

**Geophysical Report and Review On the Kettle Property**

**Vernon Mining Division  
British Columbia, Canada**

**NTS 82E/13E**

**BCGS Map Sheets 082E/097, 082E/087**

**Latitude 49° 55' 43" N Longitude 118° 41' 53" W**

**Part 2 of 2 (Maps to Accompany Appendix 2)**

**Report by:**

**William J. Wilkinson, B. Sc., P. Geo.**

**126 Nagle Place**

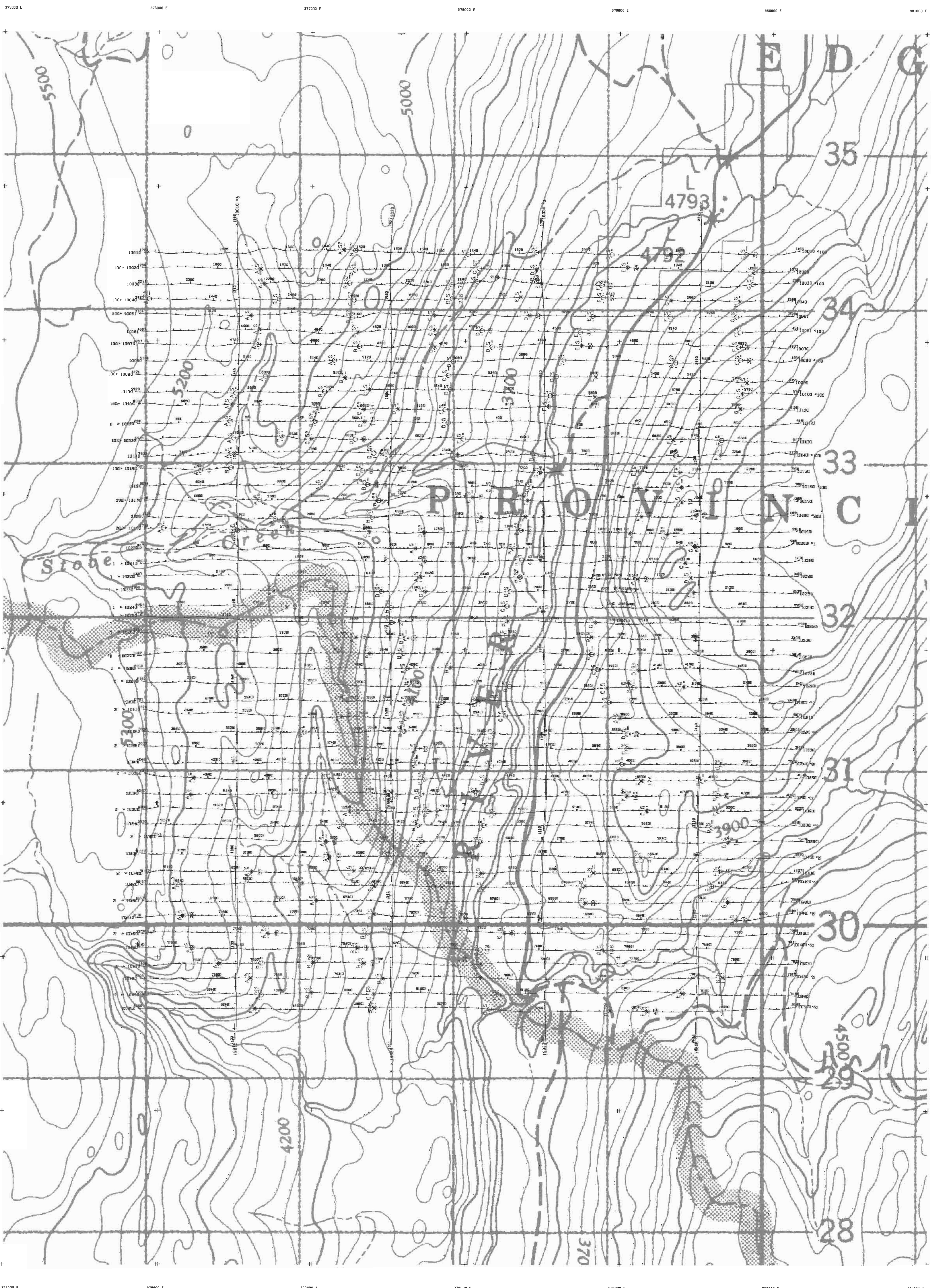
**Penticton, British Columbia**

**V2A7B5**

**#27432**

**May 25, 2004**

**27432**  
**MAPS**



**TECHNICAL SUMMARY**

Navigation ..... Differentially-corrected GPS  
 Data reduction grid interval ..... 20 metres  
 Terrain clearance ..... Helicopter 57 m  
 ..... Electromagnetic sensor 30 m  
 ..... Magnetometer 30 m  
 Data sampling interval ..... 0.1 seconds  
 Magnetometer / sensitivity ..... Cesium / 0.01 nT  
 Electromagnetic system ..... DIGHEM\*

Frequency	Sensitivity	Coil Orientation
1000 Hz	06 ppm	Vertical coplanar
5500 Hz	12 ppm	Vertical coplanar
900 Hz	12 ppm	Horizontal coplanar
7200 Hz	24 ppm	Horizontal coplanar
56000 Hz	60 ppm	Horizontal coplanar

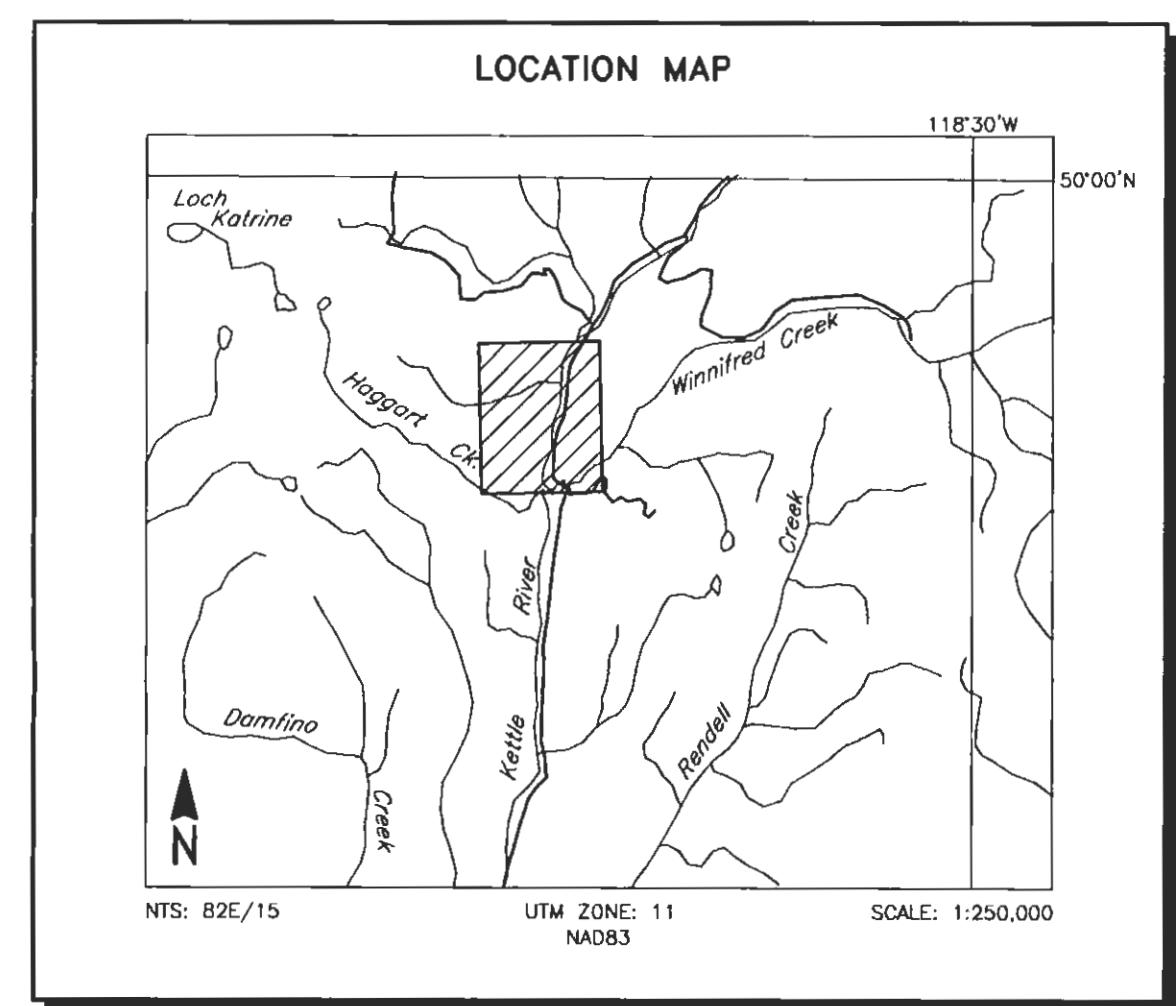
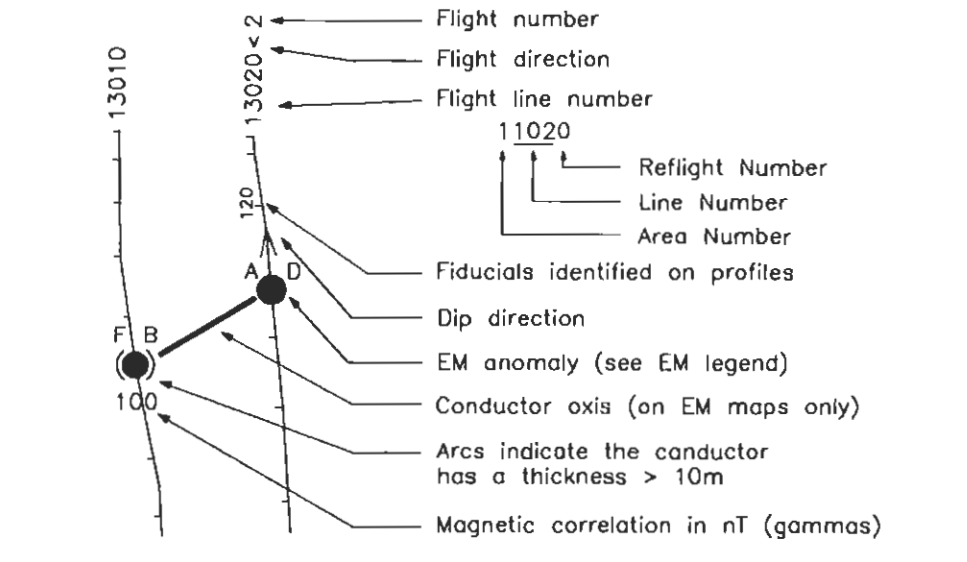


**ELECTROMAGNETIC ANOMALIES**

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
-	*	Questionable anomaly

Anomaly identifier	Interpretive symbol	Interpretive symbol	Conductor ("model")
B	○	B	Broad conductor ("thin sheet")
D	○	D	Narrow bedrock conductor ("thin sheet")
S	○	S	Conductive cover ("horizontal thin sheet")
H	○	H	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
E	○	E	Edge of broad conductor ("edge of half space")
L	○	L	Culture, e.g. power line, metal building or fence

**FLIGHT LINES WITH EM ANOMALIES**

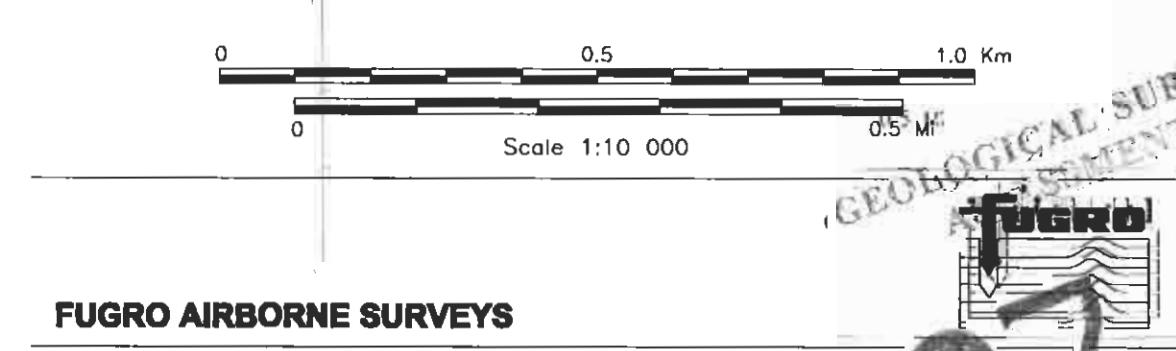


**LEROY VENTURES INC.**  
 KETTLE PROPERTY, VERNON MINING DIVISION, B.C.

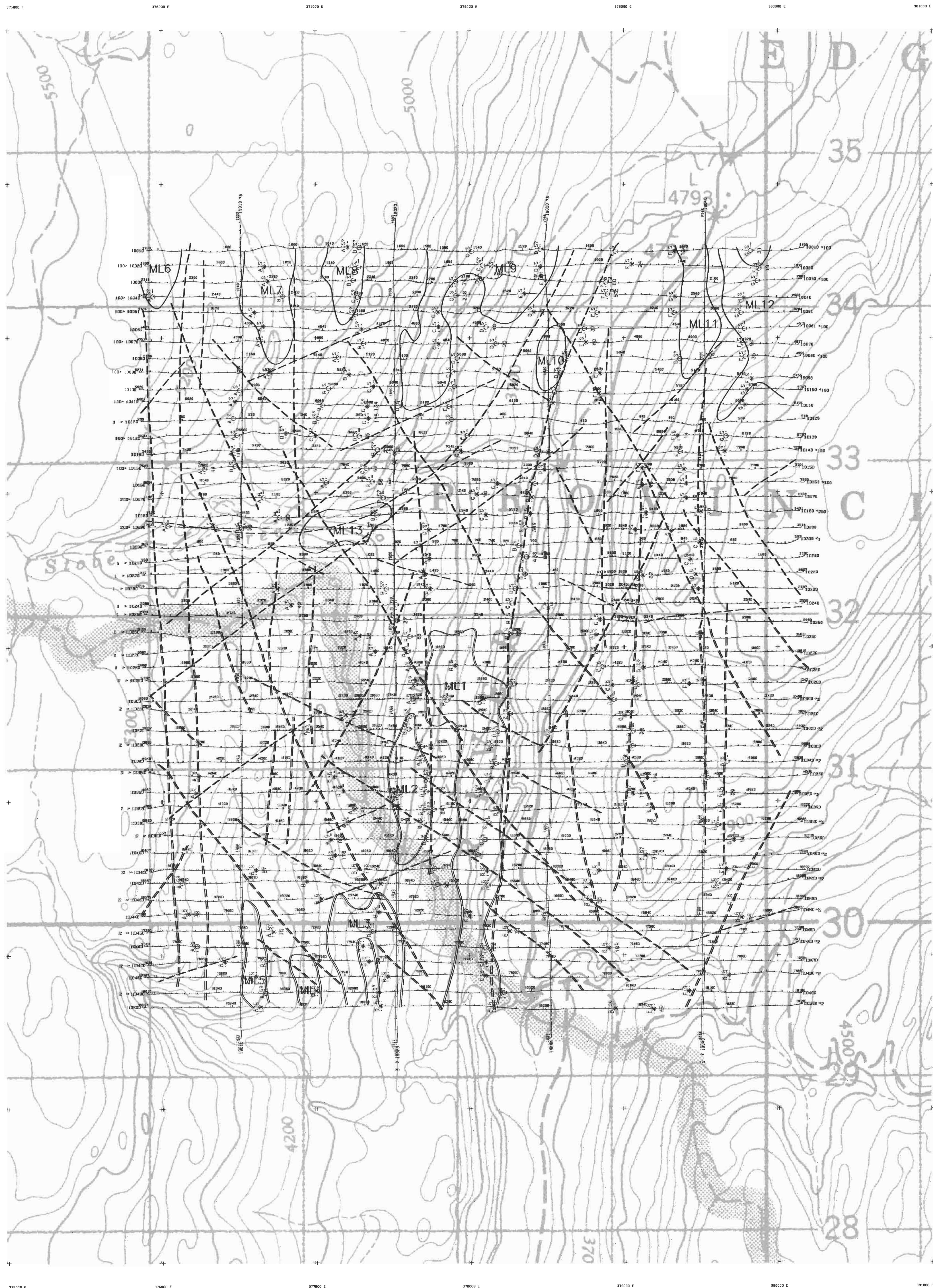
**ELECTROMAGNETIC ANOMALIES**

FUGRO DIGHEM\* SURVEY    NTS: 82E/15    GEOPHYSICIST:  
 DATE: FEBRUARY, 2004    JOB: 03096    SHEET: 1

Fugro Airborne Surveys



GEOLOGICAL SURVEY BRANCH  
 27,432



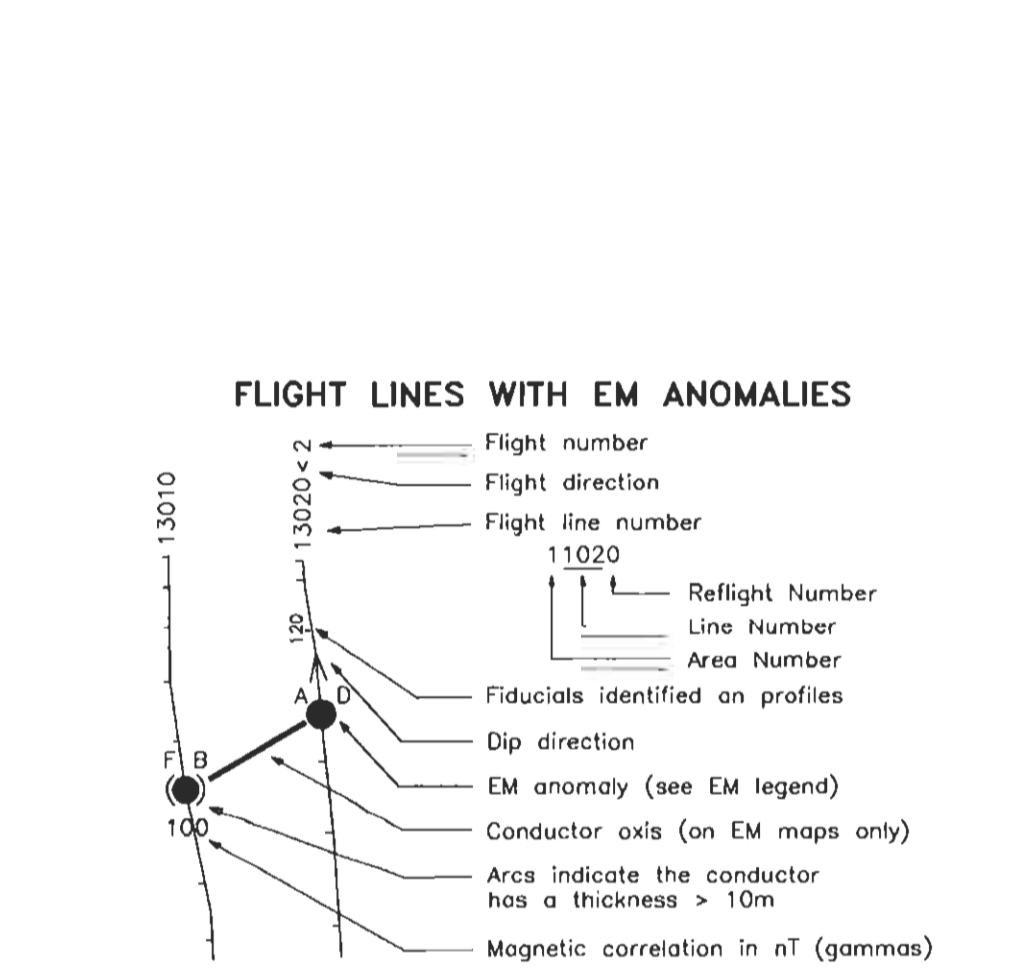
**TECHNICAL SUMMARY**

Navigation . . . . . Differentially-corrected GPS  
 Data reduction grid interval . . . . . 20 metres  
 Terrain clearance . . . . . Helicopter 57 m  
 . . . . . Electromagnetic sensor 30 m  
 . . . . . Magnetometer 30 m  
 Data sampling interval . . . . . 0.1 second  
 Magnetometer / sensitivity . . . . . Caesium / 0.01 nT  
 Electromagnetic system . . . . . DIGEM™

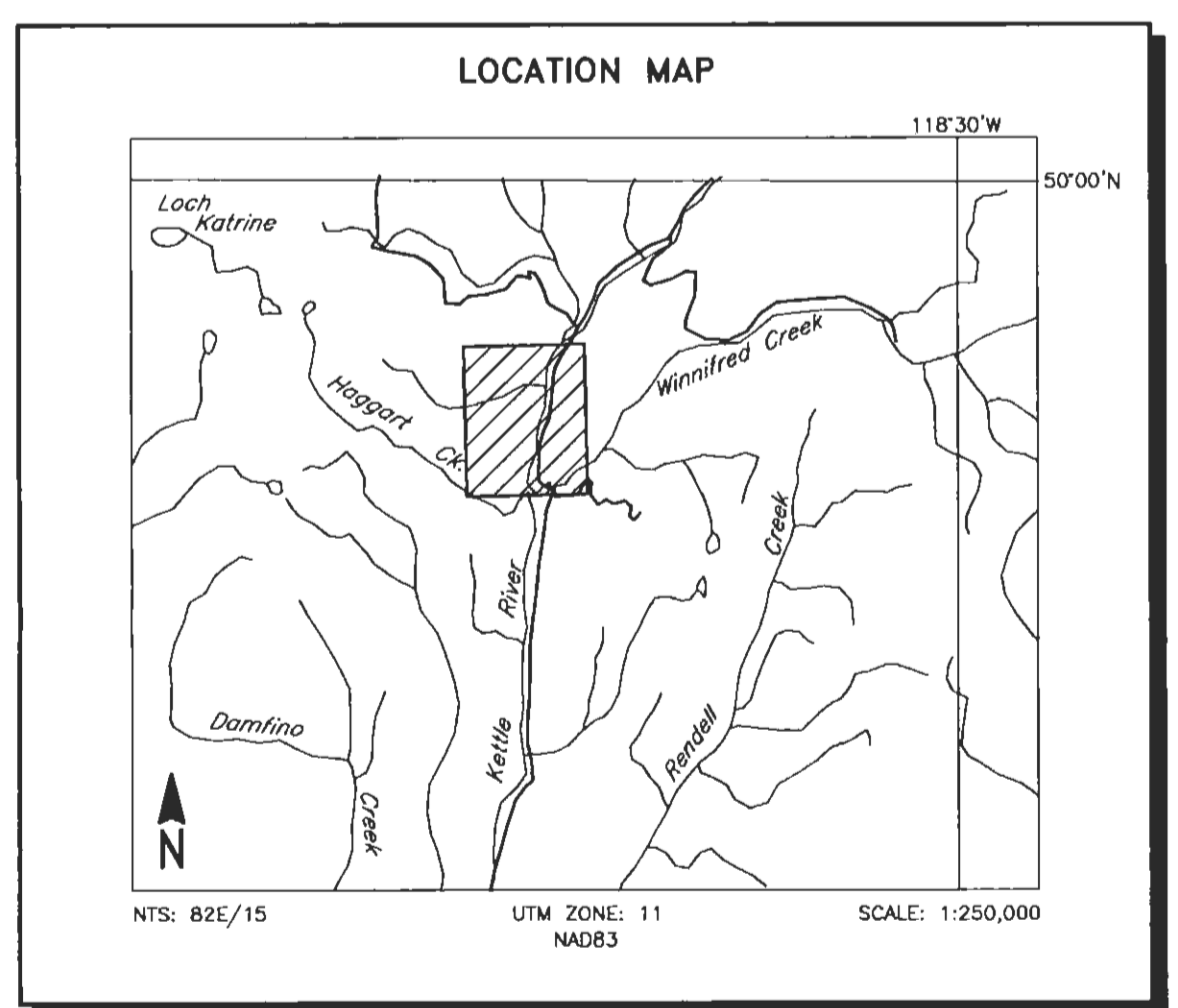
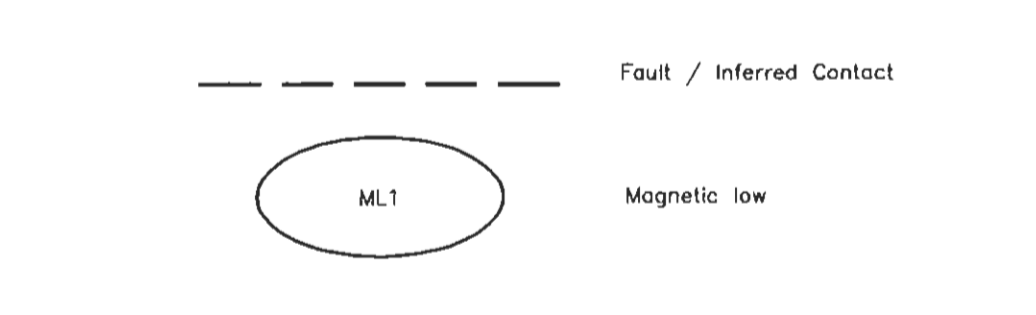
Frequency	Sensitivity	Coil Orientation
1000 Hz	.06 ppm	Vertical coaxial
5500 Hz	.12 ppm	Vertical coaxial
900 Hz	.12 ppm	Horizontal coplanar
7200 Hz	.24 ppm	Horizontal coplanar
56500 Hz	.50 ppm	Horizontal coplanar

**ELECTROMAGNETIC ANOMALIES**

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	○	5-10 siemens
2	○	1-5 siemens
1	○	< 1 siemens
-	*	Questionable anomaly



**INTERPRETATION LEGEND**

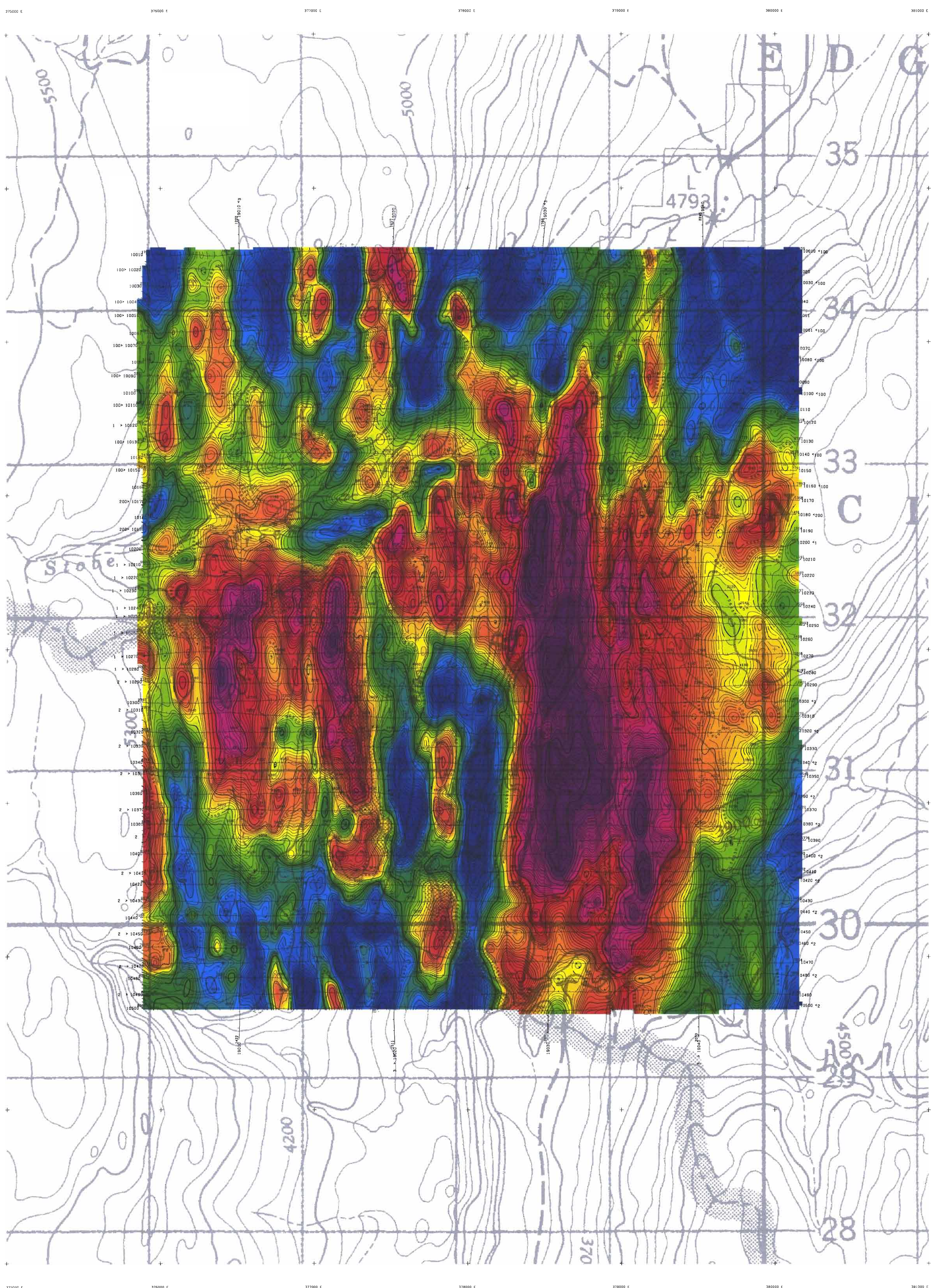


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**KETTLE PROPERTY, VERNON MINING DIVISION, B.C.**

**INTERPRETATION**  
 27, 32

FUGRO DIGEM™ SURVEY NTS: 82E/15 (NS64)  
 DATE: FEBRUARY, 2004 JOB: 04090 SHEET: 10  
 Fugro Airborne Surveys

Scale: 1:10,000



**TECHNICAL SUMMARY**

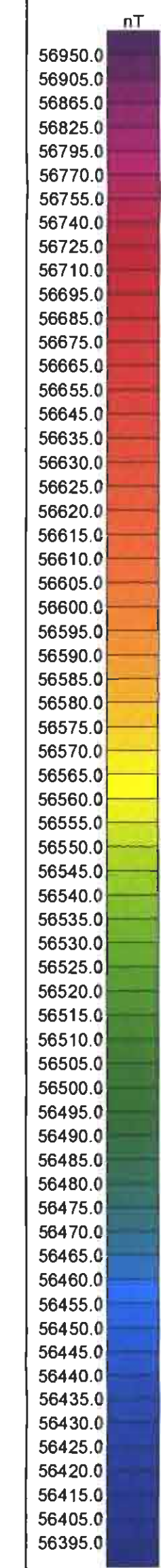
Navigation ..... Differentially-corrected GPS  
 Data reduction grid interval ..... 20 metres  
 Terrain clearance ..... Helicopter 37 m  
 ..... Electromagnetic sensor 30 m  
 Data sampling interval ..... 0.1 second  
 Magnetometer / sensitivity ..... Cesium / 0.01 nT  
 Electromagnetic system ..... DIGEM

Frequency	Sensitivity	Coil Orientation
1000 Hz	.06 ppm	Vertical coplanar
5500 Hz	.12 ppm	Vertical coplanar
900 Hz	.12 ppm	Horizontal coplanar
7200 Hz	.24 ppm	Horizontal coplanar
56000 Hz	.60 ppm	Horizontal coplanar



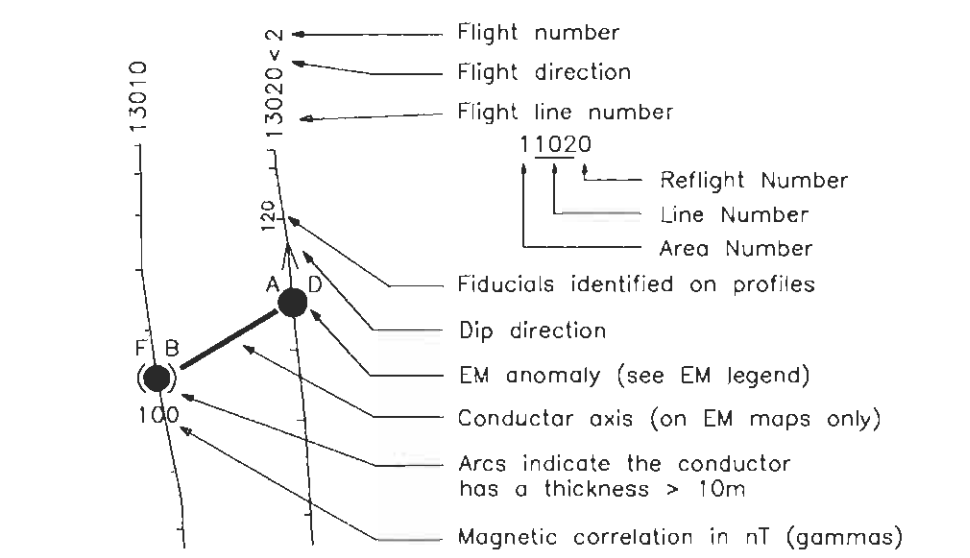
**ELECTROMAGNETIC ANOMALIES**

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
-	*	Questionable anomaly

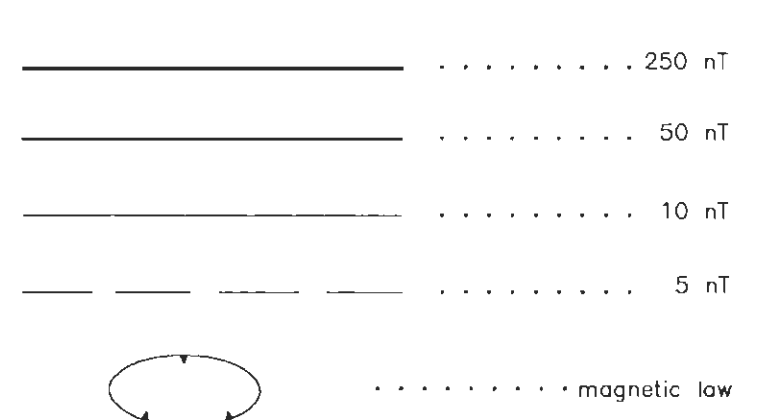


Interpretive symbol	Interpretive symbol	Interpretive symbol
B	B	B
D	D	D
S	S	S
H	H	H
E	E	E
L	L	L

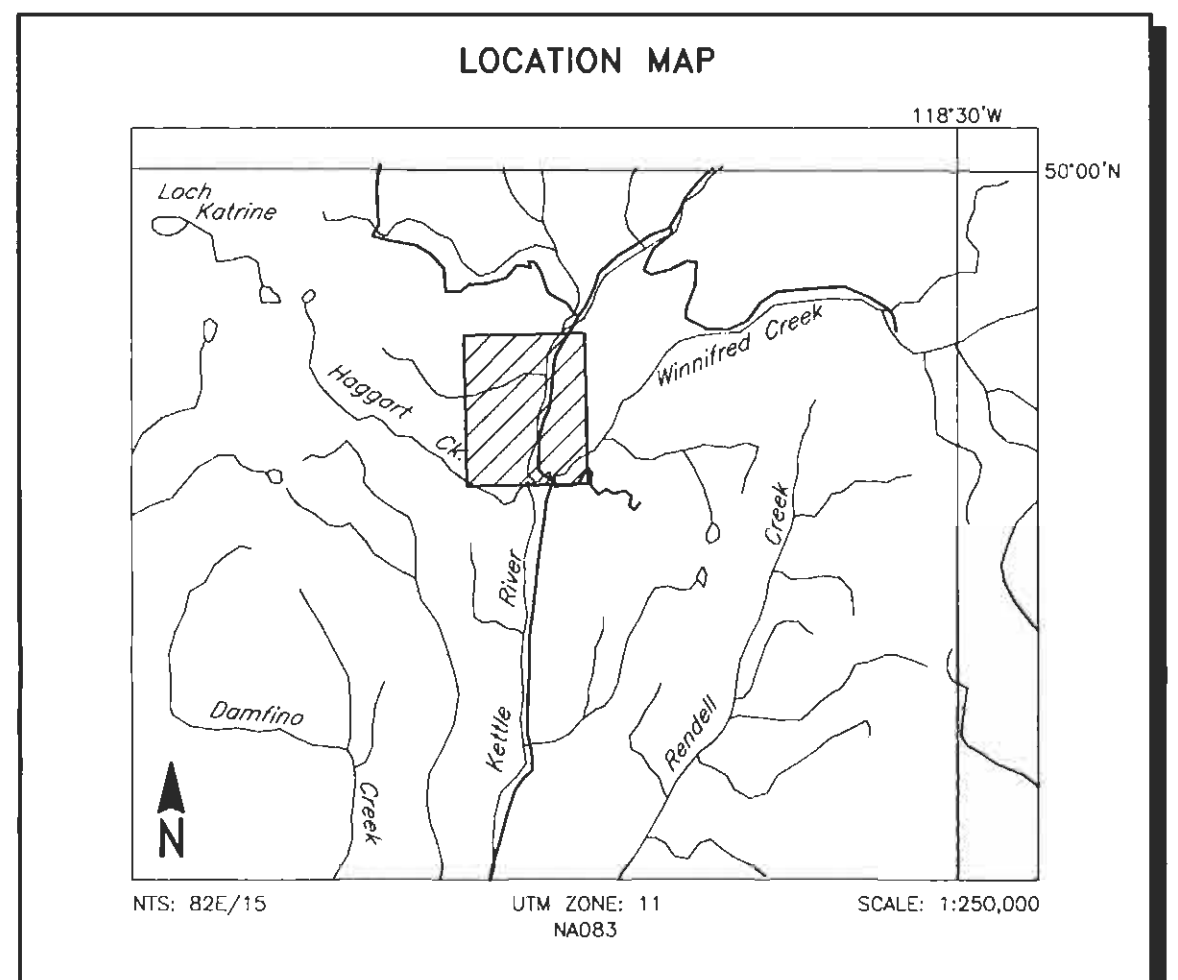
**FLIGHT LINES WITH EM ANOMALIES**



**TOTAL MAGNETIC FIELD CONTOURS**



Magnetic inclination within the survey area: 72 degrees N  
 Magnetic declination within the survey area: 18 degrees E

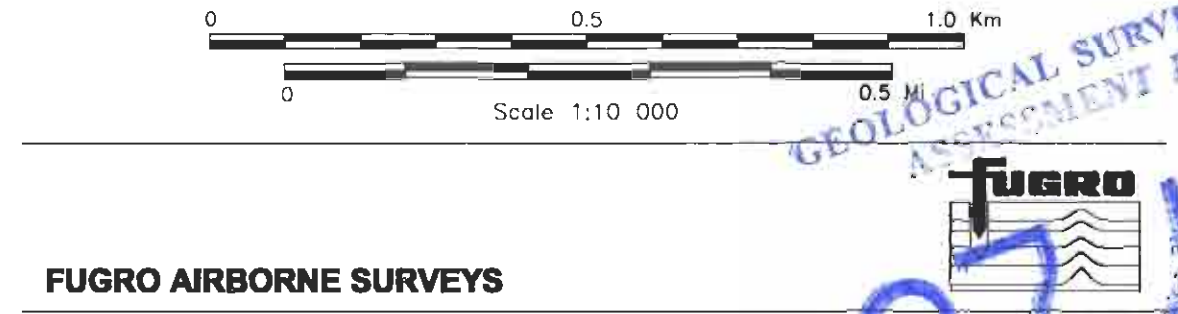


**LEROY VENTURES INC.**  
**KETTLE PROPERTY, VERNON MINING DIVISION, B.C.**

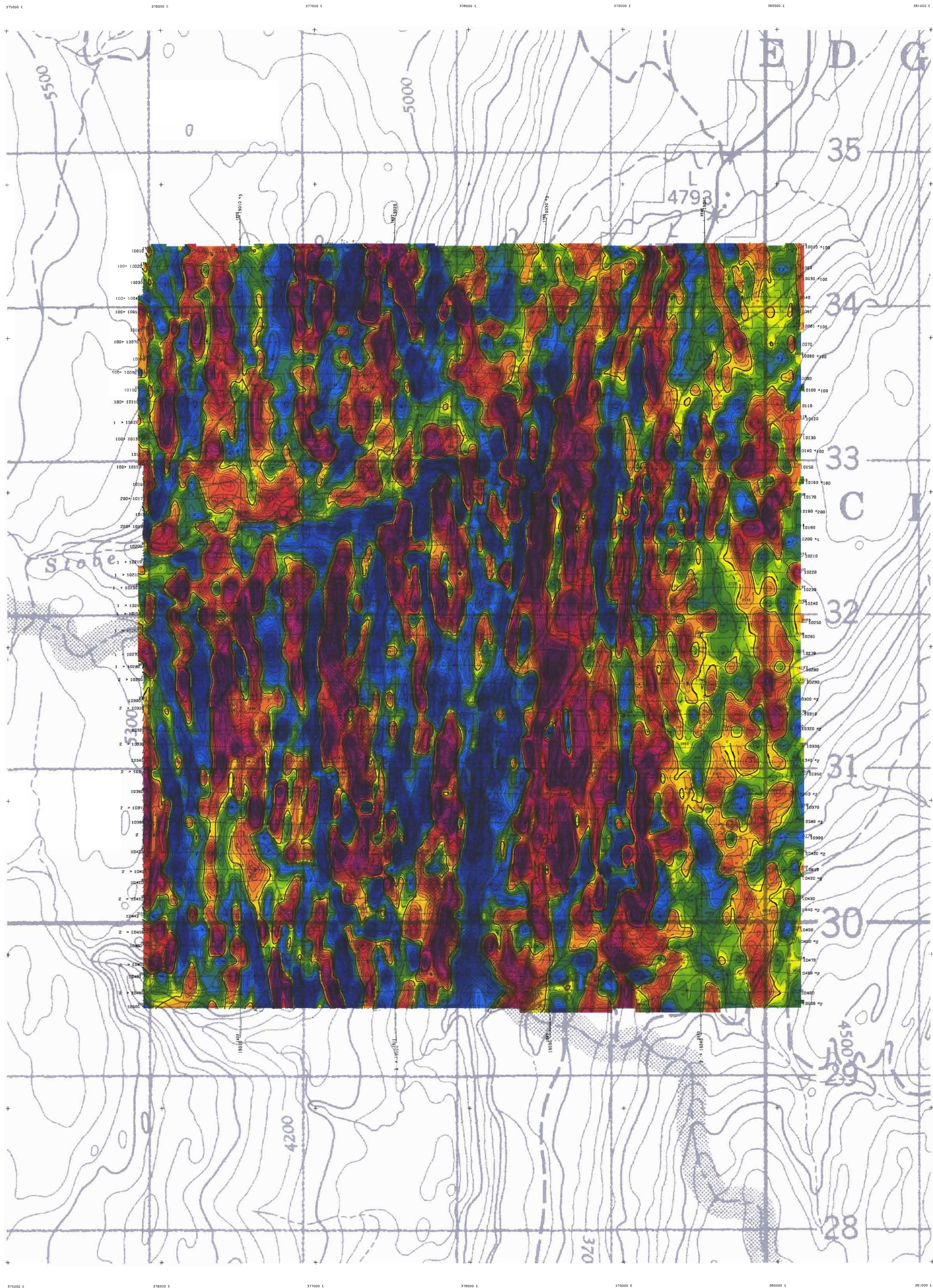
**TOTAL MAGNETIC FIELD**

FUGRO DIGEM* SURVEY	NTS: 82E/15	GEOPHYSICIST:
DATE: FEBRUARY, 2004	JOB: 03096	SHEET: 1

Fugro Airborne Surveys



GEOLOGICAL SURVEY BRANCH  
 MANAGEMENT REPORT  
 27.432



**TECHNICAL SUMMARY**

Navigation ..... Differentially-corrected GPS  
 Data reduction grid interval ..... 20 metres  
 Terrain clearance ..... Helicopter 37 m  
 Electromagnetic sensor 30 m  
 Magnetometer 30 m  
 Data sampling interval ..... 0.1 second  
 Magnetometer / sensitivity ..... Caesium / 0.01 nT  
 Electromagnetic system ..... DIGNA

Frequency	Sensitivity	Coil Orientation
1000 Hz	.06 ppm	Vertical coaxial
5500 Hz	.12 ppm	Vertical coaxial
900 Hz	.12 ppm	Horizontal coplanar
7200 Hz	.24 ppm	Horizontal coplanar
55000 Hz	.60 ppm	Horizontal coplanar



**ELECTROMAGNETIC ANOMALIES**

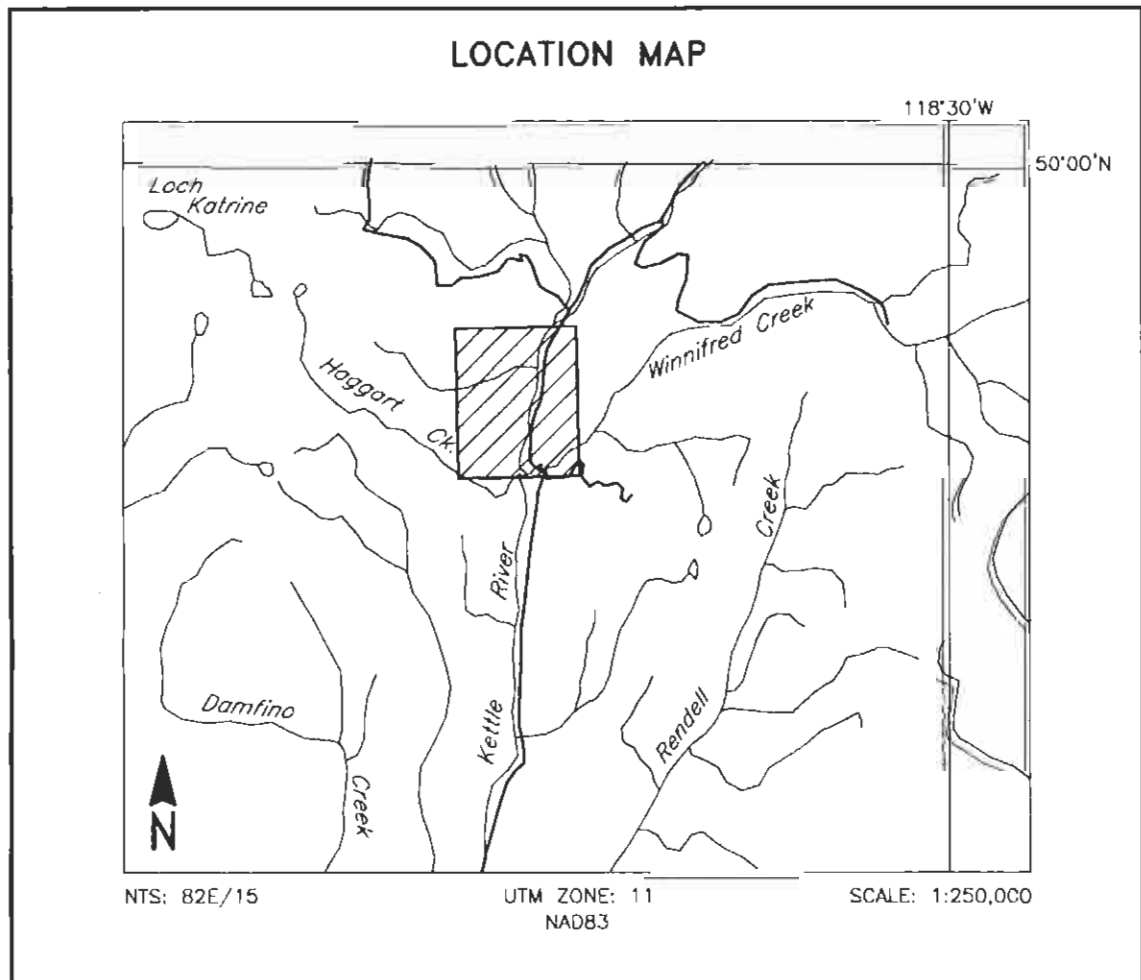
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	<1 siemens
	⊗	Questionable anomaly

Interpretive symbol	Interpretation
B	Bedrock conductor
D	Negative bedrock conductor ("thin wire")
S	Conductive cover (Horizontal thin sheet)
H	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
E	Edge of broad conductor (edge of half space)
L	Culture, e.g. power line, metal building or fence



**CALCULATED VERTICAL GRADIENT CONTOURS**

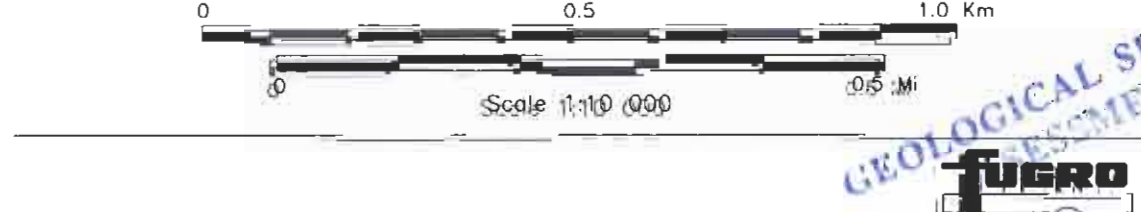
.....	0.0 nT/metre
.....	1.0 nT/metre
.....	0.2 nT/metre
.....	0.1 nT/metre



**LERoy VENTURES INC.**  
 KETTLE PROPERTY, VERNON MINING DIVISION, B.C.

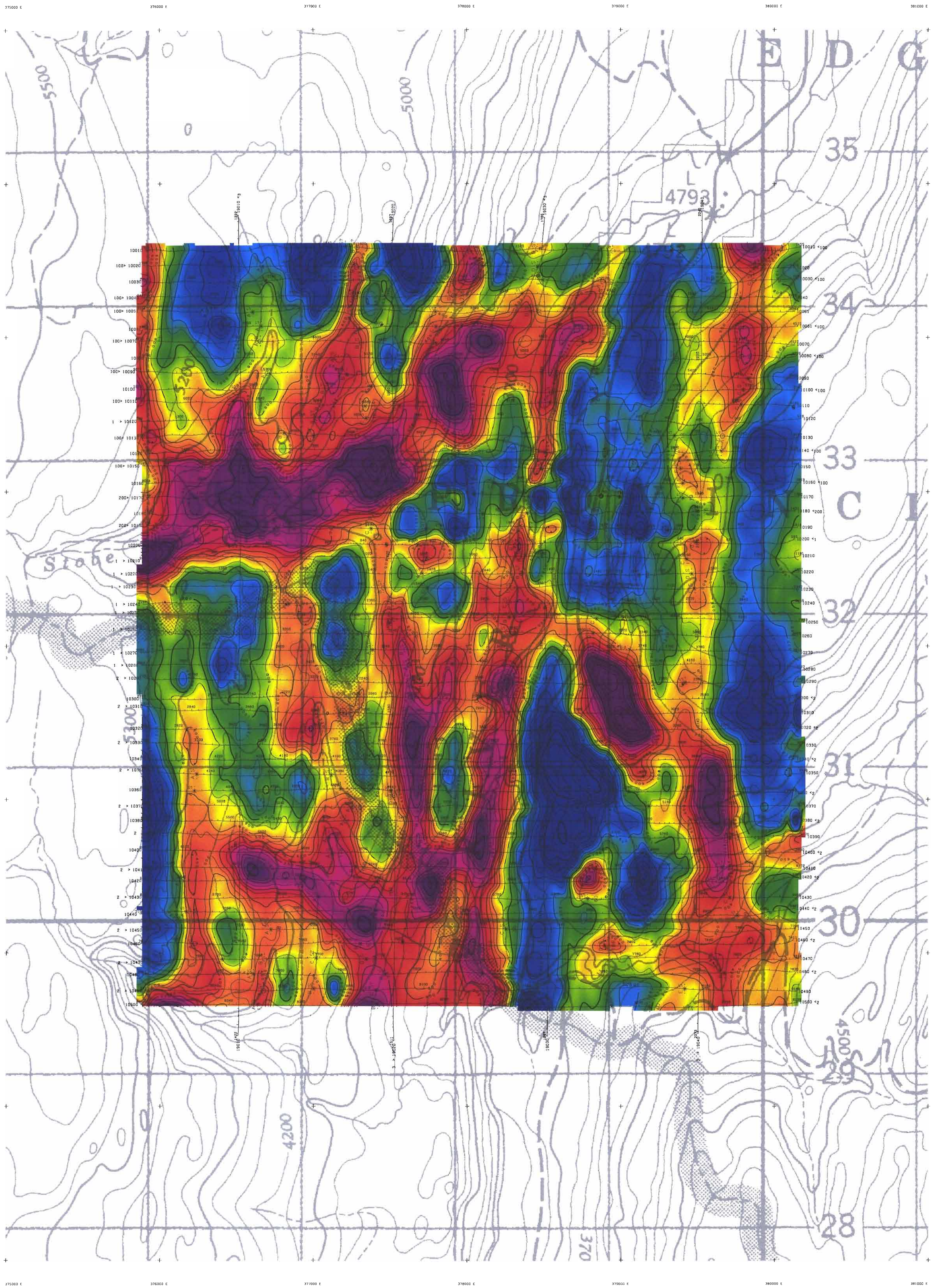
**CALCULATED VERTICAL MAGNETIC GRADIENT**

FUGRO AIRBORNE SURVEYS  
 DATE: FEBRUARY, 2004  
 NTS: 82E/15  
 JOB: 030916  
 GEOPHYSICIST:  
 SHEET: 1  
 Fugro Airborne Surveys



FUGRO AIRBORNE SURVEYS

GEOLOGICAL SURVEY BRANCH  
 ASSESSMENT REPORT  
 27.432



**TECHNICAL SUMMARY**

Navigation ..... Differentially-corrected GPS  
 Data reduction grid interval ..... 20 metres  
 Terrain clearance ..... Helicopter 57 m  
 ..... Electromagnetic sensor 30 m  
 ..... Magnetometer 30 m  
 Data sampling interval ..... 0.1 second  
 Magnetometer / sensitivity ..... Cesium / 0.01 nT  
 Electromagnetic system ..... DIGHM

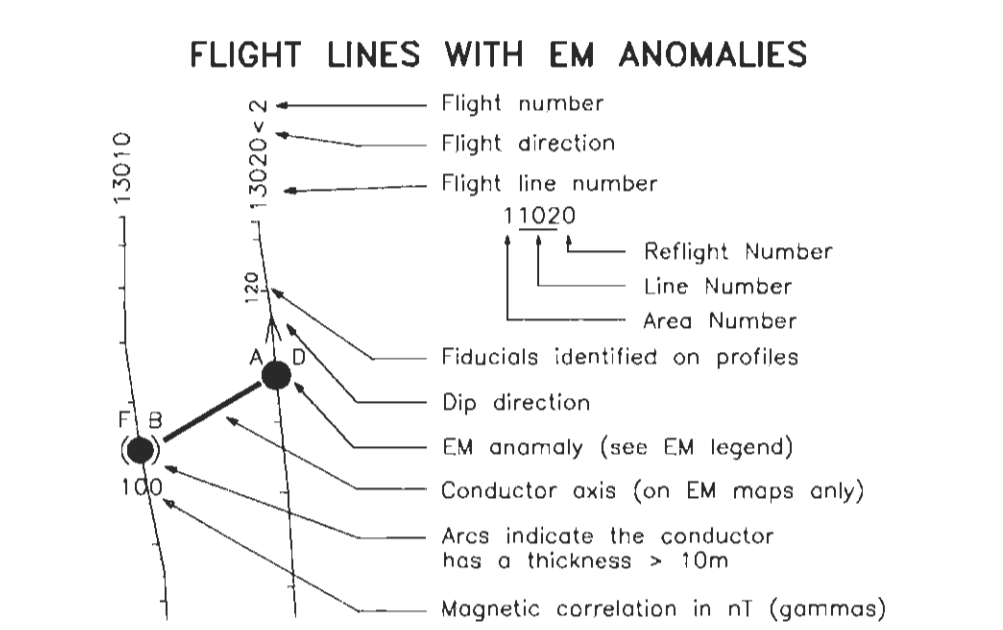
Frequency	Sensitivity	Coil Orientation
1000 Hz	.06 ppm	Vertical coaxial
5500 Hz	.12 ppm	Vertical coaxial
900 Hz	.12 ppm	Horizontal coplanar
7200 Hz	.24 ppm	Horizontal coplanar
56000 Hz	.60 ppm	Horizontal coplanar



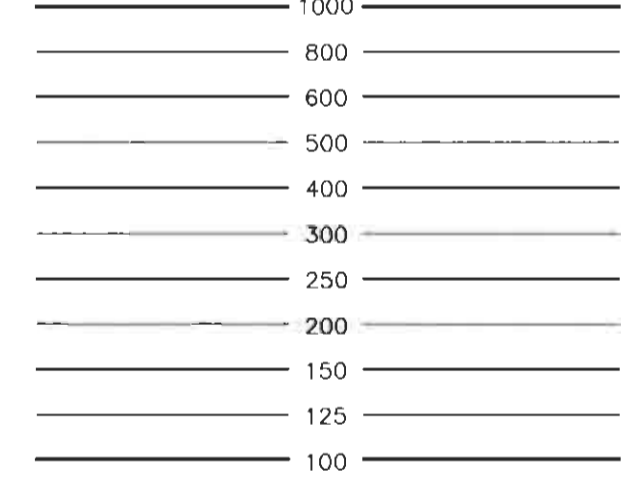
**ELECTROMAGNETIC ANOMALIES**

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	<1 siemens
-	*	Questionable anomaly

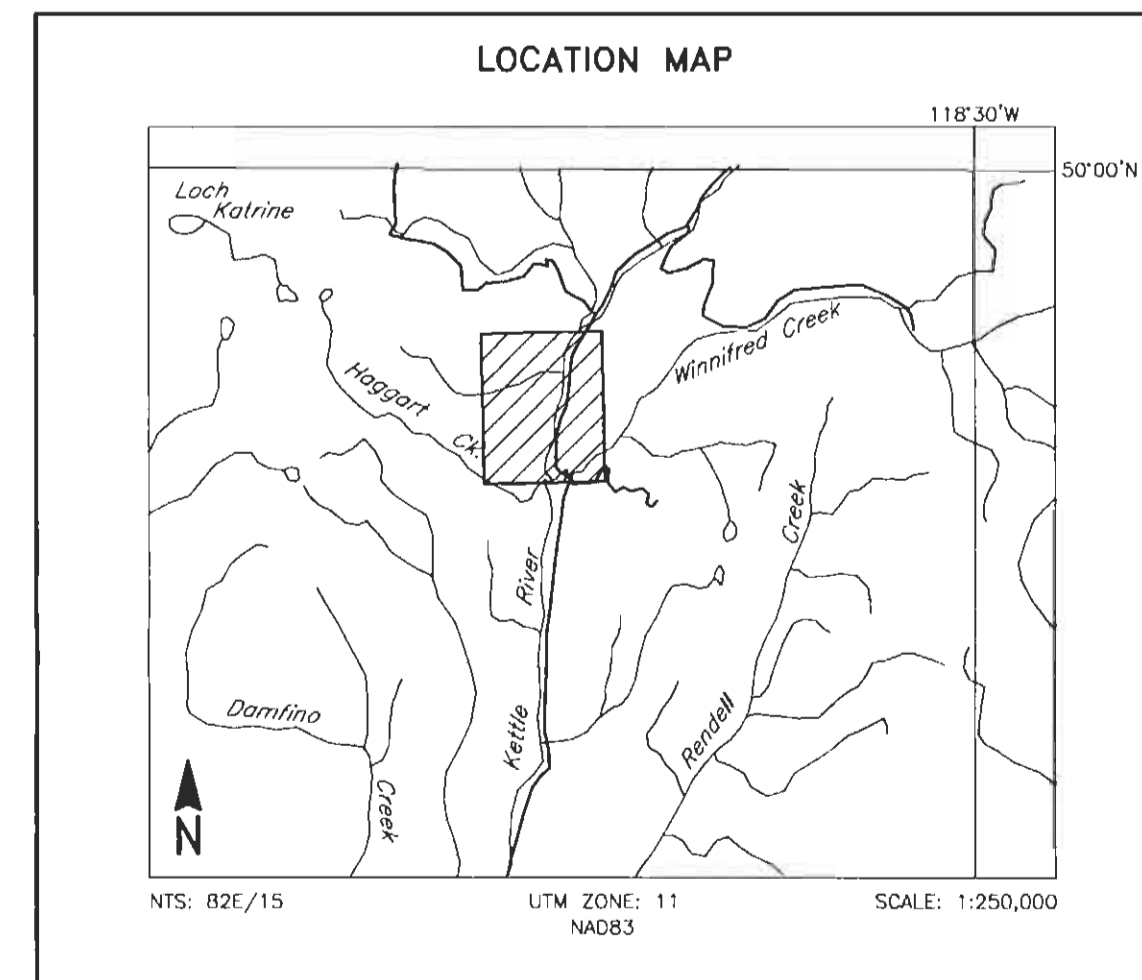
Interpretive symbol	Conductor ("model")
B	Bedrock conductor
D	Narrow bedrock conductor ("thin sheet")
S	Conductive cover ("horizontal thin sheet")
H	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
E	Edge of broad conductor ("edge of half space")
L	Culture, e.g. power line, metal building or fence



**RESISTIVITY CONTOURS**



Contours in ohm-m at 10 intervals per decade. Apparent resistivity calculated using a pseudo-layer half-space model (Fraser 1978).

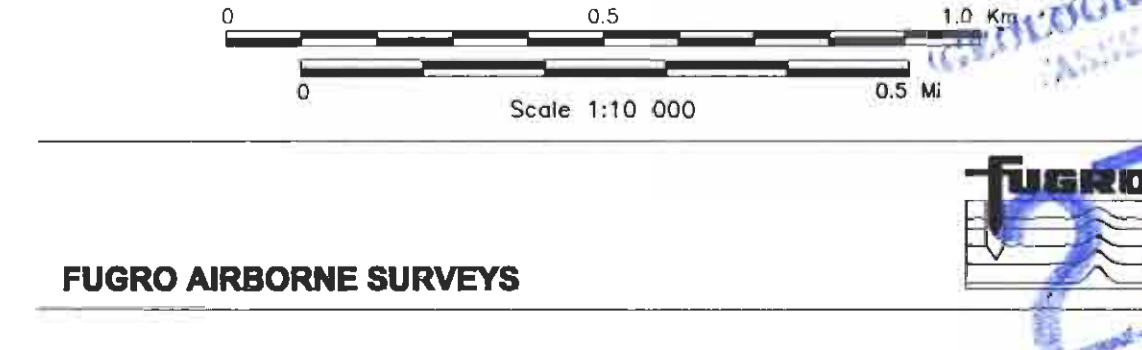


**LEROY VENTURES INC.**  
 KETTLE PROPERTY, VERNON MINING DIVISION, B.C.

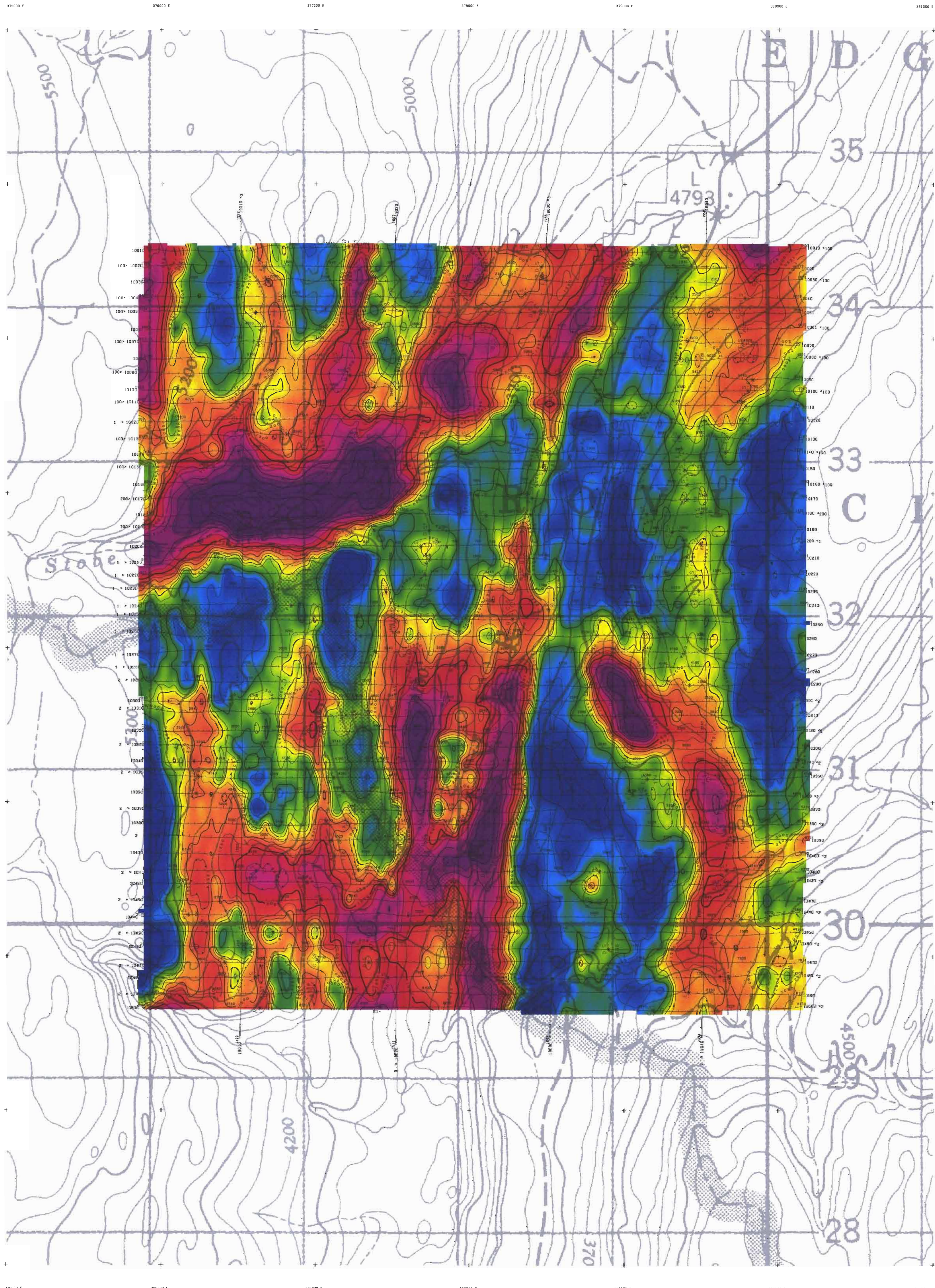
**APPARENT RESISTIVITY**  
 56,000 Hz COPLANAR

FUGRO DIGHEM* SURVEY	NTS: 82E/15	GEOPHYSICIST:
DATE: FEBRUARY, 2004	JOB: 03096	SHEET: 1

Fugro Airborne Surveys



27.432



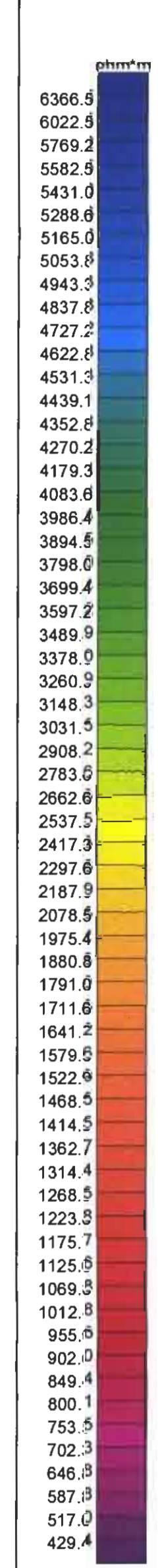
**TECHNICAL SUMMARY**

Navigation: Differentially-corrected GPS  
 Data reduction grid interval: 20 metres  
 Terrain clearance: Helicopter 37 m  
 Electromagnetic sensor 30 m  
 Magnetometer 30 m  
 Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Cesium / 0.01 nT  
 Electromagnetic system: DigiEM

Frequency	Sensitivity	Coil Orientation
1000 Hz	06 ppm	Vertical coaxial
5500 Hz	12 ppm	Vertical coaxial
900 Hz	12 ppm	Horizontal coplanar
7200 Hz	24 ppm	Horizontal coplanar
56000 Hz	60 ppm	Horizontal coplanar



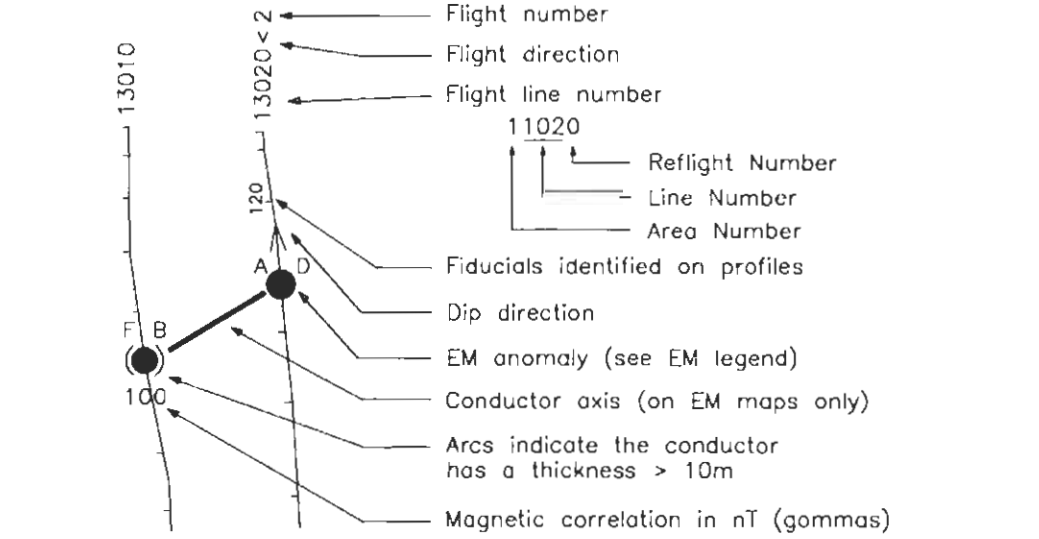
**ELECTROMAGNETIC ANOMALIES**



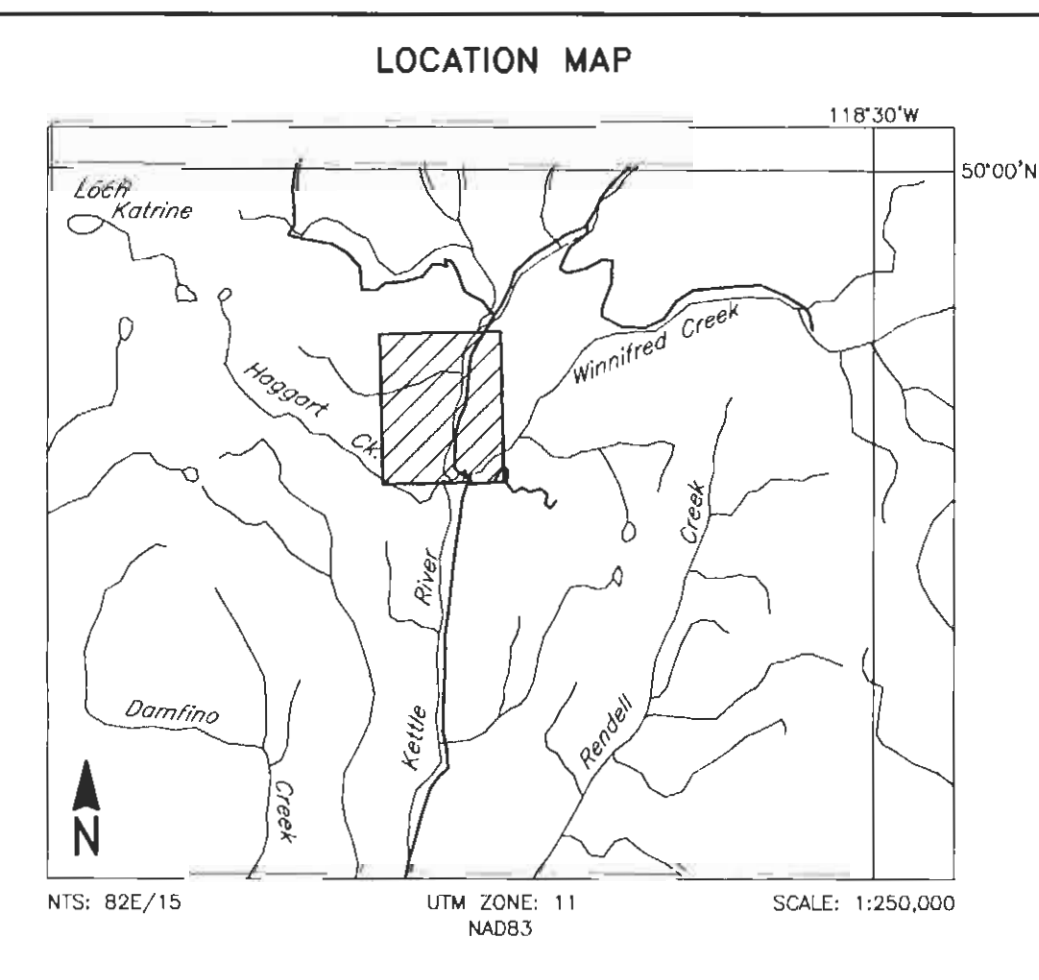
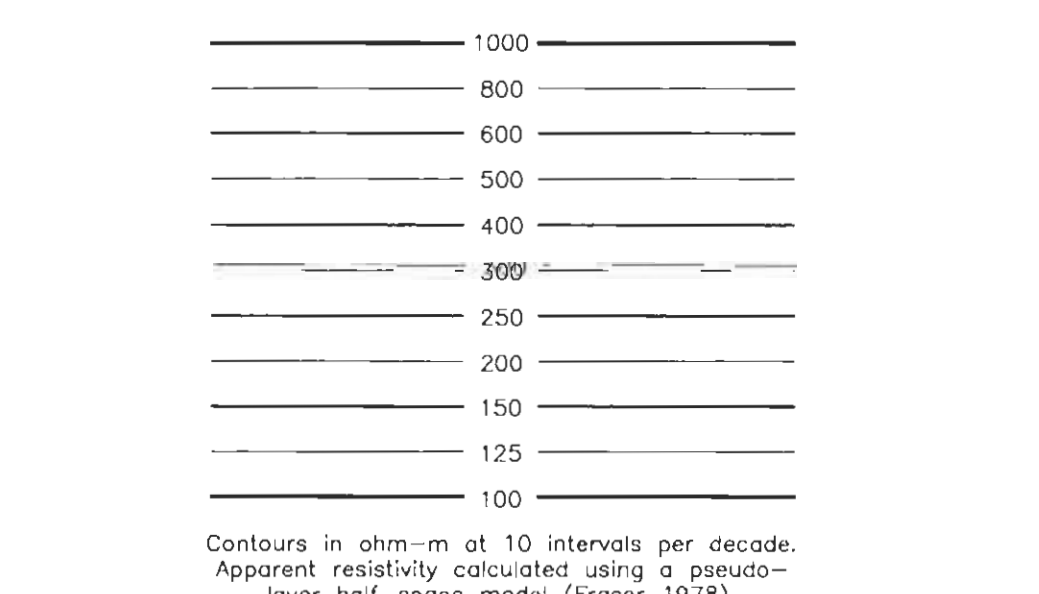
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
	*	Questionable anomaly

Interpretive symbol	Conductor ("model")
B	Bedrock conductor
D	Narrow bedrock conductor ("thin slice")
S	Conductive cover (horizontal thin sheet)
H	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
E	Edge of broad conductor ("edge of half space")
L	Culture, e.g. power line, metal building or fence

**FLIGHT LINES WITH EM ANOMALIES**



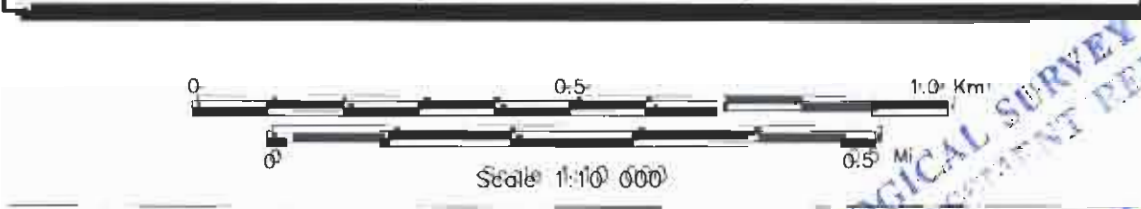
**RESISTIVITY CONTOURS**



**LEROY VENTURES INC.**  
 KETTLE PROPERTY, VERNON MINING DIVISION, B.C.

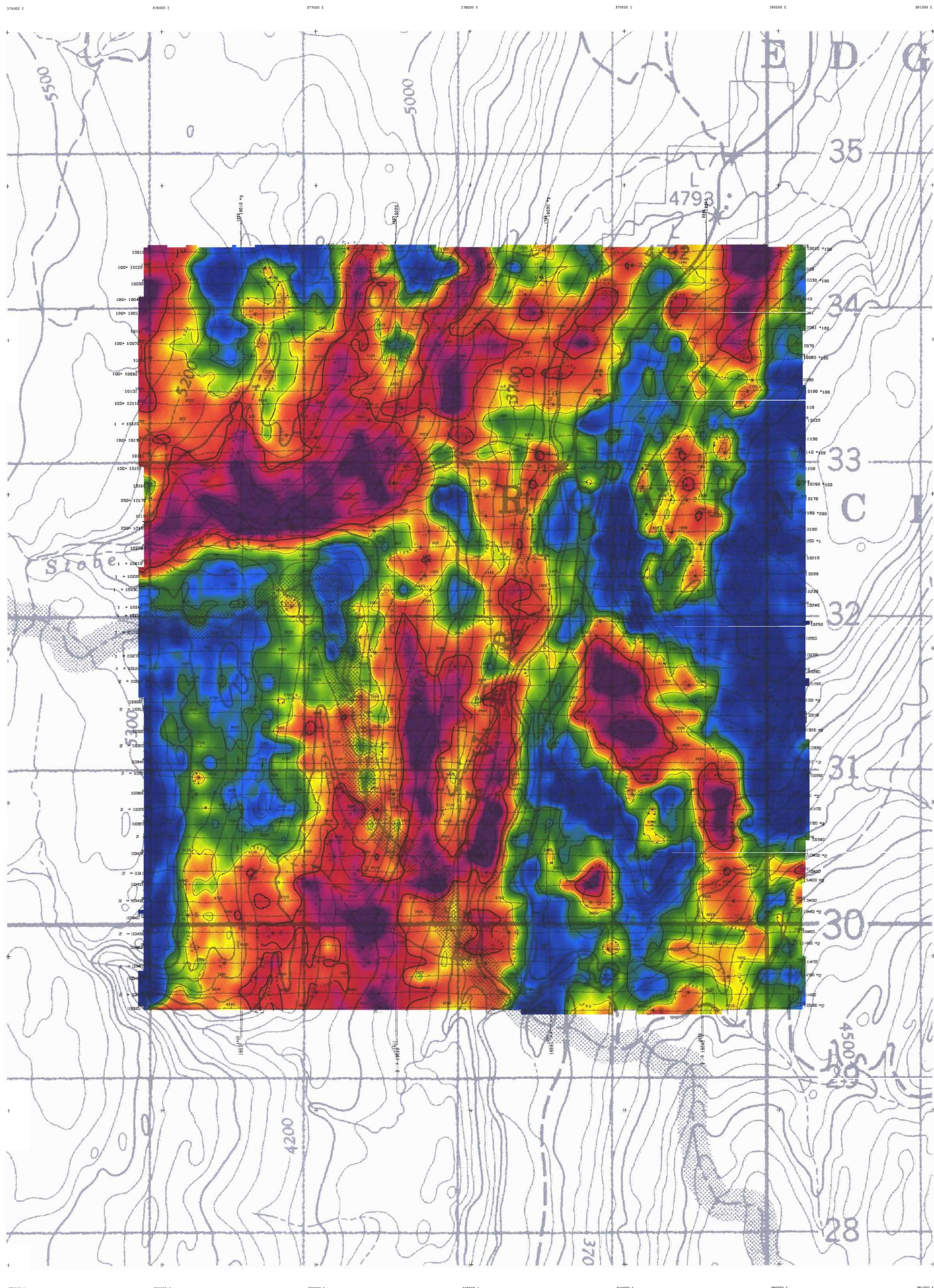
**APPARENT RESISTIVITY**  
 7200 Hz COPLANAR

FUGRO AIRBORNE SURVEY NTS: 82E/15 GEOPHYSICIST:  
 DATE: FEBRUARY, 2004 JOB: 05096 SHEET #  
 Fugro Airborne Surveys



FUGRO AIRBORNE SURVEYS

27/1/32  
 GEOLOGICAL SURVEY BRANCH  
 AIRBORNE RESISTIVITY REPORT



**TECHNICAL SUMMARY**

Navigation: Differentially-corrected GPS  
 Data reduction grid interval: 20 metres  
 Terrain clearance: Helicopter 57 m  
 Electromagnetic sensor 30 m  
 Magnetometer 30 m  
 Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Cesium / 0.01 nT  
 Electromagnetic system: DIGHEM™

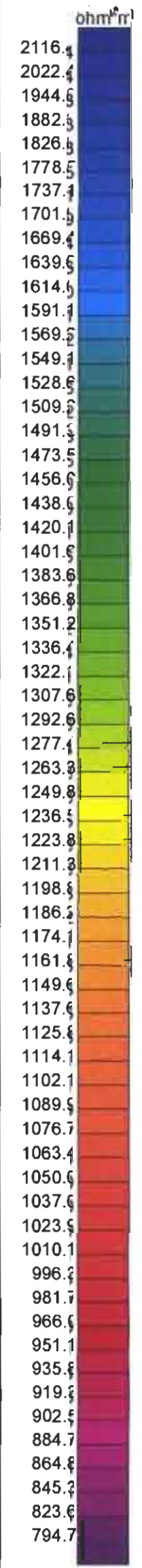
Frequency	Sensitivity	Coil Orientation
1000 Hz	.08 ppm	Vertical coplanar
5000 Hz	.12 ppm	Vertical coplanar
900 Hz	.12 ppm	Horizontal coplanar
7200 Hz	.24 ppm	Horizontal coplanar
56000 Hz	.60 ppm	Horizontal coplanar



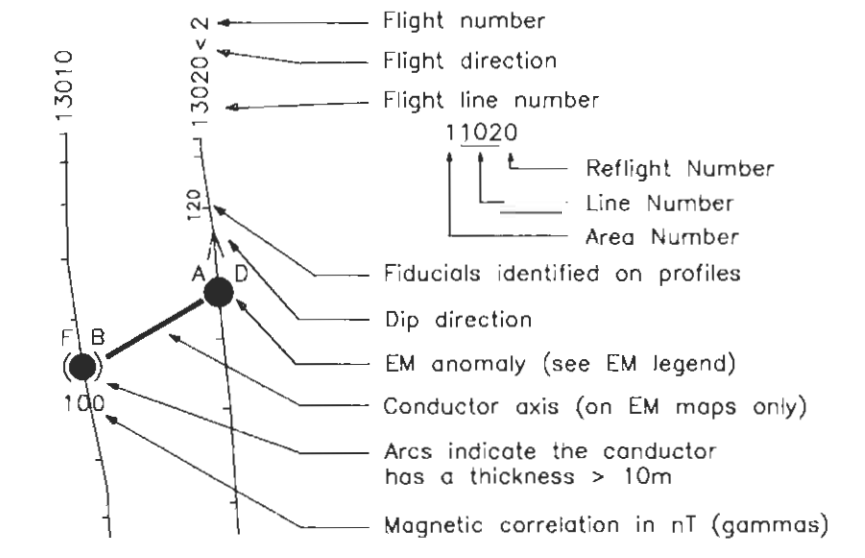
**ELECTROMAGNETIC ANOMALIES**

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	○	1-5 siemens
1	○	< 1 siemens
-	*	Questionable anomaly

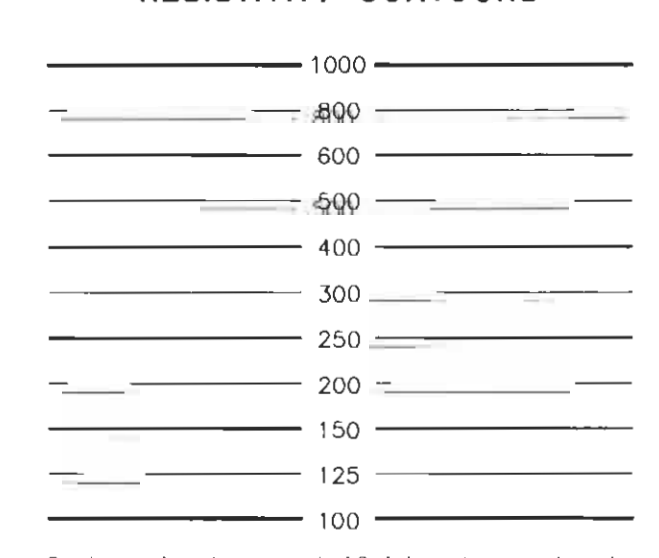
Anomaly identifier	Interpretive symbol	Interpretive symbol	Interpretive symbol
Depth is greater than:	Interpretive symbol	Interpretive symbol	Interpretive symbol
15 m	Interpretive symbol	Interpretive symbol	Interpretive symbol
30 m	Interpretive symbol	Interpretive symbol	Interpretive symbol
45 m	Interpretive symbol	Interpretive symbol	Interpretive symbol
60 m	Interpretive symbol	Interpretive symbol	Interpretive symbol



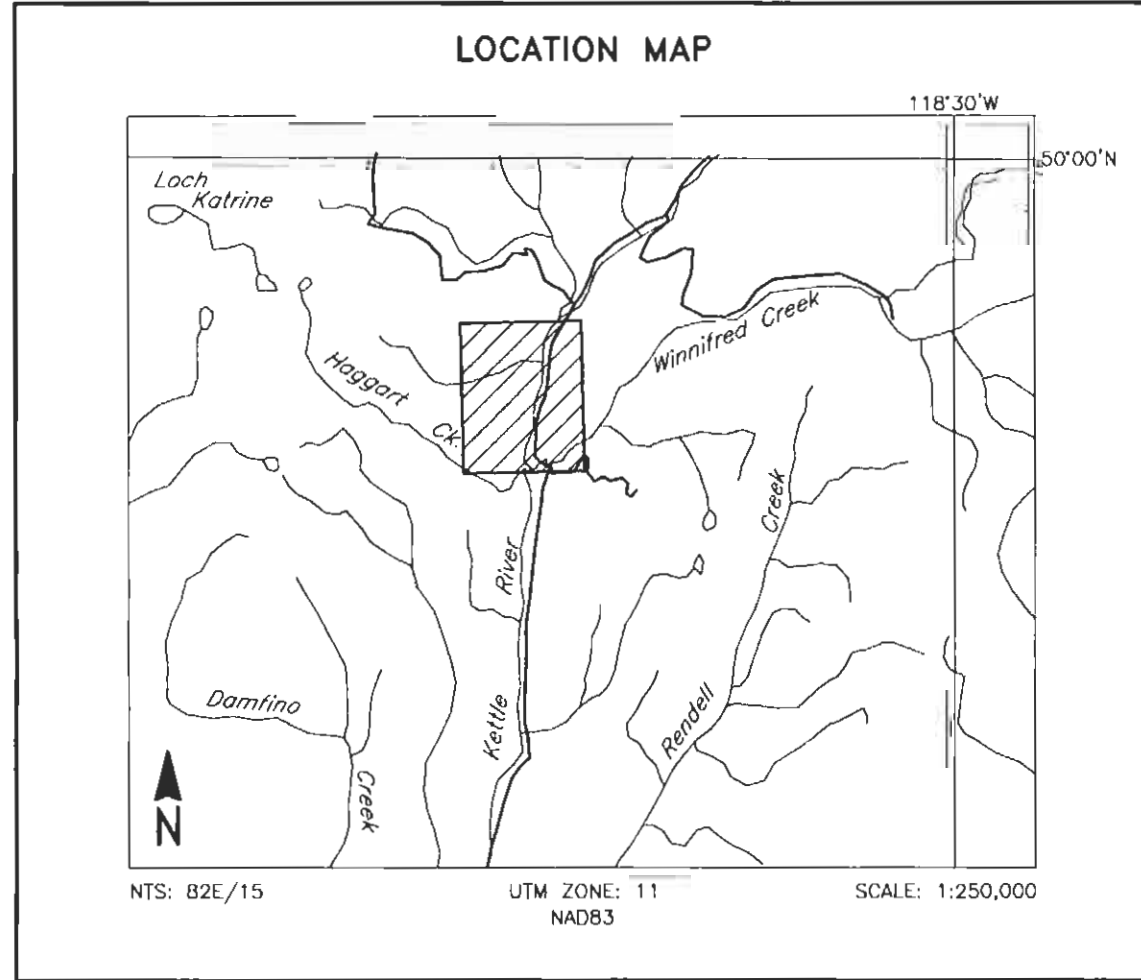
**FLIGHT LINES WITH EM ANOMALIES**



**RESISTIVITY CONTOURS**



Contours in ohm-m at 10 intervals per decade. Apparent resistivity calculated using a pseudo-layer half-space model (Frasier 1978).

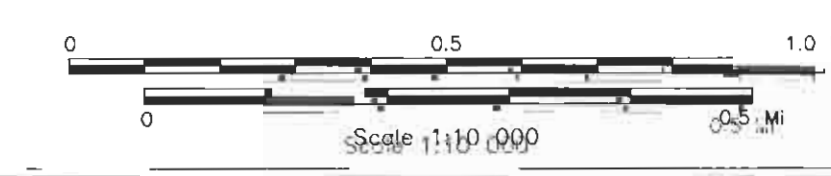


**LERoy VENTURES INC.**  
 KETTLE PROPERTY, VERNON MINING DIVISION, B.C.

**APPARENT RESISTIVITY  
 900 Hz COPLANAR**

FUGRO DIGHEM™ SURVEY	NTS: 82E/15	GEOPHYSICIST:
DATE: FEBRUARY, 2004	JOB: 03036	SHEET: 1

Fugro Airborne Surveys



FUGRO AIRBORNE SURVEYS

27-432  
 VERNON MINING DIVISION  
 KETTLE PROPERTY  
 SURVEY



**TECHNICAL SUMMARY**

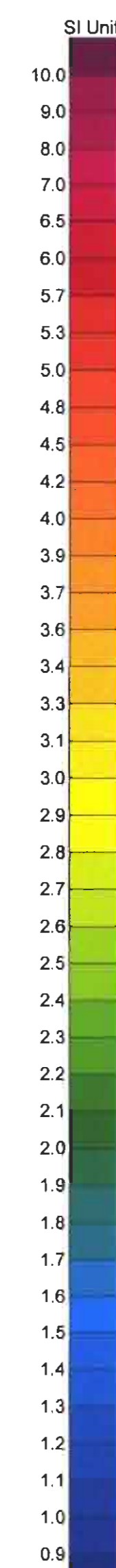
Navigation: Differentially-corrected GPS  
 Data reduction grid interval: 20 metres  
 Terrain clearance: Electromagnetic sensor 30 m  
 Helicopter 5.7 m  
 Magnetometer 30 m  
 Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Cesium / 0.01 nT  
 Electromagnetic system: DIGHEM

Frequency	Sensitivity	Coil Orientation
1000 Hz	06 ppm	Vertical coplanar
5500 Hz	12 ppm	Vertical coplanar
8500 Hz	12 ppm	Horizontal coplanar
7200 Hz	24 ppm	Horizontal coplanar
56000 Hz	60 ppm	Horizontal coplanar



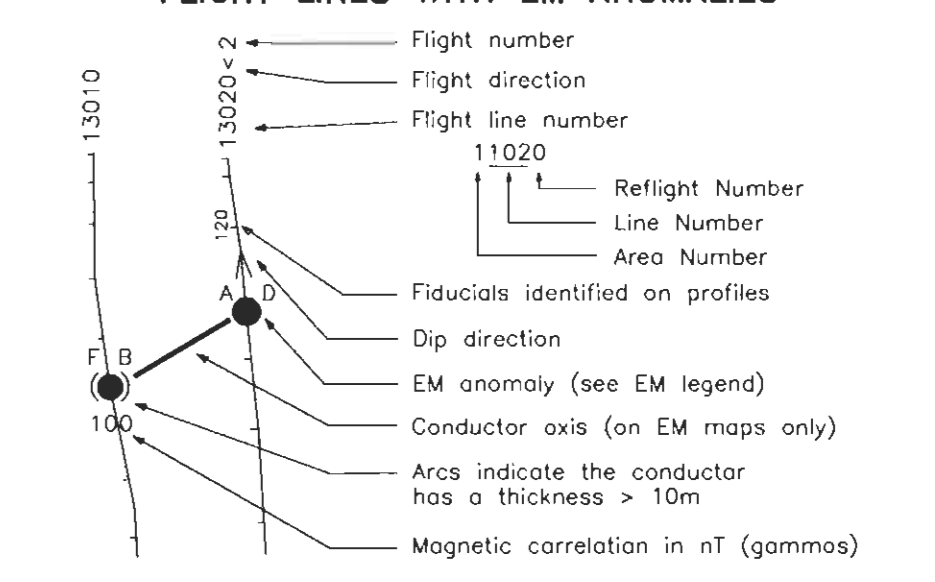
**ELECTROMAGNETIC ANOMALIES**

Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
-	*	Questionable anomaly

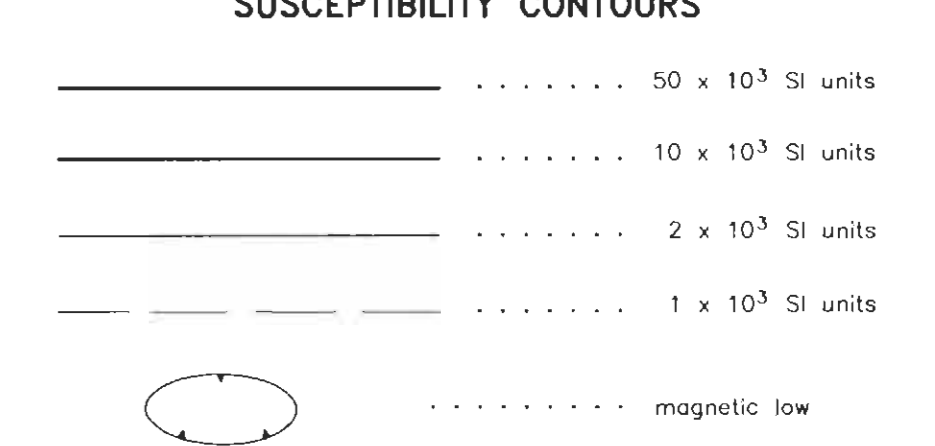


Anomaly Identifier	Interpretive symbol	Interpretive symbol
CH	○	Conductor ("model")
B	○	Bedrock conductor
D	○	Narrow bedrock conductor ("thin dike")
S	○	Conductive cover ("horizontal thin sheet")
H	○	Broad conductive rock unit, deep conductive weathering, thick conductive cover ("half saucer")
E	○	Edge of broad conductor ("edge of half space")
L	○	Cultural, e.g. power line, metal building or fence

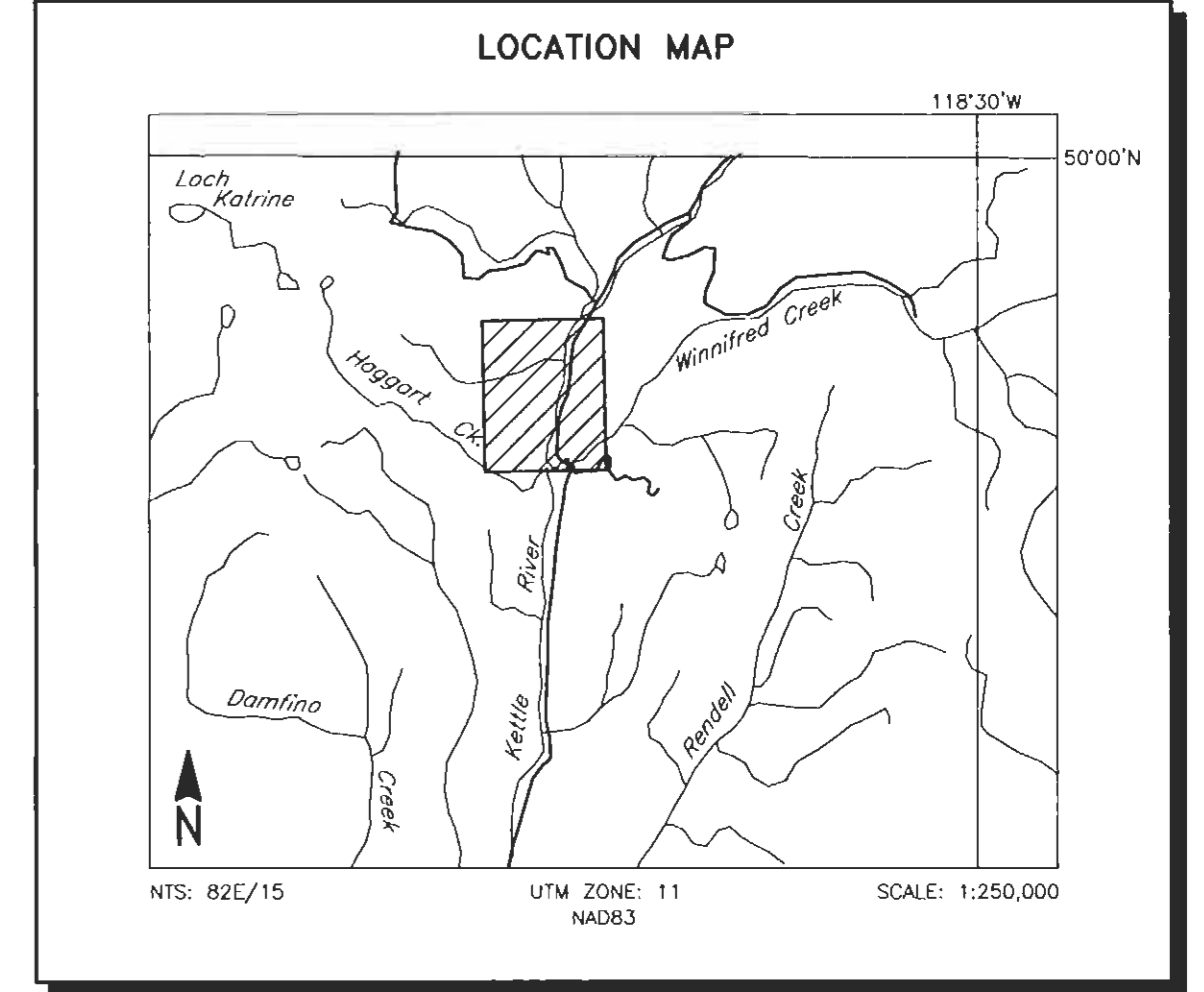
**FLIGHT LINES WITH EM ANOMALIES**



**SUSCEPTIBILITY CONTOURS**



**LOCATION MAP**



**LEROY VENTURES INC.**  
 KETTLE PROPERTY, VERNON MINING DIVISION, B.C.

**APPARENT MAGNETIC SUSCEPTIBILITY**

FUGRO DIGHEM SURVEY NTS: 82E/15 GEOPHYSICIST:  
 DATE: FEBRUARY, 2004 JOB: 03096 SHEET: 1

Fugro Airborne Surveys

