ID01288
ID01289
JD00589
JD00590

GroundTruth Exploration

GroundTruth Exploration Inc.
Box 70, Dawson YT, Y0B 1G0 (867) 993-5612

120238

Geophysical and Drone imaging Report

On Soda and Spud Creek Placer Prospecting Leases

Dawson Mining District

Soda Creek Lease No.: ID01289

Owner: Miville-Louie Fournier 100%

Spud Creek Lease No.: ID01288

Owner: Miville-Jacques Fournier 100%

Prepared by: Isaac Fage

GroundTruth Exploration Inc.

Location: 508400E, 7039375N
NTS Mapsheet: 115N/~~16~~ 07
Report Date: 3 June 2016

GroundTruth Exploration Inc.
Box 70, Dawson YT, Y0B 1G0 (867) 993-5612

Table of Contents

Contents

Summary

A high resolution GPR survey was conducted in conjunction with a UAV drone aerial photography survey on each of the Soda and Spud Creek placer leases located in the Dawson Mining District on NTS Mapsheet 115N/07. A total of 4 cross creek profiles were surveyed on each lease and UAV Drone coverage was surveyed on the full extent of both leases GPR profiles indicated depth to bedrock. Drill testing is necessary to verify depths. The UAV drone survey was successful is producing a high quality imagery and topography model of each lease to define next exploration targets.

1.0 History

Soda and Spud creeks had one limited program of drill testing on each creek near the mouth. The drilling was done by Hilker in the 1980s. Drilling results returned gold on both creeks. No futher work has been reported since this activity.

2.0 Survey location and description

Soda and Spud creeks are adjacent and both flow West into the Ladue River. They are located approximately located 90 km South-West of Dawson. It would be accessible by road in summer by way of historic road that would require some maintenance to be useable. It is currently accessible by helicopter only. See figure 1 for location.

Box 70, Dawson YT, Y0B 1G0 (867) 993-5612

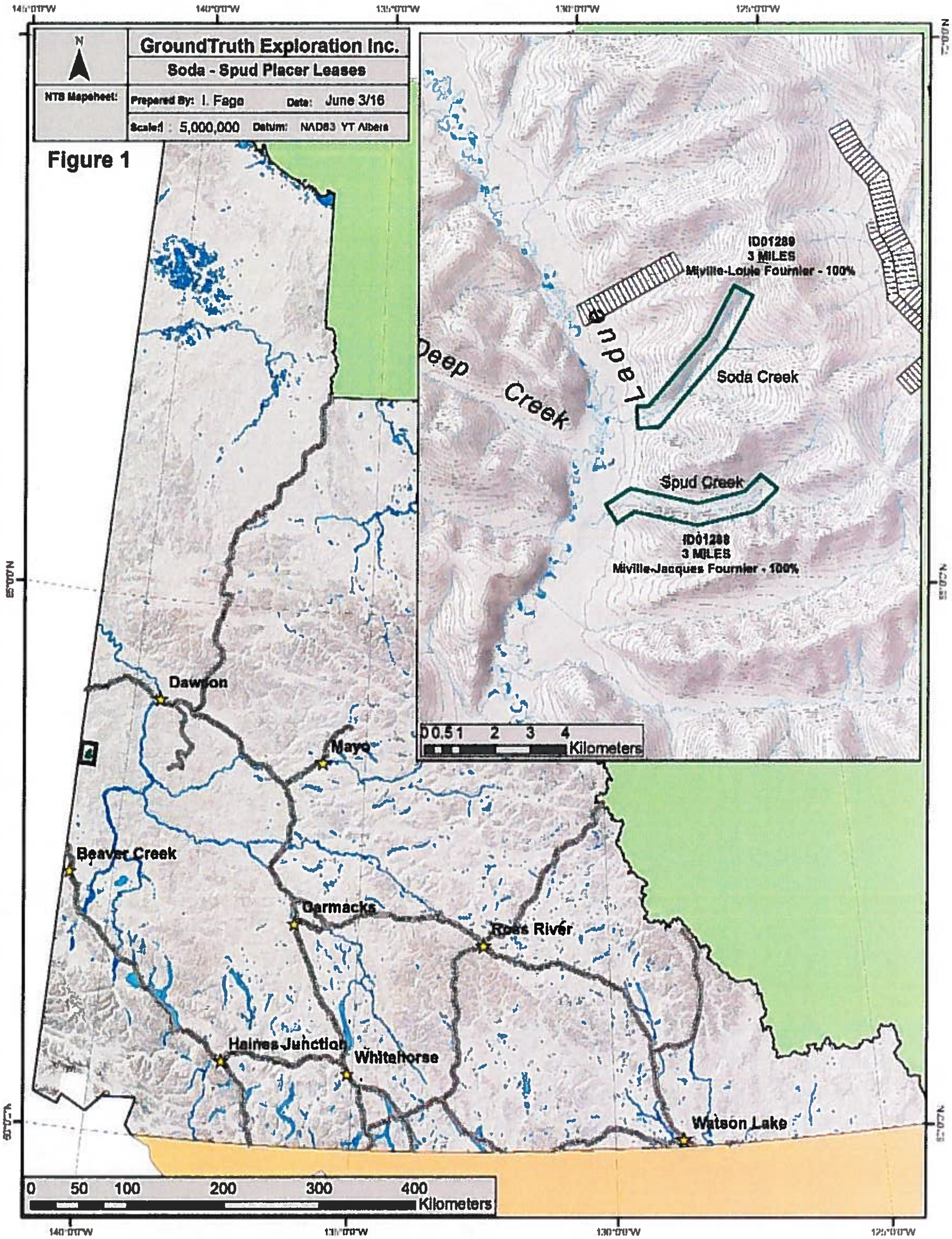


Figure 1 – Location of Soda and Spud Creek Leases.

Box 70, Dawson YT, Y0B 1G0 (867) 993-5612

3.0 Geology

The Minneapolis creek placer lease is underlain by a YGS mapped unit CPK1. It is comprised of quartzite/schist/amphibolite. See figure 2 below for property geology.

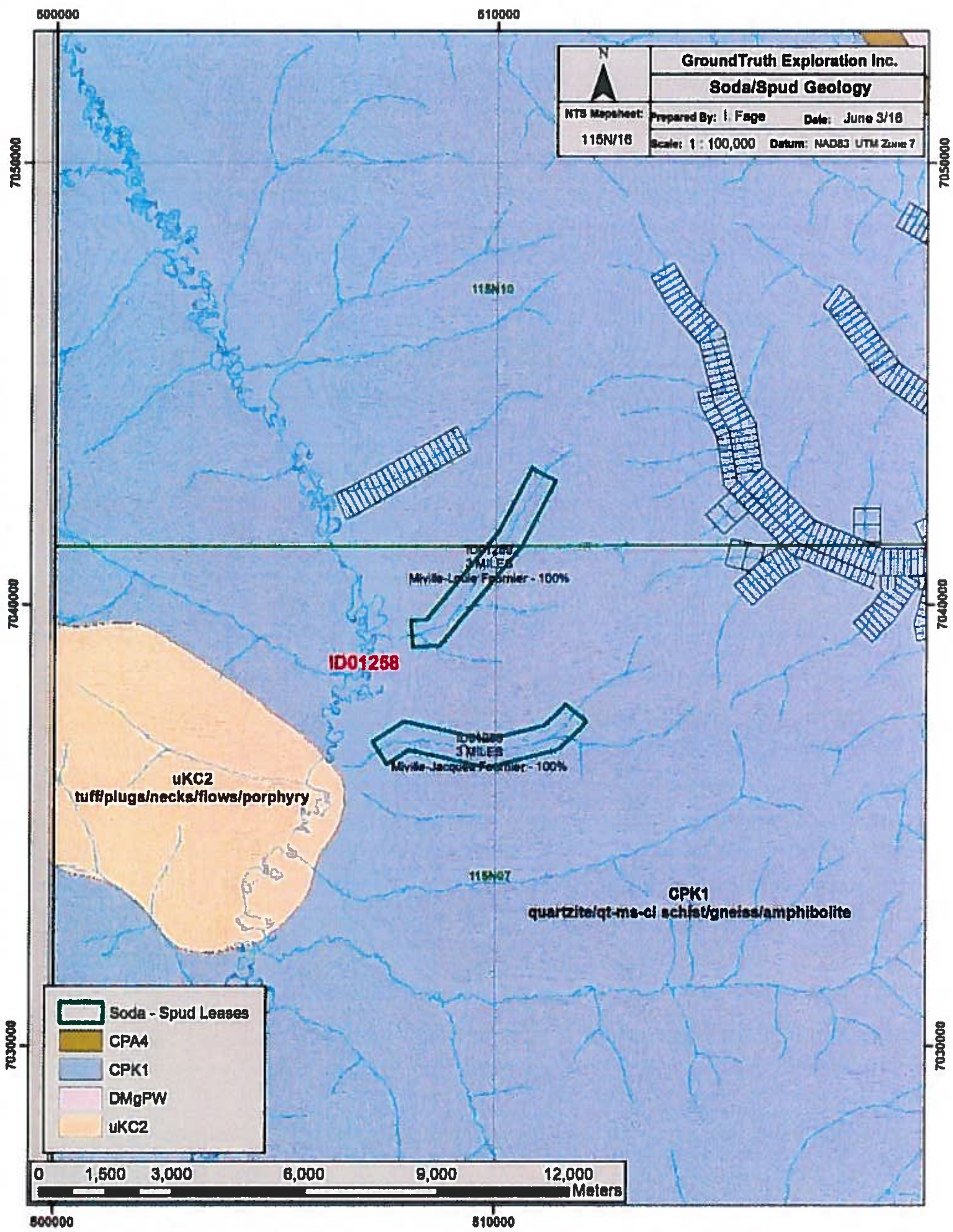


Figure 2: Bedrock Geology

4.0 Survey Objective

The main objectives of the survey was to map depth to bedrock, and to delineate any buried channel that exists along the creek. Alluvial gold is expected to be concentrated at the base of the gravels and the bedrock. To accomplish the above objectives 2D radar sections were surveyed to detect reflectors which correlate with the bedrock interface. The objective of the UAV drone survey is A) to provide a high resolution topographic surface in order to aid in determination of creek features, and B) to provide high resolution aerial photography.

5.0 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 localised 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. Depth of penetration can be a few to hundreds of meters in electrically resistive soils and rocks. For this particular project, the "snake" UltraGPR supplied by Groundradar (see www.groundradar.com) was used. The system works together with a differential GPS (RTK-DGPS) for data positioning and a portable data logger

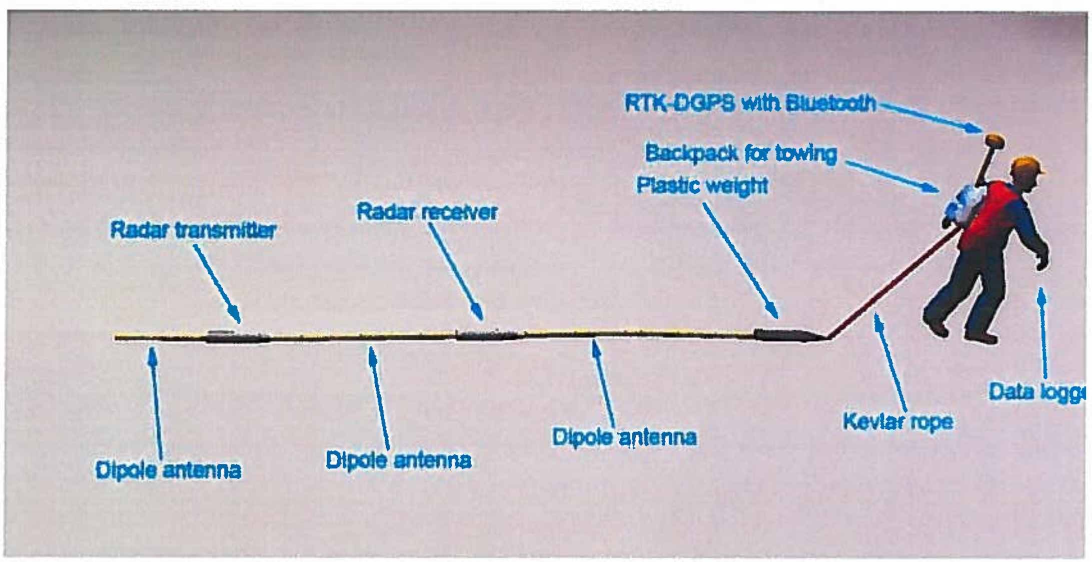


Figure 3- UltraGPR 30MHz system

6.0 Drone System

The Drone survey is typically conducted by one trained operator and one spotter. The lead operator is responsible for coordinating efficient operation of survey and ensuring optimal data quality, the spotter is responsible for maintaining visual contact with the drone, monitoring the radio, and looking for flight path conflicts.

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

UAV Drone:	Ebee UAV 'Drone' with internal GPS and radio link
Camera:	Cannon 16 megapixel camera
Base Station:	Panasonic Toughbook laptop with radio link
Power Generation:	1000watt Honda generator (for battery charging)
GPS units:	2x Promark3 GPS receivers (if GCPs are collected)
Radios:	VHF radio with aircraft frequencies
Processing:	Laptop computer with adequate RAM
Software:	Emotion software for flight planning/monitoring
	Postflight Terra3D for image Orthorectification

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

•Survey is planned using Emotion software prior to departing for field.

•Spatial resolution, footprint, number of planned flights and launch location is determined.

•Operator arrives onsite and sets up base station, UAV unit and ensures adequate launch and landing path is available.

•Prior to launch, operator calls out on Aircraft frequencies to notify Drone survey in progress. Through duration of survey, operator calls out every 5 minutes to notify aircraft of survey in progress.

•Operator Hand launches aircraft and flies survey as planned with number of required flights and maintains visual contact with the UAV

•Data is downloaded from drone after each flight and inspected for quality.

•After survey, all imagery and drone data files are Orthorectified using Postflight Terra 3D software package.

The collected data is downloaded in the field after every flight and checked for integrity. This allows any low quality imagery to be identified and resurveyed while onsite. The drone imagery data is processed every evening by the lead operator in the field using Postflight Terra 3D software provided by Sensefly. The initial orthorectified image product is generated by an automated process. This image is then cleaned up manually within the Postflight software by visually checking for low quality portions of the image and selecting another overlapping image for that location. The final cleaned image and DEM product is the result of this manual QC process. The final Image and DEM are georeferenced to NAD83 UTM projection. A final QC report is generated automatically with the final cleaned product.

Figure 4 – Ebee Drone

7.0 Results and interpretation

The GPR 2D sections show a signal character change in the upper and lower sections. Verification by way of drill testing is needed to futher interpret the data. The radargrams have been symbolized using a Red-Green-Blue color ramp to highlight reflectors and the main transition zone. The upper layer is interpreted as surficial sediments consisting of organic permafrost overlying gravels. Results from the survey show inconsistent reflectors and data dropouts in areas of interest. It is difficult to determine true depth to bedrock from this survey.

Figure 5: Soda Survey Locations with Historic Drilling

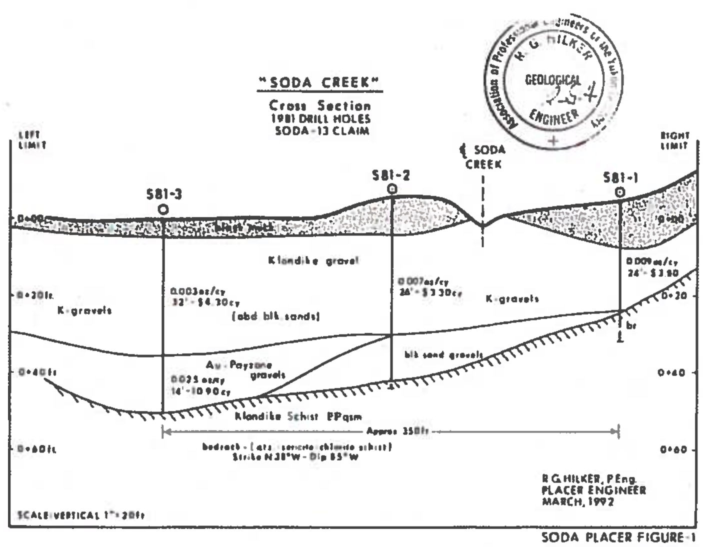


Figure 6: Soda Historic Drill

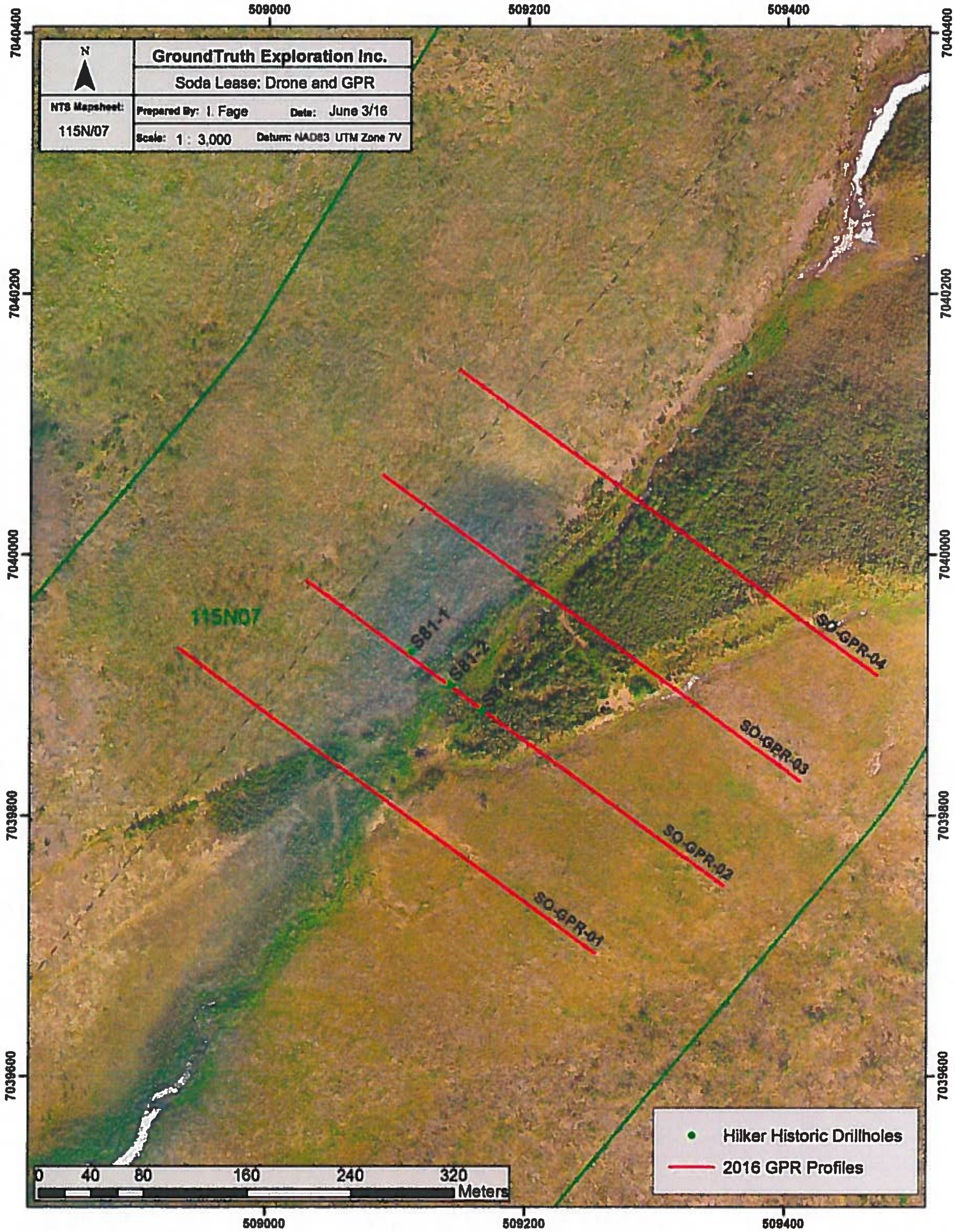
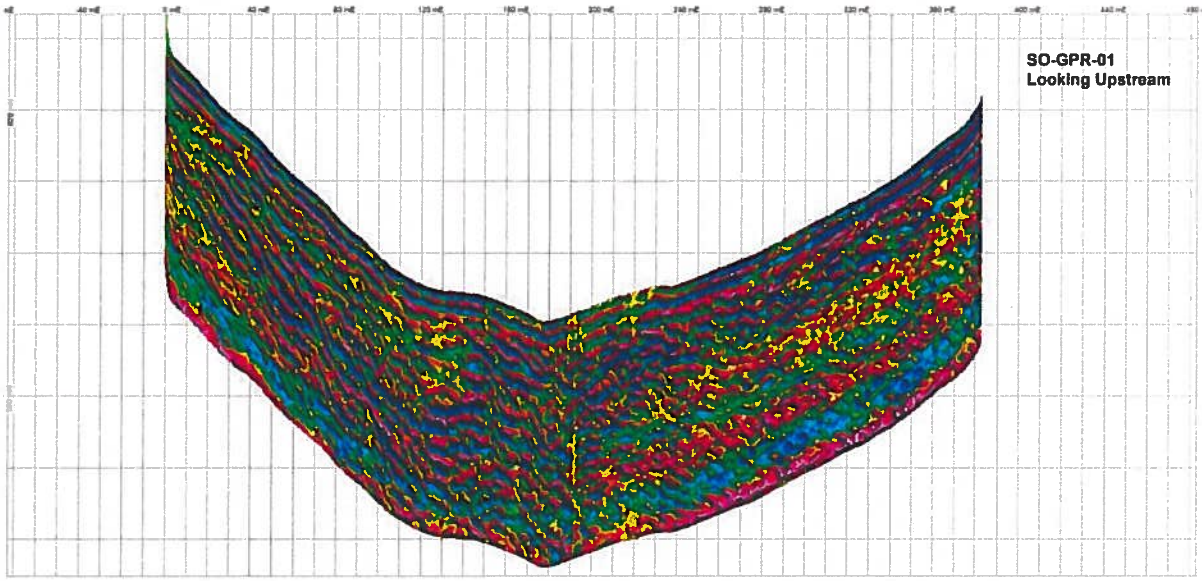
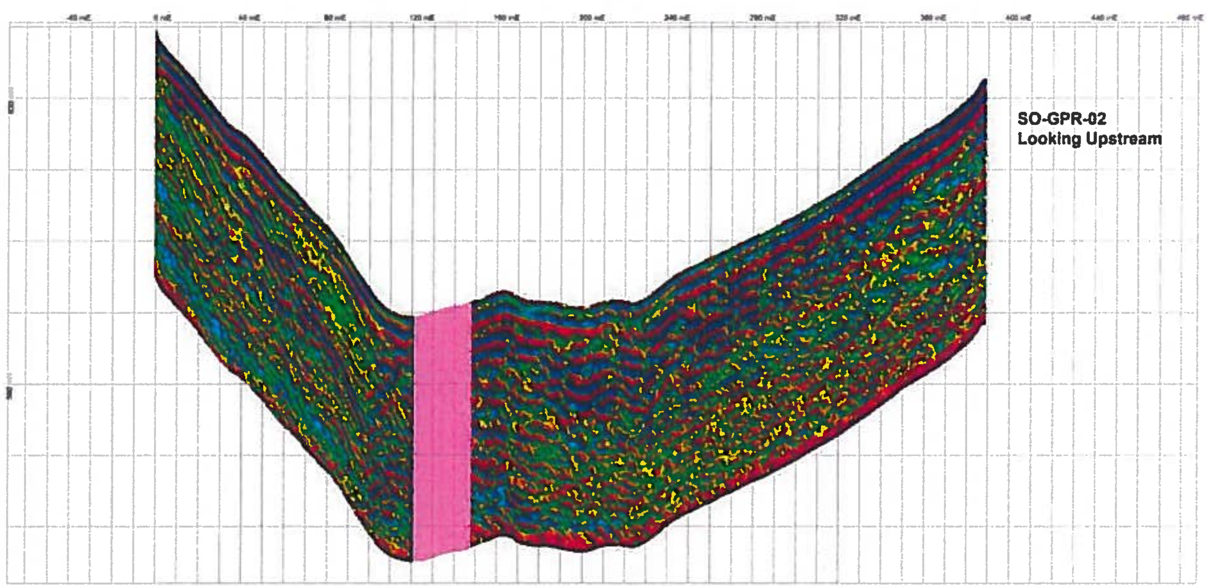
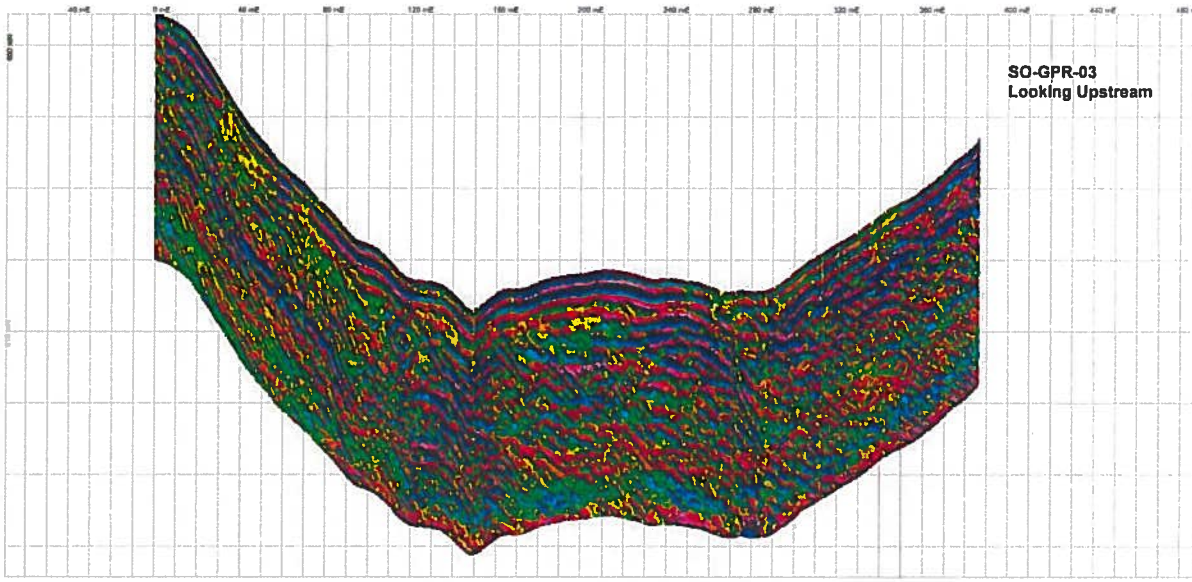
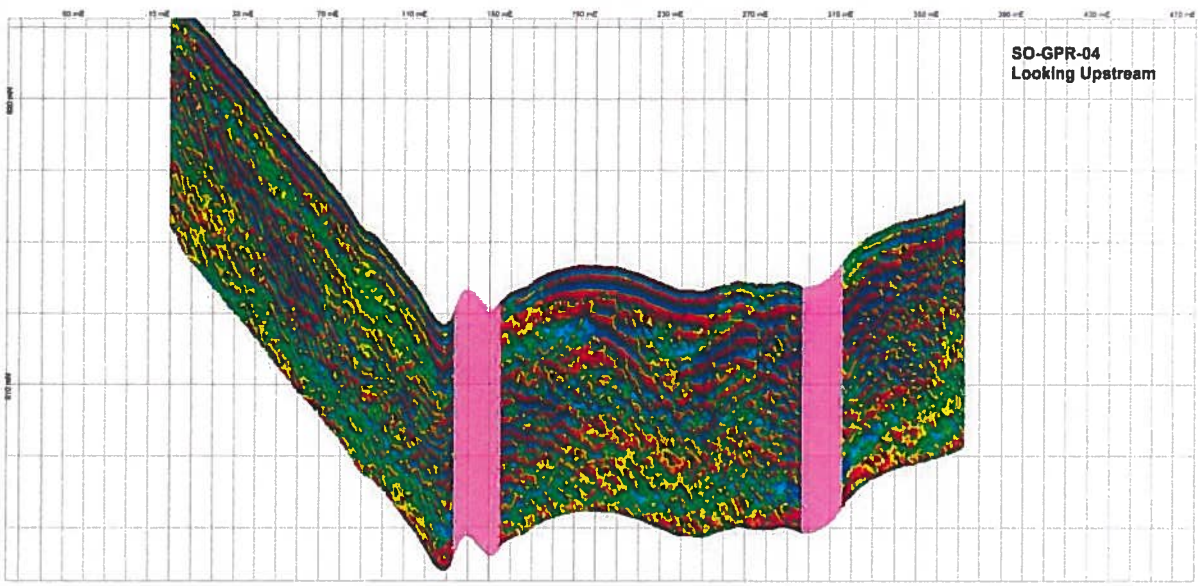


Figure 7: Detail Map of Soda Survey Location


SO-GPR-01
Looking Upstream


SO-GPR-02
Looking Upstream





Figures 8-11: Soda GPR Radargram sections

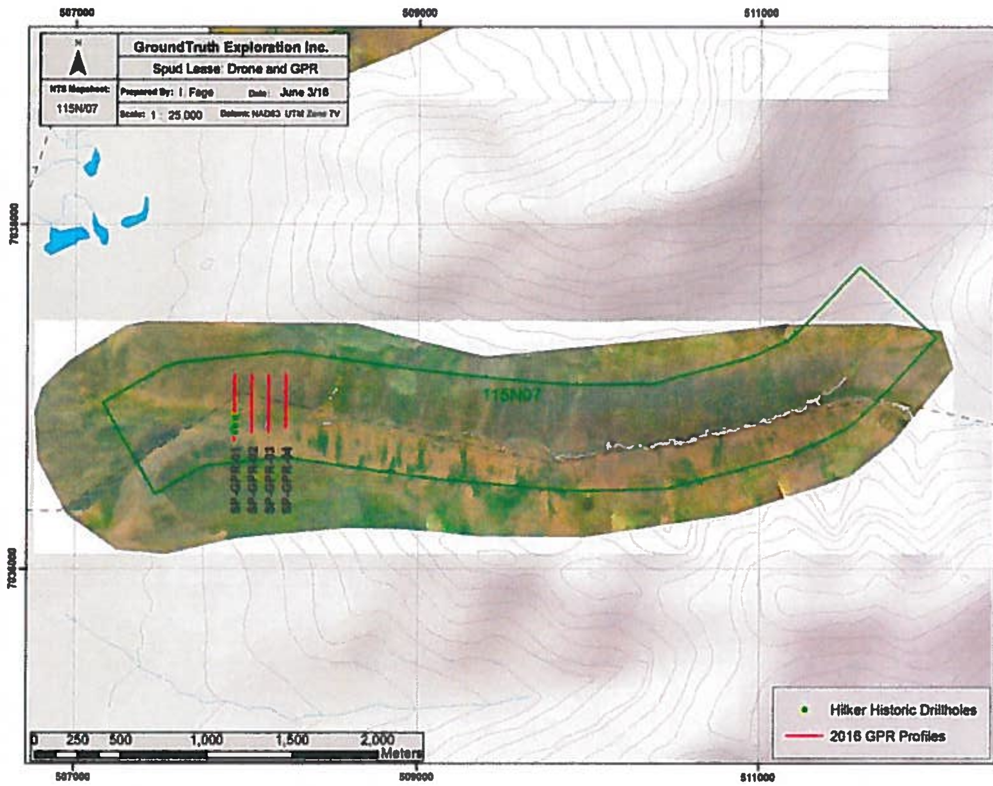


Figure 12: Spud Survey Locations

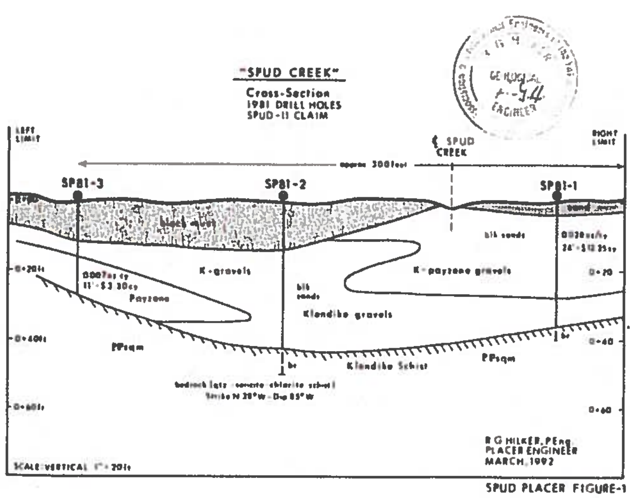


Figure 13: Historic Spud Drilling

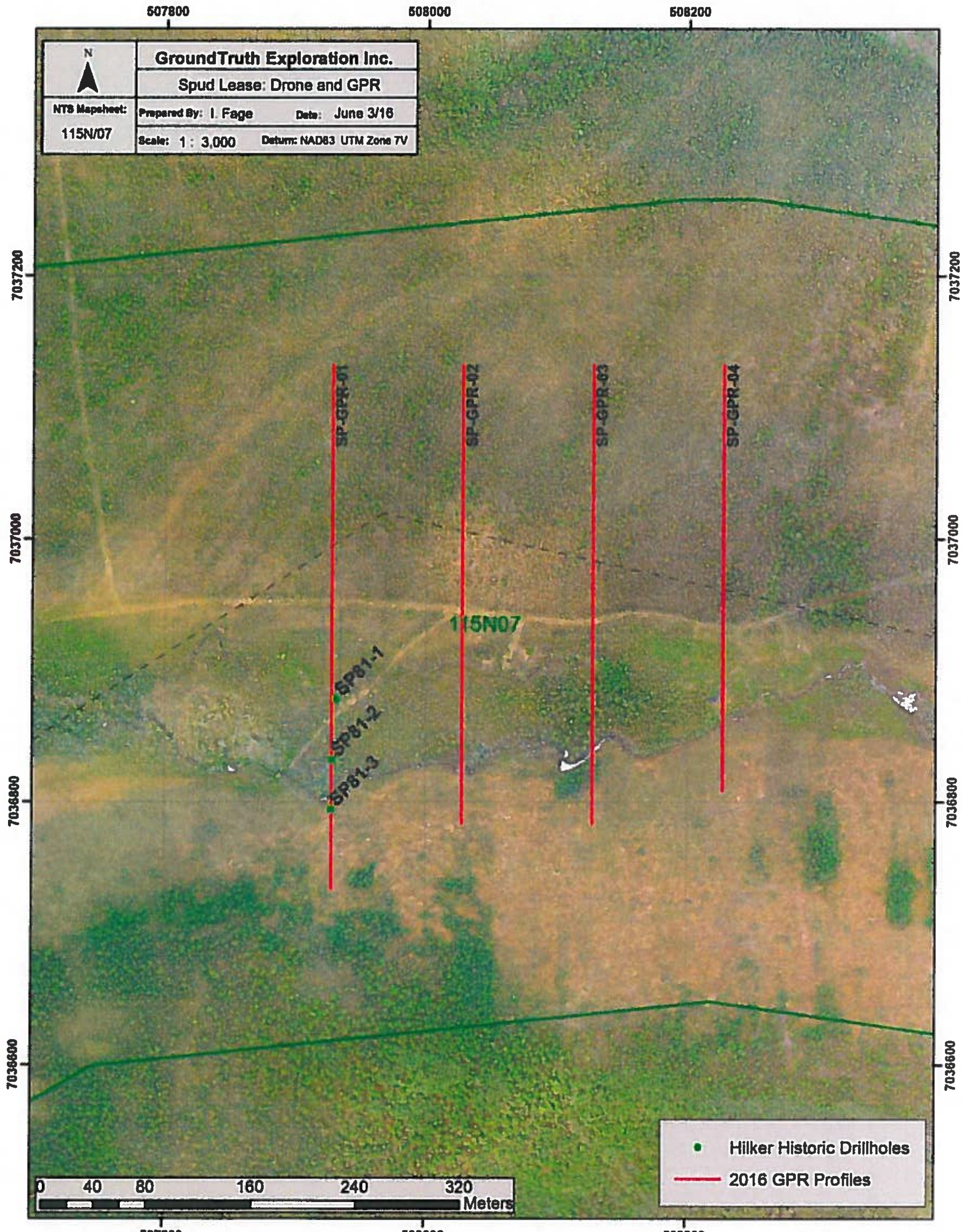
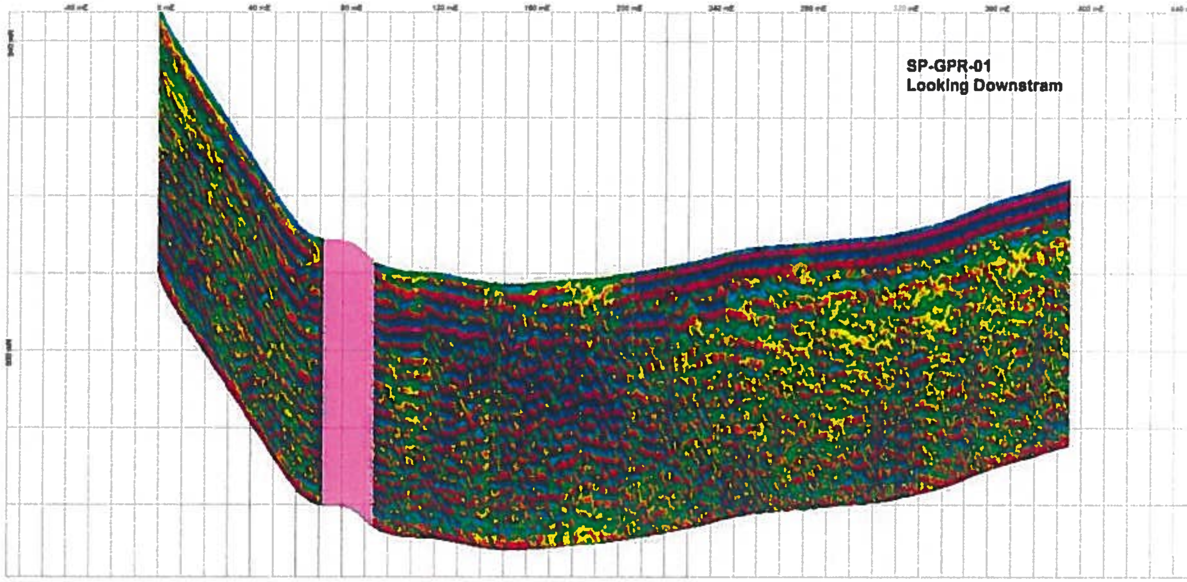
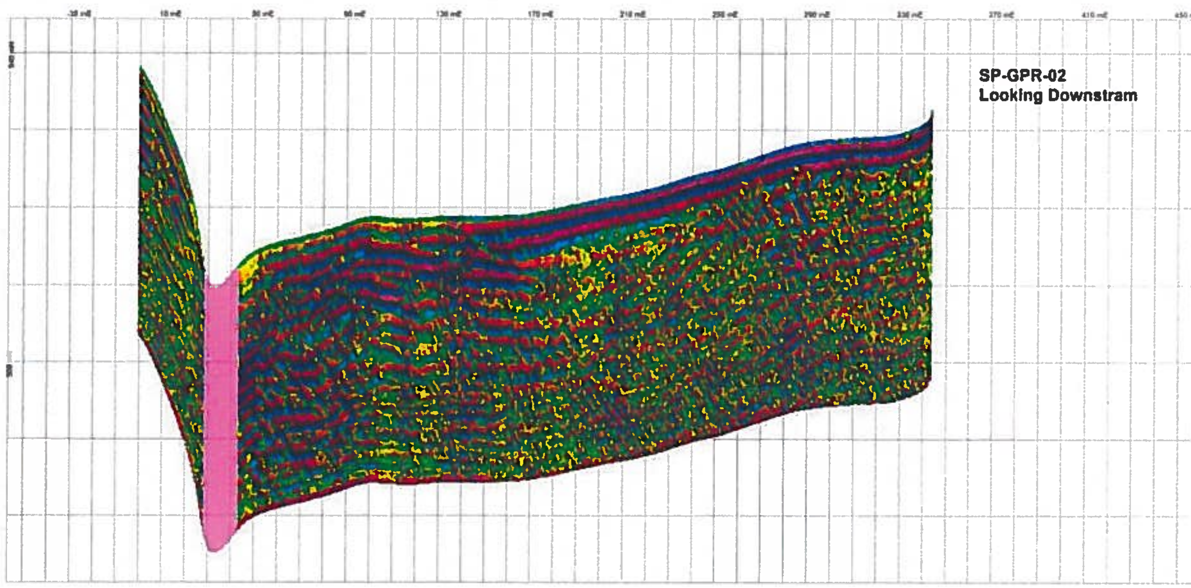
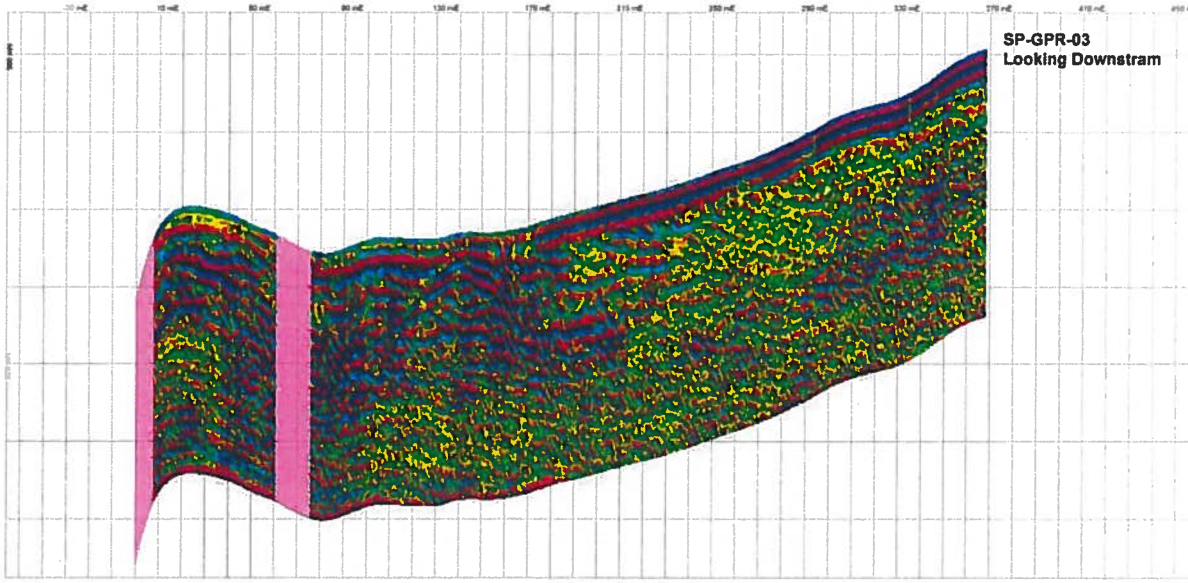


Figure 14: Detail Figure of Spud Survey with GPR/Drone/Historic Drilling


SP-GPR-01
Looking Downstram


SP-GPR-02
Looking Downstram



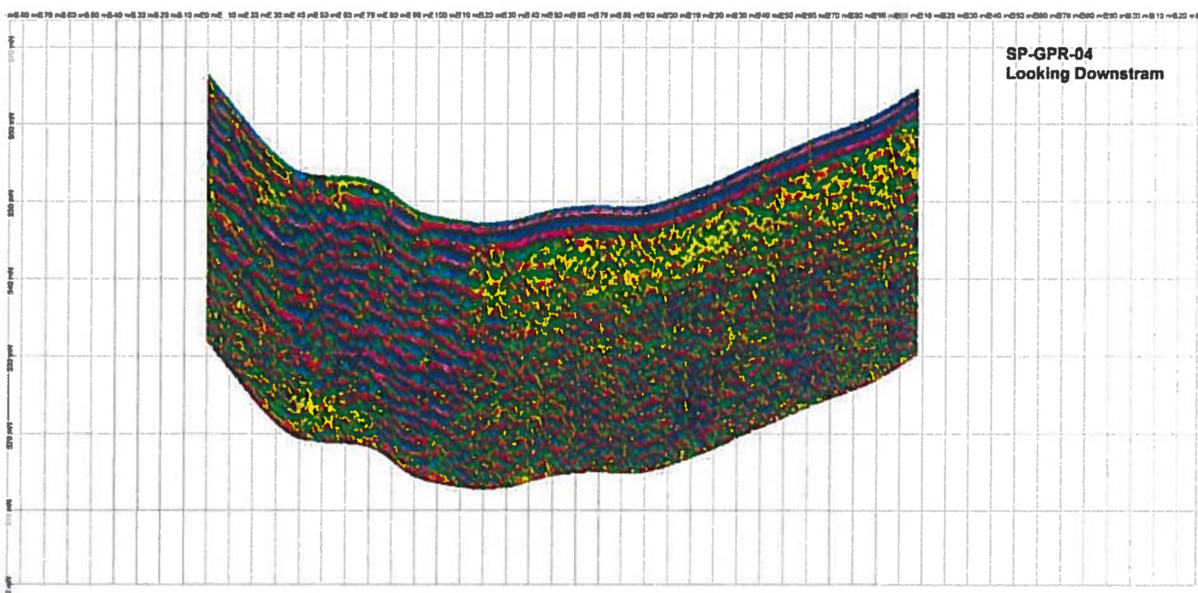


Figure 15-18 – Spud Creek Radargram sections 16-01,

8.0 Project Expenses

Invoice for work on Soda Lease:

ID01289: May 12/2016 Survey Expenses
3 mile lease:

GPR Survey:	
GPR Operator - $450/day (1/2 day)	$225
GPR Unit - $300/day (1/2 day)7	$150
GPR Processing 4 profiles @$60	$240
Interpretion - 4h * $75	$300
Report - $500 (split on Soda/Spud)	$250
Drone Operator $500	$500
Assistant Operator $350	$350
Drone $500	$500
Processing 6 flights @ $100	$600
Total Invoice:	$3,115

Invoice for work on Spud Lease:

ID01288: May 12/2016 Survey Expenses
3 mile lease:

GPR Survey:	
GPR Operator - $450/day (1/2 day)	$225
GPR Unit - $300/day (1/2 day)7	$150
GPR Processing 4 profiles @$60	$240
Interpretion - 4h * $75	$300
Report - $500 (split on Soda/Spud)	$250
Drone Operator $500	$500
Assistant Operator $350	$350
Drone $500	$500
Processing 6 flights @ $100	$600
Total Invoice:	$3,115

9.0 Statement of Qualifications

I, Isaac Fage have continuously been involved in Mineral Exploration since 2004. I hold an advanced diploma in Remote Sensing and GIS from the Centre of Geographic Sciences in Lawrencetown, Nova Scotia. I have overseen the survey work described in this report on the Soda and Spud Creek placer leases.

Dated this 3rd day of June, 2016 in Dawson, YT.

Respectfully submitted

Isaac Fage

10.0 Conclusions and recommendations

The UAV Drone survey provided excellent quality data for targeting and planning to advance exploration activity on the Soda and Spud placer leases. The GPR work conducted was done to determine depth to bedrock. The reflectors outlined by the survey did not clearly define bedrock depth and it is not recommended to use this tool for further work on the lease. Alternatively, DC Resistivity is recommended as a more suitable method to interpret depth to bedrock in these creeks. Drilling is recommended as historic drill results were encouraging and no follow up was done.