

**TECHNICAL SUMMARY**

Navigation . . . . . Serial real time differential GPS positioning  
 Data reduction grid interval . . . . . 50 metres  
 Terrain clearance . . . . . Helicopter 80 m  
 . . . . . Electromagnetic sensor 30 m  
 . . . . . Magnetometer, VLF receiver 40 m  
 Data sampling interval . . . . . 0.1 seconds  
 Magnetometer / sensitivity . . . . . Scintrex optium / 0.01 nT  
 VLF receiver / sensitivity . . . . . Hertz 2A / 1%  
 Electromagnetic system . . . . . DIOSEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5000 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
3000 Hz	0.2 ppm	Horizontal coplanar
50000 Hz	1.0 ppm	Horizontal coplanar

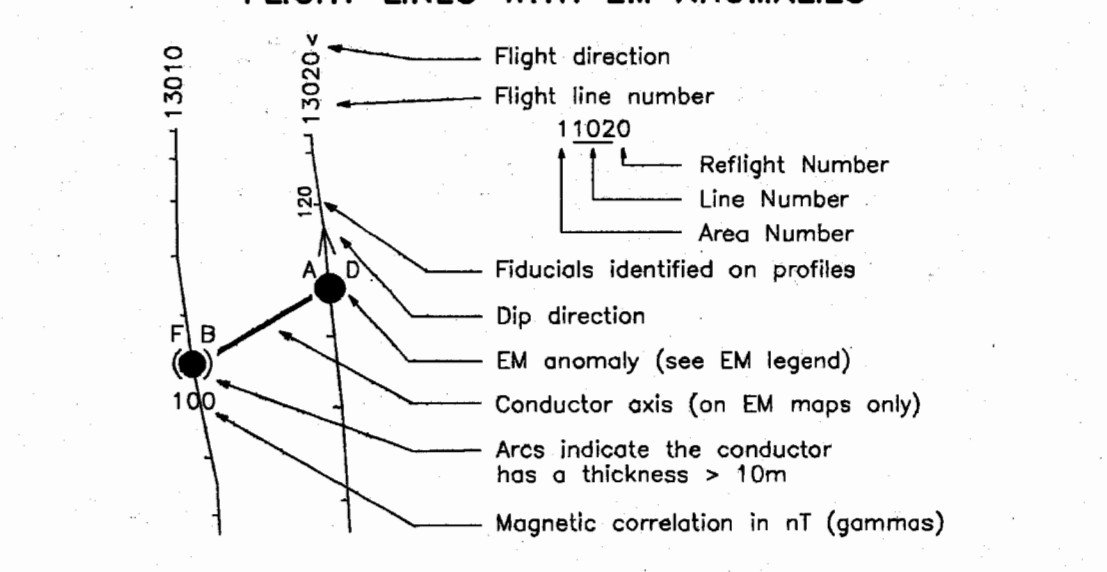


**ELECTROMAGNETIC ANOMALIES**

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	Conductor (model)
B	—	Bedrock conductor
D	—	Narrow 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

**FLIGHT LINES WITH EM ANOMALIES**

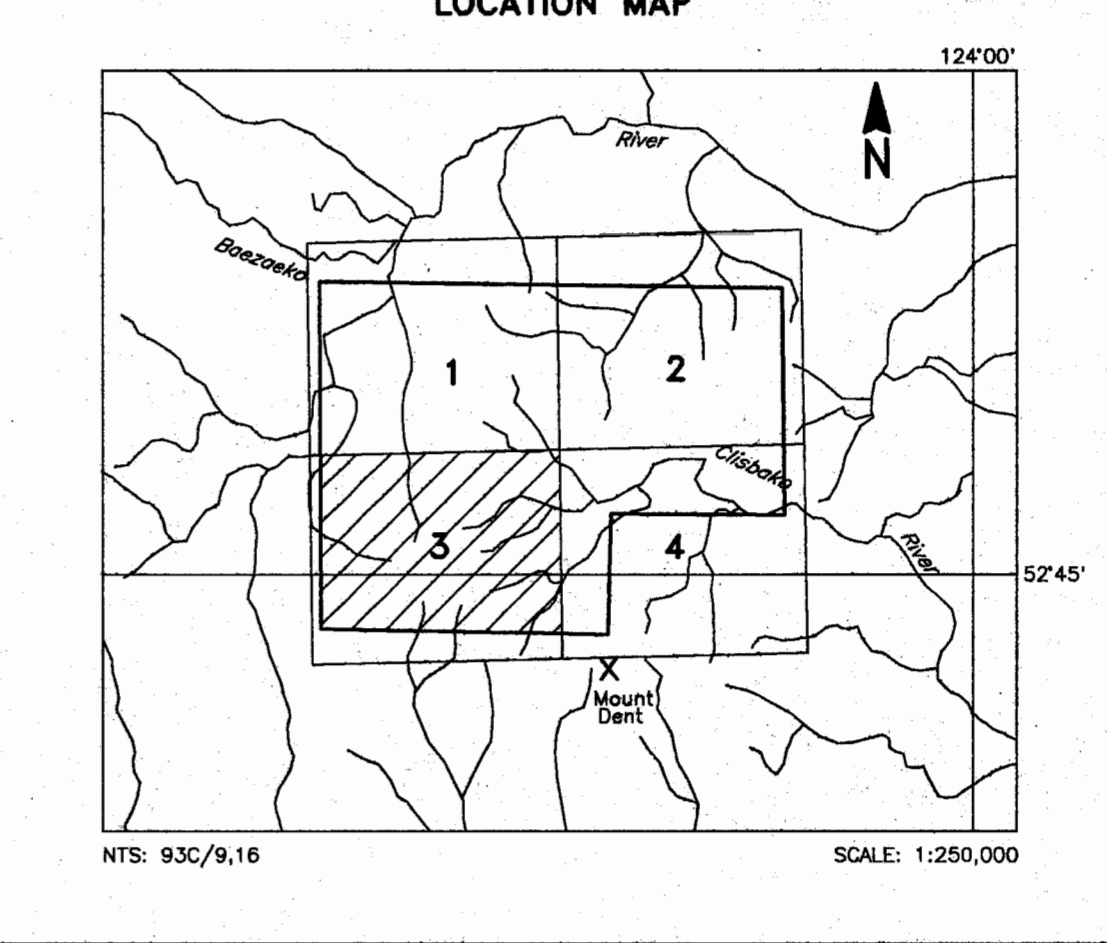


**RESISTIVITY CONTOURS**

1000
800
600
500
400
300
250
200
150
125
100

Contours in ohm-m at 10 intervals per decade

**LOCATION MAP**

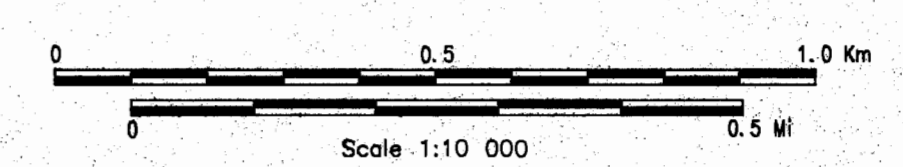


**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**RESISTIVITY**  
**900 Hz COPLANAR**

DIGHEM SURVEY	NTS: 93C/9,16	GEOPHYSICIST: [Signature]
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 3

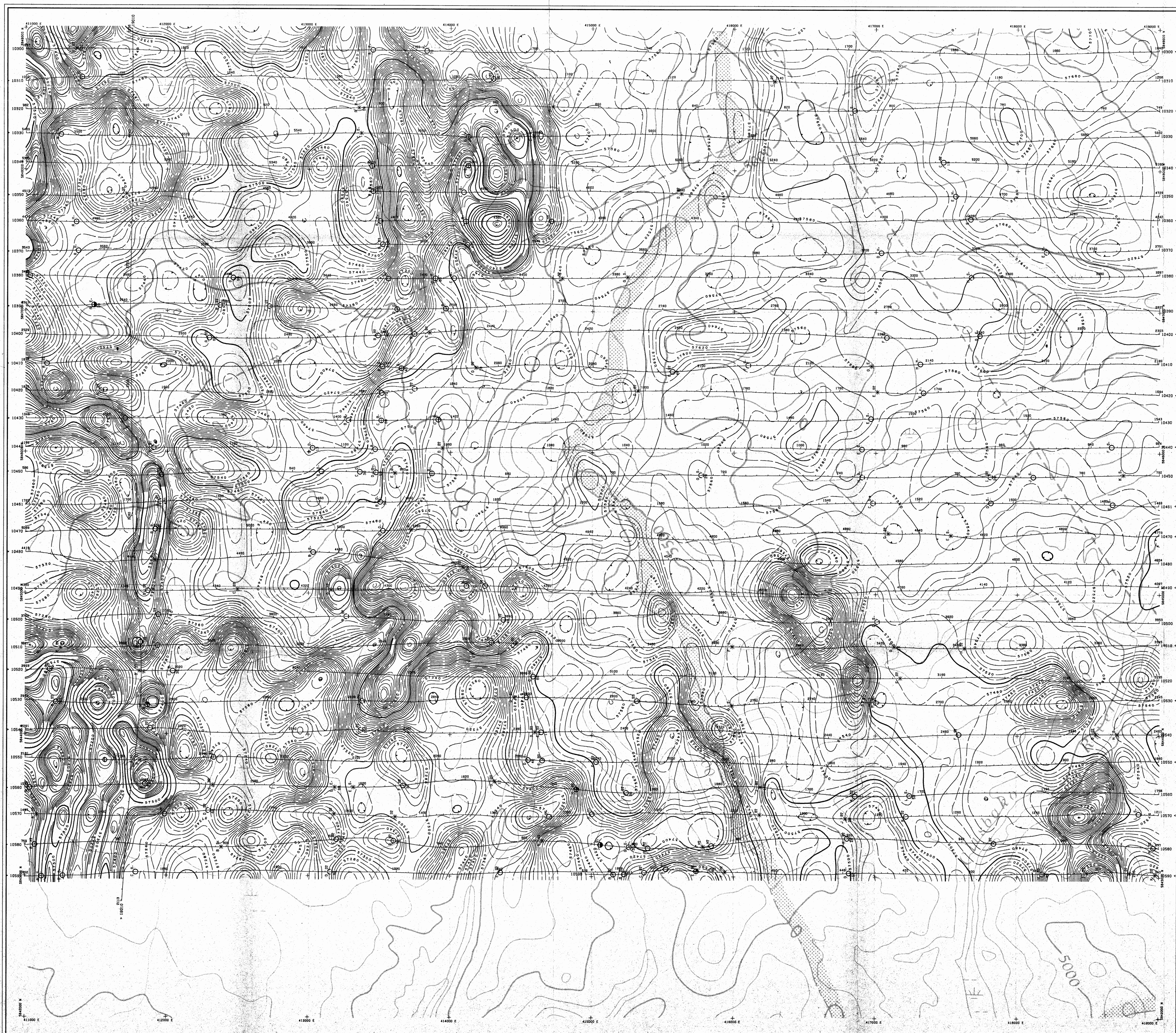
DIGHEM SURVEYS & PROCESSING INC.



**GEOLOGICAL BRIDGE**  
**ASSESSMENT RESEARCH**  
 Quality and Service in Alberta Geophysics

23,630





**TECHNICAL SUMMARY**

Navigation: Serial real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m  
 Electromagnetic sensor 30 m  
 Magnetometer: VLF receiver 40 m  
 Data sampling interval: 0.11 second  
 Magnetometer / sensitivity: Scintrex cesium / 0.01 nT  
 VLF receiver / sensitivity: Hertz 2A / 1%  
 Electromagnetic system: DIGEM™



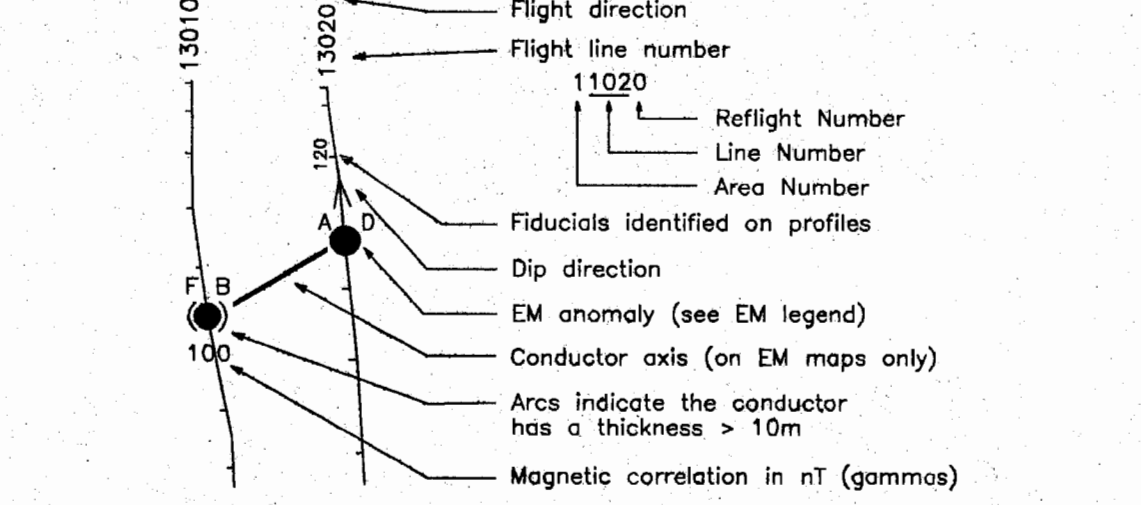
Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
2200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

**ELECTROMAGNETIC ANOMALIES**

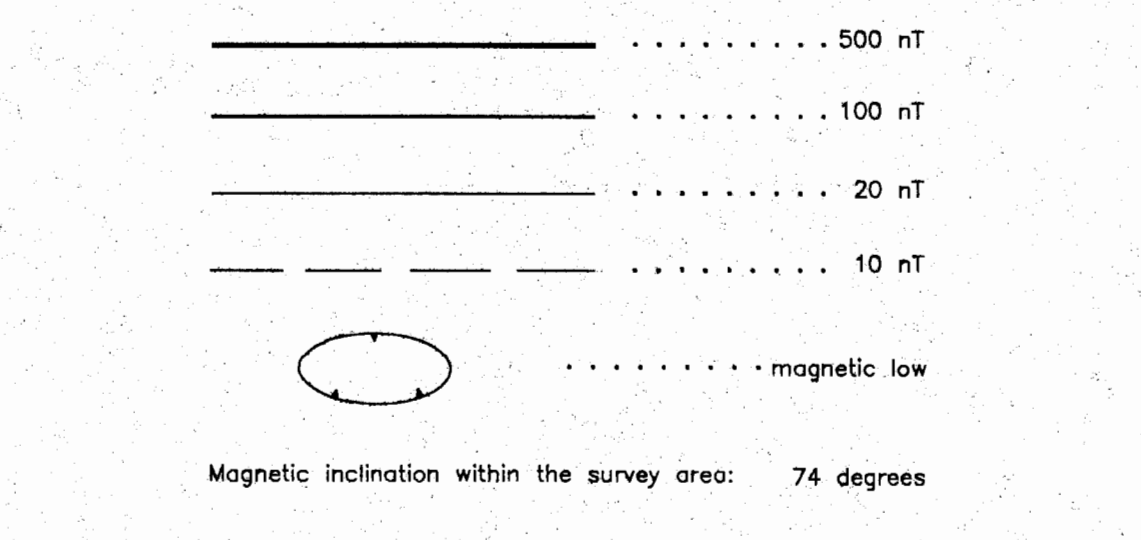
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
	*	Questionable anomaly

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

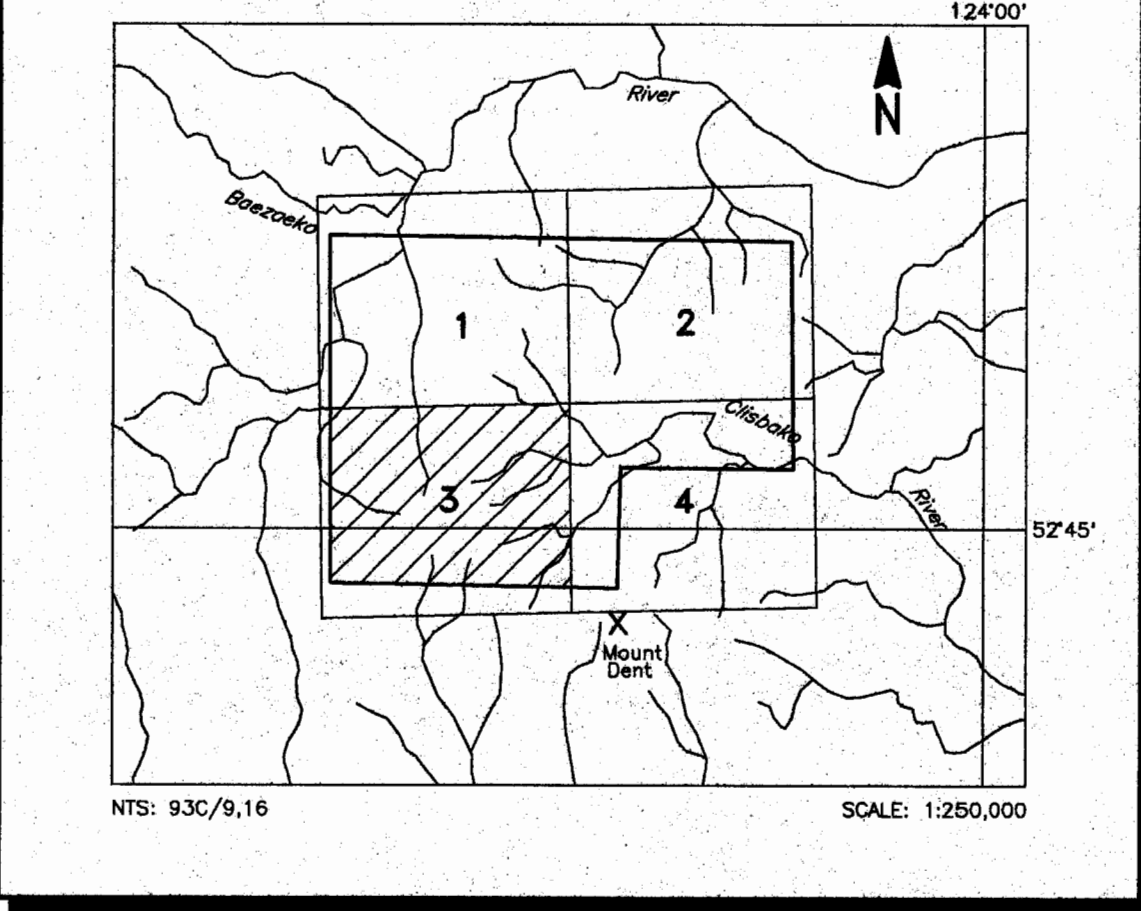
**FLIGHT LINES WITH EM ANOMALIES**



**TOTAL FIELD MAGNETIC CONTOURS**



**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**TOTAL FIELD MAGNETICS**

DIGEM™ SURVEY	NTS: 93C/9.16	GEOPHYSICIST: <i>RB</i>
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 3

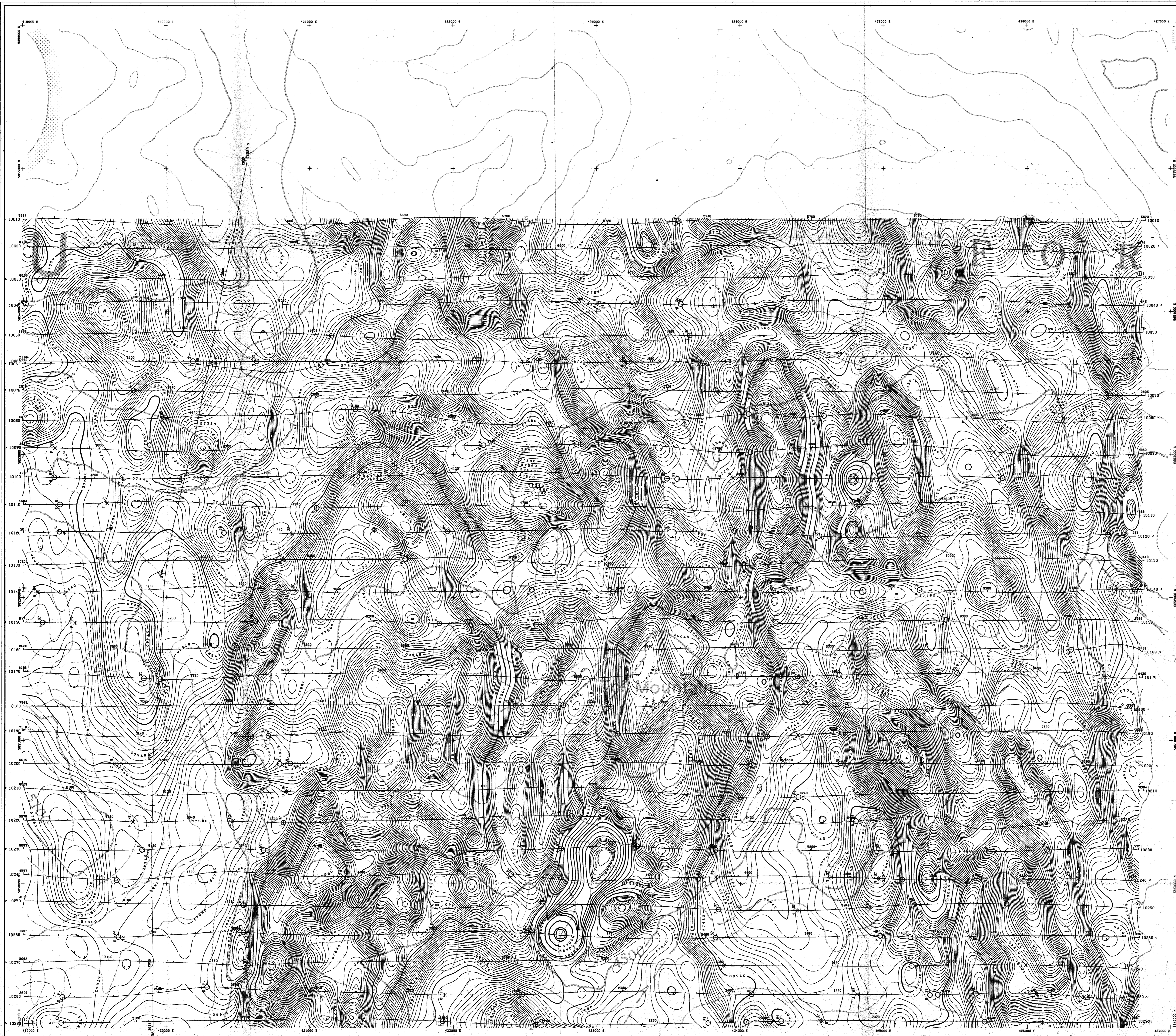
DIGEM SURVEYS & PROCESSING INC.

0 0.5 1.0 Km  
 0 0.5 1.0 Miles

**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
**DIGEM**

23,630





**TECHNICAL SUMMARY**

Navigation . . . . . Serial real time differential GPS positioning  
 Data reduction grid interval . . . . . 50 metres  
 Terrain clearance . . . . . Helicopter 60 m  
 . . . . . Electromagnetic sensor 30 m  
 Data sampling interval . . . . . 0.1 second  
 Magnetometer / sensitivity . . . . . Scintrex cesium / 0.01 nT  
 VLF receiver / sensitivity . . . . . Hartz 2A / 1%  
 Electromagnetic system . . . . . DIGHEM™

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 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**

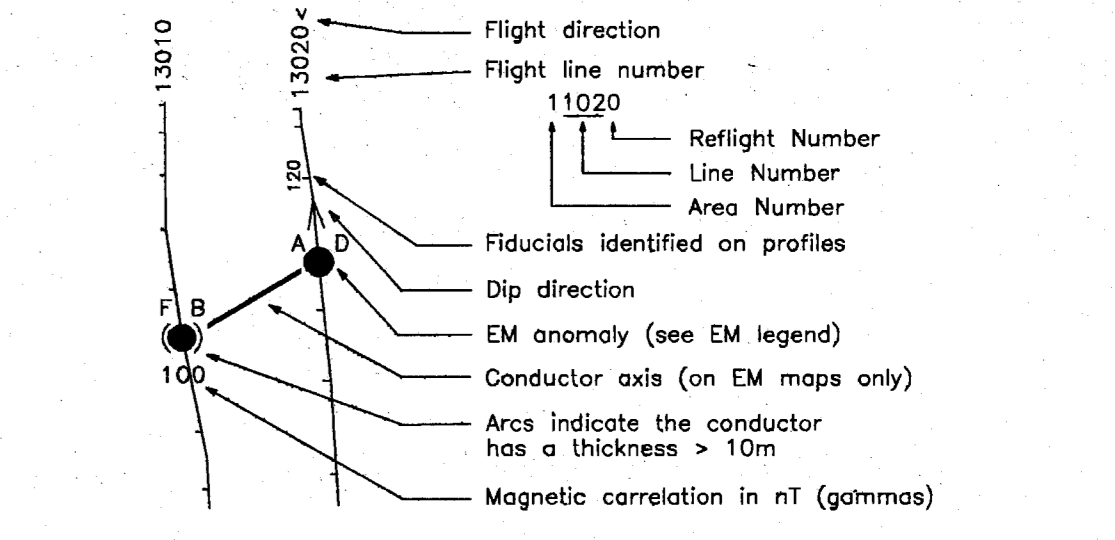
Conductor ("mode")  
 B Bedrock conductor  
 D Narrow bedrock conductor ("thin dike")  
 S Conductive cover ("horizontal thin sheet")  
 H Broad conductive rock unit, deep conductive weathering, thick conductive cover  
 E Edge of broad conductor ("edge of half space")  
 L Culture, e.g. power line,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

**Anomaly identifier**

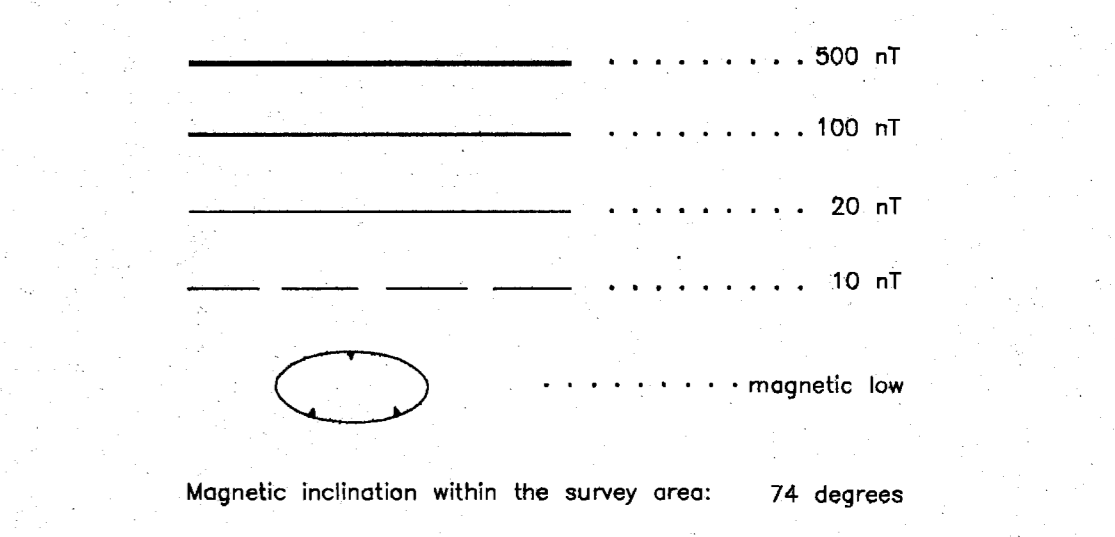
Depth is greater than:  
 15 m  
 30 m  
 40 m  
 60 m

Inphase and quadrature of coaxial coil  
 N greater than:  
 5 ppm  
 10 ppm  
 15 ppm  
 20 ppm

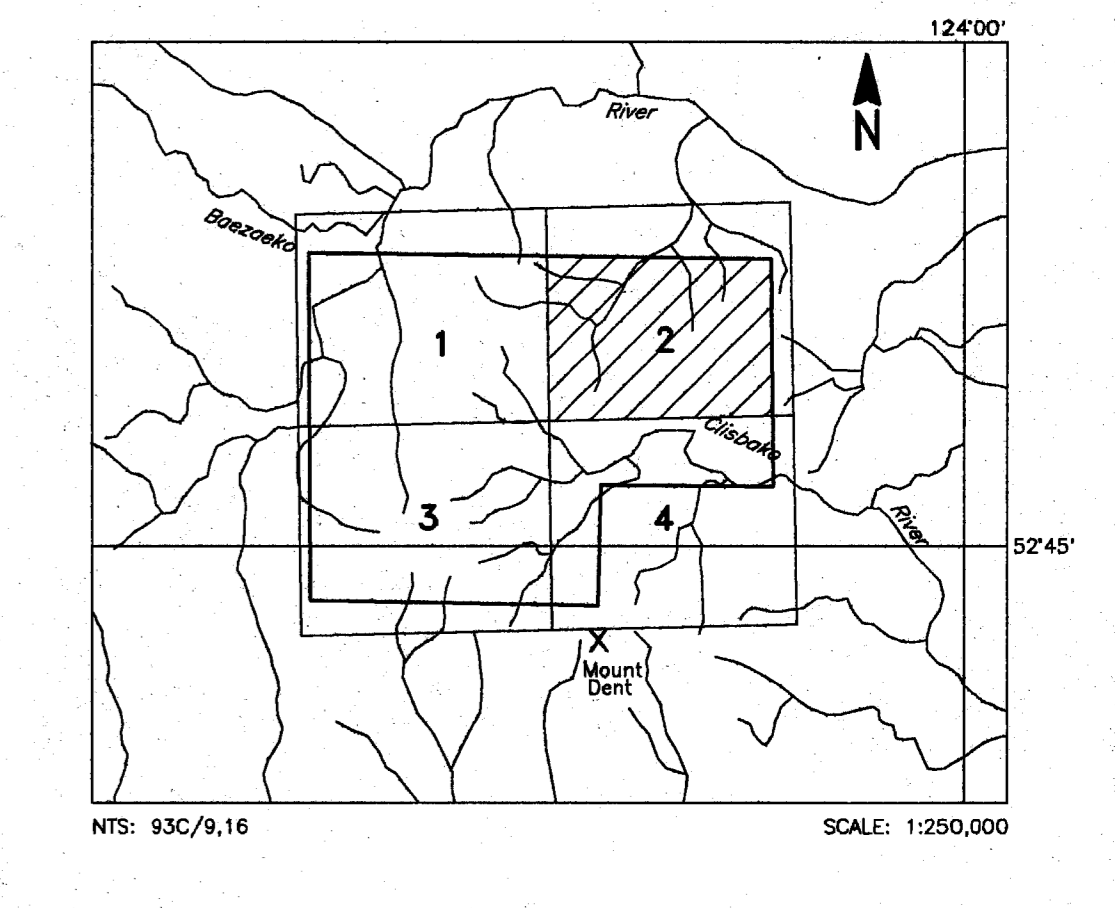
**FLIGHT LINES WITH EM ANOMALIES**



**TOTAL FIELD MAGNETIC CONTOURS**



**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**TOTAL FIELD MAGNETICS**

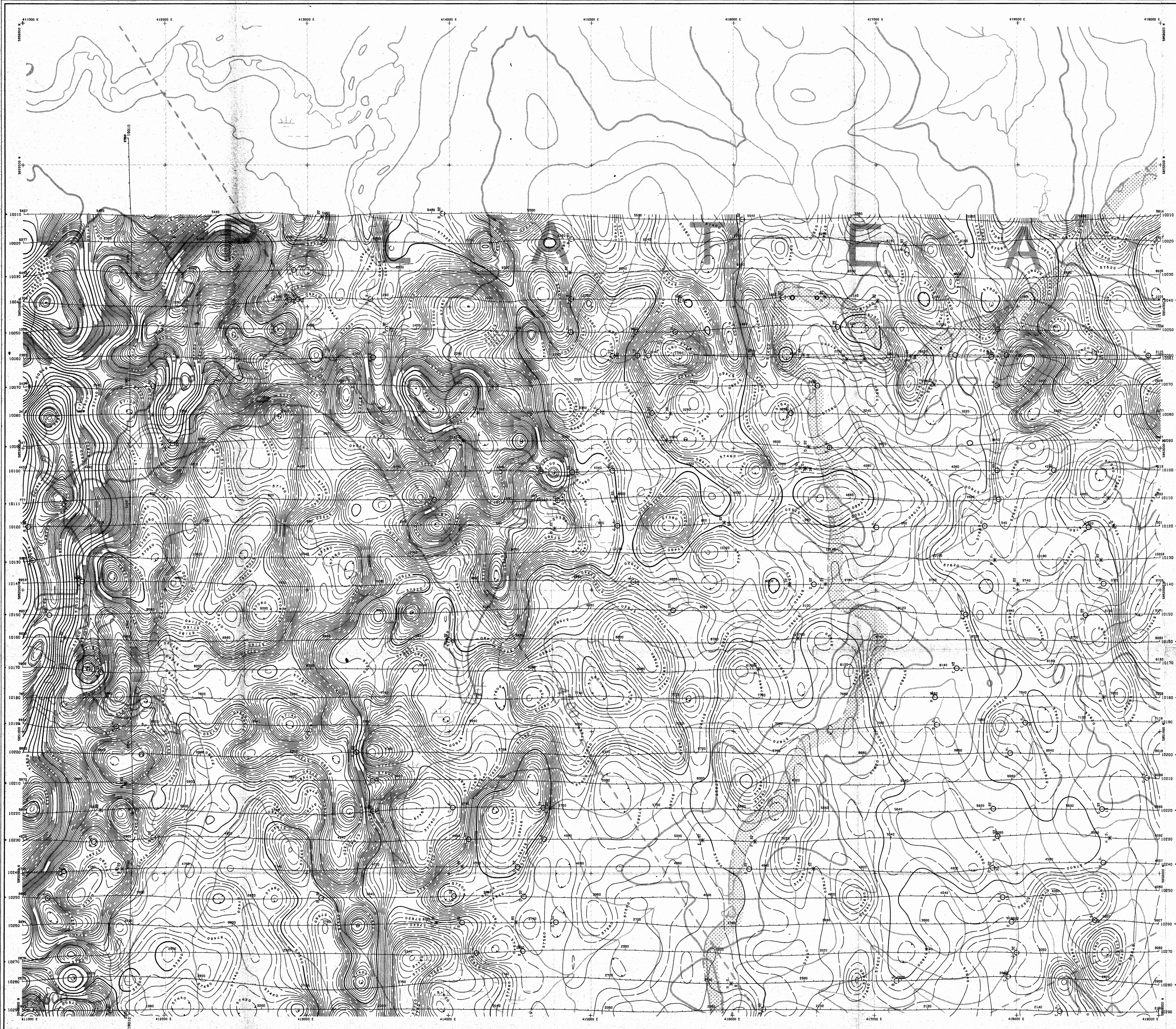
DIGHEM™ SURVEY	NTS: 93C/9,16	GEOPHYSICIST:
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 2

DIGHEM SURVEYS & PROCESSING INC.

0 0.5 1.0 Km  
 Scale 1:10 000  
**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
**DIGHEM**  
 Quality and Service in Airborne Geophysics

23,630





**TECHNICAL SUMMARY**

Navigation: Serial real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m  
 Electromagnetic sensor: 30 m  
 Magnetometer: VLF receiver 40 m  
 Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Scintrex cesium / 0.01 nT  
 VLF receiver / sensitivity: Herz 2A / 1%  
 Electromagnetic system: DIGHEM

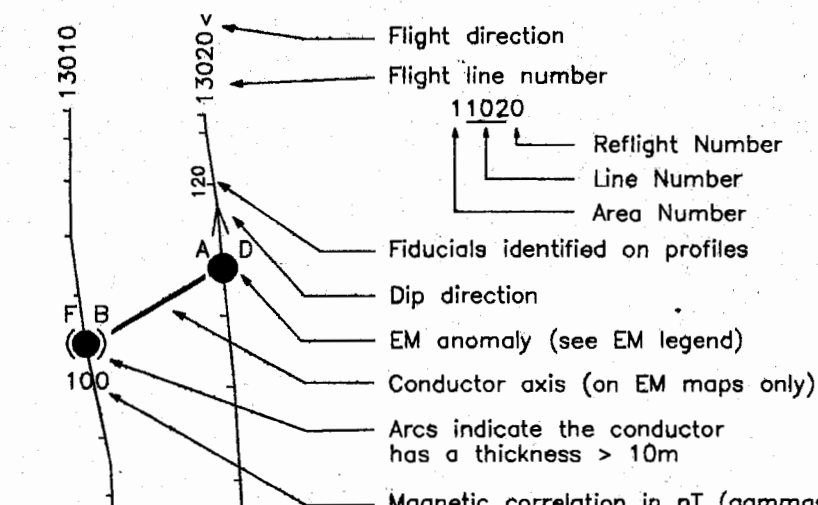
Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

**ELECTROMAGNETIC ANOMALIES**

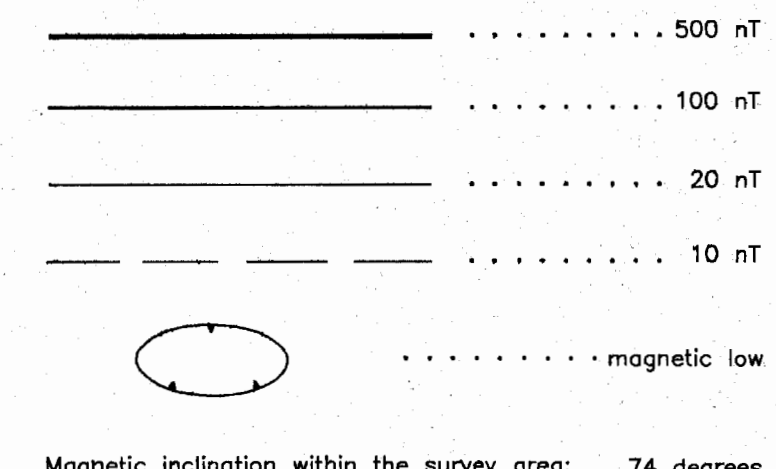
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	<1 siemens
-	*	Questionable anomaly

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

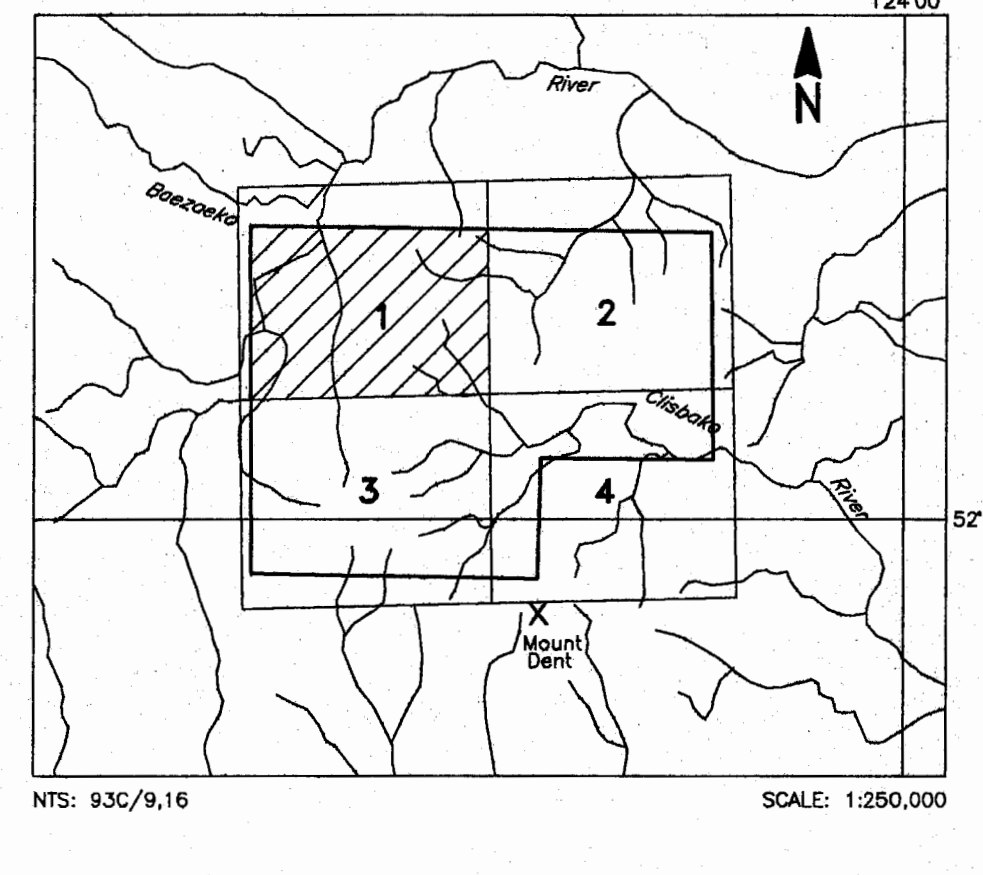
**FLIGHT LINES WITH EM ANOMALIES**



**TOTAL FIELD MAGNETIC CONTOURS**



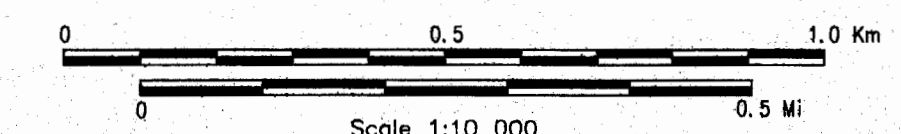
**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**TOTAL FIELD MAGNETICS**

DIGHEM SURVEY	NTS: 93C/9/16	GEOPHYSICIST: [Signature]
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 1
DIGHEM SURVEYS & PROCESSING INC.		



**GEOLOGICAL ASSESSMENT BY DIGHEM**

23,630





**TECHNICAL SUMMARY**

Navigation: Serial real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m  
 Electromagnetic sensor: 30 m  
 Magnetometer: VLF receiver 40 m  
 0.1 seconds  
 Data sampling interval: Scintrex casium / 0.01 nT  
 Magnetometer sensitivity: Scintrex casium / 0.01 nT  
 VLF receiver sensitivity: 1 Hz / 1%  
 Electromagnetic system: DIGEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
3700 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

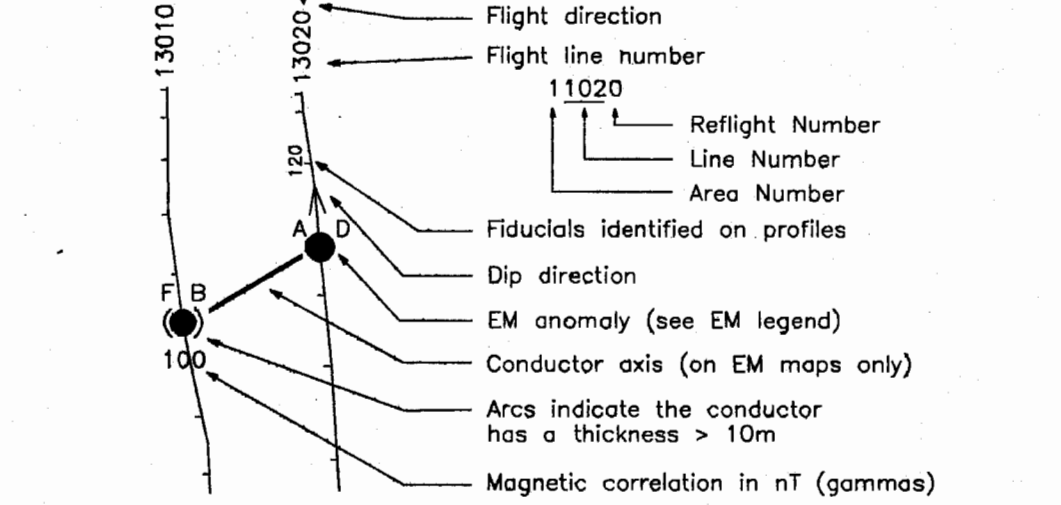


**ELECTROMAGNETIC ANOMALIES**

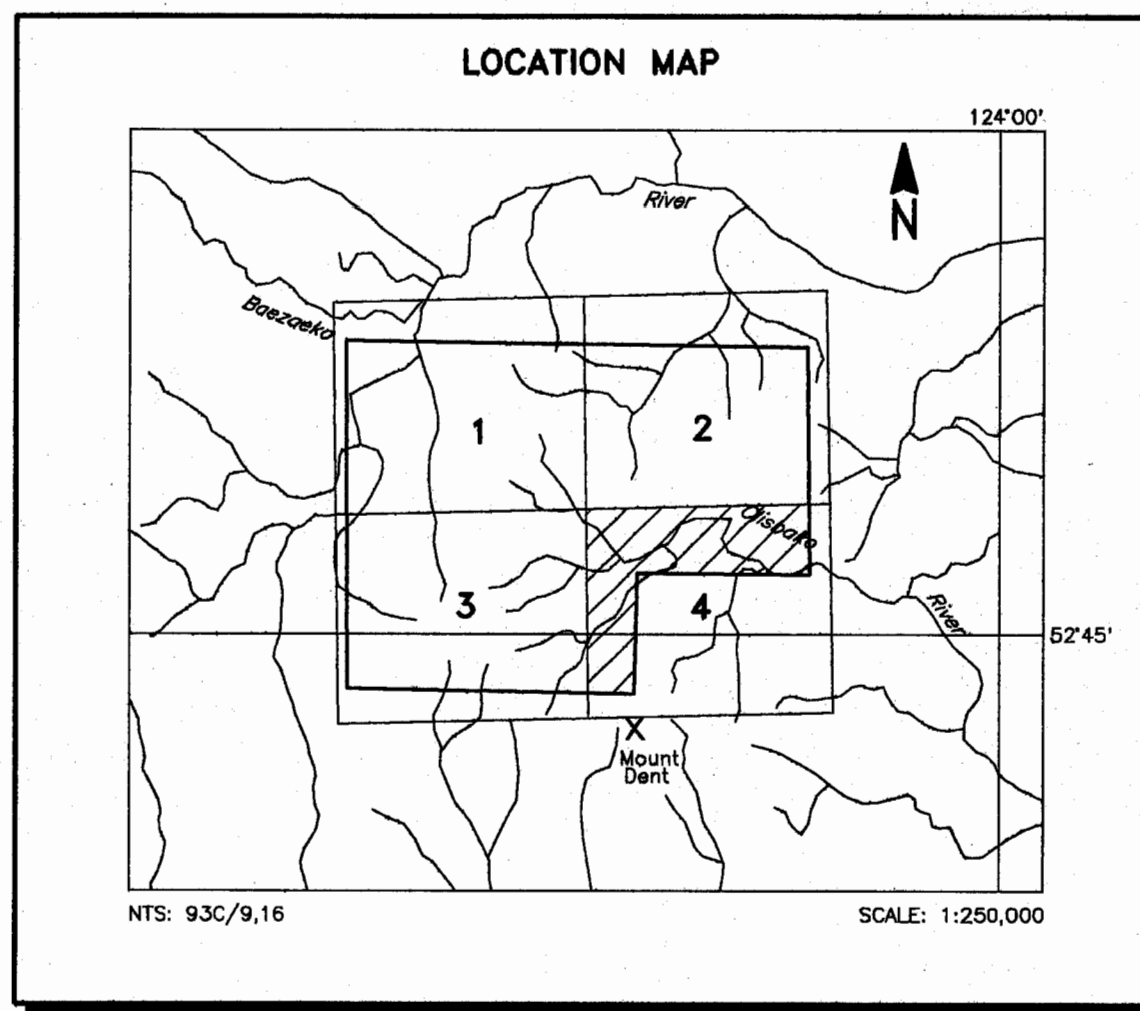
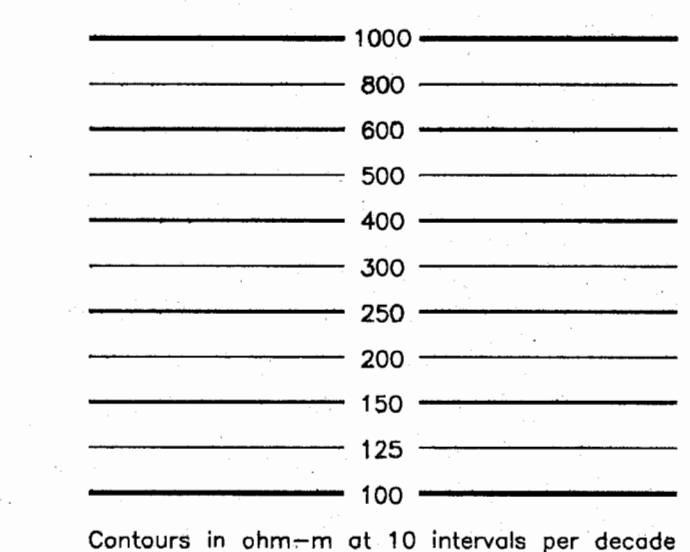
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
-	*	Questionable anomaly

Anomaly identifier	Interpretive symbol	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 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**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**RESISTIVITY**  
**56,000 Hz COPLANAR**

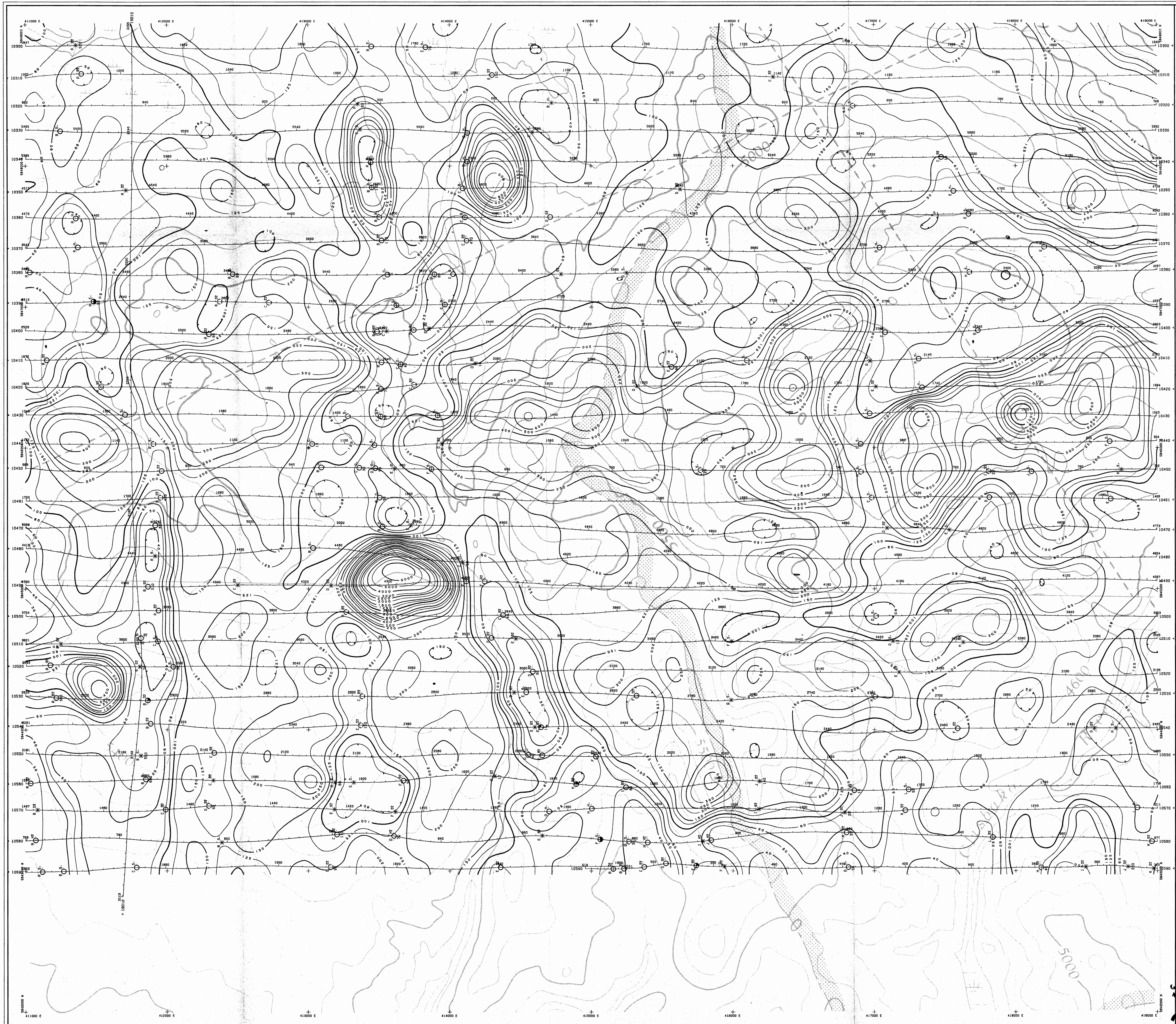
DIGEM SURVEY	NTS: 93C/9,16	GEOPHYSICIST:
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 4

DIGEM SURVEYS & PROCESSING INC.

1:10 000  
**DIGEM**  
 GEOPHYSICAL BRANCH  
 ASSESSMENT REPORT

23,630





**TECHNICAL SUMMARY**

Navigation: Serial real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m  
 Electromagnetic sensor: 30 m  
 Magnetometer: VLF receiver 40 m

Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Schlumberger / 0.01 nT  
 VLF receiver / sensitivity: Herz 2A / 1%  
 Electromagnetic system: DIGHEM

Frequency	Sensitivity	Cell Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar



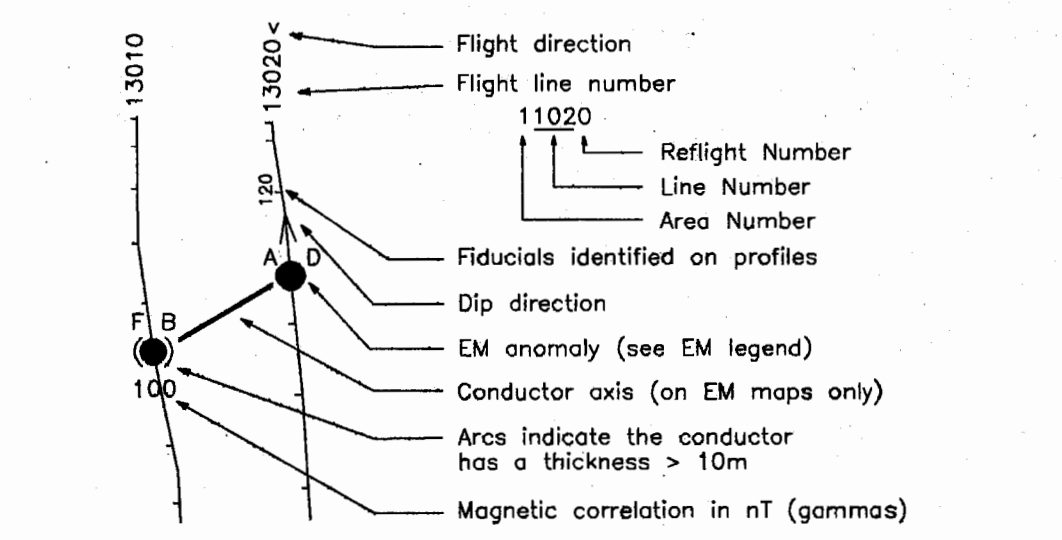
**ELECTROMAGNETIC ANOMALIES**

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	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 space")
E	○	Edge of broad conductor ("edge of half space")
L	○	Culture, e.g. power line, metal building or fence

Depth in greater than:  
 10 m  
 20 m  
 40 m  
 60 m

**FLIGHT LINES WITH EM ANOMALIES**

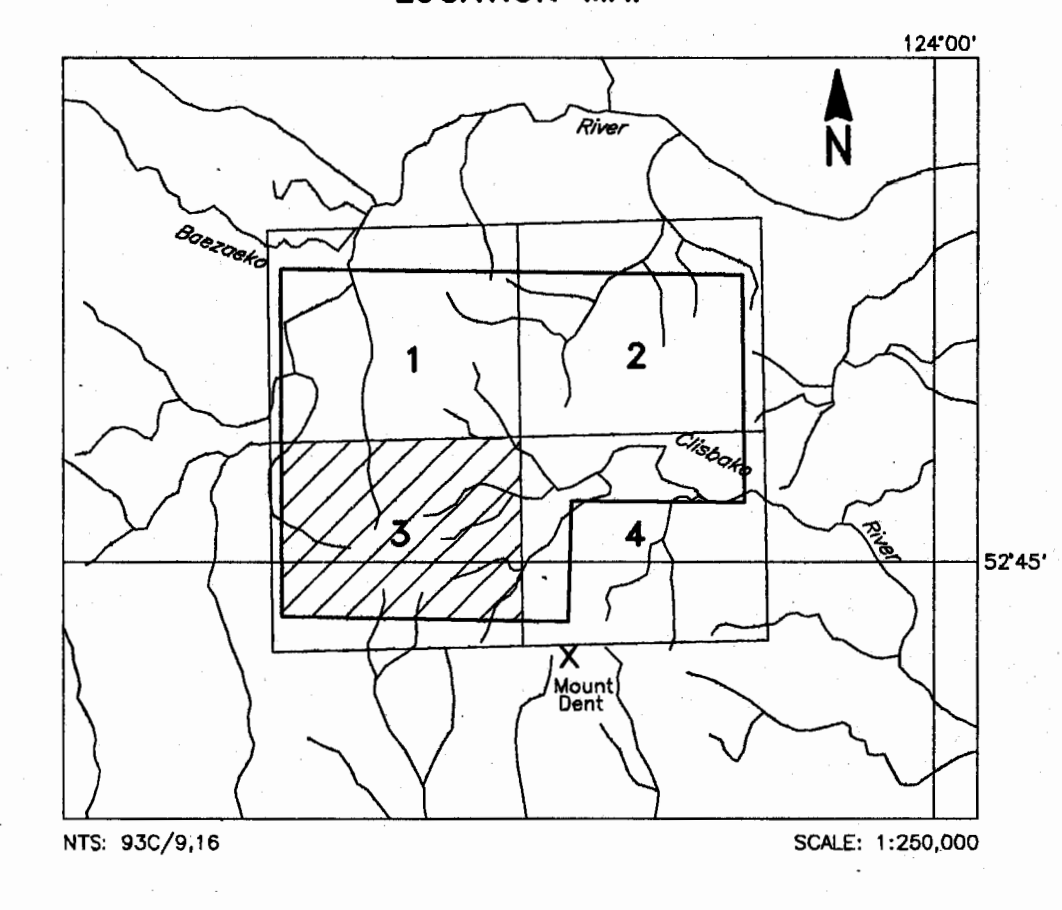


**RESISTIVITY CONTOURS**

1000
800
600
500
400
300
250
200
150
125
100

Contours in ohm-m at 10 intervals per decade

**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**RESISTIVITY**  
**56,000 Hz COPLANAR**

DIGHEM SURVEY	NTS: 93C/9,16	GEOPHYSICIST: [Signature]
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 3

**DIGHEM SURVEYS & PROCESSING INC.**

0 0.5 1.0 Km  
 Scale 1:10 000

**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**

**DIGHEM**  
 DIGHEM SURVEYS & PROCESSING INC.

**23,630**





**TECHNICAL SUMMARY**

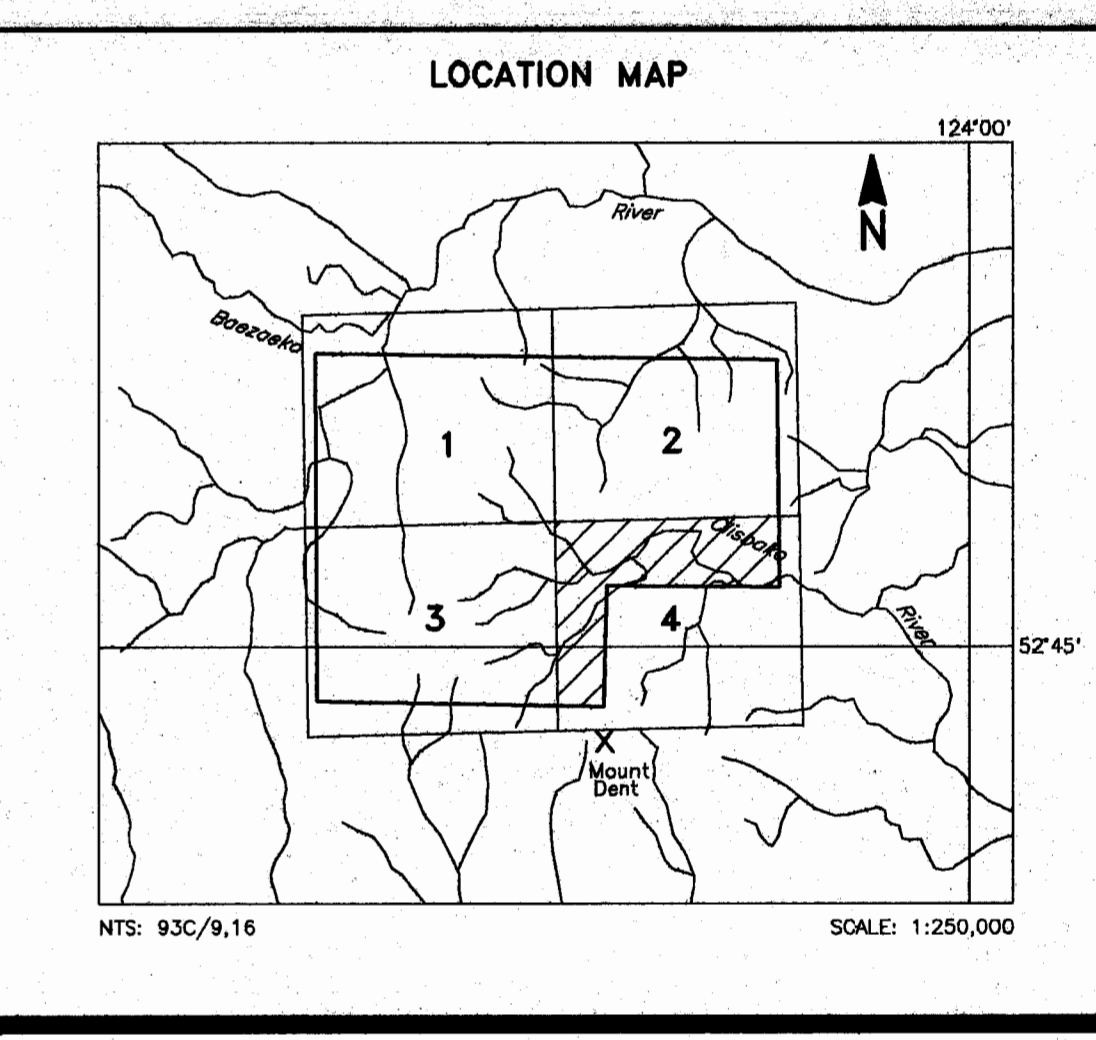
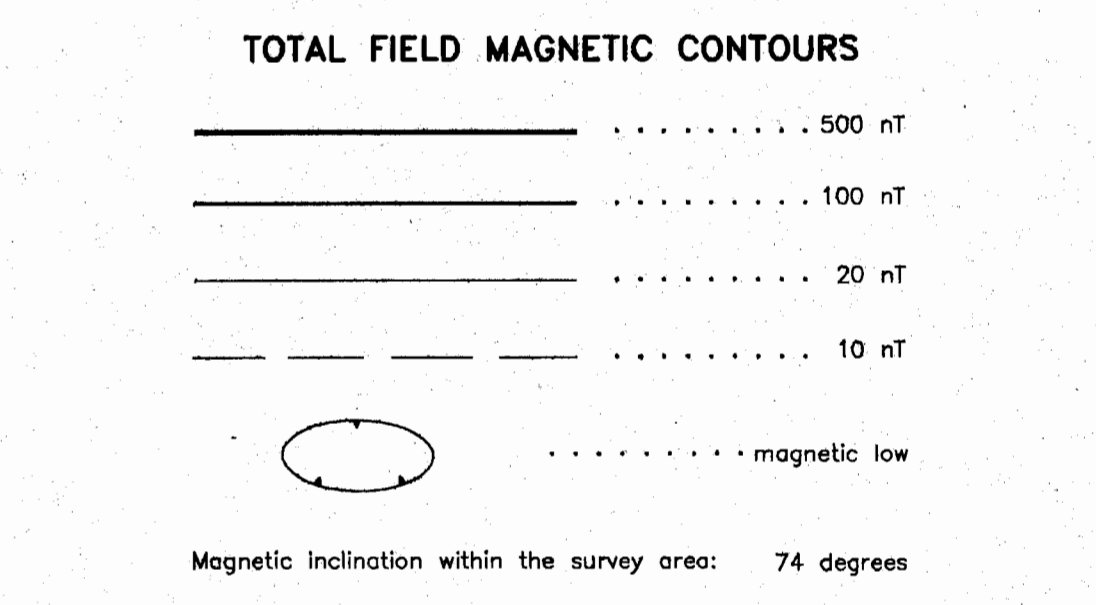
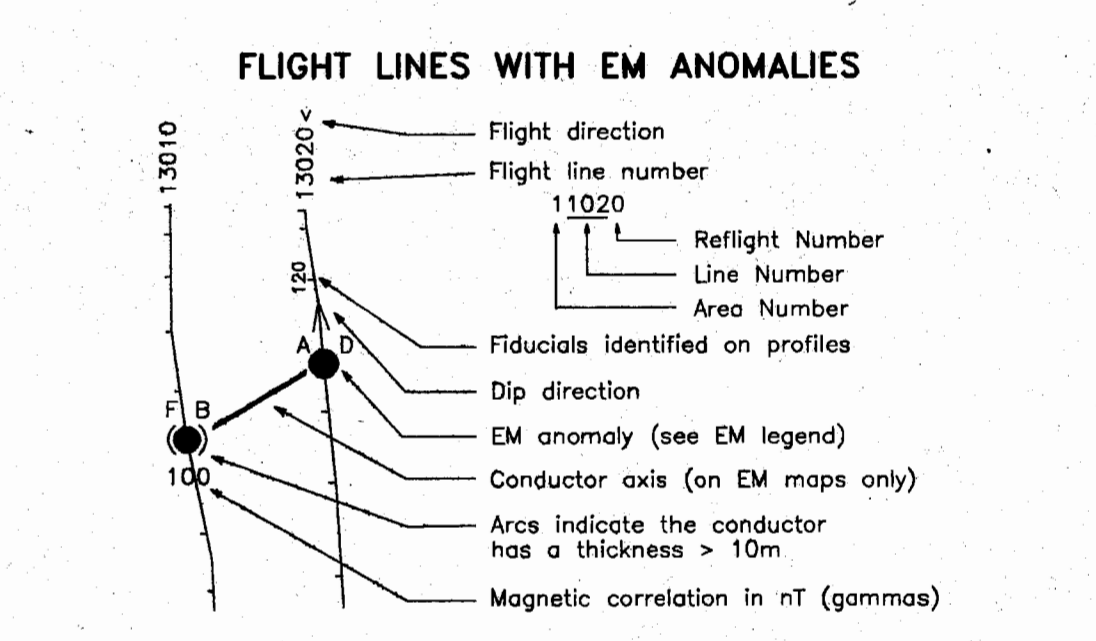
Navigation: Serial real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m  
 Electromagnetic sensor: 30 m  
 Magnetometer: VLF receiver 40 m  
 Data sampling interval: 0.1 second  
 Magnetometer sensitivity: Schlumberger casum 0.01 nT  
 VLF receiver sensitivity: 1.5 Siemens  
 Electromagnetic system: DIGEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 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	Interpretation
●	●	Conductor ("model")
○	○	Bedrock conductor
○	○	Narrow bedrock conductor ("thin dike")
○	○	Conductive cover ("horizontal thin sheet")
○	○	Basal conductive rock unit, deep conductive weathering, thick conductive cover ("half space")
○	○	Edge of broad conductor ("half space")
○	○	Cultural, e.g. power line, metal building or fence

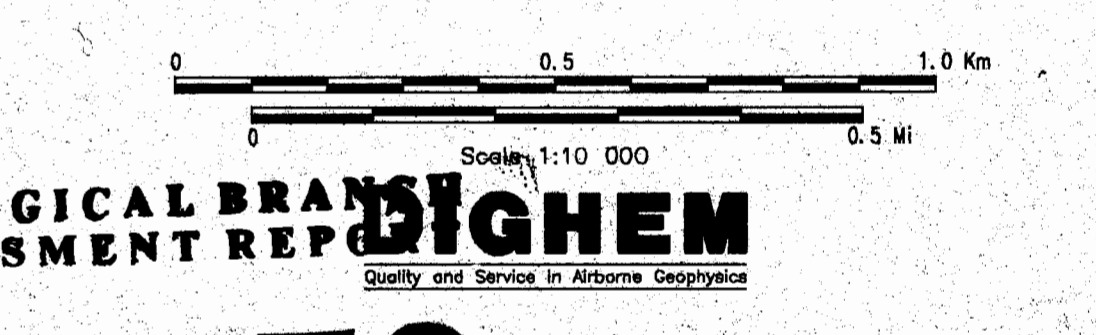


**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**TOTAL FIELD MAGNETICS**

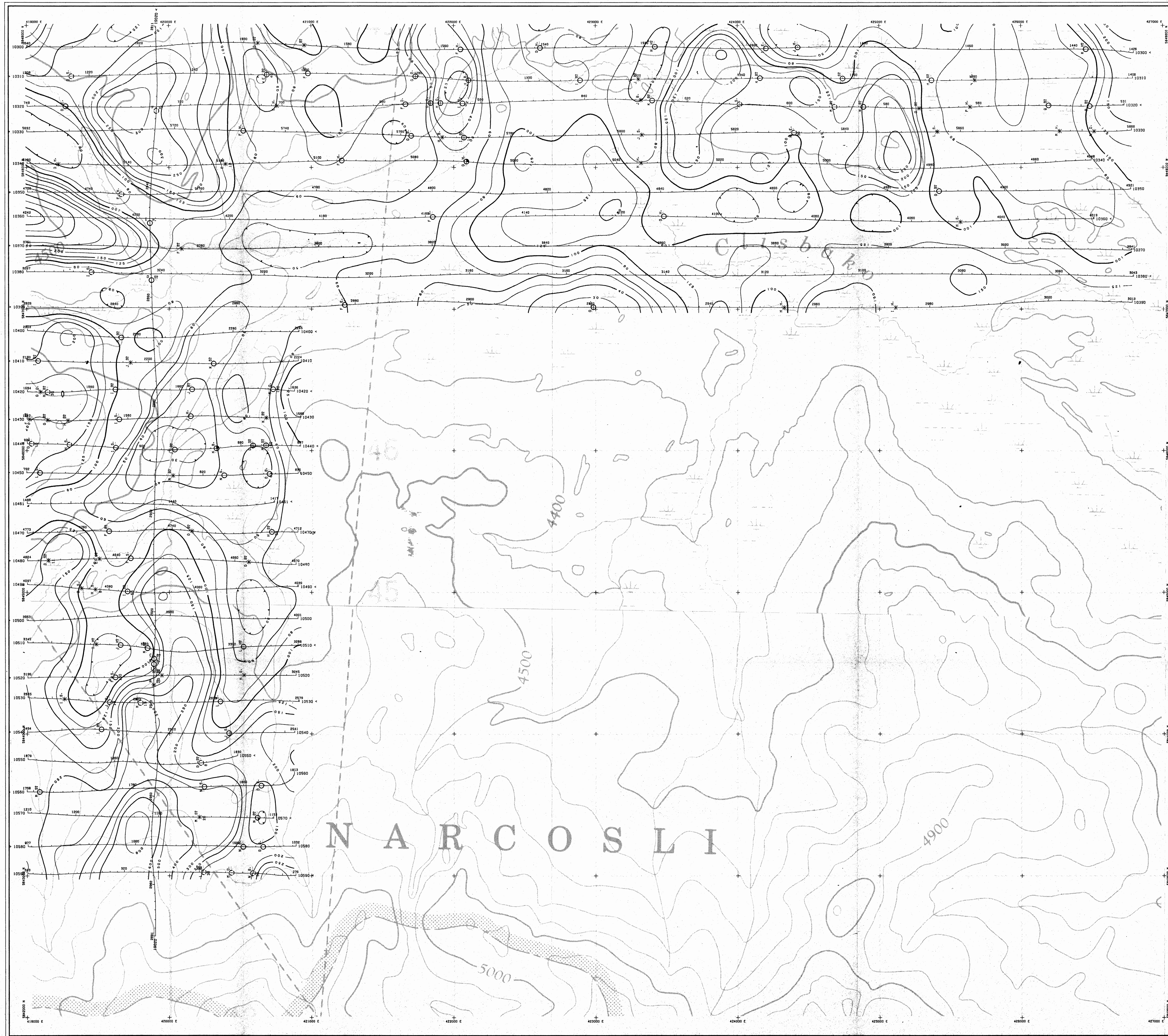
DIGEM SURVEY	NTS: 93C/9,16	GEOPHYSICIST: [Signature]
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 4

DIGEM SURVEYS & PROCESSING INC.



**23,630**





**TECHNICAL SUMMARY**

Navigation ..... Serial real time differential GPS positioning  
 Data reduction grid interval ..... 50 metres  
 Terrain clearance ..... Helicopter 60 m  
 ..... Electromagnetic sensor 30 m  
 ..... Magnetometer VLF receiver 40 m  
 Data sampling interval ..... 0.1 second  
 Magnetometer / sensitivity ..... Scintrex cesium / 0.01 nT  
 VLF receiver / sensitivity ..... Herz 2A / 1%  
 Electromagnetic system ..... DIGHEM\*

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

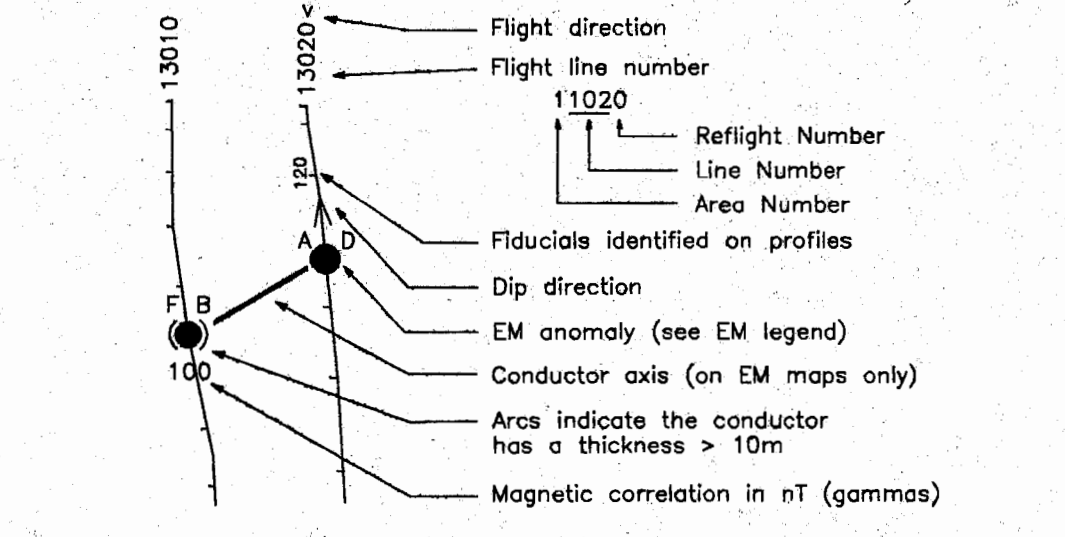


**ELECTROMAGNETIC ANOMALIES**

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	Conductor ("mode")
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, s.p. power line, metal building or fence

**FLIGHT LINES WITH EM ANOMALIES**

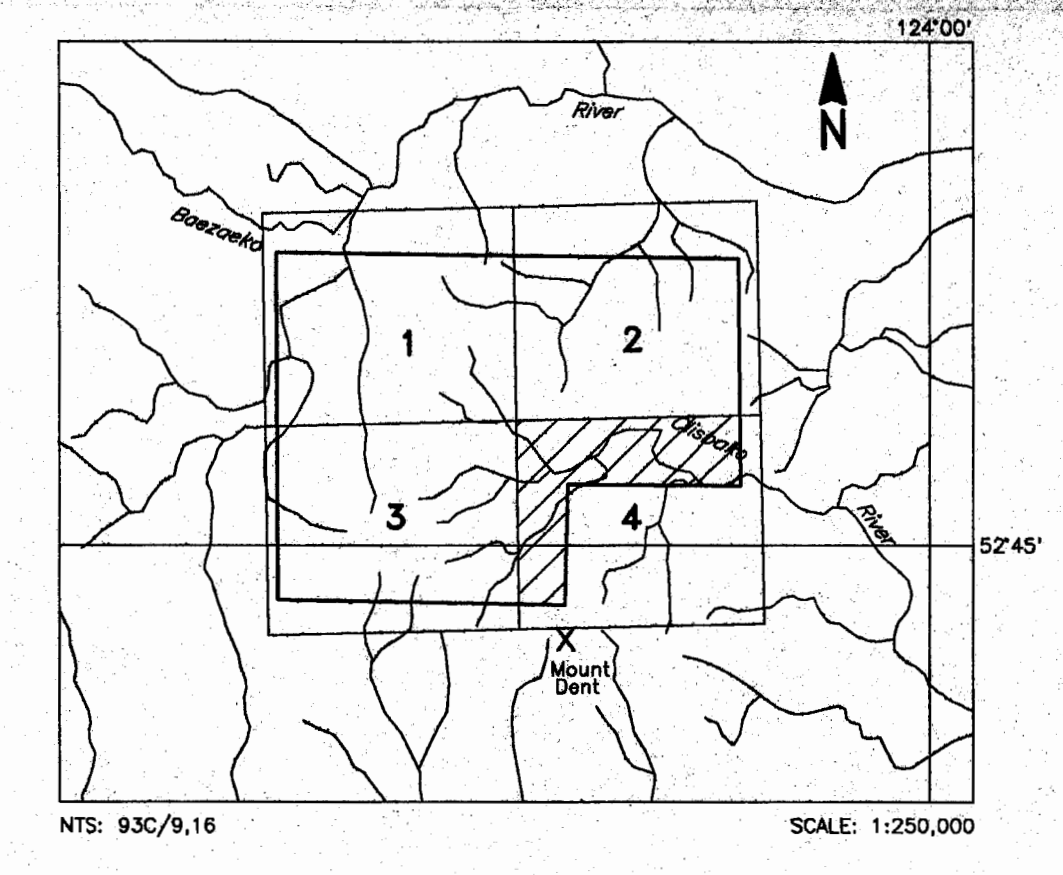


**RESISTIVITY CONTOURS**

1000
800
600
500
400
300
250
200
150
125
100

Contours in ohm-m at 10 intervals per decade

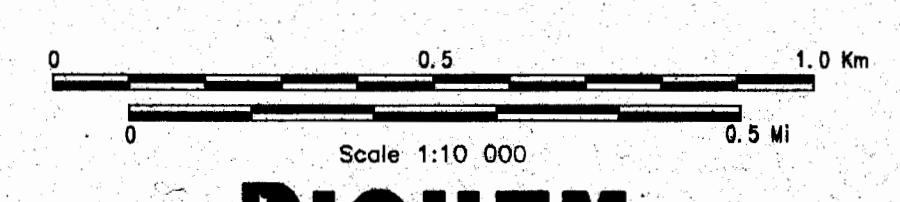
**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**RESISTIVITY**  
**7200 Hz COPLANAR**

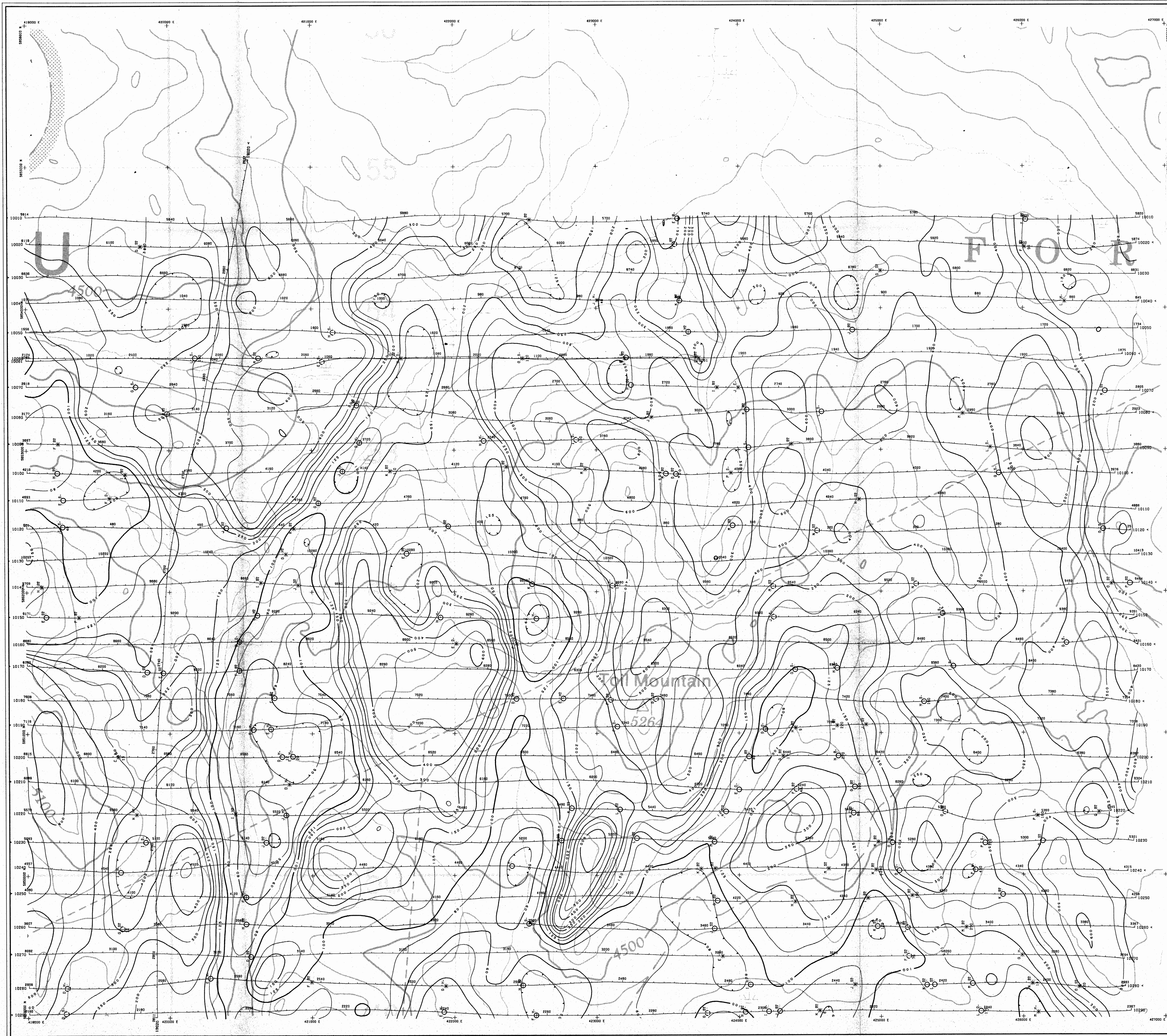
DIGHEM\* SURVEY NTS: 93C/9,16 GEOPHYSICIST: [Signature]  
 DATE: NOVEMBER 1993 JOB: 1157 SHEET: 4  
 DIGHEM SURVEYS & PROCESSING INC.



**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**

23,630





**TECHNICAL SUMMARY**

Navigation: Sercol real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Helicopter 60 m  
 Electromagnetic sensor: 30 m  
 Magnetometer, VLF receiver: 40 m  
 Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Schlumberger / 0.01 nT  
 VLF receiver / sensitivity: Herx 2A / 1%  
 Electromagnetic system: DINGEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
900 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56200 Hz	1.0 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**

- 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 space")
- E: Edge of broad conductor ("edge of half space")
- L: Culture, e.g. power line, metal building or fence

**Anomaly identifier**

- C: Inphase and out of phase
- Q: Conductive coil is greater than 18 m
- 1: 30 m
- 2: 45 m
- 3: 60 m

**FLIGHT LINES WITH EM ANOMALIES**

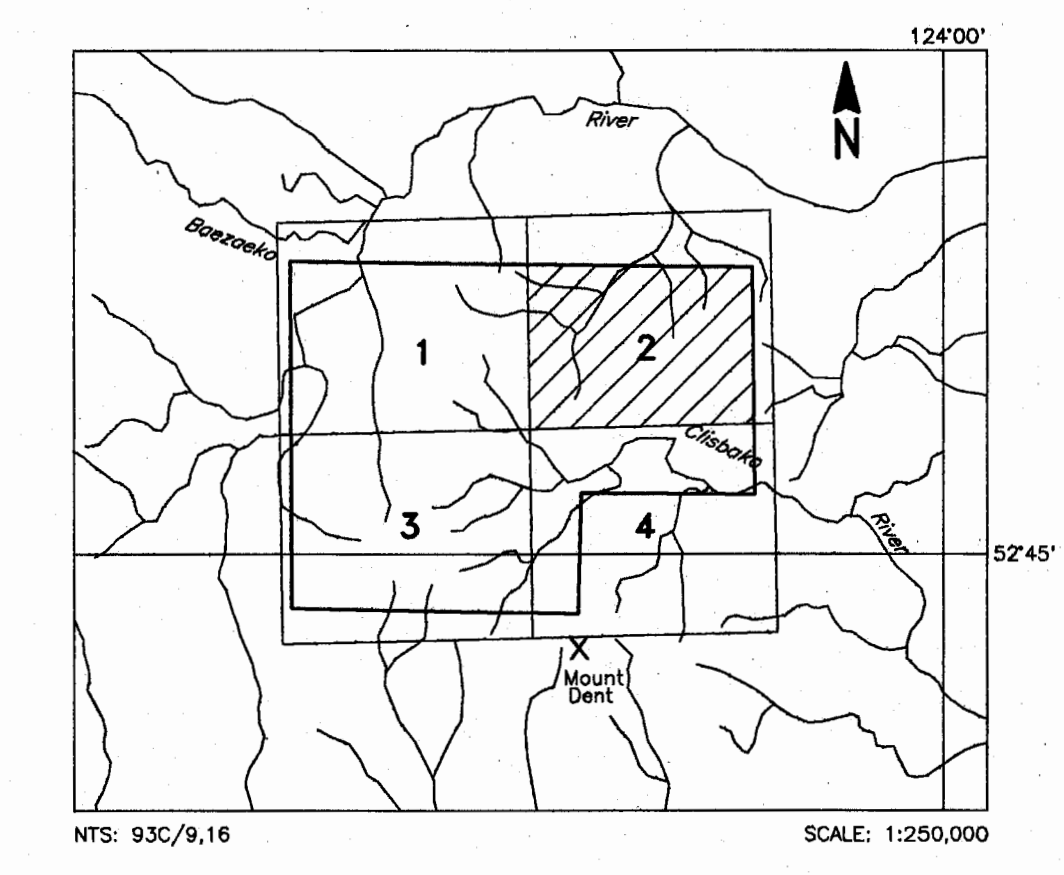
- Flight direction
- Flight line number
- 11020: Reflight Number
- Line Number
- Area Number
- Fiducials identified on profiles
- Dip direction
- EM anomaly (see EM legend)
- Conductor axis (on EM maps only)
- Area indicates the conductor has a thickness > 100m
- Magnetic correlation in nT (gamma)

**RESISTIVITY CONTOURS**

1000
800
600
500
400
300
250
200
150
125
100

Contours in ohm-m at 10 intervals per decade

**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

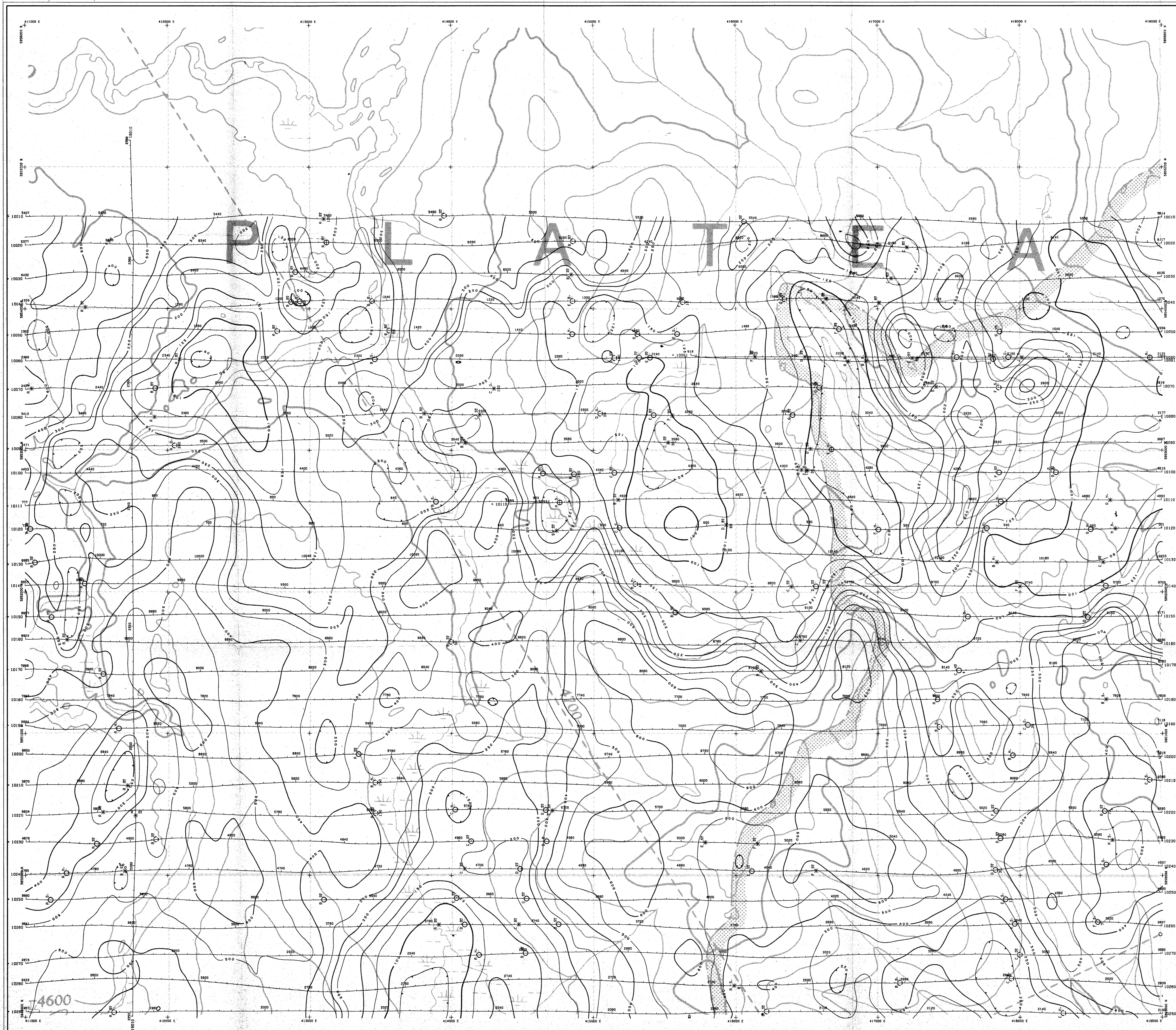
**RESISTIVITY  
 900 Hz COPLANAR**

DIGHEM SURVEY: NTS: 93C/9,16 GEOPHYSICIST: [Signature]  
 DATE: NOVEMBER 1993 JOB: 1157 SHEET: 2  
 DIGHEM SURVEYS & PROCESSING INC.

**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
 Scale: 1:10,000

**DIGHEM**  
 23,630





**TECHNICAL SUMMARY**

Navigation ..... Serial real time differential GPS positioning  
 Data reduction grid interval ..... 50 metres  
 Terrain clearance ..... Helicopter 60 m  
 Electromagnetic sensor 30 m  
 Magnetometer / sensitivity ..... Scintrex cesium / 0.01 nT  
 VLF receiver / sensitivity ..... Herz 2A / 1%  
 Electromagnetic system ..... DIGHEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
9500 Hz	0.2 ppm	Vertical coaxial
950 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
66000 Hz	1.0 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**  
 Depth is greater than:  
 15 m  
 30 m  
 45 m  
 60 m

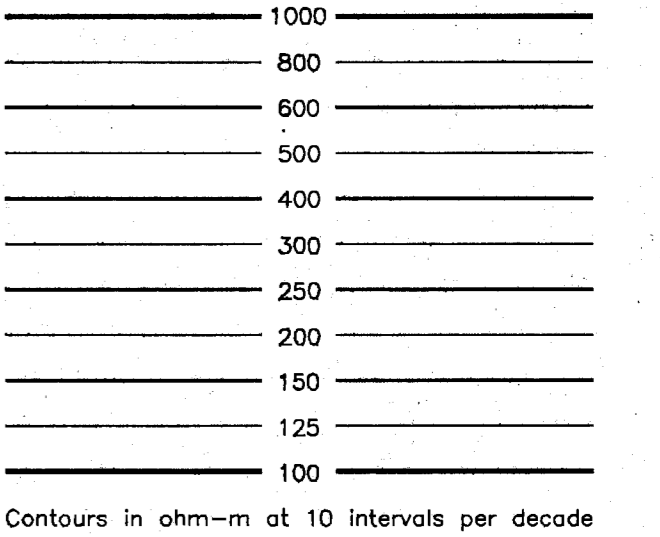
**Interpretive symbol**  
 Inphase and Quadrature of coiled coil is greater than:  
 5 ppm  
 10 ppm  
 15 ppm  
 20 ppm

**Conductor ("mode")**  
 B Broad conductor  
 D Narrow broad conductor ("thin disk")  
 S Conductive cover ("horizontal thin sheet")  
 H Broad conductive rock unit, deep conductive weathering, thick conductive cover ("thick sheet")  
 E Edge of broad conductor ("edge of hole spread")  
 L Culture, e.g. power line, metal building or fence

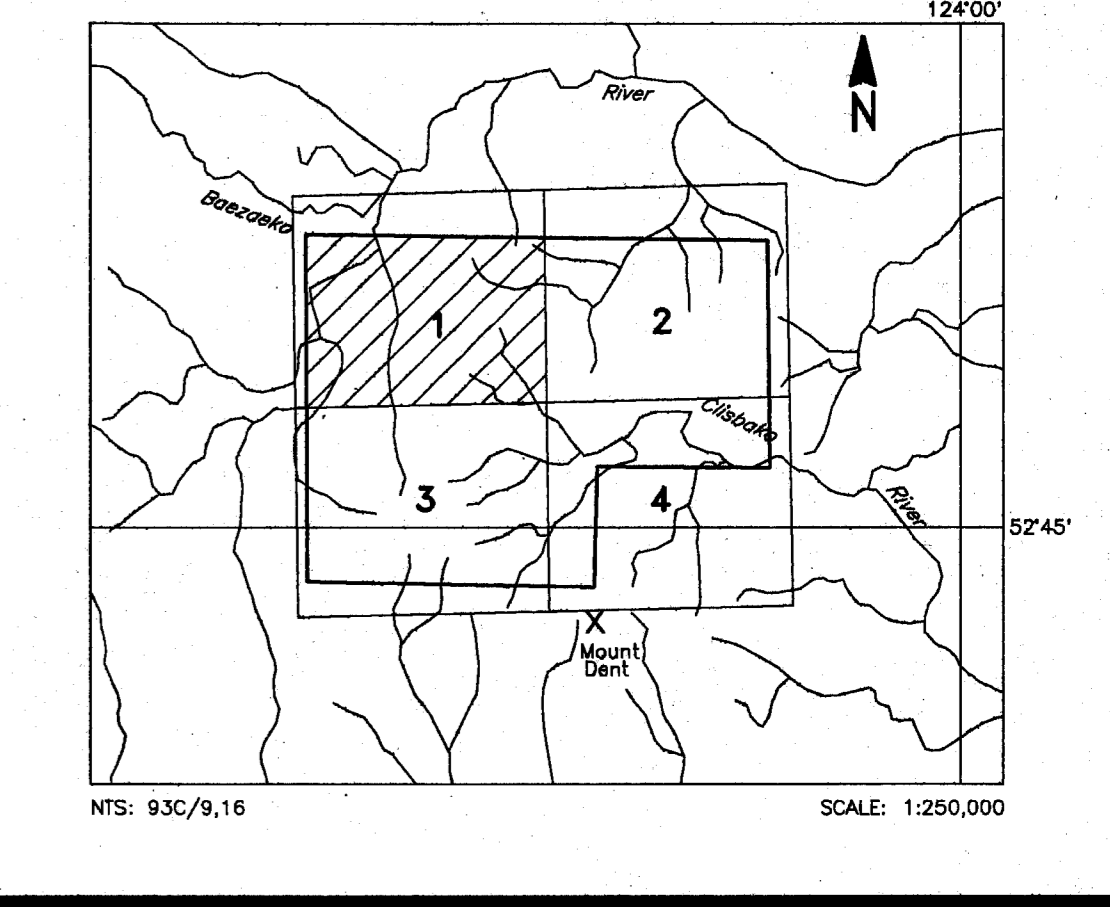
**FLIGHT LINES WITH EM ANOMALIES**

Flight direction  
 Flight line number  
 1020  
 Reflight Number  
 Line Number  
 Area Number  
 Fluctuations identified on profiles  
 Dip direction  
 EM anomaly (see EM legend)  
 Conductor axis (on EM maps only)  
 Arcs indicate the conductor has a thickness = 10m  
 Magnetic correlation in nT (gamma)

**RESISTIVITY CONTOURS**



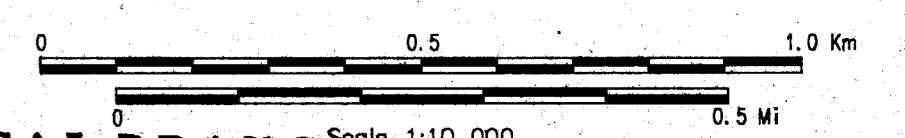
**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**RESISTIVITY  
 900 Hz COPLANAR**

DIGHEM SURVEY NTS: 93C/9,16 GEOPHYSICIST: [Signature]  
 DATE: NOVEMBER 1993 JOB: 1157 SHEET: 1  
 DIGHEM SURVEYS & PROCESSING INC.

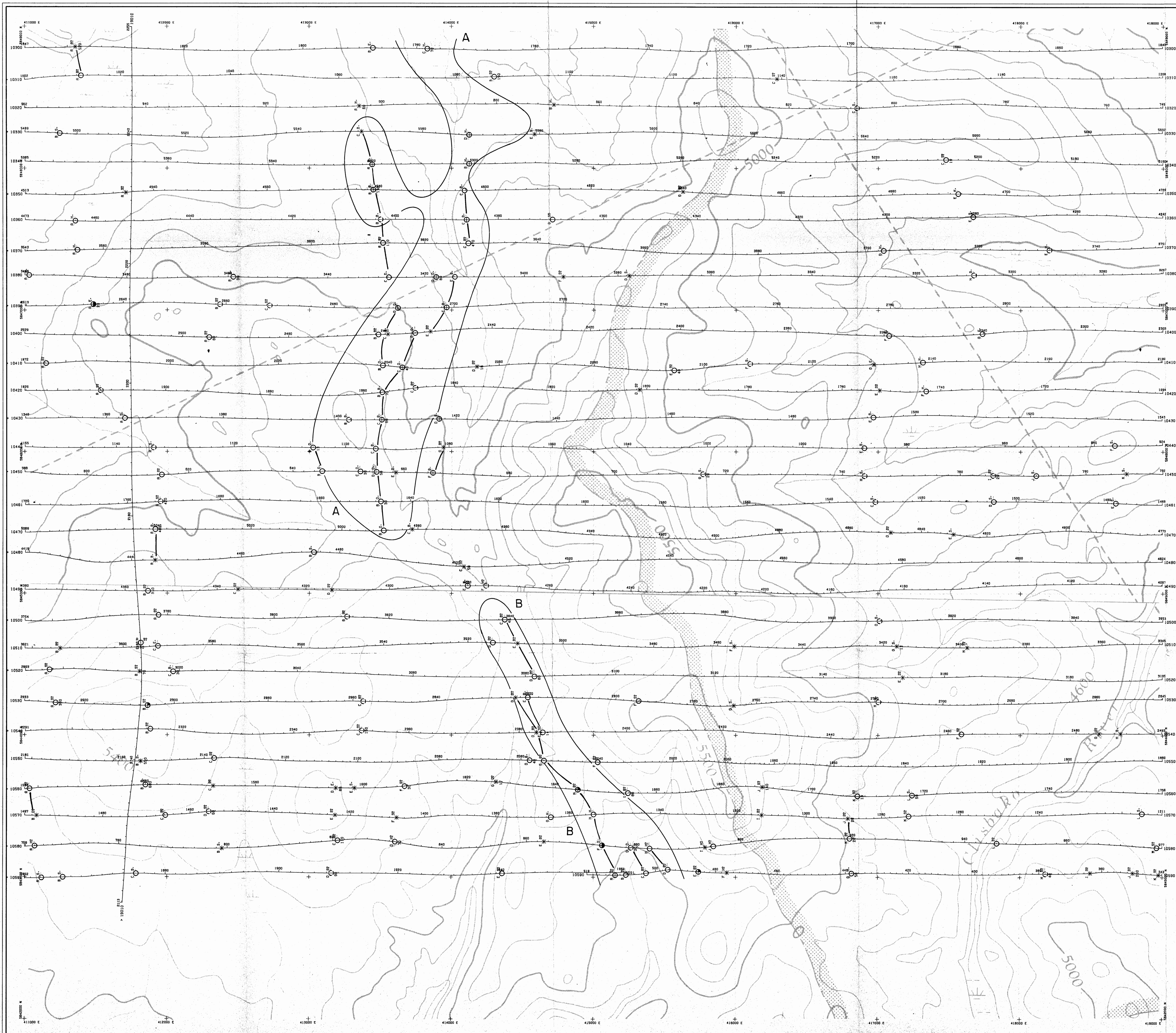


**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**DIGHEM**  
 Quality and Service in Alberta Geoscience

23,630





**TECHNICAL SUMMARY**

Navigation . . . . . Real time differential GPS positioning  
 Data reduction grid interval . . . . . 50 metres  
 Terrain clearance . . . . . Helicopter 60 m  
 . . . . . Electromagnetic sensor 30 m  
 . . . . . Magnetometer VLF receiver 40 m  
 Data sampling interval . . . . . 0.1 second  
 Magnetometer / sensitivity . . . . . Scintrex opalum / 0.01 nT  
 VLF receiver / sensitivity . . . . . Herz 2A / 1%  
 Electromagnetic system . . . . . DIGHEM

Frequency	Sensitivity	Coil Orientation
800 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
300 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
96000 Hz	1.0 ppm	Horizontal coplanar

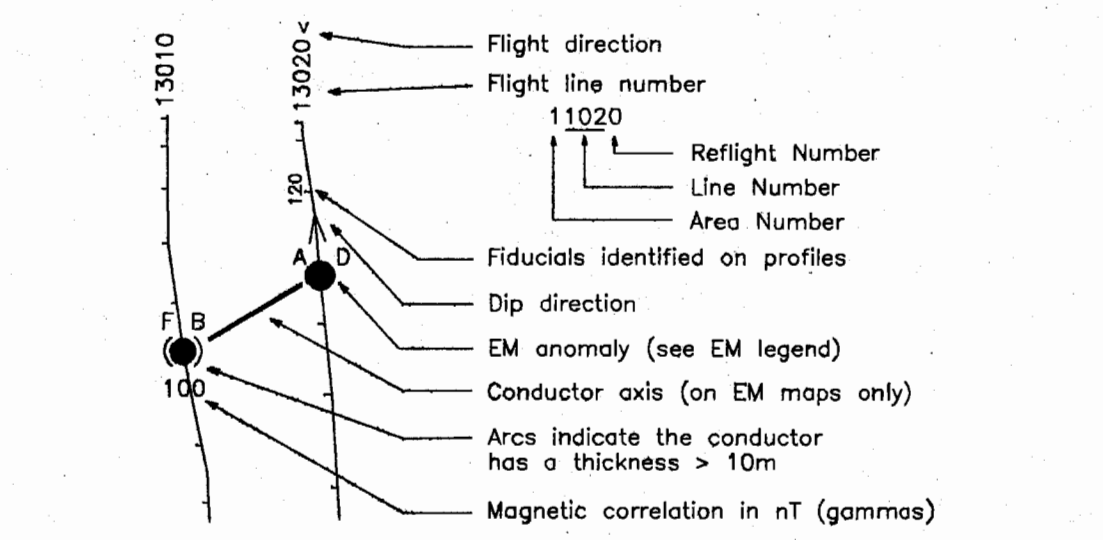


**ELECTROMAGNETIC ANOMALIES**

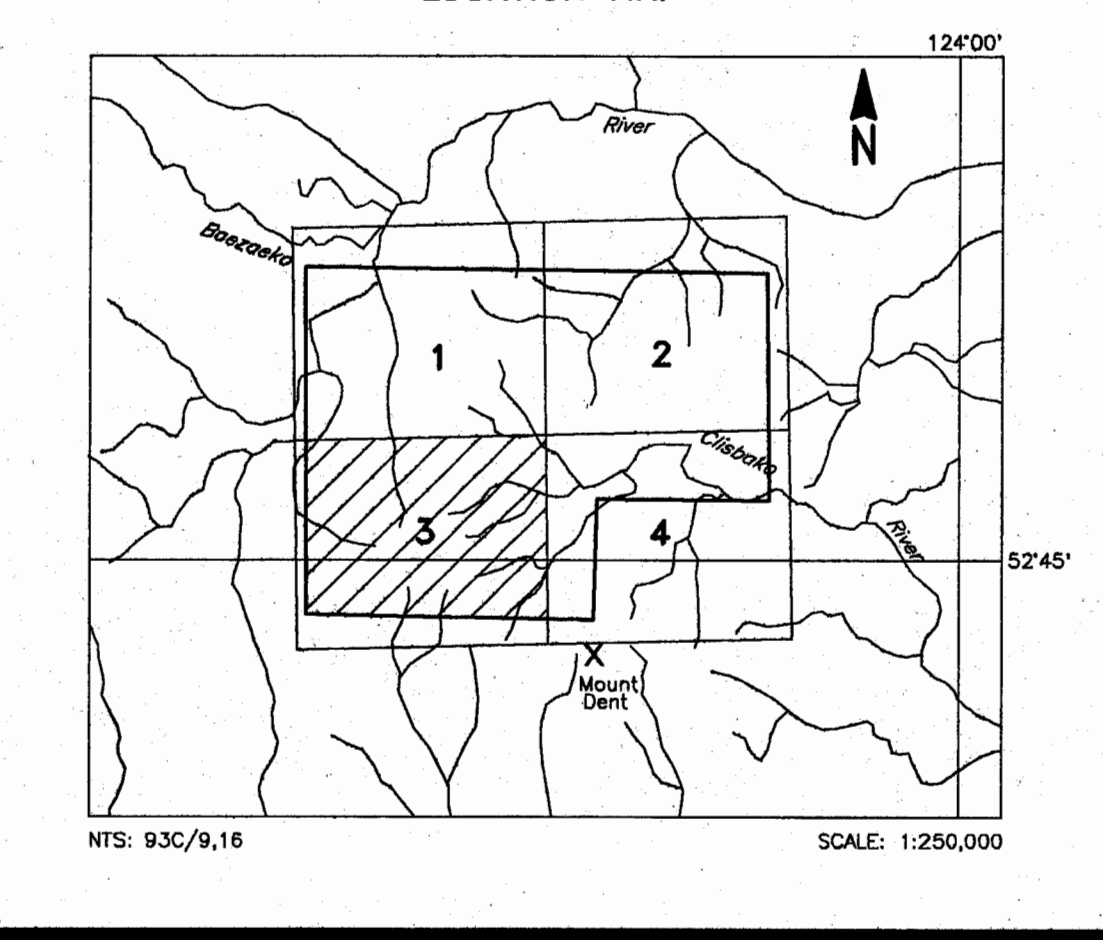
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	< 1 siemens
-	*	Questionable anomaly

Anomaly Identifier	Interpretive symbol	Conductor (model)
B	—	Bedrock conductor
D	—	Narrow bedrock conductor ("thin slab")
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**



**LOCATION MAP**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

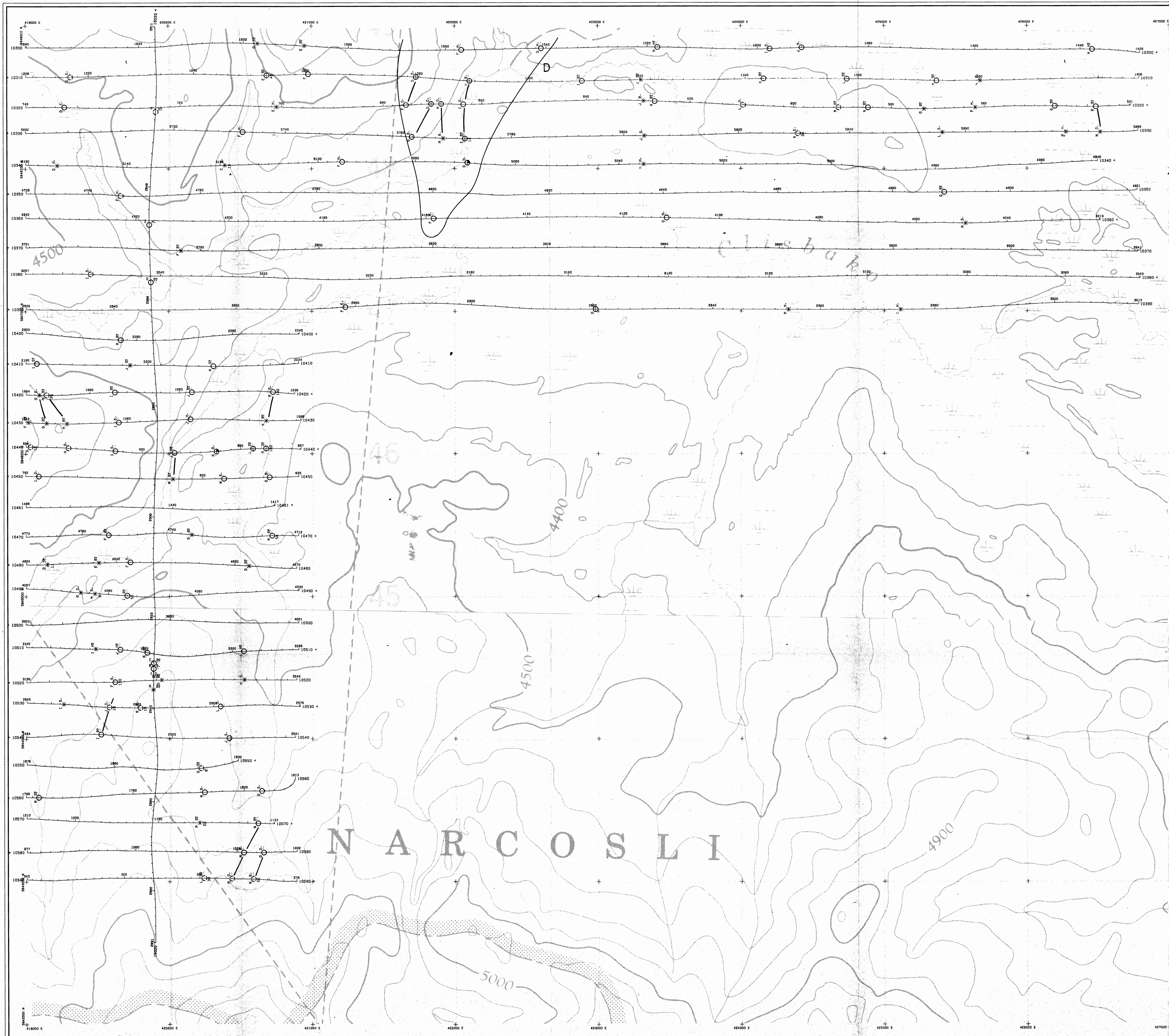
**ELECTROMAGNETIC ANOMALIES**

DIGHEM SURVEY	NTS: 93C/9,16	GEOPHYSICIST: JLB
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 3
DIGHEM SURVEYS & PROCESSING INC.		

1:10 000  
 GEOLOGICAL BRANCH  
 ASSESSMENT REPORT  
**DIGHEM**  
 Quality and Service in Resource Geophysics

**23,630**





**TECHNICAL SUMMARY**

Navigation: Serial real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m, Electromagnetic sensor 30 m, Magnetometer VLF receiver 40 m  
 Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Sinterex caesium / 0.01 nT  
 VLF receiver / sensitivity: Herz 2A / 1%  
 Electromagnetic system: DIGHEM

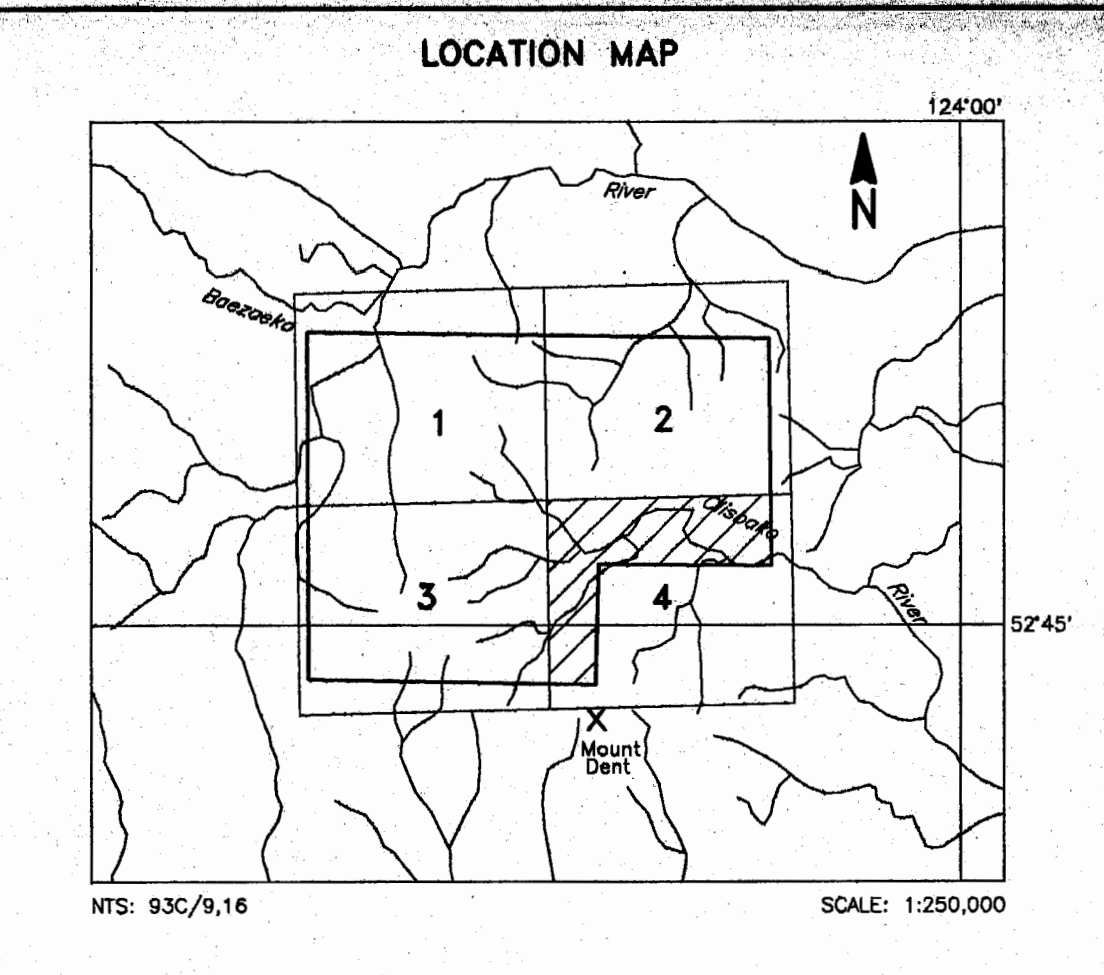
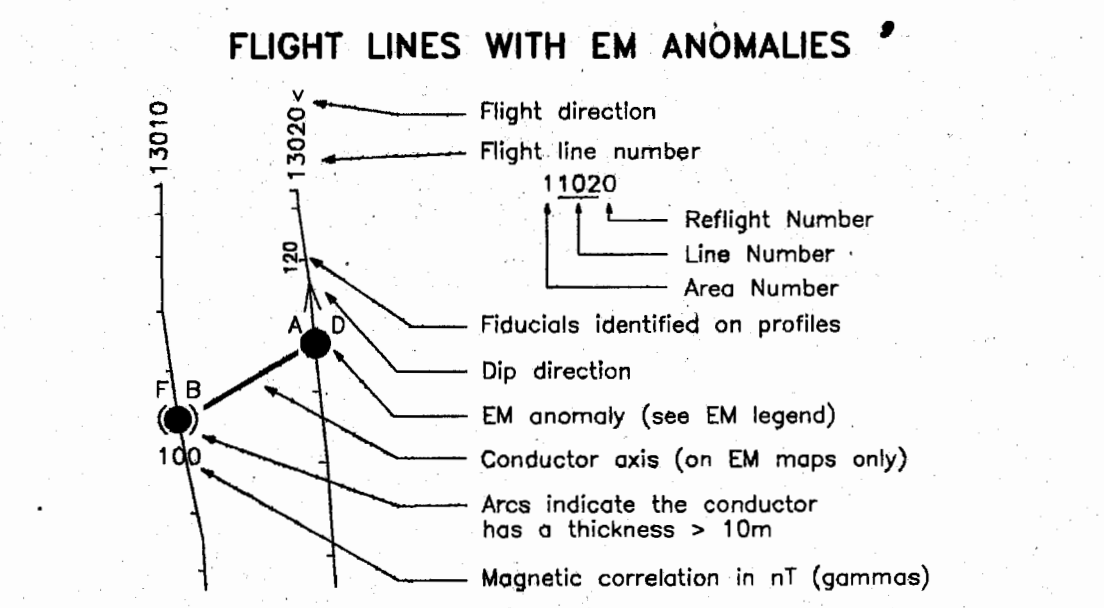
Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

**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**

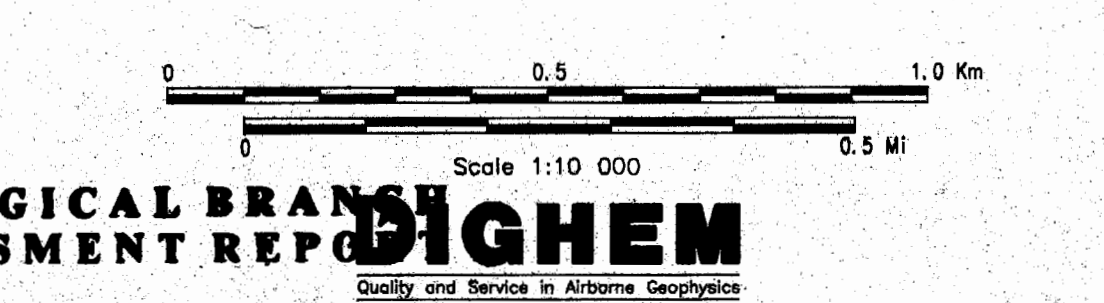
- B Bedrock conductor ("mode")
- D Narrow bedrock conductor ("thin sheet")
- S Conductive cover ("horizontal thin sheet")
- H Broad conductive rock unit, steep conductive weathering, thick conductive cover ("half space")
- E Edge of broad conductor ("edge of half space")
- L Culture, e.g. power line,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



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

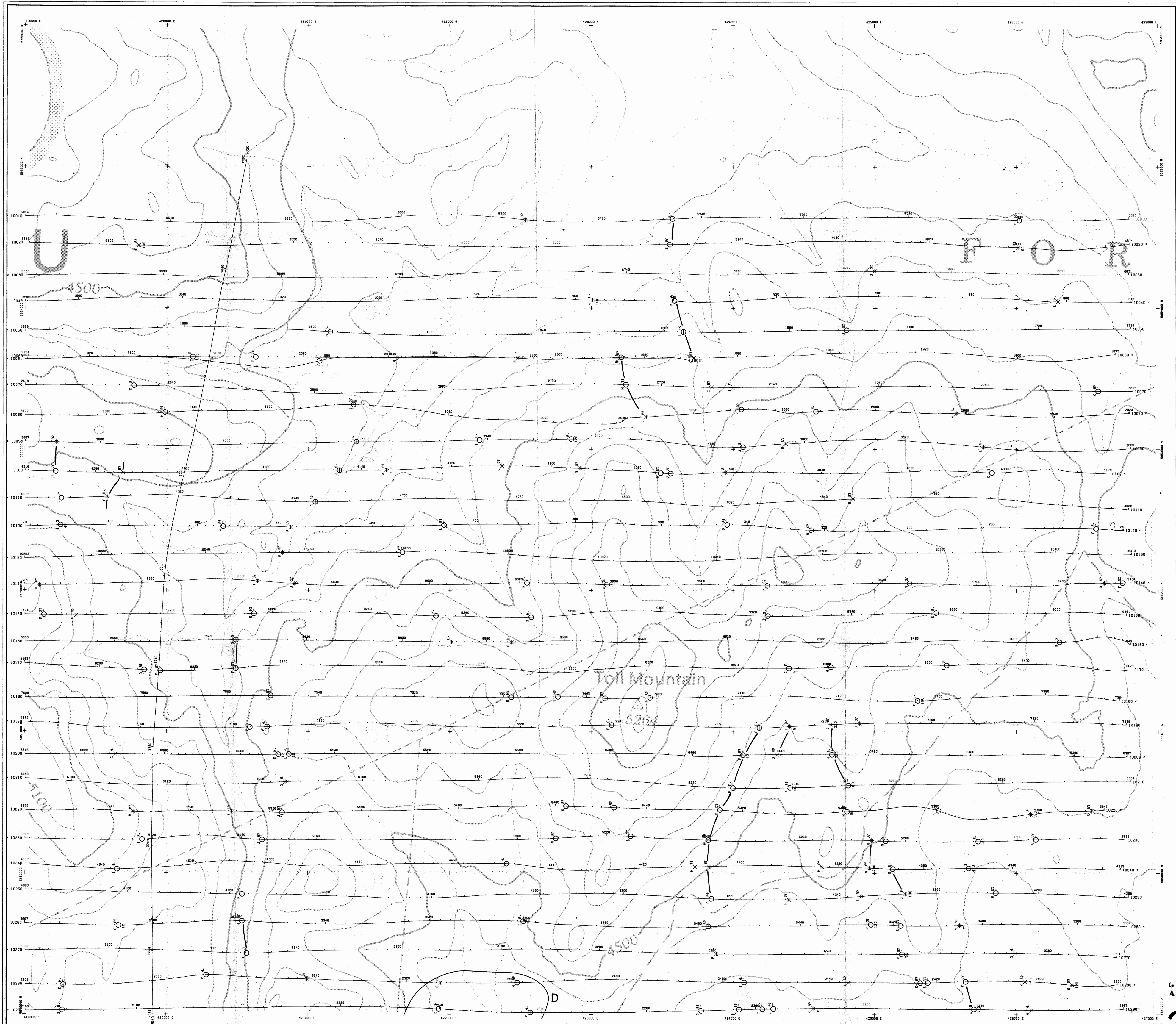
**ELECTROMAGNETIC ANOMALIES**

DIGHEM SURVEY: NTS: 93C/9,16 GEOPHYSICIST: [Signature]  
 DATE: NOVEMBER 1993 JOB: 1157 SHEET: 4  
 DIGHEM SURVEYS & PROCESSING INC.



23,630





**TECHNICAL SUMMARY**

Navigation: Serial real time differential GPS positioning  
 Data reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m  
 Electromagnetic sensor: 30 m  
 Magnetometer: VLF receiver 40 m  
 Data sampling interval: 0.1 seconds  
 Magnetometer sensitivity: Schlögl caesium / 0.01 nT  
 VLF receiver sensitivity: Herz 20 / 1%  
 Electromagnetic system: DIGEM

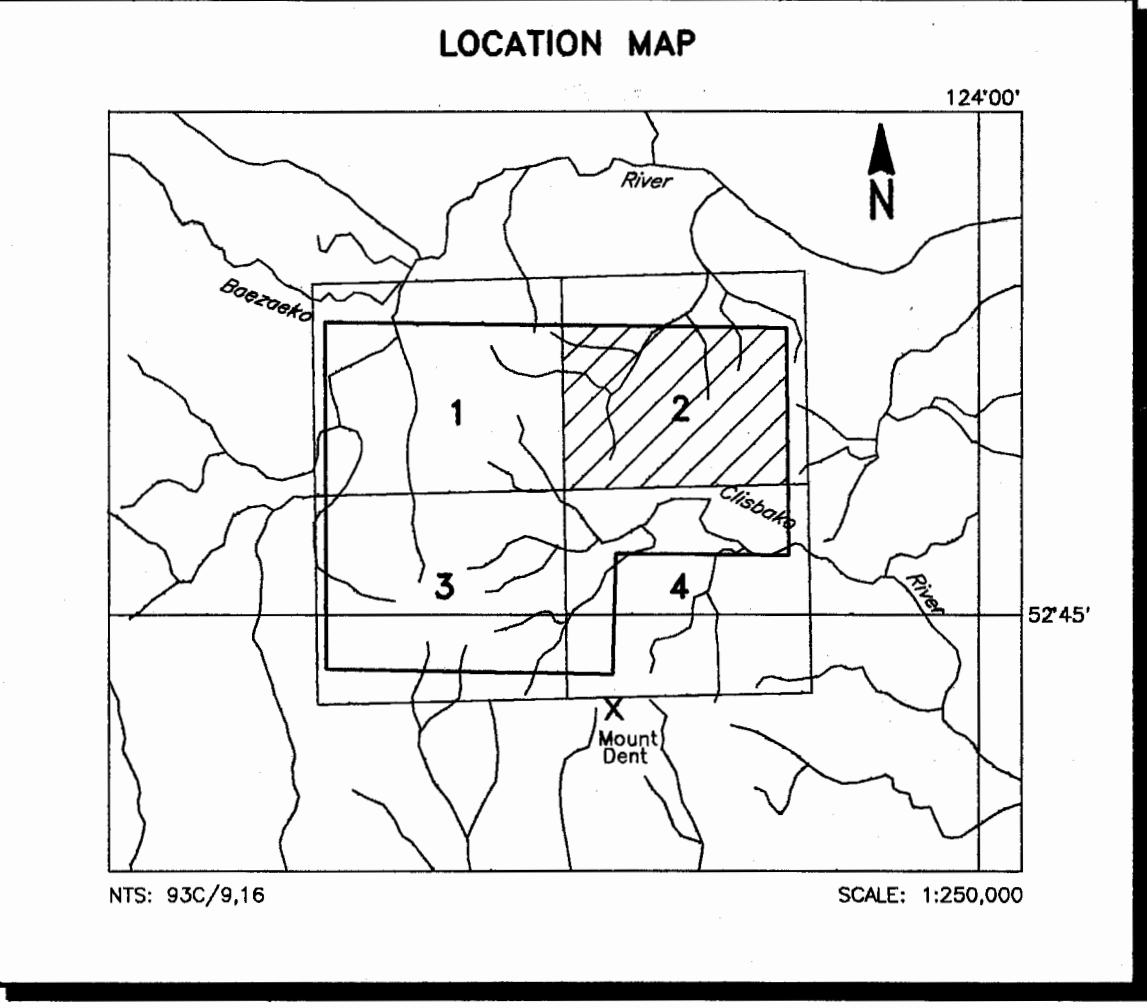
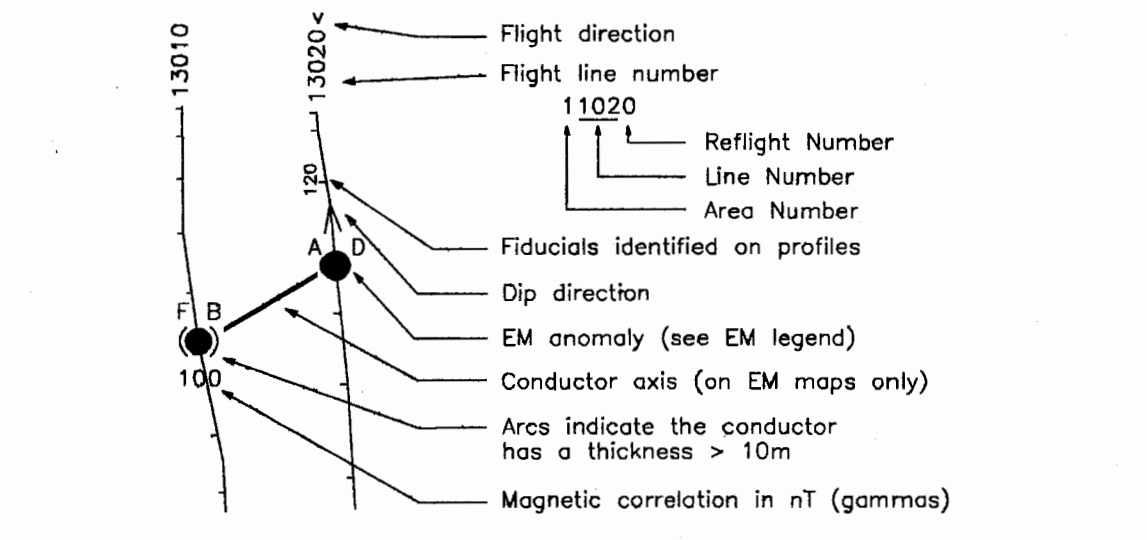
Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
3200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

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

**FLIGHT LINES WITH EM ANOMALIES**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

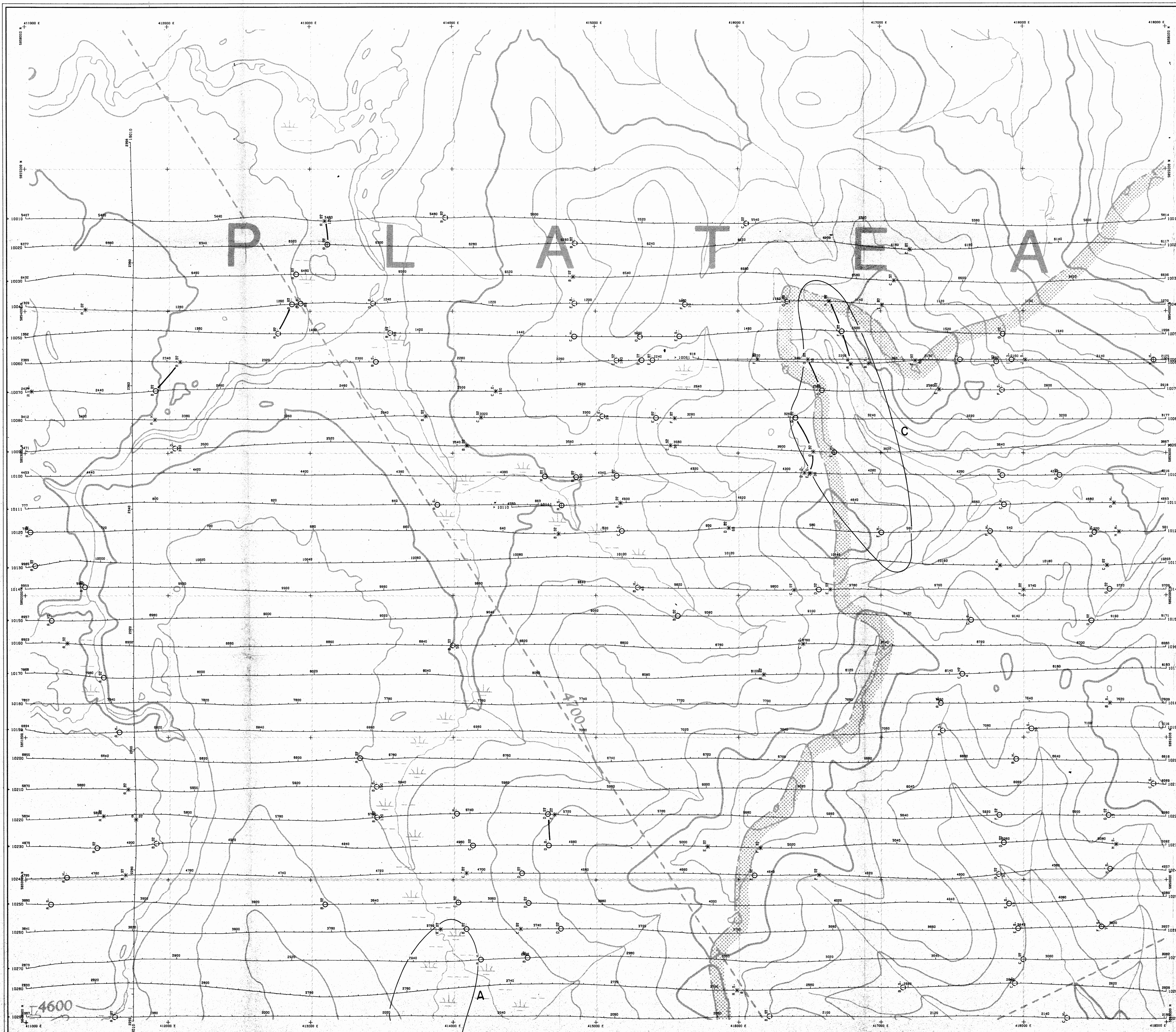
**ELECTROMAGNETIC ANOMALIES**

DIGEM SURVEY: NTS: 93C/9,16 GEPHYSCIST: [Signature]  
 DATE: NOVEMBER 1993 JOB: 1157 SHEET: 2  
 DIGEM SURVEYS & PROCESSING INC.

**GEOLOGICAL BRANCH ASSESSMENT REPORT**  
 Scale 1:10 000  
**DIGEM**  
 Service in Alberta Geophysics

23,630





**TECHNICAL SUMMARY**

Navigation: ..... Serial real time differential GPS positioning  
 Data reduction grid interval: ..... 50 metres  
 Terrain clearance: ..... Helicopter 80 m  
 ..... Electromagnetic sensor 30 m  
 Data sampling interval: ..... Magnetometer VLF receiver 40 m  
 ..... 0.1 second  
 Magnetometer / sensitivity: ..... Schriber system / 0.01 nT  
 VLF receiver / sensitivity: ..... Herz 2A / 1%  
 Electromagnetic system: ..... DIGHEM\*

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

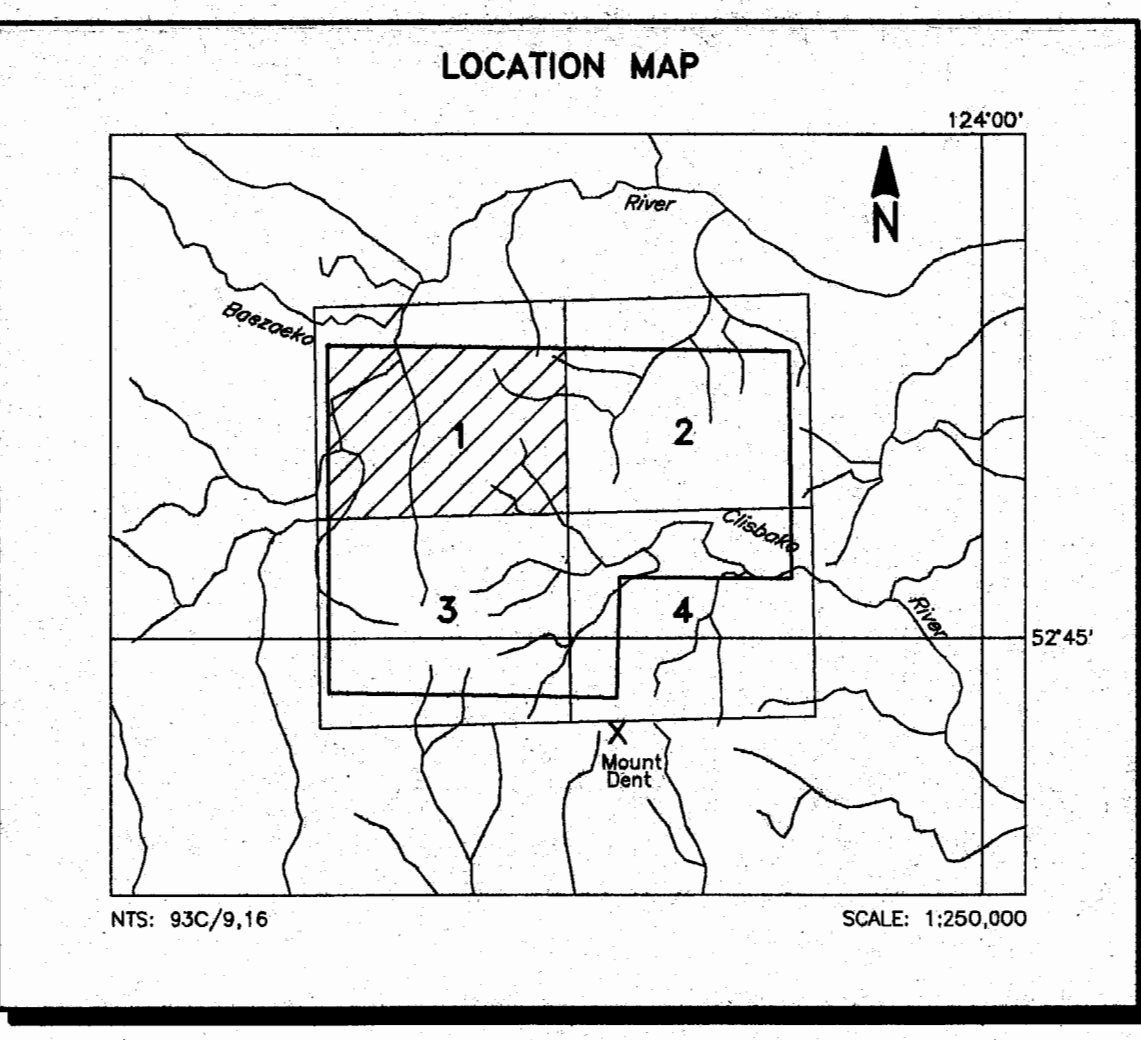
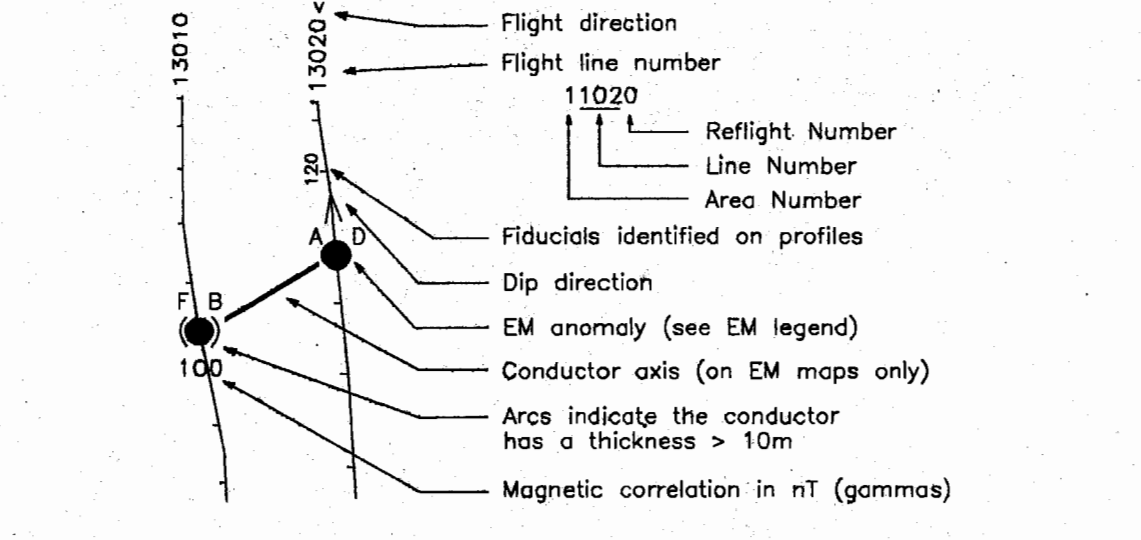
**ELECTROMAGNETIC ANOMALIES**

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**

B Bedrock conductor  
 D Narrow bedrock conductor ("thin die")  
 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**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
**MT. DENT AREA, B.C.**

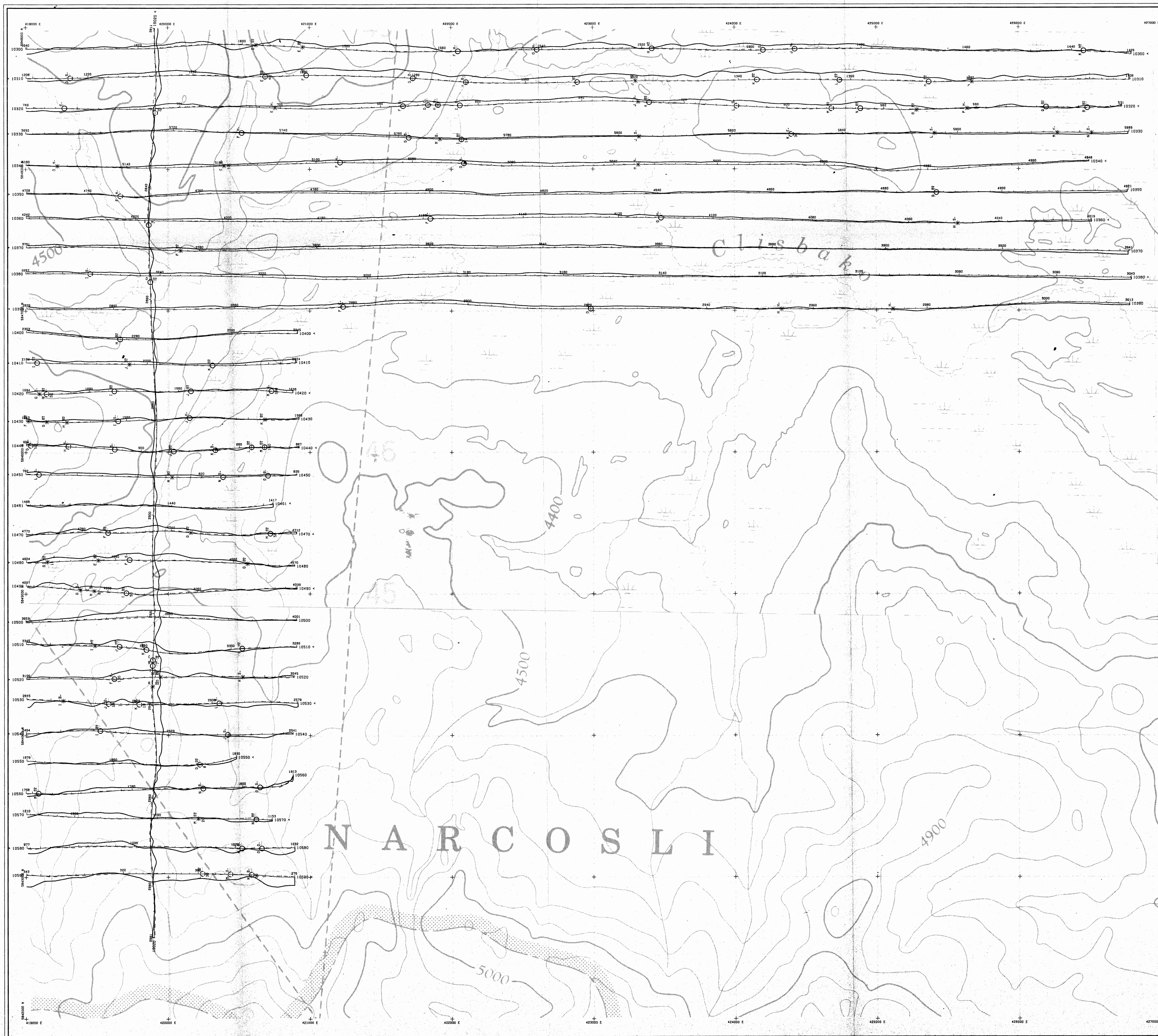
**ELECTROMAGNETIC ANOMALIES**

DIGHEM SURVEY	NTS: 83C/9,16	GEOPHYSICIST: [Signature]
DATE: NOVEMBER 1993	JOB: 1157	SHEET: 1
DIGHEM SURVEYS & PROCESSING INC.		

0 0.5 1.0 Km  
 0 0.5 1.0 Mi  
**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
**DIGHEM**  
 Quality and Service in Northern Canada

23,630





**TECHNICAL SUMMARY**

Navigation: . . . . . Real time differential GPS positioning  
 Data reduction grid interval: . . . . . 50 metres  
 Terrain clearance: . . . . . Helicopter 60 m  
 . . . . . Electromagnetic sensor 30 m  
 . . . . . Magnetometer, VLF receiver 40 m  
 Data sampling interval: . . . . . 0.1 second  
 Magnetometer/sensitivity: . . . . . Schlumberger / 0.01 nT  
 VLF receiver/sensitivity: . . . . . Her 25 / 1%  
 Electromagnetic system: . . . . . DIGEM™

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7300 Hz	0.2 ppm	Horizontal coplanar
5500 Hz	1.0 ppm	Horizontal coplanar



**ELECTROMAGNETIC ANOMALIES**

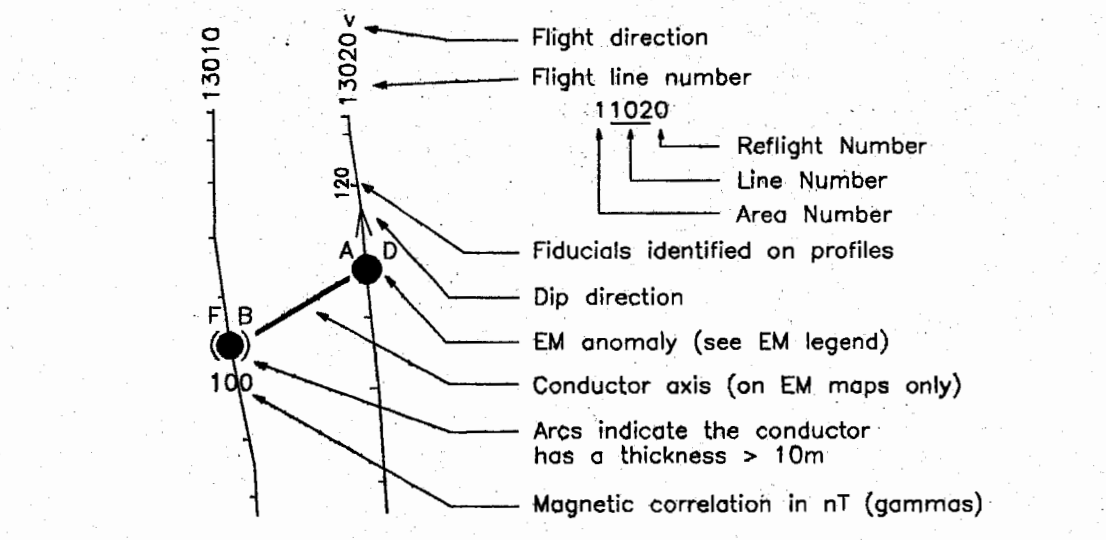
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	<1 siemens
-	*	Questionable anomaly

Anomaly identifier	Interpretive symbol	Interpretation
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 space")
E	○	Edge of broad conductor ("edge of half space")
L	○	Culture, e.g. power line, metal building or fence

Depth is greater than:  
 15 m  
 30 m  
 45 m  
 60 m

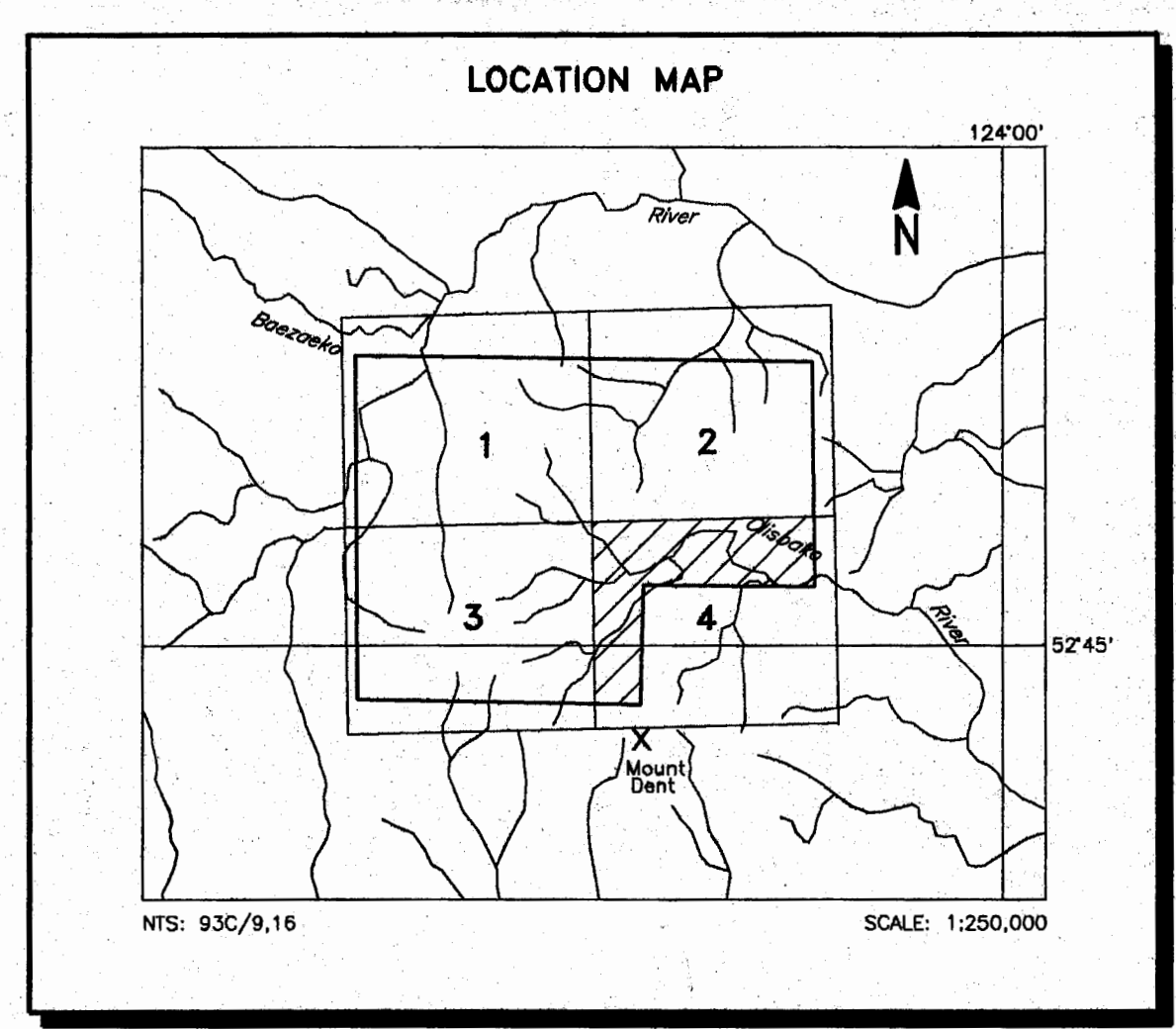
Phase and quadrant of coil  
 is greater than:  
 5 ppm  
 10 ppm  
 15 ppm  
 20 ppm

**FLIGHT LINES WITH EM ANOMALIES**



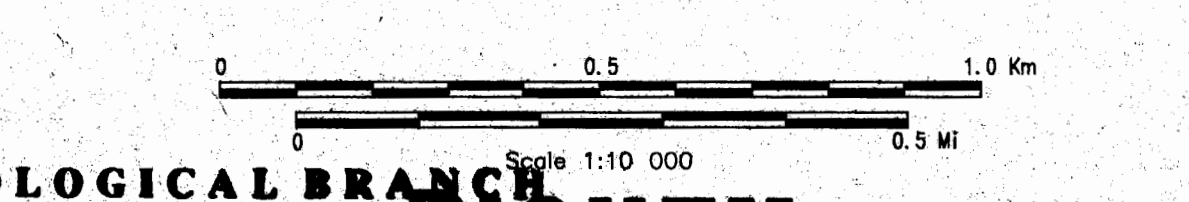
**VLF TOTAL FIELD & QUADRATURE PROFILES**

— Total field 4% per mm  
 - - - Quadrature field 4% per mm  
 STATION: NLX Seattle (Wash.) - 24.8 Hz



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

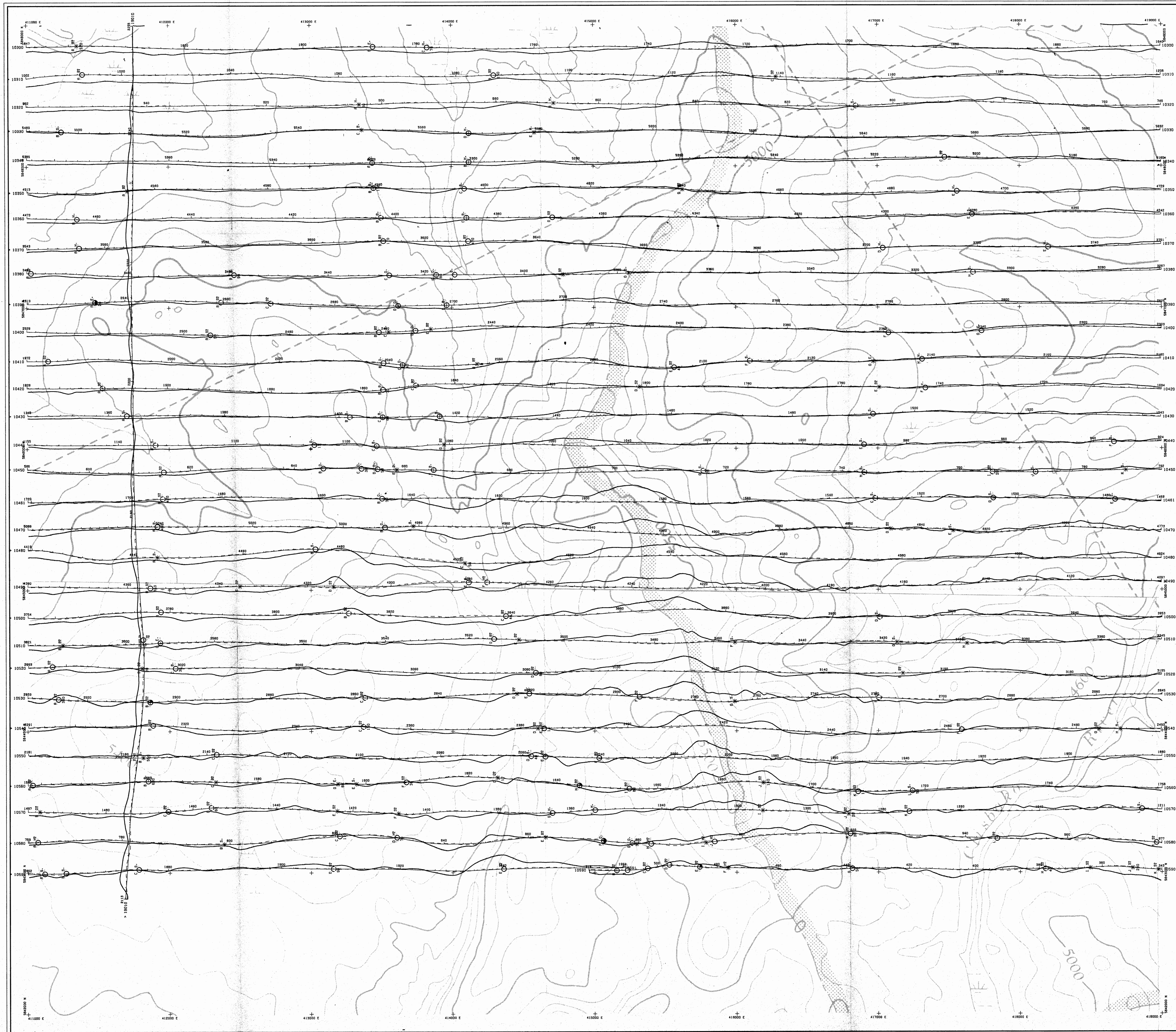
**VLF PROFILES**  
 DIGEM SURVEY: NTS: 93C/9,16 GEOPHYSICIST: [Signature]  
 DATE: NOVEMBER 1993 JOB: 1157 SHEET: 4  
 DIGEM SURVEYS & PROCESSING INC.



**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
**DIGEM**  
 Quality and Service in Alberta Geophysics

23,630





**TECHNICAL SUMMARY**

Navigation: Sercol real time differential GPS positioning  
 Date reduction grid interval: 50 metres  
 Terrain clearance: Helicopter 60 m  
 Electromagnetic sensor: 30 m  
 Magnetometer: VLF receiver 40 m  
 Data sampling interval: 0.1 second  
 Magnetometer / sensitivity: Schlumberger / 0.01 nT  
 VLF receiver / sensitivity: Herz 2A / 1%  
 Electromagnetic system: DIGEM

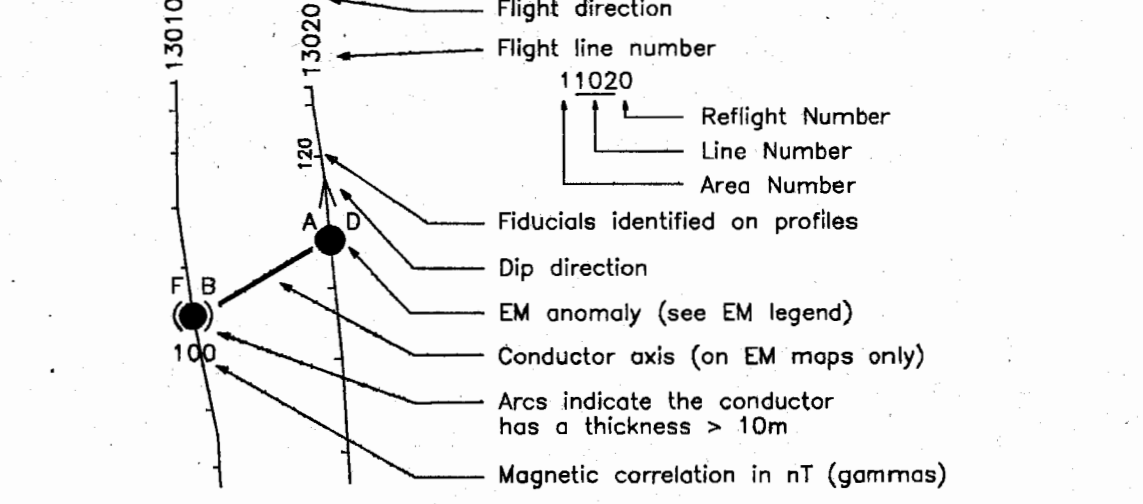
Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coplanar
5500 Hz	0.2 ppm	Vertical coplanar
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	1.0 ppm	Horizontal coplanar

**ELECTROMAGNETIC ANOMALIES**

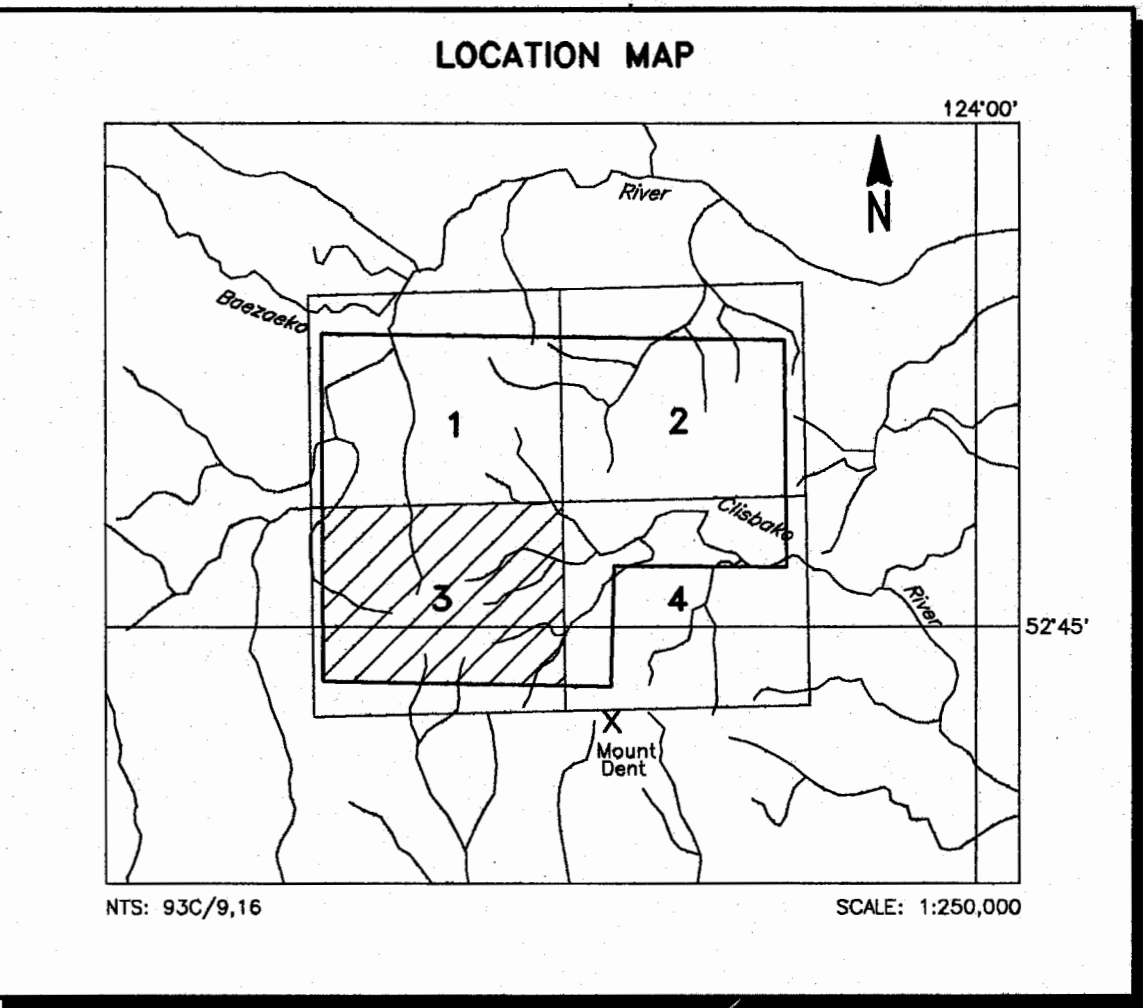
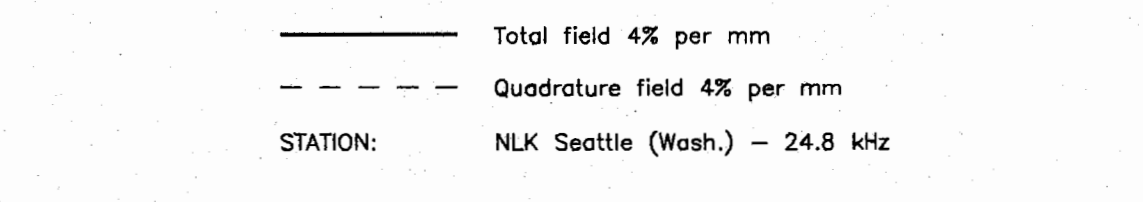
Grade	Anomaly	Conductance
7	●	>100 siemens
6	●	50-100 siemens
5	●	20-50 siemens
4	●	10-20 siemens
3	●	5-10 siemens
2	●	1-5 siemens
1	●	<1 siemens
-	*	Questionable anomaly

Anomaly Identifier	Interpretive symbol	Conductor ("model")
B	—	Bedrock conductor
D	—	Narrow bedrock conductor ("thin dike")
S	—	Conductive cover ("horizontal tin 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**



**VLF TOTAL FIELD & QUADRATURE PROFILES**



**PHELPS DODGE CORPORATION OF CANADA LIMITED**  
 MT. DENT AREA, B.C.

**VLF PROFILES**

DIGEM SURVEY: NTS: 93C/9,16 GEOPHYSICIST: [Signature]  
 DATE: NOVEMBER 1993 JOB: 1157 SHEET: 3  
 DIGEM SURVEYS & PROCESSING INC.

**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
**DIGEM**  
 1:10 000  
 0 0.5 1.0 km  
 0 0.5 1.0 MI

23,630