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N.T.S. 41P15

REPORT ON GROUND MAGNETOMETER & VLF ELECTROMAGNETIC (EM) SURVEYS, MIDLOTHIAN LAKE AREA MIDLOTHIAN LAKE PROPERTY: LARDER LAKE MINING DIVISION MIDLOTHIAN TOWNSHIP, ONTARIO

By:

JIM RENAUD,
LONDON, ONTARIO

& ROBERT DILLMAN
MOUNT BRYDGES, ONTARIO

June 20, 2023

I N D E X

Summary

This report summarizes the results of a combined ground magnetometer and VLF electromagnetic (EM) survey on the Midlothian Lake Project, North Block, in Midlothian Township. The surveys were completed by Robert Dillman and Jim Renaud on behalf of Goldenfire Minerals Inc. The surveys were completed over 5 days from June 4, 2023 and June 8, 2023 on claims 549437, 549438, 549439, 549440.

The surveys were completed to establish the presence of electromagnetic (EM) conductors or magnetic anomalies (magnetic highs and/or magnetic lows) in the listwanite, carbonate-altered ultra-mafics, altered gabbro, Temiskaming metasediments, and associated metavolcanic rocks in the area encompassing Goldenfire's new Ni-Sb-Co-Mn prospect.

The magnetometer outlined magnetic highs associated with a NNW trending diabase dike and a possible gabbroic dike-like intrusion. The VLF survey detected several conductive features potentially representing zones of sulphide mineralization, north and east-west striking faults in areas of topographic lows. Two areas of sulphide mineralization were discovered during the VLF survey.

A total of 3.75 km was surveyed by J. Renaud using a Geonics Limited EM-16 unit. The VLF station used for the survey is located at Cutler, Maine, USA which transmits at a low frequency of 24.0 kHz.

Magnetometer readings were taken at 12.5 metre intervals along survey lines. A total of 4.14 kilometres was surveyed by R. Dillman using a Gems Systems Limited GMS 19T Proton/ Gradient magnetometer. Total magnetics was recorded during the survey.

A 250 metre section of an old gridline was re-established for a baseline. Survey lines were compassed, flagged and GPS controlled. This work was completed under Exploration Plan: PL-22-000015.

Location and Access

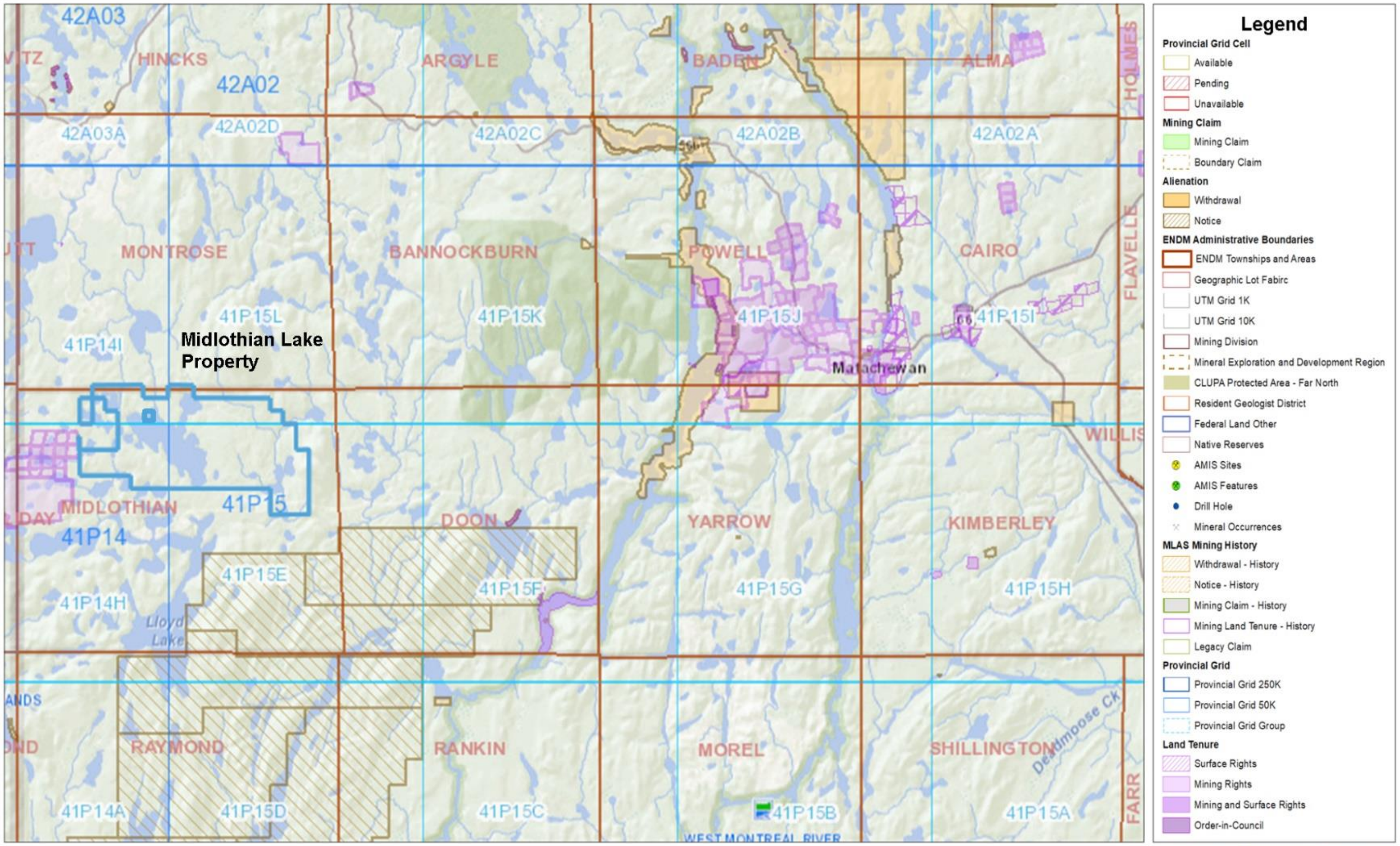
The Midlothian Lake Property is situated in Midlothian Township in the Larder Lake Mining Division of Ontario. The property is located approximately 23 kilometres southwest of the town of Matachewan (Figure 1).

The property is accessible by truck and ATV. From the town of Matachewan, the property can be reached by travelling 2.9 km southwest on Highway 566 to the Asbestos Mine Road. Go west on the mine road for 23 km at which point the road is washed out and the rest of the journey must be made on ATV along a narrow forest trail.

Ontario MINISTRY OF ENERGY, NORTHERN DEVELOPMENT AND MINES
MLAS Map Viewer

Figure 1.
Property Location Map

Notes: **Midlothian Lake Property**



Those wishing to register mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Energy, Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources and Forestry. The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Energy, Northern Development and Mines web site.

0 9.84 km

Projection: Web Mercator

Imagery Copyright Notices: Ontario Ministry of Natural Resources and Forestry; NASA Landsat Program; First Base Solutions Inc.; Aéro-Photo (1961) Inc.; DigitalGlobe Inc.; U.S. Geological Survey.

Claim Logistics and Location of Work

The Midlothian Lake Project consists of 117 mining claim cells. The property covers an approximate area of 2550 hectares (Figure 2).

All claims comprising the Midlothian Lake Property are held by Goldenfire Minerals Inc. of London, Ontario.

The area on the property where surveys were conducted is shown in Figure 2. The surveys were completed on the following 4 claims:

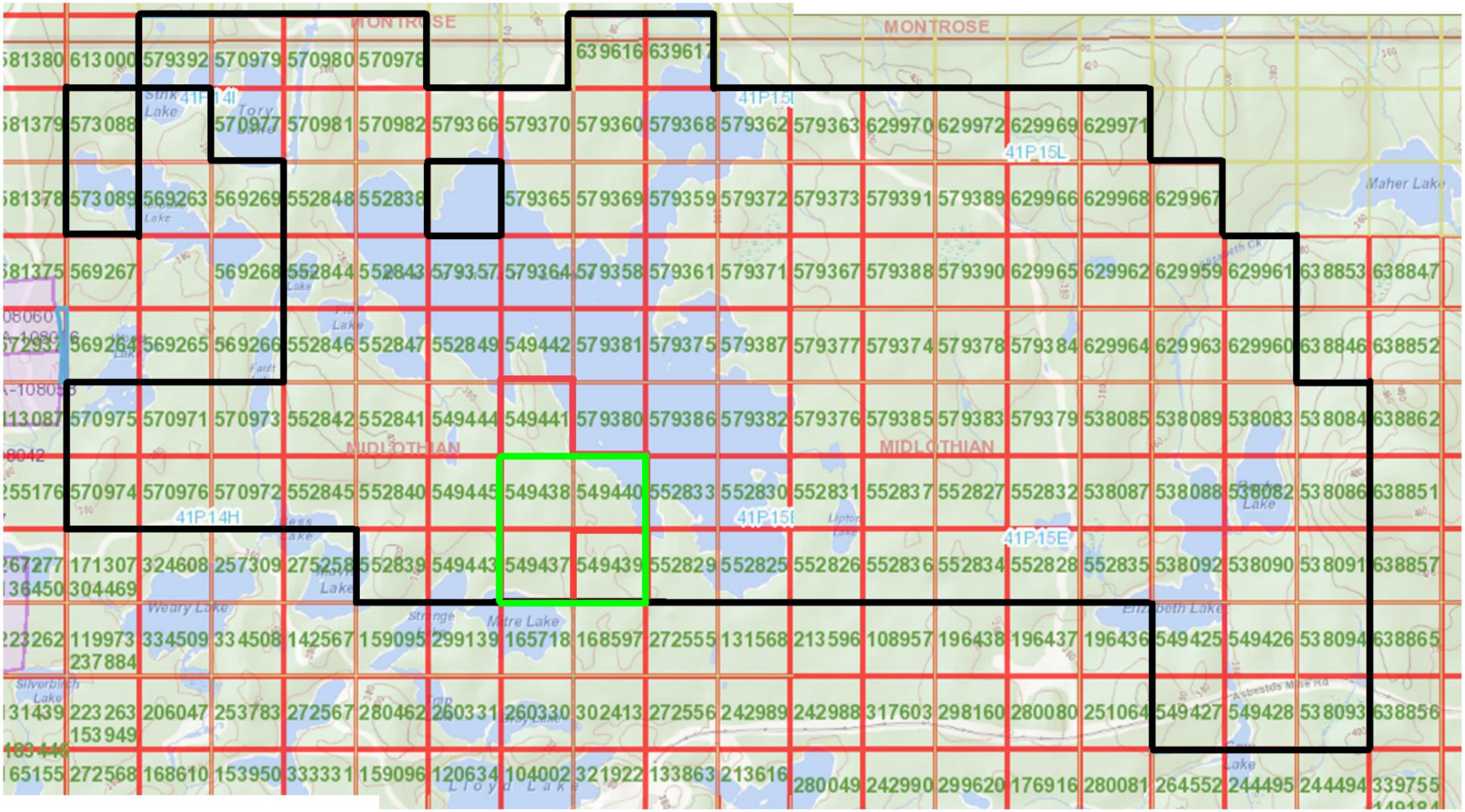
41P14H080 549438
41P14H100 549437
41P15E061 549440
41P15E081 549439

Land Status and Topography

The Midlothian Lake Property is situated entirely on Crown Land. The property is uninhabited. There are no buildings or habitats. An electrical powerline follows the Asbestos Mine Road which crosses the southeast section of the property. A system of non-maintained logging roads provide access to most areas of the property.

Sections of the property have been logged within the last 3 decades. Some of these areas are partially reforested with spruce trees. Uncut forest consisting of large spruce, balsam and poplar trees can be found bordering bodies of water and growing in higher elevations. Cedar trees and alders grow in lower areas.

The property is at a mean elevation ranging between 360 to 400 metres above sea level. Most of the property has gentle relief with rounded hills averaging 20 metres in height. Rugged terrain exists east of Elizabeth Lake where steep hills rise over 40 metres above the lake and close to Midlothian Lake where ridges and knobby outcrops range between 5 to 40 metres in height. There are several lakes on the property. The largest is Midlothian Lake which covers an approximate area of 366 hectares.



Midlothian Property

Area of Work

Figure 2.
Claim Map: Midlothian Lake Property
Midlothian Township, Ontario

Outcrop exposure in many sections of the property is good. Outcrops are abundant in higher elevations and variable exposures occur in lower elevations. Overburden is generally shallow and consists of glacial till deposited by a glacier initially moving from the northeast to the southwest and shifting northwest to southeast in its final advance.

Geology

The Midlothian Lake Property is mostly underlain by "Temiskaming" type sediments: consisting of conglomerates, slate and siltstone. Older units of rhyolite and andesite occur in the southern section of the property (Figure 3). An arcuate unit of listwanite which is the focus of the geophysical surveys occurs in the Mitre Lake area. The listwanite unit consists of dolomite, green mica (fuchsite) and minor magnesite. The listwanite unit and surrounding rock units have been intruded by a northwest trending altered gabbroic sill (dike?) and north to northwest trending diabase dikes.

It is thought that the Larder Lake Break extends beneath the Gowganda Formation west of Matachewan and continues through the south portion of Midlothian Township close to the property. Fe-carbonate alteration is very extensive in older rock units outcropping south of Midlothian Lake.

History of Exploration

Gold mineralization was first discovered in Midlothian Twp. west of Midlothian Lake in the mid 1920’s by Felix Roche. Subsequent exploration in the area by Laroma Midlothian Mines Limited lead to the discovery of gold in the listwanite unit northeast of Mitre Lake which became known as the Laroma Prospect. Through the mid-40’s to the mid-60’s, extensive trenching, pitting, and diamond drilling were carried out by Laroma Midlothian Mines Limited. Documents detailing this work are limited however numerous pits and trenches marking the prospect provide evidence of extensive historic exploration. A 60 pound bulk sample collected at the time assayed 0.76 oz/t gold.

Since the early 70’s, there has been considerable focus on gold, base metal and asbestos exploration in Midlothian Twp. Table 1. summarizes some of the historic exploration in the Mitre Lake area. Between 1965 to 1966, gold was mined briefly at the Stairs Mine located 1 km west of the property. Between 1950 to mid 70’s, asbestos was periodically produced from the United Asbestos Deposit located 1 km south of the property. Occurrences of nickel, copper and graphite have also been discovered in the Mitre Lake area.

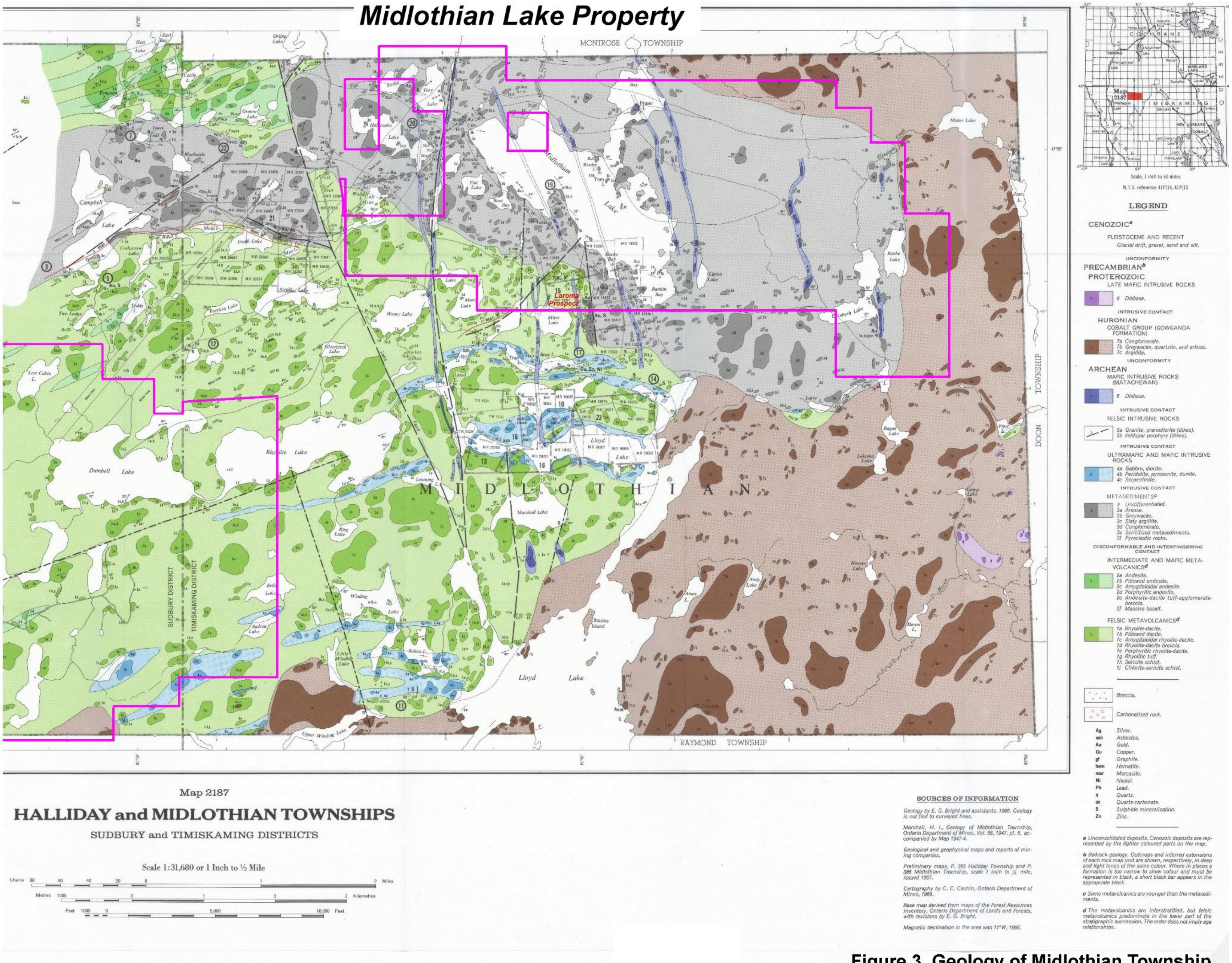


Figure 3. Geology of Midlothian Township ODM Map 2187

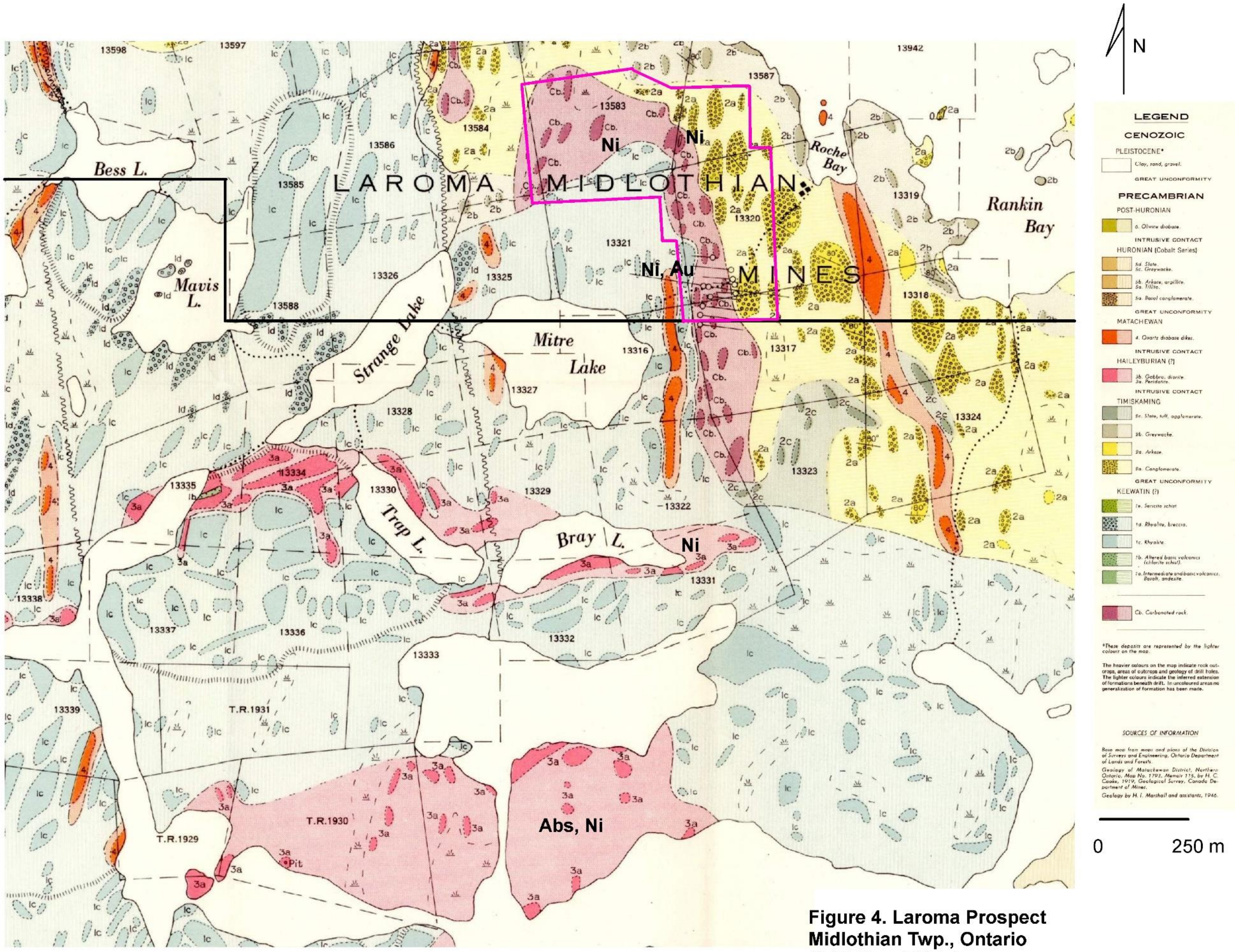


Figure 4. Laroma Prospect Midlothian Twp., Ontario ODM Map 1947-4

Property Boundary

Area of Survey

Table 1. Historic Exploration: Midlothian Lake Property, Mitre Lake Area

Company	***Year***	***Work Description***
Stairs Exploration & Mining	**1959 – 1964**	**21 DDH**
Rio Tinto Mines	**1963**	**1 DDH**
Laroma Midlothian Mines Ltd.	**1964**	**2 DDH**
Laroma Midlothian Mines Ltd.	**1964**	**3 DDH**
Timiskaming Nickel	**1968**	**1 DDH**
Canadian Johns-Manville Co. Ltd.	**1970**	**3 DDH**
Dennison Mines Ltd.	**1971**	**Geological Survey, Geochemical Survey, EM Survey and 2 DDH**
Dennison Mines Ltd.	**1971**	**2 DDH**
John Hogan	**1971**	**2 DDH**
John Hogan	**1971**	**1 DDH**
International Trust Company	**1972**	**4 DDH**
Larche/Rosseau	**1972**	**8 DDH**
Allied Mining Corp.	**1972**	**1 DDH**
Allied Mining Corp.	**1972**	**2 DDH**
Tojaro Holdings Ltd.	**1973**	**Magnetometer Survey**
Stump Mines Ltd.	**1973**	**2 DDH**
United Asbestos Inc.	**1973**	**3 DDH**
Hanna Mining Company	**1974**	**6 DDH**
Hanna Mining Company	**1974**	**6 Holes**
Northrim Mines Inc.	**1975**	**2 DDH**
International Trust Company	**1976**	**3 DDH**
Falconbridge Copper Mines Ltd.	**1978**	**7 DDH**
Shield Geophysics Ltd.	**1981**	**Airborne EM**
Regal Goldfields Ltd.	**1983**	**9 DDH**
Goldteck Mines Ltd.	**1987 – 1988**	**Geological Mapping, Mechanical Stripping, Magnetometer and Resistivity Surveys and 94 DDH**
Tom Obradovich	**1996**	**Mechanical Stripping**
Orezone Resources Inc.	**1996**	**Prospecting, Sampling (Laroma Showing)**
Orezone Resources Inc.	**2000**	**7 DDH**
Canadian Arrow Mines Ltd.	**2002**	**10 DDH**
Mustang Minerals	**2004**	**Airborne EM**
Explor Resources	**2008**	**Heli-VTEM**
Explor Resources	**2009**	**Ground Mag/IP/VLF**
Explor Resource	**2011**	**DDH (Montrose Property)**
Robert Dillman & Jim Renaud	**2019-2022**	**Prospecting, Geology, Petrography; Discovery of Ni-Sb-Co-Mn**
Goldenfire Minerals Inc.	**2022-2023**	**Prospecting, Geology, Petrography**

Survey Dates and Personnel

The ground magnetometer and VLF-EM surveys were completed in 5 days between June 4, 2023 and June 8, 2023. Mob/demob to the project area occurred on June 3, 2023 and June 10, 2023, respectively.

The surveys were performed by Robert Dillman of Mount Brydges, Ontario and Jim Renaud of London, Ontario on behalf of Goldenfire Minerals Inc.

The magnetometer instrument was operated by Robert Dillman. The VLF-EM instrument was operated by Jim Renaud.

Survey Logistics

A 250 m section of an existing historic N-S baseline was re-established for initial control of part of the survey. Survey lines were compassed and GPS controlled using a Garmin GPSMAP 66st unit set to Zone 17, NAD83. The survey grid consisted of 10 E-W orientated lines ranging 250 to 500 m long, spaced 50 to 100 metres apart, and 4 N-S orientated lines ranging 300 to 475 m long, spaced 100 to 200 m apart. Survey lines were flagged at 25 m intervals and assigned grid coordinates accordingly.

VLF readings were taken at 25 metre intervals along the lines. A total of 3.75 km was surveyed using a Geonics Limited EM-16 unit. The VLF station used for the survey is located at Cutler, Maine, USA (635324mE, 4944488mN).The station transmits at a low frequency of 24.0 kHz and is on a bearing of N115^{0}E from the survey area. The VLF instrument was orientated towards the north at N25^{0}E for all readings recorded during the survey. VLF readings and profiled data are plotted at a scale of 1:2,500 on accompanying maps. The interpretation of VLF and magnetometer data is presented on a compilation map.

Magnetometer readings were taken at 12.5 metre intervals along survey lines. A total of 4.14 kilometres was surveyed using a Gems Systems Limited GMS 19T Proton/ Gradient magnetometer. Only the total magnetics was recorded during the survey. A base station was established on the baseline at 1+00N (500287mE, 5304822mN) and periodically checked each day to monitor daily diurnal magnetic variations. Throughout the survey, diurnal variations were minimal, averaging 56,529 nanoTeslas (nT) within a range of 56,514 to 56,541 nT. All magnetometer readings were corrected for daily magnetic variations. Magnetic readings are plotted, contoured, and profiled at a scale of 1:2,500 on maps appended to this report.

The specifications of the VLF and magnetometer instruments are appended to this report.

This work has been completed under Exploration Plan: PL-22-000015.

Magnetic Survey Results

The magnetic susceptibility of the rocks within the survey area ranges from 56,275 nT to 58,314 nT. Regional magnetism decreases slightly from north to south.

The magnetic responses of the primary rock units (conglomerate, andesite, rhyolite, altered gabbro and listwanite) range from 56,473 to 56,625 nT. Magnetic peaks of +56,600nT within the primary units range from single line/ 1 station anomalies to broader single line/ multiple station anomalies up to 80 metres wide. The magnetic peaks mostly occur in the east section of the survey along L0N (800nT, diabase? in andesite), L2+00N (sulphides in andesite), L4+00N (listwanite?), L5+00N (conglomerate), and L6+00N (conglomerate).

The central section of the survey is crossed by a, strong magnetic, linear feature with upto +800nT. The anomaly is caused by a diabase dike which was observed at several locations during the survey.

Another notable magnetic anomaly occurs between L5+00W and L6+00W where they intersect L5+00N. This feature is the strongest magnetic anomaly detected during the survey however the extent of the anomaly has not been fully outlined. The magnetic feature appears circular in nature with readings between 2,200 and 2,300 nT at its core. To the west, a broad circular area of low magnetic intensity occurs between the magnetic anomaly and an historic trench exposing brecciated dolomite rocks believed to be part of the listwanite unit.

A notable but poorly defined broad area of higher magnetics occurs on L7+00W. Diabase outcrops were observed in the area during the survey.

VLF Survey Results

The VLF survey has detected 4 multi-line conductors (A, B, C & D), 7 single line conductors and numerous weak conductive features. Conductors in this survey are defined by a positive to negative shift in the inphase readings with the conductor axis occurring at the point of 0% inphase. Weak conductors are defined by inflections in the inphase readings occurring when the inphase trends lower but remain positive as result of influence when approaching a stronger conductor.

Conductors A, B and C occur in conglomerates on the east side of the grid. Conductor's A and C strike north and are situated in north-south trending topographic lineaments situated east of the Laroma Prospect. Outcrops near both conductors are schistose, sheared, and carbonate-altered likely resulting from faulting. Both conductors appear to have been tested by previous drilling. Graphitic beds are noted in the log of drill hole MT-10-03 (Grant, 2009) which tested the north end of Conductor A. Conductor B occurs to the northwest where the trend of the primary rock units' changes from north-south to east-west. Conductor B is possibly an extension of Conductor A.

Conductor D occurs in andesite outcropping west of the listwanite unit in the south section of the survey. The conductor is close to an 800nT magnetic feature and maybe part of a series of zones of pyrite mineralization occurring in the andesite unit west of the listwanite unit.

Single-line conductors occur on L0, L2+00N, L2+50N, L3+00N and L3+50N. Some of the conductors occurring on L0, L2+00N and L2+50N appear to be situated within the conglomerate unit. The conductor on L2+00N occurs very close to the east contact of the listwanite unit. Additional conductors on L0, L2+00N, L2+50N and L3+00N occur in the andesite unit west of the listwanite unit. The west conductors on L0 and L3+50N are very close to the listwanite contact. The west conductor on L2+00N is also close to the listwanite contact. This conductor coincides with a 600nT magnetic peak and a trench where thin massive sulphide veinlets were found in trench debris at the east end of the trench. Anomalous nickel values were previously obtained from rock samples of debris found north of the central section of the trench. The conductor on L3+00N is situated close to where sulphide stringers occur in andesite adjacent to outcrops of dolomite with disseminated nickel sulphides and pyrite.

Weak conductors were detected along all the lines except in the south section of the property. Some of the weaker conductive features appear to be on strike of stronger conductors either to the north or south and potentially to the northwest or southeast, a trend displayed by lineaments in the northeast section of the survey. Some of the weaker features also appear to be occurring along contacts of the listwanite and along the diabase dike. Notable weak conductors occur on L5+00N, close to dolomitic rocks exposed east of the diabase dike and within the strong magnetic anomaly situated between L6+00W and L7+00W.

Discussion of Results

The geophysical surveys were initiated to outline the extent of the listwanite unit and pinpoint sulphide mineralization with associated nickel, antinomy, cobalt and manganese content. Unfortunately, with the exception of diabase, the primary rock types in the survey area do not contain appreciable amounts of magnetic minerals to allow differentiation between the different rock types using magnetic responses. This also applies to the nickel-bearing minerals occurring within the listwanite unit which have been determined by microprobe analysis to be nickel sulphides and arsenides and not associated with pyrrhotite, awaruite, asbestos, or magnetite. As a result, prospecting combined with geological mapping appears to be the most useful methods of exploring for nickel mineralization in the Laroma Prospect. During this survey, a new nickel occurrence associated with fine-grained disseminated sulphides was identified with green mica in the listwanite unit at 499575mE, 5305180mN. Soil sampling may also be a useful method of exploration due to the abundance of outcrop and shallow nature of overburden in the survey area.

The large magnetic feature between L5W and L6W along L5+00N is an interesting non-linear, potentially circular feature measuring approximately 125m in diameter. It is possible that this may represent a late post-tectonic gabbroic plug contributing to the Ni-mineralization in the vicinity. Further definition of this magnetic anomaly is warranted. Aeromagnetic data also shows a similar magnetic feature situated approximately 700m to the west and a 3rd circular magnetic feature occurring within rhyolite 150m to the southwest.

Conclusions and Recommendations

Due to the lack of a magnetic response of the listwanite unit and in areas of nickel mineralization, using magnetics to evaluate the extent and potential of the listwanite is limited. The VLF survey was useful outlining several conductive features possibly representing the contacts of the unit and additional nickel sulphide and arsenide mineralization. Further prospecting, mapping combined with additional petrology and electron microprobe work appears to be the most effective methods to evaluating the nickel potential of the Laroma Prospect. Soil sampling may also be a useful tool due to the shallow nature of overburden, abundant outcrop and the possibility of nickel enrichment on weathered outcrop surfaces.

Additional ground magnetic and VLF surveys are warranted to further define the potentially circular, strong magnetic further situated on L5+00N and to locate two similar circular aeromagnetic features situated close the listwanite as they potentially represent gabbroic plugs and hosts for additional nickel mineralization in the area.

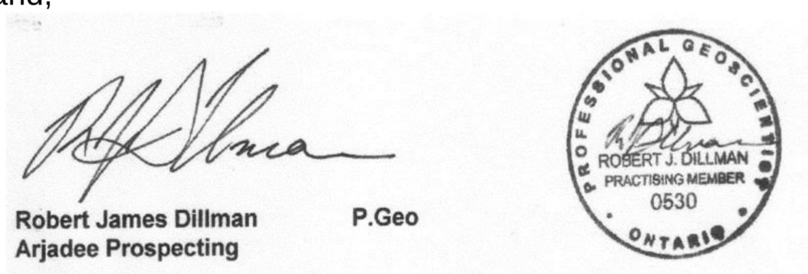
An estimated cost for additional exploration of the Laroma Prospect and provide drill targets is $110,000. A budget for the proposed work is:

Geological Mapping & Prospecting	$20,000
Rock Assays	5,000
Ground Magnetics and VLF	35,000
Electron Microprobe Investigations	15,000
Soil Sampling	35,000
	$110,000

Respectfully submitted by,

Dr. Jim Renaud, P.Geo.

and,



Robert Dillman B.Sc. P.Geo.
June 20, 2023

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CERIFICATE of AUTHOR

I, Robert J. Dillman, Professional Geologist, do certify that:

1. **I am the President and the holder of a Certificate of Authorization for:**

   ARJADEE PROSPECTING
   8901 Reily Drive, Mount Brydges, Ontario, Canada N0L1W0

2. **I graduated in 1991 with a Bachelor of Science Degree in Geology from the University of Western Ontario.**

3. **I am an active member of:**

   Professional Geoscientists of Ontario, PGO
   Prospectors and Developers Association of Canada, PDAC

4. **I have been a licensed Prospector in Ontario since 1984.**

5. **I have worked continuously as a Professional Geologist for 30 years.**

6. **Unless stated otherwise, I am responsible for the preparation of all sections of the Assessment Report titled:**

   REPORT ON GROUND MAGNETOMETER &
   VLF ELECTROMAGNETIC (EM) SURVEYS,
   MIDLOTHIAN LAKE AREA MIDLOTHIAN LAKE PROPERTY:
   LARDER LAKE MINING DIVISION MIDLOTHIAN TOWNSHIP, ONTARIO

7. **I am not aware of any material fact or material change with respect to the subject matter of the Assessment Report that is not contained in the Assessment Report and its omission to disclose makes the Assessment Report misleading.**

   Dated this 20th day of June, 2023

Robert James Dillman **P.Geo**
Arjadee Prospecting

Dr. Jim Renaud P.Geo, PhD.
Renaud Geological Consulting Ltd.
21272 Denfield Rd, London, Ontario, N6H-5L2
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CERIFICATE of AUTHOR

I, Jim Renaud, **Professional Geologist**, do certify that:

1. I am the **President** and the holder of a **Certificate of Authorization** for:
Renaud Geological Consulting Ltd.,
21272 Denfield Rd
London, Ontario, Canada
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2. That I have the degree of Bachelor of Science (Chemistry and Geology), 1999, from Western University; the degree of Honors Standing in Geology, 2000, from Western University; Masters of Science (Economic Geology), 2003, from Western University; and Doctor of Philosophy in Geology, 2014, from Western University;

3. I am an active member of:
Association of Professional Geoscientists of Ontario, APGO
Prospectors and Developers Association of Canada, PDAC

4. I have been a **licensed Prospector in Ontario** since 2000.

5. I have worked continuously as a Geologist for 19 years.

6. Unless stated otherwise, **I am responsible** for the preparation of all sections of the Assessment Report titled:

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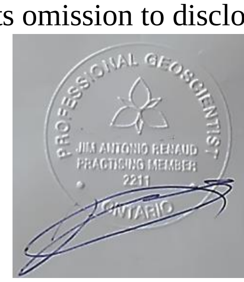
Dated this 20th day of June 2023



EM16 SPECIFICATIONS

MEASURED QUANTITY	Inphase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity).
SENSITIVITY	Inphase: ±150% Quad-phase: ± 40%
RESOLUTION	±1%
OUTPUT	Nulling by audio tone. Inphase indication from mechanical inclinometer and quad-phase from a graduated dial.
OPERATING FREQUENCY	15-25 kHz VLF Radio Band. Station selection done by means of plug-in units.
OPERATOR CONTROLS	ON/OFF switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclinometer.
POWER SUPPLY	6 disposable 'AA' cells.
DIMENSIONS	42 x 14 x 9cm
WEIGHT	Instrument: 1.6 kg Shipping: 5.5 kg

VLF-EM Instrument
serial number 16869

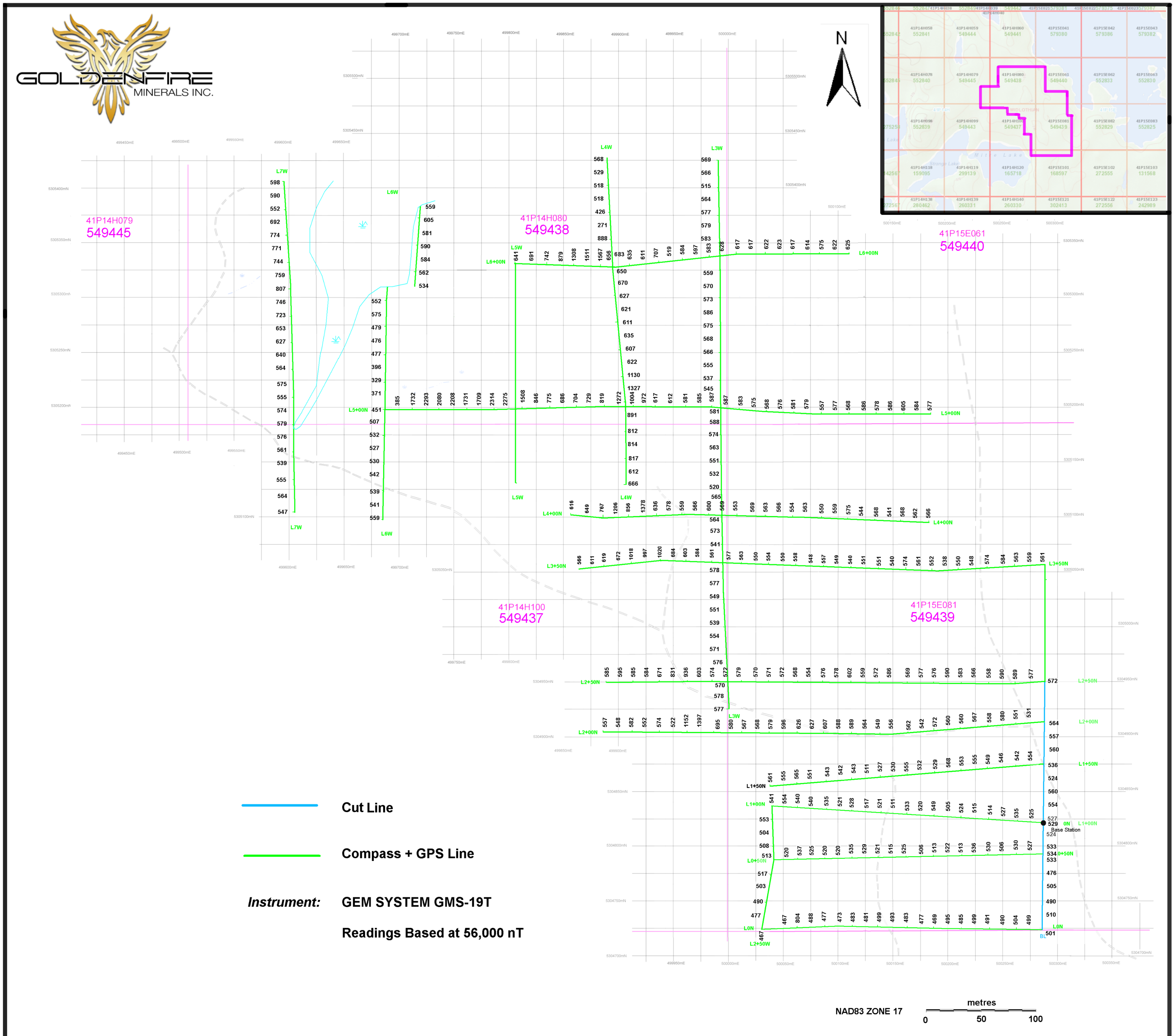
APPENDIX F: GSM-19T MAG / GRAD SPECIFICATIONS

Sensitivity	0.15 nT @ 1Hz / 0.05 nT @ 4Hz
Resolution:	0.01nT (gamma), magnetic field and gradient.
Accuracy:	+/- 0.2 nT @ 1 Hz
Range:	20,000 to 120,000nT.
Gradient Tolerance:	Over 7,000nT/m
Operating Interval:	3 seconds minimum, faster optional. Readings initiated from keyboard, external trigger, or carriage return via RS-232C.
Input / Output:	6 pin weatherproof connector, RS-232C, and (optional) analog output.
Power Requirements:	12V, 200mA peak (during polarization), 30mA standby. 300mA peak in gradiometer mode.
Power Source:	Internal 12V, 2.6Ah sealed lead-acid battery standard, others optional. An External 12V power source can also be used.
Battery Charger:	**Input:** 110 VAC, 60Hz. Optional 110 / 220 VAC, 50 / 60Hz. **Output:** dual level charging.
Operating Ranges:	Temperature: - 40°C to +50°C. Battery Voltage: **10.0V minimum to 15V maximum.** Humidity: **up to 90% relative, non condensing.**
Storage Temperature:	-50°C to +50°C.
Display:	LCD: 240 X 64 pixels, OR 8 X 30 characters. Built in heater for operation below -20°C.
Dimensions:	**Console:** 223 x 69 x 240mm. **Sensor Staff:** 4 x 450mm sections. **Sensor:** 170 x 71mm dia. **Weight:** console 2.1kg, sensor and staff assembly 2.2 kg.

VLF

Frequency Range:	15 - 30.0 kHz
Parameters Measured:	Vertical in-phase and out-of-phase components as percentage of total field. 2 relative components of horizontal field. Absolute amplitude of total field.
Resolution:	0.1%.
Number of Stations:	Up to 3 at a time.
Storage:	Automatic with: time, coordinates, magnetic field / gradient, slope, EM field, frequency, in- and out-of-phase vertical, and both horizontal components for each selected station.
Terrain Slope Range:	0° - 90° (entered manually).
Sensor Dimensions:	140 x 150 x 90 mm. (5.5 x 6 x 3 inches).
Sensor Weight:	1.0 kg (2.2 lb.).

GSM 19T Magnetometer



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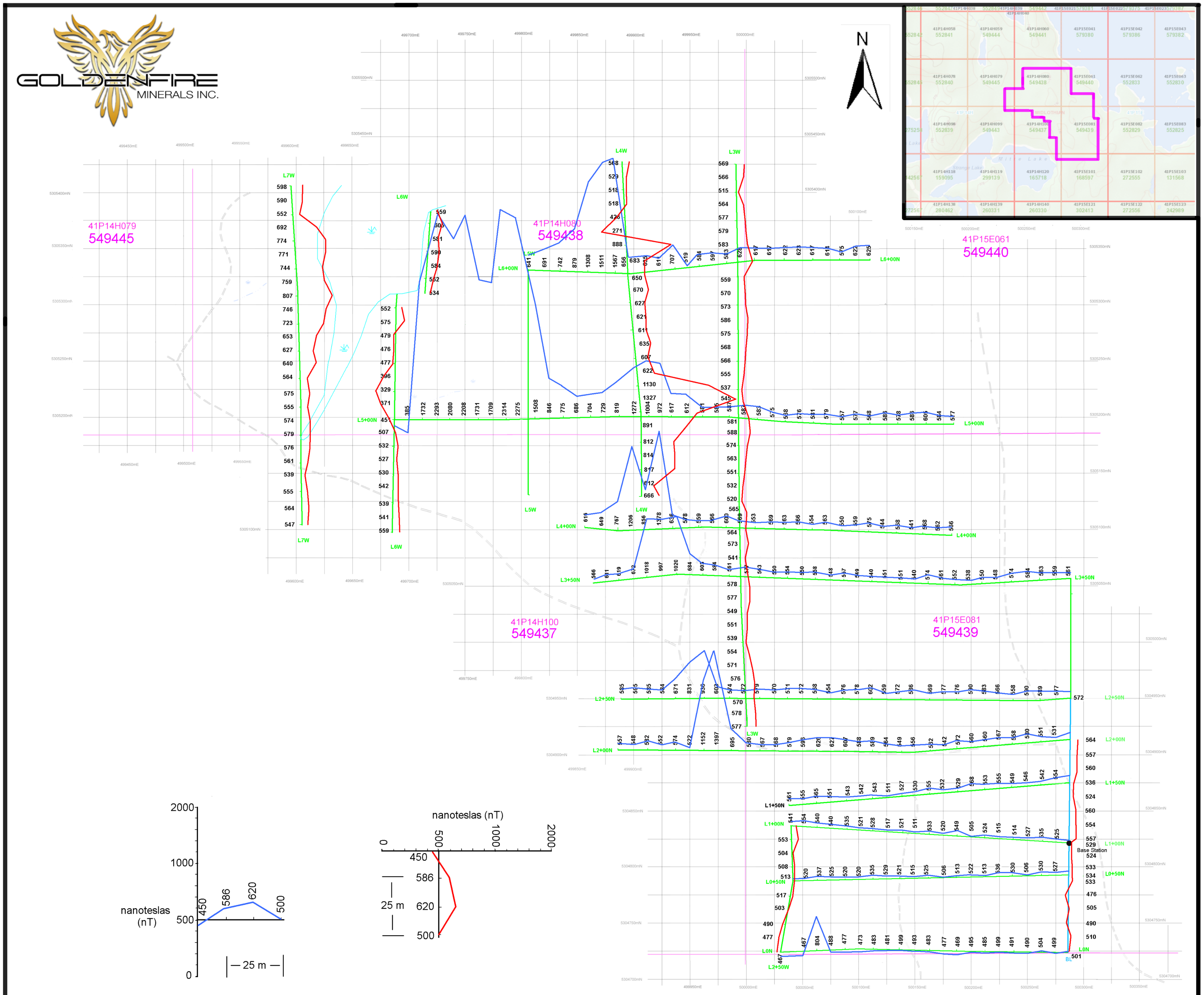
GROUND MAGNETOMETER SURVEY: TOTAL MAGNETICS

MIDLOTHIAN LAKE PROPERTY

GOLDENFIRE MINERALS INC.

Midlothian Twp., Ontario

Date:	June 2023	Map by:	RJD
Survey By:	JR, RJD	Scale:	1 ; 2,500



32

Cut Line

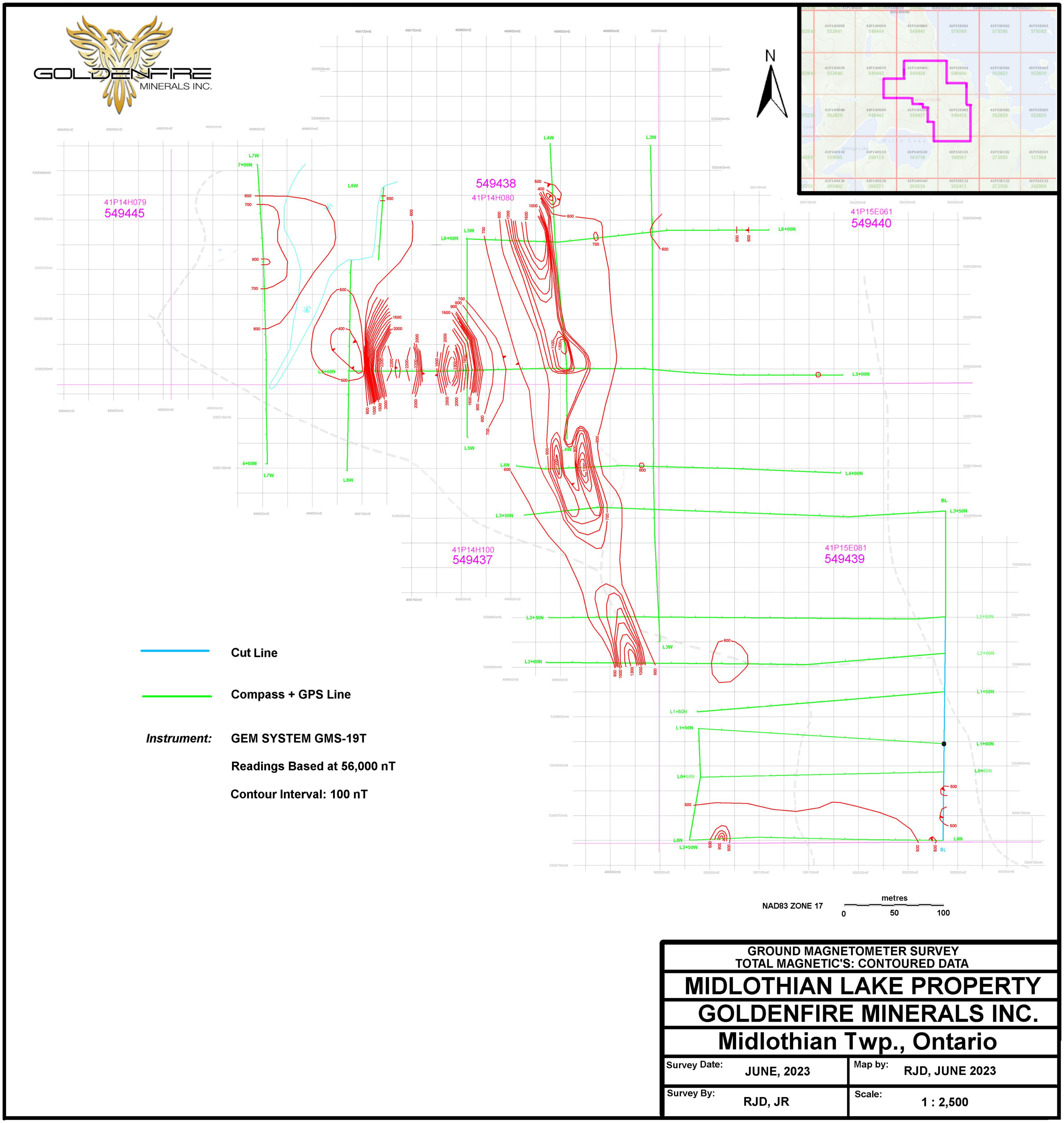
Compass + GPS Line

Instrument: **GEM SYSTEM GMS-19T**

Readings Based at 56,000 nT

Operator: **R. Dillman**

GROUND MAGNETOMETER SURVEY: TOTAL MAGNETICS PROFILED DATA	
MIDLOTHIAN LAKE PROPERTY	
GOLDENFIRE MINERALS INC.	
Midlothian Twp., Ontario	
Date: June 2023	Map by: RJD
Survey By: JR, RJD	Scale: 1 ; 2,500


GOLDENFIRE
MINERALS INC.
N
549438
41P14H080
41P14H079
549445
41P15E061
549440
41P14H100
549437
41P15E081
549439
Cut Line
Compass + GPS Line
Instrument:
GEM SYSTEM GMS-19T
Readings Based at 56,000 nT
Contour Interval: 100 nT
NAD83 ZONE 17
metres
0
50
100
GROUND MAGNETOMETER SURVEY
TOTAL MAGNETIC'S: CONTOURED DATA
MIDLOTHIAN LAKE PROPERTY
GOLDENFIRE MINERALS INC.
Midlothian Twp., Ontario
Survey Date:
JUNE, 2023
Map by:
RJD, JUNE 2023
Survey By:
RJD, JR
Scale:
1 : 2,500

32

32

Instrument: GEONIC'S LIMITED EM-16

Operator: J. Renaud

Station: NAA, Cutler, Maine 24 kHz
535324mE, 4944488mN

Cut Line

Compass + GPS Line

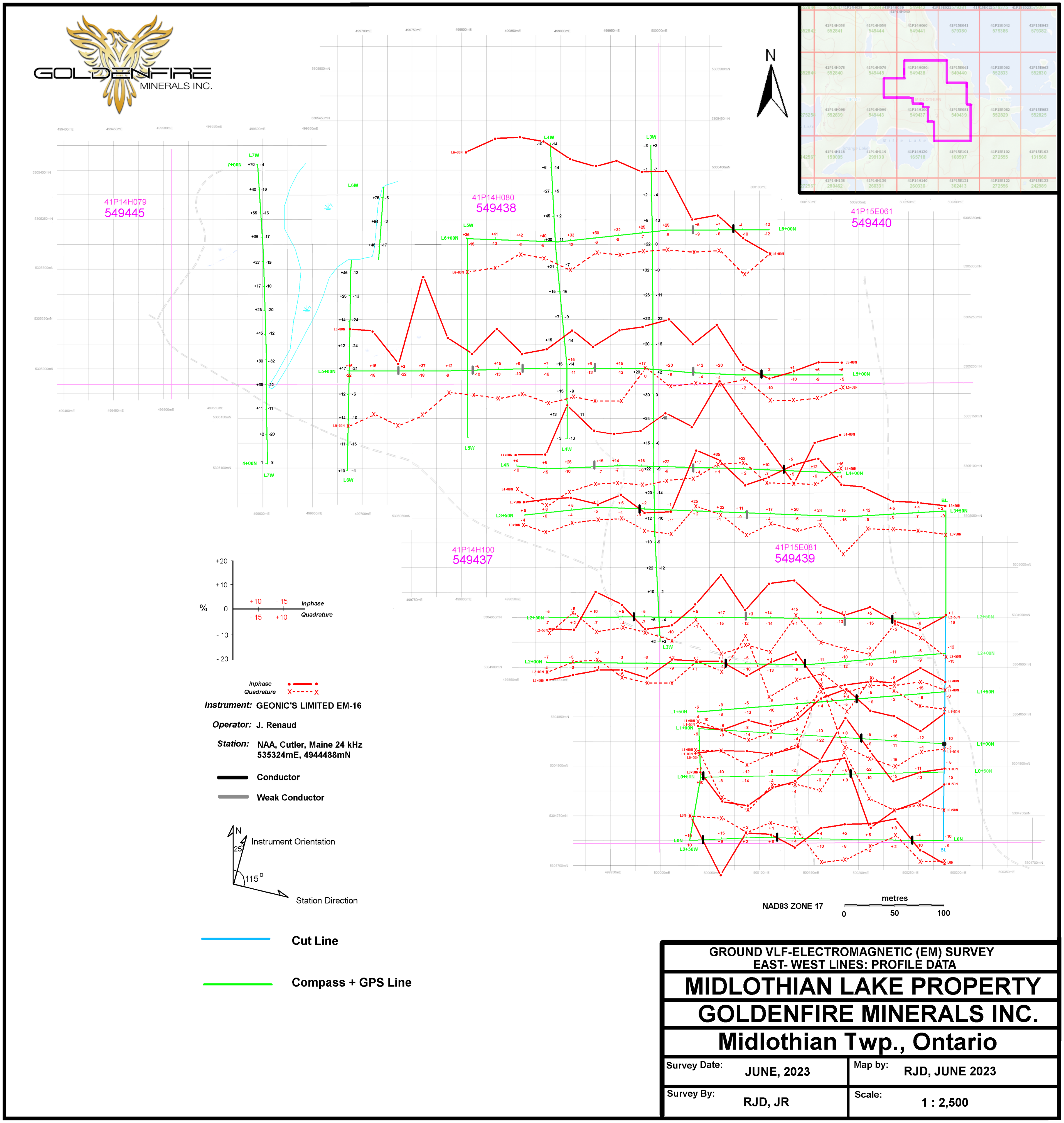
GROUND VLF-ELECTROMAGNETIC (EM) SURVEY
INSTRUMENT READINGS

MIDLOTHIAN LAKE PROPERTY

GOLDENFIRE MINERALS INC.

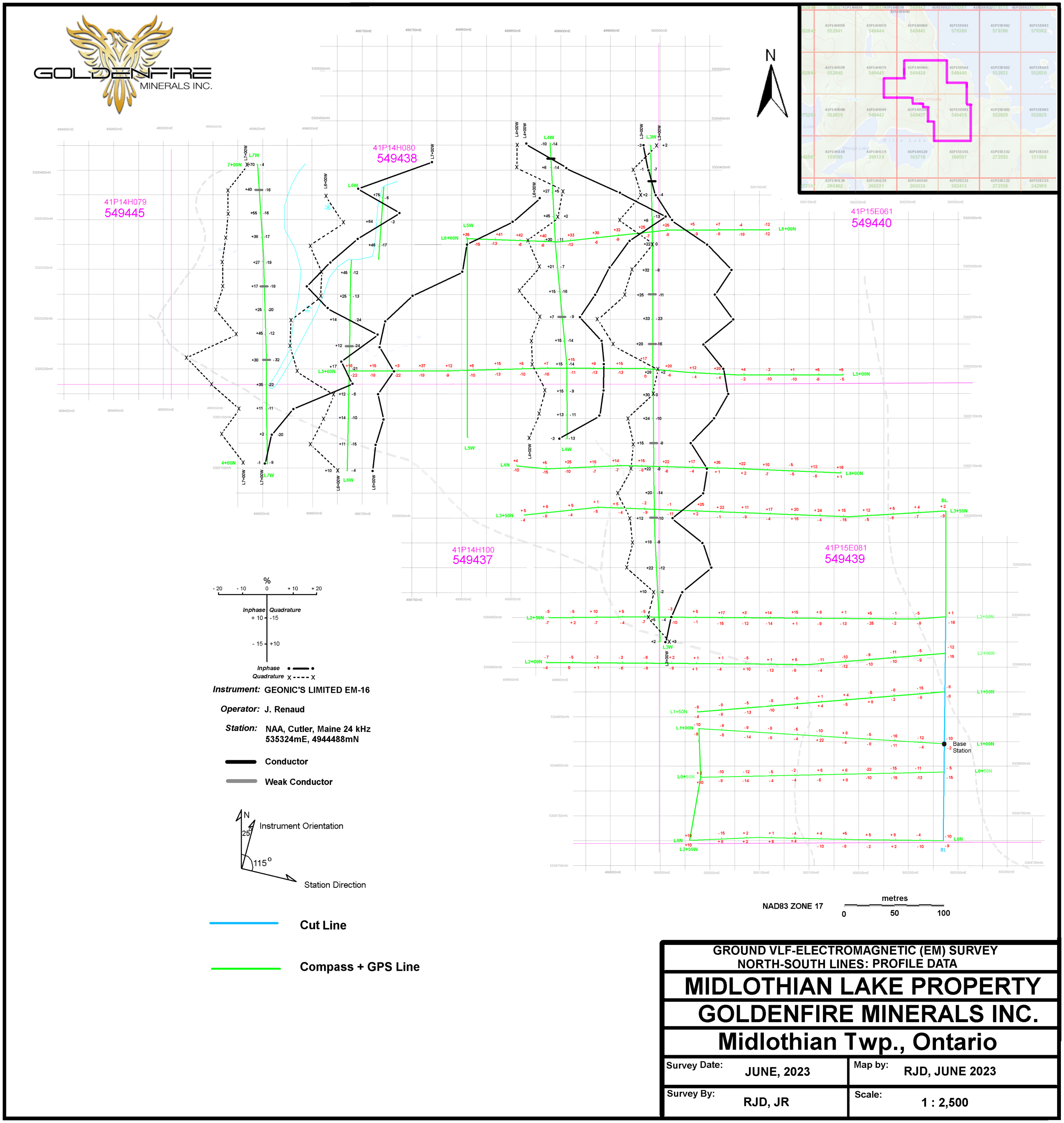
Midlothian Twp., Ontario

Survey Date: JUNE, 2023	Map by: RJD, JUNE 2023
Survey By: RJD, JR	Scale: 1 : 2,500

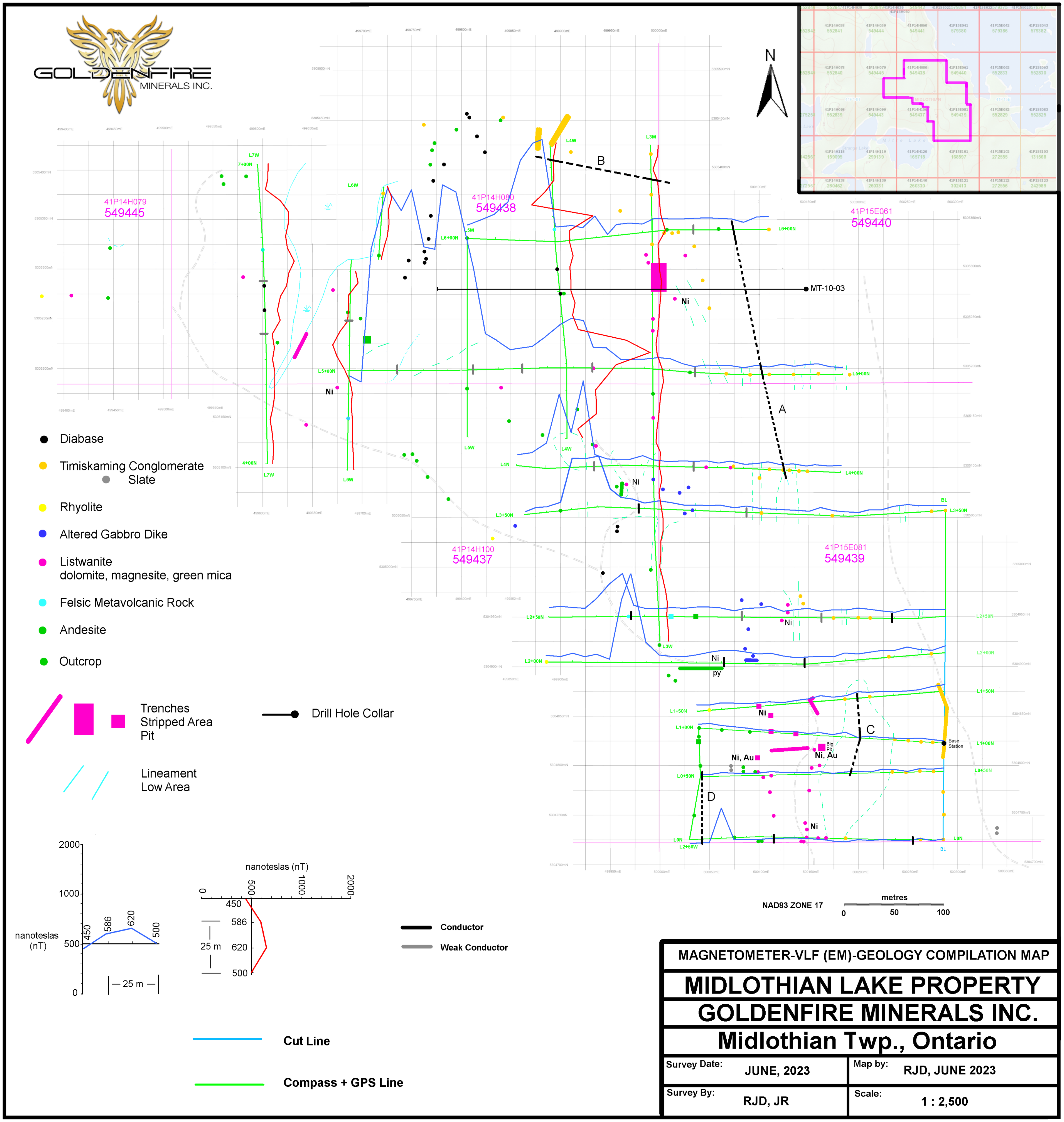


GOLDENFIRE MINERALS INC.
N
41P14H079
549445
41P14H080
549438
41P15E061
549440
41P14H100
549437
41P15E081
549439
L7W
L6W
L5W
L4W
L3W
L6+00N
L5+00N
L4+00N
L3+50N
L2+50N
L2+00N
L1+50N
L1+00N
L0+50N
L0N
L2+50W
BL
+20
+10
%
0
- 10
- 20
+10
- 15
- 15
+10
Inphase
Quadrature
Inphase
Quadrature
Instrument: GEONIC'S LIMITED EM-16
Operator: J. Renaud
Station: NAA, Cutler, Maine 24 kHz
535324mE, 4944488mN
Conductor
Weak Conductor
N
25°
115°
Instrument Orientation
Station Direction
Cut Line
Compass + GPS Line
NAD83 ZONE 17
metres
0
50
100
GROUND VLF-ELECTROMAGNETIC (EM) SURVEY
EAST- WEST LINES: PROFILE DATA
MIDLOTHIAN LAKE PROPERTY
GOLDENFIRE MINERALS INC.
Midlothian Twp., Ontario
Survey Date: JUNE, 2023
Map by: RJD, JUNE 2023
Survey By: RJD, JR
Scale: 1 : 2,500

32


GOLDENFIRE
MINERALS INC.
N
41P14H079
549445
41P14H080
549438
41P15E061
549440
41P14H100
549437
41P15E081
549439
Inphase
Quadrature
Instrument: GEONIC'S LIMITED EM-16
Operator: J. Renaud
Station: NAA, Cutler, Maine 24 kHz
535324mE, 4944488mN
Conductor
Weak Conductor
Instrument Orientation
Station Direction
115°
Cut Line
Compass + GPS Line
Base Station
NAD83 ZONE 17
metres
0
50
100
GROUND VLF-ELECTROMAGNETIC (EM) SURVEY
NORTH-SOUTH LINES: PROFILE DATA
MIDLOTHIAN LAKE PROPERTY
GOLDENFIRE MINERALS INC.
Midlothian Twp., Ontario
Survey Date: JUNE, 2023
Map by: RJD, JUNE 2023
Survey By: RJD, JR
Scale: 1 : 2,500

32


GOLDENFIRE MINERALS INC.
N
41P14H079
549445
41P14H080
549438
41P15E061
549440
41P14H100
549437
41P15E081
549439
MT-10-03
A
B
C
D
Ni
Ni, Au
py
Big Pit
Base Station
L7W
L6W
L5W
L4W
L3W
L6+00N
L5+00N
L4+00N
L3+50N
L2+50N
L2+00N
L1+50N
L1+00N
L0+50N
L0N
L2+50W
BL
Diabase
Timiskaming Conglomerate
Slate
Rhyolite
Altered Gabbro Dike
Listwanite
dolomite, magnesite, green mica
Felsic Metavolcanic Rock
Andesite
Outcrop
Trenches
Stripped Area
Pit
Drill Hole Collar
Lineament
Low Area
nanoteslas (nT)
2000
1000
500
0
450
586
620
500
25 m
Conductor
Weak Conductor
Cut Line
Compass + GPS Line
NAD83 ZONE 17
metres
0
50
100
MAGNETOMETER-VLF (EM)-GEOLOGY COMPILATION MAP
MIDLOTHIAN LAKE PROPERTY
GOLDENFIRE MINERALS INC.
Midlothian Twp., Ontario
Survey Date: JUNE, 2023
Map by: RJD, JUNE 2023
Survey By: RJD, JR
Scale: 1 : 2,500

32