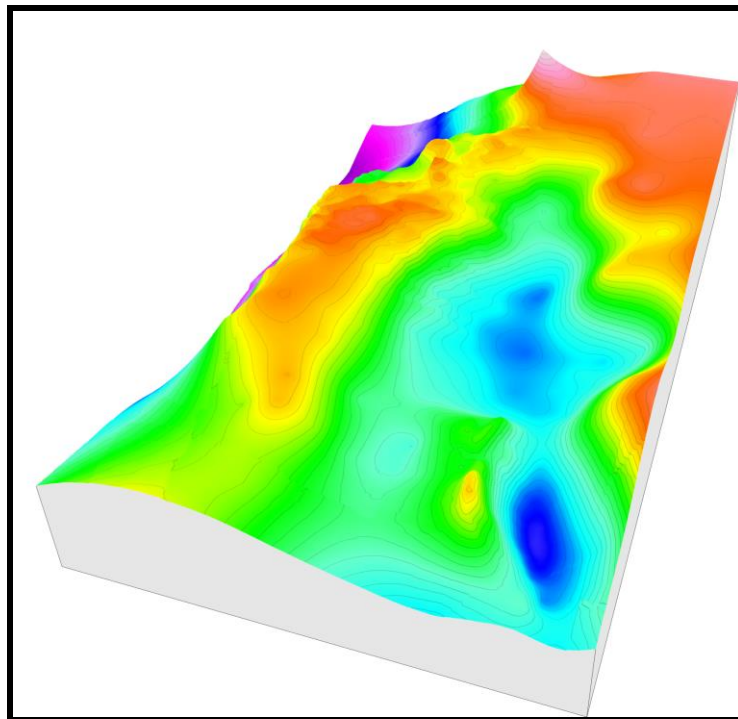


U. S. GOLD CORPORATION

**KEYSTONE PROPERTY
GRAVITY SURVEY - 2016
GEOPHYSICAL COMPILATION**



Residual Gravity Looking North-northwest



**James L. Wright M.Sc.
July 9, 2016**

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INTRODUCTION

A gravity surveys was completed over the KEYSTONE property from June 4 – 19, 2016 with the objective of structural, lithologic and alteration delineation in support of the gold exploration program. Contrasting rock types on the property and large areas of alteration justified the survey implementation. Extensive structural complexity is also present. In addition to gravity data, a number of previous geophysical surveys are also compiled and analyzed along with the new gravity results. Coordinates used for the project are **NAD 27 / UTM 11N**.

Figure 1 shows the property outline relative to roads, towns, county boundaries and topography in central Nevada.

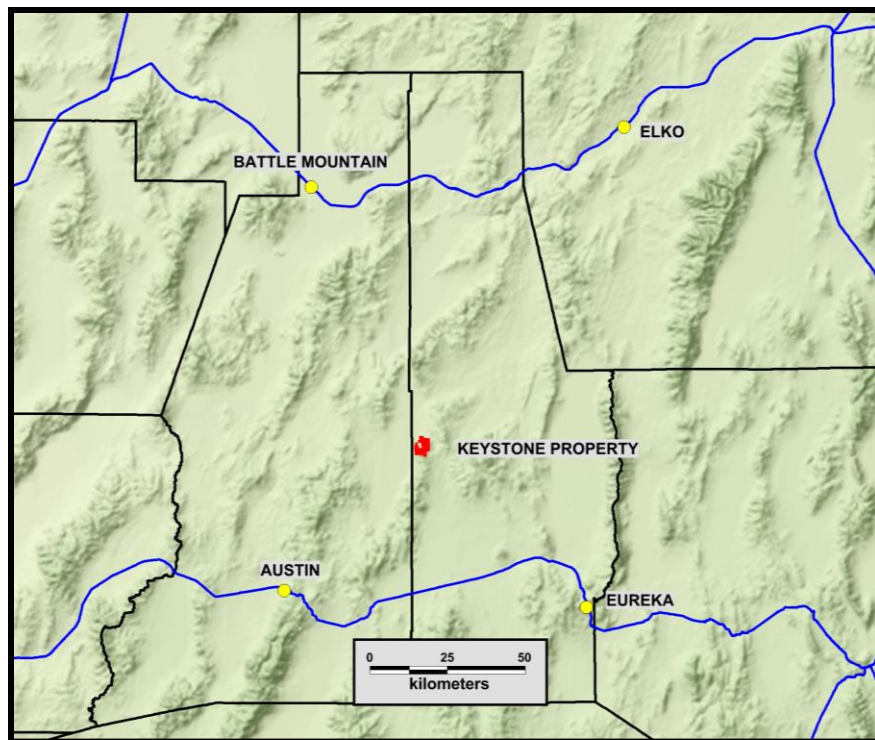


FIGURE 1: Keystone Property Location

Results of the data compilation and gravity survey are provided in digital formats. The digital products included all raw data and processed files, as well as MAPINFO and ARCGIS GIS files for all processed data and interpretations. In addition; topography, DEM, geology and geochemical data sets are also includes. All files are contained on a DVD located in a sleeve at the rear of the report. A README file on the DVD explains the folder / file organization.

The data compilation is presented first followed by survey procedure and data processing for the gravity survey. An interpretation is developed incorporating multiple data sets and finally recommendations / conclusions set forth.

DATA COMPILATION

Historic geophysical surveys include a gradient array induced polarization (IP) survey complete by Nevada Pacific Gold in 2003, gravity survey over the 3 Bar property in 2004 and airborne magnetic, controlled source audio magnto-telluric (CSAMT), and gravity surveys by Placer Dome in 2005. Coverage for the various surveys is presented in Figure 2 over gray shade topography.

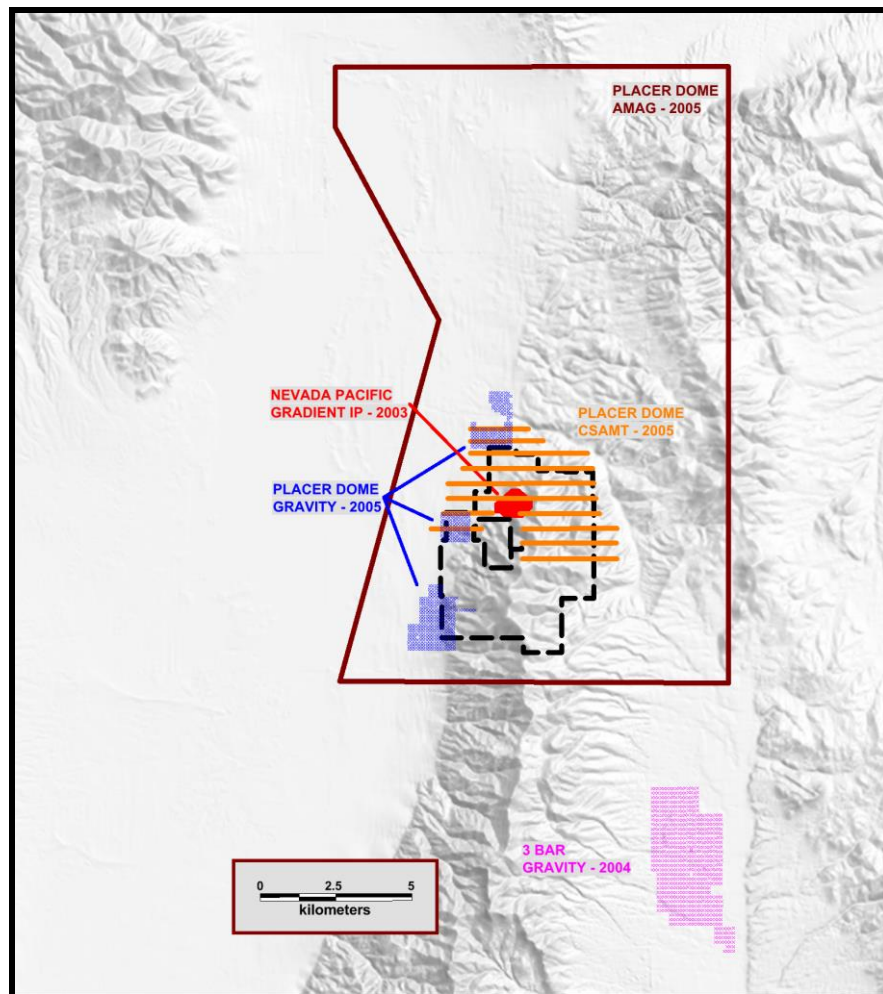


FIGURE 2: Historic Geophysical Surveys over Gray Shade Topography

Digital data for the gradient array IP was provided and Figure 3 presents the resistivity and chargeability for the survey. No information is available for the resistivity measurement units; however, ohm-m's are assumed. The IP measurement appears to be in the time domain so milliseconds (msec) are assumed. Lines are approximately spaced 50 m in a northeast to southwest orientation. A posting of the data reveals poor station control, suggesting lines were not surveyed prior to data acquisition. Data quality appears to be adequate.

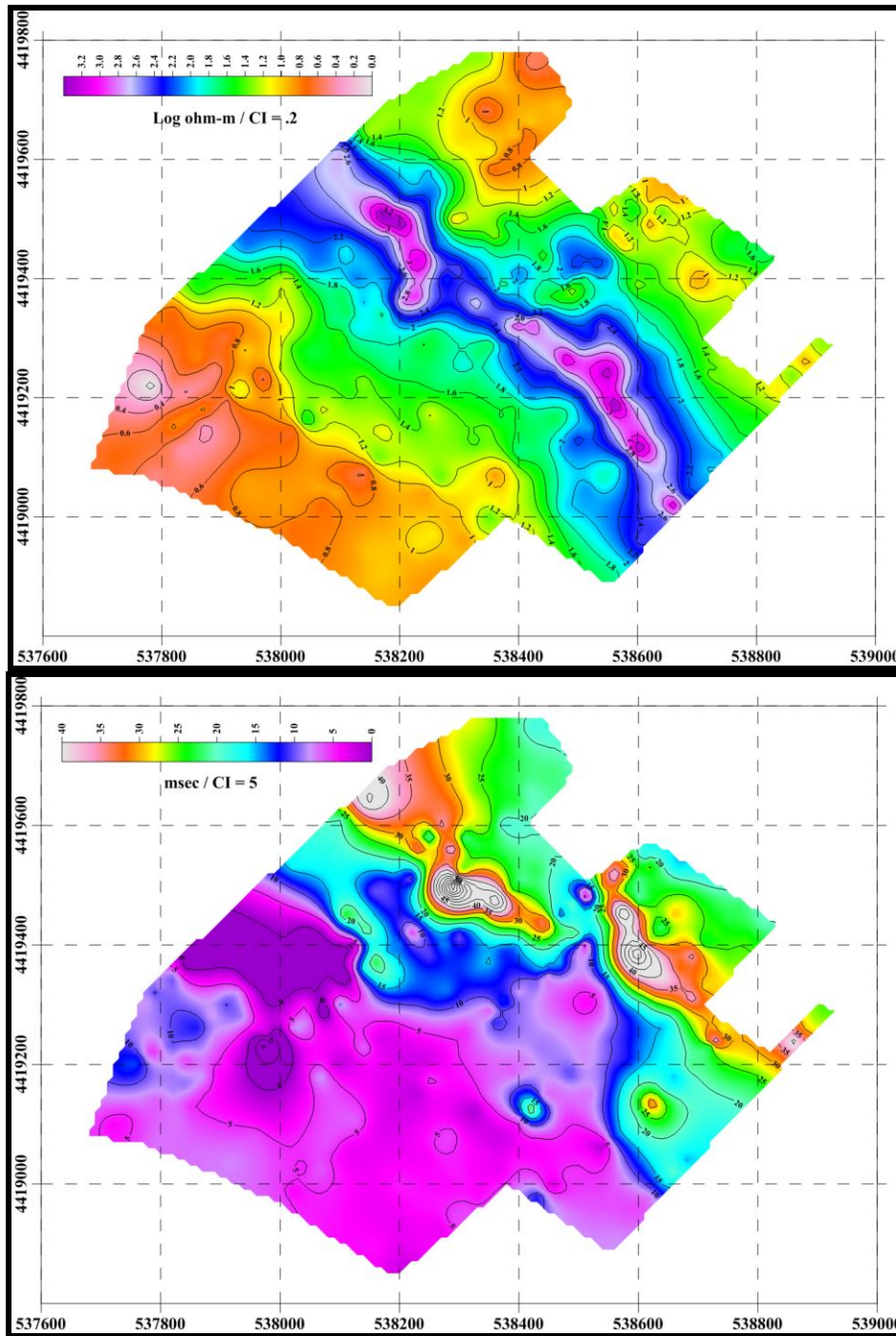


FIGURE 3: Gradient Array Resistivity (Upper) and Chargeability (Lower) Plots

The 3 Bar and Placer Dome gravity surveys include 688 and 541 stations respectively. These data were merged with the recently acquired gravity data to yield a total data resource of 2512 stations. The 3 Bar data were acquired on a 100 X 150 m grid and the Placer Dome data on a 100 m square grid. Figures 6 and 8 show the total merged data set including the 3 Bar and Placer Dome data.

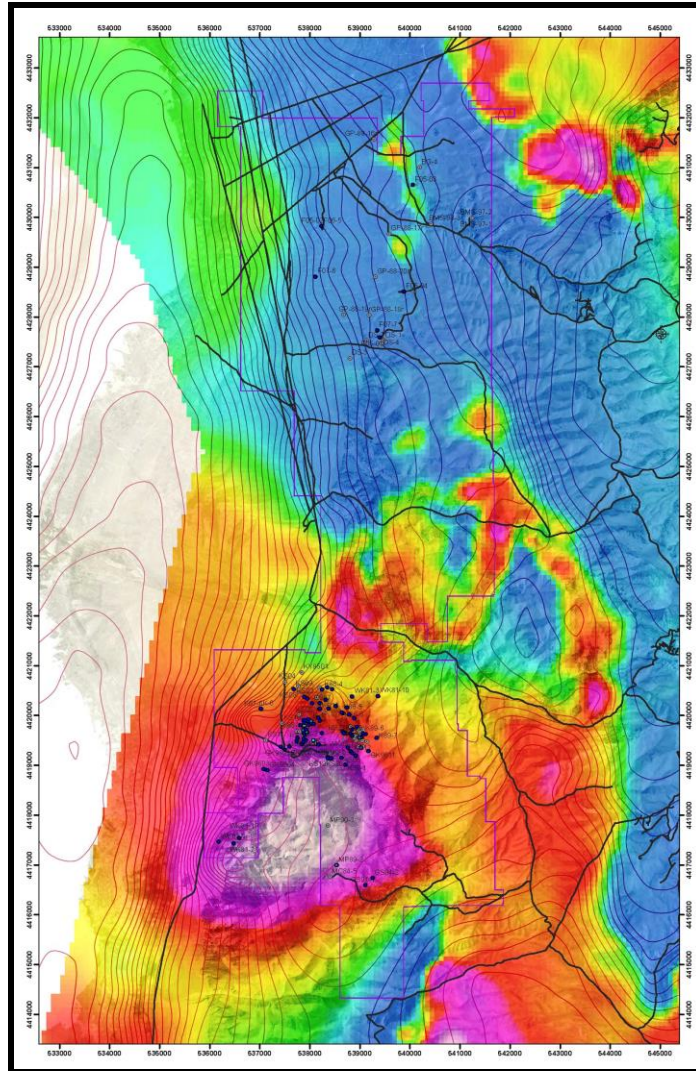


FIGURE 4: Placer Dome Airborne Magnetic Data

The Placer Dome 2005 airborne magnetic data are shown in Figure 4. The data consists only of this image. Coordinates are assumed to be NAD 27 / UTM 11N. No color bar is included and the data are assumed to be pole reduced total field. Agreement with mapped geology and other geophysical data sets are sufficient as to indicate these assumptions are likely correct. No information concerning flight line spacing, instrumentation or flight platform is available. However, given the 2005 survey data, it is likely the data were acquired with the Placer Dome in-house helicopter system.

Figure 5 presents the inverted CSAMT sections rotated to plan over gray shade topography. Ten east-west lines spaced 500 m constitute the data set. However, the northern two line and western ends of three others are missing from the data. Data include images of the inverted resistivity sections. Zonge acquired the data in 2005 for Placer Dome using a 60 m receiver dipole. A detailed logistics report is available.

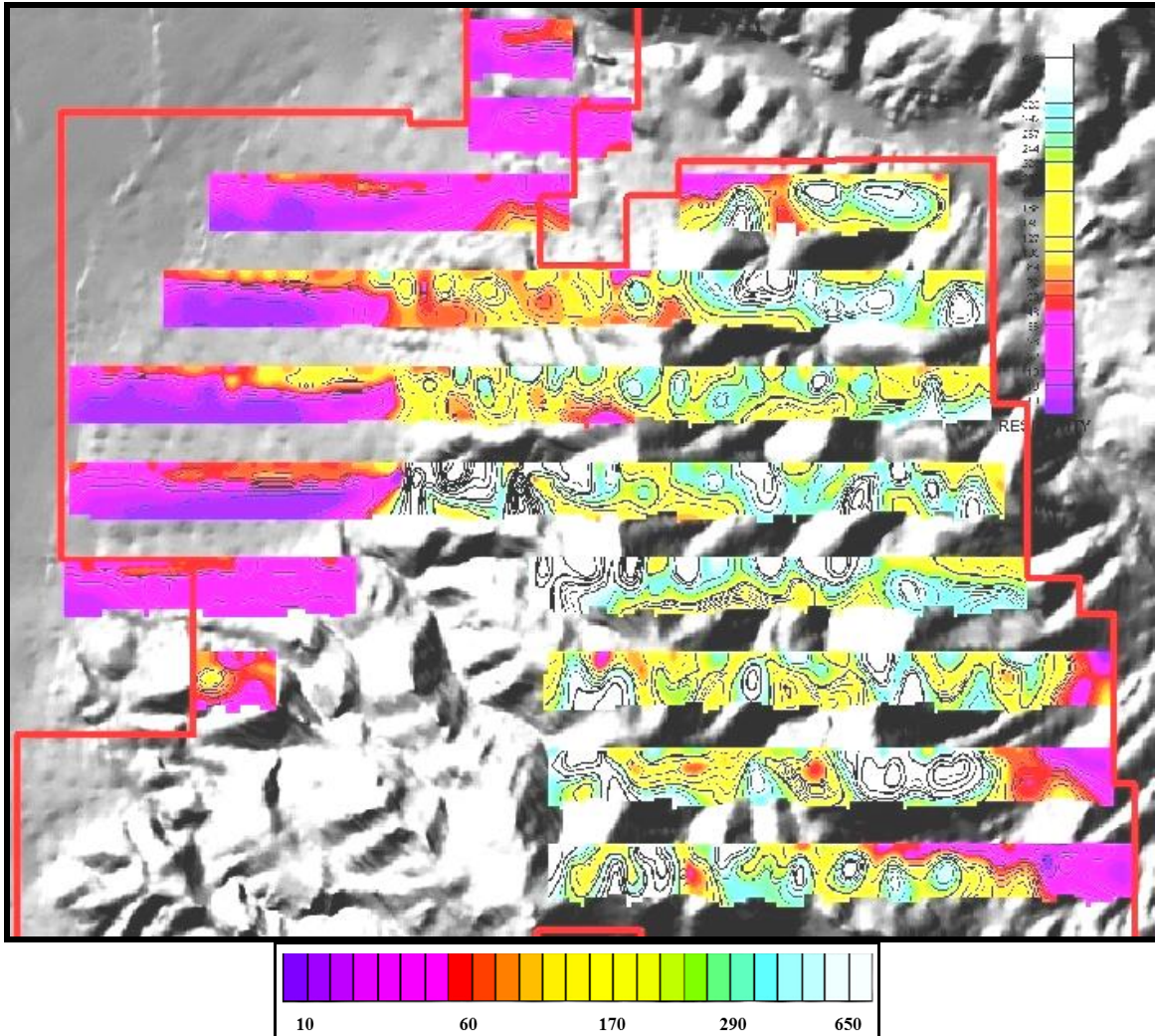
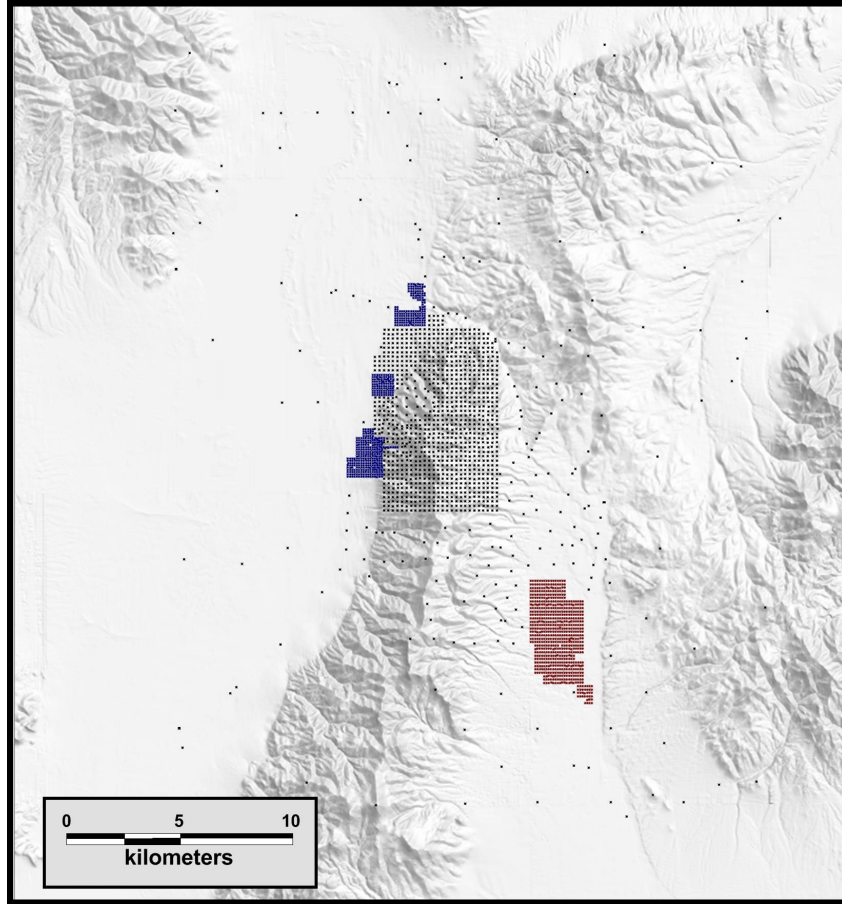


FIGURE 5: CSAMT Sections Rotated to Plan over Gray Shade Topography

GRAVITY SURVEY PROCEDURE

A total of 2512 gravity stations comprise the complete data set after inclusion of the 3 Bar, Placer Dome and surrounding USGS public domain data. Keystone stations were acquired on a 200 m grid as well as along surrounding public roads with approximately a one kilometer spacing. In addition to the 1134 surveyed grid and road stations, 154 public domain USGS station were merged into the database to provide regional coverage surround the property scale surveys. Figure 6 shows the complete station posting over the gray shade topography.

Relative gravity measurements were made with LaCoste & Romberg Model-G gravity meters. Topographic surveying was performed with Trimble Real-Time Kinematic (RTK) and Fast-Static GPS. The gravity survey is tied to the US Department of Defense gravity base EUREKA (DoD reference number 5311-1).



**FIGURE 6: Gravity Stations over Gray Shade Topography
(Black – Keystone & USGS / Red – 3 Bar / Blue – Placer Dome)**

All gravity stations were surveyed using the Real-Time Kinematic (RTK) GPS method or, where it was not possible to receive GPS base information via radio modem, the Fast-Static method was used. A GPS base station, designated KEY1, was used on the project. The coordinates and elevation of this base station location were determined by making simultaneous GPS occupations in the Fast Static mode with Continuously Operating Reference Stations (CORS). The topographic surveying was performed simultaneously with gravity data acquisition.

All gravity data processing was performed with the Xcelleration Gravity module of Oasis montaj (Version 7.0). The gravity data were processed to Complete Bouguer Gravity over a range of densities from 2.00 g/cc through 3.00 g/cc at steps of 0.05 g/cc using standard procedures and formulas.

Terrain Corrections were calculated to a distance of 167 km for each gravity station. Various procedures were used for three radii around each station: 0-10m, 10-200m, and 2-167 km. These include the triangle method, combination of a prism and a sectional ring method, and sectional ring method for the three zones respectively.

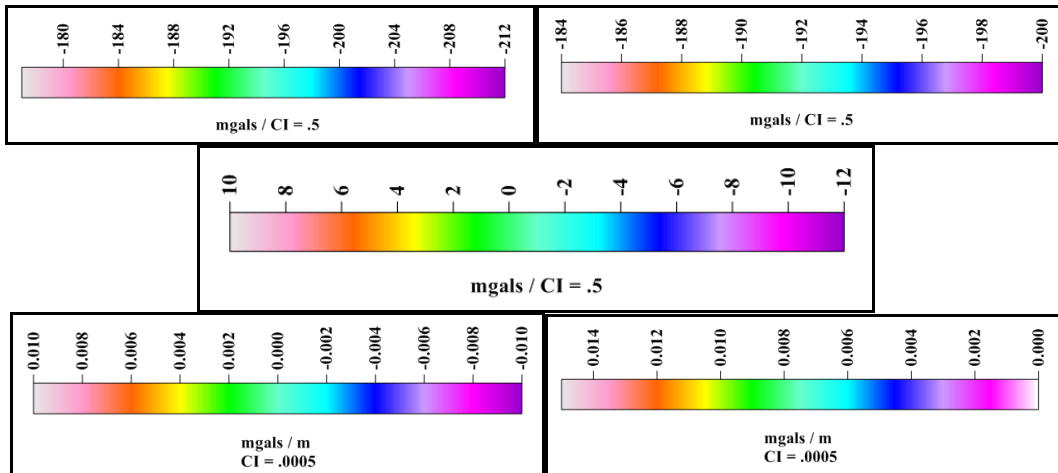
Gravity repeat statistics for the Keystone gravity survey follow.

Total number of stations: 1134
 Number of repeated stations: 56
 % stations repeated : 4.9%
 Total number of readings: 1296
 Number of repeat readings: 162
 % readings repeated: 12.5%
 Maximum repeat error: 0.0463 mGal
 Mean repeat error: 0.0123 mGal
 RMS error: 0.0186 mGal

The mean of the absolute value of all loop closure errors is 0.0250 mGal. Such a low closure error indicates good quality data, which supports the following interpretation. Additional details concerning survey logistics are available in Appendix A.

DATA PROCESSING

Data provided by MaGee Geophysical Services LLC included the gravity data corrected to the complete Bouguer anomaly (CBA) stage for a number of densities. Determination of the most suitable Bouguer density is required for removal of topographic effects in the data. The most appropriate density for processing is that which minimizes the correlation of gravity with terrain. Figure 7 presents profiles of the complete Bouguer gravity (CBA) for densities ranging from 2.00 g/cc to 3.00 g/cc. The profile crosses rough terrain in the southern part of the property extending into the basins on either side. The least correlation of CBA gravity with rough terrain occurs for a density of 2.55 g/cc. This is also a reasonable density for the rocks mapped in the area.



*Gravity Survey Color Bars
 (CBA-UL, UC-UR, RES-CENTER, VD-LL, HG-LR)*

The 2.55 g/cc data were gridded with a Kriging algorithm using a spacing of 50 m, which is 25% of the detail grid station spacing. This product is termed the CBA or GRAV. The CBA data were processed with a proprietary procedure to produce a smoothed regional grid (GRAV_UC), which subtracted from the CBA grid produced a residual (GRAV_RES) grid. Finally, the total horizontal (GRAV_HG) and first vertical derivatives (GRAV_VD) were computed from the CBA. All five grids were mask to the data limits and imaged / contoured for import into MAPINFO and ARCGIS. The images and contours were imported into the GIS as separate files. Color bars for the five products are located on the previous page. Contour intervals and units are as shown below the color bars. All data conform to the **NAD 27 / UTM 11N** coordinate system.

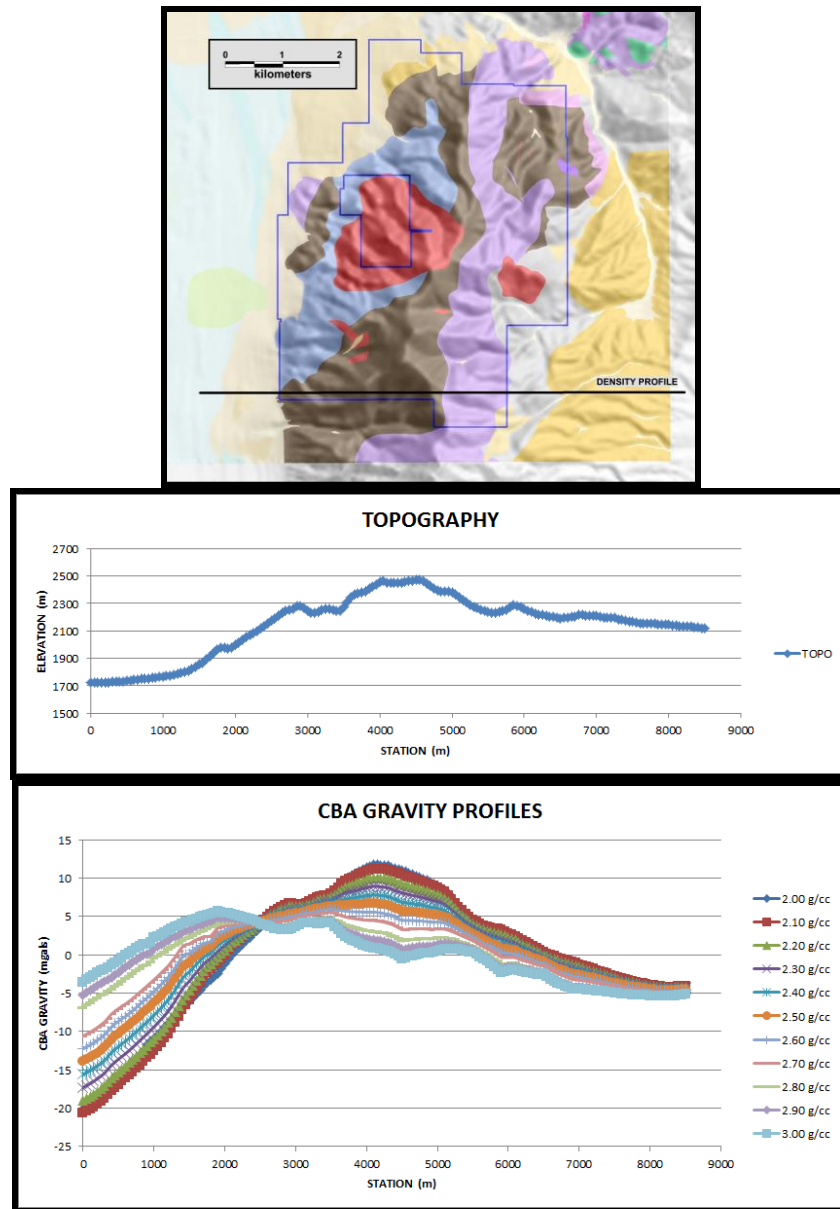


FIGURE 7: Density Profile

INTERPRETATION

Figure 8 presents the complete Bouguer anomaly (CBA) of gravity @ 2.55 g/cc over the gray shade topography. This shows all the data and is the basic gravity product from which all processed items (residual, derivatives, etc.) are generated.

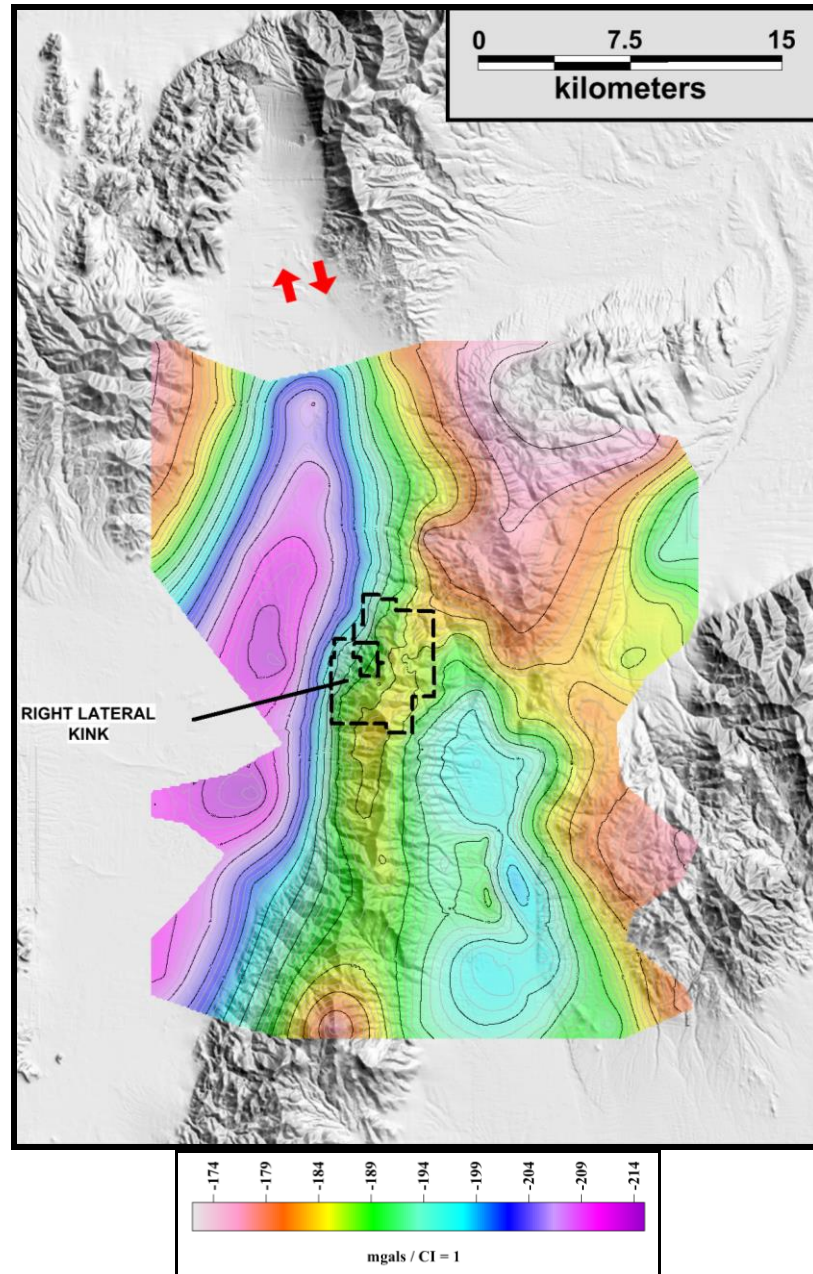


FIGURE 8: CBA Gravity, Property Outline over Gray Shade Topography

Clearly evident in the gravity and topography is a major N15W bearing structural corridor which parallels the Northern Nevada Rift (NNR). The NNR and structural corridor gradually diverge further to the north-northwest. The corridor hosts major gold

deposits to the north-northwest as well as intrusions such as the Gold Acres stock. A width on the order of 5 -10 kilometers is indicated. Also evident in the topography is an apparent right lateral kink or offset in the Simpson Park range produced by the corridor and centered on the property. A similar right lateral topographic bend is noted to the north-northwest, where the Shoshone Range intersects the structural corridor near the historic Cortez gold deposit. **This structural corridor and associated offsets constitutes the large scale structural setting in which the Keystone property is situated.**

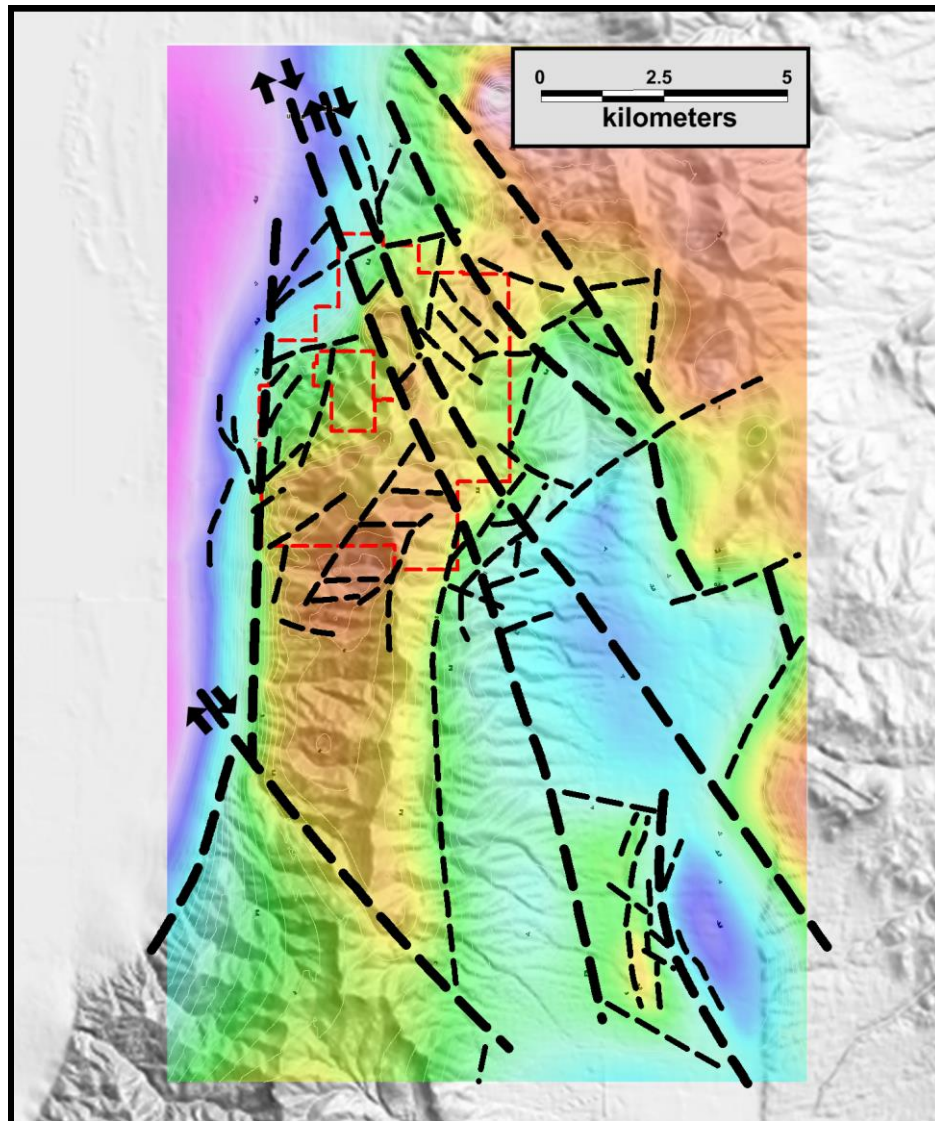


FIGURE 9: Residual Gravity, Interpreted Structures over Gray Shade Topography

The residual gravity in the vicinity of the property is shown in Figure 9 along with interpreted structures and the property outlined in a red dashed line. Dashed black lines represent the structures with line weight denoting magnitude. Five major north-northwest structures traverse the property and are elements of the major structural corridor. In

addition, three of these exhibit apparent right lateral offsets as well as dip slip movement. The southern one also displaces the Simpson Park range in a right lateral sense. The horst block to the south-southeast at the 3 Bar property is bounded by these structures. Extrapolation further to the south-southeast reveals the horst block at the Gold Bar deposit also falls along the same structural trend.

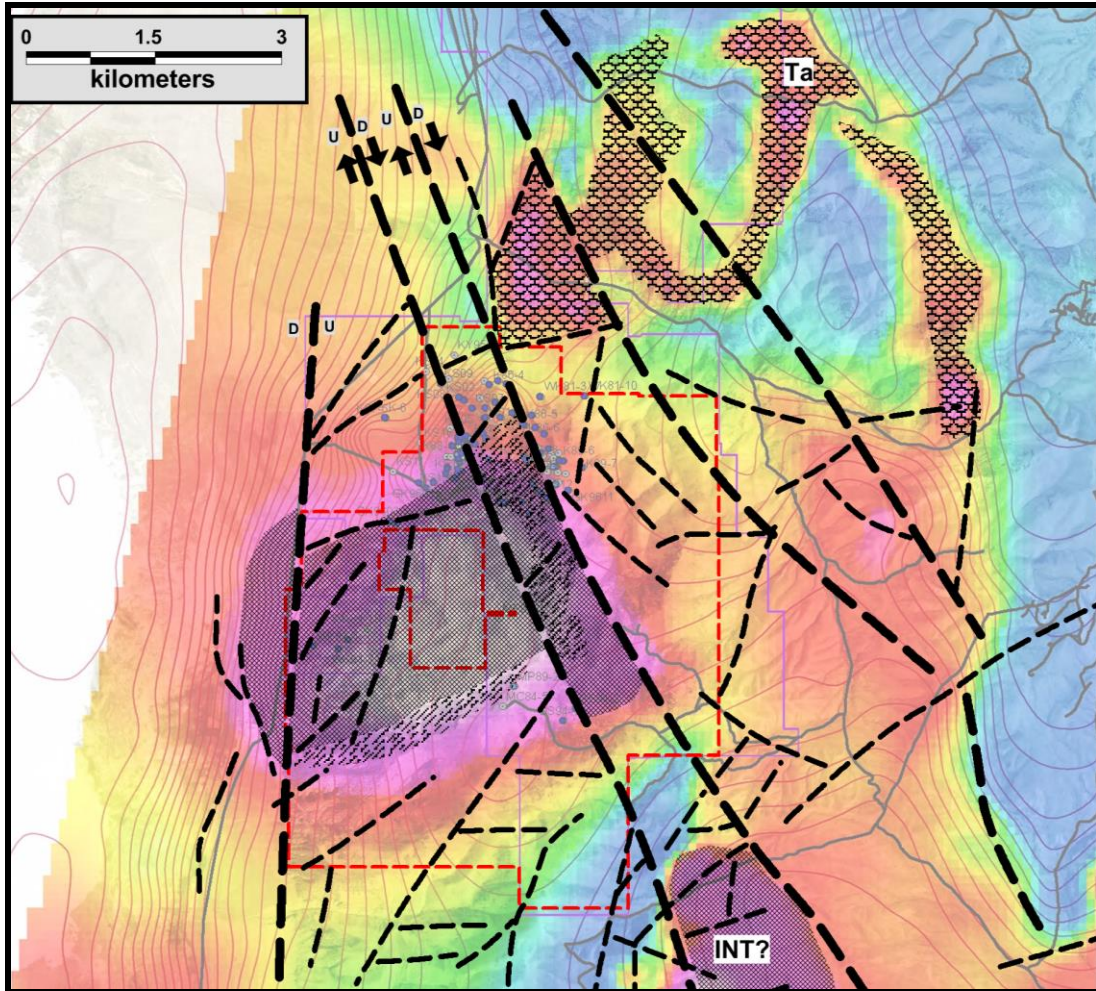


FIGURE 10: Airborne Magnetic Survey and Structural / Lithologic Interpretation

The Placer Dome airborne magnetic data is presented in Figure 10 overlain by the structural and lithologic interpretation. Intrusions (**INT**) are denoted with a black hatching and Tertiary volcanics (**Ta**) with a pillow hatching. The main McClusky intrusion produces a very obvious magnetic high. Two major north-northwest structures appear to down-drop and right laterally offset the intrusion's northeast side. Other north-northeast structures disrupt the volcanic rocks and bound the basin along the east side of the survey coverage. Both the east bounding basin and Grass Valley along the west side of the survey exhibit elevated magnetic readings. This is typical of magnetic basin fill derived from the surrounding terrain. In this case, the magnetic fill would be derived from the **Ta** and intrusive rocks. However, an unusual strong magnetic anomaly is

located in the eastern basin along the south edge of the magnetic coverage (i.e. INT?). It is bounded by two large scale north-northwest structures and interpreted as a possible intrusion beneath basin fill. **In general, the magnetic data support the structural / lithologic interpretation.**

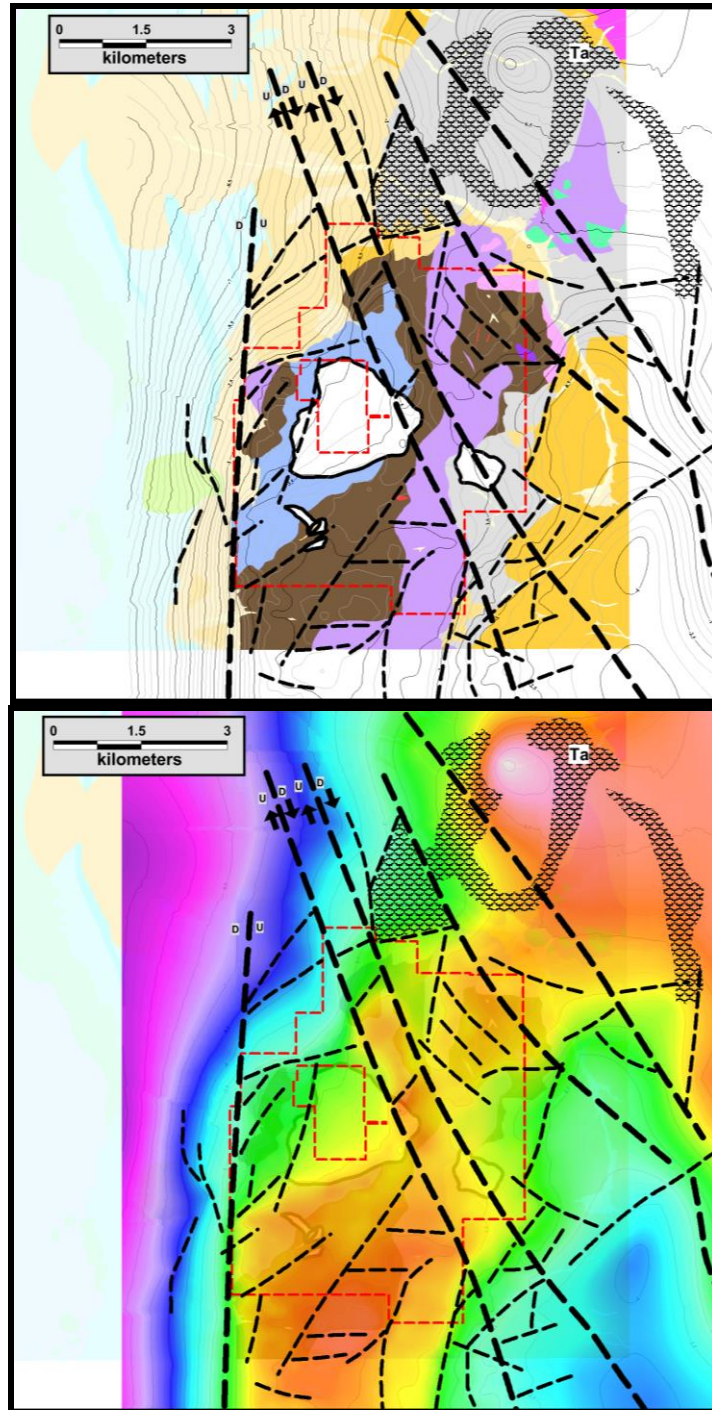


FIGURE 11: Geology and Residual Gravity with Interpretation

The property scale geology is presented in Figure 11 along with the residual gravity and interpreted structures. Most evident is an embayment or gravity low which correlates with the McClusky intrusion. Closer examination reveals gravity highs rim the intrusion along the northeast and southeast sides (see Figure 12). An unusual gravity high elongates in a north-northwest orientation along the northeast side of the intrusion and is bounded by two of the major structures. The magnetic data indicate the intrusion extends beneath this feature, while the geology indicates sediments at surface. This feature hosts the Keystone mine and has been the focus for most of the historic exploration in the district.

Interestingly, the majority of the **Ta** is not magnetic (see Figure 10). The band of **Ta** interpreted to the north appears to follow a topographic high wrapping around basement sediments, suggesting some form of flow. **Ta** is mapped as lahars and flows. Perhaps the lahar material is relatively non-magnetic as compared to the flows.

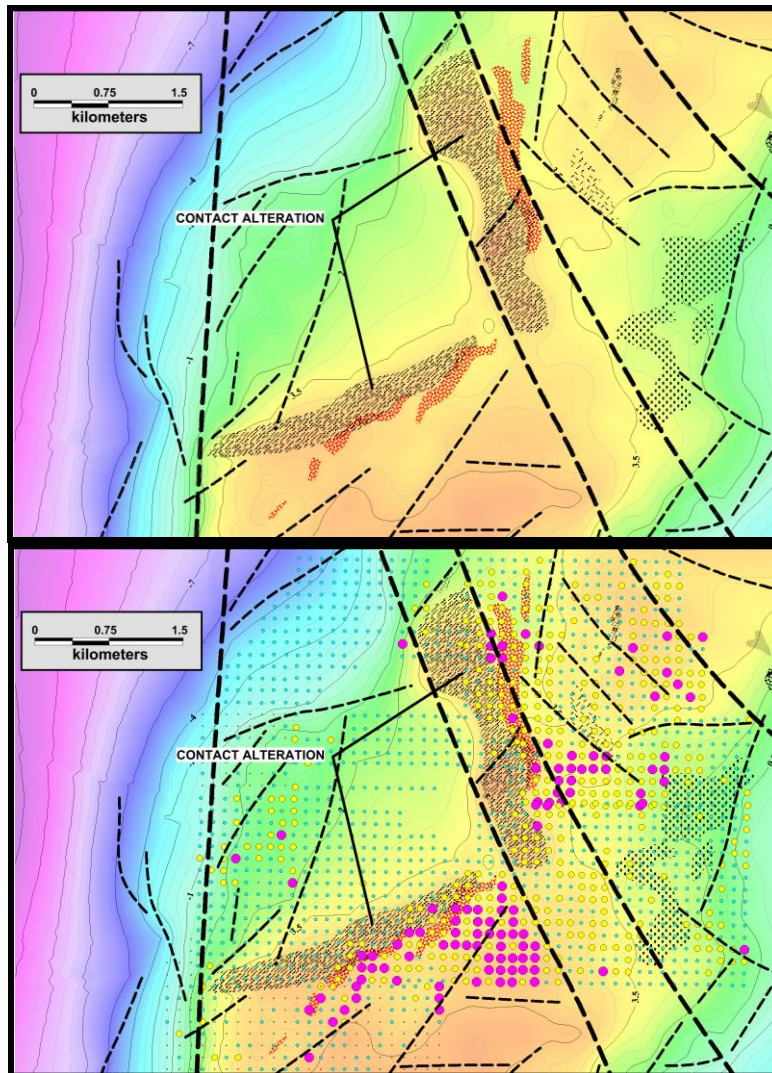


FIGURE 12: Residual Gravity, Structures, Alteration and As Soil Geochemistry

As noted previously, gravity highs tend to rim the northeast and southeast sides of the McClusky intrusion. Figure 12 shows these highs marked with black hatching and designated as contact alteration. This alteration could be metamorphic and/or metasomatic and slightly elevate the density of the sediments. Also shown is mapped silicification as a red hatching. The mapped silicification consistently falls along the margin of the contact alteration away from the intrusion. In addition arsenic soil geochemistry, depicted in the standard proportional symbol format as shown below, also clusters along the outside of the contact alteration with “blow outs” into localized weak gravity lows. **That is; dense contact alteration is located immediately outward of the intrusive contact, flanked by silicification further outward, which in turn is coincident with anomalous arsenic geochemistry and which extends even further outward.**

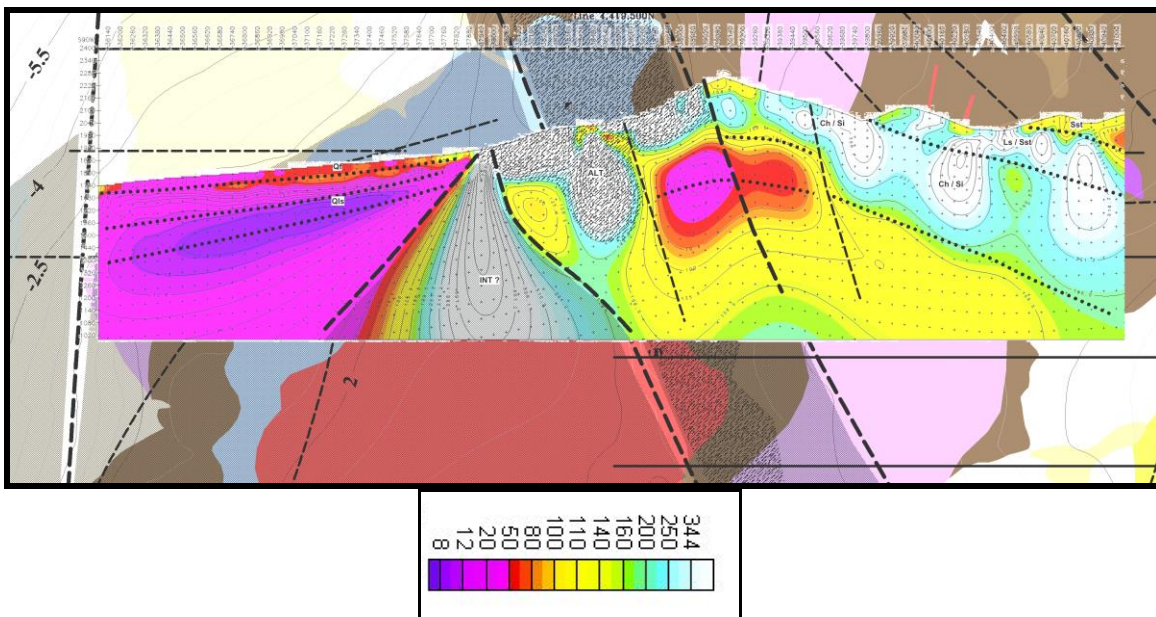
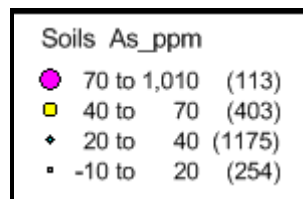


FIGURE 13: Inverted CSAMT Resistivity (ohm-m) Section 4419500N over Geology

The CSAMT survey conducted by Placer Dome in 2005 spanned a total of ten lines (see Figure 5); however, data are only available for eight of the lines with three of these having only partial coverage. As noted previously, the data is comprised of inverted resistivity sections in the form of images. Figure 13 shows the inverted section for 4419500N over the geology. The section is overlain with an interpretation based on the CSAMT data and underlain by the structural / lithologic interpretation derived primarily

from the gravity and magnetics. **Structures interpreted from the CSAMT sections agree relatively well with those from the gravity / magnetics, particularly the larger scale features.** Similar sections for all eight lines are located in Appendix B. Note, the color scales used on the individual inverted sections differs slightly from that used for the stacked sections in Figure 5. On the sections, structures are denoted with black dashed lines, contacts with dotted lines, intrusions with a gray uniform hatching and high resistivity contact alteration with a mottled hatching.

A number of general comments can be made concerning the sections. First, basin fill laps up along the western margins of sections 4419500N, 4420000N and 4420500N. This is composed of several types of layered Quaternary basin fill (i.e. **Qls, Qfo, Qfy, Qf**). To a lesser extent, basin fill also laps on to the eastern ends of the sections from the basin to the east. This fill includes similar Quaternary sediments and some Tertiary conglomerate (**Tcg**). The on-lapping from the east is most prominent on the southern section 4417500N. Interestingly, the Tertiary volcanic unit **Ta** also appears to lap on to the older sediments and is quite low in resistivity as section 4417500N indicates. The Paleozoic sediments exhibit a range of resistivities. For example, rocks mapped as chert, and designated **Ch**, have relatively uniform resistivities in excess of 300 ohm-m. Some of the high resistivities could well be produced by silicification, so the unit is generally identified with a **Ch / Si** label on the sections. A large area interpreted as quartzite on the east end of section 4420000N also correlates with relatively uniform resistivities of 300 ohm-m. A unit identified on the geology as Horse Canyon is composed of limestone and siltstone so labeled **Ls / Sst** on the sections. Resistivities associated with this unit are range from less than 100 ohm-m to over 300 ohm-m and highly variable in distribution within the unit. Presumably the high values correlate with limestone and the lows with the siltstone. The Paleozoic sediments all dip to the east on most sections and are offset by numerous structures. The easterly dip could be a result of doming around the McClusky intrusion. All sections from 4420000N to the south shows interpreted intrusive rocks (**INT**) related to the McClusky intrusion. These are denoted on the section with cross hatching. Resistivity values within the intrusion are uniformly high in the 500 – 800 ohm-m range. Contacts appear to be high angle and structural in many cases. Agreement of the intrusive rock distribution with airborne magnetics is good. In many places along the northeast margin of the intrusion the intrusive rocks appear to be capped by a relatively thin layer of altered sediments. This alteration is present to varying degrees from section 4419500N south to 4417550N, but is most developed on section 4419500N and directly associated with rocks mapped as limestone. The alteration is designated with **ALT** on the sections and denoted with a light, black, angular hatching. Resistivities associated with the alteration are high and erratic in distribution. For example, on sections 4419500N and 4419000N values in excess of 1000 ohm-m are noted. In many locations at depth and intermixed with the high values are low resistivities which certainly could be part of the overall alteration pattern. The resistivities reach lows in the 30 ohm-m range. Maturation of carbon to graphite in the sediments by heat related to the intrusion could well be the source of these low resistivities. The development of marble, skarning, silicification all tend to increase rock resistivities and could well be the processes at play in the alteration zone along the intrusive margin.

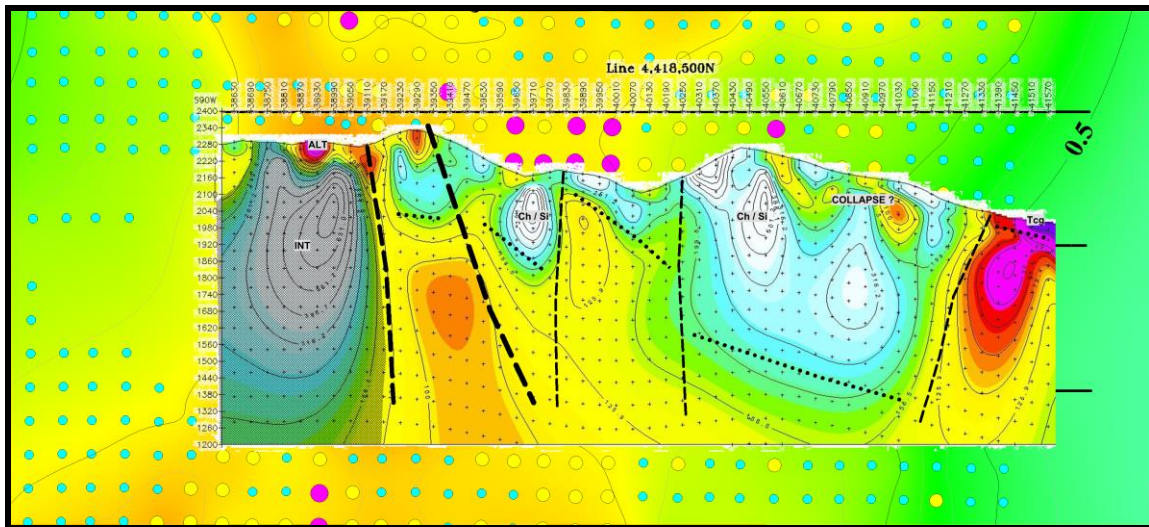


FIGURE 14: Inverted Resistivity Section 4418500N, As Soils over Residual Gravity

An unusual area of a complex resistivity occurs on section 4418500N. The pattern is characterized by high and low resistivities entwined in what appears to be a folded geometry. This pattern also correlates with a gravity low embayment in an area mapped as cherts, greenstones, limestone, siltstones and quartzite. The complex resistivity distribution, gravity embayment and highly variable geology all suggest some form of collapse feature. In addition, the arsenic soils reveal anomalous values extending into the area from the west and terminating along the **Ta** contact. A further eastward continuance of the anomalous geochemistry beneath the **Ta** is suggested.

Five areas of interested are identified based upon the combination of the gravity, geology and geochemistry. These areas are depicted in Figure 15 over the residual gravity, geology and arsenic soil geochemistry. Historic drill collars are shown as red dots. Area 1 covers a weak gravity high – low couple spanning one of the major north-northwest structures. Moderately anomalous arsenic geochemistry extends northward into the area. The gravity variations could well be produced by alteration proximal to the structure. Area 2 covers a gravity low proximal to the main north-northwest structures extending along the northeast margin of the McClusky intrusion. Considerable historic drilling is located immediately west of the area center. The gravity low could well be produce by structurally controlled decalcification immediately outboard of the main contact alteration. Area 3 is associated with a prominent gravity low embayment along the eastern basin margin and centers on the aforementioned collapse feature (see Figure 14). Anomalous arsenic soil geochemistry extends from the west into the area and appears to terminate along the **Ta** contact. Areas 4 and 5 are located east of the McClusky intrusion outboard of the contact alteration zone. Strongly anomalous arsenic soil geochemistry is noted over a wide area covering and proximal to the two areas. Gravity lows correlate with each area and, as with Area 2, could be produced by decalcification in the carbonate section at depth. None of the five areas has been directly drill tested to depth. In fact, areas 1 and 3 are well removed from any historic drilling.

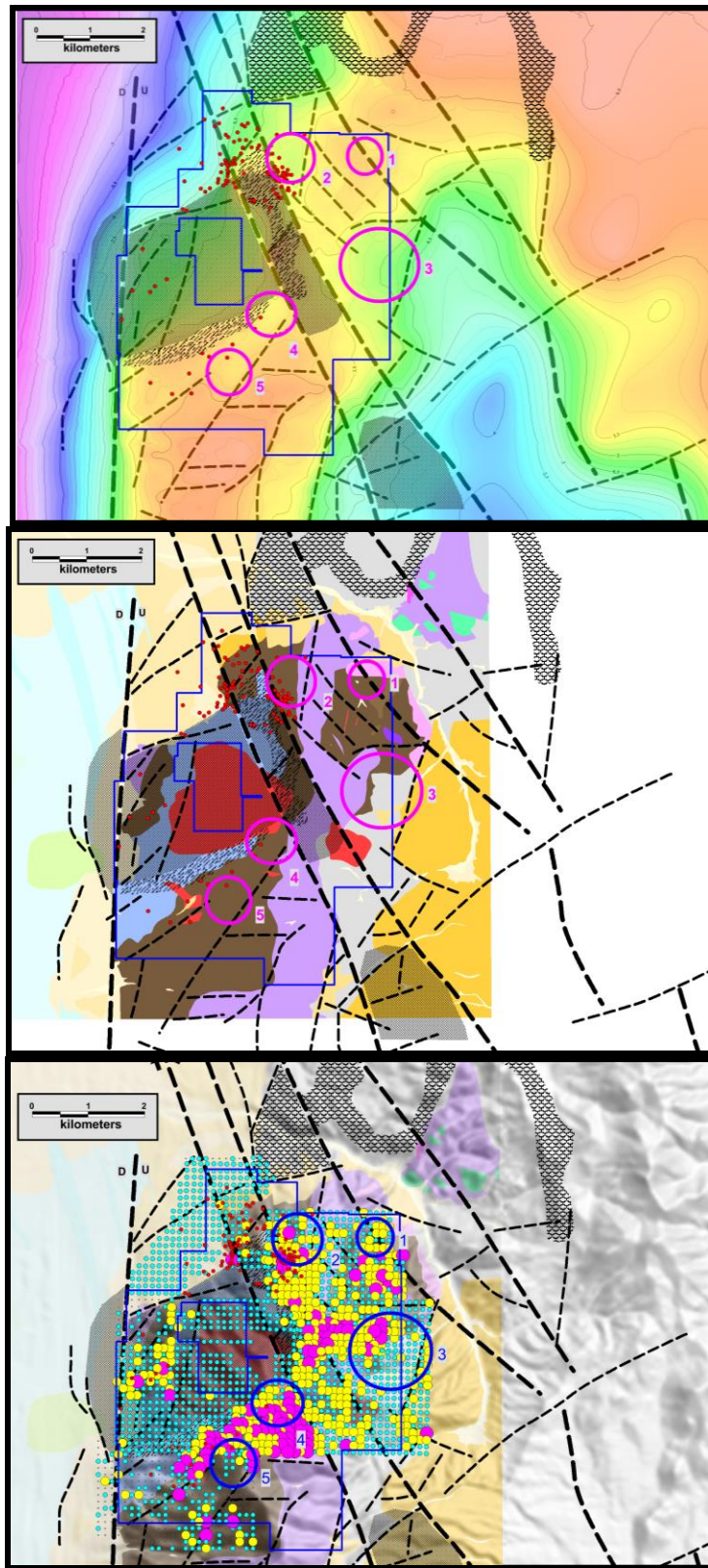


FIGURE 15: Target Areas, Residual Gravity, Geology and As Soil Geochemistry

CONCLUSIONS AND RECOMMENDATIONS

The gravity survey result, in conjunction with other data sets, indicates the property spans a major north-northwest directed structural corridor which is associated with considerable gold mineralization further to the north-northwest. Five major structures associated with the corridor traverse the property with oblique movement of right lateral down to the northeast. Two of these structures facet the northeast side of the McClusky intrusion and appear to be associated with known mineralization along the facet as indicated by the distribution of historic drilling (see Figure 15).

Gravity highs rim the McClusky intrusion along the northeast and southeast contacts. The highs show a consistent spatial relationship to mapped silicification and arsenic geochemistry. A zoned pattern of alteration / geochemistry is defined outward from the intrusive margin (see Figure 12). CSAMT lines completed in 2005 by Placer Dome provide a view of the rocks and alteration at depth. Structures and alteration interpreted primarily from the gravity and airborne magnetics agree well with the CSAMT results. Strong resistivity contrasts are noted between the various sediments and intrusive rocks, as well as alteration.

Five areas of interest are identified based mainly upon gravity, but with critical support from the geology and geochemistry. All are based upon relatively weak variations the gravity interpreted as being produce by alteration, primarily decalcification of the carbonate units at depth. All exhibit a correlation with anomalous arsenic soil geochemistry. In case of areas 2, 4, and 5 the alteration is immediately outboard of the zoned contact alteration extending along the margin of the McClusky intrusion. Ponding of hydrothermal fluids along the impermeable alteration front could be a mechanism at play in these areas.

The geophysical results should be further integrated with the drilling and geochemistry, specifically with other elements than arsenic. In addition, all five areas of interest should receive a field review including detailed mapping. Those deemed of interest should be further detailed with in-fill gravity on a staggered 200 m grid. That is, reading acquired on east-west lines located between the current lines using a 200 m station spacing offset a 100 m from the current grid. In addition, CSAMT coverage should also be considered. The historic CSAMT data clearly indicates the utility of the technique as applied to the Keystone property.

APPENDIX A

GRAVITY SURVEY

over the

**KEYSTONE PROSPECT
EUREKA & LANDER COUNTIES, NEVADA**

for

U.S. GOLD CORP

June 2016

SUBMITTEDBY

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INTRODUCTION

Gravity data were acquired at the Keystone Prospect in Eureka and Lander Counties, Nevada for U.S. Gold Corp. The gravity survey was conducted from June 4 through June 19, 2016. A total of 1134 new gravity stations were acquired.

Relative gravity measurements were made with LaCoste & Romberg Model-G gravity meters. Topographic surveying was performed with Trimble Real-Time Kinematic (RTK) and Fast-Static GPS. Field operations were based out of Eureka, Nevada.

Gravity data were processed to Complete Bouguer Gravity, merged with public domain USGS data, and forwarded to Jim Wright for further processing and interpretation.

DATA ACQUISITION

Survey Personnel

Data acquisition and surveying were performed by Brian Page, Steve Michalowski, Matt Magee, Sean Watters, and Sage Schoonen. Christopher Magee supervised all operations and completed final data processing.

Gravity Meters

LaCoste & Romberg Model-G gravity meters, serial numbers G-018, G-061, G-392, G-406, and G-603, were used on the survey. Model-G gravity meters measure relative gravity changes with a resolution of 0.01 mGal. The manufacturer's calibration tables used to convert gravity meter counter units to milliGals are included with the delivered data.

Gravity Base

The gravity survey is tied to a single U.S. Department of Defense gravity base located in Eureka (DoD reference number 5311-1).

<u>Base</u>	<u>Absolute Gravity</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Elevation</u>
EUREKA	979527.55	39.51267°	-115.96000°	1975 m

GPS Equipment

All gravity stations were surveyed using the Real-Time Kinematic (RTK) GPS method or, where it was not possible to receive GPS base information via radio modem, the Fast-Static method was used. The following GPS equipment was used on the project:

Trimble SPS880/R8/5700 receivers

Trimble Model TSC2 Data controllers

Trimble TrimMark III base radio Trimble

Zephyr GPS antennas

Trimble Business Center (Version 3.7) was used for GPS data processing.

Geodetic Survey Control

A single GPS base station, designated *KEYI*, was used on this project. The coordinates and elevation of this base station location were determined by making simultaneous GPS occupations in the Fast Static mode with Continuously Operating Reference Stations (CORS). GPS data for this station was submitted to the National Geodetic Survey (NGS) OPUS service which is an automated system that uses the three closest CORS stations to determine coordinates and elevations for unknown stations. The coordinates and elevations of station *KEYI* are listed below.

Station	WGS-84 Latitude	WGS-84 Longitude	WGS-84 EllipsoidHt.
<i>KEYI</i>	N39° 53' 30.44136"	W 116° 29' 55.05221"	2133.378 m
	NAD27UTMNorthing	NAD27UTMEasting	Elevation (NAVD29)
	4415666.531 m	542943.631 m	2152.541 m

Topographic Surveying of Gravity Stations

All topographic surveying was performed simultaneously with gravity data acquisition. The gravity stations were surveyed in NAD27 UTM Zone 11 North coordinates in meters. The Datum Grid method (NADCON) was used to transform from the WGS-84 (NAD83) datum to the NAD27 datum and the GEOID12B geoid model was used to calculate NAVD88 elevations from ellipsoid heights. The elevations were then converted to North American Vertical Datum of 1929 (NAVD29) using the NGS program VERTCON. The coordinate system parameters used on this survey are summarized below.

Datum

Datum Name	NAD27
Ellipsoid	Clarke 1866
Semi-Major Axis	6378206.4 m
Eccentricity	0.082271854
Transformation	NADCON (CONUS)

Projection

Type	Universal Transverse Mercator
Zone	UTM 11 North
Origin Latitude	00° 00' 00.00000" N
Central Meridian	117° 00' 00.00000"
W Scale Factor	0.9996
False Northing	0
False Easting	500000 m
Geoid Model	GEOID12B (CONUS)

Gravity Stations

A total of 1134 new gravity stations were acquired. Stations were reached by ATV or on foot.

DATA PROCESSING

Overview

Field data including station identifier, local time, gravity reading, measured slope, and operator remarks were recorded in the field in notebooks. The recorded data were then entered into a notebook computer in the form of GeoSoft RAW gravity files. Survey coordinates were transferred digitally.

All gravity data processing was performed with the Gravity and Terrain module of Oasis montaj (Version 8.5.2). Gravity data were processed to Complete Bouguer Gravity over a range of densities from 2.00 g/cc through 3.00 g/cc at steps of 0.05 g/cc using standard procedures and formulas.

Data Processing Parameters

The following parameters were used to reduce the gravity data:

GMT Offset	Gravity Formula	Gravity Datum
-7 hours	1967	ISGN-71

Terrain Corrections

Terrain corrections were calculated to a distance of 167 km for each gravity station. The terrain correction for the distance of 0 to 10 meters around each station was calculated using a sloped triangle method with the average slopes measured in the field. The terrain correction for the distance of 10 meters to 2000 meters around each station was calculated using a combination of a prism method and a sectional ring method with digital terrain from 10-meter Digital Elevation Models (DEM). The terrain correction for the distance of 2 to 167 kilometers around each station was calculated using the sectional ring method and digital terrain from 90-meter DEMs.

Gravity Repeats and Loop Closures

Total number of stations:	1134
Number of repeated stations:	56
% stations repeated :	
4.9% Total number of readings:	1296
Number of repeat readings:	162
% readings repeated:	12.5%
Maximum repeat error:	0.0463
mGal Mean repeat error:	0.0123
mGal RMS error:	0.0186

The mean of the absolute value of all loop closure errors is 0.0250 mGal.

DATA FILES

Raw Data Files

The raw data files are named with the gravity meter serial number, date, and operators initials. The format is *gnnn_mmm_dd_2016_iii.txt* where *gnnn* is the serial number of the gravity meter, *mmm* is the month, *dd* is the date on which the gravity loop was acquired, and *iii* are the operator's initials. The raw data file and GeoSoft database file (.gdb) for each day's data are included with the delivered data.

Final Gravity XYZ File

The final GDB file with all principle facts for the Keystone Gravity Survey is named *Keystone_Master.gdb* with a corresponding XYZ file named *Keystone_Master.xlsx*. The merged GDB is named *Keystone_Master_merge.gdb* with a corresponding XYZ file named *Keystone_Master_merge.xlsx*. The data columns in the file include headers identifying the value of each column.

Grid and Terrain Files

The file names for the grid files used to create the images in this report and to calculate the terrain corrections are as follows and are included with the delivered data.

Complete Bouguer Gravity
grid *CBG250.grd*
CBG250merge.grd
Local terrain files
Keystone_10m_DEM_expand.grd
Regional terrain files
Nevada_90m_NAD27UTM11.grd
Regional terrain correction
output file
Keystone_167_tc_expand.grd

GeoSoft Database Files

All of the additional GeoSoft database (.gdb) files associated with the data processing are also included with the delivered data, these are:

Final coordinate and elevation listing
coords_thru_jun_19_2016_NAVD29.gdb
Master gravity database
Keystone_Master.gdb
Keystone_Master_merge.gdb
Gravity Base Station database
Keystone_GravBase.gdb

GPS Data Files

The raw and processed GPS data are included with the delivered data as Trimble Business Center projects and/or included in folders organized by date.

APPENDIX B

CSAMT INVERTED RESISTIVITY SECTIONS

SECTIONS

4417500N

4418000N

4418500N

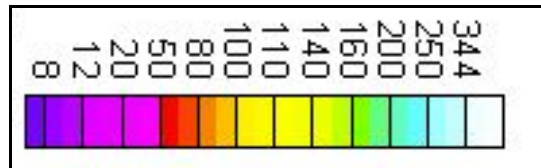
4419000N

4419500N

4420000N

4420500N

4421000N



ohm-m

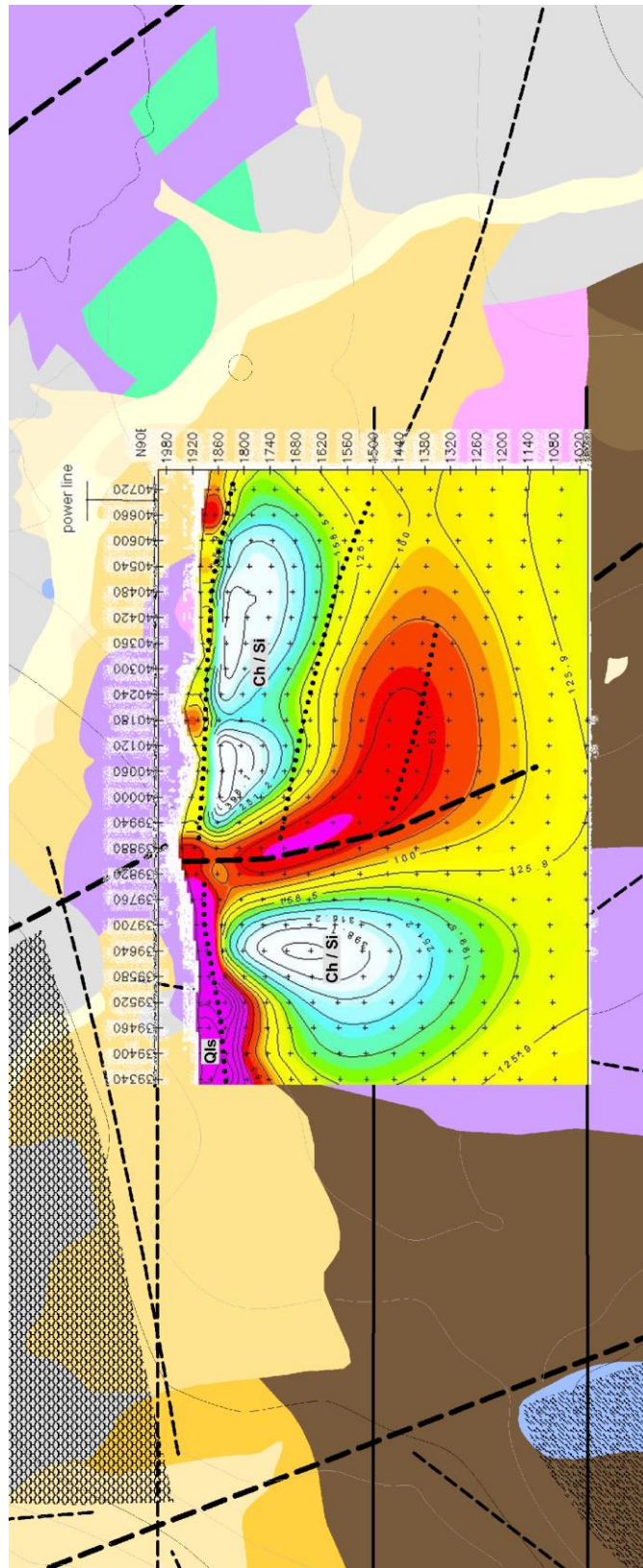


FIGURE B1: Inverted Resistivity Section 4421000N over Geology

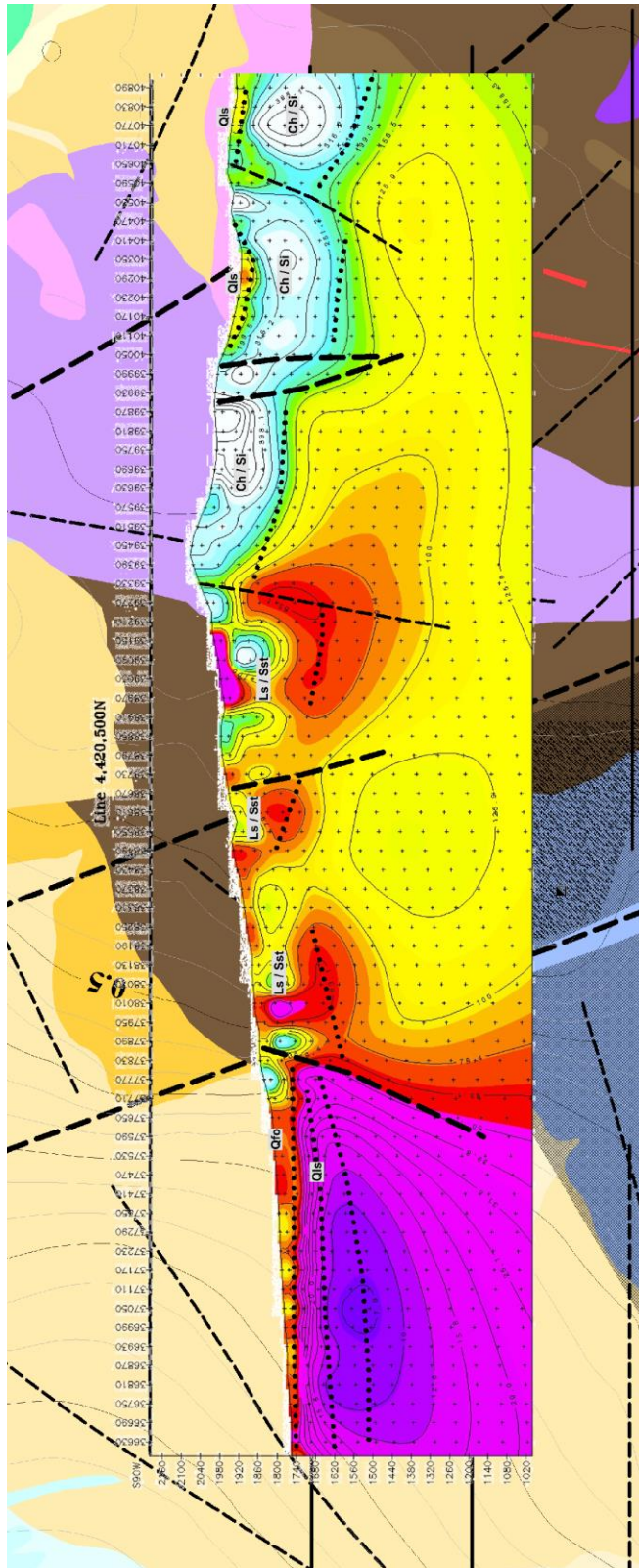


FIGURE B2: Inverted Resistivity Section 4420500N over Geology

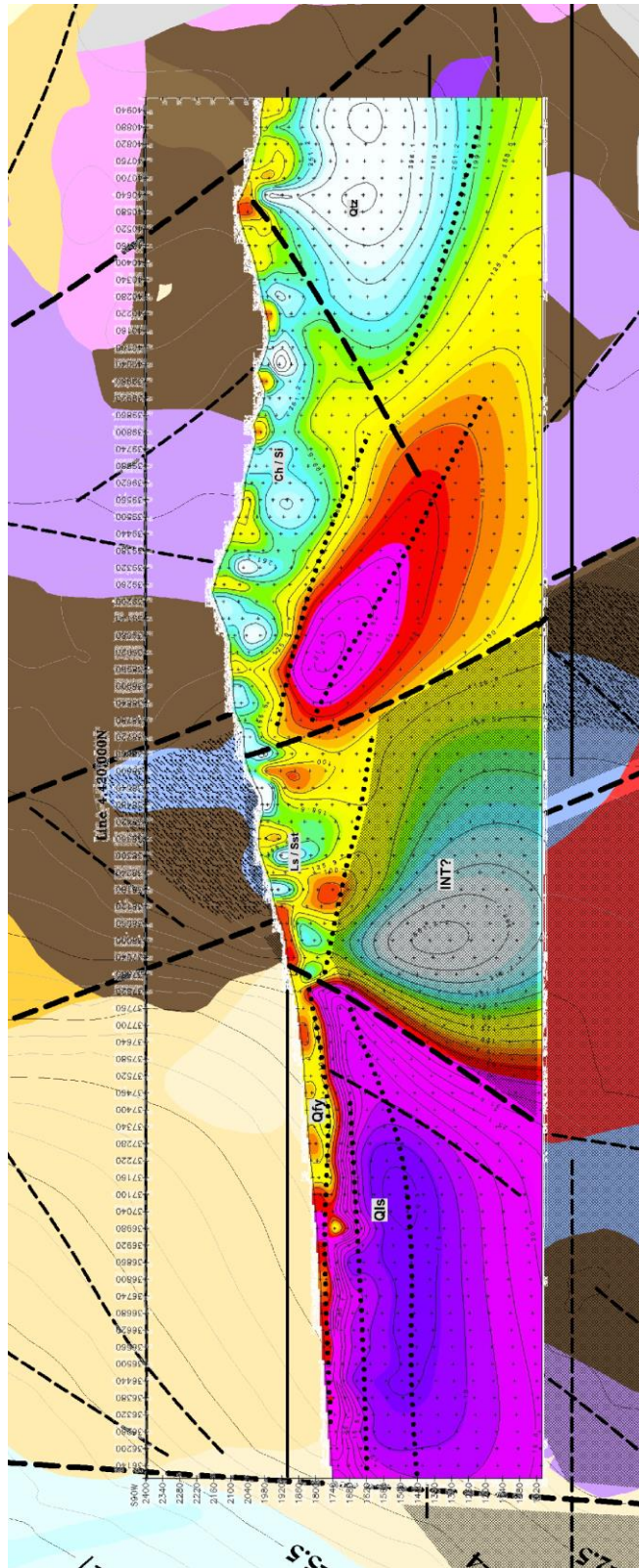


FIGURE B3: Inverted Resistivity Section 4420000N over Geology

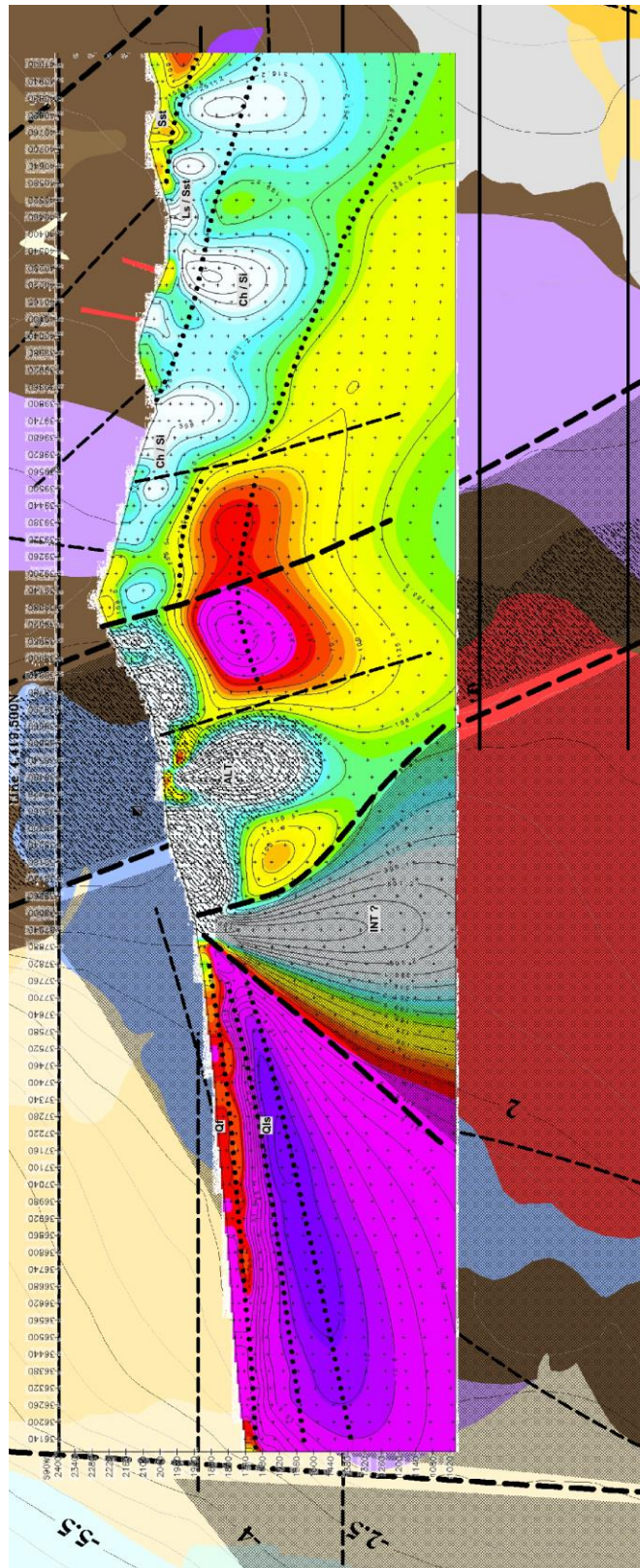


FIGURE B4: Inverted Resistivity Section 4419500N over Geology

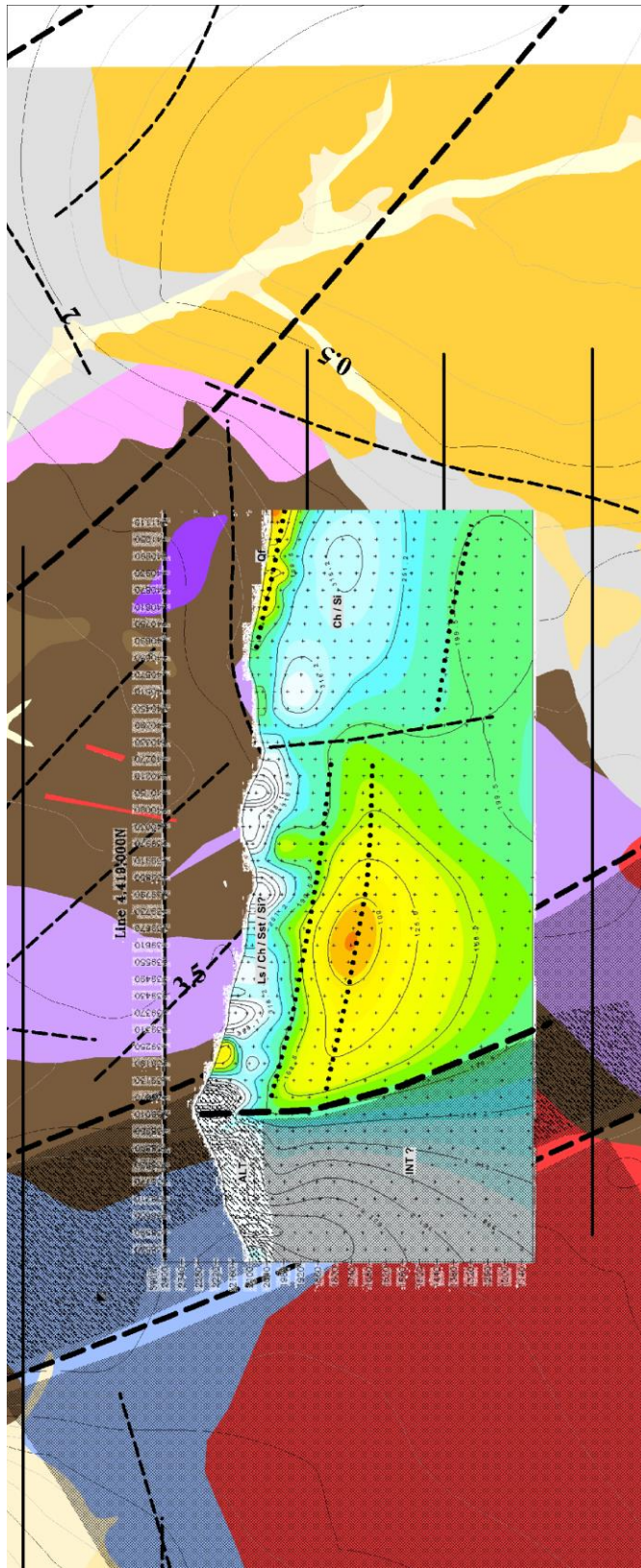


FIGURE B5: Inverted Resistivity Section 4419000N over Geology

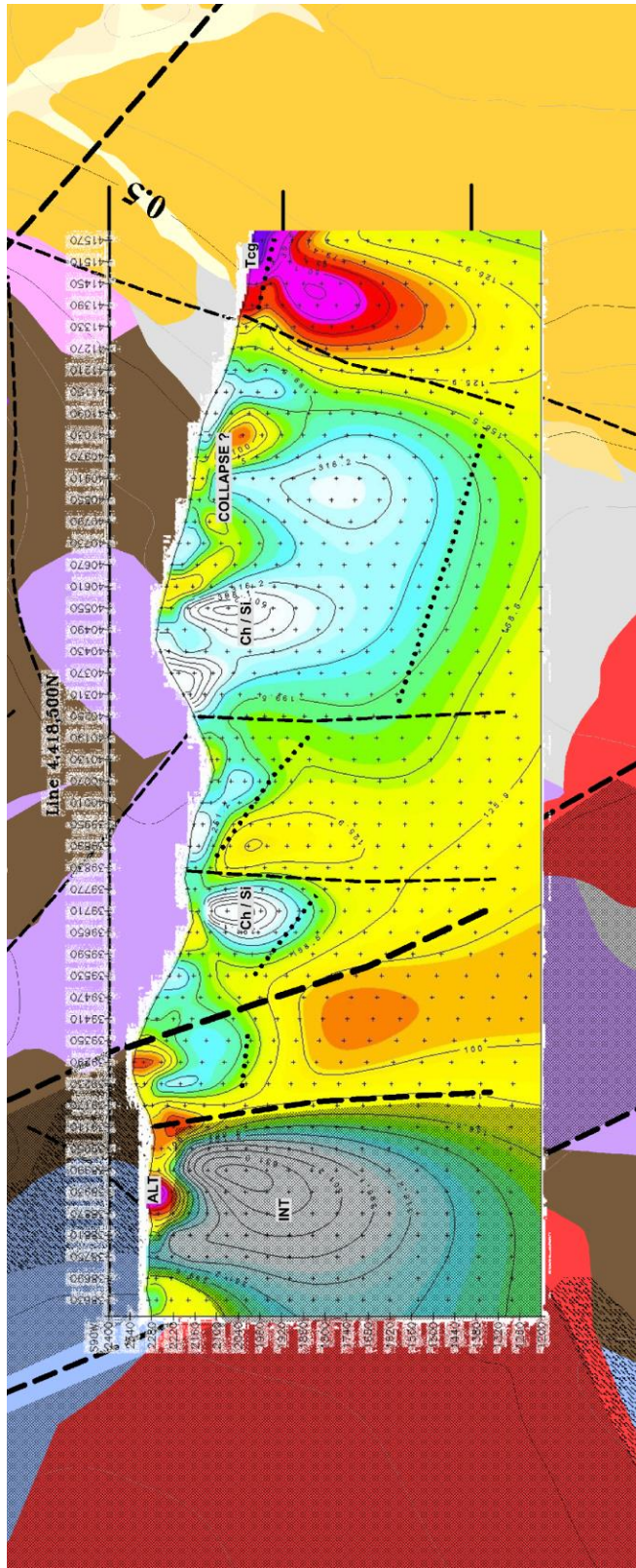


FIGURE B6: Inverted Resistivity Section 4418500N over Geology

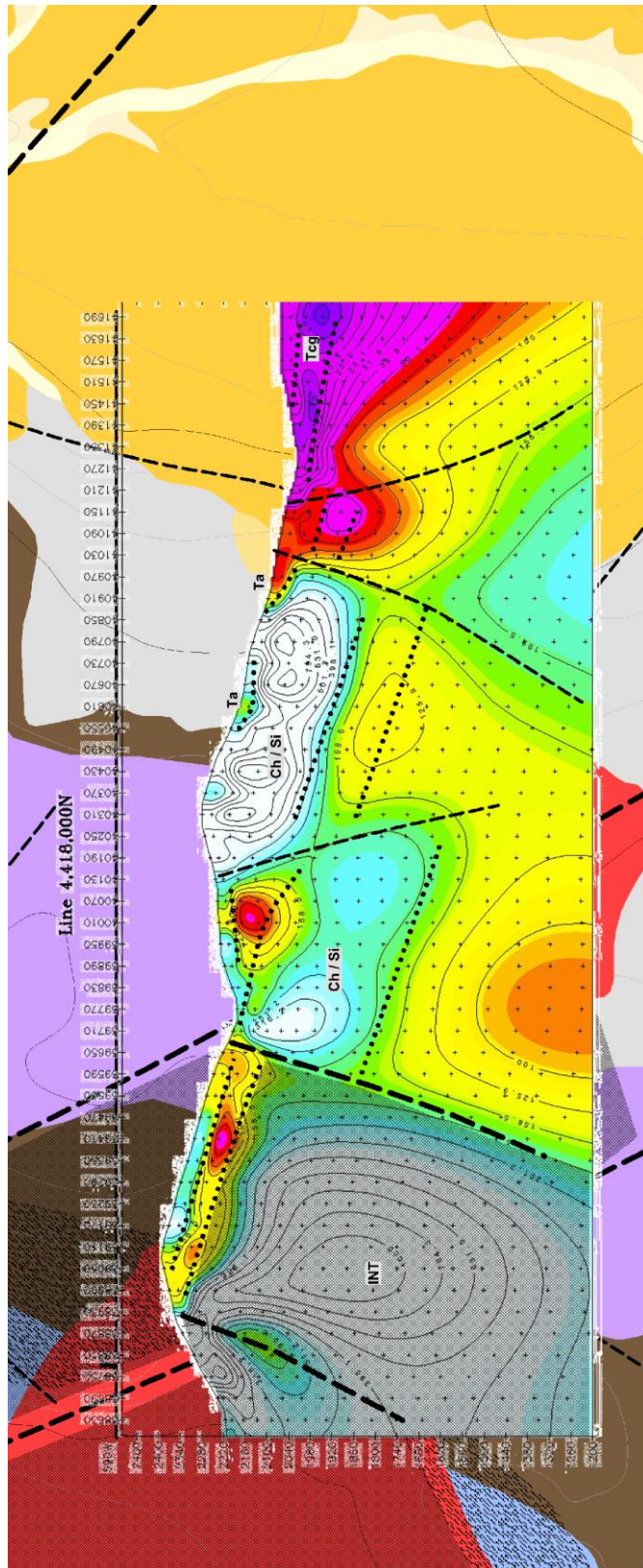


FIGURE B7: Inverted Resistivity Section 4418000N over Geology

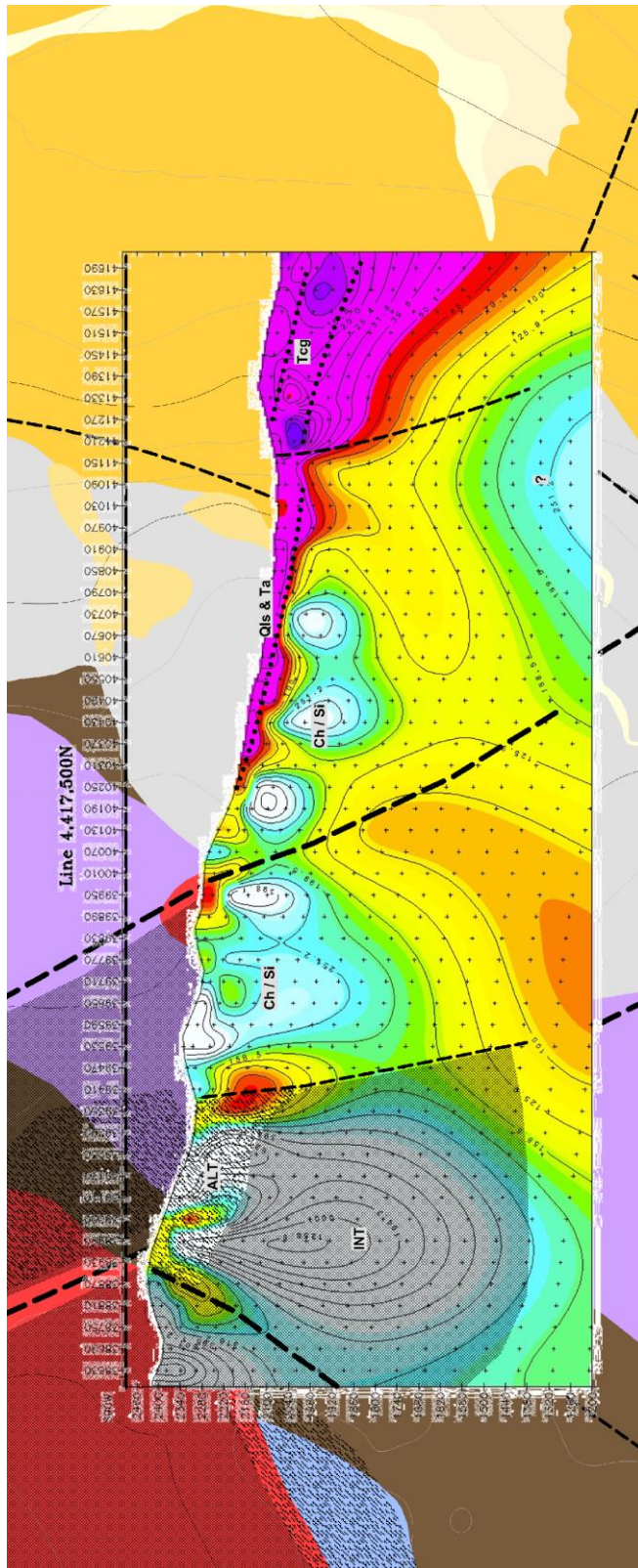


FIGURE B8: Inverted Resistivity Section 4417500N over Geology