



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

VLF-EM MAGNETOMETER SUREY

TOTAL COST: \$3,150.00

**AUTHOR: WILLIAM G. TIMMINS P. ENG
#3 -350 Lanfranco Road
Kelowna, British Columbia
V1W-3W8**

**BC Geological Survey
Assessment Report
34469**

SIGNATURE: *William G. Timmins P. Eng.*

STATEMENT OF WORK EVENT NUMBER 5466418 /SEPTEMBER 07, 2013

YEAR OF WORK: 2013

PROPERTY NAME: DENND MINERAL CLAIMS

CLAIM NAMES : DENND #1; DENND #2; DENND #3; DENND #4

COMMODITIES SOUGHT: GOLD / PRECIOUS METALS

CARIBOO MINING DIVISION OF BRITISH COLUMBIA

NTS 93A/14W

UTM ZONE 10: Northing 5,853,000 Easting 602,500

**OWNER: DOROTHY DENNIS
342 Woodwind Court
Kelowna, British Columbia
V1V 2L3**

OPERATOR: D DENNIS

REPORT
ON
VLF- ELECTRO-MAGNETIC AND MAGNETOMETER SURVEYS
SNOWSHOE CREEK AREA
THE DENND CLAIMS
CARIBOO MINING DIVISION
BRITISH COLUMBIA
EVENT NUMBER 5466418
NTS 93A/14W
FOR
DOROTHY DENNIS
BY
W.G TIMMINS, P. Eng

DECEMBER 02, 2013

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Magnetometer Survey Contours
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VLF – EM Survey Values
VLF - EM Survey Fraser Filter Contour
VLF – EM Survey Fraser Filter Values

Summary

The DENND Mineral Claim Group consists of four (4) Mineral Claim Units in the Cariboo Mining Division of British Columbia, Canada, NTS 93A/14W near the community of Likely, B.C.

Mapping and prospecting has been carried out over portions of the property in past years..

This report presents the Geophysical Results and interpretation as obtained from the VLF-Electro Magnetic and Magnetometer Survey carried out over portions of the DENND 4 mineral claims in September of 2013 and filed for assessment work as Event #5466418 on September 07, 2013

The property is underlain by the Romos Succession of rocks of the Snowshoe Group of metasediments.

A number of gold anomalies as well as weak anomalous values in other metals such as Strontium and Titanium have been outlined by previous geochemical soil sampling surveys, carried out in August of 2008 and are in proximity to magnetic anomaly B as revealed in the Magnetometer Survey of 2013.

The VLF-EM and Magnetometer Survey results indicate two former converging river channels. As indicated the heavily altered zone could be representative of a deep seated hydrothermal potentially mineral bearing source.

The VLF – EM Magnetometer Survey totaled 1.025 Line Kilometers.

Further exploration work is recommended such as trenching, test pits, geological and or structural mapping.

Geophysical Survey data has been interpreted by L Sookochoff P. Eng.

Respectfully Submitted,

William G. Timmins

W.G. Timmins P. Eng

December 02, 2013

Introduction and Terms of Reference

Chart Ventures Inc. of Burnaby, British Columbia carried out a VLF – EM Magnetometer Survey over an area of 1.025 line miles. Three line miles were completed on the DENND #4 mineral claim on September 05, 2013, supervised by E Leimanis.

The lines were spaced at 100 meter intervals with stations every 25 meters.

The author was retained by D Dennis to present the results of the VLF- Electro Magnetic and Magnetometer Survey carried on the Snowshoe Creek Grid geochemical soil surveys previously carried out over the Cariboo Mineral Property.

The Geophysical Survey data has been interpreted by L Sookochoff P. Eng.

The report was prepared by the author who was on site during the field work.

Property Description And Location

The property is located approximately 21 kilometers north-northeast of the community of Likely, in the Cariboo Mining Division of British Columbia, Canada, NTS 93A/14 W centered approximately at UTM co-ordinates 5,85,3,000N, 602,500 E

The property consists of four (4) contiguous mineral claims totaling 100 hectares. A list of the claim tenure numbers and expiry dates are tabulated below and illustrated on Figure 2.

Tenure No.	Claim Name	Area (ha)	Expiry Date
405446	DENND #1	25 Hectares	2017/10/21
405447	DENND #2	25 Hectares	2017/10/21
405448	DENND #3	25 Hectares	2017/10/21
405449	DENND #4	25 Hectares	2017/10/21

Accessibility, Climate, Local Resources, Infrastructure And Physiography

The property is located in the Quesnel Highlands of Central British Columbia with elevations ranging from 1000 meters to 1500 meters above sea level.

Topography ranges from 1300 meters dropping steeply to 1150 meters at Snowshoe Creek. Snowshoe creek flows southerly through the DENND #2 and DENND #4 mineral claims into Keithley Creek.

The area receives significant precipitation throughout the year occurring from both rain and snow. Accumulations of snow may reach three meters or more during the winter months. Temperatures can vary from -25⁰ in winter to +30⁰ in summer.

The natural vegetation is predominantly coniferous forest consisting of spruce, balsam, firs, and cedar. A large portion of the property has been logged by clear cutting and most of these areas have been replanted. Many of the replanted areas contain second growth trees ranging from three to ten meters in height.

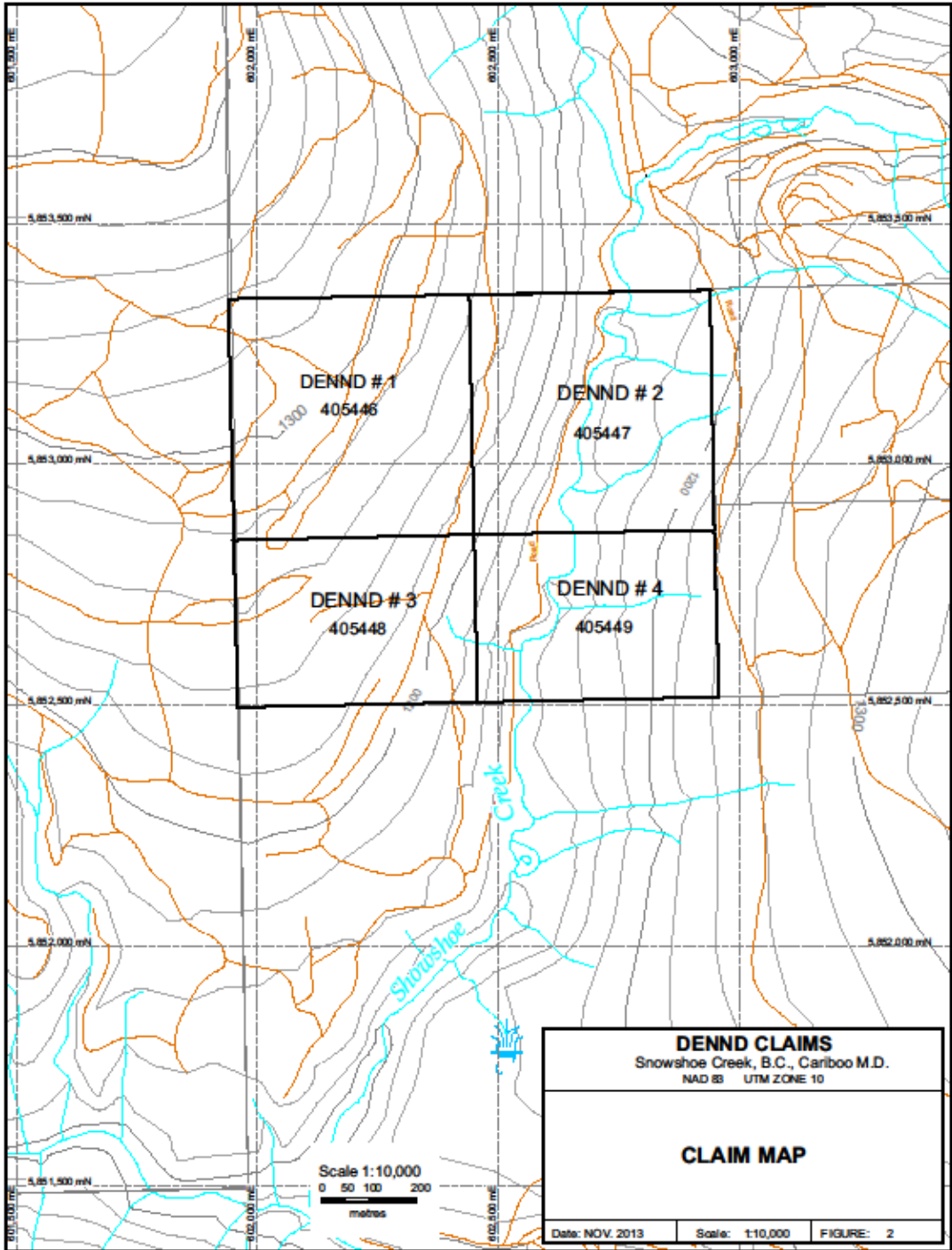
Access to the property is provided by an all-weather road to Keithley Creek from the community of Likely, B.C. and a good gravel logging road from Keithley Creek to the property. A networking of logging and skid roads provide access to various areas of the property and a good gravel road parallels the property to the east. Upgrading is often required.

The community of Likely, situated on Quesnel Lake, is reached by paved highway off Highway 97 at 150 Mile House. The distance from Highway 97 to Likely is estimated at 98 kilometers.

The nearest major town of Williams Lake, a logging and lumber centre is serviced by scheduled daily air service from Vancouver. Necessary supplies and equipment as well as local labor and modern communications are readily available. Power for exploration purposes is supplied by portable generating units when required, water services are plentiful from snowshoe creek.



DENND CLAIMS Snowshoe Creek, B.C., Cariboo M.D. Nad 83, UTM Zone 10	
LOCATION MAP	
DATE: Nov, 2013	FIGURE: 1
SCALE: As Shown	



History

The Cariboo region of British Columbia is notable for the gold rush that began in 1860 and the search for gold has continued in the region to the present day. Placer gold was discovered in Keithley, Snowshoe, Little Snowshoe, and French Snowshoe Creeks around the same time. Prospecting for hard rock deposits started shortly after the Cariboo gold rush began with production in the Wells-Barkerville area beginning in 1935.

Mineral exploration work has been carried out on the property consisting of reconnaissance mapping, road work, Geochemical Soil Sampling Survey, and prospecting.

In 2013 a VLF-Electro Magnetic and Magnetometer Survey was completed over the DENND #4 mineral claim on September 05, 2013, the subject of this Report.

Regional Geology

The rocks in the vicinity of Yank's Peak belong to the Barkerville Terrain and have been named the Snowshoe Group by Struik (1988). Struik has further divided the sedimentary and volcanic rocks of the Snowshoe Group into fourteen informal subdivisions; Ramos, Tregillus, Kee Kan, Keithley, Harvey's Ridge, Goose Peak, Agnes, Downey, Eaglenest, Bralco, Hardscrabble, Unnamed Carbonate, Island Mountain and Tom. Igneous intrusions of the terrain consist mainly of diorite and gabbro sills with quartz porphyry rhyolite. All rocks have been regionally metamorphosed to low and middle greenschist facies. The successions range in age from Hadrynian (Romas through Keithley) to Paleozoic (Harvey's Ridge through Bralco) and upper Paleozoic (Harscrabble Mountain and Island Mountain Amphibolite).

Recent work by the British Columbia Geological Survey as reported in Geological Fieldwork 2001 and Report 2002-1, suggests that the rocks of the Downey and Ramos may be equivalent to the Keithley Succession.

Property Geology

The mineral claims are underlain by the rocks of the Ramos succession of which interbedded quartzite and phyllite are the most abundant. The age of the Ramos succession is believed to be Hadrynian.

The quartzite is olive to grey on fresh surfaces, it is poorly sorted and generally medium to coarse grained. The quartz clasts are predominately glass clear and grey with minor blue. The quartzite is usually micaceous and sericite, epidote, muscovite, chlorite, and biotite occur along foliations. Some sections of the quartzite are weakly calcareous.

The phyllite varies from olive gray to black with chlorite, graphite and accessory pyrite, and pyrrhotite. There is often rhythmic banding within the phyllite and contacts between the quartzite and phyllite are usually sharp.

The local area is underlain by the rocks of the Ramos succession containing phyllite, schist, calc-silicate rocks, and quartzite. Volcanogenic rock has also been identified.

The main structure in the area is the Keithley Creek Thrust Fault that runs from Shoal's Bay on the Quesnel Lake northwest up Keithley Creek and along the lower portion of Rabbit Creek carrying onto the northwest across Fontaine Creek.

Mineralization

The Barkerville Terrain hosts the principal gold occurrences of the Cariboo area. These include the Mosquito Creek, Island Mountain, Cariboo Gold Quartz and Cariboo Hudson mines and the mineralized Snowshoe and Midas veins.

Pyrite and Pyrrhotite occur in quartz and quartz carbonate veins and veinlets, shear planes, micro fractures, replacements and disseminations.

Work Program

The program consisted of a VLF – Electro Magnetic and Magnetometer Survey conducted over three lines totaling 1.025 line kilometers on the DENND #4 mineral claims. The survey was carried out by Chart Ventures Inc of Langley, B.C. on September 05, 2013.

The survey covered high one point gold anomalies from previous Geochemical Soil Sampling Survey .

Interpretation and maps are provided by L Sookochoff P. Eng

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VLF – EM Survey

Instrumentation:

The VLF- EM unit was an EM16 (serial #54) using the Seattle Washington station.

In all electromagnetic prospecting, a transmitter induces an alternating magnetic field called (the primary field) by having a strong alternating current move through a coil of wire. This primary field travels through any medium and if a conductive mass such as a sulphide body is present, the primary field induces a secondary alternating current in the conductor, and this current in turn induces a secondary magnetic field. The receiver picks up the primary field and, if a conductor is present, the secondary field distorts the primary field. The fields are expressed as a vector, which has two components, the in-phase (or real) component and the out-of-phase (or quadrature) component.

For the VLF-EM receiver, the tilt angle in degrees of the distorted electromagnetic field with a conductor is measured from that which it would have been if the field was not distorted with a conductor. Since the fields lose strength proportionally with the distance they travel, a distant conductor has less of an effect than a close conductor. Also, the lower the frequency of the primary field, the further the field can travel and therefore the greater the depth penetration.

The VLF-EM uses a frequency range from 13 to 30 kHz, whereas most EM instruments use frequencies ranging from a few 100 to a few 1000 Hz. Because of its relatively high frequency, the VLF-EM can pick up bodies of much lower conductivity and therefore is more susceptible to clay beds, electrolyte-filled fault or shear zones and porous horizons, graphite, carbonaceous sediments, lithological contacts as well as sulphide bodies of too low a conductivity for other EM methods to pick up.

Consequently, the VLF-EM has additional uses in mapping structure and in picking up sulphide bodies of low conductivity or conventional EM methods and too small for induced polarization, (in places it can be used instead of IP). However, its susceptibility to lower conductive bodies results in a number of anomalies, many of them difficult to explain and, thus VLF-EM preferably should not be interpreted without a good geological knowledge of the property and/or other geophysical and geochemical surveys.

Theory:

Only two commonly occurring minerals are strongly magnetic, magnetite and pyrrhotite; magnetic surveys are therefore used to detect the presence of these minerals in varying concentrations. Magnetism is also useful as a reconnaissance tool for mapping geologic lithology and structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

Survey Procedure:

VLF-EM readings were taken at twenty-five meter intervals along east-west grid lines using a hand held compass and GPS unit with specific grid stations established by GPS readings. Each station location was marked, with the grid station and the location recorded in a field book. The field data is reported in Appendix 11. The field results were initially input to an excel spread sheet where upon a Mapinfo-Discover 211 program was utilized to create maps from the data results.

VLF- EM And Magnetometer Survey Results

Interpretation and Conclusions/ DENND Claim Group

VLF-EM Survey

The anomalies as shown on the coloured VLF-EM Fraser Filtered map (Figure) reflect structures and/or water courses.

This is indicated by Anomaly A which correlates with a known river;

The 200 metre long north-south anomaly B which shows up on the three grid lines, is open to the north and south and with strong probability, reflects a former river channel ;

Anomaly C which forks northeasterly from Anomaly B and is shown on the northern grid line, may indicate a former tributary of the Anomaly B indicated river channel.

A faint Anomaly D paralleling B to the east may again reflect a former structured river channel.

Magnetometer Survey

There is one sub-anomalous magnetic low (A) and one anomalous magnetic low (B) resulting from the three east-west grid line survey of a portion of the southeastern claim, Tenure 405449, of the four claim DENND Claim Group

Sub-anomalous low A correlates with the river and/or structure of VLF-EM anomaly A. (A VLF-EM anomaly can reflect either). With the bordering shoulders of magnetic high's, it appears that area A is indicated as a structural depression which the river has chosen to follow. Area A and the bordering magnetic high's are open to the south and could not be interpreted to the north as only the southernmost grid line of three grid lines extended across the river.

Anomaly B, the strongest magnetic low of the survey, appears to be near the merging point of VLF-EM anomalies B and D which may indicate a structural intersection and/or two former river channels. The bordering magnetic high E to the east could indicate a magnetite rich, with other minerals, gravel deposit, a potential unaltered intrusive at depth, or a massive sulphide deposit from which the gold nuggets in the area may have originated. (*Exploration in British Columbia 1989, page 147*)

Sub-anomalous Area D may reflect former river benches where magnetic materials with other minerals were deposited

Conclusions

The VLF-EM and magnetometer survey results indicated two former converging river channels which were preferentially positioned by predominantly north-south structures. The former rivers may have left magnetite along with other minerals in vacated channels. At the near structurally indicated convergence in the south a heavily altered zone is indicated which could be a surficial indication from a deep seated hydrothermal, potentially mineral bearing, source; the cross structure being the plumbing system for the fluids to reach surface.

Recommendation:

Exploration programs such as trenching, test pit excavation, geological mapping and geochemical soil sampling should be carried out over area “B” of the DENND #4 mineral claim where indications of placer gold deposits or lode mineral deposits may occur.

A program of test pit excavation, geological mapping and geochemical soil sampling is also recommended for to test the DENND #1; DENND #2 and DENND #3 mineral claims.

Respectfully Submitted:

William G Timmins

William G Timmins, P. Eng.

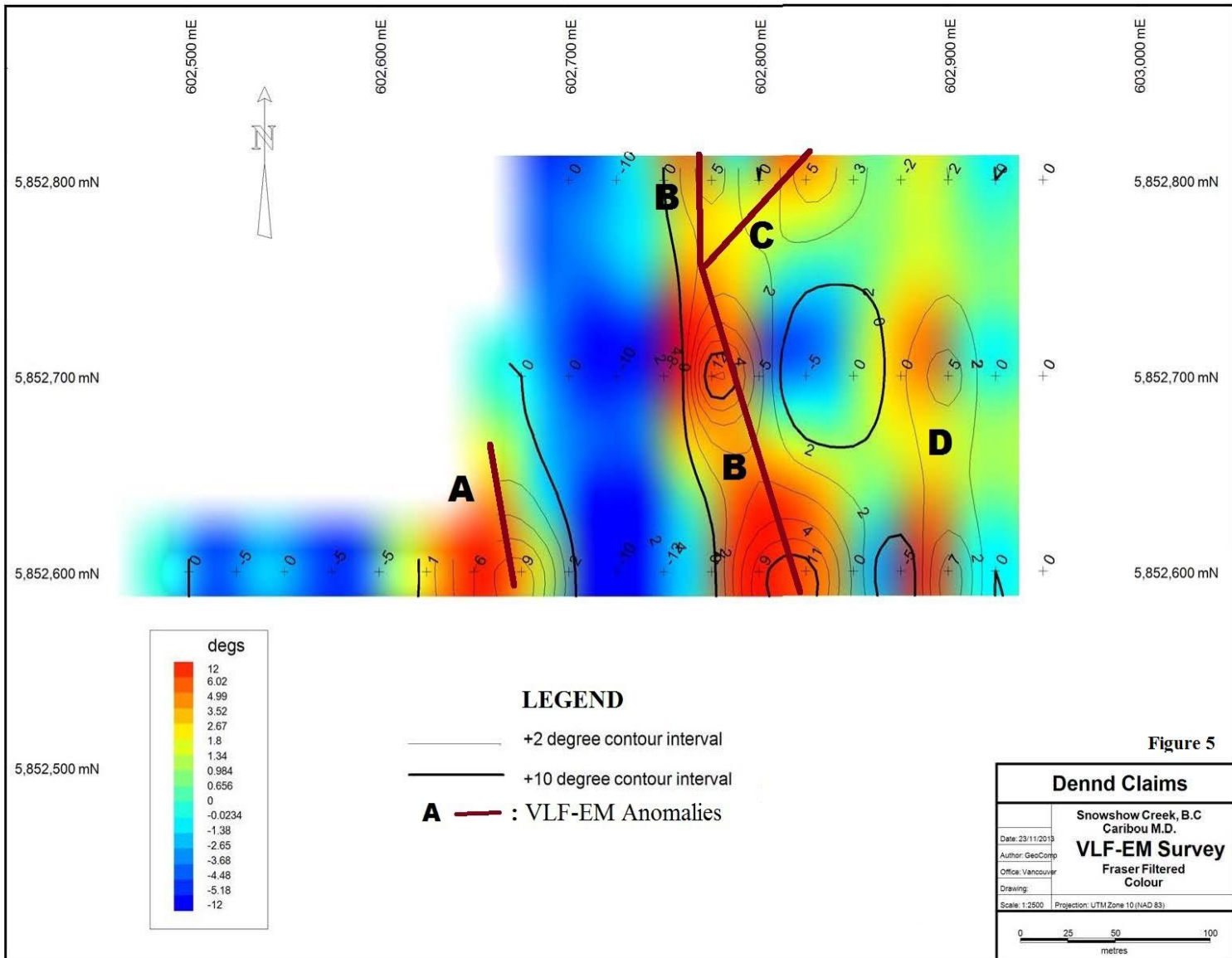
December 02, 2013

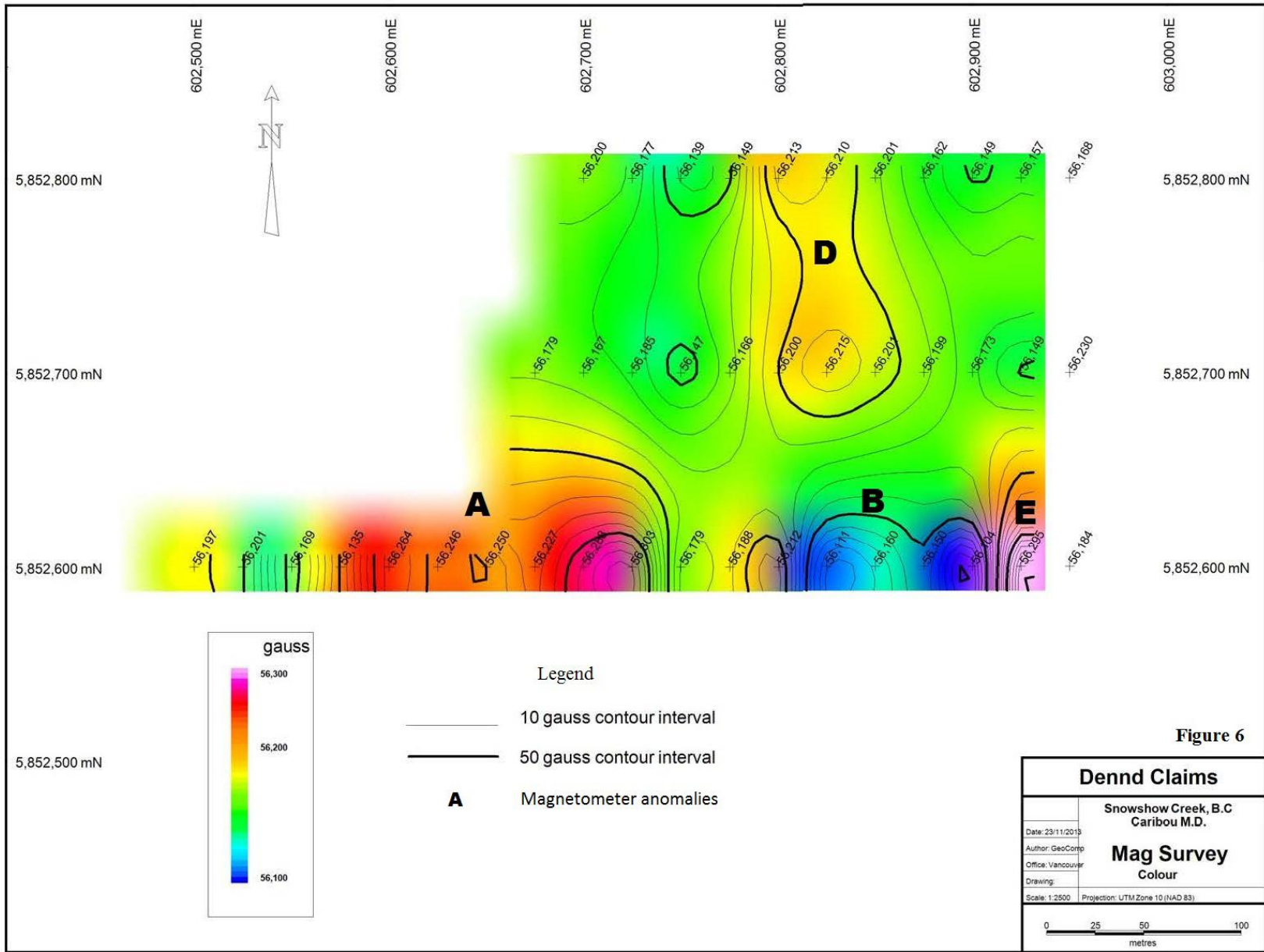
EXPENDITURES:

September 05, 2013

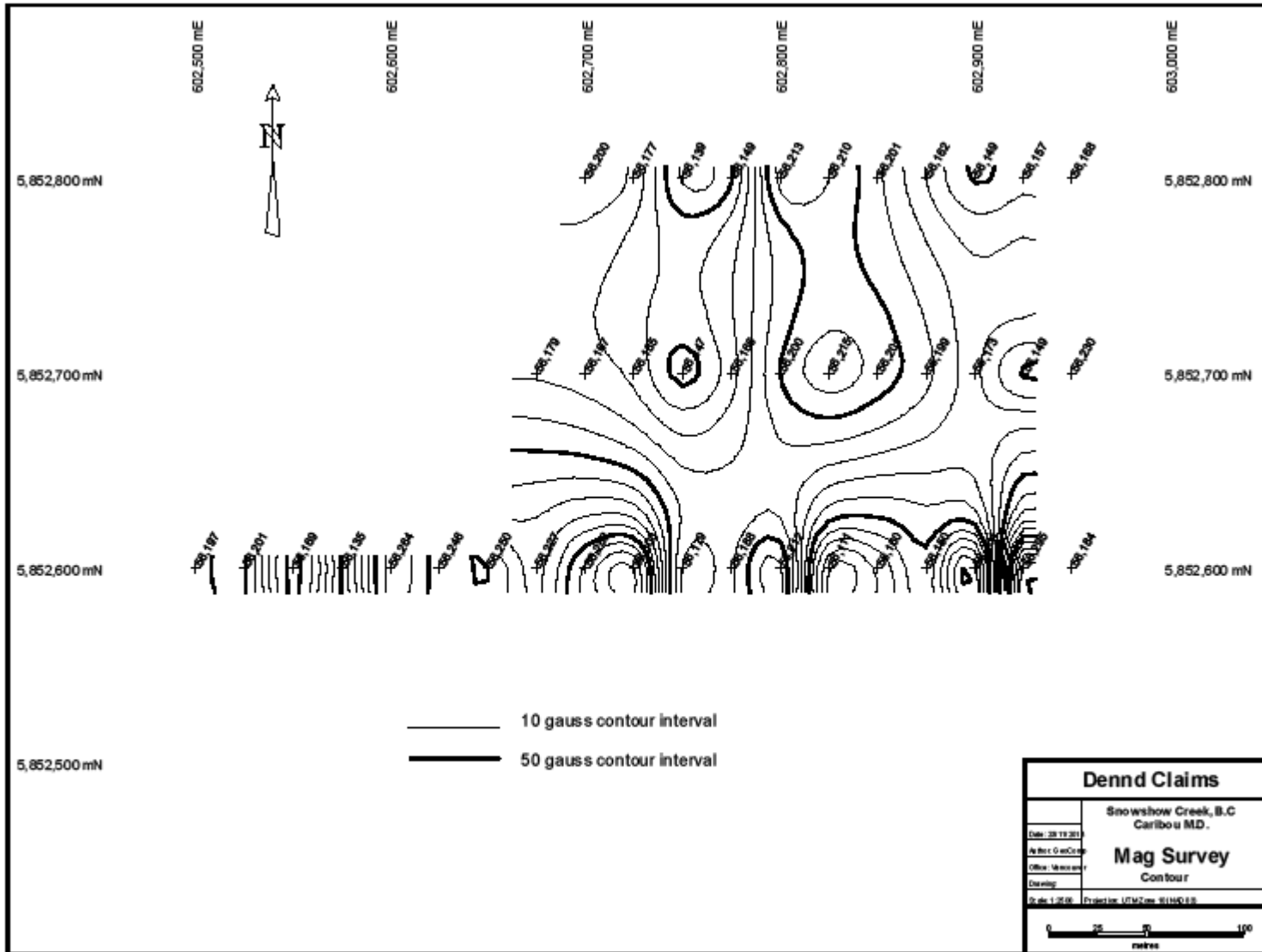
2 Geophysical Technicians @ \$250,00 per day	\$ 500.00
1 Brush Cutter @ \$250.00 per day	\$ 250.00
Engineer @ \$600.00 per day	\$ 600.00
2 Trucks @ \$50.00 per day	\$ 100.00
Chain Saw Rental @\$50.00 per day	\$ 50.00
Interpretation and maps	\$ 200.00
Room and Board @\$100.00 per day/man	\$ 400.00
VLF-EM and Magnetometer Rental	\$ 100.00
Report	<u>\$ 950.00</u>
<u>TOTAL:</u>	<u>\$3,150.00</u>

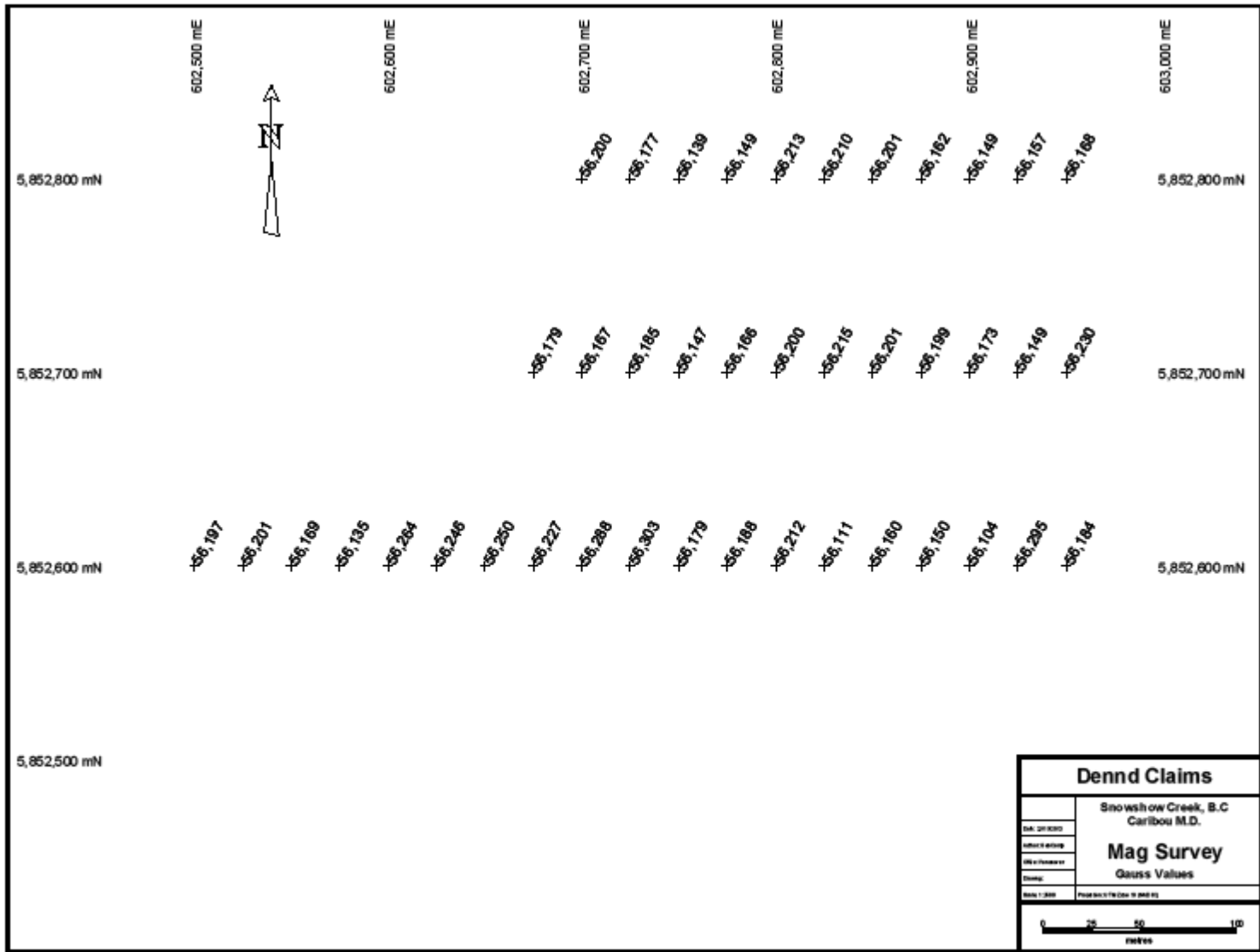
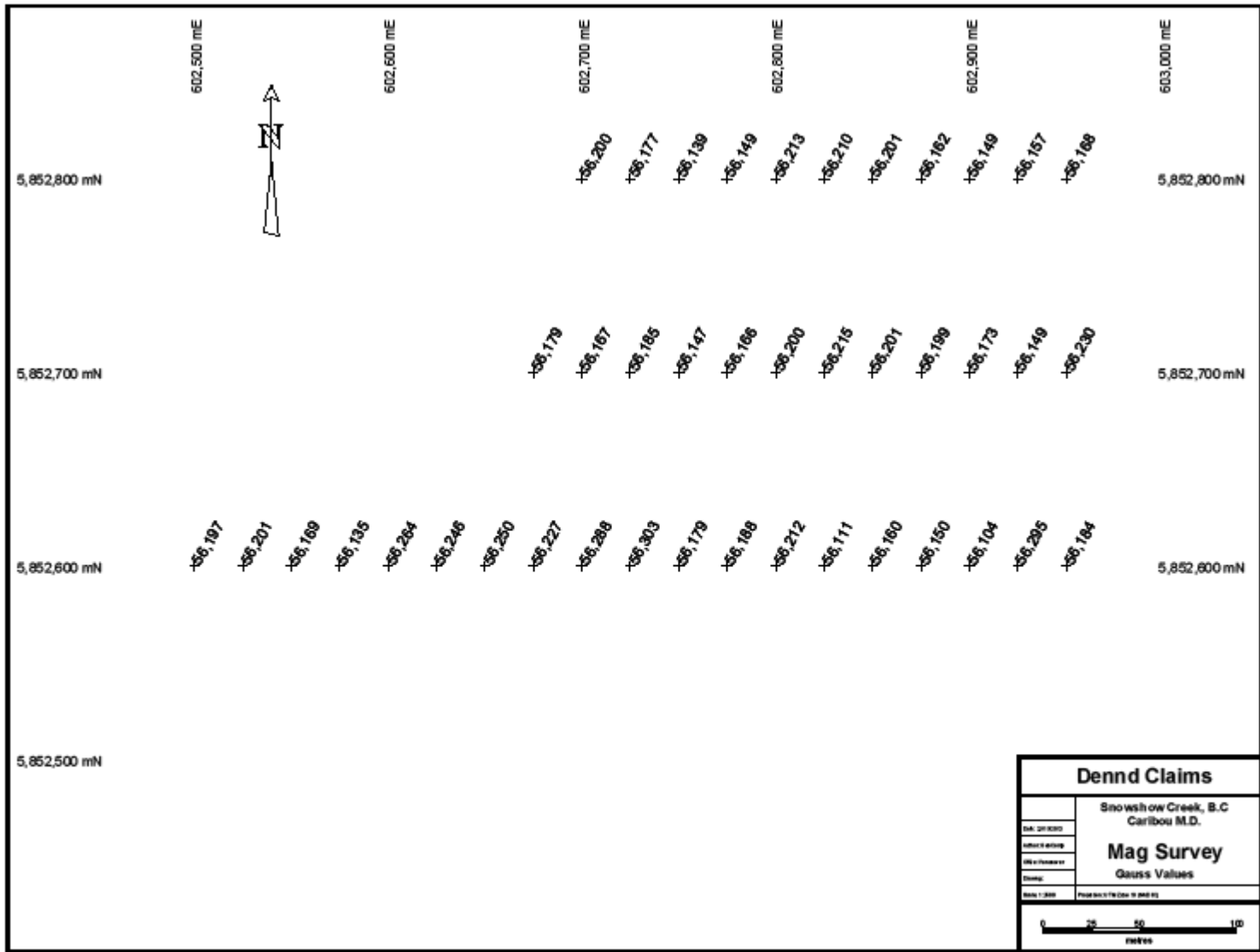


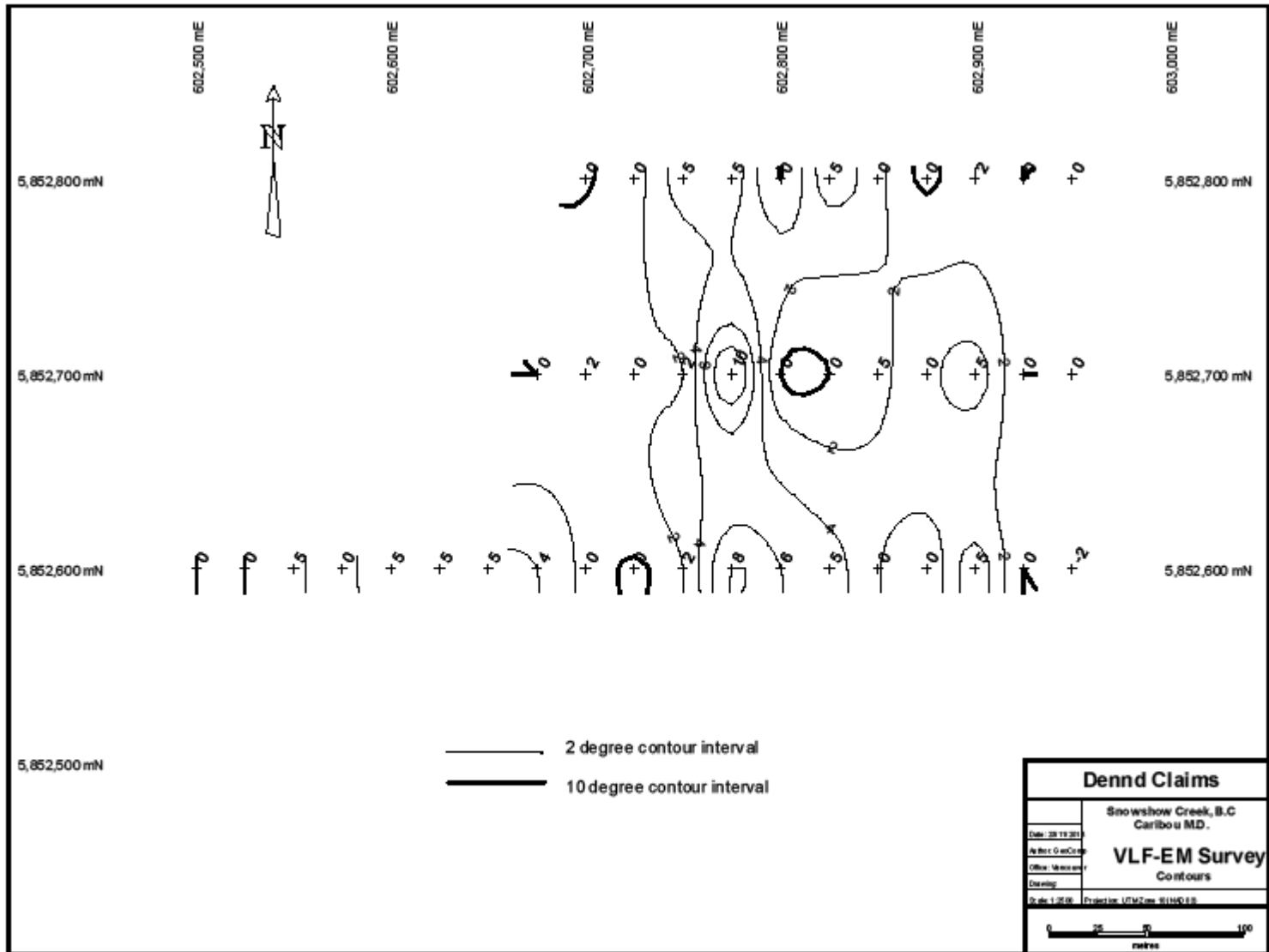


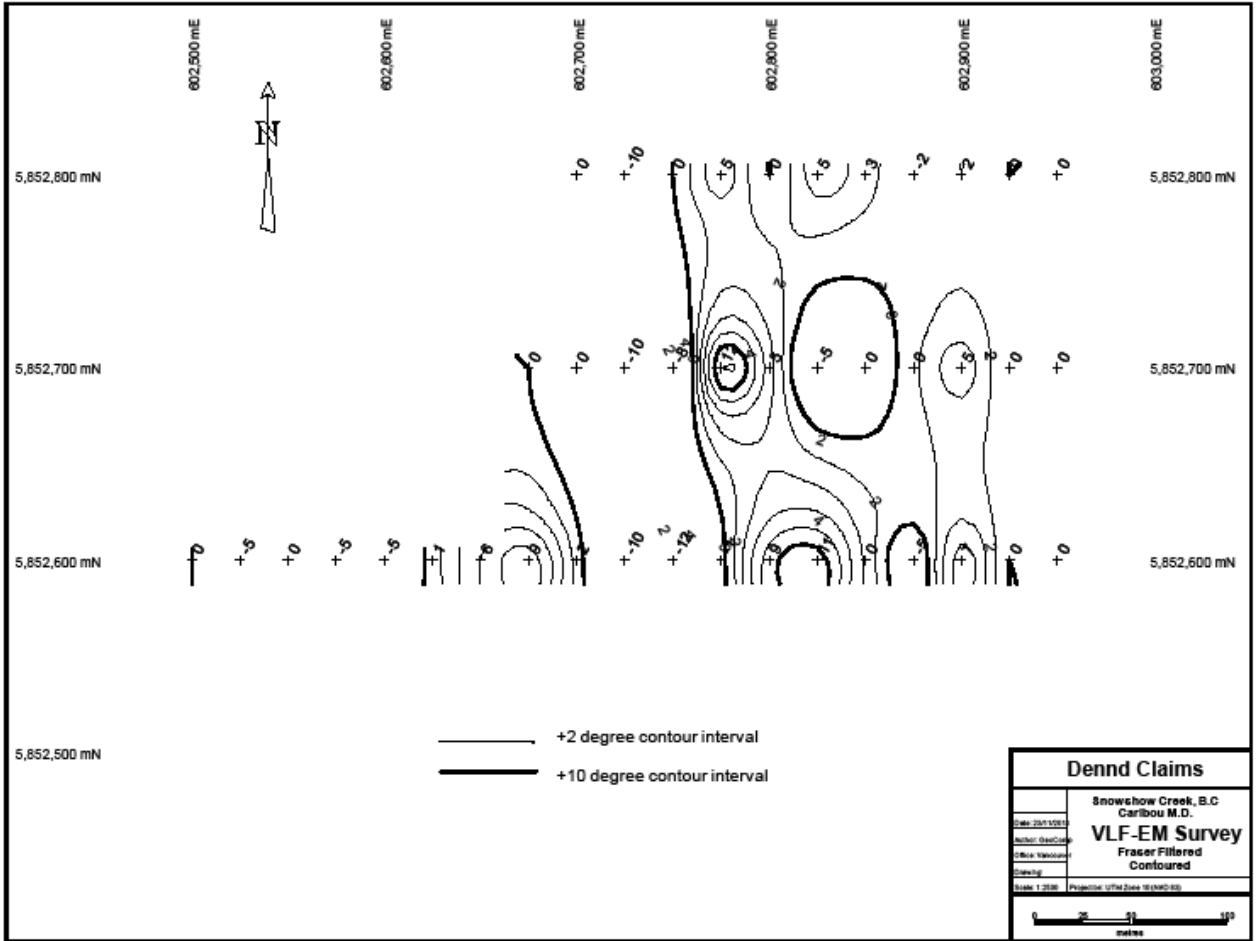


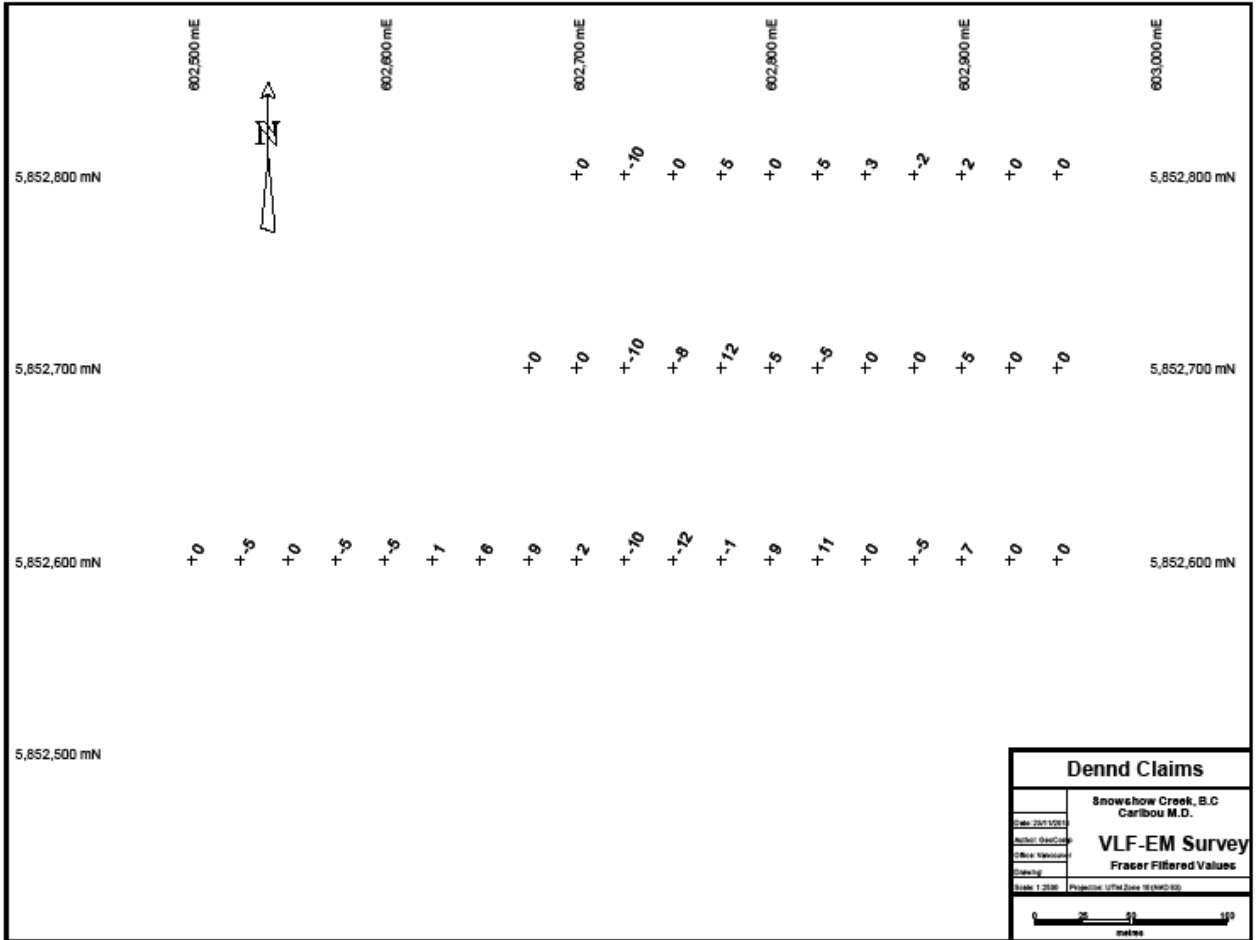
APPENDIX 1











Dennd Claims	
Snowshow Creek, B.C. Caribou M.D.	
Date: 2011/08/13	VLF-EM Survey Fraser Filtered Values
Author: Dave Cook	
Client: Vancouver	
Scale: 1:2500	
Projection: UTM Zone 18N (NAD83)	

APPENDIX 11

<u>East</u>	<u>North</u>	<u>VLF</u>	<u>VLF-FF</u>	<u>Quad</u>	<u>Magnetometer</u>
602700	5852800	0		0	56200
602725	5852800	0	-10	0	56177
602750	5852800	5	0	0	56139
602775	5852800	5	5	0	56149
602800	5852800	0	0	0	56213
602825	5852800	5	5	0	56210
602850	5852800	0	3	0	56201
602875	5852800	0	-2	0	56162
602900	5852800	2	2	0	56149
602925	5852800	0		0	56157
602950	5852800	0		0	56168
602675	5852700	0		0	56179
602700	5852700	2	0	0	56167
602725	5852700	0	-10	0	56185
602750	5852700	2	-8	0	56147
602775	5852700	10	12	0	56166
602800	5852700	0	5	0	56200
602825	5852700	0	-5	0	56215
602850	5852700	5	0	0	56201
602875	5852700	0	0	0	56199
602900	5852700	5	5	0	56173
602925	5852700	0		0	56149
602950	5852700	0		0	56230
602500	5852600	0		0	56197
602525	5852600	0	-5	0	56201
602550	5852600	5	0	0	56169
602575	5852600	0	-5	0	56135
602600	5852600	5	-5	0	56264
602625	5852600	5	1	0	56246
602650	5852600	5	6	0	56250
602675	5852600	4	9	0	56227
602700	5852600	0	2	0	56288
602725	5852600	0	-10	0	56303
602750	5852600	2	-12	0	56179
602775	5852600	8	-1	0	56188
602800	5852600	6	9	0	56212
602825	5852600	5	11	0	56111
602850	5852600	0	0	0	56160
602875	5852600	0	-5	0	56150
602900	5852600	5	7	0	56104
602925	5852600	0		0	56295
602950	5852600	-2		0	56184