Assessment Report:

UAV Aerial Photogrammetry Survey

Carmack Fork
One Mile Placer Lease

Placer Lease: ID01257
Tenure Holder: Noah Williams 100%

Dawson Mining District

NTS: 115O/14
Latitude: **63º 54.57' N** Longitude: **-139º04.55' W**

All Work Performed On: March 16, 2016
Date of Report: March 17, 2016
AUTHOR OF REPORT: Isaac Fage

Table of Contents

1 Introduction

GroundTruth Exploration Inc. conducted an aerial drone survey on the Carmack Fork placer lease held by Noah Williams. ID01257. The full extent of the lease was imaged with high resolution imagery and topography to establish exploration targets and plan a follow up program.

All work was undertaken by GroundTruth Exploration Inc.

2 Location and Access

Placer lease ID01257 is a one mile lease located on Carmack Fork and is accessed by road from Upper Bonanza Creek. The March 16, 2016 UAV survey was accessed from the Ridge Road Trail by snowmobile and the survey was staged in a clearing above the lease.

The lease is located within the Dawson Mining District on NTS mapsheet 115O/14

UAV survey staged above Carmack Fork.

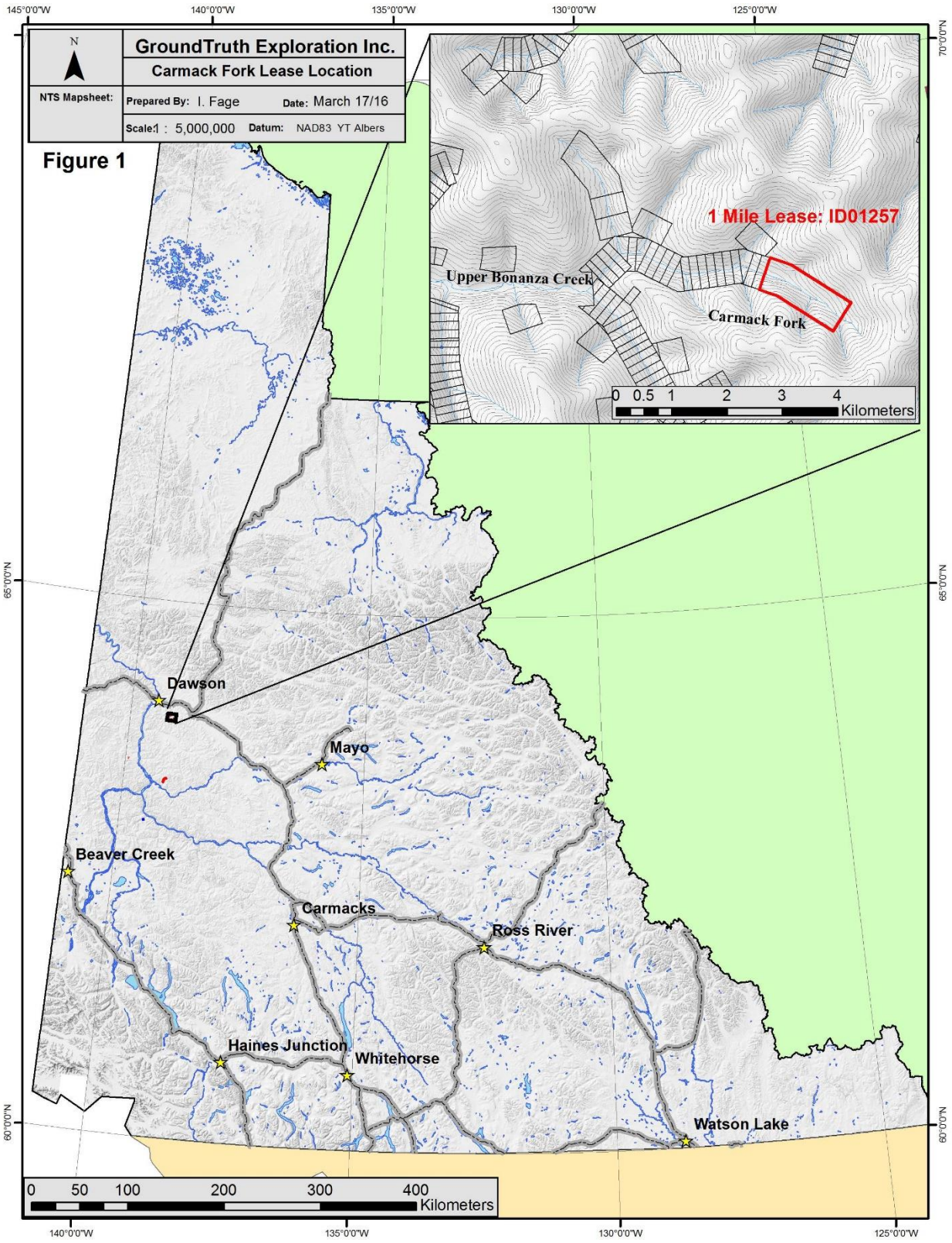
3 Physiography

The lease is located in an unglaciated zone in the Klondike Plateau region of Canada's Boreal Cordillera ecozone. Due to its location in Canada's discontinuous permafrost zone, permafrost is distributed unevenly throughout the property. The valley bottoms and northern slopes have thick moss mats, black spruce, and alder thickets over ice rich permafrost, while southern slopes are generally more sparsely vegetated with ground leaf cover and white spruce, aspen and birch forests.

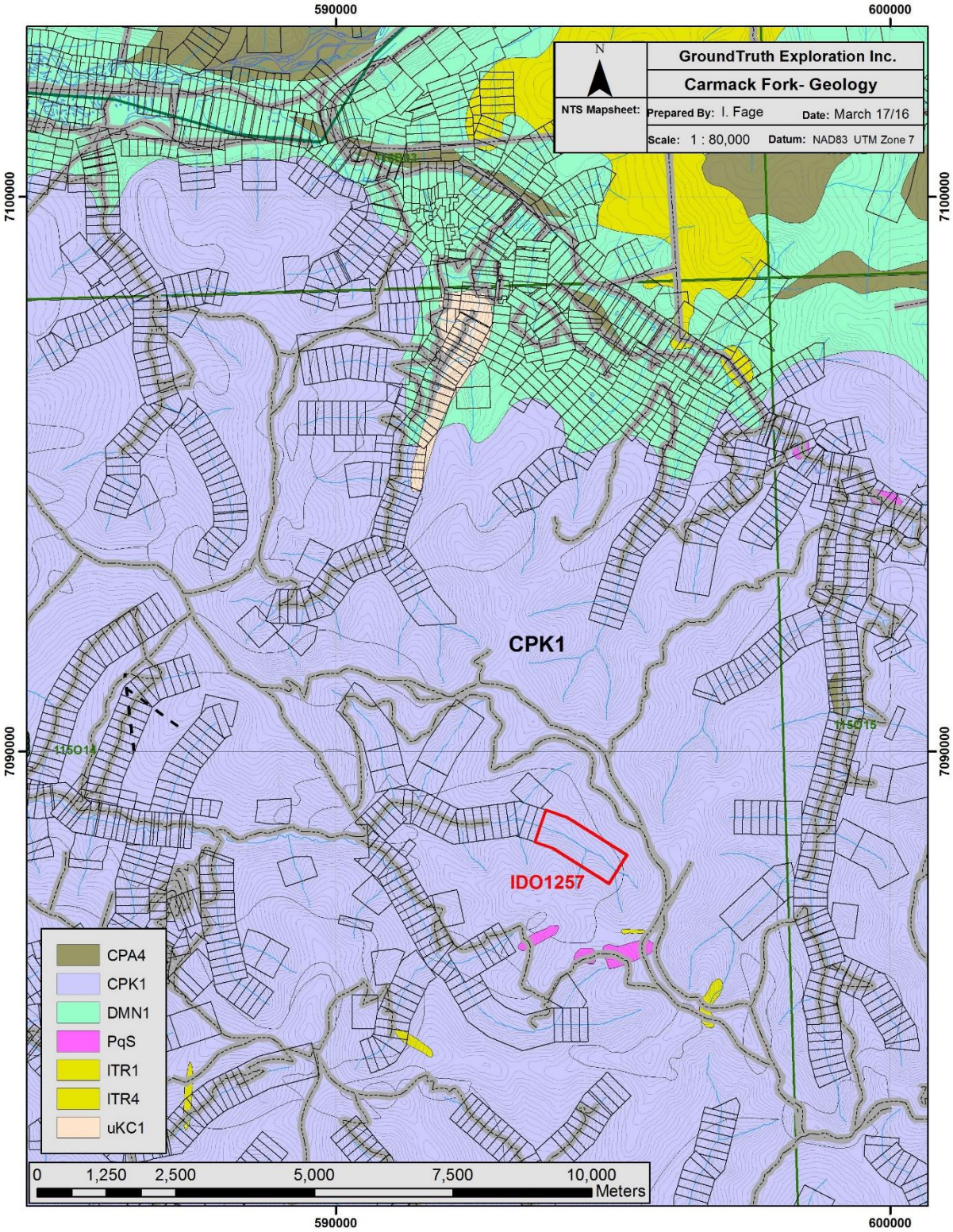
4 Climate

The interior intermontane plateau receive about 400 mm of annual precipitation. Snowfall accounts for 35 to 60% of all precipitation. Winters are long and cold, with January mean temperatures between -15°C and -27°C. Summers are warm but short, with July mean temperatures between 12°C and 15°C.

(http://www.emr.gov.yk.ca/oilandgas/pdf/bmp_boreal_cordillera_ecozone.pdf)


GroundTruth Exploration Inc.
Carmack Fork Lease Location
NTS Mapsheet:
Prepared By: I. Fage
Date: March 17/16
Scale: 1 : 5,000,000
Datum: NAD83 YT Albers
Figure 1
1 Mile Lease: ID01257
Upper Bonanza Creek
Carmack Fork
0 0.5 1 2 3 4 Kilometers
Dawson
Mayo
Beaver Creek
Carmacks
Ross River
Haines Junction
Whitehorse
Watson Lake
0 50 100 200 300 400 Kilometers
145°0'0"W
140°0'0"W
135°0'0"W
130°0'0"W
125°0'0"W
70°0'0"N
69°0'0"N
60°0'0"N

5 GEOLOGICAL SETTING



5.1 Geological Description

The Lease is underlain by the Klondike Schist unit. Regionally, it is coded as CPK1, a metamorphic unit of the Paleozoic era consisting of quartzite, quarts-muscovite-chlorite schist, gneiss and amphibolite.

6 Work Performed

The 2016 UAV survey consisted of a 1 day survey staffed with a lead UAV operator and assistant UAV operator (spotter). A total of 3 flights were run to cover the lease area.

Photogrammetry: UAV High Resolution Imagery/Elevation Survey

The Drone survey lines and spatial resolution are approved by client prior to survey in accordance with Transport Canada UAV operating permit regulations. Typical flight time is approximately 35 minutes per flight and the operator plans accordingly with available time on ground to determine the number of flights possible per day.

6.1.1 Personnel and Equipment

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

6.1.2 Operating Procedure

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.

6.1.3 Data Processing

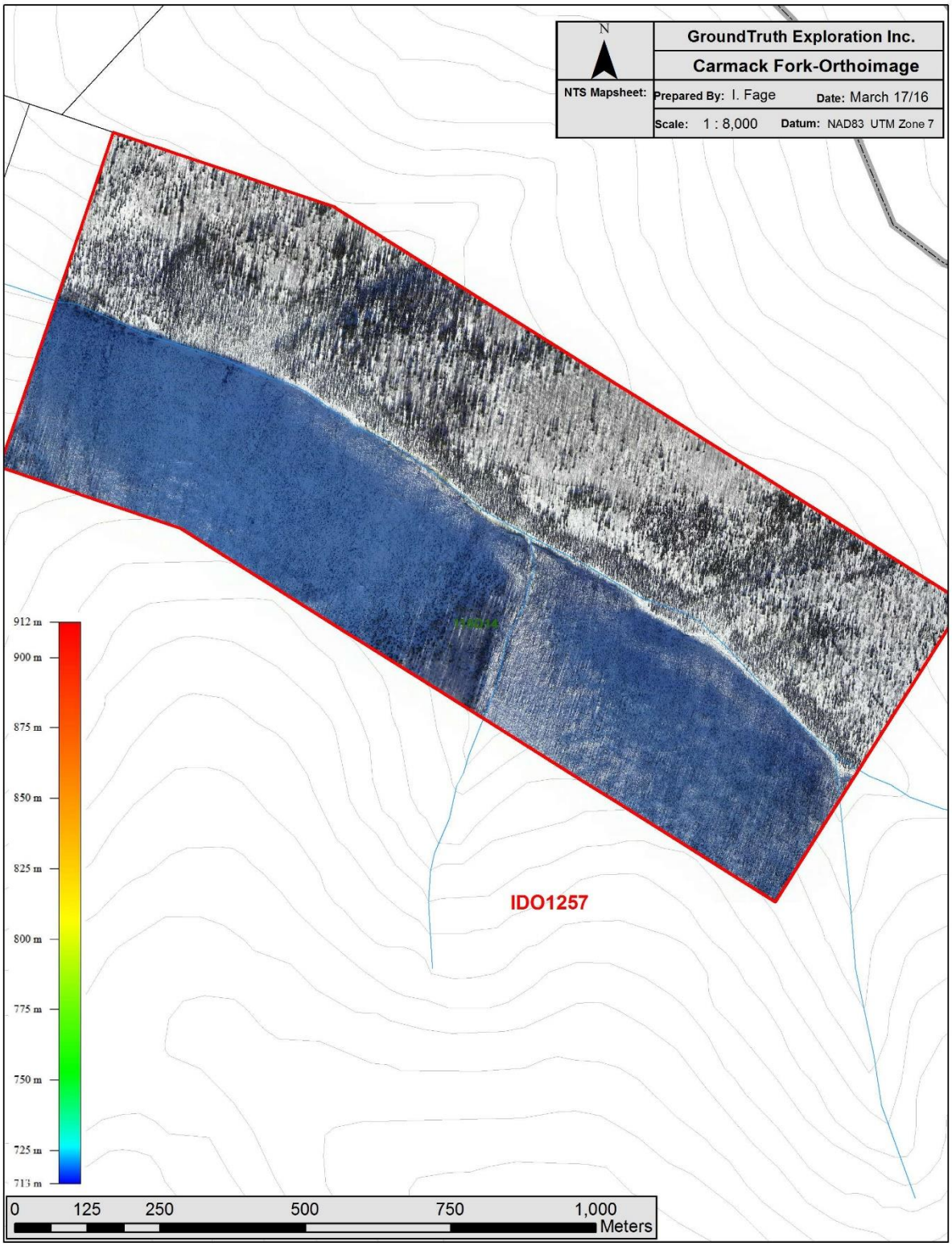
The collected data is downloaded in the field after every flight and checked for integrity. This allows any low quality imagery to be identified and resurveyed while onsite. The drone imagery data is processed every evening by the lead operator in the field using Postflight Terra 3D software provided 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.

Standard data output:

Imagery:	Georeferenced Orthoimage (.geotiff format)
Digital Elevation Model:	Gridded Elevation model (geotiff format)
Automated Quality Report:	Report with survey statistics (.pdf format)

Discussion:

The UAV survey is useful for interpreting the geophysical surveys to know in detail what the ground conditions are. Locations of permafrost, drainage and slope have a significant impact on geophysical surveys such as resistivity and GPR data. The imagery/topography allows us to get an accurate measurement of true valley floor width and margins from creek drainage. Future access and planning of exploration work locations will be planned from this dataset. Figures below show the imagery and topographic model and the level of detail which the local topography is imaged. Basic targeting interpretations are made on the topographic model figures. It is interpreted that generally the North facing slope has best prospectivity for buried placer gravels. The South facing slope generally appears to be deeply incised and bedrock being near surface with the exception of a eroded zone at the downstream limit indicated on the topo model.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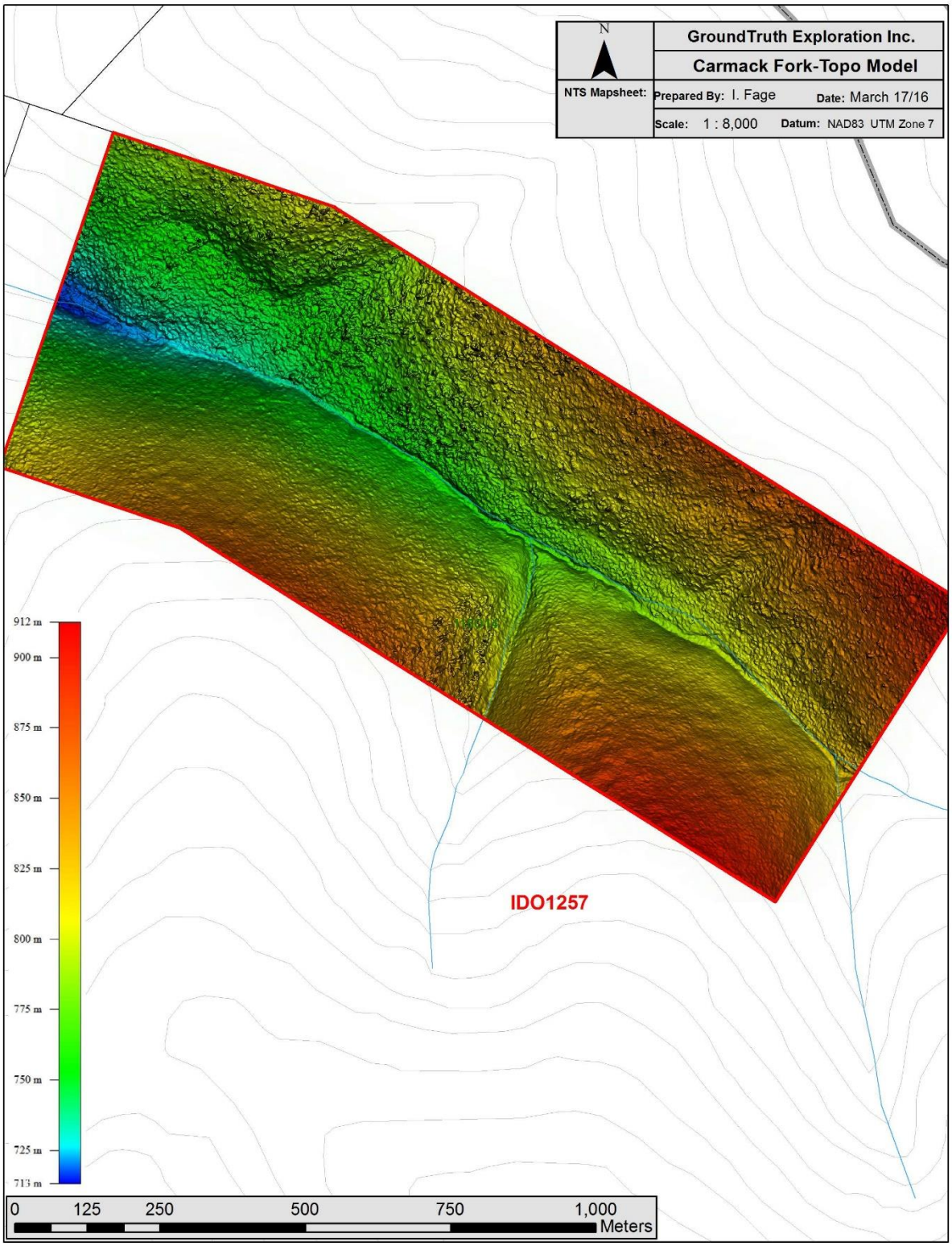
GroundTruth Exploration Inc.
Carmack Fork-Orthoimage
NTS Mapsheet:
Prepared By: I. Fage
Date: March 17/16
Scale: 1 : 8,000
Datum: NAD83 UTM Zone 7
912 m
900 m
875 m
850 m
825 m
800 m
775 m
750 m
725 m
713 m
IDO1257
0
125
250
500
750
1,000
Meters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GroundTruth Exploration Inc.
Carmack Fork-Topo Model
NTS Mapsheet:
Prepared By: I. Fage
Date: March 17/16
Scale: 1 : 8,000
Datum: NAD83 UTM Zone 7
912 m
900 m
875 m
850 m
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725 m
713 m
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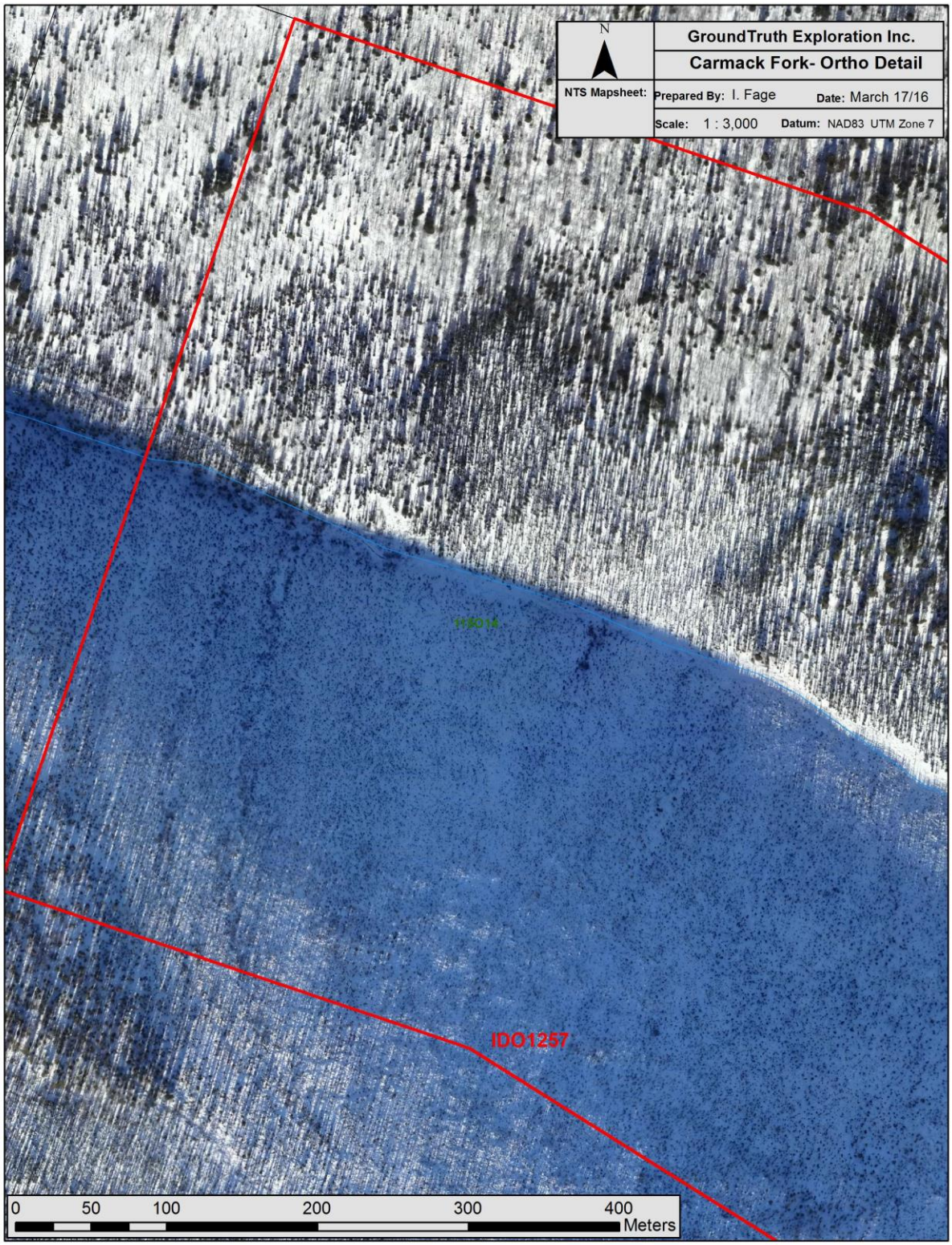
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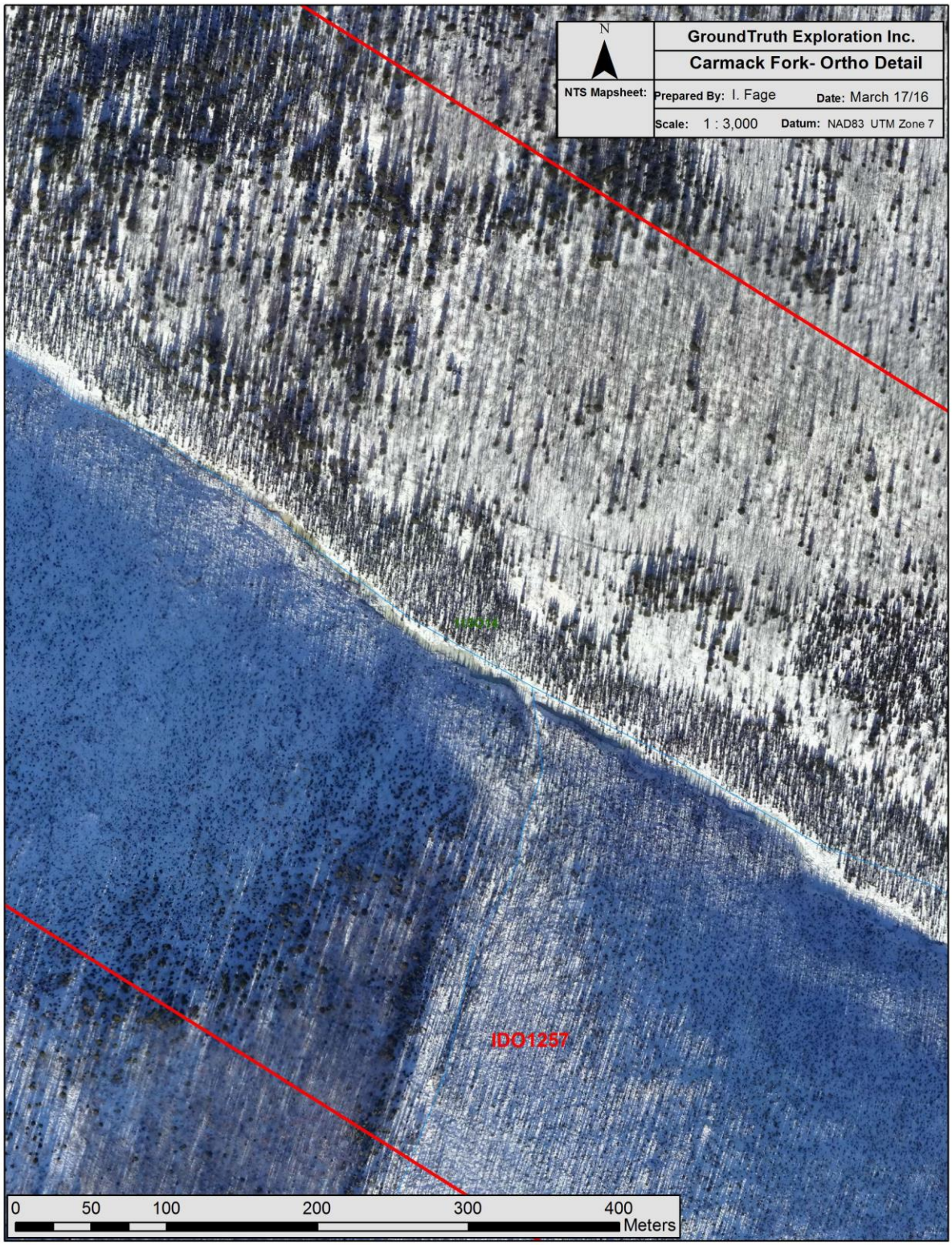
GroundTruth Exploration Inc.
Carmack Fork- Ortho Detail
NTS Mapsheet:
Prepared By: I. Fage
Date: March 17/16
Scale: 1 : 3,000
Datum: NAD83 UTM Zone 7
IDO14
IDO1257
0
50
100
200
300
400
Meters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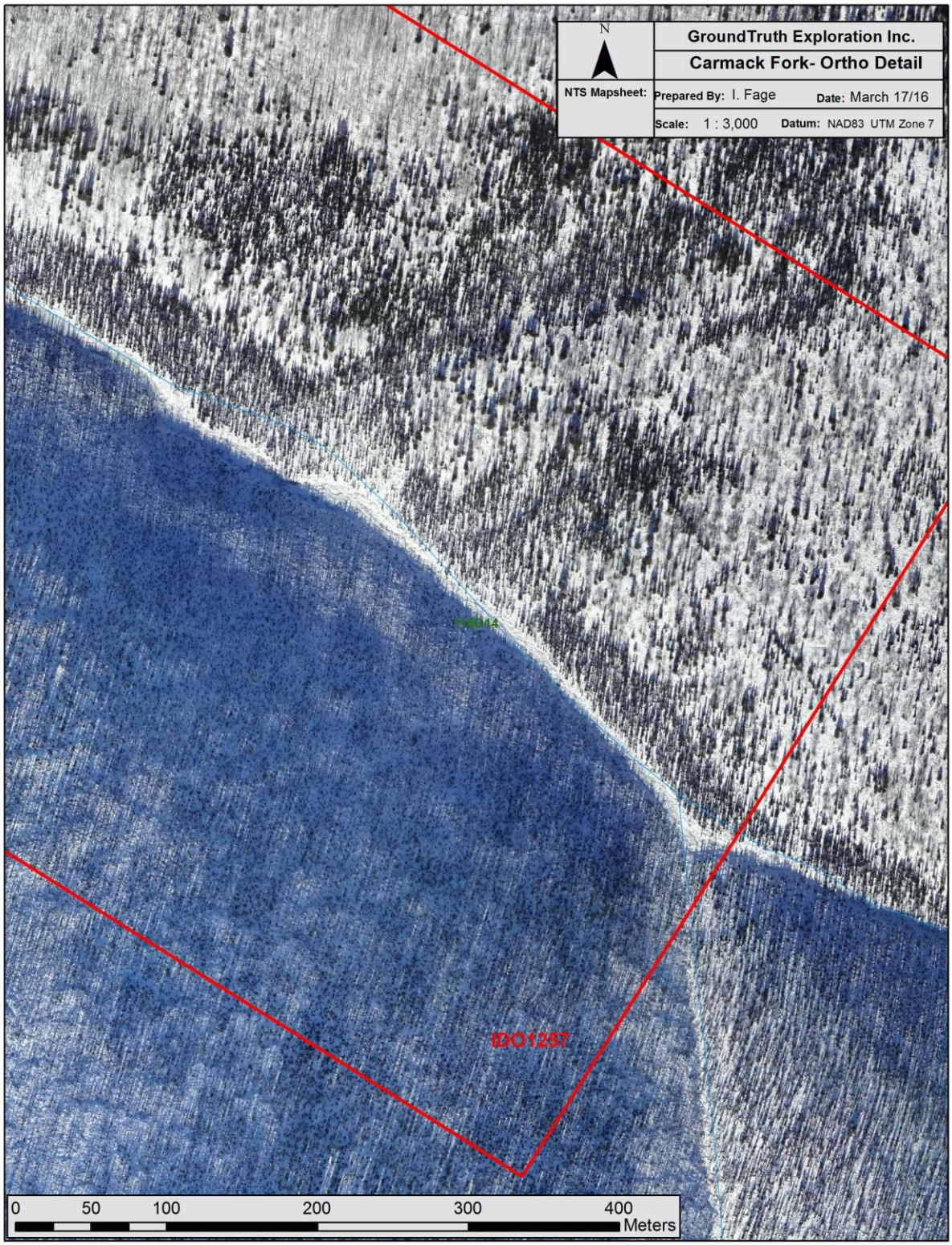
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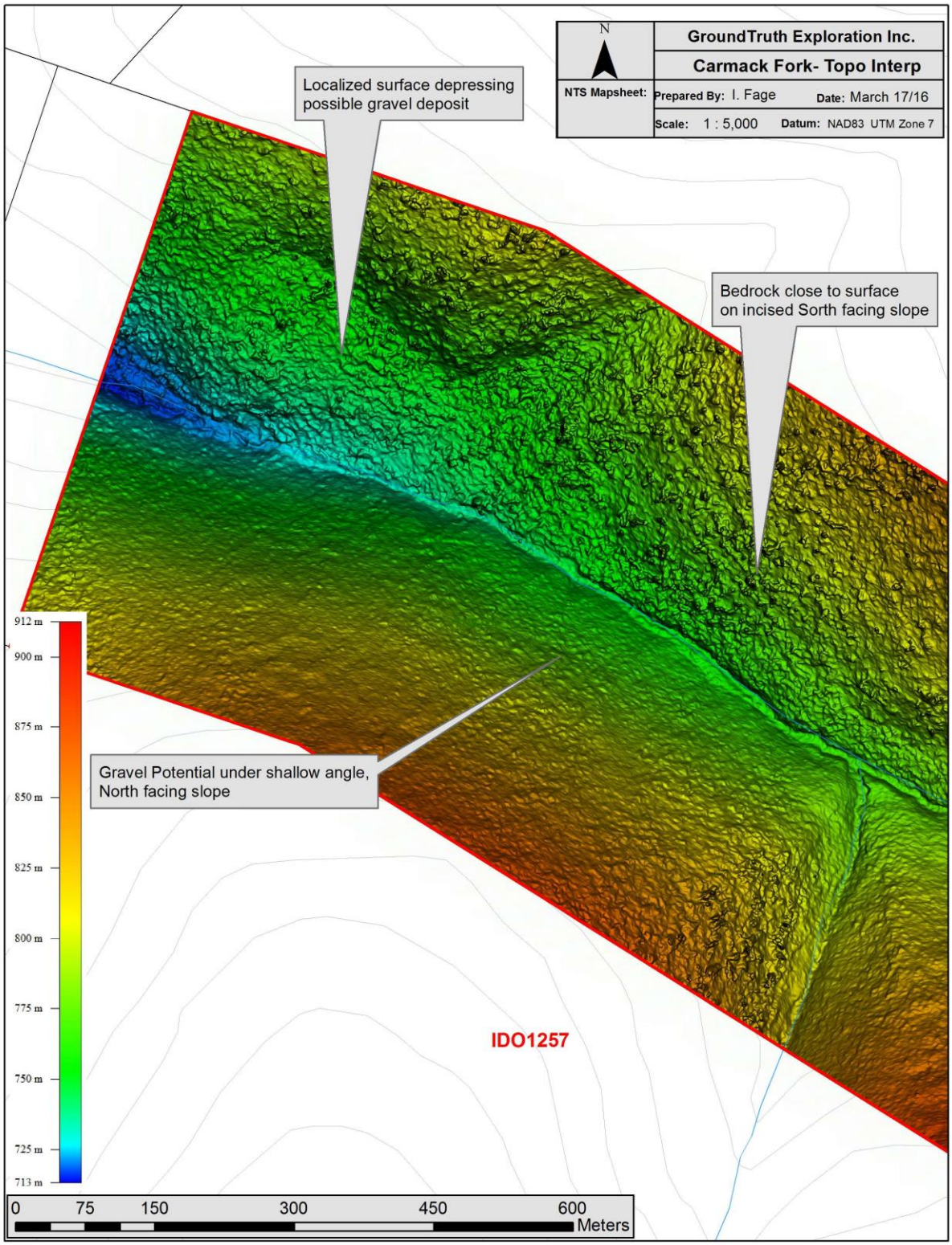
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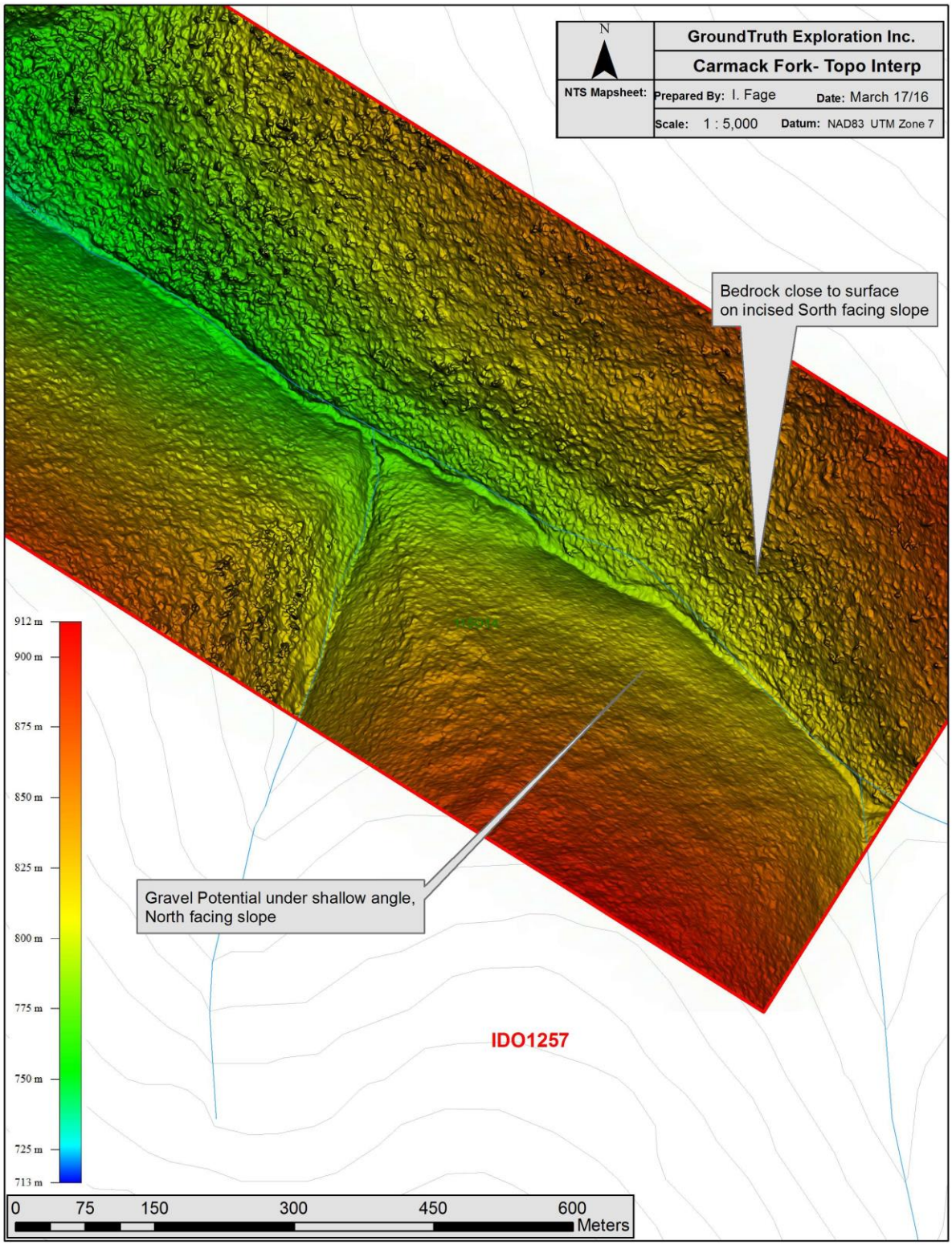
GroundTruth Exploration Inc.
Carmack Fork- Topo Interp
NTS Mapsheet:
Prepared By: I. Fage
Date: March 17/16
Scale: 1 : 5,000
Datum: NAD83 UTM Zone 7
Localized surface depressing possible gravel deposit
Bedrock close to surface on incised Sorth facing slope
Gravel Potential under shallow angle, North facing slope
IDO1257
912 m
900 m
875 m
850 m
825 m
800 m
775 m
750 m
725 m
713 m
0
75
150
300
450
600
Meters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725 m
713 m
0
75
150
300
450
600
Meters

6.1.4 Conclusion and Recommendations

Further exploration work is required to evaluate the prospectivity of the lease. It is recommended that a light geophysical survey such as DC Resistivity be conducted to evaluate potential depth and volumes of pay gravels in the drainage and adjacent north facing slope on the lease. This would then be followed up by means of drilling or test pits. Additional work is at the discretion of the property owner.

7 Statement of Costs

UAV Survey conducted on: March 16, 2016

Report Written on: March 17, 2016

Expenses:

UAV Drone Survey Invoice: Carmack Fork, Noah Williams

GroundTruth Exploration

Overview:		
A UAV Survey consisting of 3 flights x 30 minutes on Carmack Fork was conducted on March 16, 2016. Data Deliverables have been provided to Client		Invoice#: GT-NWI2016-01
Standard Data Deliverables: 1 .Orthorectified Image (.geotiff, .ecw), 2. Digital Elevation Model (.geotiff, .grd) 3. Tiled Imagery for Google Earth™ (.kml) 4. 3D point cloud (.las) 5. Quality Report (.pdf)		
Drone Acquisition/Report Cost Breakdown:		
Wages:		
1 UAV Drone Operator * $500/day		$ 500.00
Survey Equipment:		
UAV Drone with Base Station (1/2 Rate, Small Survey)		$ 250.00
Data Management and Processing Services		
Imagery Processing and Final Report - $250		*$ 250.00*
	Total Invoice:	***$ 1,000.00***

8 References

Regional Geology: Gordey, S.P. and Makepeace, A.J. (comp.) 1999: Yukon bedrock geology in Yukon digital geology, S.P. Gordey and A.J. Makepeace (comp.); Geological Survey of Canada Open File D3826 and Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-1(D)

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

Topographic data: NR Canada, CanVec Topographic Database- www.geogratis.ca

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

9 Qualification

I, Isaac Fage have been president of GroundTruth Exploration in Dawson City since May 2010. 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 Placer Lease IW00412 and IW00413.

Dated this 17th day of March, 2016 in Dawson, YT.

Respectfully submitted,

Isaac Fage