Geophysical and Drilling Report

Yukon Mineral Exploration Program (YMEP)

Excelsior Creek Placer Property

White Horse Mining District

NTS: 115J/15
Latitude: 62º 50.22' N Longitude: -138º 58.21' W

Claim List:

Excel 14-15	P 512668-669
Excel 17-19	P 512671-673
Unnamed Tributary	

Work Performed:

Mobilization:	21 September & 3, 4 October
Demobilization:	28 September & 13, 14 October
Resistivity/IP Survey:	22 - 27 September, 2018
MAG/GPR Surveys:	22 – 27 September, 2018
RAB Drilling:	5 - 12 October, 2018

Prepared for Shawn Ryan.
By GroundTruth Exploration Inc.

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1 Introduction

Excelsior Creek, a tributary of the Yukon River, has been targeted based on the discovery of the Sugar hard rock anomaly, located 20 km southeast of the Coffee Gold deposit. The Sugar Dome peak, at an elevation of 1585 meters above sea level, drains north into Excelsior Creek (Bartlett, et al.).

Shawn Ryan had analyzed various placer camps (outside the Klondike gold fields) in the Yukon and observed that Creeks flowing from significant gold deposits contained placer gold. Proven examples include Dublin Gulch deposit, Scheelite Dome, Clear Creek, Freegold Area, Moose Horn range, Mt Nansen, White Gold Deposit, and the closest analogy: Casino Deposit with Canadian Creek having placer gold.

The drainage system from the Sugar hard rock anomaly, as well as the discovery of the east-west trending Sugar Gold soil anomaly, was the incentive for the staking of approximately 125 km of Excelsior Creek.

Shawn Ryan hired GroundTruth Exploration Inc. to conduct various geophysical surveys between 22-27 of September 2018. Six profile Resistivity and Induced Polarization surveys were conducted totaling 871.5 line-m, as well as a 3,940 line-m Ground Penetrating Radar and Magnetic Survey. A follow up twenty-four hole drilling program, totaling 405 feet, was executed from the 5 to12 of October 2018.

Property Description

The prospecting leases are located approximately 138 km South of Dawson City within the Yukon River drainage system in west-central Yukon Territory. The target is centered at 62° 49’ 10.36” N and -138° 58’ 43.53” W and located on NTS map sheet 115J/15 (Figure 1). It is accessible by helicopter year-round. The Coffee Gold Camp has an airstrip 10 km north that is accessible year-round and located at the mouth of Coffee Creek.

The landscape is composed broad valleys bordered by moderately sloped, tree-covered hills ranging in elevations from 360 to 880 meters. The area experiences typical climatic conditions for central Yukon Territory with short, warm and dry summers and cold winters. Temperatures range from 0˚C to -50˚C in the winter and 0˚C to +30˚C in the summer. The property lies within Canada's discontinuous permafrost zone. Most of the valley bottoms in this area are filled with permafrost.

Geology

1.1 Regional Geology

Excelsior Creek, located in the Yukon-Tenana Terrane, is underlain by Devonian and Permian metamorphic rocks and Cretaceous plutonic rocks. The upper course of Excelsior Creek is underlain by intermediate and felsic plutonic rocks of the Whitehorse Suite. These rocks consist of quartz monzonite, granite, leucogranite, and monzogranite (mKqW). Most of the middle course of Excelsior Creek consists of K-feldspar augen granite, metraporphyry, monzogranite, and augen gneiss of the Sulphur Creek Suite (PqS). Minor areas in the middle course of the creek consist of andesite, porphyry, andesite, and dacite of the Lower Camaracks Group (uKC2) and Permian quartz-muscovite-chlorite schist of the Klondike Assemblage (PK1). The entire upper course of Excelsior Creek is underlain by the Snowcap Assemblage consisting of quartzite, psammite, pelite, schist and marble with minor greenstone and amphibolite (PDS1).

The west-northwest trending Coffee Creek dextral strike-slip fault intersects Excelsior Creek approximately 5.7 km upstream from the Yukon River. Excelsior Creek is flanked to the north by the Yukon River Thrust Fault. An unknown fault type borders the southern portion of Excelsior Creek, called the Coffee Creek Fault, which separates PqS in the north from mKqW in the south. A north-northeast trending unknown type of fault runs along the upper course of Excelsior Creek.

PqS and PK1 underlie the section of Excelsior Creek that lies within our area of study. This property has not undergone glaciation in the past, so gold should be well

accumulated and located near its hard-rock sources.

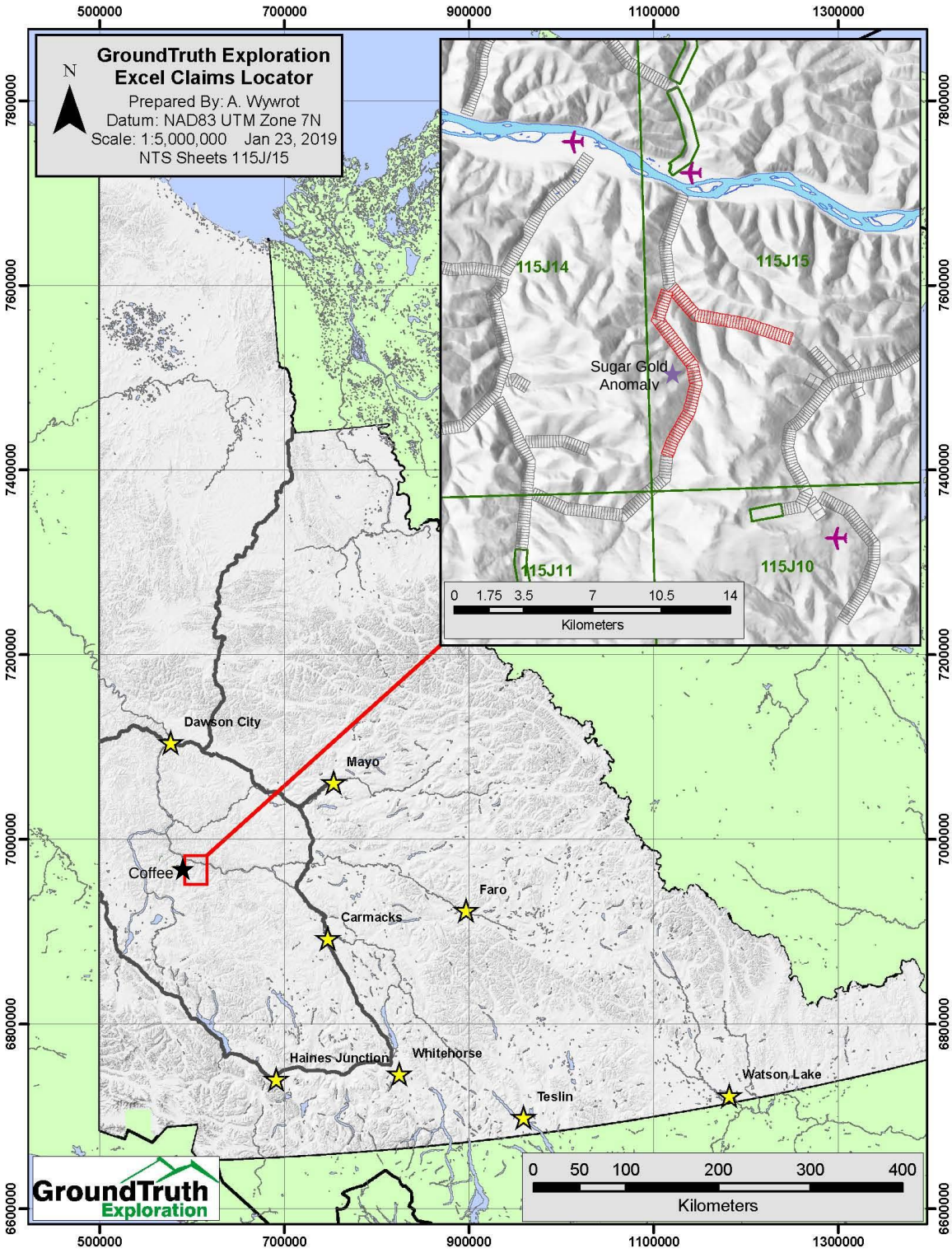

Figure 1: Property Location

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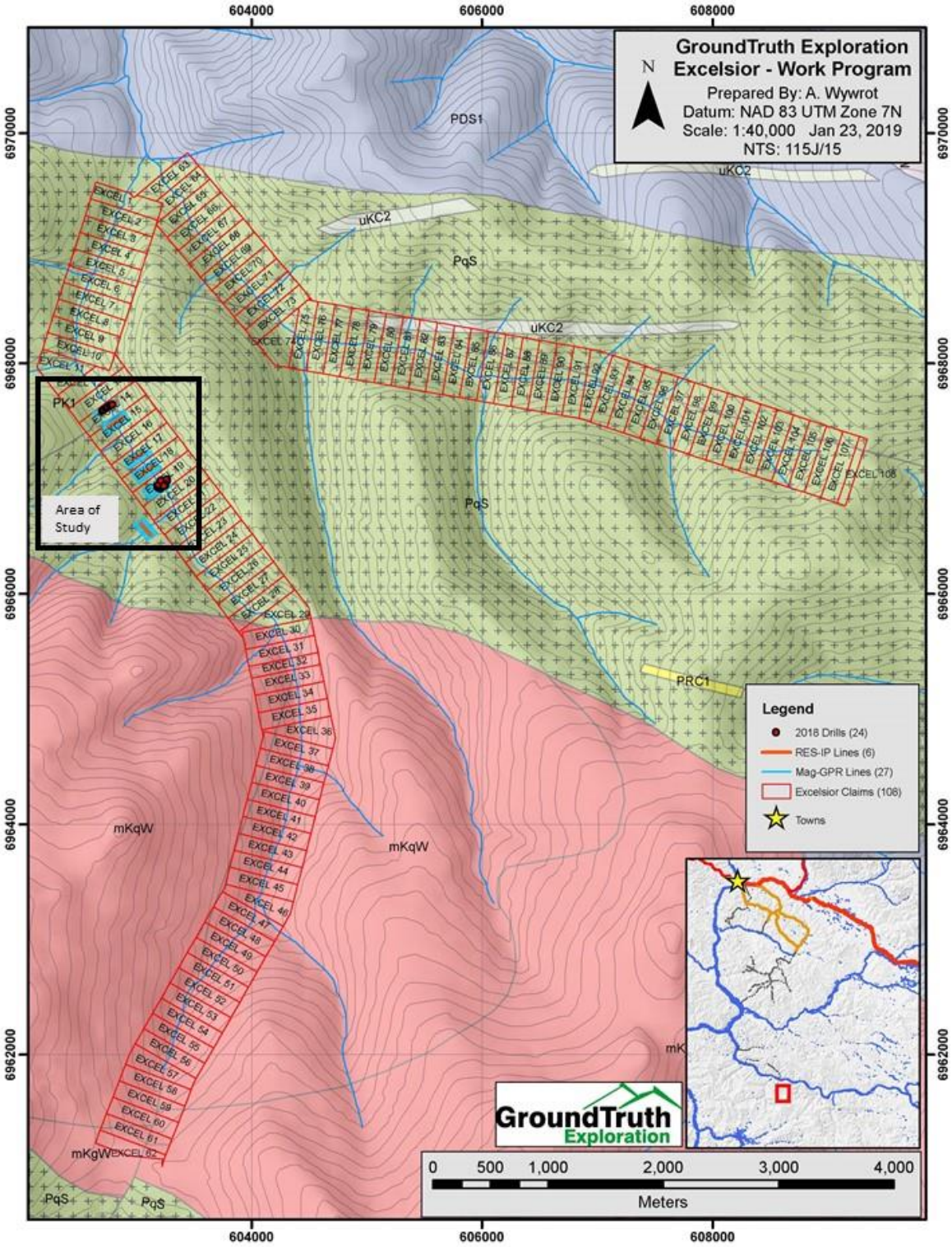

Figure 2: Geology Map and Overview of Excelsior Creek

2 Resistivity and Induced Polarization Survey

2.1 Work Performed

The DC Resistivity and Induced Polarization (RES/IP) surveys were conducted from the 22 to 27 of September 2018 on placer claims EXCEL 14 to 15, EXCEL 17 to 20 and an unclaimed tributary of Excelsior Creek. The goal of these traverses is to define the fluvial deposits, such as muck, sand, and gravel, and define important contacts, such as the permafrost table and bedrock surface.

Traverse EXCIP18-01 is composed of 84 electrodes spaced at 1.5 m resulting in a total line length of 124.5 ground meters. Traverse EXCIP18-02 consists of 79 electrodes spaced at 1.5 m resulting in a total line length of 117 ground meters. Traverse EXCIP18-03 is composed of 80 electrodes spaced at 1.5 m resulting in a total line length of 118.5 ground meters. Traverse EXCIP18-04 consists of 77 electrodes spaced at 1.5 m resulting in a total line length of 114 ground meters. Traverse EXCIP18-05 consists of 84 electrodes spaced at 2 m resulting in a total line length of 166 ground meters. Traverse EXCIP18-06 is composed of 82 electrodes spaced at 2.5 m resulting in a total line length of 202.5 ground meters. The horizontal resolution for all traverses is 1m.

The RES/IP surveys are done using Advanced Geoscience's SuperSting high-resolution resistivity meter and passive cables. A modified Schlumberger Inverse array was used on all survey lines. This array is a sounding array optimized to delineate horizontal structures, such as bedrock contacts and lithological units, has the best overall signal-to-noise ratio and the most lateral coverage. It is an ideal array for finding depths to stratigraphic layers such as muck, sand, gravel, and bedrock.

A total of six traverses were completed on the Excelsior Creek study: EXCIP18-01 to EXCIP18-06 (Figure 2). All lines lie within the Excelsior Creek Valley; line EXCIP18-01 is located on an unnamed tributary of Excelsior Creek. Line EXCIP18-02, starts upstream and lines EXCIP18-03 to EXCIP18-06 run consecutively downstream. Lines EXCIP18-02 and EXCIP18-06 were used as targets for the 2018 drill program (Figure 3).

The traverse location was surveyed with a differential GPS unit capable of sub-meter accuracy. This data was used to both map the traverses and to create the terrain file that models elevation within the resistivity processing.

The crews camped on site and walked out to the survey lines from camp. A helicopter was used to mobilize and support the camp with supplies.

2.2 Working Procedure:

- A crew of 5 is deployed to run survey.
- The midpoint of a traverse is located and the line is sighted-in using a compass and GPS.
- Minimal brush is cut along line to place pickets and set up equipment.
- Calcium Chloride (CaCl, 25% solution) is added to the base of all electrodes.
- 84 electrodes are inserted into the ground, spaced along the line at 5 m.
- Electrodes are hammered to a depth of up to 50cm (10% of electrode spacing)
- Cables are laid and attached to the electrodes.
- Contact resistance test is conducted.
- Add electrodes and CaCl solution added to each electrode with CR > 2,000 Ohms. Contact resistance test is repeated.
- Continue to add electrodes and CaCl until satisfactory contact resistance values are achieved.
- Operator initializes survey and uses DGPS and data collection software to document survey line parameters including electrode locations, topography, and geological/cultural features if present. Pickets are placed along the line every 50 m.
- Crew cuts and prepares the next survey line.

Data Processing:

The collected data is downloaded in the field after every array and checked for integrity. This allows any field errors to be identified before moving the equipment. The RES data is processed daily by the lead operator using EarthImager2D software provided by Advanced Geosciences Inc. Resistivity data-misfits are removed, and the cleaned data-set is inverted. The same process is done with the IP data. Terrain corrections are collected using a differential GPS are applied to the inversions. The DGPS data is processed using GNSS Solutions software. A .csv is created containing the DGPS traverse points collected. All raw instrument data from the DGPS and SuperSting are archived. An ESRI shapefile is created containing the traverse points collected.

The resistivity and induced polarization data from each traverse are inverted separately to minimize the number of resistivity measurements that are filtered based on chargeability inversion parameters. Once data sets are filtered, measurements associated with the largest model misfit are removed, and the inversion process is repeated until the model L2-norm is calculated as close to 1 as possible. If survey noise was estimated accurately (3 – 5%), when the model L2-norm equates to one, the

inversion algorithm has produced a model which has not iterated on measurement noise. This indicates inversion artifacts in the earth model are minimized.

2.3 Results

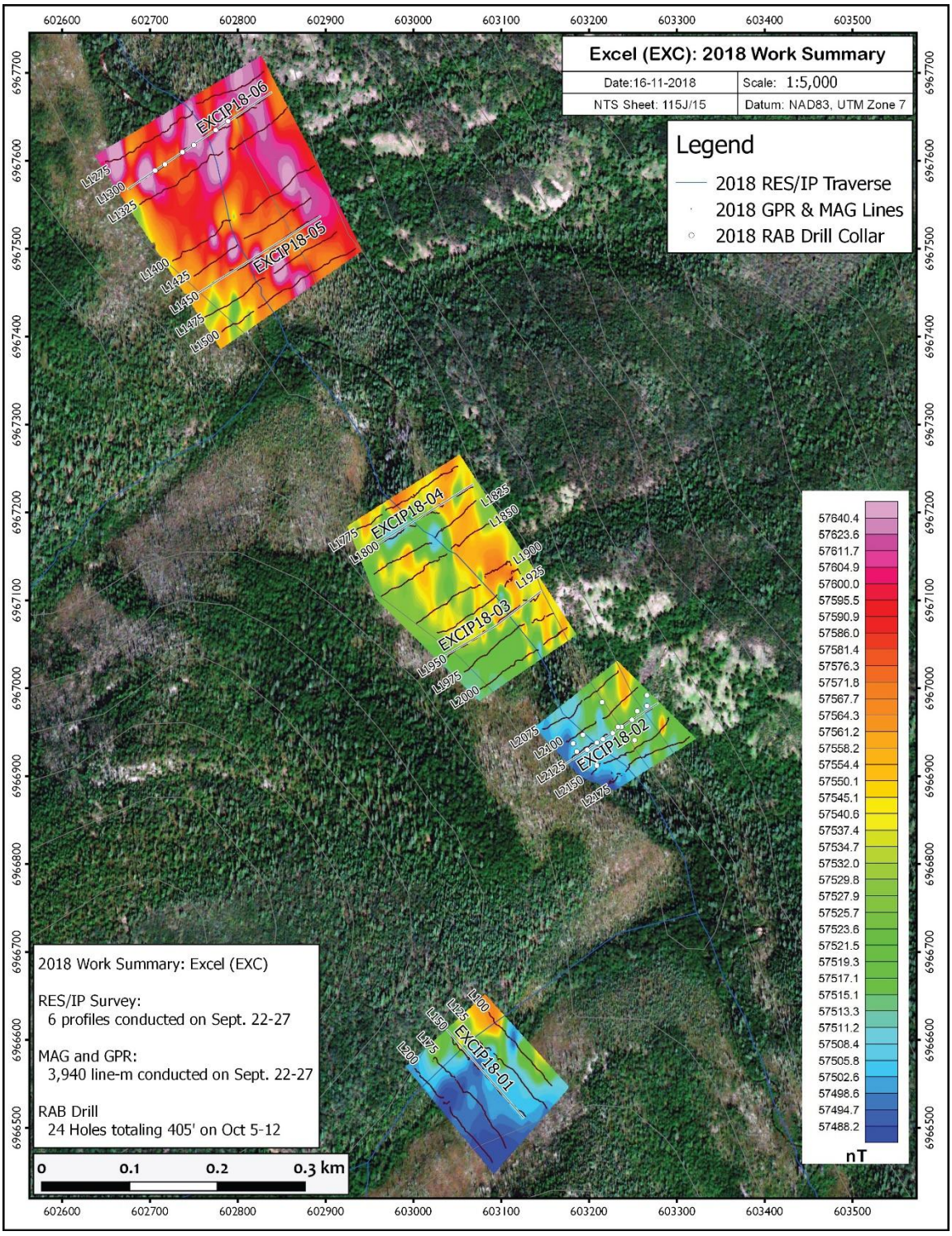

Figure 3: Location of RES/IP and GPR/MAG Lines

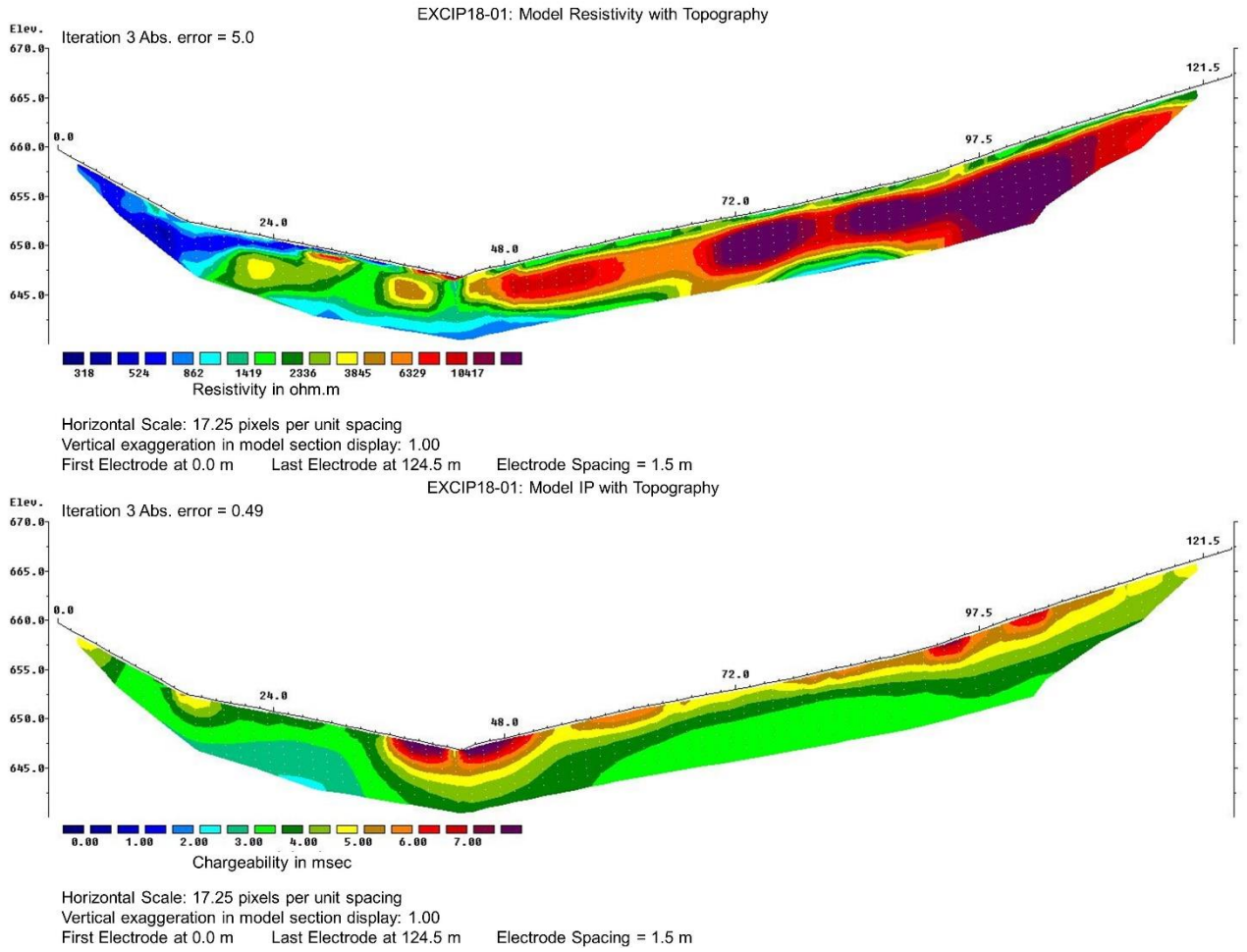

Figure 4: Resistivity and IP Profiles of Line EXCIP18-01

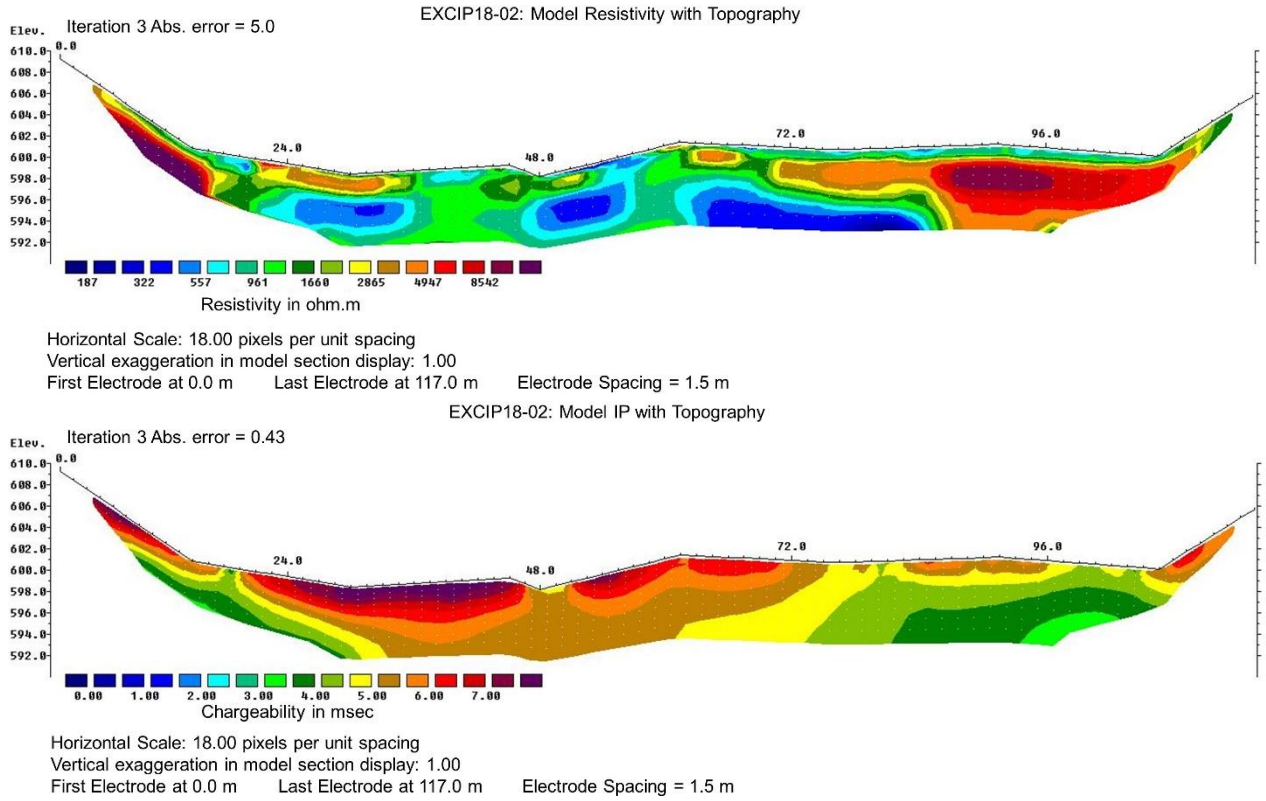

Figure 5: Resistivity and IP profiles of line EXCIP18-02

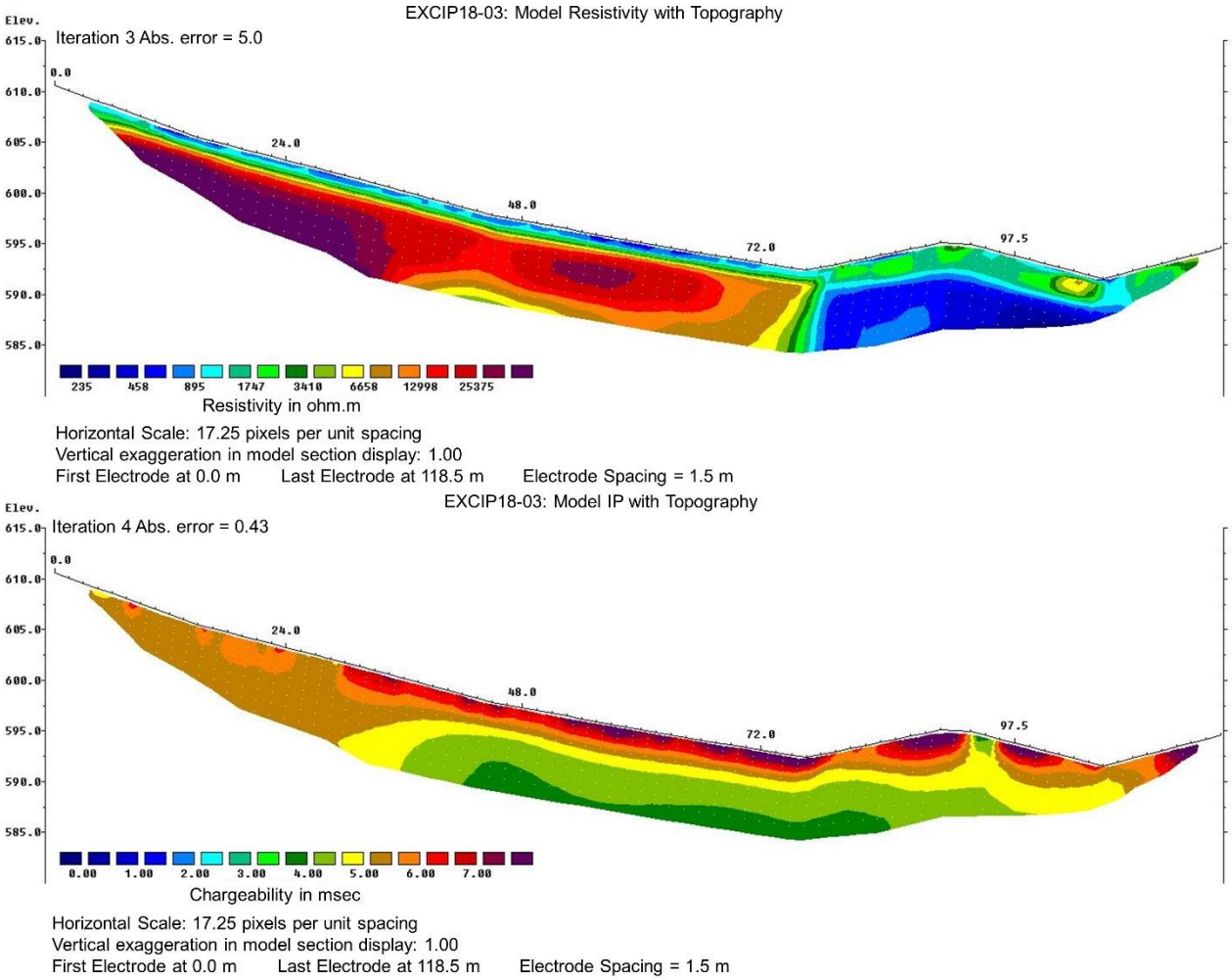

Figure 6: Resistivity and IP profiles of line EXCIP18-03

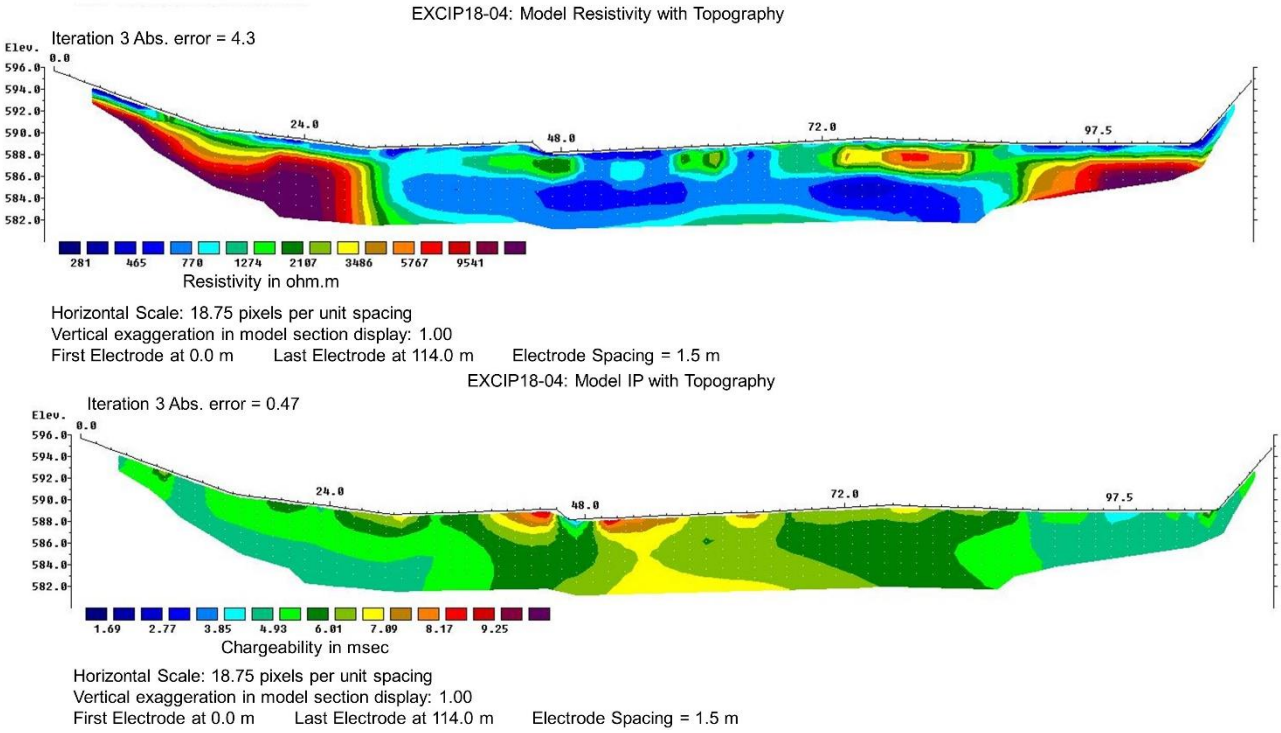

Figure 7: Resistivity and IP profiles of line EXCIP18-04

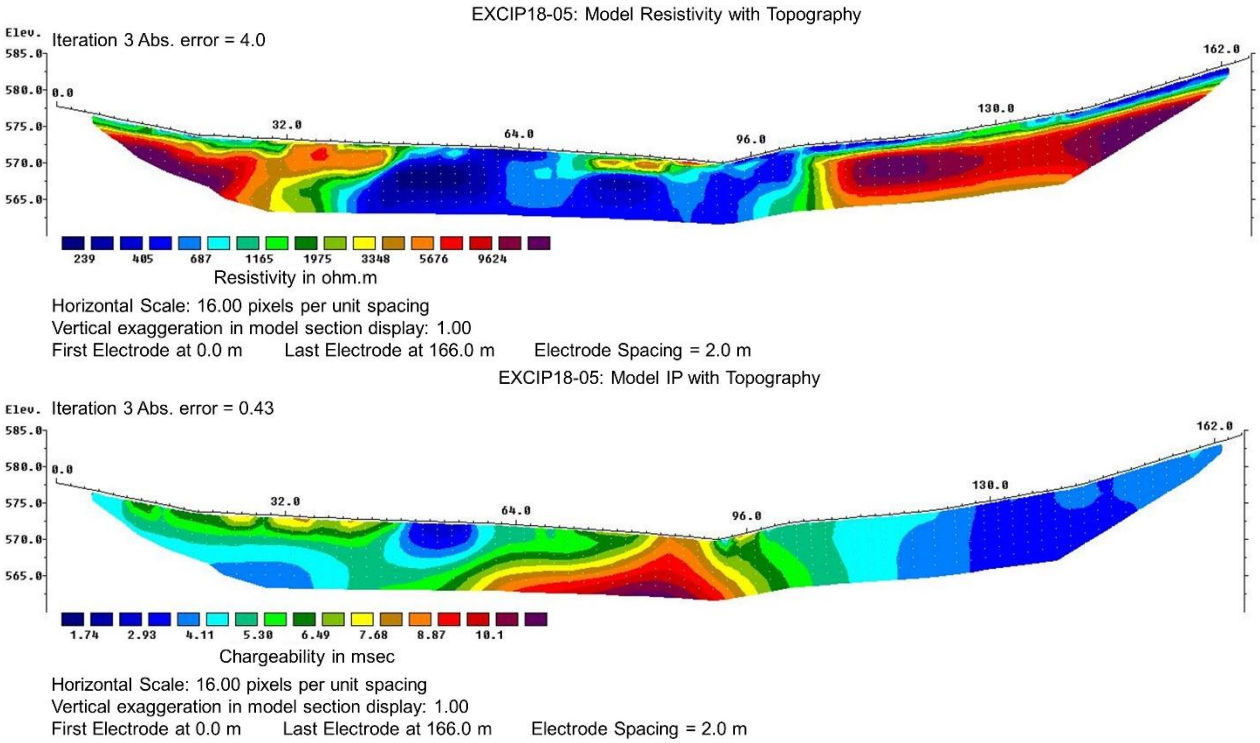

Figure 8: Resistivity and IP profiles of line EXCIP18-05

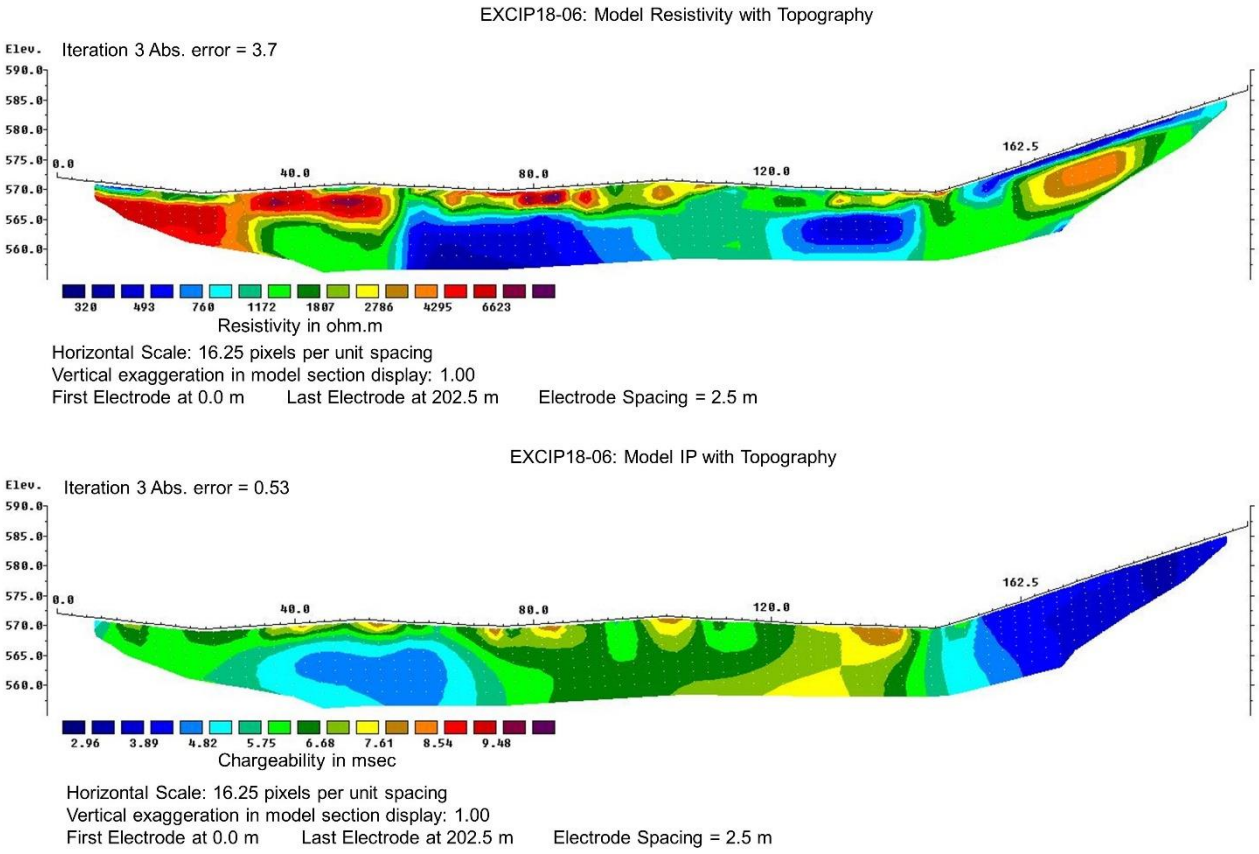

Figure 9: Resistivity and IP profiles of line EXCIP18-06

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3 Magnetic and Ground Penetrating Radar Surveys

3.1 Work Performed

The magnetic and ground penetrating radar surveys were conducted from the 22 to 27 of September 2018. The placer claims under study include EXCEL 14 – 15 and 17 – 20, and an additional unclaimed area on a tributary west of Excelsior Creek. The goal of the ground penetrating radar survey is to complement the RES/IP surveys for the identification of fluvial deposits and defining important contacts. The magnetic survey was performed to identify the magnetitic response of the black sand present to determine if the survey could be used to detect placer gold.

The traverses for the ground penetrating radar and magnetic surveys consisted of 27 lines, with a total of 3,940 line-m (Figure 3).

The magnetic survey was completed using the GEM Systems GSM-19T Proton Magnetometer for both the Magnetometer Field unit and the Base Station. Software used for the magnetic survey upload/download was the GEM Link. For diurnal correction and plotting Mapinfo-Discover software was used.

The crews camped on site and walked out to the survey lines from camp. A helicopter was used to mobilize and support the camp with supplies.

3.2 Working Procedure for the Magnetic Survey

- A crew of 2 is deployed to run the survey.
- Only one operator is required to run the MAG unit; therefore the remaining personnel cut minimal brush along lines.
- Equipment is tested and set up.
- Survey grid endpoints are uploaded to the Field magnetometer unit with a frequency of 1 reading per second.
- The base station is established where it will not be disturbed near the survey site.
- The base station is marked with a picket and the location is recorded for future use. The base station magnetometer records an observation every 5 seconds for the entire duration of the survey.
- Lines are surveyed separately with the MAG Unit
- The crew runs the survey with internal GPS recording position and navigates survey lines using internal magnetic GPS.
- At the end of each day Field and Base magnetometers are downloaded, diurnal corrections and surveys are plotted to assess the quality of the data.

Data Processing

The total field magnetic survey data is georeferenced to NAD83 UTM projected coordinates using the internal GPS in the field magnetometer. Base and rover magnetometers are synchronized to GPS time before each survey day. A reference field is chosen based on International Geomagnetic Reference Field (IGRF) calculations. Temporal geomagnetic variation is removed by linear interpolation using the base station data. Corrected data is screened for noisy or erroneous values and then plotted.

Raw data from the base and field magnetometer are outputted as a .csv. Corrected total field magnetic data files are projected to XYZ locations in a .tab format. Corrected total field magnetic figures of gridded data are stored as a .jpg and geotiff format.

3.3 Working Procedure for Ground Penetrating Radar

- A crew of 3 is deployed to run the survey.
- Two operators run the GPR unit while the remining personnel cut brush along lines. The brush must be cut low to the ground for the best survey results.
- The GX controller and 80 MHz HDR shielded antenna are set up on the rough terrain cart.
- The machine is calibrated and baseline is set for the X and Y coordinates of the start and stop positions.
- The rough terrain cart is rolled over the line.
- The data file is loaded into RadExplorer software for further processing.

Data Processing

The collected data is downloaded in the field after every survey and checked for integrity. Radargrams are processed, plotted and interpreted by GroundTruth geophysicist using RadExplorer software. Depth sections were created for a based radar wave velocity of 0.085 m/ns which is assumed for the combination of three different mediums with the following dielectric permittivity assumptions: unfrozen wet sandy/silty sediments K1 = 19, v = 0.70 m/ns; frozen saturated sandy/gravel sediments K = 2, v = 0.1 m/ns; and frozen saturated bedrock, K = 3, v = 0.135 m/ns.

3.4 Results

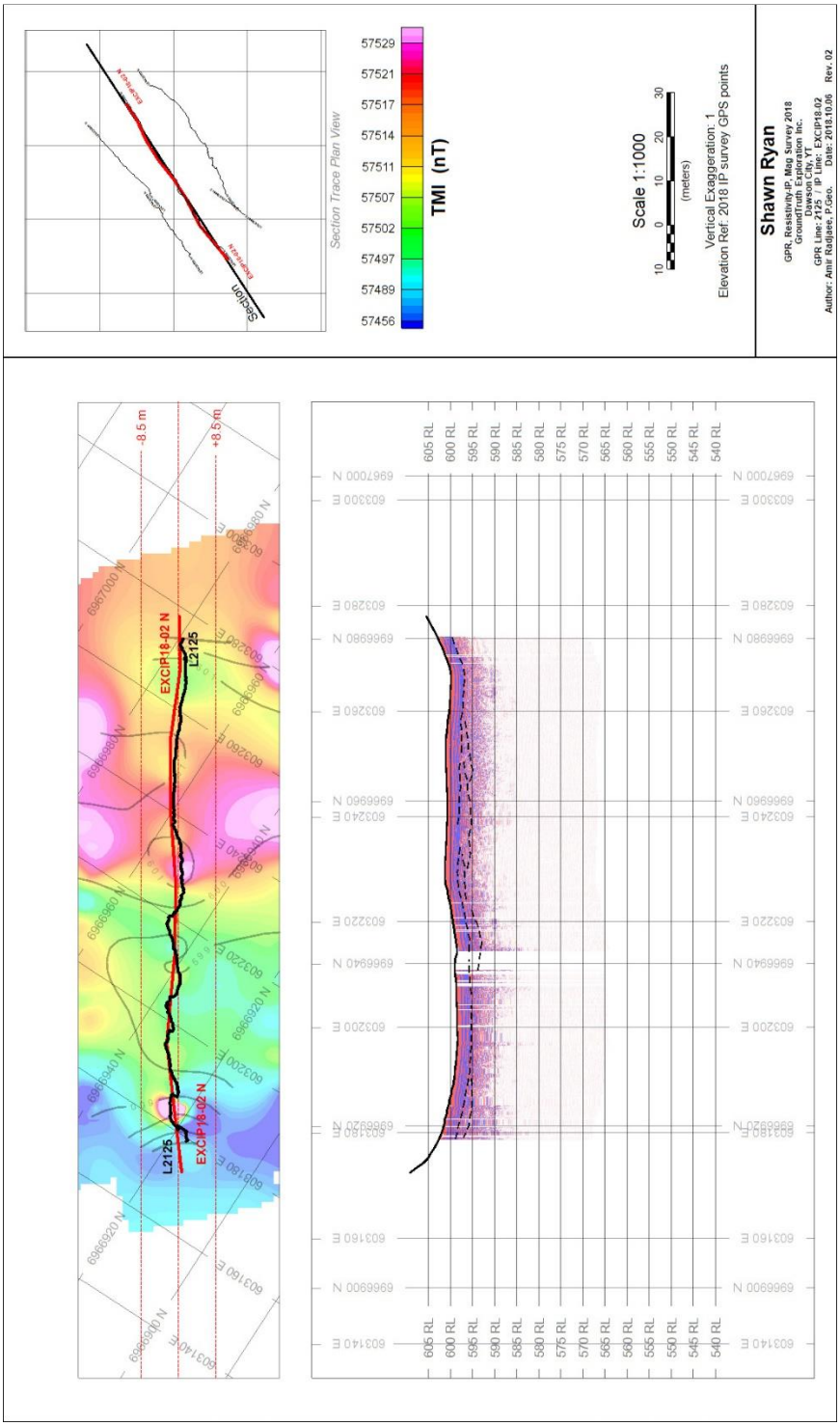

Figure 10: GPR/MAG of L2125 (EXCIP18-02)

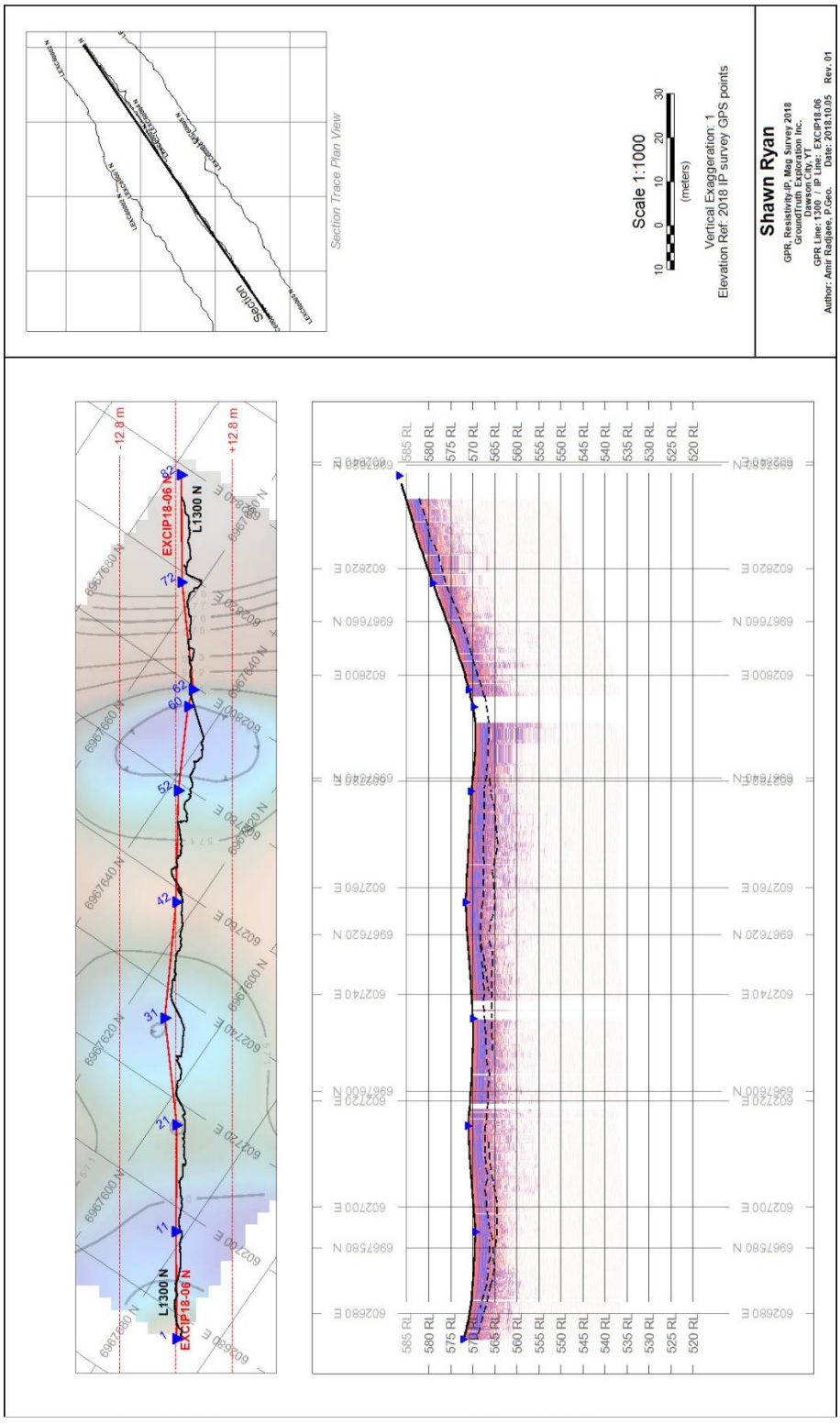

Figure 11: GPR/MAG of L1300 (EXCIP18-06)

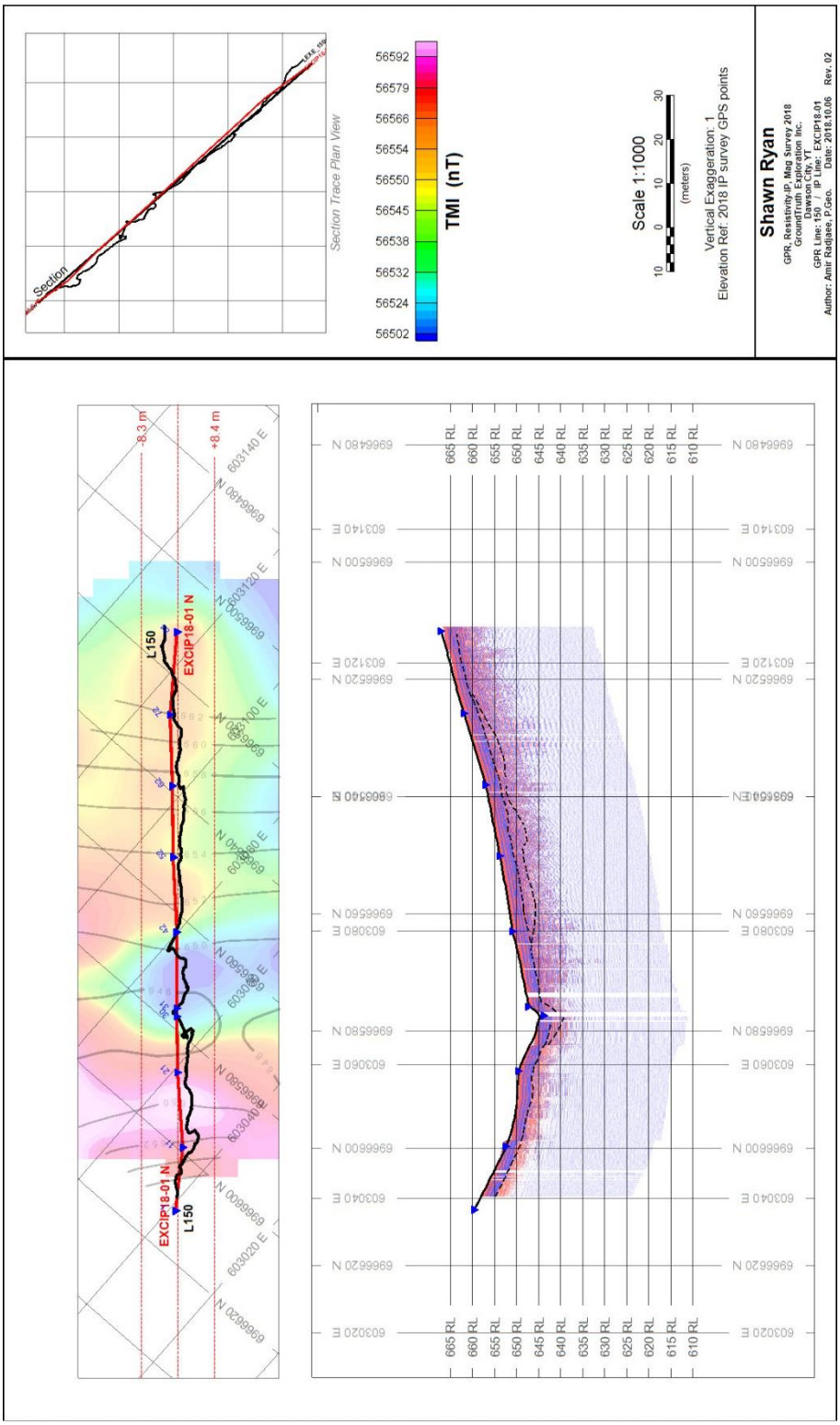

Figure 12: GPR/MAG of L150 (EXC IP18-01)

4 Rotary Air Blast (RAB) Drilling

4.1 Work Performed

The 2018 RAB Drill program on Excelsior Creek consisted of twenty-four drill holes: EXC-01 to EXC-24. A total of 123.44 m was drilled between the 5 to12 of October 2018.

EXC-01 to EXC-06 were positioned to investigate resistivity targets on traverse EXCIP18-06 (Figure 17). EXC-07 to EXC-14 were positioned to investigate resistivity targets on traverse EXCIP18-02.

4.2 Field Survey Operating Procedures:

The GT RAB Drill is a lightweight rotary percussion drill rig mounted on a set of rubber tracks. The drill itself is powered by a 44.2 hp turbocharged Kubota diesel engine. The placer RAB drives a cased hole 5” in diameter and uses 5’ drill rods. The GT RAB Drill is equipped with a wireless remote control system used to drive it between drill sites. There are four hydraulically operated vertical outriggers on the drill for self-leveling on drill sites. The rubber tracked platform on the GT RAB Drill has 2400 square inches of track coverage area giving it 1.8psi ground pressure allowing it to be extremely versatile and low impact in the field.

The GT RAB Drill is a lightweight exploration drill rig that involves the use of DTH rotary percussion drilling equipment using compressed air from a stationary air compressor which is connected to the rubber tracked drill using an air hose. The drill uses a pneumatic reciprocating piston driven ‘hammer’ to energetically drive a tungsten carbide tipped drill bit into overburden and rock. Compressed air is fed through the drill rod string to the DTH hammer and with rotation from the top drive; cuttings are then returned to the surface through the annulus under pressurized exhaust air. Cuttings then pass through the diverter/BOP and continue to the cyclone and are collected in the 24” x 36” Ore Bag at the bottom of the cyclone. Drill cuttings were logged and sampled at 2.5 feet intervals. All 2.5’ samples were processed with a Gold Hog Raptor concentrator to find placer gold.

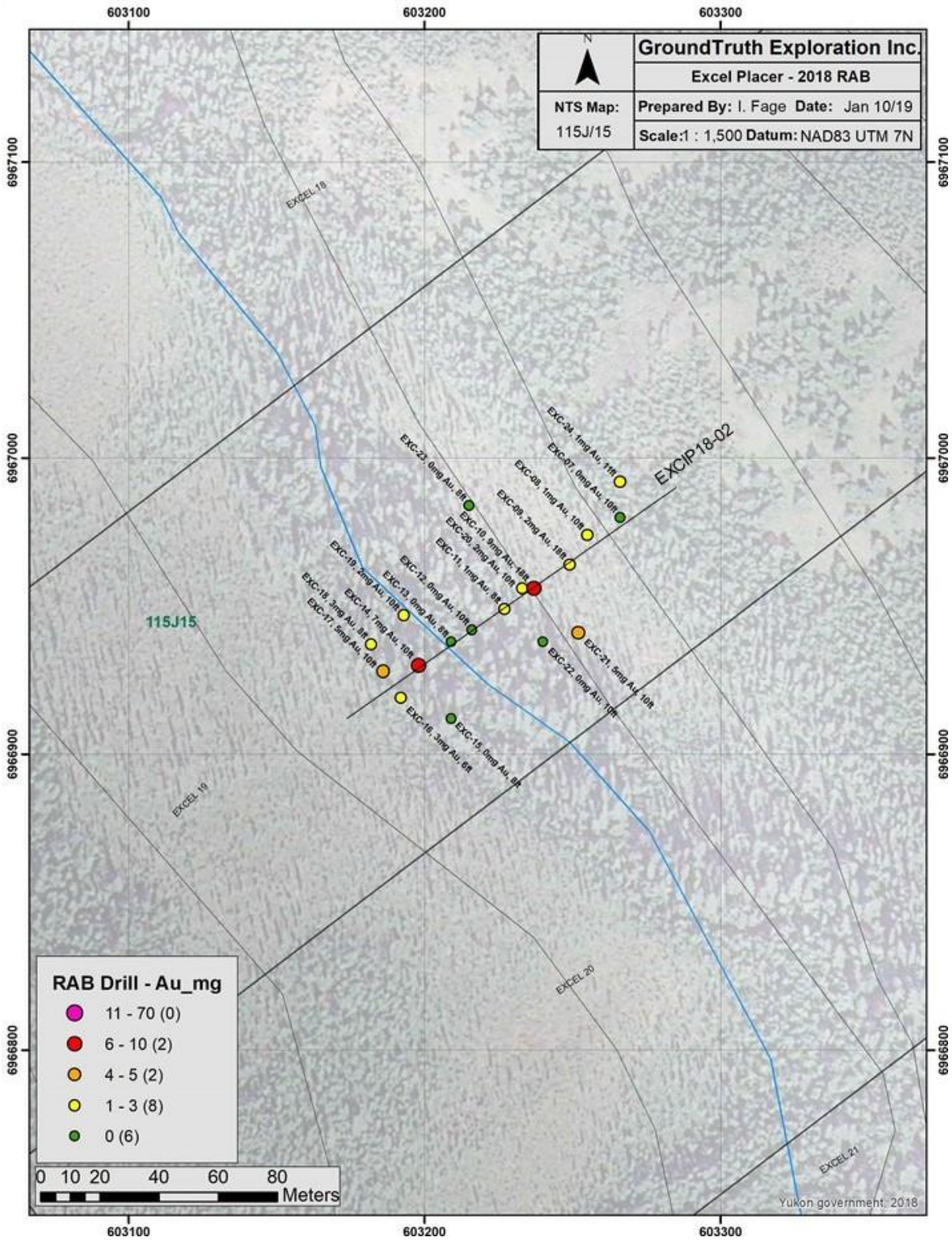

Figure 13: Drill Hole Overview of EXCPIP18-02

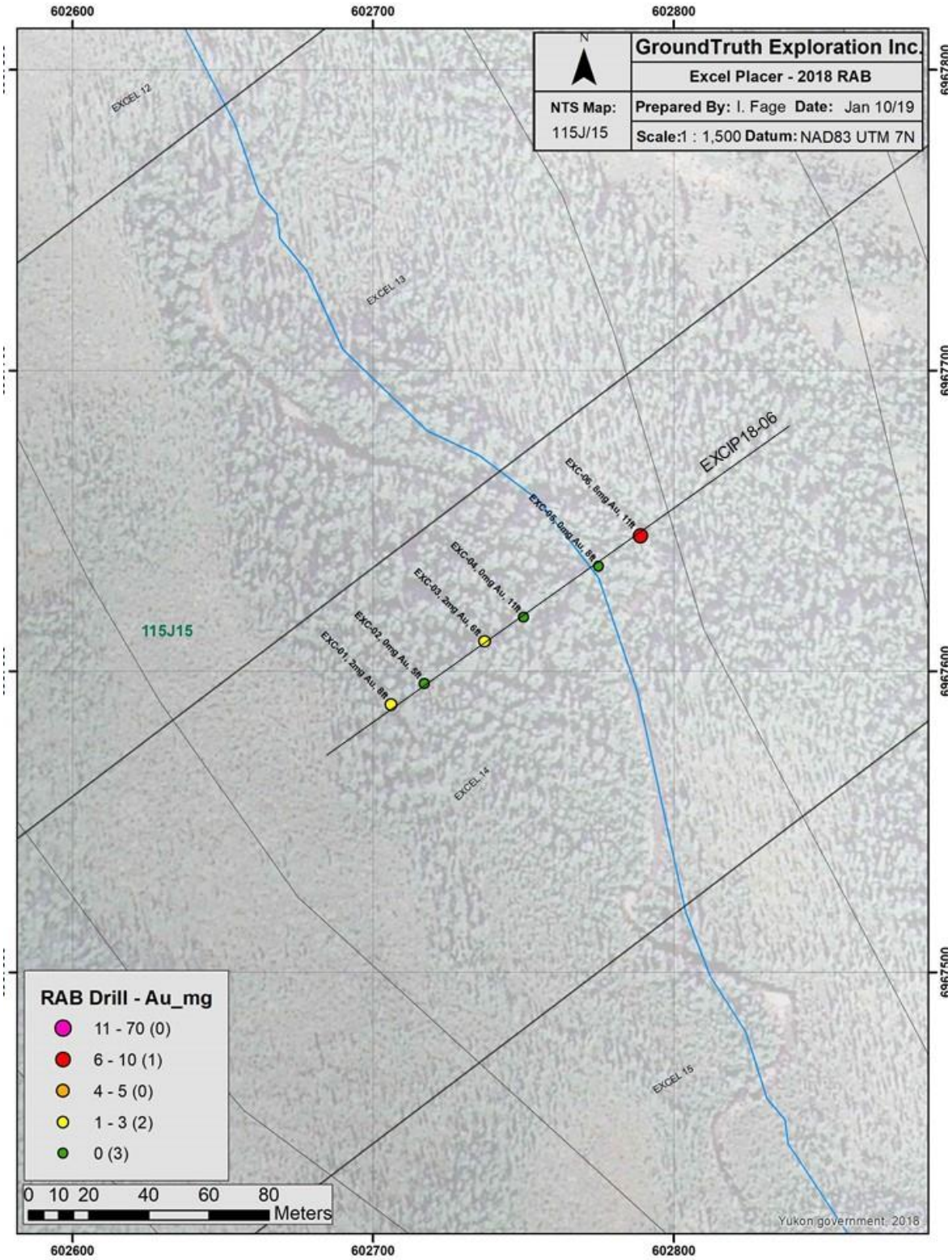

Figure 14: Drill Hole Overview of EXCIP18-06

4.3 Drill Results

Table one outlines the location and summary data of the drill holes. The detailed downhole results of each hole are found in Appendix B.

Figure 15: Collar Table and Summary Statistics for Drill Holes

HoleID	X	Y	BRDepth_m	TotDepth_m	DrillDate	Au_mg
EXC-01	602706	6967589	2.286	4.572	5 Oct, 2018	2
EXC-02	602717	6967596	1.524	3.048	6 Oct, 2018	0
EXC-03	602737	6967610	1.8288	6.096	6 Oct, 2018	2
EXC-04	602750	6967618	3.3528	6.096	6 Oct, 2018	0
EXC-05	602775	6967635	2.4384	7.62	6 Oct, 2018	< 1
EXC-06	602789	6967645	3.3528	6.096	7 Oct, 2018	8
EXC-07	603266	6966980	3.048	3.048	8 Oct, 2018	0
EXC-08	603255	6966974	3.048	4.572	8 Oct, 2018	1
EXC-09	603249	6966964	5.6388	6.096	8 Oct, 2018	2
EXC-10	603237	6966956	5.4864	6.096	8 Oct, 2018	9
EXC-11	603227	6966949	2.286	4.572	9 Oct, 2018	1
EXC-12	603216	6966942	3.048	4.572	9 Oct, 2018	0
EXC-13	603209	6966938	2.4384	4.572	9, Oct 2018	0
EXC-14	603198	6966930	3.048	6.096	9 Oct, 2018	7
EXC-15	603209	6966912	2.286	4.572	10 Oct, 2018	< 1
EXC-16	603192	6966919	1.9812	4.572	10 Oct, 2018	3
EXC-17	603186	6966928	3.048	4.572	10 Oct, 2018	5
EXC-18	603182	6966937	2.286	4.572	11 Oct, 2018	3
EXC-19	603193	6966947	3.048	6.096	11 Oct, 2018	2
EXC-20	603233	6966956	3.048	6.096	11 Oct, 2018	2
EXC-21	603252	6966941	3.048	6.096	11 Oct, 2018	5
EXC-22	603240	6966938	2.8956	4.572	12 Oct, 2018	0
EXC-23	603215	6966984	2.4384	4.572	12 Oct, 2018	0
EXC-24	603266	6966992	3.3528	4.572	12 Oct, 2018	1

5 Discussion and Interpretation

Resistivity and Induced Polarization transmit an electric current into the ground. In the case of resistivity, once processed, different lithologies will conduct different electric current, and hence can be used for interpretation of geologic features (Figure 18). In the case of induced polarization, the lithologic boundaries are detected by the polarization of the material encountered, which were used to compliment the resistivity profiles, where the bedrock interface is unclear. Since resistivity has ranges up to 100 orders of magnitude, the resistivity survey is only useful when data is high quality with different geologic features having significant contrasts in resistivity. Throughout this project resistivity values were clean, with RMS inversions ranging from 4.95% to 9.63%.

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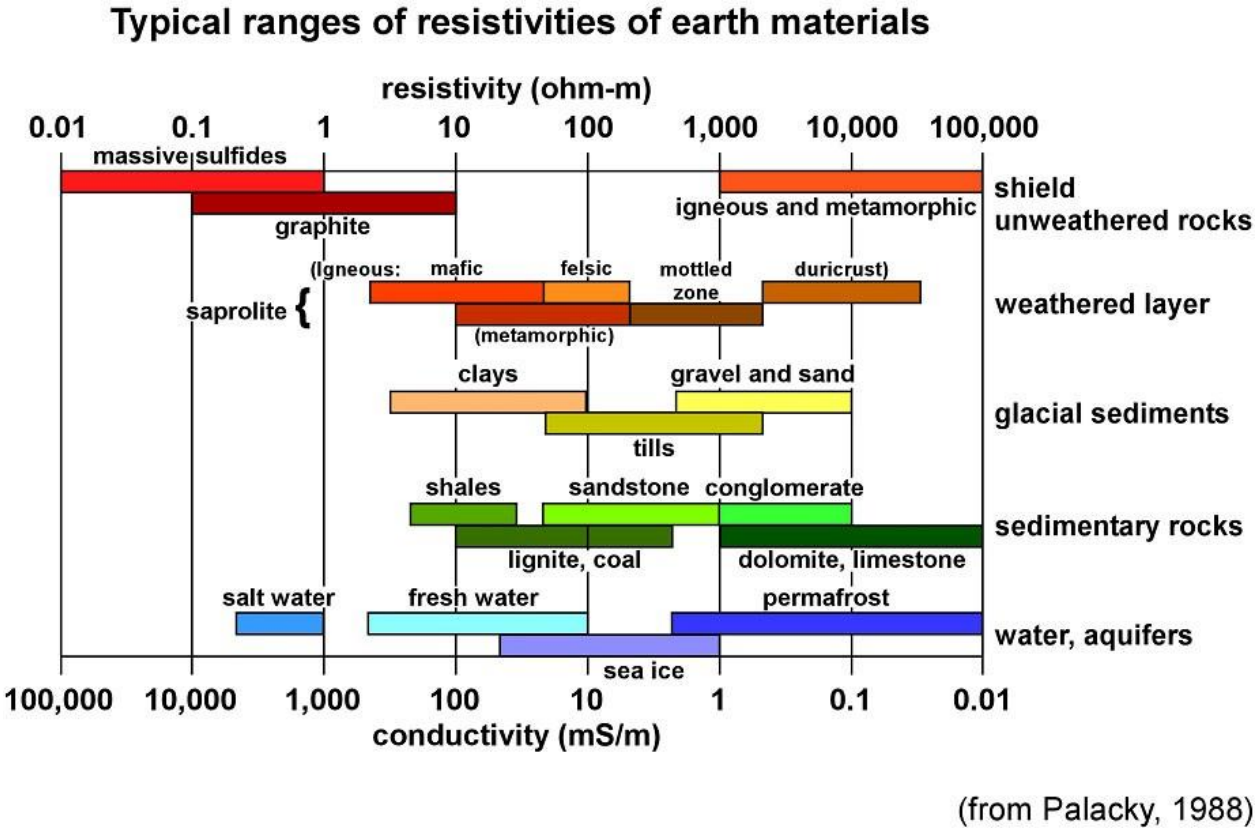


Figure 18: Ranges in Resistivity of Various Earth Materials

To complement the Resistivity and Induced Polarization surveys a the GPR Survey was employed. The GPR transmits high-frequency electromagnetic waves into the subsurface. When the electromagnetic waves contact different lithologies, with varying properties, the wave velocity is altered, and some energy is reflected or scattered back to the surface

where the amplitude and arrival time are measured. GPR is dependent on differing dielectric permittivity and electrical conductivity which affect the attenuation of the GPR signal. Dielectric permittivity is highly dependent on the water in the pore space and mineralogy. Electrical conductivity is dependent on porosity, permeability, saturation, fluid salinity, temperature and clay content (Cassidy, 2009).

Imaging of the subsurface with a combination of the described geophysical surveys proved to be of great value to the identification of lithologic boundaries. The bedrock gravel interface is the primary boundary of interest since drilling results indicated all gold was deposited 2.5 feet above the bedrock contact.

A moderate resistivity showed a correlation with coarse-grained fluvial deposits, which produced a weak wave reflection. This correlation is attributed to the high porosity and permeability of the gravel deposits and its inability to retain water in the upper layers of the stratigraphic column. A low resistivity, corresponded to fine-grained fluvial deposits producing a stronger wave reflection, which is associated with the water retaining capabilities of the clay and other fine-grained sediments. Consolidated material, mainly bedrock, created a high resistivity and the wave velocity is scattered back to the surface.

The use of geophysical surveys, to detect placer gold, show an excellent correlation between bedrock lows and high-grade gold deposition. As an example, EXC-10 and EXC-02, as seen in Figure 17 and Figure 19, respectively, lead to the conclusion of bedrock lows being an excellent place for high-grade gold accumulation. Unfortunately, not all high-grade deposits occur in the bedrock lows, as seen in EXC-14 (Figure 17). There is a possibility that in this area a flooding event took place leading to gold deposition at a higher elevation. Another possible theory is this area was the main channel during the time of deposition, and a deeper channel was carved in the area of EXC-10 and EXC-02 in an earlier period.

The third type of survey implemented was a magnetic survey, and the sole purpose was to detect magnetic anomalies. High concentrations of the magnetic black sand are theorized to be located where the paleochannel has been immobile permitting a concentration of the heavy magnetic black sand and gold. There is a limited correlation between high-grade gold deposits and the magnetic response. This is potentially due to heavy minerals having different magnetic susceptibility; magnetite has a high magnetic susceptibility of 1200 – 19200 x 10^{-3} SI units, chromite ranges from 3 – 1100 x 10^{-3} SI units and ilmenite ranges from 300 – 3500 x 10^{-3} SI units (Clark et al., 1991). A moderate to high total magnetic intensity correlates with the high-grade gold deposits of EXC-14 and EXC-10, respectively (Figure 17). In contrast, a lower total magnetic intensity was

observed at EXC-06, where a high-grade gold deposit was located (Figure 17). It is questionable that the magnetic survey can be used to detect high-grade gold deposits.

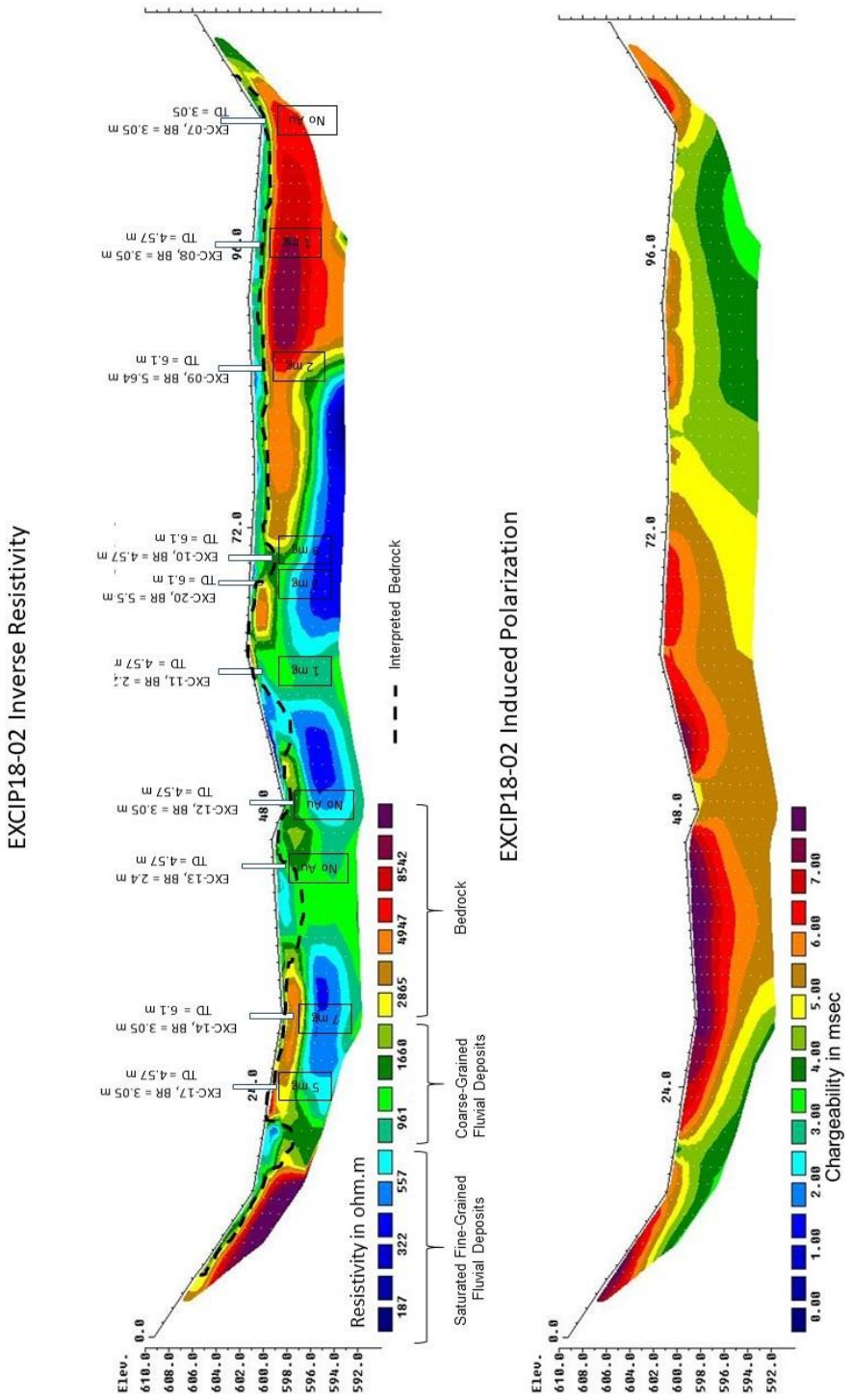


Figure 16: Resistivity of Line EXCIP18-02 with Drill Results

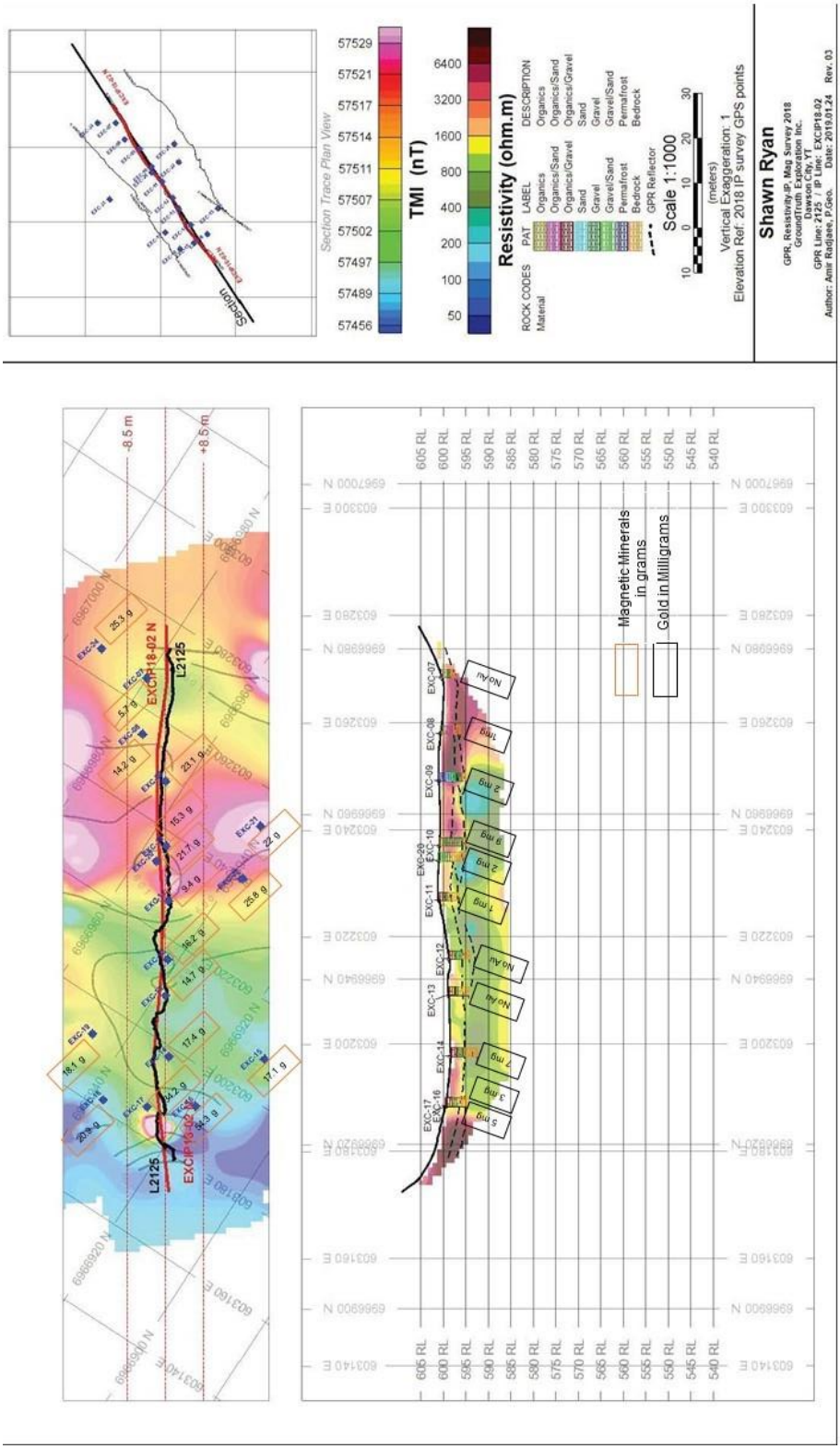


Figure 17: Resistivity, GPR and MAG of EXC18-02 with Drill Results

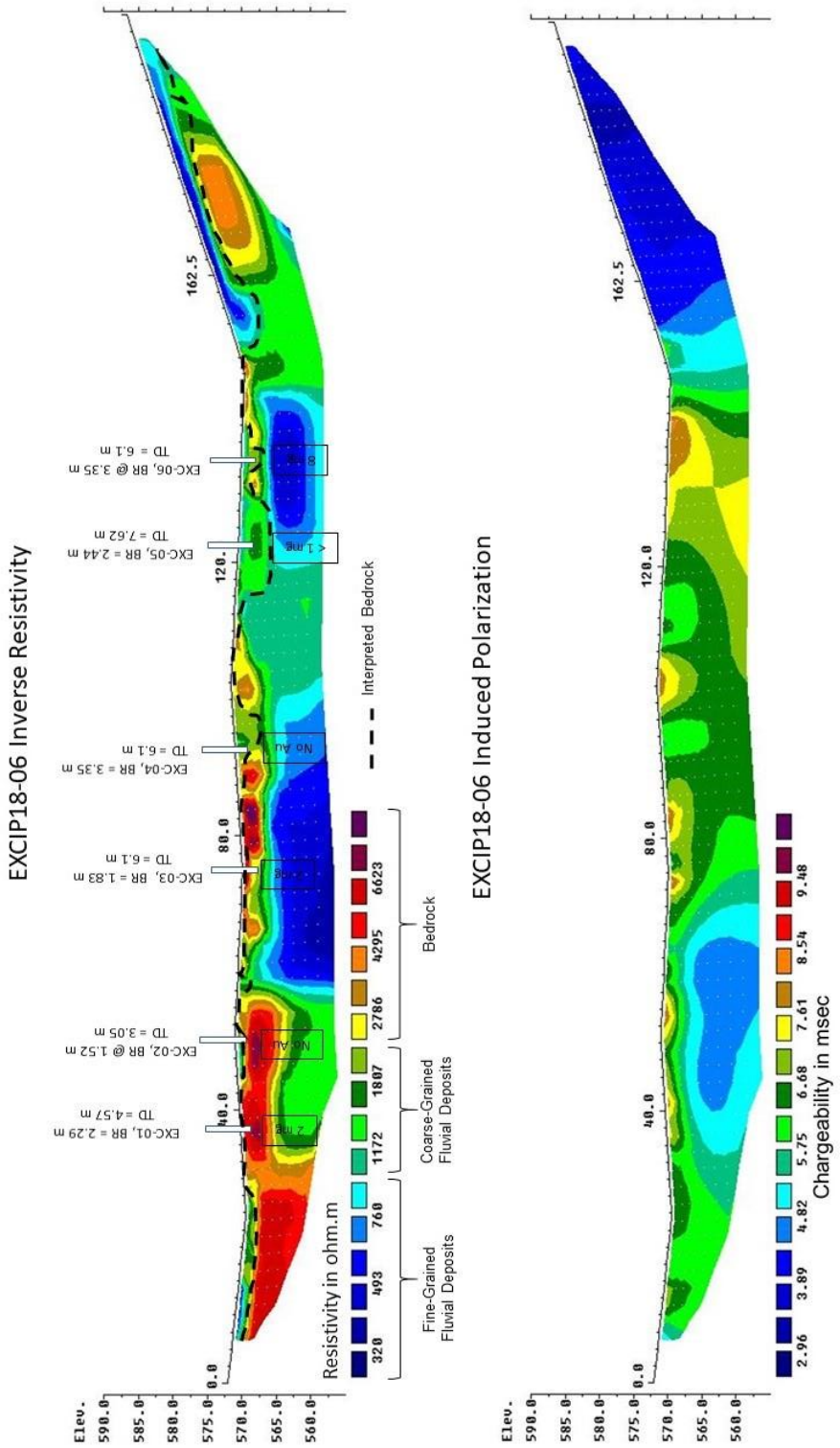


Figure 18: Resistivity of Line EXCIP18-06 with Drill Results

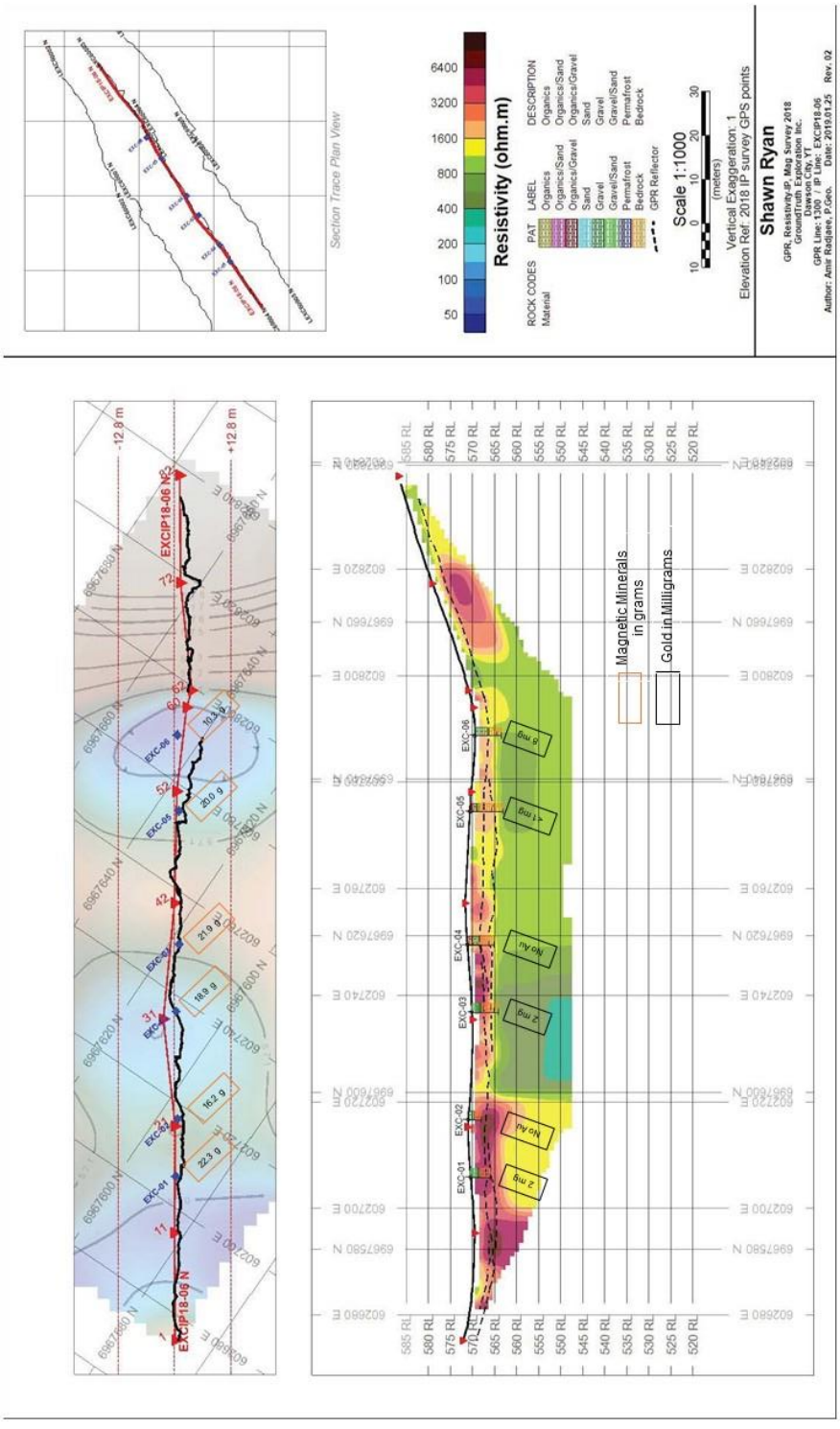


Figure 19: Resistivity, GPR and MAG of EXCIP18-06 with Drill Results

Figure 20: Image of Gold Recovered from Drill Hole EXC-06

Figure 21: Image of Gold Recovered from Drill Hole EXC-10

Figure 22: Image of Gold Recovered from Drill Hole EXC-14

6 Recommendations

The drilling results combined with the geophysical surveys, completed on Excelsior Creek, have indicated, with certainty, that bedrock depth can be defined with accuracy. Shafting or further drilling is needed to confirm and expand the interpretation set forth.

The remaining magnetic and ground penetrating radar lines should be processed and interpreted in order to find future drilling targets. Once evidence is collected on these lines, the same iterative process of refining the interpretation and continued drilling can be employed to develop an accurate and expansive model of the gold deposit at this location.

A shaft should be dug and processed in the area of the hole EXC-10 in order to determine the grade of the gold deposit. This can then be used in conjunction with the creek model to start estimating a gold resource and finally determine the economics of mining this creek.

7 Expenditures

DC Resistivity/IP: 6 profiles GroundTruth Exploration Inc.	
Invoice: GT-EXC2018-01	**$21,690.00**
Placer RAB Drilling: 24 drill holes GroundTruth Exploration Inc.	
Invoice: GT-EXC2018-01	**$43,700.00**
GPR/MAG Surveys 27 Profiles	
Invoice: GT-EXC2018-01	**$ 5,400.00**
Fixed Wing Support Great River Air	
5 Trips	**$ 7,642.44**
Helicopter Support Great River Air	
22 Trips	**$ 45,455.00**
Report:	
GroundTruth Exploration:	**$ 1,000.00**
Grand total	**$131,081.81**

8 Qualification

I, Isaac Fage have been president and operations manager of GroundTruth Exploration in Dawson City since May 2010. I have overseen the planning and collection of 300,000 + soil samples across numerous projects in Yukon Territory, Nunavut and Eastern Canada. I have worked continuously in Mineral Exploration since 2004. I hold an advanced diploma in Remote Sensing from the Centre of Geographic Sciences in Lawrencetown, Nova Scotia.

I have overseen the survey work described in this report on Excelsior Creek and have reviewed the report prepared by Allison Feduk.

Dated this 31st day of January, 2019 in Dawson, YT.

Respectfully submitted

Isaac Fage

9 References

Regional Geology: Colpron, M., Israel, S., Murphy, D.C., Pigage, L.C., and Moynihan, D., 2016. Yukon Bedrock Geology Map. Yukon Geological Survey, Open File 2016-1.

Regional Geology: Yukon Mining Map Viewer, Mining Claims Database – http://mapservices.gov.yk.ca/Mining/Load.htm

Mineral Titles: Yukon Mining Recorder, Mining Claims Database – www.yukonminingrecorder.ca

Topographic data: Natural Resourses Canada, The Atlas of Canada - Toporama- http://atlas.gc.ca/toporama/en/index.html

Bartlett, S. E., Allan, M. M., Buitenhuis, E. N., Smith, T. R., Hart, C. J. R., 2016. Field Investigations of the Sugar gold prospect, Dawson Range, Yukon (NTS 115J/14 and 115J/15. In: Yukon Exploration and Geology 2015, K.E. MacFarlane and M. G. Nordling (eds.), Yukon Geological Survey, p. 1 – 16.

Cassidy, N. J., 2009. Electrical and Magnetic Properties of Rocks, Soils and Fluids. In Ground Penetrating Radar: Theory and Applications, p. 41 – 72.

Clark, D. A. and Emerson, D. W.,1991. Notes on Rock Magnetization Characteristics in Applied Geophysical Studies. In Exploration Geophysics, p. 547 – 555.

Mortensen, J.K. and Allan, M.M., 2012. Summary of the Tectonic and Magmatic Evolution of Western Yukon and Eastern Alaska. In Yukon Gold Project Final Technical Report, Edited by Allan, M.M., Hart, C.J.R., and Mortensen, J.K. Mineral Deposit Research Unit, University of British Columbia, p. 7 – 10.

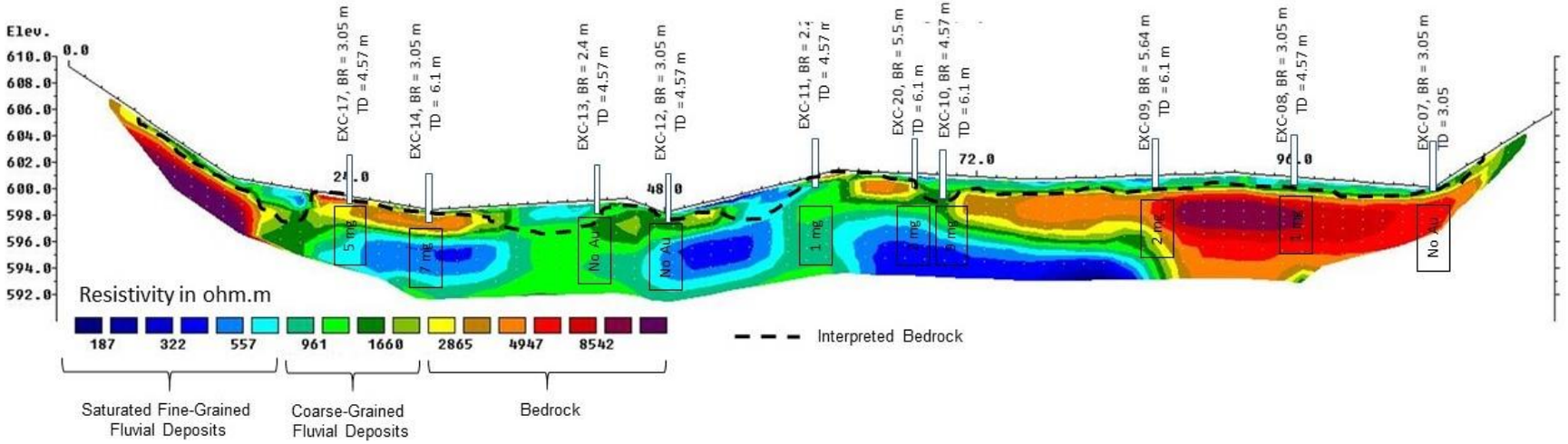
Nelson, J., Colpron, M., and Israel, S., 2013. The Cordillera of British Columbia, Yukon and Alaska: tectonics and metallogeny. In: Colpron, M., Bissig, T., Rusk, B., and Thompson, J.F.H., (Editors), Tectonics, Metallogeny, and Discovery - the North American Cordillera and similar accretionary settings. Society of Economic Geologists, Special Publication 17: 53-109.

Palacky,G. J., 1988. Resistivity Characteristics of Geologic Targets. Electromagnetic Methods in Applied Geophysics. Geological Survey of Canada

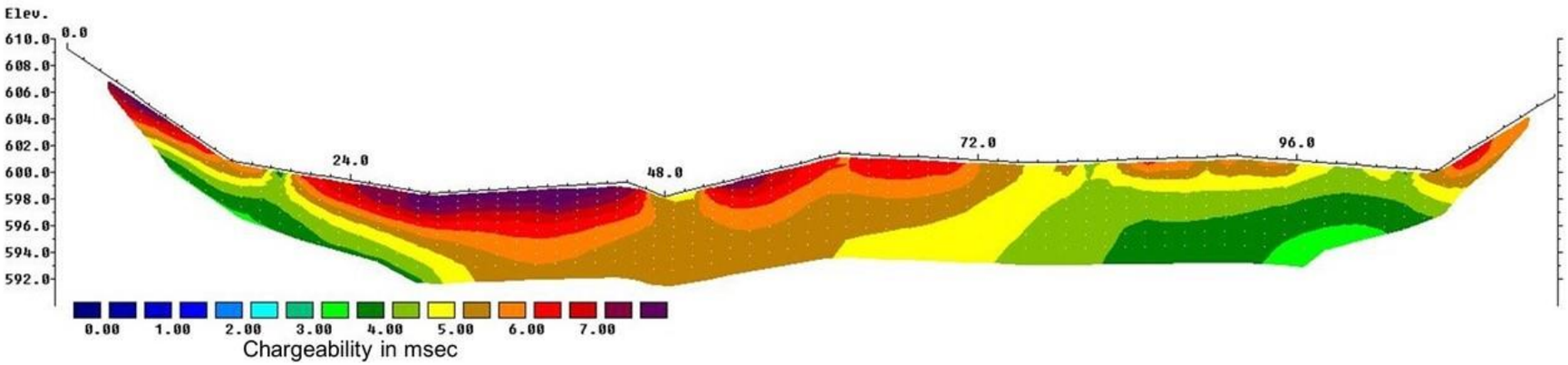
Additional review of various published scientific and reporting papers on the geology and mineral deposits of the region for indirect reference.

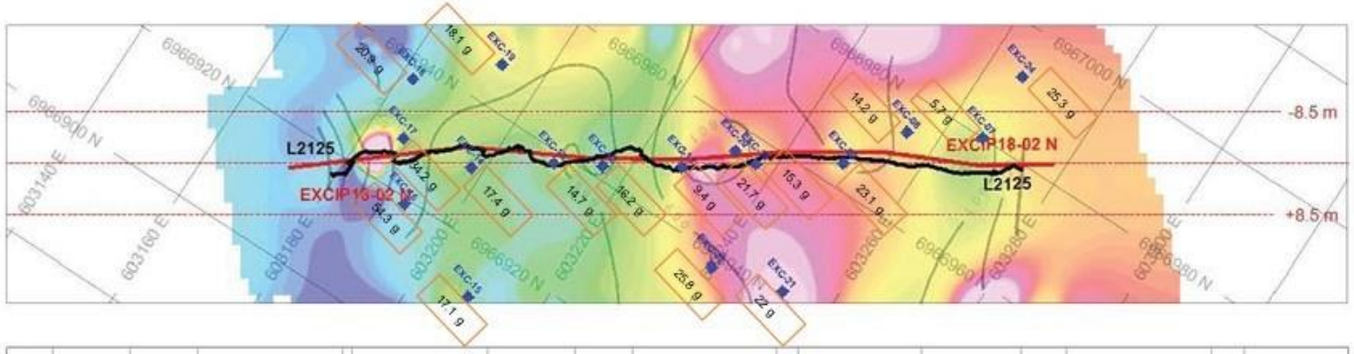
Appendix A: Interpretation Figures

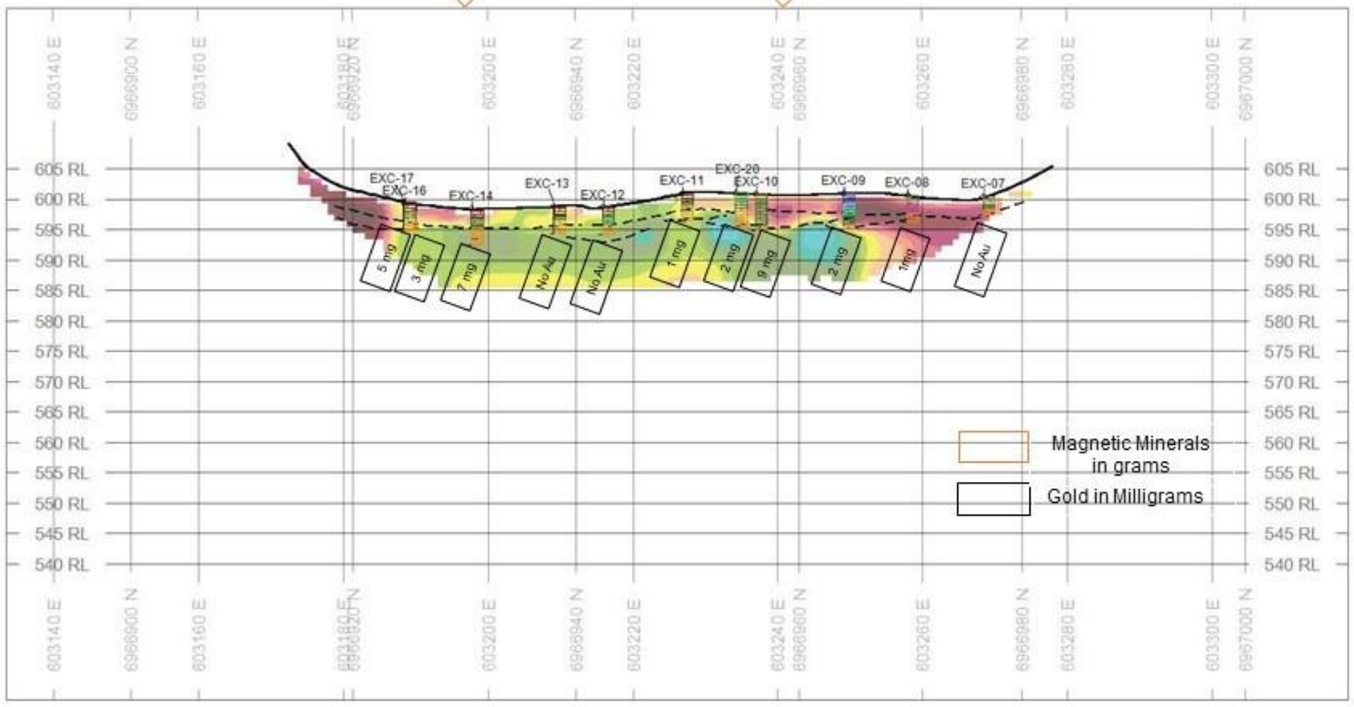
EXCIP18-02 Inverse Resistivity

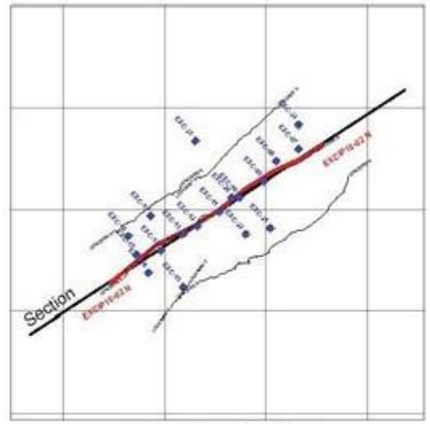


EXCIP18-02 Induced Polarization









Section Trace Plan View

TMI (nT)

57456 57489 57497 57502 57507 57511 57514 57517 57521 57529

Resistivity (ohm.m)

50 100 200 400 800 1600 3200 6400

ROCK CODES	PAT	LABEL	DESCRIPTION
Material		Organics	Organics
		Organics/Sand	Organics/Sand
		Organics/Gravel	Organics/Gravel
		Sand	Sand
		Gravel	Gravel
		Gravel/Sand	Gravel/Sand
		Permafrost	Permafrost
		Bedrock	Bedrock
		GPR Reflector	

Scale 1:1000

10 0 10 20 30

(meters)

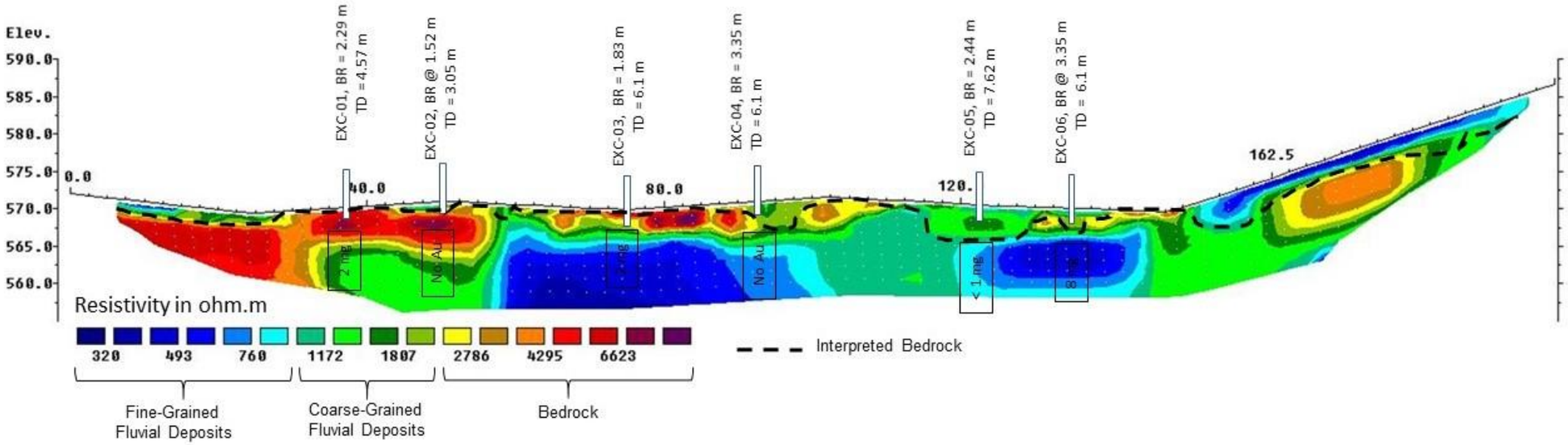
Vertical Exaggeration: 1

Elevation Ref: 2018 IP survey GPS points

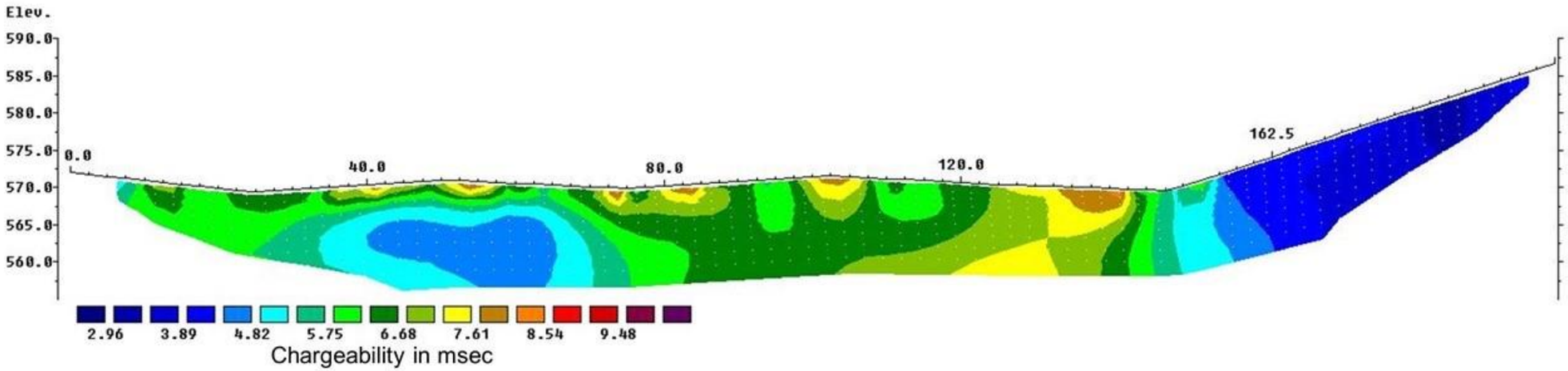
Shawn Ryan

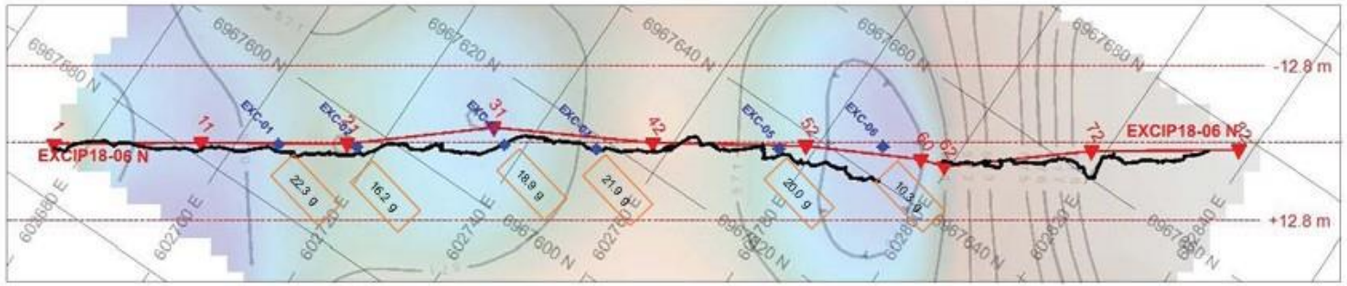
GPR, Resistivity-IP, Mag Survey 2018
GroundTruth Exploration Inc.
Dawson City, YT
GPR Line: 2125 / IP Line: EXCIP18-02
Author: Amir Radjaee, P.Geo. Date: 2019.01.24 Rev. 03

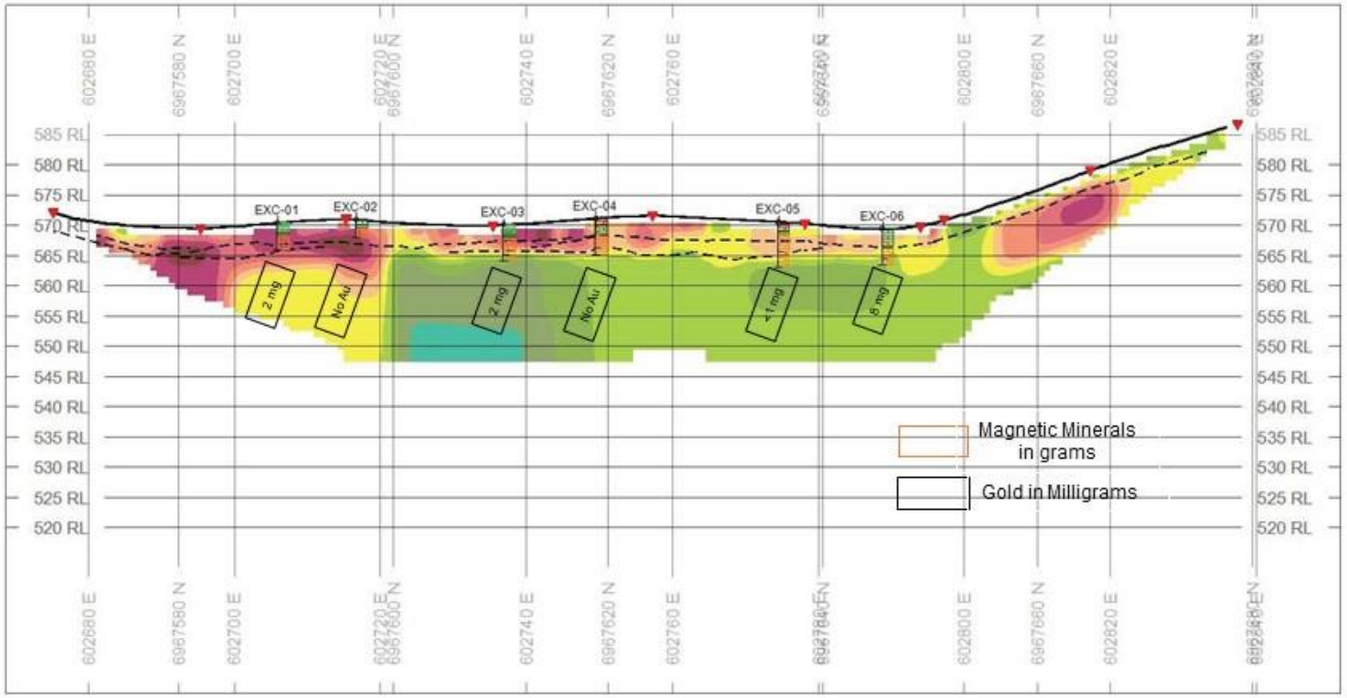
EXCIP18-06 Inverse Resistivity

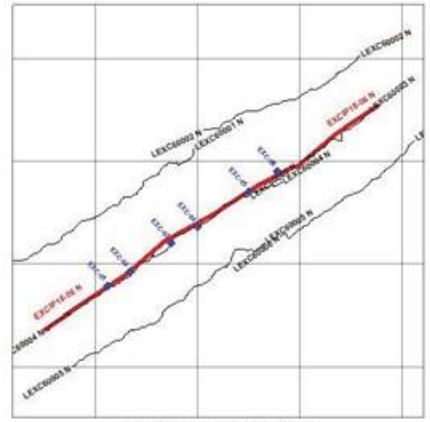


EXCIP18-06 Induced Polarization









Section Trace Plan View

Resistivity (ohm.m)

ROCK CODES	PAT	LABEL	DESCRIPTION
Material		Organics	Organics
		Organics/Sand	Organics/Sand
		Organics/Gravel	Organics/Gravel
		Sand	Sand
		Gravel	Gravel
		Gravel/Sand	Gravel/Sand
		Permafrost	Permafrost
		Bedrock	Bedrock
		GPR Reflector	

Scale 1:1000

10 0 10 20 30

(meters)

Vertical Exaggeration: 1

Elevation Ref: 2018 IP survey GPS points

Shawn Ryan

GPR, Resistivity-IP, Mag Survey 2018
GroundTruth Exploration Inc.
Dawson City, YT
GPR Line: 1300 / IP Line: EXCIP18-06
Author: Amir Radjaee, P.Geo. Date: 2019.01.25 Rev. 02

Appendix B: Drill Results

HoleID	X	Y	BRDepth_m	TotDepth_m	DrillDate	Au_mg	BRDepth_ft	TotDepth_ft
EXC-01	602706	6967589	2.286	4.572	5 Oct, 2018	2	7.5	15
EXC-02	602717	6967596	1.524	3.048	6 Oct, 2018	0	5	10
EXC-03	602737	6967610	1.8288	6.096	6 Oct, 2018	2	6	20
EXC-04	602750	6967618	3.3528	6.096	6 Oct, 2018	0	11	20
EXC-05	602775	6967635	2.4384	7.62	6 Oct, 2018	0	8	25
EXC-06	602789	6967645	3.3528	6.096	7 Oct, 2018	8	11	20
EXC-07	603266	6966980	3.048	3.048	8 Oct, 2018	0	10	10
EXC-08	603255	6966974	3.048	4.572	8 Oct, 2018	1	10	15
EXC-09	603249	6966964	5.6388	6.096	8 Oct, 2018	2	18.5	20
EXC-10	603237	6966956	5.4864	6.096	8 Oct, 2018	9	18	20
EXC-11	603227	6966949	2.286	4.572	9 Oct, 2018	1	7.5	15
EXC-12	603216	6966942	3.048	4.572	9 Oct, 2018	0	10	15
EXC-13	603209	6966938	2.4384	4.572	9, Oct 2018	0	8	15
EXC-14	603198	6966930	3.048	6.096	9 Oct, 2018	7	10	20
EXC-15	603209	6966912	2.286	4.572	10 Oct, 2018	< 1	7.5	15
EXC-16	603192	6966919	1.9812	4.572	10 Oct, 2018	3	6.5	15
EXC-17	603186	6966928	3.048	4.572	10 Oct, 2018	5	10	15
EXC-18	603182	6966937	2.286	4.572	11 Oct, 2018	3	7.5	15
EXC-19	603193	6966947	3.048	6.096	11 Oct, 2018	2	10	20
EXC-20	603233	6966956	3.048	6.096	11 Oct, 2018	2	10	20
EXC-21	603252	6966941	3.048	6.096	11 Oct, 2018	5	10	20
EXC-22	603240	6966938	2.8956	4.572	12 Oct, 2018	0	9.5	15
EXC-23	603215	6966984	2.4384	4.572	12 Oct, 2018	0	8	15
EXC-24	603266	6966992	3.3528	4.572	12 Oct, 2018	1	11	15

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
EXC-01	0	5	0	1.524	Gvls/Sand	L. Brown	Boulder / Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. Brown	Meta-seds		
	10	12.5	3.048	3.81	Bedrock	L. Brown	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	L. Brown	Meta-seds	2	22.33
EXC-02	0	5	0	1.524	Gravel	Grey	Boulders / Mix		
	5	7.5	1.524	2.286	Bedrock	L. Brown	Meta-seds		
	7.5	10	2.286	3.048	Bedrock	L. Brown	Meta-seds	0	16.244
EXC-03	0	5	0	1.524	Sand / Gravel	L. Brown	Boulders / Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. Brown	Meta-seds		
	10	12.5	3.048	3.81	Bedrock	L. Brown	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	2	18.871
EXC-04	0	5	0	1.524	Org./gvls	L. Brown	Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Boulders / Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. Grey	Meta-seds		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	0	21.8842
EXC-05	0	5	0	1.524	Org./gvls	L. Brown	Small sample		
	5	7.5	1.524	2.286	Gravel	L. Grey	Boulders / Mix / Small Sample		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Meta-seds		
	10	12.5	3.048	3.81	Bedrock	L. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)		
	20	22.5	6.096	6.858	Bedrock	Orange	Meta-seds (weathered)		
	22.5	25	6.858	7.62	Bedrock	Rusty Orange	Meta-seds (weathered)	< 1	20.028

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
EXC-06	0	5	0	1.524	Gravel	L. Grey	Boulders / Mix		
	5	7.5	1.524	2.286	Gravel	L. Grey	Boulders / Mix		
	7.5	10	2.286	3.048	Gravel	L. Grey	Boulders / Mix		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. Grey	Meta-seds		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	8	10.325
EXC-07	0	5	0	1.524	Organics	Black	Muskeg		
	5	7.5	1.524	2.286	Gravel	D. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	D. Brown	Meta-seds		
EXC-08	0	5	0	1.524	Organics	Black	Muskeg	0	5.733
	5	7.5	1.524	2.286	Organics/Sand	Black/ Brown	Muskeg/ Mix		
	7.5	10	2.286	3.048	Organics/ Sand	Black/ Brown	Muskeg/ Mix		
	10	12.5	3.048	3.81	Bedrock	D. Brown	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. Brown/ Orange	Meta-seds (weathered)	1	14.164
EXC-09	0	5	0	1.524	Permafrost	D. Brown			
	5	7.5	1.524	2.286	Sand	L. Brown	Mix		
	7.5	10	2.286	3.048	Sand	L. Brown	Mix		
	10	12.5	3.048	3.81			No sample		
	12.5	15	3.81	4.572	Gravel	L. Grey	Mix		
	15	17.5	4.572	5.334	Gravel	L. Brown	Weathered		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	2	23.112
EXC-10	0	5	0	1.524	Organics	Black	Muskeg		
	5	7.5	1.524	2.286	Gravel	L. Brown	Small sample/ Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Small sample/ Mix		
	10	12.5	3.048	3.81	Gravel	Brown	Weathered		
	12.5	15	3.81	4.572	Gravel	L. brown	Mix		
	15	17.5	4.572	5.334	Gravel	L. brown	Mix		
	17.5	20	5.334	6.096	Bedrock	D. grey	Meta-seds	9	15.296
EXC-11	0	5	0	1.524	Organics/ Gravel	Black/ L. grey	Muskeg/ Mix		
	5	7.5	1.524	2.286	Gravel	L. grey	Small sample/ Mix		
	7.5	10	2.286	3.048	Bedrock	D. grey	Meta-seds		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	1	9.438

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
EXC-12	0	5	0	1.524	Organic/ Gravel	Black/ L. Grey	Muskeg/ Mix		
	5	7.5	1.524	2.286	Gravel	L. grey	Boulders / Mix		
	7.5	10	2.286	3.048	Gravel	L. grey	Mix		
	10	12.5	3.048	3.81	Bedrock	Orange	Meta-seds (weathered)		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	0	16.26
EXC-13	0	5	0	1.524	Organics/ Gravel	Black/ L. Grey	Muskeg/ Mix		
	5	7.5	1.524	2.286	Gravel		Mix		
	7.5	10	2.286	3.048	Bedrock	Orange	Meta-seds (weathered)		
	10	12.5	3.048	3.81	Bedrock	Orange	Meta-seds (weathered)		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	0	14.672
EXC-14	0	5	0	1.524	Organics/ gravel	Black/ L. Grey	Muskeg/ mix		
	5	7.5	1.524	2.286	Gravel	L. grey	Mix		
	7.5	10	2.286	3.048	Gravel	L. Grey	Mix		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	7	17.374
EXC-15	0	5	0	1.524	Gravel	L. Grey	Poor recovery/ Boulders / mix		
	5	7.5	1.524	2.286	Gravel	D. grey	Poor Recovery/ mix		
	7.5	10	2.286	3.048	Bedrock	D. grey	Meta-seds		
	10	12.5	3.048	3.81	Bedrock	D. grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	< 1	17.056
EXC-16	0	5	0	1.524	Organics/ Gravel	Black/ L. grey	Muskeg/ Mix		
	5	7.5	1.524	2.286	Bedrock	Orange	Meta-seds (weathered)		
	7.5	10	2.286	3.048	Bedrock	Orange	Meta-seds (weathered)		
	10	12.5	3.048	3.81	Bedrock	Orange	Meta-seds (weathered)		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	3	54.283

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
EXC-17	0	5	0	1.524	Organics/ Gravel	Black/ L. Grey	Muskeg/ Boulders/ Mix		
	5	7.5	1.524	2.286	Gravel	L. grey	Mix		
	7.5	10	2.286	3.048	Gravel	L. Grey	Mix		
	10	12.5	3.048	3.81	Bedrock	Orange	Meta-seds (weathered)		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	5	34.2
EXC-18	0	5	0	1.524	Organic/ gravel	Black/ L. Grey	Muskeg/ Mix		
	5	7.5	1.524	2.286	Gravel	L. Grey	Mix		
	7.5	10	2.286	3.048	Bedrock	Orange	Meta-seds (weathered)		
	10	12.5	3.048	3.81	Bedrock	Orange	Meta-seds (weathered)		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	3	20.921
EXC-19	0	5	0	1.524	Gravel	L. Grey	Mix		
	5	7.5	1.524	2.286	Sand/ gravel	L. Brown/ L. Grey	Void / Mix		
	7.5	10	2.286	3.048	Gravel	L. Grey	Mix		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. grey	Meta-seds		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	2	18.084
EXC-20	0	5	0	1.524	Sand/ gravel	L. Brown/ L. Grey	Mix		
	5	7.5	1.524	2.286	Gravel	L. Grey	Poor recovery		
	7.5	10	2.286	3.048	Gravel	L. Grey	Mix		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. Grey	Meta-seds		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	2	21.683
EXC-21	0	5	0	1.524	Organics	Black	Poor recovery		
	5	7.5	1.524	2.286	Sand/ gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Poor recovery / Wet Muck		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. Grey	Meta-seds		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	5	22.005

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
EXC-21	0	5	0	1.524	Organics	Black	Poor recovery		
	5	7.5	1.524	2.286	Sand/ gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Poor recovery / Wet Muck		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. Grey	Meta-seds		
	15	17.5	4.572	5.334	Bedrock	Orange	Meta-seds (weathered)		
	17.5	20	5.334	6.096	Bedrock	Orange	Meta-seds (weathered)	5	22.005
EXC-22	0	5	0	1.524	Organics/ Gravel	Black/ L. grey	Muskeg/ Boulders / Mix		
	5	7.5	1.524	2.286	Gravel	L. grey	Large Boulder / Mix		
	7.5	10	2.286	3.048	Gravel	L. Grey	Mix		
	10	12.5	3.048	3.81	Bedrock	D. Grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	D. Grey	Meta-seds	0	25.821
EXC-23	0	5	0	1.524	Sand/ Gravel	L. Grey	Mix		
	5	7.5	1.524	2.286	Gravel	L. grey	Large Boulder / Mix		
	7.5	10	2.286	3.048	Bedrock	D. grey	Meta-seds		
	10	12.5	3.048	3.81	Bedrock	Orange	Meta-seds (weathered)		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	0	28.515
EXC-24	0	5	0	1.524	Gravel	L. Grey	Mix		
	5	7.5	1.524	2.286	Gravel	L. Grey	Mix		
	7.5	10	2.286	3.048	Gravel	L. Grey	Mix		
	10	12.5	3.048	3.81	Bedrock	D. grey	Meta-seds		
	12.5	15	3.81	4.572	Bedrock	Orange	Meta-seds (weathered)	1	25.259

Appendix C: Invoices

GroundTruth Exploration

Invoice

Box 70, Dawson, YT Y0B 1G0

Phone (867) 993-5612

Fax: (867) 993-5617

Date	Invoice #
31-Dec-18	GT-EXC2018-01
Terms	**Due**
Net 21	21-Jan-19

Invoice To:

Shawn Ryan

Box 213

Dawson, YT

Y0B 1G0

867-993-2499

Description	Amount
Property: Excelsior Creek Placer Exploration Program 2018	
DC Resistivity-IP Survey on Boulevard Creek Placer Property - Aug 6-14/18	$21,690.00
6 profiles surveyed with crew of 5 camped onsite	
Ground Magnetic/GPR Survey on Boulevard Creek Placer Property - Sept 11-14/18	$5,400.00
27 profiles cleared and surveyed with crew of 5 (IP crew, gear charge only)	
RAB Drilling Program on Boulevard Creek Placer Property - Sept 9-16, Sept 23-25/18	$43,700.00
24 cased holes/ 405' drilled with heliportable, track mouted RAB drill	
Excelsior Project Fixed Wing Support	$7,642.44
Excelsior Project Helicopter Support	$45,455.00
YMEP Assessment Report	$1,000.00
See attached breakdown	

Subtotal	**$ 124,887.44**
GST 5%	$ 6,244.37
Total Due	**$ 131,131.81**

GST # 811084268 RT0001

Thank you for your business!

Overview: Excelsior Creek DC Resistivity/IP Survey

6 profiles surveyed with crew of 5 camped onsite

Invoice: ***GT-EXC2018-01***

Survey Date: ***Sept 22-27/18***

GEOPHYSICAL SURVEYS - IP -DC RESISTIVITY BREAKDOWN	Charge out	Units	Costs		22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep
Wages					Sat	Sun	Mon	Tue	Wed	Thu
1 Geophysical Operator	$ 550.00	6	$ 3,300.00		1	1	1	1	1	1
1 Assistant Operator/DGPS Surveyor	$ 440.00	6	$ 2,640.00		1	1	1	1	1	1
Field Assistant(s)	$ 385.00	18	$ 6,930.00	$ 12,870.00	3	3	3	3	3	3
IP-Res Survey Equipment										
IP/Resistivity Meter: Supersting 8 Channel meter w/cables, 84 electrodes	$ 600.00	6	$ 3,600.00		1	1	1	1	1	1
Additional Cables/Switchboxes for 168 electrode survey configuration	$ 300.00	0	$ -							
Precision GPS: Ashtech Promark 100 differential GPS	$ 50.00	6	$ 300.00		1	1	1	1	1	1
Field Laptop/Software for nightly download	$ 75.00	6	$ 450.00		1	1	1	1	1	1
Iridium Sat Phone (per day)	$ 50.00	6	$ 300.00		1	1	1	1	1	1
Chainsaw for helipads/camp (per day)	$ 50.00	6	$ 300.00	$ 4,950.00	1	1	1	1	1	1
Consumable Supplies										
Stainless Electrodes: wear & tear- 2 per profile, $6 ea *2 profiles/day	$ 24.00	6	$ 144.00		1	1	1	1	1	1
Calcium Chloride: 4kg per profile, $2/kg*2 profiles/day	$ 16.00	6	$ 96.00		1	1	1	1	1	1
Pickets/Spray Paint, 9 per profile, $1/picket*2 profiles/day	$ 10.00	6	$ 60.00	$ 300.00	1	1	1	1	1	1
Additional Supplies and Support										
Remote Camp Setup for Crew (per man-day)	$ 50.00	30	$ 1,500.00		5	5	5	5	5	5
Food (per man-day)	$ 60.00	30	$ 1,800.00		5	5	5	5	5	5
Satellite Internet - per day (connected by Staff)	$ 45.00	6	$ 270.00	$ 3,570.00	1	1	1	1	1	1

DC IP-Resistivity Survey Expense:	**$ 21,690.00**

GEOPHYSICAL SURVEYS - MAG/GPR BREAKDOWN	Charge out	Units	Costs		22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep
Wages					Sat	Sun	Mon	Tue	Wed	Thu
1 Geophysical Operator	$ 550.00	0	$ -							
1 Assistant Operator/DGPS Surveyor	$ 440.00	0	$ -							
3 Field Assistant(s)	$ 385.00	0	$ -	$ -						
Program Prep, Mobe/Demobe Rate, Expediting										
Program Prep (per 25 man-days)	$ 250.00	0	$ -							
Expediting (Grocery, gear resupply, sample shipping, etc. - per hr)	$ 75.00	0	$ -	$ -						
IP-Res Survey Equipment										
Mala 80MHz HDR w GX Controller and Software - Terraplus Rental	$ 600.00	6	$ 3,600.00		1	1	1	1	1	1
GEM 19T Proton Magnetometer with Base Station	$ 300.00	6	$ 1,800.00		1	1	1	1	1	1
Precision GPS: Ashtech Promark 100 differential GPS	$ 50.00	0	$ -							
Field Laptop/Software for nightly download	$ 75.00	0	$ -							
Data Processing in the field (per hr)	$ 60.00	0	$ -							
Iridium Sat Phone (per day)	$ 50.00	0	$ -							
Chainsaw for helipads/camp (per day)	$ 50.00	0	$ -							
Radios (per man-day)	$ 6.00	0	$ -	$ 5,400.00						
Additional Supplies and Support										
Remote Camp Setup for Soil Crew (per man-day)	$ 50.00	0	$ -							
Food (per man-day)	$ 60.00	0	$ -							
Satellite Internet - per day (connected by Staff)	$ 45.00	0	$ -							
Mapping/Daily plotting - Final inversions and Summary Report (1h per survey day)	$ 75.00	0	$ -	$ -						

Magnetic-GPR Survey Expense:	**$ 5,400.00**

Overview: RAB Drilling on Excelsior Creek Target

24 cased holes/ 405' drilled with heliportable, track mouted RAB drill

Invoice: ***GT-EXC2018-01***

Survey Date: ***Oct 4-12, 2018***

RAB Drilling BREAKDOWN	Per Shift	Units	Costs		04-Oct	05-Oct	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct	12-Oct
Placer RAB Drilling Services					Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
4 man drilling/sampling crew	$ 2,200.00	9	$ 19,800.00	$ 19,800.00	1	1	1	1	1	1	1	1	1
IP-Res Survey Equipment													
GT RAB Drill - Outfitted for cased 5" Placer RAB Drilling	$ 1,200.00	9	$ 10,800.00		1	1	1	1	1	1	1	1	1
Iridium Sat Phone (per day)	$ 50.00	9	$ 450.00		1	1	1	1	1	1	1	1	1
Chainsaw for helipads/camp (per day)	$ 50.00	9	$ 450.00		1	1	1	1	1	1	1	1	1
VHF Radios/GPS at $5/person per day	$ 20.00	9	$ 180.00	$ 15,080.00	1	1	1	1	1	1	1	1	1
Consumable Supplies													
Diesel Fuel: 200l per day @ $1.40	$ 280.00	9	$ 2,520.00		1	1	1	1	1	1	1	1	1
Remote Camp Setup for Soil Crew (per man-day) $50/person/day	$ 100.00	36	$ 3,600.00		4	4	4	4	4	4	4	4	4
Food (per man-day) $60/person/day	$ 60.00	45	$ 2,700.00	$ 8,820.00	5	5	5	5	5	5	5	5	5

RAB Drilling Expense:	**$ 43,700.00**

Excelsior Project Fixed Wing Support: Sept 21-Oct 14/18

Project	Inv Date	Invoice #	Contractor	Description	Amount
EXC-IPR	1-Oct-18	6514	Great River Air	Dawson to Casino, Excelsior IP	$ 3,532.80
EXC-RAB	7-Oct-18	6520	Great River Air	Jet in/Empties out - EXC RAB	$ 883.20
EXC-RAB	10-Oct-18	6594	Great River Air	2 Jet A - Excelsior RAB	$ 825.60
EXC-RAB	10-Oct-18	6522	Great River Air	Jet A, Excelsior RAB	$ 825.60
EXC-RAB	15-Oct-18	AL-0054	Great River Air	3 drums for JET A fuel	$ 1,575.24
				EXC Fixed Wing Support Total:	**$ 7,642.44**

Excelsior Project Helicopter Support: Sept 21-Oct 14/18

Project	Inv Date	Invoice #	Contractor	Description	Amount
EXC-IPR	27-Sep-18	6966	Trans North Helicopters	21st Sept., 2018 / FT# 66529/ AC-AS350 SD2 / staking set outs - 0.5 hrs.	$ 750.00
EXC-IPR	27-Sep-18	6966	Trans North Helicopters	21st Sept., 2018 / FT# 66529/ AC-AS350 SD2 / Mobe Camp/Gear - 1.5 hrs.	$ 2,250.00
EXC-IPR	30-Sep-18	7002	Trans North Helicopters	Flight Ticket 66541 - Resupply for Excelsior IP	$ 450.00
EXC-IPR	30-Sep-18	7003	Trans North Helicopters	Flight ticket 66545 - Excelsior IPR Crew Support	$ 1,500.00
EXC-IPR	30-Sep-18	7003	Trans North Helicopters	Flight ticket 66547 - Excelsior IPR Crew Support	$ 900.00
EXC-IPR	30-Sep-18	7003	Trans North Helicopters	Flight ticket 66549 - Excelsior IPR Crew Support	$ 2,100.00
EXC-RAB	30-Sep-18	7004	Trans North Helicopters	Flight ticket 66546 - Excelsior RAB	$ 1,350.00
EXC-RAB	22-Oct-18	7047	Trans North Helicopters	Flight ticket 66554 - Excelsior RAB - Sling fuel, set out Claude	$ 825.00
EXC-RAB	22-Oct-18	7043	Trans North Helicopters	Flight ticket 66551 - Excelsior IP Demobe	$ 2,100.00
EXC-IPR	22-Oct-18	7043	Trans North Helicopters	Flight ticket 66555 - Excelsior GPR Demobe	$ 300.00
EXC-RAB	22-Oct-18	7043	Trans North Helicopters	Flight Ticket 66557 - Excelsior RAB Mobe Drill	$ 8,845.00
EXC-RAB	22-Oct-18	7043	Trans North Helicopters	Flight Ticket 66558 - Excelsior RAB Resupply	$ 2,440.00
EXC-RAB	22-Oct-18	7043	Trans North Helicopters	Flight ticket 66560 - Excelsior RAB Set outs, pick ups and resupply	$ 2,745.00
EXC-RAB	22-Oct-18	7044	Trans North Helicopters	Flight ticket 66562 - Excelsior RAB Set outs, Pick ups, Resupply	$ 1,650.00
EXC-RAB	22-Oct-18	7044	Trans North Helicopters	Flight ticket 66563 - Excelsior RAB Set outs and pick ups	$ 900.00
EXC-RAB	22-Oct-18	7044	Trans North Helicopters	Flight ticket 66565 - Excelsior RAB Set outs, Pick ups, Sling fuel	$ 1,500.00
EXC-RAB	22-Oct-18	7044	Trans North Helicopters	Flight ticket 66566 - Excelsior RAB Set outs and pick ups	$ 900.00
EXC-RAB	22-Oct-18	7044	Trans North Helicopters	Flight ticket 66567 - Excelsior RAB Set outs, pick ups, sling fuel	$ 1,350.00
EXC-RAB	22-Oct-18	7045	Trans North Helicopters	Flight ticket 66568 - Excelsior RAB Demobe	$ 7,650.00
EXC-RAB	22-Oct-18	7045	Trans North Helicopters	Flight ticket 66569 - Excelsior RAB Demobe - Kalisha , Allison and Claude	$ 1,800.00
EXC-RAB	22-Oct-18	7045	Trans North Helicopters	Flight ticket 66570 - Excelsior RAB Demobe - Jesse and Brayden	$ 600.00
EXC-RAB	22-Oct-18	7045	Trans North Helicopters	Flight ticket 66571 - Excelsior RAB Demobe to Dawson	$ 2,550.00
				EXC Helicopter Support Total:	**$ 45,455.00**