

# ALCOR RESOURCES LTD.

(Owner & Operator)

## GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT 29, 1937

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ASSESSMENT REPORT**  
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**29, 1937**

**GEOGRAPHICAL ASSESSMENT REPORT**  
(Event Number 4132937)

on the

**SED MINERAL CLAIM**  
(Tenure 392163)



**Kamloops Mining Division**

**NTS 0921.047**

**Vancouver, B.C.**

**Laurence Sookochoff, P.Eng**

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## **SUMMARY**

Alcor Resources Ltd. owns the 20 unit SED mineral claim located 25 kilometres east of the productive Highland Valley copper-moly porphyry deposits where mineralization was first discovered in 1899. The SED claim is underlain by Nicola volcanic rocks which host small granitic plugs and sills within the area. Exploration carried out in the immediate area of the SED claim since 1972 resulted in the delineation of two correlative anomalous zones of mineralization. The northeast trending "west central zone", located adjacent to the SED claim, is open to the southeast, and trending into the SED claim, based on the anomalous IP results. Mineralization in the zones is reported as up to 700 ppb gold in the soil and up to 7,500 ppb gold in grab samples. Percussion drill results from the testing of the two zones by Texada Mines in 1972 are not available.

Airborne magnetic maps indicate the SED claim to cover a broad magnetic low flanked by sharply increasing magnetic gradients on three sides. The claim is at the intersection of two major structures as indicated by prominent topographical features.

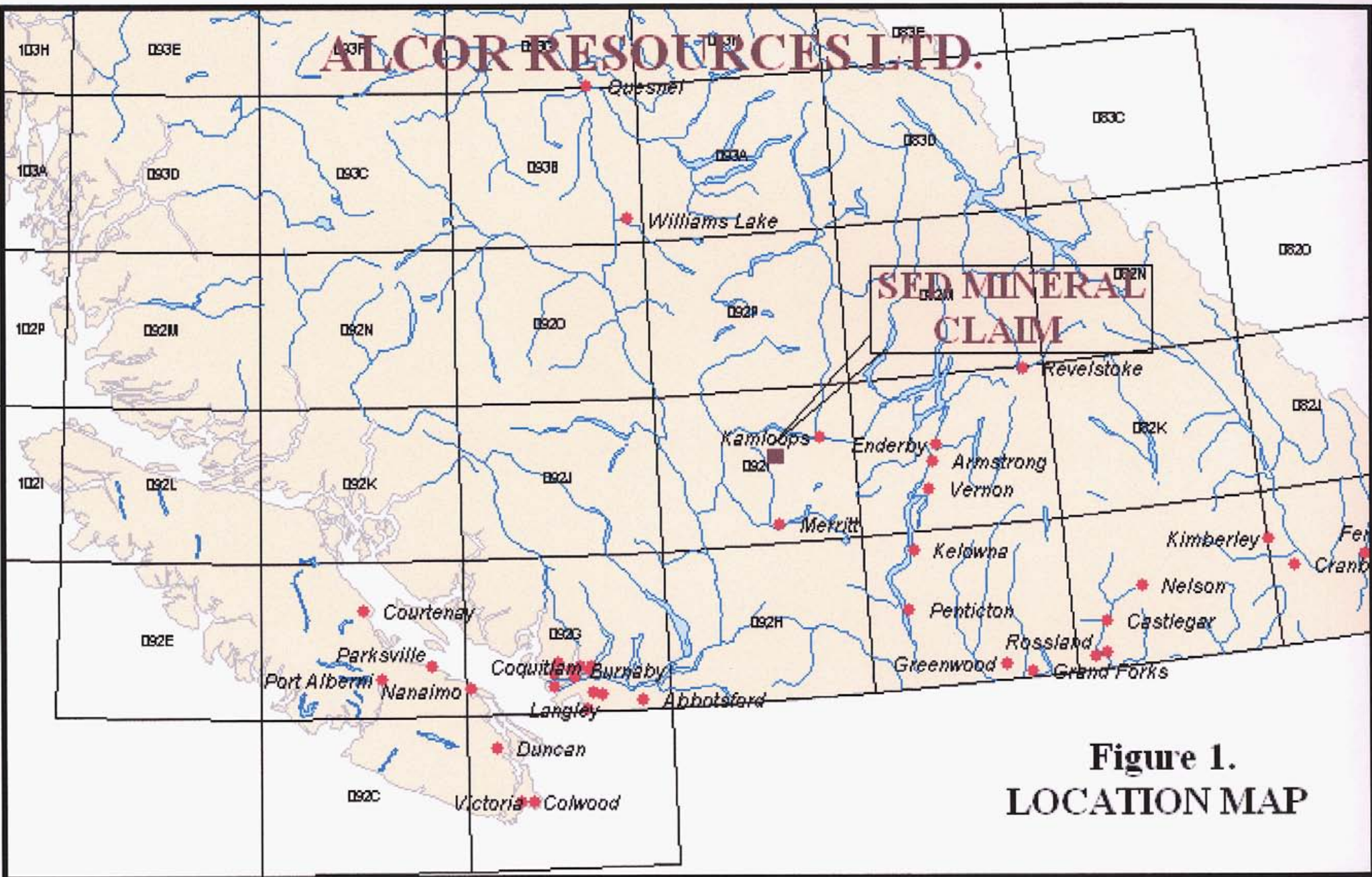
The localized VLF-EM survey completed on the SED mineral claim in July, 2006 resulted in the delineation of indicated zones of structural intersections that may localize potentially economic mineralization.

## **INTRODUCTION & TERMS OF REFERENCE**

During July 2006 an exploration program comprised of localized VLF-EM survey was completed on the SED mineral claim property of Alcor Resources Ltd. The exploration program was a continuation of the geophysical program completed in 2005 by Alcor Resources Ltd. and reported on by the writer's assessment report dated May 18, 2006.

Information for this report was obtained from sources as cited under Selected References and from exploration work as reported on herein and from work the writer has performed on the property.

# ALCOR RESOURCES LTD.



**Figure 1.**  
**LOCATION MAP**

## PROPERTY DESCRIPTION & LOCATION

The property consists of one claim comprised of 20 units. Particulars are as follows:

<u>Claim Name</u>	<u>Tenure No.-</u>	<u>Expiry Date</u>
SED (20 units)	392163	February 17, 2008

The SED claim is registered in the name of the writer and held in trust by the writer for Alcor Resources Ltd.

The property is located between Desmond Lake to the south and the Logan Lake-Kamloops highway to the north, within NTS 0901.047 in the Kamloops Mining Division. The major copper-moly porphyry deposits of the Highland Valley are 20 to 25 km west of the property and the formerly productive Afton deposit is 30 km to the northeast.

## ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

Access to the property is from the No.5 highway to a junction with the Logan Lake highway near Walloper Lake. The Logan Lake highway is taken for approximately seven km westward to the Summit Lake road. The northern boundary of the property is within two km south along the Summit Lake road and passes through the eastern portion of the claim.

The property occupies an area characterized by gently sloping hills with elevations ranging from 1,215 to 1,350 metres above sea level. Open meadows alternate with a dense forest of pine, fir and spruce, with very little or no underbrush. The area has a continental climate characterized by cold winters and hot summers. The property is within the B.C. dry belt.

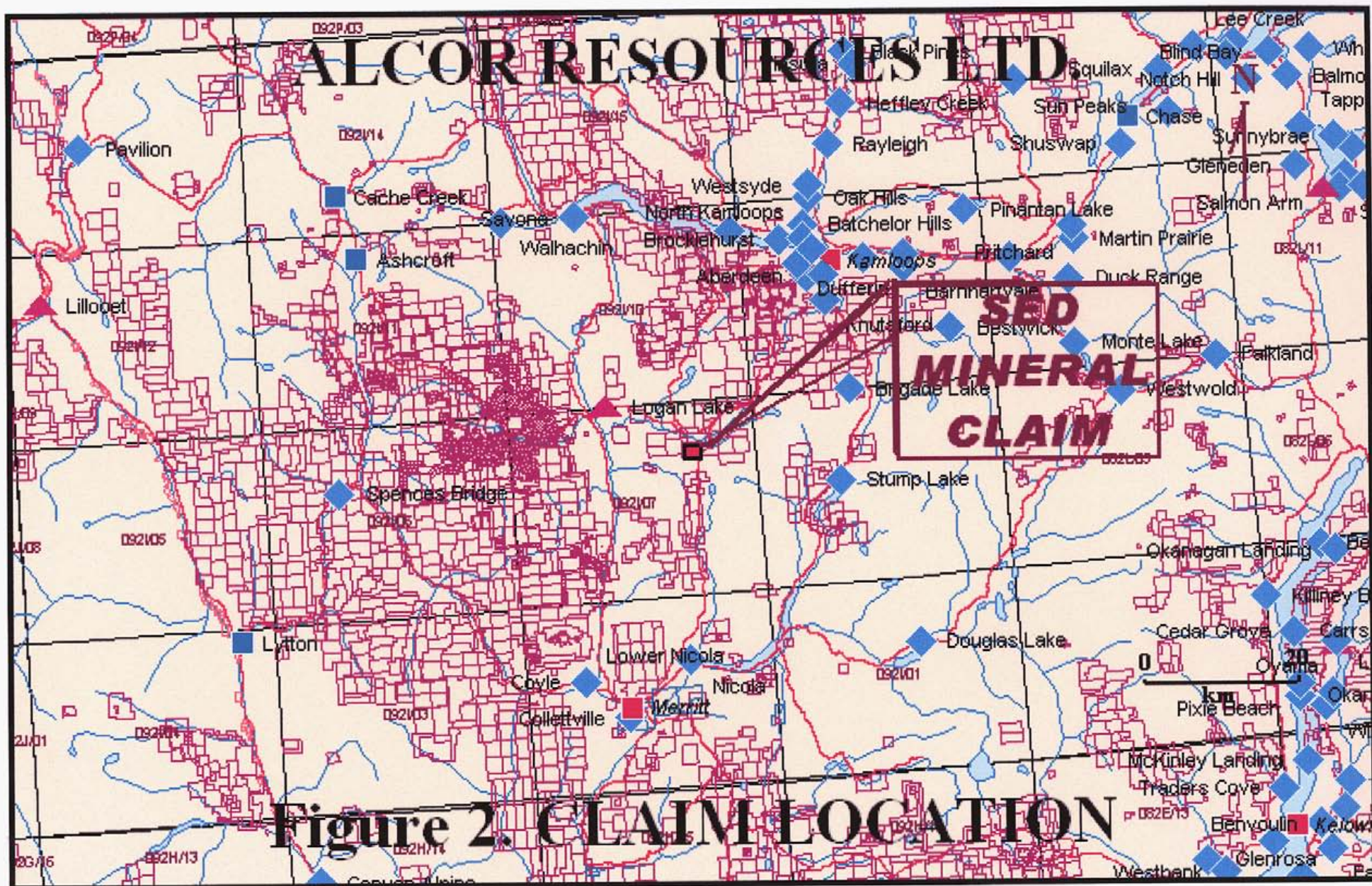
Logan Lake is 20 km west of the property and provides the infrastructure for the Highland Valley mine. Kamloops an historic mining centre 30 km northeast of the property, provided the infrastructure for the Afton Mine. Any of these centres could be a source of experienced and reliable exploration and mining personnel and a supply for most mining related equipment. Kamloops is serviced daily by commercial airline and is a hub for road and rail transportation. Vancouver, a port city on the southwest corner of, and the largest city in the Province of British Columbia, is four hours distant by road and less than one hour by air from Kamloops.

Sufficient water for all phases of the exploration program could be available from many streams and ponds within the confines of the property.

## HISTORY

Historical exploration adjacent to, or on, the ground covered by the SED mineral claim is as follows:







## **HISTORY (cont'd)**

1972 – Texada Mines Ltd. completed a magnetometer survey, a soil geochemical survey, and 1,400 feet of percussion drilling (AR 4,041) on the Plug claims which subsequently lapsed and now is ground covered in part by the northeast corner of the SED mineral claim. The surveys covered a small portion of the property adjacent to the SED mineral claim. The results of the surveys outlined four geochemical anomalies and one magnetometer anomaly.

The prime geochemical anomalies were isolated one station anomalies with values of just over 100 ppm copper. They were designated as the “B” anomaly, located within 50 metres of the northern boundary of the SED mineral claim, and the “A” anomaly located next to Meadow Creek and within 1,000 metres east of the eastern boundary of the SED mineral claim. Multi-station magnetic highs are correlative with the copper anomalous zones. There is no reported information on the results of the percussion drilling.

1972 – Texada Mines Ltd. completed an Induced Potential survey which resulted in the determination of a chargeability anomaly, SP anomaly and a resistivity low correlative with the “B” soil anomaly and sub-correlative with the “A” anomaly.

Percussion drill holes are indicated on the Texada maps; however, there is no information as to their results. The drill holes appear to have tested the correlative “B” and “A” anomalous zones. One drill hole designated as P-72-6 is located on the “B” anomaly at the boundary of the SED mineral claim. The “B” correlative anomaly is indicated to extend for 250 metres into the SED mineral claim.

1982 – Visa Resources Ltd. completed a reconnaissance program of geological mapping, geochemical soil sampling and initial ground magnetic survey over an area that included all the ground of the SED mineral claim. On the accompanying maps to his report, Cukor outlines some trenches, which are indicated to be located on the Texada correlative anomaly “B”. These trenches are also indicated to be located in part on the SED mineral claim. Cukor (1982) concludes that the broad, airborne magnetic low could be easily interpreted as being caused by a small granitic intrusion underlying the Nicola Volcanic rather close to the surface and he states that additional work is warranted.

1983 – Visa Resources Ltd. completed a localized magnetometer survey adjacent to the south of Desmond Lake (AR 11,296). Cukor (1983) reports that the results of the survey were inconclusive.

1985-1988 – Western Resources Technologies Inc. completed geological, geochemical and geophysical surveys on the WRT group of mineral claims located adjacent to the north of the SED mineral claim and on ground now covered by the SED mineral claim. Work was carried out over two localized areas designated as the Rhyolite grid, and the Meadow Creek grid which the SED mineral claim covers a southern portion thereof.

The Meadow Creek grid also includes the West Central and the South Central Plug showings which are the renamed Texada “B” correlative anomaly (West Central Plug showing) and the Texada “A” anomaly (South Central Plug showing).

## **HISTORY (cont'd)**

1992 – G.F. Crooker completed a geophysical survey on the JB 1 to 12 Claims, which were staked to cover the former Texada correlative anomalous zones “A” and “B” and which were also recently designated as the South Central Plug showing and the South Central Plug showing within the Meadow Creek zone. The surveys were localized on the two zones of the Meadow Creek grid. Crooker reports (AR 22,346) that the results of the magnetometer survey indicated a potential expression of a buried intrusive body. The VLF-EM survey results were inconclusive.

2005 – Localized geophysical surveys were completed on the SED claim by Alcor Resources Ltd.

## **GEOLOGY: SED Mineral Claim**

The SED claim is entirely underlain by two subdivisions of the Nicola volcanic rocks, the boundary bisecting the property from the southeast to the northwest. In the northeast is unit UTN5 which is comprised of an augite porphyry, augite-plagioclase porphyry volcanoclastic breccia and tuff with interbedded argillite. In the southwest is unit UTN4 which is comprised of a pillowed basic flow.

The SED claim is located at the intersection of two topographically indicated structures; the structures; the northeasterly trending structure of the Meadow Creek valley and the northwesterly trending Melba Creek valley structures.

In 1982 Visa Resources Ltd. completed a reconnaissance exploration program of geological mapping, geochemical soil sampling and initial ground magnetic survey over an area that included all the ground of the SED mineral claim. On the accompanying maps to his report, Cukor outlines some trenches, which are indicated to be located on the Texada correlative anomaly “B”. These trenches are also indicated to be located in part on the SED mineral claim. Cukor (1982) concludes that the broad, airborne magnetic low could be easily interpreted as being caused by a small granitic intrusion underlying the Nicola Volcanic rather close to the surface. He concludes that additional work on the ground is warranted.

The SED claim covers a broad magnetic low with sharply increasing magnetometer values on three of the claim boundaries.

## **MINERALIZATION: SED Mineral Claim**

There is no known mineralization on the SED mineral claim, however, the mineral zones of the west central Plug zone, as indicated by the trenches on Cukor’s (1982) map accompanying his report, may extend into the SED claim. Crooker (1992) reports that the mineralization of the west central Plug zone is of weak to moderate to carbonate-quartz-mariposite alteration over several hundred metres, with a grab sample yielding gold values of 7,500 ppb (0.282 oz/t) and 67.5 ppm silver respectively. Several soil samples taken from the same trench as the anomalous rock sample gave 70 and 150 ppb gold. Two grab samples of carbonate-quartz-mariposite schist with galena and sphalerite from the south central zone yielded 605 and 482 ppb gold and 165.1 and 258.4 ppm silver.



## **2006 EXPLORATION PROGRAM**

During July 2006, Alcor Resources Ltd. caused a completion of an exploration program of a localized VLF-EM survey on the SED mineral claim. The purpose of the survey was to delineate any anomalous responses that may occur originating from the copper/gold showing on the adjacent property to the north. Particulars are as follows

### **VLF-EM Survey**

#### **(a) Instrumentation**

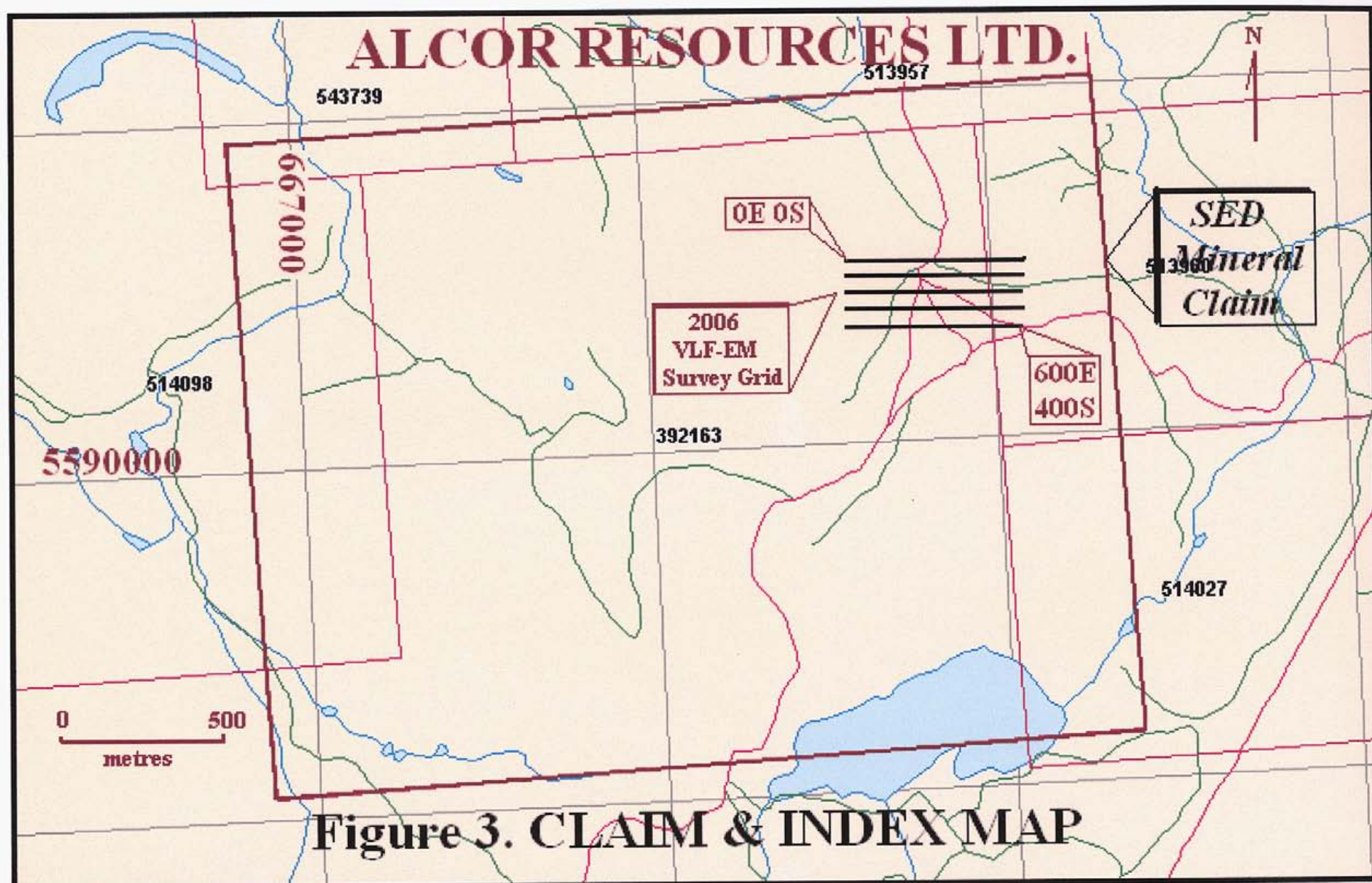
The VLF-EM survey was carried out with a VLF-EM receiver, Model 27, manufactured by Sabre Electronics Ltd. of Burnaby, British Columbia. This instrument is designed to measure the electromagnetic component of the very low frequency field (VLF-EM), which for this survey is transmitted at 24.8 kHz from Seattle (Jim Creek), Washington.

#### **b) Theory**

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 hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can pick up bodies of a 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 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 too low conductivity for 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.



## VLF-EM Survey (cont'd)

### (c) Survey Procedure

The VLF-EM readings were taken at 25 metre intervals along five 600 metre long east-west grid lines spaced at 50 metre intervals. The survey totaled three line kilometres.

### (d) Compilation of Data

The data was transferred to an Exel spreadsheet, thence to a Surfer 32 program which was utilized to plot maps from the VLF-EM data. Two maps were created; VLF-EM Raw Data (Figure 4), and contoured Fraser filtered data (Figure 5).

### e) Results

The contoured Fraser filtered data indicates four northerly trending VLF-EM anomalies as evident on the accompanying map (Figure 7). The anomalies are cross referenced to the map and text as **A**, **B**, **C**, **D**, and **E** are described as follows:

#### **Anomaly A:**

- prime anomaly;
- continuous, northeast trending for 300 metres; open to the southwest;
- intersecting with northwest trending anomalies D and E.

#### **Anomaly B:**

- discontinuous, northeast trending for 200 metres, open to the south;
- intersecting zone with northwest trending anomaly D at 450E 100S;
- intersecting zone with northwest trending anomaly E at 300E 300S.

#### **Anomaly C:**

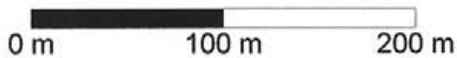
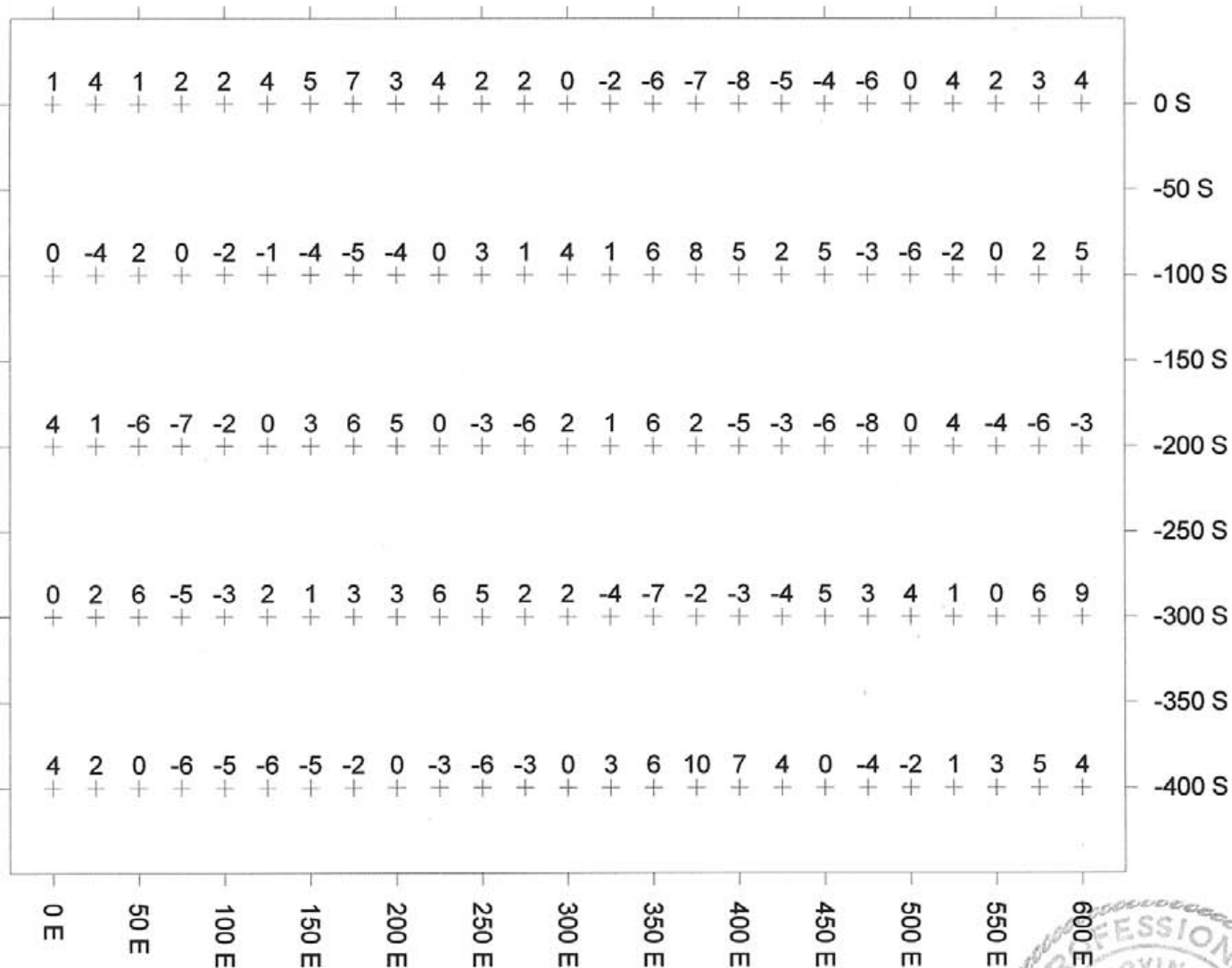
- continuous, northerly trending for 300 metres; open to the south;
- intersecting zone with a weak, closed, northeast trending anomaly at 0E 200S.

#### **Anomaly D:**

- continuous, northwest trending for 100 metres; open to the northwest; discontinuous to the southwest;
- possibly intersecting with anomaly B at 550E 200S.

#### **Anomaly E:**

- closed; northwest trending;
- possibly intersecting with anomaly B at 450E 400S;
- possibly intersecting with the northeast trending spur of anomaly C at 150E 150S.



**ALCOR RESOURCES LTD.  
SED Mineral Claim**

**VLF-EM Survey - Raw Data**

Figure 4



**VLF-EM Survey (cont'd)**

**f) Interpretation**

The northwest trend of the anomalies can either be attributed to the northwest trend, and possible associated structures, of the trend of the boundary bisecting the two subdivisions of the Nicola volcanic rocks indicated on the SED claim. As the regional structural trend is reportedly northwesterly and northeasterly, the northeast trend may indicate structures. Should both trends be interpreted as indicated structures, the intersecting structures as noted in the previous section of this report and accompanying Figure 5 may indicate zones of potential structural controlling mineralization.

**Conclusions**

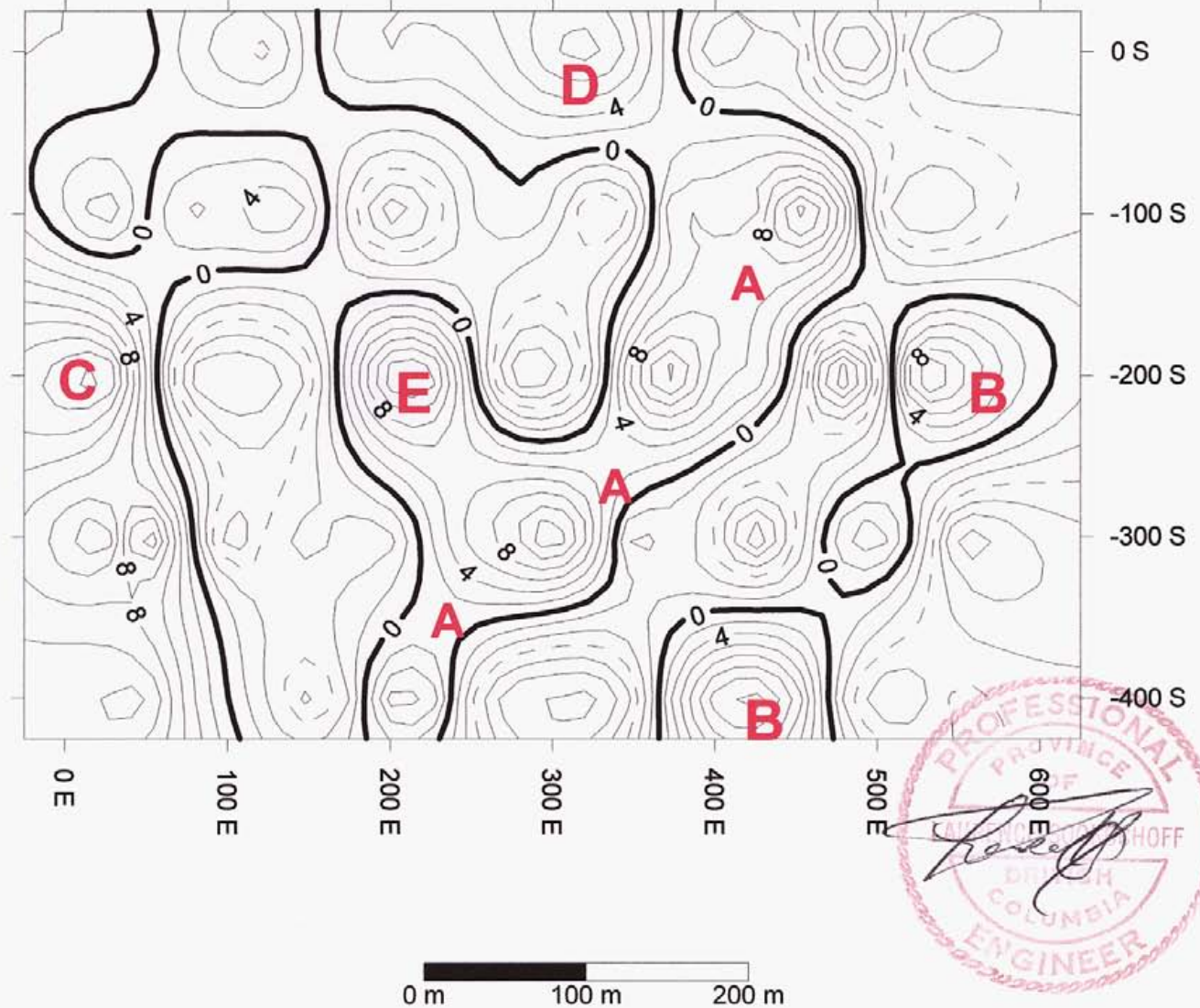
The zones of indicated structural intersections should be field examined for surface indications of potential sub-surface economic mineralization.

Respectfully submitted  
Sookochoff Consultants Inc.



Laurence Sookochoff, P.Eng.

Vancouver, BC  
June 13, 2007



**ALCOR RESOURCES LTD.**  
**DES Mineral Claim**

**VLF-EM Survey - Fraser Filtered Data**

Figure 5

**STATEMENT OF COSTS**

The fieldwork on the SED Claim was carried out between July 9-12, 2006 to the value as follows:

Laurence Sookochoff: 2 days @ \$750. -----	\$ 1,500.00
VLF Rental: 2 days @ \$ 50.00 -----	100.00
Room & board: 2 days @ \$150.00 -----	300.00
Results, maps, compilation & drafting -----	450.00
Report, xerox, & printing -----	750.00
	\$ 3,100.00

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- Cochrane, D.R.** et al – Geophysical Report on an Induced Polarization Survey of the Plug Claims on behalf of Texada Mines Ltd. October 24, 1972. AR 4,041.
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- La Rue, J.P.** – Assessment Report on Geophysical Survey on the DES Claims for C. Boitard. November 15, 1987. AR 17,070.
- Sookchoff, L.** – Geophysical Assessment Report on the SED Mineral Claim for Alcor Resources Ltd. May 18, 2006
- The Discoverers** – Monica R. Hanula–Editor, Pitt Publishing Company Limited, Toronto, Ontario, Canada. 1982.
- Geology, Exploration and Mining in British Columbia** – 1972 – pgs 165, 183, 209-220.



## CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. and state that:

- 1) I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
- 2) I have been practicing my profession for the past forty-one years.
- 3) I am registered and in good standing with the Association of Professional Engineers and Geoscientists of British Columbia.
- 4) The information for this report is based on information as itemized in the Selected Reference section of this report and from the geophysical data obtained from the field work completed by the writer.



Laurence Sookochoff, P. Eng.

Vancouver, BC  
June 13, 2007

Appendix I

**VLF-EM RESULTS  
RAW DATA**

ALCOR RESOURCES LTD. 2006 VLF-EM Survey Data								
E	S	VLF-EM	Ffilter		E	S	VLF-EM	Ffilter
0	0	1			0	-100	0	
25	0	4	2		25	-100	-4	-6
50	0	1	1		50	-100	2	0
75	0	2	-3		75	-100	0	5
100	0	2	-5		100	-100	-2	3
125	0	4	-7		125	-100	-1	6
150	0	5	-1		150	-100	-4	4
175	0	7	4		175	-100	-5	-5
200	0	3	4		200	-100	-4	-12
225	0	4	3		225	-100	0	-8
250	0	2	4		250	-100	3	-2
275	0	2	6		275	-100	1	0
300	0	0	10		300	-100	4	-2
325	0	-2	11		325	-100	1	-9
350	0	-6	7		350	-100	6	-6
375	0	-7	0		375	-100	8	7
400	0	-8	-6		400	-100	5	5
425	0	-5	-3		425	-100	2	5
450	0	-4	-3		450	-100	5	16
475	0	-6	-14		475	-100	-3	10
500	0	0	-14		500	-100	-6	-7
525	0	4	-1		525	-100	-2	-10
550	0	2	-1		550	-100	0	-9
575	0	3			575	-100	2	
600	0	4			600	-100	5	

E	S	VLF-EM	Ffilter	E	S	VLF-EM	Ffilter
0	-200	4		0	-300	0	
25	-200	1	18	25	-300	2	1
50	-200	-6	4	50	-300	6	16
75	-200	-7	-11	75	-300	-5	2
100	-200	-2	-12	100	-300	-3	-11
125	-200	0	-11	125	-300	2	-5
150	-200	3	-8	150	-300	1	-3
175	-200	6	4	175	-300	3	-5
200	-200	5	14	200	-300	3	-5
225	-200	0	14	225	-300	6	2
250	-200	-3	1	250	-300	5	7
275	-200	-6	-12	275	-300	2	9
300	-200	2	-11	300	-300	2	15
325	-200	1	-5	325	-300	-4	7
350	-200	6	10	350	-300	-7	-6
375	-200	2	16	375	-300	-2	-2
400	-200	-5	6	400	-300	-3	-6
425	-200	-3	6	425	-300	-4	-15
450	-200	-6	-1	450	-300	5	-6
475	-200	-8	-18	475	-300	3	3
500	-200	0	-8	500	-300	4	6
525	-200	4	14	525	-300	1	-1
550	-200	-4	9	550	-300	0	-14
575	-200	-6		575	-300	6	
600	-200	-3		600	-300	9	



E	S	VLF-EM	Ffilter						
	0	-400	4						
	25	-400	2	12					
	50	-400	0	13					
	75	-400	-6	5					
	100	-400	-5	0					
	125	-400	-6	-4					
	150	-400	-5	-9					
	175	-400	-2	-4					
	200	-400	0	7					
	225	-400	-3	6					
	250	-400	-6	-6					
	275	-400	-3	-12					
	300	-400	0	-12					
	325	-400	3	-13					
	350	-400	6	-8					
	375	-400	10	5					
	400	-400	7	13					
	425	-400	4	15					
	450	-400	0	10					
	475	-400	-4	-3					
	500	-400	-2	-10					
	525	-400	1	-9					
	550	-400	3	-5					
	575	-400	5						
	600	-400	4						