





















Appendix VI MICROGRAVITY SURVEY



Global Geophysics

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Our ref: 107-1012.000

GN Northern, Inc. 722 North 16th Avenue, Suite 31 Yakima, WA 98902

Attention: Mr. Imran Magsi

RE: REPORT FOR THE GRAVITY SURVEY TO LOCATE MINE WORKINGS AT SUNCADIA PROPERTY, CLE ELUM, WA

Dear Mr. Magsi:

This letter report presents the results of the geophysical survey performed by Global Geophysics in October 2017 at Suncadia Property, Cle Elum, WA. The objective of the study was to locate mine workings.

GEOPHYSICAL METHODS, INSTRUMENTATION AND FIELD PROCEDRUES

The micro-gravity was for locating low density zones such as voids and tunnel.

Micro-gravity

The gravimeter instrument measures the earth's gravitational acceleration. After corrections are made to the gravity measurements for latitude, elevation, tide, drift, regional trend, and terrain at each station, the gravity values represents an excess or deficiency in mass of the subsurface geology.

For this study, gravity measurements were made with a Burris gravity meter (or equivalent) that has a reading resolution of 5 microgal (µgals) and a standard deviation of less than 10 µgals. The average value of gravity on the Earth's surface is 980 milligals. Gravity readings were taken at 10 foot spacing. Data were recorded in a field notebook and stored digitally in the instrument, then downloaded to a laptop computer daily. The computer programs GravMaster and GravModeler were used to process and model the gravity data. Tide, free-air, latitude, Bouguer, drift, regional trend removal, and terrain corrections were applied to the readings.

RESULTS

The gravity data were collected at 74 stations. The gravity stations in Washington State Plane North are shown in Figure 1. After tide and elevation correction, the gravity contour plans are presented in Figure 2. One large low gravity zones is highlighted. The cause of this low gravity anomaly is likely due to the presence of void and/or increased soil thickness. Another small low gravity at stations 72-74 is likely due to the increase of soil thickness.

LIMITATION OF GEOPHYSICAL METHODS

Global Geophysics services will be conducted in a manner consistent with the level of care and skill ordinarily exercised by other members of the geophysical community currently practicing under similar conditions subject to the time limits and financial and physical constraints applicable to the services. However, micro-gravity is a remote sensing geophysical method that may not detect all subsurface conditions. Where interpretation from geophysical data is an important element for cost or safety of operations, the data and interpretations should always be checked for reasonableness against known or expected subsurface data, and verified at critical locations by physical means such as borings or excavation.

Sincerely,

Global Geophysics

John Liu, Ph.D., R.G. Principal Geophysicist