report Preparation	23-Mar-19	20-Mar-20	12 hours	80.00	960.00
						<b>5789.50 Total - Grid 2</b>
Grid T1	Travel (Mobe and Demobe)	31-Aug-19	31-Aug-19	236 km	0.50	118.00
Grid T1	Drone Flights	31-Aug-19	31-Aug-19	2 flights	1000.00	2000.00
Grid T1	Data Processing and Maps	31-Aug-19	15-Sep-19	9 hours	80.00	720.00
Grid T1	Report Preparation	31-Aug-19	20-Mar-20	12 hours	80.00	960.00
						<b>3798.00 Total - Grid T1</b>
Grid T2	Travel (Mobe and Demobe)	31-Aug-19	31-Aug-19	236 km	0.50	118.00
Grid T2	Drone Flights	31-Aug-19	31-Aug-19	2 flights	1000.00	2000.00
Grid T2	Data Processing and Maps	31-Aug-19	15-Sep-19	9 hours	80.00	720.00
Grid T2	Report Preparation	31-Aug-19	20-Mar-20	12 hours	80.00	960.00
						<b>3798.00 Total - Grid T2</b>
Nicol North & West	Travel (Mobe and Demobe)	28-Dec-19	28-Dec-19	245 km	0.50	122.50
Nicol North & West	Drone Flights	28-Dec-19	28-Dec-19	5 flights	1000.00	5000.00
Nicol North & West	Data Processing and Maps	28-Dec-19	15-Jan-20	10 hours	80.00	800.00
Nicol North & West	Report Preparation	28-Dec-19	20-Mar-20	12 hours	80.00	960.00
						<b>6882.50 Total - Nicol North &amp; West</b>
						<b>35244.50 Total all grids</b>
						<b>4581.79 HST</b>

**PAID**

**Zen Geomap Inc.**

HST # 79436 1915 rt 0001

# Appendix V

## Quality Control / Tests and Calibrations / Processing Steps

### Quality Control

Throughout the data acquisition phase, data are monitored closely for quality control and error-checking on all channels. Output from the Geometrics MFAM magnetometer includes a wide range of error codes, which are written to the raw data file to help diagnose problems when they occur in the field.

All data are checked on a daily basis, as field data are transferred to Zen Geomap offices in Timmins or North Bay, Ontario. When errors or problems occur, the field crew is instructed to re-fly problem areas.

### Tests and Calibrations

The following tests and calibrations are carried-out on all magnetometer equipment and sensors employed by Zen Geomap Inc.;

#### Heading Error

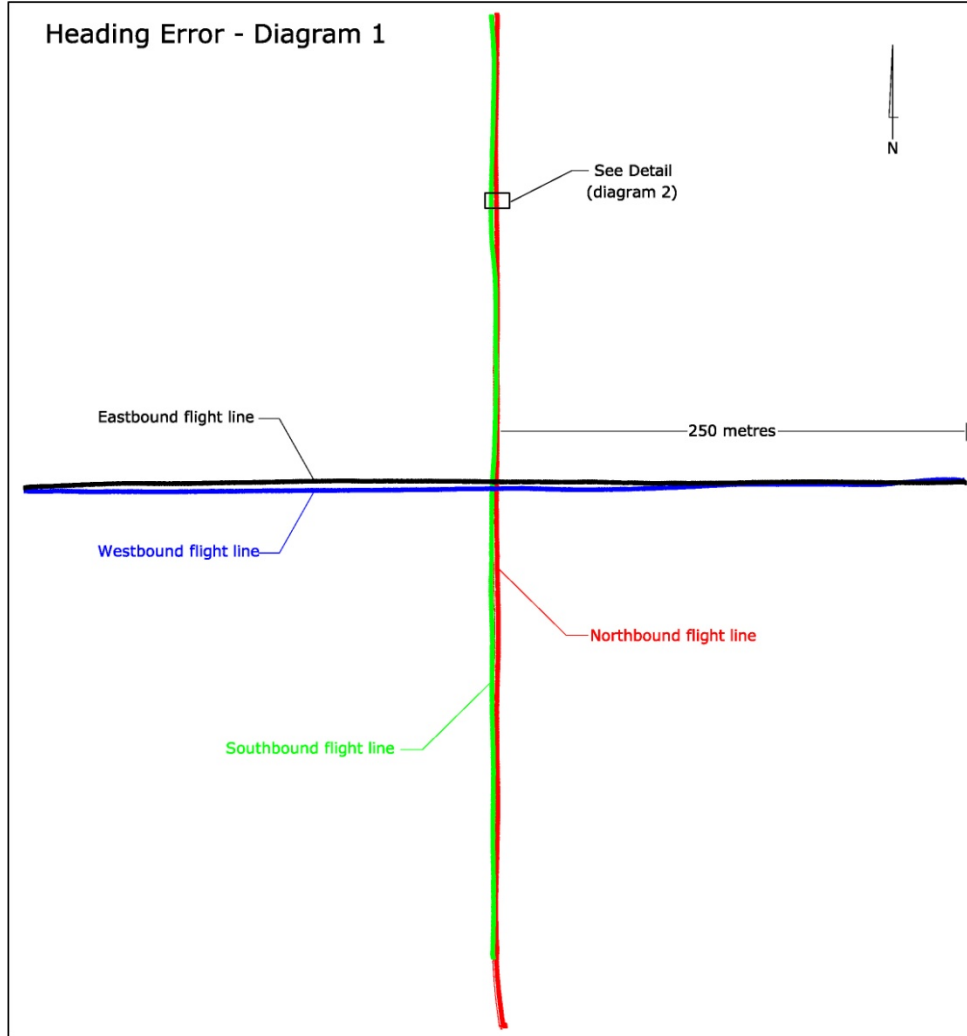
Upon receipt of a new magnetometer (or after significant repair or modification to any system component), a test flight is carried-out to determine heading error.

A cross-pattern is flown as shown in **Diagram 1**, with 500 metre N-S and E-W lines. Magnetic readings are collected along the same lines, flown in opposite directions.

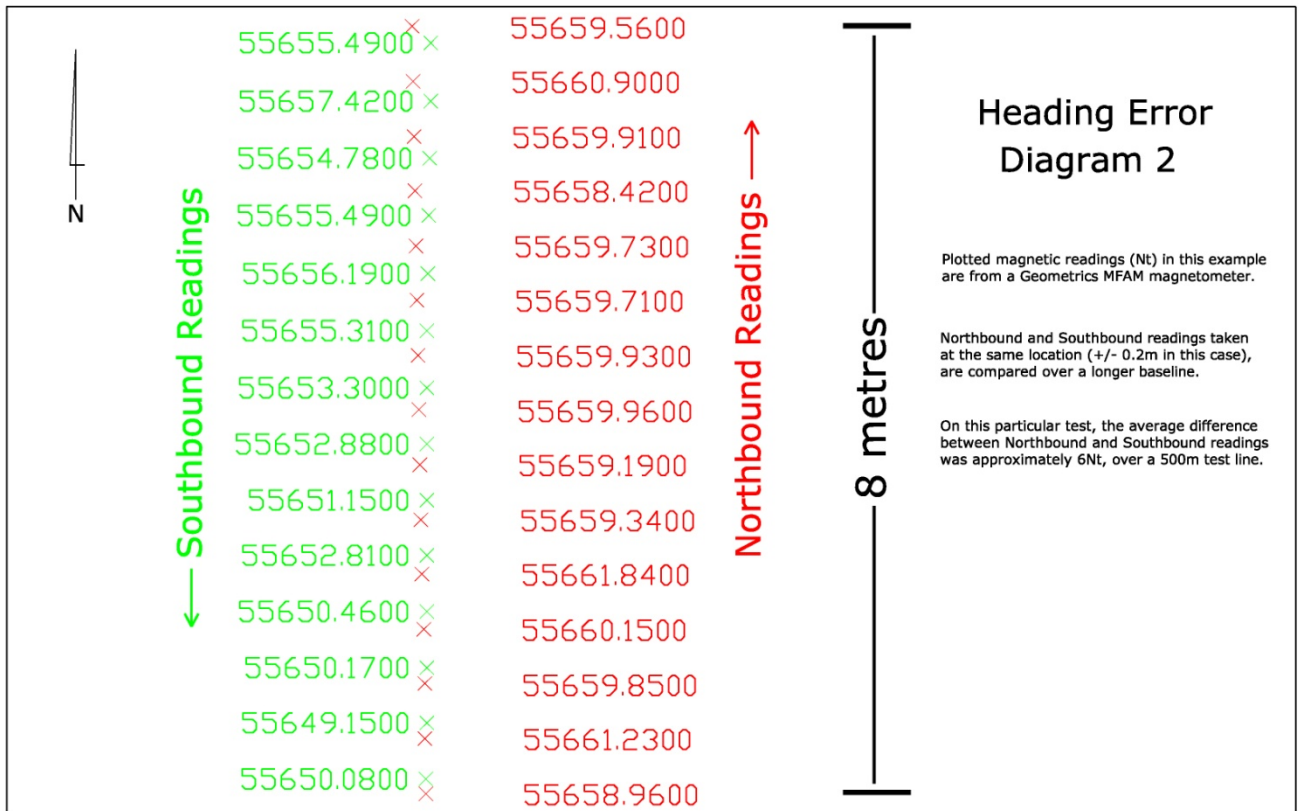
Northbound and Southbound readings at the same location (+/- 0.2m in this example) are compared. Eastbound and Westbound readings undergo the same process.

(See: Heading Error – **Diagram 2**).





Example test flight by Zen Geomap, August, 2019



### Example – Geometrics MFAM readings, August, 2019

The difference between Northbound and Southbound readings, averaged over a 500m baseline is calculated. The resulting value (6 Nt in above example), is used to apply a correction for heading error during processing.

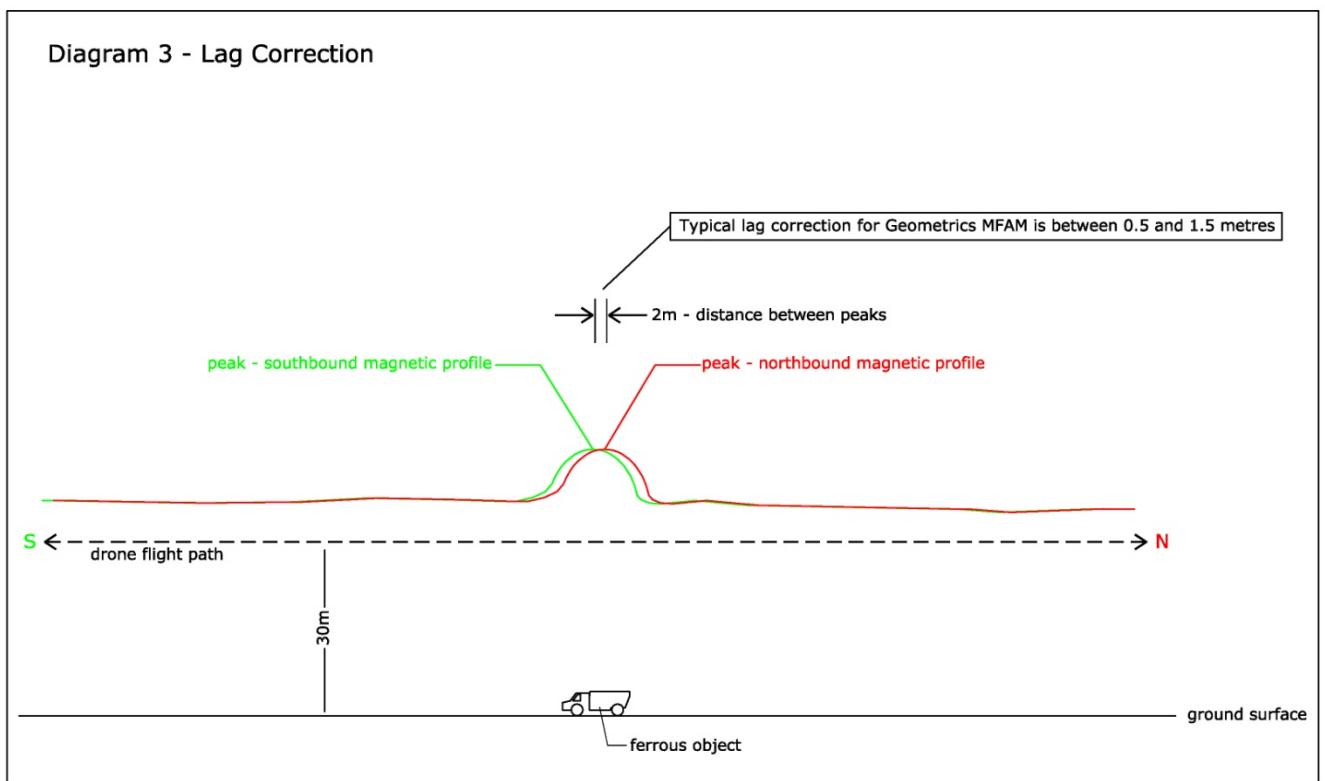
Each mag sensor will produce a unique result, however we typically apply a correction of 3Nt or less, to adjacent flight lines.

## Lag Correction

Tests are performed to determine lag correction, by flying the drone magnetometer in opposite directions over top a ferrous object. Suitable objects include steel bridges, vehicles or heavy equipment.

**Diagram 3** shows a typical flight test to determine lag correction.

A Geometrics MFAM magnetometer will typically have a lag error between 0.5 and 1.5 metres. Each mag sensor will produce a unique value. We typically apply a correction of 1m or less, to the location of magnetic readings on adjacent lines.



### **Diurnal Correction**

A Geometrics G856AX proton procession magnetometer is operated as a base station on all projects, to provide diurnal monitoring of the local magnetic field variations. Adjustment may be applied to the raw MFAM readings, when variations exceed 10 or more Nt over the course of any flight. However, we typically re-fly grid lines, if the magnetic field variation is excessive.

The location (UTM coordinate) of the base station is included in the report body.

### **Processing Steps**

Diurnal is examined for flights covering tie lines.

If magnetic field variation is excessive during tie line flights, all readings across tie lines are corrected using the base station data.

Tie lines provide a framework for leveling grid lines.

Readings on grid lines (once corrected for heading error and lag), are translated to conform to the tie lines. This process involves adjusting individual grid line segments, based on tie line intersections.

Unlike conventional airborne survey, such as fixed-wing or helicopter, a drone will take-off and land multiple times during the course of a survey. The resulting ferry lines are removed from the overall dataset prior to processing. Zen Geomap has developed import templates that run in Geosoft Oasis Montaj, to accomplish this task.

Geometrics MFAM data is not directly compatible with industry-standard software such as Geosoft. Zen Geomap has developed software (Python code) to convert raw MFAM data into a format compatible with Geosoft and other industry-standard geophysical software. The raw data from MFAM is processed through Python, prior to initial processing.

The Python code developed by Zen Geomap has been adopted by Geometrics, as the standard conversion software for drone-mounted MFAM. Geometrics has been the industry leader for airborne magnetometer equipment since 1969.

Appendix VI			BISHOP NIPISSING DIAMOND PROJECT PROPERTY HISTORY As at March 20, 2020		
Claim #	Legacy Claim #	Date	Description	Performed Assigned	Transaction #
106280	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
111760	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
	4287464	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
126017	4273040	2014-OCT-03	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)	\$11,524	R1480.01844
		2016-OCT-24	WORK PERFORMEDASSAY, BENEF, PROSP, APPROVED: 2016-NOV-29		Q1680.01763
	4282142	2016-JUN-06	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01121
131127	4282444	2016-OCT-24	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.02189
	4282705	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
	4282707	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
131742	4287461	2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0 % TO COBALT INDUSTRIES OF CANADA INC. -413298		T1880.00056
139060	4282706	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
	4282707	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
143090	4282187	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4282189	2015-NOV-05	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01881
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$6,324	Q1780.02043
150827	4282187	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4282189	2015-NOV-05	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01881

		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$6,324	Q1780.02043
	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
155683	4282187	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4282410	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
155684	4273040	2014-OCT-03	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)	\$11,524	R1480.01844
		2016-OCT-24	WORK PERFORMEDASSAY, BENEF, PROSP, APPROVED: 2016-NOV-29		Q1680.01763
	4282142	2016-JUN-06	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01121
	4282410	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
172334	4282187	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4282410	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
175091	4273040	2014-OCT-03	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)	\$11,524	R1480.01844
		2016-OCT-24	WORK PERFORMEDASSAY, BENEF, PROSP, APPROVED: 2016-NOV-29		Q1680.01763
	4282187	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	4627	Q1780.02154
	4282410	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
186844	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
187189	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944



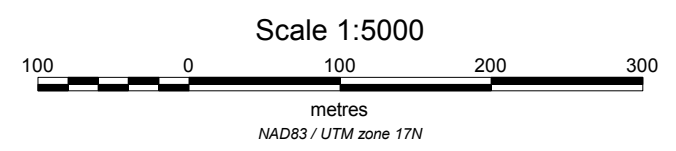
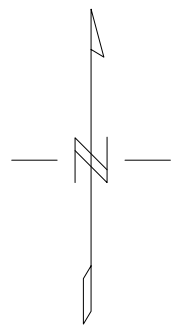
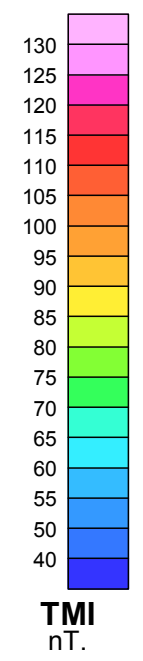
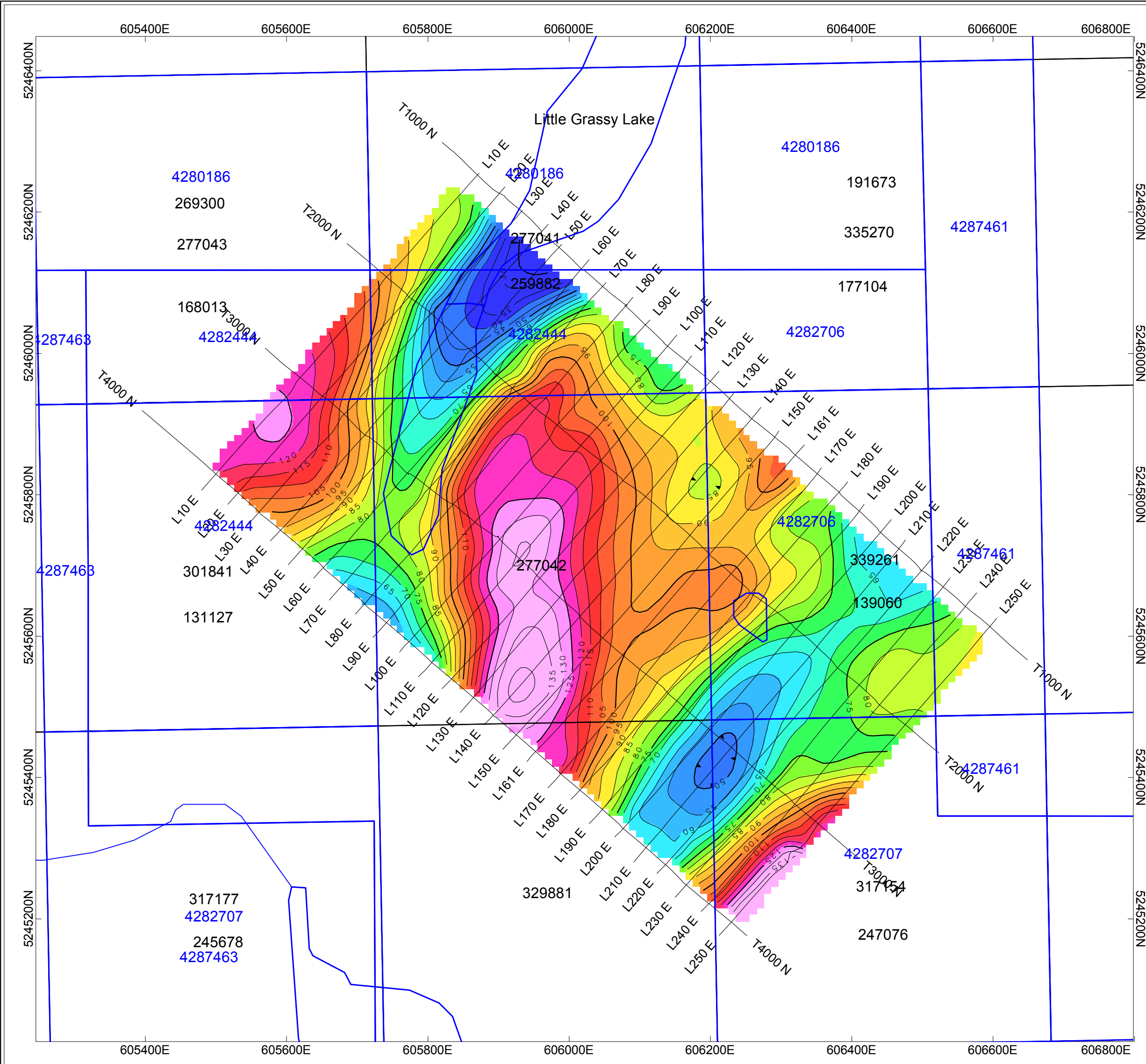
		2018- JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
187190	4287463	2017- NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018- JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
191673	4282706	2016- NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
191674	4280186	2016- OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016- DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
196494	4287463	2017- NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018- JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
	4287464	2017- NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018- JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
199542	4282409	2016- OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017- DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4286187	2015- NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017- NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043
199568	4282409	2016- OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017- DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
214520	4287463	2017- NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018- JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
	4287464	2017- NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018- JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
234633	4281431	2015- NOV-27	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01790
		2017- DEC-01	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-18	\$3,725	Q1780.02154

	4286185	017-APR-06	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1780.01265
	4286186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
245678	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
247076	4282707	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
	4286186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
	4286187	2015-NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043
254147	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
258580	4286185	017-APR-06	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1780.01265
	4286186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
259882	4280186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
265306	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
269300	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
277041	4282444	2016-OCT-24	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.02189
	4282706	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999

277042	4282444	2016-OCT-24	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.02189
	4282706	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
	4282707	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
277043	4280186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
283212	4282187	2015-NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043
	4282189	2015-NOV-05	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01881
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$6,324	Q1780.02043
	4282411	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
300383	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
	4287464	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
301841	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
302829	4281431	2015-NOV-27	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01790
		2017-DEC-01	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-18	\$3,725	Q1780.02154
	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
	4286185	017-APR-06	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1780.01265
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154

302849	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4286187	2015-NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043
307616	4280185	017-APR-06	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1780.01265
	4280186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
317154	4287461	2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0 % TO COBALT INDUSTRIES OF CANADA INC. -413298		T1880.00056
317177	4282707	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
	4286187	2015-NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043
319733	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
326551	4280185	017-APR-06	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1780.01265
	4280186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
329881	4282707	2016-NOV-14	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01999
	4286187	2015-NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043
329925	4287463	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056

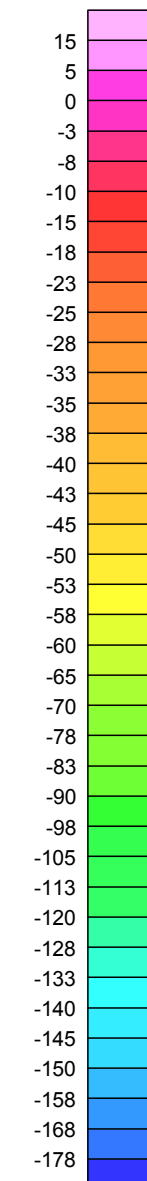
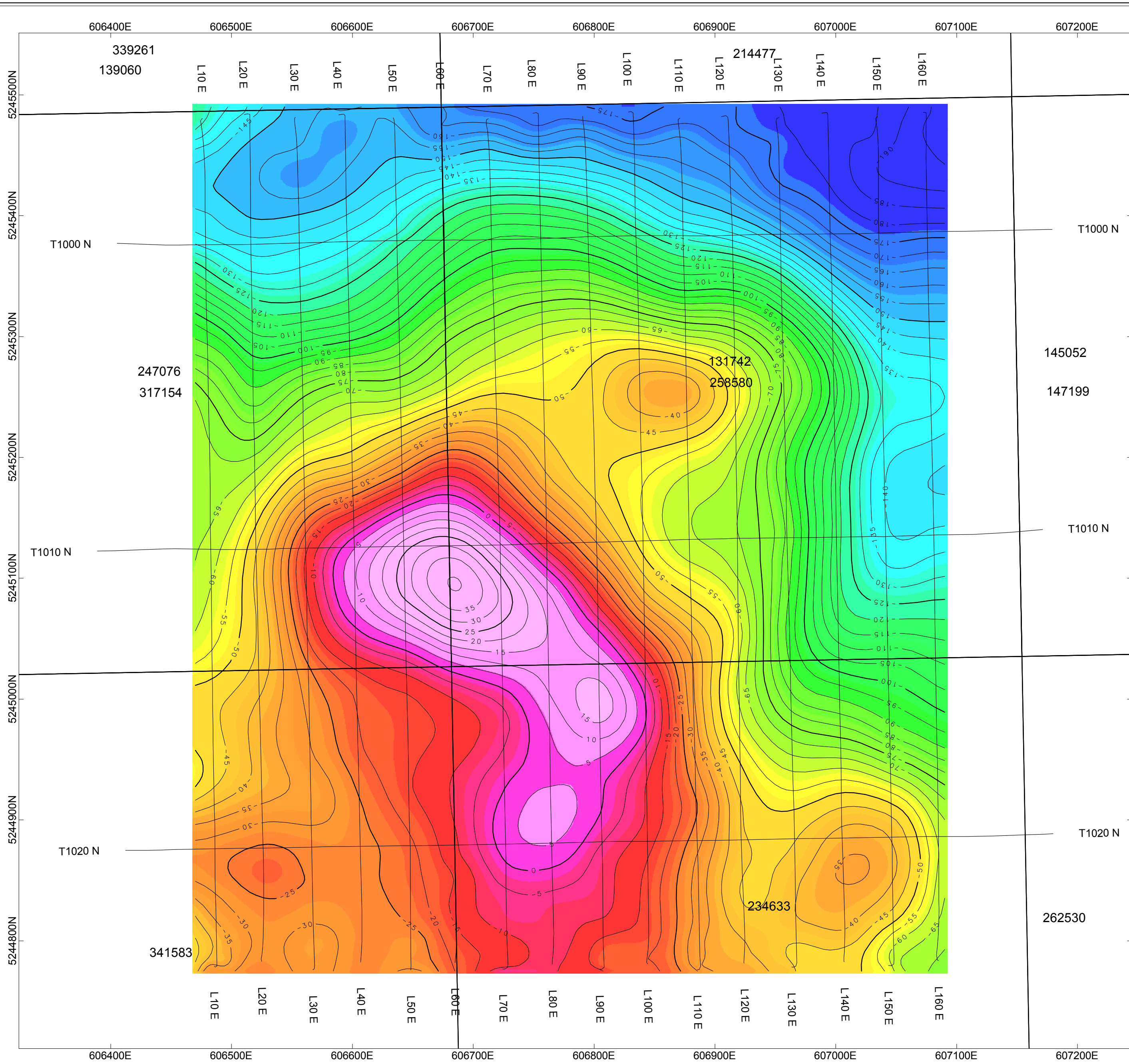
	4287464	2017-NOV-27	RECORDED BY EDEN, LANCE H. (M25662)		R1780.02944
		2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0% TO COBALT INDUSTRIES OF CANADA INC. (413298)		T1880.00056
330989	4282189	2015-NOV-05	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01881
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$6,324	Q1780.02043
	4282409	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
		2017-DEC-01	APPROVED: 2017-DEC-18 WORK PERFORMEDBENEF, MICRO, PROSP	\$4,627	Q1780.02154
	4282411	2016-OCT-21	HARRINGTON, PATRICK MICHAEL JR. (142047) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1680.01839
339261	4287461	2018-JAN-08	EDEN, LANCE H. (302295) TRANSFERS 100.0 % TO COBALT INDUSTRIES OF CANADA INC. -413298		T1880.00056
341583	4281431	2015-NOV-27	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01790
		2017-DEC-01	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-18	\$3,725	Q1780.02154
	4286186	2016-OCT-04	VON CARDINAL, THOMAS (205724) RECORDS 100.0 % IN THE NAME OF CHITARONI, GINO PAUL (117874)		R1680.01663
		2016-DEC-01	CHITARONI, GINO PAUL (117874) TRANSFERS 100.0 % TO COBALT POWER GROUP INC. (412467)		T1680.00353
	4286187	2015-NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043
343852	4273040	2014-OCT-03	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)	\$11,524	R1480.01844
		2016-OCT-24	WORK PERFORMEDASSAY, BENEF, PROSP, APPROVED: 2016-NOV-29		Q1680.01763
	4282187	2015-NOV-12	BARRETTE, MICHAEL JOSEPH (105222) RECORDS 100.0 % IN THE NAME OF BISHOP, BRIAN ANTHONY (108621)		R1580.01779
		2017-NOV-02	WORK PERFORMEDBENEF, MICRO, PROSP APPROVED: 2017-DEC-04	\$17,231	Q1780.02043



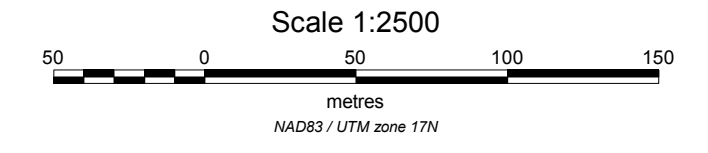
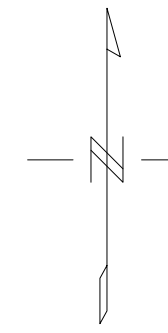
LINE KILOMETRES SURVEYED: 19.4

<b>RJK EXPLORATIONS LTD.</b>
<b>GRID 1 - LORRAIN TWP. DRONE MAGNETIC SURVEY - TMI CONTOURS MARCH 23, 2019</b>
LORRAIN TWP. LARDER LAKE MINING DIVISION CLAIMS: POSTED ON MAP CONTOUR INTERVAL = 5, 25 nT INSTRUMENT: GEOMETRICS MFAM SENSOR M600 DRONE
<b>SURVEYED BY: ZEN GEOMAP INC.</b>





TMI  
nT



LINE KILOMETRES SURVEYED: 13.6

<b>RJK EXPLORATIONS LTD.</b>	
<b>GRID T1 DRONE MAGNETIC SURVEY - TMI CONTOURS AUGUST 31, 2019</b>	
LORRAIN TWP. LARDER LAKE MINING DIVISION CLAIMS: POSTED ON MAP CONTOUR INTERVAL = 5, 25 nT INSTRUMENT: GEOMETRICS MFAM SENSOR M600 DRONE	
<b>SURVEYED BY: ZEN GEOMAP INC. / FERA UAV</b>	

606400E 606500E 606600E 606700E 606800E 606900E 607000E 607100E 607200E

5245500N 5245400N 5245300N 5245200N 5245100N 5245000N 5244900N 5244800N

339261  
139060

L10 E L20 E L30 E L40 E L50 E L60 E L70 E L80 E L90 E L100 E L110 E L120 E L130 E L140 E L150 E L160 E

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258580

T1020 N

262530

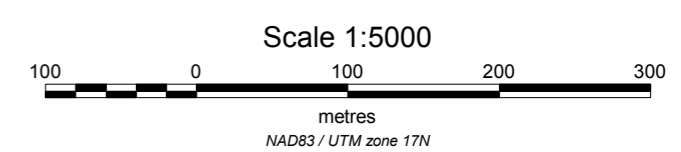
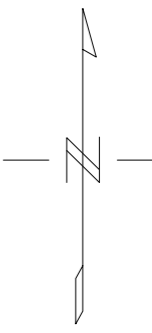
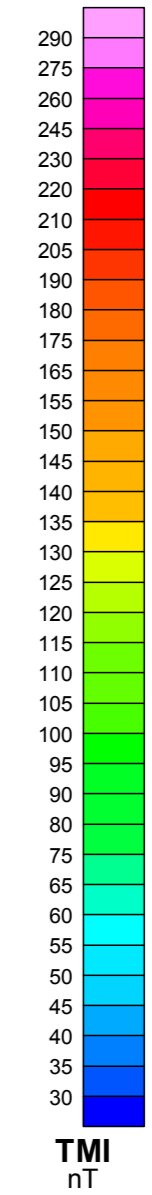
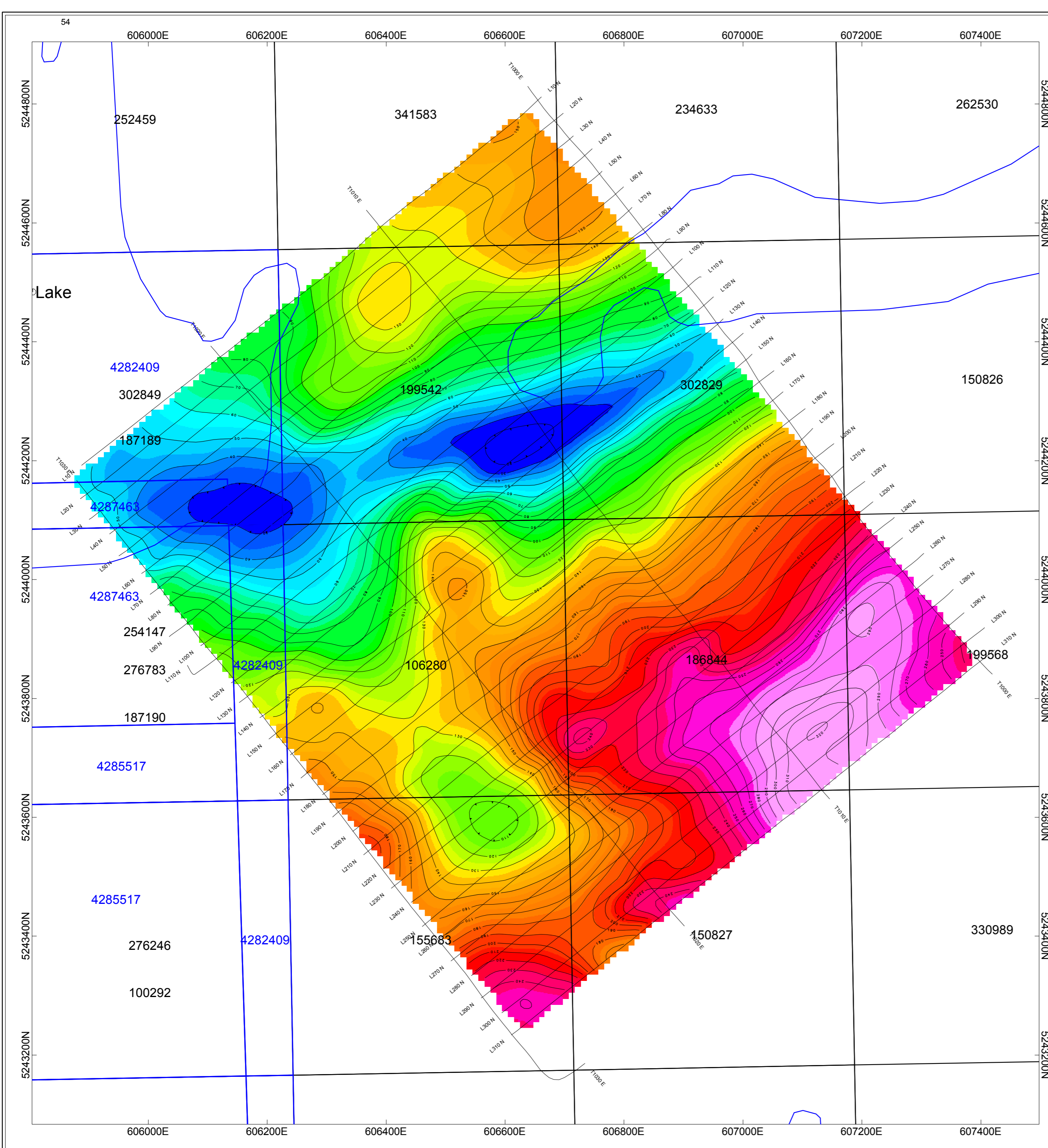
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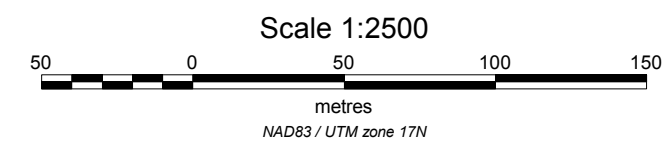
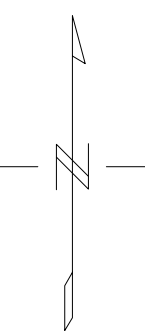
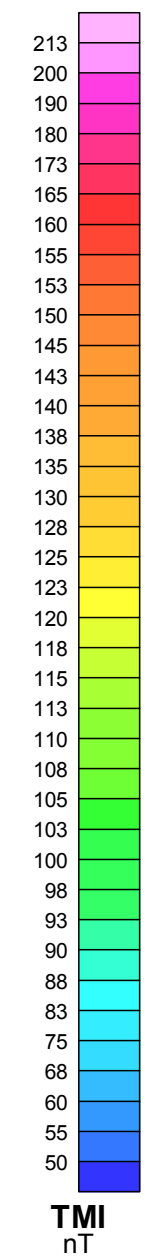
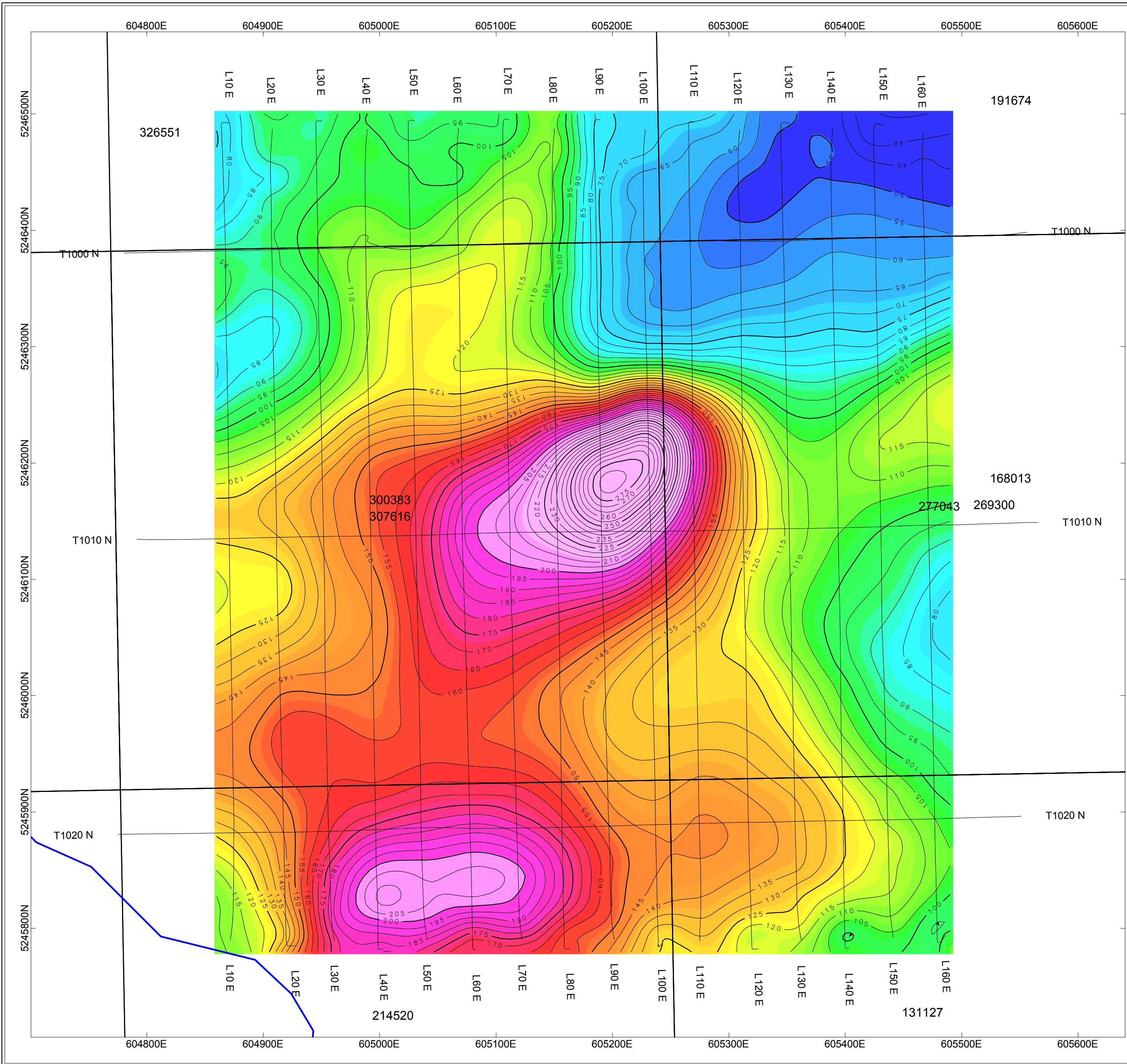
L10 E L20 E L30 E L40 E L50 E L60 E L70 E L80 E L90 E L100 E L110 E L120 E L130 E L140 E L150 E L160 E



LINE KMS. SURVEYED = 37.4

<b>RJK EXPLORATIONS LTD.</b>
<b>GRID 2 - LORRAIN TWP. DRONE MAGNETIC SURVEY - TMI CONTOURS MARCH 23, 2019</b>
LORRAIN TWP. - LARDER LAKE MINING DIVISION CLAIMS: POSTED ON MAP CONTOUR INTERVAL = 10, 50 nT INSTRUMENT: GEOMETRICS MFAM SENSOR - M600 DRONE
<b>SURVEYED BY: ZEN GEOMAP INC.</b>

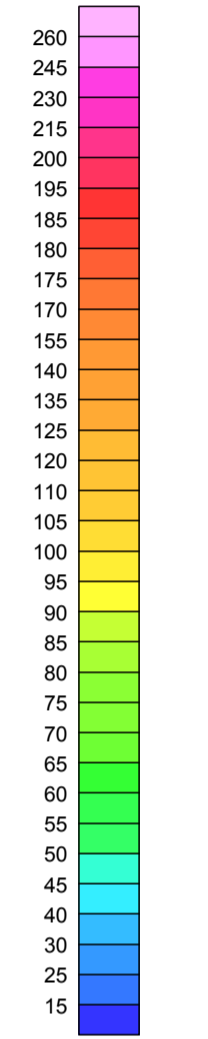
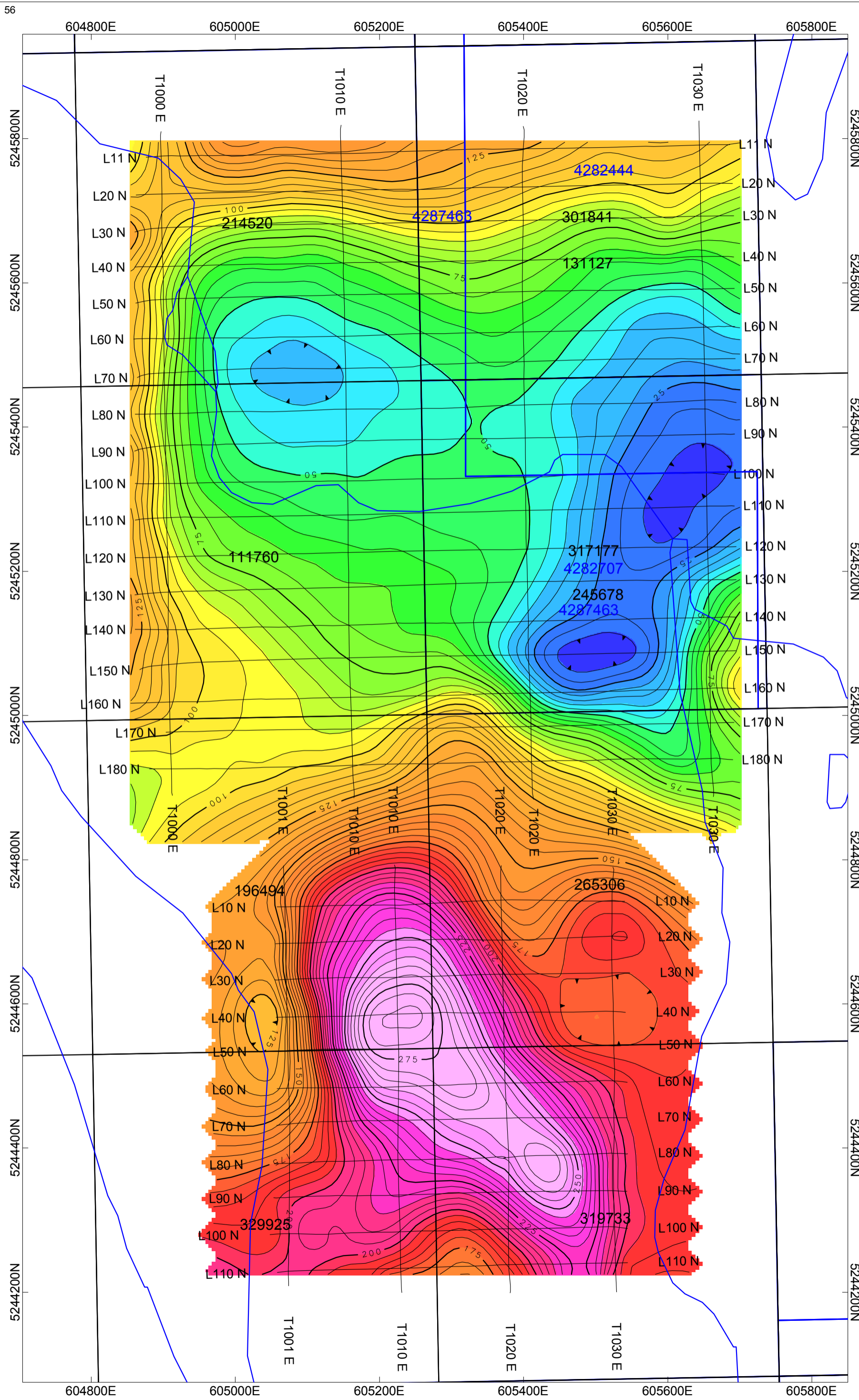




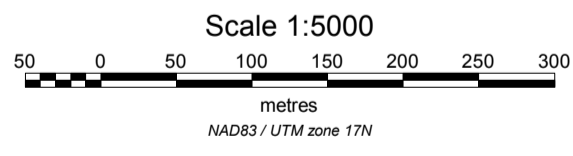
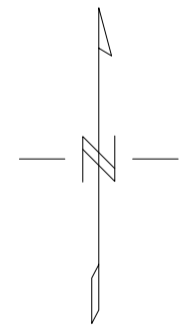
LINE KILOMETRES SURVEYED: 13.7

<b>RJK EXPLORATIONS LTD.</b>
<b>GRID T2 DRONE MAGNETIC SURVEY - TMI CONTOURS AUGUST 31, 2019</b>
LORRAIN TWP. LARDER LAKE MINING DIVISION CLAIMS: POSTED ON MAP CONTOUR INTERVAL = 5, 25 nT INSTRUMENT: GEOMETRICS MFAM SENSOR M600 DRONE
<b>SURVEYED BY: ZEN GEOMAP INC. / FERA UAV</b>



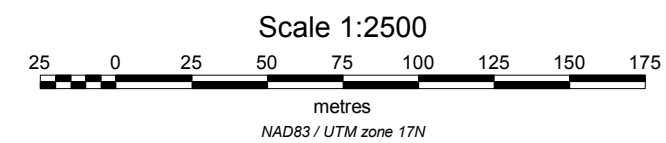
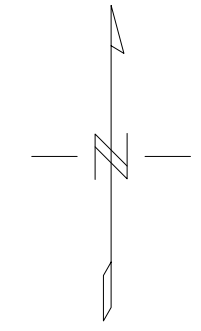
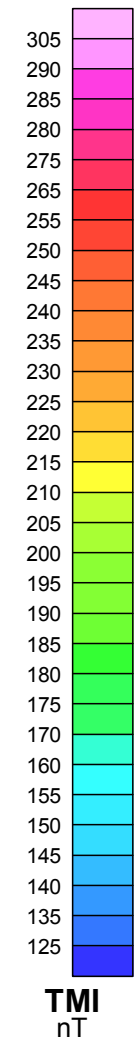
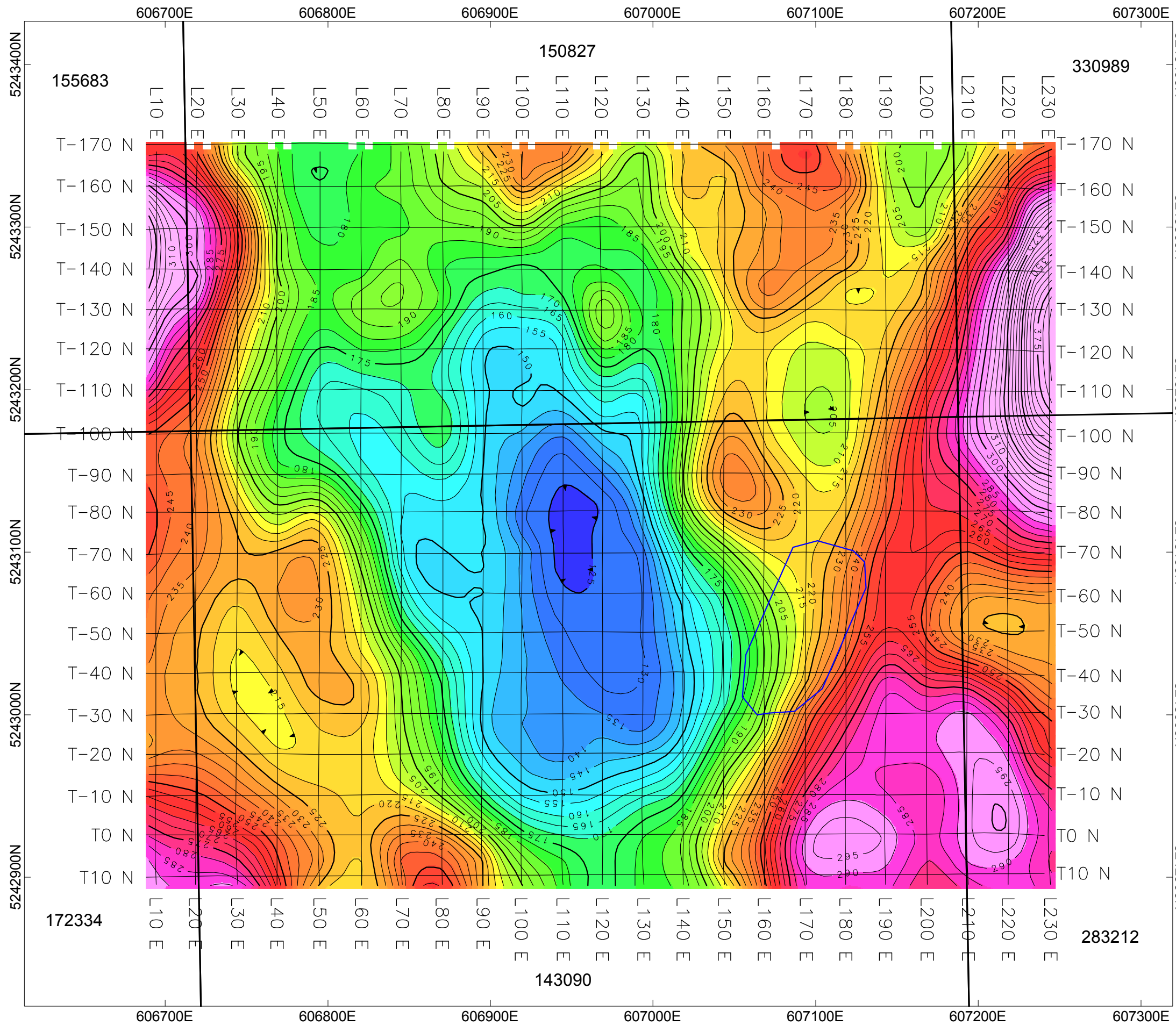


**TMI MAGNETICS**  
nT



LINE KILOMETRES SURVEYED: 26.3

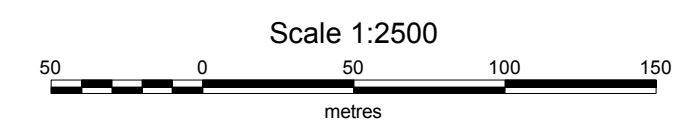
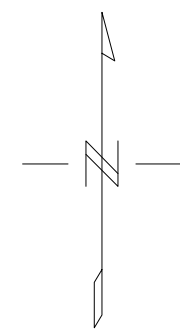
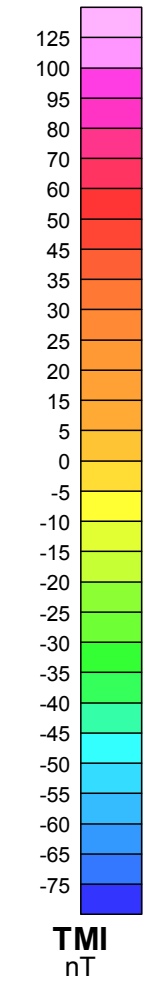
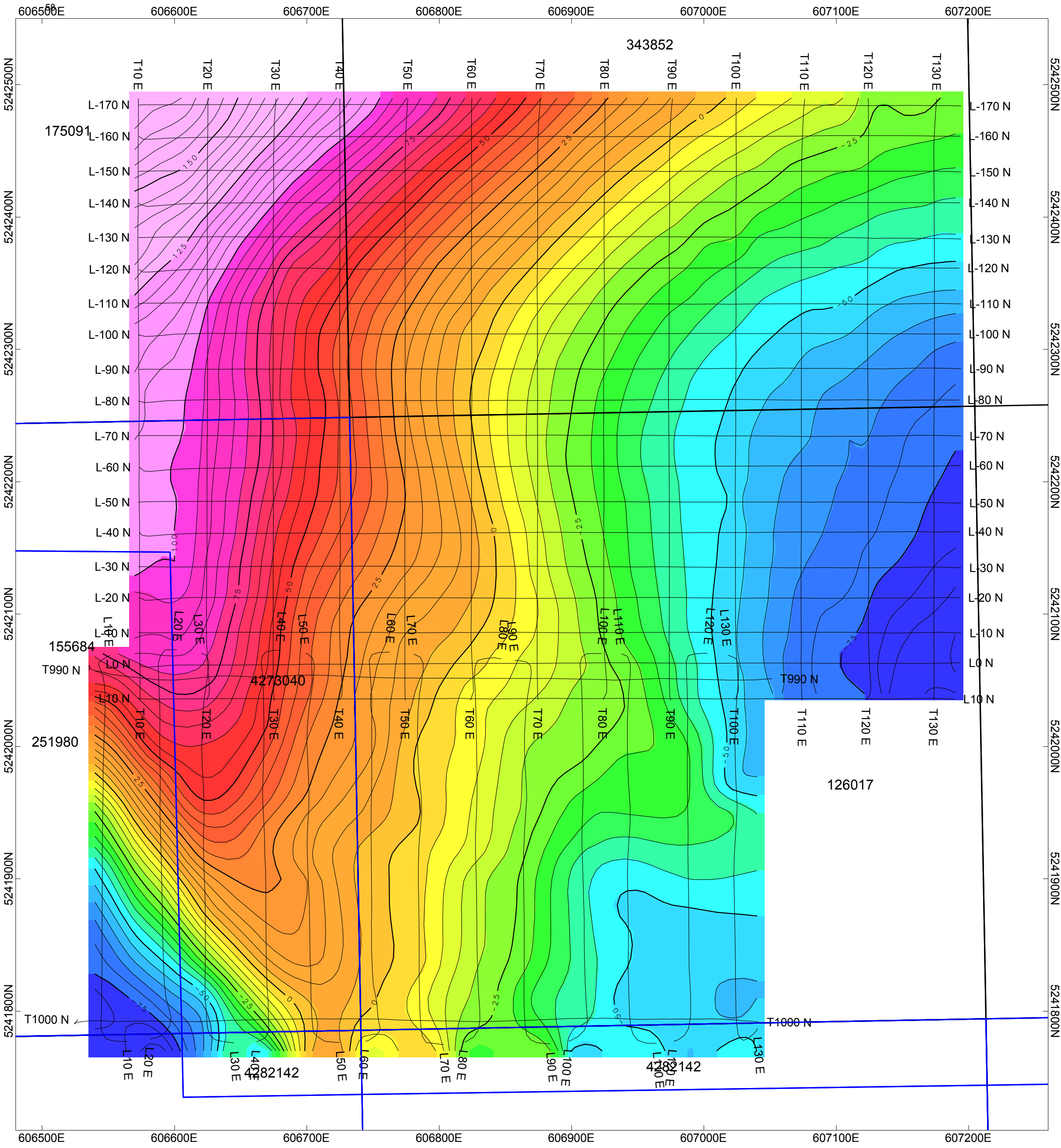
**RJK EXPLORATIONS LTD.**  
**NICOL NORTH AND WEST GRIDS**  
**DRONE MAGNETIC SURVEY - TMI CONTOURS**  
**DECEMBER 28, 2019**  
 LORRAIN TWP. - LARDER LAKE MINING DIVISION  
 CLAIMS: POSTED ON MAP  
 CONTOUR INTERVAL = 5, 25 nT  
 INSTRUMENT: GEOMETRICS MFAM SENSOR & M600 PRO DRONE  
**SURVEYED BY: FERA UAV LTD.**



Line Kilometers Surveyed: 20.9

<b>RJK EXPLORATIONS LTD.</b>
<b>NORTH GRID - LORRAIN TWP. DRONE MAGNETIC SURVEY - TMI CONTOURS MAY 29, 2018</b>
LORRAIN TWP. - LARDER LAKE MINING DIVISION CLAIMS: POSTED ON MAP CONTOUR INTERVAL = 5, 25 nT INSTRUMENT: GEOMETRICS MFAM SENSOR - M600 DRONE
<b>SURVEYED BY: ZEN GEOMAP INC.</b>





LINE KILOMETRES SURVEYED: 22.8

<b>RJK EXPLORATIONS INC.</b>
<b>SOUTH GRID - LORRAIN TWP. DRONE MAGNETIC SURVEY - CONTOURS MAY 29, 2018 AND MARCH 23, 2019</b>
LORRAIN TWP. - LARDER LAKE MINING DIVISION CLAIM NOS: POSTED ON MAP CONTOUR INTERVAL = 5, 25 nT INSTRUMENT: GEOMETRICS MFAM SENSOR - M600 DRONE
<b>SURVEYED BY: ZEN GEOMAP INC.</b>



