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GEOPHYSICAL REPORT on the Wildwood Exploration Inc. Placer Prospecting Leases

Whitehorse, Yukon Territory

Upper Independence and Coffee Creeks: Lease No.: IW00566, IW00567, IW00638

Owner: Wildwood Exploration Inc. 100% (IW00566-67) April Gaudet 100% (IW00638)

NTS # 115J/13, 14

Latitude: 62.8380° N Longitude: 139.5561° W

Whitehorse Mining District

WORK PERFORMED: August 12-14 and September 16, 2018 DATE OF REPORT: September 27, 2018 Author of Report: Isaac Fage

Page 1 of 31





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Table of Contents

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Summa	ry	
1.0	Location and Access	
2.0	Property	
3.0	Physiology and Geology	6
4.0	DC Resistivity Survey	9
5.0	Ground Penetrating Radar Survey	10
6.0	Proton Magnetometer Survey	11
7.0 C	Conclusion/ Recommendations	29
8.0 S	tatement of Expenditures	30
9.0 S	tatement of Qualifications	

1

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Summary

High Resolution DC Resistivity surveys were conducted on the Independence Creek placer leases (IW00566-567) and Ground Magnetic/Ground Penetrating Radar surveys were conducted on the Upper Coffee Creek placer lease (IW00638) to map bedrock depth, classify overburden material and detect magnetite bearing pay channel. The leases are located 135km South of Dawson on Independence and Coffee Creeks which both flow directly into the Yukon River (figure 1).

The surveys were conducted by GroundTruth Exploration Inc. of Dawson YT on August 12-14 and September 16, 2018. The property was accessed by fixed wing/helicopter based in Dawson, YT with crew camped onsite. Four DC Resistivity/IP profiles were surveyed on Independence creek lease IW00566 on Aug 12-13/18. One DC Resistivity profile was surveyed on Independence creek lease IW00567 on Aug 14/18. Seven GPR-Ground Magnetic profiles were surveyed on Coffee creek lease IW00638 on September 16/18. The DC Resistivity Survey was read using a Supersting R8 resistivity meter with 84 electrodes spaced at 1.5m, Ground Penetrating Radar was surveyed using a Mala 80Mhz GPR unit and Ground Magnetic surveys were surveyed using a GEM Systems Proton Magnetometer.

The DC Resistivity survey was successful in profiling surficial horizons to interpret depth to bedrock on leases IW00566-567. On lease IW00638, Ground Penetrating Radar surveys produced estimations of bedrock depth and Ground Magnetic surveys did not produce any conclusive magnetite channel.

1.0 Location and Access

The prospecting leases are located 135km South of Dawson City within the Yukon river drainage system in west-central Yukon Territory. It is centered at 62.8380° N, 139.5561°, on NTS mapsheet 115J/13, 14 (Figure 1). It is accessible in winter on the Yukon river via snowmobile, and accessible by helicopter year round. Neighbouring Thistle Creek (~30km to the north) has placer mines which are currently accessed from Dawson City by barge on the Yukon River to the mouth of Thistle creek.

2.0 Property

Placer Prospecting lease Tenure:

IW00566, 3 miles, Wildwood Exploration Inc. 100%, expiry Nov 18/18 IW00567, 3 miles, Wildwood Exploration Inc. 100%, expiry Nov 18/18 IW00638, 3 miles, April Gaudet 100%, expiry Dec 1/18

(Figure 2)







3.0 Physiology and Geology

The placer prospecting leases are located within the Yukon-Tanana Terrane. The landscape is composed broad valleys bordered by moderately sloped, tree covered hills ranging in elevations from 1200 to 5000 feet. The area experiences typical climatic conditions for central Yukon Territory with short, warm and dry summers and cold winters. Temperatures range from -20°C to -60°C in the winter and +10°C to +30°C in the summer.

The Carlisle Creek placer leases are underlain by a Devonian-Mississippian metamorphic unit and Jurassic granites know as Coffee Creek granite. See Figure 3. Legend for Figure 3: Regional Geology:

Devonian-Mississippian

DMN3	DMN3: NASINA: quartzite, micaceous quartzite, quartz muscovite (chlorite; feldspar augen) schist, and minor metaconglomerate and metagrit as in (1)
	but may locally include significant Nisling Assemblage
Early Ju	rassic
EJgA	EJgA: AISHIHIK SUITE: medium- to coarse- grained, foliated biotite- hornblende granodiorite; biotite-rich screens and gneissic schlieren; foliated hornblende diorite to monzodiorite with local K-feldspar megacrysts; may include unfoliated monzonite of the Long Lake Suite (Aishihik Suite)
EJqL	EJqL : LONG LAKE SUITE: massive to weakly foliated, fine to coarse grained biotite, biotite-muscovite and biotite-homblende quartz monzonite to granite, including abundant pegmatite and aplite phases; commonly K-feldspar megacrystic (Long Lake Suite)

Upper Cretaceous

	uKC1: CARMACKS: augite olivine basalt and breccia; hornblende feldspar
	porphyry andesite and dacite flows; vesicular, augite phyric andesite and
uKC1	trachyte; minor sandy tuff, granite boulder conglomerate, agglomerate and
	associated epiclastic rocks (Carmacks Gp., Little Ridge Volcanics, Casino
	Volcanics)



Mid-Cretacous RETACEOUS



mKW: WHITEHORSE SUITE

grey, medium to coarse grained, generally equigranular granitic rocks of felsic (q), intermediate (g), locally mafic (d) and rarely syenitic (y) composition

- d. hornblende diorite, biotite-hornblende quartz diorite and mesocratic, often strongly magnetic, hypersthene-hornblende diorite, quartz diorite and gabbro (Whitehorse Suite, Coast Intrusions)
- g. biotite-hornblende granodiorite, hornblende quartz diorite and hornblende diorite; leucocratic, biotite hornblende granodiorite locally with sparse grey and pink potassium feldspar phenocrysts (Whitehorse Suite, Casino granodiorite, McClintock granodiodrite, Nisling Range granodiorite)
- q. biotite quartz-monzonite, biotite granite and leucogranite, pink granophyric quartz monzonite, porphyritic biotite leucogranite, locally porphyritic (K-feldspar) hornblende monzonite to syenite, and locally porphyritic leucocratic quartz monzonite (Mt. McIntyre Suite, Whitehorse Suite, Casino Intrusions, Mt. Ward Granite, Coffee Creek Granite)
- y. hornblende syenite, grading to granite or granodiorite (Whitehorse Suite)





4.0 DC Resistivity Survey

GroundTruth Exploration Inc., of Dawson YT conducted the resistivity surveys on the Independence Creek leases IW00566-567 for Wildwood Exploration on Aug 12-14/18. The crew accessed both leases by helicopter based on at Thistle Creek. The resistivity profiles on the leases were positioned in areas targeted as being favorable for placer potential. Agreement between the profiles was very good and bedrock troughs are observed between the profiles.

The DC Resistivity survey was completed using Advanced Geoscience Inc., Supersting instrument (instrument specs in appendix). The instrument is placed at a center point of the traverse; referred to as electrode #42, with 42 electrodes on either side. The Supersting gathered apparent Resistivity and Induced Polarization, using the -following arrays:

- 1. Inverse Schlumberger SI Array (with expanding AB and MN dipoles) A=3m
- 2. Dipole Dipole DD Array (with expanding AB and MN)

The traverse was surveyed with a Juniper Geode DGPS unit to obtain accurate horizontal and vertical position.

Field Survey Operating Procedures:

- A crew of 5 is deployed to run survey.
- The midpoint of a traverse is located and the line is sighted-in using a DGPS.
- Minimal brush is cut along line to sight pickets and lay cables
- Crew placed electrodes at 1.5m spacing with measuring tape
- Electrodes are hammered to a depth of 30cm (>10% of electrode spacing)
- Cables are laid and attached to the electrodes
- Contact resistance test is conducted
- Calcium Chloride (25% solution) added to all electrodes >2k ohms. CRT reread.
- Extra electrodes added to high CR electrodes. CRT reread.
- With satisfactory Contact Resistance, Resistivity survey is Read.
- Operator surveys the traverse using DGPS and marks the traverse with pickets every 10 electrodes.

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 dataset 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 instrument raw data from the DGPS and SuperSting are archived. An ESRI shape file is created containing the traverse points collected.

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5.0 Ground Penetrating Radar Survey

GroundTruth Exploration conducted GPR surveys on lease IW00638 on Sept 16/18. The lines were oriented as cross creek profiles with spacing of 25m. The system used was a Mala Ground Explorer 80Mhz GPR system.

GPR system and basic principle

Ground Penetrating Radar (GPR) works like seismic, in that it is based on transmitting energy to the ground and measuring the time taken for the energy to be reflected back at geological targets, be they localized ore-bodies or geological interfaces/boundaries. Instead of seismic or shock waves, GPR transmits electromagnetic energy of high frequency compared to other geophysical methods. It is a very high resolution technique that is very site specific, for example it works very well where the target is within a host rock that has a higher electrical resistivity compared to the target itself, and where there are no conductive surficial layers to absorb radar energy before reaching the target. Another important factor is that radar energy can be scattered and not captured optimally if the reflecting geology or target is not consolidated or of a certain geometry. In conducive settings GPR is a fast high resolution method, can be operated by a single person and can supplement other geophysical methods very well.



Photo- Mala Ground Explorer 80MHz system

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 Geosoft Oasis Montaj software.

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6.0 Proton Magnetometer Survey

GroundTruth Exploration conducted GPR surveys on lease IW00638 on Sept 16/18. The lines were oriented as cross creek profiles with spacing of 25m. The system used was a GEM Systems 19T Proton Magnetometer with Rover and Base station.

The Total Field Ground survey is typically conducted with one operator only. No grid is required as all magnetic readings are read with corresponding GPS location. The operator is responsible for efficient operation of survey and ensuring optimal data quality. The operator downloads, corrects with base and plots all data nightly to ensure ongoing consistency throughout the survey.

The following equipment was used for the completion of the survey:

Magnetometer Field Unit: Base Station: Processing: Software: GEM Systems GSM-19T Proton Magnetometer GEM Systems GSM-19T Proton Magnetometer Laptop computer

GEM Link software for mag upload/download Mapinfo-Discover for diurnal correction/plotting

Survey Specifications

The magnetometer survey was conducted according to the following specifications: Field Magnetometer Observation Frequency: 1 reading per 0.5 of a second. Base Station Magnetometer: Set to record an observation every 10 seconds for the duration of the survey. Datum: 57500 nT

Levelling: None required

Magnetic Field Theory Applied to Placer Exploration

In a placer setting, magnetite derived from bedrock weathering is concentrated in the main channel of a creek or river where the water flow has the highest velocity and the greatest turbulence. As a result, minerals with high specific gravity (magnetite, ilmenite, gold, etc.) are preferentially concentrated in this region of the stream as material with lower specific gravity in winnowed from the sediment. High concentrations of "black sand" (magnetite, ilmenite, chromite) are often recorded in auriferous pay streaks where the stream bed has remained relatively immobile for some period, permitting hydraulic concentration to build up a significant volume of these materials.

The materials comprising black sand are magnetically susceptible. Magnetite has a very high magnetic susceptibility of 1200-19200 x 10^{-3} SI units, ilmenite ranges from 300-3500 x 10^{-3} SI units, and chromite measures from 3-1100 x 10^{-3} SI units. Average magnetic susceptibilities for sedimentary, igneous (excluding ultramafic) and metamorphic rocks are: 0-10, 3-160, and 0-70 x 10^{-3} SI units respectively. Fluvial sediments register magnetic susceptibility in the range of 0-2 x 10^{-3} SI units. There is consequently a significant susceptibility contrast between gravels enriched with black sand and average gravels/ underlying bedrock.

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Field Survey Operating Procedures

The survey is completed in the field according to the following procedure:

Field Magnetometer Observation Frequency: 1 reading per 0.5 of a second.

Base Station Magnetometer: Set to record an observation every 20 seconds for the duration of the survey.

Operator uploads survey grid endpoints to Field magnetometer unit

The base station is established in an accessible location that will not be disturbed on or near the survey site.

Base station site is marked with a picket and location recorded for future use. Operator runs survey with internal GPS recording position and navigates survey lines using internal mag GPS.

At end of day each survey day, Operator downloads Field and Base magnetometers, processes diurnal corrections and plots survey to assess data quality.

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 prior to each survey day. Temporal geomagnetic variation is removed by linear interpolation using the base station data. Corrected data is screened for noisy or erroneous values and is then plotted. The diurnally corrected and filtered data is then Reduced to Pole (RTP) based on the International Geomagnetic Reference Field (IGRF)



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7.0 Survey Results- DC Resistivity Surveys



Page 13 of 31



Survey Results: IW00566: Main Creek 3 mile Lease



Figure 5 Interpretation:

Profile INPIP18-08 shows a bedrock trough anomaly in the resistivity inversion. Bedrock is interpreted as a resistivity high (>5,000 Ohm-m) and alluvial deposits are interpreted as resistivity lows (<1,000 Ohm-m) in the inversion models. This interpreted resistivity low trough is approximately 12' deep and 40' wide on the west side of creek valley. There is a possibility of a 2nd trough on the East side of valley.





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Figure 6

Interpretation:

Profile INPIP18-09 shows two bedrock trough anomalies in the resistivity inversion. Bedrock is interpreted as a resistivity high (>5,000 Ohm-m) and alluvial deposits are interpreted as resistivity lows (<1,000 Ohm-m) in the inversion models. This interpreted resistivity low trough is again approximately 12' deep and 40' wide on the west side of creek valley. A smaller 2nd interpreted bedrock depression on the East side of valley.





Figure 7 Interpretation:

Profile INPIP18-10 shows a bedrock trough anomaly in the resistivity inversion. Bedrock is interpreted as a resistivity high (>5,000 Ohm-m) and alluvial deposits are interpreted as resistivity lows (<1,000 Ohm-m) in the inversion models. This interpreted resistivity low trough is again approximately 15' deep and 70' wide in the centre of the creek valley.



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Figure 8 Interpretation:

Profile INPIP18-11 shows two bedrock trough anomalies in the resistivity inversion. Bedrock is interpreted as a resistivity high (>5,000 Ohm-m) and alluvial deposits are interpreted as resistivity lows (<1,000 Ohm-m) in the inversion models. This interpreted resistivity low troughs are separated by a moderate resistivity high in the centre of the valley.













IW00567: Left Trib 3 mile Lease Interpretation:

Profile INPIP18-12 is on the left tributary off of the main creek. The valley is narrower than main creek. It shows a narrower bedrock trough anomaly in the resistivity inversion. Bedrock is interpreted as a resistivity high (>5,000 Ohm-m) and alluvial deposits are interpreted as resistivity lows (<1,000 Ohm-m) in the inversion models. This interpreted resistivity low trough is approximately 12' deep and 40' wide.

8.0 Survey Results- Ground Magnetic and Ground Penetrating Radar

Survey Results: IW00638: Coffee Tributary 3 mile Lease Ground Magnetic Survey

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Figure 11

Interpretation:

7 profiles of Ground Magnetics were surveyed on the lease as an orientation survey. No clear trend of a magnetite bearing channel was identified.

Ground Penetrating Radar Survey

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GroundTruth

OPR 80 MHz Survey Time Section Line 225-S

Placer Lease IW00638

GPR 80 MHz Survey Time Section Line 225-N

GroundTruth

GPR 80 MHz Survey Time Section Line 250-S

Placer Lease IW00638

GPR 80 MHz Survey Time Section Line 250-N

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GPR 80 MHz Survey Time Section Line 275-S

Placer Lease IW00638

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GPR 80 MHz Survey Time Section Line 275-N

Placer Lease IW00638

GPR 80 MHz Survey Time Section Line 300-N

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GroundTruth

GPR 80 MHz Survey Time Section Line 325-S

Placer Lease IW00638

GPR 80 MHz Survey Time Section Line 325-N

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Interpretation:

Placer lease GPR data is deemed to be of good quality. The above figures are plotted with travel time in milliseconds. The figures show reflectors that are indicative of bedrock interface. Further processing will include filtering to enhance features, add topography and convert travel time to interpreted depths.

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7.0 Conclusion/ Recommendations

DC Resistivity surveys on placer leases IW00566-567 have produced high confidence estimations of bedrock depth that are consistent with drill tested depths encountered on claims downstream of the leases. Bedrock troughs have been identified as drill targets for follow up. Follow up drilling and/or hand shafting is recommended

GPR and Magnetic orientation surveys on placer lease IW00638 produced preliminary interpretations on subsurface environment. GPR survey data shows good potential as a tool to determine depth to bedrock. Additional advanced processing will be required to produce bedrock depth models. Drill validation to tie in known bedrock depths to the calculated GPR wave velocity to depth of reflectors is recommended. Ground Magnetic surveys did not identify a magnetite bearing channel in this area. Follow up DC Resistivity, drilling and/or hand shafting is recommended.

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8.0 Statement of Expenditures

Contractor: GroundTruth Exploration Inc.

Placer Leases Surveyed: IW00566, IW00567, IW00638

ith a crew of 5 camped ons	ite		
Days	Rate	Total	
2	\$3,600	\$7,200	
Hours	Pate	Total	
8	\$75	\$600	
140			
	Total Expenditures		
	th a crew of 5 camped ons Days 2 Hours 8	th a crew of 5 camped onsite Days Rate 2 \$3,600 Hours Rate 8 \$75 Total Expenditures	th a crew of 5 camped onsite Days Rate Total 2 \$3,600 \$7,200 Hours Rate Total 8 \$75 \$600 Total Expenditures

WO0567 - Resistivity Survey				
Survey Date: Aug 14/18				
Overview: DC Resistivity Survey of 1 profile over 1 day wi	th a crew of 5 <u>camped onsi</u>	te		
Chargeout Rate of \$3,600/day all inclusive	Days	Rate	Total	
	1	\$3,600	\$3,600	
	Hours	Rate	Total	
interpretation and Reporting at \$75/h	Hours 4	Rate \$75	Total \$300	
Interpretation and Reporting at \$75/h	Hours 4	Rate \$75	Total \$300	
Interpretation and Reporting at \$75/h	Hours 4	Rate \$75 Total	Total \$300	

IW00638 -	3		
Ground Magnetic			
and GPR Survey			
Survey Date: Sept 16/18			
Overview: Ground Magnetic and GPR Survey over 1 day w	ith a crew of <u>5 camped on</u>	site	
Chargeout Rate of \$3,600/day all inclusive	Davs	Rate	Total
	1	\$3,600	\$3,600
	Hours	Rate	Total
Interpretation and Reporting at \$75/h	4	\$75	\$300
		1	
		Total	
		Expenditures	1
		on Lease:	\$3,900

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9.0 Statement of Qualifications

I, Isaac Fage of Dawson, Yukon Territory certify that I hold an Advanced Diploma in GIS/Remote Sensing from the Centre of Geographic Sciences (COGS). I am Operations Manager and President of GroundTruth Exploration Inc. I have been working in the mineral exploration industry continuously since 2004.

Isaac Fage September 28, 2018
