BILL TRERICE

TOTAL MAGNETIC FIELD SURVEY OF THE BACK CREEK PROPERTY, MT. NANSEN AREA, YUKON TERRITORY

Mike Power
AURORA GEOSCIENCES LTD.

CLAIMS

1 Mile Lease	1W00111
Placer claim	P46966
Jac 1	P46756

120190

Location: 62° 03' N, 137° 05' W
NTS: 115 I/3
Mining District: Whitehorse, YT
Date: June 16, 2001

... report has been examined by ... Geological Evaluation Unit ... 41 Yukon Pl...

... of $ ...

Chief G... Exploration and Geolog... Division, Northern Affairs ... for Commissioner of Yukon T...

This report has been examined by the Geological Evaluation Unit under Section 41 Yukon Placer Mining Act and is recommended as allowable representation work in the amount of $ 1600.00.

(signature)

for Chief Geologist, Exploration and Geological Services Division, Northern Affairs Program for Commissioner of Yukon Territory.

SUMMARY

Total magnetic field surveys were conducted on the Back Creek Placer Property, Mt. Nansen area, Yukon. The purpose of the surveys was to locate magnetite bearing pay streaks on the property. The surveys were conducted on three grids covering 2 placer claims and a 1 Mile Lease on May 24, 2001. The surveys were performed by a two man crew and covered a total of 2.62 line-km at a 5 m station spacing. The surveys identified a positive magnetic feature on the Jac 1 claim which appears to be a paleo-placer channel and identified two lows on the other 2 grids which may represent the site of greatest overburden thickness on each of these grids.

TABLE OF CONTENTS

LIST OF FIGURES

1.0 INTRODUCTION

Aurora Geosciences Ltd. was retained by Bill Trerice to conduct ground total magnetic field surveys on the Back Creek Placer Property. A total of 2.62 line-km of grid was put in and surveyed on a placer lease and 2 claims. The surveys were conducted to locate magnetite-bearing pay streaks along Back Creek. This report describes the surveys performed, data and results.

2.0 LOCATION AND ACCESS

The Back Creek Placer Property is centered at 62° 03' N, 137° 05' W, near the Mt. Nansen Mine in the central Yukon (Figure 1). The property is located approximately 55 km west of Carmacks and 200 km NW of Whitehorse. It is accessible by road from Carmacks on the Mt. Nansen Road. The route to the property is as follows:

Leg	Distance (km)
Whitehorse - Carmacks	170
Carmacks - Mt. Nansen Mine	82
Mt. Nansen Mine - Property	2

3.0 PROPERTY

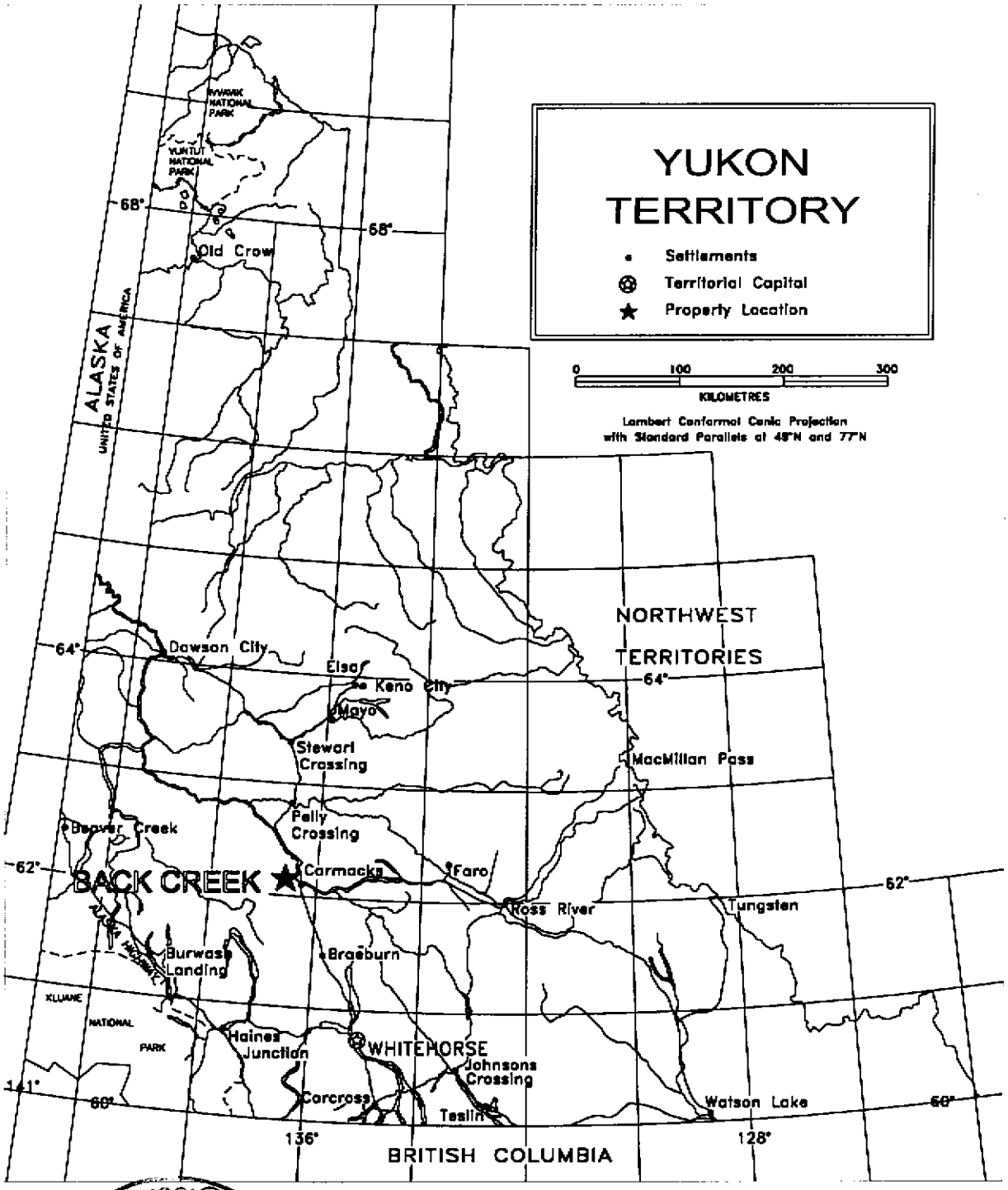
The surveys were performed on the following Placer Claims and Lease recorded in the Whitehorse Mining District. Claim information is summarized below:

Claim	Grant No.	Owner	Expiry date
1 Mile Placer Lease	1W00111	Bill Trerice (100%)	October 13, 2001
Claim	P46966	Bill Trerice (100%)	July 10, 2001
Jac 1	P46756	Bill Trerice (100%)	October 5, 2001

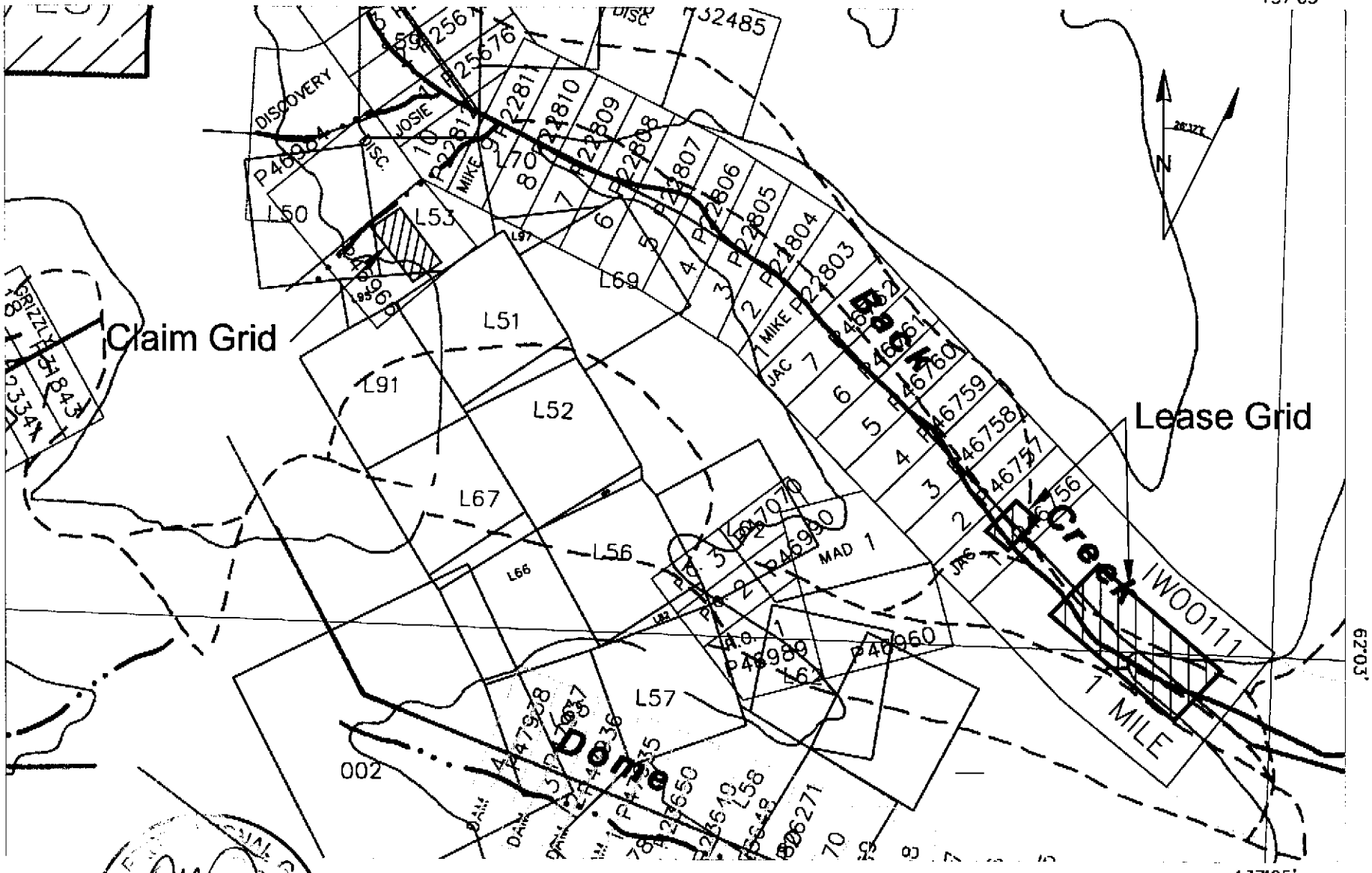
Claim locations as shown on government claim maps and the location of the survey grid are shown in Figure 2.

4.0 PHYSIOLOGY AND PLACER GEOLOGY

The geology and physiology of the area containing the Property has been described by Bostock (1936) and Gordey and Makepiece (1999) The property is in the



BILL TRERICE	BACK CREEK
	NTS: 115 I/03 — Scale 1: 6 000 000
PROPERTY LOCATION MAP FIGURE 1.	Mining District: Whitehorse
	Job: BTR-14-YT — Date: 11 June 01
	Aurora Geosciences Ltd.



BILL TRERICE	BACK CREEK
	NTS: 115 I/03 — Datum: NAD 27
CLAIM & GRID LOCATION MAP FIGURE 2.	Mining District: Whitehorse
	Job: BTR-01-YT — Date: 08 June 01
	AURORA GEOSCIENCES LTD.

REGISTERED GEOPHYSICIST N.W.T.

Dawson Ranges at elevations ranging from 1000 to 1500m. The area of the survey grid is at an elevation of approximately 1000 m. The area is subject to continental climatic conditions with a dry warm short summer during June through September punctuating a long dry winter from October through end-April. Temperatures range from 10 to 25° C during the summer period to -50° C during the coldest months of winter.

The Back Creek Placer Property is located in the Yukon Tanana Terrane of the northern Cordillera. It is underlain by metamorphic rocks partially capped and intruded by an igneous succession. The stratigraphy on the property is summarized in Table I using the nomenclature of Gordey and Makepiece (1991).

Table I. Stratigraphy in the area of the Back Creek Property

Rock unit	Lithology
Prospector Mountain Suite [Late Cretaceous - Tertiary]	Quartz feldspar porphyry
Mt. Nansen Group [mid-Cretaceous]	Feldspar phyric andesite and dacite
Pelly Gneiss [Devono-Mississippian]	Amphibolite - quartz mica schist
Metamorphosed ultramafic rocks (Nisling, Nasina, Slide Mountain) [Proterozoic - Paleozoic]	Amphibolite, serpentinite, peridotite.

Prospector Mountain Suite feldspar porphyry bodies appear to be the sources from which placer gold in the surrounding creeks are derived. The first placer discoveries in the Carmacks area date from 1898 when Henry Back discovered gold in Nansen Creek. Paying gravels were encountered on bedrock or lying on a blue clay above bedrock. The property lies near the limit of glaciation with glacial deposits found on Nansen Creek and drainages to the south.

5.0 SURVEY GRID

The geophysical surveys were conducted on three flagged grids centred whose locations are shown in Figure 2. Grid information is summarized below:

Grid	BL azimuth	Origin	Size (Line-km)
Lease	305°	BL 0E - 390216E 6881622N	1.76

Jac	337^0	BL 0E - 390055E 6881880N	0.45
P46966	161^0	BL 200W - 387884E 6883125N	0.41

A total of 2.62 line-km of grid was put in and surveyed by a two man crew. Lines were straight chained and flagged at 20 m intervals. A non-differential GPS was used to record line locations during the course of the survey.

6.0 PERSONNEL AND EQUIPMENT

The surveys were conducted by a crew consisting of the following personnel:

Bob Stirling	Technician
Bill Trerice	Helper

They were equipped with the following instruments and equipment:

Field unit:	GEM GSM-19
Base station:	GEM GSM-19
Data processing:	P-166 laptop & colour printer
Other:	4x4 truck Garmin GPS II+ GPS

The geophysical crew spent a total of 2 man-days on the property. The geophysical survey log is attached as Appendix B.

7.0 SURVEY SPECIFICATIONS

The magnetometer surveys were conducted according to the following specifications:

Station spacing:	5m
Base station magnetometer:	installed on the survey grid and cycled at maximum 15 s throughout the survey.
Levelling:	none was performed nor required

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 1200-19200x10^{-3} SI units, ilmenite ranges from 300-3500x10^{-3} SI units, 3-110x10^{-3} SI units. Average magnetic susceptibilities for sedimentary, igneous (excluding ultramafic) and metamorphic rocks are 0-18, 3-160 and 0-70 x10^{-3} SI units and the magnetic susceptibility of fluvial sediments is in the range 0-2x10^{-3} SI units. There is consequently a significant susceptibility contrast between gravels with elevated concentrations of black sand and both bedrock and average gravels.

A placer target on the property would be expected to produce a narrow (10-20 m), moderate to low amplitude (50-400 nT) positive anomaly with a small low on the magnetic north side of the anomaly. The trend of the anomaly should, in general, conform to the direction of the creek drainage.

9.0 RESULTS

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

Line Station UTM_E UTM_N Corr_field

where Corr_field is the corrected magnetic field. The following plots are appended to this report in the back pockets:

Figure 3. Total magnetic field contour map - Lease & Jac Grids

Figure 4. Total magnetic field contour map - P46966 Grid

In the area of the Lease, the total magnetic field survey identified a prominent 600 nT high parallel with Back Creek on the Jac 1 Claim Grid. This anomaly, which extends from L250W 30S to L50W 0S appears to be caused by a surficial source

and may indicate the location of a buried channel. On the Lease Grid, the total magnetic field responses appears to be caused by bedrock sources. There is a subtle low running the length of the grid from L550W 50 S to L400W 0N and thence to L150W 50N which appears to indicate the position of the old creek channel. On the P46966 Claim Grid, a prominent east-west magnetic high is probably caused by a bedrock feature. The low along the axis of the grid from L250W 30S to L1W 80S may be caused by overburden fill and indicate the thickest overburden section on the creek.

10.0 CONCLUSIONS

The results of the total magnetic field survey conducted on the Back Creek Property suggest the following conclusions:

a. The total magnetic field anomaly on the Jac 1 portion of the Lease Grid is likely caused by surficial magnetite and may be a paleoplacer channel extending from L250W 30S to L50W 0S.

b. The predominant magnetic field pattern on the portion of the Lease Grid on the 1 Mile Lease is likely caused by bedrock. There is a subtle total magnetic field low extending from L550W 50 S to L400W 0N and thence to L150W 50N. This low is parallel to the axis of the creek and may represent the deepest portion of the paleo-drainage.

c. The broad magnetic high on the P46966 Claim Grid is probably a bedrock feature. Superimposed upon it is a subtle total field low extending from L250W 30S to L1W 80S. This feature may also represent the location of the thickest section of non-susceptible overburden sediments.

11.0 RECOMMENDATIONS

The following recommendations are made based on the conclusions of this work:

a. The total magnetic field high on the Jac 1 portion of the Lease Grid should be tested for placer gold deposits based on its magnetic signature.

b. The total magnetic field lows described on the 1 Mile Lease portion of the Lease Grid and on the P46966 Claim Grid should be tested by excavation to determine if they indicate the location of the paleochannel on the creeks.

Respectfully submitted,
AURORA GEOSCIENCES LTD.

Michael A. Power, M.Sc. P.Geo.
Geophysicist

References Cited

Bostock, H.S. (1936) Carmacks District, Yukon. Geological Survey of Canada Memoir 189. Ottawa: Department of Mines and Technical Surveys.

Gordey, S.P. and A.J. Makepiece (1999) Yukon Digital Geology. Geological Survey of Canada Open File D3826.

Telford, W.M., L.P. Geldart and R.E. Sheriff (1990) Applied Geophysics (2nd Edition) New York: Cambridge University Press.

APPENDIX A. CERTIFICATE

I, Michael Allan Power, with residence and business address in Whitehorse, Yukon Territory do hereby certify that:

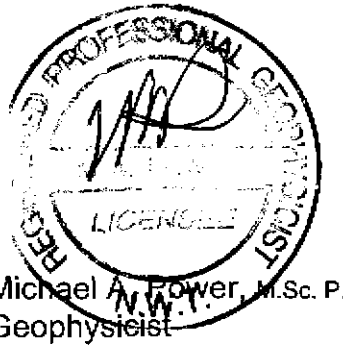
1. I hold a B.Sc. (Honours) in Geology granted in 1986 and M.Sc. in Geophysics granted in 1988, both from the University of Alberta.

2. I have been actively involved in mineral exploration in the northern Cordillera and in the Northwest Territories since 1988. I am a professional geophysicist registered with the Northwest Territories Association of Professional Engineers, Geologists and Geophysicists (Licence L942) and a profession geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia (Registration number 21131).

3. I supervised the geophysical surveys described in this report, interpreted the data collected and prepared this report.

4. I have no interest, direct or indirect, nor do I hope to receive any interest, direct or indirect, in the property of Bill Trerice.

Dated this 15th day of June 2001 in Whitehorse, Yukon Territory.



Michael A. Power, M.Sc. P.Geoph.
Geophysicist

APPENDIX B. SURVEY LOG

JOB BTR-01-YT BACK CREEK PLACER MAG SURVEY
SURVEY LOG

Wed 23 May 01	Mobilize to Back Creek from Whitehorse, arriving in the evening.
Thu 24 May 01	BT puts in grid; BS surveys. Survey of Placer Lease, Jac 1 claim and P46966 Claim. Worked from 0800 until 1800 hrs.
Fri 25 May 01	Demobilize to Whitehorse

Totals:			
	Mobe / demobe	-	2 days
	Survey	-	1 day

Personnel:

Robert Stirling (BS)
23 Mossberry Lane
Whitehorse, YT

Bill Trerice (BT)
12 Harbottle
Whitehorse, YT

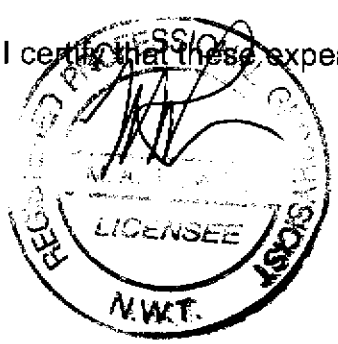
APPENDIX C. STATEMENT OF EXPENDITURES

Mobilization / demobilization	$400
Gridding	$200
Geophysical survey	$650
Report	$600
Total project expenses	***$1,850***

These expenses are apportioned to the following claims and leases prorated on the basis of the grid coverage:

Lease 1W00111	$1,242
Jac 1 P46756	$318
P46966	$290

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



Michael A. Power, M.Sc., P.Geoph.
Geophysicist

APPENDIX D. INSTRUMENT SPECIFICATIONS

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 each selected station.
Terrain Slope Range:	0° - 90° (entered manually).
Sensor Dimensions:	140 x 150 x 90 mm. (5.5 x 6 x 3 inches).
Sensor Weight:	1.0 kg (2.2 lb).

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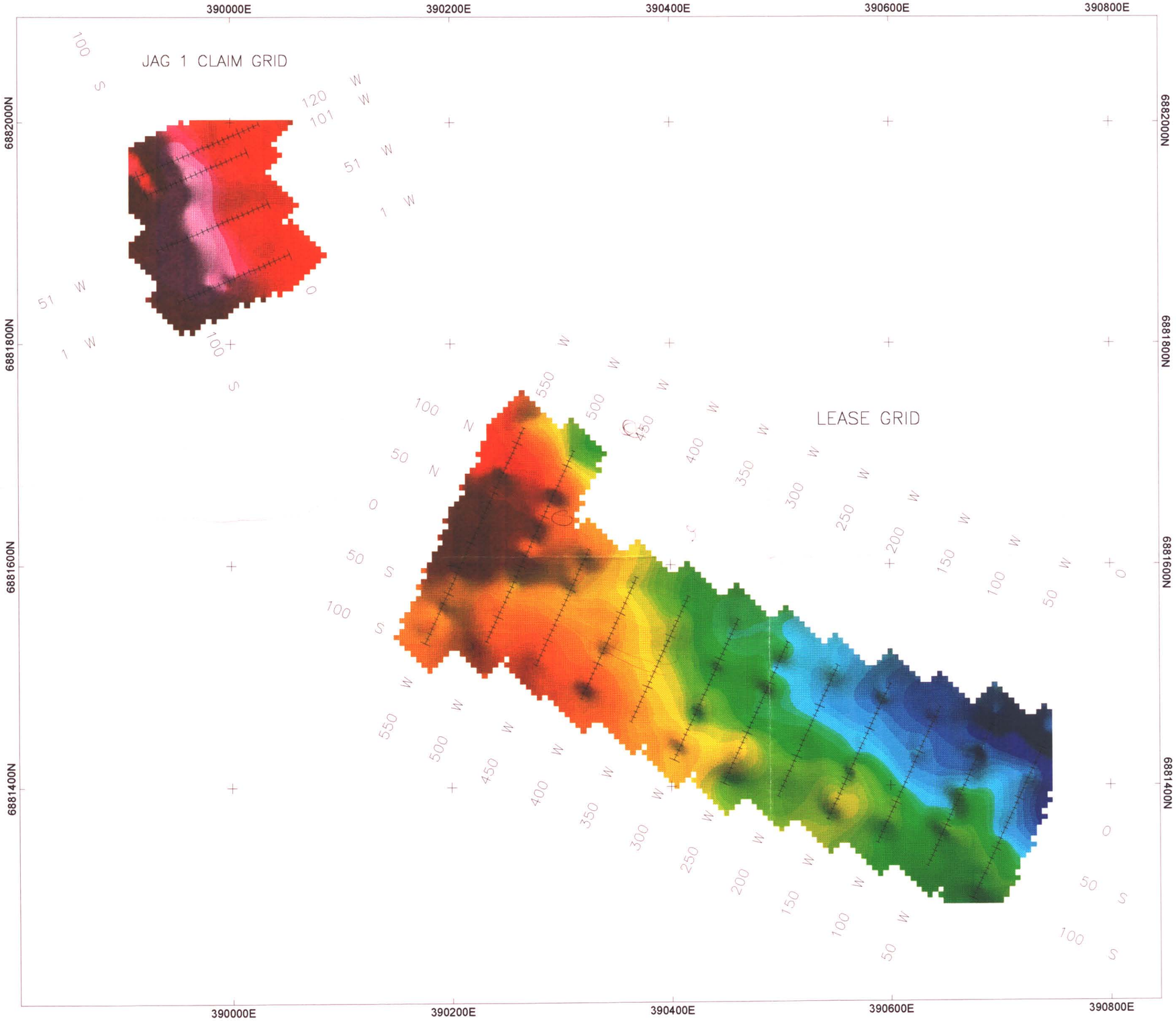
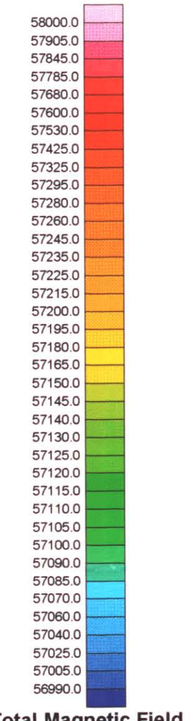




TOTAL MAGNETIC FIELD SURVEY

INSTRUMENTS: GEM GSM-19

GRIDDING: Minimum Curvature

CELL SIZE: 5 m

ILLUMINATION: 225 / 45

Scale 1:3000

50 0 50 100 150 200

metres

(1)

REGISTERED PROFESSIONAL GEOPHYSICIST
LICENSEE
N.W.T.

BILL TRERICE

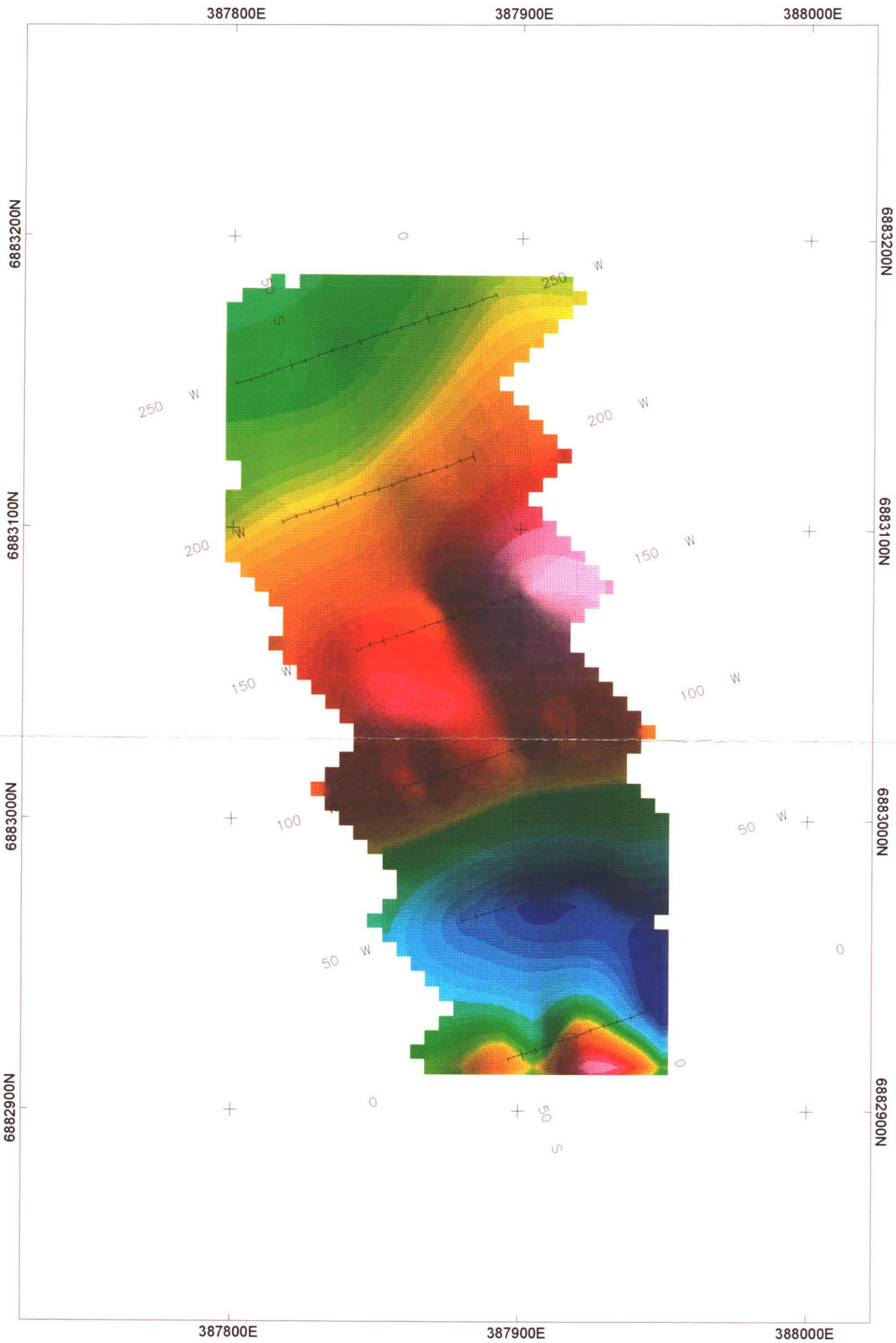
Back Creek Placer Lease 1W00111
Total Magnetic Field Shaded Contour Map
Figure 3.

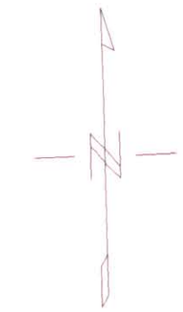
NTS: 115 I/3
Mining District: Whitehorse

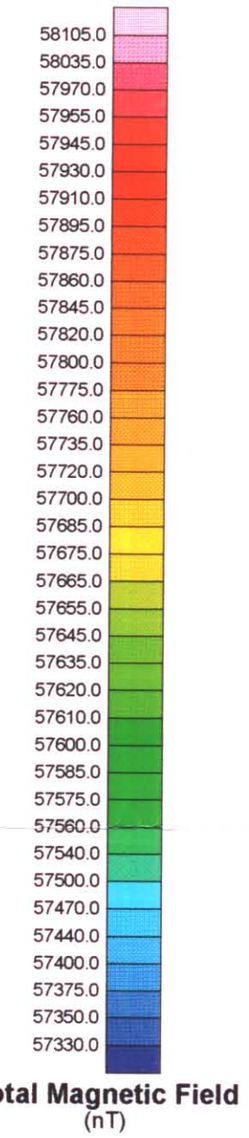
120190

Datum: NAD83
Date: 14 Jun 01

AURORA GEOSCIENCES LTD.







Total Magnetic Field
(nT)

TOTAL MAGNETIC FIELD SURVEY

INSTRUMENTS: GEM GSM-19

GRIDDING: Minimum Curvature

CELL SIZE: 5 m

ILLUMINATION: 225 / 45

Scale 1:1500

25 0 25 50 75

metres

(2)

REGISTERED PROFESSIONAL GEOPHYSICIST N.W.T.

120190 BILL TRERICE

Back Creek - P46966
Total Magnetic Field Shaded Contour
Figure 4.

NTS: 115I/3
Mining District: Whitehorse

Datum: NAD83
Date: 14 Jun 01

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