

We are committed to providing [accessible customer service](#).

If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).

Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).

**Assessment Report
On the
Jean Property**

Jean and Strange Township, Ontario, Canada

Prepared for:

1401385 Ontario Inc

Prepared by:

Brent Clark G.I.T

Clark Exploration Consulting

941 Cobalt Crescent

Thunder Bay, ON

P7B 5Z4

March 27th 2019

TABLE OF CONTENTS

1.0: Introduction	1
2.0: Property Description, Location and Accessibility	2
3.0: Property History	4
4.0: Regional and Local Geology.....	5
5.0: VLF Survey Procedure	7
6.0: Conclusions and Recommendations.....	10
7.0: References.....	11

TABLE OF FIGURES

Figure 1. Jean Property Location	2
Figure 2: Jean Claims	3
Figure 3: Regional Geology	6

Appendices

Appendix I: VLF Survey Station	
Appendix II: VLF Sections	
Appendix III: Daily Log	

1.0: Introduction

In January 2018, employees of Clark Exploration in Thunder Bay conducted a VLF survey on the Jean Property (the "Property") belonging to 1401385 Ontario Inc for the purpose of further delineating the magnetic anomaly identified in an airborne survey.

The Jean Property of 1401385 Ontario Inc consists of thirty-two (32) cells in the Jean and Strange Townships of the Thunder Bay Mining Division, northwestern Ontario. The centre of the Property is located approximately at UTM co-ordinates 719047E 5348500N (NAD 83, Zone 15).

The rocks in the area of the Property comprise the upper and lower Gunflint Formation which is part of the extensive west-northwest trending Gunflint Iron Formation or Gunflint Iron Range of northwestern Ontario. The Gunflint Iron Formation is geologically correlated with the Biwabik Formation of Mesabi Iron Range of northern Minnesota, USA.

Previous work on the property has returned encouraging results for economic iron ore deposits within the Gunflint Iron Formation as well as a recent VTEM survey outlining a favourable anomaly underlying Mt Marny.

The VLF survey program was carried out over the anomaly at Mt Marny to gain better understanding of its orientation to help the planning of a drill program.

The survey was successful in determining the location of the anomaly and a drilling program is recommended to be carried out (?) to test the economic potential of the anomaly.

2.0: Property Description, Location and Accessibility

The Jean Property of 1401385 Ontario Inc consists of thirty-two (32) cells in the Jean and Strange Townships of the Thunder Bay Mining Division, northwestern Ontario. The property is 50km west of Thunder Bay, Ontario Canada. The centre of the Property is located approximately at UTM co-ordinates 719047E 5348500N (NAD 83, Zone 15).

The Property claims are unpatented, totalling 613 hectares in area. Unpatented mineral claims include the mineral rights but they do not include the surface rights; the surface rights are held by the Crown. The claims are held 100% by 1401385 Ontario Inc.

Access to the Property is north from highway 588 along Gravel Lakes Rd for 3.5km, east on an unorganized logging road for 3km.

Permits are required for almost all stages of mineral exploration, development and mining in Ontario, but not for the prospecting and mapping as carried out in the work described in this Report.

The government of Ontario requires expenditures of \$400 per year per cell for single cell mining claims and \$200 per cell for boundary claims, prior to expiry, to keep the claims in good standing for the following year. The report must be submitted by the expiry date.

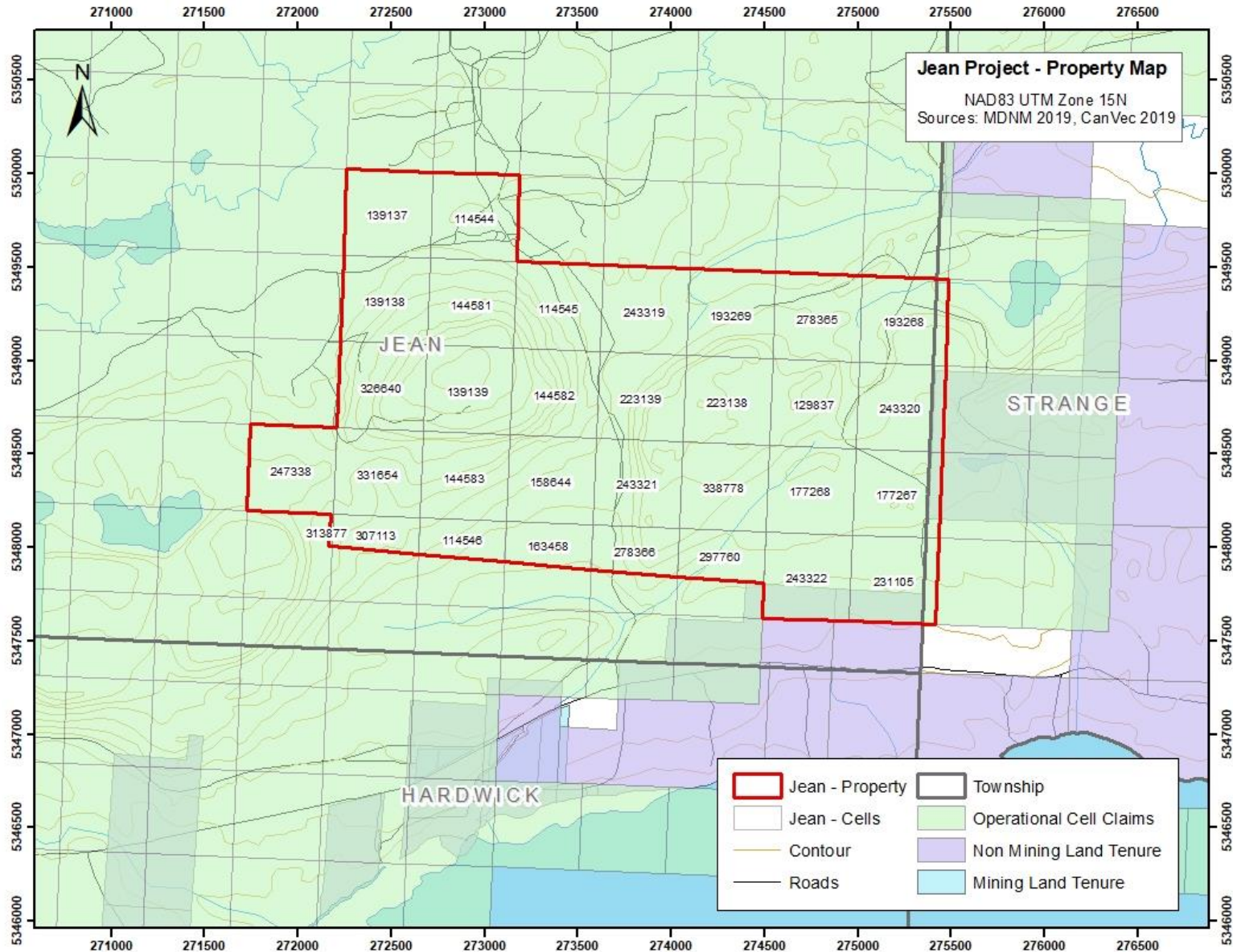
Table 1: Jean Claims

Township / Area	Tenure ID	Tenure Type	Anniversary Date
JEAN	114544	Single Cell Mining Claim	2019-04-12
JEAN	114545	Single Cell Mining Claim	2019-04-12
JEAN	114546	Boundary Cell Mining Claim	2019-04-12
JEAN	129837	Single Cell Mining Claim	2019-02-23
JEAN	139137	Boundary Cell Mining Claim	2019-04-12
JEAN	139138	Boundary Cell Mining Claim	2019-04-12
JEAN	139139	Single Cell Mining Claim	2019-04-12
JEAN	144581	Single Cell Mining Claim	2019-04-12
JEAN	144582	Single Cell Mining Claim	2019-04-12
JEAN	144583	Single Cell Mining Claim	2019-04-12
JEAN	158644	Single Cell Mining Claim	2019-04-12
JEAN	163458	Boundary Cell Mining Claim	2019-04-12
JEAN,STRANGE	177267	Single Cell Mining Claim	2019-02-23
JEAN	177268	Single Cell Mining Claim	2019-02-23
JEAN,STRANGE	193268	Single Cell Mining Claim	2019-02-23
JEAN	193269	Single Cell Mining Claim	2019-02-23
JEAN	223138	Single Cell Mining Claim	2019-02-23
JEAN	223139	Single Cell Mining Claim	2019-04-12
JEAN,STRANGE	231105	Single Cell Mining Claim	2019-02-23
JEAN	243319	Single Cell Mining Claim	2019-04-12
JEAN,STRANGE	243320	Single Cell Mining Claim	2019-02-23
JEAN	243321	Single Cell Mining Claim	2019-04-12
JEAN	243322	Single Cell Mining Claim	2019-02-23
JEAN	247338	Boundary Cell Mining Claim	2019-04-12
JEAN	278365	Single Cell Mining Claim	2019-02-23
JEAN	278366	Boundary Cell Mining Claim	2019-04-12
JEAN	297760	Boundary Cell Mining Claim	2019-02-23
JEAN	307113	Boundary Cell Mining Claim	2019-04-12
JEAN	313877	Boundary Cell Mining Claim	2019-04-12
JEAN	326640	Boundary Cell Mining Claim	2019-04-12
JEAN	331654	Boundary Cell Mining Claim	2019-04-12
JEAN	338778	Single Cell Mining Claim	2019-02-23

Figure 1. Jean Property Location



Figure 2: Jean Claims



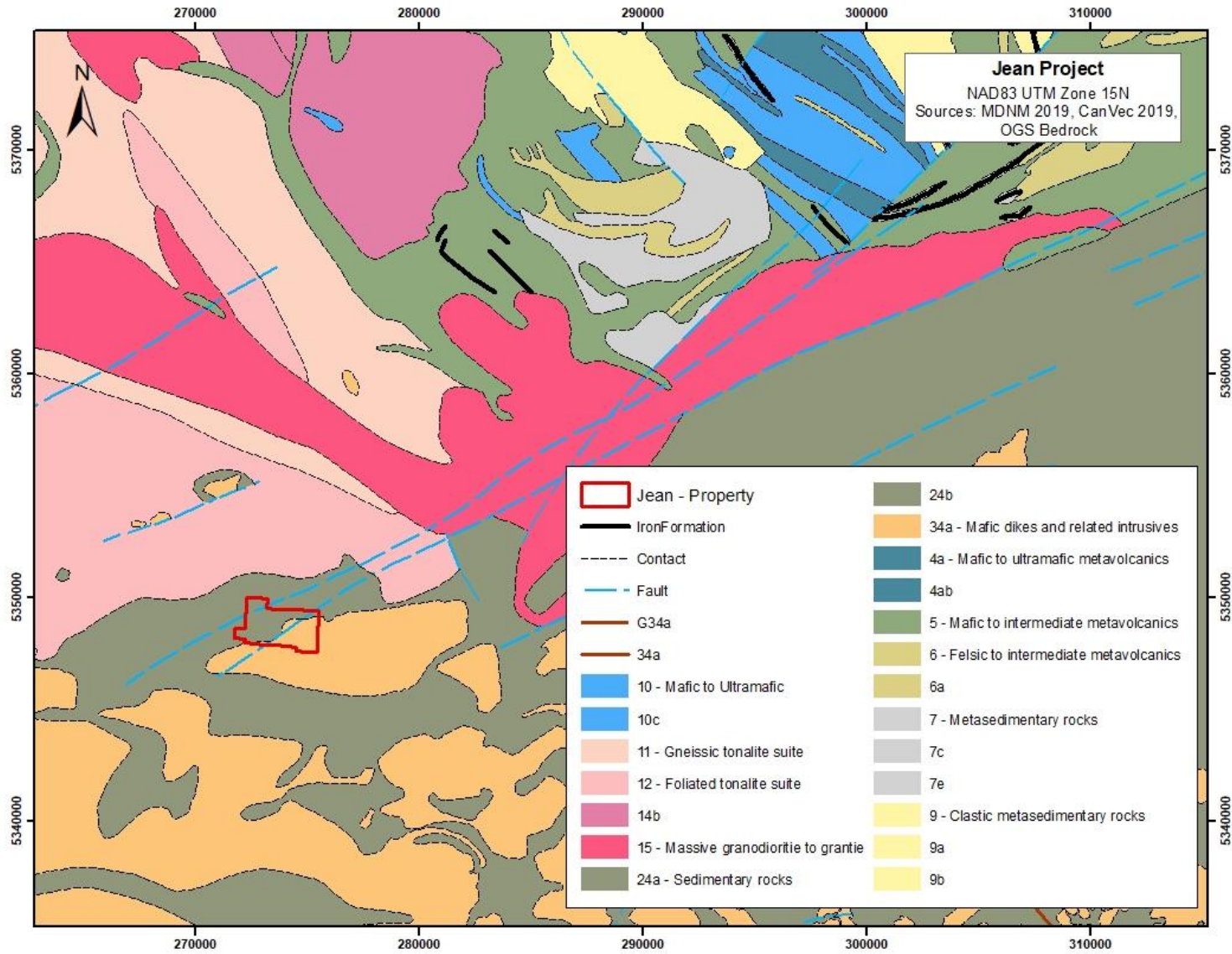
3.0: Property History

- 1961: Flint Rock Mines Ltd staked 36 mining claims north of western end of whitefish lake. Two (2) chip samples were taken on the property at the time of the report grading 29.54% over 10ft soluble iron and 25.40% over 15ft respectively, averaging 27% over 25ft. (AFRI: 52B08SW0001)
- 1962: Flint Rock Mines Ltd conducted a diamond drilling program, thirteen (13) holes totalling 3281ft (1000m) bordering Jean and Strange townships south of whitefish river near Mount Edna. Assays returned values up to 32% Iron over 25ft. (AFRI 52B08SW0002)
- 2008: Raytech Metals Corp conducted geological mapping, rock sampling and radiometric dating on the Gufflint (Mt Edna) Property. Chip samples of 12.5m of the upper-magnetite-hematite taconite unit average 22% total iron and 6.4% iron in magnetite. Sampling performed on eastern portion of current property. (AFRI 20005636)
- 2010: R. Koivisto performed a prospecting report for Harold Clementson. A total of 5 samples returning values less than 16ppb Au.
- 2010: Canadian Iron Inc conducted a airborne versatile time domain electromagnetic (VTEM) survey on the 'gunflint' property covering an area of 16.3 km² totalling 182 line kilometres. A strong anomaly was identified at Mount Marny.
- 2011: Canadian Iron Inc collected a bulk sample from a road cut exposure in the Divide Ridge area of Mt. Edna. The bulk samples averaged 29% Fe₂O₃. Select grab samples taken during a site visit returned values up to 37% Fe.
- 2012: Canadian Iron Inc conducted a diamond drilling program drilling one (1) hole totalling 155.4m. This hole was drilled to obtain subsurface information below the bulk sample taken in 2011. No assay values reported.

4.0: Regional and Local Geology

The Jean Property is located within the western portion of the Wawa Subprovince which is part of the Superior province of the Canadian Shield. Unconformably overlying Archean terrain is the Paleoproterozoic Anikimie series of sediments containing the Gunflint Formation, a thick series of iron formation, chert and argillite, which is conformably overlying Rove shales and argillites. Intruding into the Rove Formation is the Keeweenawan diabase in the form of dikes and sills.

Figure 3: Regional Geology



5.0: VLF Survey Procedure

The work was carried out from December 18th, 2018 to February 12th, 2019 by employees of Clark Exploration and Consulting of Thunder Bay, Ontario. The employees were B. Clark, P. Clark, and R. Palmer.

The survey was completed over four (4) 560m long lines spaced 200m apart with readings taken at 20m intervals. The station used was MAINE, located in Cutler, Maine, USA. The collected data was processed using Karous-Hjelt & Fraser Filtering software (KHFFilt).

Sharpe, G. 2011 described the anomaly as “Trending east-west in a curvilinear fashion, and flanking the north side of Mt Marny, this anomaly is the strongest magnetic and EM response of the entire airborne survey and it lies just within and to the east of the roughly circular magnetic “bulls eye”, that is clearly indicative of a large quantity of magnetite. To the south of this anomaly, and within an area of low magnetic intensity, is a short NE trending EM response, which may or may not be related to the main conductor to the north. Surface geological indications are that both anomalies trends coincide with exposures of the Rove Formation argillite along the north and south side of Mt. Marny, which is known to host most of the silver bearing vein systems of the area. Samples taken near the anomaly, however, did not indicate any values of silver, or any other metals for that matter.”

VLF Electromagnetics

This method uses VLF navigation signals as a primary source. The receiver measures the dip angle and the vertical quadrature of the resultant magnetic fields at the station. The method can detect weak conductors and has moderate to great depth penetration, but conductive overburden greatly diminishes its capability.

Field Procedure

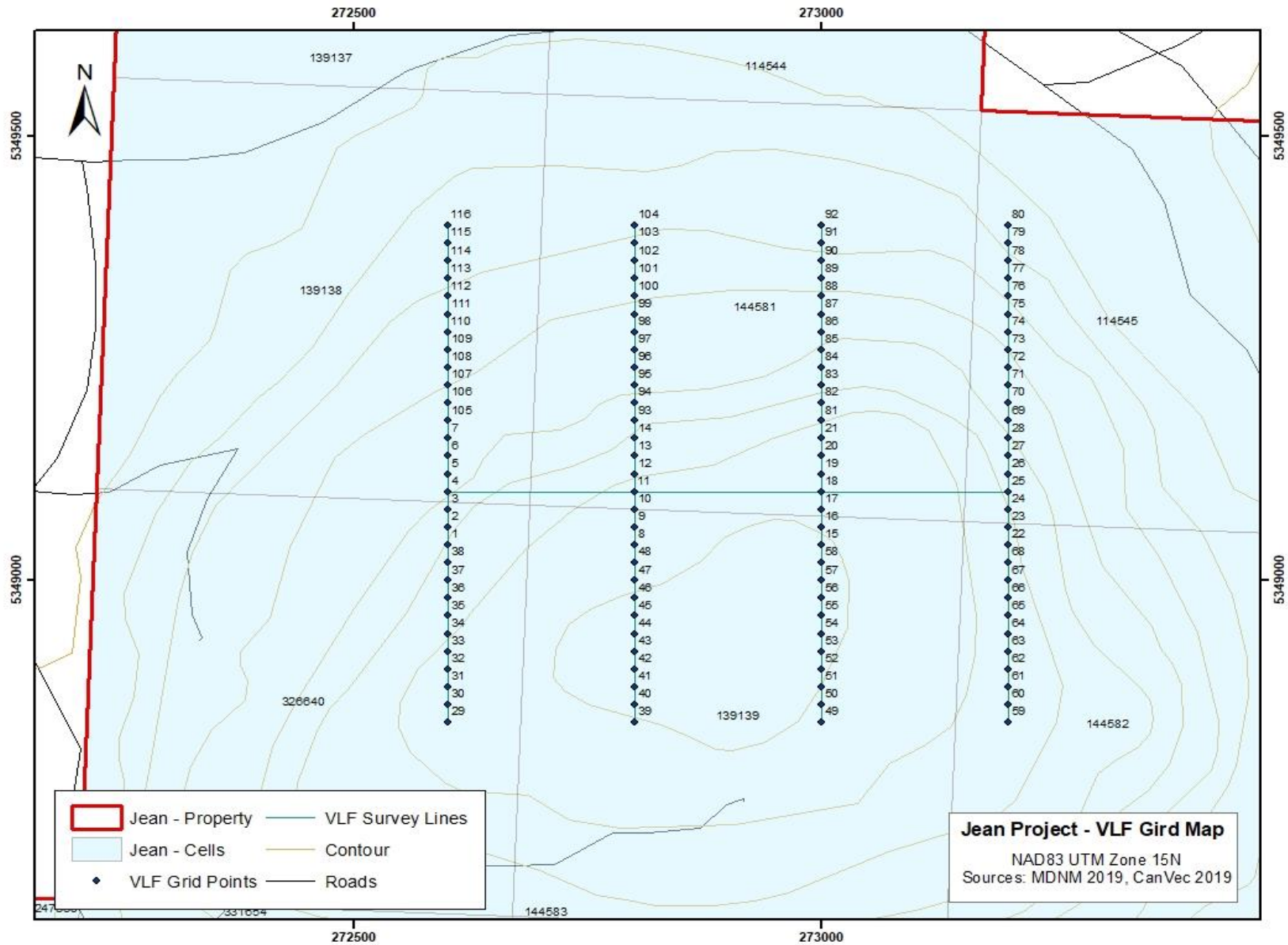
A Geonics EM-16 was employed to measure the In-Phase and Quadrature components of the EM field. The survey used VLF transmitter MAINE at Cutler, Maine, USA as a source. The stations were 20 metres apart and the in-phase (percent slope of the dip angles) and quadrature were measured facing east. The data was hand recorded in a field book, which was later input into a spreadsheet, and processed using KHFFilt software.

Geonics EM-16 Specifications

Measured Quantity	In-phase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field (ie. Tangent of the tilt angle and ellipticity)
Sensitivity	In-Phase: +/- 150%

Resolution	Quad-Phase: +/- 40%
Output	+/- 1%
Operational Frequency	Nulling by audio tone. In-phase indication from mechanical inclinometer and quad-phase from a graduated dial
Operator Controls	15 -25 KHz VLF Radio Band. Station selection done by means of plug-ins
Power Supply	On/Off switch, battery test push button, station selector, audio volume control, quadrature dial, inclinometer.
Dimensions	6 'AA' Batteries
Weight	42 x 14 x 9cm
	Instrument: 1.6kg

Figure 4: VLF Survey Grid



6.0: Conclusions and Recommendations

The work program was successful in confirming the location of the conductor which has a shallow dip to the north. The strongest responses were ~100m north of the baseline. Topography in the area may have played a roll in this response as south of the anomaly location is ~6-8m cliff faces.

Previous work noted the exposure of the Rove Formation argillite along the north and south side of Mt. Marny, which is a well known to host most of the silver bearing veins systems of the area. However, no values of silver or other metals were returned.

It is recommended that a drill hole be collared to the north with an azimuth of 180 degrees to intersect the anomaly.

7.0: References

Note: in the references listed below the terms "AFRI File" and "AFRO ID" refer to the assessment report's identification numbers for the files as found in the MNDM's Assessment File Research Image Database (AFRI) retrieved from <http://www.geologyontario.mndm.gov.on.ca>.

Acron, W., Legault, J., Smith, G., Fiset, N., 2010: Report on a helicopter borne versatile time domain electromagnetic (VTEM) and aeromagnetic geophysical survey. Gunflint Property, for Canadian Iron Inc. AFRI 20000005945

Allen, G. J., 2008: Assessment Report on Geological Mapping, Rock Sampling, and Radiometric Survey on the *Gunflint (Mt. Edna) Property* for Raytec Metals Corp. AFRI 20000003742

Chisholm, L. D., 1959: Report of Flint Rock Mines Limited Gunflint Range, Thunder Bay District, Ontario. AFRI 52B08SW0001

Koivisto, R. J., 2010: Prospecting Report for Claim 4244962, Jean TWP of the Thunder Bay Mining Division. AFRI 20000004650

Ogilvie, R., 2012: Summary Report on Drilling of the Gunflint Claims. AFRI 20000008892

Sharpe, G., 2011: Technical Report, Gunflint Property, Thunder Bay Mining District, Ontario for *Canadian Iron Inc.* AFRI 20000006688

Sutherland, H. H., 1960 Report on Diamond Drilling, Flint Rock Mines Limited, Jean Township, Thunder Bay District. AFRI 52B08SW0002

Appendix I
VLF Survey Stations

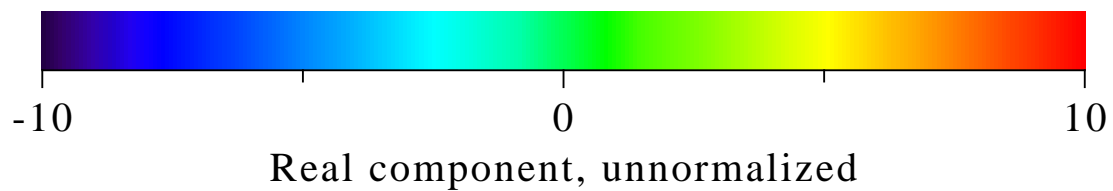
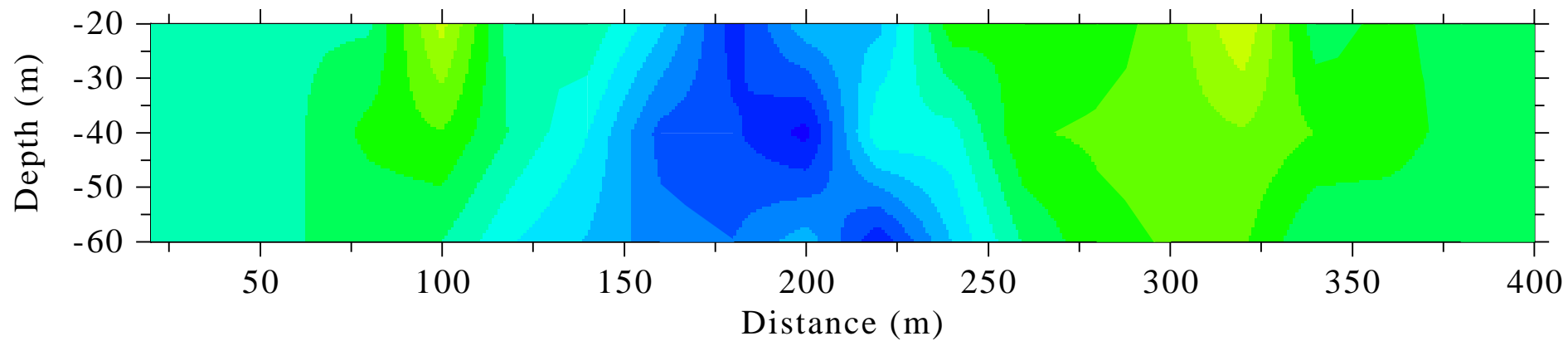
Waypoint	Line	Easting	Northing	InPhase	Quadrature	Station	KHFFILT
20	1	272600	5349400	-2	15	SEATTLE	20 -2 15
40	1	272600	5349380	0	-20	SEATTLE	40 0 -20
60	1	272600	5349360	2	-3	SEATTLE	60 2 -3
80	1	272600	5349340	4	-14	SEATTLE	80 4 -14
100	1	272600	5349320	2	-18	SEATTLE	100 2 -18
120	1	272600	5349300	10	-40	SEATTLE	120 10 -40
140	1	272600	5349280	2	15	SEATTLE	140 2 15
160	1	272600	5349260	10	4	SEATTLE	160 10 4
180	1	272600	5349240	-2	-5	SEATTLE	180 -2 -5
200	1	272600	5349220	0	8	SEATTLE	200 0 8
220	1	272600	5349200	-8	-12	SEATTLE	220 -8 -12
240	1	272600	5349180	-4	-42	SEATTLE	240 -4 -42
260	1	272600	5349160	-5	120	MAINE	260 -5 120
280	1	272600	5349140	-2	120	MAINE	280 -2 120
300	1	272600	5349120	-4	110	MAINE	300 -4 110
320	1	272600	5349100	2	115	MAINE	320 2 115
340	1	272600	5349080	4	-110	MAINE	340 4 -110
360	1	272600	5349060	3	-90	MAINE	360 3 -90
380	1	272600	5349040	2	-25	MAINE	380 2 -25
400	1	272600	5349020	0	-12	MAINE	400 0 -12
420	1	272600	5349000	0	-15	MAINE	420 0 -15
440	1	272600	5348980	0	0	MAINE	440 0 0
460	1	272600	5348960	-2	-55	MAINE	460 -2 -55
480	1	272600	5348940	2	-130	MAINE	480 2 -130
500	1	272600	5348920	2	-130	MAINE	500 2 -130
520	1	272600	5348900	0	-140	MAINE	520 0 -140
540	1	272600	5348880	-2	-135	MAINE	540 -2 -135
560	1	272600	5348860	2	-130	MAINE	560 2 -130
580	1	272600	5348840	0	-65	MAINE	580 0 -65
20	2	272800	5349400	-4	15	SEATTLE	20 -4 15
40	2	272800	5349380	6	30	SEATTLE	40 6 30
60	2	272800	5349360	10	5	SEATTLE	60 10 5
80	2	272800	5349340	-2	12	SEATTLE	80 -2 12
100	2	272800	5349320	6	12	SEATTLE	100 6 12
120	2	272800	5349300	2	0	SEATTLE	120 2 0
140	2	272800	5349280	-2	55	SEATTLE	140 -2 55
160	2	272800	5349260	4	60	SEATTLE	160 4 60
180	2	272800	5349240	2	80	SEATTLE	180 2 80
200	2	272800	5349220	2	-80	SEATTLE	200 2 -80
220	2	272800	5349200	0	-120	SEATTLE	220 0 -120

Waypoint	Line	Easting	Northing	InPhase	Quadrature	Station	KHFFILT
240	2	272800	5349180	2	-80	SEATTLE	240 2 -80
260	2	272800	5349160	0	-110	MAINE	260 0 -110
280	2	272800	5349140	0	-40	MAINE	280 0 -40
300	2	272800	5349120	0	35	MAINE	300 0 35
320	2	272800	5349100	-2	10	MAINE	320 -2 10
340	2	272800	5349080	-2	-20	MAINE	340 -2 -20
360	2	272800	5349060	-2	-25	MAINE	360 -2 -25
380	2	272800	5349040	0	-65	MAINE	380 0 -65
400	2	272800	5349020	-2	-134	MAINE	400 -2 -134
420	2	272800	5349000	0	-105	MAINE	420 0 -105
440	2	272800	5348980	-2	-148	MAINE	440 -2 -148
460	2	272800	5348960	0	-145	MAINE	460 0 -145
480	2	272800	5348940	-2	-145	MAINE	480 -2 -145
500	2	272800	5348920	0	-90	MAINE	500 0 -90
520	2	272800	5348900	0	-125	MAINE	520 0 -125
540	2	272800	5348880	-2	-90	MAINE	540 -2 -90
560	2	272800	5348860	0	-75	MAINE	560 0 -75
580	2	272800	5348840	0	-92	MAINE	580 0 -92
20	3	273000	5349400	-6	-20	SEATTLE	20 -6 -20
40	3	273000	5349380	6	-65	SEATTLE	40 6 -65
60	3	273000	5349360	10	-90	SEATTLE	60 10 -90
80	3	273000	5349340	10	-75	SEATTLE	80 10 -75
100	3	273000	5349320	12	-88	SEATTLE	100 12 -88
120	3	273000	5349300	2	120	SEATTLE	120 2 120
140	3	273000	5349280	8	-82	SEATTLE	140 8 -82
160	3	273000	5349260	2	-27	SEATTLE	160 2 -27
180	3	273000	5349240	4	70	SEATTLE	180 4 70
200	3	273000	5349220	12	-15	SEATTLE	200 12 -15
220	3	273000	5349200	12	5	SEATTLE	220 12 5
240	3	273000	5349180	4	10	SEATTLE	240 4 10
260	3	273000	5349160	-2	-30	MAINE	260 -2 -30
280	3	273000	5349140	-2	-15	MAINE	280 -2 -15
300	3	273000	5349120	-3	0	MAINE	300 -3 0
320	3	273000	5349100	-4	-35	MAINE	320 -4 -35
340	3	273000	5349080	-3	0	MAINE	340 -3 0
360	3	273000	5349060	-2	-35	MAINE	360 -2 -35
380	3	273000	5349040	4	-65	MAINE	380 4 -65
400	3	273000	5349020	-6	-110	MAINE	400 -6 -110
420	3	273000	5349000	-4	-110	MAINE	420 -4 -110
440	3	273000	5348980	-6	-115	MAINE	440 -6 -115

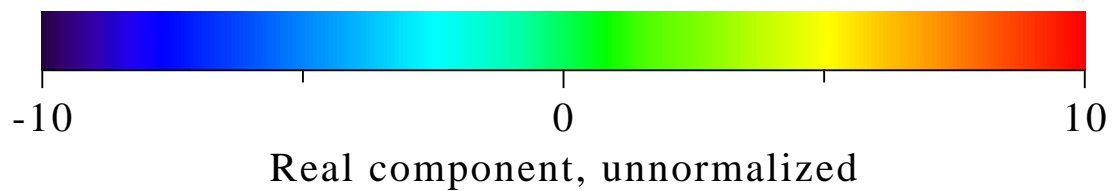
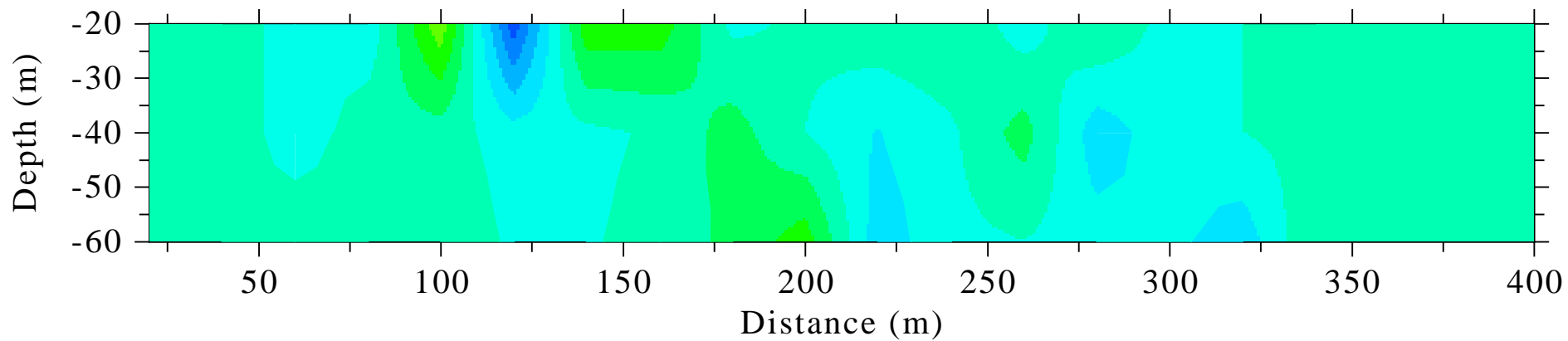
Waypoint	Line	Easting	Northing	InPhase	Quadrature	Station	KHFFILT
460	3	273000	5348960	-4	-120	MAINE	460 -4 -120
480	3	273000	5348940	-2	-140	MAINE	480 -2 -140
500	3	273000	5348920	-4	-80	MAINE	500 -4 -80
520	3	273000	5348900	-2	-105	MAINE	520 -2 -105
540	3	273000	5348880	-4	-25	MAINE	540 -4 -25
560	3	273000	5348860	0	-37	MAINE	560 0 -37
580	3	273000	5348840	0	68	MAINE	580 0 68
20	4	273200	5349400	6	45	SEATTLE	20 6 45
40	4	273200	5349380	4	80	SEATTLE	40 4 80
60	4	273200	5349360	8	85	SEATTLE	60 8 85
80	4	273200	5349340	0	-10	SEATTLE	80 0 -10
100	4	273200	5349320	2	-10	SEATTLE	100 2 -10
120	4	273200	5349300	8	-22	SEATTLE	120 8 -22
140	4	273200	5349280	16	-15	SEATTLE	140 16 -15
160	4	273200	5349260	6	-16	SEATTLE	160 6 -16
180	4	273200	5349240	-8	-30	SEATTLE	180 -8 -30
200	4	273200	5349220	4	-24	SEATTLE	200 4 -24
220	4	273200	5349200	8	-15	SEATTLE	220 8 -15
240	4	273200	5349180	4	18	SEATTLE	240 4 18
260	4	273200	5349160	-2	-100	MAINE	260 -2 -100
280	4	273200	5349140	-3	-90	MAINE	280 -3 -90
300	4	273200	5349120	-5	-90	MAINE	300 -5 -90
320	4	273200	5349100	-6	-80	MAINE	320 -6 -80
340	4	273200	5349080	-5	-50	MAINE	340 -5 -50
360	4	273200	5349060	-4	45	MAINE	360 -4 45
380	4	273200	5349040	-4	0	MAINE	380 -4 0
400	4	273200	5349020	-4	-110	MAINE	400 -4 -110
420	4	273200	5349000	-4	-95	MAINE	420 -4 -95
440	4	273200	5348980	-2	-140	MAINE	440 -2 -140
460	4	273200	5348960	-4	-120	MAINE	460 -4 -120
480	4	273200	5348940	-2	-90	MAINE	480 -2 -90
500	4	273200	5348920	-4	-72	MAINE	500 -4 -72
520	4	273200	5348900	-4	-58	MAINE	520 -4 -58
540	4	273200	5348880	0	-45	MAINE	540 0 -45
560	4	273200	5348860	0	-25	MAINE	560 0 -25
580	4	273200	5348840	-6	-15	MAINE	580 -6 -15

Appendix II
VLf Sections

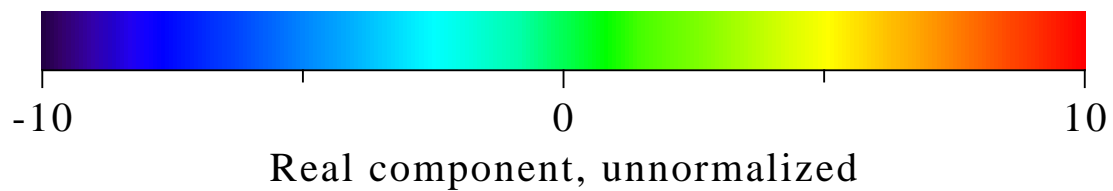
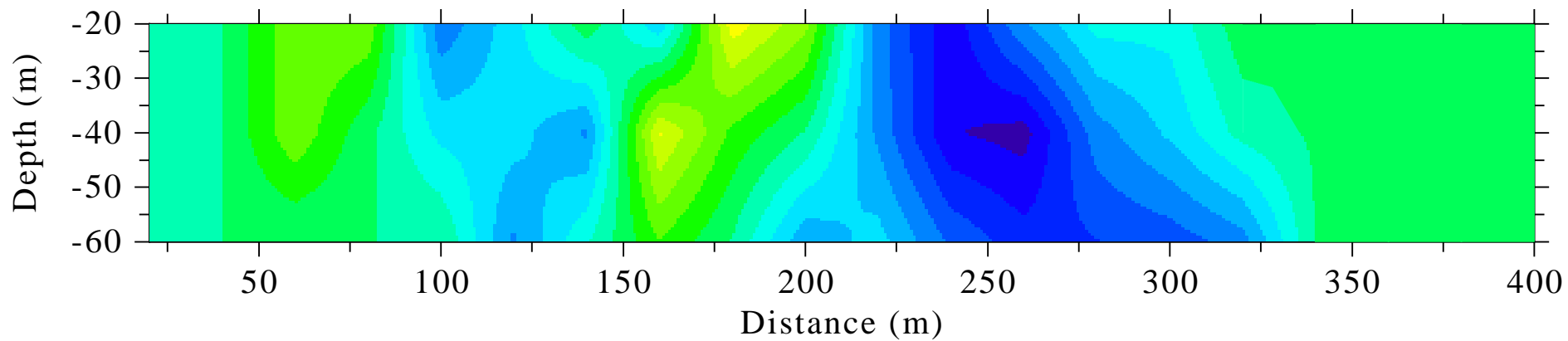
Karous-Hjelt filtering
Jean VLF Data Line 1



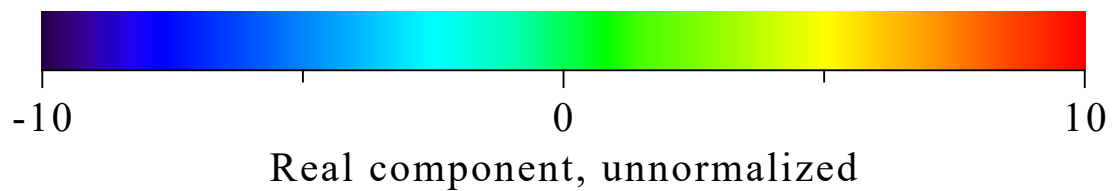
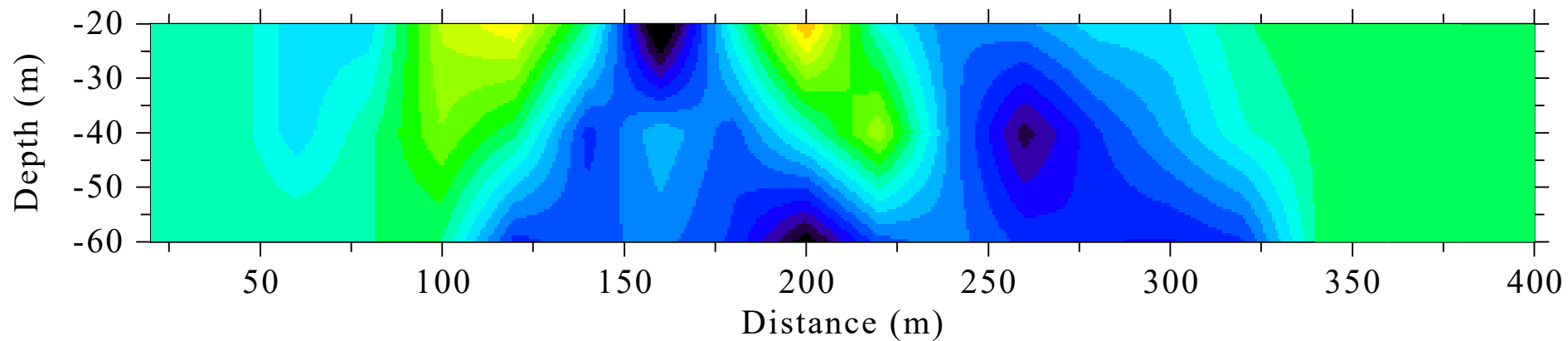
Karous-Hjelt filtering
Jean VLF Data Line 2



Karous-Hjelt filtering
Jean VLF Data Line 3



Karous-Hjelt filtering
Jean VLF Data Line 4



Appendix III

Daily Log

Jean Property – Daily Log February 2019

Date	Activity	Claims
December 18 th	Travel to property, survey central part of all lines	139138, 144581, 114545, 326640, 13939, 144582
January 10 th	Travel to property, could not gain access	N/A
February 4 th	Travel to property and survey northern extents of lines 3 & 4	114581, 114545
February 6 th	Travel to property and survey northern extents of lines 1 & 2	144581, 139138
February 12 th	Travel to property and survey southern portion of all lines	326640, 139139, 144582