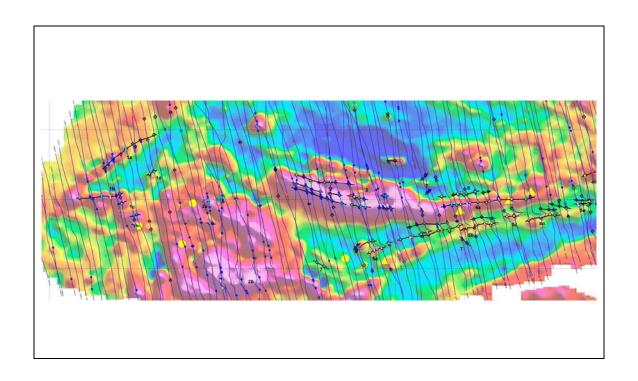
# **Exploration Drill Site Recommendations**

for the

# **Farwell Property near Wawa Ontario**

on behalf of

# **Bold Ventures Inc**



# **REPORT BY**

SCOTT HOGG & ASSOCIATES LTD





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## 1 INTRODUCTION

Bold Ventures Inc. is exploring for economic deposits of gold and base metals in an area designated the Farwell Property near Wawa Ontario. A helicopter magnetic and electromagnetic survey was carried out on behalf of the Ontario Geologic Survey by Fugro Airborne Surveys Dighem division, Geophysical Data Set 1009. A report titled Geophysical Review of a Helicopter Magnetic and Electromagnetic Survey over the Farwell Property near Wawa Ontario on behalf of Bold Ventures Inc was submitted in July, 2020. Subsequently an airborne VTEM electromagnetic survey was carried out by Geotech in 2022, project GL210203. During the summer of 2022, Scott Hogg & Associates were provided with a collection of reports including geological and drill hole information and compilations. A review of the above sources of information has been carried out and suggestions for drill hole investigations are the subject of this report.

## 2 AIRBORNE GEOPHYSICAL SURVEYS

## Dighem 1988

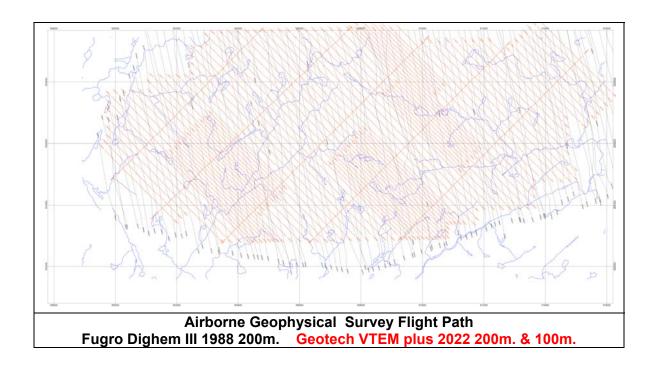
A DIGHEMIII electromagnetic/magnetic survey was flown for the Ontario Geological Survey from April 1987 to January 1988. The survey coverage consisted of 20,224 line-km flown over eleven blocks in the Wawa area of Ontario. Flight lines were flown with a line separation of 200 m. The survey utilized the DIGHEMIII electromagnetic system. Ancillary equipment consisted of a cesium magnetometer, radio altimeter, VHS video camera, analog and digital recorders, and an electronic range-range navigation system.

DIGHEM III HEM ( Helicopter Electromagnetic) system parameters

Coil Orientation	Frequency (Nominal)	Tx/Rx separation
Coaxial	900 Hz	8 m
Coplanar	900 Hz	8 m
Coplanar	7200 Hz	8 m

## Geotech VTEM 2022

The VTEM plus system recorded 43 time gate channels at an average terrain clearance of 50m. The line spacing was 200m, in-filled in part to 100m. The system included a horizontal magetic gradiometer, radar altimeter and GPS navigation system. In addition to a profile database a suite of grids and maps were provided that included magnetic total field with derivative products as well the VTEM dB/dt calculated time constant Tau.

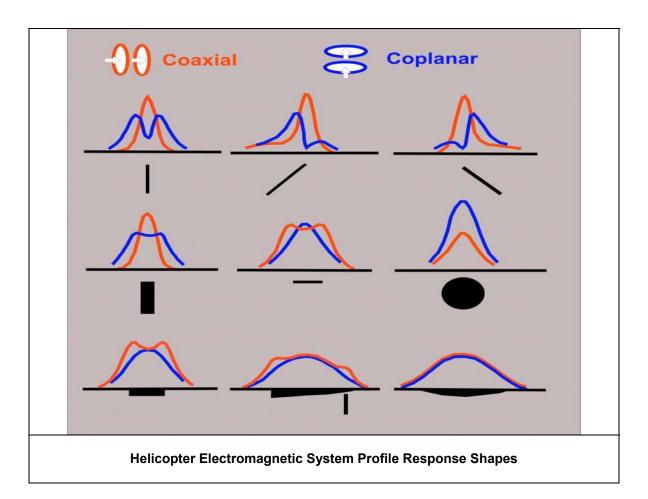


## 3 ELECTROMAGNETIC SURVEY RESPONSES

Geometrical information about the geologic conductor can often be interpreted from the profile shape of the anomaly. The change in shape is primarily related to the change in inductive coupling among the transmitter, the target, and the receiver.

The accompanying figure shows a selection of HEM response profile shapes from nine idealized targets. The response profile shape of the Dighem frequency domain system and the Geotech VTEM time domain system have significant similarities. The "coplanar" configuration consists of a vertical axis transmitter and receiver coil. In the case of the VTEM system the coils are superimposed. In the case of the Dighem system they are laterally displaced but remain coplanar. The "coaxial" designation is unique to the Dighem style system and represents a transmitter and receiver coil aligned in the direction of flight. A horizontal axis transmitter is not provided with the VTEM system and the horizontal axis receiver of the VTEM system with a vertical transmitter is not a substitute.

In the accompanying diagram the blue profile represents the conventional z axis response of the VTEM system and the "coplanar" response of the Dighem system. Over relatively narrow, steeply dipping conductors a null is evident with a more pronounced side-lobe on the down-dip side. With increasing horizontal width the null becomes less pronounced and eventually disappears over wide and/or massive conductive zones. The red profile represents the coaxial response of the Dighem system and has no parallel on the VTEM system. In the case of narrow steeply dipping conductor the response will peak over the conductor and corroborate the coplanar null as an indication of a thin steeply dipping source.



The interpretation of the Dighem survey was based on a profile response shape analysis that identified locations where a steeply dipping source was interpreted. The same procedure was carried out for the new VTEM survey. The location, along the flight lines, of these anomalies was indicated by a symbol. Where a response could be traced from line to line a conductor axis was traced.

Profile maps from the VTEM and Dighem systems are very comparable in terms of identifying steeply dipping conductor axes. A close correspondence between individual anomalies and conductor axes is evident; however, there is often a northern displacement of about 50 m. of the Dighem detail relative to the VTEM detail. This positional discrepancy can be attributed to the Dighem survey that predated the accuracy provided by GPS technology.

The conductance (mhos) of a Dighem anomaly was estimated by comparison to a modelled vertical, thin conductive sheet. In the case of the VTEM survey, the time constant Tau (msec) was calculated as a continuous profile. Increasing values of both modelled conductance (mhos) and Tau (msec) reflect increasing conductivity and/or thickness of the source.

The conductance (or Tau) estimate is a relative guide for response comparison. The higher values indicate that a significant fraction of the electrical conduction is electronic rather than electrolytic in nature. Materials that conduct electronically are limited to

certain metallic sulphides and to graphite. High conductance anomalies are generally limited to massive sulphides or graphites.

Sulphide minerals, with the exception of such ore minerals as sphalerite, cinnabar and stibnite, are good conductors. Sulphides may occur in a disseminated manner that inhibits electrical conduction through the rock mass. In this case the apparent conductance can seriously underrate the quality of the conductor in geological terms. In a similar sense the relatively non-conducting sulphide minerals, noted above, may be present in significant concentrations in association with minor conductive sulphides, and the electromagnetic response will only relate to the minor associated mineralization. Indicated conductance is also of little direct significance for the identification of gold mineralization. Although gold is highly conductive, it would not be expected to exist in sufficient quantity to create a recognizable anomaly. Minor accessory sulphide mineralization may however provide a useful indirect indication.

In summary, the estimated conductance of a conductor can provide a relatively positive identification of significant sulphide or graphite mineralization. A moderate to low conductance value does not rule out the possibility of significant economic mineralization.

## **Mineral Properties**

		Magnetic Susceptibility emu	Conductance mhos/m
Pyrrhotite	Fe <sub>n</sub> S <sub>m</sub>	125 x 10 <sup>3</sup>	30000
Magnetite	Fe <sub>3</sub> O <sub>4</sub>	500 x 10 <sup>3</sup>	3
Ilmenite	FeTiO <sub>3</sub>	150 x 10 <sup>3</sup>	1
Chalcopyite	CuFeS <sub>2</sub>	32	2000
Sphalerite	ZnS	60	0.01
Cassiterite	SnO <sub>2</sub>	90	5
Pyrite	FeS <sub>2</sub>	130	100
Hematite	Fe <sub>2</sub> O <sub>3</sub>	550	0.1
Chromite	FeCr <sub>2</sub> O <sub>4</sub>	600	
Galena	PbS		10
Graphite	С		5000
Arsenopyrite	FeAsS	240	3000

## 4 HISTORIC DRILLING INFORMATION

Numerous geological reports described exploration programs carried out by various companies in the 1980's. The primary focus was gold but copper mineralization was identified at a few sites. Airborne geophysics, followed by ground magnetic and VLF-EM surveys were often reported as contributing to drill site selection. It was hoped that such geophysical data, together with drill log information could be used to explain the source of conductive anomalies in the new surveys and help prioritize anomalies for ongoing investigation. Unfortunately the actual ground survey data was not well documented and drill locations and associated logs incomplete. A compilation of historic exploration drilling, in spreadsheet format, was provided by David Powers. The hole number, collar location, azimuth, dip, length were documented and included assay highlights when available. A condensed version of the file "2022-05-25 909 FARWELL DDH.xlsx" is included in Appendix A of this report. The hole locations were plotted on the airborne survey maps for cross reference. The drilling was carried out before GPS and like the Dighem survey the coordinates are of limited accuracy.

# **Western Region**

In the western region of the Farwell property drill programs were carried out by:

Koala Resources Ltd Holes Koala-1 to Koala-10

Captain Consolidated Resources Ltd. Holes H1 to H7

Kam Creed Mines Ltd & Koala Resources Ltd. Holes GBC-K-15,17,19

The gold exploration work by the above companies did not encounter grades that encouraged further pursuit at the time. It is unclear to the author whether any real gold or copper prospects were found. A correlation of the drill holes and airborne geophysical results present ambiguities more than solid information.

The following drill holes had assay results for gold or copper but the drill logs were not available.

H-4, had an assay of 12.8 g/t over 1.5 m but the value was uncertain. The drill site does not correlate with any airborne conductor axis.

Koala-3 had an assay indicating 130 ppm Cu and 120 ppm Ni. The hole is in the vicinity of a VTEM and Fugro conductor axis, but is not believed to have tested it.

GBC-K-17 had an assay of 3690 ppm Cu; however there is no conductor evident in either the Dighem or VTEM survey.

The following airborne electromagnetic conductors appear to be the associated with drill holes that have no recorded mineralization of interest. Perhaps pyrite or pyrrhotite was present, that would explain the conductor, but not noted since the focus was on gold assays.

Conductor 1b appears to be the target of Koala-5

Conductor 1d appears to be the target of Koala-1 and H-1

#### **Bibis Lake Area**

International Bibis Tin Mines drilled holes PK-1 to PK-7 and identified a copper mineralization zone striking N60W with a steep N dip. The grade reached 1.47% Cu over 5.2 m. Drill logs were available for revue.

The Dighem survey did not display any significant response over the body defined by drilling. It is possible that the Dighem flight lines were too far to either side to detect it. The VTEM lines were closer to the body and a response was noted on Line 1375 that indicated a north dip. On line 1380, the next line to the west, there is perhaps a subtle response that could reflect a weak response from a source striking parallel to the line that would result from minimal transmitted field coupling with the conductor. The axis direction near parallel to the flight line and a dip away from the transmitter would minimize primary field interaction with the body.

The conductors immediately to the northeast were drilled by Villeneuve Resources and a drill report with logs indicated significant pyrite and pyrrhotite up to 25% on holes MO-88-01, MO-88-02 and MO-88-03. Holes MO-88-04 and MO-88-05 had minor mineralization and do not appear to target an identified airborne survey conductor.

# Eastern Region

The K-88 series of drill holes, by Tundra Gold Mines Ltd. often seem to be associated with airborne survey conductors. In the drill hole database minor gold of 0.65 and 0.45 ppm were reported for hole K-88-3 and K-88-4 but for holes K-88-1&2 and K-88-5,6&7, no values were noted. No drill logs were available that might confirm whether the hole intersected mineralization that could be the source of an associated airborne geophysical conductor. The possible hole to conductor relationships, east of the Bibis zone, are the following.

Drill Hole	Airborne Geophysical Conductor
K-88-01	Between the 4a and 5b conducive bands
K-88-02	Possible intersection of conductor 6
K-88-03	Possible intersection of conductor 6
K-88-04	Possible intersection of conductor 6
K-88-05	North of main 5b conductive bands
K-88-06	North of main 5b conductive bands
K-88-07	North of main 5b conductive bands

The KT-88 series of drill holes, by Alotta Resouces Ltd. and AL-79 series by Noranda Exploration Company are focused in the vicinity of conductor 4b. In the drill hole database minor gold of 0.69 ppm was reported for hole KT-88-11. No drill logs were available that might confirm whether the hole intersected mineralization that could be the source of an associated airborne geophysical conductor. The possible drill hole to conductor relationships are the following.

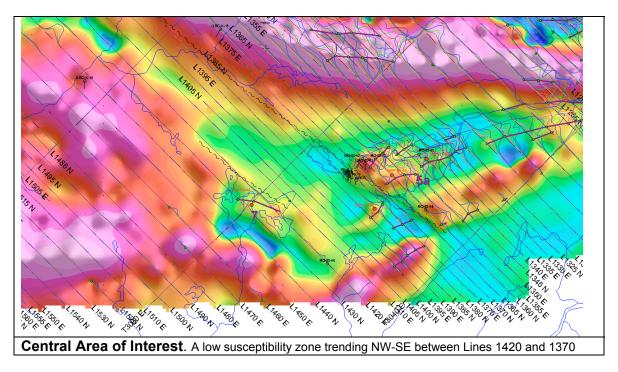
Drill Hole	Airborne Geophysical Conductor
KT-88-01	East of the project area on possible extension of 4b
KT-88-02	East of the project area on possible extension of 4b
KT-88-03	East of the project area on possible extension of 4b
KT-88-04	East of the project area on possible extension of 4b
KT-88-05	South of the 4b conductor axis
KT-88-06	East of the project area on possible extension of 4b
KT-88-07	South of the 4b conductor axis
KT-88-08	East of the project area on possible extension of 4b
KT-88-09	East of the project area on possible extension of 4b
KT-88-10	North of the 4b conductor axis
KT-88-11	East of the project area on possible extension of 4b
KT-88-12	North of the 4b conductor axis
AL-79-1	South of the 4b conductor axis
AL-79-2	South of the 4b conductor axis

The K series of drill holes, K-1 to K-19, by Tundra Gold Mines Ltd were focused on an area just to the east of the project area. In hole K-5 a gold grade of 13.37 ppm was reported. The holes seem to be on an extension of conductor axis 4b

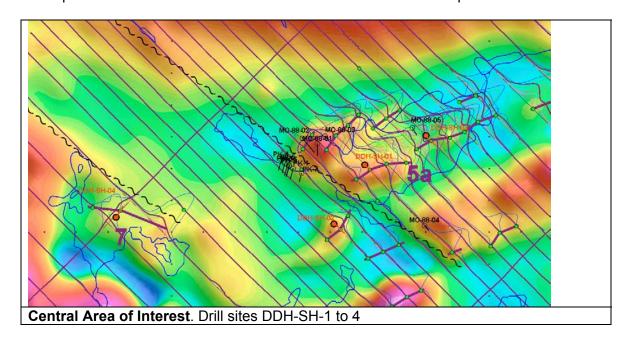
Two holes within the Farwell project had both copper and gold indications. **K-20** and **K-21** at the same collar location reported 2280 Cu ppm and 0.34 Au ppm. No drill logs were available. The holes appear to target the eastern end of conductor axis 4a.

# 5 DRILL TARGET SUGGESTIONS

The first area of interest is in the central part of the project area as illustrated in the following map. A zone of lower magnetic susceptibility trends in a NW-SE direction and is bounded roughly by line 1420 on the west and 1370 to the east. The zone margins are parallel to the flight line direction an are thus poorly defined; however, fault contacts have been interpreted at several locations. The Bibis copper mineralization occurs at the eastern contact.

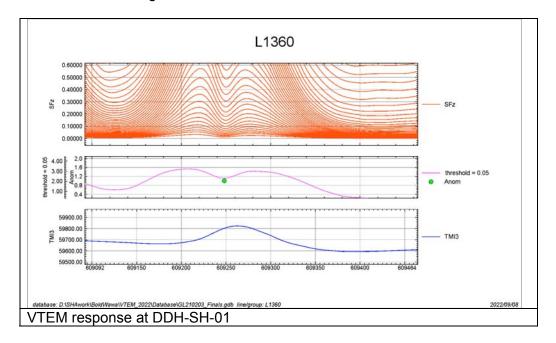


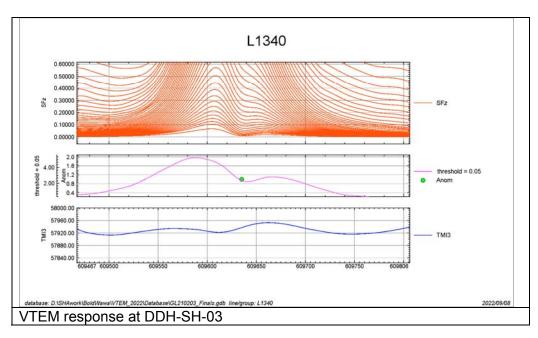
Four possible drill sites in this central area are illustrated in the map below.



## DDH-SH-01 and DDH-SH-03

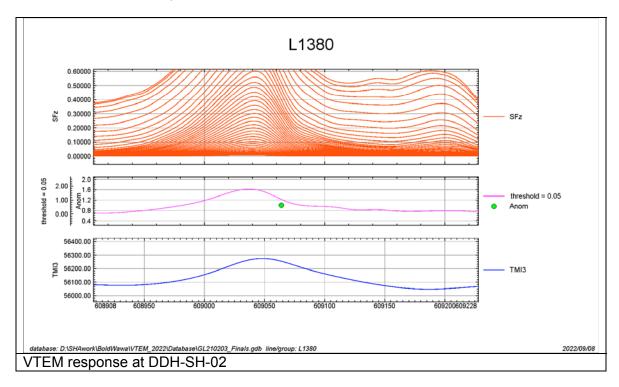
These site are located in the vicinity of the Bibis body which was defined by the PK series of drill holes and is aligned in a N60W direction. The conductors located to the northeast of the body are aligned SW-NE and are believed to be associated with massive pyrite and pyrrhotite encountered in the Villeneuve Resources MO-88-01, MO-88-02 and MO-88-03. The site DDH-SH-01 provides for a test of the conductor to the east of Bibis on Line 1360 that is more conductive and less magnetic than the Villeneuve target, factors that might reflect chalcopyrite displacing pyrrhotite. DDH-SH-03 is located further east on another segment of the conductor axis. The magnetic signature is even lower and the Tau greater.





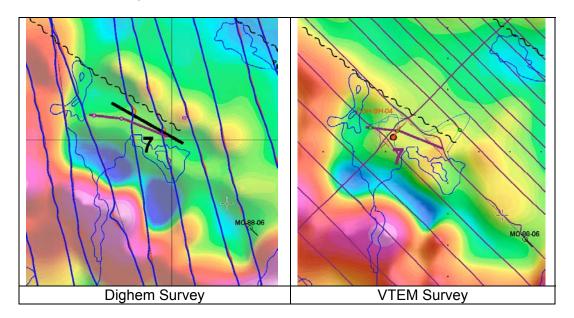
# DDH-SH-02

The target of DDH-SH\_02 lies to the southeast of the Bibis body and within the central zone of lower magnetic susceptibility. The Tau and associated magnetic response are modest but its proximity to Bibis adds interest.

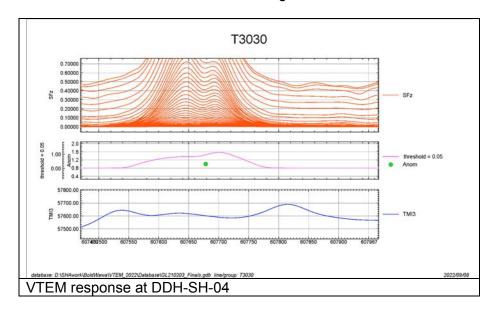


## DDH-SH-04

The target of this drill site is conductor 7, a weak electromagnetic signature aligned in a NW-SE direction, and falling within the central zone of low magnetic susceptibility. The definition of the magnetic and electromagnetic response is clearer in the Dighem survey with a slightly different line direction. The map below compares the survey results but the location of the Dighem data is believed to be displaced as noted earlier.

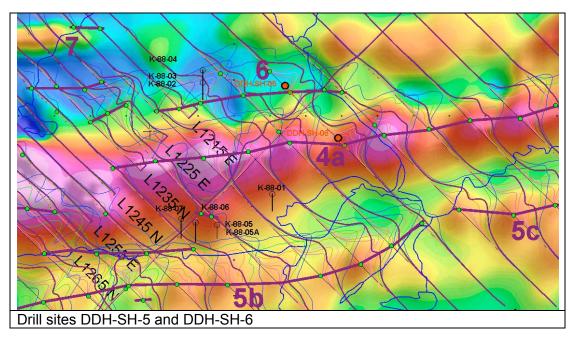


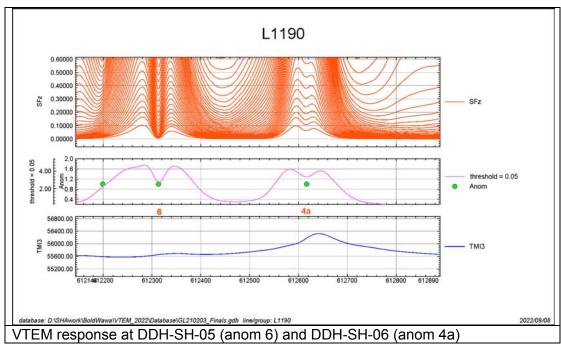
The VTEM survey results are most effectively defined on the tie line T3030. The response profile indicates a steeply dipping conductor with a Tau of about 1 msec. The weak magnetic lineaments that bound the conductor to the SW and NE are evident in the profile presentation. This is the only anomaly identified that presents a weak linear conductor, in a magnetic low bounded by parallel weakly magnetic linears; a combination considered favourable for gold association.



## DDH-SH-05 and DDH-SH-06

These drill sites lie north of Brown Lake with copper and gold results to either side. The anomalies are on Line 1190 that appears to follow a slight dislocation of both magnetic and electromagnetic axes 4a and 5b/5c. The calculated Tau is above 4 msec for both responses with a notably reduced magnetic response associated with DDH-SH\_5, conductor axis 6. At these site there is the potential for both copper and gold mineralization





# 6 ANOMALY AND COLLAR COORDINATES

The electromagnetic anomalies were identified on the Geotech VTEM profiles and indicated on the maps as green circles. The anomaly location is given in UTM coordinates, WGS-84, Zone 16 N. The anomaly location identifies the interpreted surface projection of a steeply dipping conductive source.

A hole location has been calculated based on a 45 degree dip and 40 m set back from the conductor that would intersect a vertical conductor at about 55 m down hole. The hole has been position on the interpreted down dip side of the conductor.

Line	Hole	Target_e	Target_n	<b>Backset</b>	Length	Dip	<b>Azimuth</b>	Collar_e	Collar_n
L1360	1	609248	5334393	40	100	45	135	609220	5334421
L1380	2	609064	5334016	40	100	45	135	609036	5334044
L1340	3	609635	5334573	40	100	45	135	609607	5334601
T3030	4	607678	5334135	40	100	45	30	607658	5334100
L1190-6	5	612313	5336132	40	100	45	135	612285	5336160
L1190-4a	6	612616	5335834	40	100	45	135	612588	5335862

Scott Hogg, P.Eng. President Scott Hogg & Associates Ltd. Toronto September, 2022

# 7 APPENDIX I HISTORIC DRILL TABLE

		> /		/6				<u></u>	<u> </u>	<b>&amp;</b> /
The College of the Co	rio	**************************************	,	Sommons	Sold Sold Sold Sold Sold Sold Sold Sold	W. John W.	Triangle Policy of the Policy	way John John John John John John John John	W. John	
International Bibis Tin Mines	/ <b>&amp;</b> PK-1	608766	5334400	/ 6	9100	<del>/                                    </del>	Tr	NIL	/ <b>Q</b> *	
International Bibis Tin Mines	PK-2	608739	5334416		23000			1412		
International Bibis Tin Mines	PK-3	608712	5334430		13700					
International Bibis Tin Mines	PK-4	608691	5334455		19000					
International Bibis Tin Mines	PK-5 PK-6	608733 608743	5334437 5334422		40200		8.23			
International Bibis Tin Mines International Bibis Tin Mines	PK-6 PK-7	608743	5334422		6800 Tr		7.54			
Koala Resources Ltd.	Koala-1	603016	5336829	NSA			7.54			
Koala Resources Ltd.	Koala-2	603270	5336172	NSA						
Koala Resources Ltd.	Koala-3	602312	5335358		130				120	
Koala Resources Ltd.	Koala-4	602235	5334965					3.77		
Koala Resources Ltd.	Koala-5	601524	5336140	NOA				30.86		
Koala Resources Ltd. Koala Resources Ltd.	Koala-6 Koala-7	602226 603883	5334670 5335696	NSA NSA						
Koala Resources Ltd.	Koala-8	601940	5336552	NSA						
Koala Resources Ltd.	Koala-9	604044	5334496	NSA						
Koala Resources Ltd.	Koala-10	602010	5335001	NSA						
Tundra Gold Mines Ltd.	K-88-01	612214	5335566	NSA						
Tundra Gold Mines Ltd.	K-88-02	611826	5336185	NSA						
Tundra Gold Mines Ltd.	K-88-03	611826	5336185					0.65		
Tundra Gold Mines Ltd.	K-88-04	611826	5336254					0.45		
Tundra Gold Mines Ltd.	K-88-05	611906	5335395 5335395	no assays	•	<del>                                     </del>				
Tundra Gold Mines Ltd. Tundra Gold Mines Ltd.	K-88-05A K-88-06	611906 611786	5335395	no assays	•		+			
Tundra Gold Mines Ltd.  Tundra Gold Mines Ltd.	K-88-07	611707	5335407	no assays	•	<del>                                     </del>				
Villeneuve Resources Ltd.	MO-88-01	608918	5334555	NSA			<u> </u>			
Villeneuve Resources Ltd.	MO-88-02	608824	5334591	NSA						
Villeneuve Resources Ltd.	MO-88-03	608967	5334604				ND	0.69		
Villeneuve Resources Ltd.	MO-88-04	609593	5334041	NSA						
Villeneuve Resources Ltd.	MO-88-05	609516	5334657				2.06	NIL		
Villeneuve Resources Ltd.	MO-88-06	608497	5333437	NOA			1.03	Tr		
Garry B. Carnovale (Kam Creed I	GBC-K-15 GBC-K-17	605791 604457	5335479 5337078	NSA	2600			Nil		
Garry B. Carnovale (Kam Creed I Garry B. Carnovale (Kam Creed I	GBC-K-17 GBC-K-19	607303	5336055	NSA	3690			INII		
Captain Consolidated Resources		602913	5336766	110/1				1.22		
Captain Consolidated Resources	H-2	602067	5335667	NSA						
Captain Consolidated Resources		601985	5335331	NSA						
Captain Consolidated Resources	H-5	604340	5335342					3.84		
Captain Consolidated Resources	H-6	604450	5335329	NSA						
Captain Consolidated Resources	H-8	602881	5335073	NSA						
Captain Consolidated Resources		602980	5335048	NSA				14.06		
Captain Consolidated Resources Captain Consolidated Resources	H-4 H-7	603712 601055	5334690 5333779	NSA	+			14.06		
Tundra Gold Mines Limited	K-1	617872	533779	NOA				2.06		
Tundra Gold Mines Limited	K-2	617847	5337865					1.03		
Tundra Gold Mines Limited	K-3	617833	5337893	NSA						
Tundra Gold Mines Limited	K-4	617680	5337713					6.17		
Tundra Gold Mines Limited	K-5	617661	5337754					13.37		
Tundra Gold Mines Limited	K-6	617815	5337935					5.83		
Tundra Gold Mines Limited	K-7	617642	5337796 5337869	no assays	posted	<del>                                     </del>				
Tundra Gold Mines Limited Tundra Gold Mines Limited	K-8 K-9	617913 617513	5337869	NSA		<del>                                     </del>		1.37		
Tundra Gold Mines Limited Tundra Gold Mines Limited	K-10	617970	5337894	NSA				1.01		
Tundra Gold Mines Limited	K-11	617805	5337814					0.69		
Tundra Gold Mines Limited	K-12	617750	5337785	NSA						
Tundra Gold Mines Limited	K-13	617605	5337736					2.40		
Tundra Gold Mines Limited	K-14	617435	5337668					0.69		
Tundra Gold Mines Limited	K-15	617732	5337825	NC A		<del>                                     </del>		0.69		
Tundra Gold Mines Limited	K-16	617337	5337659 5337609	NSA	-	<del>                                     </del>		1.03		
Tundra Gold Mines Limited Tundra Gold Mines Limited	K-17 K-18	617360 617988	5337609	NSA		<del>                                     </del>		1.03		
Tundra Gold Mines Limited  Tundra Gold Mines Limited	K-18	617266	5337593	,,				1.37		
Tundra Gold Mines Limited	K-20	614077	5336143		2280			0.34		
Tundra Gold Mines Limited	K-21	614077	5336143		1800			0.34		
Noranda Exploration Co. Ltd.	AL-79-1	615527	5336635	NSA						
Noranda Exploration Co. Ltd.	AL-79-2	615570	5336658	NSA						
Alotta Resources Ltd.	KT-88-01	616135	5336754	NSA						
Alotta Resources Ltd.	KT-88-02	615956	5336658	NSA NSA	<del>                                     </del>	<del>                                     </del>				
Alotta Resources Ltd. Alotta Resources Ltd.	KT-88-03 KT-88-04	616091 615919	5336807 5336709	NSA			+			
Alotta Resources Ltd.	KT-88-05	615771	5336616	NSA		<del>                                     </del>				
Alotta Resources Ltd.	KT-88-06	616044	5336751	NSA	1		<u> </u>			
Alotta Resources Ltd.	KT-88-07	615714	5336703	NSA						
Alotta Resources Ltd.	KT-88-08	616178	5336855	NSA						
Alotta Resources Ltd.	KT-88-09	616111	5336973	NSA						
Alotta Resources Ltd.	KT-88-10	615660	5336797	NSA		<b> </b>				
Alotta Resources Ltd.	KT-88-11	616047	5337071	NC A		<del>                                     </del>		0.69		
Alotta Resources Ltd.	KT-88-12	615597	5336920	NSA				l	i .	