ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016 -510 West Hastings Street
Vancouver, B.C. V6B 1L8
Telephone: 604-688-2568 Fax: 604-688-2578

ASSESSMENT REPORT

describing

LIDAR SURVEYING

Work performed on October 14, 2015

at the

VAULT PROPERTY

VAULT 1-180 YD56961-YD57140

NTS 115G/12
Latitude 61°35'N; Longitude 139°35'W

located in the

Whitehorse Mining District
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

STRATEGIC METALS LTD.

by

H. Burrell, P.Geo.

April 2016

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APPENDICES

Statement of Expenditures
Vault 1-180 Mineral Claims
March 24, 2016

Contract LIDAR Survey (including management)

Eagle Mapping Ltd.	$29,493.00

Labour

D. Eaton (geologist) 13 hours March to January at $120/hr	1,638.00
H. Burrell (geologist) 16 hours March to January at $106/hr	1,780.80
	3,418.80
	$32,911.80

180 claims = $182.84/claim

APPENDIX I

PHYSICAL COPY OF LIDAR SURVEY REPORT

LiDAR Data Report

Yukon Sites: Byng, Mars, Hartless Joe & Vault Claims

Data collected and prepared for:

Archer Cathro & Associates

1016-510 East Hastings Street

Vancouver, BC V6B 1L8

Eagle Mapping Ltd.

#201 2071 Kingsway Ave

Port Coquitlam, BC V3C6N2

1.877.942.5551

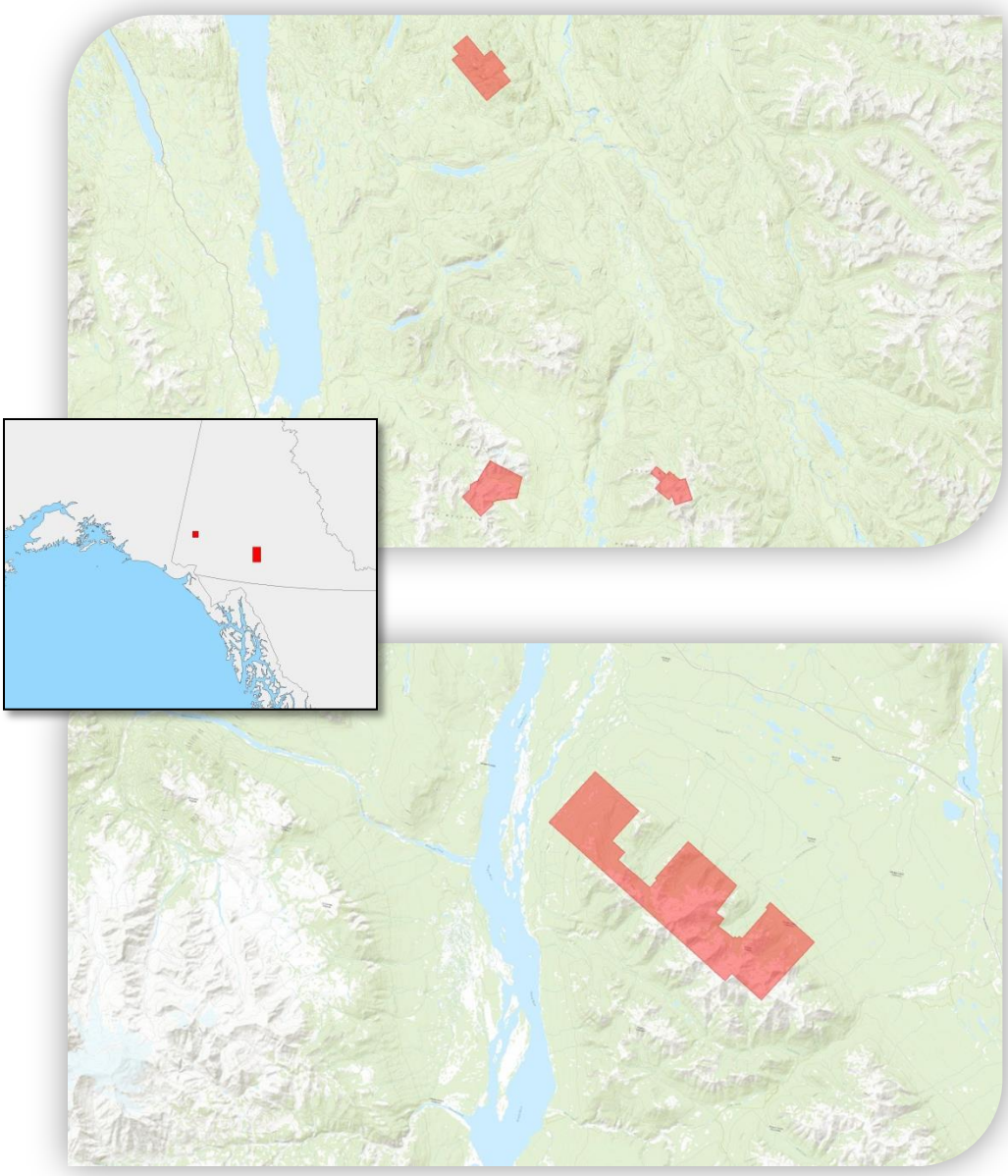
EML Project 15-051

Report Contents

1. Project Overview

1.1 Area of Interest

Eagle Mapping Ltd. collected aerial LiDAR of project Area 1, near Whitehorse, YT and Area 2, near Burwash Landing, YT on October 14, 2015. The total Area of Interest (AOI) for this project covers 8110 hectares.



Area 1	
AOI Name and Size	
Mars	1932 ha
Byng	838 ha
Hartless Joe	1780 ha

Area 2	
AOI Name and Size	
Vault	3560 ha

1.2 File Formats, Units, and Projection

Project deliverables include the following:

Digital Elevation Model – 1m resolution

- Shapefile format
- Delivered as one file per project AOI

Digital Surface Model – 1m resolution

- Shapefile format
- Delivered as one file per project AOI

Elevation Contours – 1m resolution

- Shapefile format
- Delivered as one file per project AOI

LiDAR Intensity

- Geotiff format
- Delivered as one file per project AOI

LiDAR Data Report

- Overview of project specifications, methodology and accuracies achieved
- PDF format

Area 1	
Map Projection Information	
Projection	UTM zone 8N
Horizontal Datum	NAD83 (CSRS)
Vertical Datum	CGVD2013
Geoid	CGG2013
Units	Meters
EPSG Code	3155

Area 2	
Map Projection Information	
Projection	UTM zone 7N
Horizontal Datum	NAD83 (CSRS)
Vertical Datum	CGVD2013
Geoid	CGG2013
Units	Meters
EPSG Code	3154

2. Acquisition & Calibration

2.1 Airborne LiDAR Collection

A Riegl Q1560 dual-channel LiDAR system was used for acquisition of the LiDAR data. This system was installed in a Piper Navajo operated by Peregrine Aerial Surveys out of Abbotsford, BC. In total, 32 flight lines were required to cover all AOIs. Nominal flying height was 1450m above ground level (AGL) and flying speed was approximately 140knts. The scan field of view for the Riegl Q1560 is 29° either side of nadir, for a total scan field of view of 58°. The scan rate used for this project was 800 kHz. However, due to the nature of the 4-sided rotating mirror in Riegl scanners only 2/3 of pulses are recorded (533 kHz useable). This yields an average pulse density of 4 pulses per channel per swath (8 pulses per dual-channel flight line). Note, each pulse may result in one or more returned points as the pulse filters through vegetation, etc.

LiDAR Acquisition Specifications	
Flight Altitude	1450m AGL
Flying Speed	140kts nominal
Scan Rate	800khz (533khz usable)
Scan Field of View	58°
Line Spacing	640m
Minimum Overlap	60%

2.2 Aircraft GNSS Trajectory Processing

GNSS post-processing determines the position and attitude of the aircraft at 200Hz along the entire flight path. This data is logged on the Q1560 via an Applanix POS AV510. Post-processing requires data from the onboard GNSS and Inertial Measurement Unit (IMU) as well as data from one or more static GNSS base station(s) with known coordinates.

Processing is done with Applanix PosPAC v7.1 software. Here the aircraft GNSS / IMU data is referenced to the base station data to provide adjusted positions for the aircraft in latitude, longitude, and height, roll, pitch, and yaw / heading. The final trajectory is then smoothed, and exported in .pos format for use in RiProcess for LiDAR processing. The resulting flight path is commonly referred to as a Smoothed Best Estimate of Trajectory (SBET).

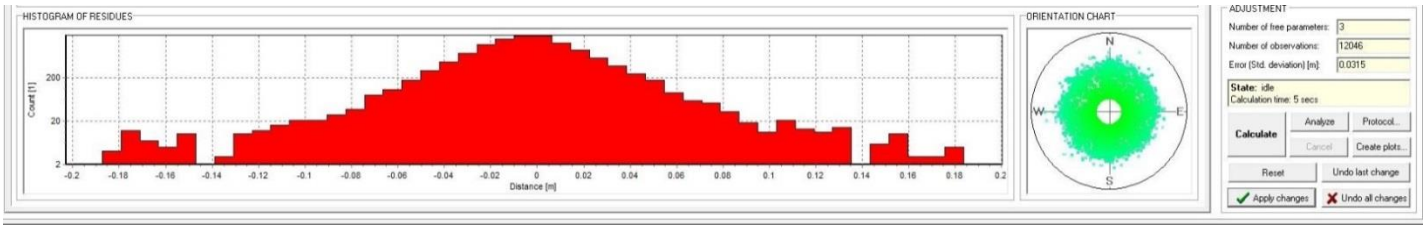
Trajectory Processing Results	
Min. # of Satellites	7
Max. # of Satellites	11
Minimum PDOP	1.5
Maximum PDOP	3.5
RMSE	2.5 cm

Mission planning ensures the project is flown during a period of good satellite visibility, resulting here in an average PDOP of 2.0 and maximum of 3.5. The statistical accuracy (RMS) of the SBET trajectory is < 2.5cm.

The base station used for deferential GPS processing was located in Whitehorse, YT and is a continuously operating station which is part of the Canadian Active Control Station (CACS) network.

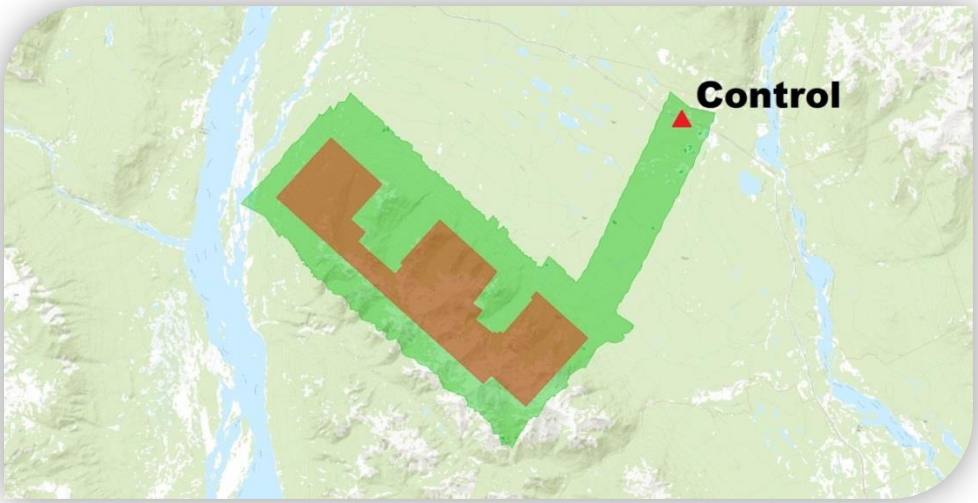
2.3 LiDAR Calibration

LiDAR data was calibrated using Riegl RiProcess software. A quality check was performed using matching tie planes which are calculated automatically and analyzed via a least-squares adjustment. Manual cross section checks were also performed to verify the automatic results. Internal accuracy of the LiDAR data was calculated at ±5 cm. Once deemed properly calibrated, the LAS data is exported along with individual 'trajectories' for each scan line. All data is projected into UTM and adjusted to the proper geoid (CGG2013) at this time.



3. Ground Control Measurement

Due to the long base line during data acquisition of the Vault AOI claim, LiDAR collection was planned to include a high precision 3D control monument which is maintained as part of the Canadian Passive Control Network. LiDAR data was check against the control and no shift was applied.



4. Results and Conclusions

4.1 Point Density and Coverage

The delivered LiDAR data is positioned with an average density of 8-9 points / sq. meter for all returns, and 7-8 points / sq. meter counting only first-returns. Density is greater for all returns vs first-returns due to the full waveform analysis performed by the Q1560 laser. By analyzing the full LiDAR waveform, the Q1560 is able to extract many additional points in vegetation, or other terrain where the laser pulse is 'filtered' through many objects in close proximity to each other.

4.2 Accuracy

Due to a robust internal calibration and accurate flight trajectory it is Eagle Mapping's confident conclusion that the LiDAR data is accurate to <15cm vertically and <30cm horizontally.

APPENDIX II

DIGITAL COPY OF LIDAR SURVEY REPORT AND DELIVERABLES