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# SUMMARY REPORT ON THE LIV PORPHYRY PROJECT, LIVINGSTONE CREEK, YUKON TERRITORY 

YUKON GEOLOGICAL SURVEY - PROSPECTING PROGRAM YMIP 04-054

FALL 2004

TABLE OF CONTENTS


APPENDIX 1: Reduced Size 2004 Airborne Geophysical Survey Maps -- -- -- $\quad$-- 25


Figure 1


Figure 2


Figure 3

## SUMMARY AND CONCLUSIONS

In the fall of 2004 a prospecting project (Liv Porphyry) was conducted over a large circular (landsat) feature at the headwaters of Livingstone Creek. The circular feature was interpreted to be caused by recessive weathering over a young intrusion related ring dyke - radial dyke structure.

The entire Liv Porphyry target area is located within the world class Livingstone Placer Gold Camp and the circular structure is specifically located at the headwaters of Livingstone Creek, a drainage that has produced well over 100,000 ounces of course gold. The creeks within the Livingstone Camp have had on going placer gold production for well over 100 years.

Initial prospecting efforts within the circular structure have revealed quartz-carbonate veins carrying very anomalous copper values ( 6115 ppm Cu ) as well as highly fractured country rock with anomalous gold values ( 1142 ppb Au ). The target area has been observed to have an abundance of quartz veins and veinlets in the area where mineralization has been found. It has been reported by two independent sources that substantial amounts of pyrite exist in a large creek draining the eastern extent of the Liv Porphyry target. The two sources have also said that the creek has a strong smell of sulphur emanating from eroding pyrite in the creek bed.

A Yukon Government geologist mapping in the area in 2004 also found some very interesting mineralization. Geologist Maurice Colpron found unknown extents of copper mineralization (malachite and chalcopyrite) as well as hydrothermal nickel mineralization (nickeline). He also commented that the area has an unusual amount of sulfide (pyrite) present in all of the bedrock units. Colpron also found a young intrusive dacite porphyry body and other intrusive dykes within the circular feature. A large elongated breccia body was also located along the western edge of a vertical strike-slip fault that cuts the circular landsat feature.

All of the mineralized areas, found to date, are located within the circular landsat feature or just on its outer edge.

The circular landsat feature also has a coincident magnetic anomaly that is itself circular in shape.

A large block of quartz claims have been staked over the target and an exploration program, designed to locate a porphyry $\mathrm{Cu}-\mathrm{Au}$ deposit, will be conducted over the area in 2005. The exploration will consist of soil sampling, silt sampling, alteration assemblage mapping, prospecting, airborne geophysics, and ground geophysics.

Core drilling will be conducted in late 2005 or 2006 on any significant geophysical anomalies found in the 2005 summer exploration season.

## INTRODUCTION

The area of interest regarding this report is known as the Liv Porphyry Area (fig.3).
During late 2004 a prospecting program was carried out over the Liv Porphyry Area at Livingstone Creek, Yukon. The program was conducted by Cordilleran Minerals Limited. Cordilleran Minerals collected rock samples and soils from the Liv Porphyry Area.

Exploration over the Liv Porphyry Area was conducted to identify any gold or copper mineralization found to be associated with porphyry or other intrusion related igneous rocks in the target area.

This report will discuss the general geology of the area and the analytical results from preliminary rock and soil samples taken across the target.

## LOCATION AND ACCESS

The Liv Porphyry Area is located in south-central Yukon. The target area is 25 kilometers east of the Teslin River at the headwaters of Livingstone Creek (fig. 3) on NTS mapsheet 105E 08 (fig. 4 \& 5). It is within the Whitehorse Mining District.

The approximate geographical center for the target area would be located at UTM 544658 E/6799358N

## PHYSIOGRAPHY, VEGETATION AND CLIMATE

The Liv Porphyry Project is located in a sparsely forested area of high rolling hills to rough mountainous terrain (fig.2). The highest point in the area is 2000 m . Drainage in the area is very good. Local creeks have a continuous supply of water during the spring and summer months. Most of the creek water is provided from melting permafrost. Some wetlands are located in the lower valleys alongside local creeks and rivers.

Vegetation in the area is relatively sparse. Moss, lichen and grasses, common to the area, cover much of the high alpine slopes of the target area. Willow, buckbrush and Black Spruce are found spread-out through the valleys, along with other varieties of moss and long grasses.

The climate of the area is typical of the interior continental region at this latitude. Winters are long with short hours of daylight and average daily temperatures of -20 Celsius. Summers are pleasant and warm with long days ( 20 hours of daylight on June 21), although it can be quite rainy at times. The average summer temperature is 19 Celsius with highs ranging into the low 30's (Celsius).

## HISTORY AND PREVIOUS WORK

The real history of the Livingstone Creek area probably began in the early 1880's when prospectors first found gold in the southern Yukon. In 1881 explorers ascending the Big Salmon River discovered payable quantities of gold on many of the river bars along its watercourse. In 1884 substantial amounts of fine gold were discovered on Cassiar Bar, on the Yukon River just 73 kilometers north-west of the Livingstone Creek Placer Camp. It has been suggested that these placer gold occurrences may have been derived from glacial materials carrying gold away from the course placer gold fields at Livingstone Creek.

The news of early placer gold discoveries in the southern Yukon probably led to more prospectors exploring in the area. In 1894 it is reported that Joseph E. Peters prospected on Livingstone Creek. The initial gold discovery of the Livingstone Placer Camp is recorded as being made on Cottoneva Creek in 1898. All of the other creeks in the camp were also discovered in that year. Active mining in the camp was thought to have started after rich course gold was found by Peters on Livingstone Creek. J. Peters and George Black started to mine the creek near the turn of the century and they name the creek after Black's friend and fellow lawyer M.D. Livingstone.

The creek was mined on a continuous basis until the First World War. It was claimed that over a million dollars worth of gold was taken from Livingstone Creek before 1920. The other creeks in the camp also produced significant amounts of course gold. In 1905 a 39 ounce nugget was found on Summit Creek, a drainage immediately north of Livingstone. Placer production from the entire area almost ceased for about 20 years after WWI, but that has passed and now the creeks of the Livingstone camp have been mined on a continual basis from about the 1940's until today.

The amount of placer gold found in the Livingstone Camp is quite significant considering that the area has been glaciated on three occasions. Glaciers moving through an area usual spell the end of any placer deposits formed over time. The shear weight of glacial ice usual scours clean everything in its path. The Livingstone Camp was spared this sacrifice because the latest glaciers moved across the area at right angles to the general direction that the local creeks flow. This preservation event and others in the area helped create the world class placer deposits that existed at Livingstone. If the area had not been touch by glaciers (like the Klondike gold fields) the Livingstone Camp may well have been one of the richest placer gold discoveries on earth.

The lode source for the Livingstone Placer Camp has always been a bit of an enigma. Over 1500 men lived at the town site of Livingstone, near the turn of the 20 th century, and it is said that many of them looked for the source of the placer gold but it was never found in big way. Some smaller veins were discovered and mined but the mother lode source for the camp was never found. The early history of lode prospecting and mining in the area has been lost so we may never know to what extent the locals knew of any lode sources or ideas regarding such sources. Lode prospecting and exploration in the Livingstone Camp has been very limited since the early 1900 's.

Recently a few exploration companies have made interesting discoveries over the Livingstone area but most have not had a good model from which to continue to conduct their exploration programs. In the early 1970's prospectors started to stake claims in the Livingstone camp area. The high gold price of the 1980's led larger companies to the area. In 1981 DuPont Exploration of Canada conducted a large widespread regional stream sediment survey across approximately $20,000 \mathrm{sq}$. km of land in southern Yukon and northern British Columbia. The Liv Project area was detected in that survey as having an anomalous gold and copper signature. Subsequent exploration of the area found a heavy metal copper, gold and silver anomaly coming from the central zone of the Liv Porphyry target but no follow up work was conducted in the area. In 1986 Archer-Cathro explored the west side of the Liv area and found bonanza grade gold and silver in quartz vein float. Two specimens assayed $303 \mathrm{~g} / \mathrm{t} \mathrm{Au}, 8.24 \mathrm{~g} / \mathrm{t} \mathrm{Ag}, 23.4 \% \mathrm{Sb}, 0.01 \% \mathrm{~Pb}$, and $66.5 \mathrm{~g} / \mathrm{t} \mathrm{Au}$, $2756.5 \mathrm{~g} / \mathrm{t} \mathrm{Ag}, 30.4 \% \mathrm{As}, 6.3 \% \mathrm{~Pb}, 0.4 \% \mathrm{Zn}, 0.5 \% \mathrm{Sb}$, respectively. The source of the quartz was not found and their claims were eventually sold along with their interest because they did not have a good model from which to continue their exploration of the area. Other small blocks of claims have been staked in the area but no history exists for any work conducted by the owners or the reasons behind the staking initiative.

In the early 1990's two German geologists conducted research on veins in the Livingstone area and concluded that veins carrying gold in the area were of epithermal origin and could be the source for the placer gold at Livingstone because of chemical similarities between placer gold and gold from local quartz veins. This theory has dominated and thus restricted the exploration of the Livingstone Placer Camp since that release of the report in 1992.

In 1995 a private company, Ross River Gold, explored in the area of the Liv Project. Robin Tolbert, Vice-President of exploration for Ross River Minerals (public equivalent) told the author that he had discovered gold mineralization on the immediate east side of the Liv Project area and he was inclined to stake the area but he could not convince the CEO of the company to commit to such a venture without having a solid exploration model to guide the process. Tolbert also said that he had notice a large amount of pyrite in the local drainage (Mendocina Creek) and that the pyrite existed in such huge quantities that the area was blanketed with a smell of sulfur from the decomposing sulfides.

More recently a large block of claims was staked on the western side of the Livingstone Camp in 1997-98. The prospectors who staked the block were interested in exploring for economic gold bearing quartz veins that were being touted as the source for the Livingstone placer gold. They did find many interesting veins, some carrying gold, but in the end the veins did not appear to be a sure source for the rich placer deposits at Livingstone.

Cordilleran Minerals Ltd. staked 637 quartz claims over an intrusion related ring structure and related magnetic signature in November of 2004. We intend to explore the area for a gold and copper bearing porphyry deposit.

## PROPERTY AND CLAIM STATUS

Cordilleran Minerals Limited owns 637 quartz mineral claims within the Liv Project area at this moment. The area is equivalent to approximately 130 square kilometers. The status of the claims is listed below.

| Claim Name | Grant Number | $\frac{\text { Expiry Date }}{2005 / 11 / 29}$ |
| :--- | :---: | :---: |
| MIK 1-637 | YC37133-YC37769 105E-08 | 200 |



Figure 4

## 2004 WORK COMPLETED

Cordilleran Minerals Limited conducted preliminary prospecting work over the Liv Porphyry Area in late 2004. Employees Mark Lindsay, Dale Brown and Adam Mickey provided support and help for the prospecting program. The prospecting program was carried out on September $11^{\text {th }}$, September $18^{\text {Th }}$, and November $15^{\text {th }}, 2004$.

## REGIONAL GEOLOGY

The Liv Project area is located within the morphogeological Omineca Belt. In many areas of Yukon the Omineca Belt is dominated by crystalline rocks of the Yukon Tanana Terrane. This appears to be the case in the Liv Porphyry Area, but this may change in the near future due to a recent geological mapping project being conducted in the area by the Yukon Geological Survey.


Figure 5
The geology in the immediate area of Liv Project (fig. 6) is composed of rocks of Yukon Tanana Terrane. They include the Snowcap Complex (SC - Metasedimentary basement to Yukon-Tanana Terrane; Consists predominantly of quartzite, psammitic schist and graphitic phyllite, and subordinate chlorite schist and amphibolite; Continental margin


#### Abstract

assemblage; Chlorite schist is alkaline (OIB); Amphibolite tholeiitic (MORB); Intruded by Mississippian tonalite and granodiorite), and the Livingstone Creek Assemblage (LC - Predominantly volcaniclastic rocks; minor greenstone, felsic meta-volcanic rocks and marble; Arc assemblage rocks that resemble the Carboniferous Little Salmon formation in Glenlyon map area) and also the Mendocina Assemblage (M - Greenstone (MORB), gabbro and serpentinized peridotite; minor carbonaceous phyllite and felsic metavolcanic; Possibly correlative with the Fire Lake formation of the Finlayson Lake district). Intrusive rocks include the Cretaceous Last Peak granite (LKg), Quiet Lake granite ( $\mathbf{E K g}$ ) and an older foliated tonalite and granodiorite body (DMg).


## STRUCTURE

Several structural trends occur within the general target area. A major fault is trends in a north/south direction, along or close to the contact between the mapped location of the Quiet Lake Batholith (see fig.6) and the adjacent ultramafic and metamorphic rocks. This fault may be the conduit that allowed the upward movement of the Liv Porphyry into its current position.

Thrust faults have also been mapped in the area. Figure 6 shows the location of the thrust faults. The faults may be conduits to fluids produced by the intrusion of the Liv Porphyry into the area. The thrust faults mirror the extensive magnetic signature of the area and may reflect the presence of fault related mineralization.

A large area of brecciation occurs along the western edge of the major fault transecting the area.

## QUARTZ VEINS

Several large northwest/southeast trending quartz veins have been seen in outcrop in the target area. The veins were not traced on surface but they appeared to be quite persistent and approximately 1 m wide. A section of one vein carried significant copper values. The quartz vein material is white, and it is carrying a good quantity of sulfide minerals.

There appeared to be a large number of white quartz veins in the local area.

## ALTERATION

Alteration assemblages also appear to be associated with the target area. Pyrite alteration (Figure 7) was seen on a ridge on the east side of the Liv ring structure. An area of outcrop near the vein copper showing appeared to have substantial sericite alteration.

The ultramafic in the area shows several signs of being altered. Numerous veins cut through the unit near the major fault in the area. Some bleached ultramafic rocks were
also observed in the target area.

## ECONOMIC GEOLOGY

Sulphide mineralization is found in most if not all rocks throughout the target area. Pyrite is the predominant sulfide mineral, with occurrences of chalcopyrite and rare occurrences of nickeline. The most obvious mineralized sites seemed to be related to the occurrence of structures that may be related to the ring structure. Some rusty quartz veins were seen carrying significant chalcopyrite and malachite. Assayed samples of the quartz vein material returned values as high as 6100 ppm Cu and $22.7 \mathrm{~g} / \mathrm{t} \mathrm{Ag}$. Minor copper (chalcopyrite) was also observed in other quartz veins in the area.

Another rock samples from the target area carried significant gold values. The sample, taken from a pyrite, sericite altered section of bedrock, assayed higher than 1100 ppb Au and 248 ppm arsenic.

Soil samples returned high metal values in Pb and Ag . Assay highs of 102 ppm Pb and 1.6 ppm Ag were found in soils along the west side of the major north-south fault in the area. Copper values were elevated but hovered only around the 50 ppm mark.

## ROCK ANALYSIS

14 rock grab samples (Lars 02-16) were collected from the property between September 11 and November 15, 2004. The rocks selected were all grab samples.

The samples were sent to Acme Laboratories Ltd. in Vancouver, British Columbia for analysis. At Acme Labs the rocks were crushed and sieved to -150 mesh, digested in hot $\mathrm{HCL} / \mathrm{HNO}_{3}$ and analyzed by ICP-MS.

## SOIL ANALYSIS

5 soil samples (Lass 01-05) were collected from the target area between September 11 and November 15, 2004. The samples were collected in wet strength Kraft sample bags and air-dried in Whitehorse.

The soils were collected from partially frozen ground. The samples were taken at 100 m intervals along the west side of the major north-south trending fault that cross through the target area. Sample sites were dug with a grub hoe and samples were taken, by hand, from the " $B$ " horizon.

The soils were sent to Acme Laboratories LTD. in Vancouver, British Columbia for analysis. At Acme labs the soils were dried and sieved to -80 mesh, digested in hot $\mathrm{HCL} / \mathrm{HNO}_{3}$ and analyzed by ICP-MS.

## CONCLUSIONS AND RECOMMENDATIONS

The Liv Porphyry Area at the Livingstone Creek Placer Gold Camp in the Yukon Territory covers geology permissive to host a potentially large Porphyry Au or Porphyry $\mathrm{Cu}-\mathrm{Au}$ mineral deposit. To fully explore these possibilities the following program of work is recommended for the 2005 exploration season:
a) Conduct an airborne geophysical survey over the Liv Project area. The airborne survey should entail collecting magnetic and time domain electromagnetic data over the target.
b) Conduct a soil sampling program over the central (ring structure) area of the target. The soil survey should cover the extent of the magnetic anomaly that exists within the ring structure and where the magnetic anomaly exists outside the ring structure. Compile all geochemical data as it is received, plot it on a geological map and examine it for any anomalous gold or copper trends or geochemical trends associated with Porphyry $\mathrm{Cu}-\mathrm{Au}$ mineralization. Carry out additional sampling if necessary.
c) Carry out alteration mapping and prospecting throughout the Liv Porphyry area. This reconnaissance work should be carried out on a priority basis with the highest priority projects being deemed the ones associated with the (said) ring structure and associated magnetic anomaly and any areas immediately north of the ring structure where the magnetic anomaly can be traced. Reconnaissance prospecting work, in other areas, should be carried out throughout the season as is convenient.
d) Complete a compilation of all known exploration, geochemical, geophysical and geological data. Use the data to plan the first drill program. Carry out examinations of any new prospects identified during the compilation. Reconnaissance prospecting and mapping should be conducted on any new areas when convenient.
e) Conduct a program of diamond drilling to test any geophysical anomalies identified by the processes of the above section (d). The length of holes would be determined by the results of the surveys but should probably total about 2000 metres per target in a first reconnaissance phase of drilling. Depending on the results of the geophysics surveys and the diamond drilling, it may be necessary to drill some targets in late fall.

The 2005 program should be staffed with a project geologist and technician / core splitter, as well as a consulting geophysicist and a consulting mapping geologist. An exploration services firm should be hire to conduct the soil survey and the all geophysical surveys.

## APPENDIX I

From ACME ANALYTICAL LABORATORIES LTD. VANCOUVER BC.
To Cordilleran Minerals

| Acme file | A4064 | 94 Re | ceive | OC | 18 | * | 16 | mp | s in this | di | file. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analysis: G | ROUP | 1DX-3 | 0.0 G |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ELEMENT | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | $\cup$ | Au | Th | Sr | Cd | Sb | Bi |  |
| SAMPLES | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | \% | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LARS 02 | 1.1 | 25 | 11.5 | 52 | 0.1 | 19 | 10 | 427 | 2.45 | 3.8 | 0.9 | 0.9 | 14.7 | 14 | <. 1 | 0.7 | 0.1 |  |
| LARS 03A | 0.8 | 3.1 | 14.5 | 4 | <. 1 | 2.1 | 1.7 | 1613 | 0.5 | 1.7 | < 1 | < 5 | 0.1 | 314 | 0.7 | 0.1 | < 1 |  |
| LARS 03B | 1.3 | 14.9 | 8.4 | 10 | 0.1 | 5.1 | 6 | 693 | 1.49 | 4.7 | 0.8 | 3 | 12.4 | 49 | 0.4 | 0.2 | 0.1 |  |
| LARS 05 | 1 | 1132.5 | 13.5 | 7 | 2 | 4.3 | 1.9 | 541 | 0.9 | 7.6 | 0.3 | 4.1 | 0.5 | 117 | 0.4 | 1.3 | 0.1 |  |
| LARS 06 | 2.7 | 6115.1 | 38.1 | 9 | 22.7 | 3.9 | 3.5 | 291 | 1.28 | 25.2 | 0.6 | 41 | 0.1 | 55 | 1.3 | 10.2 | 0.7 |  |
| LARS 07 | 0.8 | 51.1 | 5.4 | 4 | 0.2 | 2.1 | 0.7 | 520 | 0.39 | 1.4 | 0.1 | < 5 | 0.2 | 1757 | 0.1 | 0.2 | < 1 |  |
| LARS 08 | 2.2 | 55.6 | 3.9 | 30 | 0.4 | 5 | 8.8 | 1104 | 3.27 | 248.3 | 0.2 | 1142.9 | 0.8 | 262 | 0.2 | 0.5 | 0.2 |  |
| LARS 09 | 2.2 | 11.8 | 1.6 | 10 | 0.1 | 5.3 | 1.5 | 249 | 0.76 | 1.9 | 0.1 | 2.6 | 0.2 | 20 | 0.1 | 0.1 | < 1 |  |
| LARS 10 | 1.2 | 7.9 | 7.2 |  | 0.3 | 2.5 | 0.5 | 247 | 0.36 | 0.7 | 0.1 | <. 5 | <. 1 | 133 | 0.2 | 0.1 | 0.4 |  |
| LARS 11 | 1.2 | 11.8 | 4.2 | 10 | <. 1 | 1.1 | 1 | 184 | 0.62 | 0.8 | 0.2 | <. 5 | 0.1 | 18 | 0.2 | 0.1 | 0.1 |  |
| LARS 13 | 0.7 | 11.8 | 6.8 | 14 | 0.1 | 1.9 | 1.8 | 608 | 0.63 | 3.2 | 0.3 | 6.5 | 0.1 | 40 | 0.4 | 0.1 | 0.1 |  |
| LARS 14 | 1.2 | 8.4 | 7.9 | 10 | 0.3 | 3.1 | 10.7 | 240 | 1.65 | 6.1 | 10.9 | 41.1 | 1.3 | 70 | 0.2 | 0.3 | 0.3 |  |
| RE LARS | 1.4 | 8.6 | 8 | 9 | 0.3 | 3.9 | 10.6 | 239 | 1.66 | 5.8 | 10.8 | 45.3 | 1.4 | 72 | 0.2 | 0.3 | 0.3 |  |
| LARS 15 | 0.5 | 278.6 | 2.6 | 75 | 0.3 | 7.9 | 18.6 | 595 | 3.46 | 1.1 | 0.4 | 2.5 | 2.1 | 65 | 0.1 | 0.3 | < 1 |  |
| LARS 16 | 0.5 | 150.7 | 2.3 | 76 | 0.1 | 8 | 18.2 | 557 | 3.36 | 1.3 | 0.3 | <. 5 | 1.7 | 71 | <. 1 | 0.4 | <. 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| v | Ca | $P$ | La | Cr | Mg | Ba | Ti | B | Al | Na | K | w | Hg | Sc | TI | S | Ga | Se |
| ppm | \% | \% | ppm | ppm | \% | ppm | \% | ppm | \% | \% | \% | ppm | ppm | ppm | ppm | \% | ppm | ppm |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 0.72 | 0.035 | 43 | 14.9 | 0.53 | 207 | 0.004 | 3 | 1.08 | 0.035 | 0.31 | 0.1 | < 01 | 2.6 | 0.1 | < 05 | 3 | <. 5 |
| $<1$ | 7.21 | 0.002 | 2 | 3.9 | 0.07 | 2478 | <.001 | 1 | 0.02 | 0.007 | 0.01 | 1.5 | 0.01 | 2.7 | <. 1 | < 05 | <1 | <. |
| 6 | 1.5 | 0.012 | 22 | 6.2 | 0.06 | 717 | 0.003 | 1 | 0.24 | 0.077 | 0.05 | 0.1 | < 01 | 1.6 | < 1 | < 0.0 |  | < 5 |
| 5 | 1.69 | 0.023 | 2 | 7.7 | 0.02 | 1452 | 0.001 | 2 | 0.06 | 0.015 | 0.02 | 1.7 | 0.03 | 1 | < 1 | 0.08 | < | <. 5 |
| 1 | 0.61 | 0.002 | 1 | 9.6 | 0.01 | 294 | <.001 | 2 | 0.01 | 0.004 | 0.01 | < 1 | 0.21 | 0.6 | < 1 | 0.39 | <1 | 1.6 |
| 3 | 14.73 | 0.003 | 2 | 4.7 | 0.05 | 2281 | 0.001 | $<1$ | 0.02 | 0.012 | < 01 | 1.7 | 0.01 | 0.6 | <. 1 | 0.12 | <1 | <. 5 |
| 7 | 3.08 | 0.12 | 5 | 3.7 | 0.65 | 131 | 0.004 | 2 | 0.26 | 0.057 | 0.13 | 0.3 | <. 01 | 2.3 | <. 1 | 1.19 | 1 | < 5 |
| 2 | 0.46 | 0.006 | 1 | 7.9 | 0.04 | 161 | 0.001 | <1 | 0.05 | 0.012 | 0.02 | 0.1 | < 01 | 0.8 | < 1 | < 05 | <1 | <. 5 |
| $<1$ | 1.81 | 0.001 | <1 | 5.6 | 0.01 | 2170 | <.001 | 1 | 0.01 | 0.008 | <. 01 | 2.1 | < 01 | 0.5 | < 1 | 0.07 | <1 | <. 5 |
| 1 | 0.04 | 0.01 | 1 | 3.8 | 0.02 | 799 | 0.001 | 2 | 0.18 | 0.095 | 0.03 | 0.1 | <. 01 | 0.4 | <. 1 | <. 05 | 1 | <. 5 |
| <1 | 0.51 | 0.026 | <1 | 3.6 | 0.01 | 360 | 0.001 | 2 | 0.15 | 0.094 | 0.03 | 1.2 | < 01 | 0.8 | < 1 | 0.08 | <1 | <. 5 |
| <1 | 0.78 | 0.12 | 1 | 5 | 0.01 | 491 | 0.002 | <1 | 0.16 | 0.084 | 0.02 | 0.5 | < 01 | 0.8 | < 1 | 0.14 | <1 | 0.8 |
| <1 | 0.78 | 0.121 | 1 | 4.6 | 0.01 | 510 | 0.003 | <1 | 0.17 | 0.086 | 0.02 | 0.4 | 0.02 | 0.8 | < 1 | 0.16 | <1 | 0.7 |
| 88 | 1.32 | 0.115 | 6 | 5.1 | 1.59 | 401 | 0.125 | 2 | 1.79 | 0.059 | 0.16 | 0.4 | < 01 | 4.3 | 0.1 | < 0.0 | 7 | < 5 |
| 93 | 1.32 | 0.116 | 5 | 4.9 | 1.55 | 320 | 0.145 | 1 | 1.76 | 0.045 | 0.23 | 0.1 | 0.01 | 3.6 | 0.1 | < 05 | 6 | <. 5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |




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# SUMMARY REPORT ON OLDTIMERS HILL AREA PROSPECTING PROGRAM AND AIRBORNE GEOPHYSICAL SURVEY 

## YUKON GEOLOGICAL SURVEY - PROSPECTING PROGRAM YMIP 04-054

SUMMER 2004

By
Mark Lindsay
Cordilleran Minerals Ltd

## TABLE OF CONTENTS




Figure 1


Figure 2


Figure 3

## SUMMARY

In the summer of 2004 a ( $10 \mathrm{~km} \times 12 \mathrm{~km}$ ) helicopter-borne geophysics survey was conducted over the Miklin Claims near the south end of Quiet Lake in Yukon. The Miklin Claims cover the area known in this report as Oldtimers Hill, which exists in the west central part of the survey grid.

The rocks that underlie the airborne survey area are diverse and have been described as mainly calcareous metasedimentary and metavolcanic rocks with associated granitic intrusions. Limited amounts of extrusive felsic volcanic rocks have also been observed in the project area as well as a relatively large ultramafic stock. Outcrop is very scarce within the survey area.

The airborne survey outlined several interesting conductors within the Miklin Claim block. The survey also highlighted an apparent network of major linear structures that exists on the nose of the section of Quiet Lake Batholith that intrudes into the area. The linear structures and many EM conductors occur in coincidence. At one such occurrence two deep seated EM conductors exist near the intersection of four major linear (fault) structures. Several other very interesting EM anomalies occur further to the south west.

The survey also discovered a large circular resistivity anomaly. The anomaly is actually coincidental with an EM conductor that is found in the exact center of the area of high resistivity.

The large circular resistivity anomaly is also coincident with the location of the highly magnetic ultramafic intrusive stock in the area. The stock is bounded on all sides by what appear to be long linear fault structures. Another north trending fault cuts through the middle of the ultramafic. Several EM anomalies (including the two mentioned earlier) occur around the perimeter of the ultramafic.

The higher frequency EM channels did not detect any anomalies near the surface on the Miklin Claims and the stronger anomalies were detected by the lowest EM frequencies $(980 \mathrm{~Hz} / 880 \mathrm{~Hz})$. The EM anomalies also appear to be more flat lying than vertical as they have respond the strongest to the 880 coplanar (lowest) frequency.

The strength of the EM conductors is also quite interesting. The conductance values for the survey area anomalies varies from $<10 \mathrm{~S}$ (Siemens) to over $>10,000 \mathrm{~S}$, with several high values in between.

Ground EM, IP and Mag geophysics survey should be conducted over parts of the Miklin Claims so as to ground-truth all EM/Mag anomalies of interest. This would identify any possible conductors associated with massive sulfides linked to the emplacement of the Cretaceous granite into the area of the ultramafic stock. The magnetic survey will identify any magnetic or structural features that may be associated with mineralization and an IP survey will highlight disseminated sulfides targets in the area.

## INTRODUCTION

The areas of interest regarding this report are known is known as Oldtimers Hill (fig.3).
The 2004 airborne geophysics survey was conducted by McPhar Geosurveys on behalf of Cordilleran Minerals Ltd. The survey collected electromagnetic (EM), magnetic (Mag) and radiometric (RAD) geophysical data. The job was started on August $1^{\text {st }}$ and finished on August $7^{\text {th }}$, 2004. The survey covered the areas known as Smoker Flats, Kingdome Ridge and Oldtimers Hill. Ground support for the airborne survey and helicopter crews was provided by Cordilleran Minerals Ltd.

Geophysical exploration over the Smoker Flats area was conducted to identify the conductive, magnetic or radiometric source of gossanous materials found in certain places throughout the area and of gold mineralization found in drill core from the central part of the target area.

This report will discuss the general geology of the area and the analytical results from helicopter-borne geophysics survey across the target.

## LOCATION AND ACCESS

Oldtimers Hill is located on N.T.S. mapsheet 105 C 14 , and is within the Whitehorse Mining District. The target area is located immediately at the south end of Quiet Lake. The area is accessible from Whitehorse, to the west, by helicopter; a flight of approximately 110 Km . A staging area near Oldtimers Hill can be accessed in the summer months by driving 135 Km east along the Alaska Highway from Whitehorse to Johnson's Crossing, and then north on the Canol Road for another 80 Km .

The approximate geographic center of the target areas is UTM $606962 \mathrm{E} / 6755060 \mathrm{~N}$.

## PHYSIOGRAPHY, VEGETATION AND CLIMATE

Oldtimers Hill is located on the eastern flanks the Big Salmon Mountains and at the immediate southern end of Quiet Lake. Bedrock exposures are almost non-existent along the far eastern side of the target area but the central and western portions of the Oldtimers Hill area have good exposures of bedrock.

The elevation of the area is from 820 m to 1840 m . Drainage in the area is good to very good in some location and poor in lower lying areas. Local creeks have a continuous supply of water during the spring and summer months. Most of the creek water is provided from melting permafrost.

Vegetation in the mid and lower lying areas is very dense. Black Spruce, Lodge-pole Pine and Alder Willow are found throughout the entire area. Trees start to get a little scarce
above 1300 meters. Moss, lichen and long grasses are found everywhere. The terrain for the most part is split between dry woodland foothills and alpine mountainous areas.

The climate of the area is typical of the interior continental region at this latitude. Winters are long with short hours of daylight and average daily temperatures of -20 Celsius. Summers are pleasant and warm with long days ( 20 hours of daylight on June 21), although it can be quite rainy at times. There is a yearly average of 120 days of precipitation. The average summer temperature is 22 Celsius with highs ranging into the low 30's.

## HISTORY AND PREVIOUS WORK

The general area of the south end of Quiet Lake has been explored intermittently since prospectors first ascended the Big Salmon River to Quiet Lake in 1897/98 in their search for placer gold deposits. The few who prospected this part of the territory recognized the mineral potential and settled in the area. A few creeks in the region produced placer gold and men built small settlements around their discoveries. Cottonwood Creek, which flows through the southern part of the Oldtimers Hill Area, was the site of one such settlement.

Gold was discovered on Cottonwood Creek near the turn of the $20^{\text {th }}$ century. At its height the settlement at Cottonwood Creek had approximately seven cabins. Placer workings on the creek are quite extensive for such a small remote drainage. It appears that a fire burnt down all of the cabins sometime in the early 1900's. A lone prospector was living and mining on the creek as late as 1925. Equipment found at the prospector's cabin suggests that he was engaged in placer gold and hard-rock mining.

In the mid 1960's interest in the target area began when a large rust gossan was discovered by people who were salvaging pipe from the 1940's Canol Road pipeline. It was later revealed that the US Army had also recorded finding large rust gossans in the southern parts of the area, while building the Canol Road. Continuous exploration was conducted in the area from 1966 to 1973.

Mineral exploration programs conducted around the south end of Quiet Lake during the 1960's and 1970's, for the most part, were of a reconnaissance nature. Work carried out in the area included airborne geophysics [electromagnetics and magnetics], a variety of ground electromagnetics and magnetics geophysical surveys, geochemical soil sampling, and very limited diamond drilling. Many of the surveys were not extensive enough to define the sources of anomalies that exist in the area, and the greater numbers of anomalies were not investigated. Mineral exploration surveys from the area have created a good template to guide future work programs. There have been limited amounts of exploration in the area since the mid 1970's.

## PROPERTY and CLAIM STATUS

Cordilleran Minerals Limited owns 212 quartz mineral claims (fig.4) over the Smoker Flats area. The area is equivalent to approximately 44 square kilometers. The status of the claims is listed below.

## Claim Name

MIKLIN 1 - 212

Grant Number
YC26755-YC29866 105C 14

Expiry Date 2005/05/29


Figure 4

## 2004 WORK COMPLETED

McPhar Geosurveys Ltd conducted a helicopter-borne electromagnetic, magnetic and radiometrics geophysical survey over the Oldtimers Hill area in 2004. The survey was carried out between August $1^{\text {st }}$ and August $7^{\text {Th }}$ 2004. Cordilleran Minerals provided a base-camp and employees Mark Lindsay, Dale Brown, Adam Mickey and Chad Pen provided support and help for the survey and helicopter crews while they worked in the Oldtimers Hill area. Prospecting of the target area was conducted between August 1 and August

## REGIONAL GEOLOGY

The Canol Project Area is located within the morphogeological Omineca Belt? The Omineca Belt is dominated by crystalline rocks of the Yukon Tanana Terrane. The Yukon Tanana Terrane, which is the largest terrane in the Yukon, is well recognized for its mineral deposit potential through the discovery of the several massive sulphide deposits within its bounds in southeast Yukon. The world class Fort Knox and Pogo intrusion related gold deposits, in Alaska, also occur within Yukon Tanana Terrane.


Figure 5
The geology in the immediate area of Canol Project (fig. 5) is composed of rocks of the Nasina Assemblage (DMN - graphitic quartzite and muscovite quartz-rich schist, with interspersed marble [4] and marble [2]). Ingenika Group rocks (PCI4 - thin bedded slate, siltstone, quartzite and minor limestone with local medium to coarse grained, feldspathic sandstone to orthoquartzite; muscovite biotite +/- garnet schist, micaceous quartzite, minor amphibolite and marble; rare granodiorite gneiss) may be in the local area, as they are known to occur immediate to the west of the target area. Amphibolite Assemblage rocks ( $\mathbf{P P a}$ - metamorphosed mafic rocks including (1) amphibolite (2) ultramafic rocks of unknown association and (3) mafic-ultramafic intrusions within Nasina assemblage) occur to the east of the Canol Project Area and may have some association with the ultramafic rocks that occur (under cover) in the central part of the target area. The Cassiar Suite intrusive ( $\mathbf{m K q C}$ - medium to coarse grained, equigranular to porphyritic [K-feldspar] granite and biotite quartz monzonite; biotite-hornblende quartz monzonite and granodiorite), known as the Quiet Lake Batholith, is thought to intrude all other rock units in the area of the Canol Project.

## 2004 AIRBORNE SURVEY SPECIFICATIONS

## FLIGHT SPECIFICATIONS

## 1. Flight Lines

Line directions and line spacings are specified in Schedule B, but may be subject to change and will therefore be confirmed between McPhar's and Client's representative immediately prior to the commencement of the survey operations.

## 2. Terrain Clearances

Optimum terrain clearances for the helicopter and instrumentation during normal survey flying are:

- Helicopter - 60 metres
- Gamma ray Spectrometer - 60 metres
- Magnetometer - 30 metres
- Hummingbird EM sensor - 30 metres


## 3. Airspeed

Normal helicopter airspeed will be approximately $110 \mathrm{~km} / \mathrm{hr}$, but this may vary in areas of rugged terrain. With a sampling rate of 0.1 second, EM, magnetometer and altimeter measurements are acquired approximately every 3 metres along the survey line.

Gamma ray Spectrometer data are collected approximately every 30 metres along the survey line.

Table 1

| SURVEY SPEED <br> $(\mathrm{km} / \mathrm{hour})$ | SURVEY <br> SPEED <br> (metres/sec) | SAMPLING <br> INTERVAL <br> $(0.1$ second $)$ |
| :--- | :--- | :--- |
| 110 | 30 metres | 3 metres |

## 4. Magnetic Diurnal

Flight lines, or portions thereof, will be re-flown if the magnetic diurnal exceeds 25 nT in a straight-line chord over 5 minutes. Survey data acquisition will be stopped altogether in the case of severe magnetic diurnal activity.
5. Sampling Rates

Table 2

| SYSTEM/No. of CHANNELS | SAMPLING <br> RATES/SEC. |
| :--- | :--- |
| Total Field Magnetometer (1 channel) | 0.1 sec |
| E.M. -880 Hz (2 channels) Coplanar | 0.1 sec |
| E.M. -980 Hz (2 channels) Coaxial | 0.1 sec |
| E.M. $-6.6 \mathrm{kHz}(2$ channels) Coplanar | 0.1 sec |
| E.M. $-7 \mathrm{kHz}(2$ channels) Coaxial | 0.1 sec |
| E.M. $-34 \mathrm{kHz}(2$ channels) Coplanar | 0.1 sec |
| Gamma ray Spectrometer $(512$ channels plus $\mathrm{U}, \mathrm{Th}, \mathrm{K}, \mathrm{TC}$ <br> and cosmic) | 1.0 sec |
| Radar Altimeter ( 1 channel) | 1.0 sec |
| DGPS Navigation | 1.0 sec |

## SURVEY INSTRUMENTS

## 1.The Helicopter-borne HUMMINGBIRD5 Digital Electromagnetic System

The HUMMINGBIRD5 is an all-digital, high-performance, multi-sensor airborne geophysical surveying system designed to fully utilize the latest technologies and digital data acquisition techniques in a low-weight, lowest-cost configuration.

The HUMMINGBIRD5 sensor, which is the heart of this system, can be simply described as a multi-frequency, multi-coil electromagnetic system, which measures the in-phase and quadrature responses from a number of coil-pairs installed in a tubular bird, towed beneath a helicopter.

HUMMINGBIRD5 features horizontal coplanar and vertical coaxial coil sets at frequencies of $880 \mathrm{~Hz}, 980 \mathrm{~Hz}, 6.6 \mathrm{kHz}, 7 \mathrm{kHz}$ and 34 kHz .

The system noise of the EM sensor is less than 2 ppm of the transmitted field, under ideal conditions. A total of ten EM channels of information are sampled at 0.1 second intervals or approximately every 3 metres along the survey line (at a survey airspeed of approximately 110 kph ), with a time constant of 0.1 second.

The EM system is calibrated with an external coil at the start and end of each survey and with an internal coil approximately three times per hour during survey flights. The phasing of the EM system is checked with an external ferrite rod before each survey flight.

For ease of shipping, the HUMMINGBIRD5 sensor/bird is constructed in 3 sections, each of approximately 2.2 m in length. The three sections are shipped in their own separate containers and joined together in the field in a matter of a few hours by the operating crew.

Table 3

| COIL <br> FREQUENCY | COIL <br> ORIENTATION | COIL <br> SEPARATION | CHANNELS |
| :--- | :--- | :--- | :--- |
| 880 Hz | Coplanar | 6.0 metres $(19$ <br> $\mathrm{ft})$ | I, Q |
| 980 Hz | Coaxial | 6.0 metres $(19$ <br> $\mathrm{ft})$ | I, Q |
| 6.6 kHz | Coplanar | 6.3 metres $(20.5$ <br> $\mathrm{ft})$ | I, Q |
| 7 kHz | Coaxial | 6.3 metres $(20.5$ <br> $\mathrm{ft})$ | $\mathrm{I}, \mathrm{Q}$ |
| 35 kHz | Coplanar | 4.9 metres $(16$ <br> $\mathrm{ft})$ | I, Q |
| $\mathrm{Q}=$ Quadrature |  |  |  |

Sferic activity can be reduced by post-survey processing to less than 2.0 ppm .
The electromagnetic system and ancillary equipment will be operating for a sufficient period prior to survey flying to allow for sufficient warm-up of the equipment. Nulling, ferrite and external Q-coil calibration for the EM system will only be performed after the system has stabilized following the-warm-up period. All of these ground calibrations will be completed before commencement of each flight. Internal calibrations will be performed frequently throughout the survey flights.

## 2. Airborne High Sensitivity Magnetometer

Either a Scintrex CS-2 Cesium or a Geometrics G-822A split-beam total-field magnetometer sensor, installed in the HUMMINGBIRD airfoil, with a sampling rate of ten times per second and an in-flight sensitivity of 0.01 nT , will be utilized. The magnetometer will perform continuously in areas of high magnetic gradient with the ambient range of the sensor approximately $20 \mathrm{k}-100 \mathrm{k} \mathrm{nT}$. Aerodynamic magnetometer noise should not exceed 0.25 nT .

## 3. Gamma-ray Spectrometer System

A Pico-Envirotec GRS-410 multi-channel gamma-ray spectrometer with 16.8 litres "downward looking" NaI sensor and 4.2 litres "upward looking" NaI sensor will be utilised during this survey, and will sample data once per second. The thermally isolated sensor will be installed in the cabin of the helicopter.

The GRS-410 is a self-stabilizing spectrometer, and tracks and corrects for the spectral drift by following a spectral peak, typically thorium. The standard regions of interest, as listed below, will be recorded and processed. The 256 channel digital data will be recorded and provided to Client. An example of the standard regions of interest that will be recorded, with window limits in MeV , is given in the table below:

Table 4 Sample Regions of Interest (ROI)

| Sample of Standard Windows |  |  |
| :--- | :--- | :--- |
| Element | Approximate <br> Lower Boundary (MeV) | Approximate <br> Upper Boundary <br> $(\mathrm{MeV})$ |
| Total Count | 0.41 | 2.81 |
| Potassium | 1.37 | 1.57 |
| Uranium | 1.66 | 1.86 |
| Thorium | 2.41 | 2.81 |
| Cosmic | 3.00 | $\infty$ |
| Upward-looking Uranium | 1.66 | 1.86 |

The spectrometer will be calibrated daily using standard calibration thorium (Th), cesium (Cs) and uranium (U) sources.

## 2004 AIRBORNE SURVEY RESULTS

The results of the 2004 helicopter-borne geophysics survey are summarized in the next few sections. The boundary for the Oldtimers Hill Area (red in Fig. 7) exists around the mid western part of the survey grid.

The summary of results is based on observations made by Cordilleran Minerals staff and is not the opinion of a professional geophysicist. A full analysis of the airborne geophysical specifications, methods and results, analyzed by a professional geophysicist, will be attached to this report at a later date.

The electromagnetic survey carried out over the Miklin Claims in 2004 collected data from the $6600 \mathrm{~Hz}, 980 \mathrm{~Hz}$ and 880 Hz electromagnetic frequencies. The EM data was
converted to maps showing horizontal offset profiles and as apparent conductivity contours and points.

The magnetic data was collected in the following formats: Total magnetic field contours; reduction-to-the-pole (RTP) magnetic contours; calculated first vertical derivative contours; calculated second derivative contours and analytic signal of the magnetic contours

Radiometric data was collected in the following formats: Total count contours, uranium contours, thorium contours and potassium contours and the selected radiometric ratio color contour for $\mathrm{Th} / \mathrm{K}$.


Figure 6

## ELECTROMAGNETIC (EM) SURVEY



The 2004 air geophysics survey discovered a broad area of heightened conductivity (blue in Fig. 7) on the nose of the section of the Quiet Lake Batholith that intrudes into the general target area. The area of enhanced EM conductivity in Figure 7 is approximately 45 sq. km.

The EM response in the higher frequencies (near surface) was poor. Analysis of the highest EM frequencies ( $35000 \& 7000 \mathrm{~Hz}$ ) was not included in the final airborne geophysics report. The EM response in the horizontal offset 6600 Hz coplanar frequency
(highest frequency for this report) detected some small anomalies nearer to the surface, but overall the data was subdued. The horizontal offset response for the coaxial 7000 Hz frequency (not included in report) was reported as basically flat across the entire airborne grid as was the 35000 Hz frequency.

The lowest frequency coil (coplanar 880 Hz ) expressed the largest horizontal offset. The horizontal offset EM response over the target area, as shown in Figure 8, was (at least) twice as strong in the 880 Hz coplanar EM coil as compared to the 980 Hz coaxial EM coil. The strength in responsiveness of the 880 Hz EM coil appears to show that the focal point of conductive zones in the target area exists relatively deep (as deep as the system could detect) in the local stratigraphy. The height difference between the ( 880 and 980 Hz ) horizontal offset profiles shows that the EM anomalies are potentially wide (flatter lying) structures as compared to usual narrow (vertical) dykes or veins. The 880 Hz coil can detect anomalies that exist about 100 meters below surface.

Figure 8 shows an example of a method of presenting EM data (horizontal offset profiles). The blue lines are 880 Hz coplanar and the red lines are 980 Hz coaxial.


The conductances map in figure 9 shows the areas where the calculated EM conductances were strongest in the target area. The conductance's ( 6600 Hz frequency) were calculated with the help of a computer program. The point conductance values (Fig. 11) for the 980 coaxial coils were most numerous in the 10-50S (Siemens) range with several anomalies in the $50-100 \mathrm{~S}$ range and one at $100-500 \mathrm{~S}$, two at $500-1000 \mathrm{~S}$ and one over 10,000 s.

A very interesting anomalous feature on the conductance map is a circular area of high resistivity (yellow circle Fig. 9 \& 10) near the north end of the survey grid. The resistivity anomaly is large $(\sim 3 \mathrm{~km} \times 3 \mathrm{~km})$. The anomaly is very odd by the fact that it has a conductor in its center? The conductive zone is approximately 1 kilometer wide (Fig. 10). The area has the strongest conductor ( $>10,000 \mathrm{~S}$ ) on the airborne grid and it appears to exists on the edge of the ultramafic.

The circular resistivity anomaly is also ringed by smaller conductive areas. One large conductive zone exists immediately to the south. Any of these conductors could be reflecting the occurrence of massive sulfide bodies associated with the ultramafic intrusion.


Figure 9


Figure 10


Figure 11

## MAGNETIC SURVEY



Figure 12
The results of the magnetic survey (Fig. 12) over the Miklin Claims have provided an interesting glimpse at the major structural features that exist at this geographic location.

The magnetic data has highlighted several linear features on the nose of the Quiet Lake Batholith. The most evident fault structures are outlined in figure 13. The two northwest trending linear anomalies in figure 13 (on the immediate northeast side of the dominant
magnetic anomaly) have been ground-truthed and thus are real fault structures. The size and emplacement of the ultramafic intrusive stock (the dominant magnetic anomaly) appears to be closely constrained by the apparent fault/fracture zones.

The most dominant feature on the magnetic map is the highly magnetic ultramafic stock. The stock is substantially more magnetic than other rocks in the area. The high degree of magnetism in the ultramafic may be due to a metamorphic alteration process that has occurred in the rock. The absolute magnetic intensity of the ultramafic (above background - earth's magnetic field) is $\sim 3200 \mathrm{nT}$.


Figure 13
There is another fault bound block to the southwest, which exhibits some relatively strong magnetic signatures. The geological nature of this area is poorly understood. The author has seen ultramafic rocks, mafic sediments and schists in the area. The magnetic anomalies may be from granites that have intruded these units.

Another important feature regarding the magnetic data is the large area of magnetic low that is an intricate part of the overall magnetic signature associated with the pronounced
location of the ultramafic intrusive stock. The low magnetic areas may be related to alteration brought on by the intruding granite rocks from the west.

The magnetic low areas (violet color in Fig. 14) are interwoven within the ultramafic magnetic high areas (light and dark pink colors) and form a northward curving shape that mirrors the location of the previously mentioned circular resistivity anomaly. The magnetic lows are also intimately associated with some of the EM conductors. The magnetic low areas are possible locations of alteration where magnetite has been destroyed and replaced with clay, carbonate or quartz.


Figure 14

## RADIOMETRIC SURVEY

The radiometric data from the 2004 airborne survey was useful in helping to decipher areas that had been affected by the intrusion of the Quiet Lake Batholith. A large part of the survey area is covered with significant depths of overburden and this factor may have affected the collection of accurate gamma-rays emissions for the survey.

The most diagnostic radiometric data from the survey is the potassium contours map. The map (Fig. 15) highlights the main outcrop locations along the west side of the grid area. The Quiet Lake Batholith intrudes from the west and is conspicuous from the large amount of pink coloration all along the western side of the airborne grid. In the central and east portion of the grid the colors blue are most dominant indicating the locations of bodies of water, swamps (lowest $\% \mathrm{~K}$ ) that known to occur in the area and accentuating the (probable) locations of deep sections of overburden.


Figure 15

An example of how the map helps in defining an area is given in figure 15 , where the red X marks a spot where a 22 m wide quartz vein with significant pyrite and sericite mineralization was encountered while ground-truthing an anomaly in 2003. The sericite probably produced the potassic anomaly at this location.


Figure 16
Another interesting piece of radiometric data is the thorium/potassium ( $\mathrm{Th} / \mathrm{K}$ ) ratio map in figure 16. Very low $\mathrm{Th} / \mathrm{K}$ ratios (violet color) sometimes indicate areas of alteration in regard to felsic related intrusive processes.

The map shows several areas that are the anomalously lowest of $\mathrm{Th} / \mathrm{K}$ ratios. The $\mathrm{Th} / \mathrm{K}$ anomalies seem to trend in a southwest-northeast pattern and may be reflecting and may be reflecting alteration processes associated with the location of the Quiet Lake Batholith. Some of these areas correspond to known alteration zones and others may also be related to alteration zones, but are in need of investigation.

The areas of high $\mathrm{Th} / \mathrm{K}$ ratios on the east side of the grid may be reflecting the deep overburden conditions that possibly exist in that area. The high ratios in the upper-middle part of the grid may be associated with the known occurrence of ultramafic rocks.

## PROSPECTING

A limited amount of prospecting was conducted in the Oldtimers Hill area due to unforeseen circumstances regarding the execution of the airborne geophysics survey.

The area has very little outcropping rock. Silt sampling of the two main creeks draining the target area was carried out as well as prospecting of any rock outcrops along the edges of the streams.

A day was also spent looking for new showings and rock outcrop.

## ECONOMIC GEOLOGY

Although there is pronounced lack of outcropping rock in the target area there is always some sulphide mineralization found in most if not all rocks found throughout the target area. Pyrite is the predominant sulfide mineral, with occurrences of pyrrhotite and marcasite. The mineralization probably averages 1 or 2 percent sulfide.

No new outcrops or showings were discovered during the time spent in the Oldtimers Hill area.

8 rock samples were collected from target area. All of the samples came from outcrops along stream valleys. The highest copper value found in rock was 108 ppm and the highest gold value was 4.8 ppb .

16 Silt samples were collected from two streams in the target area. Quiet Creek and Cottonwood Creek were the streams that were tested. Assays returned one anomalously high value of 330 ppb Au from Quiet Creek. This high value comes from within the area of the large circular resistivity feature (mentioned earlier) and coincides with high silt gold values found in this stream from past exploration.

## ROCK ANALYSIS

8 rock grab samples were collected from the property between August 1 and 7 2004. The rocks selected were all grab samples.

The samples were sent to Acme Laboratories Ltd. in Vancouver, British Columbia for analysis. At Acme Labs the rocks were crushed and sieved to -150 mesh, digested in hot $\mathrm{HCL} / \mathrm{HNO}_{3}$ and analyzed by ICP-MS.

## SOIL ANALYSIS

16 silt samples were collected from the target area between August 1 and 7 2004. The samples were collected in wet strength Kraft sample bags and air-dried at camp.

The silts were sent to Acme Laboratories LTD. in Vancouver, British Columbia for analysis. At Acme labs the silts were dried and sieved to -80 mesh, digested in hot $\mathrm{HCL} / \mathrm{HNO}_{3}$ and analyzed by ICP-MS.

## CONCLUSIONS AND RECOMMENDATIONS

The Oldtimers Hill Area, although only represented by a small part of the 2004 Helicopter-borne Geophysics Survey, is an area that has potential to host economic mineral deposits. The target covers ground which hosts a large circular resistivity anomaly and a primitive ultramafic stock which are potentially significant areas.

Now that interesting airborne anomalies have been discovered within the Oldtimers Hill Area the zone now needs to have ground geophysical surveys conducted over the highest potential anomalies to accurately identify ground coordinates of the anomalies for further investigation. This process will also weed out any weaker anomalies that exist.

A line grid should be slashed out over all high potential conductors and resistivity anomalies. The grid should be cut perpendicular to the trend of the EM horizontal offset profiles. Maxmin Horizontal Loop Electromagnetics (HLEM), Induced Polarization (IP) and ground Magnetics (Mag) surveys should be conducted over all of the grid area.

Once ground geophysics is completed the data should be analyzed and drill targets should be identified and prioritized. Drilling using a core drill should then take place at the discrepancy of the project operator.

## APPENDIX I















## APPENDIX II

| From ACME ANALYTICAL LABORATORIES LTD, VANCOUVER BC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Cordilleran Minerals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acme file \# A404595 Received: AUG 162004 |  |  |  |  |  |  | * 16 samples in this disk file. |  |  |  |  |  |  |  |  |  |  |  |  |
| Analysis: GROUP 1DX - 1.00 GM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ELEMENT | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| SAMPLES | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | \% | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | \% |
| QCSS01 | 1.3 | 36.8 | 8.8 | 67 | 0.1 | 60.9 | 14 | 691 | 2.48 | 6.3 | 1.6 | 50.3 | 5.7 | 26 | 0.3 | 0.4 | 0.1 | 53 | 0.55 |
| QCSS02 | 1.1 | 19.5 | 6.4 | 56 | 0.1 | 47.5 | 9.9 | 535 | 1.99 | 4.9 | 1.5 | 7.8 | 5.3 | 26 | 0.3 | 0.4 | 0.1 | 43 | 0.56 |
| QCSS03 | 1.1 | 24 | 7.5 | 61 | 0.1 | 49.1 | 11 | 581 | 2.24 | 5.4 | 2.8 | 12.6 | 5.1 | 30 | 0.4 | 0.5 | 0.1 | 43 | 0.61 |
| QCSS04 | 1.1 | 27.1 | 8.1 | 70 | 0.1 | 52.8 | 11.2 | 615 | 2.22 | 5.5 | 2.7 | 1.9 | 4.5 | 34 | 0.5 | 0.5 | 0.1 | 43 | 0.68 |
| QCSS05 | 0.8 | 18.3 | 6.4 | 52 | 0.1 | 40.7 | 8.6 | 467 | 1.77 | 4.2 | 1.7 | 2.1 | 4.9 | 27 | 0.3 | 0.4 | 0.1 | 36 | 0.53 |
| QCSS06 | 0.8 | 19.8 | 8.1 | 58 | 0.1 | 41.6 | 9.3 | 460 | 1.9 | 4.5 | 2 | 16 | 4.5 | 28 | 0.3 | 0.4 | 0.1 | 39 | 0.6 |
| QCSS07 | 1.1 | 18.8 | 8.1 | 50 | 0.1 | 40.8 | 9.2 | 534 | 1.78 | 5 | 1.9 | 1.4 | 4.6 | 24 | 0.4 | 0.3 | 0.1 | 38 | 0.55 |
| QCSS08 | 1.4 | 25.6 | 7.7 | 60 | 0.1 | 50 | 10.5 | 662 | 1.98 | 5 | 2.9 | 330.4 | 4.2 | 36 | 0.5 | 0.6 | 0.1 | 39 | 0.72 |
| QCSS09 | 1 | 19.4 | 7.8 | 55 | 0.1 | 44 | 10 | 481 | 2.08 | 4.6 | 2 | 16.5 | 5.7 | 27 | 0.3 | 0.4 | 0.1 | 44 | 0.57 |
| QCSS10 | 0.7 | 17.1 | 6.2 | 46 | 0.1 | 34.3 | 8 | 412 | 1.77 | 3.9 | 1.5 | 1 | 4.1 | 25 | 0.3 | 0.4 | 0.1 | 36 | 0.53 |
| CCSS01 | 0.8 | 30.9 | 7.1 | 60 | 0.1 | 45.7 | 12.2 | 493 | 2.98 | 6.2 | 2.5 | 6.6 | 5.9 | 36 | 0.2 | 0.5 | 0.1 | 67 | 0.86 |
| CCSS02 | 0.9 | 19.4 | 6 | 49 | <. 1 | 33.2 | 9.3 | 443 | 2.11 | 4.2 | 1.6 | 0.7 | 5.5 | 24 | 0.2 | 0.3 | 0.1 | 53 | 0.58 |
| RE CCSS03 | 0.9 | 25.3 | 6.4 | 51 | 0.1 | 40 | 11.5 | 582 | 2.14 | 4.7 | 1.2 | 42.7 | 4.7 | 33 | 0.3 | 0.4 | 0.1 | 46 | 0.82 |
| CCSS03 | 0.8 | 24.5 | 6.2 | 52 | 0.1 | 41.4 | 11.4 | 576 | 2.1 | 4.4 | 1.3 | 2.8 | 4.7 | 33 | 0.4 | 0.4 | 0.1 | 47 | 0.8 |
| CCSS04 | 0.9 | 21.5 | 6.6 | 47 | 0.1 | 36.4 | 10.2 | 433 | 2.59 | 5.1 | 2 | 4.5 | 6.5 | 31 | 0.3 | 0.4 | 0.1 | 65 | 0.84 |
| CCSS06 | 0.9 | 40.2 | 8.9 | 74 | 0.1 | 52.2 | 14 | 692 | 2.98 | 6.6 | 1.6 | 3.1 | 5.4 | 41 | 0.4 | 0.5 | 0.2 | 56 | 0.86 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P | La | Cr | Mg | Ba | Ti | B | AI | Na | K | W | Hg | Sc | TI | S | Ga | Se |  |  |  |
| \% | ppm | ppm | \% | ppm | \% | ppm | \% | \% | \% | ppm | ppm | ppm | ppm | \% | ppm | ppm |  |  |  |
| 0.104 | 18 | 54.3 | 0.97 | 183 | 0.1 | 2 | 1.08 | 0.021 | 0.13 | 0.2 | 0.03 | 3.5 | 0.2 | <. 05 | 5 | <. 5 |  |  |  |
| 0.088 | 17 | 41.8 | 0.7 | 181 | 0.076 | 2 | 0.92 | 0.017 | 0.11 | 0.3 | 0.02 | 2.7 | 0.1 | <. 05 | 3 | 0.6 |  |  |  |
| 0.087 | 18 | 40.3 | 0.79 | 213 | 0.075 | 2 | 1.11 | 0.015 | 0.12 | 0.2 | 0.04 | 3.2 | 0.1 | <. 05 | 4 | 0.8 |  |  |  |
| 0.083 | 18 | 40.7 | 0.77 | 237 | 0.074 | 2 | 1.19 | 0.017 | 0.13 | 0.2 | 0.05 | 3.5 | 0.1 | <. 05 | 4 | 1.2 |  |  |  |
| 0.082 | 16 | 33.3 | 0.61 | 179 | 0.067 | 1 | 0.81 | 0.015 | 0.1 | 0.1 | 0.03 | 2.4 | 0.1 | <. 05 | 3 | 0.7 |  |  |  |
| 0.077 | 17 | 36.2 | 0.66 | 188 | 0.073 | 3 | 0.91 | 0.017 | 0.11 | 0.2 | 0.03 | 3 | 0.1 | <. 05 | 3 | 1 |  |  |  |
| 0.077 | 15 | 34.4 | 0.61 | 182 | 0.07 | 2 | 0.81 | 0.016 | 0.1 | 0.2 | 0.03 | 2.4 | 0.1 | <. 05 | 3 | 0.6 |  |  |  |
| 0.076 | 17 | 38.8 | 0.71 | 229 | 0.072 | 2 | 0.99 | 0.016 | 0.12 | 0.2 | 0.38 | 3.2 | 0.1 | <. 05 | 4 | 1.5 |  |  |  |
| 0.093 | 17 | 40.3 | 0.67 | 177 | 0.075 | 2 | 0.89 | 0.013 | 0.11 | 0.3 | 0.03 | 2.6 | 0.1 | <. 05 | 4 | 0.7 |  |  |  |
| 0.084 | 15 | 33.5 | 0.61 | 164 | 0.068 | 2 | 0.8 | 0.013 | 0.09 | 0.2 | 0.03 | 2.5 | 0.1 | <.05 | 3 | 0.6 |  |  |  |
| 0.108 | 18 | 49.7 | 0.86 | 205 | 0.132 | 2 | 1.06 | 0.019 | 0.11 | 0.3 | 0.05 | 3.8 | 0.1 | <. 05 | 4 | 0.6 |  |  |  |
| 0.11 | 16 | 37.6 | 0.59 | 153 | 0.095 | 1 | 0.7 | 0.015 | 0.08 | 0.7 | 0.02 | 2.5 | 0.1 | <. 05 | 3 | < 5 |  |  |  |
| 0.087 | 15 | 37.4 | 0.77 | 183 | 0.095 | 1 | 0.91 | 0.019 | 0.11 | 0.3 | 0.03 | 3 | 0.1 | <. 05 | 3 | 0.5 |  |  |  |
| 0.084 | 14 | 35.7 | 0.75 | 178 | 0.093 | 2 | 0.9 | 0.019 | 0.1 | 0.2 | 0.03 | 3.2 | 0.1 | <. 05 | , | < 5 |  |  |  |
| 0.115 | 18 | 44.3 | 0.63 | 155 | 0.121 | 1 | 0.63 | 0.014 | 0.08 | 0.9 | 0.08 | 2.5 | 0.1 | <. 05 | 3 | < 5 |  |  |  |
| 0.086 | 19 | 49 | 1.05 | 248 | 0.109 | 3 | 1.51 | 0.018 | 0.16 | 0.1 | 0.06 | 5.1 | 0.1 | <. 05 | 5 | 0.5 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |




# OLDTIMERS HILL - QUIET LAKE AREA ROCK AND SILT SAMPLE LOCATIONS 

105C 14


SCALE

## INVOICE

## Zany Geophysical Consultant

12579 Taylor Place
Summerland, B.C. VOH 1 Zs
Fax 2504040388

Client:
Mark Lindsay Invoice \#: 2005-002
Cordilleran Minerals Ltd. Date: 9-Feb-2005
100 Platinum Road
Whitehorse, Yukon Territory
Y1A 6 Ag
Project: Interpretation of Helicopter-borne Geophysical Survey, Canol Area, Yukon Territory

| Units | Description | Unit cost | Cost |  |
| :--- | :--- | :--- | :--- | :--- |
| 5 | Geophysical Consulting <br> (Airborne Mag, EM, Rad data processing and interpretation) | $\$ 800$ | $4,000.00$ |  |
|  |  | Sub Total: $\$ 8$ | $4,000.00$ |  |
|  |  | GST (7\%): $\$$ | 280.00 |  |
|  |  | Total: | $\$$ | $\mathbf{4 , 2 8 0 . 0 0}$ |

GST Reg. No: 851292946 RT0001

Payable upon receipt $2 \%$ over 30 days

# Zang Geophysical Consultant 

Michael W. Zang
12579 Taylor Place
Summerland, B.C.
V0H 1 Z8
(h) 2504040338
(C) 2504862245
(f) 2504040388
mzang@shaw.ca
February 8, 2005
Cordilleran Minerals Limited 100 Platinum Road
Whitehorse, Yukon Territory
Y1A 6A9

Subject: First pass interpretation of helicopter-borne geophysical survey Canol Survey Area
As requested the aeromagnetic, radiometric and electromagnetic data from the Hummingbird helicopter airborne survey on the Canol survey area, Yukon was reviewed. A first pass geomagnetic map was created to determine if prospective conductive anomalies may be present in the area.

The figure 1 shows the preliminary geomagnetic map generated.
The main geological units identified in the map are ultramafic, a volcanic/sedimentary sequence, granite, a meta-sedimentary sequence, near surface high magnetic intensity units and a few main structures.

The ultramafic has been identified by its shallow easterly dip and very high magnetic susceptibility. One of the distinctive effects of this unit on the Hummingbird EM system is the negative effect on the in-phase data. This makes the final picking of targets and accurate calculation of the physical properties of the target difficult.

The volcanic/sedimentary sequence has been identified by is moderate to high magnetic susceptibility.

The granite has been identified by is moderate magnetic susceptibility and coincidence with a high potassium and total count radiometric anomalies.
The meta-sedimentary sequence is a low magnetic susceptibility unit and makes up the background response.


Figure 1 - Geomagnetic Map of Canol Survey Area
Table 1 presents the location of the conductive zones identified in the survey area. The east and north coordinates are the UTM limits of the zones and the zone number corresponds to the grouping found in the attached Montaj map. The grouping of the anomalies into zones was based on the similarity of the profiles and the corresponding magnetic trend.

Of the 72 zones identified, 45 are considered to be due to highly conductive material in all or part of the zone. The highly conductive zones are indicated in the table.

As can be seen in the maps the highly conductive zones fit into three main groupings. The north group located between $603000 \mathrm{E}, 6757000 \mathrm{~N}$ and $605000 \mathrm{E}, 6760000 \mathrm{~N}$ is coincident with north-
west limit of the ultramafic. The central group located between $602000 \mathrm{E}, 6754000 \mathrm{~N}$ and $606000 \mathrm{E}, 6756000 \mathrm{~N}$ is coincident with the south-west limit of the ultramafic. These two areas represent the most prospective areas for follow-up exploration. The northern area is highlighted primarily for its nickel potential and the central area for its nickel and gold potential.

The last grouping is located between $601000 \mathrm{E}, 6752000 \mathrm{~N}$ and $605000 \mathrm{E}, 6754000 \mathrm{~N}$ is coincident with the contact between the volcanic/sedimentary sequence and the meta-sediments. This area is considered to be of less importance than the first two groups.

Table 1
Conductive Zone \#
East North
Highly
Conductive Zones
16038056758454
16039856758394
16041886758357
16043786758330
16045956758325
16046876758302
16046876758233
16045956758219
16043876758219
16041936758260
16039766758279
16038056758334
16037276758371
16037226758450
16037636758464
16038056758454
26039486758547
26041746758699
26042536758782
26042026758833
2 - 6040916758759
26039856758685
26039206758625
26039026758584
26039206758547
$2603948 \quad 6758547$
$\begin{array}{llll}3 & 604165 & 6759087 & \text { Yes }\end{array}$
36044106758990 Yes
36046326758893 Yes
36046556758861 Yes
36046326758801 Yes
$\begin{array}{llll}3 & 604572 & 6758824 & \text { Yes }\end{array}$
$\begin{array}{lll}3 & 604382 & 6758907\end{array}$
36041796758990 Yes
36041146759032 Yes

| 3 | 604114 | 6759087 | Yes |
| :---: | :---: | :---: | :---: |
| 3 | 604165 | 6759087 | Yes |
| 4 | 603994 | 6758912 | Yes |
| 4 | 603800 | 6758815 | Yes |
| 4 | 603593 | 6758727 | Yes |
| 4 | 603417 | 6758644 | Yes |
| 4 | 603223 | 6758454 | Yes |
| 4 | 602979 | 6758256 | Yes |
| 4 | 602605 | 6757831 | Yes |
| 4 | 602411 | 6757563 | Yes |
| 4 | 602346 | 6757508 | Yes |
| 4 | 602346 | 6757443 | Yes |
| 4 | 602415 | 6757485 | Yes |
| 4 | 602600 | 6757739 | Yes |
| 4 | 602794 | 6757974 | Yes |
| 4 | 602979 | 6758159 | Yes |
| 4 | 603223 | 6758371 | Yes |
| 4 | 603422 | 6758556 | Yes |
| 4 | 603593 | 6758648 | Yes |
| 4 | 603800 | 6758741 | Yes |
| 4 | 603990 | 6758815 | Yes |
| 4 | 604054 | 6758861 | Yes |
| 4 | 604050 | 6758902 | Yes |
| 4 | 604017 | 6758912 | Yes |
| 4 | 603994 | 6758912 | Yes |
| 5 | 603800 | 6758713 | Yes |
| 5 | 603602 | 6758584 | Yes |
| 5 | 603413 | 6758441 | Yes |
| 5 | 603325 | 6758357 | Yes |
| 5 | 603279 | 6758311 | Yes |
| 5 | 603302 | 6758279 | Yes |
| 5 | 603413 | 6758367 | Yes |
| 5 | 603597 | 6758510 | Yes |
| 5 | 603800 | 6758630 | Yes |
| 5 | 603874 | 6758676 | Yes |
| 5 | 603879 | 6758718 | Yes |
| 5 | 603842 | 6758727 | Yes |
| 5 | 603800 | 6758713 | Yes |
| 6 | 604595 | 6757729 | Yes |
| 6 | 604391 | 6757729 | Yes |
| 6 | 604253 | 6757771 | Yes |
| 6 | 604184 | 6757813 | Yes |
| 6 | 604101 | 6757836 | Yes |
| 6 | 604101 | 6757891 | Yes |
| 6 | 604174 | 6757891 | Yes |
| 6 | 604294 | 6757845 | Yes |
| 6 | 604387 | 6757808 | Yes |
| 6 | 604502 | 6757808 | Yes |
| 6 | 604585 | 6757803 | Yes |
| 6 | 604673 | 6757803 | Yes |
| 6 | 604687 | 6757753 | Yes |
| 6 | 604659 | 6757734 | Yes |


| 6 | 604595 | 6757729 | Yes |
| :--- | :--- | :--- | :--- |
| 7 | 604590 | 6757037 | Yes |
| 7 | 604378 | 6757180 | Yes |
| 7 | 604179 | 6757342 | Yes |
| 7 | 604110 | 6757369 | Yes |
| 7 | 604077 | 6757392 | Yes |
| 7 | 604082 | 6757420 | Yes |
| 7 | 604137 | 6757429 | Yes |
| 7 | 604179 | 675725 | Yes |
| 7 | 604373 | 6757254 | Yes |
| 7 | 604493 | 6757180 | Yes |
| 7 | 604590 | 6757120 | Yes |
| 7 | 604664 | 6757074 | Yes |
| 7 | 604659 | 6757028 | Yes |
| 7 | 604595 | 6757028 | Yes |
| 7 | 604590 | 6757037 | Yes |
| 8 | 604590 | 6757428 |  |
| 8 | 604789 | 675786 |  |
| 8 | 604858 | 6757245 |  |
| 8 | 604862 | 6757185 |  |
| 8 | 604784 | 6757212 |  |
| 8 | 604659 | 6757282 |  |
| 8 | 604595 | 6757319 |  |
| 8 | 604525 | 675734 |  |
| 8 | 604521 | 6757416 |  |
| 8 | 604562 | 6757411 |  |
| 8 | 604590 | 6757406 |  |
| 9 | 602789 | 6757282 |  |
| 9 | 602979 | 6757494 |  |
| 9 | 603191 | 6757600 |  |
| 9 | 603376 | 6757628 |  |
| 9 | 603583 | 6757559 |  |
| 9 | 603777 | 6757522 |  |
| 9 | 603976 | 6757508 |  |
| 9 | 604101 | 6757485 |  |
| 9 | 604193 | 6757466 |  |
| 9 | 604244 | 6757494 |  |
| 9 | 604188 | 6757540 |  |
| 9 | 603971 | 6757586 |  |
| 9 | 603773 | 6757596 |  |
| 9 | 603588 | 6757642 |  |
| 9 | 603385 | 6757697 |  |
| 9 | 603205 | 6757679 |  |
| 9 | 602979 | 6757573 |  |
| 9 | 602877 | 6757452 |  |
| 9 | 602780 | 6757351 |  |
| 9 | 602729 | 6757300 |  |
| 9 | 602720 | 6757240 |  |
|  |  |  |  |


| 9 | 602771 | 6757268 |  |
| ---: | ---: | ---: | :--- |
| 9 | 602789 | 6757282 |  |
| 10 | 602785 | 6757651 | Yes |
| 10 | 602979 | 6757693 | Yes |
| 10 | 603057 | 6757720 | Yes |
| 10 | 603076 | 6757762 | Yes |
| 10 | 602997 | 6757776 | Yes |
| 10 | 602923 | 6757748 | Yes |
| 10 | 602789 | 6757720 | Yes |
| 10 | 602683 | 6757679 | Yes |
| 10 | 602683 | 6757628 | Yes |
| 10 | 602771 | 6757651 | Yes |
| 10 | 602785 | 6757651 | Yes |
| 11 | 603389 | 6757402 |  |
| 11 | 603269 | 6757365 |  |
| 11 | 603269 | 6757300 |  |
| 11 | 603385 | 6757323 |  |
| 11 | 603486 | 6757328 |  |
| 11 | 603519 | 6757379 |  |
| 11 | 603468 | 6757397 |  |
| 11 | 603399 | 6757397 |  |
| 11 | 603389 | 6757402 |  |
| 12 | 605079 | 6757517 |  |
| 12 | 604992 | 6757526 |  |
| 12 | 604927 | 6757494 |  |
| 12 | 604885 | 6757462 |  |
| 12 | 604936 | 6757420 |  |
| 12 | 605024 | 6757406 |  |
| 12 | 605089 | 6757448 |  |
| 12 | 605098 | 6757494 |  |
| 12 | 605079 | 6757517 |  |
| 13 | 604202 | 6756057 | Yes |
| 13 | 604386 | 6755943 | Yes |
| 13 | 604443 | 6755914 | Yes |
| 13 | 604483 | 6755960 | Yes |
| 13 | 604397 | 6756029 | Yes |
| 13 | 604299 | 6756103 | Yes |
| 13 | 604219 | 6756138 | Yes |
| 13 | 604144 | 6756149 | Yes |
| 13 | 604116 | 6756109 | Yes |
| 13 | 604161 | 6756080 | Yes |
| 13 | 604202 | 6756057 | Yes |
| 14 | 604610 | 6755690 |  |
| 14 | 604793 | 6755673 |  |
| 14 | 604851 | 6755696 |  |
| 14 | 604851 | 6755736 |  |
| 14 | 604788 | 6755741 |  |
| 14 | 604707 | 6755764 |  |
| 14 | 604610 | 6755764 |  |
| 14 | 604541 | 6755764 |  |
| 14 | 604529 | 6755719 |  |
|  |  |  |  |


| 14 | 604564 | 6755684 |  |
| :---: | :---: | :---: | :---: |
| 14 | 604610 | 6755690 |  |
| 15 | 604001 | 6756138 | Yes |
| 15 | 604213 | 6756155 | Yes |
| 15 | 604374 | 6756121 | Yes |
| 15 | 604627 | 6756011 | Yes |
| 15 | 604679 | 6756017 | Yes |
| 15 | 604690 | 6756046 | Yes |
| 15 | 604610 | 6756092 | Yes |
| 15 | 604483 | 6756178 | Yes |
| 15 | 604397 | 6756213 | Yes |
| 15 | 604305 | 6756236 | Yes |
| 15 | 604202 | 6756241 | Yes |
| 15 | 604087 | 6756224 | Yes |
| 15 | 604001 | 6756213 | Yes |
| 15 | 603914 | 6756178 | Yes |
| 15 | 603903 | 6756138 | Yes |
| 15 | 603966 | 6756126 | Yes |
| 15 | 604001 | 6756138 | Yes |
| 16 | 604615 | 6755322 | Yes |
| 16 | 604805 | 6755253 | Yes |
| 16 | 605012 | 6755144 | Yes |
| 16 | 605178 | 6755092 | Yes |
| 16 | 605299 | 6755087 | Yes |
| 16 | 605299 | 6755138 | Yes |
| 16 | 605178 | 6755173 | Yes |
| 16 | 605006 | 6755219 | Yes |
| 16 | 604805 | 6755334 | Yes |
| 16 | 604615 | 6755397 | Yes |
| 16 | 604541 | 6755403 | Yes |
| 16 | 604523 | 6755357 | Yes |
| 16 | 604558 | 6755328 | Yes |
| 16 | 604615 | 6755322 | Yes |
| 17 | 604024 | 6755655 |  |
| 17 | 604207 | 6755673 |  |
| 17 | 604271 | 6755684 |  |
| 17 | 604294 | 6755770 |  |
| 17 | 604202 | 6755759 |  |
| 17 | 604012 | 6755736 |  |
| 17 | 603955 | 6755701 |  |
| 17 | 603983 | 6755673 |  |
| 17 | 604024 | 6755655 |  |
| 18 | 603776 | 6753806 | Yes |
| 18 | 603577 | 6753764 | Yes |
| 18 | 603378 | 6753631 | Yes |
| 18 | 603188 | 6753540 | Yes |
| 18 | 602989 | 6753416 | Yes |
| 18 | 602939 | 6753424 | Yes |
| 18 | 602939 | 6753466 | Yes |
| 18 | 602997 | 6753490 | Yes |
| 18 | 603196 | 6753623 | Yes |
| 18 | 603387 | 6753689 | Yes |


| 18 | 603586 | 6753839 | Yes |
| :--- | :--- | :--- | :--- |
| 18 | 603768 | 6753864 | Yes |
| 18 | 603826 | 6753864 | Yes |
| 18 | 603834 | 6753830 | Yes |
| 18 | 603810 | 6753806 | Yes |
| 18 | 603776 | 6753806 | Yes |
| 19 | 604780 | 6753615 | Yes |
| 19 | 604987 | 6753615 | Yes |
| 19 | 605186 | 6753648 | Yes |
| 19 | 605269 | 6753681 | Yes |
| 19 | 605194 | 6753714 | Yes |
| 19 | 604987 | 6753706 | Yes |
| 19 | 604780 | 6753681 | Yes |
| 19 | 604697 | 6753665 | Yes |
| 19 | 604697 | 6753631 | Yes |
| 19 | 604738 | 6753623 | Yes |
| 19 | 604780 | 6753615 | Yes |
| 20 | 602640 | 6757195 |  |
| 20 | 602600 | 6757141 |  |
| 20 | 602533 | 6757074 |  |
| 20 | 602560 | 6757014 |  |
| 20 | 602620 | 6757067 |  |
| 20 | 602681 | 6757141 |  |
| 20 | 602674 | 6757175 |  |
| 20 | 602640 | 6757195 |  |
| 21 | 602210 | 6757088 | Yes |
| 21 | 602405 | 6757128 | Yes |
| 21 | 602459 | 6757128 | Yes |
| 21 | 602459 | 6757067 | Yes |
| 21 | 602405 | 6757054 | Yes |
| 21 | 602223 | 6757007 | Yes |
| 21 | 602129 | 6757007 | Yes |
| 21 | 602143 | 6757067 | Yes |
| 21 | 602210 | 6757088 | Yes |
| 22 | 602230 | 6756657 | Yes |
| 23 | 23 | 63 | 63 |


| 23 | 602540 | 6756758 |  |
| :--- | :--- | :--- | :--- |
| 23 | 602506 | 6756718 |  |
| 23 | 602553 | 6756697 |  |
| 23 | 602593 | 6756677 |  |
| 24 | 604392 | 6755066 | Yes |
| 24 | 604173 | 6755182 | Yes |
| 24 | 604016 | 6755250 | Yes |
| 24 | 603907 | 6755319 | Yes |
| 24 | 603872 | 6755373 | Yes |
| 24 | 603927 | 6755367 | Yes |
| 24 | 604030 | 6755332 | Yes |
| 24 | 604214 | 6755250 | Yes |
| 24 | 604351 | 6755168 | Yes |
| 24 | 604392 | 6755148 | Yes |
| 24 | 604481 | 6755121 | Yes |
| 24 | 604481 | 6755066 | Yes |
| 24 | 604385 | 6755066 | Yes |
| 24 | 604392 | 6755066 | Yes |
| 25 | 604617 | 6755127 | Yes |
| 25 | 604815 | 6755086 | Yes |
| 25 | 604884 | 6755093 | Yes |
| 25 | 604897 | 6755127 | Yes |
| 25 | 604822 | 6755175 | Yes |
| 25 | 604699 | 6755209 | Yes |
| 25 | 604617 | 6755216 | Yes |
| 25 | 604549 | 6755209 | Yes |
| 25 | 604542 | 6755168 | Yes |
| 25 | 604583 | 6755141 | Yes |
| 25 | 604617 | 6755127 | Yes |
| 26 | 605779 | 6754164 | Yes |
| 26 | 605923 | 6754246 | Yes |
| 26 | 606005 | 6754294 | Yes |
| 26 | 606087 | 6754342 | Yes |
| 26 | 606046 | 6754389 | Yes |
| 26 | 605991 | 6754362 | Yes |
| 26 | 605882 | 6754301 | Yes |
| 26 | 605779 | 6754246 | Yes |
| 26 | 605718 | 6754219 | Yes |
| 26 | 605711 | 6754184 | Yes |
| 26 | 605745 | 6754171 | Yes |
| 26 | 605779 | 6754164 | Yes |
| 27 | 605198 | 6754314 | Yes |
| 27 | 605014 | 6754362 | Yes |
| 27 | 604891 | 6754424 | Yes |
| 27 | 609918 | 6754471 | Yes |
| 27 | 605014 | 6754437 | Yes |
| 27 | 605205 | 6754396 | Yes |
| 27 | 605280 | 6754362 | Yes |
| 27 | 605294 | 6754321 | Yes |
| 27 | 605253 | 6754301 | Yes |
| 27 | 605198 | 6754314 | Yes |
| 28 | 605437 | 6754608 | Yes |
|  |  |  |  |


| 28 | 605383 | 6754622 | Yes |
| :--- | :--- | :--- | :--- |
| 28 | 605246 | 6754663 | Yes |
| 28 | 605178 | 6754676 | Yes |
| 28 | 605089 | 6754704 | Yes |
| 28 | 605021 | 6754724 | Yes |
| 28 | 604952 | 6754758 | Yes |
| 28 | 604938 | 6754806 | Yes |
| 28 | 605007 | 6754806 | Yes |
| 28 | 605191 | 6754752 | Yes |
| 28 | 605396 | 6754690 | Yes |
| 28 | 605492 | 6754663 | Yes |
| 28 | 605499 | 6754608 | Yes |
| 28 | 605417 | 6754608 | Yes |
| 28 | 605437 | 6754608 | Yes |
| 29 | 605376 | 6754881 | Yes |
| 29 | 605513 | 6754834 | Yes |
| 29 | 605608 | 6754799 | Yes |
| 29 | 605697 | 6754813 | Yes |
| 29 | 605697 | 6754861 | Yes |
| 29 | 605595 | 6754888 | Yes |
| 29 | 605499 | 6754916 | Yes |
| 29 | 605437 | 6754943 | Yes |
| 29 | 605383 | 6754957 | Yes |
| 29 | 605314 | 6754977 | Yes |
| 29 | 605267 | 6754943 | Yes |
| 29 | 605328 | 6754895 | Yes |
| 29 | 605376 | 6754881 | Yes |
| 30 | 604180 | 6754533 | Yes |
| 30 | 603989 | 6754499 | Yes |
| 30 | 603784 | 6754560 | Yes |
| 30 | 603592 | 6754581 | Yes |
| 30 | 603380 | 6754724 | Yes |
| 30 | 603189 | 6754977 | Yes |
| 30 | 602991 | 6755127 | Yes |
| 30 | 602923 | 6755175 | Yes |
| 30 | 602929 | 6755237 | Yes |
| 30 | 602991 | 6755203 | Yes |
| 30 | 603182 | 6755066 | Yes |
| 30 | 603380 | 6754806 | Yes |
| 30 | 603592 | 6754656 | Yes |
| 30 | 603784 | 6754649 | Yes |
| 30 | 603982 | 6754574 | Yes |
| 30 | 604180 | 6754601 | Yes |
| 30 | 604276 | 6754594 | Yes |
| 30 | 604262 | 6754547 | Yes |
| 30 | 604235 | 6754533 | Yes |
| 30 | 604180 | 6754533 | Yes |
| 31 | 603572 | 6756118 | Yes |
| 31 | 603538 | 6756091 | Yes |
| 31 | 603531 | 6755941 | Yes |
| 31 | 603538 | 6755777 | Yes |
| 31 | 603551 | 6755688 | Yes |
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| 31 | 603592 | 6755660 | Yes |
| :--- | :--- | :--- | :--- |
| 31 | 603688 | 6755613 | Yes |
| 31 | 603749 | 6755578 | Yes |
| 31 | 603790 | 6755544 | Yes |
| 31 | 603859 | 6755551 | Yes |
| 31 | 603879 | 6755585 | Yes |
| 31 | 60311 | 6755619 | Yes |
| 31 | 603708 | 6755681 | Yes |
| 31 | 603654 | 6755729 | Yes |
| 31 | 603613 | 6755742 | Yes |
| 31 | 603585 | 6755872 | Yes |
| 31 | 603592 | 6755995 | Yes |
| 31 | 603613 | 6756050 | Yes |
| 31 | 603592 | 6756118 | Yes |
| 31 | 60372 | 6756118 | Yes |
| 32 | 604023 | 6755510 | Yes |
| 32 | 604118 | 6755462 | Yes |
| 32 | 604159 | 6755414 | Yes |
| 32 | 604112 | 6755387 | Yes |
| 32 | 604036 | 6755414 | Yes |
| 32 | 603995 | 6755428 | Yes |
| 32 | 603988 | 6755455 | Yes |
| 32 | 603934 | 6755496 | Yes |
| 32 | 604002 | 6755517 | Yes |
| 32 | 604023 | 6755510 | Yes |
| 33 | 604802 | 6754731 | Yes |
| 33 | 604850 | 6754738 | Yes |
| 33 | 604884 | 6754697 | Yes |
| 33 | 604877 | 6754642 | Yes |
| 33 | 604815 | 6754635 | Yes |
| 33 | 604754 | 6754635 | Yes |
| 33 | 604706 | 6754656 | Yes |
| 33 | 604713 | 6754704 | Yes |
| 33 | 604761 | 6754731 | Yes |
| 33 | 604802 | 6754731 | Yes |
| 34 | 605581 | 6754471 |  |
| 34 | 605670 | 6754492 |  |
| 34 | 605690 | 6754540 |  |
| 34 | 605642 | 6754553 |  |
| 34 | 605588 | 6754553 |  |
| 34 | 605506 | 6754547 |  |
| 34 | 605492 | 6754492 |  |
| 34 | 605519 | 6754465 | . |
| 34 | 605500 | 6754465 |  |
| 34 | 605581 | 6754471 |  |
| 35 | 605711 | 6754970 |  |
| 35 | 605800 | 6754970 |  |
| 35 | 605902 | 6754991 |  |
| 35 | 605916 | 6755039 |  |
| 35 | 605861 | 6755052 |  |
| 35 | 605793 | 6755059 |  |
| 35 | 605697 | 6755032 |  |
|  |  |  |  |


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| :--- | :--- | :--- | :--- |
| 35 | 605683 | 6754991 |  |
| 35 | 605711 | 6754970 |  |
| 36 | 602601 | 6755455 | Yes |
| 36 | 602800 | 6755503 | Yes |
| 36 | 602902 | 6755537 | Yes |
| 36 | 602888 | 6755565 | Yes |
| 36 | 602847 | 6755578 | Yes |
| 36 | 602786 | 6755572 | Yes |
| 36 | 602683 | 6755551 | Yes |
| 36 | 602608 | 6755537 | Yes |
| 36 | 602513 | 6755503 | Yes |
| 36 | 602513 | 6755469 | Yes |
| 36 | 602567 | 6755455 | Yes |
| 36 | 602601 | 6755455 | Yes |
| 37 | 60210 | 6755257 | Yes |
| 37 | 602526 | 6755237 | Yes |
| 37 | 602601 | 6755223 | Yes |
| 37 | 602677 | 6755189 | Yes |
| 37 | 602656 | 6755148 | Yes |
| 37 | 602601 | 6755141 | Yes |
| 37 | 602506 | 6755141 | Yes |
| 37 | 60217 | 6755162 | Yes |
| 37 | 602362 | 6755196 | Yes |
| 37 | 602335 | 6755244 | Yes |
| 37 | 602383 | 6755271 | Yes |
| 37 | 602410 | 6755257 | Yes |
| 38 | 602328 | 6754622 | Yes |
| 38 | 602424 | 6754629 | Yes |
| 38 | 602588 | 6754608 | Yes |
| 38 | 602718 | 6754608 | Yes |
| 38 | 602806 | 6754629 | Yes |
| 38 | 602861 | 6754649 | Yes |
| 38 | 602847 | 6754697 | Yes |
| 38 | 602793 | 6754704 | Yes |
| 38 | 602656 | 6754704 | Yes |
| 38 | 602601 | 6754690 | Yes |
| 38 | 602485 | 6754711 | Yes |
| 38 | 602396 | 6754711 | Yes |
| 38 | 602328 | 6754711 | Yes |
| 38 | 602301 | 6754690 | Yes |
| 38 | 602294 | 6754649 | Yes |
| 38 | 602328 | 6754622 | Yes |
| 39 | 600203 | 6753275 |  |
| 39 | 600319 | 6753323 |  |
| 39 | 60001 | 6753364 |  |
| 39 | 600490 | 6753419 |  |
| 39 | 600483 | 6753467 |  |
| 39 | 600394 | 6753439 |  |
| 39 | 600312 | 6753398 |  |
| 39 | 600210 | 6753357 |  |
| 39 | 600121 | 6753316 |  |
| 39 | 600107 | 6753269 |  |
|  |  |  |  |


| 39 | 600148 | 6753262 |  |
| :---: | :---: | :---: | :---: |
| 39 | 600203 | 6753275 |  |
| 40 | 603121 | 6753884 | Yes |
| 40 | 603018 | 6753870 | Yes |
| 40 | 602916 | 6753884 | Yes |
| 40 | 602800 | 6753904 | Yes |
| 40 | 602759 | 6753904 | Yes |
| 40 | 602704 | 6753884 | Yes |
| 40 | 602588 | 6753863 | Yes |
| 40 | 602519 | 6753863 | Yes |
| 40 | 602499 | 6753890 | Yes |
| 40 | 602533 | 6753925 | Yes |
| 40 | 602601 | 6753952 | Yes |
| 40 | 602697 | 6753972 | Yes |
| 40 | 602800 | 6753993 | Yes |
| 40 | 602923 | 6753979 | Yes |
| 40 | 603032 | 6753952 | Yes |
| 40 | 603114 | 6753938 | Yes |
| 40 | 603128 | 6753911 | Yes |
| 40 | 603121 | 6753884 | Yes |
| 41 | 602984 | 6752599 | Yes |
| 41 | 603121 | 6752551 | Yes |
| 41 | 603216 | 6752517 | Yes |
| 41 | 603298 | 6752537 | Yes |
| 41 | 603333 | 6752585 | Yes |
| 41 | 603292 | 6752606 | Yes |
| 41 | 603216 | 6752613 | Yes |
| 41 | 603169 | 6752613 | Yes |
| 41 | 603107 | 6752654 | Yes |
| 41 | 603032 | 6752674 | Yes |
| 41 | 602970 | 6752674 | Yes |
| 41 | 602888 | 6752667 | Yes |
| 41 | 602888 | 6752619 | Yes |
| 41 | 602943 | 6752599 | Yes |
| 41 | 602984 | 6752599 | Yes |
| 42 | 602731 | 6753638 | Yes |
| 42 | 602642 | 6753610 | Yes |
| 42 | 602595 | 6753617 | Yes |
| 42 | 602451 | 6753631 | Yes |
| 42 | 602369 | 6753624 | Yes |
| 42 | 602308 | 6753603 | Yes |
| 42 | 602280 | 6753631 | Yes |
| 42 | 602362 | 6753692 | Yes |
| 42 | 602417 | 6753720 | Yes |
| 42 | 602472 | 6753726 | Yes |
| 42 | 602574 | 6753699 | Yes |
| 42 | 602649 | 6753699 | Yes |
| 42 | 602697 | 6753699 | Yes |
| 42 | 602724 | 6753685 | Yes |
| 42 | 602731 | 6753672 | Yes |
| 42 | 602731 | 6753638 | Yes |
| 43 | 602786 | 6753364 | Yes |


| 43 | 602615 | 6753364 | Yes |
| :---: | :---: | :---: | :---: |
| 43 | 602567 | 6753357 | Yes |
| 43 | 602444 | 6753316 | Yes |
| 43 | 602390 | 6753316 | Yes |
| 43 | 602328 | 6753289 | Yes |
| 43 | 602239 | 6753248 | Yes |
| 43 | 602178 | 6753228 | Yes |
| 43 | 602089 | 6753193 | Yes |
| 43 | 602007 | 6753180 | Yes |
| 43 | 601870 | 6753173 | Yes |
| 43 | 601809 | 6753173 | Yes |
| 43 | 601699 | 6753111 | Yes |
| 43 | 601638 | 6753064 | Yes |
| 43 | 601590 | 6753043 | Yes |
| 43 | 601501 | 6753070 | Yes |
| 43 | 601556 | 6753111 | Yes |
| 43 | 601604 | 6753125 | Yes |
| 43 | 601679 | 6753193 | Yes |
| 43 | 601754 | 6753228 | Yes |
| 43 | 601816 | 6753255 | Yes |
| 43 | 601898 | 6753262 | Yes |
| 43 | 602007 | 6753248 | Yes |
| 43 | 602137 | 6753275 | Yes |
| 43 | 602191 | 6753310 | Yes |
| 43 | 602321 | 6753364 | Yes |
| 43 | 602390 | 6753392 | Yes |
| 43 | 602485 | 6753405 | Yes |
| 43 | 602540 | 6753433 | Yes |
| 43 | 602608 | 6753439 | Yes |
| 43 | 602704 | 6753439 | Yes |
| 43 | 602772 | 6753439 | Yes |
| 43 | 602854 | 6753433 | Yes |
| 43 | 602868 | 6753378 | Yes |
| 43 | 602841 | 6753364 | Yes |
| 43 | 602786 | 6753364 | Yes |
| 44 | 601857 | 6753392 | Yes |
| 44 | 601980 | 6753371 | Yes |
| 44 | 602089 | 6753405 | Yes |
| 44 | 602191 | 6753426 | Yes |
| 44 | 602260 | 6753480 | Yes |
| 44 | 602280 | 6753515 | Yes |
| 44 | 602246 | 6753508 | Yes |
| 44 | 602191 | 6753501 | Yes |
| 44 | 602075 | 6753460 | Yes |
| 44 | 602000 | 6753453 | Yes |
| 44 | 601925 | 6753446 | Yes |
| 44 | 601870 | 6753446 | Yes |
| 44 | 601857 | 6753433 | Yes |
| 44 | 601843 | 6753419 | Yes |
| 44 | 601857 | 6753392 | Yes |
| 45 | 602130 | 6752975 | Yes |
| 45 | 602198 | 6752988 | Yes |


| 45 | 602321 | 6753029 | Yes |
| :--- | :--- | :--- | :--- |
| 45 | 602355 | 6753077 | Yes |
| 45 | 602287 | 6753091 | Yes |
| 45 | 602246 | 6753084 | Yes |
| 45 | 602198 | 6753070 | Yes |
| 45 | 602130 | 6753029 | Yes |
| 45 | 602116 | 6752995 | Yes |
| 45 | 602130 | 6752975 | Yes |
| 46 | 601993 | 6752695 | Yes |
| 46 | 601891 | 6752708 | Yes |
| 46 | 601795 | 6752708 | Yes |
| 46 | 601706 | 6752688 | Yes |
| 46 | 601638 | 6752681 | Yes |
| 46 | 601624 | 6752722 | Yes |
| 46 | 601679 | 6752756 | Yes |
| 46 | 601788 | 6752790 | Yes |
| 46 | 601891 | 6752790 | Yes |
| 46 | 601973 | 6752797 | Yes |
| 46 | 602027 | 6752790 | Yes |
| 46 | 602068 | 6752763 | Yes |
| 46 | 602068 | 6752715 | Yes |
| 46 | 602034 | 6752695 | Yes |
| 46 | 601993 | 6752695 | Yes |
| 47 | 601385 | 6752578 | Yes |
| 47 | 601289 | 6752537 | Yes |
| 47 | 601228 | 6752537 | Yes |
| 47 | 601125 | 6752428 | Yes |
| 47 | 601050 | 6752380 | Yes |
| 47 | 600954 | 6752312 | Yes |
| 47 | 600845 | 6752209 | Yes |
| 47 | 600797 | 6752203 | Yes |
| 47 | 600695 | 6752155 | Yes |
| 47 | 600572 | 6752148 | Yes |
| 47 | 600449 | 6752148 | Yes |
| 47 | 600387 | 6752162 | Yes |
| 47 | 600305 | 6752155 | Yes |
| 47 | 600244 | 6752155 | Yes |
| 47 | 600175 | 6752168 | Yes |
| 47 | 600080 | 6752189 | Yes |
| 47 | 600087 | 6752223 | Yes |
| 47 | 600182 | 6752244 | Yes |
| 47 | 600292 | 6752244 | Yes |
| 47 | 600421 | 6752244 | Yes |
| 47 | 600517 | 6752237 | Yes |
| 47 | 600599 | 6752244 | Yes |
| 47 | 600715 | 6752271 | Yes |
| 47 | 600784 | 6752291 | Yes |
| 47 | 600913 | 6752373 | Yes |
| 47 | 600982 | 6752408 | Yes |
| 47 | 601098 | 6752503 | Yes |
| 47 | 601159 | 6752606 | Yes |
| 47 | 601228 | 6752626 | Yes |
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| 47 | 601317 | 6752660 | Yes |
| :--- | :--- | :--- | :--- |
| 47 | 601385 | 6752660 | Yes |
| 47 | 601440 | 6752667 | Yes |
| 47 | 601460 | 6752613 | Yes |
| 47 | 601440 | 6752585 | Yes |
| 47 | 601385 | 6752578 | Yes |
| 48 | 601611 | 6751540 | Yes |
| 48 | 601488 | 6751553 | Yes |
| 48 | 601385 | 6751547 | Yes |
| 48 | 601235 | 6751492 | Yes |
| 48 | 601180 | 6751478 | Yes |
| 48 | 601091 | 6751478 | Yes |
| 48 | 601098 | 6751512 | Yes |
| 48 | 601180 | 6751553 | Yes |
| 48 | 601282 | 6751594 | Yes |
| 48 | 601385 | 6751635 | Yes |
| 48 | 601488 | 6751635 | Yes |
| 48 | 601590 | 6751629 | Yes |
| 48 | 601665 | 6751635 | Yes |
| 48 | 601713 | 6751588 | Yes |
| 48 | 601679 | 6751547 | Yes |
| 48 | 601611 | 6751540 | Yes |
| 49 | 600312 | 6751560 |  |
| 49 | 600421 | 6751581 |  |
| 49 | 600565 | 6751642 |  |
| 49 | 600592 | 6751656 |  |
| 49 | 600722 | 6751704 |  |
| 49 | 600784 | 6751731 |  |
| 49 | 60913 | 6751738 |  |
| 49 | 600954 | 6751772 |  |
| 49 | 601132 | 6751813 |  |
| 49 | 601194 | 6751847 |  |
| 49 | 601255 | 6751875 |  |
| 49 | 601310 | 6751922 |  |
| 49 | 601289 | 6751936 |  |
| 49 | 601194 | 6751929 |  |
| 49 | 601030 | 6751861 |  |
| 49 | 600941 | 6751827 |  |
| 49 | 600845 | 6751813 |  |
| 49 | 600790 | 6751799 |  |
| 49 | 600667 | 6751758 |  |
| 49 | 600585 | 6751752 |  |
| 49 | 600490 | 6751711 |  |
| 49 | 60415 | 6751663 |  |
| 49 | 600353 | 6751649 |  |
| 49 | 600319 | 6751615 |  |
| 49 | 600312 | 6751588 |  |
| 49 | 600312 | 6751560 |  |
| 50 | 602075 | 6752175 |  |
| 50 | 602185 | 6752216 |  |
| 50 | 602273 | 6752250 |  |
| 50 | 602314 | 6752291 |  |
|  |  |  |  |


| 50 | 602260 | 6752298 |  |
| :--- | :--- | :--- | :--- |
| 50 | 602191 | 6752291 |  |
| 50 | 602130 | 6752278 |  |
| 50 | 602089 | 6752244 |  |
| 50 | 602075 | 6752203 |  |
| 50 | 602075 | 6752175 |  |
| 51 | 603995 | 6753193 | Yes |
| 51 | 603859 | 6753125 | Yes |
| 51 | 603784 | 6753105 | Yes |
| 51 | 603667 | 6753105 | Yes |
| 51 | 603592 | 6753111 | Yes |
| 51 | 603476 | 6753070 | Yes |
| 51 | 603387 | 6753064 | Yes |
| 51 | 603346 | 6753064 | Yes |
| 51 | 603292 | 6753002 | Yes |
| 51 | 603333 | 6752975 | Yes |
| 51 | 603408 | 6752995 | Yes |
| 51 | 603517 | 6753002 | Yes |
| 51 | 603585 | 6753016 | Yes |
| 51 | 603695 | 6753016 | Yes |
| 51 | 603777 | 6753023 | Yes |
| 51 | 603927 | 6753064 | Yes |
| 51 | 604009 | 6753105 | Yes |
| 51 | 604077 | 6753146 | Yes |
| 51 | 604098 | 6753207 | Yes |
| 51 | 604084 | 6753221 | Yes |
| 51 | 603995 | 6753193 | Yes |
| 52 | 604440 | 6753221 | Yes |
| 52 | 604569 | 6753241 | Yes |
| 52 | 604720 | 6753316 | Yes |
| 52 | 604795 | 6753405 | Yes |
| 52 | 604884 | 6753439 | Yes |
| 52 | 604918 | 6753453 | Yes |
| 52 | 604904 | 6753494 | Yes |
| 52 | 604795 | 6753494 | Yes |
| 52 | 604706 | 6753439 | Yes |
| 52 | 604583 | 6753310 | Yes |
| 52 | 604508 | 6753323 | Yes |
| 52 | 604433 | 6753316 | Yes |
| 52 | 604337 | 6753282 | Yes |
| 52 | 604344 | 6753241 | Yes |
| 52 | 604399 | 6753234 | Yes |
| 52 | 604440 | 6753221 | Yes |
| 53 | 604727 | 6752449 |  |
| 53 | 604795 | 6752435 |  |
| 53 | 604938 | 6752408 |  |
| 53 | 605027 | 6752401 |  |
| 53 | 605137 | 6752483 |  |
| 53 | 605205 | 6752565 |  |
| 53 | 605267 | 6752606 |  |
| 53 | 605280 | 6752674 |  |
| 53 | 605232 | 6752674 |  |
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| 53 | 605178 | 6752640 |  |
| :--- | :--- | :--- | :--- |
| 53 | 605109 | 6752578 |  |
| 53 | 605041 | 6752531 |  |
| 53 | 604986 | 6752490 |  |
| 53 | 60911 | 6752490 |  |
| 53 | 604863 | 6752510 |  |
| 53 | 604795 | 6752510 |  |
| 53 | 604727 | 6752510 |  |
| 53 | 604699 | 6752496 |  |
| 53 | 604699 | 6752442 |  |
| 53 | 604727 | 6752449 |  |
| 54 | 602882 | 6751752 |  |
| 54 | 60977 | 6751717 |  |
| 54 | 603134 | 6751683 |  |
| 54 | 603210 | 6751670 |  |
| 54 | 603305 | 6751622 |  |
| 54 | 603401 | 6751581 |  |
| 54 | 603462 | 6751553 |  |
| 54 | 603497 | 6751581 |  |
| 54 | 603476 | 6751622 |  |
| 54 | 63394 | 6751642 |  |
| 54 | 603333 | 6751676 |  |
| 54 | 603257 | 6751711 |  |
| 54 | 603196 | 6751752 |  |
| 54 | 603066 | 6751786 |  |
| 54 | 603018 | 6751793 |  |
| 54 | 602977 | 6751799 |  |
| 54 | 60292 | 6751806 |  |
| 54 | 602895 | 6751799 |  |
| 54 | 602875 | 6751779 |  |
| 54 | 602882 | 6751752 |  |
| 55 | 603298 | 6752790 |  |
| 55 | 603380 | 6752763 |  |
| 55 | 603456 | 6752736 |  |
| 55 | 603538 | 6752783 |  |
| 55 | 603503 | 6752818 |  |
| 55 | 603421 | 6752845 |  |
| 55 | 603394 | 6752845 |  |
| 55 | 603339 | 6752845 |  |
| 55 | 603305 | 6752831 |  |
| 55 | 603298 | 6752818 |  |
| 55 | 603298 | 6752790 |  |
| 56 | 603763 | 6752688 | Yes |
| 56 | 60002 | 6752811 | Yes |
| 56 | 604112 | 6752756 | Yes |
| 56 | 604180 | 6752722 | Yes |
| 56 | 604296 | 6752688 | Yes |
| 56 | 604399 | 6752660 | Yes |
| 56 | 604501 | 6752688 | Yes |
|  |  |  |  |


| 56 | 604583 | 6752736 | Yes |
| :--- | :--- | :--- | :--- |
| 56 | 604645 | 6752804 | Yes |
| 56 | 604658 | 6752845 | Yes |
| 56 | 604583 | 6752859 | Yes |
| 56 | 604501 | 6752811 | Yes |
| 56 | 604426 | 6752763 | Yes |
| 56 | 604358 | 6752756 | Yes |
| 56 | 604228 | 652783 | Yes |
| 56 | 604159 | 6752804 | Yes |
| 56 | 604084 | 6752859 | Yes |
| 56 | 603961 | 6752900 | Yes |
| 56 | 603900 | 6752859 | Yes |
| 56 | 603825 | 6752824 | Yes |
| 56 | 603749 | 6752763 | Yes |
| 56 | 603695 | 6752708 | Yes |
| 56 | 603729 | 6752681 | Yes |
| 56 | 603763 | 6752688 | Yes |
| 57 | 604993 | 6752988 | Yes |
| 57 | 605144 | 6753180 | Yes |
| 57 | 605205 | 6753262 | Yes |
| 57 | 605260 | 6753337 | Yes |
| 57 | 605200 | 6753378 | Yes |
| 57 | 605178 | 6753330 | Yes |
| 57 | 605096 | 6753207 | Yes |
| 57 | 605034 | 6753118 | Yes |
| 57 | 605000 | 6753064 | Yes |
| 57 | 604897 | 6753023 | Yes |
| 57 | 604891 | 6752975 | Yes |
| 57 | 604959 | 6752982 | Yes |
| 57 | 604993 | 652988 | Yes |
| 58 | 604310 | 6752893 | Yes |
| 58 | 604405 | 6752934 | Yes |
| 58 | 604501 | 6752934 | Yes |
| 58 | 604515 | 6752886 | Yes |
| 58 | 604494 | 6752852 | Yes |
| 58 | 604392 | 6752838 | Yes |
| 58 | 604300 | 6752818 | Yes |
| 58 | 604269 | 652852 | Yes |
| 58 | 604310 | 6752893 | Yes |
| 59 | 603907 | 6751492 |  |
| 59 | 604016 | 6751492 |  |
| 59 | 604098 | 6751526 |  |
| 59 | 604132 | 6751567 |  |
| 59 | 604118 | 6755581 |  |
| 59 | 604077 | 6755581 |  |
| 59 | 603989 | 6751574 |  |
| 59 | 603920 | 6751560 |  |
| 59 | 603893 | 6751526 |  |
| 59 | 603907 | 6751492 |  |
| 60 | 603913 | 6753726 |  |
| 60 | 604009 | 6753699 |  |
| 60 | 604118 | 6753665 |  |
|  |  |  |  |


| 60 | 604194 | 6753644 |  |
| :--- | :--- | :--- | :--- |
| 60 | 604282 | 6753644 |  |
| 60 | 604303 | 6753679 |  |
| 60 | 604276 | 6753699 |  |
| 60 | 604194 | 6753726 |  |
| 60 | 604132 | 6753754 |  |
| 60 | 60084 | 6753767 |  |
| 60 | 604016 | 6753774 |  |
| 60 | 603961 | 6753795 |  |
| 60 | 603913 | 6753774 |  |
| 60 | 603913 | 6753747 |  |
| 60 | 603913 | 6753726 |  |
| 61 | 603126 | 6756057 |  |
| 61 | 603200 | 6756080 |  |
| 61 | 603274 | 6756097 |  |
| 61 | 603314 | 6756040 |  |
| 61 | 603297 | 6755994 |  |
| 61 | 603217 | 6755989 |  |
| 61 | 603148 | 6755972 |  |
| 61 | 603086 | 6755994 |  |
| 61 | 603074 | 6756029 |  |
| 61 | 603126 | 6756057 |  |
| 62 | 602904 | 6757931 | Yes |
| 62 | 602978 | 6757943 | Yes |
| 62 | 603069 | 6757988 | Yes |
| 62 | 603103 | 6758028 | Yes |
| 62 | 603086 | 6758056 | Yes |
| 62 | 63052 | 6758056 | Yes |
| 62 | 602983 | 6758022 | Yes |
| 62 | 602915 | 6757999 | Yes |
| 62 | 602892 | 6757971 | Yes |
| 62 | 602892 | 6757954 | Yes |
| 62 | 602904 | 6757931 | Yes |
| 63 | 604100 | 6759213 |  |
| 63 | 603997 | 6759184 |  |
| 63 | 63804 | 6759127 |  |
| 63 | 603701 | 6759156 |  |
| 63 | 603581 | 6759184 |  |
| 63 | 603513 | 6759150 |  |
| 63 | 603467 | 6759105 |  |
| 63 | 603410 | 6759082 |  |
| 63 | 603336 | 6759076 |  |
| 63 | 603314 | 6759105 |  |
| 63 | 603410 | 6759167 |  |
| 63 | 603507 | 6759236 |  |
| 63 | 603593 | 6759264 |  |
| 63 | 603712 | 6759241 |  |
| 63 | 603792 | 6759218 |  |
| 63 | 603895 | 6759218 |  |
| 63 | 603963 | 6759258 |  |
|  |  |  |  |
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| 63 | 604026 | 6759258 |  |
| :--- | :--- | :--- | :--- |
| 63 | 604077 | 6759258 |  |
| 63 | 604100 | 6759224 |  |
| 63 | 604100 | 6759213 |  |
| 64 | 604071 | 6759503 | Yes |
| 64 | 603980 | 6759458 | Yes |
| 64 | 603860 | 6759418 | Yes |
| 64 | 603798 | 6759412 | Yes |
| 64 | 603707 | 6759446 | Yes |
| 64 | 603644 | 6759486 | Yes |
| 64 | 603598 | 6759515 | Yes |
| 64 | 603541 | 6759555 | Yes |
| 64 | 603507 | 6759606 | Yes |
| 64 | 603598 | 6759606 | Yes |
| 64 | 603695 | 6759543 | Yes |
| 64 | 603781 | 6759492 | Yes |
| 64 | 603872 | 6759492 | Yes |
| 64 | 603992 | 6759532 | Yes |
| 64 | 604077 | 6759549 | Yes |
| 64 | 604088 | 6759515 | Yes |
| 64 | 604071 | 6759503 | Yes |
| 65 | 603974 | 6759925 | Yes |
| 65 | 603872 | 6759805 | Yes |
| 65 | 603792 | 6759743 | Yes |
| 65 | 603718 | 6759743 | Yes |
| 65 | 603604 | 6759725 | Yes |
| 65 | 603564 | 6759743 | Yes |
| 65 | 603604 | 6759811 | Yes |
| 65 | 603667 | 6759811 | Yes |
| 65 | 603798 | 6759811 | Yes |
| 65 | 603889 | 6759908 | Yes |
| 65 | 603963 | 6759982 | Yes |
| 65 | 603997 | 6760010 | Yes |
| 65 | 604066 | 6760027 | Yes |
| 65 | 604066 | 6759976 | Yes |
| 65 | 604014 | 6759948 | Yes |
| 65 | 603974 | 6759925 | Yes |
| 66 | 603325 | 6759777 |  |
| 66 | 603393 | 6759839 |  |
| 66 | 603479 | 6759891 |  |
| 66 | 603502 | 6759817 |  |
| 66 | 603416 | 6759754 |  |
| 66 | 603382 | 6759748 |  |
| 66 | 603319 | 6759754 |  |
| 66 | 603325 | 6759777 |  |
| 67 | 603792 | 6760056 | Yes |
| 67 | 603872 | 6760084 | Yes |
| 67 | 603883 | 6760033 | Yes |
| 67 | 603786 | 6759965 | Yes |
| 67 | 603712 | 6759959 | Yes |
| 67 | 603724 | 6760016 | Yes |
| 67 | 603758 | 6760033 | Yes |
|  |  |  |  |


| 67 | 603792 | 6760056 | Yes |
| :--- | :--- | :--- | :--- |
| 68 | 605797 | 6759743 | Yes |
| 68 | 605900 | 6759520 | Yes |
| 68 | 605985 | 6759435 | Yes |
| 68 | 606025 | 6759429 | Yes |
| 68 | 606014 | 6759463 | Yes |
| 68 | 605985 | 6759515 | Yes |
| 68 | 65934 | 6759629 | Yes |
| 68 | 605877 | 6759714 | Yes |
| 68 | 605849 | 6759765 | Yes |
| 68 | 605792 | 6759817 | Yes |
| 68 | 605740 | 6759845 | Yes |
| 68 | 605752 | 6759777 | Yes |
| 68 | 605780 | 6759748 | Yes |
| 68 | 605797 | 6759743 | Yes |
| 69 | 605905 | 6758626 |  |
| 69 | 605991 | 6758529 |  |
| 69 | 606048 | 6758478 |  |
| 69 | 606059 | 6758432 |  |
| 69 | 605962 | 6758467 |  |
| 69 | 605917 | 6758535 |  |
| 69 | 605894 | 6758586 |  |
| 69 | 605888 | 6758615 |  |
| 69 | 605905 | 6758626 |  |
| 70 | 606119 | 6757823 |  |
| 70 | 606191 | 6757713 |  |
| 70 | 606240 | 6757642 |  |
| 70 | 606262 | 6757680 |  |
| 70 | 606223 | 6757746 |  |
| 70 | 606196 | 6757795 |  |
| 70 | 606169 | 6757834 |  |
| 70 | 606136 | 6757839 |  |
| 70 | 606119 | 6757823 |  |
| 71 | 606322 | 6756379 |  |
| 71 | 606366 | 6756264 |  |
| 71 | 606405 | 6756215 |  |
| 71 | 606448 | 6756171 |  |
| 71 | 606459 | 6756226 |  |
| 71 | 606426 | 6756275 |  |
| 71 | 606399 | 6756314 |  |
| 71 | 606377 | 6756352 |  |
| 71 | 606350 | 6756374 |  |
| 71 | 606322 | 6756379 |  |
| 72 | 602689 | 6750946 |  |
| 72 | 602777 | 6750946 |  |
| 72 | 602865 | 6750946 |  |
| 72 | 602865 | 6751001 |  |
| 72 | 602799 | 6751012 |  |
| 72 | 602766 | 6751012 |  |
| 72 | 602700 | 6751012 |  |
| 72 | 602678 | 6750979 |  |
| 72 | 602689 | 6750946 |  |
|  |  |  |  |

Table 2 presents the location of the conductive anomalies identified in the survey area and grouped into zones in Table 1. The east and north coordinates are the UTM location of the anomalies. The RTP_MAG column represents the reduced to the pole magnetic intensity value corresponding to this location. A background of 57000 nT has been removed from each value.

Table 2

| East | North | RTP_MAG |
| ---: | ---: | :---: |
| 602215 | 6757043 | 225 |
| 602231 | 6756883 | 162 |
| 602403 | 6756855 | 35 |
| 602403 | 6757084 | 114 |
| 602412 | 6757518 | 198 |
| 602600 | 6757780 | 184 |
| 602616 | 6757101 | -7 |
| 602608 | 6756708 | -54 |
| 602780 | 6756699 | -56 |
| 602788 | 6757322 | -18 |
| 602780 | 675682 | 151 |
| 602788 | 6758026 | 180 |
| 602977 | 6758206 | 181 |
| 602977 | 6757977 | 128 |
| 602977 | 6757731 | 77 |
| 602977 | 6757527 | -47 |
| 603198 | 6757633 | -46 |
| 603214 | 675811 | 178 |
| 603394 | 6759795 | 173 |
| 603411 | 6759115 | 182 |
| 603419 | 6758599 | 95 |
| 603419 | 6758403 | 105 |
| 603386 | 6757658 | -82 |
| 603386 | 6757346 | 1588 |
| 603583 | 675600 | -195 |
| 603599 | 6758354 | 103 |
| 603599 | 6758550 | 121 |
| 603591 | 6758681 | 72 |
| 603591 | 6759214 | 161 |
| 603591 | 6759558 | 154 |
| 603607 | 6759762 | 159 |
| 603796 | 676000 | 127 |
| 603796 | 6759771 | 122 |
| 603796 | 6759443 | 115 |
| 603796 | 6759165 | 131 |
| 603804 | 6758771 | -41 |
| 603804 | 6758665 | -33 |
| 603804 | 6758386 | 201 |
| 603779 | 6757551 | -212 |
| 603984 | 6757543 | -236 |
| 603976 | 675839 | 325 |
| 603976 | 6758616 | 126 |
|  |  |  |
|  |  |  |


| 603992 | 6758845 | 44 |
| :---: | :---: | :---: |
| 604000 | 6759214 | 101 |
| 603984 | 6759492 | 110 |
| 603984 | 6759951 | 76 |
| 604181 | 6759025 | 75 |
| 604181 | 6758763 | 46 |
| 604189 | 6758305 | 404 |
| 604181 | 6757846 | -88 |
| 604181 | 6757379 | -469 |
| 604377 | 6757215 | -335 |
| 604393 | 6757764 | -160 |
| 604377 | 6758264 | 505 |
| 604393 | 6758952 | 12 |
| 604598 | 6758853 | -32 |
| 604598 | 6757764 | -100 |
| 604590 | 6757363 | -366 |
| 604582 | 6757076 | -264 |
| 604787 | 6757248 | -248 |
| 604999 | 6757453 | -302 |
| 605794 | 6759771 | 112 |
| 605982 | 6759476 | 119 |
| 605982 | 6758501 | 124 |
| 606195 | 6757748 | 98 |
| 606400 | 6756265 | 856 |
| 605786 | 6754202 | 39 |
| 605794 | 6755004 | 434 |
| 605605 | 6754840 | 120 |
| 605597 | 6754505 | 33 |
| 605384 | 6754652 | -40 |
| 605384 | 6754906 | 10 |
| 605188 | 6755119 | 33 |
| 605188 | 6754709 | -41 |
| 605204 | 6754349 | -24 |
| 605196 | 6753678 | 54 |
| 604991 | 6753653 | 63 |
| 605016 | 6754398 | 33 |
| 605016 | 6754759 | -23 |
| 604999 | 6755176 | -22 |
| 604803 | 6755291 | -118 |
| 604819 | 6755127 | 15 |
| 604803 | 6754677 | 33 |
| 604795 | 6753637 | 91 |
| 604795 | 6753448 | 70 |
| 604615 | 6755160 | 52 |
| 604623 | 6755348 | -61 |
| 604615 | 6755725 | 64 |
| 604795 | 6755709 | 134 |
| 604623 | 6756044 | 662 |
| 604385 | 6756159 | 252 |
| 604385 | 6755979 | -5 |
| 604197 | 6753678 | 122 |
| 604009 | 6753727 | 129 |
|  |  |  |
| 60 |  |  |


| 603779 | 6753817 | 140 |
| :---: | :---: | :---: |
| 603583 | 6753792 | 150 |
| 603386 | 6753645 | 156 |
| 603206 | 6753571 | 183 |
| 604181 | 6754554 | 81 |
| 603984 | 6754529 | 98 |
| 603787 | 6754603 | 113 |
| 603591 | 6754611 | 140 |
| 603386 | 6754759 | 142 |
| 604393 | 6755094 | 104 |
| 604189 | 6755225 | 48 |
| 604025 | 6755283 | 94 |
| 604025 | 6755463 | 26 |
| 604205 | 6755709 | -76 |
| 604017 | 6755692 | -57 |
| 604205 | 6756093 | -99 |
| 603992 | 6756167 | -27 |
| 604205 | 6756192 | -37 |
| 603583 | 6756069 | -51 |
| 603804 | 6755577 | 31 |
| 603599 | 6755700 | -15 |
| 603206 | 6756028 | 14 |
| 603190 | 6755012 | 148 |
| 602985 | 6754939 | 194 |
| 602993 | 6755160 | 116 |
| 602796 | 6755528 | 165 |
| 602608 | 6755487 | 194 |
| 602796 | 6755266 | 148 |
| 602592 | 6755176 | 200 |
| 602420 | 6755201 | 235 |
| 602420 | 6754660 | 232 |
| 602600 | 6754644 | 220 |
| 602788 | 6754652 | 191 |
| 603026 | 6753907 | 178 |
| 603009 | 6753440 | 170 |
| 602993 | 6752637 | 174 |
| 602985 | 6751753 | 115 |
| 603206 | 6751712 | 92 |
| 603403 | 6751597 | 24 |
| 604009 | 6751524 | 24 |
| 604795 | 6752465 | 46 |
| 604582 | 6752809 | 475 |
| 604410 | 6752695 | 187 |
| 604181 | 6752760 | 11 |
| 603992 | 6752850 | 112 |
| 603771 | 6752719 | 172 |
| 604582 | 6753268 | 100 |
| 604434 | 6753260 | 117 |
| 604000 | 6753145 | 95 |
| 603779 | 6753055 | 98 |
| 603591 | 6753055 | 85 |
| 603403 | 6753022 | 137 |
|  |  |  |
| 6 |  |  |


| 603394 | 6752793 | 273 |
| :--- | :--- | :---: |
| 603206 | 6752564 | 192 |
| 602190 | 6752244 | 143 |
| 602788 | 6753391 | 163 |
| 602796 | 6753940 | 176 |
| 602592 | 6753899 | 175 |
| 602592 | 6753653 | 194 |
| 602600 | 6753391 | 173 |
| 602387 | 6753342 | 161 |
| 602379 | 6753661 | 183 |
| 602190 | 6753456 | 175 |
| 602199 | 6753268 | 161 |
| 602199 | 6753014 | 158 |
| 601994 | 6752736 | 100 |
| 602010 | 6753211 | 145 |
| 602002 | 6753407 | 179 |
| 601814 | 6753211 | 148 |
| 601797 | 6752744 | 131 |
| 601601 | 6751581 | 49 |
| 601593 | 6753080 | 161 |
| 601388 | 6752605 | 119 |
| 601224 | 6752572 | 113 |
| 601183 | 6751515 | 71 |
| 601388 | 6751581 | 40 |
| 602780 | 6750959 | -38 |
| 600978 | 6752351 | 123 |
| 600782 | 6752228 | 84 |
| 600593 | 6752187 | 55 |
| 600413 | 6752195 | 47 |
| 600176 | 6752203 | 98 |
| 600413 | 6751614 | 154 |
| 600593 | 6751696 | 204 |
| 600798 | 6751761 | 158 |
| 600946 | 6751786 | 156 |
| 601200 | 6751884 | 157 |
| 600200 | 6753309 | 150 |
| 600397 | 6753391 | 159 |
| 604999 | 6753006 | 115 |
| 605196 | 6753293 | 143 |
| 605188 | 6752588 | 171 |
| 605008 | 6752433 | 54 |
| 605990 | 6754324 | 78 |
| 604604 | 6758265 | 614 |
| 604405 | 6752879 | 150 |
|  |  |  |

Statement of Qualifications - Michael W. Lang
I, Michael W. Rang of 12579 Taylor Place, Summerland, in the Province of British Columbia, I do hereby certify that:

1. I am a graduate of York University, Faculty of Earth Science - degree (B.Sc.).
2. I have been engaged in mining exploration since 1981.
3. I am familiar with the use and interpretation of the airborne geophysical methods that are discussed in this report.
4. I hold no direct or indirect interest in, nor do I expect to receive any benefits from the mineral property or properties described in this report.


