BUD DAVIS

TOTAL MAGNETIC FIELD SURVEY VICTORIA CREEK, PEANUT PROPERTY WHITEHORSE MINING DISTRICT, YUKON TERRITORY

Phil Jackson AURORA GEOSCIENCES LTD.

CLAIMS

PEANUT 1 - 10 P47458 - P47467

Formerly Placer Prospecting Lease IW00217

120209

Location: 62° 6' 42" N, 137° 9' 33"W NTS: 115 I/03 Mining District: Whitehorse Date: October 1, 2006



SUMMARY

A total magnetic field survey was conducted on the Peanut Property for Bud Davis, in order to locate detrital magnetic concentrates associated with placer gold deposits. The survey area is located along Victoria Creek, 50 km W of Carmacks,Yukon. The survey was conducted on a flagged grid with survey control aided by nondifferential GPS navigation. The survey was conducted on June 28th and June 29th. A total of 4.735 line-km was surveyed on 30m line spacing. A subtle magnetic feature is identified trending NS and exhibits characteristics of detrital or weak dipole clusters. It is recommended that the NS trending feature be test pitted at the southern end of Grid A to test for concentrations of gold that may be associated with magnetite in the area. If favourable results occur, further pitting and testing for gold should be continued to the north, as the subtle feature likely continues across the boundary seen at L300N. An expansion of the magnetics survey towards the west on grid A is also recommended to confirm the boundary of the strong magnetic anomaly as well as to test for the possibility of a splay to the NW.

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1.0 INTRODUCTION

Aurora Geosciences Ltd. was retained by Bud Davis to conduct a ground total magnetic field survey on the Victoria Creek, Peanut Placer Property. A total of 4.735 line-km were surveyed. The surveys were conducted on June 28th and 29th, 2006 to locate magnetite bearing pay streaks along Victoria Creek. This report describes the surveys performed, data, results and an interpretation.

2.0 LOCATION AND ACCESS

The Peanut Property is located along Victoria Creek West of Carmacks, Yukon. and is centered at 62° 6' 42" N 137 ° 9' 33" W (Figure 1). The surveyed area runs along a swampy valley hemming-in Victoria creek, the crew was mobilized to camp via 4x4 truck from Whitehorse. The property is located approximately 50 km West of Carmacks.

3.0 PROPERTY

The Peanut Placer Property consists of the following claims staked under the Yukon Placer Mining Act in the Whitehorse Mining District¹. Claim information is summarized below:

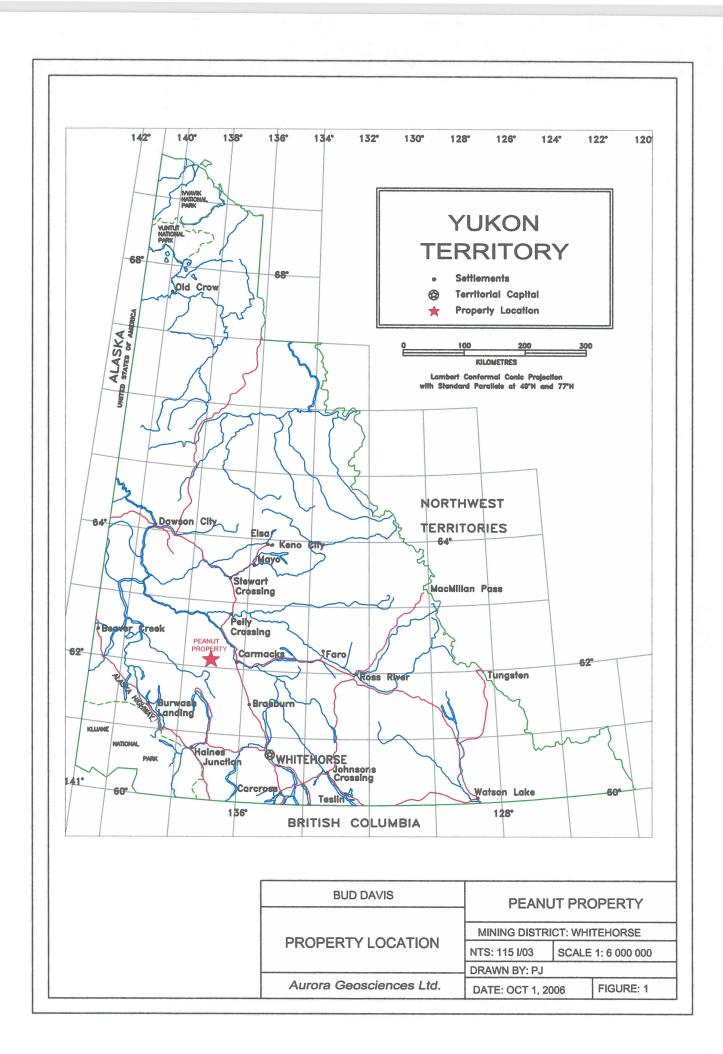
| Claim Name | Grant Number | <u>Owner</u> | Expiry Date |
|-------------|-----------------|-------------------|---------------|
| PEANUT 1-10 | P47458 - P47467 | David (Bud) Davis | July 14, 2007 |

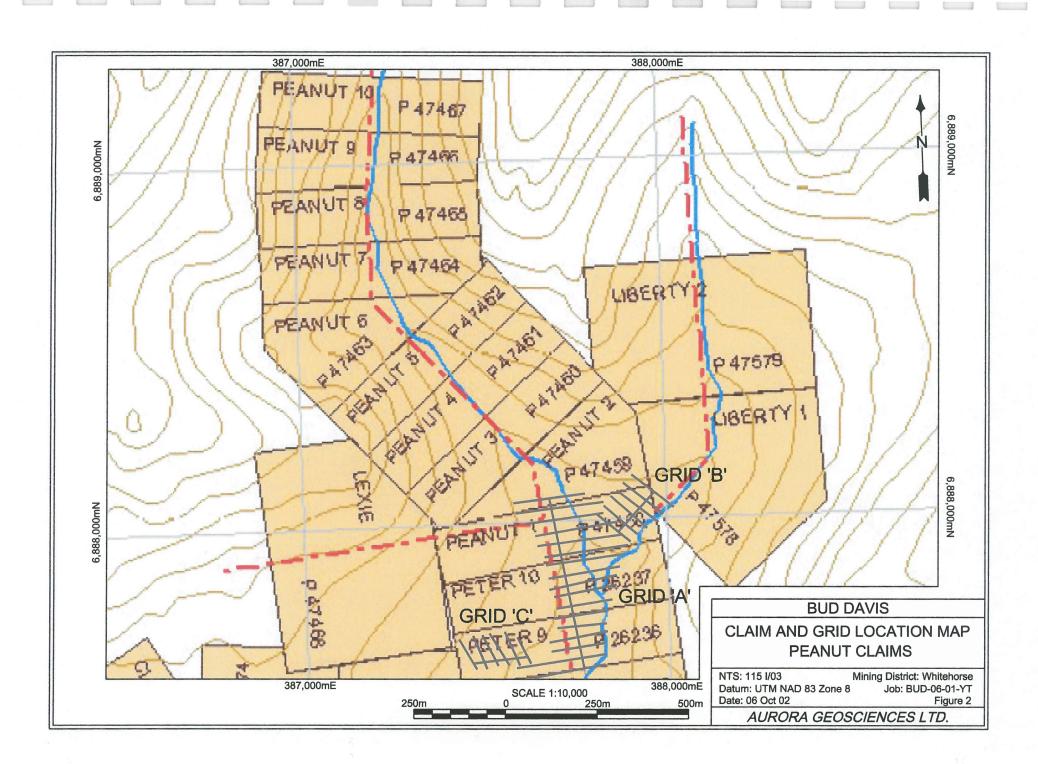
Claim locations as shown on government claim maps are shown in Figure 2. Ground checks have shown the current government claim map to be incorrect. The grid location on all figures is correct, however it should be noted that the grid lies entirely within the Peanut claims, with the south end of Grid A positioned at the south end of the Peanut 1 claim.

4.0 PHYSIOLOGY AND REGIONAL GEOLOGY

The property and survey grid area are in the Mount Nansen area at elevations ranging from 4200 to 5200 feet. The area is subject to continental climatic conditions with short, hot, generally dry summers and cold winters. Temperatures range from -20 to -55°C during the winter and from 10 to 30°C during the in the summer.

¹ Claim information from <u>www.yukonminingrecorder.ca</u> on Oct. 1, 2006

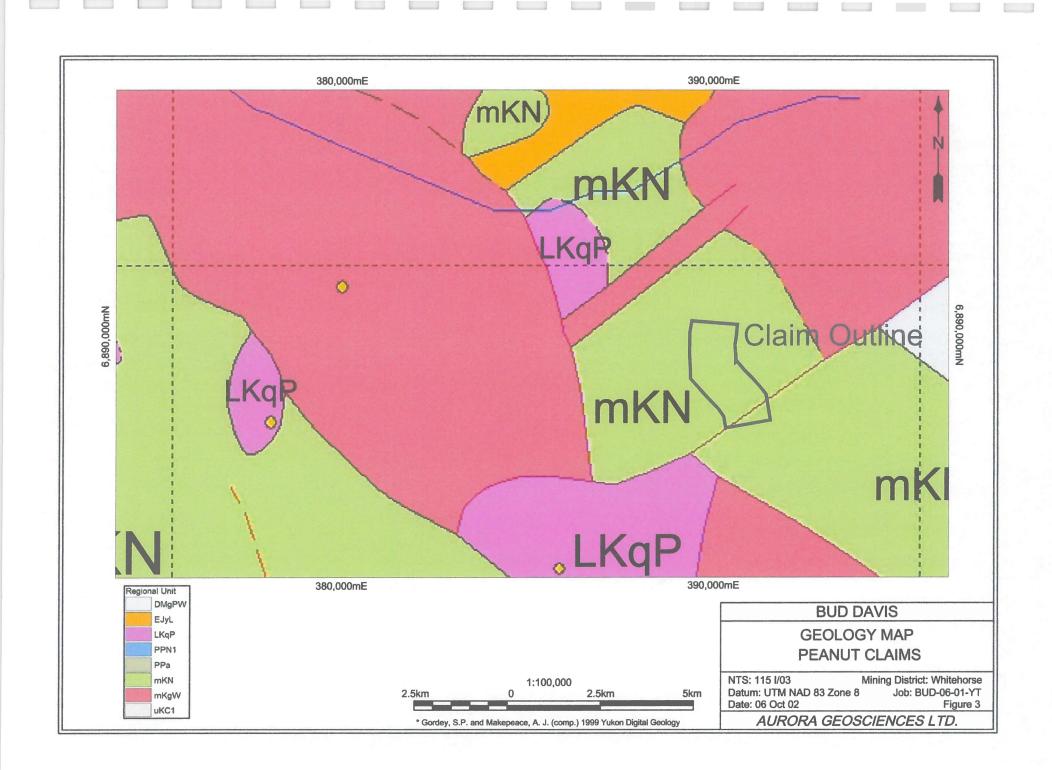




The Peanut Property is located in the northern Cordillera. The regional geology is shown in Figure 3 and rock unit lithologies are briefly summarized in Table 1. (Gordey et al., 2003).

| Table 1. | Stratigraphy |
|----------|--------------|
|----------|--------------|

| Rock unit | Lithology |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mount Nansen Group mKN | massive aphyric or feldspar-phyric andesite to dacite flows, breccia and tuff, massive, heterolithic, quartz and feldspar-phyric, feldspar lapilli tuff, flow banded quartz phyric rhyolite and quartz feldspar porphyry plugs, dykes, sills and breccia (Mount Nansen GP., Byng Creek Volcanics, Hutshi Gp.) |
| Whitehorse Suite - mKyW | hornblende syenite, grading to granite or granodiorite (Whitehorse Suite) |
| Prospector Mountain Suite - LKqP | quartz monzonite, biotite quartz-rich granite; porphyritic alaskite and granite with plagioclase and quartz-eye phenocrysts; biotite and hornblende quartz monzodiorite, granite, and leucocratic granodiorite with local alkali feldspar phenocrysts (Prospector Mountain Suite, Carcross Pluton) |
| Long Lake Suite - EJyL | resistant, dark weathering, massive, coarse- to very coarse- grained and porphyritic, mesocratic hornblende syenite; locally sheared, commonly fractured and saussuritized; locally has well developed layering of aligned pink K-feldspar tablets (Big Creek Syenite) |



5.0 SURVEY GRID

Three separate grids were established using a hipchain and magnetic compass. The grids are orientated with the base line having the same azimuth as the associated creeks. Grid A tracks along Victoria Creek at an azimuth of 350°, Grid B follows Liberty Creek at 43° and Grid C follows a nameless creek at the south end of Grid A with the baseline tracking 265°. Survey lines are orthogonal to the baselines, line separation on all grids is 30 meters and stations along the lines were marked with flagging tape at ten meter intervals. Data from all three grids has been merged to form a single database and plotted as a single map. Control for the magnetic survey was maintained with nondifferential GPS navigation. The operator's track was recorded then matched with the magnetic data through the time stamp and interpolation.

6.0 PERSONNEL AND EQUIPMENT

The survey was conducted by the following personnel:

| Gabriel Fortin | Crew chief, Junior Geologist |
|----------------|------------------------------|
| Cody Woodman | Field technician |

The crew were equipped with the following instruments and equipment:

| Field magnetometer: | 2 - Gem GSM-19T proton precession magnetometer. |
|---------------------|---------------------------------------------------------------------|
| Base magnetometer: | 1 - Gem GSM-19T proton precession magnetometer. |
| Data processing: | P-1.2GHz laptop with Oasis Montaj software package. |
| Other equipment: | 1 - satellite phone 2 - Garmin 72 non-differential GPS receivers |

The geophysical crew spent a total of 4 man-days on the property. The geophysical survey log is attached as Appendix B.

7.0 SURVEY SPECIFICATIONS

The magnetometer survey was conducted according to the following specifications:

| Station spacing: | 5 m nominal, location of each station matched to GPS position through the track time stamp and interpolation. |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Base station magnetometer: | Installed on the survey grid at 387753E, 6888057N near the camp and cycled at 5 s. Variations exceeding 10 nT over the 5s interval were rejected. |
| Syncronization: | Base and rover mags were synchronized daily to GPS time (UTC). |

8.0 MAGNETIC FIELD THEORY

Magnetic field theory is well described in standard texts (eg. Telford *et. al.* 1990). In a placer setting, magnetite derived from bedrock weathering is concentrated in the main channel of a creek or river (thalweg) where the water flow has the highest velocity and greatest turbulence. As a result, minerals with high specific gravity (magnetite, ilmenite, gold, etc.) are preferentially concentrated in this region of the stream bed as material with lower specific gravity is winnowed from the sediment. High concentrations of "black sand" (magnetite, ilmenite, chromite) are often recorded in auriferous pay streaks where the stream bed has remained relatively immobile for some period, permitting hydraulic concentration to build up a significant volume of these minerals.

The materials comprising black sand are magnetically susceptible. Magnetite has a very high magnetic susceptibility of $1200-19200 \times 10^{-3}$ SI units, ilmenite ranges from $300-3500 \times 10^{-3}$ SI units. Average magnetic susceptibilities for sedimentary, igneous (excluding ultramafic) and metamorphic rocks are 0-18, 3-160 and 0-70 $\times 10^{-3}$ SI units and the magnetic susceptibility of fluvial sediments is in the range $0-2 \times 10^{-3}$ SI units. There is consequently a significant susceptibility contrast between gravels with elevated concentrations of black sand and both bedrock and average gravels.

9.0 RESULTS

Digital data is appended to this report on CDROM. The magnetic field data is in the following format:

Line Station UTME_WGS84 UTMN_WGS84 Rawmag Corr_mag Final

"Rawmag" is the raw total magnetic field reading from the rover unit, "Corr_mag" is the reading after the diurnal correction has been applied and "Final" is the final data set after all levelling required for day to day and operator to operator level shifts. A plot at 1:2000 is appended to this report in the back pocket:

Figure 4. Total magnetic field contour map

10.0 DISCUSSION & RECOMMENDATIONS

The total magnetic field survey identified several significant features on the property. Data collected was levelled with 57000 nT as the datum. The total field ranges from 56698 nT to approximately 58100 nT, with areas of magnetic high over 57700 nT. A large magnetic high is seen on the southern half of Grid A, a change in lithology and/or faulting is interpreted at L300N, within the magnetic high a more subtle magnetic feature trends from the southern end of the baseline on Grid A through to L300N, the trend is indicated in Figure 4 and may continue past L300N as it is hidden by the stronger lithologic change. The feature can be traced as seen in Figure 4 and exhibits characteristics of detrital or weak dipole clusters.

It is recommended that the NS trending feature be test pitted at the southern end of Grid A to test for concentrations of gold that may be associated with magnetite in the area. If favourable results occur, further pitting and testing for gold should be continued to the north, as the subtle feature likely continues across the boundary seen at L300N. An expansion of the magnetics survey towards the west on grid A is also recommended to confirm the boundary of the strong magnetic anomaly as well as to test for the possibility of a splay to the NW. The subtle feature as traced on Figure 4 is currently shown as open to the south and north with the possibility of a splay to the northwest, it should also be noted that features seen past the end the survey lines, particularly at the west side of L60N on Grid A appear large and open due to artifacts created by the minimum curvature gridding algorithm.

Respectfully submitted,

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AURORA GEOSCIENCES LTD.

Phil Jackson, P.Geoph. Geophysicist



APPENDIX A. CERTIFICATE

STATEMENT OF QUALIFICATIONS

I, Phil Jackson, of the City of Whitehorse, Yukon, Canada,

HEREBY CERTIFY:

That my address is 75 Walnut Cresent, Whitehorse, YT Y1A 5C7.

That I am a graduate of Concordia University in Geology / Physics: B.Sc. - Concordia University, Montreal, Quebec, 1996

That I have been a practising Geophysicist since 1997:

January 1997 to present

Aurora Geosciences Ltd. Yellowknife, N.W.T. Geophysicist

That I am registered as a Professional Geophysicist by The Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories (Registration #1667).

That I am entitled to practice as a Professional Geophysicist in the Northwest Territories and Nunavut.

That I have no direct or indirect interest in the Peanut Property.

Dated this <u>5</u> day of <u>octoBer</u>, 20<u>c</u> at Whitehorse, YT

Phil Jackson, P. Geoph.

APPENDIX B. SURVEY LOG



AURORA GEOSCIENCES LTD. JOB BUD-06-01-YT BUD DAVIS MAG SURVEY

Period: June 28th - June 29th, 2006

 Personnel:
 Gabriel Fortin
 Crew Chief / Geologist

 Cody Woodman
 Helper

Wed 28 June/06 **Mobe & Survey** Mobe to camp from Whitehorse and survey part day. Wx: rain and cool Production 2.0 km

Thu 29 June/06 Survey & Demobe Suveyed remainder of grid and de-mobe to next job via Dawson City. Wx: Cloudy and warm. Production: 2.735 km

APPENDIX C. STATEMENT OF EXPENDITURES

| Crew charges - 2 person for 2 days | 1460.00 |
|---------------------------------------------------|---------|
| Job Prep and phone & computer rental | 400.00 |
| Magnetometer rental 3 units for 2 days | 480.00 |
| Truck rental 2 days @ \$100 | 200.00 |
| Supplies (fuel, flagging/pickets, groceries, etc) | 86.43 |
| Report - lump sum cost | 2200.00 |
| General administration fees | 12.94 |
| GST on Exploration services and admin. | 290.35 |
| | |

Total project expenses

\$5129.50

I certify that these expenses are correct to the best of my knowledge.

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Phil Jackson, P.Geoph. Geophysicist

APPENDIX D. INSTRUMENT SPECIFICATIONS

| GSM-19 In: | struction | M | anual | |
|------------|-----------|---|-------|--|
|------------|-----------|---|-------|--|

INSTRUMENT SPECIFICATIONS

MAGNETOMETER / GRADIOMETER

| Resolution: | 0.01nT (gamma), magnetic field and gradient. |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accuracy: | 0.2nT over operating range. |
| Range: | 20,000 to 120,000nT. |
| Gradient Tolerance: | Over 10, 000nT/m |
| Operating Interval: | 3 seconds minimum, faster optional. Readings initiated from keyboard, |
| | external trigger, or carriage return via RS-232C. |
| Input / Output: | 6 pin weatherproof connector, RS-232C, and (optional) analog output. |
| Power Requirements: | 12V, 200mA peak (during polarization), 30mA standby. 300mA peak in |
| | gradiometer mode. |
| Power Source: | Internal 12V, 2.6Ah sealed lead-acid battery standard, others optional. |
| | An External 12V power source can also be used. |
| Battery Charger: | Input: 110 VAC, 60Hz. Optional 110 / 220 VAC, 50 / 60Hz. |
| | Output: dual level charging. |
| Operating Ranges: | Temperature: - 40°C to +60°C. |
| | Battery Voltage: 10.0V minimum to 15V maximum. |
| | Humidity: up to 90% relative, non condensing. |
| Storage Temperature: | -50°C to +65°C. |
| Display: | LCD: 240 X 64 pixels, OR 8 X 30 characters. Built in heater for operation |
| | below -20°C. |
| Dimensions: | Console: 223 x 69 x 240mm. |
| | Sensor Staff: 4 x 450mm sections. |
| | Sensor: 170 x 71mm dia. |
| | Weight: console 2.1kg, Staff 0.9kg, Sensors 1.1kg each. |
| VLF | |
| Frequency Range: | 15 - 30.0 kHz plus 57.9 kHz (Alaskan station) |
| Parameters Measured: | Vertical in-phase and out-of-phase components as percentage of total field. 2 relative components of horizontal field. Absolute amplitude of total field. |
| Resolution: | 0.1%. |
| Number of Stations: | Up to 3 at a time. |
| Storage: | Automatic with: time, coordinates, magnetic field / gradient, slope, EM field, |
| | frequency, in- and out-of-phase vertical, and both horizontal components for |
| Terrain Slope Range: | each selected station. 0° - 90° (entered manually). |
| Sensor Dimensions: | $140 \times 150 \times 90 \text{ mm.} (5.5 \times 6 \times 3 \text{ inches}).$ |
| Sensor Weight: | 1.0 kg (2.2 lb). |
| _ | 9 V 1997 |

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APPENDIX G GSM-19T MAGNETOMETER/GRADIOMETER

THEORETICAL DESCRIPTION

Introduction

The GSM-19T is a portable standard proton magnetometer/gradiometer designed for handheld or base station use for geophysical, geotechnical, or archaeological exploration, long term magnetic field monitoring at Magnetic Observatories, volcanological and seismic research, etc. The GSM-19T is a secondary standard for measurement of the Earth's magnetic field, having 0.2nT resolution, and 1nT absolute accuracy over its full temperature range.

The GSM-19T is a microprocessor based instrument with storing capabilities. Large memory storage is a available (up to 2Mbytes). Synchronized operation between hand held and base station units is possible, and the corrections for diurnal variations of magnetic field are done automatically. The results of measurement are made available in serial form (RS-232-C interface) for collection by data acquisition systems, terminals or computers. Both on-line and post-operation transfer are possible.

The measurement of two magnetic fields for determination of gradient is done concurrently with strict control of measuring intervals. The result is a high quality gradient reading, independent of diurnal variations of maganetic field.

Optionally the addition of a VLF sensor for combined magnetometer / gradiometer-VLF measurement is available.

Magnetic Field Measurement

The magnetic field measuring process consist of the following steps:

- a) Polarization: A strong DC current is passed through the sensor creating polarization of a proton-rich fluid in the sensor.
- b) Pause: The pause allows the electrical transients to die off, leaving a slowly decaying proton precession signal above the noise level.
- c) Counting: The proton precession frequency is measured and converted into magnetic field units.
- d) Storage: The results are stored in memory together with date, time and coordinates of measurement. In base station mode, only the time and total field are stored.

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