Geophysical, UAV Drone, and RAB Drilling

Independence and Carlisle Creek Placer Properties
Owner: Wildwood Exploration Inc.

Whitehorse Mining District

NTS: 115J/13 & 115J/14
Latitude: 62º 52.09' N Longitude: -139º 33.55' W

Claim List:

Independence 1 - 97	P 510923 - 511019
Independence 98 - 137	P 511369 - 511408
Independence 138 – 190	P 511316 - 511368
Independence 191 – 243	P 511927 - 511979
Independence 244 – 300	P 511556 - 511612
Inca 1 – 28	P 511528 - 511555
Carlisle 1 – 53	P 510219 - 510271

Work Performed:

MAG Survey:	14 September, 2018
GPR Survey:	11, 13, 14 September, 2018
RES/IP Surveys:	6 – 10 August, 2018
RAB Drilling:	9 – 16 & 23 – 25 September, 2018

Date of Report: September 29, 2019
Author of Report: Allison Feduk

Summary

This report summarizes three ground geophysical surveys, UAV drone imagery and a thirty-four hole drill program completed by GroundTruth Exploration during the field season of 2018 on the Carlisle, Inca and Independence Creek placer properties. The geophysical surveys and drilling programs traverse perpendicularly across the valley to highlight the placer target zones.

The ground geophysical surveys included five high resolution DC resistivity and induced polarization surveys, a 30-line ground penetrating radar survey and a 20-line magnetic survey.

Results from the 2018 resistivity and ground penetrating radar has shown a contrast at the bedrock interface which corresponds to the bedrock boundary from the 2018 drilling data. The magnetic survey does not indicate with positivity that trends in magnetic anomalies can be used to detect high grade gold deposition.

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Y0B 1G0

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1.0 Introduction

'Boulevard Creek,' a tributary of Independence Creek, Carlisle Creek and Inca have been targeted based on the discovery of the Coffee Gold hard rock deposit and the Gold Sunrise-Sunset soil anomaly.

The geophysical program on Boulevard Creek, undertaken by GroundTruth Exploration Inc., consisted of High-Resolution DC Resistivity and Induced Polarization (RES/IP) surveys, Ground Penetrating Radar (GPR) surveys and Magnetic (MAG) surveys. Five RES/IP profiles, totaling 705-line meters, were conducted between the 6 to10 of August 2018. A 2,210-line meter GPR survey was completed on the 11, 13, and 14 of September 2018 and a 2,460-line meter MAG survey was performed on the 14 of September 2018.

The RES/IP and GPR work was intended to measure the depth to bedrock and to map underlying lithology thickness to determine if any paleochannels favorable to gold deposition could be detected. The MAG survey was performed to identify the magnetitic response of the black sand present in the pay channel to determine if the survey would be useful in detecting placer gold.

A thirty-four hole drilling program was performed between the 9 to 16 and 23 to 25 of September, 2018. The RES/IP surveys were used to target some of the drill holes. Neither the MAG nor GPR surveys were processed before drilling; thus the drilling portion of the program was not able to use these surveys.

2.0 Previous Investigations

A moderate amount of work has been reported by GroundTruth Exploration Inc. on Carlisle Creek and Independence Creek placer properties. This includes MAG surveys conducted in 2012. Both MAG and RES/IP surveys were completed in 2013, 2014 and 2015. UAV Drone, GPR and MAG surveys were implemented in 2016. Resolve Frequency Domain Electromagnetic survey, RES/IP and RAB drilling were completed in 2017.

3.0 Location and Access

The prospecting leases are located approximately 130 km South of Dawson City within the Yukon River drainage system in west-central Yukon Territory. The target is centered at Latitude: 62° 52.09' N, Longitude: -139º 33.55' W, and located on NTS map sheets

115J/13 and 115J/14 (Figure 1). It is accessible in winter via snowmobile on the Yukon River and by helicopter year-round. The Coffee Gold Camp has an airstrip 25 km northeast that is reachable year-round and located at the mouth of Coffee Creek.

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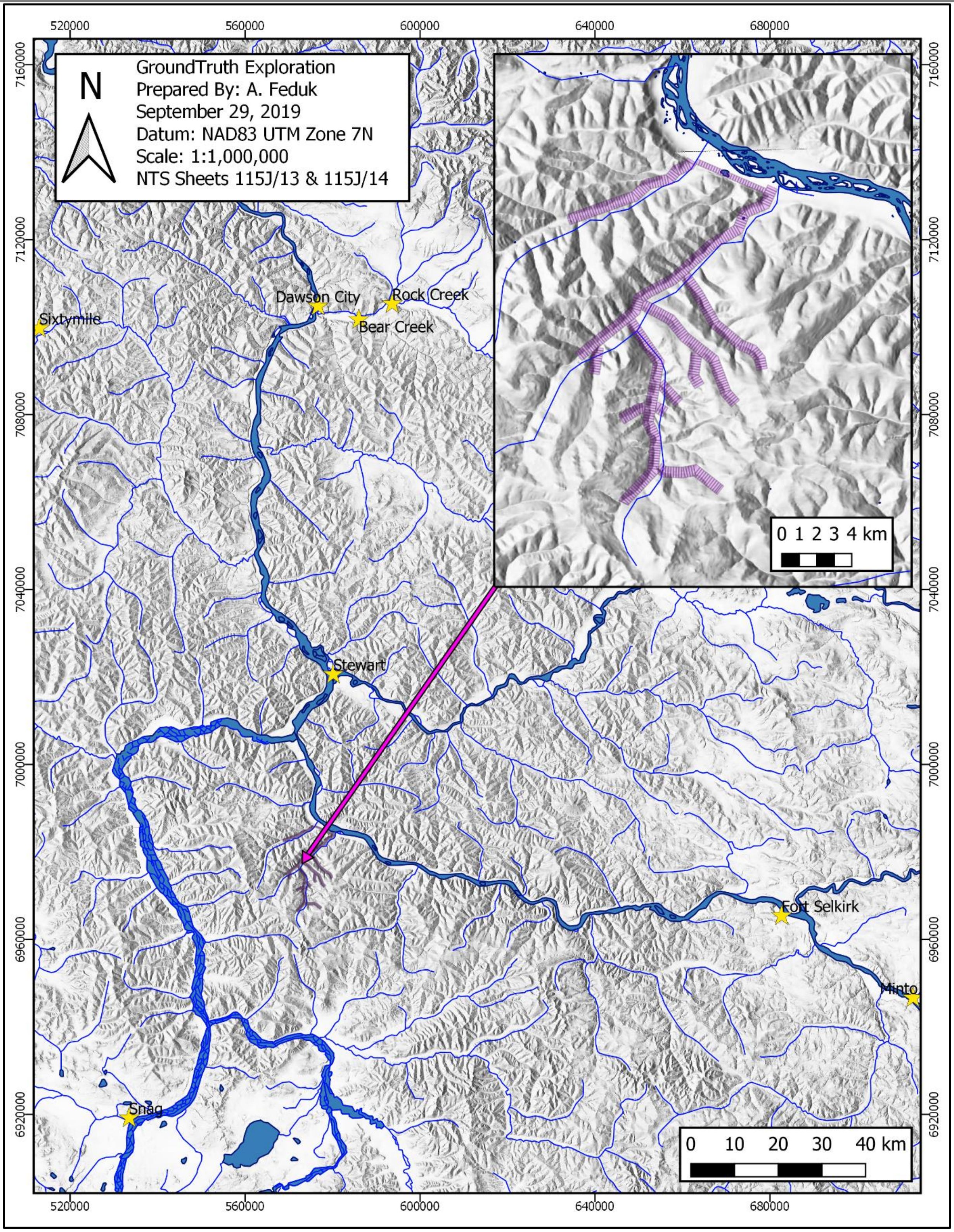

Figure 1: Property Location

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4.0 Physiography and Climate

The landscape is composed broad valleys bordered by moderately sloped, tree-covered hills ranging in elevations from 420 m to 1200 m. 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.

5.0 Geology

5.1 Regional Geology

Carlisle and Independence Creeks are situated in the Yukon-Tanana Terrane (YTT). The YTT is a late Devonian to middle Mississippian continental magmatic arc extending from northern British Columbia into west-central Yukon and eastern Alaska and is bounded to the northeast by the Tintina fault and to the south-west by the Denali fault (Colpron et al., 2006).

The YTT is composed of four main assemblages including the Snowcap, Finlayson, Klondike and Klinkit (Colpron et al. 2006) intruded by the Dawson Range batholith (phase of the Whitehorse Suite), Prospector Mountain plutonic suite and Casino plutonic suites (Mortensen et al., 2010).

“The Snowcap assemblage (PDS1) forms the base of the YTT consisting of quartzite, psammite, pelite and marble with minor greenstone and amphibolite. The Finlayson assemblage (DMF1) is composed of amphibolite, garnet amphibolite and schist. The Klondike assemblage (PK1, PK2) consists of muscovite-chlorite quartz phyllite, quartz-muscovite-chlorite schist, micaceous quartzite, psammite, phyllonite and schist. The Whitehorse Suite (mKqW, mKgW), a phase of the Dawson Range Batholith, consists of biotite quartz monzonite, biotite granite, leucogranite, monzogranite, granodiorite, diorite, granite and tonalite.” (Ryan et al., 2013). The Klinkit (CK1) is composed of mafic to intermediate metavolcaniclastic and metavolcanics rocks, with minor limestone and conglomerate (Colpron et al., 2006; Roots et al, 2004).

5.2 Property Geology

Carlisle Creek and Independence Creek are underlain by Neoproterozoic and Paleozoic rocks of the Snowcap assemblage (PDS1), Devonian and Mississippian intermediate to mafic volcanic to volcaniclastic rocks of the Finlayson assemblage (DMF1), middle to late Permian rocks of the Sulphur Creek suite (PqS) and Klondike assemblage (PK1), and mid-Cretaceous plutonic rocks of the Whitehorse Suite (mKqW). The properties bedrock geology is shown in Figure 2.

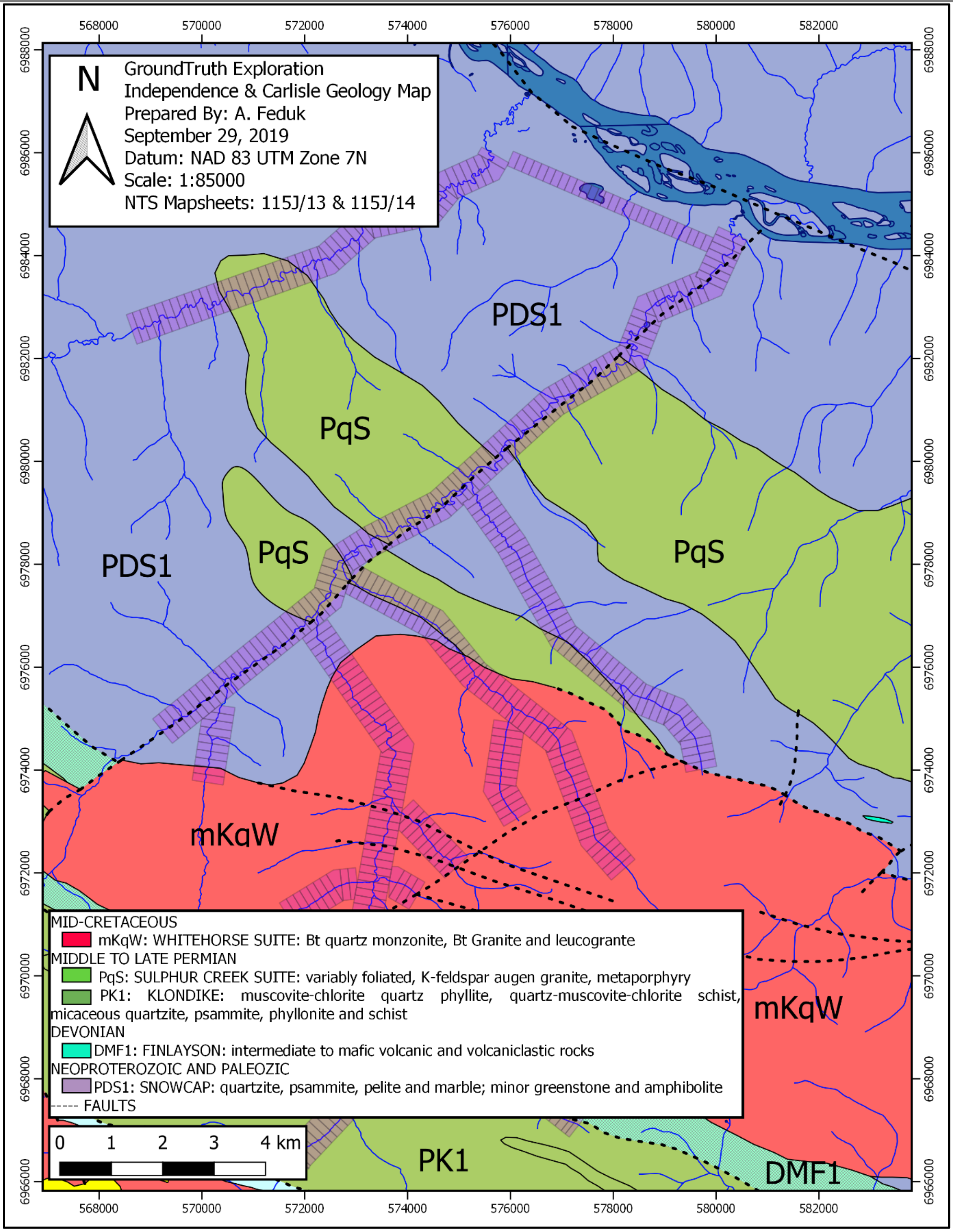

Figure 2: Property Geology

6.0 Resistivity and Induced Polarization Survey

6.1 Work Performed

The DC Resistivity and Induced Polarization (RES/IP) surveys were conducted from the 6 to 10 of August 2018, on the placer claims Independence 170, 171, 173, 174, 178 and 179 (Figure 4). 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.

A total of five traverses were completed on the Boulevard Creek study: INPIP18-02, INPIP18-03, INPIP18-04, INPIP18-05 and INPIP18-07, the traverses started downstream with INPIP18-02 and consecutively ran upstream to INPIP18-07 (Figure 4 to 9).

Survey traverses INPIP18-02 and INPIP18-05 are composed of 84 electrodes spaced at 2m. This electrode spacing results in a total line length of 166 ground meters, a horizontal resolution of 1 m and a potential depth of investigation up to 15.3 meters between electrodes 21 and 59 (Figure 3). Traverses INPIP18-03, INPIP18–04 and INPIP18-07 are composed of 84 electrodes spaced at 1.5m. This spacing results in a total line length of 124.5 ground meters, a horizontal resolution of 1 m and a potential depth of investigation up to 11 meters between electrodes 18 and 43.

Figure 3: Array Geometry from Line INPIP18-02

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.

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.

6.2 Operating 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.

6.3 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/IP 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 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.

6.4 Results

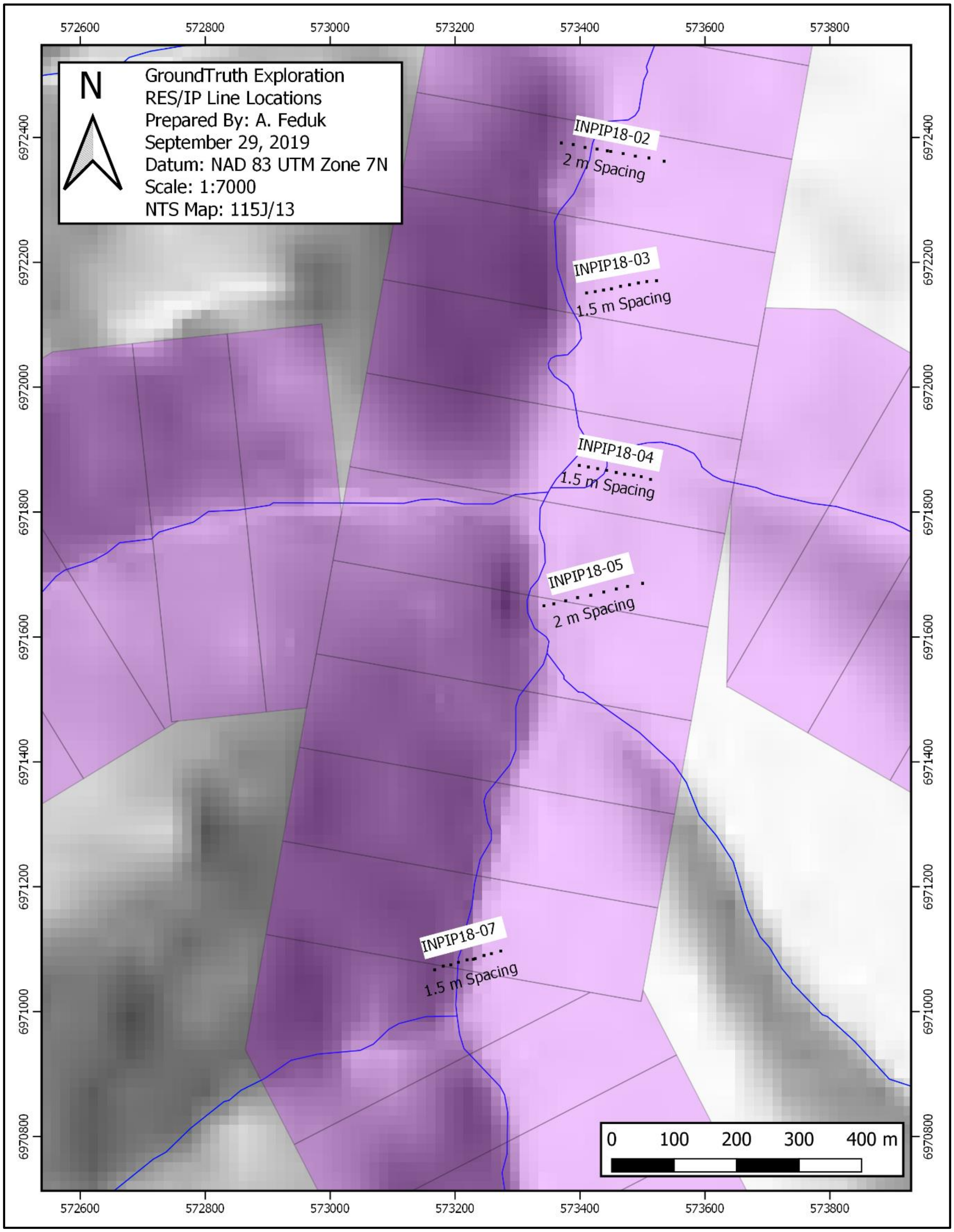

Figure 4: Location of RES/IP Profiles

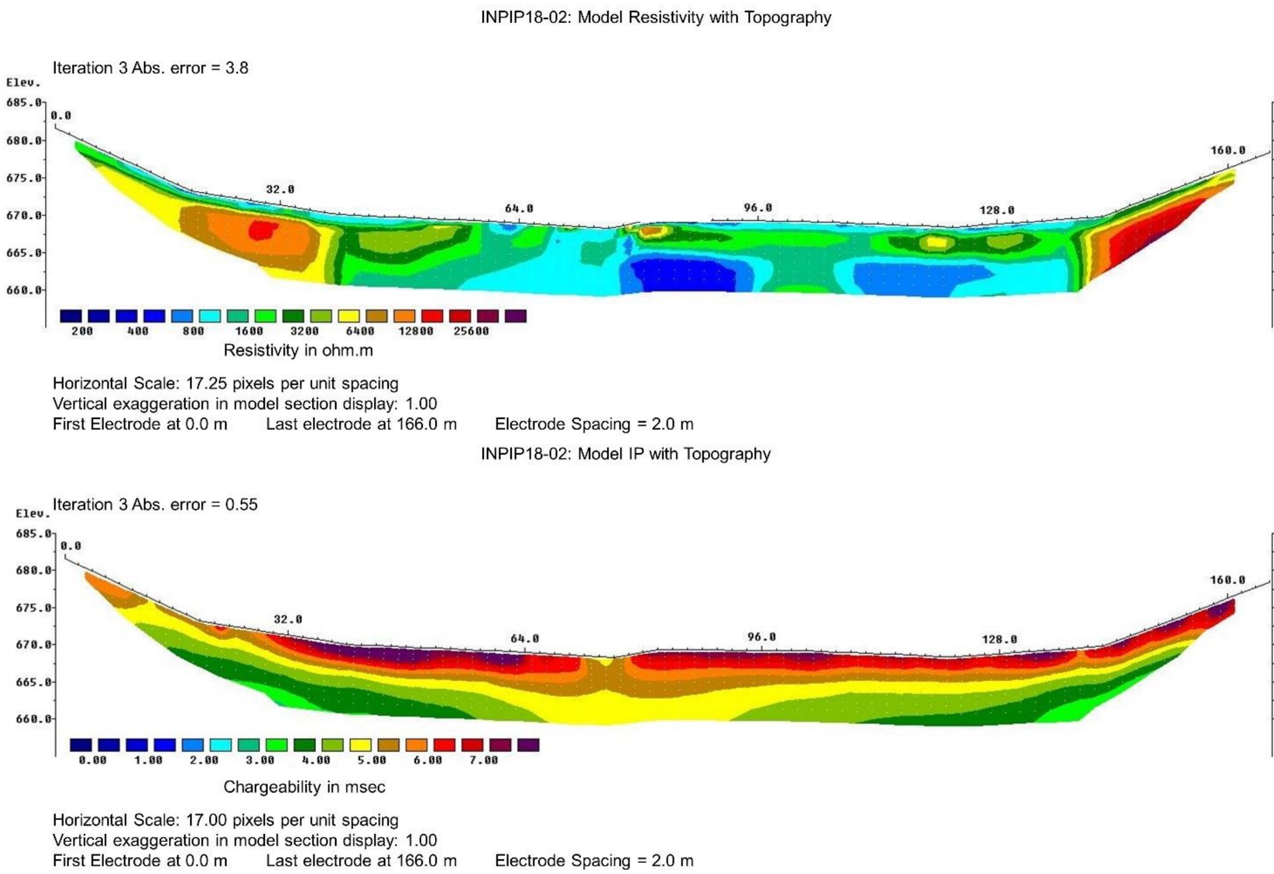

Figure 5: Resistivity and IP Profiles of Line INPIP18-02

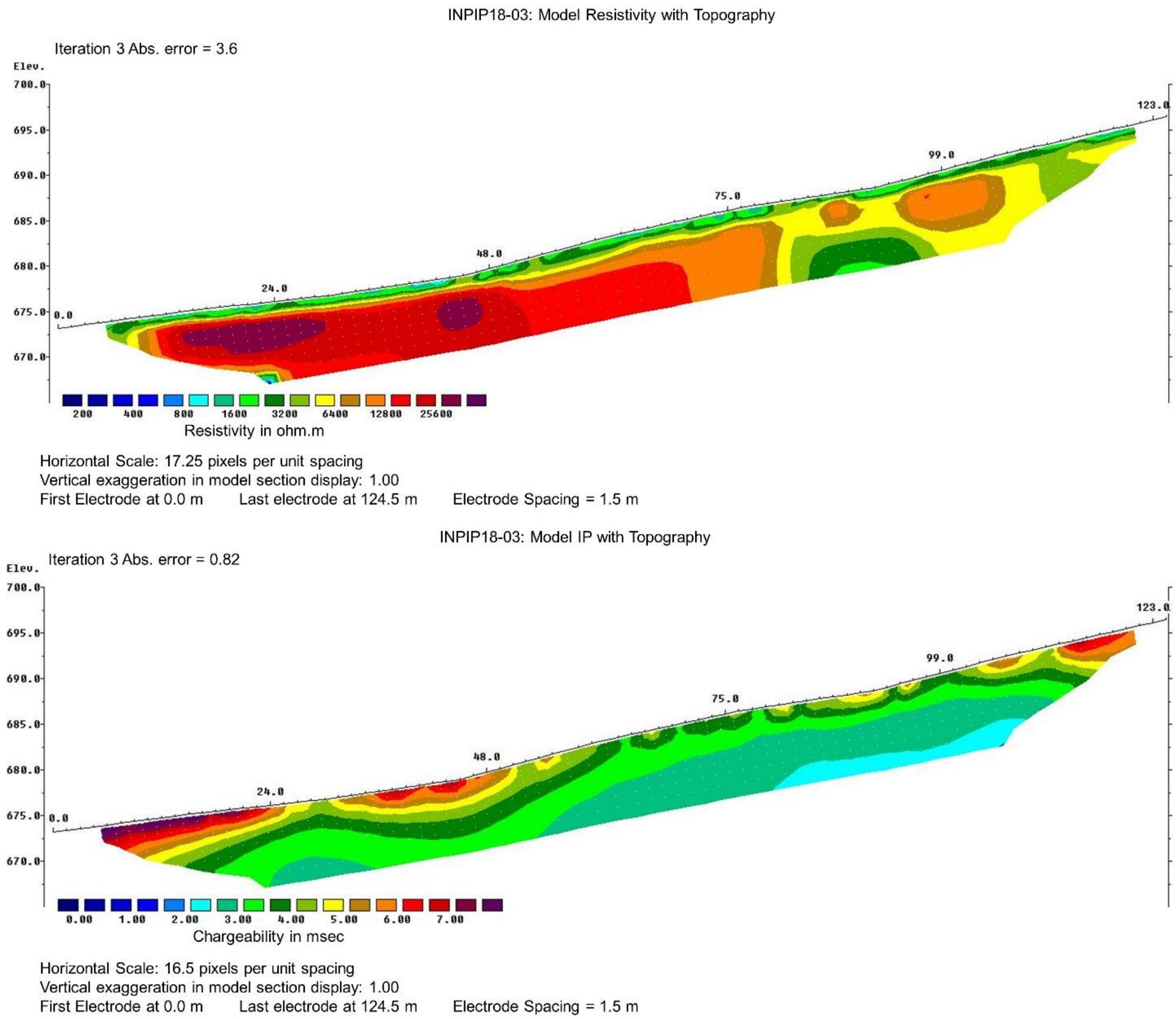

Figure 6: Resistivity and IP profiles of line INPIP18-03

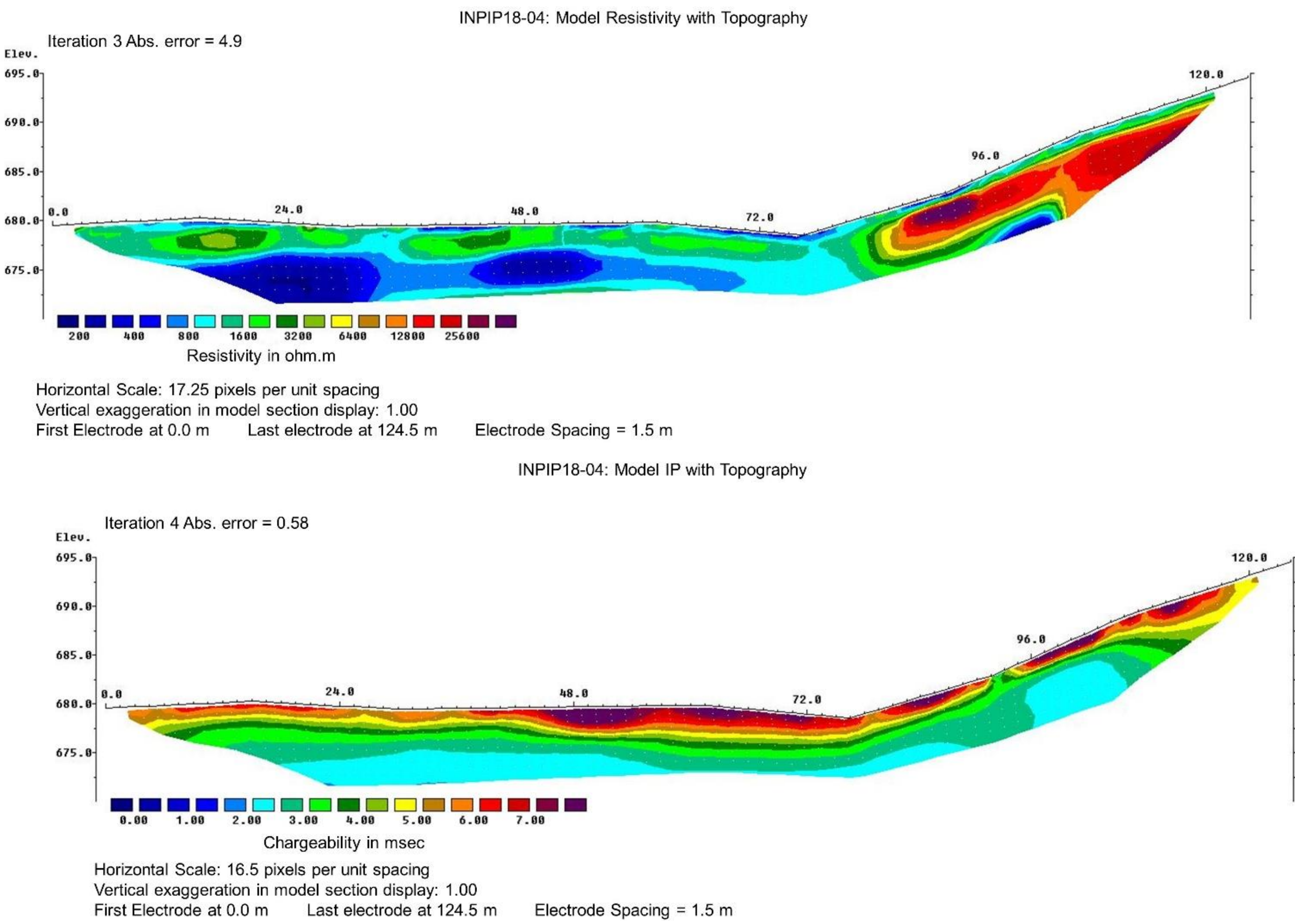

Figure 7: Resistivity and IP profiles of line INPIP18-04

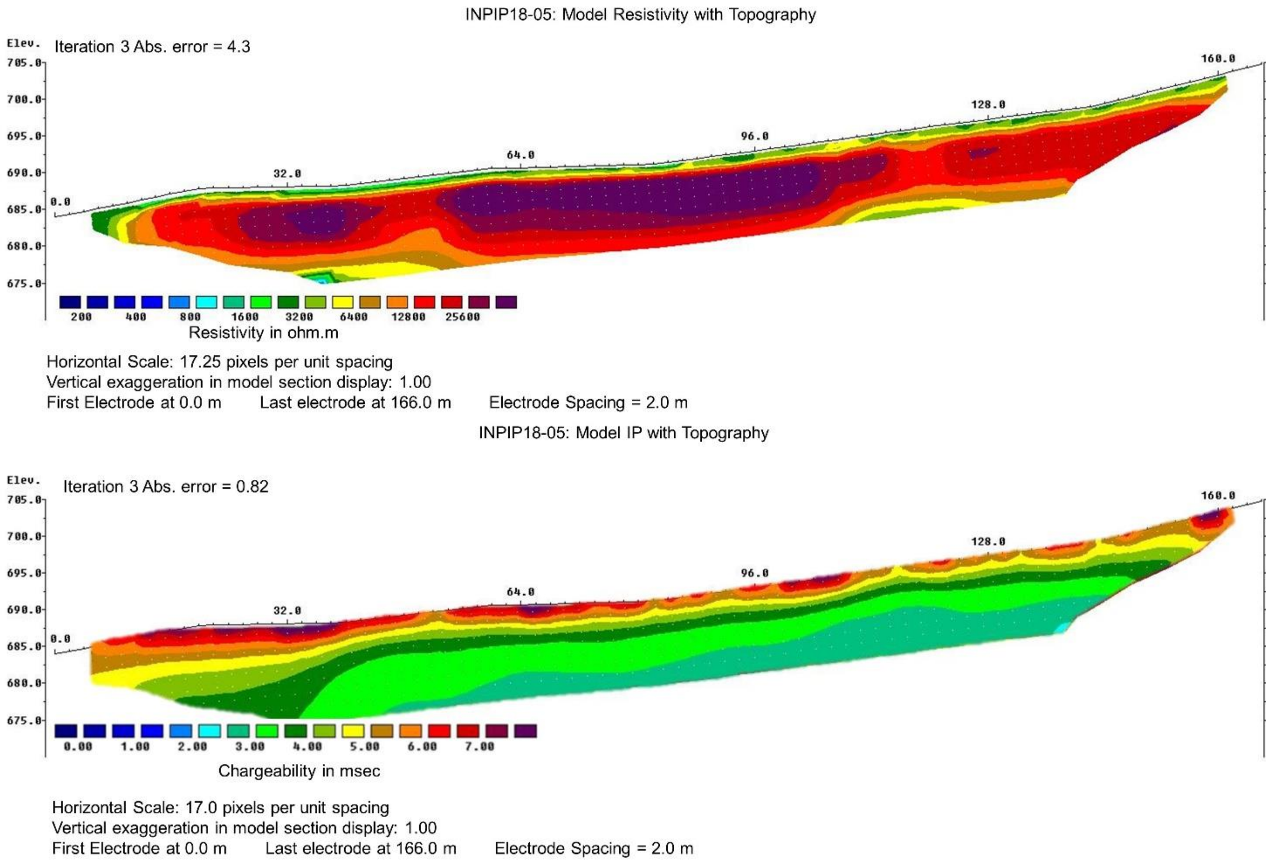

Figure 8: Resistivity and IP profiles of line INPIP-05

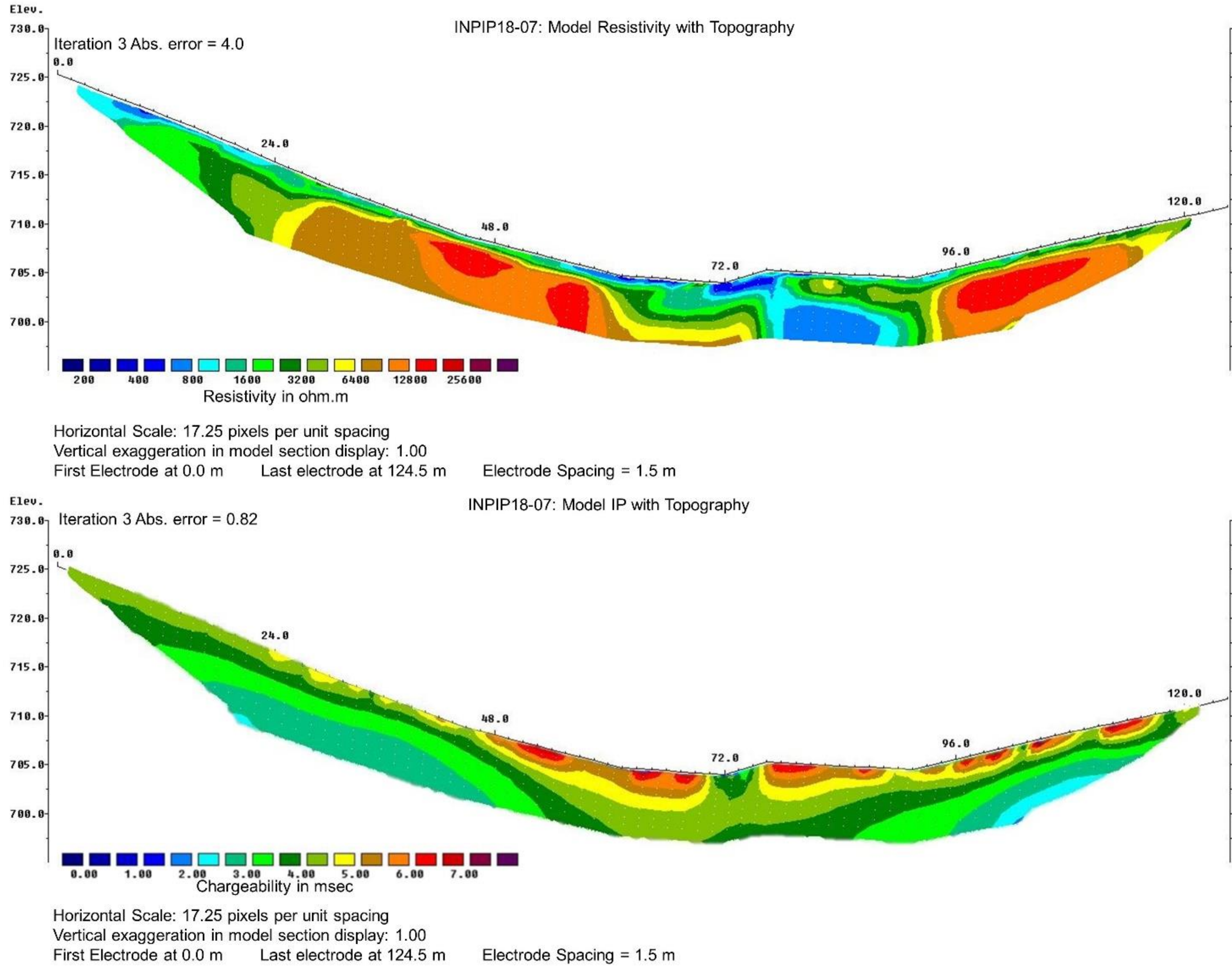

Figure 9: Resistivity and IP profiles of line INPIP18-07

7.0 Magnetic and Ground Penetrating Radar Surveys

7.1 Work Performed

The Magnetic and Ground Penetrating Radar Surveys were conducted on the 11 and 13 to 14 of September 2018. The placer claims under study include INDEPENDENCE 170 to 175. The goal of the GPR survey is to complement the RES/IP surveys for the identification of fluvial deposits and defining important contacts. The MAG survey was implemented 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 GPR consisted of 30 lines, with a total of 2,210 line-m. The traverses for the MAG Survey included 20 lines, with a total of 2,460 line-m (Figure 10).

The MAG survey was completed using the GEM Systems GSM-19T Proton Magnetometer for both the Magnetometer Field unit and the Base Station. Software used for MAG 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.

7.2 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 remining 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 GPR unit and the MAG Unit
- The crew runs the survey with internal GPS recording position and navigates survey lines using internal mag 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.

7.3 MAG 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 Mag data files are projected to XYZ locations in a .tab format. Corrected Total field Mag figures of gridded data are stored as a .jpg and geotiff format.

7.4 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 80MHz 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

7.5 GPR 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.

7.6 Results

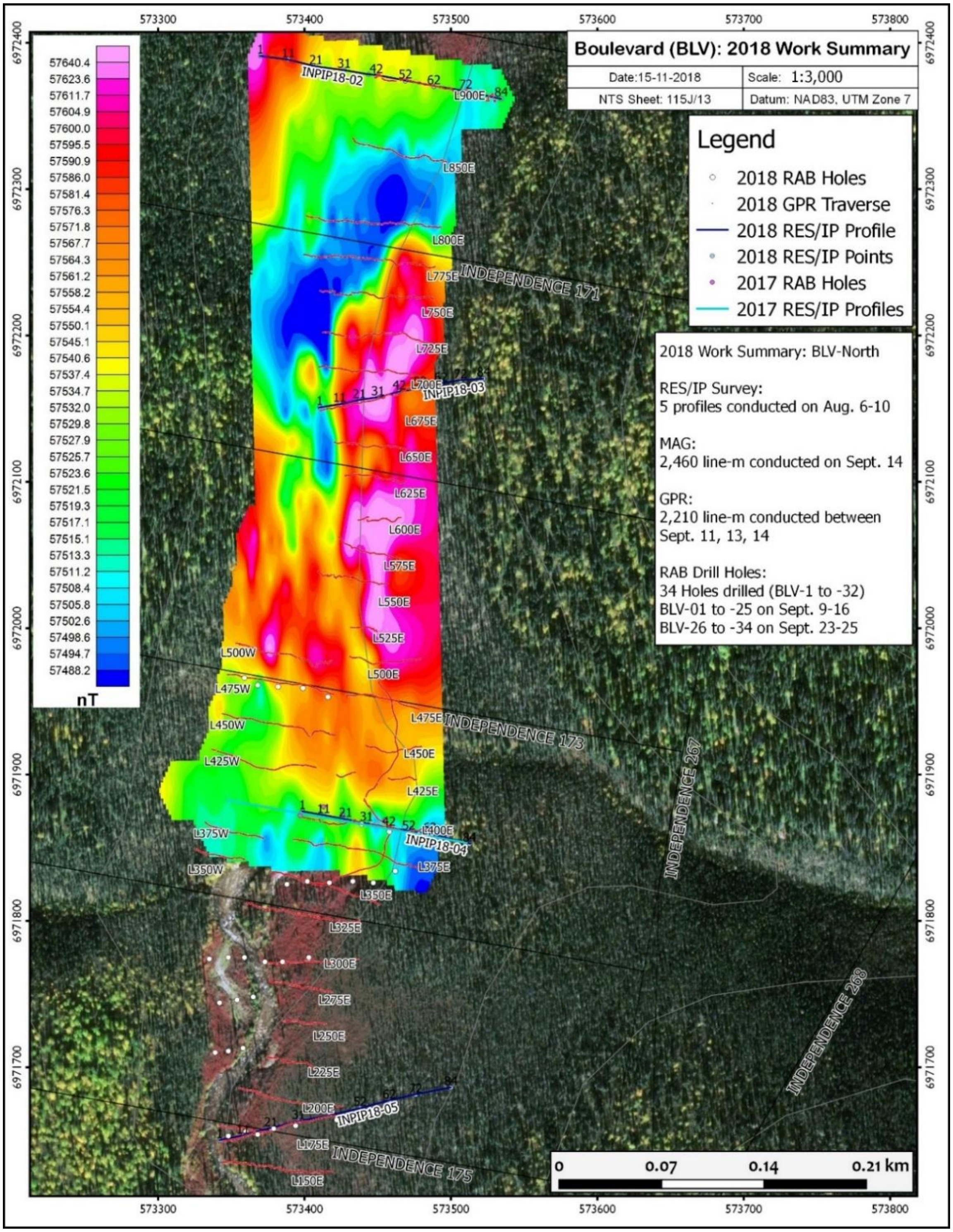

Figure 10: Location of RES/IP and GPR/MAG Lines

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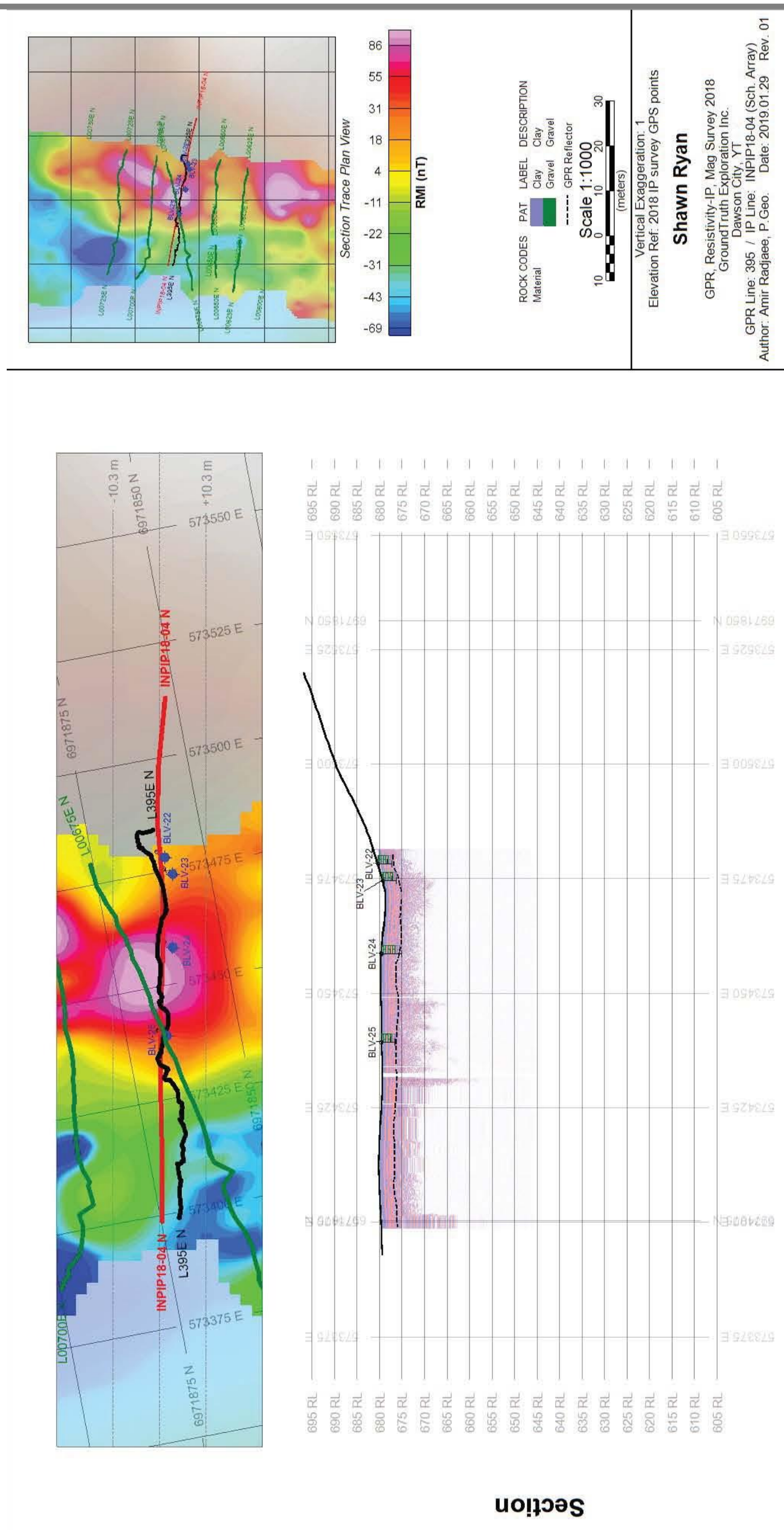

Figure 11: GPR/MAG of L400E (INPIP18-04)

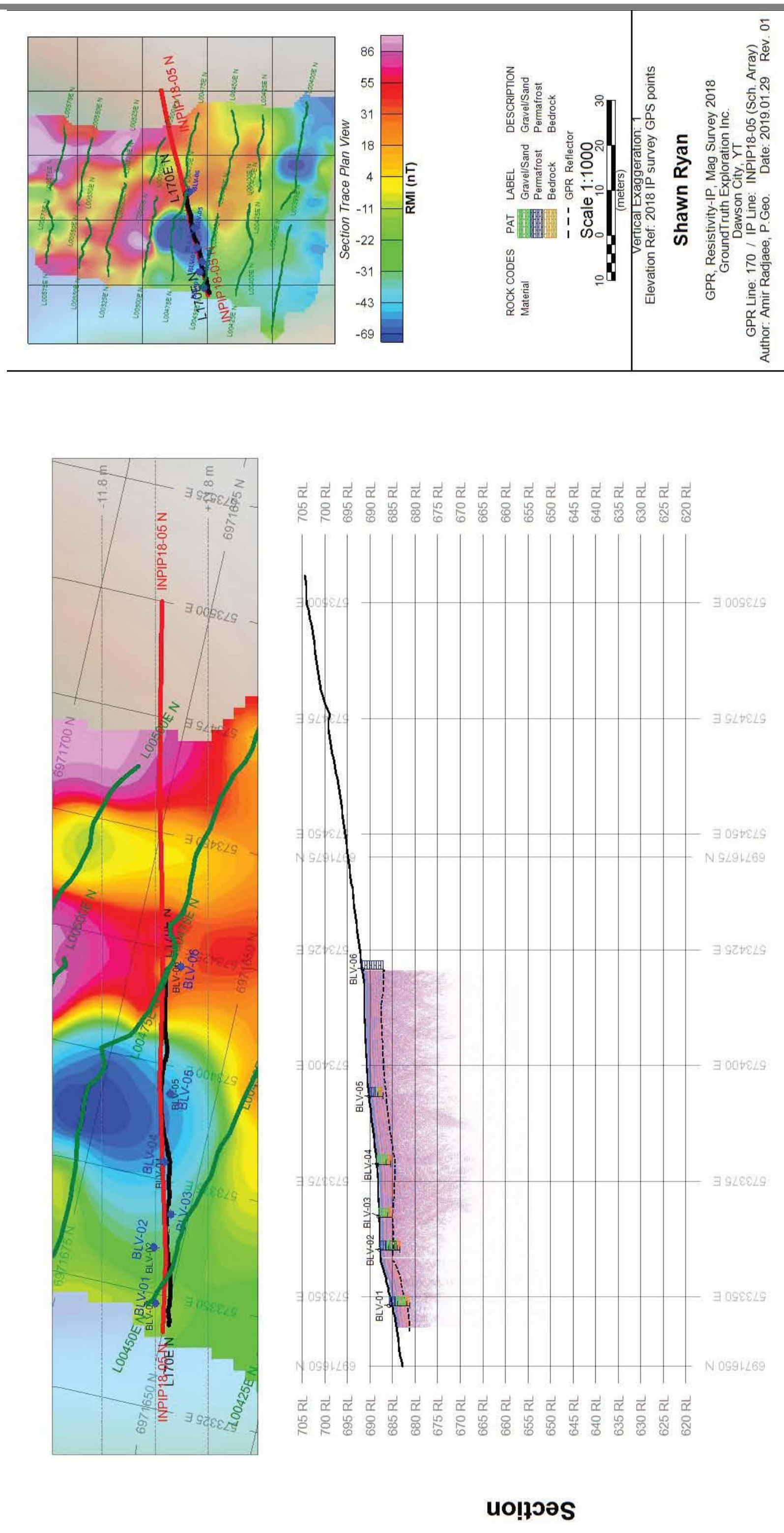

Figure 12: GPR/MAG of L175E (INPIP18-05)

8.0 UAV Drone Imagery

8.1 Work Performed

The UAV drone was flown over claims INDEPENDENCE 149 to 190, 257 to 263 and 267 to 273 on 9 of October 2018. The survey area consisted of 12 km^2. High resolution aerial imagery was used to create orthomosaics, elevation models and aid in the mapping of Boulevard Creek.

8.2 Working Procedure

- A crew of 1 is deployed to run the survey
- A flight plan is created using Emotion software with the desired overlap and resolution, the elevation model is downloaded, and flights are orientated
- A staging area is located, bearing and approach span are set
- The drone is launched and monitored using a laptop to ensure data is being retrieved and no complications arise
- Photos are captured and saved to the camera SD card
- After landing photos are copied to the laptop under a designated flight number

8.3 Data Processing

Flight data is processed using the Emotion software, flight logs are located and images are imported. The geotags are logged and imagery is imported into Adobe Lightroom. Postflight 3D/P4D Pro Mapper is used to build the orthomosaic and elevation models.

8.4 Results

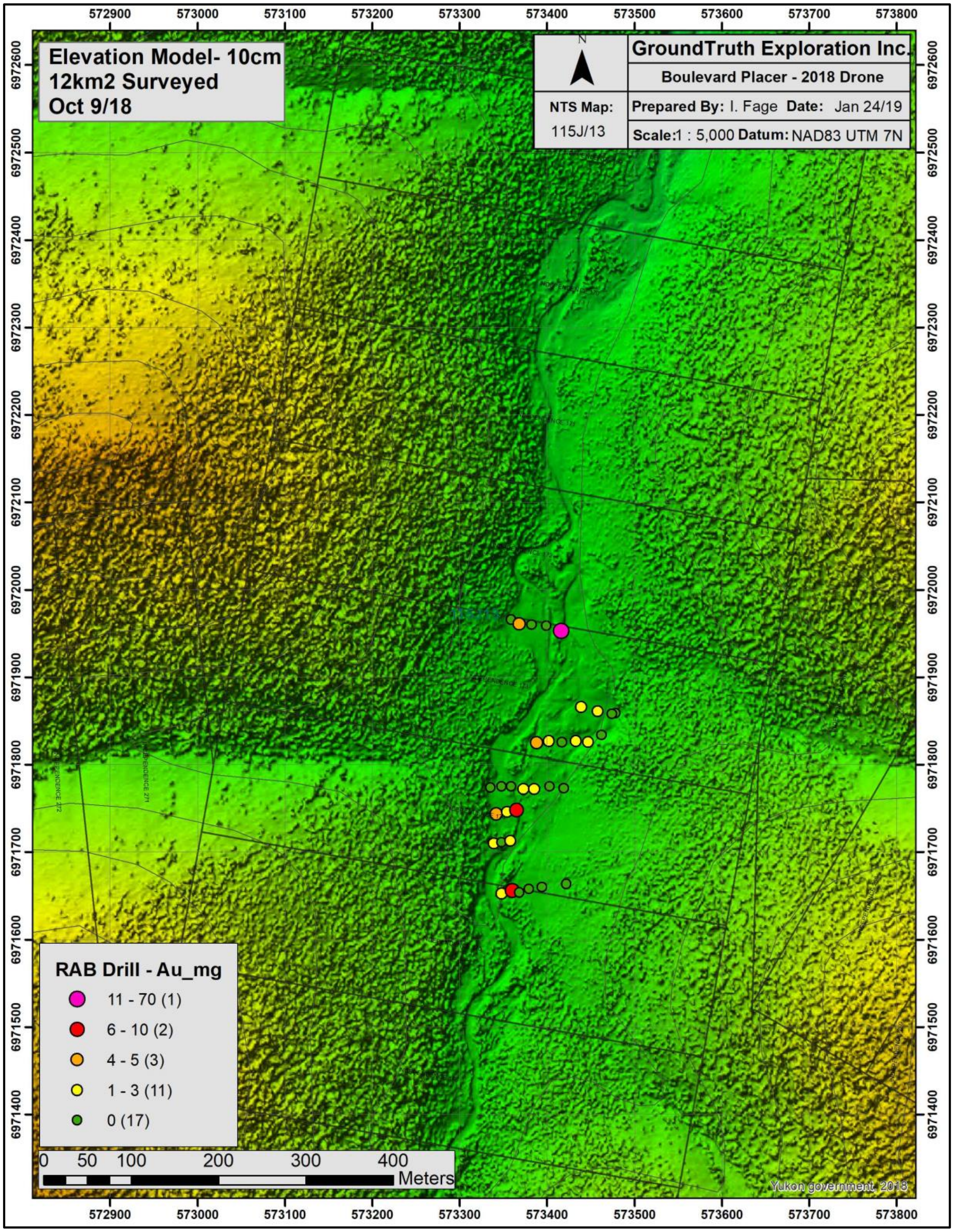

Figure 13: UAV Drone Topography Overview with Gold Occurrences

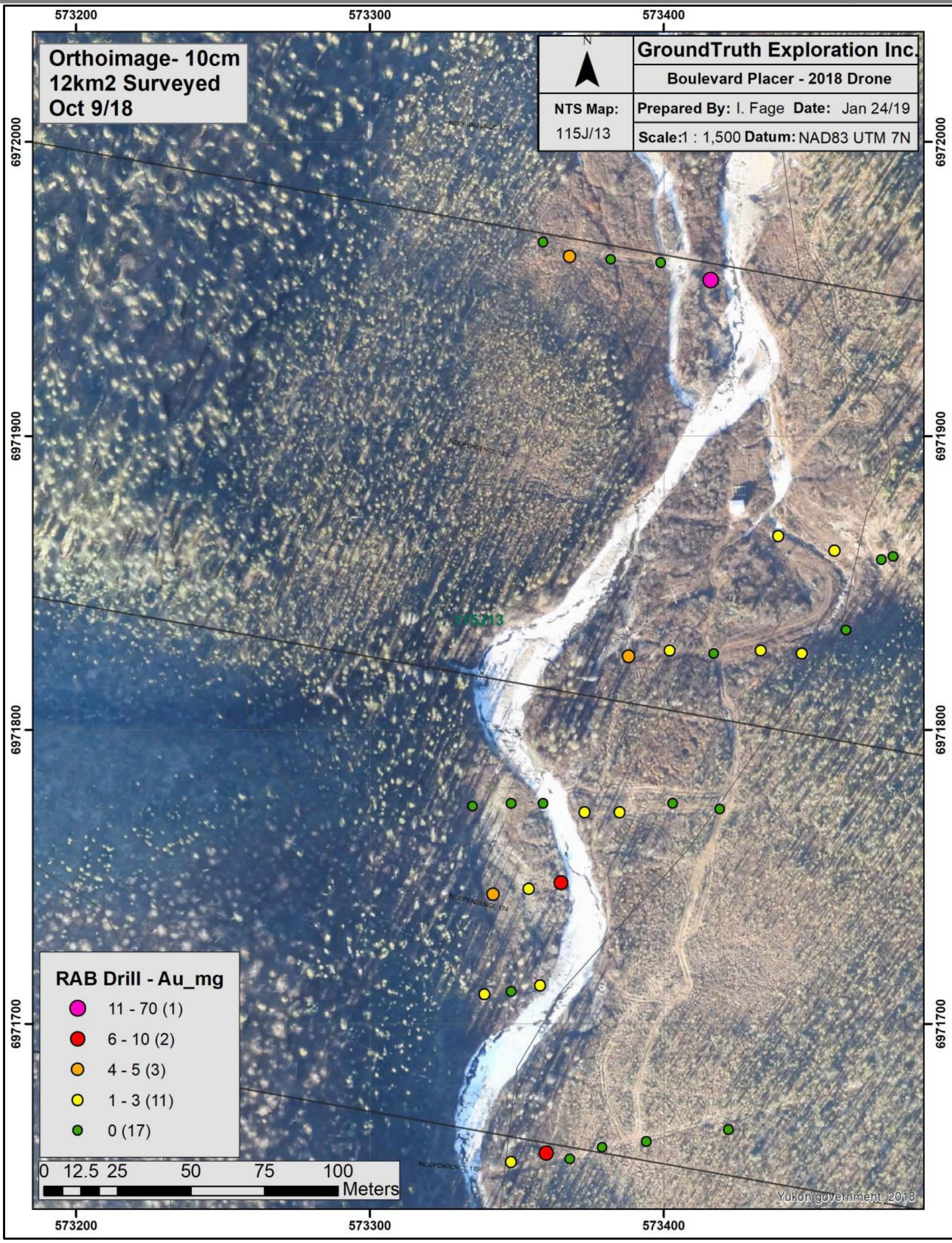

Figure 14: UAV Drone Orthoimage with Gold Occurrences

9.0 Rotary Air Blast (RAB) Drilling

9.1 Work Performed

The 2018 RAB Drill program on Boulevard Creek consisted of thirty-four holes: BLV-01 to BLV-34. A total of 95 m was drilled between the 9 to 16 of September, 2018 and 42.7 m between the 23 to 25 September, 2018.

BLV-01 to BLV-06 were positioned to investigate resistivity targets on traverse INPIP18-05 (Figure 10 and 12). BLV-22 to BLV-25 were positioned to examine resistivity targets on traverse INPIP18-04. The remainder of the holes were drilled to investigate the GPR and MAG data which would be processed after drilling was complete.

9.2 Field Survey Operating Procedures

The GT RAB Drill is a light-weight 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 2400sq inches of track coverage area giving it 1.8 psi 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 a

24” x 36” Ore Bag at the bottom of the cyclone. Drill cuttings were logged and sampled at 2.5 feet intervals. Prospective gravel samples were isolated and processed in a small long tom.

9.3 Drill Results

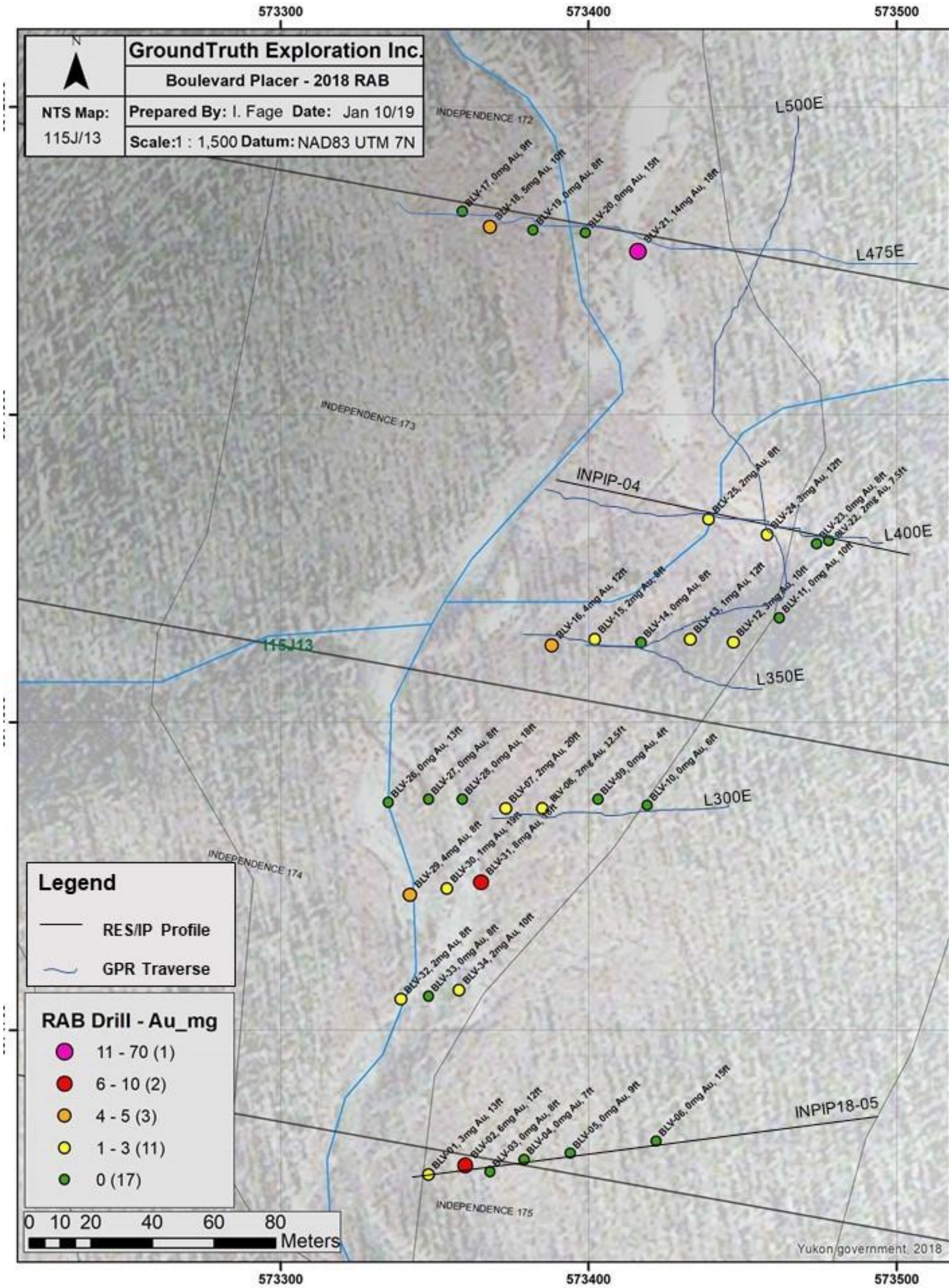

Figure 15: Drill Hole Overview with Au Weight and Bedrock Depth

Figure 16 outlines the location and summary data of the drill holes. The detailed downhole results of each hole are found Appendix B.

HoleID	X	Y	BRDepth_m	TotDepth_m	DrillDate	Au_mg
BLV-01	573348	6971653	3.9624	4.572	09 Sep, 2018	3
BLV-02	573360	6971656	3.6576	4.572	09 Sep, 2018	6
BLV-03	573368	6971654	2.5908	3.048	09 Sep, 2018	< 1
BLV-04	573379	6971658	2.1336	3.048	10 Sep, 2018	< 1
BLV-05	573394	6971660	2.7432	3.048	11 Sep, 2018	0
BLV-06	573422	6971664	n/a	4.572	11 Sep, 2018	< 1
BLV-07	573373	6971772	4.572 (Clay)	6.096	11 Sep, 2018	2
BLV-08	573385	6971772	3.81	4.572	11 Sep, 2018	2
BLV-09	573403	6971775	1.2192	2.286	12 Sep, 2018	0
BLV-10	573419	6971773	1.8288	3.048	12 Sep, 2018	0
BLV-11	573462	6971834	2.286 (Clay)	3.048	12 Sep, 2018	< 1
BLV-12	573447	6971826	1.542 (Clay)	3.048	12 Sep, 2018	3
BLV-13	573433	6971827	3.81 (Clay)	4.572	13 Sep, 2018	1
BLV-14	573417	6971826	2.286	3.048	13 Sep, 2018	< 1
BLV-15	573402	6971827	2.286	3.048	13 Sep, 2018	2
BLV-16	573388	6971825	3.81 (Clay)	4.572	13 Sep, 2018	4
BLV-17	573359	6971966	2.7432	3.048	14 Sep, 2018	0
BLV-18	573368	6971961	3.048 (Clay)	4.267	14 Sep, 2018	5
BLV-19	573382	6971960	2.286	3.048	14 Sep, 2018	< 1
BLV-20	573399	6971959	4.572 (Clay)	4.572	15 Sep, 2018	< 1
BLV-21	573416	6971953	5.334 (Clay)	6.096	15 Sep, 2018	14
BLV-22	573478	6971859	2.286 (Clay)	3.048	15 Sep, 2018	< 1
BLV-23	573474	6971858	2.286 (Clay)	3.048	15 Sep, 2018	< 1
BLV-24	573458	6971861	3.81 (Clay)	4.572	16 Sep, 2018	3
BLV-25	573439	6971866	2.286 (Clay)	3.048	16 Sep, 2018	2
BLV-26	573335	6971774	3.9624	4.572	23 Sep, 2018	0
BLV-27	573348	6971775	2.286	4.572	24 Sep, 2018	0
BLV-28	573359	6971775	5.334 (Clay)	6.096	24 Sep, 2018	0
BLV-29	573342	6971744	2.5908	3.048	24 Sep, 2018	4
BLV-30	573354	6971746	5.7912	6.096	24 Sep, 2018	1
BLV-31	573365	6971748	5.334	6.096	24 Sep, 2018	8
BLV-32	573339	6971710	2.286	3.048	25 Sep, 2018	2
BLV-33	573348	6971711	2.286	4.572	25 Sep, 2018	< 1
BLV-34	573358	6971713	2.8956	4.572	25 Sep, 2018	2

Figure 16: Summary Statistics for Drill Holes

10.0 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 17). 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%.

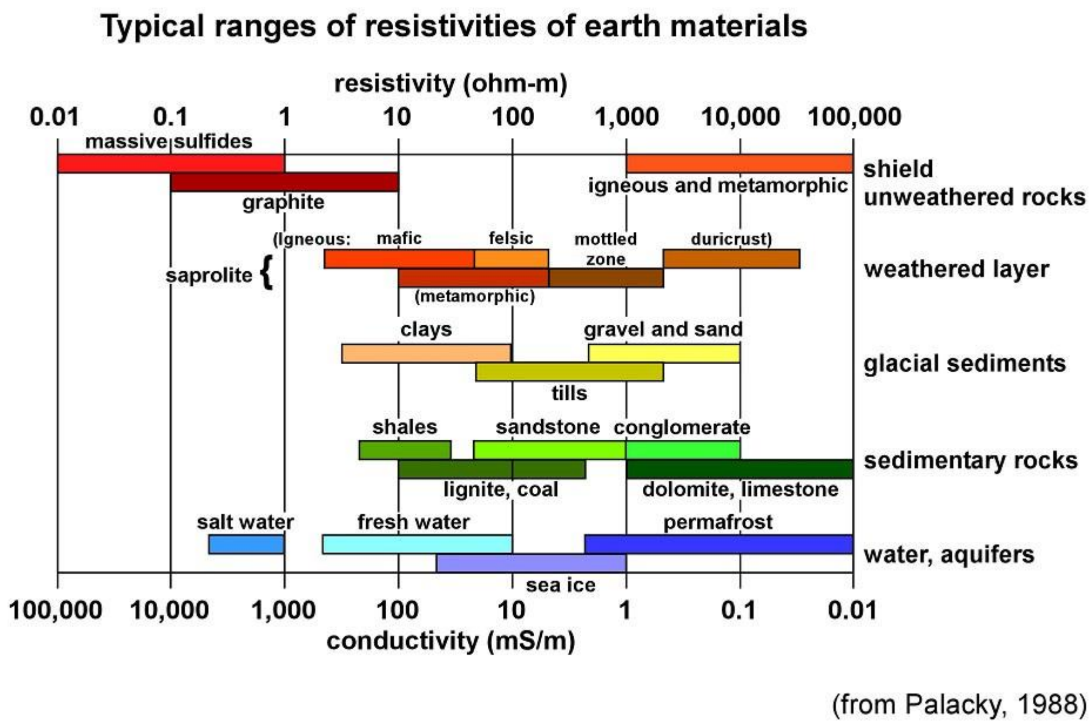

Figure 17: Ranges in resistivity of Various Earth Material

To complement the Resistivity and Induced Polarization surveys a Ground Penetrating Radar (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 detection of fine and coarse-grained fluvial deposits correlated well with the geophysical surveys. All the holes drilled on INPIP18-04 terminated in a saturated clay which can be seen clearly on the resistivity and GPR profiles. The gravels found on this drill line were retaining water due to the clay base, hence the low resistivity signature of the gravels (Figure 18). The gold found on this profile consisted of specks and flour sized particles. There are three targets to be investigated further that are proposed to have a higher grade of gold where the bedrock lows are interpreted to be. On INPIP18-05 all holes, except for BLV-06, terminated in bedrock and a prominent gravel layer can be detected with a moderate resistivity (Figure 20).

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 the high magnetic response and the measured weights of the magnetic minerals in the drill holes. 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 residual magnetic intensity correlates with all drill holes on INPIP18-04. The drill holes located on INPIP18-05 show a range, from high to low residual magnetic intensity. Not all high magnetic intensities were shown to have a high magnetic mineral weight, and drill holes with low magnetic mineral weights showed a high magnetic intensity. The area of high-grade gold deposition, as seen in BLV-01 and BLV-02, depicts a moderate magnetic response. In theory, the higher magnetic response should correlate with the higher-grade gold deposits and show the direction the paleochannel flows. This brings into question if the actual paleochannel with high-grade gold deposition will depict a moderate magnetic response rather than a high magnetic response.

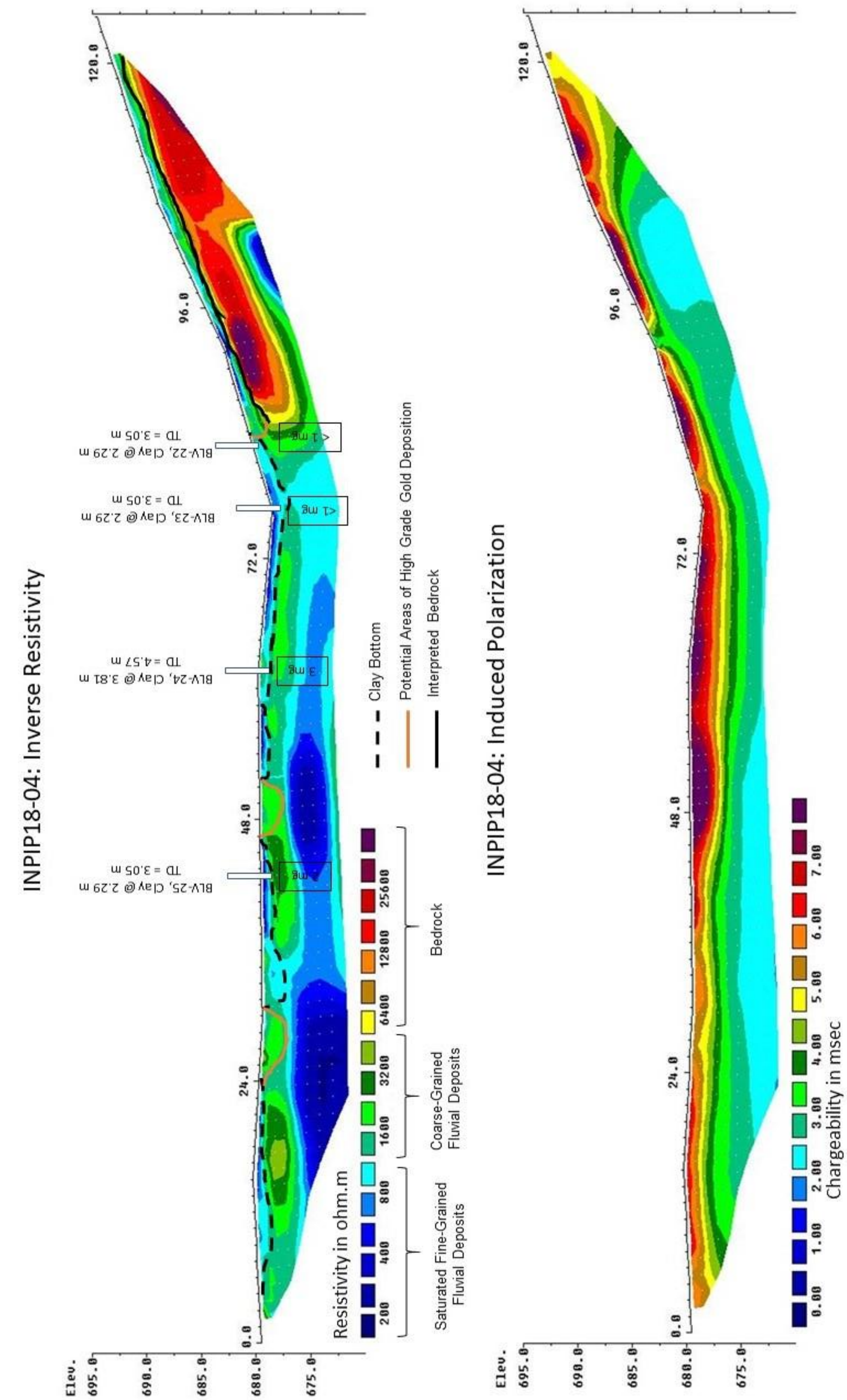

Figure 18: Resistivity of Line INPIP18-04 with Drill Results

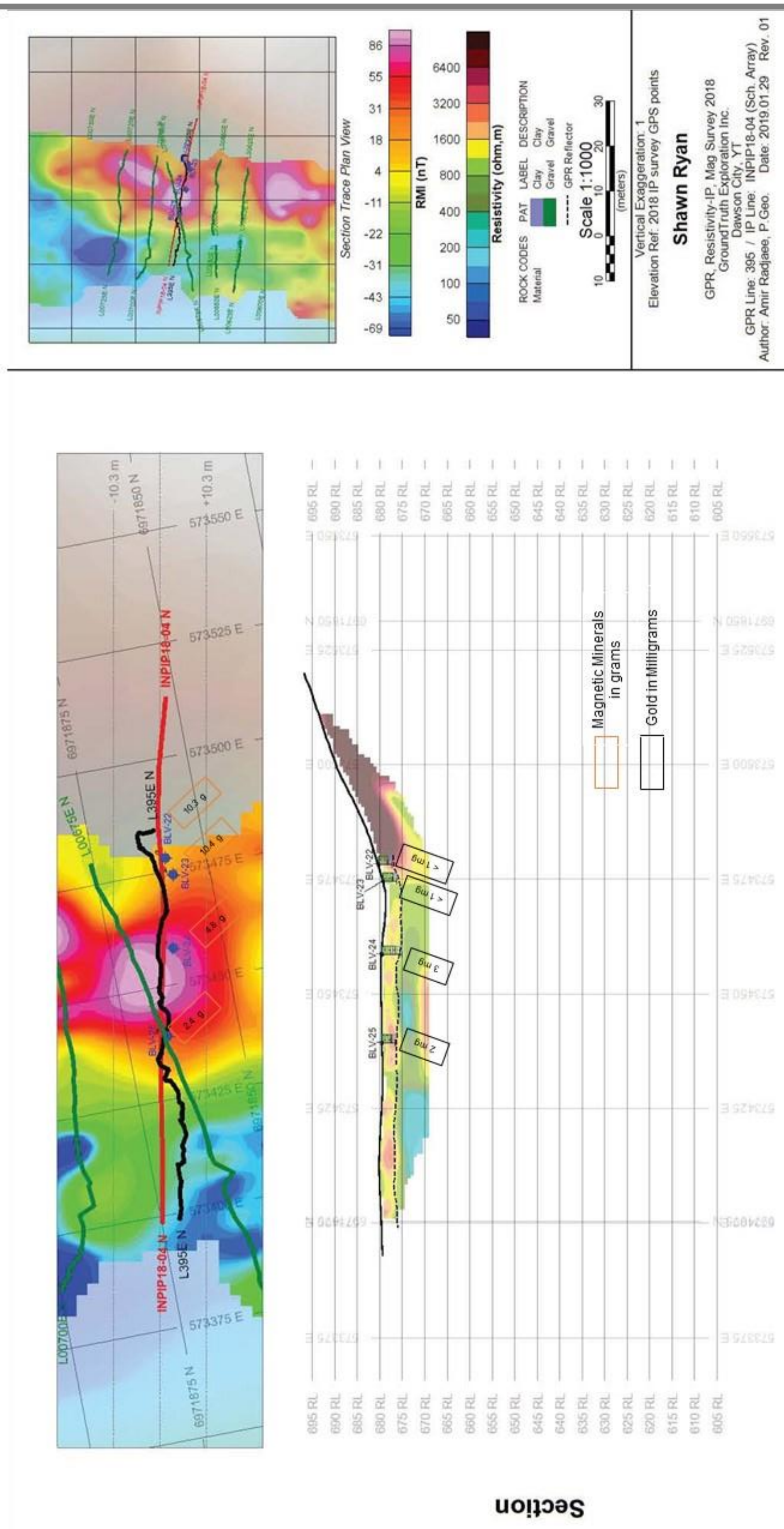

Figure 19: Resistivity, GPR and MAG of INPIP18-04 with Drill Results

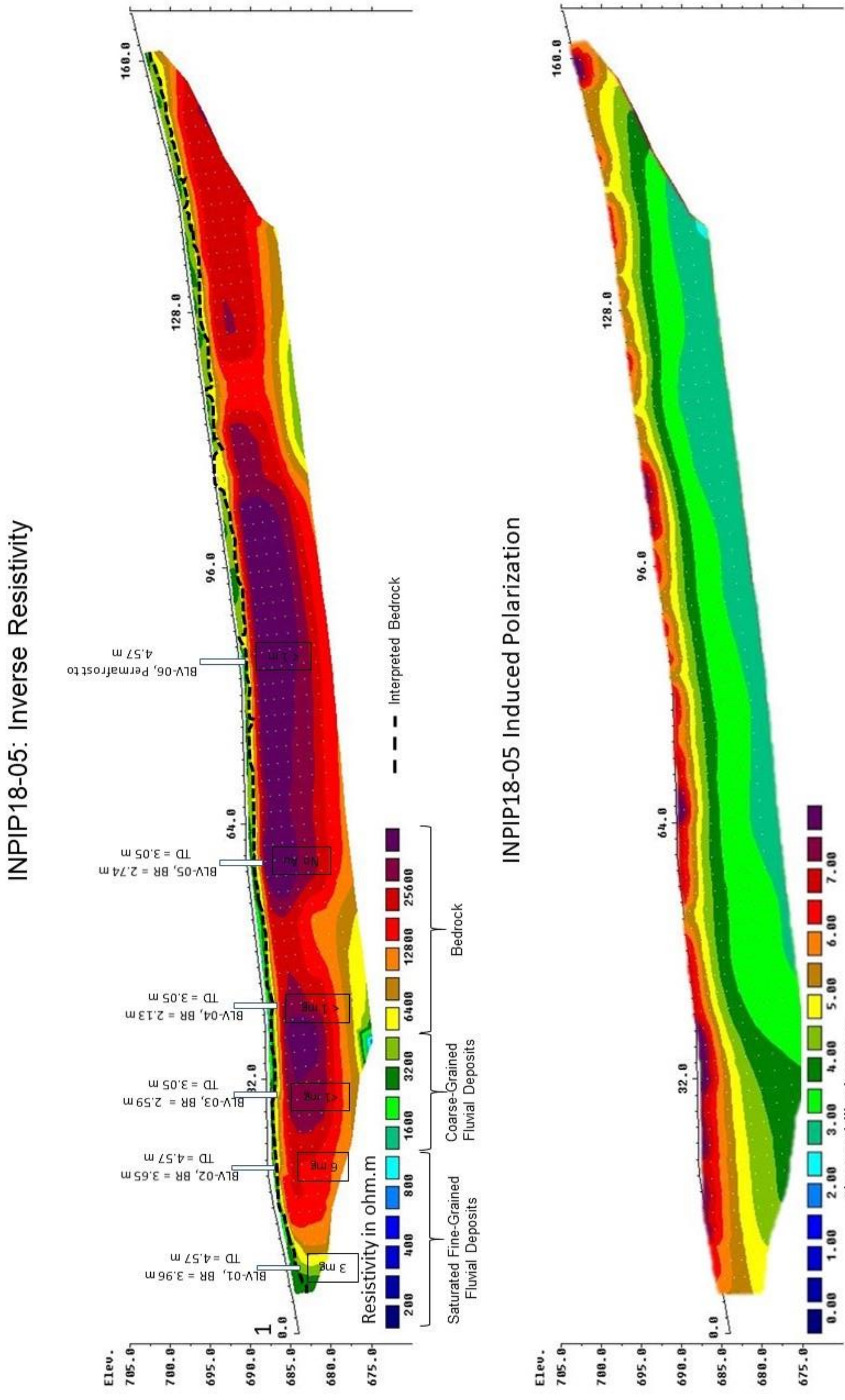

Figure 20: Resistivity of Line INPIP18-05 with Drill Results

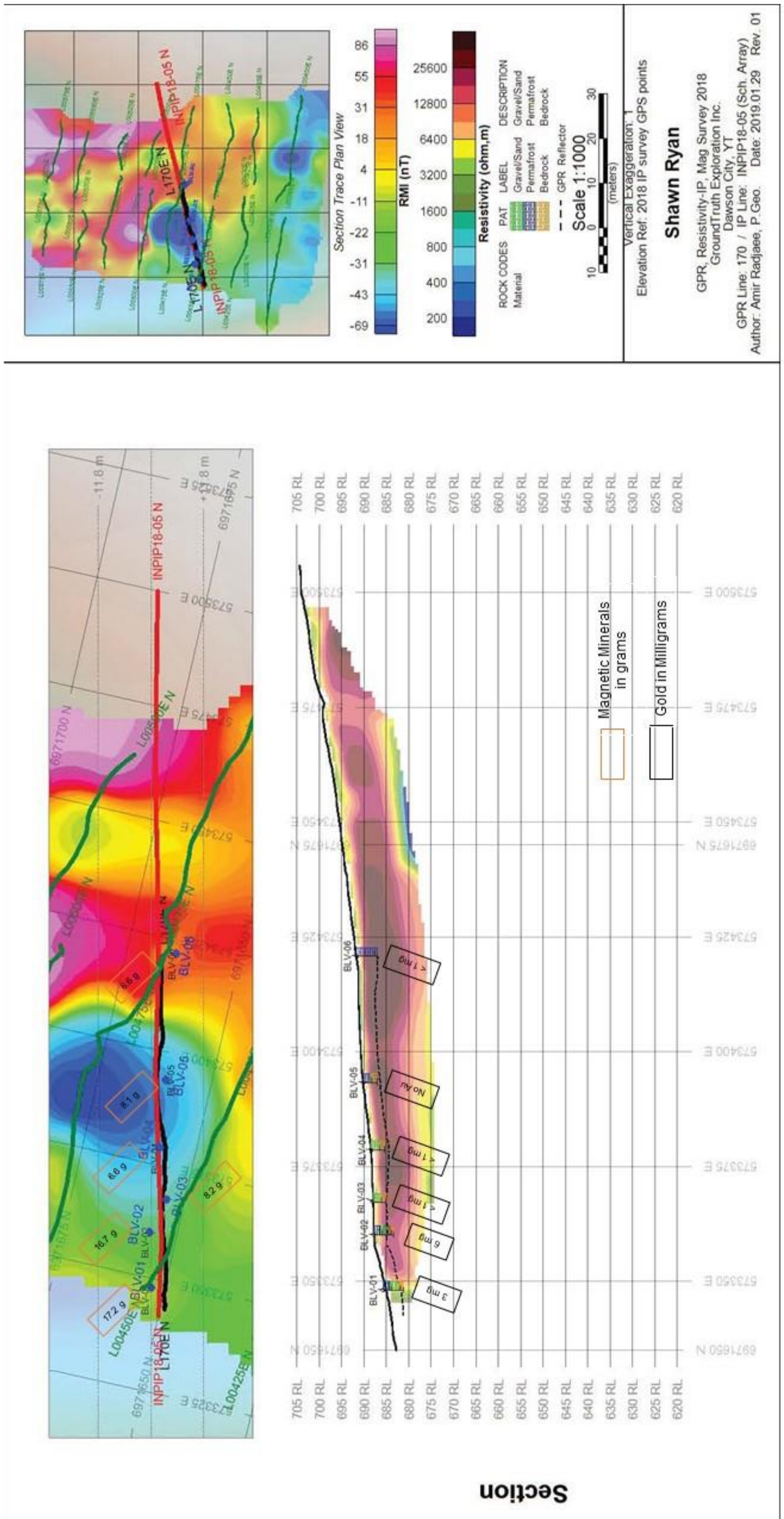

Figure 21: Resistivity, GPR and MAG of INPIP18-05 with Drill Results

11.0 Recommendations

The drilling results, completed on Boulevard Creek, have indicated, with certainty, that fine-grained deposits, coarse grain deposits and bedrock depth can all be distinguished using the combined geophysical surveys. Shafting or further drilling is required to confirm and expand the interpretation set forth.

The remaining Magnetic and Ground Penetrating Radar lines should be processed and interpreted 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 BLV-02 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.

12.0 Statement of Expenditures

Independence Group GW01318: Expenditures

Work Performed: August 6 - 10, 11 - 14, 2018 & September 9 - 16 & 23 - 25, 2018			
Invoice #: GT-BLV2018-01			
GroundTruth DC Resistivity-IP Survey: August 6 - 10/2018			
GroundTruth RES-IP Survey	5 proflies surveyed w/ AGI superstring & Crew of 5 w/ camp	5 days @ $3,615/d	18,075.00
GroundTruth MAG/GPR Survey: September 11 - 14, 2018			
GroundTruth MAG/GPR Survey:	30 lines surveyed with Mala 80 MHz w/ GX Controller and software	4 days @ $3,955/d	15,820.00
	& GEM 19T Proton Magentometer crew of 5 w/camp		
GroundTruth UVA Drone Survey: October 9, 2018			
GroundTruth UVA Drone Survey	Crew of 1 w/camp	1 day @ $2,422/d	2,422.00
GroundTruth Drilling - Rotary Air Blast Drilling 5.0" Cased Holes: September 9 - 16 & 23- 25, 2018			
GroundTruth Drilling	(34 holes @ 451.5') 5" holes to bedrock/clay with tracked RAB, Crew of 5 w/ camp	11 Shifts @ 4,827/shift incl. sluicing	53,100.00
Helicopter & Fixed Wing Support:			
Heli Support	Astar B2/B3	15 hours	32,040.00
Fixed Wing Support	Tintina Air	4 hours	4,567.50
Fixed Wing Support	Great River Air	12 hours	10,886.40
		Total Expenditures for Assessment	136,910.90
		Renewal Years Available	684.50
		Renewal Years Used (at $200/claim/year)	672.5

13.0 Statement of Qualification

I, Allison Feduk with a business address in Dawson City, Yukon, and residential address in Carlyle, Saskatchewan, do herby certify that:

1. I graduated from the University of Regina in the fall of 2011 with a Bachelor of Science in Geology.

2. From 2012 to present I have been actively engaged in mining and mineral exploration in Alberta and the Yukon Territory.

3. I have been an employee of GroundTruth Exploration Inc. since July of 2018.

4. I am not aware of any material fact or material change with respect to the subject matter of this report, the omission to disclose which makes this report misleading.

Dated this 29th day of September, 2019.

Respectfully submitted,

Allison Feduk

14.0 References

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

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Ryan, J. J., Zagorevski, A., Williams, S. P., Roots, C., Ciolkiewicz, W., Hayward, N., and Chapman, J. B., 2013. Geology of Stevenson Ridge (northeastern part), Yukon; Geological Survey of Canada, Canadian Geoscience Map 116 and 117.

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

Appendix A: Drill Results

Hole_ID	X	Y	TD_ft	BR_ft	TD_m	BR_m	Au_mg
BLV-01	573348	6971653	15	13	4.572	3.9624	3
BLV-02	573360	6971656	15	12	4.572	3.6576	6
BLV-03	573368	6971654	10	8.5	3.048	2.5908	< 1
BLV-04	573379	6971658	10	7	3.048	2.1336	< 1
BLV-05	573394	6971660	10	9	3.048	2.7432	0
BLV-06	573422	6971664	15	All Permafrost	4.572	All Permafrost	< 1
BLV-07	573373	6971772	20	Gumbo @ 15'	6.096	Gumbo @ 4.572	2
BLV-08	573385	6971772	15	12.5	4.572	3.81	2
BLV-09	573403	6971775	7.5	4	2.286	1.2192	0
BLV-10	573419	6971773	10	6	3.048	1.8288	< 1
BLV-11	573462	6971834	10	Clay @ 7.5	3.048	Clay @ 2.286	< 1
BLV-12	573447	6971826	10	Clay @ 5	3.048	Clay @ 1.524	3
BLV-13	573433	6971827	15	Gumbo @ 12.5	4.572	Gumbo @ 3.81	1
BLV-14	573417	6971826	10	7.5	3.048	2.286	< 1
BLV-15	573402	6971827	10	7.5	3.048	2.286	2
BLV-16	573388	6971825	15	Clay @ 12.5	4.572	Clay @ 3.81	4
BLV-17	573359	6971966	10	9	3.048	2.7432	0
BLV-18	573368	6971961	14	Clay @ 10	4.2672	Clay @ 3.048	5
BLV-19	573382	6971960	10	7.5	3.048	2.286	< 1
BLV-20	573399	6971959	15	Clay @ 15'	4.572	Clay @ 4.572	< 1
BLV-21	573416	6971953	20	Clay @17.5	6.096	Clay @ 5.334	14
BLV-22	573478	6971859	10	Clay @ 7.5	3.048	Clay @ 2.286	< 1
BLV-23	573474	6971858	10	Clay @ 7.5	3.048	Clay @ 2.286	< 1
BLV-24	573458	6971861	15	Clay @ 12.5	4.572	Clay @ 3.81	3
BLV-25	573439	6971866	10	Clay @ 7.5	3.048	Clay @ 2.286	2
BLV-26	573335	6971774	15	13	4.572	3.9624	0
BLV-27	573348	6971775	15	7.5	4.572	2.286	0
BLV-28	573359	6971775	20	Clay @ 17.5	6.096	Clay @ 5.334	0
BLV-29	573342	6971744	10	8.5	3.048	2.5908	4
BLV-30	573354	6971746	20	19	6.096	5.7912	1
BLV-31	573365	6971748	20	17.5	6.096	5.334	8
BLV-32	573339	6971710	10	7.5	3.048	2.286	2
BLV-33	573348	6971711	15	7.5	4.572	2.286	< 1
BLV-34	573358	6971713	15	9.5	4.572	2.8956	2

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
BLV-01	0	5	0	1.524	Permafrost / Sand	D./L. Brown	Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Boulders / Mix		
	7.5	10	2.286	3.048	Sand / Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Sand / Gravel	L. Brown	Mix		
	12.5	15	3.81	4.572	Bedrock	L. Grey	Plutonic-seds (Weathered)	3	17.205
BLV-02	0	5	0	1.524	Permafrost / Sand	D./L. Brown	Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Gravel	L. Grey	Mix		
	10	12.5	3.048	3.81	Gravel	L. Grey	Mix		
	12.5	15	3.81	4.572	Bedrock	L. Grey	Plutonic-seds	6	16.709
BLV-03	0	5	0	1.524	Sand / Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Plutonic-seds	< 1	8.209
BLV-04	0	5	0	1.524	Sand / Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Plutonic-seds	< 1	6.722
BLV-05	0	5	0	1.524	Permafrost	D. Brown	Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Plutonic-seds	NG	8.123
BLV-06	0	5	0	1.524	Permafrost	D. Brown	Mix		
	5	7.5	1.524	2.286	Permafrost	D. Brown	Mix		
	7.5	10	2.286	3.048	Permafrost	D. Brown	Mix		
	10	12.5	3.048	3.81	Permafrost	D. Brown	Mix		
	12.5	15	3.81	4.572	Permafrost	D. Brown	Mix	< 1	6.601
BLV-07	0	5	0	1.524	Organics	Black	Muskeg/Mix		
	5	7.5	1.524	2.286	Organics	Black	Muskeg/Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Clay / Gravel	L. Brown	Clay/Mix		
	12.5	15	3.81	4.572	Clay / Gravel	L. Brown	Clay/Mix		
	15	17.5	4.572	5.334	Clay	L. Brown	Clay		
	17.5	20	5.334	6.096	Clay	L. Brown	Clay	2	4.761
BLV-08	0	5	0	1.524	Organics / Sand / Gravel	Black / L. Brown	Muskeg/Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Sand / Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Sand / Gravel	L. Brown	Mix		
	12.5	15	3.81	4.572	Bedrock	L. Grey	Plutonic-seds	2	17.844
BLV-09	0	5	0	1.524	Sand / Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Bedrock	L. Grey	Plutonic-seds	NG	7.811
BLV-10	0	5	0	1.524	Organics / Sand / Gravel	Black / L. Brown	Muskeg/Mix		
	5	7.5	1.524	2.286	Bedrock	L. Grey	Plutonic-seds		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Plutonic-seds	NG	10.516

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
BLV-11	0	5	0	1.524	Gravel	L. Brown	Boulders / Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Clay	L. Brown	Clay	< 1	8.271
BLV-12	0	5	0	1.524	Organics / Sand	Black / L. Brown	Muskeg/Mix		
	5	7.5	1.524	2.286	Clay	L. Brown	Clay		
	7.5	10	2.286	3.048	Clay	L. Brown	Clay	3	5.578
BLV-13	0	5	0	1.524	Organics / Sand / Gravel	Black / L. Brown	Muskeg/ Boulders / Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Sand / Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Clay	L. Brown	Clay		
	12.5	15	3.81	4.572	Clay	L. Brown	Clay	1	12.618
BLV-14	0	5	0	1.524	Organics / Sand / Gravel	L. Brown	Muskeg/Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Plutonic-seds	< 1	9.49
BLV-15	0	5	0	1.524	Sand / Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Sand / Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Plutonic-seds	2	14.871
BLV-16	0	5	0	1.524	Organics / Sand / Gravel	L. Brown	Muskeg/ Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Clay	L. Brown	Clay		
	12.5	15	3.81	4.572	Clay	L. Brown	Clay	4	11.489
BLV-17	0	5	0	1.524	Organics / sand / gravel	L. Brown	Muskeg/Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. grey	Plutonic-seds	NG	15.41
BLV-18	0	5	0	1.524	Organics / Sand/ Gravel	L. Brown	Muskeg/Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	MIx		
	7.5	10	2.286	3.048	Clay / Sand	L. Brown	Clay/Mix		
	10	12.5	3.048	3.81	Clay / Sand	L. Brown	Clay/Mix		
	12.5	14	3.81	4.2672	Clay	L. Brown	Clay	5	7.543
BLV-19	0	5	0	1.524	Organics	Black	Poor recovery		
	5	7.5	1.524	2.286	Clay / Sand	L. Brown	Poor Recovery		
	7.5	10	2.286	3.048	Bedrock	L. Grey	Plutonic-seds	< 1	6.55
BLV-20	0	5	0	1.524	Organics	Black	Poor Recovery		
	5	7.5	1.524	2.286	Clay / Sand	L. Brown	Clay/Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Gravel	L. Brown	Mix		
	12.5	15	3.81	4.572	Gravel	L. Brown	Voids/Mix	< 1	10.36

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
BLV-21	0	5	0	1.524	Organics / Gravel	L. Brown	Muskeg/ 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	Gravel	L. Brown	Mix		
	12.5	15	3.81	4.572	Clay	L. Brown	Clay		
	15	17.5	4.572	5.334	Clay	L. Brown	Clay		
	17.5	20	5.334	6.096	Clay	L. Brown	Clay	14	21.498
BLV-22	0	5	0	1.524	Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Clay	L. Brown	Clay	< 1	10.326
BLV-23	0	5	0	1.524	Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Clay	L. Brown	Clay	< 1	10.834
BLV-24	0	5	0	1.524	Gravel	L. Brown	Boulders / Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	MIx		
	10	12.5	3.048	3.81	Clay	L. Brown	Clay		
	12.5	15	3.81	4.572	Clay	L. Brown	Clay	3	4.751
BLV-25	0	5	0	1.524	Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Clay	L. Brown	Clay	2	2.396
BLV-26	0	5	0	1.524	Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Sand / Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Sand / Gravel	L. Brown	Mix		
	12.5	15	3.81	4.572	Bedrock	L. Grey	Plutonic-seds	NG	5.712
BLV-27	0	5	0	1.524	Gravel	L. Brown	Boulders /Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Boulders /MIx		
	7.5	10	2.286	3.048	Sand / Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Sand / Gravel	L. Brown	MIx		
	12.5	15	3.81	4.572	Bedrock	L. Grey	Plutonic-seds	NG	5.029
BLV-28	0	5	0	1.524	Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Gravel	L. Brown	MIx		
	12.5	15	3.81	4.572	Gravel / clay	L. Brown	Clay/Mix		
	15	17.5	4.572	5.334	Gravel / Clay	L. Brown	Clay/Mix		
	17.5	20	5.334	6.096	Clay	L. Brown	Clay	NG	2.671
BLV-29	0	5	0	1.524	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. grey	Plutonic-seds	4	15.492

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Au_mg	Magnetic Minerals_g
BLV-30	0	5	0	1.524	Gravel	L. Brown	Boulders /Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix/ Weathered		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix/Weathered		
	10	12.5	3.048	3.81	Gravel	L. Brown	Mix/Weathered		
	12.5	15	3.81	4.572	Gravel	L. Brown	Mix/Weathered		
	15	17.5	4.572	5.334	Gravel	L. Brown	Mix/Weathered		
	17.5	20	5.334	6.096	Bedrock	L. grey	Plutonic-seds	1	7.771
BLV-31	0	5	0	1.524	Gravel / Sand	L. Brown	Boulders /Mix		
	5	7.5	1.524	2.286	Gravel / Sand	L. Brown	Mix/ Weathered		
	7.5	10	2.286	3.048	Gravel / Sand	L. Brown	Mix/Weathered		
	10	12.5	3.048	3.81	Gravel / Sand	L. Brown	Mix/Weathered		
	12.5	15	3.81	4.572	Gravel / Sand	L. Brown	Mix/Weathered		
	15	17.5	4.572	5.334	Gravel / Sand	Orange	Mix/Weathered		
	17.5	20	5.334	6.096	Bedrock	L. grey	Plutonic-seds	8	11.082
BLV-32	0	5	0	1.524	Permafrost	D. brown			
	5	7.5	1.524	2.286	Gravel	L. Brown	Mix		
	7.5	10	2.286	3.048	Bedrock	L. grey	Plutonic-seds	2	8.042
BLV-33	0	5	0	1.524	Permafrost	D. Brown			
	5	7.5	1.524	2.286	Gravel/ Sand	L. Brown	Mix		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Gravel	L. Brown/ Orange	Mix		
	12.5	15	3.81	4.572	Bedrock	L. grey	Plutonic-seds (Weathered)	< 1	15.751
BLV-34	0	5	0	1.524	Gravel	L. Brown	Mix		
	5	7.5	1.524	2.286	Gravel	L. Brown	weathered		
	7.5	10	2.286	3.048	Gravel	L. Brown	Mix		
	10	12.5	3.048	3.81	Bedrock	L. Grey	Plutonic-seds		
	12.5	15	3.81	4.572	Bedrock	L. grey	Plutonic-seds (weathered)	2	28.327