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CANADIAN EXPLORATION SERVICES LTD

RT MINERALS CORP.

Q2873 – Link-Catharine Property
3D Distributed Induced Polarization Survey

C Jason Ploeger, P.Geo.

February 5, 2021

RTM

RT MINERALS CORP.

Abstract

CXS was contracted to perform a detailed 3D Distributed IP survey on the Link-Catharine Property. The survey was designed to investigate the historic some historic mineralization and to locate previously unidentified mineralization.

The 3D IP survey responded to the known mineralization that was identified by historic drilling. The 3D IP survey highlighted multiple features that should be further investigated. Most of the highlighted anomalies fall under what appears to be a heavier overburden cover and respond as a higher chargeability. A total of nine follow-up locations have been identified.

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Q2873 – Link-Catharine Property
3D Distributed Induced Polarization Survey

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TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF TABLES AND FIGURES

1. SURVEY DETAILS

1.1 Project Name

This project is known as the **Link-Catharine Project**.

1.2 Client

RT Minerals Corp.

Suite 1100 – 595 Howe Street
Vancouver, BC
V6C 2T5

1.3 Overview

During the winter of 2021, CXS performed a detailed 3D Distributed Induced Polarization (3D IP) survey for RT Minerals Corp. over the Link-Catharine Project. An infinite was employed and placed at 584528E 5308104N. Twenty-two logger locations were used with two orthogonal 50-100 metre dipoles at each logger site. A total of 4.9-line kilometres of current injection was performed at an injection interval of 50 metres. The survey was completed between January 16 and January 18, 2021.

1.4 Objective

The objective of the 3D distributed IP survey was to perform a detailed multidirectional induced polarization survey of the area. The survey specifically targeted known historic mineralization in an attempt to isolate additional targets.

1.5 Survey & Physical Activities Undertaken

Survey/Physical Activity	Dates	Total Days in Field	Total Line Kilometres
3D Distributed IP	January 16 to January 18, 2021	3	4.9

Table 1: Survey and Physical Activity Details

1.6 Summary of Results, Conclusions & Recommendations

The 3D IP survey responded to the known mineralization that was identified by historical drilling. The 3D IP survey highlighted multiple features that should be further investigated. Most of the highlighted anomalies fall under what appears to be a heavier overburden cover and respond as a higher chargeability. A total of nine follow-up locations have been identified by this work.

1.7 Coordinate System

Projection: UTM zone 17N
Datum: NAD83
UTM Coordinates near the center of the grid: 583950 Easting and 5310768 Northing

2. SURVEY LOCATION DETAILS

2.1 Location

The Link-Catharine Project is located in Catharine Township, approximately 21.5 km southwest of Larder Lake, Ontario.

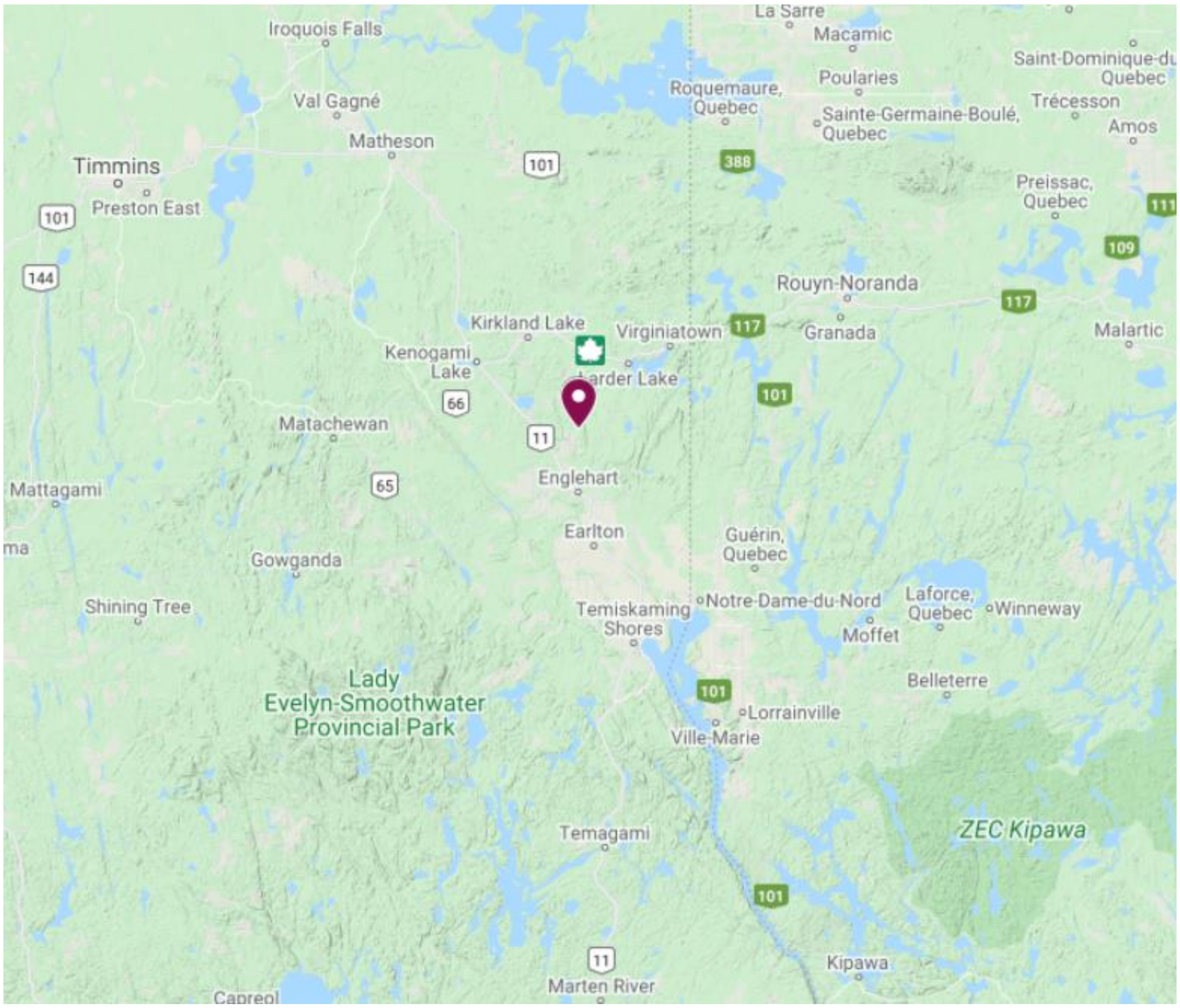


Figure 1: Location of the Link-Catharine Project (Map data ©2021 Google)

2.2 Access

Access to the Property was attained with a 4x4 truck via a year-round gravel road. The Property is located approximately 6.7km east on the Pacaud Chamberlain Boundary Road, which can be found 13.5km north along highway 11 from the town of Englehart, Ontario. From this point, a snow machine was used for the final 2.5km along an OFSC trail to the survey site.

2.3 MINING CLAIMS

The survey area covers a portion of mining claims, patents and leases located in Coleman Township, within the Larder Lake Mining Division.

Cell Number	Provincial Grid Cell ID	Ownership of Land	Township
550424	31M13L260	Terry Arnold Link	Catharine
550431	31M13K241	Terry Arnold Link	Catharine
550436	31M13L280	Terry Arnold Link	Catharine
550426	31M13K261	Terry Arnold Link	Catharine
550428	31M13L300	Terry Arnold Link	Catharine
550425	31M13K281	Terry Arnold Link	Catharine

Table 2: Mining Lands and Cells Information

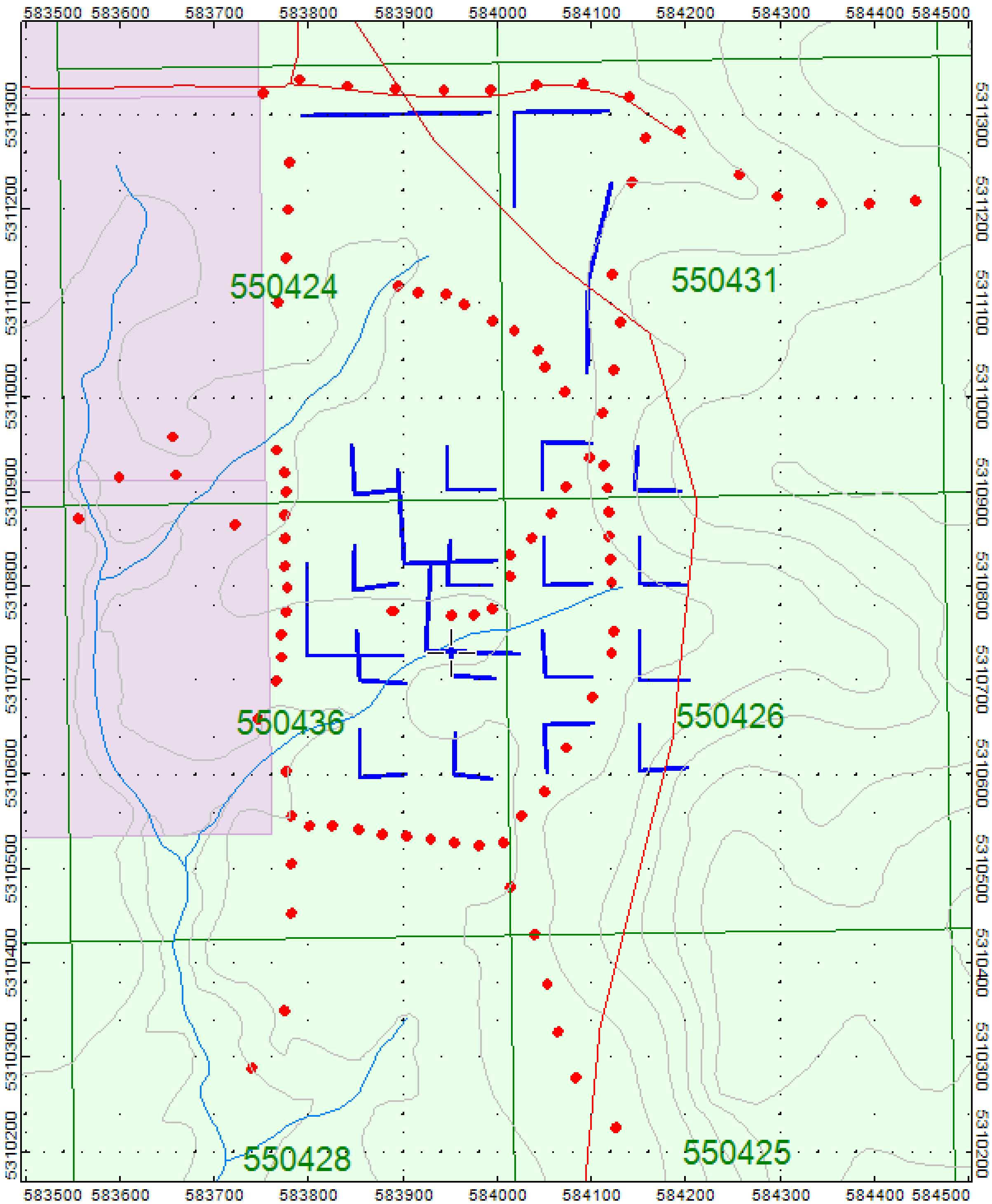


Figure 2: Operational Claim Map with 3D IP Electrode Sites – Red=Transmit Locations – Blue=Read Dipole

2.4 Property History

There have been many historical exploration projects carried out over the years, all over the survey area. The following list describes details of the previous geoscience work collected by the Mines and Minerals Division and provided by OGSEarth (MNDM & OGSEarth, 2021).

- **1970: Moncrieff Uranium Mines Limited. (File 32D04SW0292 and 31M13NW0102)**
  Airborne Geophysical and Diamond Drilling – Catharine Township
  During 1970 Moncrieff performed an airborne EM survey and drilled one hole totalling 467 feet.

- **1993: Sudbury Contact Mines Limited (File 31M13NW0023)**
  Ground Geophysical – Catharine Township
  During 1993 Sudbury Contact Mines performed a magnetometer, VLF EM and induced polarization survey over the Property.

- **1999-2005: Terry Link (File 31M13NW2013, 31M13NW2014, 31M13NW2029 and 20000000748**
  Diamond Drilling – Catharine Township
  During this period, Terry Link drilled 13 drill holes totalling 4286 feet.

- **2009: Golden Dawn Minerals Inc. (File 20006214)**
  Ground Geophysical – Catharine Township
  In 2009 Golden Dawn performed magnetometer and VLF EM surveys over the Property. Drilling was also performed, but no reports were located.

- **2015: Oban Mining Corp. (File 2_56487_10_Assessment-MapLidar2015_Oban-Cote_Final)**
  Geological – Catharine Township
  During 2015 Oban Mining performed an extensive geological/prospecting campaign, which included this area. They also flew a LiDAR survey over this area.

2.5 General Regional/Local Geological Settings

General Geology:

Taken from T. Link (2005), Catharine Twp. is underlain by an easterly facing sequence of Archean volcanic rocks; immediately to the west is the Round Lake granodiorite batholith, with its margin convex to the east. In general, conformity with this margin are: (a) banded tuff, (b) basic to intermediate lavas and intrusions, (c) intermediate to acid fragmental rocks, and (d) coarse-grained volcanic rocks.

The emplacement of the Round Lake Batholith caused stretching, banding and folding of the adjacent tuffs and mafic volcanics, creating a deformation zone along its margin. Several faults occur, many extending radially from the batholith.

Gold is present, usually in quartz or quartz-carbonate sulphide veins associated with shearing proximal to the Round Lake Batholith. Magnetite is found in iron formation associated with the banded tuff next to the batholith.

Local
Granodioritic rocks of the Round Lake Batholith lie along the western edge of the Property and are covered by clay overburden. In contact with the eastern margin of the batholith is sulphide facies iron formation, and sheared, folded and carbonate altered mafic tuffs and flows and ultramafic flow rocks. These rocks form a band up to 400 metres wide, with rare outcrops protruding through the clay overburden. It is these rocks that host the gold mineralization on the Property. To the east and forming a high ridge is a 200-metre wide band of gabbro and a 100-metre wide band of diorite. On the eastern slope of the hill is a thick unit of pillowed and massive mafic flows.

Gold mineralization is associated with pyrite; in wide zones of quartz veined iron carbonate and green fuchsite carbonate alteration, and also in narrow quartz-carbonate veins. The orientation of the zones and veins is complicated by folding and faulting.

2.6 Target of Interest

The survey specifically targeted known historic mineralization in an attempt to characterize the signature and to identify additional targets.

3. PLANNING

3.1 EXPLORATION PERMIT/PLAN

The 3D Distributed Induced Polarization survey was performed over mining claims held by Terry Link. The required permit is PR-19-000183 for the entire area of the survey coverage.

3.2 SURVEY DESIGN

Specialized IP survey design software was used as a tool to assist in the targeting of the survey. In this case, a theoretical survey distribution scenario was established to determine the survey results coverage.

For optimal coverage, 22 receivers with 3 read electrodes each were planned in selected locations. The 3 read electrodes of each receiver were layed out in 2 orthogonal directions, with 50 or 100-metre dipole lengths (generally grid north-south and grid east-west). Current injections were planned at 50-metre intervals along the trails and roads. An infinite location was chosen for this survey to provide pole-dipole array configuration with the infinite to be at a place as far as possible from the grid.

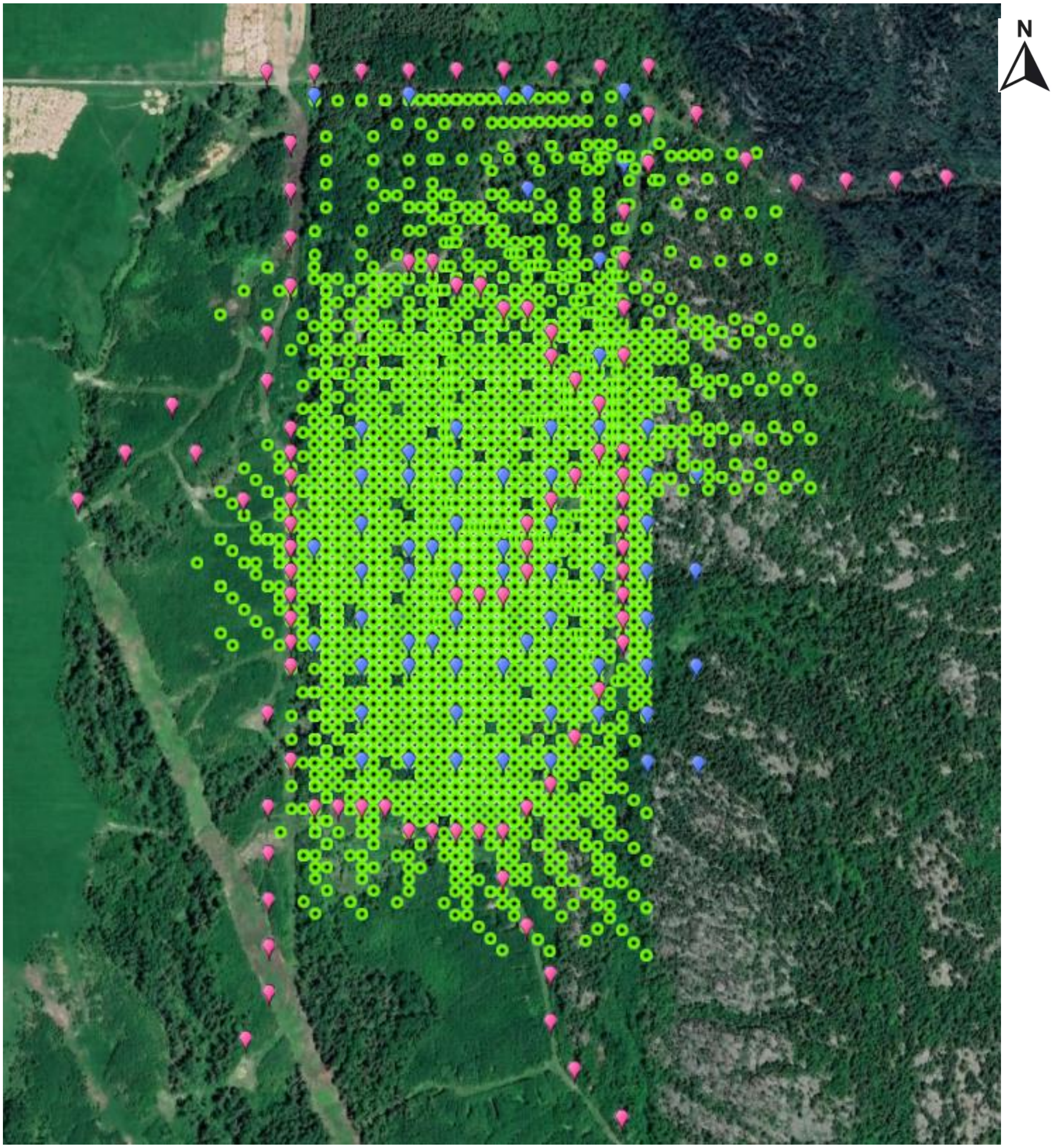


Figure 3: Survey Design Model Looking Down – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point (©2020 Google, Image ©2021 Maxar Technologies, Image ©2021 CNES/Airbus)

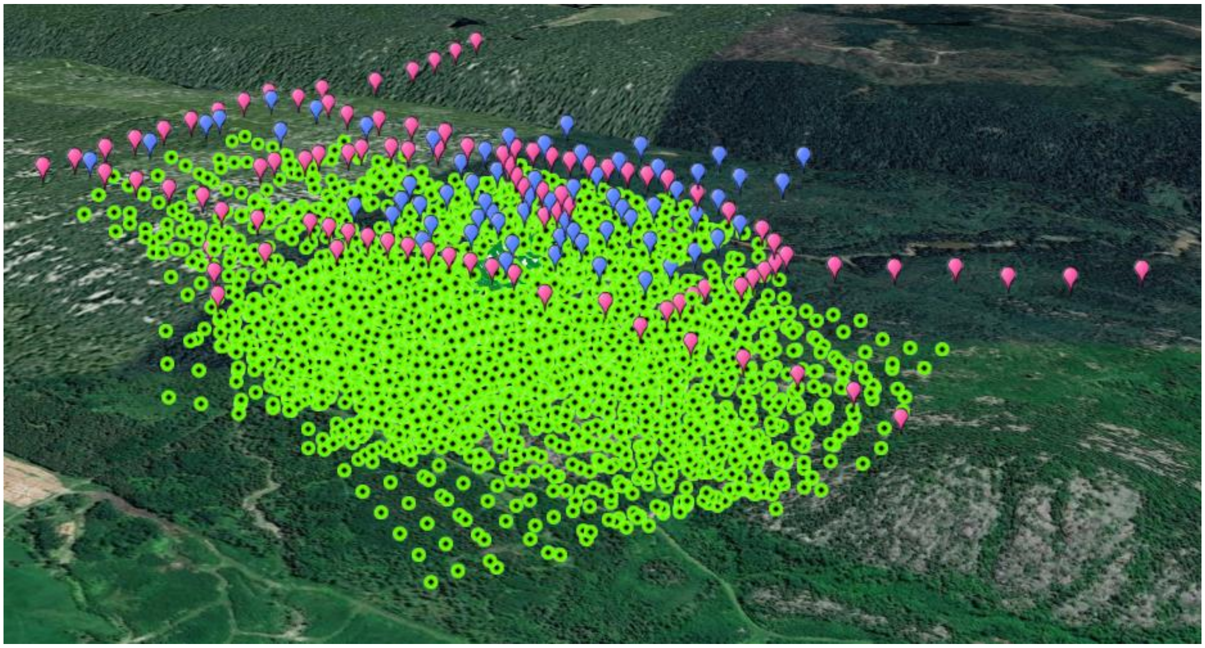


Figure 4: Survey Design Model Looking Northeast – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point (©2020 Google, Image ©2021 Maxar Technologies, Image ©2021 CNES/Airbus)

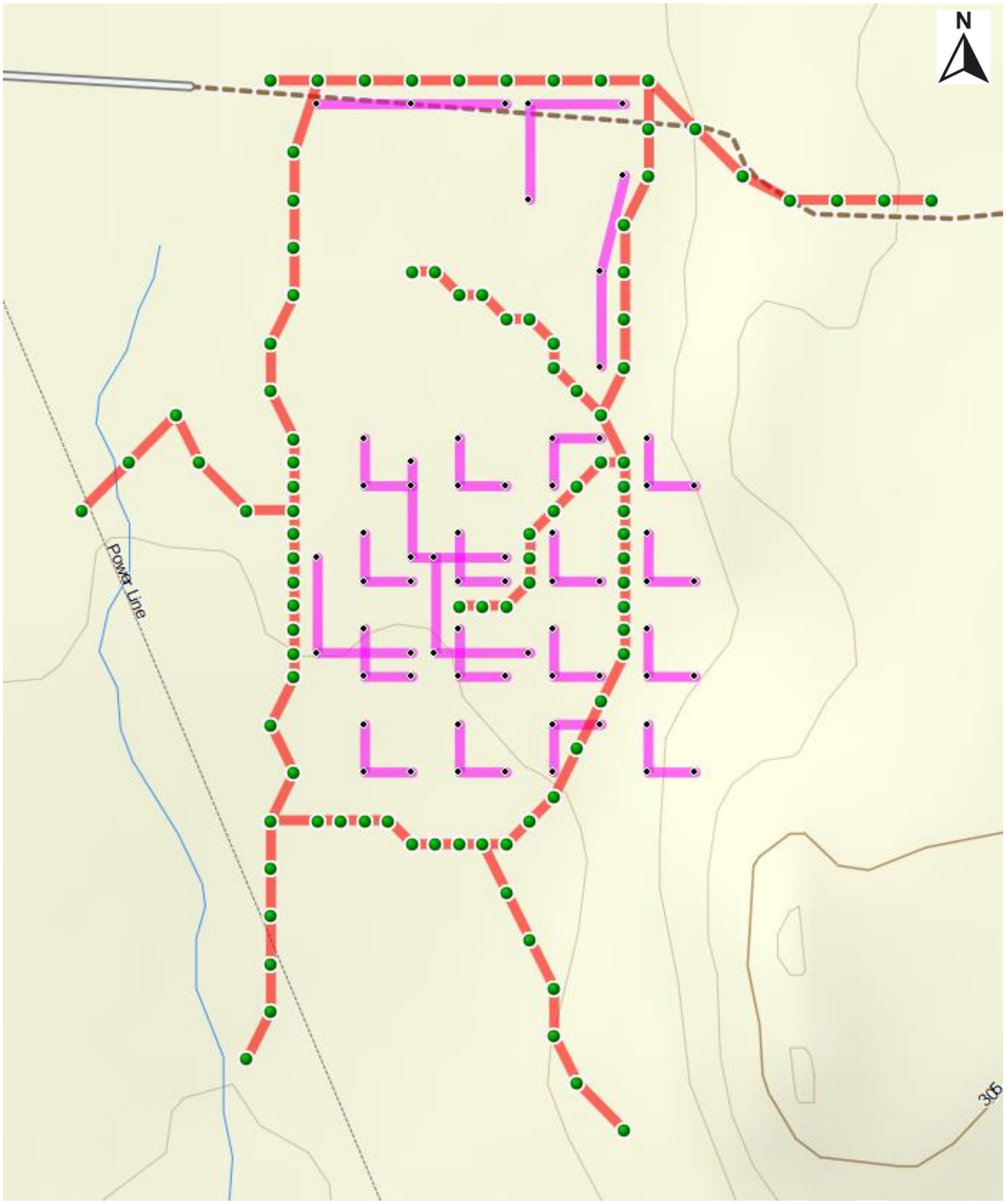


Figure 5: Planned Survey Layout – Green Circles=Current Injections, Pink Lines=Di-poles, Black Dots=Read Electrodes

4. SURVEY WORK UNDERTAKEN

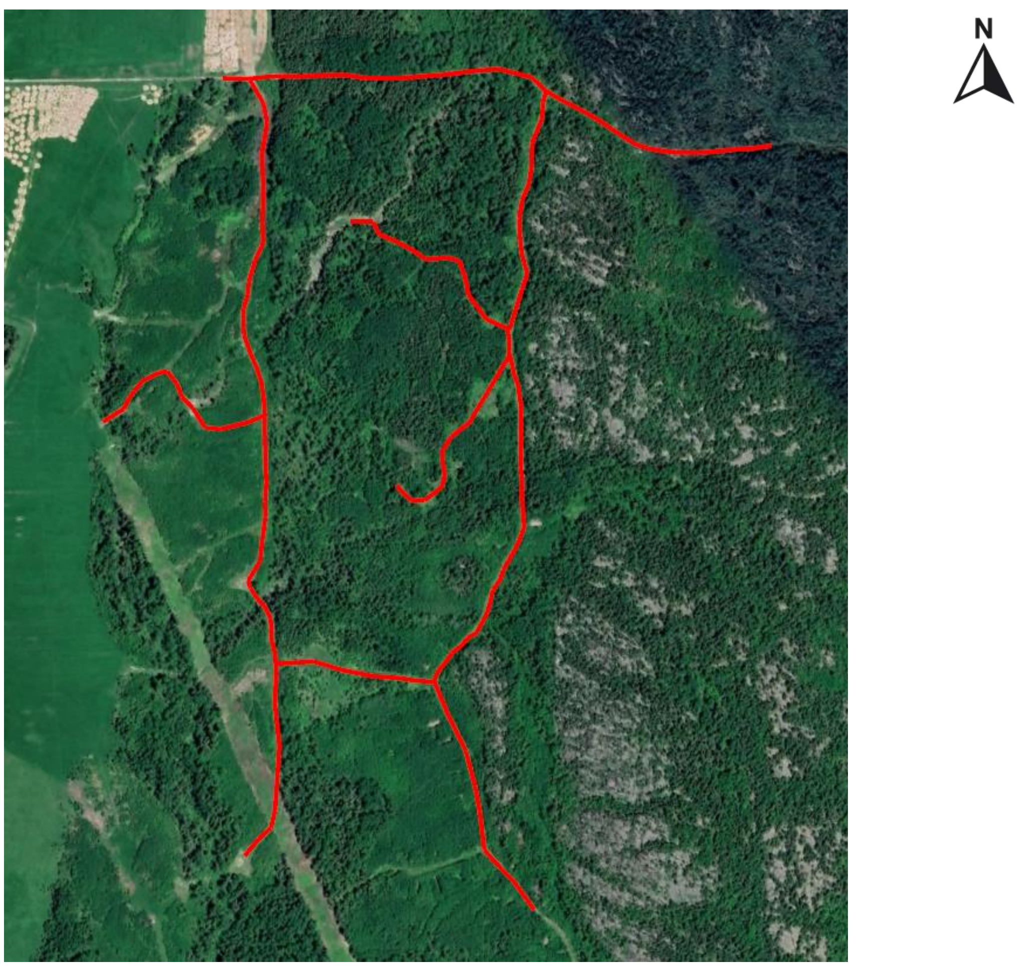
4.1 Summary

CXS was contracted to perform a 3D IP survey over the Link-Catharine Property. The crew accessed the site on January 16 and completed the Survey on January 18, 2021.

A total length of 4.9 kilometres was covered with 98 injected current locations for this 3D Distributed Induced Polarization survey. Collected GPS locations were applied to the electrode field locations. The survey area footprint was 0.36 km^2 with irregular dimensions of (0.45x0.8km).

4.2 Survey Grid

No survey grid was cut for this survey. All wires and current paths were along roads and a system of trails. The current paths were chosen from various satellite images prior to the survey execution.



<u>Figure 6: trail System Selected for the Injections Corridors (©2020 Google, Image ©2021 Maxar Technologies, Image ©2021 CNES/Airbus)</u>

4.3 Survey Setup

Twenty-two receivers were placed in 22 previously selected locations scattered between the grid lines. Each receiver was connected to 2 relatively orthogonal, ~50-100-metre dipoles (north-south and east-west). The coordinates of the read electrodes were recorded by GPS and are listed in Table 3. Due to field conditions, exact locations and directions were not always achieved. The infinite location was chosen by the crew and located at 584528E, 5308104N, approximately 3 km south of the grid, located as far as possible to achieve a pole-dipole array scenario. The survey area footprint was 0.36 km^2 with the irregular dimensions of (0.45x0.8km

Read Electrode	UTM X (m)	UTM Y (m)
402-P1	583992	5311302
402-P2	583892	5311301
402-P3	583792	5311299
403-P1	584018	5311203
403-P2	584017	5311302
403-P3	584118	5311305
404-P1	584095	5311027
404-P2	584096	5311127
404-P3	584120	5311228
405-P1	583845	5310950
405-P2	583849	5310898
405-P3	583896	5310903
406-P1	583947	5310949
406-P2	583947	5310903
406-P3	583997	5310903
407-P1	584047	5310903
407-P2	584047	5310953
407-P3	584099	5310952
408-P1	584148	5310948
408-P2	584145	5310903
408-P3	584195	5310902
409-P1	583893	5310924
409-P2	583901	5310825
409-P3	583998	5310828
410-P1	583848	5310843
410-P2	583847	5310797
410-P3	583893	5310804
411-P1	583949	5310848
411-P2	583946	5310802

Read Electrode	UTM X (m)	UTM Y (m)
413-P1	584150	5310853
413-P2	584151	5310804
413-P3	584199	5310802
414-P1	583797	5310824
414-P2	583797	5310726
414-P3	583899	5310726
415-P1	583929	5310822
415-P2	583924	5310731
415-P3	584023	5310729
416-P1	583850	5310752
416-P2	583854	5310701
416-P3	583903	5310697
417-P1	583951	5310753
417-P2	583950	5310706
417-P3	583997	5310702
418-P1	584048	5310753
418-P2	584051	5310704
418-P3	584099	5310703
419-P1	584151	5310753
419-P2	584150	5310701
419-P3	584202	5310701
420-P1	583854	5310648
420-P2	583854	5310598
420-P3	583902	5310600
421-P1	583955	5310645
421-P2	583953	5310601
421-P3	583994	5310596
422-P1	584053	5310602
422-P2	584050	5310653

411-P3	583994	5310801	422-P3	584102	5310655
412-P1	584049	5310852	423-P1	584150	5310653
412-P2	584049	5310802	423-P2	584150	5310604
412-P3	584099	5310803	423-P3	584201	5310607

Table 3: Receiver Electrode Coordinates

4.4 Data Acquisition

CXS began occupying the grid on January 16, with data acquisition on January 17, 2021. Current injection sites were injected along previously selected road and trail corridors at approximately 50-metre increments. GPS data were collected at each injection rod location prior to the current injections and recorded along with the associated injection files created on the current monitor. In total, there were 98 current injections over 4.9km of lines.

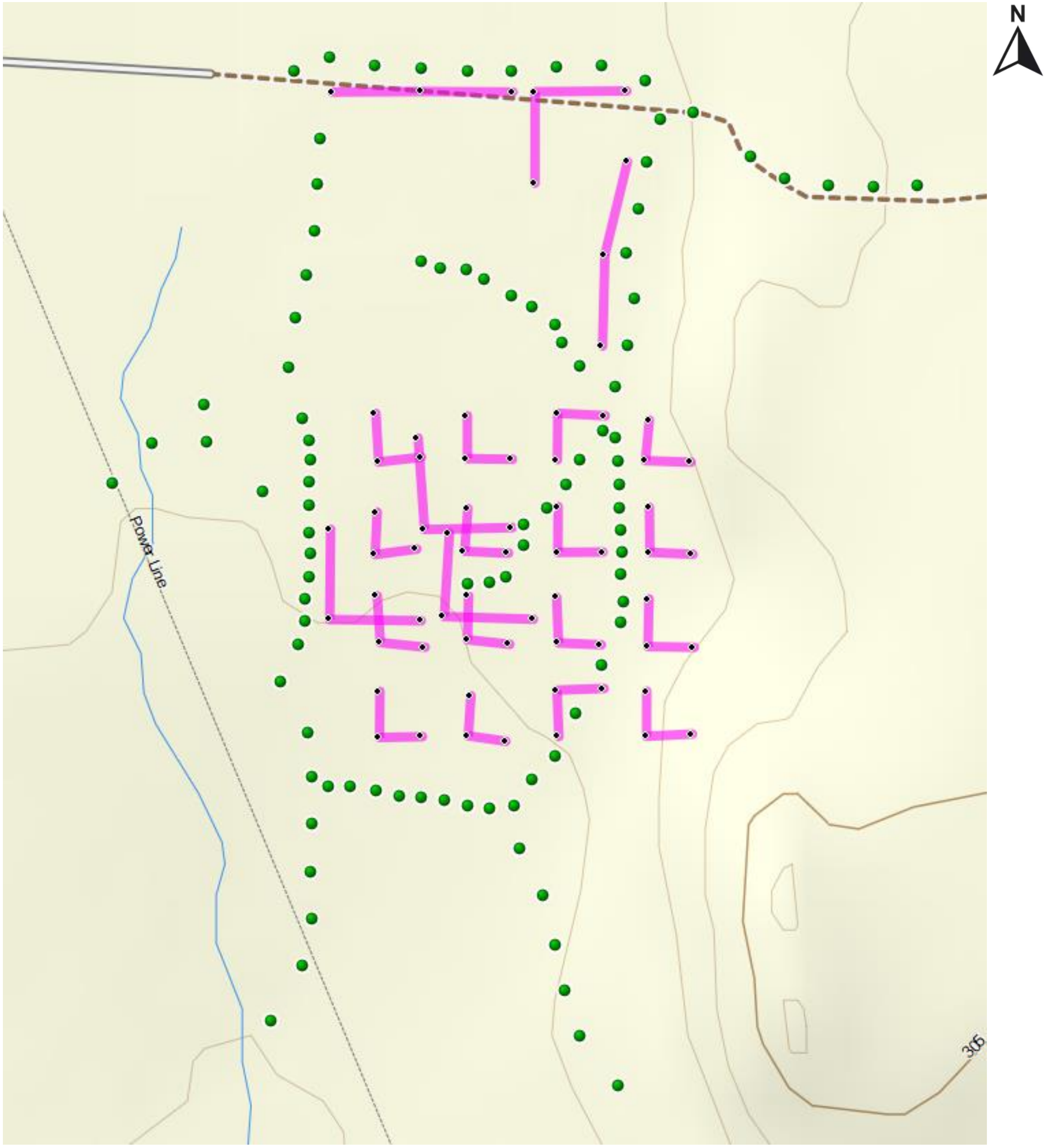


Figure 7: Field Survey Layout with Injection Sites (green dots) in Mapsource

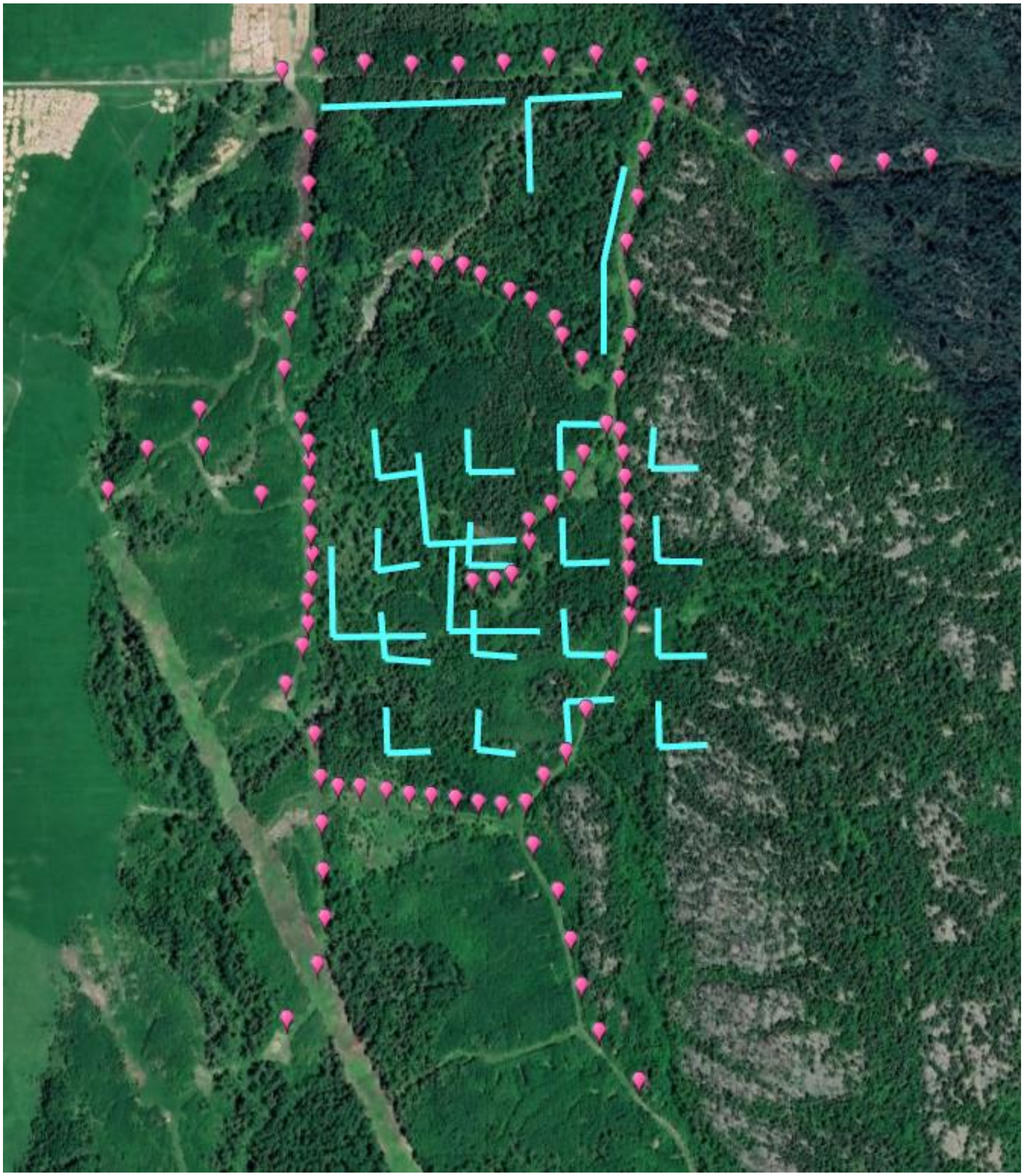


Figure 8: Receiver Dipole Orientations on Google Earth (©2020 Google, Image ©2021 Maxar Technologies, Image ©2021 CNES/Airbus)

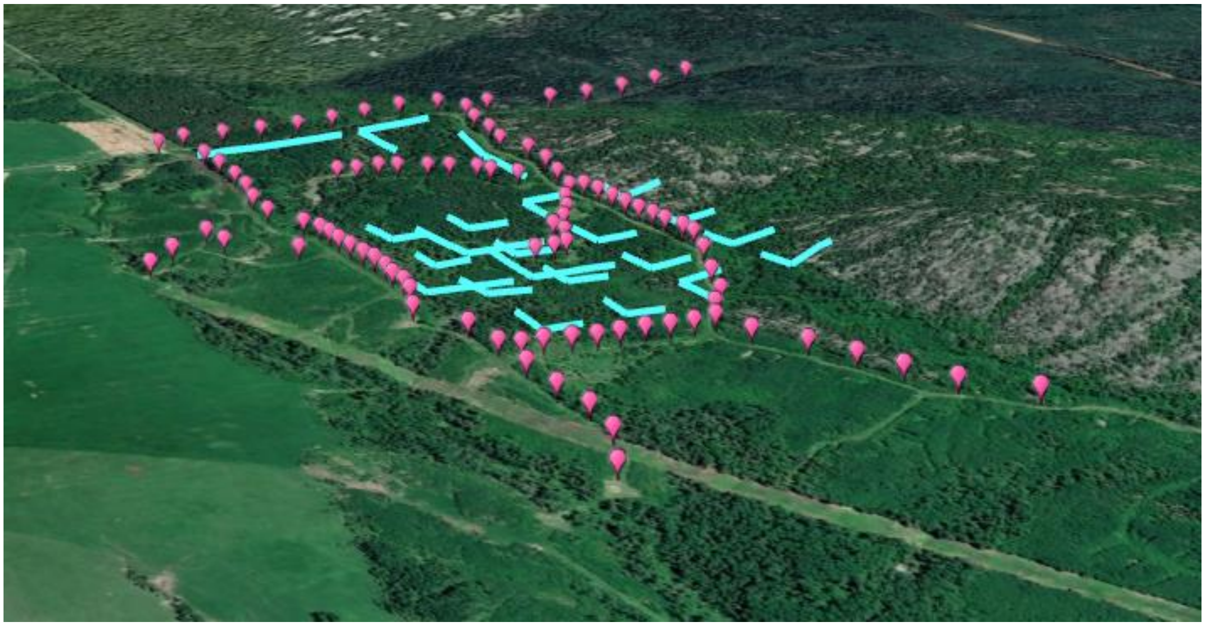


Figure 9: Topographical Relief with the Survey Deployment Looking Northeast (Image ©2021 Maxar Technologies, ©2020 Google, Image ©2021 CNES/Airbus)

4.5 Survey Log

3D IP Survey Log					
Date	**Description**	**Line**	**Min Extent**	**Max Extent**	**Total survey (m)**
January 16, 2021	Mobilize to survey area and begin to set up logger sites and infinite.	-	-	-	-
January 17, 2021	Complete setup and begin survey. Inject on road/trail system.				
	59 injections and 2.95 km				
January 18, 2021	Continue Survey. Complete the injections on the road/trail system. Recover equipment.				
	39 injections and 1.95 km				
Total	**4.9 Line Kilometres and 98 Injections**				

Table 4: 3D IP Survey Log

4.6 Personnel

Crew Member	**Position**	**Resident**	**Province**

Bruce Lavalley	Crew Chief	Dobie	Ontario
Neil Jack	Transmitter Operator	Kirkland Lake	Ontario
Claudia Moraga	IP Technician	Dobie	Ontario
Richard Bates	IP Technician	Virginiatown	Ontario
Kameron Stoesz	IP Technician	Kirkland Lake	Ontario
Joey Emmell	IP Technician	Englehart	Ontario
Brody Johnston	IP Technician	Orillia	Ontario
C Jason Ploeger	Senior Geophysicist	Larder Lake	Ontario

Table 5: CXS Induced Polarization Personnel

4.7 Field Notes: Condition and Culture

The average weather over the six field days was -9.7°C with high up to 0°C and lows down to -19°C. No precipitation fell during the survey period. The soil appeared wet with little frost penetration.

Some culture was noted in the survey area. An electric fence existed near the west side of the survey area, and a powerline existed approximately 200m west of the survey area.

Topographical features and ground characteristics along the read dipoles and current injection lines are noted in the following two tables (Table 6 & 7, respectively).

Logger Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
402	**Soil**	P1 and P2 Clay – P2 Clay/Mud
	Topo	P1, P2 and P3 Flat
	Veg	P1 and P2 Spruce – P3 Mixed
	Culture	No culture noted
403	**Soil**	P1, P2 and P3 Clay
	Topo	P1, P2 and P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
404	**Soil**	P1, P2 and P3 Rocky/Clay
	Topo	P1, P2 and P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
405	**Soil**	P1, P2 and P3 Soft ground
	Topo	P1, P2 and P3 Flat

Logger Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
406	**Soil**	P1, P2 and P3 Soft ground
	Topo	P1, P2 and P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
407	**Soil**	P1 and P3 Clay - P2 Rocky/Clay
	Topo	P1 and P3 Flat - P2 Sidehill
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
408	**Soil**	P1, P2 and P3 Rock
	Topo	P1 and P2 bottom of the hill - P3 top of the hill
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
409	**Soil**	P1, P2 and P3 Clay
	Topo	P1, P2 and P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
410	**Soil**	P1 Rocky/Clay - P2 and P3 Sandy/Loam/Clay
	Topo	P1, P2 and P3 Flat
	Veg	P1 Mixed bush – P2 and P3 Swampy
	Culture	No culture noted
411	**Soil**	P1, P2 and P3 Rocky/Clay
	Topo	P1 and P2 Sidehill – P3 Up and Down
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
412	**Soil**	P1, P2 and P3 Rocky/Clay
	Topo	P1, P2 and P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
413	**Soil**	P1 and P3 Rock - P2 Clay
	Topo	P1 and P2 bottom of the hill - P3 top of the hill

Logger Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
414	**Soil**	P1 and P2 Clay - P3 Sandy clay
	Topo	P1 Flat – P2 Top of a small ridge – P3 Next to a creek
	Veg	P1 and P2 Mixed - P3 Tag alders
	Culture	No culture noted
415	**Soil**	P1 and P2 Clay - P3 Sandy clay
	Topo	P1 Flat - P2 Sidehill – P3 Next to a creek
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
416	**Soil**	P1, P2 and P3 Clay
	Topo	P1 Flat - P2 and P3 Sidehill
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
417	**Soil**	P1, P2 and P3 Clay
	Topo	P1 and P2 Sidehill - P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
418	**Soil**	P1, P2 and P3 Clay/Rock
	Topo	P1, P2 and P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
419	**Soil**	P1 and P2 Rock/Clay – P3 Rock
	Topo	P1 and P2 bottom of the hill - P3 top of the hill
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
420	**Soil**	P1, P2 and P3 Clay
	Topo	P1, P2 and P3 Sidehill
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
421	**Soil**	P1, P2 and P3 Clay/Rock
	Topo	P1 Flat - P2 and P3 Sidehill on edge of creek

Logger Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
422	**Soil**	P1, P2 and P3 Clay/Rock
	Topo	P1, P2 and P3 Flat
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
423	**Soil**	P1 Rock/Clay – P2 and P3 Rock
	Topo	P1 and P2 bottom of the hill - P3 top of the hill
	Veg	P1, P2 and P3 Mixed
	Culture	No culture noted
Infinite	**Soil**	Mud/clay/Wet
	Topo	Flat/Valley
	Veg	Poplar/Alder
	Culture	No culture noted

Table 6: Logger Electrode & Dipole Field Notes

Date	Line	Station	UTM X (m)	UTM Y (m)	Inf I (mA)	Injection Electrode Field Notes
17-Jan-21	NA	NA	583950	5310768	3600	uphill clay
	NA	NA	583974	5310769	2600	flat clay
	NA	NA	583993	5310775	1100	sidehill clay
	NA	NA	584012	5310810	3000	flat rock and clay
	NA	NA	584012	5310833	2800	flat rock and clay
	NA	NA	584036	5310851	3700	flat rock and clay
	NA	NA	584057	5310877	2100	flat clay
	NA	NA	584072	5310905	3600	flat clay
	NA	NA	584097	5310936	3600	flat clay
	NA	NA	584112	5310928	3600	flat clay
	NA	NA	584115	5310904	3100	flat clay
	NA	NA	584117	5310878	2700	flat clay
	NA	NA	584117	5310853	2800	downhill rock and clay
	NA	NA	584119	5310828	3600	downhill rock and clay
	NA	NA	584120	5310804	3600	downhill rock and clay

Date	Line	Station	UTM X (m)	UTM Y (m)	Inf I (mA)	Injection Electrode Field Notes
	NA	NA	584120	5310780	3200	uphill rock and clay
	NA	NA	584122	5310751	3500	uphill rock and clay
	NA	NA	584120	5310729	3600	flat clay
	NA	NA	584100	5310682	3600	flat clay
	NA	NA	584072	5310628	3000	downhill rock and clay
	NA	NA	584049	5310581	3800	downhill rock and clay
	NA	NA	584025	5310556	4000	downhill rock and clay
	NA	NA	584005	5310527	4100	flat clay
	NA	NA	584013	5310480	3800	flat clay
	NA	NA	584039	5310430	2600	flat clay
	NA	NA	584052	5310377	2800	flat clay
	NA	NA	584064	5310327	3400	flat rock and clay
	NA	NA	584082	5310278	3500	downhill rock and clay
	NA	NA	584125	5310225	3600	uphill rock and clay
	NA	NA	583800	5310545	3800	flat clay
	NA	NA	583824	5310545	3800	flat clay
	NA	NA	583852	5310541	3500	flat clay
	NA	NA	583877	5310536	3500	flat clay
	NA	NA	583902	5310534	3800	flat clay
	NA	NA	583928	5310531	3800	flat clay
	NA	NA	583953	5310527	3600	flat clay
	NA	NA	583979	5310524	3500	flat clay
	NA	NA	584111	5310984	3500	flat rock and clay
	NA	NA	584123	5311029	3700	downhill rock and clay
	NA	NA	584130	5311080	4100	flat rock and clay
	NA	NA	584121	5311130	3100	flat clay
	NA	NA	584134	5311178	3000	flat clay
	NA	NA	584142	5311228	3500	uphill rock and clay
	NA	NA	584156	5311275	3500	uphill rock and clay
	NA	NA	584192	5311283	1600	uphill rock and clay
	NA	NA	584256	5311236	2900	uphill rock and clay
	NA	NA	584296	5311213	2800	flat rock and clay
	NA	NA	584343	5311206	1600	uphill rock and clay
	NA	NA	584393	5311205	2100	uphill rock and clay
	NA	NA	584442	5311208	1700	uphill rock and clay
	NA	NA	583894	5311118	4100	flat rock and clay
	NA	NA	583915	5311111	3600	flat rock and clay
	NA	NA	583944	5311109	4400	uphill rock and clay

Date	Line	Station	UTM X (m)	UTM Y (m)	Inf I (mA)	Injection Electrode Field Notes
	NA	NA	583963	5311098	3800	uphill rock and clay
	NA	NA	583994	5311081	3300	uphill rock and clay
	NA	NA	584017	5311070	3600	uphill rock and clay
	NA	NA	584043	5311050	3800	uphill rock and clay
	NA	NA	584050	5311032	3600	uphill rock and clay
	NA	NA	584071	5311006	3600	flat rock and clay
18-Jan	NA	NA	584139	5311318	4200	flat clay
	NA	NA	584090	5311332	3500	flat clay
	NA	NA	584040	5311331	4400	flat clay
	NA	NA	583991	5311326	4000	flat clay
	NA	NA	583942	5311325	3800	flat clay
	NA	NA	583891	5311327	4000	flat clay
	NA	NA	583840	5311330	4400	flat clay
	NA	NA	583789	5311337	3200	flat clay
	NA	NA	583750	5311322	3600	flat clay - farm field
	NA	NA	583779	5311249	4500	flat clay
	NA	NA	583777	5311199	3300	flat clay
	NA	NA	583775	5311148	3300	flat clay
	NA	NA	583767	5311101	3600	flat clay
	NA	NA	583755	5311054	4200	flat clay
	NA	NA	583555	5310871	3600	downhill clay
	NA	NA	583598	5310915	3900	flat clay
	NA	NA	583655	5310958	3800	downhill clay
	NA	NA	583658	5310918	4400	uphill clay
	NA	NA	583721	5310865	3600	flat clay
	NA	NA	583748	5311000	3400	flat clay
	NA	NA	583765	5310944	4400	flat clay
	NA	NA	583773	5310920	3800	flat clay
	NA	NA	583775	5310900	4400	flat clay
	NA	NA	583773	5310875	3800	flat clay
	NA	NA	583774	5310850	4100	flat clay
	NA	NA	583774	5310821	4300	flat clay
	NA	NA	583776	5310799	4300	flat clay
	NA	NA	583775	5310772	2000	downhill clay
	NA	NA	583770	5310748	4200	flat clay
	NA	NA	583770	5310724	4200	flat clay
	NA	NA	583764	5310699	4200	flat clay
	NA	NA	583745	5310658	4700	downhill clay

Date	Line	Station	UTM X (m)	UTM Y (m)	Inf I (mA)	Injection Electrode Field Notes
	NA	NA	583775	5310603	5000	uphill clay
	NA	NA	583781	5310556	4000	flat clay
	NA	NA	583781	5310505	4500	flat clay
	NA	NA	583781	5310453	4200	flat clay
	NA	NA	583783	5310401	4100	flat clay
	NA	NA	583773	5310349	3100	flat clay
	NA	NA	583739	5310289	4200	sidehill clay

Table 7: Current Injection Field Notes

4.8 Safety

Canadian Exploration Services Ltd prides itself in creating and maintaining a safe work environment for its employees. Each crew member is briefed on the job site location, equipment safety, standard operating procedures along with our health and safety manual. An emergency response plan is generated relating to the specific job, and with the Jobsite predominantly in the field, which is unpredictable, morning safety briefings are essential. Topics are generally chosen based on Jobsite characteristics of the area, weather conditions, timing and crew experience. All possible issues discussed during a survey, dependent on field conditions and time of the year, are listed in the following table.

Safety Topic	Protocol
Active Work Site	Be aware of surrounding activities – drilling, mine monitoring, and traffic. Caution when working near roads, and post safety signs to alert passers-by of ongoing geophysical surveys.
ATV	Conduct circle check before operating an ATV. Ensure brakes and tires are in good working condition. Drive at reasonable speeds according to terrain to avoid accidents. The use of helmets is mandatory.
Extreme Temperatures	With temperatures down to -40, there is an increased risk of cold-related injuries (i.e. frostbite, hypothermia). Dress accordingly and take breaks to warm up if necessary. Bring extra clothing to anticipate for possible drop in temperature throughout the day. With temperatures up to +30C, there is an increased risk of heatstroke. Keep hydrated throughout the day and in shaded areas if possible.
Communication	Check-in with the crew leader or any crew member when working individually to inform the team of your safety and well-being.

Safety Topic	Protocol
Heavy Lifting	When lifting equipment individually, always lift with your legs rather than your back. Always ask fellow crew members for help when lifting or moving heavy and large equipment (i.e. transmitter, generator, snowmobile, etc.).
Hunting Seasons	There may be more traffic during hunting season. Be careful when crossing. Wear proper (high-visibility) attire to avoid being mistaken for an animal in the bush.
Power Protocol	When in doubt, always assume that power is on and stay clear of survey circuits until confirmed otherwise.
Power Tools	Be alert when operating power tools – chainsaw, Tanaka, etc. Do not use equipment when unsure of safety instructions for the specific device.
Rain	Terrains may be slippery. Traverse carefully to avoid slipping, especially when ascending, descending, or walking along the side of hills. When there is a chance of a thunderstorm, notify the transmitter operator when thunder is heard. Be extra careful with power protocol due to the increased risk of shock. Bring extra clothing in case the gear gets too wet and heavy.
Sharp Tools	Be careful when handling tools such as a machete and knives to avoid injuries. Inform another crew member of any injuries.
Slips, Trips and Falls	With the increased risk of hidden hazards with snow cover, the proper use of snowshoes is encouraged to avoid injuries from slipping, tripping, or falling. Three points of contact are encouraged.
Snowmobile	Proper use of PPE (i.e. safety helmet, high visibility attire, etc.). Practice safety checks before operating snowmobiles. Ensure that engines and brakes are in good working condition. Ensure that oil, coolant, and gasoline levels are sufficient for the distance of travel. Check that snowmobile is physically safe to operate (i.e. no broken parts).
Truck and Trailer	Conduct safety checks prior to operation of company trucks to ensure engines, brakes, tires, and etc., are in good working condition prior to operating the vehicle. Conduct circuit checks when mobilizing and de-mobilizing trailers.
Water Hazards	Creeks, lakes, and swamps may not be fully frozen even under very low temperatures. The use of a stick or pole is encouraged for testing water bodies prior to crossing.
Wildlife	Always be aware of surroundings, keeping an eye out for animals such as bears, moose and wolves. Carry bear spray when in the field during the summer.

Safety Topic	Protocol
Winter Driving	Snow accumulation, freezing rain and icy conditions create added road hazards. The road into field sites may be rough. Drive at appropriate speeds according to road conditions.

Table 8: General Safety Topic Protocols

Emphasized daily topics discussed in the field for this project include:

Date	Safety Topic
January 16, 2021	Covid-19 New government stay at home order.
January 17, 2021	Power protocol – always assume power is on. Clear in front and clear in the back on the radio. If unsure, ask the transmitter operator.
January 18, 2021	Covid-19 policy review and updated government guidelines.

Table 9: Daily field safety topic

5. INSTRUMENTATION & METHODS

5.1 INSTRUMENTATION[1]

Twenty-two 2-channel Full Waver IP receivers were employed for the 3D IP survey. The transmitter consisted of a GDDII (5kW) with a Honda 6500 as a power plant. Two current monitors were connected to the transmitter to record the current transmitted; one to record each 90s transmit and the second to continuously record throughout the day, as a backup.

Time-domain IP surveys involve the measurement of the magnitude of the polarization voltage that results from the injection of pulsed current into the ground. Apparent resistivity and chargeability are the parameters of interest measured through this procedure.

5.2 THEORETICAL BASIS

Time-domain IP (TD-IP) surveys involve the measurement of the magnitude of the polarization voltage that results from the injection of pulsed current into the ground.

Two main mechanisms are known to be responsible for the IP effect, although the exact causes are still poorly understood. The main mechanism in rocks containing metallic conductors is electrode polarization (overvoltage effect). This results from the buildup of charge on either side of conductive grains within the rock matrix as they block the flow of current. On removal of this current, the ions responsible for the charge slowly diffuse back into the electrolyte (groundwater), and the potential difference across each grain slowly decays to zero.

The second mechanism, membrane polarization, results from a constriction of the flow of ions around narrow pore channels. It may also result from the excessive buildup of positive ions around clay particles. This cloud of positive ions similarly blocks the passage of negative ions through pore spaces within the rock. On removal of the applied voltage, the concentration of ions slowly returns to its original state resulting in the observed IP response.

In TD-IP, the current is usually applied in the form of a square waveform, with the polarization voltage being measured over a series of short time intervals after each current cut-off, following a short delay of approximately 0.5s. These readings are integrated to give the area under the decay curve. The integral voltage is divided by the observed steady voltage (the voltage due to the applied current, plus the polarization voltage) to give the apparent chargeability (Ma) measured in milliseconds. For a given charging period and integration time, the measured apparent chargeability provides qualitative information on the subsurface geology.

[1] Refer to appendix B for instrument specifications.

The polarization voltage is measured using a pair of non-polarizing electrodes like those used in spontaneous potential measurements and other IP techniques.

5.3 SURVEY SPECIFICATIONS

3D Distributed Induced Polarization Array

The 3D Distributed Induced Polarization array configuration was used for this survey. This array consisted of 66 mobile stainless steel read electrodes and two current electrodes. Twenty-two portable receivers were each connected to 3 read electrodes (P1, P2, and P3) to create two orthogonal components with 50-100m dipole spacing. The power location CA was chosen based on field conditions but placed throughout the survey area (randomly or in a grid-like manner). In this case, a series of access roads and trail systems were used. Along each road/trail, the power transmits were injected at approximately every 50m. The infinite was located about 2.7 kilometres south of the survey area at 584528E 5308104 N. The infinite was placed in a location to achieve a pole-dipole type array. The maximum theoretical depth obtained was approximately 400 metres.

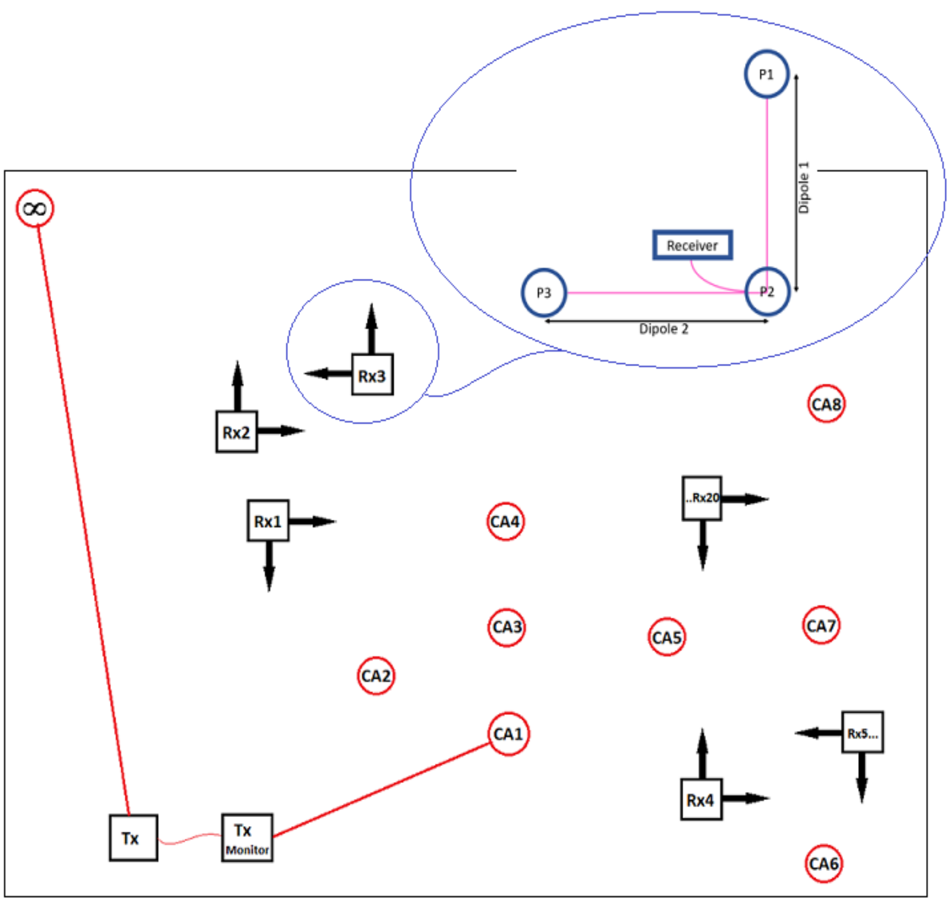


Figure 10: 3D Distributed IP Configuration

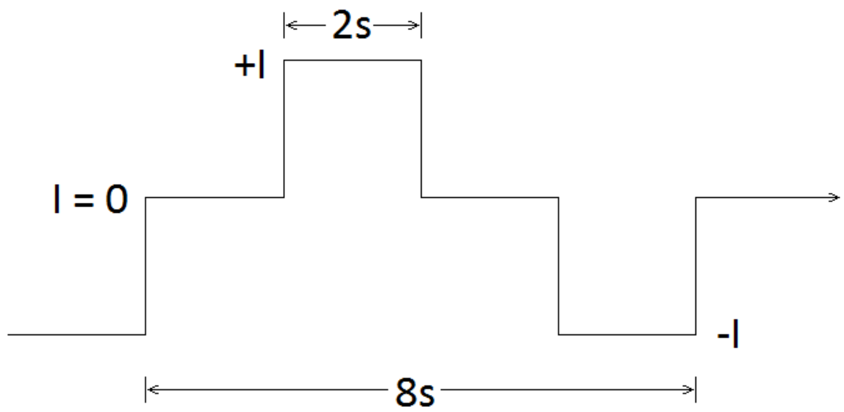


Figure 11: Transmit Cycle Used

6. QUALITY CONTROL & PROCESSING

6.1 FIELD QUALITY CONTROL

Daily field quality control steps consisted of the following:

1. Resistivity checks – the resistivity of each dipole was recorded in the field before and post-acquisition to ensure dipoles were connected to the receiver properly, and the electrode was well contacted with the ground.

2. GPS checks – internal GPS of each receiver was checked that they were placed in the proper position. GPS and injection file time stamps were compared to confirm the correlation.

3. Data check – data was dumped daily and confirmed that the number of GPS points matched the number of injection files.

4. Backup – a second current monitor recorded the transmit cycles continuously throughout every acquisition day. If necessary, the backup was used.

5. Repeats – repeats of lines/data were taken if necessary.

6.2 PROCESSING

In the office, processing of the data and quality control was done interchangeably. The steps included:

1. Import positions – GPS coordinates were imported into each corresponding current injection file (IAB) and receiver file (VMN) using the Fullwave Viewer Software.

2. GPS check – the imported positions were confirmed on Google Earth.

3. Synchronization check – in case of GPS lags or different time settings the synchronization of the files was checked to determine they match (Figure 12).

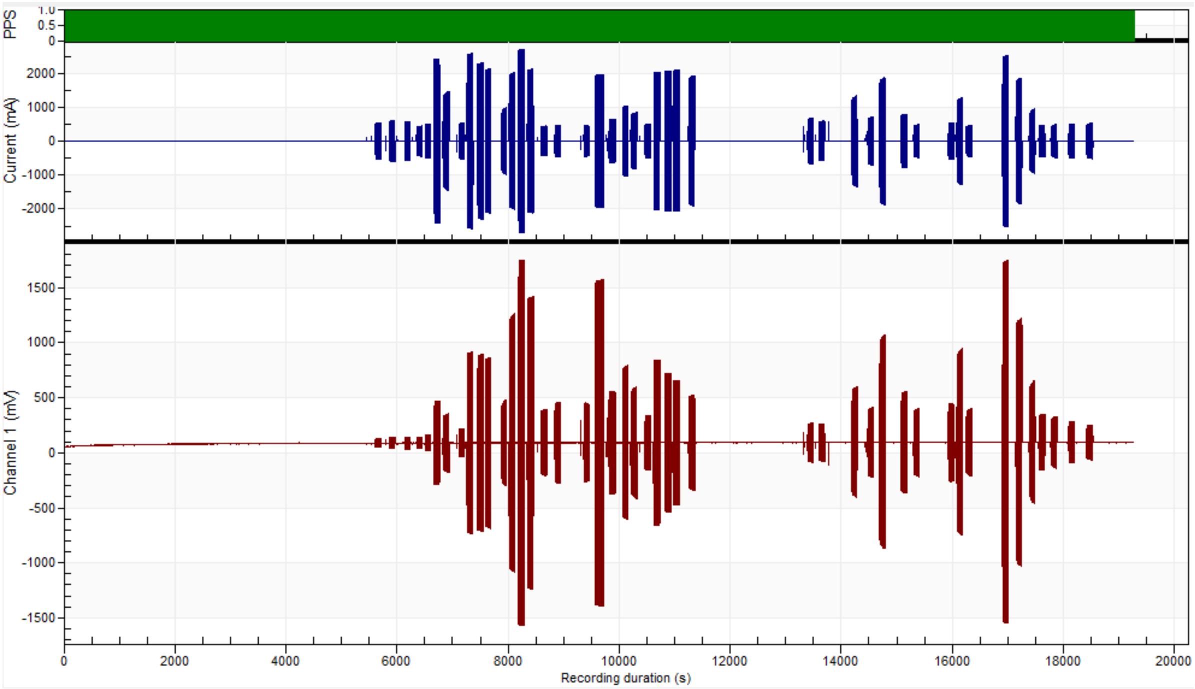


Figure 12: Receiver recordings (red) synchronized with the current injections (blue)

4. Prosys output – a complete .bin file was output from the Fullwave Viewer software.

5. Data quality control – values were viewed in the complete .bin file. Accepted values with a normal M1-M20 range would have a proper transmit cycle, a smooth curve, and a high amplitude low-frequency narrow peak (Figure 13). Unaccepted values with an abnormal M1-M20 range (Figure 14, red circle) would not have proper signals (Figure 15). These abnormal values could be due to a few different things or a combination of the following; the dipole being too far from the current injected, the background noise being greater than that of the current injected, poor dipole coupling, and/or cultural features on the surface causing coupling or a significant background noise interference. These were removed in the following step.

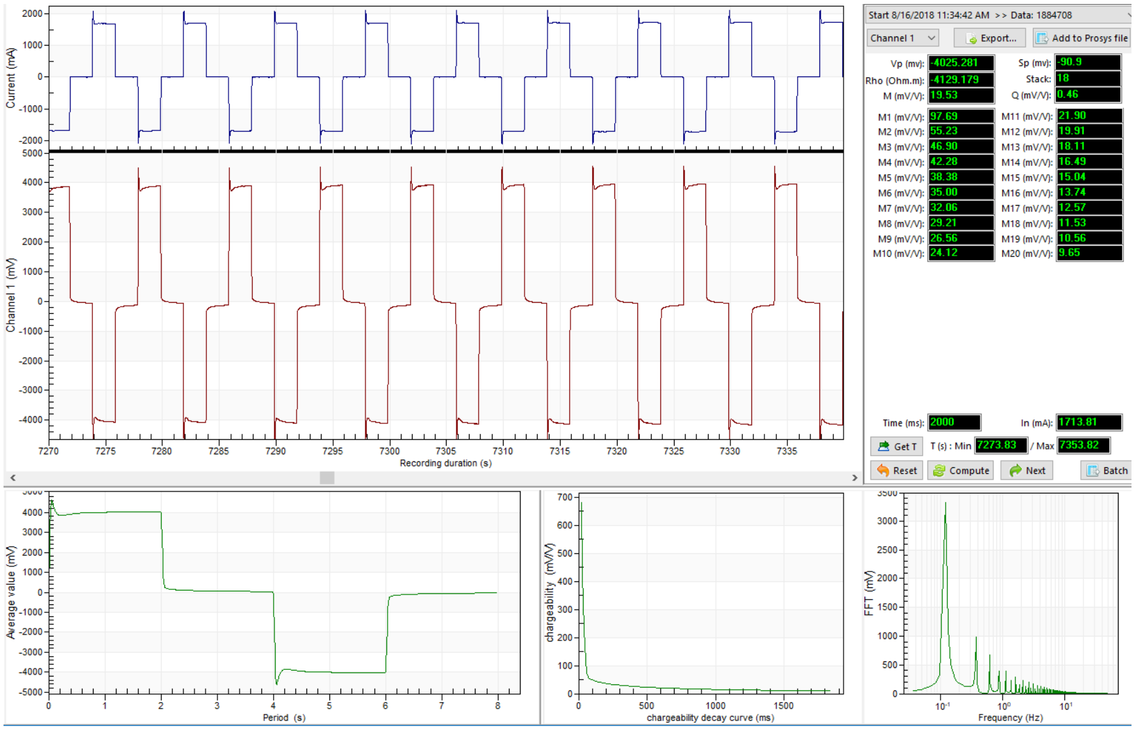


Figure 13: Good 90 second transmit/read pair. Injection (blue), read signal (red), transmit signal (bottom left), decay curve (bottom centre), FFT (bottom right).

M1 (...	M2 (...	M3 (...	M4 (...	M5 (...	M6 (...	M7 (...	M8 (...
69.11	45.44	39.99	36.58	33.48	30.76	28.53	26.05
75.78	48.86	41.69	37.53	34.34	31.16	27.97	25.89
75.73	50.14	43.65	39.60	36.34	33.18	30.49	27.90
81.56	54.13	46.51	41.97	38.16	34.65	31.68	28.80
69.46	44.71	38.75	35.17	32.20	29.45	27.06	24.76
94.25	66.44	57.79	52.34	47.77	43.66	40.14	36.61
128554.88	-11085.17	-14311.44	-14973.24	-16379.58	-4281.03	4318.25	-3929.44
67.53	41.83	35.59	32.24	29.36	26.85	24.26	22.33
65.87	42.73	37.79	34.62	31.80	29.44	27.04	24.97
91.27	62.90	54.94	49.39	45.30	41.31	37.83	34.67
91.55	63.34	55.08	50.01	45.57	41.54	38.07	34.83
124.30	92.27	80.17	72.73	66.38	61.02	56.01	50.97
66.66	44.00	37.08	32.36	29.95	27.68	24.13	22.05

Figure 14: Output .bin file viewed in Prosys. Larger abnormal M values circled in red.

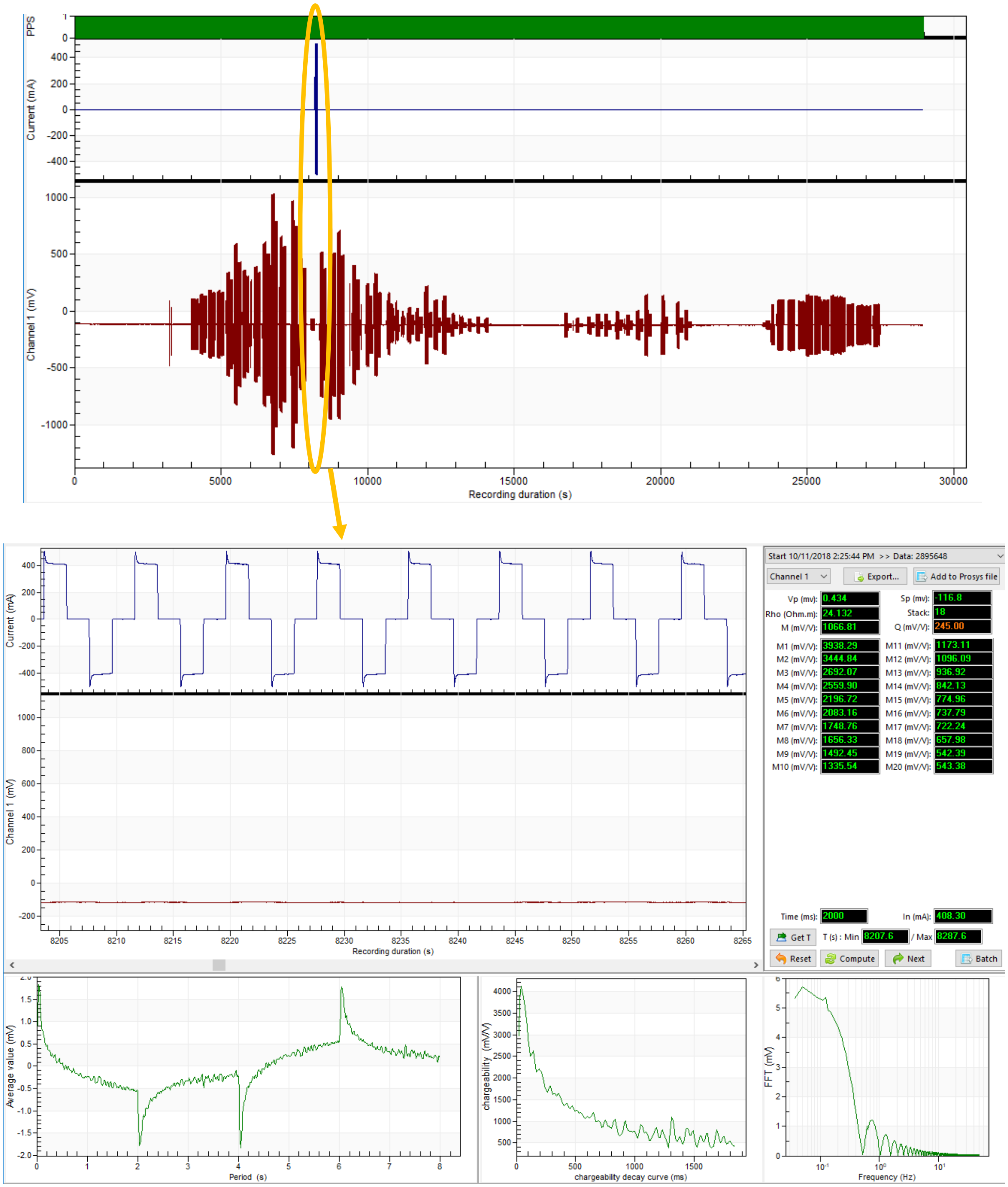


Figure 15: Signal, cycle, and curves of abnormal unaccepted M values.

6. Filtering – Values with unrealistic resistivities and chargeabilities, high standard deviations, large geometric factors, and that are oversaturated were filtered out (Figure 16).

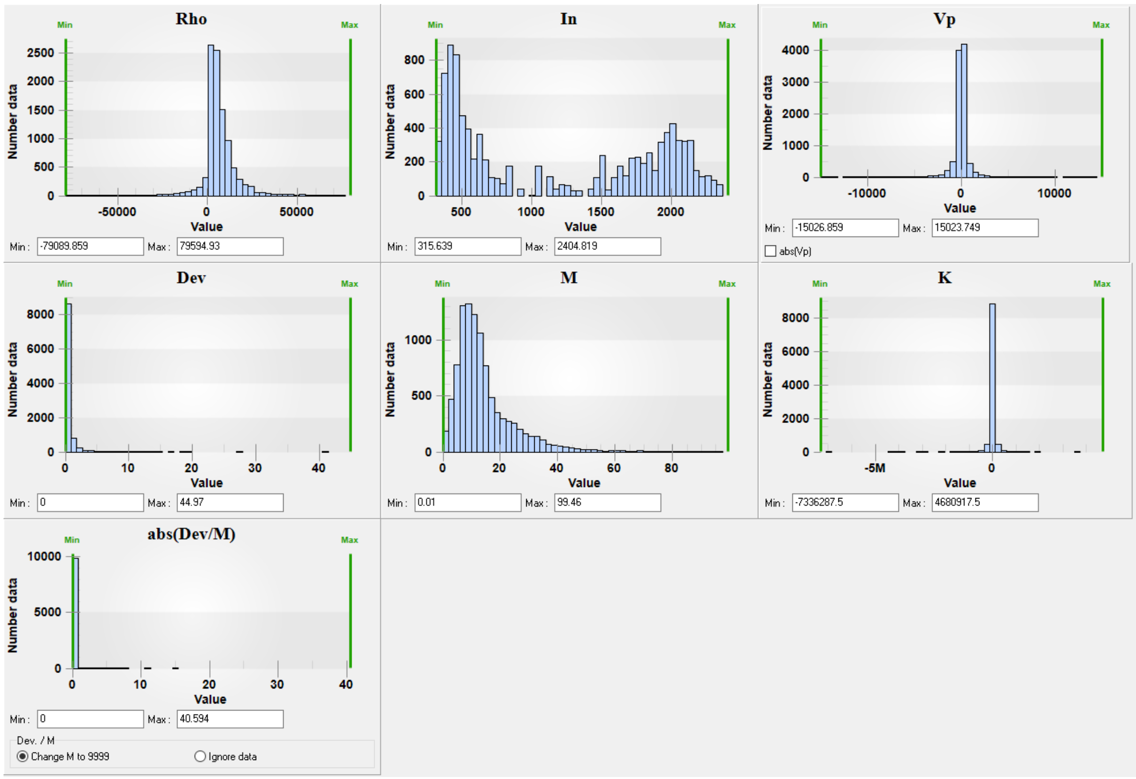


Figure 16: Filtering options

3D viewing of the raw calculated chargeability and resistivity results was observed in Geosoft Oasis (Figures 17-20; Y=North). Calculated report points from acquisition were recorded at a maximum depth of approximately 400 metres depth.

A total of 2441 filtered data points were collected from this 3D IP survey configuration over a period of 3 days.

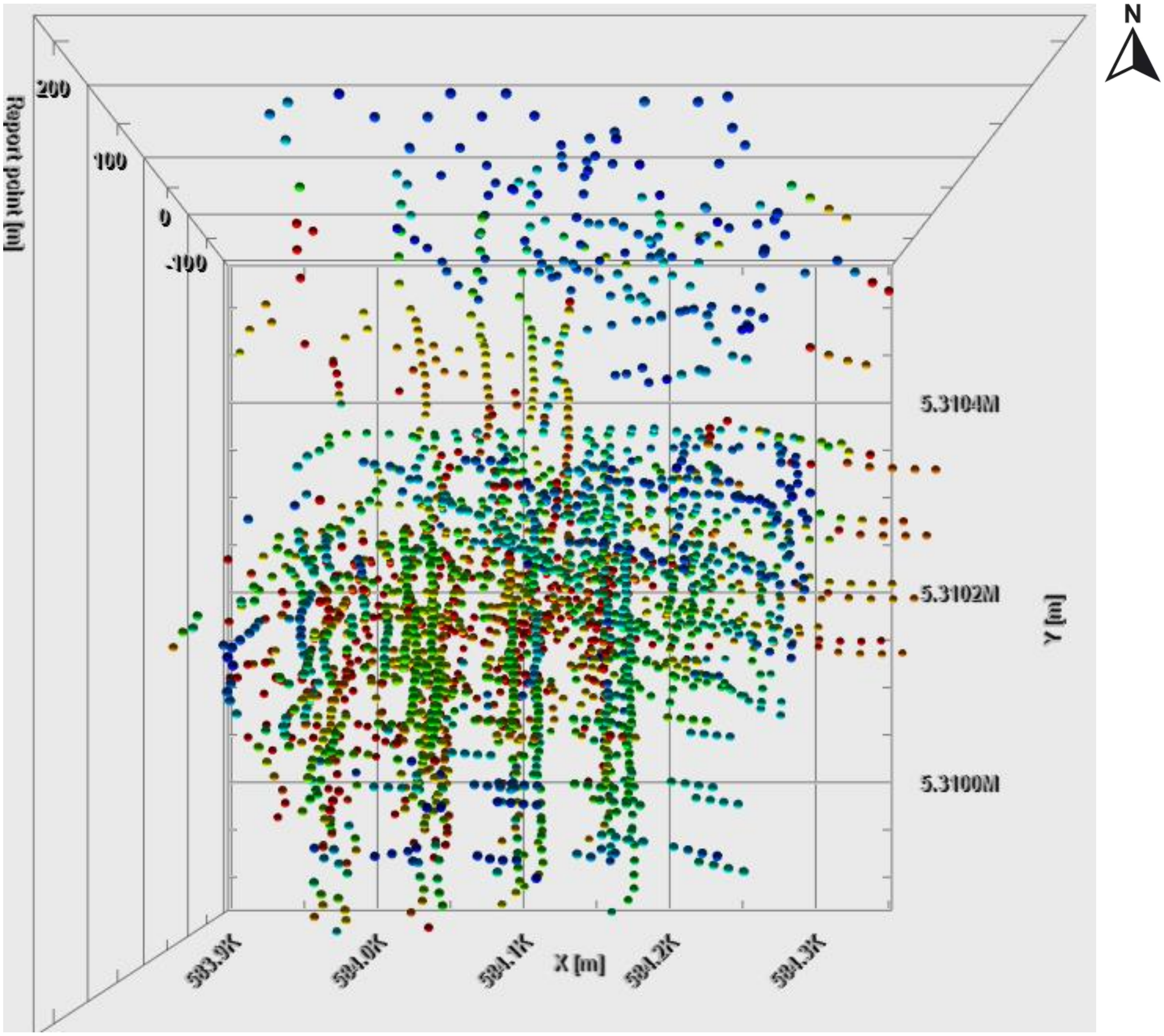


Figure 17: Measured chargeability data points looking down

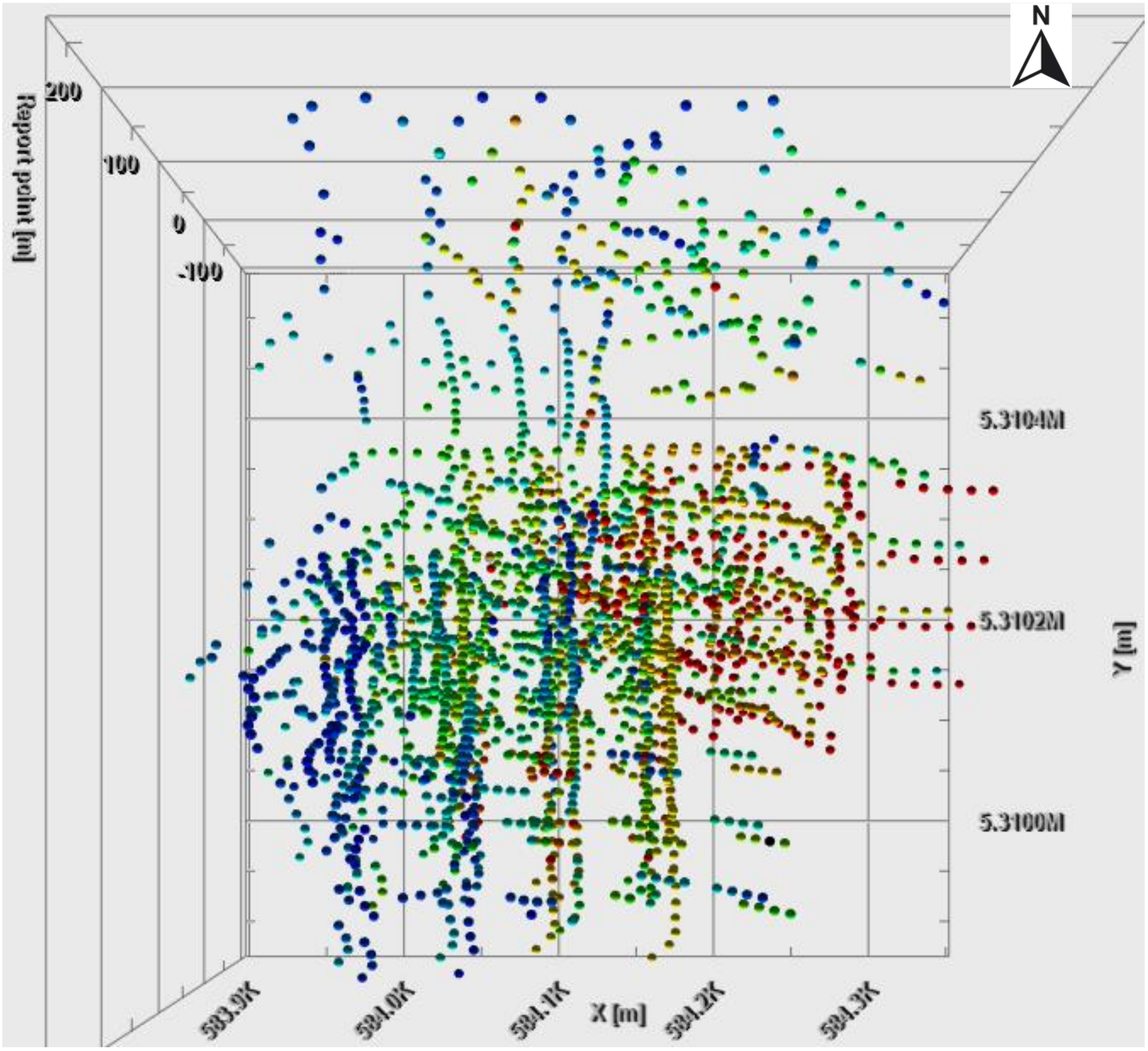


Figure 18: Top view of the complete set of measured resistivity data points

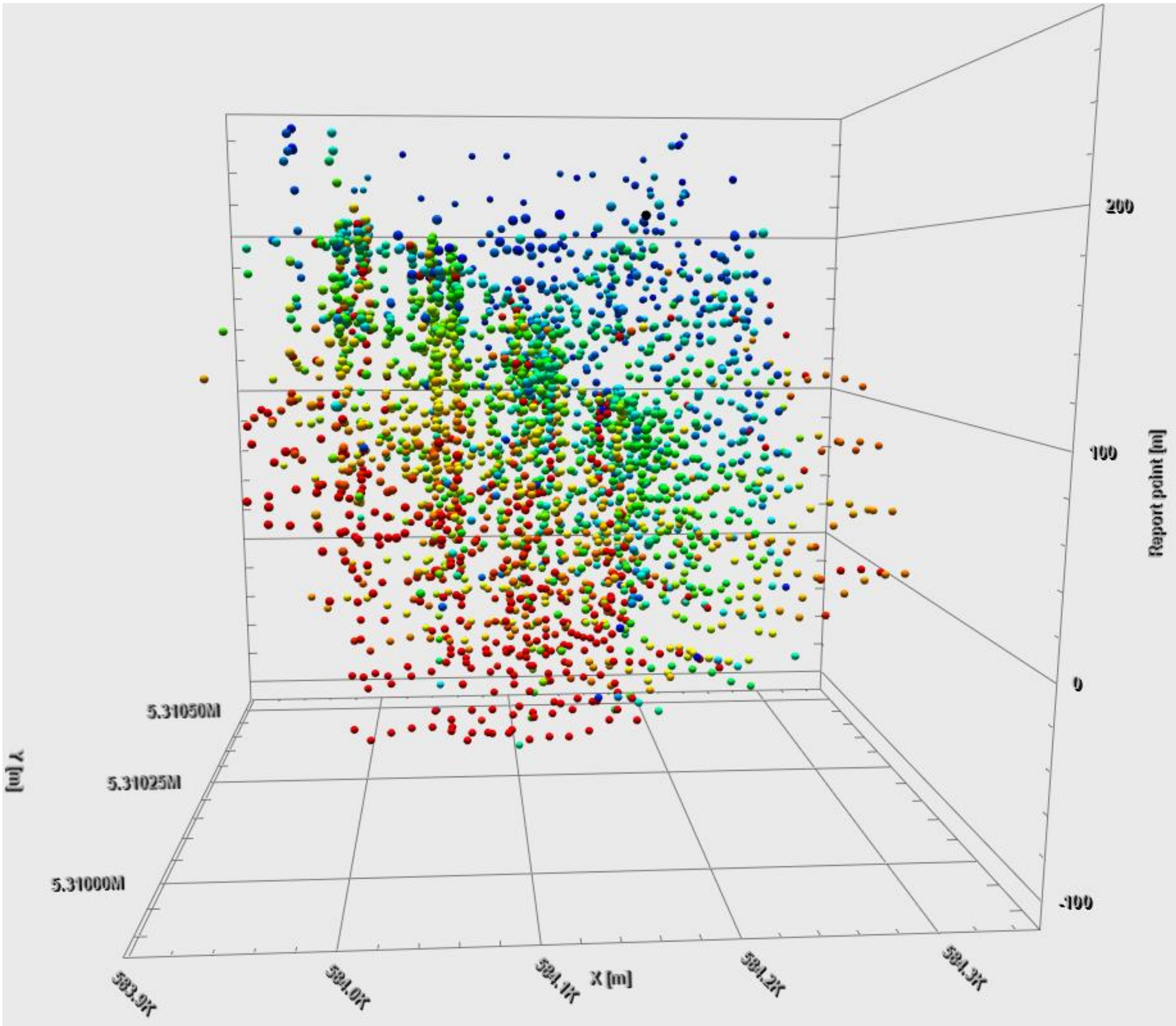


Figure 19: Side views of the complete measured chargeability dataset facing North

6.3 INVERSION

Inversions of the filtered data was done in RES3DINV Professional version 3.18.2. RES3DINV is a 3D inversion software specifically used for resistivity and induced polarization data. From the finalized Prosys file, export to a RES3DINV format was created with specific selections depending on the survey type completed. The selections seen in Figure 21 are standard 3D distributed IP array settings. Depending on the intended survey array type, including the remote may or may not be used. Topography was included.

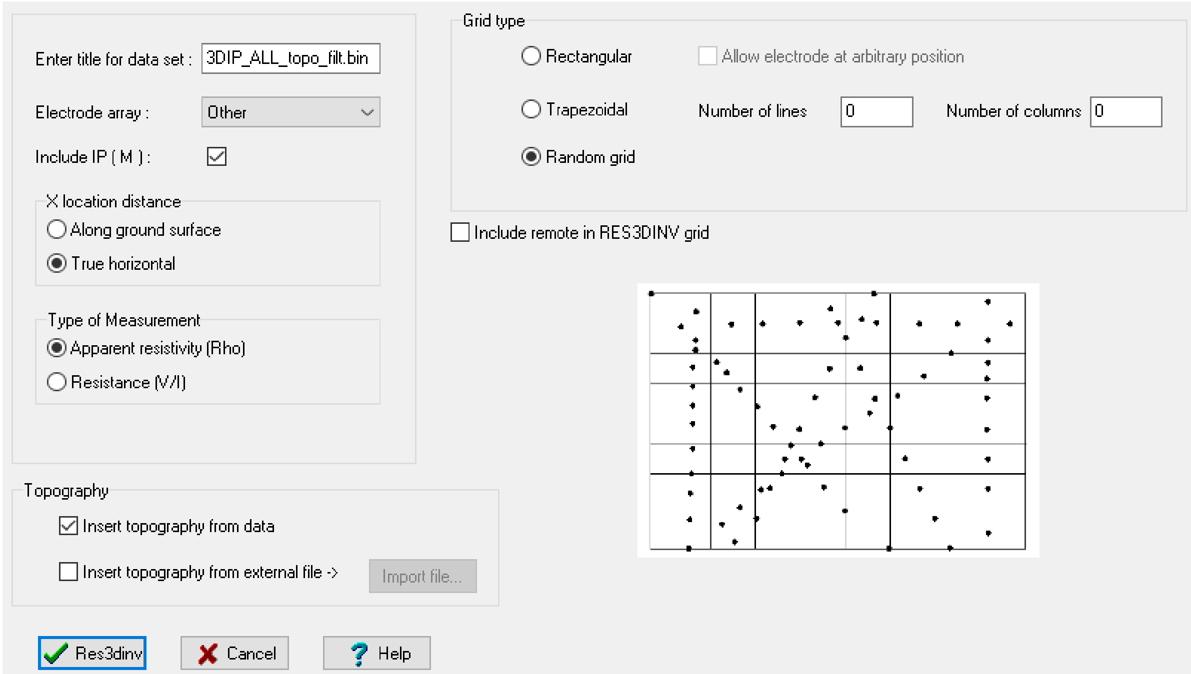


Figure 20: Export settings selection from Prosys to RES3DINV

Model grid settings were chosen based on the infinite locations and the dipole lengths. Uniform cell size was chosen to be ¼ or 1/5 of the dipole length; in this survey case, a cell size of 12.5m was used (Figure 23). To reduce edge artifacts, a few cells extension was added. Manual edits to the cell uniformity may be necessary depending on the location of the infinite. In this case, manual edits were not made as the two remote electrodes were close to the survey layout.

The theoretical maximum depth obtained from the Fullwave Designer was 400 metres. Calculated report points from acquisition were recorded at a maximum depth of approximately 400 metres depth. However, a maximum depth of 500 metres was used because resolution and sensitivity decrease as depth increases. Sensitivity values represent how well the model is constrained, with higher sensitivities providing less uncertainty and greater validity. To constrain and optimize both the resolution and sensitivity of the inversion a maximum depth of 500m was used.

Important inversion parameters used for the creation of the model are described in Table 9[2].

[2] Refer to the RES3DINV manual and tutorial by Dr. M.H. Loke.

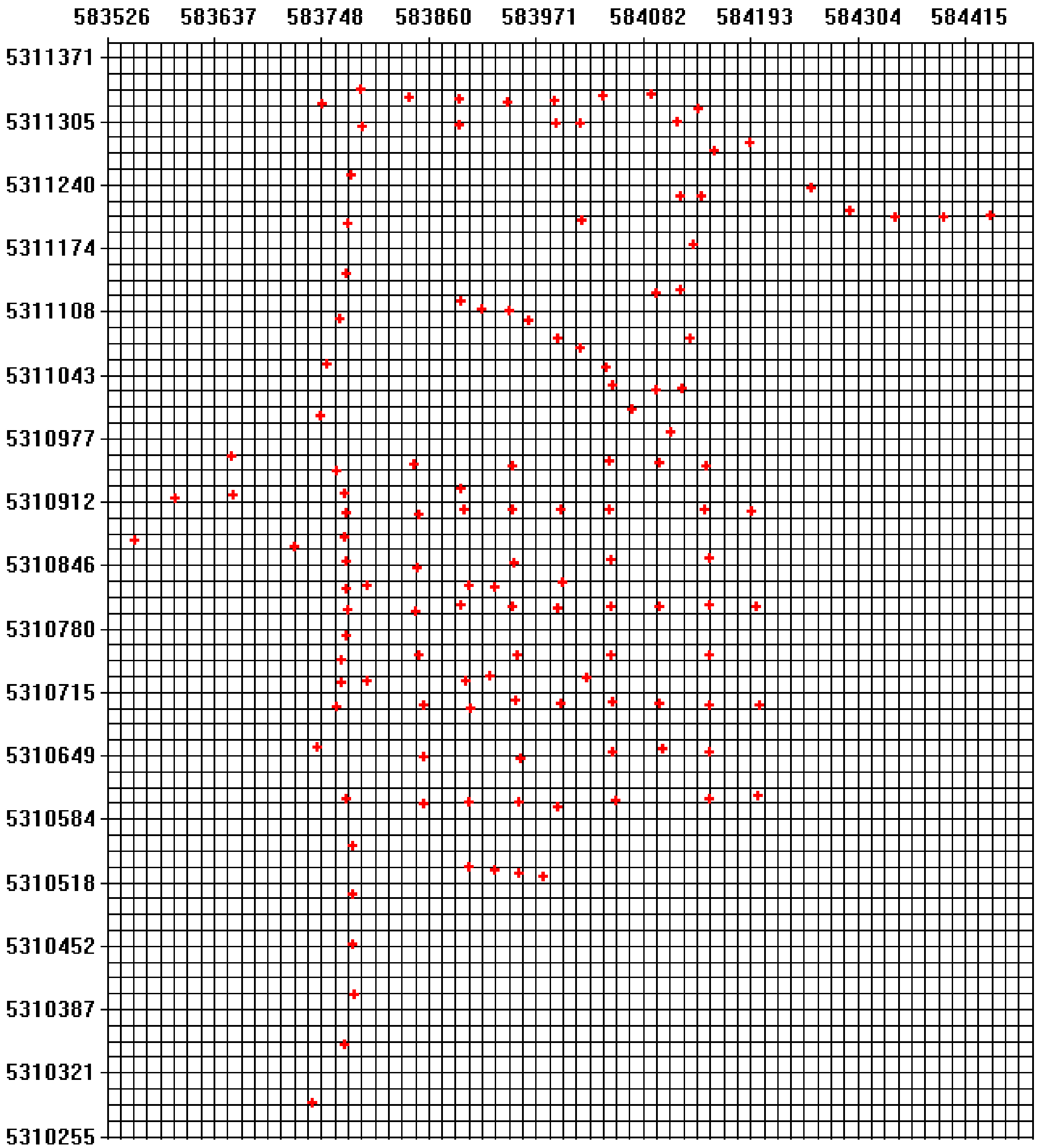


Figure 21: 12.5m model cell size – model viewer in RES3DINV

Parameter	Description

Refined Topography	Estimates the topography of each interior node individually to take non-linear topography variations within each model block into account.
Higher Damping of 1st layer	Useful to avoid unusually large resistivity variations in the top layer (Loke and Dahlin 2010).
Diagonal Filter Components	Reduces effects of produced structures with boundaries aligned along with the horizontal and vertical directions.
Robust Data Constraint	Attempts to minimize the absolute difference between the measured and calculated apparent resistivity values (Claerbout and Muir 1971). Less sensitive to the very noisy data point.
Robust Model Constraint	Produces models with regions of more uniform resistivity values with sharper boundaries.
Incomplete Gauss-Newton	An approximate solution of the least-squares equation that uses an iterative linear conjugate-gradient method.
Reference Model	An additional constraint on the model to limit the deviation of the model resistivity from a homogenous reference model. This is normally the average of the apparent resistivity values.
Logarithm of Apparent Resistivity	In 2D systems, it is ~impossible to determine whether the measured potential has the same sign as the transmitted current; thus, it was assumed apparent resistivity is always positive, and the logarithm is used. However, negative apparent resistivity values not caused by noise are observed in 3D distributed IP systems, especially with near-surface large resistivity contrasts and topography. Thus, the logarithm of apparent resistivity is not used because negative apparent resistivity values are real and kept throughout the inversion for a more accurate model. (Loke, 2018)
Forward Modeling Method	The finite-element method with a medium extended four horizontal node mesh between electrodes is used for datasets with topography and for improved accuracy.
Non-Linear IP Complex Method	The non-linear method calculates apparent IP using a complex resistivity formula. This method treats conductivity as a complex quantity with real and imaginary components (Kenma et al., 2000). The complex conductivity and complex potential are calculated. These components are calculated in a two-step inversion process during each iteration. First, the resistivity model is calculated, then the IP model is calculated.
IP Model Transformation	The “range-bound” transformation method is used to ensure the model IP values produced by the inversion program does not exceed the lower or upper limits of 0-800 mV/V.

Table 10: Inversion Parameter Descriptions (© (1996-2018) M.H.Loke)

7. RESULTS, INTERPRETATION & CONCLUSIONS

7.1 RESULTS

Eight of the fourteen depth sections of the IP and resistivity from the RES3DINV viewer of iteration five is shown in the next two figures, respectively. From top left to top right and bottom left to bottom right, the blocks are at depths: 0-12.5m, 12.5-26.8m, 26.89-43.4m, 43.4-62.3m, 62.3-84.2m, 84.2-109.3m, 109.3-138.2m, and 138.2-171.4m.

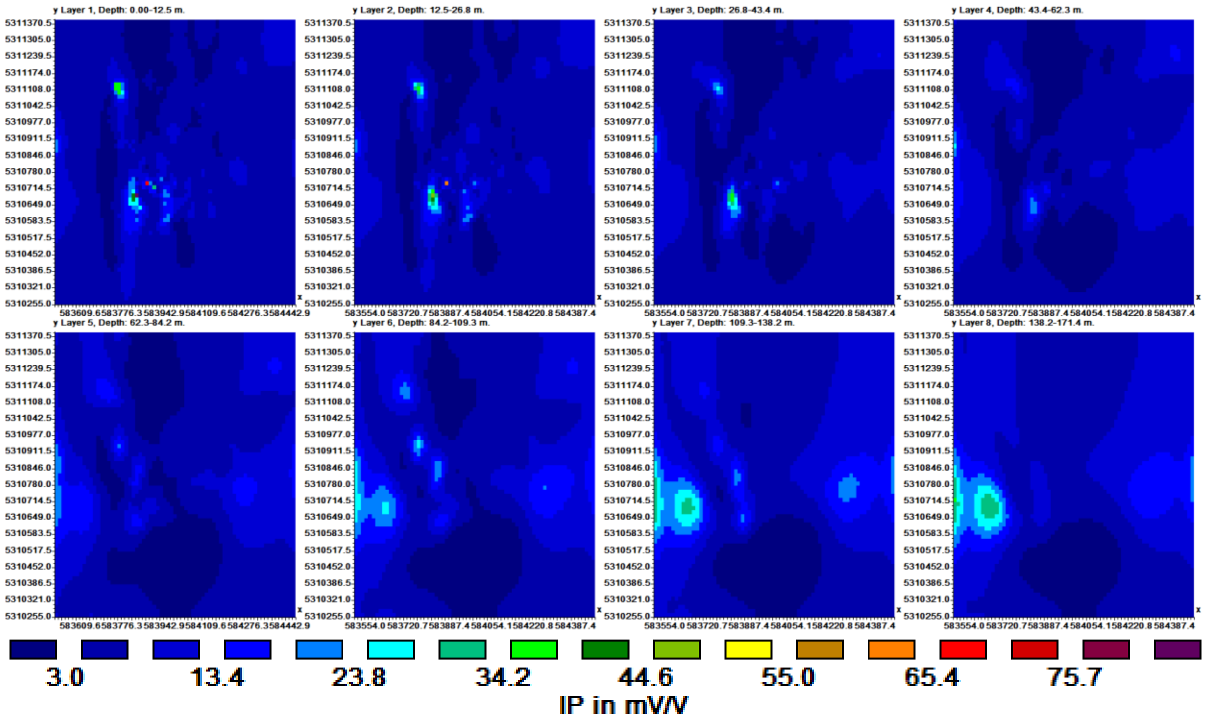


Figure 22: 8 IP depth sections ranging from 0-171.4m as viewed in RES3DINV

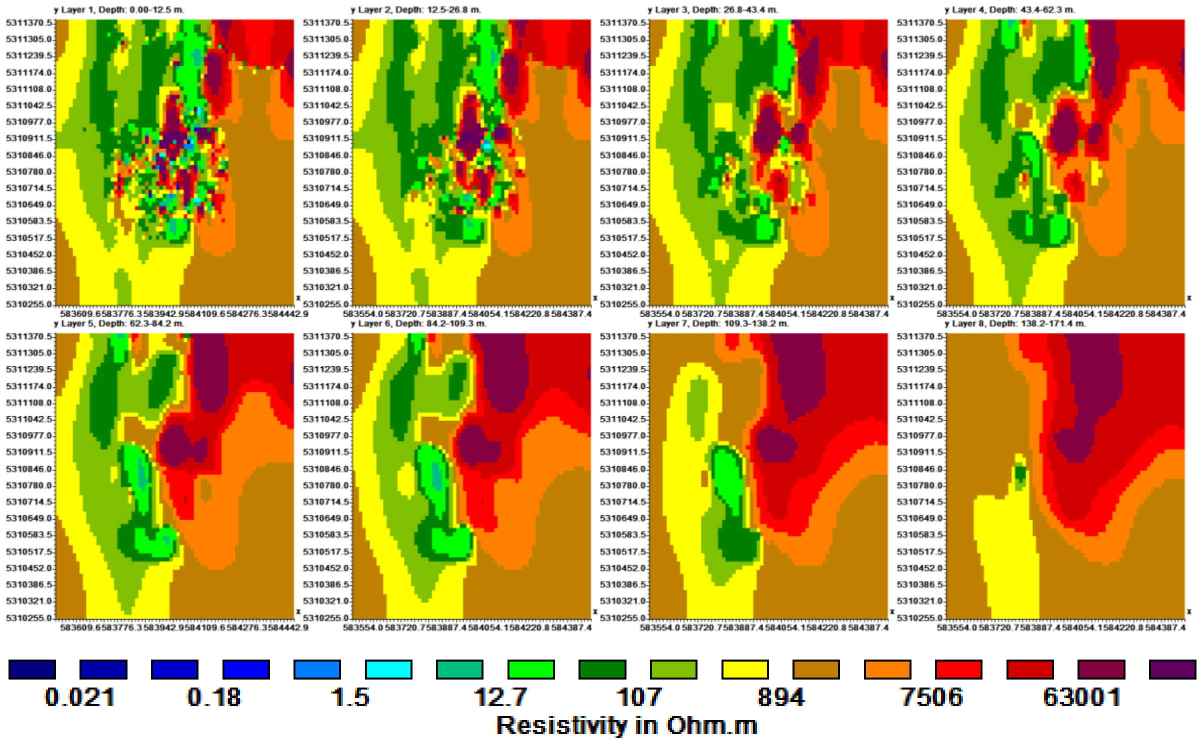


Figure 23: 8 resistivity depth sections ranging from 0-171.4m as viewed in RES3DINV

A final XYZ was output from the inversion iteration ten and provided the resistivity, conductivity, chargeability, and sensitivity values at the centre and the corner of the model blocks. In this case, the resolution was also calculated. This was imported and modelled in Geosoft Oasis.

A horizontal slice of the chargeability and resistivity from the final inversion model overlaid in Google Earth is seen in the following two figures.

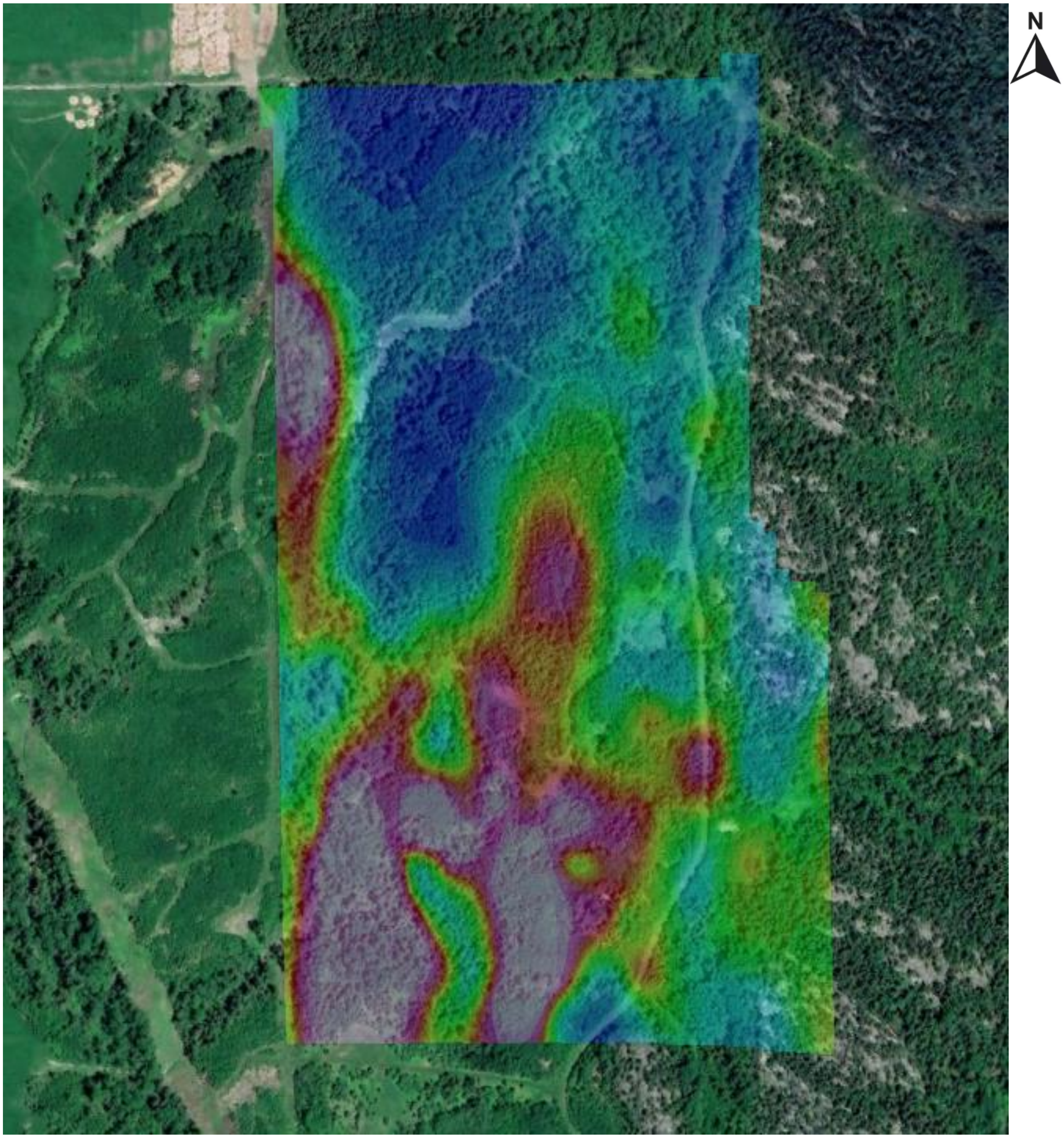


Figure 24: Chargeability grid (250m MSL) overlaying Google Earth. (©2020 Google, Image ©2021 CNES/Airbus, Image©2021 Maxar Technologies)

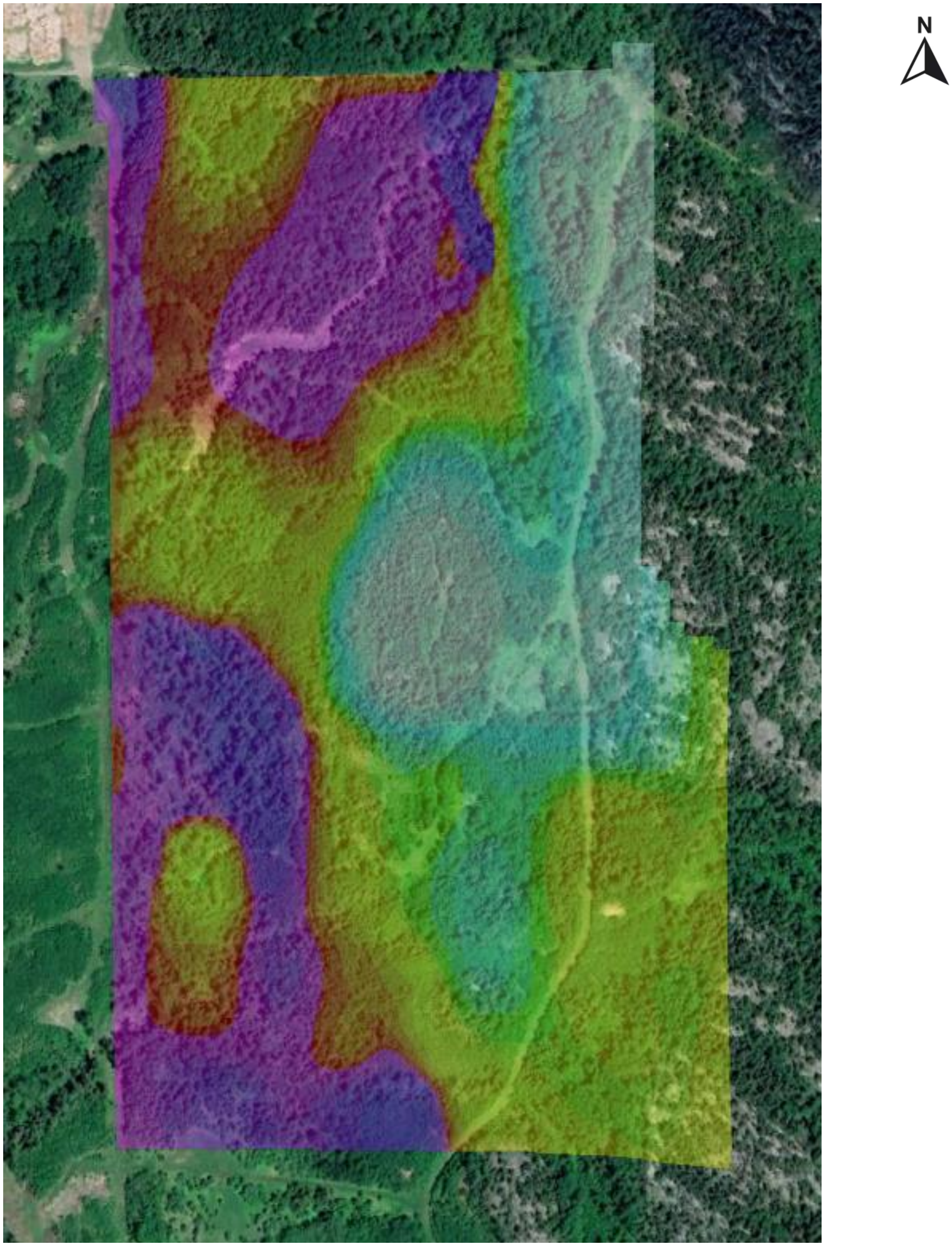


Figure 25: Resistivity grid (250m MSL) overlaying Google Earth. (©2020 Google, Image ©2021 Maxar Technologies)

7.2 INTERPRETATIONS

The survey specifically targeted known historic mineralization in an attempt to isolate additional targets. The focus of the survey was concentrated south of the 2020 drilling, with some information collected to the North. This dataset was inverted to produce a 3D chargeability and resistivity models.

Some farming-related culture was noted along the west side of the survey area; however, it did not appear to impact the survey.

When looking at the inversion model, not much information was obtained in the north end and near the model boundaries. This results in the inversion padding of the model and may result in inconsistent results in these along the boundaries.

The survey indicates the presence of a conductive clay overburden over most of the area. The clay resulted in strong current injections throughout the entire survey area.

Figures 26 and 27 are examples of the 3D chargeability model at 12mV/V superimposed on a 200 metre MSL chargeability slice.

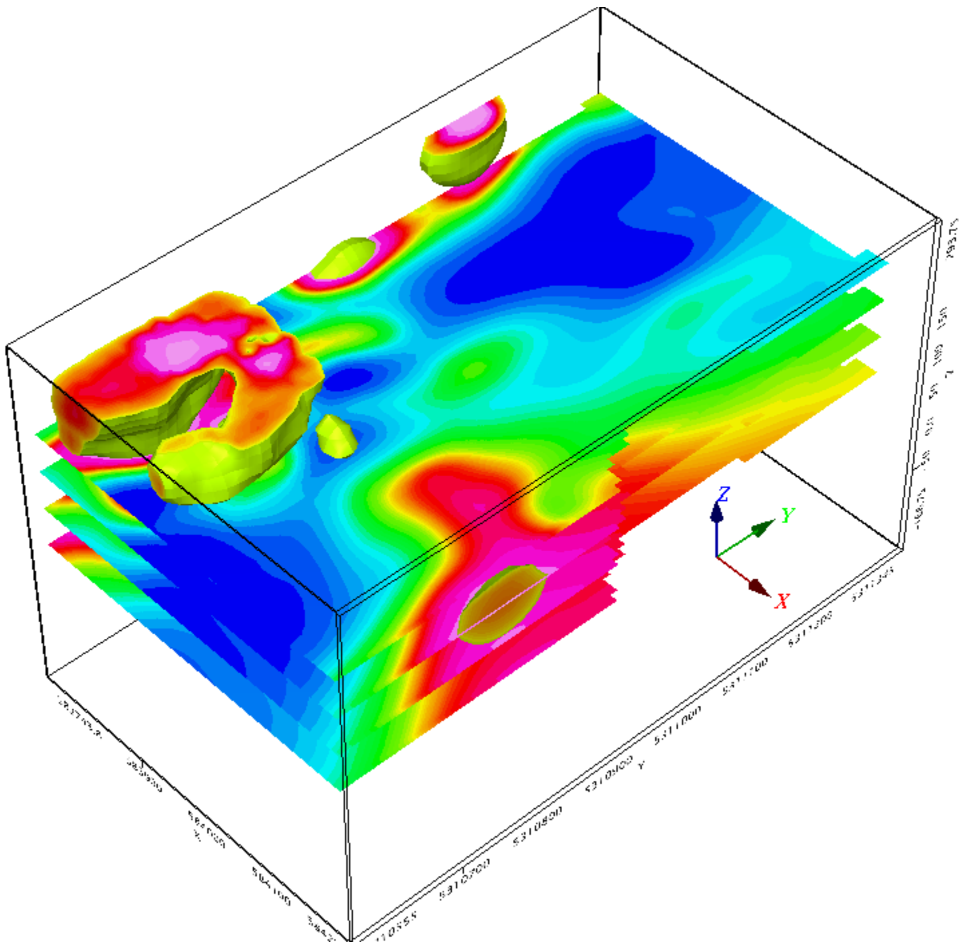


Figure 26: 3D chargeability model with 200m MSL slice yellow = 12mV/V looking northwest

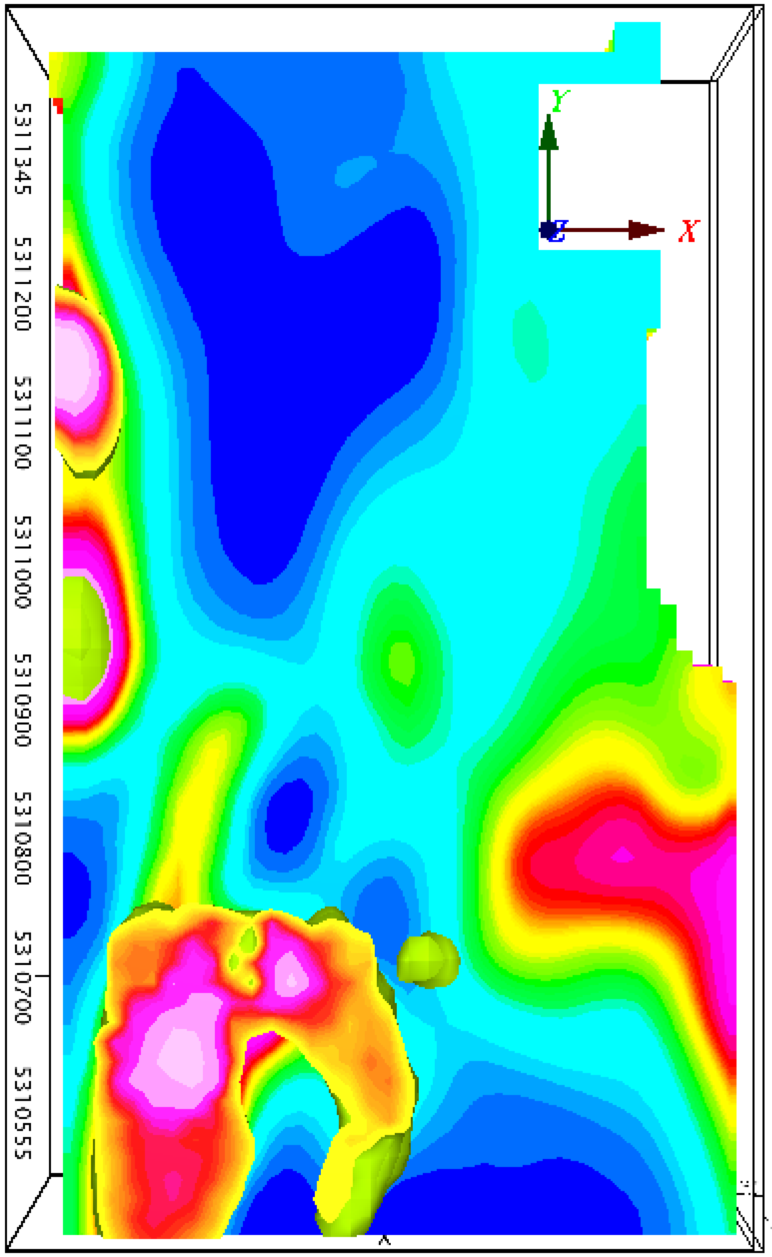


Figure 27: 3D chargeability model with 200m MSL slice pink = 12mV/V looking down

Strong chargeability in most of the historic drill intersects, correlate with the chargeability responses within the inversion. The chargeability response appears almost vertical but maybe dipping east or west. There is a definite southerly plunge within the dataset. The chargeability signatures may be a result of an increase in finely disseminated sulphides or a carbonate zone.

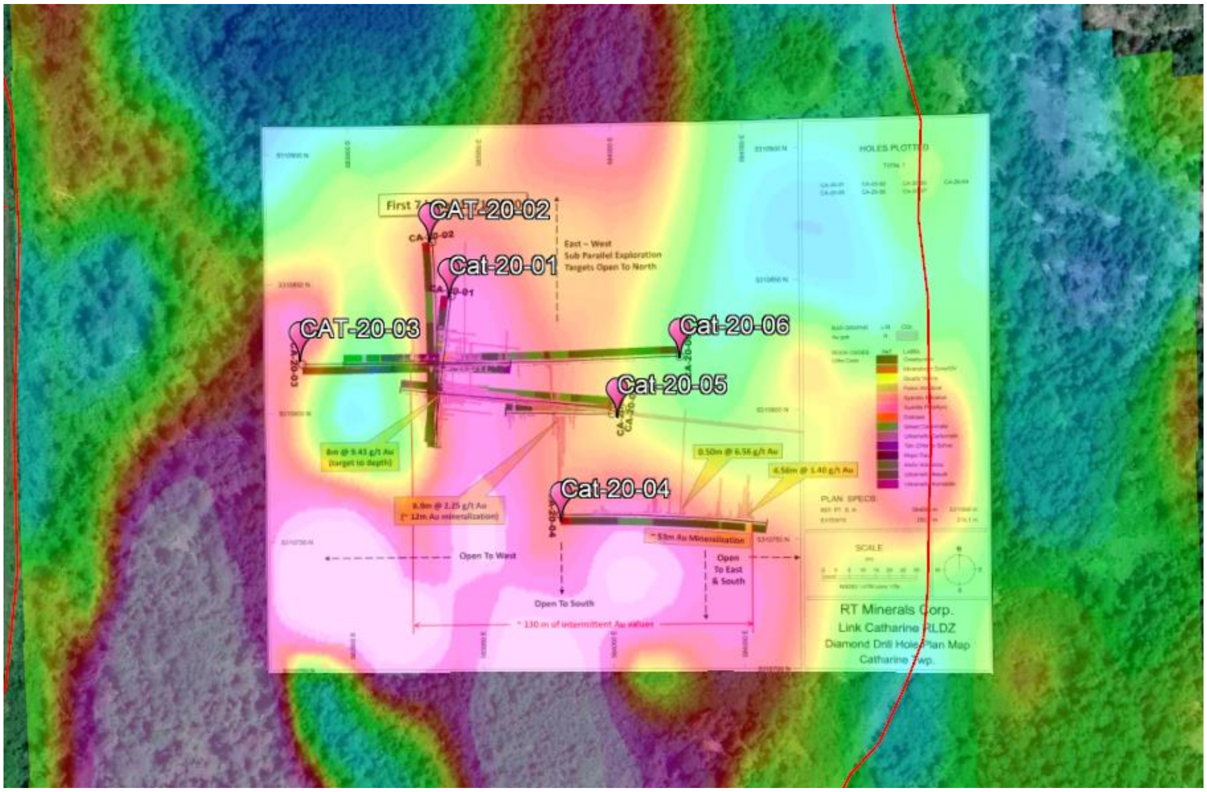


Figure 28: 3D chargeability model with 250m MSL and the 2020 drill results, obtained from the RT Minerals website overlaying Google Earth. (©2020 Google, Image ©2021 Maxar Technologies)

Figures 29 and 30 shows the resistivity model on the resistivity 150m MSL plane.

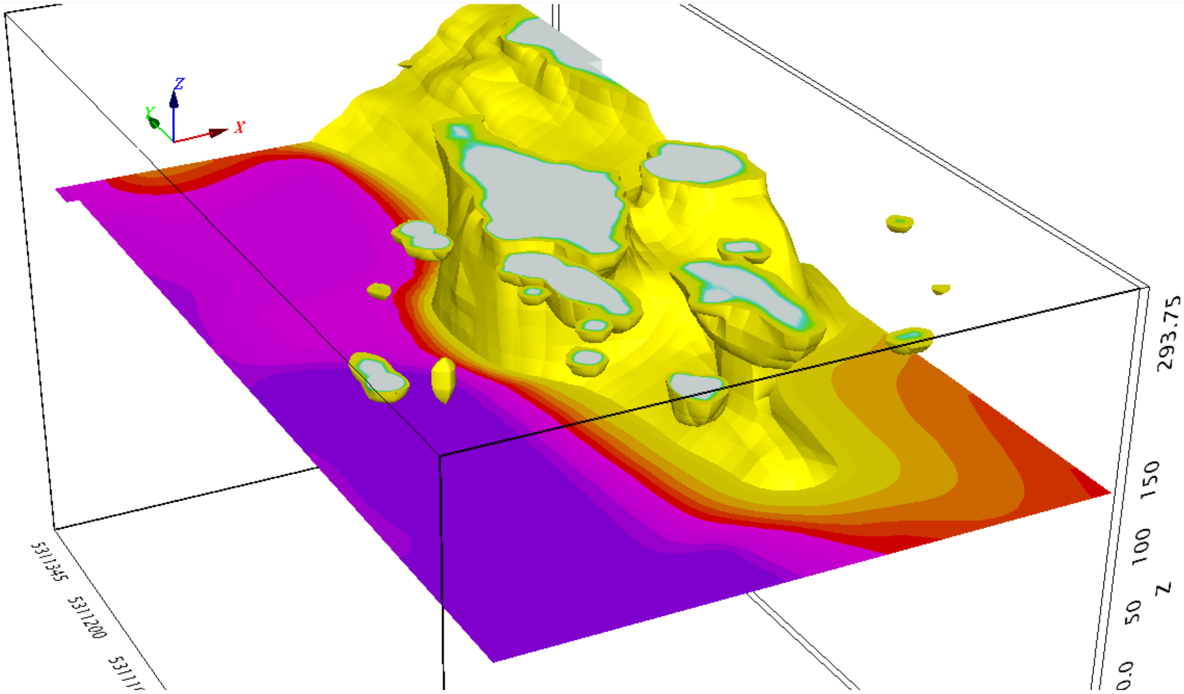


Figure 29: 3D resistivity voxel with 150m MSL slice slices (yellow/white = > 20000 ohm.meters) looking northeast

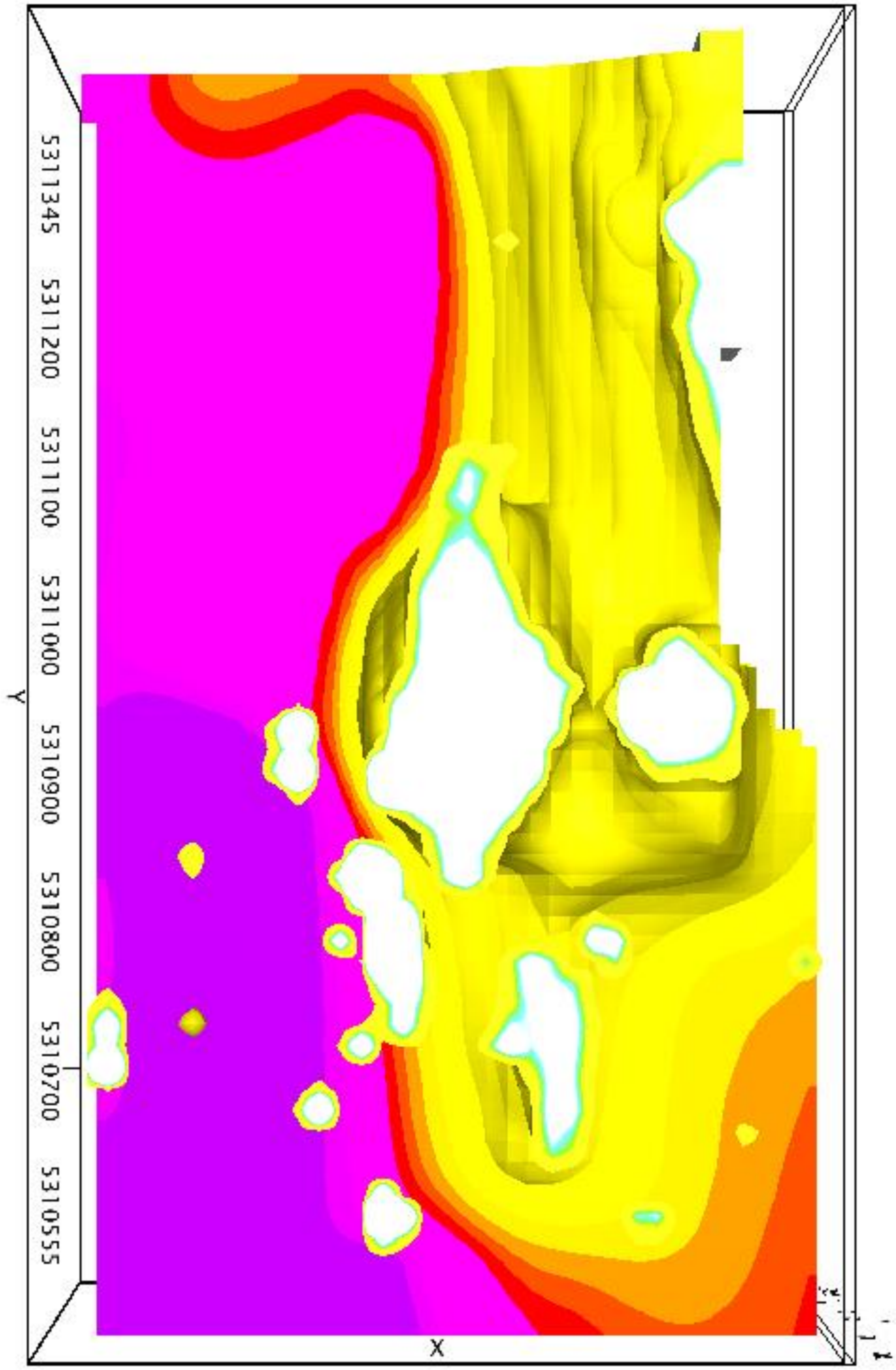


Figure 30: 3D resistivity voxel with 150m MSL slice slices (yellow/white = > 20000 ohm.meters) looking down

The resistivity signature indicates the prsence of conductive overburden. This decrease the reliability with depth of the resistivity results. The results indicate the precense of a strong north- south structure with at least to lateral offsets. A resistivity plan slice from 200 MSL provides a better visulisations of the offsets.

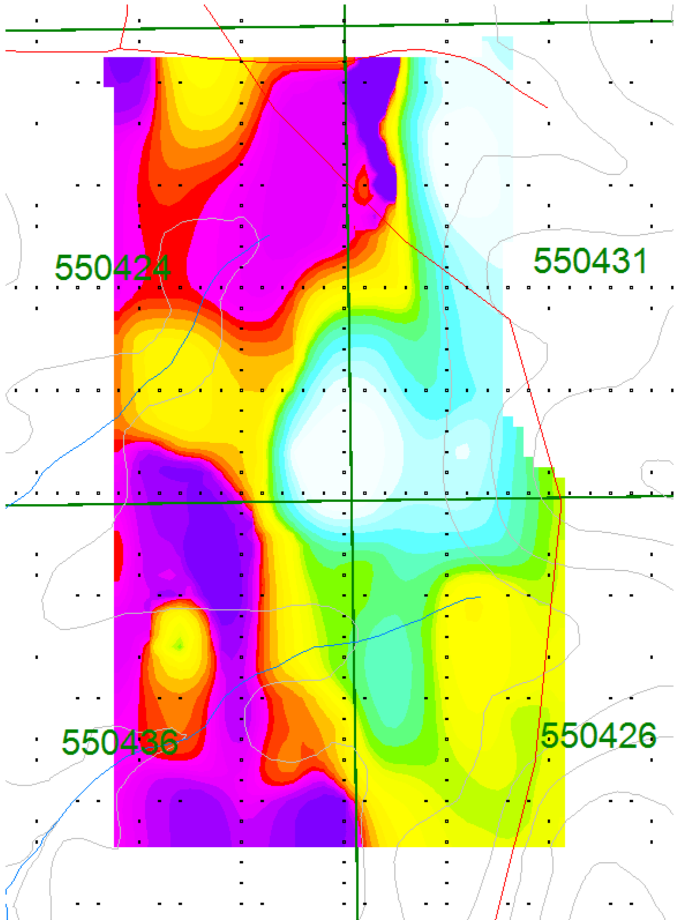


Figure 31: 200m MSL plan of 3D Resistivity model

The data seems to suggest the existence of a repeated chargeability sequence between the east and west side of the strong southerly anomaly. This may suggest that the north-south structure may have resulted in a upthrusted block, which would result in the repeating of the response. This could also be explained with a north-south alteration zone or dike, which bisects the chargeable zone.

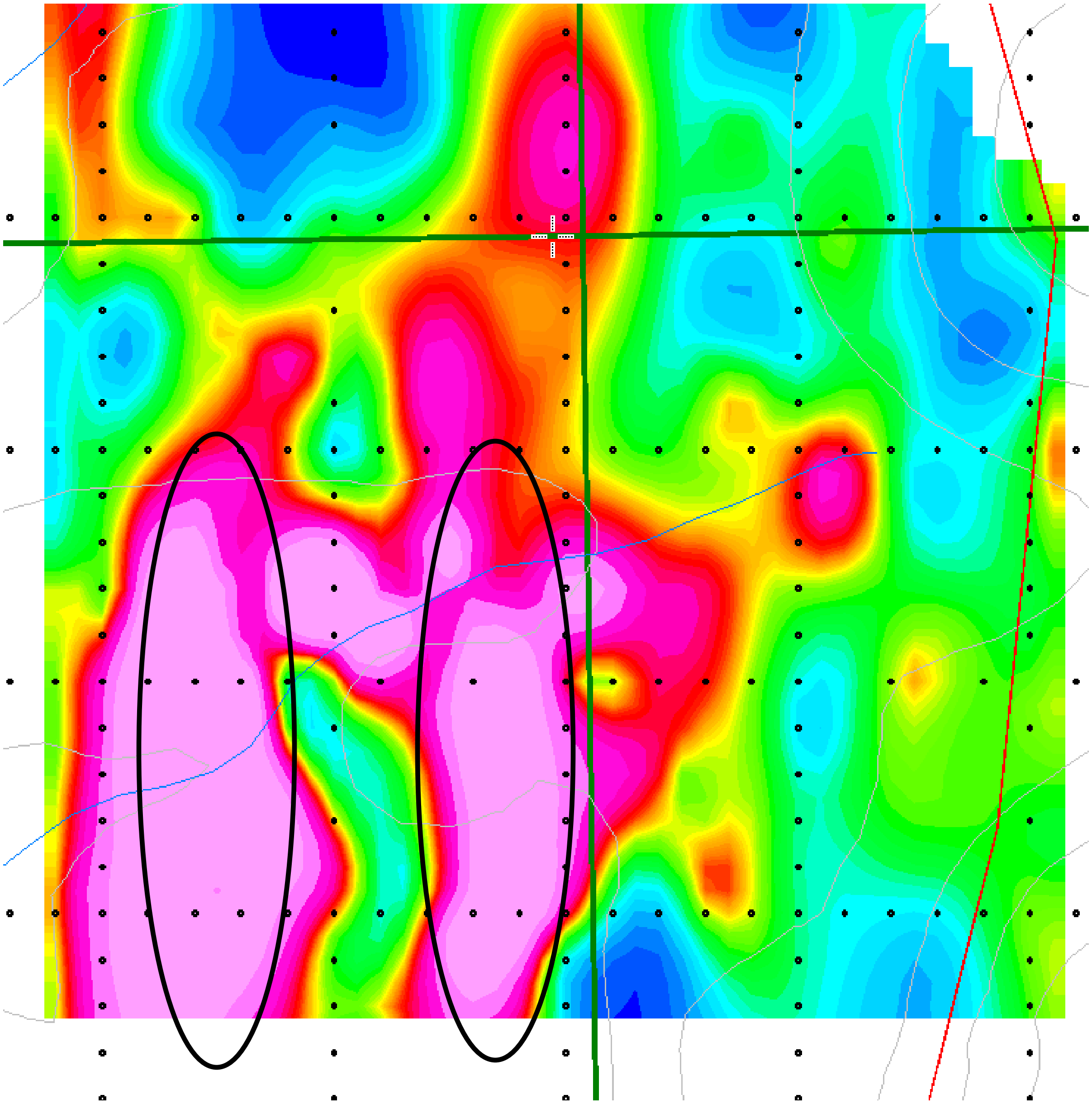


Figure 32: Chargeability model slice at 250m MSL indicating the repeated chargeability.

7.3 RECOMMENDATIONS

The model indicates the presence of overburden. Any follow-up would have to be either in the form of a soil survey or drill testing as there is little to no outcrop expected in the anomalous regions.

It is recommended that historic work be compiled. This compilation overlaid on the present geophysical model may indicate sources of the anomalies and allow for better identification and correlation to the expected geophysical signatures.

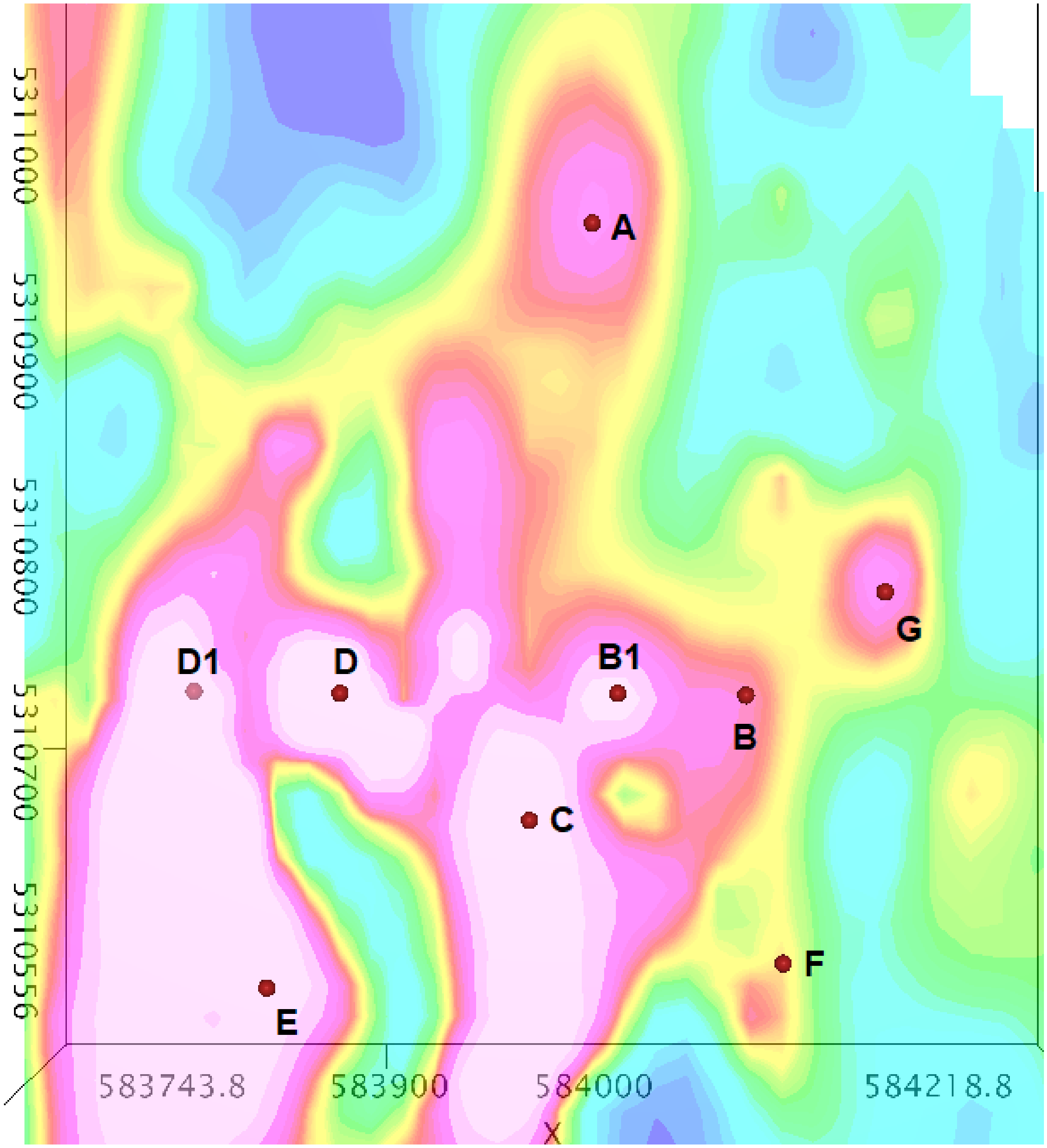


Figure 33: Recommended Targets superimposed on 250m MSL chargeability model slice

Figure 33 indicates the areas recommended for drill testing outside of the 2020 drill program area. The UTM coordinates can be seen in the following table.

	Target E	Target N	Targeted MSL	
A	584000	5310925	250	
B	584010	5310740	250	
B1	584060	5310740	275	
C	583975	5310690	250	
D	583900	5310740	250	
D1	583840	5310740	225	
E	583871	5310624	250	
F	584075	5310635	265	optional
G	584115	5310780	265	optional

Table 11: Recommended Targets for Follow-up

I would also recommend performing additional IP on the Property. This should consist of a similar survey using 100m dipoles with a grid being cut for better current injection distribution.

7.4 CONCLUSIONS

The 3D IP survey responded to the known mineralization that was identified by historic drilling. The 3D IP survey highlighted multiple features that should be further investigated. Most of the highlighted anomalies fall under what appears to be a heavier overburden cover and respond as a higher chargeability. A total of nine follow-up locations have been identified.

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, C. Jason Ploeger, hereby declare that:

1. I am a professional geophysicist with residence in Larder Lake, Ontario and am presently employed as a Geophysicist and Geophysical Manager of Canadian Exploration Services Ltd. of Larder Lake, Ontario.
2. I am a Practicing Member of the Association of Professional Geoscientists, with membership number 2172.
3. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.
4. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.
5. I am a member of the Ontario Prospectors Association, a Director of the Northern Prospectors Association and a member of the Society of Exploration Geophysicists.
6. I do not have nor expect an interest in the properties and securities of **RT Minerals Corp.**
7. I am responsible for the final processing and validation of the survey results and the compilation of the presentation of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

PROFESSIONAL GEOSCIENTIST
C. JASON PLOEGER
PRACTISING MEMBER
2172
ONTARIO

C. Jason Ploeger, P.Geo., B.Sc.
Geophysical Manager
Canadian Exploration Services Ltd.

Larder Lake, ON
February 5, 2021

APPENDIX B

IRIS V-FullWaver Receiver[3]

2 CHANNELS IP FULL WAVE RECORD

- 2 simultaneous dipoles
- Several weeks recording
- Time stamped data

V-Full Waver: this logger for electrical signal is a new concept of compact and low consumption unit designed for advanced Time Domain Induced Polarization, Resistivity and SP measurements. It can work in all field conditions, small, discrete, autonomous and can record continuously without operator.

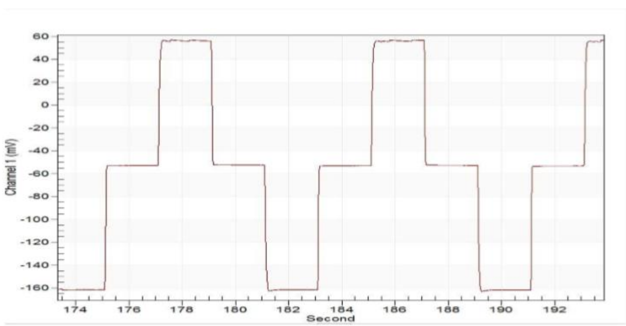
Compactness: light, discrete and easy to setup on the field, even on remote areas. Autonomous two dipoles logger, no need of the operator during acquisition. V-Full Waver allows a high productivity for dipole-dipole, gradient, extended pole-pole and other arrays. A network of several tens of channels can be quickly installed on the field for deep exploration and advanced processing (perpendicular dipoles, remote reference...)

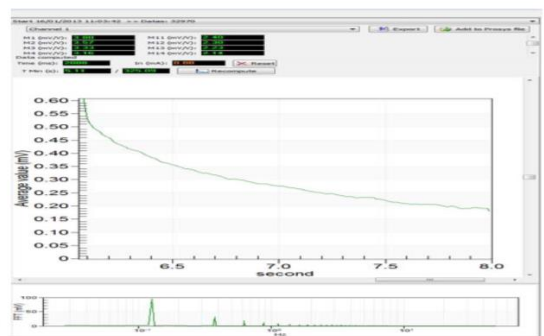
Internal GPS: an integrated GPS, very accurate and providing PPS signal (one pulse per second) allows to store all time series with time information. This is crucial to process data from several V-Full Waver loggers installed in a same area. This is also useful to correlate with injection dipole waveform, in case this has also been recorded with a I-Full Waver logger.

[3] Information obtained from http://www.iris-instruments.com/Pdf_file/V_fullwaver.pdf

High resolution: samples are recorded every 10 (ten) milliseconds (100 Hz sampling frequency). Data from several recorders can be merged and processed together with the Full Wave Viewer program delivered with the system. All data is synchronized through the GPS-PPS time stamping. A post acquisition processing permits to improve the signal-to-noise ratio. This also allows good quality IP data for deep investigations and for noisy areas.

Internal memory: the memory can store up to one month recording time. Then data can directly be transferred to a USB key in a few seconds.





TECHNICAL SPECIFICATIONS

- Max. input voltage: 15 V
- Protection: up to 1 000 V
- Accuracy: 0.2 % typical
- Resolution: 10 µV
- Sampling rate: 10 milli seconds (100 Hz)
- Induced Polarization (chargeability) measured every 10 milliseconds (200 IP windows for a 2 sec pulse)
- Input impedance: 100 MΩ
- Low pass filter Cut off frequency: 10 Hz
- Upper frequency which can be resolved: 50 Hz
- Frequency resolution: up to 34 micro Hz
- Internal GPS with PPS (one pulse per second)
- Time resolution: 250 micro seconds (time stamped samples)
- Battery test
- Contact resistance check

GENERAL SPECIFICATIONS

- LCD display, graphic and alpha numeric with 16 lines of 40 characters
- Data flash memory: one-month recording
- After acquisition: possibility of data storage on a USB key (8 GB or more).
- Power supply: internal Li-Ion rechargeable battery; optional external 12V standard car battery can be also used

- Autonomy: 20 operating hours with the internal Li-Ion battery
- Weather proof IP 67
- Shock resistant resin NK-7, case with handle
- Operating temperature: -20 °C to +70 °C
- Dimensions: 31 x 25 x 15 cm
- Weight: 2.8 kg

APPENDIX B

IRIS I-FullWaver Current Monitor[4]

IP Fullwave Record

• Recording injected current
• Several weeks recording
• Time stamped data

Fullwaver: this logger for electrical signal is a new concept of compact and low consumption unit designed for advanced Time Domain Induced Polarization, Resistivity and SP measurements. It can work in all field conditions, small, discrete, autonomous and can record continuously without operator. I-Fullwaver is connected in series on the AB injection line, it measures and logs very accurately the injected current IAB.

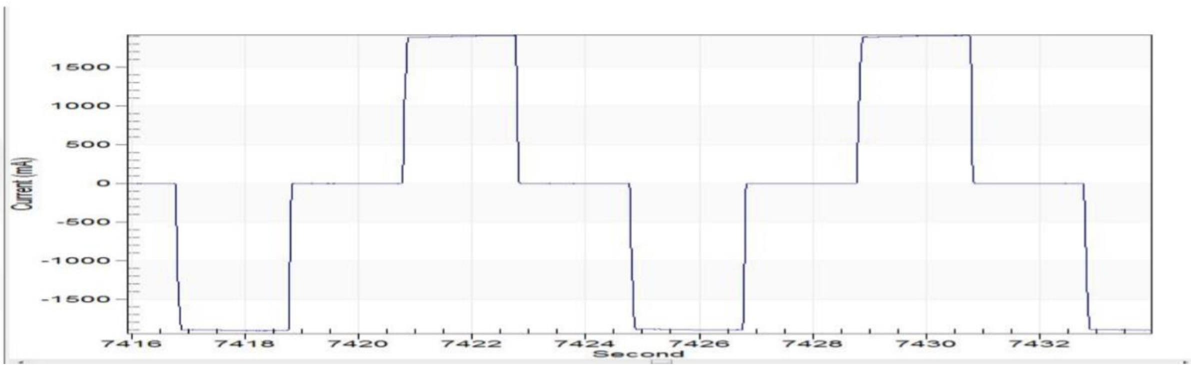
Compactness: light, discrete and easy to setup on the field, even on remote areas. This autonomous logger does not need any operator during the acquisition. I-Fullwaver is connected close to the transmitter or close to any injection electrode

Integrated GPS: an integrated gps, very accurate and providing PPS signal (one pulse per second) allows to store all time series with time information. This is crucial to correlate and process data with V-Fullwaver receiver loggers installed in a same area. This information displays the behaviour of the transmitter, its regulation specifications and the value of Iab in order to compute accurately the apparent resistivity.

[4] Information obtained from http://www.iris-instruments.com/Pdf_file/I_fullwaver.pdf

High resolution: samples are recorded every 10 (ten) milliseconds (100 Hz sampling frequency). Data from several recorders (for current and received voltages) can be merged and processed together with the FullWaveViewer program delivered with the system. All data is synchronized through the GPS-PPS time stamping. A post acquisition processing allows to improve the signal-to-noise ratio, giving good quality IP data for deep investigations in noisy areas.

Internal memory: the memory can store up to three months recording time. Then data can directly be transferred to a USB key in a few seconds.



TECHNICAL SPECIFICATIONS

- Current range: +/- 25 000 mA
- Current resolution: 0.1 mA
- Accuracy: +/- 1 mA
- Protection: up to 50 A and 3 000 V
- Magnetic sensor
- Magnetization offset (offset memory): up to 0.05%
- Offset calibration
- Sampling rate: 10 milliseconds (100 Hz)
- Integrated GPS with PPS (one pulse per second)
- Time resolution: 250 micro seconds (time stamped samples)
- Battery test

GENERAL SPECIFICATIONS

- LCD display, alpha numeric with 4 lines of 20 characters
- Data flash memory: three months recording
- After acquisition: possibility of data storage on a USB key (8 Gb or more).
- Power supply: internal Li-Ion rechargeable battery; optional external 12V standard car battery can be also used
- Autonomy: 20 operating hours with the internal Li-Ion battery.
- Weather proof IP 67
- Shock resistant resin NK-7, case with handle
- Operating temperature: -20 °C to +70 °C
- Dimensions: 31 x 25 x 15 cm
- Weight: 3.0 kg

APPENDIX B

GGD II 5kW

SPECIFICATIONS

- Protection against short circuits even at 0 ohms
- Output Voltage range: 150V to 2400V in 14 steps
- Power source is a standard 220/240V, 20/60 Hz source
- Displays electrode contact, transmitting power and current

ELECTRICAL CHARACTERISTICS

- Standard Time Base of 2 seconds for time domain – 2 seconds on, 2 seconds' off
- Optional Time Base of DC, 0.5, 1, 2, 4 or 8 seconds
- Output Current Range, 0.030 to 10A
- Output Voltage Range, 150 to 2400V in 14 steps
- Ability to Link 2 GDD transmitters to double power output

CONTROLS

- Switch ON/OFF
- Output Voltage Range Switch: 150V, 180V, 350V, 420V, 500V, 600V, 700V, 840V, 1000V, 1200V, 1400V, 1680V, 2000V and 2400V

DISPLAYS

- Output Current LCD: reads +- 0.0010A

- Electrode Contact Displayed when not Transmitting
- Output Power Displayed when Transmitting
- Automatic Thermostat controlled LCD heater for LCD
- Total Protection Against Short Circuits
- Indicator Lamps Indicate Overloads
-

GENERAL SPECIFICATIONS

- Weather proof
- Shock resistant pelican case
- Operating temperature: -40 °C to +65 °C
- Dimensions: 26 x 45 x 55 cm
- Weight: 40 kg

APPENDIX C

REFERENCES

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Loke, M.H. and Dahlin, T., 2010. Methods to Reduce Banding Effects in 3-D Resistivity Inversion. Near Surface 2010 – 16th European Meeting of Environmental and Engineering Geophysics 6 – 8 September 2010, Zurich, Switzerland, A16.

Jackson, S. A., 2011. National Instrument 43-101 Report for 2008-2009 Diamond Drilling on the Link-Catharine Property and Associated Claims with Summary of 1994-2009 Drilling Catharine Township, Northeastern Ontario.

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APPENDIX D

DIGITAL DATA

The digital data contains

- PDF copy of this report
- PDF copy of the maps
- Raw data in binary format
- Raw data in CSV format
- Ascii XYZ of inversion results
- Packed Oasis maps
- Oasis databases
- 3D Oasis voxels created

APPENDIX E

LIST OF MAPS (IN MAP POCKET)

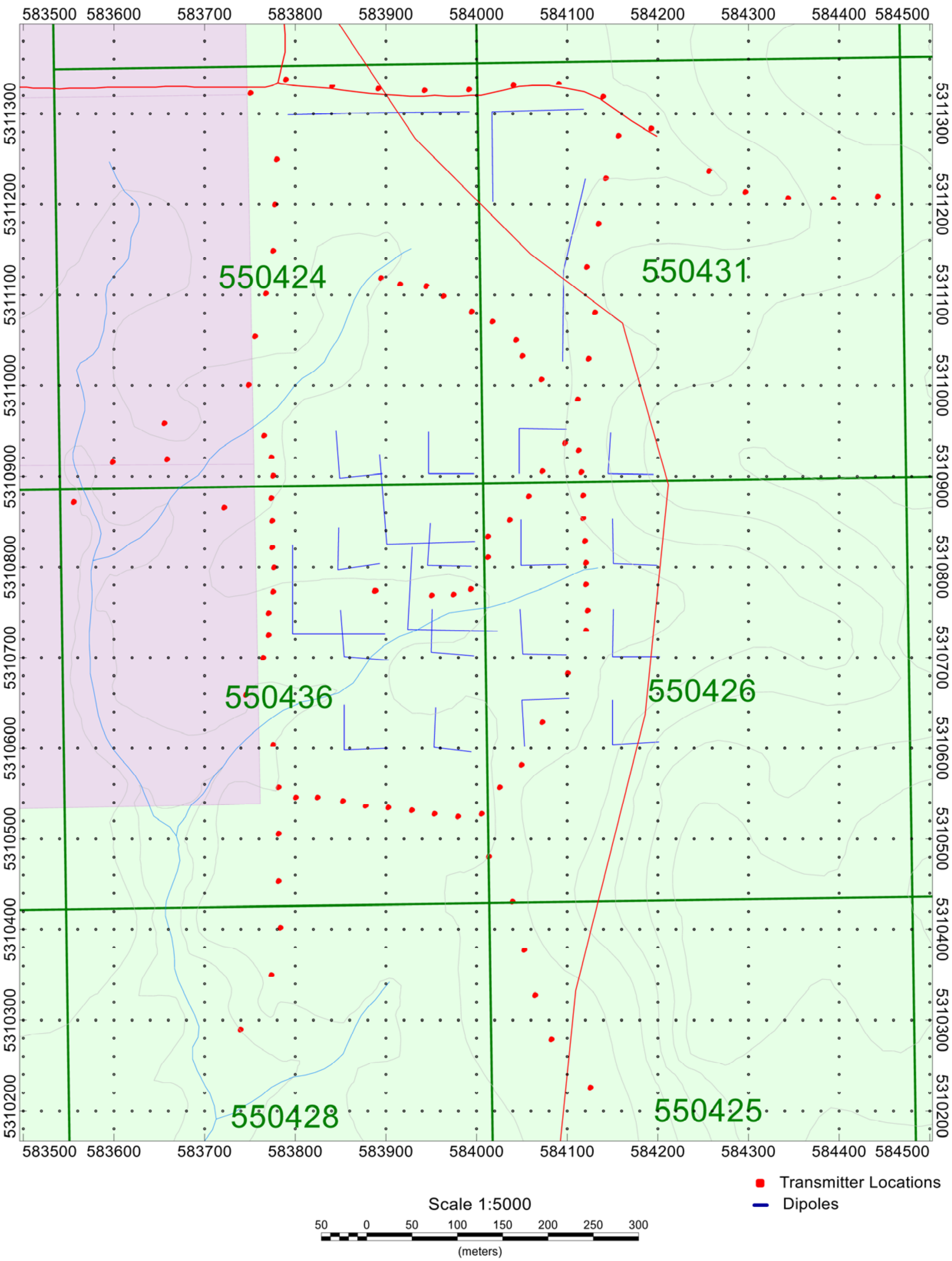
Grid Sketch (1:5000)

1) Q2873-RTM-LinkCatharine-3DIP-Layout-Claims

IP Plan Map (1:5000)

2) Q2873-RTM-LinkCatharine-3DIP-Chr-250MSL
3) Q2873-RTM-LinkCatharine-3DIP-Chr-200MSL
4) Q2873-RTM-LinkCatharine-3DIP-Chr-150MSL
5) Q2873-RTM-LinkCatharine-3DIP-Chr-100MSL
6) Q2873-RTM-LinkCatharine-3DIP-Chr-50MSL
7) Q2873-RTM-LinkCatharine-3DIP-Chr-0MSL
8) Q2873-RTM-LinkCatharine-3DIP-Res-250MSL
9) Q2873-RTM-LinkCatharine-3DIP-Res-200MSL
10) Q2873-RTM-LinkCatharine-3DIP-Res-150MSL
11) Q2873-RTM-LinkCatharine-3DIP-Res-100MSL
12) Q2873-RTM-LinkCatharine-3DIP-Res-50MSL
13) Q2873-RTM-LinkCatharine-3DIP-Res-0MSL

TOTAL MAPS = 13



RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

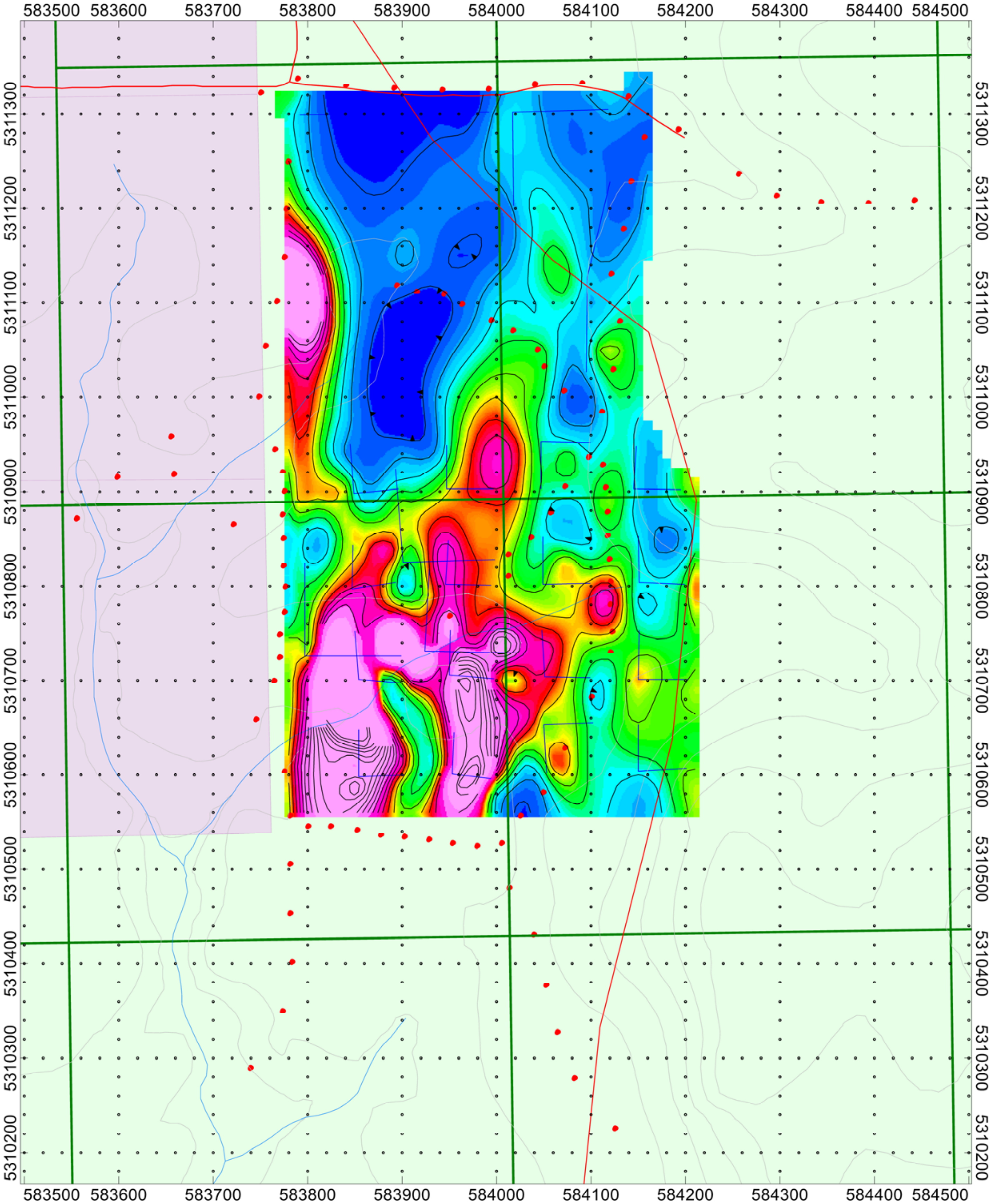
3D Distributed Induced Polarization Array
Survey Layout
Operational Claim Fabric

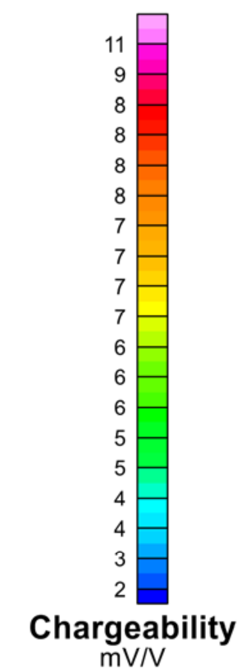
Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Layout-Claims





Transmitter Locations
Dipoles

Scale 1:5000

50 0 50 100 150 200 250 300

(meters)

NAD83 / UTM zone 17N

RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 250m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

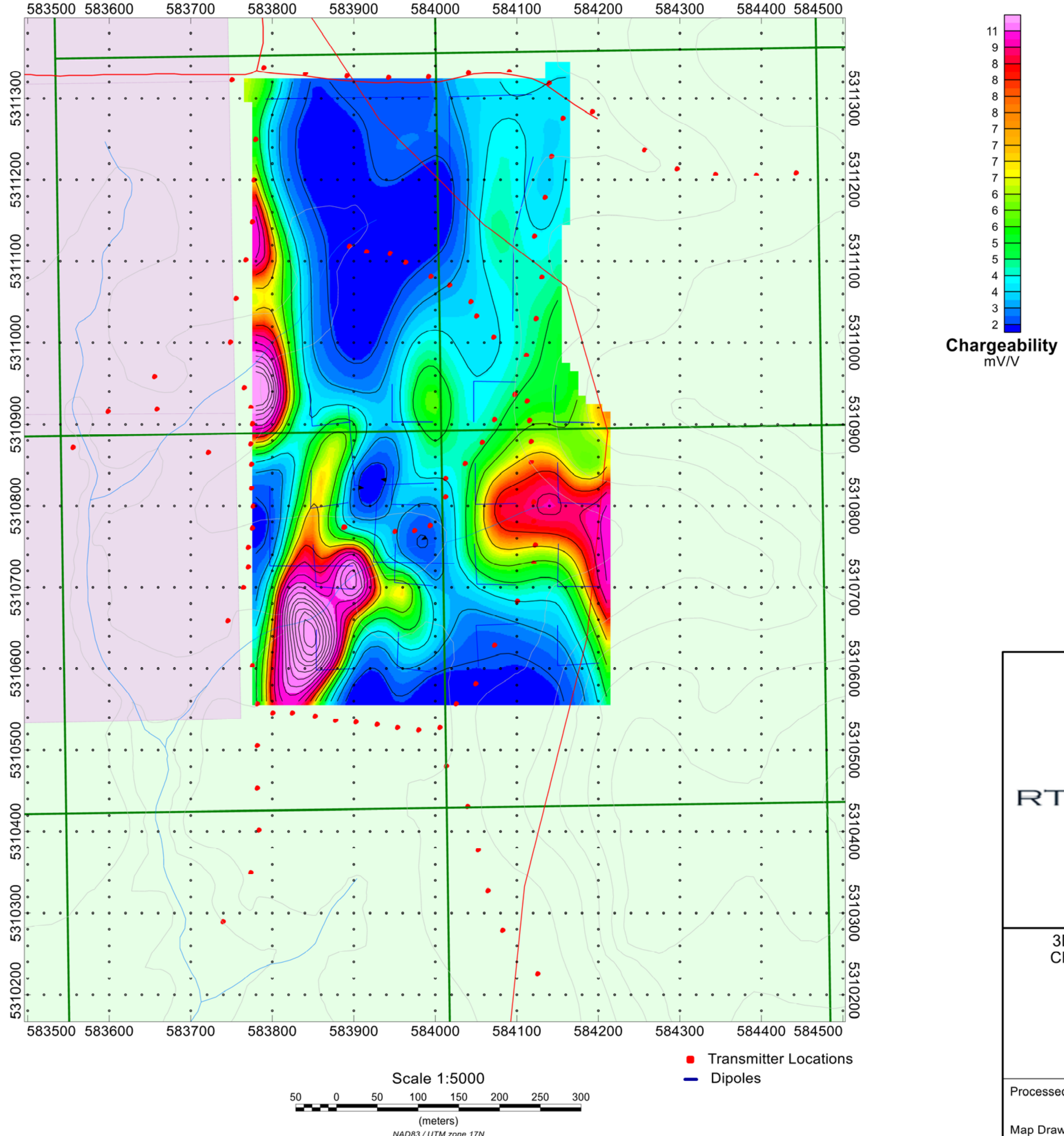
Contour intervals: 1 mV/V

Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Chr-250MSL



RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 200m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

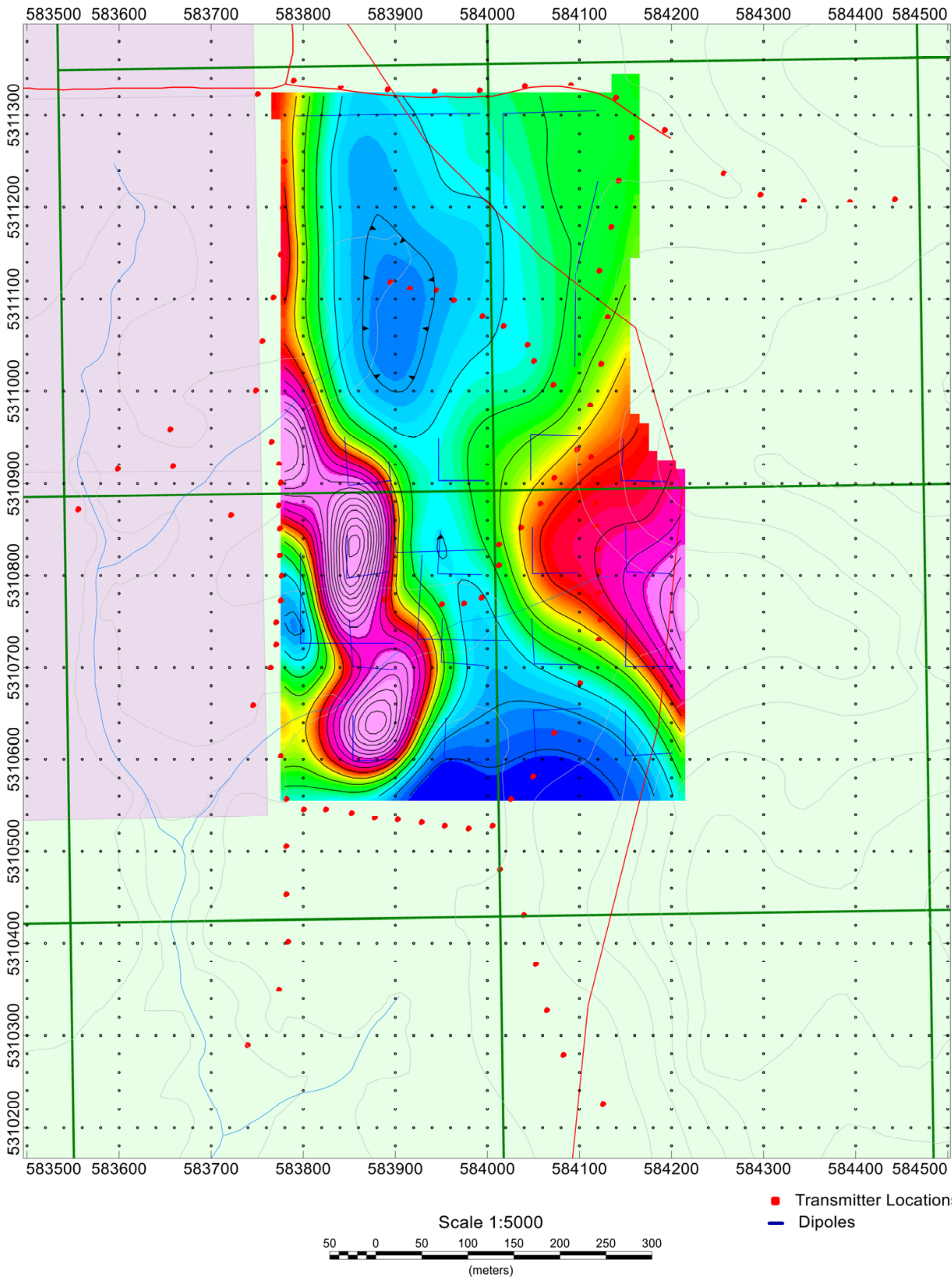
Contour intervals: 1 mV/V

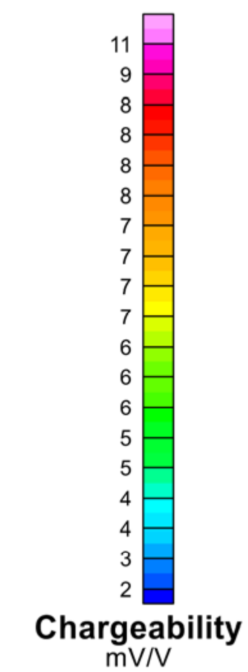
Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Chr-200MSL





RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 150m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

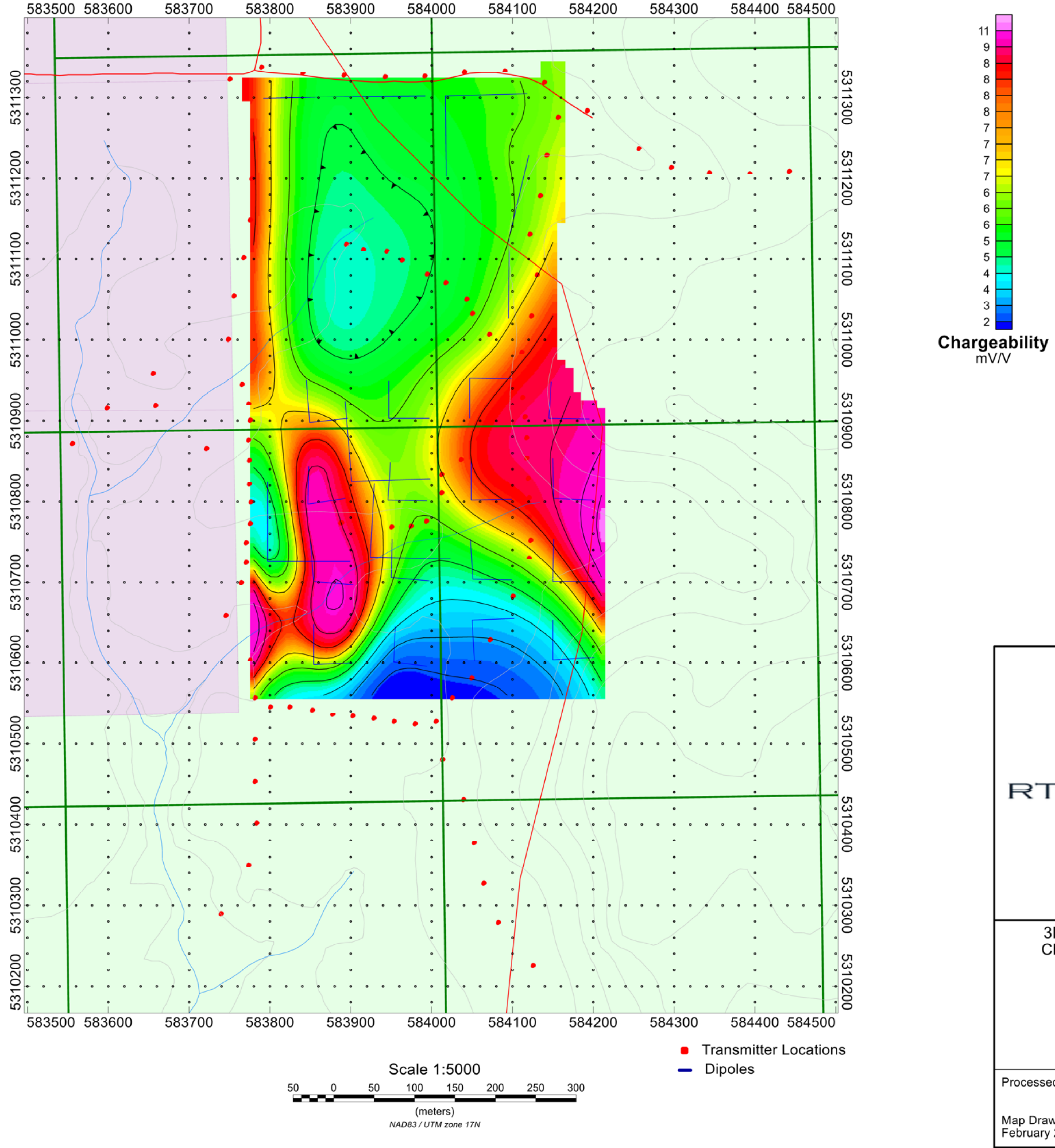
Contour intervals: 1 mV/V

Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Chr-150MSL



RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 100m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

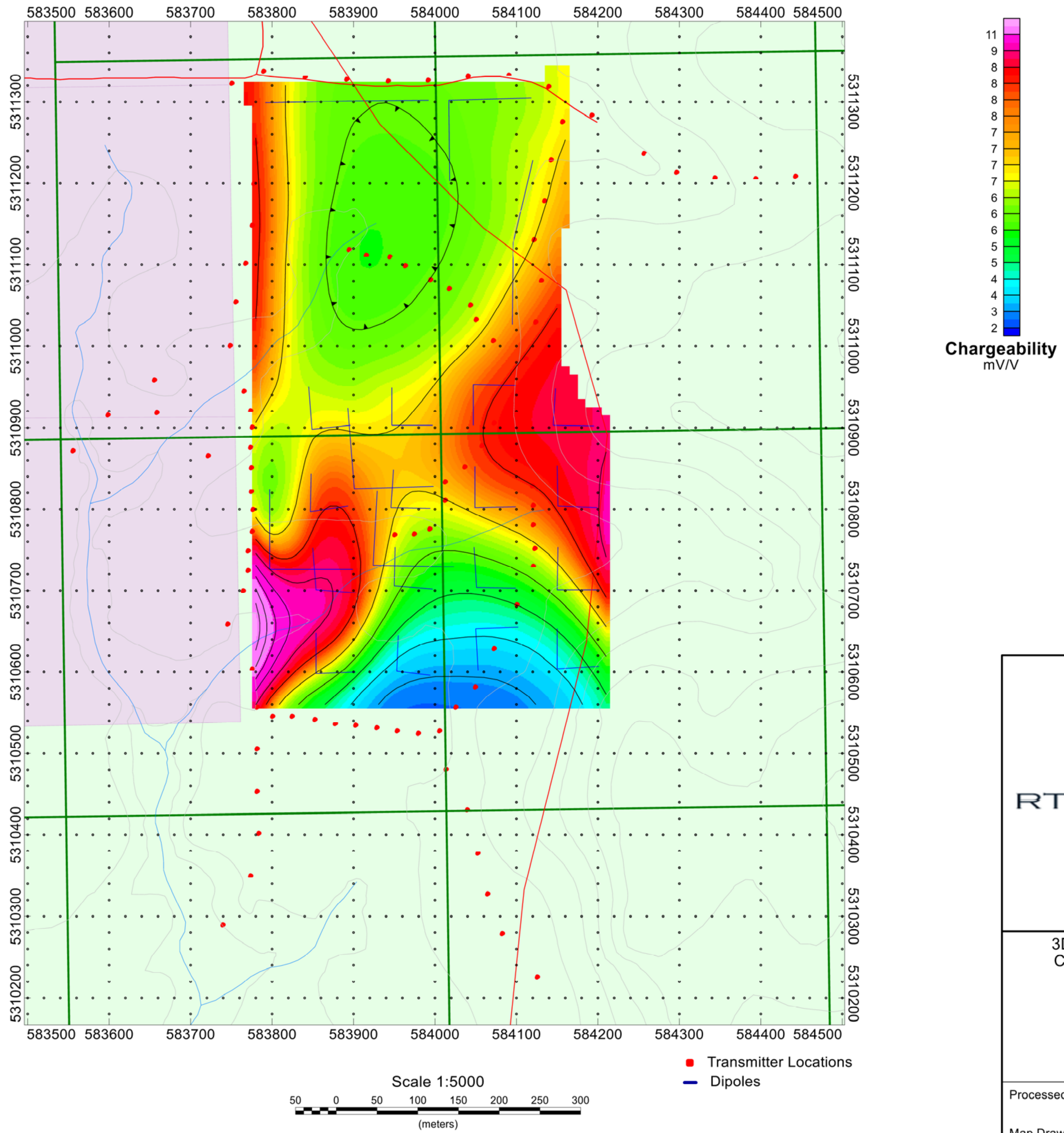
Contour intervals: 1 mV/V

Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Chr-100MSL



RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 50m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

Contour intervals: 1 mV/V

Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

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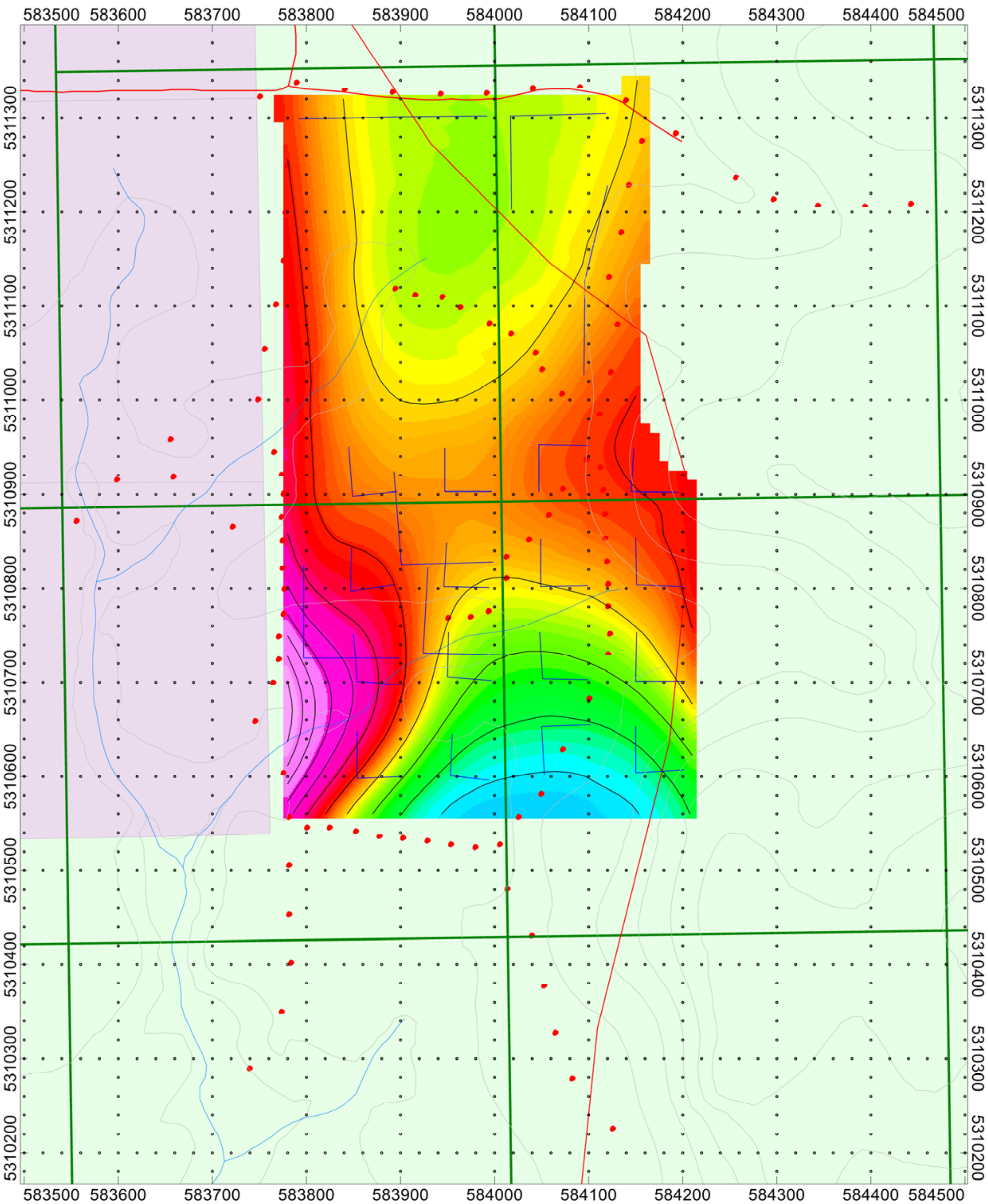
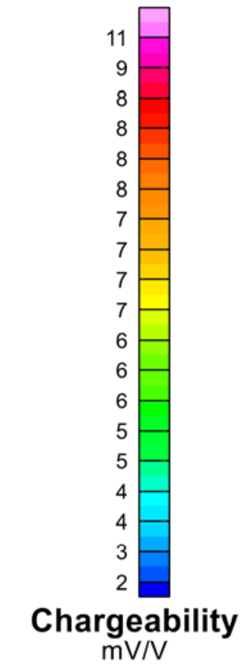
Drawing: Q2873-RTM-LinkCatharine-3DIP-Chr-50MSL





Transmitter Locations
Dipoles

Scale 1:5000

50 0 50 100 150 200 250 300
(meters)
NAD83 / UTM zone 17N

RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 0m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

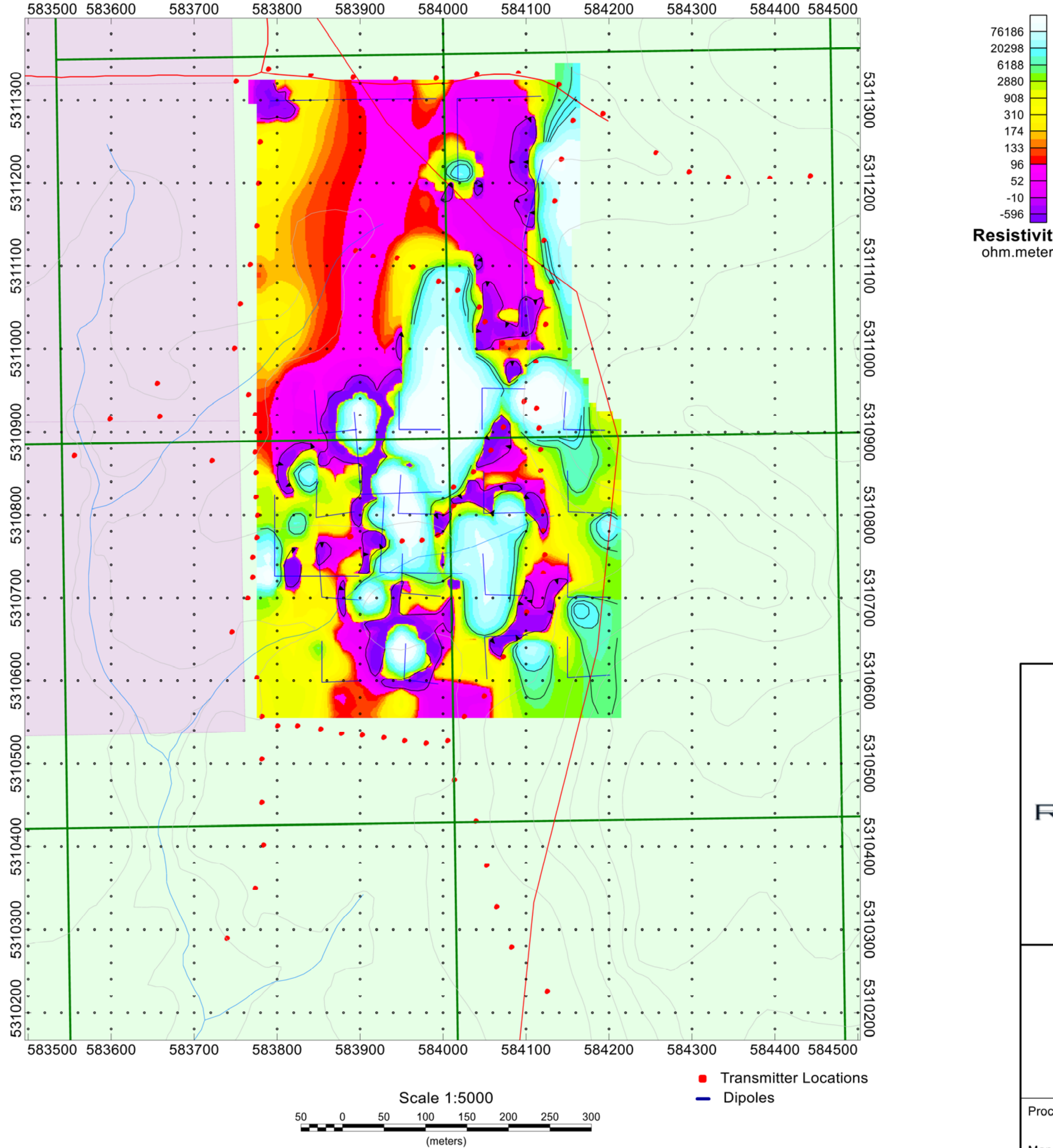
Contour intervals: 1 mV/V

Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Chr-0MSL



RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 250m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

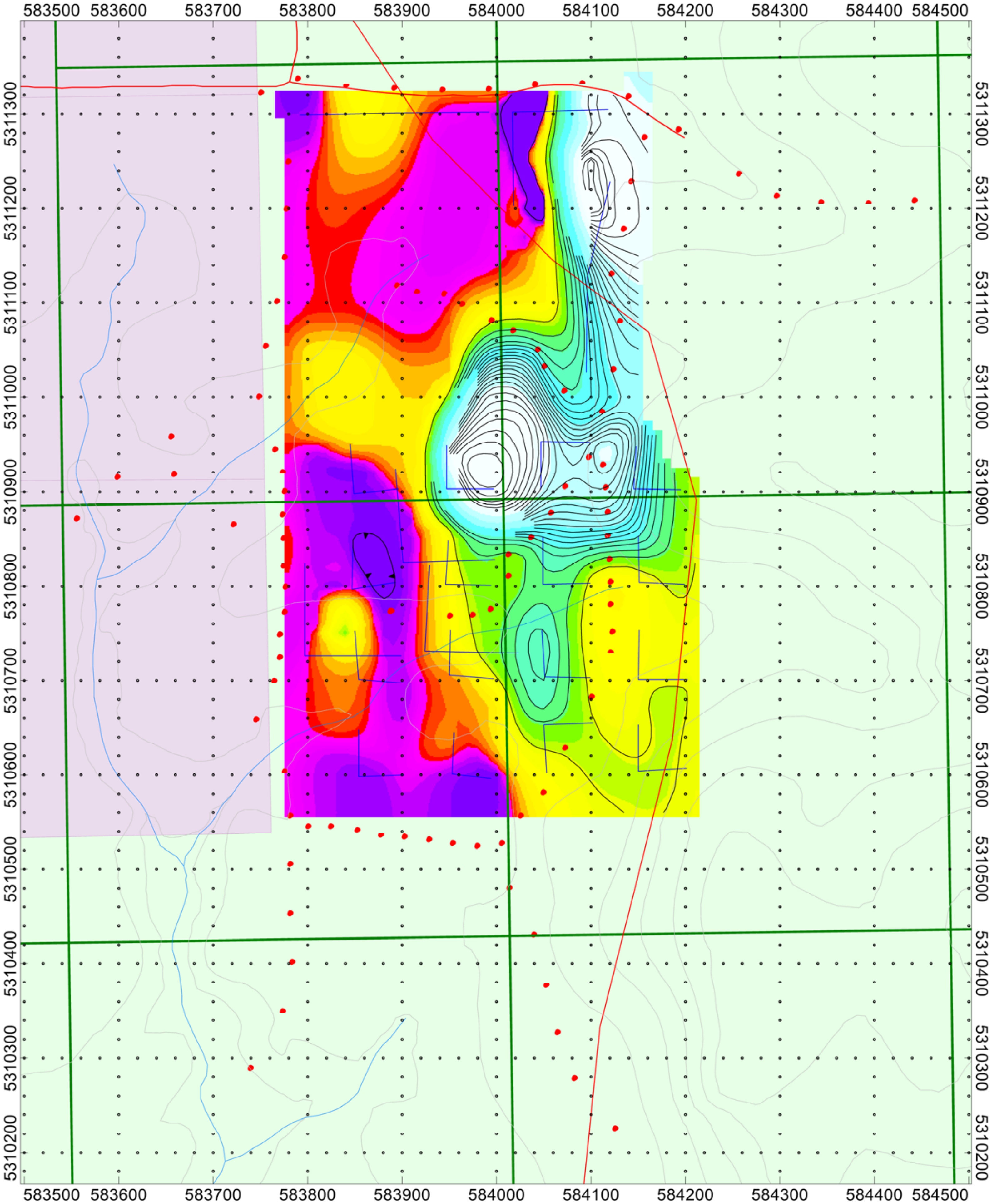
Contour intervals: 5000 ohm.meter

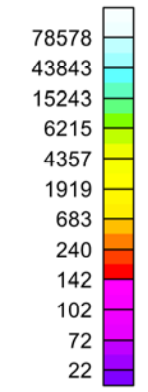
Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Res-250MSL





Transmitter Locations
Dipoles

Scale 1:5000

50 0 50 100 150 200 250 300

(meters)

NAD83 / UTM zone 17N

RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 200m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

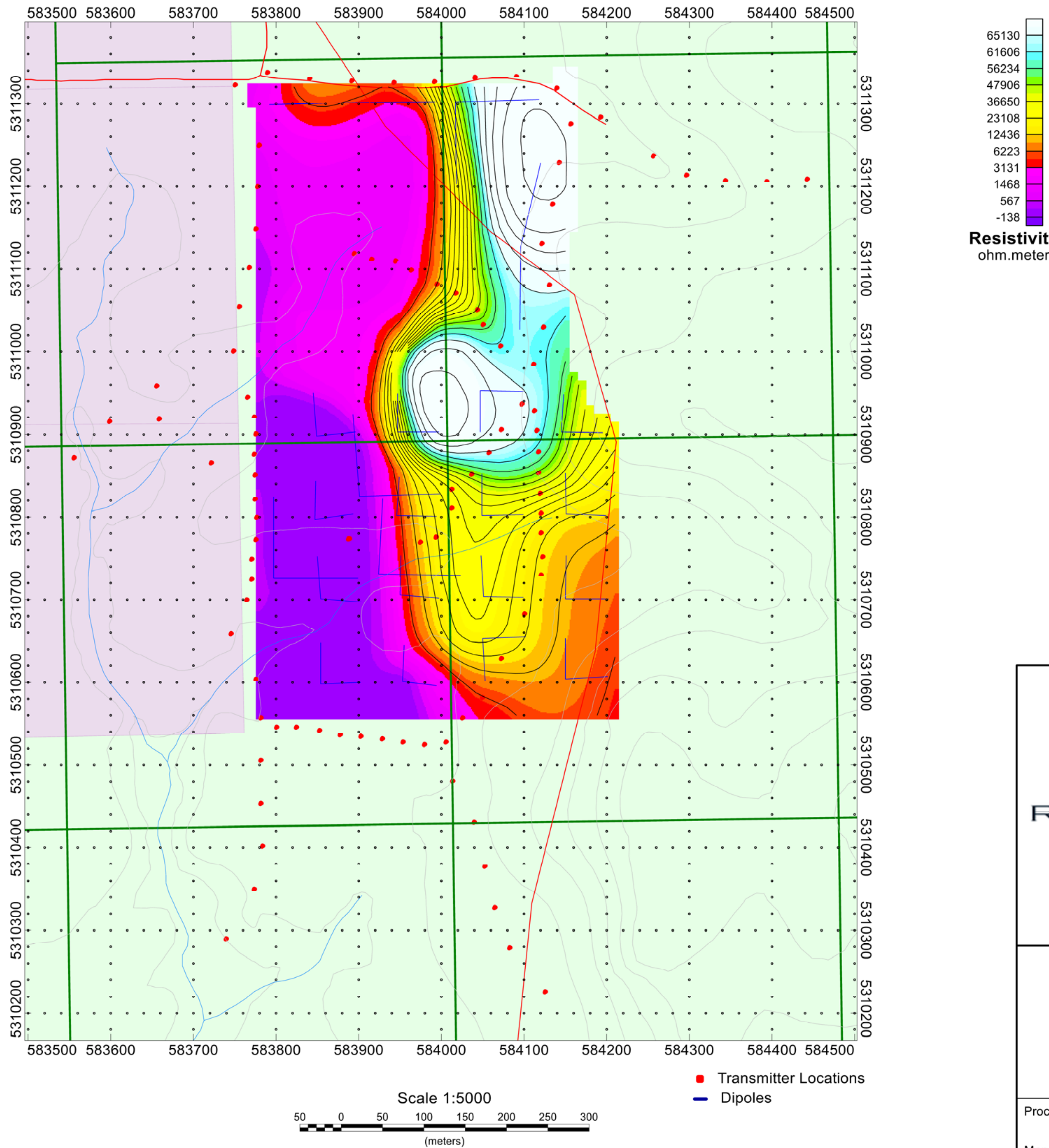
Contour intervals: 5000 ohm.meter

Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Res-200MSL



RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 150m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

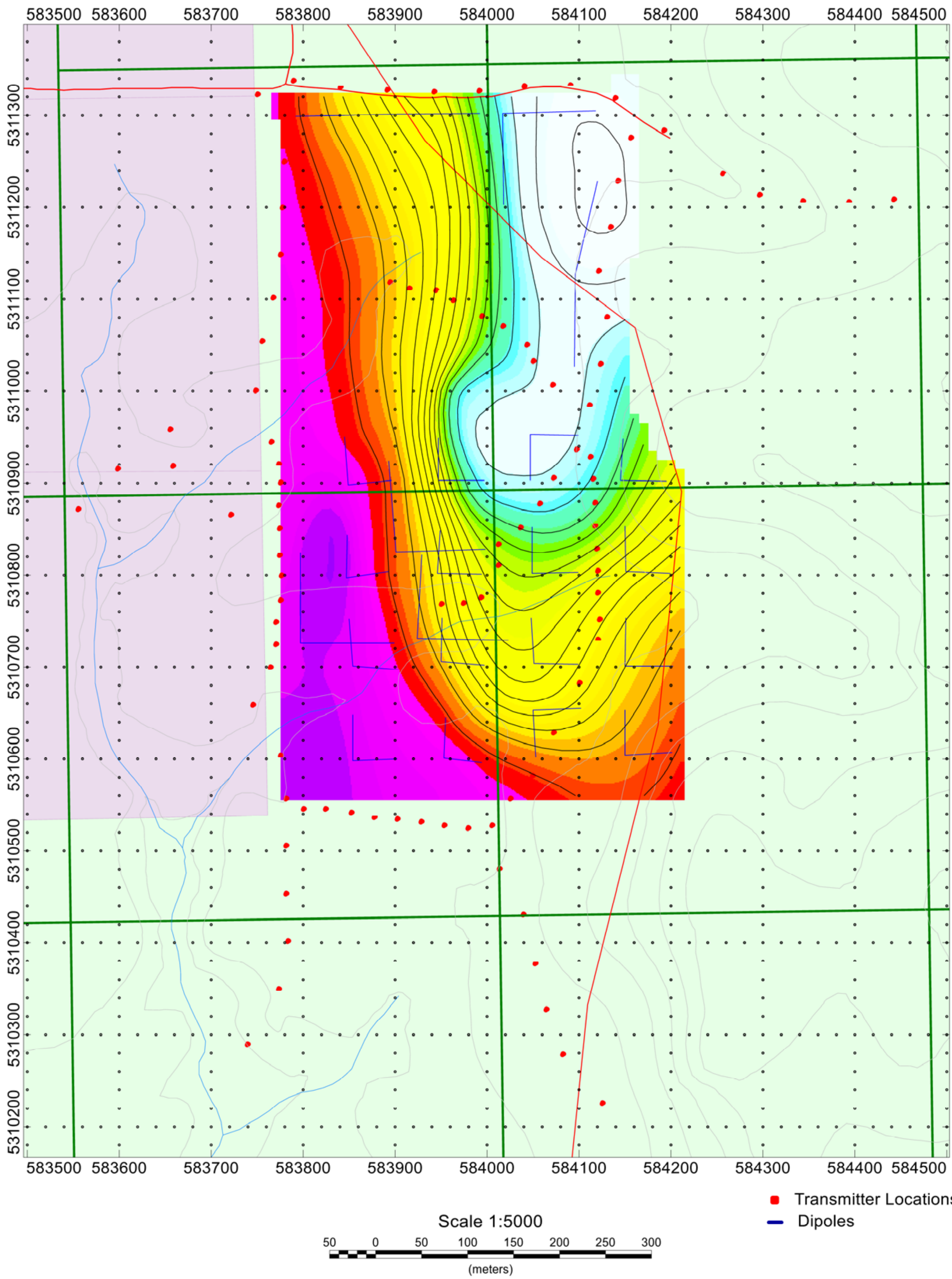
Contour intervals: 5000 ohm.meter

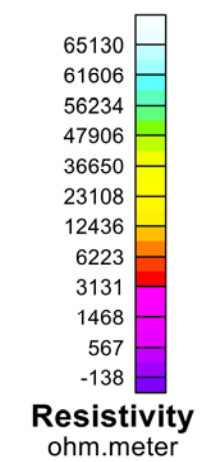
Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Res-150MSL





RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 100m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

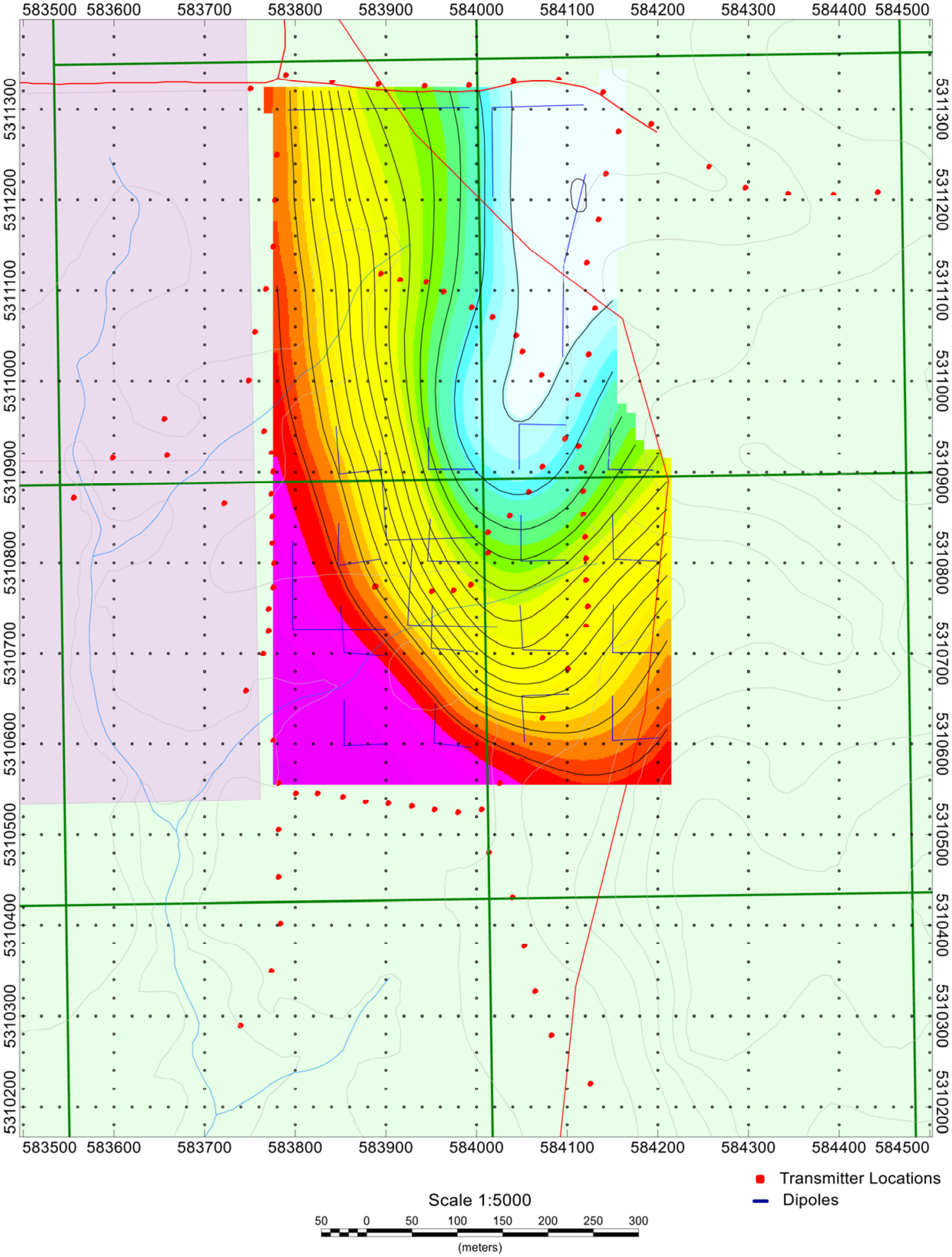
Contour intervals: 5000 ohm.meter

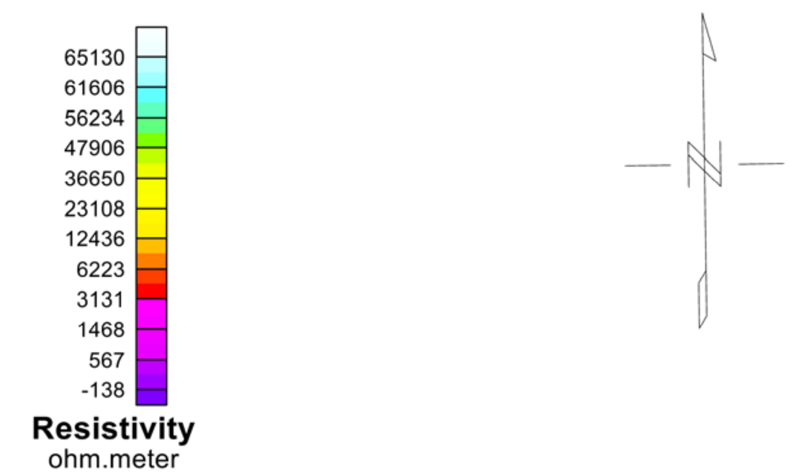
Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Res-100MSL





RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 50m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

Contour intervals: 5000 ohm.meter

Processed By: C. Jason Ploeger, PGeo

Map Drawn By: C. Jason Ploeger, PGeo
February 2021

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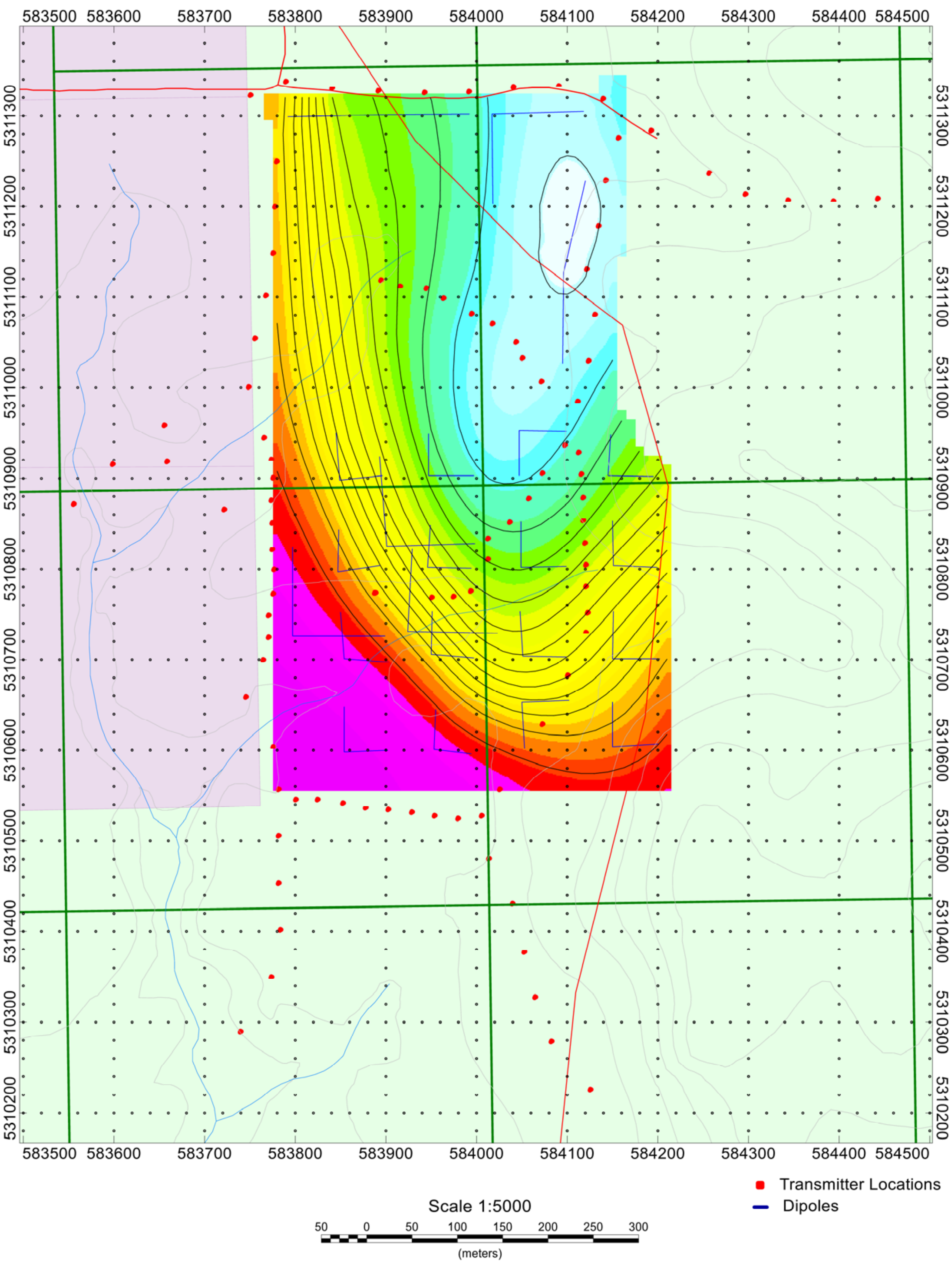
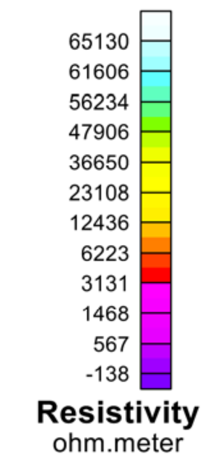
Drawing: Q2873-RTM-LinkCatharine-3DIP-Res-50MSL





RTM
RT MINERALS CORP.

Link-Catharine Property
Catharine Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 0m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5kW Time Domain)

Contour intervals: 5000 ohm.meter

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February 2021

CXS CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2873-RTM-LinkCatharine-3DIP-Res-0MSL

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