

**Memorandum Report of 2016 Work**

**On the**

**Bishop Property**

MB 1 – 18 YE27701 to YE27718

**Dawson Mining District, Yukon  
NTS Sheets 115O11 Reindeer Mountain  
63°37' N. Lat., 139°02' W. Long.**

**Operated by and Recorded to**



Janelle Smith BSc. Hons Geol. MAIG.

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## **Certificate of Qualifications**

I, Janelle Smith, an employee of Taku Gold Corp certify that:

1. I obtained a Bachelor of Science degree from the University of New England, New South Wales Australia, in 1985, and an Honours Degree in Geology from James Cook University, Queensland Australia in 1986. I have worked as a Geologist since 1986, am a Member in good standing with the Australian Institute of Geoscientists (Number 4640) and I am a “qualified person” as defined in Section 1.1 of the National Instrument 43-101, 2011.
2. I have not visited the Bishop-Montana property. In this instance I am completing this document of the Bishop Montana 2017 assessment report as it was left outstanding at the time of a company restructure. I have spoken with the author of the VLF survey interpretation and obtained a copy of his report that is included in Appendix A.
3. I am not aware of any material fact or material change with respect to the subject matter of the report that is not disclosed in the report which, by its omission, makes the report misleading;
4. I am employed as a geologist by Taku Gold Corp and hold no shares in this company.
5. I hold no direct interest in the Bishop-Montana property as a result of my prior involvement with the property; and
6. I have read, and this report has not been prepared for the purposes, nor in full compliance with, National Instrument 43-101 and according to Form 43-101F1.

Respectfully submitted this day of April 2019,

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Janelle Smith  
Signature on file.

## Introduction

In 2010 to 2011, Taku completed airborne geophysical survey and extensive soil geochemical surveys over the Bishop-Montana property. At least six strong gold-in-soil anomalies with values up to 2623 parts per billion gold (“ppb Au”) were identified. In 2012, limited prospecting and sampling over some of these anomalies returned values up to 2.2 grams per tonne (“gpt Au”) from float samples of rock. These soil and rock values merited further exploration through geophysical surveys followed by targeted prospecting.

In 2016 Marty Huber a geologist and a field assistant with Breakaway Exploration undertook a very low frequency electromagnetic (VLF-EM) survey on 12 x 2000m x 100m spaced east-west oriented grid lines over the Bishop property. Once the geophysical results were obtained these was delivered to Dynamic Discovery of Ottawa to interpret the data and prepare a report that is included in Appendix A.

This memorandum report was prepared to complete statutory assessment work filings required under the Yukon Quartz Mining Act. It is not intended to and does not fully comply with National Instrument 43-101.

## Location, Property Information and Access

The Bishop-Montana property is located approximately 50km south of Dawson City in the Klondike region of the Yukon (Figure 1). The Property covers approximately 368 hectares of the Dawson Mining Division and is held 100% by Taku Gold Corp. The approximate center of the Property is described by 63°40’ North Latitude and 139°3’ West Longitude on N.T.S. Sheet 115O11. In total, the Property includes 18 un-surveyed mineral titles (Figure 2 and 3) more fully described in Table 1 below.

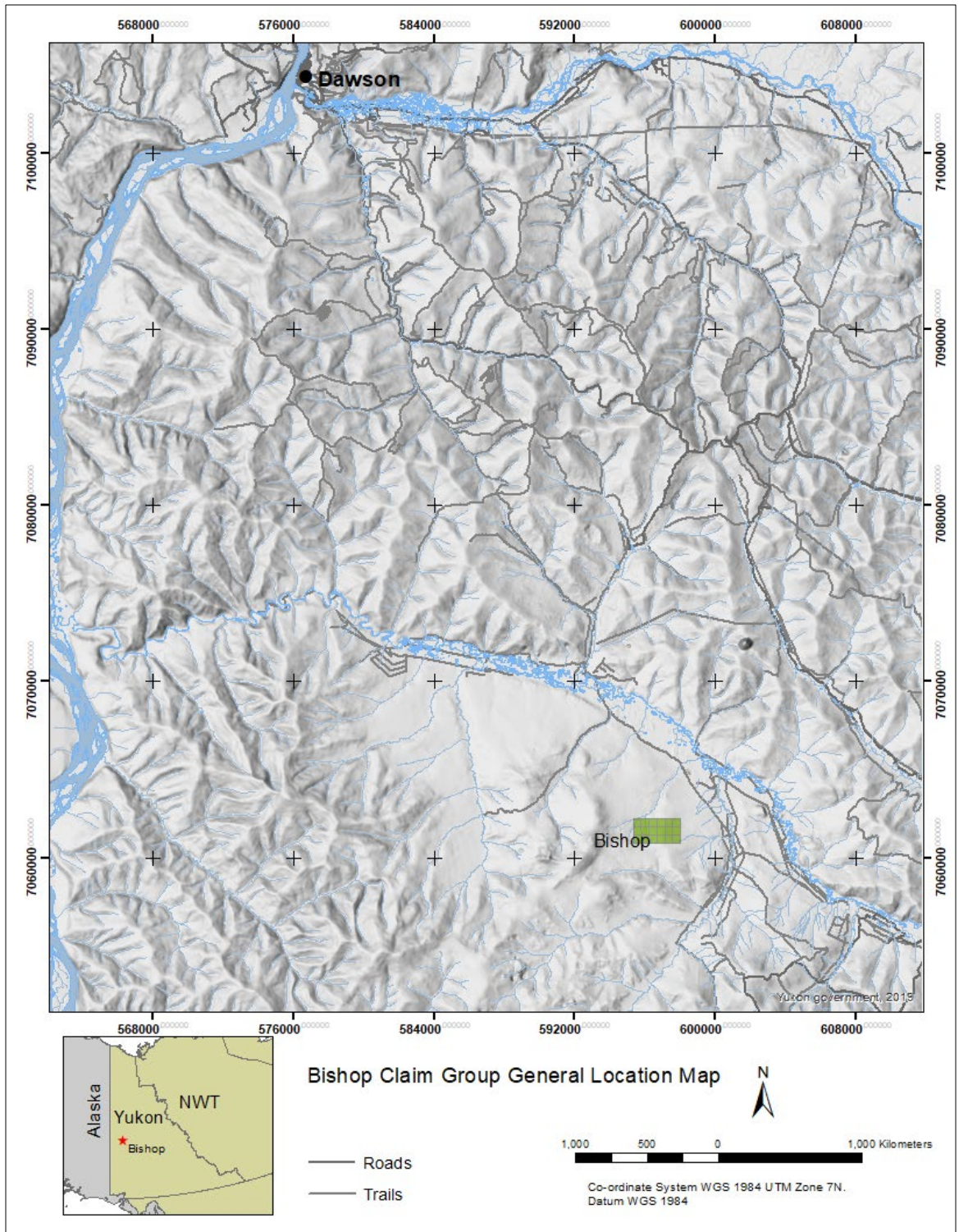
Table 1 - List of Claims

Claim Name	Tag No.	Expiry Date	#
MB 1 – 18	YE27701 to YE27718	10-August-22	18
Total			18

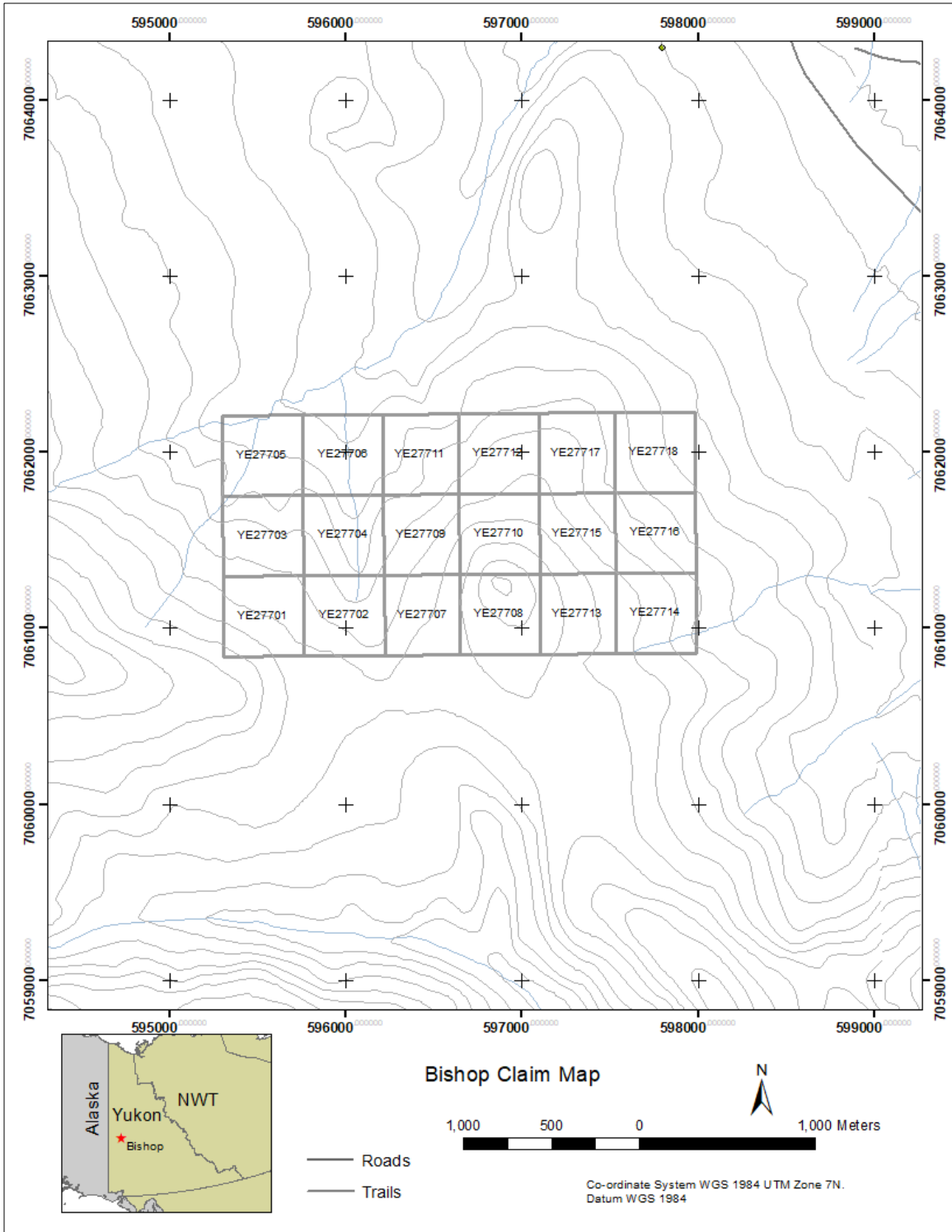
The Bishop-Montana claims can be accessed by a network of summer roads from Dawson City. There are a series of seasonal mining roads and ATV trails that lead the NE corner of the claim block. The roads and trails are very rough and steep in places and can become very slippery and dangerous when wet.

## Previous Work

Despite an ongoing history of placer mining in the area, there has been limited hard rock (quartz) exploration on the Bishop block. Table 2 below lists all known assessment reports that describe work done adjacent to and within the boundaries of the present Property. In 2010, Taku, a five-hole drill program on the Bishop block (Fekete and Dubois, 2011) and a 4,828-sample soil geochemical survey over the entire Property was completed in 2011 (Fekete and MacPhail, 2012).



**Figure 1 – General Location Map**



**Figure 1 - Claim Map Bishop**

**Table 2 - Previous Assessment Work Files**

Company	Year	AFR No.	Author	Work
Eldorado Nuclear Ltd	1983	091406	R.D. Cruickshank	Mapping, soil sampling
Yukon Inc.	2002	094397	T. Morgan & V. Matkovich	Geophysics, geochem
Yukon Inc	2003	094422	T. Morgan & V. Matkovich	Drilling, trenching
Taku Gold	2011	096221	MFekete & B Dubois	Drilling
Taku Gold	2012	096296	M Fekete & MacPhail	Soil Geochem

There are only two mineral showings documented within and immediately adjacent to the area of the Property listed in Table 3 below:

**Table 3 - MINFILE Showings**

MINFILE No.	MINEFILE Name	Link
1150 164	Matgan	1150 164
1150 056	FotherGill	1150 056

### Geological Context and Deposit Model

The Property lies within the Yukon-Tanana Terrane which generally consists of several successions of layered metamorphosed sedimentary and volcanic rocks ranging from Late Proterozoic to Late Permian age. These deformed layered rocks were intruded by igneous bodies in the Permian, Jurassic, Cretaceous, and Paleogene periods. Particularly in the Upper Jurassic to Lower Cretaceous episodes of magmatic activity were accompanied by eruption of volcanic material. The Yukon-Tanana was subject to numerous prolonged contractional deformational events that led to significant structural thickening.

The Bishop claim block lies within the Klondike gold district of the Stewart River Area. The district has been interpreted to be underlain by the Klondike assemblage (Mortensen, 1996) which is comprised of strongly deformed and altered mafic to felsic metavolcanic rocks and as well as deformed subvolcanic and plutonic equivalents, together with interlayered non-carbonaceous metasediments. This was emplaced as a stack of three distinct thrust plates over rocks of the Late Devonian Early Mississippian Nasina assemblage.

The most recent regional mapping and compilation work (Figure 4) in the Stewart River Area (Ryan and Gordey, 2005) indicates that the majority of the Bishop Property is underlain by Devonian to Mississippian quartz–mica schist (DMps) further described as metasedimentary rocks dominated by metapsammite, semipelite, and metapelite. Quartz-garnet-biotite-muscovite schist possibly derived from siliceous siltstone is common as well as micaceous quartzite. Conglomerate is found rarely in this area. Small bodies of marble were noted within the area of the claim block (DMc). The Devonian to Mississippian rocks are overlain in places by much younger Lower Cretaceous Tantalus Formation (IKTcg) clast supported pebble to cobble conglomerate with clasts of vein quartz and foliated quartzite.

The Property lies within underexplored Klondike-White Gold district of the loosely defined Tintina Gold Belt. The Klondike-White Gold district lies within the larger Dawson Range area where several known gold and porphyry copper deposits show a wide range of styles, geological settings and geochemical associations. Taku’s exploration effort at Bishop does not adhere to any firm deposit model but is instead based on practical survey methods that generate drill targets and have led to discoveries by other groups working in the area.

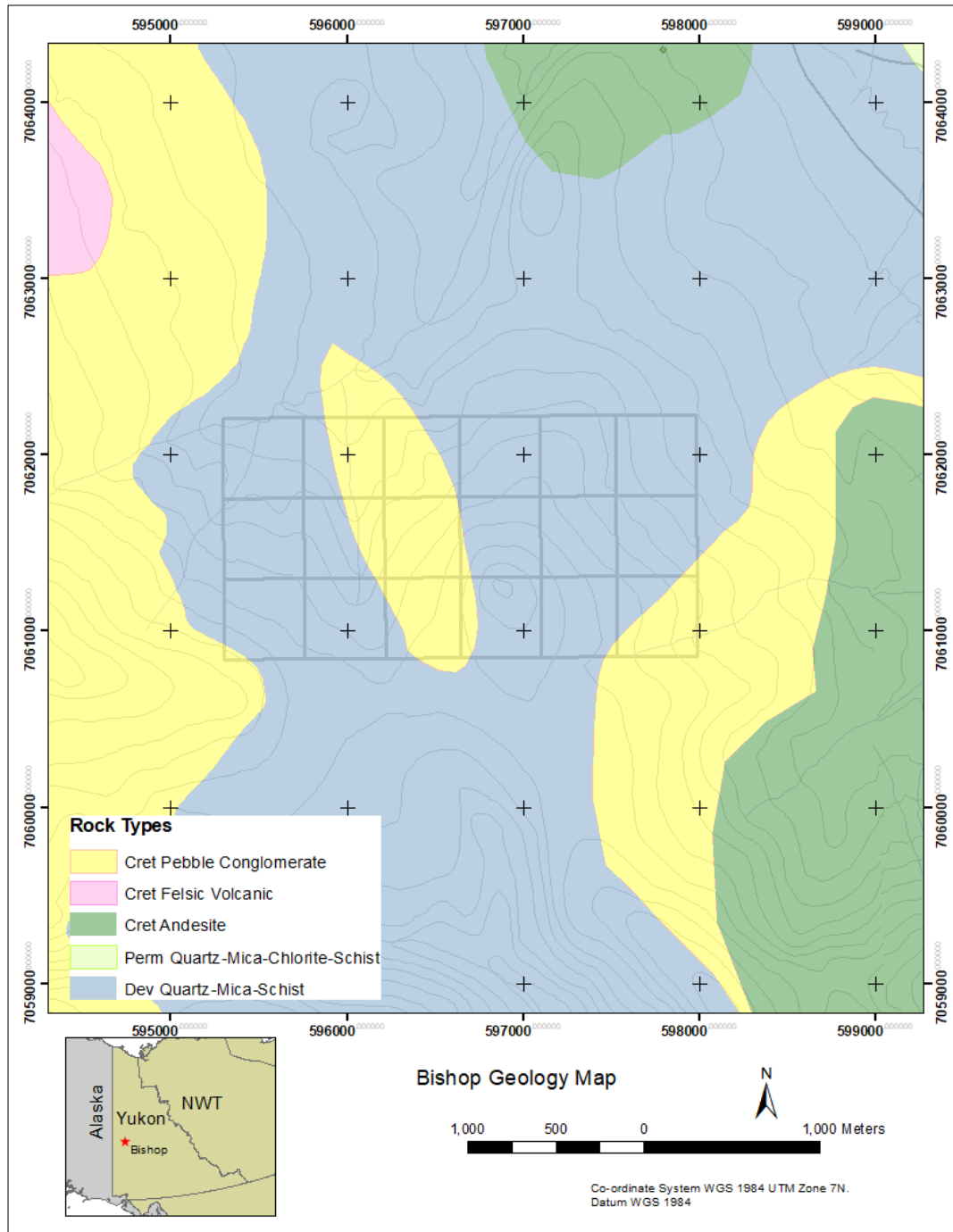


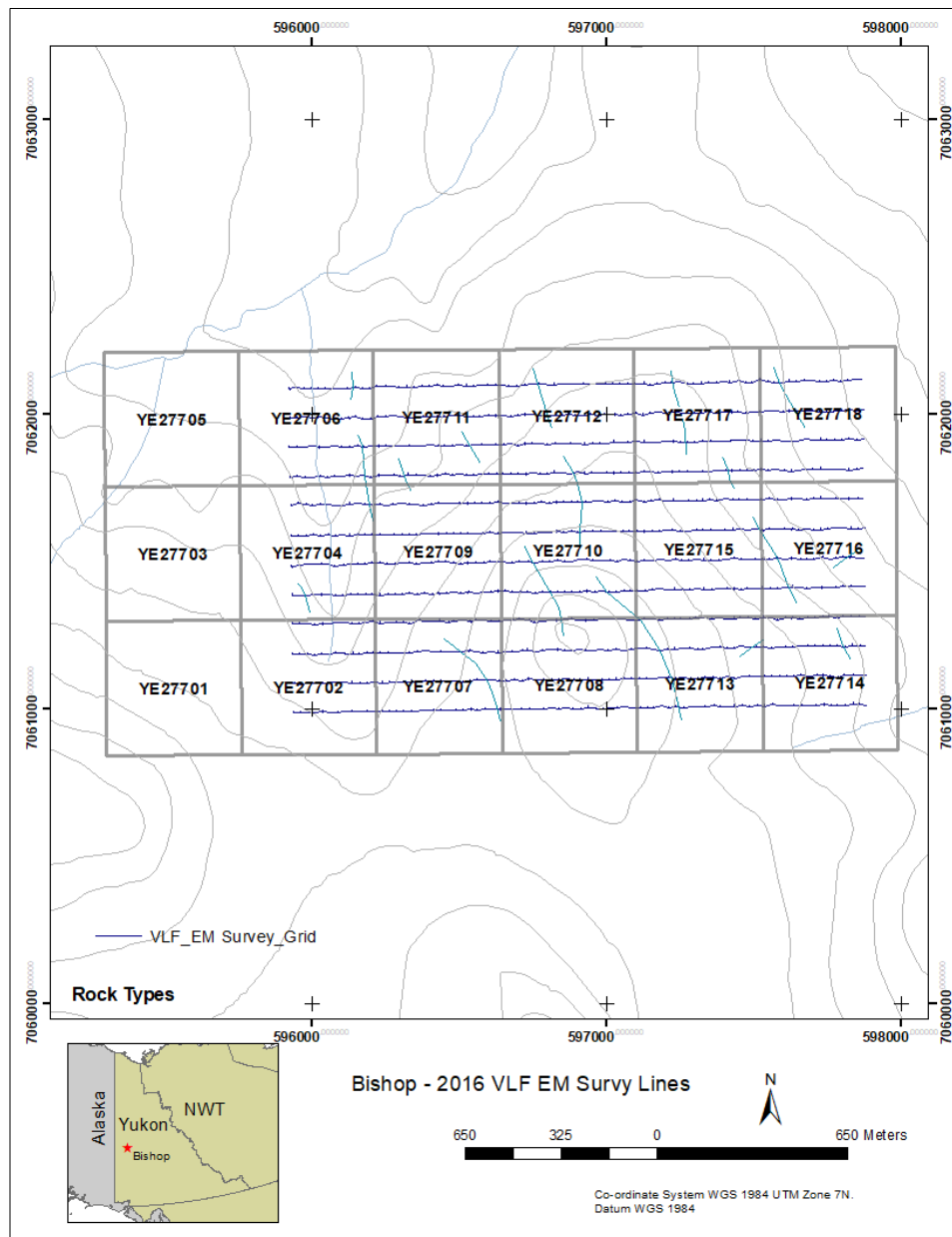
Figure 4 - Property Geology Map (from Yukon Geoscience regional mapping series, 2005)



## 2016 Exploration

A VLF-EM survey was completed on the Property from 15 – 17 August 2016 by Marty Huber and Josh Judson for a total of 23.4-line kilometers.

The survey grid consists of a network of 12 lines oriented N090 and spaced every 100 m. Survey lines were all 1950 m in length, for a total survey production of 23.4 km. The survey was carried out through the bush with the help of real-time GPS navigation, which made line cutting and chaining unnecessary. Technical supervision of the survey was provided by Joël Dubé, P.Eng., the data were transferred to Dynamic Discovery Geoscience's office in Ottawa to undergo full data QC and interpretation. The report prepared by Dynamic Discovery is provided in Appendix 1.



**Figure 4: Survey lines and Bishop mineral claims location.**

## Results of VLF-EM work.

A number of possible weak to moderate conductors were defined by the interpretation of the VLF-EM survey. The position of these conductors are mapped in the Dynamic Discover (2017) report included in Appendix 1.

## Interpretation and Conclusions

The 2012 soil sampling survey (Fekete, 2012) on the Bishop property showed a weak gold anomaly with a maximum gold value of 64 ppb. Scattered low grade sulphur values of 0.2 to 0.6 %, in the same area as well as the position on a low ridge indicate that the anomalous gold in soil values may be insitu.

The VLF\_EM survey defined low to moderate conductive horizons that trend NNW. This is the same as the predominant orientation of the structural grain in the area. Crosscutting NE trending conductors were also interpreted. These NE trending conductors may represent fault zones.

## Recommendations

It is recommended that exploration work continue on the Bishop block with two to three days of prospecting, with special attention paid to areas where the NE trending conductive horizons cross cut the NW trending zones and anomalous gold and sulphur geochemical values occur in soil. As there is reported to be a horizon of weathered bedrock (Fekete, 2012) it may be pragmatic to return to the area with a geoprobe and drill a few lines of shallow holes to bedrock over the area of anomalous geochemistry.

The estimated cost of the work is \$46,920 as detailed in Table 4 below. Note that all camp, food, lodging, supplies, transportation, rentals and other incidental expenses are included in the estimated cost.

**Table 4 - Estimated Costs**

Geoprobe Drill	3	days @	\$1,000	per day	\$3,000	
Geologist	5	days @	\$700	per day	\$3,500	
Assistants (2)	3	days @	\$1,400	per day	\$4,200	
Helicopter w/ fuel	6	hours @	\$2,000	per hour	\$12,000	
Truck w/ fuel	3	days @	\$200	per day	\$600	
Food, lodging and In Yukon travel					\$3000	
Rock Samples	500	samples @	\$25	per sample	\$12,500	
Report	1	report @	\$2,000	per report	\$2,000	
					Subtotal	\$40,800
					~15% Contingency	\$6,120
					Total	\$46,920

## References

- Dube J., 2017 Technical Report Geophysical VLF-EM Ground Survey, Bishop Property.
- Fekete, M. and Dubois, B. (2011): 2010 drilling on the Bishop Property, Dawson Mining District, Yukon NTS Sheet 115O10 & 11, 63°41'N. Lat., 139°00'W. Long. (unpub.)
- Fekete, M. and, MacPhail D. (2012): 2011 surface work on the Bishop-Montana Property Dawson Mining District, Yukon, NTS Sheets 115O10 & 115O11, 63°37' N. Lat., 139°02' W., Long.(unpub.)
- Gordey, S.P. and Ryan, J.J. (2005): Geology, Stewart River Area (115 N, 115-O and part of 115 J), Yukon Territory; Geological Survey of Canada, Open File 4970, scale 1:250 000.
- Mortensen, J.K. (1996): Geological compilation maps of the northern Stewart River map area, Klondike and Sixtymile Districts (115N/15, 16; 115O/13, 14; and parts of 115O/15, 16). Exploration and Geological Services Division, Yukon region, Indian and Northern Affairs Canada, Open File 1996-1 (G).
- Poon, J. (2010): Airborne geophysical report, Montana Property (unpub.)

## **Appendix A – VLF-EM Report Dynamic Discovery**

*Technical Report*  
*Geophysical VLF-EM Ground Survey*

*Bishop Property*

*MB2-18/YE27702-27718 Claim Series*

*Center UTM-7N X=596900, Y=7061500*

*NTS 115011*

*Dawson Mining District, Yukon*

*Field Work Performed August 15<sup>th</sup> to 17<sup>th</sup>, 2016, for*



**TAKU GOLD**  
CORP.

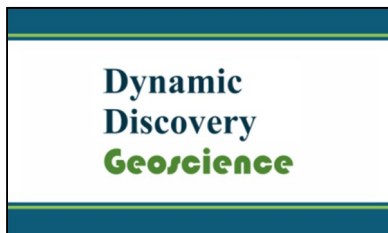
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*Report by Joël Dubé, May 23<sup>rd</sup> 2017*



Prepared by  
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May 2017

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High standard  
Discovery oriented  
Innovative

Efficacité  
Professionnalisme  
Expérience

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## I. INTRODUCTION

At the request of the mineral exploration company Taku Gold Corporation, the exploration services company Breakaway Exploration Management Inc. of Val-d'Or (QC) conducted a Very Low Frequency Electro-Magnetic (VLF-EM) survey on the Bishop Project (Figure 1). The consulting firm Dynamic Discovery Geoscience Ltd. of Ottawa (ON) received the mandate to control the quality of the survey, to process the acquired data and to present and interpret these data in the current report.

Figure 1: General location of the Bishop Project



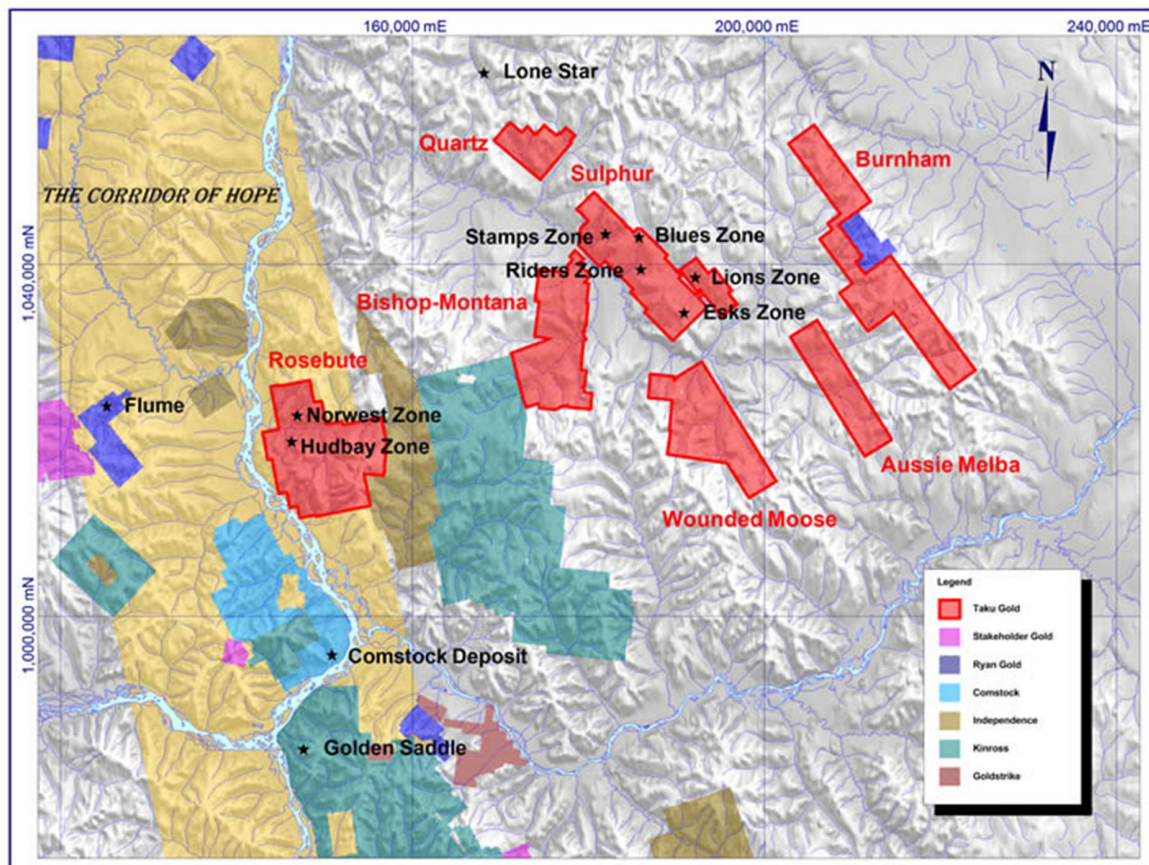
The survey was conducted from August 15<sup>th</sup> to 17<sup>th</sup>, 2016, by Mr. Marty Huber and Josh Judson, under the supervision of Mr. Mark Fekete, P.Geo., for a total of 23.4 linear km.

The goal of the survey was to characterize the sub-surface rocks with respect to their signature to the VLF-EM method, and to identify responses possibly associated to mineralized occurrences. In order to provide assistance in the data interpretation process, airborne magnetic data acquired in the area in 2000 are also used (Stewart River I survey, available at Natural Resources Canada, 2017).

## II. BISHOP PROJECT

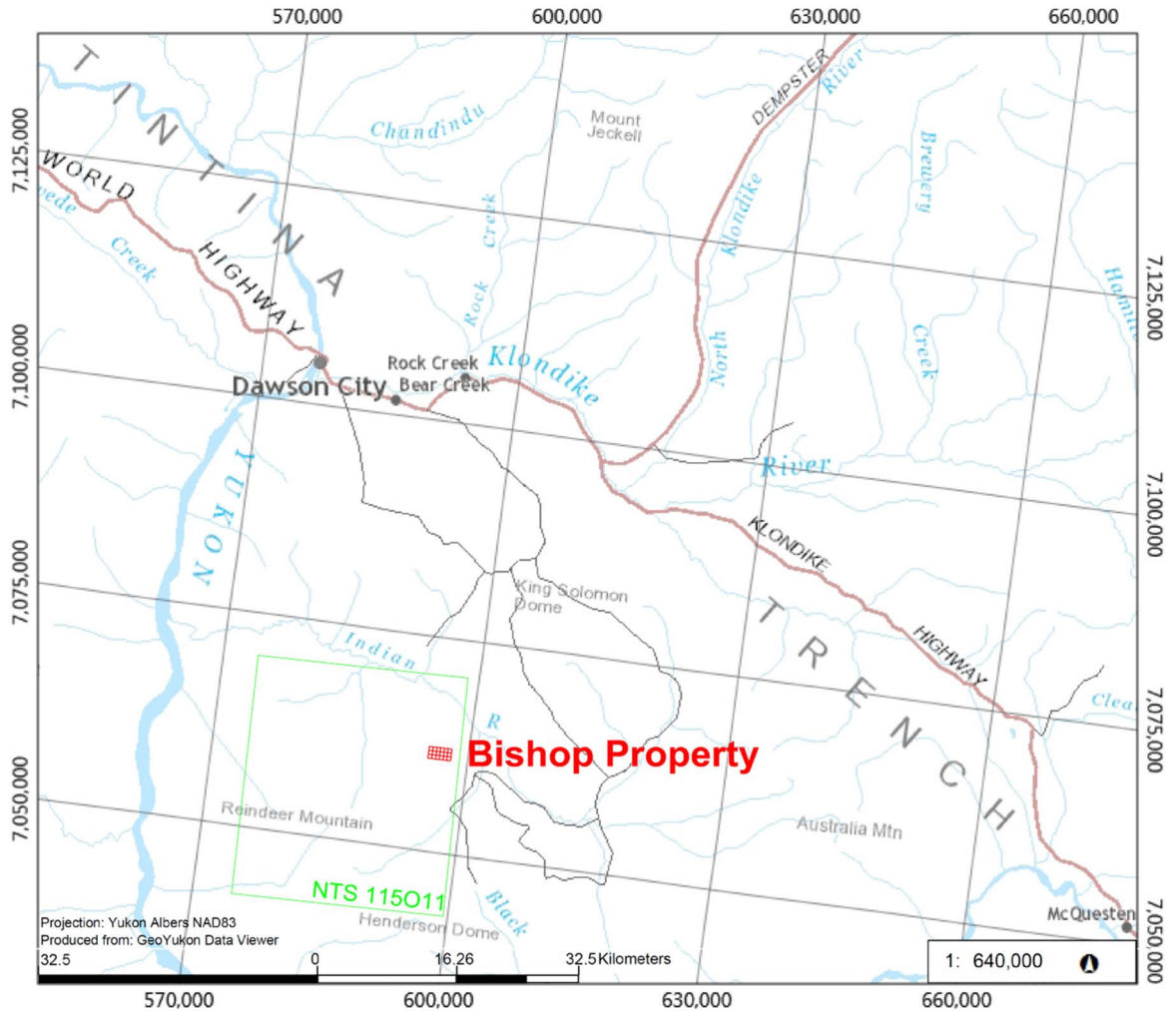
The Bishop Property consists of a block of mineral claims located about 48 km southeast of Dawson City. This property is part of a constellation of properties owned by Taku Gold Corp. in the area, and shown in red in Figure 2.

Figure 2: Mineral properties south of Dawson City



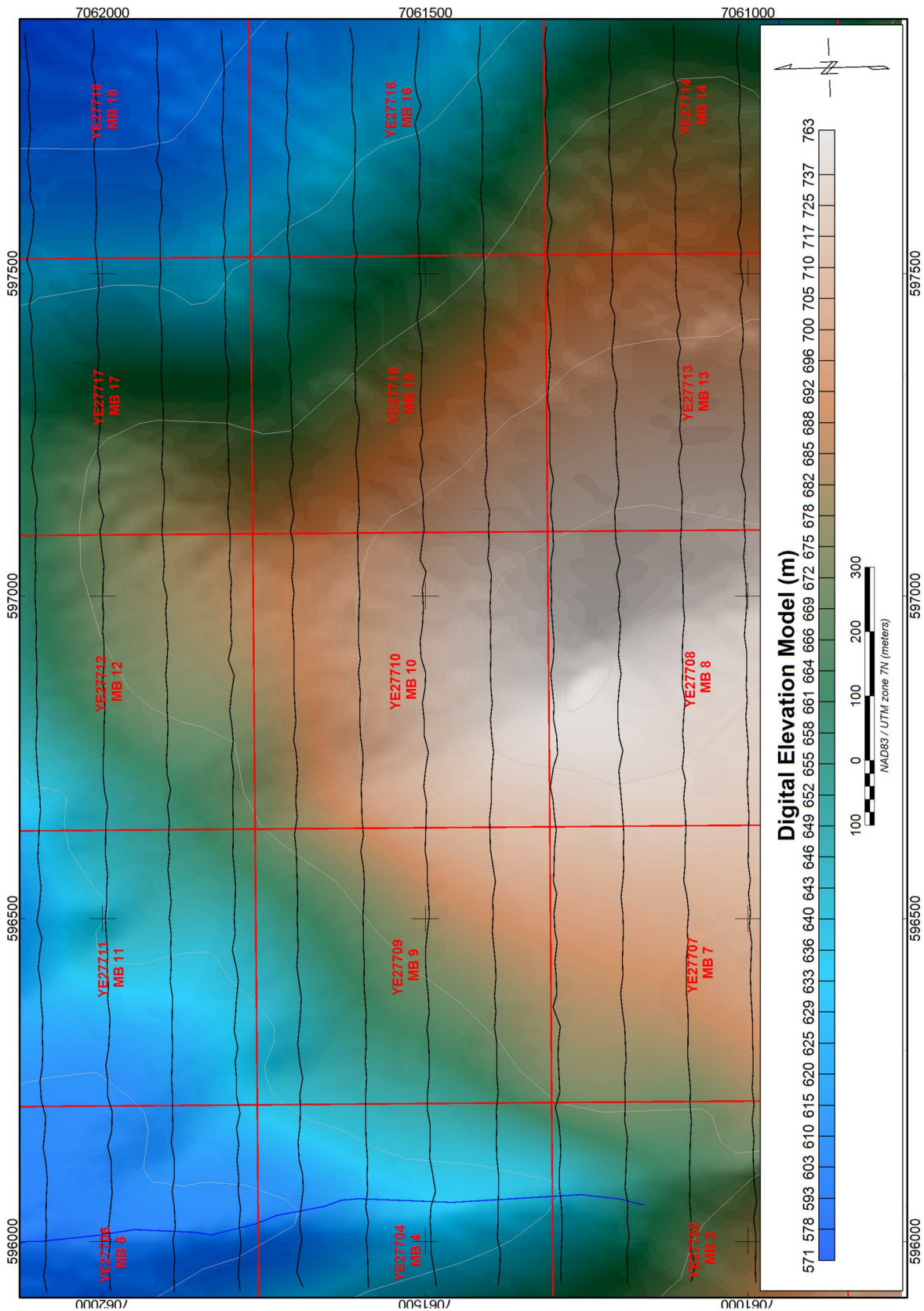
The Bishop Property claims are shown in Figures 3. Most of the Property has been covered by the VLF-EM survey. This zone can be accessed in the summer via secondary roads connecting to Dawson City.

Figure 3: Regional location of the Bishop Property and surveyed area



The Property is located within NTS map sheet 115011. The survey grid consists of a network of 12 lines oriented N090 and spaced every 100 m. Survey lines are all 1950 m in length, for a total survey production of 23.4 km. The survey was carried out through the bush with the help of real-time GPS navigation, which made line cutting and chaining unnecessary. Mining titles covered by the survey lines are shown in Figure 4, and all the Bishop Property claims that have been at least partly covered by the survey are listed in Appendix A.

Figure 4: Survey lines and Bishop mineral claims location



### III. TECHNICAL SPECIFICATIONS

#### Field Operations

The VLF-EM survey, totalling 23.4 km, was carried out from August 15<sup>th</sup> to 17<sup>th</sup> 2016, by Marty Huber and Josh Judson of Breakaway Exploration Management. VLF-EM data were recorded every 25 m along the lines, for a total of 948 data points collected. Technical supervision was provided by Joël Dubé, P.Eng. On top of data inspection performed on the field by the operators while conducting the survey and transferring the data to a computer, the data were transferred to Dynamic Discovery Geoscience's office in Ottawa to undergo full data QC.

#### Survey Equipment

The equipment used for the VLF-EM survey consisted of an EM-16 device manufactured by Geonics. The EM-16 VLF system enables measurements of the vertical in-phase (P) and out-of-phase (Q) components expressed as % of the VLF horizontal primary field, with a resolution of 1 %.

Two VLF transmitter antennae were used: NPM Lualualei, Hawaii, emitting at a frequency of 21.4 kHz and NLK Seattle, Washington, emitting at a frequency of 24.8 kHz. The Hawaii antenna is located about 4900 km from the survey block, at an azimuth of N206, while the Seattle antenna is at a distance of 2040 km in the N142 direction. This implies that conductors striking NNE-SSW are best coupled with the EM signal from the Hawaii antenna, while the Seattle antenna's signal is best coupled with NW-SE conductors. The 64 degrees difference between the primary field directions from both antennae ensures that no conductors are left undetected with this survey configuration. By convention, all VLF-EM measurements were made with the instrument facing N120 for the Hawaii antenna and N060 for the Seattle antenna, for proper polarity of the results.

A GPS unit was used both for navigation purposes along an ideal local grid (no lines were cut) and for recording of survey stations locations, with an absolute accuracy of 2 to 5 m.

## IV. DATA PROCESSING AND PRESENTATION

Data compilation including editing and filtering, quality control (QC), and final data processing was performed by Joël Dubé, P.Eng. Processing was performed on high performance computers optimized for quick daily QC and processing tasks. Geosoft software Oasis Montaj version 9.1.3 was used.

### VLF-EM data

The vertical in-phase and out-of-phase components are presented in profiles. The in-phase component was further processed with a Fraser filter which results in a signal with maximum amplitude at the inflexion point of the input signal. This parameter was interpolated onto a regular grid using a bi-directional gridding algorithm to create a two-dimensional grid equally incremented in x and y directions. The final grids were created with 20 m grid cell size, appropriate for the survey lines spaced at 100 m, and were filtered with a 3x3 Hanning filter to reduce short wavelength noise in the grids. The Fraser filtered in-phase component effectively enables identification of the conductors in an intuitive way by looking at maximum amplitude lineaments on its contour map.

### Deliverables

The maps created to present the information extracted from the survey are summarized in Table 1. All maps are referred to NAD-83 in the UTM projection Zone 7 North, with coordinates in metres. Maps are at a 1:5,000 scale and are provided in PDF, PNG and Geosoft MAP formats.

Table 1: Delivered maps

No.	Nom	Description
1	DEM	Location of the survey lines and of the mineral claims
2	PQprof_Hawaii	VLF-EM in-phase & out-of-phase profiles for Hawaii antenna
3	P-FRASERcont_Hawaii	Fraser filtered VLF-EM in-phase contours for Hawaii antenna
4	PQprof_Seattle	VLF-EM in-phase & out-of-phase profiles for Seattle antenna
5	P-FRASERcont_Seattle	Fraser filtered VLF-EM in-phase contours for Seattle antenna
6	INTERPRETATION	Interpretation map with regional airborne Residual Total Field

Digital data are also supplied for all the parameters recorded during the survey. The database is delivered in the Geosoft GDB format. As well, data grids created for mapping purposes are included in the deliverables. They are referenced to NAD-83 in the UTM projection Zone 7 North, with coordinates in metres. Grids are provided in Geosoft GRD format, with a 20m grid cell size. Finally, interpretation elements found on the interpretation map are supplied in the Esri SHP format.

## V. RESULTS INTERPRETATION AND DISCUSSION

### Supporting data

Although no magnetic data were acquired as part of this project, public domain airborne magnetic data are presented here in an effort to support the interpretation process. The heliborne magnetic data used were acquired in 2000 with a 500 m line spacing at an altitude above the ground of 120 m, and is published by Natural Resources Canada (NRCan, 2017). This survey is referred to as the Stewart River I survey.

### Magnetic data

The residual Total Magnetic Intensity (TMI) of the area is presented in Figure 5 together with interpreted features extracted from the interpretation map. The magnetic signal variations seen in the block are reflected in Table 2 which summarizes data statistics of the TMI.

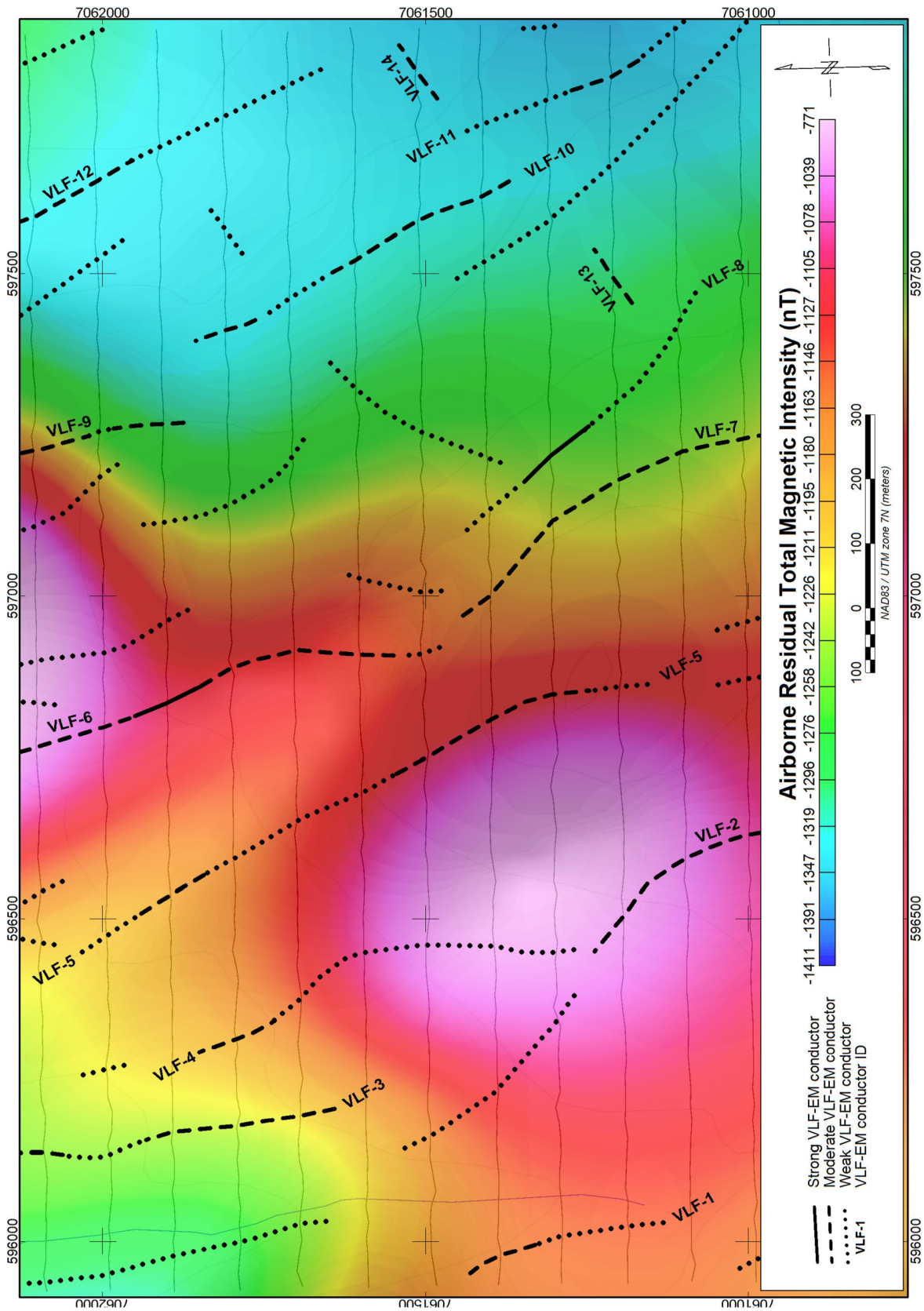
The area is characterized by two magnetic anomalies: one in the middle of the north edge of the survey grid, and the other in its south-west quadrant. The western half of the survey block is overall more magnetic than the eastern half. Areas with strong magnetic signal could relate to mafic/ultra-mafic rocks or to sulphides rich zones, while areas with depreciated magnetic background are more likely to relate to sedimentary rocks. The central part of the surveyed area could therefore represent an important contact zone generally trending N-S. The magnetic grain seems to indicate a general NNW-SSE trend of the geology, but this is possibly biased by the airborne survey lines oriented N048.

Given the low resolution of the available magnetic data (500 m line spacing), these data should be regarded as regional information only and are of limited use for direct local targeting since anomalies are not well defined. For the same reasons, definition of local faulting structures is impossible based on these magnetic data.

Table 2: Residual Total Magnetic Intensity statistics

Statistic	TMI (nT)
Minimum	-1411
Maximum	-771
Median	-1210
Mean	-1209
Standard Deviation	111

Figure 5: Airborne Residual Total Magnetic Intensity and geophysical interpretation





## VLF-EM data

VLF-EM anomalies have been identified by looking at both the in-phase and out-of-phase components for typical cross-over patterns, in conjunction with the Fraser-filtered in-phase contours, which aim at making the cross-over detection easier. The Fraser-filtered data are shown on Figure 6 for the NPM Hawaii antenna and on Figure 7 for the NLK Seattle antenna. The results are generally similar for both antennae in most areas (confirming that the results are of good quality), except for conductive features that are rather oriented WNW-ESE (poorly coupled to Hawaii antenna) or NE-SW (poorly coupled to Seattle antenna), which is expected when coupling between antennae used is at a high angle such as in this case. Since the results from the Seattle antenna appear less disturbed and more continuous, it tends to show that conductors found in the area are mostly trending NW-SE to NNW-SSE. The interpretation of conductive axes has therefore been carried out looking at results for both antennae simultaneously, but with precedence of results of the Seattle antenna over those of the Hawaii antenna.

Interpreted anomalies have been classified as weak (dotted black lines), moderate (dashed black lines) and strong (continuous black lines) based on the amplitude of the vertical components and the out-of-phase signal behaviour relative to the in-phase signal. For instance, strong conductors will generate an out-of-phase response that is opposite in sign to the in-phase component (reversed cross-over). Among the anomalies that have been outlined on the interpretation products, the few that were stronger and appearing related to possible mineralisation were identified with an ID number starting with the 'VLF' prefix. Based on the strength of the VLF-EM conductor, its continuity over several lines or its association to a magnetic anomaly, a priority number (1 being prioritized) has been given to each VLF-EM conductor axis in order to guide follow-up efforts. This information, together with the approximate strike length, the magnetic signature association and some comments for each conductive axis, are listed in Table 3. Out of the 14 VLF-EM conductors identified in the survey area, 1 is deemed of first priority, 8 of second priority and 5 of third priority.

It is important to mention that strong topographic features are known to affect the VLF-EM results (Nabighian, 1991). For instance, prominent ridges will cause a response typical of a conductor, while deep valleys will cause a reversed anomaly. However, these effects are dependent on the resistivity of the ground and cannot be corrected for since this parameter is unknown a priori. In the Bishop Property, it is possible that the NNW-SSE gentle ridge associated to the VLF-5 axis is contributing, at least partly, to generate this anomaly. This being said, it is also possible that a bedrock conductor is running parallel to this subtle ridge. Figure 8 shows the Digital Elevation Model (DEM) data together with the VLF-EM interpretation.

The interpreted VLF axes are mostly trending from NW-SE to NNW-SSE, but a few marginal ones are possibly trending N-S to NE-SW. In some cases, a few conductors appear to show correlation to the magnetic data locally, but, again, this is difficult to confirm given the weak resolution of the magnetic data. In some other cases, in particular in the postulated N-S contact zone found in the middle of the grid, conductive axes rather appear to highlight discontinuities in the magnetic signal. This suggests that some conductors may actually be associated to faults, fractures or shear zones. The overburden troughs, clay minerals or mineralization often found in association with fault structures can explain their conductive nature and hence their response to the VLF-EM method. Such structural features are known to enable the circulation and precipitation of mineralizing fluids. Consequently, VLF-EM axes that appear to denote such type of structure should definitely be investigated further.

Table 3: Interpreted VLF-EM anomalies

ID	Length (m)	Priority	Magnetic association	Comments
VLF-1	200	3	None	Weak to moderate VLF-EM conductor. Open to W.
VLF-2	200	2	Near strong high	Weak to moderate VLF-EM conductor. Possible continuity of VLF-4 conductor. Open to S.
VLF-3	400	2	None	Weak to moderate VLF-EM conductor. Open to N.
VLF-4	500	2	Near strong high	Weak to moderate VLF-EM conductor. Possible continuity of VLF-2 conductor.
VLF-5	800	2	Between two magnetic highs	Weak to moderate VLF-EM conductor. Associated to topographic ridge.
VLF-6	600	1	Near strong high	Weak to strong VLF-EM conductor. Possible continuity of VLF-7 conductor. Open to N.
VLF-7	400	2	At contact between high and low	Weak to moderate VLF-EM conductor. Possible continuity of VLF-6 conductor. Open to S.
VLF-8	300	2	At contact between high and low	Weak to strong VLF-EM conductor.
VLF-9	200	2	At contact between high and low	Moderate VLF-EM conductor. Possible continuity of VLF-10 conductor. Open to N.
VLF-10	400	3	Moderate low	Weak to moderate VLF-EM conductor. Possible continuity of VLF-9 and 11 conductors.
VLF-11	300	3	Moderate low	Weak to moderate VLF-EM conductor. Possible continuity of VLF-10 conductor. Open to E.
VLF-12	400	2	Moderate low	Weak to moderate VLF-EM conductor. Open to N.
VLF-13	N/A	3	None	Moderate VLF-EM conductor. Only seen on Hawaii antenna data.
VLF-14	N/A	3	None	Moderate VLF-EM conductor. Only seen on Hawaii antenna data.

Figure 6: Hawaii Fraser filtered in-phase component and geophysical interpretation

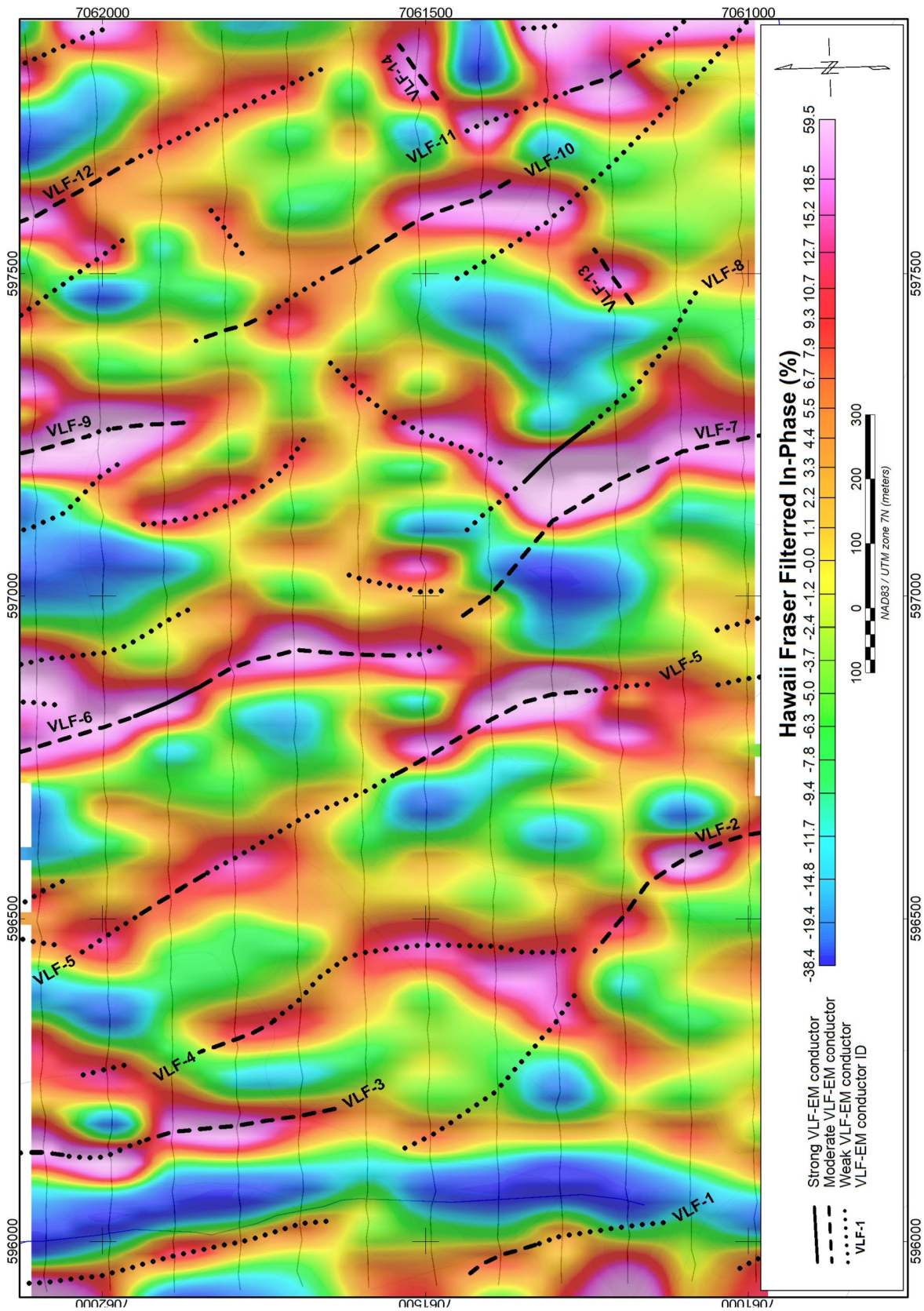


Figure 7: Seattle Fraser filtered in-phase component and geophysical interpretation

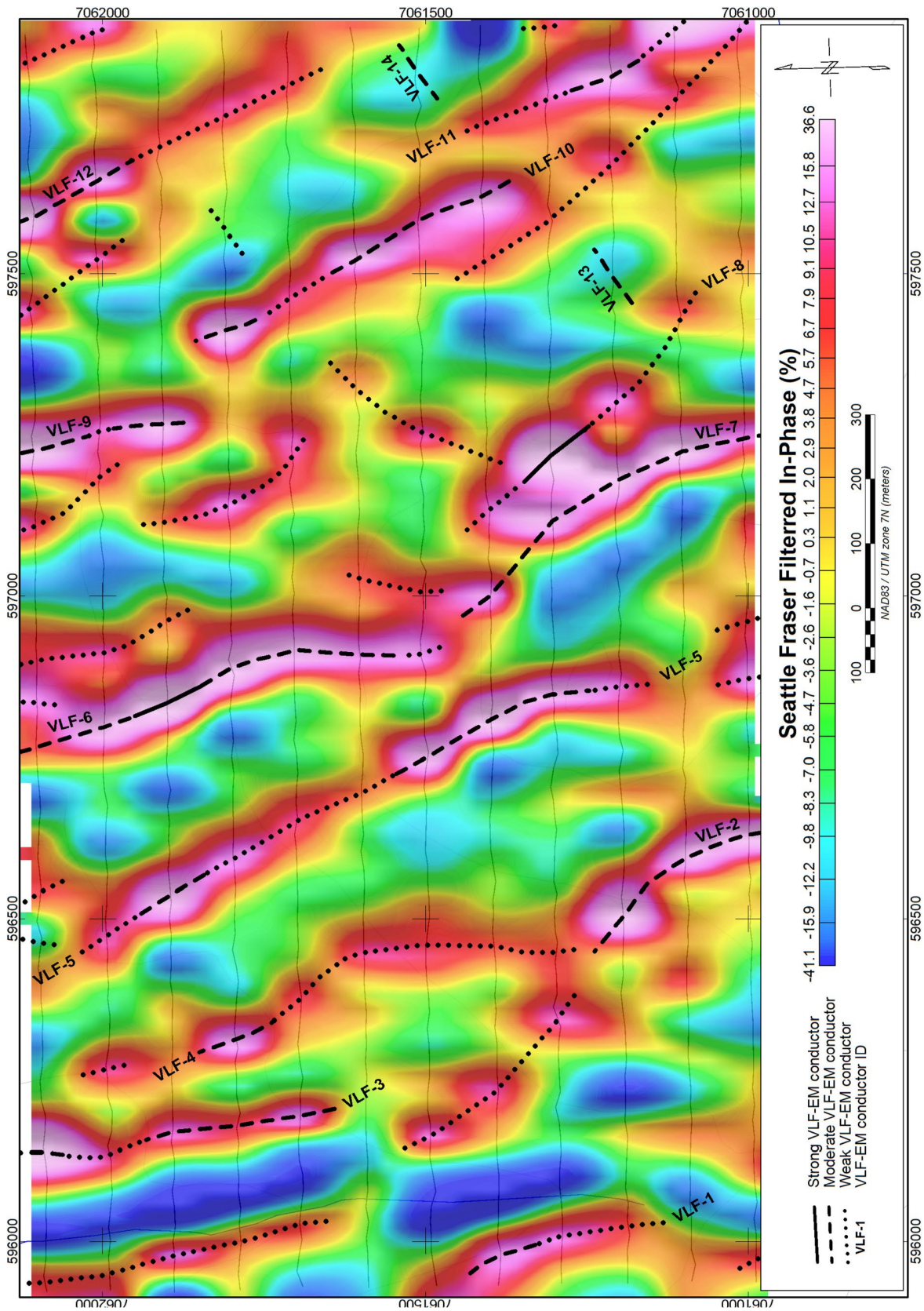
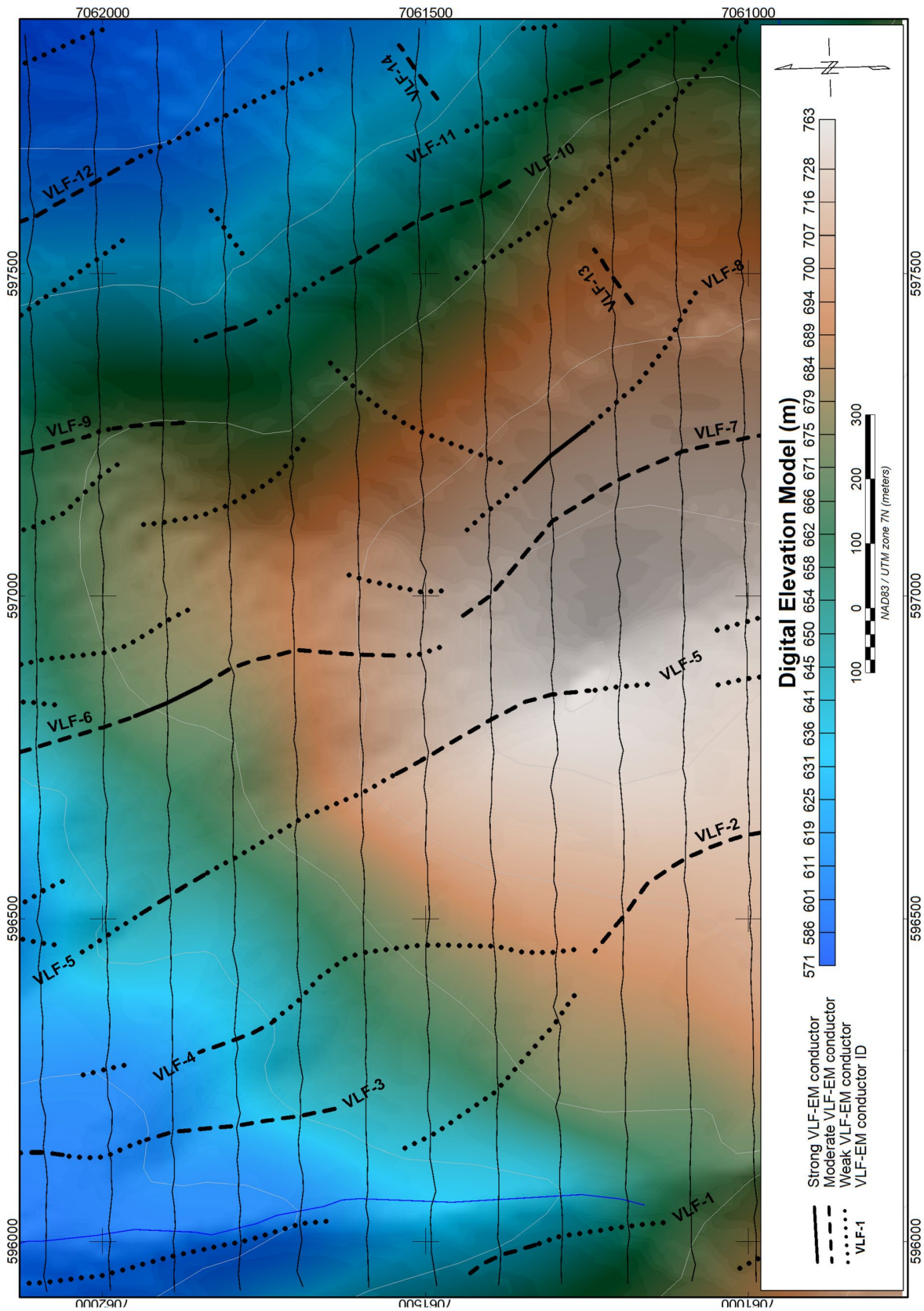


Figure 8: Digital elevation model and geophysical interpretation



## Recommendations

It is worth mentioning that the penetration of the VLF-EM method is relatively weak compared to other methods. It is estimated in the order of 40-60 m in resistive areas, but can go down to 4-5 m in very conductive environments. However, this limitation is greatly compensated for by the limited efforts and expenses that must be deployed to acquire the results, which makes it a very efficient reconnaissance tool. The limited penetration depth of the method also implies that simple ground prospecting and stripping techniques are usually sufficient to perform follow-up and determine the nature of the sources.

It is therefore recommended to investigate the outlined conductive anomalies by basic prospecting methods, using the provided interpretation map and table as a guide to prioritize this reconnaissance effort. Areas where these VLF-EM conductors seem to cross-cut the magnetic signal could relate to fault structures and should be paid particular attention. Prioritization of targets should be revisited in light of other geoscience information such as geochemical and geological data.

Following a preliminary prospecting phase, sources identified as promising for mineralization discoveries could then be the object of localized resistivity/IP surveys that can be efficiently used to penetrate the ground at further depth and better image the geometry of conductive and chargeable sources in preparation for drilling. This method has the advantage of responding to disseminated sulphide occurrences, to which gold mineralization is often associated.

## VI. CONCLUSION

The VLF-EM survey conducted in August 2016 by Breakaway Exploration Management on Taku Gold's Bishop Property was successful in better characterising the physical properties distribution within the area, which could support a better understanding of the geological setting. In particular, several conductors were interpreted based on the results. Some of the VLF-EM conductors interpreted were identified as potential exploration targets and prioritized for further investigation. The survey parameters used and the general data quality of the survey were adequate to meet these objectives.

Respectfully submitted,



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Joël Dubé, P.Eng.  
May 23<sup>rd</sup> 2017

## VII. REFERENCES

Canadian Aeromagnetic Data Base (2017), Airborne Geophysics Section, GSC – Central Canada Division, Geological Survey of Canada, Earth Sciences Sector, Natural Resources Canada

Nabighian, M.N, 1991. *Electromagnetic Methods in Applied Geophysics, Vol 2*; Society of Exploration Geophysicists, p. 611

## VIII. Statement of Qualifications

Joël Dubé  
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I, Joël Dubé, P.Eng., do hereby certify that:

1. I am a Professional Engineer specialized in geophysics, President of Dynamic Discovery Geoscience Ltd, registered in Canada.
2. I earned a Bachelor of Engineering in Geological Engineering in 1999 from the École Polytechnique de Montréal.
3. I am an Engineer registered with the Ordre des Ingénieurs du Québec, No. 122937, and a Professional Engineer with Professional Engineers Ontario, No. 100194954 (CofA No. 100219617) and with the Association of Professional Engineers and Geoscientists of New Brunswick, No. L5202 (CofA No. F1853).
4. I have practised my profession for 18 years in exploration geophysics.
5. I have not received and do not expect to receive a direct or indirect interest in the properties covered by this report.

Dated this 23<sup>rd</sup> of May, 2017



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Joël Dubé, P.Eng. #100194954



**IX. Appendix A – Bishop Property mineral claims covered**

NTS Map Sheet	Grant Number	Mineral Claim Tag
115O11	MB 2	YE27702
115O11	MB 4	YE27704
115O11	MB 6	YE27706
115O11	MB 7	YE27707
115O11	MB 8	YE27708
115O11	MB 9	YE27709
115O11	MB 10	YE27710
115O11	MB 11	YE27711
115O11	MB 12	YE27712
115O11	MB 13	YE27713
115O11	MB 14	YE27714
115O11	MB 15	YE27715
115O11	MB 16	YE27716
115O11	MB 17	YE27717
115O11	MB 18	YE27718

## Appendix B - Statement of Work Expenditures

<b>Geophysics (VLF-EM Survey)</b>					
<b>Breakaway Expl. Mgmt. Inc. # 1127</b>			<b>Rate</b>		<b>Amount</b>
5250	Wages and Contract				
	M Huber		9 days @	\$ 450.00	\$4,050.00
	J Judson		7 days @	\$ 450.00	\$3,150.00
5251	F&L				\$7,200.00
	M Huber Expense		1 item @	776.09	\$ 776.09
					\$776.09
5252	Supplies		1 item @	\$127.97	\$ 127.97
					\$127.97
5253	Transport				
	Truck Rental		1197 km @	\$0.50	\$598.50
	M Huber Expense		1 item	\$10.71	\$10.71
	J Judson Expense		1 item	\$78.00	\$78.00
	AFD Expense		1 item	\$310.00	\$310.00
					\$997.21
5254	Rentals				
	VLF		6 days @	\$15.00	\$90.00
	FM Radios		6 days @	\$5.00	\$30.00
	Ipaq GPS		6 days @	\$15.00	\$90.00
	Sat phone		5 days @	\$15.00	\$75.00
	Camp		5 days @	\$75.00	\$375.00
					\$660.00
<b>Dynamic Dscovery #2017-247</b>					
5255	Reports, drafting Maps etc.				\$2,690.63
				<b>Total</b>	<b>\$12,451.90</b>
<b>Daily Journals</b>					
	<b>Date</b>	<b>Personnel</b>	<b>Activity</b>		
	12/Aug/16	Marty	Prepare grids, maps, TM files		
	13/Aug/16	Marty Josh	Marty Josh -Drive Whitehorse to Dawson		
	14/Aug/16	Marty Josh	Groceries etc, drive to Sulphur, set up camp		
	15/Aug/16	Marty Josh	Survey		
	16/Aug/16	Marty Josh	Survey		
	17/Aug/16	Marty Josh	Survey		
	18/Aug/16	Marty Josh	Pack up camp, drive to Dawson		
	19/Aug/16	Marty Josh	Drive to Whitehorse		
	7/Sep/16	Marty	Download data, compile for Joel Dube		