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OPERATIONS REPORT

for

LAC DES ISLES MINES LTD.

Horizontal Magnetic Gradient & Matrix VLF-EM Airborne Survey

Sunday Lake Project Thunder Bay, ON

File: B486

November 3, 2019

Requested by Kevin Stevens Consulting Geologist

1

Prepared by: Charles Barrie, M.Sc., P.Geo VP/Owner **Terraquest Ltd.**

Table of Contents

1. II	NTRODUCTON	4
1.1.	EXECUTIVE SUMMARY	4
1.1.		
2. S	URVEY SPECIFICATIONS	6
2.1.	LINES AND DATA	6
2.2.		
2.3.		
2.4.	NAVIGATION SPECIFICATIONS	7
2.5.		
2.6.	TOLERANCES - REFLIGHT	10
1.	. Traverse Line Interval	
2.	. Terrain Clearance:	
3.	Diurnal Variation:	11
4.	. GPS Data:	11
5.	. Radio Transmission:	11
6.	. Sample Interval:	
3. A	AIRBORNE GEOPHYSICAL EQUIPMENT	12
J. A		
3.1.	SURVEY AIRCRAFT	12
3.2.		
3.3.		
1.	0	
2.	$1 \qquad 3 \qquad 1 \qquad 2$	
3.	0 5	
4.		
5.		
6.		
7.		
8.	Barometric Altimeter	
4. B	SASE STATION EQUIPMENT	16
4.1.	BASE STATION MAGNETOMETER / GPS RECEIVER	16
г т	ESTS AND CALIBRATIONS	17
5. T	ESIS AND CALIBRATIONS	
5.1.	MAGNETIC FIGURE OF MERIT	17
5.2.	MAGNETIC LAG	17
5.3.	RADAR CALIBRATION	
6. L	OGISTICS	
C 1		10
6.1.		
6.2.		
6.3.	BASE OF OPERATIONS	20
7. D	DATA PROCESSING	23
7.1.	DATA QUALITY CONTROL / PRELIMINARY PLOTS	
7.2.		
7.3.		
1.		
2.		
3.		
4.	. The Magnetic Field Micro-Levelling	24

2019/04/02

5.	Calculated Vertical Derivative	
6.	Analytic Signal	
7.	Horizontal Gradients	
8.	Reconstructed Total Field (RTF)	25
9.	Grids	
7.4.	MAGNETIC DATA MAPS	
1.	Total Magnetic Intensity	
2.	Calculated Vertical Derivative	27
3.	Analytic Signal	
4.	Measured Horizontal East-West Gradient	
5.	Measured Horizontal North-South Gradient	
6.	Reconstructed Total Field	
7.5.	FINAL ELECTROMAGNETC DATA PROCESSING	
7.6.	VLF DATA MAPS	
1.	Amplitude of the Secondary Total Field Strength (NAA, Cutler, ME)	
2.	High-Pass Filter of the Secondary Total Field Strength (NAA, Cutler, ME)	
3.	Amplitude of the Secondary Total Field Strength (NML, La Moure, ND)	
4.	High-Pass Filter of the Secondary Total Field Strength (NML, La Moure, ND)	
5.	Amplitude of the Secondary Total Field Strength (NLK, Jim Creek, WA)	
6.	High Pass Filter of the Secondary Total Field Strength (NLK, Jim Creek, WA)	
7.7.	LIST OF FINAL PRODUCTS	40
8. SU	MMARY	41
9. AP	PENDICES	42
9.1.	APPENDIX I - CERTIFICATE OF QUALIFICATION	42
9.2.	APPENDIX II - MAGNETIC FIGURE OF MERIT (FOM)	
9.3.	APPENDIX III - FIELD OPERATIONS SUMMARY	
1.	Survey Diary	
2.	Survey Flight List	
9.4.	APPENDIX IV – README	
1.	MAIN BLOCK	
2.	WEST BLOCK	
2. 3.	EAST BLOCK	
<i>.</i>		

1. INTRODUCTON

1.1. EXECUTIVE SUMMARY

This report describes the specifications and parameters of an airborne geophysical survey carried out for:

LAC DES ISLES MINES LTD.

556 Tenth Ave. Thunder Bay, ON P7B 2R2

Attention: Dave Benson, Exploration Manager Phone: 907-623-8005 Email: <u>davebenson@nap.com</u>

The survey was performed by:

TERRAQUEST LTD.,

301-2900 John Street Markham ON, Canada L3R 5G3

Phone: 905-477-2800 ext. 31 Email: cb@terraquest.ca.

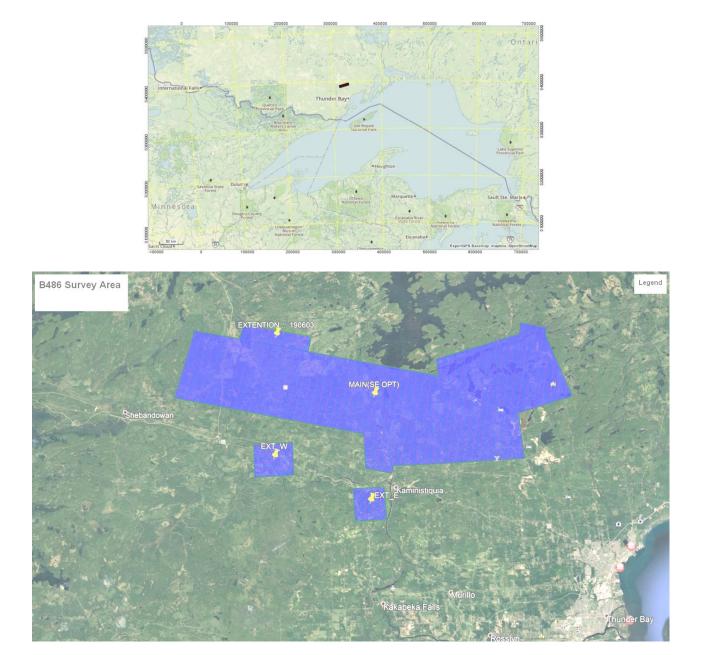
The purpose of this survey is to collect geophysical data that can be used to prospect directly for economic minerals that are characterized by anomalous magnetic or conductive responses. Secondly, the geophysical patterns can be used indirectly for exploration by mapping the geology in detail, including faults, shear zones, folding, alteration zones and other structures. The data are carefully processed and contoured to produce grid files and maps that show distinctive patterns of the geophysical parameters.

To obtain this data, the area was systematically traversed by aircraft carrying geophysical equipment along parallel flight lines. The lines are oriented to intersect the geology and structure so as to provide optimum contour patterns of the geophysical data.

1.2. LOCATION

The Sunday Lake Project is located approximately 28 kilometres northwest of Thunder Bay, Ontario, just north of the village of Kaministiquia located on route 102, and route #17 to Upsala cuts though the western edge of the survey. Route #589 through Lappe can be used to access the eastern part of the survey block

The survey area is irregular in shape with 19 corners with maximum east-west dimension of 54 km and a variable north-south dimension of 10 to 15 km. The centre of the survey is approximately 48°38' N and 89°35' W. Two small non-contiguous blocks are included with this survey, an 8 x 8 km block immediately southwest of Kaministiquia, and a 9x9 km block mid way to Shabaqua Corners along highway 102.



2. SURVEY SPECIFICATIONS

2.1. LINES AND DATA

Parameter	Specification
Aircraft Speed	mean 58.3 m/sec 209.9 km/hr
Magnetic & VLF Sampling Interval	5.8 m (10Hz)
Flight-line Interval all Blocks	100 metres
Flight-line Direction Main Block	105/285 degrees
Flight-Line Direction East Block	090/270 degrees
Flight-Line Direction West Block	000/180 degrees
Control-line Interval all Blocks	1000 metres
Control-line Direction Main Block	015/195 degrees
Control Line Direction East Block	000/180 degrees
Control Line Direction West Block	090/270 degrees
Mean Terrain Clearance Main/East/West Blocks	91.8 / 123.3 / 137.5 metres

2.2. SURVEY KILOMETRAGE

B486: SUNDAY L. PROJECT – UPDATED FLIGHT PLANNING (190427)						
	LINE	LINE	TIE	TIE	Total NLIN	Total LKM
BLOCK	NLIN	LKM	NLIN	LKM		
EAST BLOCK	42	168.4	4	17.1	46	185.5
WEST BLOCK	51	222.4	4	20.1	55	242.4
MAIN BLOCK	245	6211.1	52	630.1	297	6841.3
NORTHERN						
EXTENSION	23	219.5	9	20.7	32	240.2
Grand Total	361	6821.4	69	688.0	430	7509.4

2.3. SURVEY OUTLINE

The corner coordinates were supplied by the client and used to create the navigation files.

2.4. NAVIGATION SPECIFICATIONS

The satellite navigation system was used to ferry to the survey and to survey along each line. The survey coordinates were supplied by the client and were used to establish the survey boundaries and flight lines. The flight path guidance accuracy is variable depending upon the number and condition (health) of the satellites employed. With WAAS real time correction the accuracy was for the most part better than 3 metres.

The following are the navigation files used for the Sunday Lake Project, B486. These files include survey corner coordinates in WGS84 projection Zone 16N, line spacing, line direction, master line and other navigational parameters for the **Main Block**, **West Block**, **East Block** and the **Northern Extension to the Main Block**

0 MAIN_SE	MAIN	BLOCK
1 U 273		
	5381662	
	5386289	
	5392927	
	5402605	
	5393793	
	5396259	
2 327877 2 328230 2 331714 2 331444		
2 328230		AREA CORNER 8
2 331714		AREA CORNER 9
2 331444		AREA CORNER 10
	5397620	AREA CORNER 11
2 333748		AREA CORNER 12
2 326222		AREA CORNER 13
	5381642	AREA CORNER 14
		AREA CORNER 15
		AREA CORNER 16
		AREA CORNER 17
		AREA CORNER 18
	5381642	
4 245		MBER OF LINES
5 100.0		ACING, m
8 75		X CROSS TRACK, m
9 0 0 0		LTA X/Y/Z
10 1		FPR EVERY 1 SECS
11 0.9996000		
14 0		ES EXTENDED BEYOND AREA
16 10		ST LINE NUMBER
		105.0 MASTER POINT, HEADING
		15.0 TIE LINE MASTER POINT, HEADING
19 1000.0		LINE SPACING, LINE EXTENSION, m
		298.257223563 22 ELLIPSOID
21 0		EQUATORIAL CROSSING, N HEMISPHERE
		RS-232 PORT 2 INCOMING FORMAT
		RS-232 PORT OUTGOING FORMAT
38 0		TRIC SYSTEM
41 0.00	SYS	TEM LAG, Secs.

800.00PLANNED ALTITUDE, m830GPS ALTITUDE FOR VERTICAL BAR840.000.00ALTITUDE COEFFICIENT, OFFSET85100MAX VERTICAL BAR SCALE102UTMUTM X/Y SCALE
0 EXT_W WEST BLOCK
1 U 273
2 291049 5381379 AREA CORNER 1 2 291049 5385736 AREA CORNER 2
2 291049 5385736 AREA CORNER 2 2 296064 5385736 AREA CORNER 3
2 296064 5381379 AREA CORNER 4 2 291049 5381379 AREA CORNER 5
3 291049 5381379 CORI WAYPOINT 1
451NUMBER OF LINES5100.0SPACING, m875MAX CROSS TRACK, m
8 75 MAX CROSS TRACK, m
9 0 0 0 DELTA X/Y/Z
10 1 LOG FPR EVERY 1 SECS 11 0.9996000000 0.0 0.0 K0, X/Y SHIFT 14 0 LINES EXTENDED BEYOND AREA
11 0.9996000000 0.0 0.0 K0, X/Y SHIFT 14 0 LINES EXTENDED BEYOND AREA
14 0 LINES EXTENDED BEYOND AREA 16 10 FIRST LINE NUMBER
17 291049.0 5381379.0 0.0 MASTER POINT HEADING
 291049.0 5381379.0 0.0 MASTER POINT, HEADING 291049.0 5381379.0 90.0 TIE LINE MASTER POINT, HEADING
19 1000.0 0 TIE LINE SPACING, LINE EXTENSION, m
20 WGS-84 6378137.0 298.257223563 22 ELLIPSOID
210NO EQUATORIAL CROSSING, N HEMISPHERE
30 20 9600 N 1 8 RS-232 PORT 2 INCOMING FORMAT
31 20 9600 N 1 8 RS-232 PORT OUTGOING FORMAT
38 0 METRIC SYSTEM 41 0.00 SYSTEM LAG, Secs.
410.00STSTEM LAO, Sets.800.00PLANNED ALTITUDE, m
83 0 GPS ALTITUDE FOR VERTICAL BAR
84 0.00 0.00 ALTITUDE COEFFICIENT, OFFSET
85 100 MAX VERTICAL BAR SCALE
102 UTM UTM X/Y SCALE
0 EXT_E EAST BLOCK 1 U 273
2 303611 5374769 AREA CORNER 1
2 303611 5379036 AREA CORNER 2
2 307623 5379036 AREA CORNER 3
2 307623 5374769 AREA CORNER 4
2 303611 5374769 AREA CORNER 5
3 303611 5374769 COR1 WAYPOINT 1
4 42 NUMBER OF LINES
5 100.0 SPACING, m
8 75 MAX CROSS TRACK, m 9 0 0 0 DELTA X/Y/Z
10 1 LOG FPR EVERY 1 SECS
11 0.9996000000 0.0 0.0 K0, X/Y SHIFT
14 0 LINES EXTENDED BEYOND AREA
16 10 FIRST LINE NUMBER
17 303611.0 5374769.0 90.0 MASTER POINT, HEADING
18 303000.0 5374769.0 0.0 TIE LINE MASTER POINT, HEADING 19 1000.0 0 TIE LINE SPACING, LINE EXTENSION, m
20 WGS-84 6378137.0 298.257223563 22 ELLIPSOID
21 0 NO EQUATORIAL CROSSING, N HEMISPHERE
30 20 9600 N 1 8 RS-232 PORT 2 INCOMING FORMAT
31 20 9600 N 1 8 RS-232 PORT OUTGOING FORMAT

38 0 41 0.00 80 0.00 83 0 84 0.00 85 100 102 UTM	GPS ALTIT 0.00 ALTITU	AG, Secs. ALTITUDE, m UDE FOR VERTICAL BAR DE COEFFICIENT, OFFSET TICAL BAR SCALE
0 MEXT	NO	RTHERN EXTENSION TO MAIN BLOCK
1 U 273		
2 28949	5 5400926 Al	REA CORNER 1
2 290114		REA CORNER 2
2 29930		REA CORNER 3
	7 5398492 Al	
	5 5400926 Al	REA CORNER 5
3 31610		OR1 WAYPOINT 1
4 23	NUMBE	R OF LINES
5 100.0	SPACIN	G, m
8 75	MAX CF	ROSS TRACK, m
9 0 0 0	DELTA	X/Y/Z
10 1		R EVERY 1 SECS
11 0.99960		.0 K0, X/Y SHIFT
14 0		XTENDED BEYOND AREA
16 501		INE NUMBER
		.0 MASTER POINT, HEADING
) TIE LINE MASTER POINT, HEADING
19 1000.		INE SPACING, LINE EXTENSION, m
20 WGS-84		8.257223563 22 ELLIPSOID
21 0		ATORIAL CROSSING, N HEMISPHERE
		-232 PORT 2 INCOMING FORMAT
31 20		-232 PORT OUTGOING FORMAT
38 0		CSYSTEM
41 0.00		1 LAG, Secs.
80 0.00		ED ALTITUDE, M
83 0 84 0.00		TITUDE FOR VERTICAL BAR
84 0.00 85 100		TUDE COEFFICIENT, OFFSET RTICAL BAR SCALE
65 100	MAA VE	NTICAL DAN SCALE

2.5. PLANNED NAVIGATIONAL FLIGHT PATH



(Contract version not including the North Extension)

2.6. TOLERANCES - REFLIGHT

1. Traverse Line Interval

Re-flights would take place if the cross-track deviation of the final differentially corrected flight path from the preplanned flight path is greater than 25 metres over a distance greater than 1 kilometre.

2. Terrain Clearance:

Initially a computer-generated drape surface was planned to guide the terrain clearance at 50-70 metres, but once on site it was discovered that the topographic relief disrupted the laminar flow of the unusually strong winds at this time of the year, creating strong low level turbulence. Unfortunately, these conditions impacted the safety of the aircraft and crew, forcing them to increase the terrain clearance. Furthermore, complaints from cottagers and permanent residents plus several communication towers presented concerns for low level flight. Attempts were made to lower the terrain clearance locally, but this resulted in a non-uniform drape surface which negatively impacts data processing (see Data Processing section 7.3). For these reasons, the

resulting survey mean terrain clearances are 91.8 metres, 123.3 metres and 137.5 metres for the Main, East and West Blocks respectively.

3. Diurnal Variation:

Diurnal activity during survey data acquisition was limited to less than 3 nT non-linear deviations from a 1-minute chord.

4. GPS Data:

GPS data included at least 4 satellites for navigation and flight path recovery. There were no significant gaps in any of the digital data including GPS and magnetic data.

5. Radio Transmission:

The aircraft pilot makes no radio transmission that interferes with magnetic response.

6. Sample Interval:

A reflight is required if the sample interval along one or more of the survey lines exceeds 10 metres over a cumulative total of 1000 metres.

3. AIRBORNE GEOPHYSICAL EQUIPMENT

3.1. SURVEY AIRCRAFT

The Cessna U206, registration C-GGLS, owned and operated by Terraquest Ltd. was the survey aircraft for B486. This aircraft is approved by the Canadian Ministry of transport and has a certification for specialty flying that includes airborne geophysical surveys. This aircraft is maintained by a regulatory AMO facility, Enterprise Air Ltd. in Oshawa, ON. Extensive maintenance was performed prior to this survey to significantly reduce the magnetic interference from electrical sources.

The aircraft has been specifically modified with long-range fuel cells to provide up to 7 hours of range, outboard tanks, tundra tires, cargo door, and avionics as well as an array of sensors to carry out airborne geophysical surveys.



3.2. EQUIPMENT OVERVIEW

The primary airborne geophysical equipment includes three high sensitivity cesium vapour magnetometers and a Matrix Total Field frequency specific VLF-EM system. Ancillary support equipment includes a tri-axial fluxgate magnetometer, radar altimeter, barometric altimeter, GPS receiver with a real-time correction service, and a navigation system. The navigation system

comprises a left/right indicator for the pilot and a screen showing the survey area, planned flight lines, and the real time flight path. All data were collected and stored by the data acquisition system. The following is a summary of the equipment specifications:

Aircraft	Cessna U206 / C-GGLS
Equipment:	
Magnetometers	Scintrex CS-2&3 Cesium Vapour
3-axis Fluxgate Magnetometer	Billingsley TFM100-LN
VLF-EM (proprietary)	Magenta Matrix Frequency Specific VLF-EM
GPS Receiver	Hemisphere R230 with WAAS real time correction
Radar Altimeter	King KRA 10A
Barometric Altimeter	Sensym LX18001AN
Acquisition	RMS Instruments DAARC 500
Navigation	AgNav Inc. P151 Linav system
Specifications:	
Lateral Sensor separation	13.21 metres
Longitudinal Sensor separation	8.87 metres
FOM	<1.5 nT
Sensitivity	0.001 nT

The 13.75 volts aircraft power is converted to 27.5 volts DC for the geophysical equipment by an ABS power supply.

3.3. EQUIPMENT SPECIFICATIONS

1. Magnetics:

Three high-resolution cesium vapour magnetometers, manufactured by Scintrex, were installed in the tail stinger and two wing tips extensions; the transverse separation was 13.21 metres and the longitudinal separation was 8.87 metres.

Cesium Vapour Magnetometer	(mounted in tail stinger and wing tip extensions)
Manufacturer	Scintrex
Models	CS-2, CS-3
Resolution	0.001 nT counting at 0.1 per second
Sensitivity	+/- 0.005 nT
Dynamic Range	15,000 to 100,000 nT
Fourth Difference	0.02 nT

2. Data Acquisition & Magnetic Compensation System

DAS & Compensation	Combined
Model	DAARC 500
Manufacturer	RMS Instruments
Operating System	QNX 6.3 or greater
Time	104 MHz temperature compensated crystal clock

Front End Magnetic Processing	Resolution 0.32pT; system noise <0.1pT; sample rate 160, 640, 800m or 1280 Hz
Front End - Fluxgate	I/F module; oversampling, self-calibrating 16 bit A/D converter
Compensation	Improvement Ratio (total field) 10-20 typical
Input Serial	8 isolated RS232 channels; ASCII & Binary formats
Input Analog	16 bit, self-calibrating A/D conv.
Input Events	Four latched event inputs
Raw Data Logging	At front end sampling rate, 1 MB buffer
Output/Recording	Rate 10, 20 or 40 Hz; Serial up to 115.2 kbps; Recording media 1 GB Flash; 80 GB Hard Drive; Flash disk via USB; Display
Front Panel Indicators	8 LEDs for mag input; 2 LEDs for Front End status

3. Navigation System

Navigation System	
Model	P151
Manufacturer	AgNav Inc.
Operating System	Linex
Microprocessor	CPU Pentium based
Ports	RS232 for all devices
Graphic Display	Colour Screen
Pilot Display	P202: position, left/right, navigational info

4. Real-Time Correction GPS Receiver

GPS Differential Receiver	
Model	R120
Manufacturer	Hemisphere
Output	NMEA string, PPS
Channels	12 Channel DGPS, internal L-band
Position Update	0.5 second for navigation
Correction Service	Real time correction service WAAS
Sample Rate	Up to 10hz, set at 5 hz

5. Magenta Digital, Frequency Specific VLF-EM System

The Matrix VLF-EM System by Magenta is a newly developed digital, frequency specific VLF-EM system. The sensor consists of 3 orthogonal coils mounted in the tail stinger which are coupled with a receiver-console. The Matrix VLF-EM System measures the total field (the vector sum of all coils). The data are recorded on three VLF frequencies: Cutler Maine NAA frequency 24.0 kHz, La Moure North Dakota NML frequency 25.2 kHz and Seattle, WA NLK frequency 24.8 kHz, which yield outputs of Total Field, Vertical and Planar Ellipticities, azimuth to transmitter and Tilt Angle.

VLF – EM	Source field
Model	Matrix
Manufacturer	Magenta Ltd.
Primary Source	Magnetic field component radiated from government VLF radio transmitters
Parameters Measured	Total Field (Conductivity), Vertical and Planar Ellipticities, Azimuth to Transmitter and Tilt Angle
Frequency Range	Cutler (24.0 kHz), La Moure (25.2 kHz) and Seattle (24.8 kHz)
Gain	Constant gain setting
Filtering	No filtering

6. Tri-Axial Fluxgate Magnetic Sensor

The fluxgate tri-axial magnetometer was mounted in the rear of the aircraft cabin to monitor aircraft manoeuver and magnetic interference. This was used to compensate the high sensitivity data in real time.

Tri-Axial Fluxgate Magnetic Sensor	(for compensation, mounted in mid-section of tail stinger)
Model	TFM100-LN
Manufacturer	Billingsley Magnetics
Description	Low noise miniature triaxial fluxgate magnetometer
Axial Alignment	> Orthogonality $>$ +/- 0.5 degree
Accuracy	< +/- 0.75% of full scale (0.5% typical)
Field Measurement	+/- 100,000 nanotesla
Linearity	< +/- 0.0035% of full scale
Sensitivity	100 microvolt/nanotesla
Noise	< 14 picotesla RMS/–Hz @ 1 Hz

7. Radar Altimeter

Radar Altimeter	
Model	KRA-10A
Manufacturer	King
Serial Number	071-1114-00
Accuracy	5% up to 2,500 feet
Calibrate Accuracy	1%
Output	Analog for pilot, converted to digital for data acquisition

8. Barometric Altimeter

Barometric Altimeter	
Model	LX18001AN
Manufacturer	Sensym Inc.
Source	Coupled to aircraft barometric system

4. BASE STATION EQUIPMENT

4.1. BASE STATION MAGNETOMETER / GPS RECEIVER

The magnetometer was similar to the type used in the aircraft, a cesium magnetometer manufactured by Scintrex. The magnetometer processor was a KMAG manufactured by Kroum VS Instruments and the data logger was a PDA by Archer. The counter was powered by a 10VAC 50/60 Hz to 30VDC 3.0 amp power supply with an internal 12VDC fan. The logging software SDAS-1 was written by Kroum VS Instrument Ltd. specifically for handheld pc hardware. It supports real time graphics with selectable windows (uses two user selectable scales, coarse and fine). Time recorded was taken from the base GPS receiver. Magnetic data was logged at 1Hz. Data collection was by RS232 recording ASCII string and stored on flash card.

Magnetometer Type	Cesium Vapour
Model	CS-3
Manufacturer	Scintrex Ltd.
Sensitivity	0.022 nT / vHz@1Hz
Resolution	0.001 nT
Dynamic Range	15,000 – 120,000 nT
GPS model	GPS 18
GPS manufacturer	Garmin

5. TESTS AND CALIBRATIONS

5.1. MAGNETIC FIGURE OF MERIT

Compensation calibration tests were performed to determine the magnetic influence of aircraft maneuvers and the effectiveness of the aircraft compensation method. The aircraft flew a square pattern in the four survey directions at a high altitude over a magnetically quiet area and performed pitches (\pm 5°), rolls (\pm 10°) and yaws (\pm 5°). The sum of the maximum peak-to-peak residual noise amplitudes in the total compensated signal resulting from the twelve maneuvers is referred to as the FOM. The FOM was flown on May 11, 2019 and the values for this survey were 0.75 nT, 0.91 nT and 0.47 nT for the Left, Right and Tail sensors respectively (see Appendix II).

5.2. MAGNETIC LAG

Evaluation of the magnetic lag factor was accomplished by comparing survey data flown over a series of distinct magnetic anomalies in opposing directions. The measured lag was 0.3 seconds for the wingtip sensors and 0.50 seconds for the tail sensor. The results are presented in the following table:

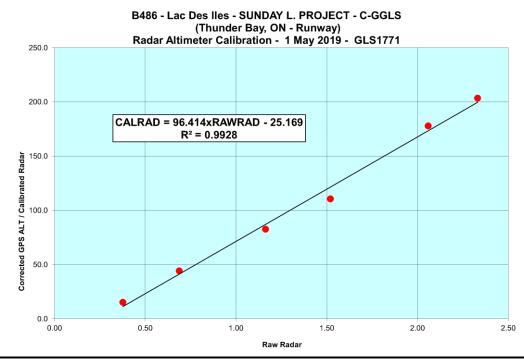
		C-GGLS : LAG TEST	r				
		WINGTIP SENSORS (TF1, T	(F2)				
LINE	DIR	Reference Anomaly					
			A	В	С		
S160	160°	FIDUCIAL	62221.2	62206.6	62200.5		
		х	678658.8	678323.5	678180.2	5	
		Y	5153914.8	5154819.5	5155184.1		
		SPEED (S1)	68.0	64.6	64.1		
S340	340°	FIDUCIAL	62362.2	62380.2	62387.6		
		х	678642.3	678319.8	678176.0		
		Y	5153938.1	5154855.7	5155223.0		
		SPEED (S ₂)	55.8	53.2	53.6		
	_	DELTA (apparent directional seperation, metres)	28.6	36.4	39.1		
		LAG (secs) *	28.6 0.2	36.4 0.3	39.1 0.3	AVG LAG	
LINE	DIR		0.2		20.75.0.75	AVG LAG	
LINE	DIR	LAG (secs) *	0.2	0.3	20.75.0.75	AVG LAG	
LINE	DIR 160°	LAG (secs) *	0.2 Re	0.3	0.3	AVG LAG	
		LAG (secs) * TAIL SENSOR (TF3)	0.2 Re A	0.3 eference Anomaly B	0.3 C	AVG LAG	
		LAG (secs) * TAIL SENSOR (TF3) FIDUCIAL	0.2 Re A 62221.4	0.3 eference Anomaly B 62206.8	0.3 C 62200.7	AVG LAG	
		LAG (secs) * TAIL SENSOR (TF3) FIDUCIAL	0.2 Re 62221.4 678663.1	0.3 ference Anomaly B 62206.8 678328.3	0.3 C 62200.7 678184.9	AVG LAG	
		TAIL SENSOR (TF3)	0.2 A 62221.4 678663.1 5153901.9	0.3 ference Anomaly B 62206.8 678328.3 5154807.6	0.3 C 62200.7 678184.9 5155172.2	AVG LAG	
		TAIL SENSOR (TF3)	0.2 A 62221.4 678663.1 5153901.9	0.3 ference Anomaly B 62206.8 678328.3 5154807.6	0.3 C 62200.7 678184.9 5155172.2	AVG LAG	
\$160	160°	LAG (secs) * TAIL SENSOR (TF3) FIDUCIAL X Y SPEED (S1)	0.2 Re 62221.4 678663.1 5153901.9 68.0	0.3	C 62200.7 678184.9 5155172.2 64.1	AVG LAG	
\$160	160°	LAG (secs) * TAIL SENSOR (TF3) FIDUCIAL X Y SPEED (S1) FIDUCIAL	0.2 Re 62221.4 678663.1 5153901.9 68.0 62362.4	0.3	0.3 C 62200.7 678184.9 5155172.2 64.1 62387.8	AVG LAG	
\$160	160°	LAG (secs) * TAIL SENSOR (TF3) FIDUCIAL X Y SPEED (S1) FIDUCIAL X Y SPEED (S1) FIDUCIAL X	0.2 Re 62221.4 678663.1 5153901.9 68.0 62362.4 678638.6	0.3 ference Anomaly 8 62206.8 678328.3 5154807.6 64.6 62380.4 678316.4	C 62200.7 678184.9 5155172.2 64.1 62387.8 678172.1	AVG LAG	
\$160	160°	LAG (secs) * TAIL SENSOR (TF3) FIDUCIAL X Y SPEED (S1) FIDUCIAL X Y SPEED (S2) SPEED (S2) SPEED (S2)	0.2 Re 62221.4 678663.1 5153901.9 68.0 62362.4 678638.6 5153948.6 5153948.6 555.8	0.3 ference Anomaly B 62206.8 678328.3 5154807.6 64.6 62380.4 678316.4 5154865.7 53.2	C 62200.7 678184.9 5155172.2 64.1 62387.8 678172.1 5155232.9 53.5	AVG LAG	
\$160	160°	LAG (secs) * TAIL SENSOR (TF3) FIDUCIAL X Y SPEED (S1) FIDUCIAL X Y Y	0.2 A 62221.4 678663.1 5153901.9 68.0 62362.4 678638.6 5153948.6	0.3 (ference Anomaly 8 62206.8 678328.3 5154807.6 64.6 62380.4 678316.4 5154865.7	C 62200.7 678184.9 5155172.2 64.1 62387.8 678172.1 5155232.9	AVG LAG	

5.3. RADAR CALIBRATION

	C-GGLS: RADAR CALIBRATION DATA SUMMARY Calibration performed: Thunder Bay, ON (01 May 2019, GLS1771)						
	Can	bration perform	led: Thunder Bay, ON (01)	May 2019, GL317	71)		
					INTERCEPT	-25.1690	
					SLOPE	96.413882	
LINE	RAW RADAR	GPS ALT	CORRECTED GPS ALT	RAW RADAR	CALIBRATE	D RADAR	ERROR *
Ground Ref		197.0	0.0				
S10100	0.3763	212.1	15.1	0.3763	11.	.1	-4.0
S10200	0.6871	241.1	44.1	0.6871	41	.1	-3.0
S10300	1.1625	279.5	82.5	1.1625	86.	.9	4.4
S10400	1.5200	307.5	110.5	1.5200	121	.4	10.9
S10500	2.0589	374.8	177.8	2.0589	173	3.3	-4.5
S10600	2.3311	400.4	203.4	2.3311	199	9.6	-3.8

* Error estimated as (Calibrated Radar) - (Corrected GPS Alt)

Imp	Imperial Units						
LINE	GPS_ALT (ft)	CAL_RAD (ft)					
S10100	49.5	36.5					
S10200	144.7	134.8					
S10300	270.7	285.1					
S10400	362.5	398.2					
S10500	583.3	568.7					
S10600	667.3	654.8					



6. LOGISTICS

6.1. PERSONNEL

The contractor supplied the following properly qualified and experienced personnel to carry out the survey and to reduce, compile and report on the data:

Survey:	Pilots	Nathanael Walton Alexis Desbois Xavier Pichot Mez
	Operator	David Salvatori
	Electronics Technologist	James Bursey
	Office QC Processor	Allen Duffy
Office:	Final Processing	Allen Duffy
		John Charlton
		Brian Sargent
	Manager	Charles Barrie

6.2. FLIGHT REPORTING

The aircraft and crew arrived in Thunder Bay airport (CYQT) April 24, 2019, unloaded the airplane, and the crew loaded the survey navigation files. The following day they set up the base station and performed the first FOM to discover some new magnetic noise had entered the system. This was resolved after 15 days of intensive investigation, after which an exceptionally clean FOM was achieved on May 11th.

The survey was flown in 33 flights (1777-1809) from May 13th to June 11th and, in total, consisted of 1 day calibration, 2 scheduled aircraft maintenance days, 17 unscheduled maintenance days, 1.5 mob/demob days, 0.5 set-up days, 16.5 survey production days, 1 day testing, 7.5 standby weather days and 1 day for training. On the 11th day of June the survey was completed and the demob was approved by the client and accomplished.

Significant deviations were made to the aircraft terrain clearance on this survey primarily due to powerful near-surface turbulence created by the topographic effect on consistently strong winds plus complaints from local inhabitants and presence of towers, all affecting the safety criteria of the survey (see Section 2.6.2).

The team made every effort to maintain efficiency while collecting VLF-EM data by flying control lines when VLF transmitters were scheduled to be offline to maximize coverage. Also the survey was flown in an "every-other" line mode and the fill-in lines were planned as much as possible for different days such that VLF-off days would not be on adjacent lines (see section 7.5.1).

During the survey, the pilot maintained daily personal, aircraft and preflight safety reports. The base station and airborne data were monitored throughout the survey and recorded by precise notes of each flight. At the end of each flight day the flight report and data were uploaded to the project geophysicist who performed quality control on the raw and compensated survey data. Additionally, the geophysicist transcribed the operator notes and entered quality control notes into a spreadsheet in excel. From this spreadsheet periodic and summary reports were automatically generated. Detailed Flight and Line Lists in Appendix 9.3 show statistics for all flights each day.

A Summary of flight and production statistics appears below.

All survey personnel crew adopted and worked under the Terraquest Ltd. Health, Safety and Environmental Protection Manual (which include Site Specific Safety Plan and Emergency Response Plan) along with guidelines from the IAGSA safety and security standards.

6.3. BASE OF OPERATIONS

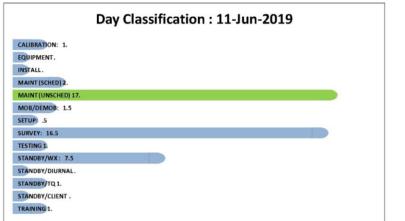
Terraquest's base of operations was at Thunder Bay Airport (CYQT). The base station (combined high sensitivity magnetic and GPS) was set up at a secure location at the airport.

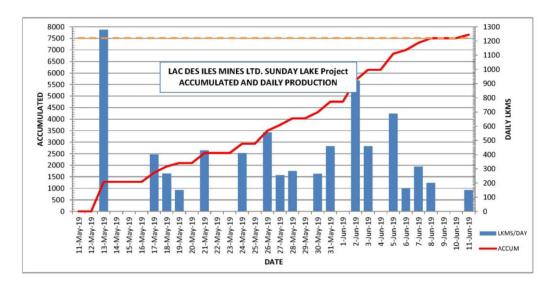
The crew's accommodations were the responsibility and cost of Terraquest. The crew stayed at the Airline Hotel, 698 Arthur Street West, Thunder Bay.

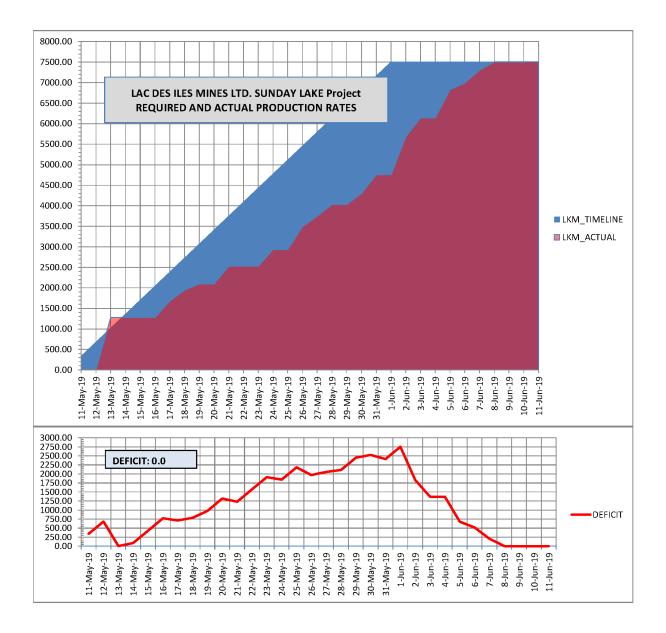
SUMMARY OF FLIGHT AND PRODUCTION

		1	TER	RAQ	UES	T		
PRO.	JECT REF	B486 /LA	C DES ILE	S MINES L	TD. /SUN	DAY LAK	E: SPRING	2019
CURRENT STATUS:	11.4	un-19	C-GGLS	i i				
CORRENT STATUS.	TOTAL	INSTALL/ SET-UP	HIATUS	OPS DAYS	LKM/DAY	COMPL (%)	TOTAL FLT TIME	TOTAL PRD TIME
	49	17		32	234.7	100.00%	93:16:00	35:59:16
OVERALL PRODUCTIO	N SUMMAR	1	1					
OVERALL PRODUCTIO	N SUMMAR	1	ary Date	11-Jun-19				
OVERALL PRODUCTIO	N SUMMAR	Summa	AN	11-Jun-19 FLO	WN			
OVERALL PRODUCTIO	N SUMMAR	Summa				REMAIN	COMPL (%)	REFLT
OVERALL PRODUCTIO	N SUMMAR	Summa	AN LKMS	FLO	WN LKMS	REMAIN	COMPL (%) 100.00%	
OVERALL PRODUCTIO		Summa PL NLIN	AN LKMS	FLO NLIN	WN LKMS	REMAIN		
OVERALL PRODUCTIO		Summa PL NLIN	AN LKMS	FLO NLIN	WN LKMS	REMAIN		
OVERALL PRODUCTIO	TOTAL	Summa PL NLIN 430	AN LKMS 7509.5	FLOV NLIN 430	WN LKMS 7509.5	REMAIN	100.00%	

GGLS	_
DAY CLASS SUMMARY	
CALIBRATION	1.0
EQUIPMENT	
INSTALL	
MAINT (SCHED)	2.0
MAINT (UNSCHED)	17.0
MOB/DEMOB	1.5
SETUP	0.5
SURVEY	16.5
TESTING	1.0
STANDBY/WX	7.5
STANDBY/DIURNAL	
STANDBY/TQ	1.0
STANDBY/CLIENT	
TRAINING	1.0
TOTAL	49.0







7. DATA PROCESSING

7.1. DATA QUALITY CONTROL / PRELIMINARY PLOTS

The field data were examined in the evening after each flight by a geophysicist to inspect the data for quality control and tolerances. All data were approved and checked for continuity and integrity. Magnetic data were corrected for diurnal to produce preliminary plots.

7.2. DIGITAL TERRAIN MODEL

The radar altimeter data were subtracted from the GPS altitude to produce a Digital Terrain Model. The resulting data were microlevelled to remove line-to-line imperfections in the data. The final grids were created using bi-directional Akima spline interpolation at a cell size of 25 metres.

7.3. FINAL MAGNETIC DATA PROCESSING

1. Lag Correction of Total Magnetic Field

The evaluation of the magnetic lag factor was accomplished by acquiring survey data flown in opposite directions over a series of distinct magnetic anomalies. The measured factors were 0.5 seconds for the tail Mag and 0.3 seconds for the wing tips.

2. Diurnal Data and Diurnal Corrections of the Total Magnetic Field

Magnetic data from the Diurnal Base Station were scrutinized for spurious readings (data spikes) and any obvious cultural interference. Any such features were manually removed and the data reinterpolated (Akima spline) to maintain a continuous record. A low-pass filter (60 fid cut-off wavelength) was applied to the edited diurnal record. The resulting data was used to pre-level (diurnally correct) the measured TMI data for the Tie lines prior to implementing Tie-Traverse intersection leveling. Traverse line data were not pre-leveled with Diurnal Base Station to avoid the risk of contaminating the airborne data with any remaining imperfections in the base station record.

3. Total Magnetic Field Tie-Traverse Line Intersection Levelling

As noted in previous sections, environmental conditions combined with absolute navigational obstacles (communication towers, etc) necessitated the aircraft's departure from a controlled drape surface. These conditions resulted in some altitude miss-ties at Tie-Traverse line intersections (i.e. large differences in terrain clearance at intersection points) and, in some cases, reduced line-to-line data continuity (due to varying terrain clearance). Since these would negatively impact the intersection and subsequent leveling procedures, magnetic variability due to terrain clearance was reduced by pre-treating data with a correction based on local vertical magnetic gradient multiplied by terrain clearance deviation. This correction, though relatively mild, enhanced the subsequent leveling procedures.

The lag corrected, pre-treated (altitude correction) data were refined using tie-line levelling. Using the Geosoft Oasis implementation of this procedure, an initial table of tie-traverse line intersection differences is compiled (together with supporting ancillary parameters such as local gradient, etc.) and intersection data is loaded into the processing databases. In a series of iterative levelling passes, outlier intersection values are either disabled or modified to refine and finalize the overall result.

4. The Magnetic Field Micro-Levelling

Minor levelling imperfections may still exist in the gradient enhanced intersection levelled data, most likely due to incomplete removal of diurnal influences in sections of lines between intersection points. These errors are removed by application of mild micro-levelling procedure whereby highly directional filtering identifies and removes residual noise correlated with the line direction.

5. Calculated Vertical Derivative

The first Vertical Derivative was calculated using a 2D FFT operator on the Total Field data grid. Unwanted, high frequency "ringing" in the resulting 1VD grid was minimized by concurrent application of an 8th order Butterworth low pass filter with a cut-off keyed to the line spacing.

6. Analytic Signal

The Analytic Signal, which is derived from the three orthogonal magnetic gradients, has the advantage of producing body centric anomalies - regardless of magnetic inclination - with source edges mapped out by the function's maxima. Additionally, approximate source depth may be estimated by measuring individual anomaly widths at half amplitude.

7. Horizontal Gradients

Terraquest solves the spatial mathematical relationship of the three total field measurements (left, right and tail) by using the accurate location of the three magnetic sensors in space to directly calculate the East-West and North-South gradients, referenced to geographic north, at each point along the survey line.

Both gradients were then median-leveled to remove bias; followed by mild micro-leveling to remove any remaining imperfections. Following this, the transverse and longitudinal gradients were gridded using a bi-directional Akima algorithm and a cell size of 25 metres. The measured transverse and longitudinal gradients provide an improved rendition of the shorter wavelengths in magnetic field than the residual magnetic field measured by the tail sensor alone. This is because the direction and amplitude of the field's total horizontal gradient can be determined using the 2 measured gradients, providing information regarding the behaviour of the magnetic field in-between traverse lines. Thus, it is useful to incorporate the gradient data in the preparation of the residual magnetic field grid

8. Reconstructed Total Field (RTF)

Data grids of the measured horizontal gradients were used to generate the Reconstructed Total Magnetic Field using the 2D FFT process described by J. B. Nelson (Nelson, 1994)*. This product (RTF) has the advantage of being un-affected by magnetic diurnal activity, though longer magnetic spatial wavelengths are not represented due to measurement resolution limitations in the magnetometers. The resulting data units (expressed as pseudo nanoTesla) are not true nT; approximate conversion to true nT may be accomplished by application of scaling factor if required. Using the calculated Reconstructed Total Field data grid, a "RTF" Geosoft database channel is created by performing a grid look-up ("grid sample") for each data point in the production database.

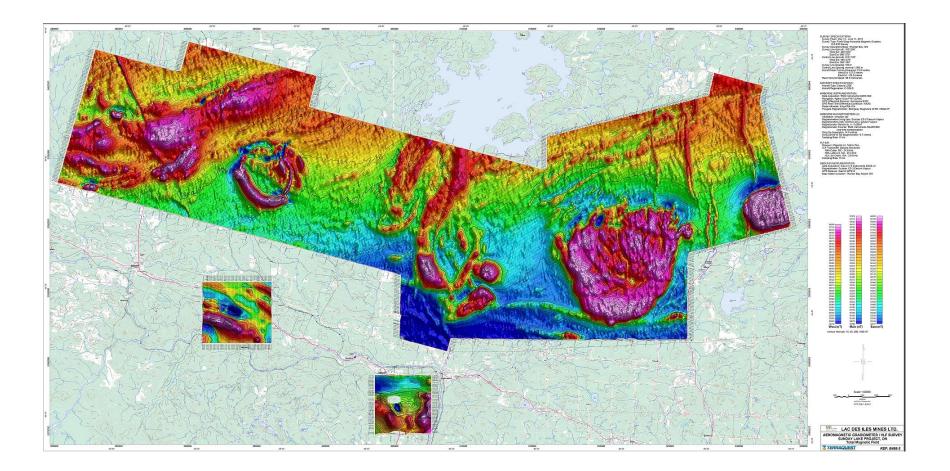
* Reference: Nelson, J.B., 1994, Leveling total-field aeromagnetic data with measured horizontal gradients: Geophysics, 59, 1166-1170

9. Grids

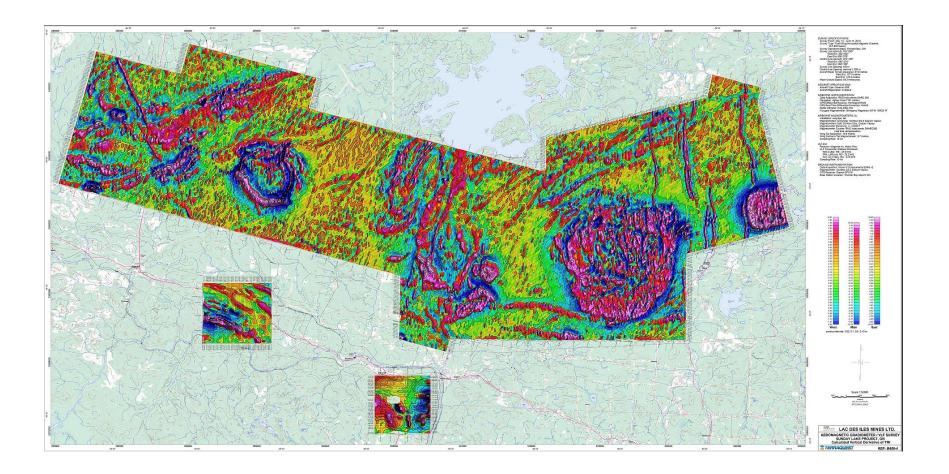
Magnetic data grids were created using bi-directional data interpolation at a cell size of 25 metres.

7.4. MAGNETIC DATA MAPS

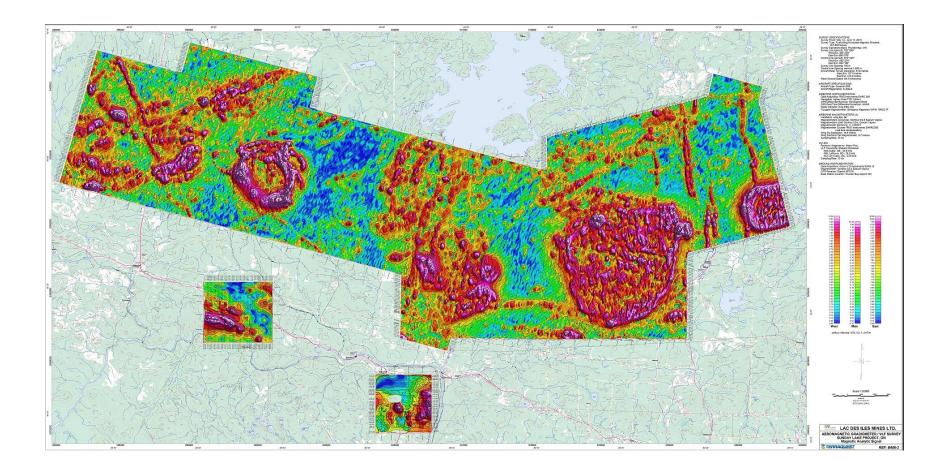
1. Total Magnetic Intensity



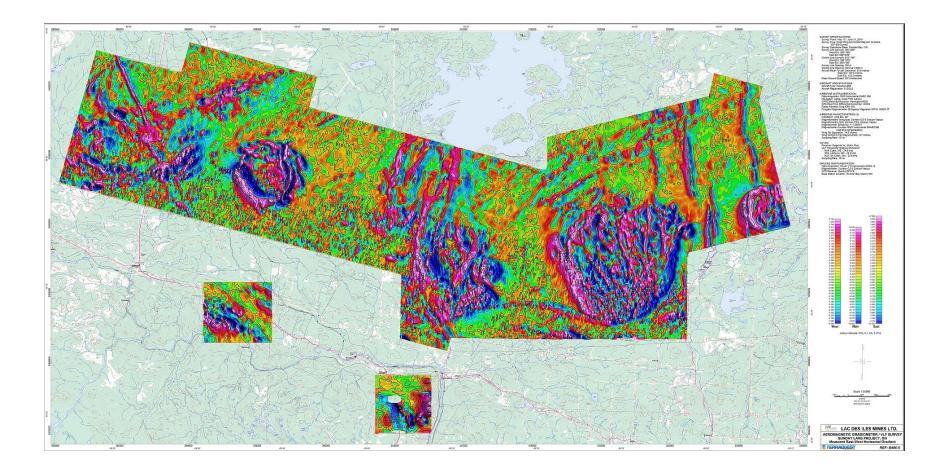
2. Calculated Vertical Derivative



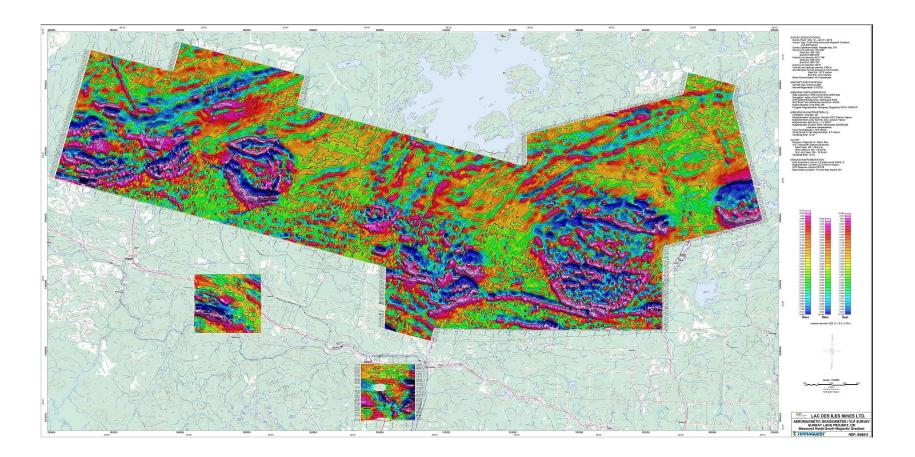
3. Analytic Signal



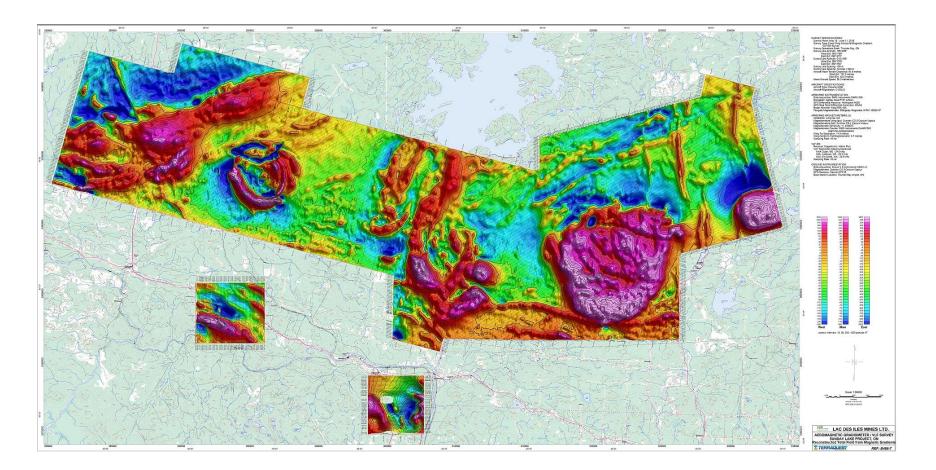
4. Measured Horizontal East-West Gradient



5. Measured Horizontal North-South Gradient



6. Reconstructed Total Field



7.5. FINAL ELECTROMAGNETC DATA PROCESSING

1. Matrix VLF-EM Monitoring

VLF-EM data were captured using a Magenta Inc. Matrix Digital VLF receiver. This instrument is capable of simultaneously monitoring up to four VLF frequencies, recording amplitude (secondary field), transmitter station azimuth (relative to aircraft orientation), vertical and planar ellipticities and field tilt angle. For this project, the following VLF transmitters were monitored:

- Station NAA: Cutler, Maine 24.0 kHz
- Station NML: La Moure, North Dakota 25.2 kHz
- Station NLK: Jim Creek, Washington 24.8 kHz

Transmitter power, distances and azimuths relative to the survey block are illustrated the Figure on the next page. Transmitter stations are nominally shut down for scheduled maintenance as follows: NAA Cutler, Maine on Mondays, NML LaMoure, North Dakota on parts of Wednesdays, and NLK Seattle, Washington progressively throughout Wednesday such that there is generally always some signal. Deviations to this schedule are not uncommon.

The survey was flown in a manner that ensures as much as possible that adjacent lines do not have the same VLF Transmitter-off day (see discussion in section 6.2), this ensures that there no significant gaps in the recorded VLF data since the long wavelength of the VLF signal readily crosses three or more survey lines.

The actual "times-off" of each transmitter signal for each survey line throughout the survey period is documented in the Line Listing in the Appendix 9.3.

2. Matrix VLF-EM Processing

Field Amplitude was processed and presented separately for each of the frequencies. Processing of the raw amplitude data consisted of the following:

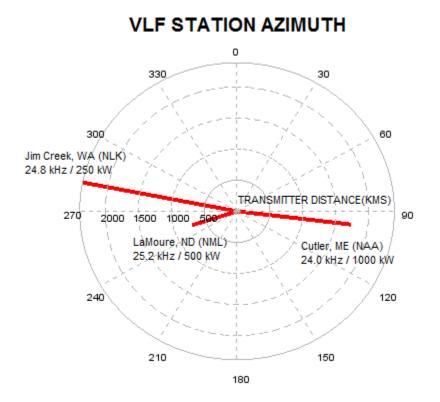
- Mask out any embedded "off-line" data
- Noise reduction filtering using non-linear Naudy filtering (5 pt filter width)
- Lag correction (correction factor = -0.25 sec)
- Initial levelling (mean subtraction)
- Fine levelling (micro-levelling)
- Application of bias offsets such that finalised data ranged positive

The finalised conductivity data for each channel were presented as a series of colour images of total field strength (amplitude). Conductor axes and other VLF anomalous features (topographic effects, conductive lake sediments, etc.) are mapped by "hot" colours (orange -> red -> magenta) as peak centric lineaments.

A High-Pass filter was applied to the final conductivity map in order the enhance the location of the conductor axes and presented as a separate channel in the database and final map.

The orientation and distances of the primary fields are located on the legend of each Matrix VLF-EM Total Field conductivity map. The final grids were created using Minimum Curvature data interpolations at a cell size of 25 m.

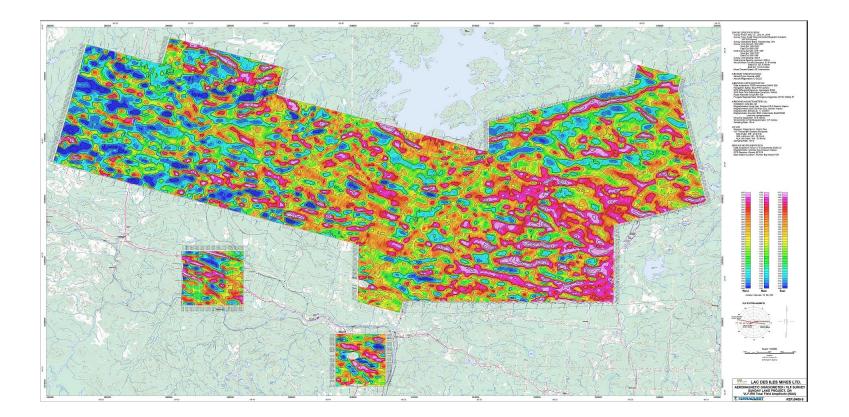
VLF STATION AZIMUTH - B486 Survey



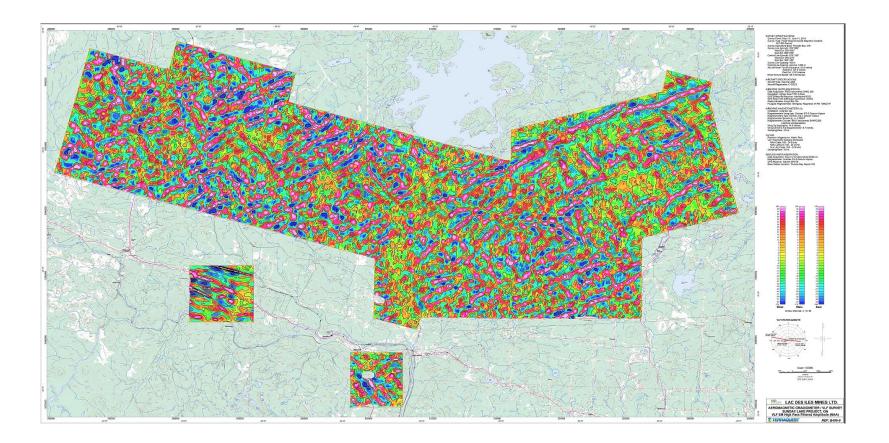
Comment: The Matrix VLF-EM conductivity data in this survey display excellent correlation with magnetic, litholgical and structural trends across the survey area, accordingly this EM data set would be a good candidate for inversion modeling to create resistivity products. Where the conductivity products are successful in mapping structure, resistivity products have the potential to map lithologies independently from magnetic properties.

7.6. VLF-EM DATA MAPS

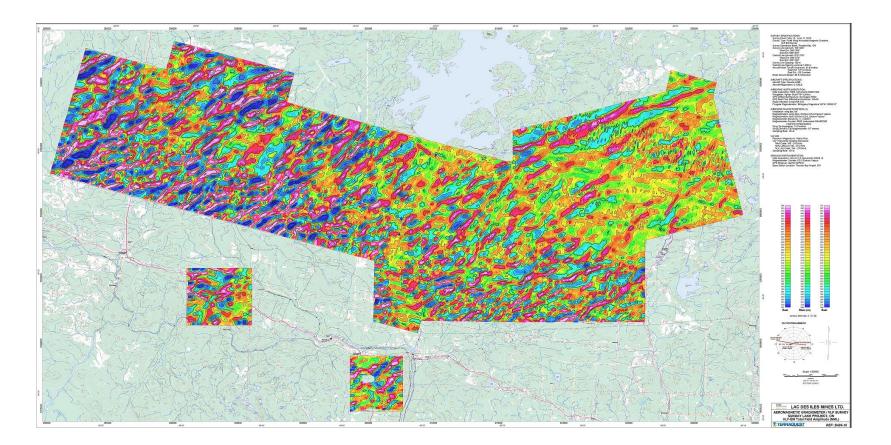
1. Amplitude of the Secondary Total Field Strength (NAA, Cutler, ME)



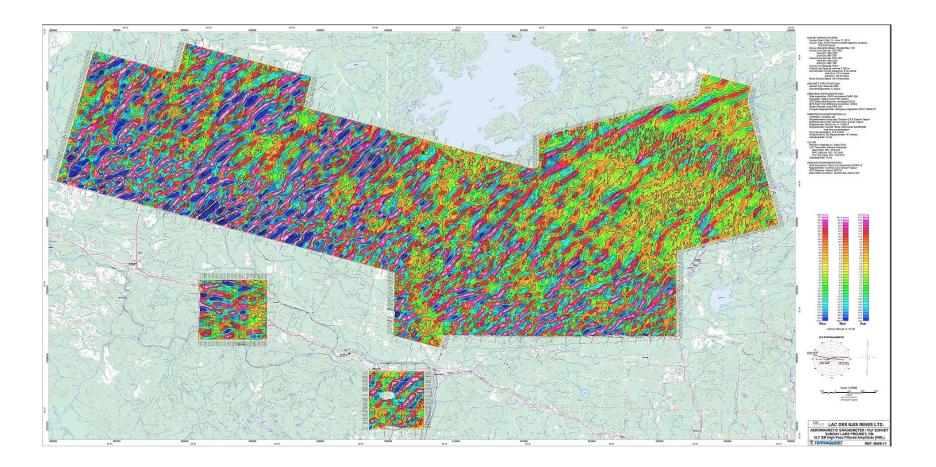
2. High-Pass Filter of the Secondary Total Field Strength (NAA, Cutler, ME)



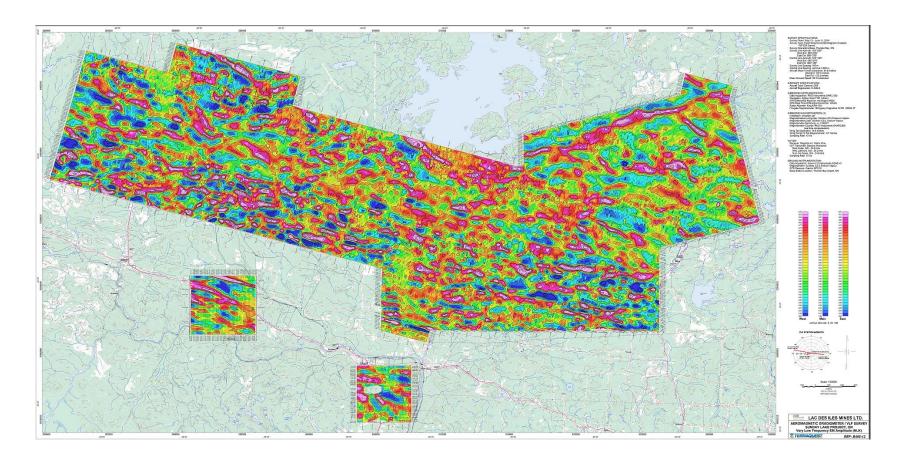
3. Amplitude of the Secondary Total Field Strength (NML, La Moure, ND)



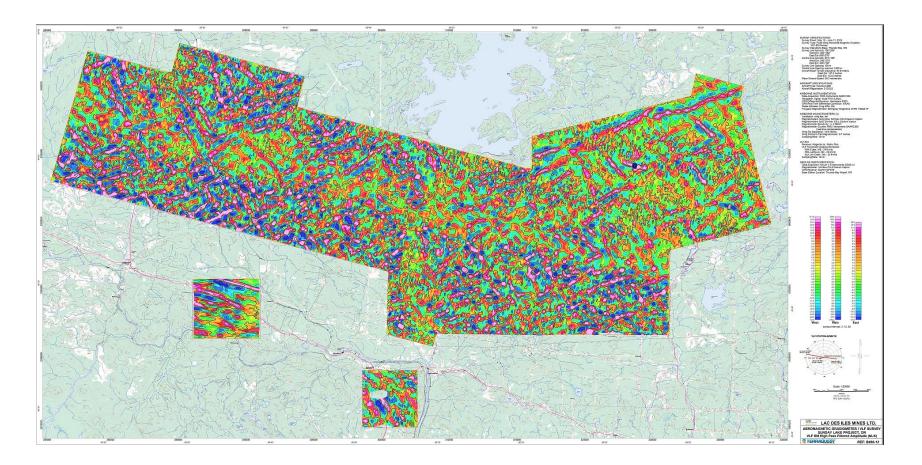
4. High-Pass Filter of the Secondary Total Field Strength (NML, La Moure, ND)



5. Amplitude of the Secondary Total Field Strength (NLK, Jim Creek, WA)



6. High Pass Filter of the Secondary Total Field Strength (NLK, Jim Creek, WA)



7.7. LIST OF FINAL PRODUCTS

A complete list of all final products is listed in the ReadMe file Appendix 9.4. All products including this Report are contained on an Archive DVD.

The following maps were produced in digital format in Low Resolution for the Operations Report, and High Resolution for the Database and Plotted Maps at 1:50,000 scale (2 copies):

- 1. Digital Terrain Model
- 2. Total Magnetic Intensity
- 3. Analytic Signal
- 4. Calculated Vertical Derivative of Total Magnetic Intensity
- 5. Measured Magnetic Horizontal Gradient East-West
- 6. Measured Magnetic horizontal Gradient North-South
- 7. Reconstructed Total Magnetic Field
- 8. Amplitude of the Secondary Total VLF-EM Field (NAA, Cutler, ME)
- 9. High Pass Filter of Total VLF-EM Field (NAA, Cutler, ME)
- 10. Amplitude of the Secondary Total VLF-EM Field (NML, La Moure, ND)
- 11. High Pass Filter of Total VLF-EM Field (NML, La Moure, ND)
- 12. Amplitude of the Secondary Total VLF-EM Field (NLK, Jim Creek, WA)
- 13. High Pass Filter of Total VLF-EM Field (NLK, Jim Creek, WA)
 - Digital grid archives in GEOSOFT
 - Two copies of all final maps plotted on glossy film
 - JPEG format of maps
 - Digital Profile Archives in GEOSOFT GDB format (compatible with 4.1 or higher)
 - Operations Report in PDF format
 - Readme.txt

8. SUMMARY

An airborne, high sensitivity, horizontal magnetic gradient and Matrix VLF-EM survey was performed over the Sunday Lake Project located approximately 28 km north of Thunder Bay, Ontario. The survey was comprised of a **Main Block** and two small **East** and **West Blocks** flown with a mean terrain clearances of respectively 91.8 metres, 123.3 metres and 137.5 metres. The traverse line interval was 100 metres and control line intervals were 1000 metres. The aircraft mean speed was 209.9 km/hr (58.3 m/sec) with a data sample rate of 10 Hz, the equivalent data points are approximately 5.8 metres along the flight lines. The base of operations was at Thunder Bay International Airport (CYQT); a high sensitivity magnetic and a GPS base station was setup at a quiet and secure area at the airport. Throughout the survey this base station recorded the diurnal magnetic activity and was synchronized to the airborne data using GPS time.

The data were subjected to final processing to produce a digital archive and two glossy colour copies of the following maps:

- a) **Digital Terrain Model** with Flight Path
- b) **Magnetics:** Total Magnetic Intensity of tail sensor, Analytic Signal, Calculated Vertical Derivative, Measured Horizontal Gradients (East-West and North-South), Reconstructed Total Magnetic Field
- c) **MATRIX VLF-EM**: Amplitude of the Secondary Total Field from i) NAA, Cutler, ME, ii) NML, La Moure, ND and iii) NLK, Jim Creek, WA, and High-Pass Filter Products from all three frequencies.

The data has been archived as Geosoft database (GDB), GRID, and .JPEG formats; this report is included in the archive report in PDF format.

High resolution horizontal gradient magnetic data have provided a detailed data set which can be used to improve the magnetic mapping. The Matrix VLF-EM conductivity products show good correlation with both magnetic and geologic trends and have been successful in identifying and mapping the structural fabric across the survey area. Based on the merit of this data, additional inversion processing of the EM data is recommended to obtain resistivity products in order to potentially map lithologies independently from their magnetic properties.

Respectfully Submitted,

Charles Barrie, M.Sc Vice President Terraquest Ltd.

9. APPENDICES

9.1. APPENDIX I - CERTIFICATE OF QUALIFICATION

I, Charles Q. Barrie, certify that I:

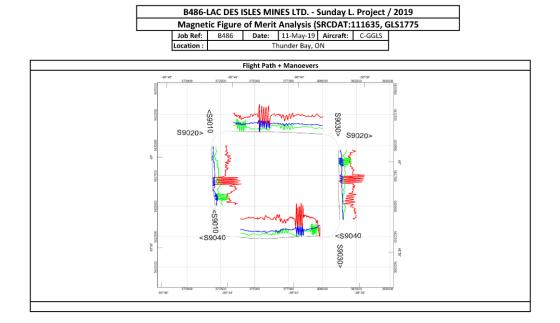
- am registered as a Fellow with the Geological Association of Canada, as P. Geo. with the Association of Professional Geoscientists of Ontario and work professionally as a geologist,
- 2) hold an Honours degree in Geology from McMaster University, Canada, obtained in 1977,
- 3) hold an M.Sc. in Geology from Dalhousie University, Canada, obtained in 1980,
- 4) am a member of the Prospectors and Developers Association of Canada,
- 5) am a member of the Canadian Institute of Mining, Metallurgy and Petroleum,
- 6) have worked as a geologist for thirty-nine years,
- 7) am employed by and am a co-owner of Terraquest Ltd., specializing in high sensitivity airborne geophysical surveys for thirty-four years, and
- 8) have prepared this operations and specifications report pertaining to airborne data collected by Terraquest Ltd.

Markham, Ontario, Canada

Signed

Charles Barrie, M.S. CHARLES Q. PRACTISING ME Vice President Terraquest Ltd.

9.2. APPENDIX II - MAGNETIC FIGURE OF MERIT (FOM)



					F	OM Inde	k : Sensor	1						
		Calculation note: Residual noise was isolated using a 101 pt Hanning high pass convolution filter with a subsequent low-pass filter (1.0 fid cutoff) applied to reduce non-related HF noise. Individual min-max values determined from the maximum consecutive peak-to-trough residual noise amplitude within each manoevre group												
LINE	DIR													
			MAX	MIN	MAX	MIN	MAX	MIN		P	ĸ	'	2	
9010	N	Ъ	0.0171	-0.0266	0.0495	-0.0196	0.0029	-0.0570		0.0437	0.0690	0.0599	0.17	
9020	E		0.0104	-0.0411	0.0363	-0.0349	0.0033	-0.0348		0.0515	0.0712	0.0380	0.16	
9030	S	Ъ	-0.0152	-0.0606	0.0363	-0.0135	0.0928	0.0314		0.0454	0.0498	0.0614	0.15	
9040	W		0.0290	-0.0468	0.0469	-0.0801	0.0479	-0.0125		0.0757	0.1270	0.0604	0.26	
									Σ	0.2163	0.3171	0.2197	0.75	
'								Full FC	OM Index :	0.7531				
						Eq.	Traverse FO	V Index (Σ	Trav x 2) :	0.6586				

	FOM Index : Sensor 2												
LINE	DIR	TRAV FLG	PIT	СН	RC)LL	YAY	w		р		v	
			MAX	MIN	MAX	MIN	MAX	MIN		F	R	T	2
9010	N	Ъ	0.0282	-0.0194	0.0494	-0.0206	0.0208	-0.0570		0.0475	0.0701	0.0778	0.1954
9020	E		0.0081	-0.0527	0.0661	-0.0370	0.0516	-0.0782		0.0608	0.1031	0.1298	0.2937
9030	S	Ъ	-0.0102	-0.0562	0.0652	0.0044	0.1039	0.0292		0.0461	0.0608	0.0747	0.1816
9040	W		0.0349	-0.0320	0.0409	-0.0647	0.0566	-0.0097		0.0669	0.1056	0.0663	0.2388
									Σ	0.2214	0.3396	0.3486	0.9096
				OM Index :	0.9096								
					Trav x 2) :	0.7541							

					F	OM Inde	x : Sensor	3					
LINE	DIR	TRAV FLG	PIT	СН	RC	DLL	YAN	N		р		v	
			MAX	MIN	MAX	MIN	MAX	MIN		Р	R	T	2
9010	N	Ъ	0.0213	-0.0237	0.0305	-0.0027	0.0119	-0.0409		0.0450	0.0333	0.0528	0.1310
9020	E		-0.0133	-0.0360	0.0236	-0.0085	0.0142	-0.0409		0.0226	0.0322	0.0551	0.1099
9030	S	Po	-0.0142	-0.0523	0.0405	0.0195	0.0782	0.0414		0.0381	0.0210	0.0368	0.0958
9040	W		0.0146	-0.0313	0.0009	-0.0433	0.0331	-0.0081		0.0459	0.0442	0.0413	0.1314
									Σ	0.1516	0.1306	0.1859	0.4681
-								Full FC	OM Index :	0.4681			
				Trav x 2) :	0.4536								

9.3. APPENDIX III - FIELD OPERATIONS SUMMARY

1. Survey Diary

AC	DATE	COUNT	CLASS (by	half day)	LKMS	ACCUM	COMMENT
C-GGLS	24-Apr-19	1	MOB/DEMOB	MOB/DEMOB			GLS1766,1767: ferry from Oshawa to Thunderbay
C-GGLS	25-Apr-19	2	SETUP	CALIBRATION			Noisy Base station location; out of spec FOM CAL
C-GGLS	26-Apr-19	3	MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	27-Apr-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	28-Apr-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	29-Apr-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	30-Apr-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	1-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	2-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	3-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	4-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	5-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix hoise sources on C-GGLS + fix misc other problems
C-GGLS	6-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix hoise sources on C-GGLS + fix misc other problems
C-GGLS	7-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix hoise sources on C-GGLS + fix misc other problems
C-GGLS	,		,				Diagnose/Fix hoise sources on C-GGLS + fix misc other problems
	8-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			
C-GGLS	9-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	10-May-19		MAINT (UNSCHED)	MAINT (UNSCHED)			Diagnose/Fix noise sources on C-GGLS + fix misc other problems
C-GGLS	11-May-19		MAINT (UNSCHED)	CALIBRATION			Successful FOM (solution matrix 2)
C-GGLS	12-May-19		TESTING	TESTING			VLF test flight (verify no interference)
C-GGLS	13-May-19		SURVEY	SURVEY	1278.99	1279.0	GLS1777, GLS1778; No diurnal data (Sensor failure)
C-GGLS	14-May-19		STANDBY/TQ	STANDBY/TQ			GLS1779(?)
C-GGLS	15-May-19		TRAINING	TRAINING			TRAINING: GLS1780, GLS1781, GLS1782
C-GGLS	16-May-19		SURVEY	SURVEY			Nate Walton departs for Toronto
C-GGLS	17-May-19		SURVEY	SURVEY	400.21		GLS1783, GLS1784
C-GGLS	18-May-19		SURVEY	SURVEY	267.06		GLS1785, GLS1786
C-GGLS	19-May-19		MAINT (SCHED)	MAINT (UNSCHED)	149.87	2096.1	
C-GGLS	20-May-19		MAINT (UNSCHED)	SURVEY			GL\$1787
C-GGLS	21-May-19		MAINT (UNSCHED)	SURVEY	430.55	2526.7	GLS1788
C-GGLS	22-May-19		STANDBY/WX	STANDBY/WX			
C-GGLS	23-May-19		STANDBY/WX	STANDBY/WX			
C-GGLS	24-May-19		SURVEY	SURVEY	409.97	2936.6	GLS1789
C-GGLS	25-May-19		STANDBY/WX	STANDBY/WX			
C-GGLS	26-May-19		SURVEY	SURVEY	557.26		GLS1790, GLS1791
C-GGLS	27-May-19		SURVEY	SURVEY	255.61	3749.5	
C-GGLS	28-May-19		SURVEY	SURVEY	285.24	4034.8	GLS1793; ferry to Sioux Lookout for maintenance
C-GGLS	29-May-19		MAINT (SCHED)	MAINT (SCHED)			
C-GGLS	30-May-19		MAINT (SCHED)	SURVEY	264.87		Return from Sioux Lookout; survey flight in afternoon GLS1796
C-GGLS	31-May-19	38	SURVEY	SURVEY	458.58	4758.2	GLS1797, GLS1798
C-GGLS	1-Jun-19	39	STANDBY/WX	STANDBY/WX			
C-GGLS	2-Jun-19	40	SURVEY	SURVEY	922.34	5680.6	GLS1799, GLS1800
C-GGLS	3-Jun-19	41	SURVEY	SURVEY	460.09	6140.6	GLS1801
C-GGLS	4-Jun-19	42	STANDBY/WX	STANDBY/WX			
C-GGLS	5-Jun-19		SURVEY	SURVEY	689.25	6829.9	GLS1802, GLS1803
C-GGLS	6-Jun-19	44	SURVEY	STANDBY/WX	161.49	6991.4	GLS1804
C-GGLS	7-Jun-19		SURVEY	SURVEY	313.69	7305.1	GLS1805, GLS1806
C-GGLS	8-Jun-19		SURVEY	SURVEY	200.45	7505.5	
C-GGLS	9-Jun-19		STANDBY/WX	STANDBY/WX			
C-GGLS	10-Jun-19		STANDBY/WX	STANDBY/WX			
C-GGLS	11-Jun-19		SURVEY	MOB/DEMOB	150.72	7656.2	GLS1809 (Antenna Reflights); Survey ends: demob
			1	1			

2. Survey Flight List

	REF:	B486	CLIENT:	LAC DES IL	ES MINES LT	FD. ()	PROJECT:	SUNDAY LA	AKE									
AC	BLOCK	ITEM	ТҮР	PLANNED	TOTAL	DATE	FLIGHT	LNUM	LKMS	ACCEPT	STATUS	REJECT LKMS	UTC-START	UTC-END	PROD TIME	MAT NAA	NML	NLK
C-GGLS	MAIN		LINE	3.61	3.61		1790	10	3.61	3.61			14:13:28	14:14:31	0:01:03			
C-GGLS C-GGLS	MAIN		LINE	3.60 3.60	3.60 3.60	28-May-19 26-May-19	1793 1790	20 30	3.60	3.60 3.60			13:33:59 14:16:50		0:01:02 0:01:03			
C-GGLS	MAIN		LINE	3.59	3.59	28-May-19	1793	40	3.59	3.59			13:37:32	13:38:30	0:00:58			
C-GGLS C-GGLS	MAIN		LINE	3.59 3.59	3.59 3.59	26-May-19 28-May-19	1790 1793	50 60	3.59	3.59 3.59			14:20:17 13:40:49	14:21:20 13:41:51	0:01:02 0:01:01			
C-GGLS	MAIN		LINE	3.58	3.58		1790	70	3.58	3.58			14:23:50		0:01:01			
C-GGLS	MAIN		LINE	3.58	3.58	28-May-19	1793	80	3.58	3.58			13:44:32	13:45:33	0:01:01			
C-GGLS C-GGLS	MAIN		LINE	3.57 3.57	3.57 3.57	26-May-19 28-May-19	1790 1793	90 100	3.57	3.57 3.57			14:27:30 13:48:40		0:01:02			
C-GGLS	MAIN		LINE	3.57	3.57	26-May-19	1790	110	3.57	3.57	FULL		14:31:08		0:01:00			
C-GGLS	MAIN		LINE	3.59	3.59		1793	120	3.59	3.59			13:52:13		0:01:00			
C-GGLS C-GGLS	MAIN		LINE	3.64 3.69	3.64 3.69	26-May-19 28-May-19	1790 1793	130 140	3.64	3.64			14:34:42 13:55:52	14:35:44 13:56:56	0:01:02			
C-GGLS	MAIN	150	LINE	3.74	3.74	26-May-19	1790	150	3.74	3.74	FULL		14:38:36	14:39:41	0:01:05			
C-GGLS C-GGLS	MAIN		LINE	3.79 3.84	3.79 3.84	28-May-19 26-May-19	1793 1790	160 170	3.79	3.79 3.84			13:59:33 14:42:28	14:00:36	0:01:03 0:01:04			
C-GGLS	MAIN		LINE	4.00	4.00		1790	170	4.00	4.00			14:03:27	14:43:31 14:04:37	0:01:10			
C-GGLS	MAIN	190	LINE	4.23	4.23	26-May-19	1790	190	4.23	4.23			14:46:32	14:47:45	0:01:12			
C-GGLS C-GGLS	MAIN		LINE	4.47	4.47	28-May-19 26-May-19	1793 1790	200 210	4.47	4.47			14:07:32 14:50:30	14:08:48 14:51:50	0:01:16			
C-GGLS	MAIN		LINE	4.70	4.70	28-May-19 28-May-19	1790	210	4.70	4.70			14:50:50	14:51:50	0:01:20			
C-GGLS	MAIN	230	LINE	5.16	5.16	26-May-19	1790	230	5.16	5.16	FULL		14:55:10	14:56:40	0:01:30			
C-GGLS	MAIN		LINE	5.40	5.40		1793	240	5.40	5.40			14:16:09		0:01:31			
C-GGLS C-GGLS	MAIN		LINE	5.63 5.87	5.63 5.87	26-May-19 28-May-19	1790 1793	250 260	5.63 5.87	5.63 5.87			14:59:23 14:20:58	15:00:57 14:22:41	0:01:34			
C-GGLS	MAIN	270	LINE	6.10	6.10	26-May-19	1790	270	6.10	6.10	FULL		15:03:55	15:05:42	0:01:47			
C-GGLS	MAIN		LINE	6.34 6.57	6.34 6.57		1793 1790	280 290	6.34 6.57	6.34 6.57			14:25:11 15:08:48	14:26:58 15:10:38	0:01:47 0:01:50			
C-GGLS C-GGLS	MAIN		LINE	6.81	6.81	26-May-19 28-May-19	1790	300	6.81	6.57			15:08:48		0:01:50			
C-GGLS	MAIN	310	LINE	7.04	7.04	26-May-19	1790	310	7.04	7.04	FULL		15:13:55	15:15:56	0:02:01			
C-GGLS	MAIN		LINE	7.28	7.28		1793	320	7.28	7.28			14:34:28		0:01:59			
C-GGLS C-GGLS	MAIN		LINE	7.51	7.51		1790 1793	330 340	7.51	7.51			15:19:10 14:38:57	15:21:17 14:41:11	0:02:07 0:02:14			
C-GGLS	MAIN	350	LINE	7.98	7.98	26-May-19	1790	350	7.98	7.98	FULL		15:24:08	15:26:20	0:02:12			
C-GGLS	MAIN		LINE	8.21	8.21	28-May-19	1793	360	8.21	8.21			14:44:07	14:46:20 15:31:37	0:02:13 0:02:17			
C-GGLS C-GGLS	MAIN		LINE	8.45 8.68	8.45 8.68	26-May-19 28-May-19	1790 1793	370 380	8.45	8.45 8.68			15:29:20 14:49:22	14:51:56	0:02:17			
C-GGLS	MAIN		LINE	8.92	8.92	26-May-19	1790	390	8.92	8.92	FULL		15:34:57	15:37:26	0:02:29			
C-GGLS	MAIN	400		9.15	9.15	28-May-19	1793	400	9.15	9.15			14:54:29	14:56:58	0:02:29			
C-GGLS C-GGLS	MAIN	410	LINE	9.39 9.62	9.39 9.62	26-May-19 28-May-19	1790 1793	410 420	9.39	9.39 9.62			15:40:26 14:59:32	15:43:04 15:02:23	0:02:39 0:02:51		OFFLINE	
C-GGLS	MAIN	430	LINE	9.85	9.85	26-May-19	1790	430	9.85	9.85	FULL		15:45:36	15:48:22	0:02:45			
C-GGLS	MAIN		LINE	10.09	10.09	28-May-19	1793	440	10.09	10.09			15:05:07	15:07:52	0:02:45		OFFLINE	
C-GGLS C-GGLS	MAIN	450	LINE	10.32	10.32 10.56	26-May-19 28-May-19	1790 1793	450 460	10.32	10.32 10.56			15:51:07 15:10:36	15:54:00 15:13:42	0:02:53 0:03:05		OFFLINE	
C-GGLS	MAIN	470	LINE	10.79	10.79	26-May-19	1790	470	10.79	10.79	FULL		15:56:50	15:59:50	0:03:00			
C-GGLS	MAIN		LINE	11.03	11.03	28-May-19	1793 1791	480 490	11.03 11.26	11.03			15:16:38		0:02:58		OFFLINE	
C-GGLS C-GGLS	MAIN		LINE	11.26 11.49	11.26 11.49	26-May-19 28-May-19	1791	490	11.26	11.26 11.49			22:04:14 15:22:02		0:03:18		OFFLINE	
C-GGLS	MAIN	510	LINE	11.73	11.73	26-May-19	1791	510	11.73	11.73	FULL		22:09:57	22:13:09	0:03:12			
C-GGLS C-GGLS	MAIN		LINE	11.96 12.20	11.96 12.20	28-May-19 26-May-19	1793 1791	520 530	11.96 12.20	11.96 12.20			15:28:19 22:15:45		0:03:12		OFFLINE	
C-GGLS	MAIN		LINE	12.20	12.20	28-May-19	1793	540	12.20	12.20			15:33:51		0:03:43		OFFLINE	
C-GGLS	MAIN		LINE	12.67	12.67		1791	550	12.67	12.67			22:21:42		0:03:29			
C-GGLS C-GGLS	MAIN		LINE	12.90 13.14	12.90 13.14		1793 1791	560 570	12.90 13.14	12.90 13.14			15:39:48 22:27:37	15:43:18 22:31:26	0:03:29 0:03:49		OFFLINE	
C-GGLS	MAIN		LINE	13.37	13.37	28-May-19	1793	580	13.37	13.37			15:45:53	15:49:50	0:03:56		OFFLINE	
C-GGLS	MAIN		LINE	13.61	13.61	26-May-19	1791	590	13.61	13.61			22:34:01	22:37:46	0:03:46			
C-GGLS C-GGLS	MAIN		LINE	13.84 14.07	13.84 14.07	28-May-19 26-May-19	1793 1791	600 610	13.84 14.07	13.84 14.07			15:52:31 22:40:16	15:56:13 22:44:21	0:03:43		OFFLINE	
C-GGLS	MAIN	620	LINE	14.31	14.31	28-May-19	1793	620	14.31	14.31	FULL		15:58:39	16:02:56	0:04:17		OFFLINE	
C-GGLS C-GGLS	MAIN	630	LINE	14.54 14.78	14.54 14.78	26-May-19 28-May-19	1791 1793	630 640	14.54 14.78	14.54 14.78			22:46:38 16:05:42	22:50:36 16:09:40	0:03:58		OFFLINE	
C-GGLS	MAIN		LINE	14.78	14.78		1793	640	14.78	14.78			22:52:53		0:03:58		OFFLINE	
C-GGLS	MAIN	660	LINE	15.25	15.25	28-May-19	1793	660	15.25	15.25	FULL		16:12:05	16:16:46	0:04:41		OFFLINE	
	MAIN		LINE	15.48 15.72		26-May-19 28-May-19	1791 1793	670 680	15.48 15.72	15.48 15.72				23:04:09 16:23:52	0:04:13 0:04:14		OFFLINE	
	MAIN		LINE	15.72		28-May-19 26-May-19	1/93	690	15.72	15.72			23:06:55	23:11:35	0:04:14		OFFLINE	
C-GGLS	MAIN	700	LINE	16.18	16.18	30-May-19	1796	700	16.18	16.18	FULL		22:51:57	22:56:24	0:04:26			
C-GGLS C-GGLS	MAIN		LINE	16.42 16.65	16.42	26-May-19 30-May-19	1791 1796	710 720	16.42 16.65	16.42 16.65				23:18:42 23:04:28	0:04:31 0:05:06			
C-GGLS	MAIN	730	LINE	16.65	16.89		1796	720	16.65	16.89	FULL			23:04:28	0:04:53			
C-GGLS	MAIN	740	LINE	17.12	17.12	30-May-19	1796	740	17.12	17.12	FULL		23:07:11	23:11:52	0:04:41			
C-GGLS C-GGLS	MAIN	750	LINE	17.36	17.36	26-May-19 7-Jun-19	1791 1806	750 751	11.72 17.36	17.36	REJECT FULL			23:32:10 23:17:11	0:03:13			
C-GGLS	MAIN	760	LINE	17.59	17.59	30-May-19	1796	760	17.50	17.59			23:14:17	23:19:44	0:05:27			
C-GGLS	MAIN		LINE	17.79	17.79	7-Jun-19	1806	770	17.79	17.79				23:10:22	0:05:34			
C-GGLS C-GGLS	MAIN		LINE	17.82 17.84		30-May-19 27-May-19	1796 1792	780 790	17.82 17.84	17.82 17.84			23:22:08 18:08:37	23:27:04 18:13:18	0:04:55 0:04:41			
C-GGLS	MAIN	800	LINE	17.87	17.87	30-May-19	1796	800	17.87	17.87	FULL		23:30:03	23:35:35	0:05:33			
C-GGLS	MAIN	810	LINE	17.90	17.90	27-May-19	1792	810	17.90	17.90	FULL		18:16:16	18:21:47	0:05:31			
	MAIN		LINE	17.93 17.96	17.93 17.96		1796 1792	820 830	17.93 17.96	17.93 17.96			23:37:53 18:24:53		0:04:53 0:04:38			
C-GGLS	MAIN	840	LINE	17.99	17.99	30-May-19	1796	840	17.99	17.99	FULL		23:45:32	23:51:09	0:05:37			
C-GGLS	MAIN	850	LINE	18.02	18.02	27-May-19	1792	850	18.02	18.02			18:33:04	18:38:36	0:05:32			
C-GGLS	MAIN		LINE	18.04	18.04		1796	860	18.04	18.04			23:53:03		0:04:52			
C-GGLS C-GGLS	MAIN		LINE	18.07 18.10	18.07 18.10		1792 1796	870 880	18.07 18.10	18.07 18.10			18:41:19 24:00:18		0:04:47			
C-GGLS	MAIN		LINE	18.10	18.10		1796	890	18.10	18.10			18:49:43		0:05:33			
C-GGLS	MAIN	900	LINE	18.16	18.16	30-May-19	1796	900	18.16	18.16	FULL		24:07:55	24:12:49	0:04:53			
C-GGLS	MAIN		LINE	18.19		27-May-19	1792	910	18.19					19:05:48	0:04:50			
C-GGLS	MAIN	920	LINE	18.22	18.22	30-May-19	1796	920	18.22	18.22	FULL	I	24:16:01	24:21:37	0:05:36			L

	REF:	B486	CLIENT:	LAC DES IL	ES MINES LI	(D. ()	PROJECT:	SUNDAY LA	KE									
																	TRIX VLF ST	
AC	BLOCK	ITEM	ТҮР	PLANNED	TOTAL	DATE	FLIGHT	LNUM	LKMS	ACCEPT	STATUS	REJECT LKMS	UTC-START	UTC-END	PROD TIME	NAA	NML	NLK
C-GGLS	MAIN	930	LINE	18.24	18.24	27-May-19	1792	930	18.24	18.24	FULL	arcorie.	19:09:13	19:14:48	0:05:35			
C-GGLS	MAIN	940		18.14	18.14		1796	940	18.14	18.14			24:23:34		0:04:52			
C-GGLS	MAIN		LINE	17.94 17.73	17.94 17.73		1792 1796	950	17.94 17.73	17.94 17.73			19:17:29 24:31:09	19:22:15	0:04:46			
C-GGLS C-GGLS	MAIN		LINE	17.52	17.75		1796	960 970	17.73	17.52			19:25:44	24:36:36 19:31:07	0:05:27 0:05:24			
C-GGLS	MAIN	980		17.32	17.32		1796	980	17.32	17.32			24:38:30	24:43:08	0:04:37			
C-GGLS	MAIN		LINE	17.11	17.11		1792	990	17.11	17.11			19:33:31	19:38:02	0:04:31			
C-GGLS	MAIN	1000		16.91	16.91		1797	1000	16.91	16.91			19:23:32	19:28:19	0:04:48			
C-GGLS C-GGLS	MAIN	1010		50.66 50.49	50.66 50.49		1792 1797	1450 1020	50.66 50.49	50.66 50.49			19:51:37 19:40:26	20:06:45 19:54:56	0:15:08 0:14:30			<u> </u>
C-GGLS	MAIN	1020		50.31	50.31		1787	1020	50.31	50.31			14:52:11	15:05:37	0:13:27	OFFLINE		
C-GGLS	MAIN	1040	LINE	50.13	50.13		1798	1040	50.13	50.13			22:49:30	23:03:54	0:14:24			
C-GGLS	MAIN	1050		49.96	49.96		1787	1050	49.96	49.96			15:10:31	15:25:24	0:14:53	OFFLINE		
C-GGLS C-GGLS	MAIN	1060	LINE	49.78 49.60	49.78 49.60	31-May-19 19-May-19	1798 1787	1060 1070	49.78 49.60	49.78 49.60			23:06:15 15:31:13	23:20:36 15:44:36	0:14:20 0:13:23	OFFLINE		<u> </u>
C-GGLS	MAIN	1080	LINE	49.43	49.43		1798	1080	49.43				23:22:52	23:36:44	0:13:52			
C-GGLS	MAIN	1090	LINE	49.25	49.25		1788	1090	49.25	49.25			21:14:07	21:30:10	0:16:03			
C-GGLS	MAIN	1100		49.07	49.07	31-May-19	1798	1100	49.07	49.07			23:39:02	23:53:26	0:14:24		0.5511115	
C-GGLS C-GGLS	MAIN	1110 1120	LINE	48.90 48.72	48.90 48.72		1788 1798	1110 1120	48.90	48.90 48.72			21:32:26 23:55:19	21:45:20 24:08:47	0:12:54 0:13:27		OFFLINE	<u> </u>
C-GGLS	MAIN	1130	LINE	48.55	48.55		1788	1130	48.55	48.55			21:48:13		0:15:27		OFFLINE	
C-GGLS	MAIN	1140		48.37	48.37	31-May-19	1798	1140	48.37	48.37			24:11:09	24:25:28	0:14:19			
C-GGLS	MAIN	1150		48.19	48.19		1788	1150	48.19	48.19			22:05:49	22:18:32	0:12:43		OFFLINE	
C-GGLS C-GGLS	MAIN	1160 1170		48.02 47.84	48.02 47.84		1798 1788	1160 1170	48.02	48.02 47.84			24:27:47 22:21:08	24:40:49 22:36:11	0:13:01 0:15:03		OFFLINE	<u> </u>
C-GGLS	MAIN	1170		47.66	47.66		1788	1170	47.66	47.66			24:43:08	22:56:11	0:13:03		OTPLINE	
C-GGLS	MAIN	1190	LINE	47.49	47.49	21-May-19	1788	1190	47.49	47.49	FULL		22:38:23	22:50:46	0:12:23			
C-GGLS	MAIN	1200		47.31	47.31	3-Jun-19	1801	1200	47.31	47.31			13:05:32	13:18:56	0:13:24	OFFLINE		<u> </u>
C-GGLS C-GGLS	MAIN	1210 1220		47.13 46.96	47.13 46.96	21-May-19 3-Jun-19	1788 1801	1210 1220	47.13 46.96	47.13 46.96			22:53:33 13:20:58	23:08:19 13:34:09	0:14:47 0:13:11	OFFLINE		<u> </u>
C-GGLS	MAIN	1220		46.96	46.96		1801	1220	46.96				23:10:37	23:22:41	0:13:11	OFFLINE		<u> </u>
C-GGLS	MAIN	1240	LINE	46.60	46.60	3-Jun-19	1801	1240	46.60	46.60	FULL		13:36:20	13:49:41	0:13:21	OFFLINE		
C-GGLS	MAIN	1250		46.43	46.43	21-May-19	1788	1250	46.43	46.43			23:24:59	23:39:33	0:14:34			
C-GGLS C-GGLS	MAIN	1260 1270	LINE	46.25 46.08	46.25 46.08	3-Jun-19 24-May-19	1801 1789	1260 1270	46.25	46.25 46.08			13:51:53 15:34:29	14:04:39 15:49:17	0:12:46 0:14:47	OFFLINE		
C-GGLS	MAIN	1270	LINE	46.08	46.08	24-iviay-19 3-Jun-19	1789	1270	46.08				15:54:29	14:20:50	0:14:47	OFFLINE		
C-GGLS	MAIN	1290		45.72	45.72	24-May-19	1789	1290	45.72	45.72			15:51:20	16:03:03	0:11:44			
C-GGLS	MAIN	1300		45.55	45.55	3-Jun-19	1801	1300	45.55	45.55			14:23:07	14:35:42	0:12:35	OFFLINE		
C-GGLS	MAIN	1310		45.37	45.37	24-May-19	1789	1310	45.37	45.37			16:05:20	16:19:49	0:14:29	OFFLINE		
C-GGLS C-GGLS	MAIN	1320 1330	LINE	45.30 45.32	45.30 45.32	3-Jun-19 24-May-19	1801 1789	1320 1330	45.30 45.32	45.30 45.32			14:38:12 16:21:47	14:51:09 16:33:19	0:12:57 0:11:32	OFFLINE		
C-GGLS	MAIN	1330		45.35	45.35	3-Jun-19	1801	1340	45.35	45.35			14:53:21	15:05:44	0:12:23	OFFLINE		
C-GGLS	MAIN	1350		45.38	45.38	24-May-19	1789	1350	45.38	45.38			16:35:56	16:50:32	0:14:37			
C-GGLS	MAIN	1360		45.41	45.41	3-Jun-19	1801	1360	45.41	45.41			15:08:34	15:21:41	0:13:07	OFFLINE		
C-GGLS C-GGLS	MAIN	1370 1380		45.44	45.44 45.47	24-May-19 3-Jun-19	1789 1801	1370 1380	45.44	45.44 45.47			16:52:28 15:23:46	17:03:56 15:36:03	0:11:28 0:12:17	OFFLINE		
C-GGLS	MAIN	1380		45.47	45.47	24-May-19	1789	1380	45.47	45.47			15:25:46	17:20:54	0:12:17	OFFLINE		
C-GGLS	MAIN	1400		45.52	45.52	7-Jun-19	1806	1400	45.52	45.52			22:39:55	22:52:02	0:12:07			
C-GGLS	MAIN	1410		45.55	45.55	24-May-19	1789	1410	45.55	45.55			17:23:38	17:35:10	0:11:32			
C-GGLS	MAIN	1420 1430		45.58 45.61	45.58 45.61	2-Jun-19	1799 1789	1420 1430	45.58 45.61	45.58 45.61			13:20:31 17:37:47	13:34:12 17:52:18	0:13:42 0:14:31			
C-GGLS C-GGLS	MAIN	1450		45.61	45.61	24-May-19 2-Jun-19	1789	1450	45.61	45.61			17:37:47	17:52:18	0:14:51			
C-GGLS	MAIN	1450		45.66	45.66		1790	1450	45.66	45.66			12:51:12	13:04:09	0:12:56			
C-GGLS	MAIN	1460	LINE	45.69	45.69	2-Jun-19	1799	1460	45.69	45.69			13:50:36	14:04:33	0:13:57			
C-GGLS C-GGLS	MAIN	1470 1480	LINE	45.72	45.72	26-May-19	1790 1799	1470 1480	45.72	45.72 45.75			13:06:34 14:06:56	13:19:32 14:18:48	0:12:58 0:11:52			
C-GGLS	MAIN	1460	LINE	45.75	45.75	2-Jun-19 11-Jun-19	1799	1480	45.75		REFLIGHT		12:55:05	14:18:48	0:11:52			
C-GGLS	MAIN	1490	LINE	45.78	45.78	26-May-19	1790	1490	45.78	45.78			13:21:49		0:12:56			
C-GGLS	MAIN					11-Jun-19	1809	1491	11.65		REFLIGHT		13:01:24					
C-GGLS	MAIN	1500	LINE	45.81	45.81	2-Jun-19	1799 1809	1500 1501	45.81	45.81			14:21:26	14:35:25 13:11:11	0:13:59			
C-GGLS C-GGLS	MAIN	1510	LINE	45.83	45.83	11-Jun-19 26-May-19	1809	1501	11.65 45.83	45.83	REFLIGHT FULL		13:07:58 13:37:32	13:11:11 13:50:45	0:13:13			
C-GGLS	MAIN					11-Jun-19	1809	1510	11.65		REFLIGHT		13:15:50	13:19:24	0.15.15			
C-GGLS	MAIN	1520	LINE	45.86	45.86	2-Jun-19	1799	1520	45.86	45.86			14:37:29	14:49:19	0:11:50			
C-GGLS C-GGLS	MAIN	1530	LINE	45.89	45.00	11-Jun-19	1809 1790	1521 1530	11.66 45.89		REFLIGHT		13:22:09 13:53:04	13:25:15 14:05:53	0:12:49			
C-GGLS	MAIN	1530	LINE	45.69	45.89	26-May-19 11-Jun-19	1790	1530	45.89		REFLIGHT			13:33:54				<u> </u>
C-GGLS	MAIN	1540	LINE	45.92	45.92	2-Jun-19	1799	1540	45.92	45.92			14:51:39	15:05:40				
C-GGLS	MAIN					11-Jun-19	1809	1541	11.65		REFLIGHT			13:39:42				
C-GGLS C-GGLS	MAIN	1550 1560		45.95 45.97	45.95 45.97	13-May-19 2-Jun-19	1778 1799	1550 1560	45.95	45.95 45.97				21:39:03 15:19:46	0:15:44 0:11:47	OFFLINE		
C-GGLS	MAIN	100	LINE	45.9/	45.97	2-Jun-19 11-Jun-19	1799	1560	45.97		REFLIGHT		13:44:00		0:11:47			<u> </u>
C-GGLS	MAIN	1570		46.00	46.00		1778	1570	46.00	46.00	FULL		21:08:19	21:21:57	0:13:37	OFFLINE		CORRUP
C-GGLS	MAIN	1580		46.03	46.03	2-Jun-19	1800	1580	46.03	46.03			22:16:05		0:13:53			
C-GGLS C-GGLS	MAIN	1590 1600		46.06	46.06 46.09	13-May-19 2-Jun-19	1778 1800	1590 1600	46.06	46.06 46.09			20:53:52 22:32:19		0:13:12 0:12:31	OFFLINE	CORRUPT	
C-GGLS	MAIN	1600		46.09	46.09		1800	1610	46.09	46.09			20:38:53		0:12:31 0:13:39	OFFLINE	CORRUPT	CORRUP
C-GGLS	MAIN	1620		46.15	46.15	2-Jun-19	1800	1620	46.15	46.15				23:01:37	0:13:42			
C-GGLS	MAIN	1630		46.17	46.17		1778	1630	46.17	46.17			20:24:16		0:13:17	OFFLINE		<u> </u>
C-GGLS	MAIN	1640 1650		46.20 46.23	46.20 46.23		1800 1778	1640 1650	46.20					23:16:35 20:21:36	0:12:33	OFFLINE		+
C-GGLS	MAIN	1650		46.23	46.23	2-Jun-19	1778	1650	46.23	46.23				23:32:53	0:13:51	OFFLINE		<u> </u>
C-GGLS	MAIN	1670		46.29	46.29		1778	1670	46.29					20:06:43	0:13:20	OFFLINE		
C-GGLS	MAIN	1680	LINE	46.31	46.31	2-Jun-19	1800	1680	46.31	46.31	FULL		23:35:41	23:48:25	0:12:44			
C-GGLS	MAIN	1690		46.34	46.34		1778	1690	46.34	46.34				19:52:14		OFFLINE		<u> </u>
C-GGLS	MAIN	1700 1710		46.37 46.40	46.37 46.40	2-Jun-19 13-May-19	1800 1778	1700 1710	46.37 46.40	46.37 46.40			23:50:52	24:04:24 19:37:13		OFFLINE		<u> </u>
GGLS	MAIN	1710		46.40	46.40	2-Jun-19	1778	1710	46.40	46.40				24:19:33	0:13:14	OTTEINE		-
C-GGLS	MAIN	1720		46.46	46.46	13-May-19	1778	1720	46.46	46.46				19:22:46	0:13:52	OFFLINE		
C-GGLS	MAIN	1740		46.48	46.48	2-Jun-19	1800	1740	46.48	46.48			24:21:51	24:35:11	0:13:20			
C-GGLS	MAIN	1750		46.51	46.51 46.54	13-May-19	1778 1800	1750	46.51	46.51			18:54:15		0:13:22	OFFLINE		CORRUP
C-GGLS	MAIN	1760	LINE	46.54 46.57	46.54	2-Jun-19 13-May-19		1760 1770	46.54 46.57	46.54 46.57			24:37:04 18:38:49	24:50:09 18:52:55	0:13:05 0:14:06	OFFLINE		CORRUP
C-GGLS					10.01		21.70	1780	46.60			-	24:52:22		0:13:18			+

	REF:	B486	CLIENT:	LAC DES ILE	ES MINES L	FD. ()	PROJECT:	SUNDAY LA	KE									
AC	BLOCK	ITEM	ТҮР	PLANNED	TOTAL	DATE	FLIGHT	LNUM	LKMS	ACCEPT	STATUS	REJECT	UTC-START	UTC-END	PROD TIME	MA NAA	TRIX VLF ST	ATUS NLK
C-GGLS	MAIN	1790	LINE	46.63	46.63	13-May-19	1777	1790	46.63	46.63	FULL	LKMS	16:14:51	16:27:47	0:12:56	OFFLINE		
C-GGLS	MAIN	1800	LINE	46.65	46.65	2-Jun-19	1800	1800	46.65	46.65	FULL		25:07:42	25:20:51	0:13:09			
C-GGLS C-GGLS	MAIN		LINE	46.68 46.71	46.68 46.71	13-May-19 5-Jun-19	1777 1802	1810 1820	46.68 46.71	46.68 46.71			15:59:30 17:39:22	16:13:37 17:52:33	0:14:06	OFFLINE		CORRUPT
C-GGLS	MAIN	1830	LINE	46.74	46.74	13-May-19	1777	1830	46.74	46.74	FULL		15:44:56	15:57:51	0:12:55	OFFLINE	CORRUPT	CORRUPT
C-GGLS C-GGLS	MAIN	1840 1850		46.77 46.80	46.77 46.80	5-Jun-19 13-May-19	1802 1777	1840 1850	46.77 46.80	46.77 46.80			17:55:23 15:28:25	18:08:59 15:42:32	0:13:36 0:14:07	OFFLINE	CORRUPT	CORRUPT
C-GGLS	MAIN	1860		46.82	46.82	5-Jun-19	1802	1860	46.82	46.82	FULL		18:10:55	18:24:23	0:13:28			
C-GGLS C-GGLS	MAIN	1870 1880	LINE	46.85 46.88	46.85 46.88	13-May-19 5-Jun-19	1777 1802	1870 1880	46.85 46.88	46.85 46.88			15:14:09 18:26:51	15:27:09 18:40:06	0:13:00	OFFLINE		
C-GGLS	MAIN	1890	LINE	46.91	46.91	13-May-19	1777	1890	46.91	46.91	FULL		14:58:55	15:12:57	0:14:02	OFFLINE		
C-GGLS C-GGLS	MAIN		LINE	46.94 46.97	46.94 46.97	5-Jun-19 13-May-19	1802 1777	1900 1910	46.94 46.97	46.94 46.97			18:41:49 14:44:11	18:55:25 14:57:22	0:13:35 0:13:11	OFFLINE		
C-GGLS	MAIN	1920	LINE	46.92	46.92	5-Jun-19	1802	1920	46.92	46.92	FULL		18:57:47	19:11:01	0:13:14			
C-GGLS C-GGLS	MAIN	1930	LINE	46.55 46.18	46.55 46.18	13-May-19 5-Jun-19	1777 1802	1930 1940	46.55 46.18	46.55 46.18			14:27:44 19:13:11	14:41:17 19:26:34	0:13:32 0:13:22	OFFLINE		
C-GGLS	MAIN	1950	LINE	45.80	45.80	13-May-19	1777	1950	45.80	45.80	FULL		14:13:42	14:26:40	0:12:58	OFFLINE		
C-GGLS C-GGLS	MAIN	1960	LINE	45.43 45.06	45.43 45.06	5-Jun-19 13-May-19	1802 1777	1960 1970	45.43	45.43 45.06			19:28:57 13:59:22	19:41:53 14:12:30	0:12:56 0:13:08	OFFLINE		
C-GGLS	MAIN	1980	LINE	44.69	44.69	5-Jun-19	1802	1980	44.69	44.69	FULL		19:44:03	19:56:47	0:12:43			
C-GGLS C-GGLS	MAIN	1990 2000	LINE	44.32 43.94	44.32 43.94	13-May-19 5-Jun-19	1777 1802	1990 2000	44.32 43.94	44.32 43.94			13:45:41 19:58:50	13:58:10 20:11:12	0:12:30	OFFLINE		
C-GGLS	MAIN	2000		17.79	17.79		1777	2000	17.79	17.79			13:32:02	13:37:01	0:04:59	OFFLINE		CORRUPT
C-GGLS	MAIN	2020		17.39 16.99	17.39	5-Jun-19	1802	2020	17.39	17.39 16.99			20:13:39 13:25:53	20:18:51	0:05:12	OFFLINE		CORRUPT
C-GGLS C-GGLS	MAIN	2030 2040	LINE	16.99	16.99 16.59	13-May-19 5-Jun-19	1777 1802	2030 2040	16.99 16.59	16.99			20:21:02	13:30:45 20:25:30	0:04:53 0:04:29	OFFLINE		
C-GGLS	MAIN	2050		16.19	16.19	13-May-19	1777	2050	16.19	16.19			13:19:41	13:24:10	0:04:29	OFFLINE		CORRUPT
C-GGLS C-GGLS	MAIN	2060 2070	LINE	15.80 15.40	15.80 15.40	5-Jun-19 13-May-19	1802 1777	2060 2070	15.80 15.40	15.80 15.40			20:28:40 13:13:32	20:33:05 13:18:00	0:04:25 0:04:29	OFFLINE	CORRUPT	CORRUPT
C-GGLS	MAIN	2080	LINE	15.00	15.00	5-Jun-19	1802	2080	15.00	15.00	FULL		20:35:01	20:39:13	0:04:12			
C-GGLS C-GGLS	MAIN		LINE	14.60 14.20	14.60 14.20	13-May-19 5-Jun-19	1777 1803	2090 2100	14.60 14.20	14.60 14.20			13:08:06 23:15:09	13:12:11 23:19:17	0:04:06 0:04:07	OFFLINE	CORRUPT	CORRUPT
C-GGLS	MAIN	2110	LINE	13.80	13.80	13-May-19	1777	2110	13.80	13.80	FULL		13:02:53	13:06:54	0:04:01	OFFLINE	CORRUPT	CORRUPT
C-GGLS C-GGLS	MAIN	2120	LINE	13.41 13.01	13.41 13.01	5-Jun-19 13-May-19	1803 1777	2120 2130	13.41	13.41 13.01			23:21:32 12:57:57	23:25:17 13:01:39	0:03:45	OFFLINE	CORRUPT	CORRUPT
C-GGLS	MAIN	2140	LINE	12.61	12.61	5-Jun-19	1803	2140	12.61	12.61	FULL		23:26:57	23:30:40	0:03:43			
C-GGLS C-GGLS	MAIN	2150	LINE	12.21 11.82	12.21 11.82	13-May-19 5-Jun-19	1777 1803	2150 2160	12.21	12.21 11.82			12:53:23 23:32:29	12:56:55 23:35:43	0:03:32 0:03:14	OFFLINE	CORRUPT	CORRUPT
C-GGLS	MAIN		LINE	11.82	11.82		1803	2160	11.82	11.82			12:48:55	12:52:11	0:03:14	OFFLINE	CORRUPT	CORRUPT
C-GGLS	MAIN		LINE	11.02	11.02	5-Jun-19	1803 1777	2180	11.02	11.02			23:37:33	23:40:50	0:03:17	orrune		
C-GGLS C-GGLS	MAIN	2190		10.60 10.18	10.60 10.18	13-May-19 5-Jun-19	1///	2190 2200	10.60	10.60 10.18			12:44:43 23:42:48	12:47:49 23:45:37	0:03:06	OFFLINE		
C-GGLS	MAIN	2210	LINE	9.76	9.76	13-May-19	1777	2210	9.76	9.76	FULL		12:40:33	12:43:21	0:02:48	OFFLINE		
C-GGLS C-GGLS	MAIN	2220 2230		9.34 8.92	9.34 8.92	5-Jun-19 13-May-19	1803 1777	2220 2230	9.34 8.92	9.34 8.92			23:47:45 12:36:52	23:50:31 12:39:29	0:02:46	OFFLINE		
C-GGLS	MAIN	2240	LINE	8.50	8.50	5-Jun-19	1803	2240	8.50	8.50	FULL		23:52:44	23:55:04	0:02:20			
C-GGLS C-GGLS	MAIN	2250	LINE	8.08	8.08 7.66	13-May-19 5-Jun-19	1777 1803	2250 2260	8.08	8.08 7.66			12:33:23 23:57:20	12:35:42 23:59:37	0:02:19 0:02:18	OFFLINE		
C-GGLS	MAIN	2270	LINE	7.24	7.24	13-May-19	1777	2270	7.24	7.24	FULL		12:28:57	12:31:04	0:02:08	OFFLINE		
C-GGLS C-GGLS	MAIN		LINE	6.82 6.40	6.82 6.40	5-Jun-19 13-May-19	1803 1777	2280 2290	6.82 6.40	6.82 6.40			24:01:25 12:24:40	24:03:20 12:26:31	0:01:55 0:01:51	OFFLINE		
C-GGLS	MAIN			0.40	0.40	19-May-19	1787	2290	6.40		IGNORE		14:40:28	14:42:21	0:01:53	OFFLINE		
C-GGLS C-GGLS	MAIN		LINE	5.98 5.56	5.98 5.56	5-Jun-19 13-May-19	1803 1777	2300 2310	5.98 5.56	5.98 5.56			24:05:28 12:20:16	24:07:15	0:01:47 0:01:31	OFFLINE		
C-GGLS	MAIN	2310	LINC	5.50	5.50	19-May-19	1777	2310	5.56		IGNORE		14:36:29	12:21:47	0:01:31	OFFLINE		
C-GGLS	MAIN	2320		5.14	5.14	5-Jun-19	1803	2320	5.14	5.14			24:09:42 12:17:34	24:11:05	0:01:23	OFFLINE		
C-GGLS C-GGLS	MAIN	2330	LINE	4.72	4.72	13-May-19 19-May-19	1777 1787	2330 2331	4.72	4.72	IGNORE		12:17:34	12:18:56 14:33:53	0:01:22 0:01:21	OFFLINE		
C-GGLS	MAIN		LINE	4.30	4.30	5-Jun-19	1803	2340	4.30	4.30			24:13:17	24:14:32	0:01:15			
C-GGLS C-GGLS	MAIN	2350	LINE	3.88	3.88	13-May-19 19-May-19	1777 1787	2350 2351	3.88	3.88	IGNORE		12:15:04 14:28:35	12:16:06 14:29:39	0:01:02	OFFLINE		
C-GGLS	MAIN	2360		3.73	3.73	5-Jun-19	1803	2360	3.73	3.73	FULL		24:16:56	24:17:55	0:00:59			
C-GGLS C-GGLS	MAIN	2370	LINE	3.71	3.71	13-May-19 19-May-19	1777 1787	2370 2371	3.71 3.71	3.71	FULL IGNORE		12:12:33 14:24:45	12:13:38 14:25:49	0:01:06 0:01:04	OFFLINE		
C-GGLS	MAIN	2380		3.68	3.68	5-Jun-19	1803	2380	3.68	3.68	FULL		24:20:14	24:21:18	0:01:04			
C-GGLS C-GGLS	MAIN	2390	LINE	3.65	3.65	13-May-19 19-May-19	1777 1787	2390 2391	3.65	3.65	FULL IGNORE		12:10:06 14:20:32	12:11:07 14:21:34	0:01:01 0:01:02	OFFLINE		<u> </u>
C-GGLS	MAIN		LINE	3.63	3.63	5-Jun-19	1803	2400	3.63	3.63	FULL		24:23:11	24:24:05	0:00:55			
	MAIN	2410	LINE	3.60	3.60	13-May-19 18-May-19	1777 1786	2410 2411	3.60	3.60	FULL IGNORE			12:08:45 22:24:52	0:01:03 0:00:57	OFFLINE		
C-GGLS	MAIN		LINE	3.57	3.57	5-Jun-19	1803	2420	3.57	3.57	FULL		24:25:47	24:26:51	0:01:04			
C-GGLS C-GGLS	MAIN	2430	LINE	3.55	3.55	13-May-19 18-May-19	1777 1786	2430 2431	3.55	3.55	FULL IGNORE			12:05:59 22:19:13	0:00:59 0:01:01	OFFLINE		
C-GGLS	MAIN		LINE	3.52	3.52	5-Jun-19	1803	2440	3.52	3.52	FULL		24:28:29	24:29:23	0:00:54			
C-GGLS C-GGLS	MAIN	2450	LINE	3.49	3.49	13-May-19 18-May-19	1777 1786	2450 2451	3.49 3.49	3.49	FULL IGNORE		12:02:28	12:03:26 22:14:46	0:00:59 0:00:57	OFFLINE		
C-GGLS	MAIN	10010		10.06	10.06	17-May-19	1783	10010	10.06	10.06	FULL		13:47:52	13:50:51	0:02:59			
C-GGLS C-GGLS	MAIN	10020 10030		10.06	10.06	17-May-19 17-May-19	1784 1783	10020 10030	10.06	10.06 10.06				21:40:31 13:56:17	0:02:59 0:02:46	OFFLINE		<u> </u>
	MAIN	10030		10.06		17-May-19 17-May-19	1785	10030	10.06	10.06			21:43:26	21:46:07	0:02:40	OFFLINE		
	MAIN	10050 10060		10.05		17-May-19	1783 1784	10050	10.05 10.05	10.05				14:02:22	0:02:55	OFFLINE		
	MAIN	10060		10.05 10.05		17-May-19 17-May-19	1/84	10060 10070	10.05	10.05 10.05				21:52:07 14:09:37	0:02:57 0:02:45	OFFLINE		
C-GGLS	MAIN	10080	TIE	10.05	10.05	17-May-19	1784	10080	10.05	10.05	FULL		21:55:42	21:58:25	0:02:43	OFFLINE		
	MAIN	10090 10100		10.04		17-May-19 17-May-19	1783 1784	10090 10100	10.04	10.04 10.04				14:15:15 22:04:23	0:02:57 0:02:56	OFFLINE		<u> </u>
C-GGLS	MAIN	10110	TIE	10.04	10.04	17-May-19	1783	10110	10.04	10.04	FULL		14:18:28	14:21:13	0:02:44			
	MAIN	10120 10130		10.04 10.04		17-May-19 17-May-19	1784 1783	10120 10130	10.04 10.04	10.04 10.04				22:09:57 14:26:53	0:02:46 0:02:56	OFFLINE		-
C-GGLS	MAIN	10140	TIE	10.03	10.03	17-May-19	1784	10140	10.03	10.03	FULL		22:13:25	22:16:23	0:02:59	OFFLINE		
C-GGLS	MAIN	10150 10160		10.03 10.03		17-May-19	1783 1784	10150 10160	10.03 10.03	10.03 10.03				14:32:19	0:02:45	OFFLINE		<u> </u>
C-GGLS		10160		10.03		17-May-19 17-May-19	1/84	10160	10.03	10.03		<u> </u>		22:21:52 14:38:18	0:02:45	OFFLINE	<u> </u>	<u> </u>
C-GGLS	MAIN	10170				18-May-19				10.03				14:42:26		OFFLINE		

	REF:	B486	CLIENT:	LAC DES IL	ES MINES LI	TD. ()	PROJECT:	SUNDAY LA	AKE							l		
AC	BLOCK	ITEM	ТҮР	PLANNED	TOTAL	DATE	FLIGHT	LNUM	LKMS	ACCEPT	STATUS	REJECT	UTC-START	UTC-END	PROD TIME	MA' NAA	RIX VLF STA NML	NLK
C-GGLS	MAIN	10190	TIE	10.02	10.02	17-May-19	1783	10190	10.02	10.02	EL II I	LKMS	14:41:18	14:44:03	0:02:45			
C-GGLS	MAIN	10190		10.02	10.02		1785	10130	10.02		FULL		14:41:18	14:44:03	0:02:43	OFFLINE		
C-GGLS	MAIN	10210		10.02	10.02		1783	10210	10.02		FULL		14:47:26	14:50:20	0:02:54	0.551 1115		
C-GGLS C-GGLS	MAIN	10220 10230		10.02	10.02		1785 1783	10220 10230	10.02	10.02			14:51:40 14:53:54	14:54:44 14:56:38	0:03:05	OFFLINE		
C-GGLS	MAIN	10230		10.02	10.02		1785	10230	10.02	10.02			14:58:01	15:00:39	0:02:38	OFFLINE		
C-GGLS	MAIN	10250		10.01	10.01		1783	10250	10.01	10.01			14:59:53	15:02:47	0:02:54			
C-GGLS C-GGLS	MAIN	10260 10270		10.01	10.01 11.82		1785 1783	10260 10270	10.01 11.82	10.01 11.82			15:03:50 15:06:15	15:06:53 15:09:22	0:03:04 0:03:06	OFFLINE		
C-GGLS	MAIN	10270		11.82	11.82		1785	10270	11.82				15:10:24	15:14:18	0:03:53	OFFLINE		
C-GGLS	MAIN	10290		14.49	14.49	17-May-19	1783	10290	14.49	14.49			15:13:09	15:17:36	0:04:27			
C-GGLS	MAIN	10300		14.49	14.49		1785	10300	14.49	14.49			15:17:53	15:22:16	0:04:23	OFFLINE		
C-GGLS C-GGLS	MAIN	10310 10320		14.48 13.27	14.48 13.27	17-May-19 18-May-19	1783 1785	10310 10320	14.48 13.27	14.48 13.27	FULL		15:20:51 15:26:09	15:24:40 15:29:46	0:03:49 0:03:37	OFFLINE		
C-GGLS	MAIN	10330		13.01	13.01		1783	10330	13.01		FULL		15:29:20	15:33:19	0:04:00			
C-GGLS	MAIN	10340		12.76	12.76		1785	10340	12.76		FULL		15:33:31	15:37:22	0:03:51	OFFLINE		
C-GGLS C-GGLS	MAIN	10350 10360		15.32 15.63	15.32 15.63	17-May-19 18-May-19	1783 1785	10350 10360	15.32 15.63	15.32 15.63	FULL		15:38:15 15:42:40	15:42:22 15:46:52	0:04:07 0:04:12	OFFLINE		
C-GGLS	MAIN	10370		15.93	15.93		1783	10370	15.93	15.93	FULL		15:44:56	15:49:43	0:04:46			
C-GGLS	MAIN	10380		16.24	16.24		1785	10380	16.24	16.24	FULL		15:50:36	15:55:30	0:04:54	OFFLINE		
C-GGLS C-GGLS	MAIN	10390 10400		16.53 16.83	16.53 16.83		1783 1785	10390 10400	16.53 16.83	16.53 16.83	FULL		15:52:53 15:59:55	15:57:19 16:04:25	0:04:27 0:04:30	OFFLINE		
C-GGLS	MAIN	10400		17.12	10.83		1783	10400	10.83	10.83	FULL		20:34:53	20:39:59	0:04:30	OFFLINE		
C-GGLS	MAIN	10420		17.41	17.41		1785	10420	17.41		FULL		16:08:31	16:13:48	0:05:17	OFFLINE		
C-GGLS	MAIN	10430		17.70	17.70		1784	10430	17.70	17.70			20:42:57	20:47:57	0:05:00	OFFLINE		
C-GGLS C-GGLS	MAIN	10440 10450		17.99 19.88	17.99 19.88		1785 1784	10440 10450	17.99 19.88	17.99 19.88			16:17:46 20:50:53	16:22:44 20:56:46	0:04:57 0:05:53	OFFLINE		
C-GGLS	MAIN	10450		19.61	19.61		1784	10450	19.88		FULL		16:27:17	16:33:13	0:05:56	OFFLINE		
C-GGLS	MAIN	10470		19.34	19.34		1784	10470	19.34	19.34			21:00:00	21:05:22	0:05:22	OFFLINE		
C-GGLS	MAIN	10480		12.06	12.06		1785 1784	10480 10490	12.06 9.22	12.06 9.22		-	16:37:21	16:40:30	0:03:09	OFFLINE		
C-GGLS C-GGLS	MAIN	10490 10500		9.22 6.88	9.22		1/84	10490	9.22	9.22			21:12:10 16:44:31	21:14:54 16:46:39	0:02:44 0:02:08	OFFLINE		
C-GGLS	MAIN	10510	TIE	4.53	4.53	17-May-19	1784	10510	4.53	4.53	FULL		21:19:15	21:20:31	0:01:16	OFFLINE		
C-GGLS	MAIN	10520		2.19	2.19		1785	10520	2.19	2.19	FULL		16:49:33	16:50:08	0:00:34	OFFLINE		
C-GGLS C-GGLS	EXT_E EXT_E	3010 3020		4.01 4.01	4.01 4.01	27-May-19 7-Jun-19	1792 1805	1450 3020	4.01 4.01	4.01			20:27:17 12:59:51	20:28:20 13:00:55	0:01:03 0:01:04			
	EXT_E	3030		4.01	4.01		1792	1450	4.01		FULL		20:31:58	20:33:09	0:01:11			
	EXT_E		LINE	4.01	4.01	7-Jun-19	1805	3040	4.01	4.01	FULL		13:03:31	13:04:43	0:01:11			
	EXT_E	3050	LINE	4.01	4.01	5-Jun-19	1803	3050 3060	4.01	4.01	FULL		24:31:20	24:32:35	0:01:15 0:01:08			
C-GGLS C-GGLS	EXT_E EXT_E		LINE	4.01	4.01	7-Jun-19 5-Jun-19	1805 1803	3060	4.01	4.01	FULL		13:06:59 24:35:05	13:08:06 24:36:08	0:01:08			
C-GGLS	EXT_E	3080		4.01	4.01	7-Jun-19	1805	3080	4.01		FULL		13:11:21	13:12:39	0:01:18			
C-GGLS	EXT_E	3090		4.01	4.01	5-Jun-19	1803	3090	4.01		FULL		24:38:32	24:39:52	0:01:19			
C-GGLS C-GGLS	EXT_E EXT_E	3100 3110		4.01	4.01	7-Jun-19 5-Jun-19	1805 1803	3100 3110	4.01	4.01	FULL		13:14:38 24:42:12	13:15:48 24:43:15	0:01:09 0:01:04			
C-GGLS	EXT_E	3120		4.01	4.01	7-Jun-19	1803	3110	4.01		FULL		13:19:23	13:20:35	0:01:12			
C-GGLS	EXT_E	3130		4.01	4.01	5-Jun-19	1803	3130	4.01		FULL		24:45:42	24:46:58	0:01:17			
	EXT_E	3140		4.01	4.01	7-Jun-19	1805	3140	4.01	4.01			13:23:06	13:24:13	0:01:07			<u> </u>
C-GGLS C-GGLS	EXT_E EXT_E	3150	LINE	4.01	4.01	5-Jun-19 11-Jun-19	1803 1809	3150 3151	4.01		FULL REFLIGHT		24:48:59 12:02:42	24:50:01 12:03:49	0:01:02			
C-GGLS	EXT_E	3160	LINE	4.01	4.01	7-Jun-19	1805	3160	4.01		FULL		13:27:02	13:28:22	0:01:19			
C-GGLS	EXT_E					11-Jun-19	1809	3161	4.01		REFLIGHT		12:07:17	12:08:33				
C-GGLS C-GGLS	EXT_E EXT_E	3170 3180		4.01 4.01	4.01 4.01	11-Jun-19	1809 1805	3170 3180	4.01	4.01	FULL		12:11:31 13:30:56	12:12:35 13:31:59	0:01:04			
C-GGLS	EXT E	5190	LINE	4.01	4.01	7-Jun-19 11-Jun-19	1805	3180	4.01		REFLIGHT		12:15:36	12:16:48	0:01:05			
C-GGLS	EXT_E	3190	LINE	4.01	4.01	6-Jun-19	1804	3190	4.01		FULL		16:50:05	16:51:13	0:01:09			
C-GGLS	EXT_E	2200	11115	1.01	1.01	11-Jun-19	1809	3191	4.02		REFLIGHT		12:19:26	12:20:30	0.01.15			
	EXT_E EXT_E	3200	LINE	4.01	4.01	7-Jun-19 11-Jun-19	1805 1809	3200 3201	4.01 4.01	4.01 4.01	REFLIGHT		13:35:23 12:23:12	13:36:39 12:24:42	0:01:16			
C-GGLS	EXT_E	3210	LINE	4.01	4.01	6-Jun-19	1804	3210	4.01	4.01	FULL		16:53:52	16:54:58	0:01:05			
C-GGLS	EXT_E	3220		4.01	4.01	7-Jun-19	1805	3220	4.01	4.01	FULL		13:39:20	13:40:25	0:01:05			
C-GGLS C-GGLS	EXT_E EXT_E	3230 3240		4.01	4.01 4.01	6-Jun-19 7-Jun-19	1804	3230 3240	4.01 4.01	4.01 4.01	FULL		16:57:25 13:43:09	16:58:36	0:01:10			
C-GGLS	EXT_E	3240		4.01	4.01	7-Jun-19 6-Jun-19	1805 1804	3240	4.01	4.01	FULL	<u> </u>	13:43:09 17:00:50	13:44:24 17:01:55	0:01:16 0:01:06			
C-GGLS	EXT_E	3260	LINE	4.01	4.01	7-Jun-19	1805	3260	4.01	4.01	FULL		13:47:10	13:48:13	0:01:04			
C-GGLS	EXT_E	3270		4.01	4.01	6-Jun-19	1804	3270	4.01	4.01 4.01	FULL		17:04:11		0:01:12			
	EXT_E EXT_E	3280 3290		4.01 4.01	4.01 4.01	7-Jun-19 6-Jun-19	1805 1804	3280 3290	4.01 4.01		FULL			13:52:46 17:08:33	0:01:16 0:01:03			
C-GGLS	EXT_E	3300	LINE	4.01	4.01	7-Jun-19	1805	3300	4.01	4.01	FULL		13:55:18	13:56:23	0:01:05			
C-GGLS	EXT_E	3310		4.01	4.01	6-Jun-19	1804	3310	4.01	4.01	FULL			17:12:14	0:01:08			
	EXT_E EXT_E	3320 3330		4.01	4.01 4.01	7-Jun-19 6-Jun-19	1805 1804	3320 3330	4.01 4.01		FULL FULL			14:00:55 17:15:29	0:01:15 0:01:05			
	EXT_E	3330		4.01	4.01	6-Jun-19 7-Jun-19	1804	3330	4.01		FULL			17:15:29	0:01:03			
C-GGLS	EXT_E	3350	LINE	4.01	4.01	6-Jun-19	1804	3350	4.01	4.01	FULL		17:18:24	17:19:33	0:01:10			
	EXT_E	3360	LINE	4.01	4.01	7-Jun-19	1805	3360	4.01	4.01				14:08:37	0:01:11			
	EXT_E EXT_E	3370	LINE	4.01	4.01	11-Jun-19 6-Jun-19	1809 1804	3361 3370	4.01 4.01		REFLIGHT FULL			12:30:45 17:23:03	0:01:04			
	EXT_E	3380		4.01	4.01	7-Jun-19	1804	3380	4.01	4.01			14:11:08		0:01:04			
C-GGLS	EXT_E	3390	LINE	4.01	4.01	6-Jun-19	1804	3390	4.01	4.01	FULL		17:25:14	17:26:23	0:01:09			
	EXT_E	3400	LINE	4.01	4.01	7-Jun-19 11-Jun-19	1805 1809	3400 3401	4.01 4.01		FULL REFLIGHT		14:15:27 12:33:43		0:00:34			
	EXT_E EXT_E	3410	LINE	4.01	4.01			3401	4.01		FULL	<u> </u>	12:33:43		0:01:06			
C-GGLS	EXT_E					11-Jun-19	1809	3411	4.01	4.01	REFLIGHT		12:37:39	12:38:43				
C-GGLS	EXT_E	3420	LINE	4.01	4.01	7-Jun-19		3420	4.01		FULL			14:19:12	0:01:03			
	EXT_E EXT_W	30020	TIF	4.27	4.27	11-Jun-19 18-May-19	1809 1785	3421 30020	4.01 4.27		REFLIGHT FULL			12:43:11 17:24:33	0:01:14	OFFLINE		
	EXT_W	30020		4.27	4.27		1/85	30020	4.27		FULL	<u> </u>		17:24:33	0:01:14			
C-GGLS	EXT_W	30040	TIE	4.27	4.27	18-May-19	1785	30040	4.27	4.27	FULL		17:31:07	17:32:20	0:01:13	OFFLINE		
	EXT_W	30050		4.27	4.27		1785	30050	4.27		FULL	<u> </u>		17:36:38	0:01:10	OFFLINE		
	EXT_W EXT_W	4010	LINE	4.36	4.36	6-Jun-19 11-Jun-19	1804 1809	4010 4011	4.36		FULL REFLIGHT			17:40:45 11:46:11	0:01:08			
C-GGLS	1	I		1 100	4.36			4011	4.35		FULL		14:24:51		0:01:11			
	EXT_W	4020	LINE	4.36	4.30	7-5011-15	1005											
C-GGLS C-GGLS	EXT_W EXT_W EXT_W	4020		4.36		11-Jun-19	1809	4021 4030	4.35	4.35	REFLIGHT FULL		11:49:08		0:01:15			

	REF:	B486	CLIENT:	LAC DES ILE	S MINES LT	D. ()	PROJECT:	SU NDAY LA	AKE									
AC	BLOCK	ITEM	түр	PLANNED	TOTAL	DATE	FLIGHT	LNUM	LKMS	ACCEPT	STATUS	REJECT	UTC-START	UTC-END	PROD TIME	MAT NAA	RIX VLF ST/ NML	ATUS NLK
	EXT_W					11-Jun-19	1809	4031	4.35		REFLIGHT	LKMS	11:52:59	11:54:11				
	EXT_W EXT_W	4040	LINE	4.36	4.36	7-Jun-19	1805	4040 4041	4.36 4.35		FULL REFLIGHT		14:27:59 11:57:10		0:01:20			
	EXT_W	4050	LINE	4.36	4.36	11-Jun-19 6-Jun-19	1809 1804	4041	4.35	4.35			17:46:43		0:01:13			
C-GGLS	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4060	4.36		FULL		14:31:20		0:01:12			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4070 4080	4.36		FULL		17:49:38 14:35:43		0:01:13			
	EXT_W		LINE	4.36	4.36	6-Jun-19	1804	4090	4.36		FULL		17:52:51		0:01:15			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4100	4.36	4.36			14:39:07		0:01:10			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4110 4120	4.36		FULL		17:56:19 14:43:04		0:01:12 0:01:18			
	EXT_W	4130	LINE	4.36	4.36	6-Jun-19	1804	4130	4.36	4.36	FULL		17:59:35	18:00:49	0:01:14			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4140	4.36		FULL		14:46:21	14:47:33	0:01:11			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4150 4160	4.36 4.36		FULL		18:03:03 14:49:52	18:04:15 14:51:13	0:01:12 0:01:20			
C-GGLS	EXT_W	4170	LINE	4.36	4.36	6-Jun-19	1804	4170	4.36	4.36	FULL		18:06:10	18:07:26	0:01:16			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4180	4.36		FULL		14:53:26 18:10:22		0:01:12			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4190 4200	4.36	4.36	FULL		14:57:06		0:01:16			
C-GGLS	EXT_W	4210	LINE	4.36	4.36	6-Jun-19	1804	4210	4.36	4.36	FULL		18:13:25	18:14:39	0:01:14			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4220	4.36		FULL		15:00:56		0:01:11			
	EXT_W EXT_W		LINE	4.36 4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4230 4240	4.36 4.36	4.36	FULL		18:16:38 15:04:35		0:01:13 0:01:19			<u> </u>
C-GGLS	EXT_W	4250	LINE	4.36	4.36	6-Jun-19	1804	4250	4.36	4.36	FULL		18:19:45	18:21:01	0:01:16			
	EXT_W		LINE	4.36	4.36 4.36	7-Jun-19	1805 1804	4260 4270	4.36		FULL		15:08:30 18:22:48		0:01:10			<u> </u>
	EXT_W EXT_W		LINE	4.36	4.36	6-Jun-19 7-Jun-19	1804	4270	4.36		FULL		18:22:48		0:01:12			<u> </u>
C-GGLS	EXT_W	4290	LINE	4.36	4.36	6-Jun-19	1804	4290	4.36	4.36	FULL		18:26:14	18:27:30	0:01:16			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	7-Jun-19 6-Jun-19	1805 1804	4300 4310	4.36		FULL		15:16:11 18:29:46		0:01:12 0:01:16			<u> </u>
	EXT_W EXT_W		LINE	4.36	4.36	7-Jun-19	1804	4310 4320	4.36		FULL		18:29:46		0:01:16			<u> </u>
C-GGLS	EXT_W		LINE	4.36	4.36	6-Jun-19	1804	4330	4.36	4.36	FULL		18:33:08	18:34:24	0:01:16			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4340	4.36		FULL		15:23:04		0:01:10			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4350 4360	4.36		FULL		18:36:41 15:26:52	18:37:54 15:28:11	0:01:12 0:01:20			
	EXT_W		LINE	4.36	4.36	6-Jun-19	1804	4370	4.36		FULL		18:39:51	18:41:06	0:01:15			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4380	4.36	4.36			15:30:39		0:01:10			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4390 4400	4.36		FULL		18:42:54	18:44:11 15:35:36	0:01:17 0:01:21			
	EXT_W	4410	LINE	4.36	4.36	6-Jun-19	1804	4410	4.36	4.36	FULL		18:46:03		0:01:14			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4420	4.36		FULL		15:38:07		0:01:09			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4430 4440	4.36	4.36	FULL		18:49:08 15:41:46		0:01:15 0:01:21			
	EXT_W		LINE	4.36	4.36	6-Jun-19	1804	4450	4.36		FULL		18:52:35		0:01:11			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4460	4.36		FULL		15:45:27	15:46:36	0:01:09			
	EXT_W EXT_W		LINE	4.36	4.36 4.36	6-Jun-19 7-Jun-19	1804 1805	4470 4480	4.36	4.36	FULL		18:56:05 15:48:58		0:01:16			
C-GGLS	EXT_W	4490	LINE	4.36	4.36	6-Jun-19	1804	4490	4.36	4.36	FULL		18:59:36	19:00:48	0:01:12			
	EXT_W		LINE	4.36	4.36	7-Jun-19	1805	4500	4.36		FULL		15:52:37	15:53:45	0:01:08			
	EXT_W EXT_W	4510	LINE	4.36	4.36 5.02	6-Jun-19 18-May-19	1804 1785	4510 40010	4.36		FULL		19:03:01 17:01:14	19:04:16 17:02:35	0:01:15 0:01:21	OFFLINE		
C-GGLS	EXT_W	40020	TIE	5.02	5.02	18-May-19	1785	40020	5.02	5.02	FULL		17:05:36	17:07:04	0:01:28	OFFLINE		
	EXT_W EXT_W	40030 40040		5.02 5.02	5.02 5.02	18-May-19	1785 1785	40030 40040	5.02 5.02		FULL		17:10:48 17:16:00		0:01:21 0:01:32	OFFLINE		
C-GGLS	MEXT		LINE	9.52	9.52	18-May-19 7-Jun-19	1785	5010	9.52		FULL		24:03:24		0:02:31	OFFLINE		
C-GGLS	MEXT	5020	LINE	9.52	9.52	8-Jun-19	1808	5020	9.52	9.52	FULL		23:42:57	23:45:40	0:02:43			
C-GGLS C-GGLS	MEXT		LINE	9.52 9.53	9.52 9.53	7-Jun-19 8-Jun-19	1806 1808	5030 5040	9.52	9.52	FULL		24:08:10 23:48:27	24:11:10 23:51:16	0:03:00 0:02:50			
C-GGLS	MEXT		LINE	9.53	9.53	8-Jun-19 8-Jun-19	1808	5050	9.53	9.53			15:06:53		0:02:46			
C-GGLS	MEXT		LINE	9.53	9.53	8-Jun-19	1808	5060	9.53	9.53			23:53:50	23:56:34	0:02:44			<u> </u>
C-GGLS C-GGLS	MEXT		LINE	9.53 9.54	9.53 9.54	8-Jun-19 8-Jun-19	1807 1808	5070 5080	9.53 9.54	9.53 9.54			15:11:59 23:59:13		0:02:41 0:02:44			<u> </u>
C-GGLS	MEXT	5090	LINE	9.54	9.54	8-Jun-19	1807	5090	9.54	9.54	FULL		15:16:59	15:19:51	0:02:52			
C-GGLS	MEXT		LINE	9.54	9.54	8-Jun-19	1808	5100	9.54	9.54			24:04:32		0:02:46			<u> </u>
C-GGLS C-GGLS	MEXT		LINE	9.54 9.54	9.54 9.54	8-Jun-19 8-Jun-19	1807 1808	5110 5120	9.54 9.54	9.54 9.54			15:22:28 24:10:02		0:02:45			<u> </u>
C-GGLS	MEXT	5130	LINE	9.54	9.54	8-Jun-19	1807	5130	9.54	9.54	FULL		15:27:47	15:30:37	0:02:50			
	MEXT		LINE	9.55	9.55	8-Jun-19	1808	5140	9.55		FULL		24:15:19		0:02:44			<u> </u>
	MEXT		LINE	9.55 9.55	9.55 9.55	8-Jun-19 8-Jun-19	1807 1808	5150 5160	9.55	9.55 9.55			15:33:06 24:20:37	15:35:49 24:23:23	0:02:42 0:02:45			+
C-GGLS	MEXT	5170	LINE	9.55	9.55	8-Jun-19	1807	5170	9.55	9.55	FULL		15:39:03	15:41:54	0:02:51			
	MEXT		LINE	9.56	9.56	8-Jun-19		5180	9.56	9.56 9.56	FULL			24:28:29 15:47:06	0:02:44			<u> </u>
	MEXT		LINE	9.56 9.56	9.56 9.56	8-Jun-19 8-Jun-19		5190 5200	9.56 9.56		FULL			24:33:45	0:02:42 0:02:46			<u> </u>
C-GGLS	MEXT	5210	LINE	9.56	9.56	8-Jun-19	1808	5210	9.56	9.56	FULL		23:33:01	23:35:44	0:02:43			
	MEXT		LINE	9.56	9.56	8-Jun-19	1808	5220	9.56		FULL			24:38:39	0:02:42			<u> </u>
	MEXT	5230 50010	LINE	9.57 2.32	9.57 2.32	8-Jun-19 7-Jun-19	1808 1806	5230 50010	9.57 2.32	9.57 2.32	FULL			23:41:04 23:28:32	0:02:54			+
C-GGLS	MEXT	50020	TIE	2.32	2.32	7-Jun-19	1806	50020	2.32	2.32	FULL		23:30:59	23:31:42	0:00:42			
	MEXT	50030		2.31	2.31	7-Jun-19		50030	2.31		FULL			23:34:41	0:00:36			
C-GGLS C-GGLS	MEXT	50040 50050		2.31 2.30	2.31	7-Jun-19 7-Jun-19		50040 50050	2.31	2.31	FULL			23:38:32 23:41:36	0:00:42			<u> </u>
C-GGLS	MEXT	50060	TIE	2.30	2.30	7-Jun-19 7-Jun-19		50050	2.30	2.30	FULL			23:41:30	0:00:43			
	MEXT	50070		2.30	2.30	7-Jun-19	1806	50070	2.30	2.30	FULL		23:48:08	23:48:45	0:00:37			L
		FOOT -																
C-GGLS	MEXT	50080 50090		2.29	2.29 2.29	7-Jun-19 7-Jun-19		50080 50090	2.29	2.29				23:52:32 23:55:55	0:00:44 0:00:36			

9.4. APPENDIX IV – README

1. MAIN BLOCK

TERRAQUEST Data Archive Documentation

TERRAQUEST reference : B486

```
Client: Lac des Iles Mines Ltd.

Project: Sunday Lake Project - MAIN BLOCK

Type: Horizontal Gradient Magnetics/MATRIX-VLF

Aircraft Type: Cessna 206

Aircraft ID: C-GGLS

Operations: Summer, 2019

Survey Base: Thunder Bay, ON

Archive Version: 190815

Prepared By: Allen Duffy
```

```
1. Data Organisation:
```

```
\---B486 MAIN
   +---DATA
           B486ARC_MAIN_190815.gdb
    \---GRIDS
            AMP1 FNL.grd
            AMP1 FNL.grd.gi
            AMP1 FNL HP.grd
            AMP1_FNL_HP.grd.gi
            AMP2 FNL.grd
           AMP2 FNL.grd.gi
            AMP2_FNL_HP.grd
            AMP2 FNL HP.grd.gi
           AMP3 FNL.grd
            AMP3 FNL.grd.gi
            AMP3_FNL_HP.grd
            AMP3 FNL HP.grd.gi
            ANSIGFNL.grd
            ANSIGFNL.grd.gi
            HGEWFNL.grd
            HGEWFNL.grd.gi
            HGNSFNL.grd
           HGNSFNL.grd.gi
            MAGFNL.grd
           MAGFNL.grd.gi
            RTF.grd
            RTF.grd.gi
            VDVFNL.grd
            VDVFNL.grd.gi
```

2. Database Contents: MAG/VLF (B486ARC_MAIN_190815.gdb) -

Data sampled at 10Hz ...

X UTM WIN	: UTM Easting - WGS84, UTM Zone 16N (metres)
Y UTM WIN	: UTM Northing - WGS84, UTM Zone 16N (metres)
DATE	: Flight Date (DD/MM/YYYY format - ASCII)
Flight	: Flight Number
FID	: Fiducial (UTC seconds)
TIME	: UTC TIME (hh:mm:ss.ss format)
RADAR	: Aircraft clearance (m AGL)

7. T. TT	· WCC94 Altitude (metroe AMGI)
ALT DTMFNL	: WGS84 Altitude (metres AMSL)
	: Final Digital Terrain Model (m AMSL)
LAT	: Latitude (decimal degrees)
LON	: Longitude (decimal degrees)
DIUEDIT	: Base Station Diurnal data (nT)
VMX	: Fluxgate X component (nT)
VMY	: Fluxgate Y component (nT)
VMZ	: Fluxgate Z component (nT)
TF1UNC	: Raw measured TMI (nT) - Left Wing
TF2UNC	: Raw measured TMI (nT) - Right Wing
TF3UNC	: Raw measured TMI (nT) - Tail
TF1CMP	: Compensated,measured TMI (nT) - Left Wing
TF2CMP	: Compensated,measured TMI (nT) - Right Wing
TF3CMP	: Compensated,measured TMI (nT) - Tail
TF1CMPEDIT	: Compensated,measured TMI - Spikes Removed (nT) - Left Wing
TF2CMPEDIT	: Compensated,measured TMI - Spikes Removed (nT) - Right Wing
TF3CMPEDIT	: Compensated,measured TMI - Spikes Removed (nT) - Tail
MAGFNL	: Final, corrected measured TMI (nT) - Tail
HGEWFNL	: Final, corrected, lagged East-West mag gradient (nT/m)
HGNSFNL	: Final, corrected, lagged North-South mag gradient (nT/m)
SER06 AMP1	: MATRIX/VLF Amplitude - NAA
SER06 AMP2	: MATRIX/VLF Amplitude - NML
SER06 AMP3	: MATRIX/VLF Amplitude - NLK
SER06 DIR1	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NAA
SER06 DIR2	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NML
SER06 DIR3	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NLK
SER06 EP1	: MATRIX/VLF Ellipticity (Planar) - NAA
SER06 EP2	: MATRIX/VLF Ellipticity (Planar) - NML
SER06 EP3	: MATRIX/VLF Ellipticity (Planar) - NLK
SER06 EV1	: MATRIX/VLF Ellipticity (Vertical) - NAA
SER06 EV2	: MATRIX/VLF Ellipticity (Vertical) - NML
SER06 EV3	: MATRIX/VLF Ellipticity (Vertical) - NLK
SER06 TLT1	: MATRIX/VLF Tilt - NAA
SER06 TLT2	: MATRIX/VLF Tilt - NML
SER06_ILI2 SER06_TLT3	: MATRIX/VLF Tilt - NHL : MATRIX/VLF Tilt - NLK
AMP1 FNL	: Final, levelled, lagged Amplitude - NAA
_	: Final, levelled, lagged Amplitude - NMA
AMP2_FNL	
AMP3_FNL	: Final, levelled, lagged Amplitude - NLK
AMP1_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NAA
AMP2_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NML
AMP3_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NLK
IP1_LAG_ML	: Processed InPhase - NAA
QD1_LAG_ML	: Processed Quadrature - NAA
IP2_LAG_ML	: Processed InPhase - NML
QD2_LAG_ML	: Processed Quadrature - NML
IP3_LAG_ML	: Processed InPhase - NLK
QD3_LAG_ML	: Processed Quadrature - NLK

3. Data Grids

Grids prepared using Bi-Directional (Akima) spline with a 25m grid cell size.

DTMFNL.grd	: Digital Terrain Model (m AMSL)
AMP1_FNL.grd	: Final, levelled, lagged Amplitude - NAA
AMP1_FNL_HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NAA
AMP2_FNL.grd	: Final, levelled, lagged Amplitude - NML
AMP2 FNL HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NML
AMP3_FNL.grd	: Final, levelled, lagged Amplitude - NLK
AMP3_FNL_HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NLK
ANSIGFNL.grd	: Analytic Signal (calculated from MAGFNL)
HGEWFNL.grd	: East-West mag gradient (nT/m)
HGNSFNL.grd	: North-South mag gradient (nT/m)
MAGFNL.grd	: Final, corrected measured Total Magnetic Intensity (nT) - Tail
RTF.grd	: Reconstructed Total Magnetic Field (from measured gradients)
VDVFNL.grd	: Calculated First Vertical Magnetic Derivative (nT/m) ${}$

2. WEST BLOCK

TERRAQUEST Data Archive Documentation _____ TERRAQUEST reference : B486 Client: Lac des Iles Mines Ltd. Project: Sunday Lake Project - WEST BLOCK Type: Horizontal Gradient Magnetics/MATRIX-VLF Aircraft Type: Cessna 206 Aircraft ID: C-GGLS Operations: Summer, 2019 Survey Base: Thunder Bay, ON Archive Version: 190816 Prepared By: Allen Duffy 1. Data Organisation: \---B486 WEST +---DATA B486ARC WEST 190816.gdb \---GRIDS AMP1 FNL.grd AMP1 FNL.grd.gi AMP1 FNL HP.grd AMP1_FNL_HP.grd.gi AMP2_FNL.grd AMP2 FNL.grd.gi AMP2_FNL_HP.grd AMP2 FNL HP.grd.gi AMP3 FNL.grd AMP3 FNL.grd.gi AMP3_FNL_HP.grd AMP3 FNL HP.grd.gi ANSIGFNL.grd ANSIGFNL.grd.gi HGEWFNL.grd HGEWFNL.grd.gi HGNSFNL.grd HGNSFNL.grd.gi MAGFNL.grd MAGFNL.grd.gi RTF.grd RTF.grd.gi VDVFNL.grd VDVFNL.grd.gi 2. Database Contents: MAG/VLF (B486ARC WEST 190816.gdb) -Data sampled at 10Hz ... X_UTM_WIN : UTM Easting - WGS84, UTM Zone 16N (metres) Y_UTM_WIN : UTM Northing - WGS84, UTM Zone 16N (metres) DATE : Flight Date (DD/MM/YYYY format - ASCII) Flight : Flight Number : Flight Number Flight FID : Fiducial (UTC seconds) : Flaucial (ore seconds) : UTC TIME (hh:mm:ss.ss format) : Aircraft clearance (m AGL) : WGS84 Altitude (metres AMSL) TIME RADAR ALT : WGS84 ALLILUGE (metres inst, : Final Digital Terrain Model (m AMSL) : Latitude (decimal degrees) : Longitude (decimal degrees) DTMFNL LAT LON LON DIUEDIT : Base Station Diurnal data (nT) VMX : Fluxgate X component (nT) : Fluxgate Y component (nT) VMY

VMZ	: Fluxgate Z component (nT)
TF1UNC	: Raw measured TMI (nT) - Left Wing
TF2UNC	: Raw measured TMI (nT) - Right Wing
TF3UNC	: Raw measured TMI (nT) - Tail
TF1CMP	: Compensated, measured TMI (nT) - Left Wing
TF2CMP	: Compensated, measured TMI (nT) - Right Wing
TF3CMP	: Compensated, measured TMI (nT) - Tail
TF1CMPEDIT	: Compensated, measured TMI - Spikes Removed (nT) - Left Wing
TF2CMPEDIT	: Compensated, measured TMI - Spikes Removed (NT) - Right Wing
TF3CMPEDIT	: Compensated, measured TMI - Spikes Removed (NT) - Tail
MAGFNL	: Final, corrected measured TMI (nT) - Tail
HGEWFNL	: Final, corrected, lagged East-West mag gradient (nT/m)
HGNSFNL	: Final, corrected, lagged North-South mag gradient (nT/m)
SER06 AMP1	: MATRIX/VLF Amplitude - NAA
SER06 AMP2	: MATRIX/VLF Amplitude - NML
SER06 AMP3	: MATRIX/VLF Amplitude - NLK
SER06 DIR1	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NAA
SER06 DIR2	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NML
SER06 DIR3	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NLK
SER06 EP1	: MATRIX/VLF Ellipticity (Planar) - NAA
SER06 EP2	: MATRIX/VLF Ellipticity (Planar) - NML
SER06 EP3	: MATRIX/VLF Ellipticity (Planar) - NLK
SER06 EV1	: MATRIX/VLF Ellipticity (Vertical) - NAA
SER06 EV2	: MATRIX/VLF Ellipticity (Vertical) - NML
SER06 EV3	: MATRIX/VLF Ellipticity (Vertical) - NLK
SER06 TLT1	: MATRIX/VLF Tilt - NAA
SER06 TLT2	: MATRIX/VLF Tilt - NML
SER06 TLT3	: MATRIX/VLF Tilt - NLK
AMP1 FNL	: Final, levelled, lagged Amplitude - NAA
AMP2 FNL	: Final, levelled, lagged Amplitude - NML
AMP3_FNL	: Final, levelled, lagged Amplitude - NLK
AMP1_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NAA
AMP2_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NML
AMP3_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NLK
IP1_LAG_ML	: Processed InPhase - NAA
QD1_LAG_ML	: Processed Quadrature - NAA
IP2_LAG_ML	: Processed InPhase - NML
QD2_LAG_ML	: Processed Quadrature - NML
IP3_LAG_ML	: Processed InPhase - NLK
QD3_LAG_ML	: Processed Quadrature - NLK

3. Data Grids

Grids prepared using Bi-Directional (Akima) spline with a 25m grid cell size.

DTMFNL.grd	: Digital Terrain Model (m AMSL)
AMP1 FNL.grd	: Final, levelled, lagged Amplitude - NAA
AMP1 FNL HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NAA
AMP2 FNL.grd	: Final, levelled, lagged Amplitude - NML
AMP2 FNL HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NML
AMP3 FNL.grd	: Final, levelled, lagged Amplitude - NLK
AMP3 FNL HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NLK
ANSIGFNL.grd	: Analytic Signal (calculated from MAGFNL)
HGEWFNL.grd	: East-West mag gradient (nT/m)
HGNSFNL.grd	: North-South mag gradient (nT/m)
MAGFNL.grd	: Final, corrected measured Total Magnetic Intensity (nT) - Tail
RTF.grd	: Reconstructed Total Magnetic Field (from measured gradients)
VDVFNL.grd	: Calculated First Vertical Magnetic Derivative (nT/m)

3. EAST BLOCK

```
TERRAQUEST Data Archive Documentation
_____
TERRAQUEST reference : B486
Client: Lac des Iles Mines Ltd.
Project: Sunday Lake Project - EAST BLOCK
Type: Horizontal Gradient Magnetics/MATRIX-VLF
Aircraft Type: Cessna 206
Aircraft ID: C-GGLS
Operations: Summer, 2019
Survey Base: Thunder Bay, ON
Archive Version: 190816
Prepared By: Allen Duffy
1. Data Organisation:
\---B486 EAST
    +---DATA
     B486ARC EAST 190816.gdb
     \---GRIDS
              AMP1 FNL.grd
              AMP1 FNL.grd.gi
              AMP1 FNL HP.grd
              AMP1_FNL_HP.grd.gi
AMP2_FNL.grd
              AMP2 FNL.grd.gi
              AMP2_FNL_HP.grd
              AMP2 FNL HP.grd.gi
              AMP3 FNL.grd
              AMP3 FNL.grd.gi
              AMP3_FNL_HP.grd
              AMP3 FNL HP.grd.gi
              ANSIGFNL.grd
              ANSIGFNL.grd.gi
              HGEWFNL.grd
              HGEWFNL.grd.gi
              HGNSFNL.grd
              HGNSFNL.grd.gi
              MAGFNL.grd
              MAGFNL.grd.gi
              RTF.grd
              RTF.grd.gi
              VDVFNL.grd
              VDVFNL.grd.gi
2. Database Contents: MAG/VLF (B486ARC EAST 190816.gdb) -
    Data sampled at 10Hz ...
    X_UTM_WIN : UTM Easting - WGS84, UTM Zone 16N (metres)
Y_UTM_WIN : UTM Northing - WGS84, UTM Zone 16N (metres)
DATE : Flight Date (DD/MM/YYYY format - ASCII)
Flight : Flight Number
                      : Flight Number
    Flight
    FID
                      : Fiducial (UTC seconds)
                   : Flaucial (ore seconds)

: UTC TIME (hh:mm:ss.ss format)

: Aircraft clearance (m AGL)

: WGS84 Altitude (metres AMSL)
    TIME
    RADAR
    ALT
                 : WGS04 Altitude (metros inst,

: Final Digital Terrain Model (m AMSL)

: Latitude (decimal degrees)

: Longitude (decimal degrees)
    DTMFNL
    LAT
LON
    LON
DIUEDIT
                     : Base Station Diurnal data (nT)
                      : Fluxgate X component (nT)
    VMX
                       : Fluxgate Y component (nT)
    VMY
```

VMZ	: Fluxgate Z component (nT)
TF1UNC	: Raw measured TMI (nT) - Left Wing
TF2UNC	: Raw measured TMI (nT) - Right Wing
TF3UNC	: Raw measured TMI (nT) - Tail
TF1CMP	: Compensated, measured TMI (nT) - Left Wing
TF2CMP	: Compensated, measured TMI (nT) - Right Wing
TF3CMP	: Compensated, measured TMI (nT) - Tail
TF1CMPEDIT	: Compensated, measured TMI - Spikes Removed (nT) - Left Wing
TF2CMPEDIT	: Compensated, measured TMI - Spikes Removed (NT) - Right Wing
TF3CMPEDIT	: Compensated, measured TMI - Spikes Removed (NT) - Tail
MAGFNL	: Final, corrected measured TMI (nT) - Tail
HGEWFNL	: Final, corrected, lagged East-West mag gradient (nT/m)
HGNSFNL	: Final, corrected, lagged North-South mag gradient (nT/m)
SER06 AMP1	: MATRIX/VLF Amplitude - NAA
SER06 AMP2	: MATRIX/VLF Amplitude - NML
SER06 AMP3	: MATRIX/VLF Amplitude - NLK
SER06 DIR1	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NAA
SER06 DIR2	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NML
SER06 DIR3	: MATRIX/VLF Apparent Station Azimuth (referenced to Aircraft) - NLK
SER06 EP1	: MATRIX/VLF Ellipticity (Planar) - NAA
SER06 EP2	: MATRIX/VLF Ellipticity (Planar) - NML
SER06 EP3	: MATRIX/VLF Ellipticity (Planar) - NLK
SER06 EV1	: MATRIX/VLF Ellipticity (Vertical) - NAA
SER06 EV2	: MATRIX/VLF Ellipticity (Vertical) - NML
SER06 EV3	: MATRIX/VLF Ellipticity (Vertical) - NLK
SER06 TLT1	: MATRIX/VLF Tilt - NAA
SER06 TLT2	: MATRIX/VLF Tilt - NML
SER06 TLT3	: MATRIX/VLF Tilt - NLK
AMP1 FNL	: Final, levelled, lagged Amplitude - NAA
AMP2_FNL	: Final, levelled, lagged Amplitude - NML
AMP3_FNL	: Final, levelled, lagged Amplitude - NLK
AMP1_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NAA
AMP2_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NML
AMP3_FNL_HP	: Final, levelled, lagged, High Pass filtered Amplitude - NLK
IP1_LAG_ML	: Processed InPhase - NAA
QD1_LAG_ML	: Processed Quadrature - NAA
IP2_LAG_ML	: Processed InPhase - NML
QD2_LAG_ML	: Processed Quadrature - NML
IP3_LAG_ML	: Processed InPhase - NLK
QD3_LAG_ML	: Processed Quadrature - NLK

3. Data Grids

Grids prepared using Bi-Directional (Akima) spline with a 25m grid cell size.

DTMFNL.grd	: Digital Terrain Model (m AMSL)
AMP1 FNL.grd	: Final, levelled, lagged Amplitude - NAA
AMP1 FNL HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NAA
AMP2 FNL.grd	: Final, levelled, lagged Amplitude - NML
AMP2 FNL HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NML
AMP3 FNL.grd	: Final, levelled, lagged Amplitude - NLK
AMP3 FNL HP.grd	: Final, levelled, lagged, high pass filtered Amplitude - NLK
ANSIGFNL.grd	: Analytic Signal (calculated from MAGFNL)
HGEWFNL.grd	: East-West mag gradient (nT/m)
HGNSFNL.grd	: North-South mag gradient (nT/m)
MAGFNL.grd	: Final, corrected measured Total Magnetic Intensity (nT) - Tail
RTF.grd	: Reconstructed Total Magnetic Field (from measured gradients)
VDVFNL.grd	: Calculated First Vertical Magnetic Derivative (nT/m)

Additional Appendices:

The following appendices contains outstanding items required under 'Technical Standards for Reporting Assessment Work' guidelines; namely Section 8. Airborne Geophysical Survey Work.

Appendix A: Property Geology and Exploration History - 8. (vii)

Appendix B: Regional Geology - 8. (viii)

Appendix C: Flight Lines Over Claims – 8. (xv)

Appendix A: Property Exploration History - 8. (vii)

Limited exploration work has been completed on the Shabaqua Granitic Intrusion. Historic logging roads and trails must be used to access the property, and Non-Mining Land Tenure blocks overlap the northern section of the intrusion. 1401385 Ontario Inc. and Transition Metals Corp. currently hold claim cells within the Shabaqua Intrusion.

May 2019: Terraquest Ltd., contracted by North American Palladium, completed a Horizontal Magnetic Gradient & Matrix VLF-EM Airborne Survey that covered an area northwest of Thunder Bay, including the Shabaqua Intrusion.

September 2019: North American Palladium employees completed prospecting work on the property, collecting eight samples for geochemical analysis. Outcrops observed were dominantly felsic intrusive rocks related to the Shabaqua Intrusion, along with Archean metasediments and Nipigon Diabase.

Appendix B: Regional and Local Geology - 8. (viii)

Regional Geology

The claim group is located within the Quetico Subprovince (also termed the Quetico Basin) of the Superior Province in Ontario. Rocks of the Quetico Basin form a 1000 km east-west trending belt averaging 70 km in width - bounded to the north by the Wabigoon and Marmion Terranes and to the south by the Wawa Terrane (Percival, 2017). Turbiditic metasedimentary rocks dominant the Quetico Basin, along with minor iron formation, felsic intrusions, and mafic-ultramafic intrusions. These rocks are interpreted to have formed as an accretionary prism between the converging Wabigoon and Wawa Terranes (Percival, 1988).

Local Geology

The claim group is situated within the Shabaqua Granite Complex, part of a larger suite of granitic intrusions recognized as the Dog Lake Granite Chain (Kuzmich et al., 2012). This Granite Chain is host to six magnetite-bearing granitic intrusions, and can be identified through aeromagnetic surveys. These intrusions, from east to west, are Penasen Lake, White Lily, Barnum Lake, Trout Lake, Silver Falls, and Shabaqua intrusions. Kuzmich et al. (2012) have classified these granitic intrusions as varying from S-type to I-type granites based on petrologic and geochemical data.

The Shabaqua intrusion is the most poorly studied granitic complex within the Dog Lake Granite Chain. Host rocks vary in composition from Monzodiorite to Syenite, and are overlain by Archean metasedimentary rocks of the Quetico Basin and Nipigon Diabase related to the Midcontinent Rift.

References

Kuzmich, B., Hollings, P., Scott, J.F., Campbell, D.A., 2011. Geochemistry and Petrology of the Dog Lake Granite Chain, Quetico Basin, Northwestern Ontario, HBSc. Geology Thesis, Lakehead University.

Percival, J.A., 1988. A regional perspective of the Quetico metasedimentary belt, Superior Province, Canada: Canadian Journal of Earth Sciences, v. 26, p. 677-693.

Percival, J.A. 2007. Geology and metallogeny of the Superior Province, Canada. In: Goodfellow, W.D. (Ed.), Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 903-928.

Appendix C: Flight Lines Over Claims – 8. (xv)

The total line-kilometers flown for this survey are 7509.4 km. The total distance flown on NAP claims is 365 km over 7 claims.

