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REPORT ON A FALCON® AIRBORNE GRAVITY  
GRADIOMETER AND MAGNETOMETER SURVEY  
MANN PROJECT,  
MANN TOWNSHIP, ONTARIO, NTS 42A14 & 42A15



Contractor: **Xcalibur**  
MULTIPHYSICS

**Date: January 17, 2023**

**Report Prepared by:**  
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## EXECUTIVE SUMMARY

This report details the high-sensitivity aeromagnetic and FALCON<sup>®</sup> Airborne Gravity Gradiometer geophysical survey conducted over the Mann Project located 47km NE of Timmins, Ontario.

The property consists of 489 contiguous mining claims, belonging to three different land holders who entered in a joint venture to explore this large target. 215 claims held by C.A. Cox (Cox), 209 claims held by Noble Minerals (NOB), and the remaining 65 claims held by Canada Nickel Company (CNC). The area is centered around a potential bulk-tonnage magmatic nickel sulphide deposit. These Type II disseminated nickel sulphide deposits have unique geophysical characteristics due to the serpentinization process which liberates nickel from the mafic minerals, chiefly olivine found within ultramafic peridotite and dunite. This alteration process produces magnetite and an associated decrease in density which produces overlapping gravity lows with magnetic highs.

This survey successfully identified 3 potential geophysical prospects of several kms long an approximately 3 km long, by up to 900 m wide that can now be confidently targeted due to the results of this study. The next steps for evaluating this target include but are not limited to a 15-20-hole ~6,000m diamond drill program with widely spaced holes, and minor surface prospecting activities.

## **1.0 INTRODUCTION**

This report details the high-sensitivity aeromagnetic and FALCON<sup>®</sup> Airborne Gravity Gradiometer (AGG) and Magnetometer survey conducted over the Mann Project for Canada Nickel Company Inc. “CNC” in a joint venture with Noble Minerals (NOB), as well as C.A. Cox (Cox). The survey was completed by Xcalibur Multiphysics Ltd. (“Xcalibur”) between July 26<sup>th</sup> and July 31<sup>st</sup>, 2022.

The geophysical surveys were carried out by Xcalibur Multiphysics Ltd. (“Xcalibur”, the “Contractor”) having its head office at 2505 Meadowvale Boulevard, Mississauga, Ontario, Canada, L5N 5S2.

The “lead” client, overseeing the operation, Canada Nickel Company Inc., having its head office at 130 King Street West, Toronto, Ontario, Canada, M5X 1E3.

The objective of this survey is to delineate and evaluate ultramafic intrusions located on the property using the combination of density and magnetic properties of the survey area geology.

## **2.0 SURVEY AREA**

### **2.1 LOCATION**

The survey area centered at approximately 498800E, 5410200N (UTM Z 17N) contained within the NTS topographic sheet 041A, covered a 156 km<sup>2</sup> area approximately 47 km NE of Timmins, Ontario.

### **2.2 ACCESS**

The property is accessible from Cochrane, Ontario via Highway 11 and by a series of logging roads. Follow Highway 11 south from Cochrane approximately 27 km’s then take a right (west) onto Potter Road. Follow Potter for 15 km west until you reach the logging roads that will give access to several parts of the anomaly.

### **2.3 INFRASTRUCTURE**

Within the survey block there are few minor dirt roads and some trails likely only accessible during the winter months.

### **2.4 CLIMATE**

The average daily temperature varies from a high of +24°C during July to a low of -24°C during January. Annual snowfall is approximately 296 cm and annual rainfall is 58 cm.

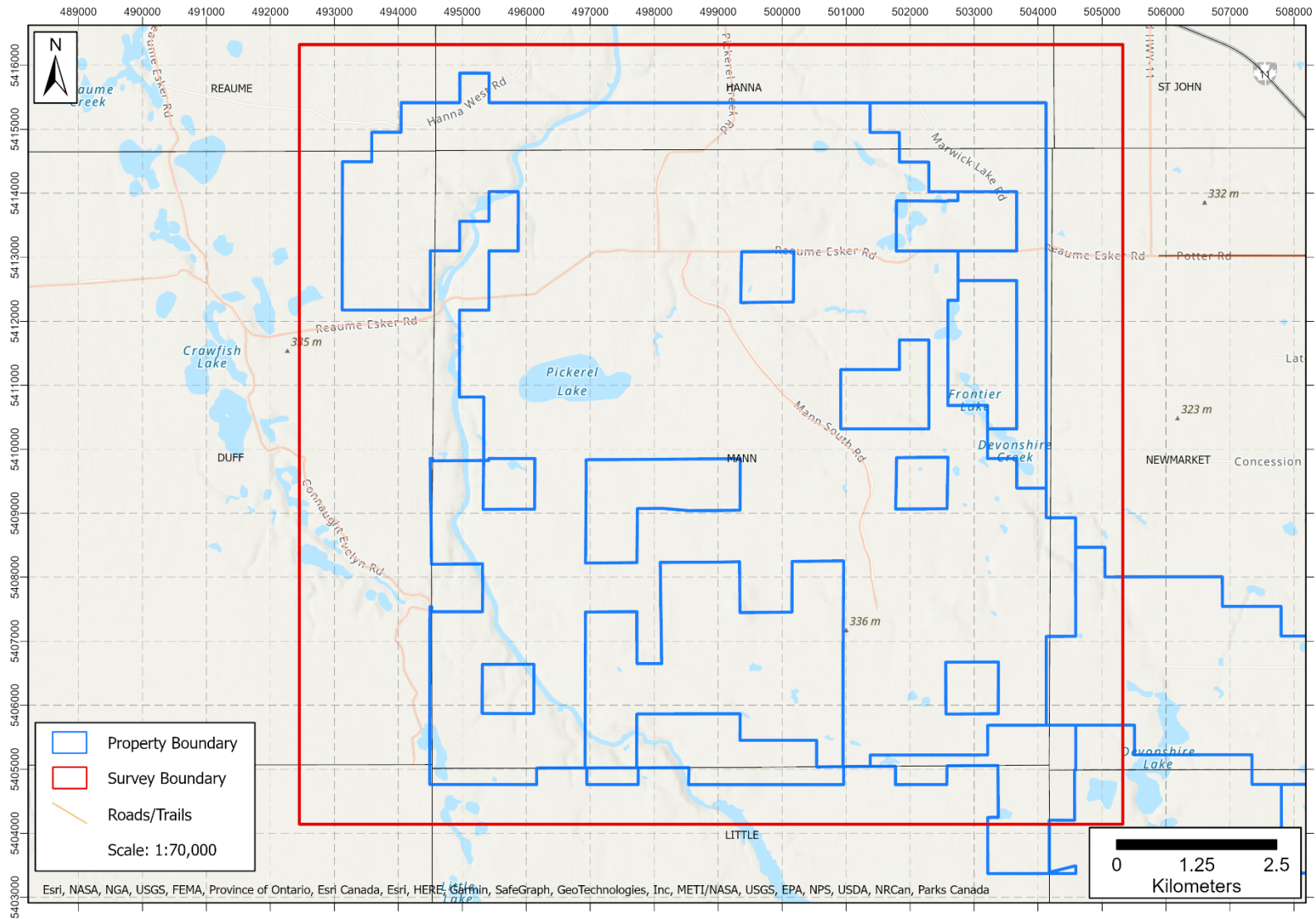


Figure 1: Mann Project map showing location of geophysical survey area (red) and property boundary (blue). Northern Ontario.

## 2.5 PHYSIOGRAPHY

The survey area physiography consists of rolling hills with some outcrop and a few lakes. Total topographic variation is ~61 m ranging from 249 m to 310 m for the ~156 square kilometer survey area.

## 2.6 MINERAL AND MINING CLAIMS

The property is a joint venture consisting of 489 single cell mining claims. The joint venture for the exploration of this target consists of three parties: 1) C.A. Cox, holding a total of 215 claims ; 2) Noble Minerals holding 209 claims; and 3) Canada Nickel Company holding 65 claims (Appendix I).

## 2.7 FLIGHT AND TIE LINES

The survey consisted of a total of 1,728 total line km's, spaced 100m apart, oriented N-S, covering 156 km<sup>2</sup> with tie lines (E-W) every 1000m. The flight lines are shown in Figure 2 and summarized in Table 4.

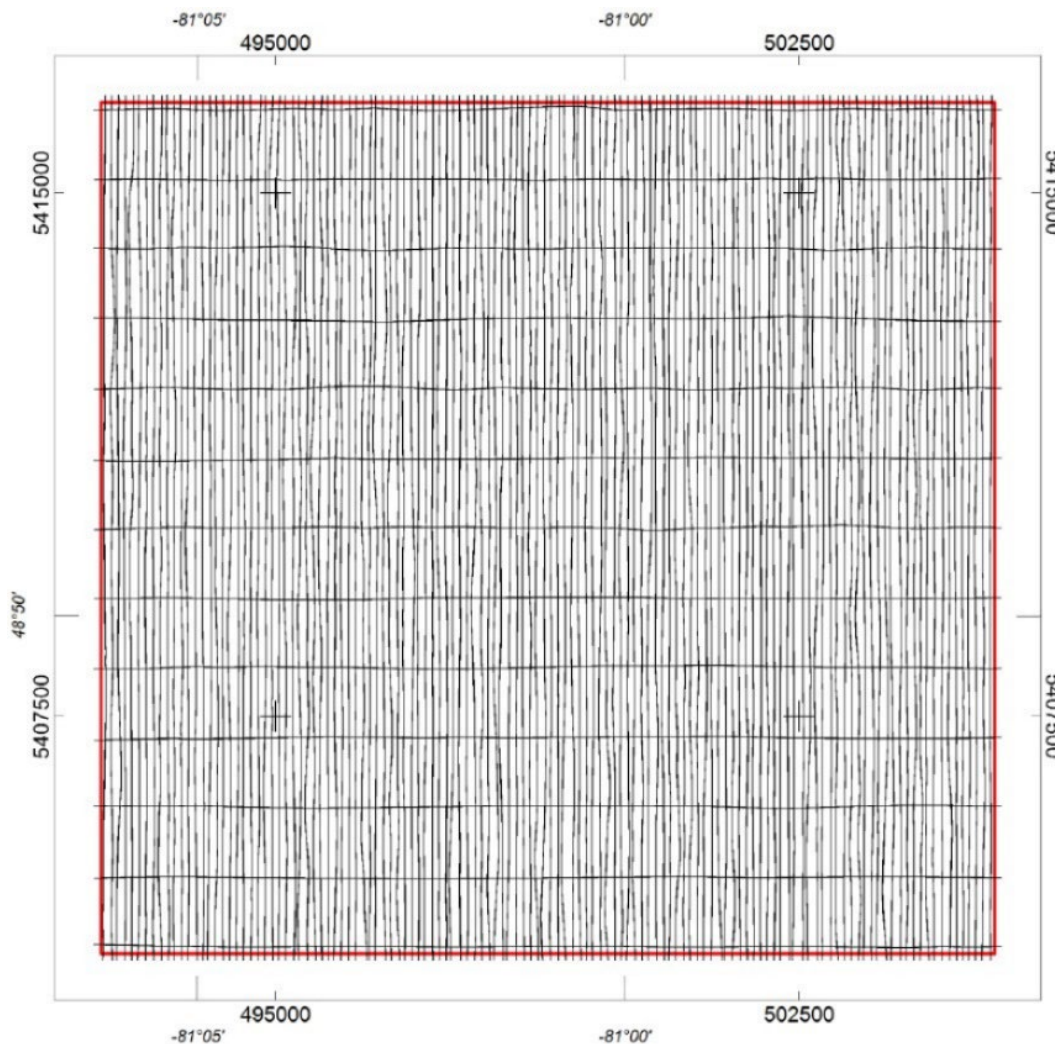


Figure 2: Flight path map.



Table 1: Geophysical Survey Specifications

<b>Total Kilometres (km)</b>	1,728
<b>Clearance Method</b>	Drape
<b>Minimum Drape Height (m)</b>	80
<b>Traverse Line Direction (deg.)</b>	000/180
<b>Traverse Line Spacing (m)</b>	100
<b>Tie Line Direction (deg.)</b>	090/270
<b>Tie Line Spacing (m)</b>	1000

## 2.8 DATUM AND PROJECTION

The survey was flown using the WGS-84 Datum. The Datum used to produce this report as well as the map products, grids and database is WGS-84. The projection is UTM, ZONE 17 N. All references to UTM coordinates in this report are based on the WGS-84 Datum.

## 2.9 FIELD OPERATIONS

The survey was based out of Timmins, Ontario. The survey aircraft was operated from Timmins Victor M. Power Airport using aviation fuel available on site. A temporary office was set up in Timmins where all survey operations were run, and the post-flight data verification was performed.

## 2.10 BASE STATIONS

A dual frequency GPS base station was set up to correct the raw GPS data collected in the aircraft. A secondary GPS base station was available but was not required.

### 2.10.1 GPS Base Station (Novatel OEM4)

Location: Timmins Victor M. Power Airport (ITRF 2014)

Date: July 25th, 2022

Latitude: 48° 34' 07.11379" N

Longitude: 81° 22' 09.30541" W

Height: 256.942 m ellipsoidal

### 2.10.2 Magnetometer Base station (CF1)

Location: Timmins Victor M. Power Airport

Date: July 25th, 2022

Used for flights: All

Base: 55,580 nT

## 2.11 FIELD PERSONNEL

The following technical personnel participated in field operations:

Table 2: Survey Field Personnel

<b>Crew Leader:</b>	D. Patzer
<b>Pilots:</b>	S. Parks, A. Gascoigne
<b>AME:</b>	D. Oystreck, P. van Schie
<b>Technicians:</b>	D. Patzer
<b>Project Manager:</b>	B. Robinson
<b>QC and Processing:</b>	J. Mohammed-Nour, P. Chambers

### 3.0 EXPLORATION HISTORY

Historical exploration activities completed at the Mann Project area are summarized in Table 3 below acquired from the Ontario Assessment File Database (OAFD). The area has received extensive exploration since the early 1940's, spanning predominantly from diamond drilling and geophysical work. The most recent exploration work in the nearby area was completed by Edward Shynkorenko in 2021. More than 280 short diamond drill holes have been completed in this township, following up on mainly Nickel, Copper, and Zinc showings.

Table 3: Ontario Assessment File Database (OAFD) Historical Exploration Work Completed at the Mann Project.

Company	Year	File ID	Work Description
Tres-Or Resources Ltd	2008 - 2009	20000004285	Beneficiation Studies, Geochemical, Manual Labour, Miscellaneous Compilation and Interpretation, Other, Rock Sampling
Snl Enterprises Inc, Tres-Or Resources Ltd	2007 - 2008	20000003835; 20000003615	Assaying and Analyses, Diamond Drilling
Canadian Arrow Mines Ltd	2005 - 2006	20000001058	Electromagnetic, Linecutting, Magnetic / Magnetometer Survey
Tres-Or Resources Ltd	2005 - 2006	20000001838	Geochemical
Snl Enterprises Ltd, Tres-Or Resources Ltd	2004 - 2005	20000001326	Assaying and Analyses, Geological Survey / Mapping, Microscopic Studies
Geodex Minerals Ltd, Moneta Porcupine Mines	2003 - 2005	20000000381	Assaying and Analyses, Geochemical, Linecutting
Inco Ltd	2003 - 2004	20000000267	Electromagnetic, Geological Survey / Mapping, Linecutting, Magnetic / Magnetometer Survey
Leonard Hill	1999 - 2000	42A14SE2012	Diamond Drilling, Electromagnetic, Induced Polarization, Magnetic / Magnetometer Survey, Open Cutting

John T Ward	1996 - 1998	42A15NW2002	Assaying and Analyses, Diamond Drilling, Compilation and Interpretation, Gravity, Induced Polarization, Magnetic / Magnetometer Survey, Open Cutting
Falconbridge Ltd	1995 - 1996	42A15NW0022	Electromagnetic, Magnetic / Magnetometer Survey, Open Cutting
L Edward, Leonard Edward Hill	1991 - 1995	42A14SE0021	Assaying and Analyses, Diamond Drilling
Abitibi Mining Corp, Canico	1966 - 1973	42A14SE0106	Airborne Electromagnetic, Airborne Magnetometer, Assaying and Analyses, Geochemical, Miscellaneous Compilation and Interpretation, Other
Globe Expl & Mining Co Ltd	1965 - 1966	42A14SE0098	Electromagnetic, Magnetic / Magnetometer Survey
Canadian Johns-Manville Co Ltd	1950 - 1951	42A15SW0035	Geological Survey / Mapping, Magnetic / Magnetometer Survey
Edward Shynkorenko	2021	20000019526	Assaying and Analyses, Prospecting By Licence Holder, Rock Sampling
2025369 Ontario Inc, Moneta Porcupine Mines Ltd	2008	20000003512	Diamond Drilling
Dianor Resources Inc	2007	20000002598	Diamond Drilling
Snl Enterprises Ltd, Tres-Or Resources Ltd	2006	20000002380	Airborne Electromagnetic, Airborne Magnetometer
Canadian Arrow Mines Ltd	2005	20000001191	Diamond Drilling
Falconbridge Ltd	2004	20000000364; 20000000744	Electromagnetic, Linecutting, Magnetic / Magnetometer Survey; Assaying and Analyses, Diamond Drilling
First Point Minerals Corp	2002	42A14NE2007	Assaying and Analyses, Diamond Drilling
Broadlands Resources Ltd, Tres-Or Resources Ltd	2001	42A14SE2016; 42A14SE2017; 42A14SE2015	Assaying and Analyses, Compilation and Interpretation - Diamond Drilling, Induced Polarization, Linecutting, Magnetic / Magnetometer Survey
First Point Minerals Corp	2000- 2001	42A15NW2005; 42A14NE2006	Compilation and Interpretation - Ground Geophysics, Induced Polarization, Open Cutting; Geochemical, Geological Survey / Mapping
East West Resources Corp	2000	42A14NE2005	Induced Polarization, Open Cutting

Falconbridge Ltd	2000	42A15SW2013	Assaying and Analyses, Diamond Drilling; Induced Polarization, Open Cutting
Falconbridge Ltd	1999	42A15SW2009; 42A14SE2010; 42A15SW2012; 42A14NE2003	Assaying and Analyses, Diamond Drilling
Wallace Kent Smith	1999	42A14SE2011	Geochemical
Falconbridge Ltd	1998	42A15SW2004; 42A15SW2006; 42A15SW2007	Electromagnetic, Magnetic / Magnetometer Survey, Open Cutting; Assaying and Analyses, Diamond Drilling
John T Ward	1998	42A15NW2004	Electromagnetic, Gravity, Magnetic / Magnetometer Survey, Open Cutting
Leonard Edward Hill	1998	42A14SE2007	Electromagnetic, Geological Survey / Mapping, Magnetic / Magnetometer Survey, Open Cutting
Falconbridge Ltd	1997	42A15SW2003; 42A14SE2005	Diamond Drilling; Electromagnetic, Open Cutting
Leonard Edward Hill	1997	42A14SE2002	Assaying and Analyses, Diamond Drilling
Falconbridge Ltd	1996	42A15SW0062; 42A15SW0059; 42A14NE0091; 42A14NE0089; 42A15SW0055; 42A15SW0071; 42A14SE0034; 42A15SW0065; 42A15SW0064; 42A14SE0031	Magnetic / Magnetometer Survey, Open Cutting, Assaying and Analyses, Diamond Drilling,
Falconbridge Ltd	1996	42A15NW0021; 42A15SW0070; 42A14SE0032; 42A15NW0026; 42A14SE0030; 42A14SE0033; 42A15SW0068; 42A14NE0096; 42A15NW0027; 42A15SW0063	Electromagnetic, Magnetic / Magnetometer Survey, Open Cutting, Diamond Drilling
Leonard Edward Hill	1996	42A14SE0040	Diamond Drilling
W K Smith	1996	42A14SE0024	Electromagnetic Very Low Frequency, Magnetic / Magnetometer Survey, Open Cutting
D A Ward, J T Ward	1995	42A15NW0014; 42A15NW0013; 42A15NW0025	Electromagnetic, Gravity, Induced Polarization, Magnetic / Magnetometer Survey, Open Cutting; Assaying and Analyses, Diamond Drilling, Induced Polarization, Manual Labour
Falconbridge Ltd	1995	42A14SE0011; 42A15SW0018; 42A15SW0054;	Diamond Drilling; Electromagnetic, Magnetic / Magnetometer Survey, Open Cutting, Other

		42A15SW0053; 42A14NE0065; 42A14SE0012; 42A14SE0020; 42A14SE0019;	
L E Hill	1995	42A14SE0017	Bedrock Trenching, Mechanical, Microscopic Studies, Prospecting by Licence Holder
Phelps Dodge Corp of Can	1995	42A15SW0052; 42A15SW0061	Electromagnetic, Magnetic / Magnetometer Survey, Open Cutting; Assaying and Analyses, Compilation and Interpretation - Geochemistry, Diamond Drilling
D Ward, J Ward	1994	42A15NW0018; 42A15NW0023	Electromagnetic, Geochemical, Gravity, Induced Polarization, Magnetic / Magnetometer Survey, Manual Labour, Open Cutting
R Westhaver	1993	42A14SE0039	Geological Survey / Mapping, Induced Polarization, Magnetic / Magnetometer Survey
L Hill	1992	42A14SE0302; 42A14SE0301	Diamond Drilling, Assaying and Analyses, Geochemical
D Ward, J Ward	1990	42A15SW0506	Geochemical, Gravity, Magnetic / Magnetometer Survey
Leonard E Hill	1990	42A14SE8611	Other
Skead Holdings Ltd	1990	42A15SW0001	Geological Survey / Mapping
Noranda Exploration Co	1989	42A15SW0003; 42A15SW0002; 42A14SE0304	Electromagnetic, Magnetic / Magnetometer Survey
Placer Dome Ltd	1989	42A15SW0508	Electromagnetic, Electromagnetic Very Low Frequency, Magnetic / Magnetometer Survey
H L Mineral Holdings Ltd	1988	42A15SW8870	Diamond Drilling
L E Hill	1988	42A14SE0305	Diamond Drilling
Mckinnon Prospecting	1988	42A15SW0004	Airborne Electromagnetic Very Low Frequency, Airborne Magnetometer
Shield Platinum Resources	1988	42A14NE0007	Airborne Electromagnetic, Airborne Magnetometer
Skead Holdings Ltd	1988	42A15SW0005	Airborne Electromagnetic, Airborne Magnetometer
A C A Howe International	1987	42A14NE0006	Geochemical, Geological Survey / Mapping
Imperial Platinum Corp	1987	42A14NE0008	Electromagnetic Very Low Frequency, Magnetic / Magnetometer Survey
L Hill	1987	42A14SE0307	Diamond Drilling
Noranda Exploration Co	1987	42A14SE0306; 42A15SW0006	Diamond Drilling
Angela Developments Ltd	1986	42A15SW8860	Airborne Electromagnetic Very Low Frequency, Airborne Magnetometer

Noranda Exploration Co	1986	42A15SW0009; 42A15SW0008	Airborne Magnetometer
Bp Resources Canada	1985	42A14SE0308; 42A14SE0309	Electromagnetic
Samim Canada Ltd	1982	42A15SW0146	Airborne Electromagnetic
H D Carlson	1981	42A15NW0007	Electromagnetic Very Low Frequency
Norcen Energy Resources	1981	42A15SE0011; 42A14SE0122	Electromagnetic, Magnetic / Magnetometer Survey
Noranda Exploration Co	1979	42A14SE0314	Diamond Drilling
Norcen Energy Resources	1979	42A15SW0151	Airborne Magnetometer
Shell Canada Resources	1979	42A14NE0071	Electromagnetic, Magnetic / Magnetometer Survey
Rosario Resources Canada Ltd	1978	42A14SE0315; 42A14SE0078	Diamond Drilling, EM
Dome Exploration Ltd	1977	42A14SE0319; 42A15SW0013 42A15SW0154	Assaying and Analyses, Diamond Drilling
Noranda Exploration Co	1977	42A14SE0316	Electromagnetic, Magnetic / Magnetometer Survey
Rosario Resources Canada Ltd	1977	42A14NE0015	Electromagnetic, Geological Survey / Mapping, Gravity, Magnetic / Magnetometer Survey
Shell Canada Resources	1977	42A15SW8638; 42A14SE0080; 42A15SW0012	Magnetic / Magnetometer Survey
Dome Expl (Canada) Ltd	1976	42A15SW0016; 42A14SE0318	Electromagnetic, Magnetic / Magnetometer Survey
Hollinger Mines Ltd	1976	42A15SW0036; 42A15SW0014	Diamond Drilling
Noranda Exploration Co	1976	42A14SE0312	Electromagnetic, Magnetic / Magnetometer Survey
Texasgulf Canada Ltd	1976	42A15SW0121	Electromagnetic, Magnetic / Magnetometer Survey
Brascan Resources Ltd	1975	42A15NW0010	Airborne Electromagnetic, Airborne Magnetometer
Hollinger Mines Ltd	1975	42A14SE0323; 42A14SE0320; 42A15SW0021; 42A15SW0037; 42A15SW0017	Magnetic / Magnetometer Survey
Amax Potash Ltd	1973	42A15SW0155; 42A14SE0044;	Airborne Electromagnetic, Magnetic / Magnetometer Survey

		42A14SE0325; 42A15SW0157; 42A15SW0022	
Deepex Joint Venture, Duncan R Derry Ltd	1973	42A14SE0324	Electromagnetic, Gravity, Magnetic / Magnetometer Survey
Duncan R Derry Ltd	1973	42A14SE0401	Electromagnetic, Magnetic / Magnetometer Survey
Holmer Gold Mines Ltd	1973	42A14SE0340; 42A14SE0322	Assaying and Analyses, Diamond Drilling
Intl Mogul Mines Ltd	1973	42A15SW0041; 42A15SW0513	Assaying and Analyses, Diamond Drilling, Electromagnetic, Geological Survey / Mapping, Magnetic / Magnetometer Survey
Noranda Exploration Co	1973	42A14SE0083; 42A15NW0512; 42A15SW0020	Electromagnetic, Magnetic / Magnetometer Survey
Amax Potash Ltd	1972	42A15SW0025; 42A15SW0024; 42A15SW0026	Magnetic / Magnetometer Survey
J Tesluk	1972	42A14NE0078	Geochemical
Amax Potash Ltd	1971	42A15SW0023	Electromagnetic, Magnetic / Magnetometer Survey
Holmer Gold Mines Ltd	1971	42A14NE3273; 42A14NE0328	Electromagnetic, Magnetic / Magnetometer Survey
L R Berry	1971	42A15SW0038	Diamond Drilling
Noranda Exploration Co	1971	42A14NE0087	Electromagnetic, Magnetic / Magnetometer Survey
Dome Exploration Ltd	1970	42A15SW0015	Diamond Drilling
Noranda Exploration Co	1970	42A14SE8639; 42A14SE0332; 42A14SE0331	Geochemical, Geological Survey / Mapping, Electromagnetic, Magnetic / Magnetometer Survey
Cromarty Expl Co Ltd	1968	42A15SW0027; 42A15SW0040	Electromagnetic, Magnetic / Magnetometer Survey, Assaying and Analyses, Diamond Drilling
F Thompson	1967	42A15SW0028	Compilation and Interpretation - Geology, Electromagnetic, Magnetic / Magnetometer Survey
Quebec Cobalt & Expl Ltd	1967	42A14SE0344	Diamond Drilling
Intl Nickel Co of Can Ltd	1966	42A14SE0343	Diamond Drilling
Marathon Mines Ltd	1966	42A14SE0092	Electromagnetic, Magnetic / Magnetometer Survey
Acme Gas & Oil Co Ltd	1965	42A14SE0321	Airborne Electromagnetic
Cons Fenimore Iron Mines Ltd	1965	42A14NE0056	Electromagnetic, Magnetic / Magnetometer Survey

Harry Shlesinger	1965	42A14SE8641	Electromagnetic, Magnetic / Magnetometer Survey
Intl Nickel Co of Can Ltd	1965	42A14SE0342	Diamond Drilling
Jonsmith Mines Ltd	1965	42A15SW0030; 20000005038; 42A15SW0042	Geological Survey / Mapping; Assaying and Analyses, Diamond Drilling
Obrien Gold Mines Ltd	1965	42A15SW0043; 42A15SW0351; 42A15SW0330	Diamond Drilling, Electromagnetic, Magnetic / Magnetometer Survey
Patino Mining Corp	1965	42A14SE8640	Electromagnetic, Magnetic / Magnetometer Survey
Torbrit Silver Mines	1965	42A15SW0039	Assaying and Analyses, Diamond Drilling
Jonsmith Mines Ltd	1964	42A14SE0335	Electromagnetic, Magnetic / Magnetometer Survey
Newrich Expl Ltd	1964	42A15SW0514	Magnetic / Magnetometer Survey
Transterre Expl Ltd	1964	42A14SE0095	Electromagnetic, Magnetic / Magnetometer Survey
Canadian Johns-Manville Co Ltd	1951	42A14SE0346; 42A14SE0345; 42A14NE0060	Diamond Drilling, Magnetic / Magnetometer Survey
Northland Mines (1940) Ltd	1951	42A14SE0338	Magnetic / Magnetometer Survey
Dominion Gulf Co	1950	42A15SW0031	Compilation and Interpretation - Diamond Drilling, Magnetic / Magnetometer Survey
P S Zevely	1949	42A14SE0341	Diamond Drilling
Intl Nickel Co of Can Ltd	1948	42A14SE0336	Gravity, Magnetic / Magnetometer Survey
P B Zevely	1947	42A14SE0337	Magnetic / Magnetometer Survey
Cunigold Mining Syndicate Ltd	1945	42A15SW0034	Geological Survey / Mapping, Magnetic / Magnetometer Survey



## **4.0 GEOLOGY**

The Mann Intrusive Complex is a layered mafic/ultramafic body that intrudes the western extents of the Abitibi greenstone belt (Goode and Crocket (1999)), within the Archean Superior Craton. Surrounding mafic volcanics have been dated at 2.706 Ga, pointing to a Late Archean age for the intrusion (Barrie, 1999).

The iron-rich ultramafic rocks of the Mann Intrusive Complex dominate the regional magnetics. The strong magnetic response of these rocks largely mask less iron-rich rock types, such as the pyroxenites and gabbros which locally are enriched in platinum group elements (PGE).

### **4.1 REGIONAL GEOLOGY**

The Mann Project is situated on the southern Abitibi Greenstone Belt ('AGB'), a Precambrian aged volcano-sedimentary belt cored by intervening domes of synvolcanic to syntectonic felsic plutonic rocks. Mafic to ultramafic sills and flows intrude volcanic stratigraphy, particularly around the flanks of regional volcanic domes. Younger Archean ultrabasic lamprophyre and minor carbonatite dikes variably cut stratigraphy. Regional east-west trending strike-slip faults such as the Porcupine-Destor and Cadillac-Larder deformation zones cross the AGB. These deformation zones are interpreted as Archean rifts, filled with clastic sediments, and later reactivated as strike-slip faults by compressional shortening that has tilted regional stratigraphy to near vertical dips. Multiple diabase dike swarms generally trending north-south occupy regional faults/structures in the AGB.

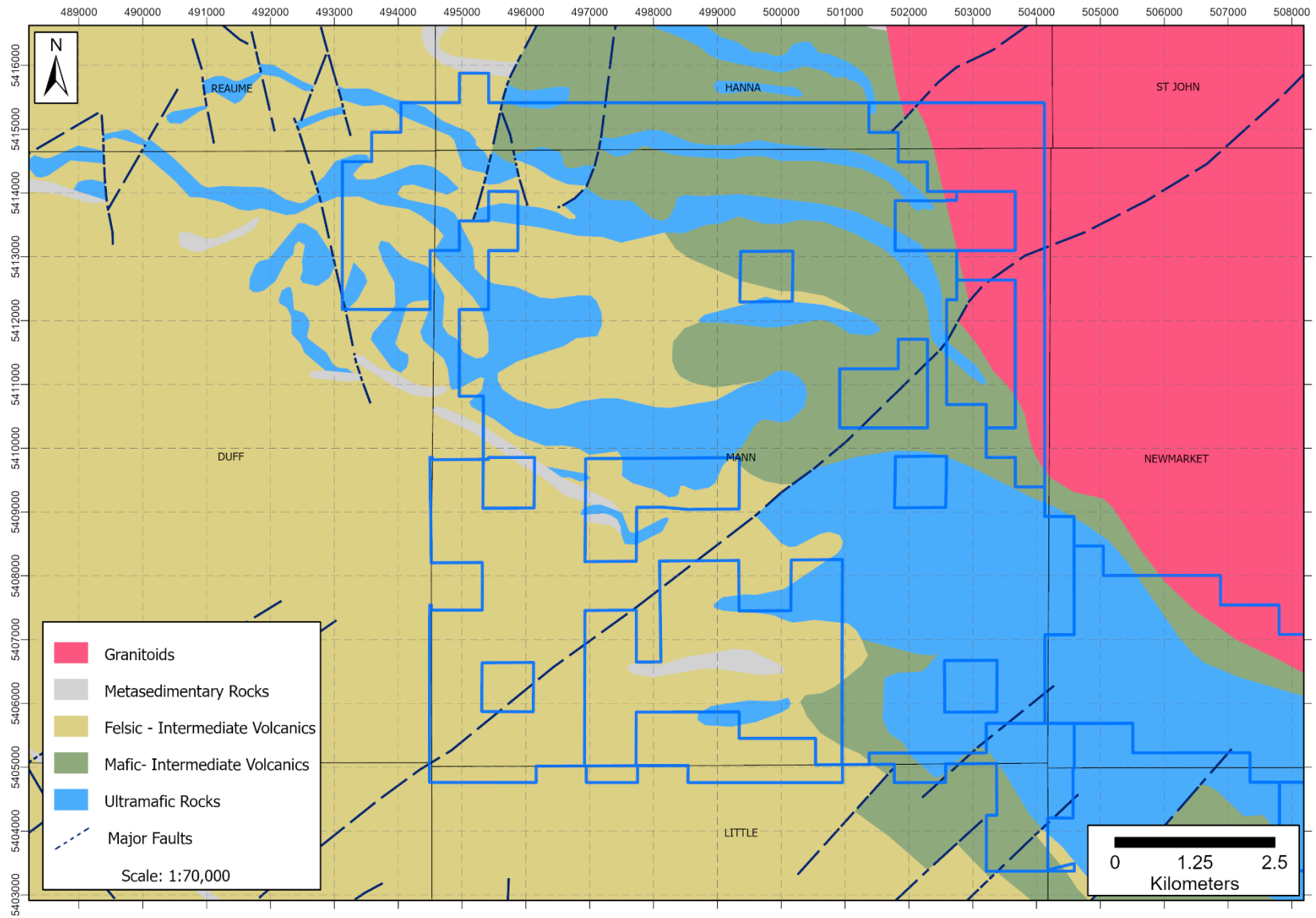


Figure 3: Mann Project bedrock geology map from: OGS report MRD 126 REV-1 1:70,000 Scale Bedrock Geology of Ontario.

## **4.2 PROPERTY GEOLOGY**

The Mann Property covers peridotites, gabbros and pyroxenites of the Mann Intrusive Complex. These mafic and ultramafic rocks occur in magmatic layers, and are partially exposed along the Frederick House River near the western edge of the property (Figure. 4). Exposures near the bridge where the Potter Road crosses the Frederick House river have been mapped by Good and Crockett (1999), Dunn (2001) and Palmer (in Tims 2005), all showing gabbro, pyroxenite, and peridotite cut by roughly north-south faults that generally parallel the river. Chip samples across clinopyroxenite in this exposure area returned anomalous Pt and Pd values of approximately 0.6 g/t over lengths between 12.20 and 22.00 m (Keast, 2000).

## **4.3 DEPOSIT GEOLOGY**

Based on historic diamond drill logs and current interpretation of the geophysical work, three main distinctive ultramafic units exist striking in a predominantly NW-SE direction. The contacts between the ultramafic lithologies and the surrounding basal rocks are relatively sharp. The ultramafic units consist of variably serpentinized dunite that grade into a layered peridotite-pyroxenite-gabbro sequence with possible rhythmic layering to the top. These magmatic intrusions may contain disseminated primary blebs of predominantly pentlandite and nickeliferous pyrrhotite. Secondary greenschist alteration then liberates the Ni from the silicate olivine structure through the serpentinization process, effectively adding to, and upgrading existing sulphides to the more nickeliferous heazelwoodite. Magnetite is produced as a byproduct of the serpentinization process causing the deposits to have strong magnetic signatures. Additionally, during the serpentinization process, the density of the dunite decreases from ~ 3.2 g/cm<sup>3</sup> to ~2.5-2.6 g/cm<sup>3</sup> producing a gravity low due to the contrast with surrounding volcanic sequences. The combined geophysical signatures of strong magnetic responses with overlapping low gravity anomalies are what is being targeted with this survey.

## **5.0 AIRBORNE SURVEY DATA QUALITY CONTROL RESULTS**

Data quality control (QC) was provided by the contractor Xcalibur and reviewed by CNC. The QC results are summarised below, and taken from an internal report as produced by Xcalibur Multiphysics to CNC.

## 5.1 TURBULENCE

The mean turbulence recorded in the Mann Block survey area was 49.9 milli g (where  $g = 9.80665$  m/sec/sec). Turbulence was variable, ranging from very low to high. The typical pattern for a given day was for turbulence to increase and decrease with daily temperature. The turbulence pattern across the survey area is shown in Figure 4.

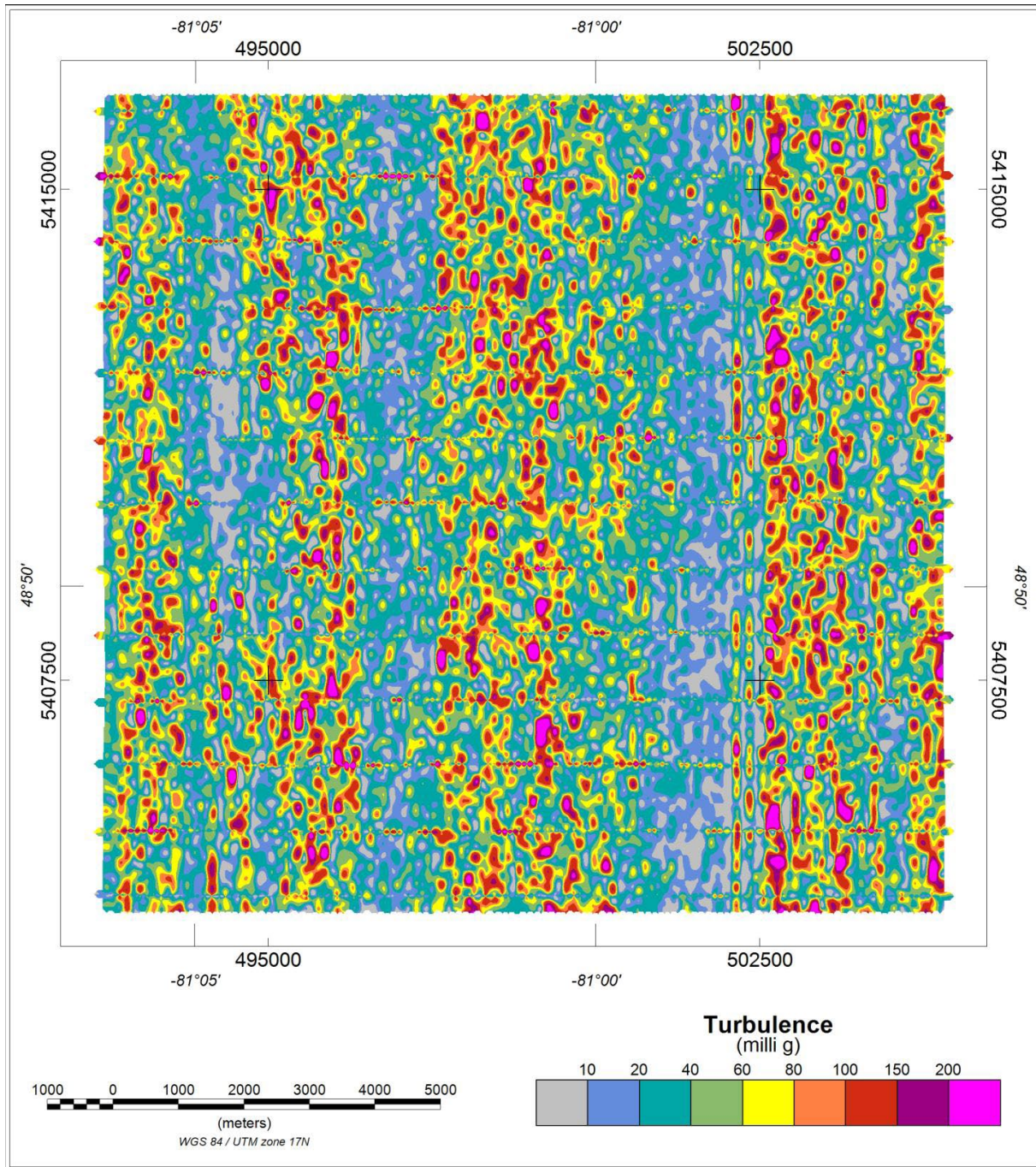


Figure 4. Mann Block. Turbulence (milli g where  $g = 9.80665$  m/sec/sec)



## 5.2 AGG SYSTEM NOISE

The system noise is defined to be the standard deviation of half the difference between the A & B complements, for each of the NE and UV curvature components. The results for this survey were very good with values of 3.19 E and 3.00 E for NE and UV respectively.

Figure 5 and Figure 6 provide a representation of the variation in this standard deviation for each component. This is achieved by gridding a rolling measurement of standard deviation along each line using a window length of 100 data points.

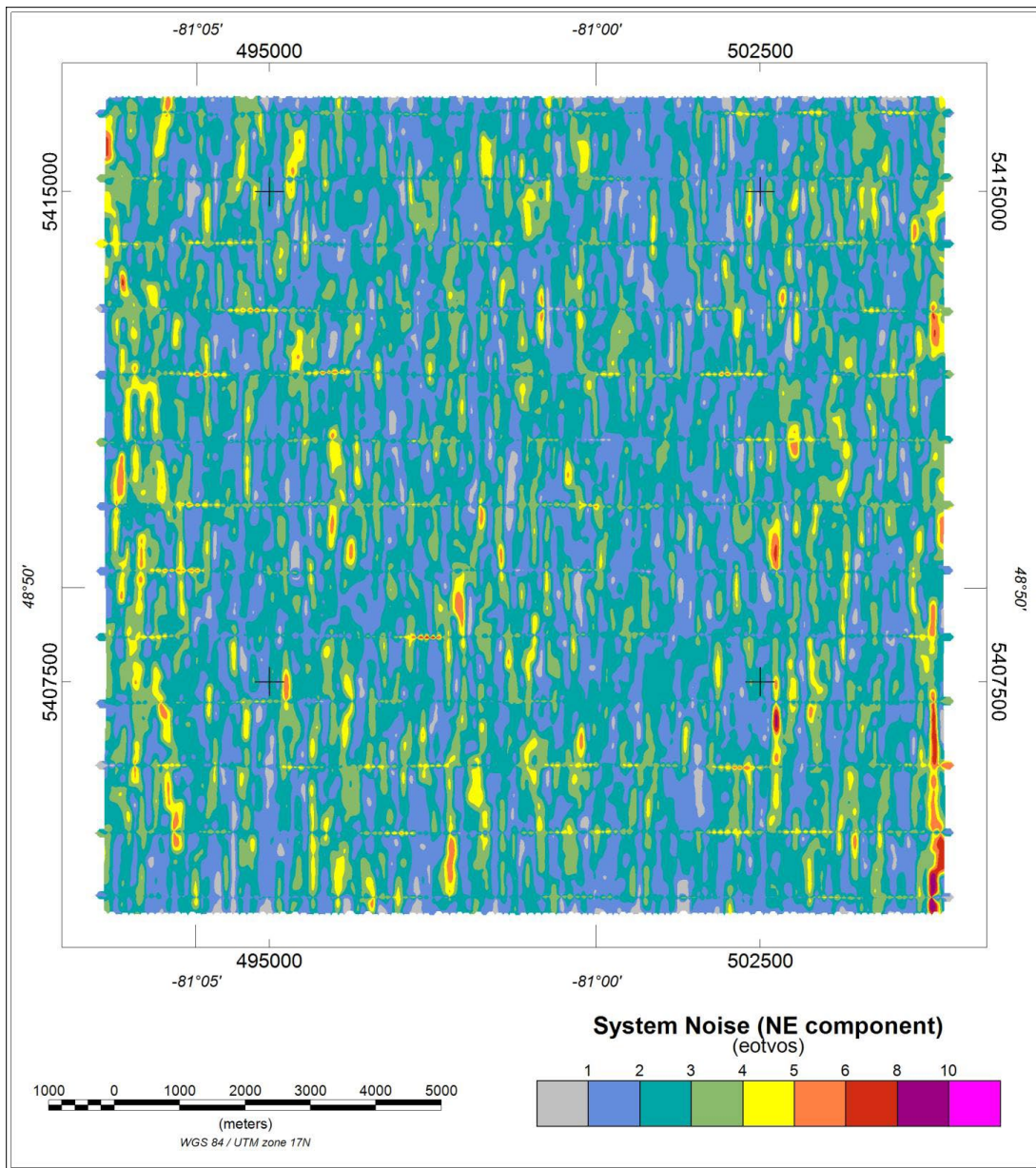


Figure 5. Mann Block. System Noise NE (eotvos)

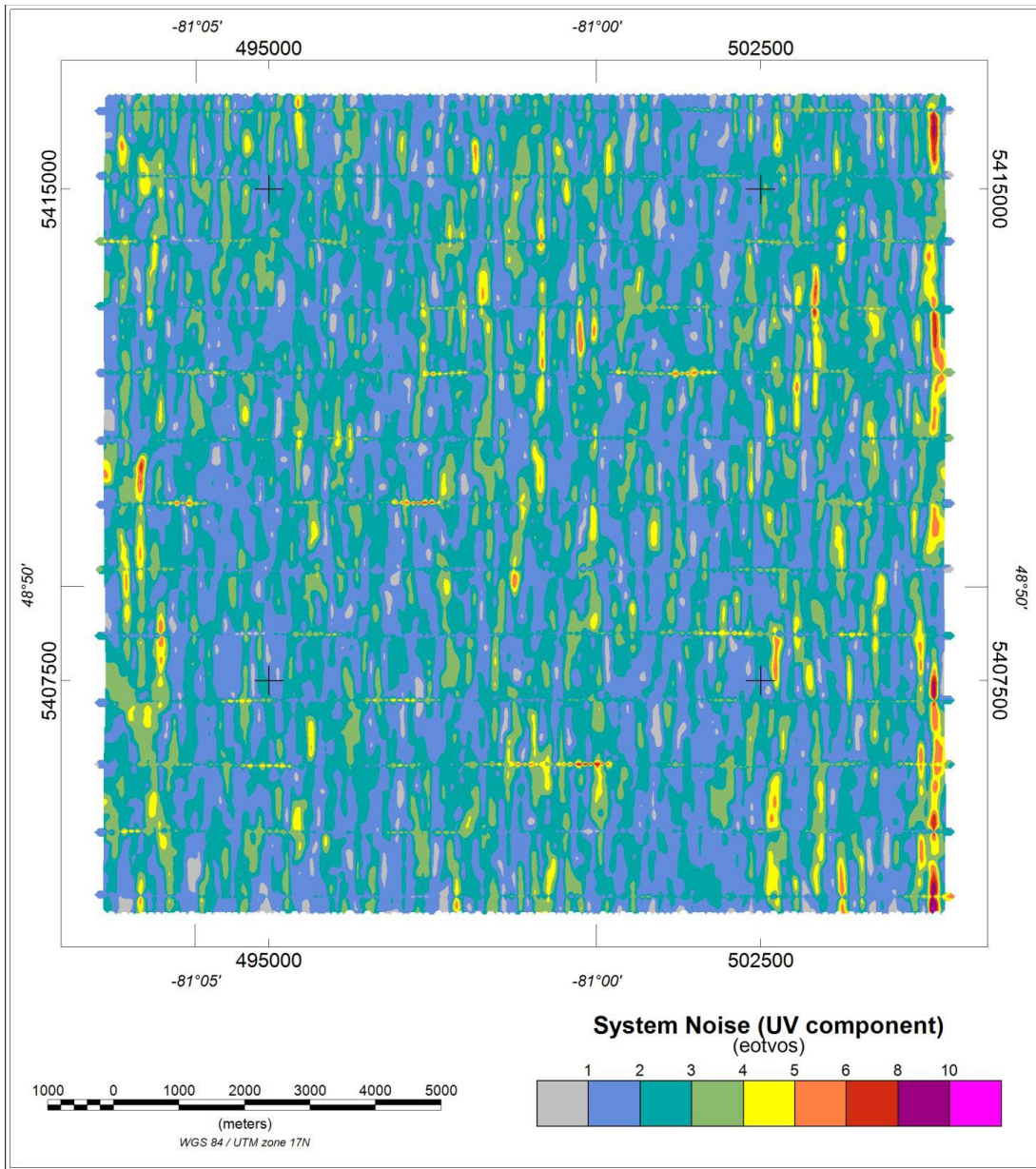


Figure 6. Mann Block. System Noise UV (eotvos)

## 5.5 DIGITAL TERRAIN MODEL

Laser scanner range data were combined with GPS position and height data (adjusted from height above the WGS84 ellipsoid to height above the geoid by applying the Earth Gravitational Model 1996 (EGM96)). The output of this process is a “swath” of terrain elevations extending either side of the aircraft flight path. Width and sample density of this swath varies with aircraft height. Typical values are 100 to 150 metres and 5 to 10 metres respectively (Figure 7).



Because terrain correction of AGG data requires knowledge of the terrain at distances up to at least 40 km from the data location, laser scanner data collected only along the survey line path must be supplemented by data from another source. For this purpose, Shuttle Radar Topography Mission (SRTM) v3 (one arc second resolution) data are used.

Laser scanner data quality was good with scan density generally above 90%. Laser scanner data were gridded at 10 m with a 1 cell maximum extension beyond data limits. To fill gaps between lines and extend data coverage beyond the survey area, SRTM grid data were excised to an area 65 km beyond the planned survey area. The excised data were adjusted to the level of the laser scanner data using a Fourier domain wrapping method. The two grids were then combined into a single grid such that unmodified laser scanner data were used where defined and adjusted SRTM data were used to fill the gaps and extend the area.

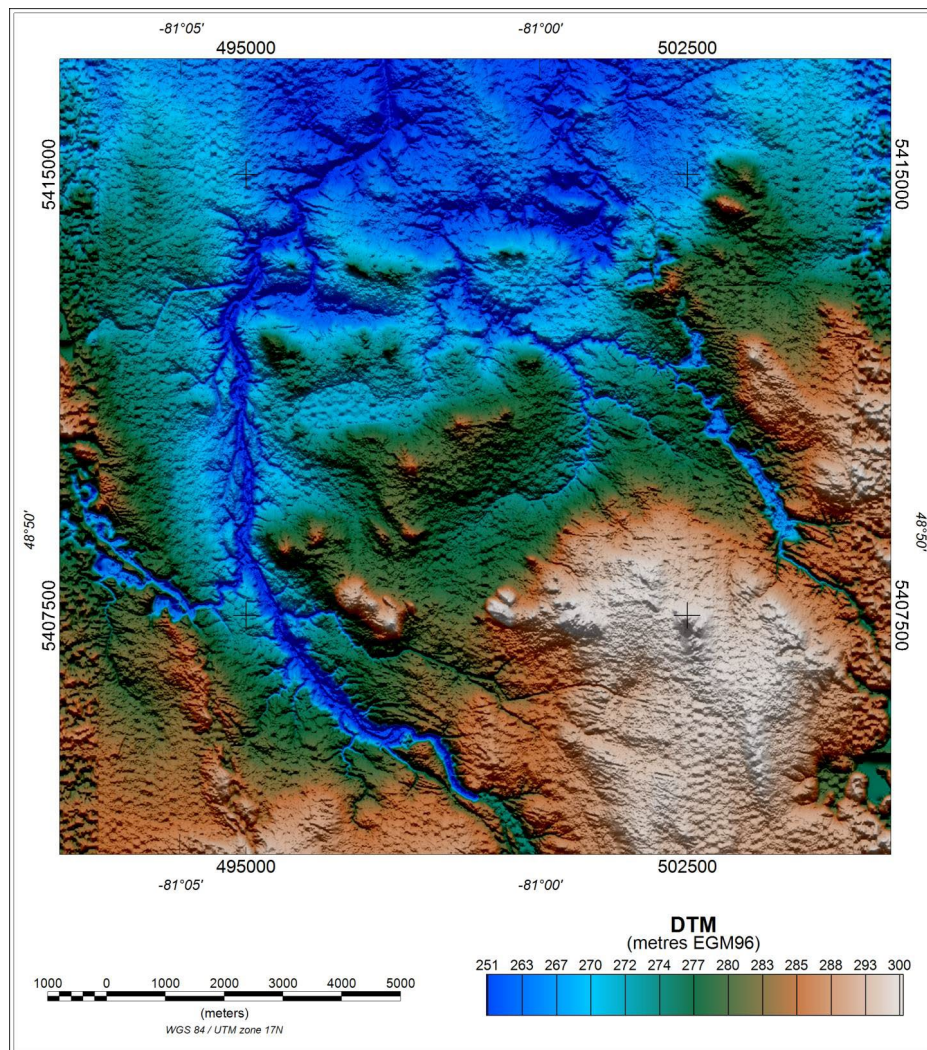


Figure 7. Mann Block. Final Digital Terrain Model (metres, referenced to the EGM96 geoid)

## 5.6 DRAPE SURFACE DEVIATION

Flying height for the Mann Block survey was determined by a pre-computed “drape surface”; designed to create a smooth flight surface, maximising both acquisition quality and safety. The average deviation of actual flying height from this surface was 1.4 m across the survey area. The deviation is shown in Figure 8.

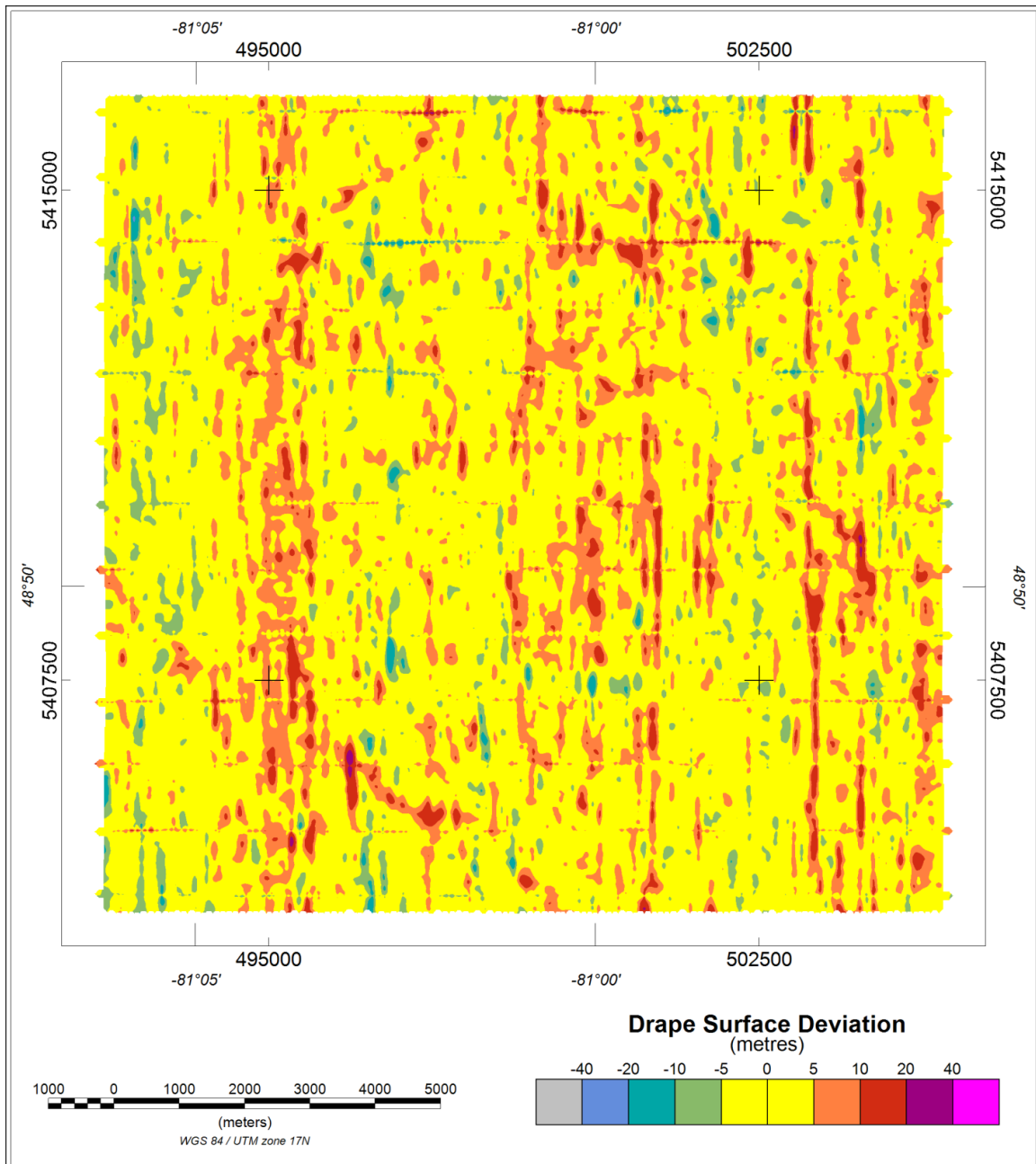


Figure 8. Mann Block. Deviation from drape surface (metres)



## 6.0 FALCON® AIRBORNE GRAVITY GRADIENT (AGG) RESULTS

### 6.1 PROCESSING SUMMARY

A summary of the processing steps for FALCON® AGG data as provided by the Contractor is shown in Figure 9.

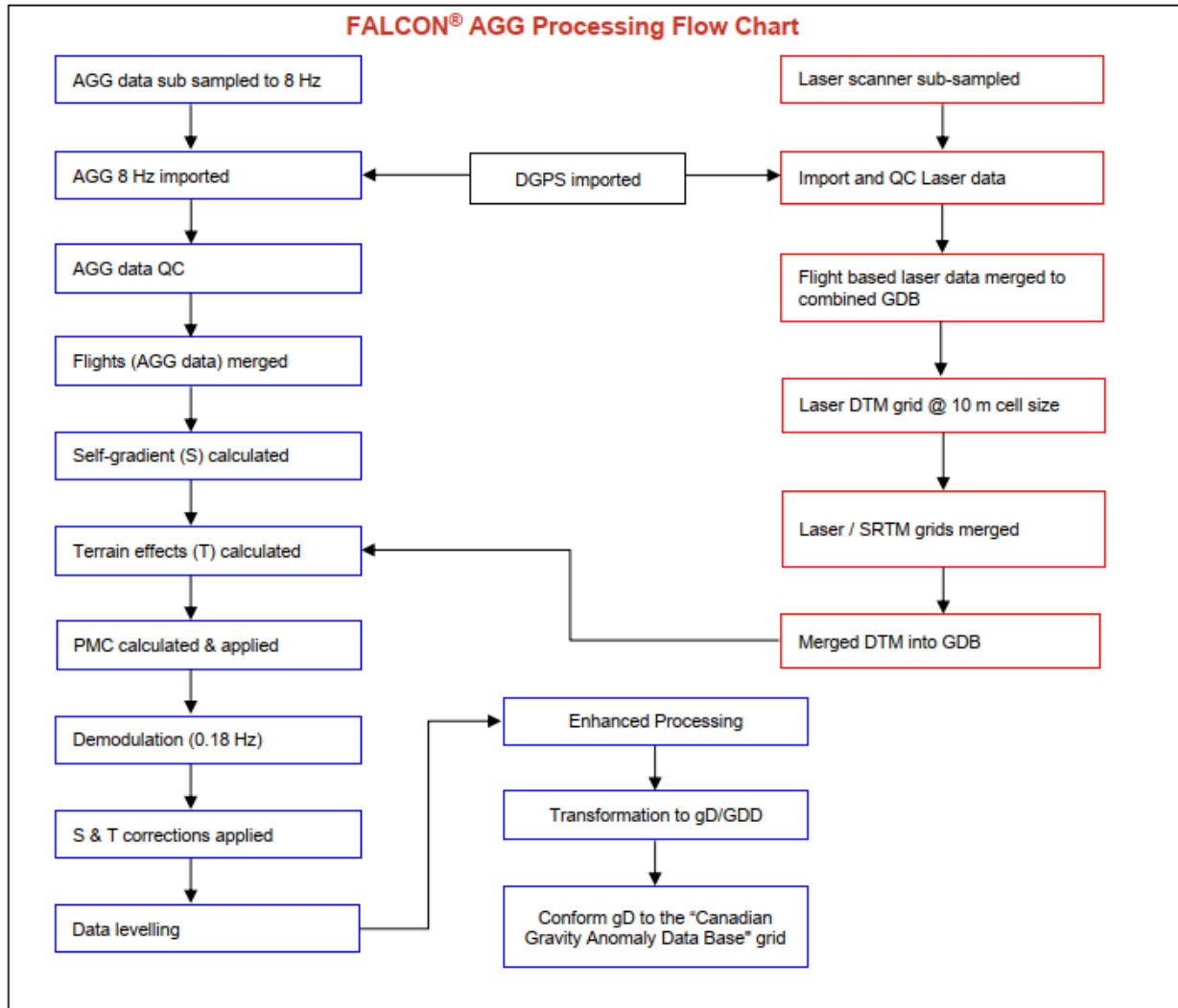


Figure 9: FALCON® AGG processing flowchart.

## 6.2 FALCON AIRBORNE GRAVITY GRADIOMETER DATA

The FALCON® Airborne Gravity Gradiometer data were digitally recorded by the ADAS on removable hard drives. The raw data were then copied to the field processing laptop, backed up twice onto hard disk media and transferred by Secure File Transfer to the Xcalibur Multiphysics Jandakot data processing centre.

Preliminary processing and QC of the FALCON® AGG data were completed on-site and at the Jandakot data processing centre using Xcalibur Multiphysics' AGG QC software. Further QC and final FALCON® AGG data processing were performed at the Jandakot data processing centre.

## 6.3 RADAR, LASER AND POSITIONAL DATA

The terrain clearance measured by the radar altimeter in metres was recorded at 10 Hz. The data were plotted and inspected for quality.

Laser scanner returns were recorded at a rate of 36 scans per second with each scan returning 276 data points. Each return was converted to ground surface elevation by combining scanner range and angle data with aircraft position and attitude data. Computed elevations were then sub sampled by first dividing each scan into ten segments and combining five adjacent scans per segment, then using a special algorithm to select the optimum return within each data "bin" thus formed. Sub-sampled laser scanner data were edited to remove spikes prior to gridding.

The GPS ground station position was determined by sending several hours of collected data to an online GPS processing service to obtain a differentially corrected computed position. The service selected was CSRS-PPP, which is provided by Natural Resources Canada. The GPS data were processed and quality controlled using the WGS84 datum.

Parameters for the WGS84 datum are:

Ellipsoid: WGS84

Semi-major axis: 6,378,137.0 m

Inverse flattening (1/f): 298.257

All processing was performed using WGS84/UTM Zone 17N coordinates. Final line data and final grid data were supplied in this projection.

## 6.4 CORRECTION AND LEVELLING

Terrain corrections were derived from the digital terrain model grid for every data point in the survey. A terrain density of 1.00 g/cm<sup>3</sup> was used to compute the terrain correction channels, which were then multiplied by the chosen correction density before being subtracted from the data.

In consultation with the Client, a correction density of 2.2 g/cm<sup>3</sup> was selected as approximating most closely the density of the terrain in the survey area and was applied. As standard, a density of 2.67 g/cm<sup>3</sup> was also applied and these data are also included.

The terrain corrected data and the uncorrected data were then tie line levelled. All lines were used in the levelling process to produce a single combined set of levelled data.

WARNING: Since tie line levelling is performed after terrain correction, the use of the levelled uncorrected data together with the terrain correction channels to create data corrected for a different terrain density will almost certainly result in residual levelling errors in the new corrected data.

Micro-levelling was applied to the levelled data to remove residual levelling errors.

## 6.5 ENHANCED PROCESSING

The enhanced processing technique improves the noise amplitude density (as discussed by Christensen et al, 2015) by 25-50% for surveys with line spacing of less than 1 km. The method exploits the different spatial frequencies of system noise and geologic signal. After converting the data into the 2D spatial domain, a custom spatial filter is applied that removes the system noise, while retaining the remaining geologic signal. The process will limit the data resolution to the survey line spacing. The Falcon Difference Noise of the standard product is 3.07 E at 162 m resolution and after applying the processing enhancement, the Falcon Difference Noise is 4.52 E at 100 m resolution. Calculating the noise amplitude density is a more appropriate means to evaluate noise with data at different resolutions. The standard product has a noise amplitude density of 1.74 E $\sqrt{\text{km}}$  and the enhanced product has a noise amplitude density of 1.43 E $\sqrt{\text{km}}$ .

## 6.6 FALCON® AIRBORNE GRAVITY GRADIENT DATA - $G_{DD}$ & $G_D$

The transformation into GDD and  $g_D$  was accomplished using a Fourier domain transformation method.

The Fourier domain transformation method firstly calculates many flat surfaces at constant intervals between the lowest and highest-flying altitude. The transformation is performed on each of these surfaces and the result is a three-dimensional array for each tensor component where each level corresponds to a flat layer of a constant flying height. Using an approximation, the data is interpolated from this array back onto the processing drape surface.

The transformation uses a smoothed surface onto which the output data are projected. This surface is a smoother equivalent of the actual flying surface.

The Fourier (density 2.2 g/cm<sup>3</sup>) GDD map is shown in Figure 10.

The Fourier vertical gravity ( $g_D$ ), derived by integrating GDD, (density 2.2 g/cm<sup>3</sup>) result is presented in Figure 11.

## 6.7 CONFORMING $G_D$ TO REGIONAL GRAVITY

As discussed in section 9.3, the long wavelength information in  $g_D$  and GDD (both the Fourier and equivalent source versions) can be improved by incorporating ancillary information. Such information is available in the form of the Canadian Gravity Anomaly Data Base.

The Fourier  $g_D$  and GDD grids were conformed to grids derived from a subset of the Canadian Gravity Anomaly Data Base as follows. The  $g_D$  (density 2.2 g/cm<sup>3</sup>) results are presented in Figure 12.

- Low pass filter the regional data using a cosine squared filter with cut-off at 30 km, tapering to 20 km.
- High pass filter the  $g_D$  and GDD data using a cosine squared filter with cut-off at 30 km, tapering to 20 km.
- Conform the Fourier data to the regional data by addition of the filtered grids. The filter design is such that this method provides uniform frequency response across the overlap frequencies.

Further discussion of this method can be found in Dransfield (2010).

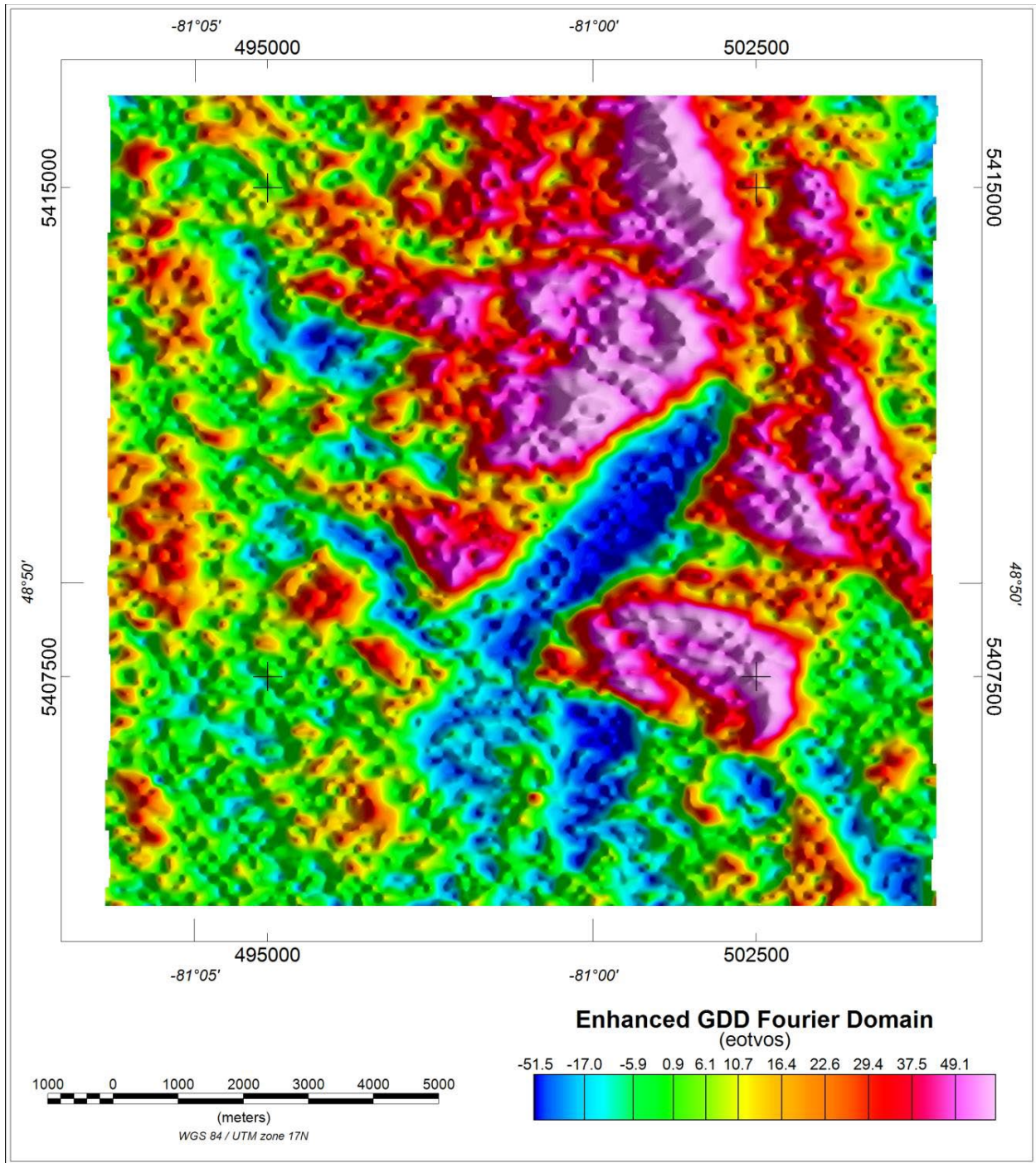


Figure 10. Mann Block. Enhanced Vertical Gravity Gradient (GDD) from Fourier processing (eotvos)

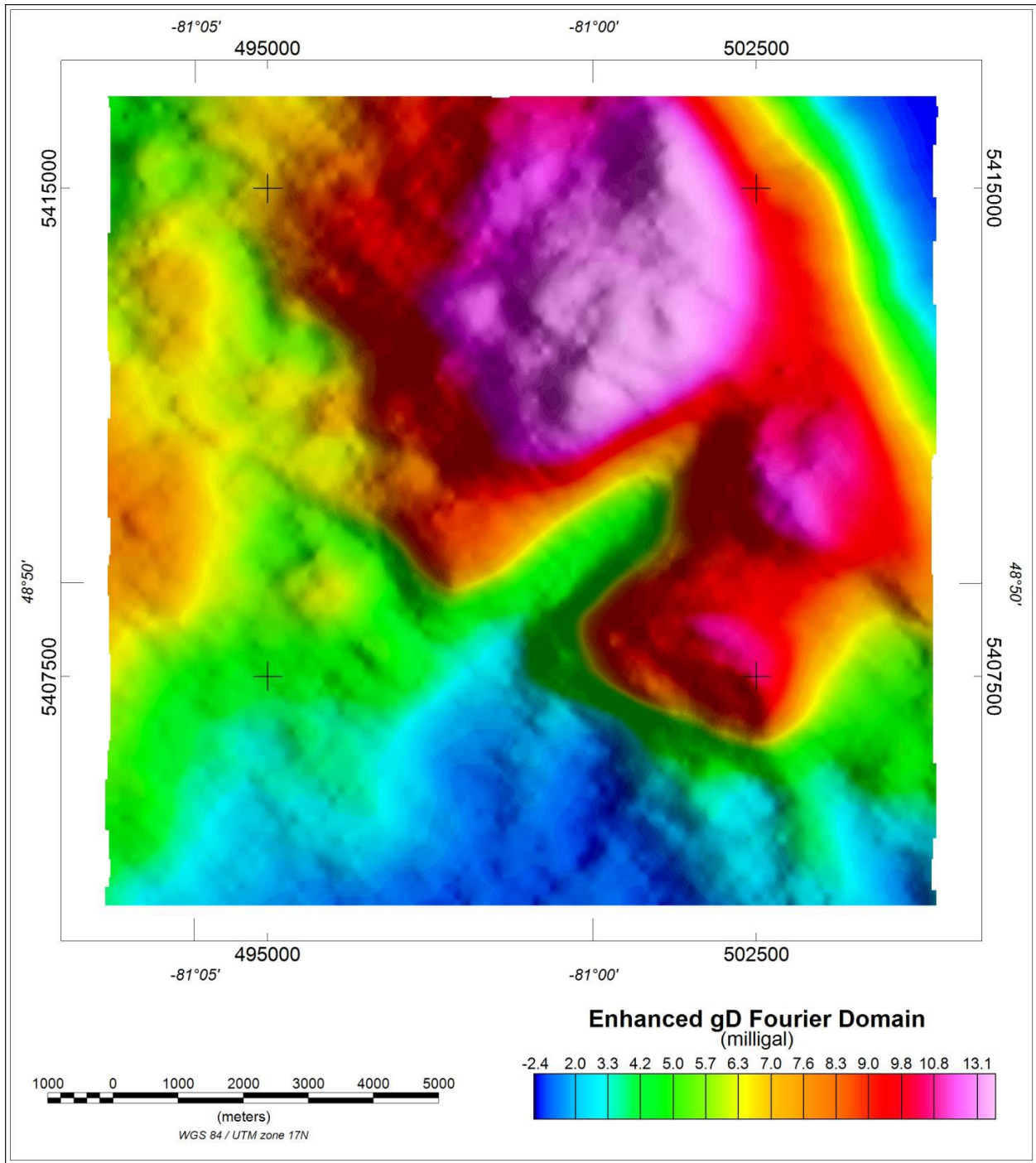


Figure 11. Mann Block. Enhanced Vertical Gravity (gD) from Fourier processing (milligal)



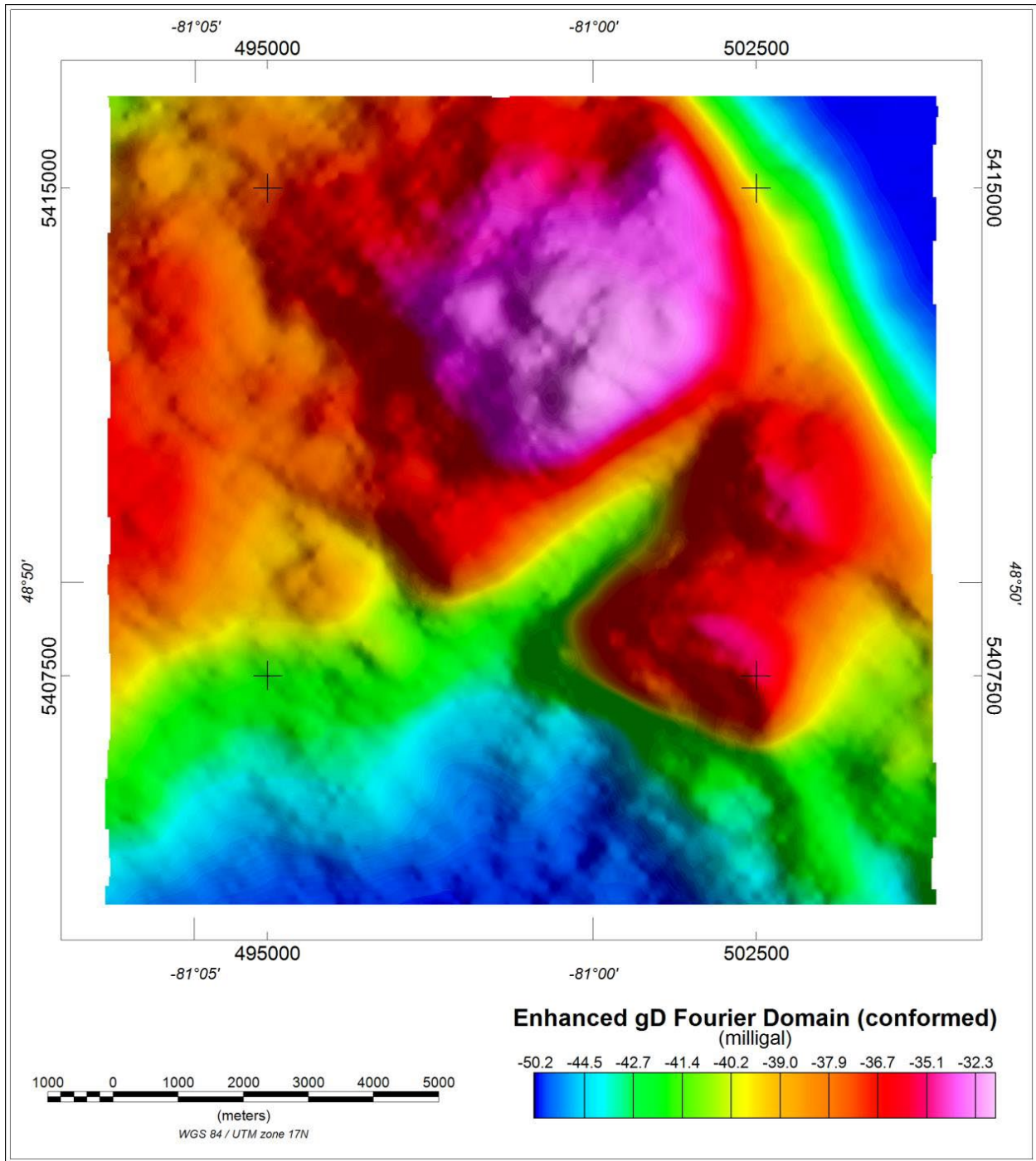


Figure 12: Enhanced Vertical Gravity (gD) from Fourier processing conformed to regional gravity data (milligal).

## 7.0 AEROMAGNETIC RESULTS

### 7.1 PROCESSING SUMMARY

A summary flow chart of the processing steps for the aeromagnetic data is presented in Figure 13.

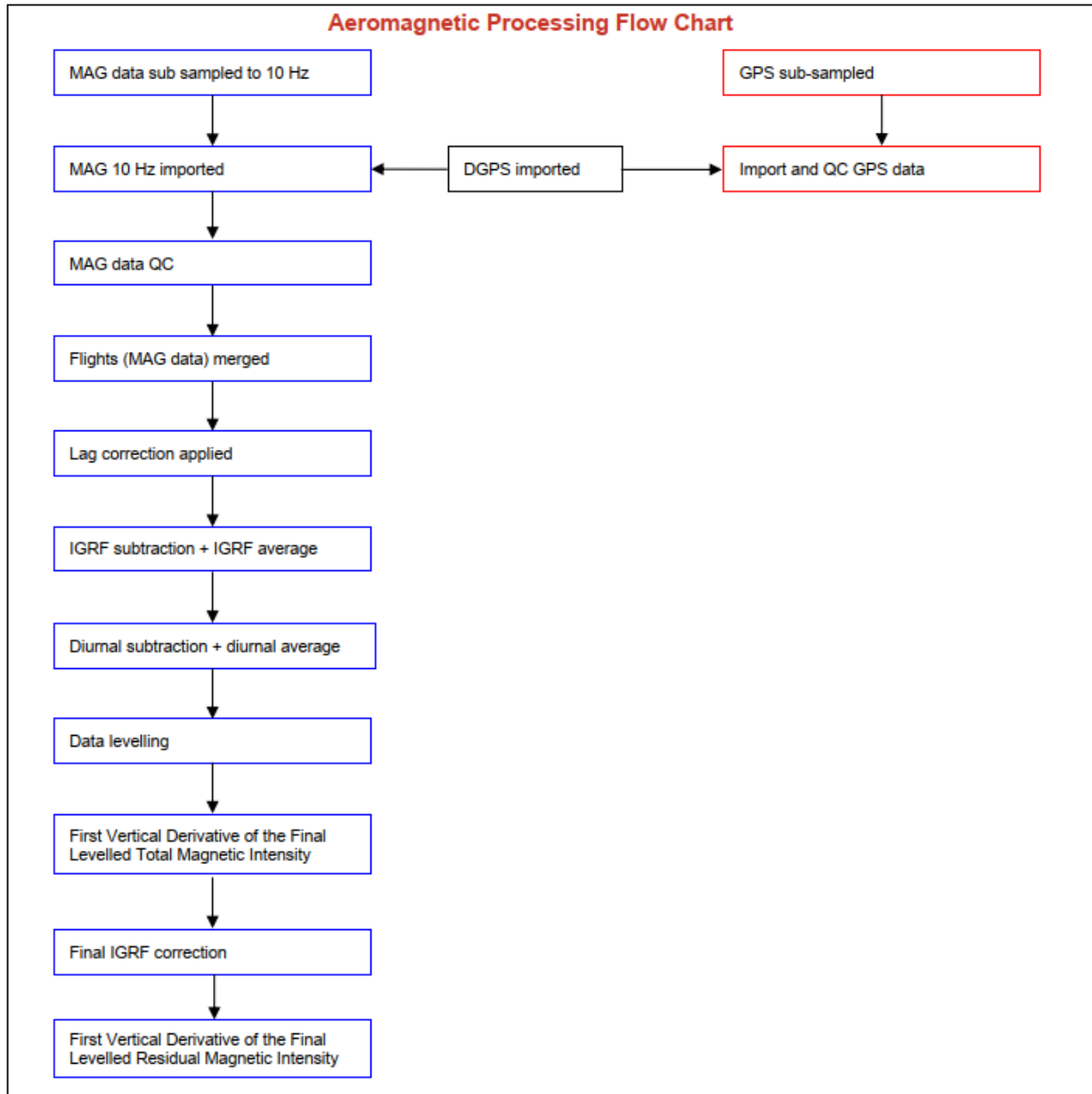


Figure 13: Aeromagnetic data processing flow chart.



## 7.2 MAGNETIC DATA

Figures 14 and 15 demonstrate the results of the Total Magnetic Intensity (TMI) measured in nanoteslas (nT) and the First Vertical Derivative of the TMI (nT/m), respectively.

The aeromagnetic data were digitally recorded by the FASDAS on removable hard drives. The raw data were then copied onto the field processing laptop, backed up twice onto hard drive media and sent via FTP to Xcalibur Multiphysics' secure server.

Preliminary QC of the aeromagnetic data was completed on-site using Xcalibur Multiphysics' proprietary ATLAS software. Further QC and aeromagnetic data processing were performed by the office-based data processor.

All aeromagnetic data were lagged prior to final processing. A lag of 1.1 seconds was applied. The IGRF model 2020 was calculated at date 26th July, 2022, using the GPS height for each magnetic reading. This value was subtracted from each magnetic reading and a base value of 55,580 nT added back to produce an IGRF corrected total magnetic intensity.

The edited base station magnetics (diurnal) were filtered using a long wavelength filter to retain wavelengths longer than 35 seconds. This value was subtracted from the IGRF corrected total magnetic intensity. Next, the average, averaged from the magnetic diurnal data for all lines, base value of 55,580 nT was added back to the magnetics. This produced the diurnally corrected total magnetic intensity.

The IGRF and diurnally corrected total magnetic intensity data were tie line levelled using Xcalibur Multiphysics' proprietary ATLAS software. The total magnetic intensity data were micro-levelled using Xcalibur Multiphysics' proprietary ATLAS software.

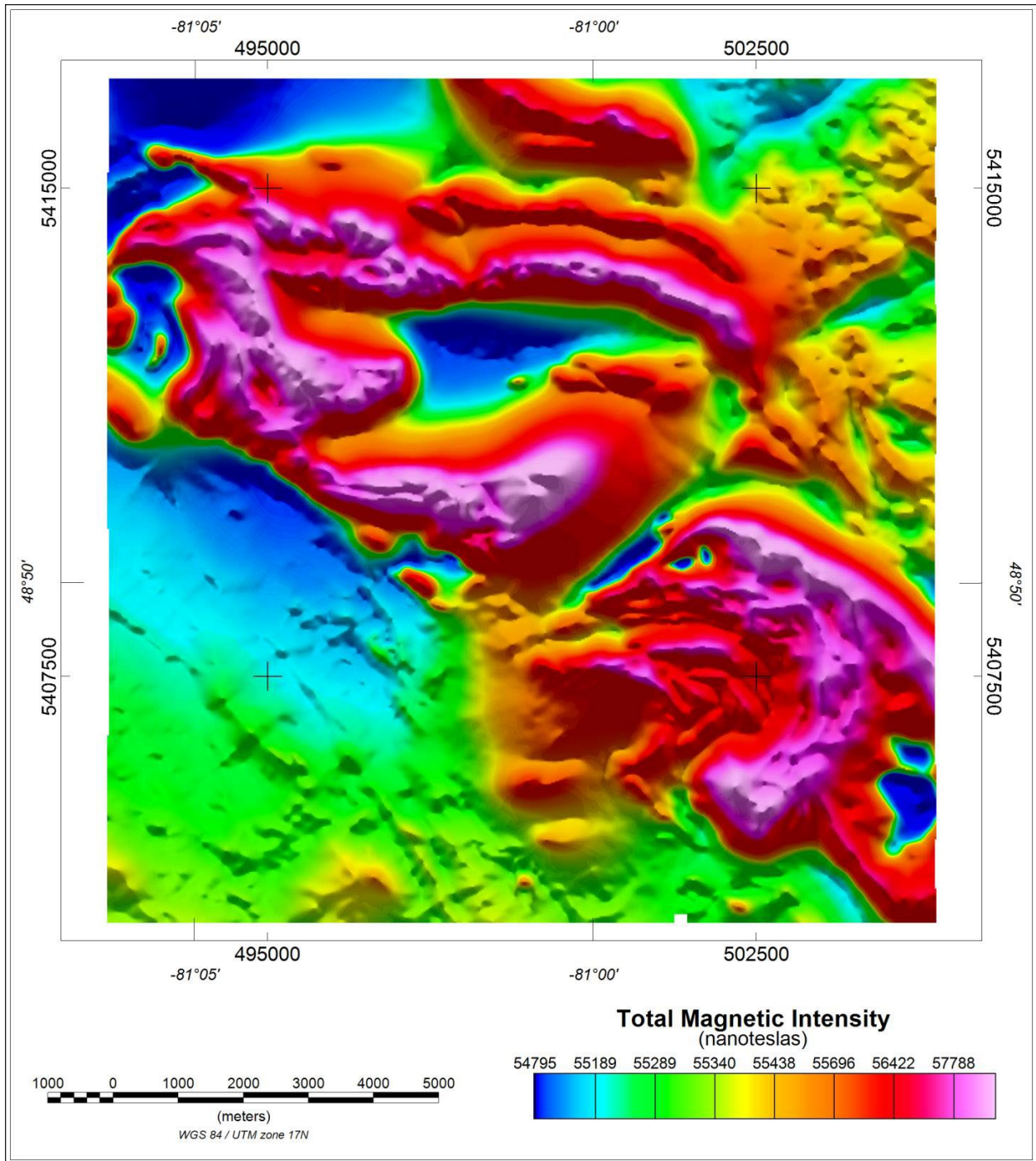


Figure 14: Total Magnetic Intensity (TMI).

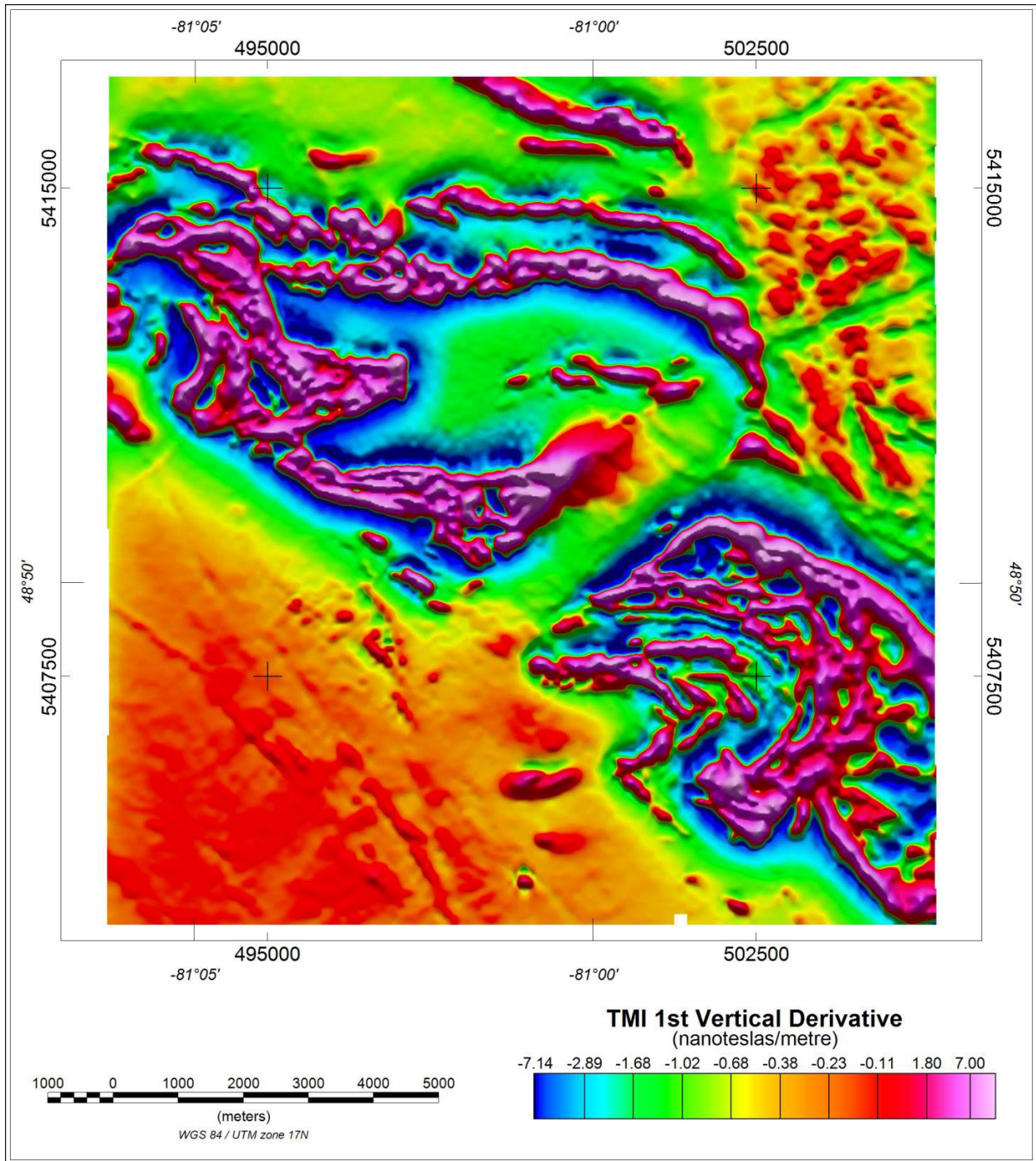


Figure 15: First Vertical Derivative of the Total Magnetic Intensity (nT/m).

## 8.0 INTERPRETATION AND CONCLUSIONS

The goal of this survey was to identify bulk-tonnage (Type II) disseminated magmatic nickel sulphide deposits. Geophysical signatures associated with the alteration and further endowment of these potentially substantial deposits produce overlapping low gravity anomalies with strong magnetic signatures.

The synthesis of overlapping geophysical signatures combined with the compilation and interpretation of both surface prospecting and diamond drill hole surveys; has proven the Mann Project is a potentially valuable brownfields site that could host a bulk tonnage magmatic nickel sulphide deposit.

Future work should include but not be limited to:

A 15-20hole, 6,000 m diamond drill program consisting of widely spaced (~400 m apart) drill holes perpendicular to strike with the target of crossing the ultramafic units and testing dip continuity to a true depth of ~300m.

Airborne EM geophysical survey to locate potential primary sulphide accumulation or strongly disseminated bands within the mineralized envelope.

Surface prospecting and ground truthing to further refine the lithological and structural characteristics of the property geology.

## 9.0 REFERENCES

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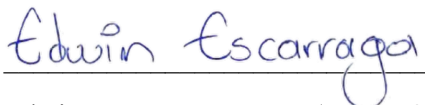
## 10.0 CERTIFICATE OF QUALIFICATIONS

### STATEMENT OF QUALIFICATIONS

I, Edwin Escarraga, P.Geo., do hereby certify that:

- 1) I am a Senior Project geologist, Director of Exploration employed by Canada Nickel Company., with a business address at 130 King Street West, Suite 1900, Toronto ON, M5X 1E3.
- 2) I graduated with a degree of Bachelor of Science Honours, Geology from the Universidad Nacional de Colombia in 2007 and a M. Sc Geology from Acadia University, NS, Canada, in 2010.
- 3) I am a Professional Geoscientist (P.Geo.) registered with the Professional Geoscientists of Ontario (PGO No. 2859) and I am a member of the Prospectors and Developers Association of Canada.
- 4) I am responsible for the preparation of this report.
- 5) I have no prior involvement with the property that is the subject of this Report.
- 6) I own directly or indirectly shares of Canada Nickel which I hold for investment purposes.
- 7) I have no direct interest in the Mann Property.
- 8) I reviewed the data contained within this report based on my general experience and my involvement with planning the survey and reviewing the data, and I am responsible for its contents.

Dated this 18th day of January 2023.



Edwin Escarraga, P. Geo. (PGO # 2859)



## **APPENDIX I – SURVEY EQUIPMENT**

The following survey equipment information is cited from the processing and logistics report provided by the Contractor Xcalibur Multiphysics (Xcalibur MPH (Canada) Ltd., 2022).

### **SURVEY AIRCRAFT**

An Xcalibur Multiphysics Cessna C208B turbo prop, Canadian registration C-FXAG was used to fly the survey area.

### **FALCON AIRBORNE GRAVITY GRADIOMETER (AGG) SYSTEM (GALILEO)**

The FALCON® AGG System is based on current state-of-the-art airborne gravity gradiometer technology and has been optimized for airborne broadband geophysical exploration. The system is capable of supporting surveying activities in areas ranging from 1,000 ft below sea level to 13,000 ft above sea level with aircraft speeds from 30 to 130 knots. The FALCON® AGG data streams were digitally recorded at different rates on removable drives installed in the FALCON® AGG electronics rack.

### **DIGITAL ACQUISITION SYSTEM (FASDAS)**

The FASDAS is a data acquisition system executing propriety software for the acquisition and recording of location, magnetic and ancillary data. Data are presented both numerically and graphically in real time on the VGA display providing on-line quality control capability.

The FASDAS is also used for real time navigation. A pre-programmed flight plan, containing boundary coordinates, line start and end coordinates, altitude values calculated for a theoretical drape surface, line spacing and cross track definitions is loaded into the computer prior to each flight. The WGS84 latitude, longitude and altitude received from the real-time corrected, dual frequency Novatel positioning receiver, is transformed to the local coordinate system for cross track and distance to go values. This information, together with ground heading and speed, is displayed to the pilot numerically and graphically on a two-line LCD display. It is also presented on the operator LCD screen in conjunction with a pictorial representation of the survey area, survey lines and ongoing flight path.

### **FALCON® AGG DATA ACQUISITION SYSTEM (ADAS)**

The ADAS provides control and data display for the FALCON® AGG system. Data are displayed in real time for the operator and warnings displayed should system parameters deviate from tolerance specifications. All FALCON® AGG and laser scanner data are recorded to a removable hard drive.

### **AERIAL AND GROUND MAGNETOMETERS**

The airborne Caesium magnetometer was a Scintrex CS-3 having a noise envelope of 0.05 nT pk-pk, 0.1 Hz bandwidth. The ground magnetometer was a Scintrex CS-3 Caesium sensor sampling at 1 Hz.

## **REAL-TIME DIFFERENTIAL GPS**

The Novatel OEMV-3G multi-frequency positioning receiver provides real-time differential GNSS for the on-board navigation system. The OEMV-3 is designed to track the GPS L1 and L2 signals, as well as GLONASS L1 and L2. The differential data set is relayed via a geo-synchronous satellite to the aircraft where the receiver optimized the corrections for the current location.

## **GPS BASE STATION RECEIVER AND ALTIMETER**

The Novatel OEMV-3 is a multi-channel, L1/L2 GNSS receiver. It provides raw range information of all satellites in view sampled every second and recorded on a computer laptop. These data are used to provide post-processed differential GNSS (DGNSS) corrections for the rover data flight path. The King KRA405B Radar Altimeter has an accuracy of 3 ft or  $\pm 3\%$  at 0-500 ft and  $\pm 5\%$  at 500-2500 ft, a range of 0-2,500 ft and a measurement rate of 10 Hz.

## **LASER SCANNER**

The Riegl LMS-Q240I-60 laser scanner is designed for high-speed line scanning applications. The system is based upon the principle of time-of-flight measurement of short laser pulses in the infrared wavelength region and the angular deflection of the laser beam is obtained by a rotating polygon mirror wheel. The measurement range is up to 650 m with a minimum range of 2 m and an accuracy of 20 mm. The laser beam is eye-safe, the laser wavelength is 0.9  $\mu\text{m}$ , the scan angle range is  $\pm 40^\circ$  and the scan speed is 36 scans/s.

## **DATA PROCESSING HARDWARE AND SOFTWARE**

The following equipment and software were used:

### **Hardware**

- One 2.0 GHz (or higher) laptop computer
- External USB hard drive reader for ADAS removable drives
- Two External USB hard drives for data backup
- All-In-One printer, copier, scanner

### **Software**

- Oasis Montaj data processing and imaging software
- GrafNav Differential GPS processing software
- Xcalibur Multiphysics' Atlas data processing software
- Xcalibur Multiphysics' DiAGG processing software



## APPENDIX II – MINING CLAIMS DATA (C.A. COX)

The following is a summary table of mining claims contained within the Mann Project boundary.

*Table 4: List of mineral claims held by C. A. Cox located on the Mann Project.*

Tenure Number	Title Type	Issue Date	Anniversary
631622	Single Cell Mining Claim	2021-01-21	2024-01-21
618011	Single Cell Mining Claim	2020-11-05	2023-11-05
582624	Single Cell Mining Claim	2020-03-21	2023-03-21
582623	Single Cell Mining Claim	2020-03-21	2023-03-21
583410	Single Cell Mining Claim	2020-04-06	2023-04-06
583411	Single Cell Mining Claim	2020-04-06	2023-04-06
583412	Single Cell Mining Claim	2020-04-06	2023-04-06
583603	Single Cell Mining Claim	2020-04-09	2023-04-09
631614	Single Cell Mining Claim	2021-01-20	2024-01-20
631615	Single Cell Mining Claim	2021-01-20	2024-01-20
631616	Single Cell Mining Claim	2021-01-20	2024-01-20
631617	Single Cell Mining Claim	2021-01-20	2024-01-20
631618	Single Cell Mining Claim	2021-01-20	2024-01-20
631633	Single Cell Mining Claim	2021-01-21	2024-01-21
631635	Single Cell Mining Claim	2021-01-21	2024-01-21
631619	Single Cell Mining Claim	2021-01-21	2023-01-21
631620	Single Cell Mining Claim	2021-01-21	2023-01-21
631621	Single Cell Mining Claim	2021-01-21	2024-01-21
631629	Single Cell Mining Claim	2021-01-21	2024-01-21
631630	Single Cell Mining Claim	2021-01-21	2024-01-21
631631	Single Cell Mining Claim	2021-01-21	2024-01-21
631634	Single Cell Mining Claim	2021-01-21	2024-01-21
631636	Single Cell Mining Claim	2021-01-21	2024-01-21
638590	Single Cell Mining Claim	2021-02-20	2023-02-20
638591	Single Cell Mining Claim	2021-02-20	2023-02-20
638592	Single Cell Mining Claim	2021-02-20	2023-02-20
638593	Single Cell Mining Claim	2021-02-20	2023-02-20
638594	Single Cell Mining Claim	2021-02-20	2023-02-20
638595	Single Cell Mining Claim	2021-02-20	2023-02-20
631623	Single Cell Mining Claim	2021-01-21	2024-01-21
631624	Single Cell Mining Claim	2021-01-21	2024-01-21
631625	Single Cell Mining Claim	2021-01-21	2024-01-21
631626	Single Cell Mining Claim	2021-01-21	2024-01-21
631627	Single Cell Mining Claim	2021-01-21	2024-01-21
583069	Single Cell Mining Claim	2020-04-02	2023-04-02
583070	Single Cell Mining Claim	2020-04-02	2023-04-02
583071	Single Cell Mining Claim	2020-04-02	2023-04-02
583072	Single Cell Mining Claim	2020-04-02	2023-04-02

631628	Single Cell Mining Claim	2021-01-21	2024-01-21
581246	Single Cell Mining Claim	2020-03-08	2023-03-08
581247	Single Cell Mining Claim	2020-03-08	2023-03-08
581248	Single Cell Mining Claim	2020-03-08	2023-03-08
581249	Single Cell Mining Claim	2020-03-08	2023-03-08
581250	Single Cell Mining Claim	2020-03-08	2023-03-08
581251	Single Cell Mining Claim	2020-03-08	2023-03-08
582581	Single Cell Mining Claim	2020-03-19	2023-03-19
582582	Single Cell Mining Claim	2020-03-19	2023-03-19
582583	Single Cell Mining Claim	2020-03-19	2023-03-19
582584	Single Cell Mining Claim	2020-03-19	2023-03-19
582588	Single Cell Mining Claim	2020-03-19	2023-03-19
582585	Single Cell Mining Claim	2020-03-19	2023-03-19
582586	Single Cell Mining Claim	2020-03-19	2023-03-19
582587	Single Cell Mining Claim	2020-03-19	2023-03-19
579449	Single Cell Mining Claim	2020-02-24	2023-02-24
579450	Single Cell Mining Claim	2020-02-24	2023-02-24
576220	Single Cell Mining Claim	2020-02-09	2023-02-09
576221	Single Cell Mining Claim	2020-02-09	2023-02-09
576222	Single Cell Mining Claim	2020-02-09	2023-02-09
576223	Single Cell Mining Claim	2020-02-09	2023-02-09
566835	Single Cell Mining Claim	2019-12-17	2023-12-17
574454	Single Cell Mining Claim	2020-02-01	2023-02-01
575228	Single Cell Mining Claim	2020-02-03	2023-02-03
575225	Single Cell Mining Claim	2020-02-02	2023-02-02
575226	Single Cell Mining Claim	2020-02-02	2023-02-02
575227	Single Cell Mining Claim	2020-02-02	2023-02-02
576327	Single Cell Mining Claim	2020-02-10	2023-02-10
576328	Single Cell Mining Claim	2020-02-10	2023-02-10
576329	Single Cell Mining Claim	2020-02-10	2023-02-10
576330	Single Cell Mining Claim	2020-02-10	2023-02-10
574447	Single Cell Mining Claim	2020-02-01	2023-02-01
574448	Single Cell Mining Claim	2020-02-01	2023-02-01
574455	Single Cell Mining Claim	2020-02-01	2023-02-01
574449	Single Cell Mining Claim	2020-02-01	2023-02-01
574450	Single Cell Mining Claim	2020-02-01	2023-02-01
574451	Single Cell Mining Claim	2020-02-01	2023-02-01
574452	Single Cell Mining Claim	2020-02-01	2023-02-01
574453	Single Cell Mining Claim	2020-02-01	2023-02-01
575587	Single Cell Mining Claim	2020-02-06	2023-02-06
575588	Single Cell Mining Claim	2020-02-06	2023-02-06
575589	Single Cell Mining Claim	2020-02-06	2023-02-06
575590	Single Cell Mining Claim	2020-02-06	2023-02-06

575591	Single Cell Mining Claim	2020-02-06	2023-02-06
575592	Single Cell Mining Claim	2020-02-06	2023-02-06
574456	Single Cell Mining Claim	2020-02-01	2023-02-01
578985	Single Cell Mining Claim	2020-02-21	2023-02-21
575599	Single Cell Mining Claim	2020-02-06	2023-02-06
582589	Single Cell Mining Claim	2020-03-19	2023-03-19
582590	Single Cell Mining Claim	2020-03-19	2023-03-19
582591	Single Cell Mining Claim	2020-03-19	2023-03-19
582592	Single Cell Mining Claim	2020-03-19	2023-03-19
575593	Single Cell Mining Claim	2020-02-06	2023-02-06
575594	Single Cell Mining Claim	2020-02-06	2023-02-06
575595	Single Cell Mining Claim	2020-02-06	2023-02-06
575596	Single Cell Mining Claim	2020-02-06	2023-02-06
575597	Single Cell Mining Claim	2020-02-06	2023-02-06
575598	Single Cell Mining Claim	2020-02-06	2023-02-06
582593	Single Cell Mining Claim	2020-03-19	2023-03-19
582594	Single Cell Mining Claim	2020-03-19	2023-03-19
582595	Single Cell Mining Claim	2020-03-19	2023-03-19
582596	Single Cell Mining Claim	2020-03-19	2023-03-19
582597	Single Cell Mining Claim	2020-03-19	2023-03-19
582598	Single Cell Mining Claim	2020-03-19	2023-03-19
583076	Single Cell Mining Claim	2020-04-02	2023-04-02
583077	Single Cell Mining Claim	2020-04-02	2023-04-02
578978	Single Cell Mining Claim	2020-02-21	2023-02-21
578979	Single Cell Mining Claim	2020-02-21	2023-02-21
578980	Single Cell Mining Claim	2020-02-21	2023-02-21
578981	Single Cell Mining Claim	2020-02-21	2023-02-21
578982	Single Cell Mining Claim	2020-02-21	2023-02-21
578983	Single Cell Mining Claim	2020-02-21	2023-02-21
578984	Single Cell Mining Claim	2020-02-21	2023-02-21
583075	Single Cell Mining Claim	2020-04-02	2023-04-02
575584	Single Cell Mining Claim	2020-02-06	2023-02-06
575585	Single Cell Mining Claim	2020-02-06	2023-02-06
575586	Single Cell Mining Claim	2020-02-06	2023-02-06
575600	Single Cell Mining Claim	2020-02-06	2023-02-06
583413	Single Cell Mining Claim	2020-04-06	2023-04-06
583414	Single Cell Mining Claim	2020-04-06	2023-04-06
583415	Single Cell Mining Claim	2020-04-06	2023-04-06
574387	Single Cell Mining Claim	2020-01-31	2023-01-31
574388	Single Cell Mining Claim	2020-01-31	2023-01-31
574389	Single Cell Mining Claim	2020-01-31	2023-01-31
574390	Single Cell Mining Claim	2020-01-31	2023-01-31
574391	Single Cell Mining Claim	2020-01-31	2023-01-31

574392	Single Cell Mining Claim	2020-01-31	2023-01-31
583398	Single Cell Mining Claim	2020-04-06	2023-04-06
583399	Single Cell Mining Claim	2020-04-06	2023-04-06
583400	Single Cell Mining Claim	2020-04-06	2023-04-06
583401	Single Cell Mining Claim	2020-04-06	2023-04-06
583402	Single Cell Mining Claim	2020-04-06	2023-04-06
583403	Single Cell Mining Claim	2020-04-06	2023-04-06
579291	Single Cell Mining Claim	2020-02-21	2023-02-21
582599	Single Cell Mining Claim	2020-03-19	2023-03-19
582616	Single Cell Mining Claim	2020-03-21	2023-03-21
582617	Single Cell Mining Claim	2020-03-21	2023-03-21
582618	Single Cell Mining Claim	2020-03-21	2023-03-21
582619	Single Cell Mining Claim	2020-03-21	2023-03-21
582620	Single Cell Mining Claim	2020-03-21	2023-03-21
582622	Single Cell Mining Claim	2020-03-21	2023-03-21
618027	Single Cell Mining Claim	2020-11-05	2023-11-05
618028	Single Cell Mining Claim	2020-11-05	2023-11-05
618029	Single Cell Mining Claim	2020-11-05	2023-11-05
618030	Single Cell Mining Claim	2020-11-05	2023-11-05
617999	Single Cell Mining Claim	2020-11-05	2023-11-05
618000	Single Cell Mining Claim	2020-11-05	2023-11-05
618001	Single Cell Mining Claim	2020-11-05	2023-11-05
618002	Single Cell Mining Claim	2020-11-05	2023-11-05
618003	Single Cell Mining Claim	2020-11-05	2023-11-05
618004	Single Cell Mining Claim	2020-11-05	2023-11-05
618005	Single Cell Mining Claim	2020-11-05	2023-11-05
618006	Single Cell Mining Claim	2020-11-05	2023-11-05
618007	Single Cell Mining Claim	2020-11-05	2023-11-05
618008	Single Cell Mining Claim	2020-11-05	2023-11-05
618009	Single Cell Mining Claim	2020-11-05	2023-11-05
618010	Single Cell Mining Claim	2020-11-05	2023-11-05
618012	Single Cell Mining Claim	2020-11-05	2023-11-05
618013	Single Cell Mining Claim	2020-11-05	2023-11-05
618014	Single Cell Mining Claim	2020-11-05	2023-11-05
618015	Single Cell Mining Claim	2020-11-05	2023-11-05
618016	Single Cell Mining Claim	2020-11-05	2023-11-05
618017	Single Cell Mining Claim	2020-11-05	2023-11-05
618026	Single Cell Mining Claim	2020-11-05	2023-11-05
631632	Single Cell Mining Claim	2021-01-21	2024-01-21
638580	Single Cell Mining Claim	2021-02-19	2023-02-19
638581	Single Cell Mining Claim	2021-02-19	2023-02-19
638582	Single Cell Mining Claim	2021-02-19	2023-02-19
638583	Single Cell Mining Claim	2021-02-19	2023-02-19

638584	Single Cell Mining Claim	2021-02-19	2023-02-19
638841	Single Cell Mining Claim	2021-02-20	2023-02-20
638842	Single Cell Mining Claim	2021-02-20	2023-02-20
638843	Single Cell Mining Claim	2021-02-20	2023-02-20
638844	Single Cell Mining Claim	2021-02-20	2023-02-20
638764	Single Cell Mining Claim	2021-02-20	2023-02-20
638765	Single Cell Mining Claim	2021-02-20	2023-02-20
638766	Single Cell Mining Claim	2021-02-20	2023-02-20
638869	Single Cell Mining Claim	2021-02-20	2023-02-20
638870	Single Cell Mining Claim	2021-02-20	2023-02-20
638871	Single Cell Mining Claim	2021-02-20	2023-02-20
638872	Single Cell Mining Claim	2021-02-20	2023-02-20
638873	Single Cell Mining Claim	2021-02-20	2023-02-20
640068	Single Cell Mining Claim	2021-03-01	2023-03-01
639518	Single Cell Mining Claim	2021-02-24	2023-02-24
639519	Single Cell Mining Claim	2021-02-24	2023-02-24
639445	Single Cell Mining Claim	2021-02-23	2023-02-23
639446	Single Cell Mining Claim	2021-02-23	2023-02-23
639447	Single Cell Mining Claim	2021-02-23	2023-02-23
639436	Single Cell Mining Claim	2021-02-23	2023-02-23
639437	Single Cell Mining Claim	2021-02-23	2023-02-23
639438	Single Cell Mining Claim	2021-02-23	2023-02-23
639439	Single Cell Mining Claim	2021-02-23	2023-02-23
639513	Single Cell Mining Claim	2021-02-24	2023-02-24
639514	Single Cell Mining Claim	2021-02-24	2023-02-24
639515	Single Cell Mining Claim	2021-02-24	2023-02-24
639516	Single Cell Mining Claim	2021-02-24	2023-02-24
639517	Single Cell Mining Claim	2021-02-24	2023-02-24
639440	Single Cell Mining Claim	2021-02-23	2023-02-23
639441	Single Cell Mining Claim	2021-02-23	2023-02-23
639442	Single Cell Mining Claim	2021-02-23	2023-02-23
639443	Single Cell Mining Claim	2021-02-23	2023-02-23
639444	Single Cell Mining Claim	2021-02-23	2023-02-23
641102	Single Cell Mining Claim	2021-03-08	2023-03-08
641103	Single Cell Mining Claim	2021-03-08	2023-03-08
641104	Single Cell Mining Claim	2021-03-08	2023-03-08
641105	Single Cell Mining Claim	2021-03-08	2023-03-08
641106	Single Cell Mining Claim	2021-03-08	2023-03-08
641107	Single Cell Mining Claim	2021-03-08	2023-03-08
641108	Single Cell Mining Claim	2021-03-08	2023-03-08
641109	Single Cell Mining Claim	2021-03-08	2023-03-08
641110	Single Cell Mining Claim	2021-03-08	2023-03-08
644593	Single Cell Mining Claim	2021-03-19	2023-03-19

644594	Single Cell Mining Claim	2021-03-19	2023-03-19
654647	Single Cell Mining Claim	2021-05-03	2023-05-03
654648	Single Cell Mining Claim	2021-05-03	2023-05-03
654649	Single Cell Mining Claim	2021-05-03	2023-05-03
654650	Single Cell Mining Claim	2021-05-03	2023-05-03

## APPENDIX II – MINING CLAIMS DATA (NOB)

The following is a summary table of mining claims contained within the Mann Project boundary.

*Table 5. List of mineral claims held by Noble Minerals located on the Mann Project*

Tenure Number	Title Type	Issue Date	Anniversary
587114	Single Cell Mining Claim	2020-05-03	2024-05-03
586357	Single Cell Mining Claim	2020-05-01	2024-05-01
586358	Single Cell Mining Claim	2020-05-01	2024-05-01
653442	Single Cell Mining Claim	2021-04-29	2023-04-29
638380	Single Cell Mining Claim	2021-02-19	2023-02-19
638381	Single Cell Mining Claim	2021-02-19	2023-02-19
638382	Single Cell Mining Claim	2021-02-19	2023-02-19
638383	Single Cell Mining Claim	2021-02-19	2023-02-19
638384	Single Cell Mining Claim	2021-02-19	2023-02-19
638385	Single Cell Mining Claim	2021-02-19	2023-02-19
638386	Single Cell Mining Claim	2021-02-19	2023-02-19
638387	Single Cell Mining Claim	2021-02-19	2023-02-19
638388	Single Cell Mining Claim	2021-02-19	2023-02-19
638389	Single Cell Mining Claim	2021-02-19	2023-02-19
638390	Single Cell Mining Claim	2021-02-19	2023-02-19
638391	Single Cell Mining Claim	2021-02-19	2023-02-19
638392	Single Cell Mining Claim	2021-02-19	2023-02-19
638393	Single Cell Mining Claim	2021-02-19	2023-02-19
638394	Single Cell Mining Claim	2021-02-19	2023-02-19
638395	Single Cell Mining Claim	2021-02-19	2023-02-19
638396	Single Cell Mining Claim	2021-02-19	2023-02-19
638397	Single Cell Mining Claim	2021-02-19	2023-02-19
638398	Single Cell Mining Claim	2021-02-19	2023-02-19
638399	Single Cell Mining Claim	2021-02-19	2023-02-19
638400	Single Cell Mining Claim	2021-02-19	2023-02-19
638401	Single Cell Mining Claim	2021-02-19	2023-02-19
638402	Single Cell Mining Claim	2021-02-19	2023-02-19
638403	Single Cell Mining Claim	2021-02-19	2023-02-19
638404	Single Cell Mining Claim	2021-02-19	2023-02-19











653425	Single Cell Mining Claim	2021-04-28	2023-04-28
653428	Single Cell Mining Claim	2021-04-28	2023-04-28
653429	Single Cell Mining Claim	2021-04-28	2023-04-28
653431	Single Cell Mining Claim	2021-04-28	2023-04-28
653432	Single Cell Mining Claim	2021-04-28	2023-04-28
653437	Single Cell Mining Claim	2021-04-28	2023-04-28
653438	Single Cell Mining Claim	2021-04-28	2023-04-28
653441	Single Cell Mining Claim	2021-04-28	2023-04-28

## APPENDIX II – MINING CLAIMS DATA (CNC)

The following is a summary table of mining claims contained within the Mann Project boundary.

*Table 6. List of mineral claims held by Canada Nickel located on the Mann Project*

Tenure Number	Title Type	Issue Date	Anniversary
667515	Single Cell Mining Claim	2021-07-02	2023-07-02
667516	Single Cell Mining Claim	2021-07-02	2023-07-02
667511	Single Cell Mining Claim	2021-07-02	2023-07-02
667512	Single Cell Mining Claim	2021-07-02	2023-07-02
667513	Single Cell Mining Claim	2021-07-02	2023-07-02
667514	Single Cell Mining Claim	2021-07-02	2023-07-02
638109	Single Cell Mining Claim	2021-02-19	2023-02-19
638110	Single Cell Mining Claim	2021-02-19	2023-02-19
638115	Single Cell Mining Claim	2021-02-19	2023-02-19
638118	Single Cell Mining Claim	2021-02-19	2023-02-19
638119	Single Cell Mining Claim	2021-02-19	2023-02-19
638122	Single Cell Mining Claim	2021-02-19	2023-02-19
638123	Single Cell Mining Claim	2021-02-19	2023-02-19
638130	Single Cell Mining Claim	2021-02-19	2023-02-19
638131	Single Cell Mining Claim	2021-02-19	2023-02-19
638132	Single Cell Mining Claim	2021-02-19	2023-02-19
638133	Single Cell Mining Claim	2021-02-19	2023-02-19
638144	Single Cell Mining Claim	2021-02-19	2023-02-19
638149	Single Cell Mining Claim	2021-02-19	2023-02-19
638150	Single Cell Mining Claim	2021-02-19	2023-02-19
654639	Single Cell Mining Claim	2021-05-03	2023-05-03
654640	Single Cell Mining Claim	2021-05-03	2023-05-03
654641	Single Cell Mining Claim	2021-05-03	2023-05-03
654642	Single Cell Mining Claim	2021-05-03	2023-05-03
654643	Single Cell Mining Claim	2021-05-03	2023-05-03

