374000 E | 376000 E | 378000 E | 380000 E | 382000 E | 384000 E | 386000 E | 388000 E

6296000 N | 6294000 N | 6292000 N | 6290000 N | 6288000 N | 6286000 N | 6284000 N | 6282000 N

BC Geological Survey
Assessment Report
30282k

TECHNICAL SUMMARY

Navigation	Differentially–corrected GPS
Data reduction grid interval	30 metres
Terrain clearance	Helicopter, Spectrometer 57 m Electromagnetic sensor 30 m Magnetometer 30 m
Data sampling interval	0.1 second
Magnetometer / sensitivity	Cesium / 0.01 nT
Electromagnetic system	DIGHEM*
Spectrometer	GR820

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

Anomaly Identifier — Interpretive symbol — Inphase and Quadrature of coaxial coil is greater than

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

. 5 ppm
.. 10 ppm
... 15 ppm
.... 20 ppm

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

ohm·m

1081 | 1080 | 1052 | 999 | 939 | 876 | 811 | 745 | 678 | 611 | 544 | 478 | 411 | 346 | 282 | 221 | 164 | 108 | 52

FLIGHT LINES WITH EM ANOMALIES

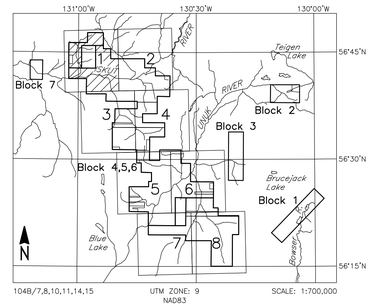
- Flight number
- Flight direction
- Flight line number
  - Reflight Number
  - Line Number
  - Area Number
- Fiducials identified on profiles
- Dip direction
- EM anomaly (see EM legend)
- Conductor axis (on EM maps only)
- Arcs indicate the conductor has a thickness > 10m
- Magnetic correlation in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

RESISTIVITY CONTOURS

1000 | 800 | 600 | 500 | 400 | 300 | 250 | 200 | 150 | 125 | 100

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

LOCATION MAP



HATHOR EXPLORATION LIMITED

ESKAY AREA BLOCKS 4–6, B.C.

APPARENT RESISTIVITY
900 Hz COPLANAR

FUGRO DIGHEM*/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 1
Fugro Airborne Surveys		

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS

406000 E 408000 E 410000 E 412000 E 414000 E 416000 E 418000 E 420000 E

6248000 N 6246000 N 6244000 N 6242000 N 6240000 N 6238000 N 6236000 N 6234000 N

ICEFIELD

MOUNT FRANK MACKIE

BELL IRVING RIVER

TECHNICAL SUMMARY

Navigation	Differentially–corrected GPS
Data reduction grid interval	30 metres
Terrain clearance	Helicopter, Spectrometer 57 m Electromagnetic sensor 30 m Magnetometer 30 m
Data sampling interval	0.1 second
Magnetometer / sensitivity	Cesium / 0.01 nT
Electromagnetic system	DIGHEM*
Spectrometer	GR820

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

Anomaly Identifier — Interpretive symbol — Inphase and Quadrature of coaxial coil is greater than

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

5 ppm
10 ppm
15 ppm
20 ppm

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

ohm·m

20000
19654
18321
16725
15080
13415
11679
9793
7830
6104
4801
3798
2989
2335
1749
1281
918
664
452

RESISTIVITY CONTOURS

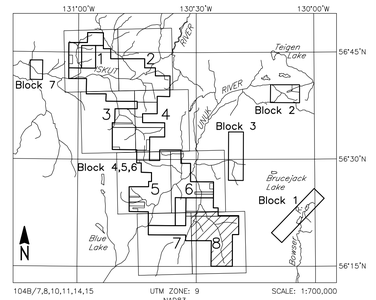
1000
800
600
500
400
300
250
200
150
125
100

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

FLIGHT LINES WITH EM ANOMALIES

Flight number
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)
Arcs indicate the conductor has a thickness > 10m
Magnetic correlation in nT (gammas)

LOCATION MAP



HATHOR EXPLORATION LIMITED
ESKAY AREA BLOCKS 4–6, B.C.

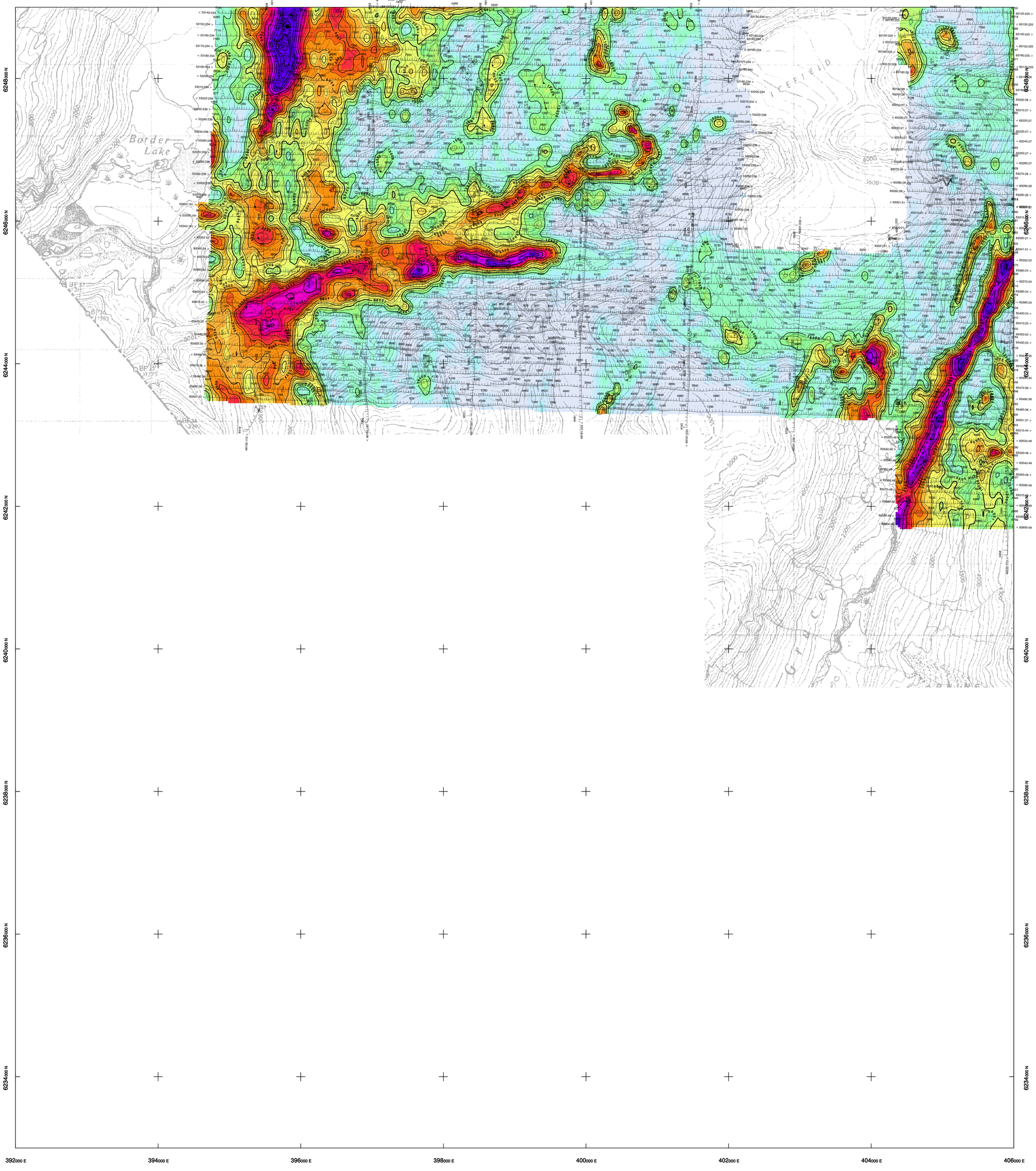
APPARENT RESISTIVITY
56,000 Hz COPLANAR

FUGRO DIGHEM*/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 8

Fugro Airborne Surveys

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS



TECHNICAL SUMMARY

Navigation . . . . . Differentially-corrected GPS
Data reduction grid interval . . . . 30 metres
Terrain clearance . . . . . Helicopter, Spectrometer 57 m
Electromagnetic sensor 30 m
Magnetometer 30 m
Data sampling interval . . . . . 0.1 second
Magnetometer / sensitivity . . . . . Cesium / 0.01 nT
Electromagnetic system . . . . . DIGHEM V
Spectrometer GR820

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

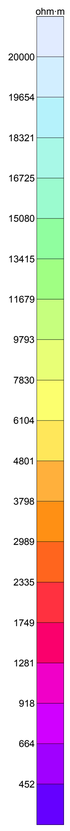
ELECTROMAGNETIC ANOMALIES

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

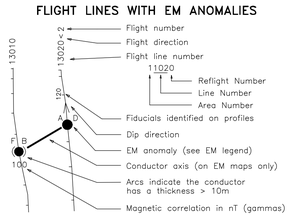
Anomaly identifier — Interpretive symbol — Depth is greater than
- 15 m
- 30 m
- 45 m
- 60 m

Inphase and Quadrature of coaxial coil is greater than
- 5 ppm
- 10 ppm
- 15 ppm
- 20 ppm

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

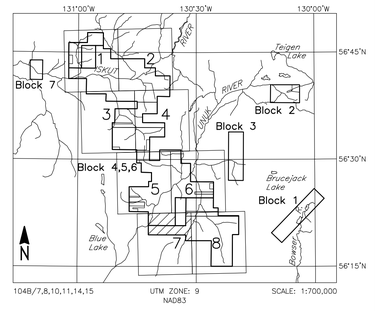


RESISTIVITY CONTOURS

1000
800
600
500
400
300
250
200
150
125
100

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

LOCATION MAP



HATHOR EXPLORATION LIMITED
ESKAY AREA BLOCKS 4–6, B.C.

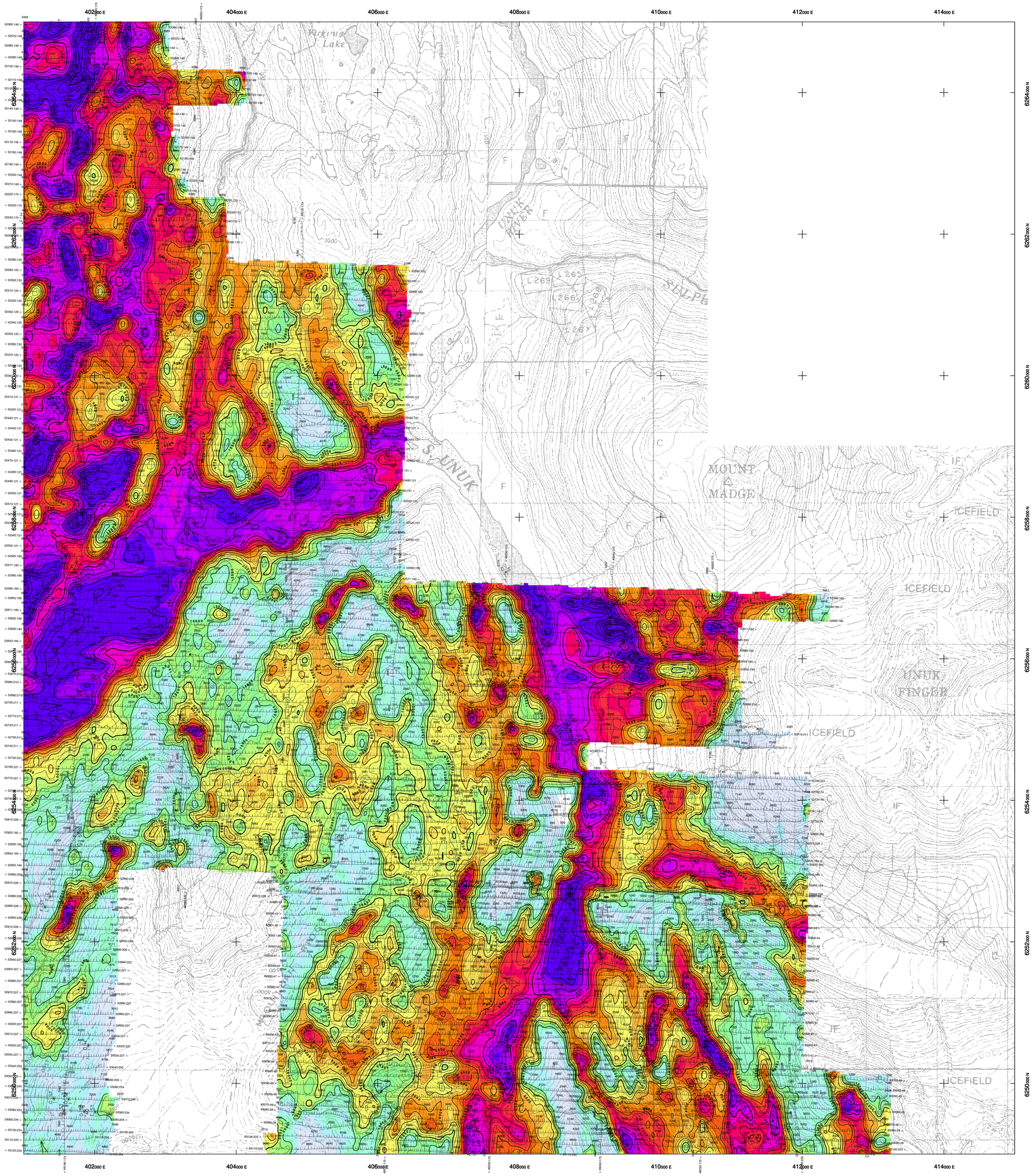
APPARENT RESISTIVITY
56,000 Hz COPLANAR

FUGRO DIGHEM V/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 7

Fugro Airborne Surveys

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS



TECHNICAL SUMMARY

Navigation . . . . . Differentially-corrected GPS
Data reduction grid interval . . . . 30 metres
Terrain clearance . . . . . Helicopter, Spectrometer 57 m
Electromagnetic sensor 30 m
Magnetometer 30 m
Data sampling interval . . . . . 0.1 second
Magnetometer / sensitivity . . . . . Cesium / 0.01 nT
Electromagnetic system . . . . . DIGHEM*
Spectrometer GR820

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

Anomaly identifier
Interpretive symbol
Depth is greater than
· 15 m
: 30 m
⁞ 45 m
⁞ 60 m
Inphase and Quadrature of coaxial coil is greater than
. 5 ppm
.. 10 ppm
... 15 ppm
.... 20 ppm

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

ohm·m
20000
19654
18321
16725
15080
13415
11679
9793
7830
6104
4801
3798
2989
2335
1749
1281
918
664
452

FLIGHT LINES WITH EM ANOMALIES

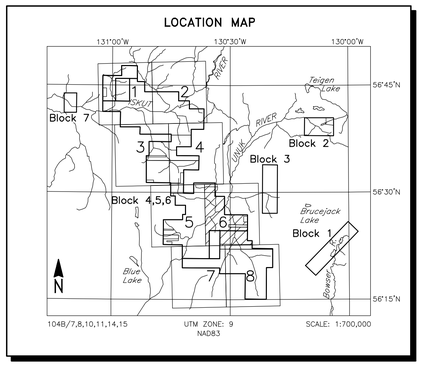
Flight number
Flight direction
Flight line number
11020
Reflight Number
Line Number
Area Number
Fiducials identified on profiles
Dip direction
EM anomaly (see EM legend)
Conductor axis (on EM maps only)
Arcs indicate the conductor has a thickness > 10m
Magnetic correlation in nT (gammas)

RESISTIVITY CONTOURS

1000
800
600
500
400
300
250
200
150
125
100

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

LOCATION MAP



HATHOR EXPLORATION LIMITED
ESKAY AREA BLOCKS 4–6, B.C.

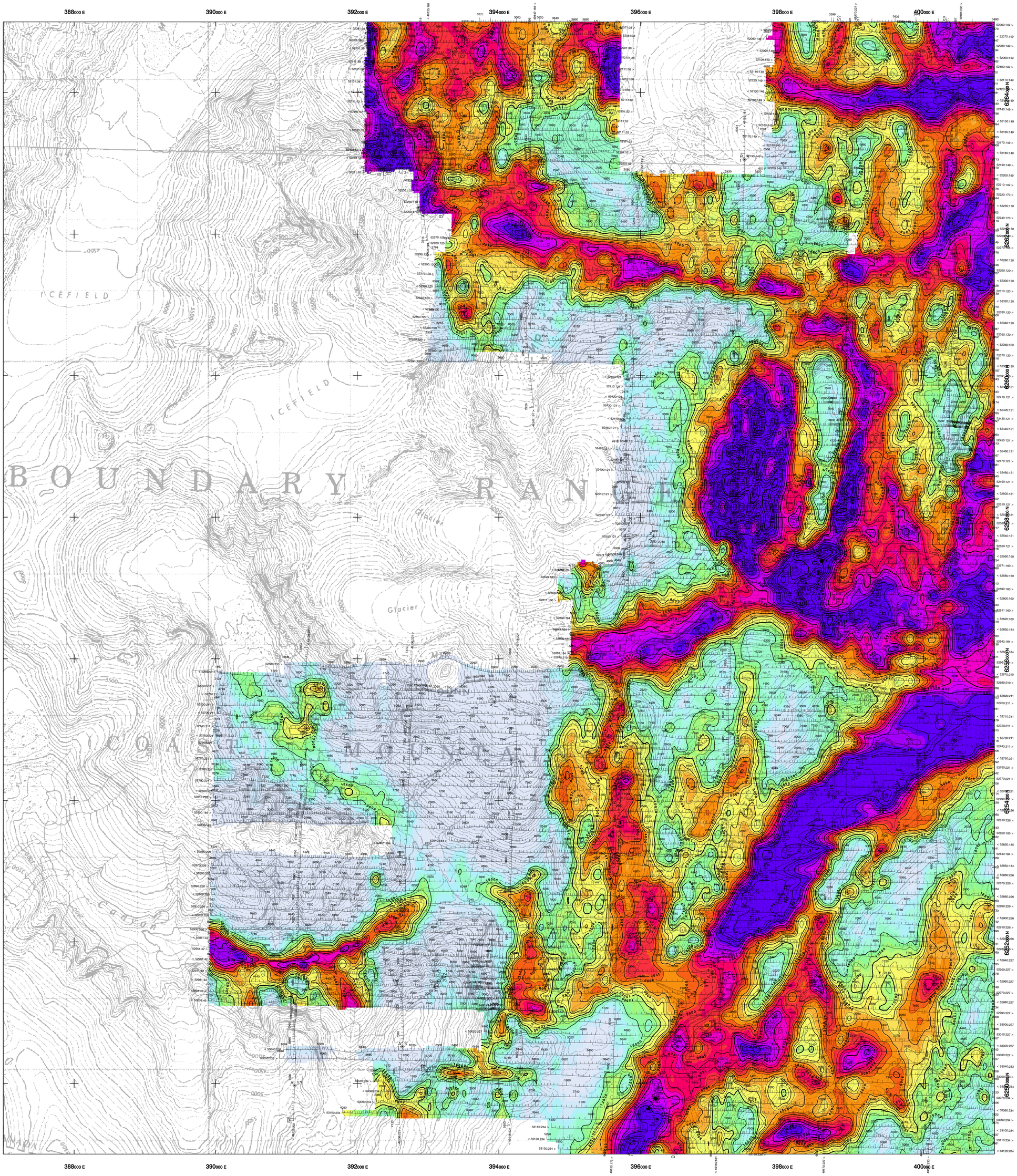
APPARENT RESISTIVITY
56,000 Hz COPLANAR

FUGRO DIGHEM*/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 6

Fugro Airborne Surveys

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS



TECHNICAL SUMMARY

Navigation . . . . . Differentially-corrected GPS
Data reduction grid interval . . . . 30 metres
Terrain clearance . . . . . Helicopter, Spectrometer 57 m
Electromagnetic sensor 30 m
Magnetometer 30 m
Data sampling interval . . . . . 0.1 second
Magnetometer / sensitivity . . . . . Cesium / 0.01 nT
Electromagnetic system . . . . . DIGHEM*
Spectrometer GR820

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

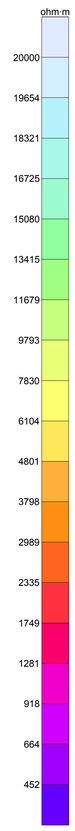
ELECTROMAGNETIC ANOMALIES

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

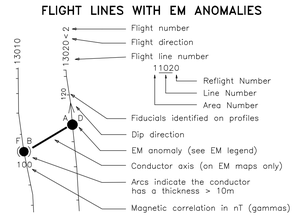
Anomaly identifier — Interpretive symbol — Depth is greater than
· 15 m
: 30 m
⁞ 45 m
⁞ 60 m

Inphase and Quadrature of coaxial coil is greater than
. 5 ppm
.. 10 ppm
... 15 ppm
.... 20 ppm

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

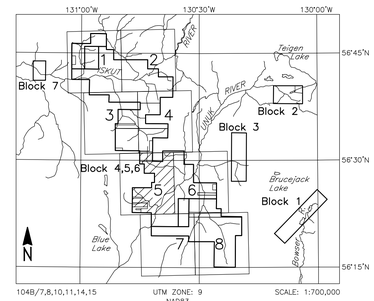


RESISTIVITY CONTOURS

1000
800
600
500
400
300
250
200
150
125
100

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

LOCATION MAP



HATHOR EXPLORATION LIMITED

ESKAY AREA BLOCKS 4–6, B.C.

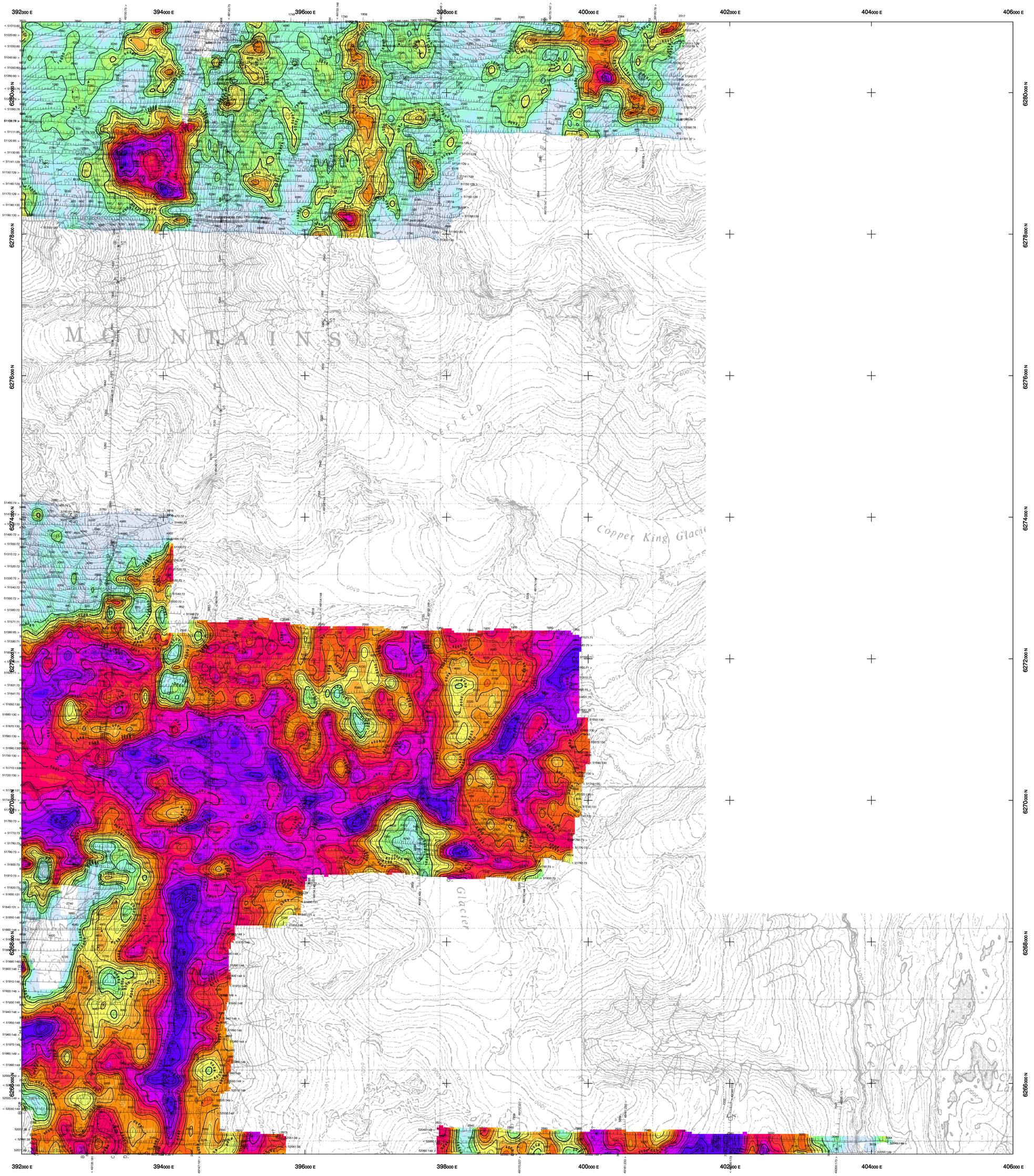
APPARENT RESISTIVITY 56,000 Hz COPLANAR

FUGRO DIGHEM*/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 5

Fugro Airborne Surveys

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS



TECHNICAL SUMMARY

Navigation . . . . . Differentially-corrected GPS
Data reduction grid interval . . . . 30 metres
Terrain clearance . . . . . Helicopter, Spectrometer 57 m
Electromagnetic sensor 30 m
Magnetometer 30 m
Data sampling interval . . . . . 0.1 second
Magnetometer / sensitivity . . . . . Cesium / 0.01 nT
Electromagnetic system . . . . . DIGHEM^{V}
Spectrometer GR820

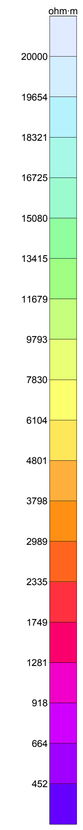
Frequency	Sensitivity	Coil Orientation
1000 Hz	.06 ppm	Vertical coaxial
5500 Hz	.12 ppm	Vertical coaxial
900 Hz	.12 ppm	Horizontal coplanar
7200 Hz	.24 ppm	Horizontal coplanar
56000 Hz	.60 ppm	Horizontal coplanar

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

Anomaly identifier
Interpretive symbol
Depth is greater than
· 15 m
: 30 m
⁞ 45 m
⁞ 60 m
Inphase and Quadrature of coaxial coil is greater than
. 5 ppm
.. 10 ppm
... 15 ppm
.... 20 ppm

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

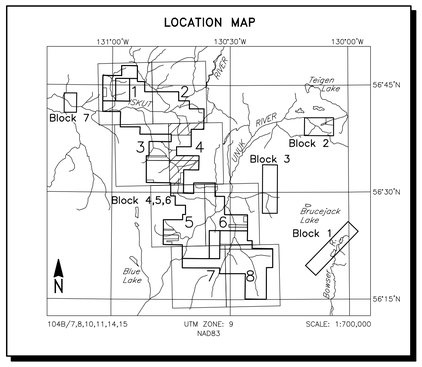
Flight number
Flight direction
Flight line number
11020
Reflight Number
Line Number
Area Number
Fiducials identified on profiles
Dip direction
EM anomaly (see EM legend)
Conductor axis (on EM maps only)
Arcs indicate the conductor has a thickness > 10m
Magnetic correlation in nT (gammas)

RESISTIVITY CONTOURS

1000
800
600
500
400
300
250
200
150
125
100

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

LOCATION MAP



HATHOR EXPLORATION LIMITED
ESKAY AREA BLOCKS 4–6, B.C.

APPARENT RESISTIVITY
56,000 Hz COPLANAR

FUGRO DIGHEM^{V}/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 4

Fugro Airborne Surveys

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS

TECHNICAL SUMMARY

Navigation	Differentially–corrected GPS
Data reduction grid interval	30 metres
Terrain clearance	Helicopter, Spectrometer 57 m Electromagnetic sensor 30 m Magnetometer 30 m
Data sampling interval	0.1 second
Magnetometer / sensitivity	Cesium / 0.01 nT
Electromagnetic system	DIGHEM^V
Spectrometer	GR820

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

Anomaly identifier; Interpretive symbol; Inphase and Quadrature of coaxial coil is greater than 5 ppm / 10 ppm / 15 ppm / 20 ppm; Depth is greater than 15 m / 30 m / 45 m / 60 m

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

Flight number; 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); Arcs indicate the conductor has a thickness > 10m; Magnetic correlation in nT (gammas)

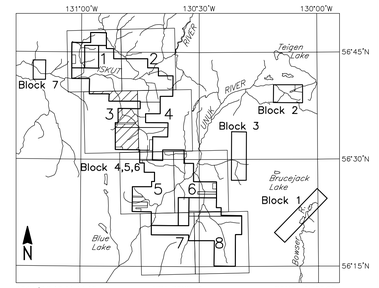
ohm·m: 20000, 19654, 18321, 16725, 15080, 13415, 11679, 9793, 7830, 6104, 4801, 3798, 2989, 2335, 1749, 1281, 918, 664, 452

RESISTIVITY CONTOURS

1000, 800, 600, 500, 400, 300, 250, 200, 150, 125, 100

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

LOCATION MAP



HATHOR EXPLORATION LIMITED
ESKAY AREA BLOCKS 4–6, B.C.

APPARENT RESISTIVITY
56,000 Hz COPLANAR

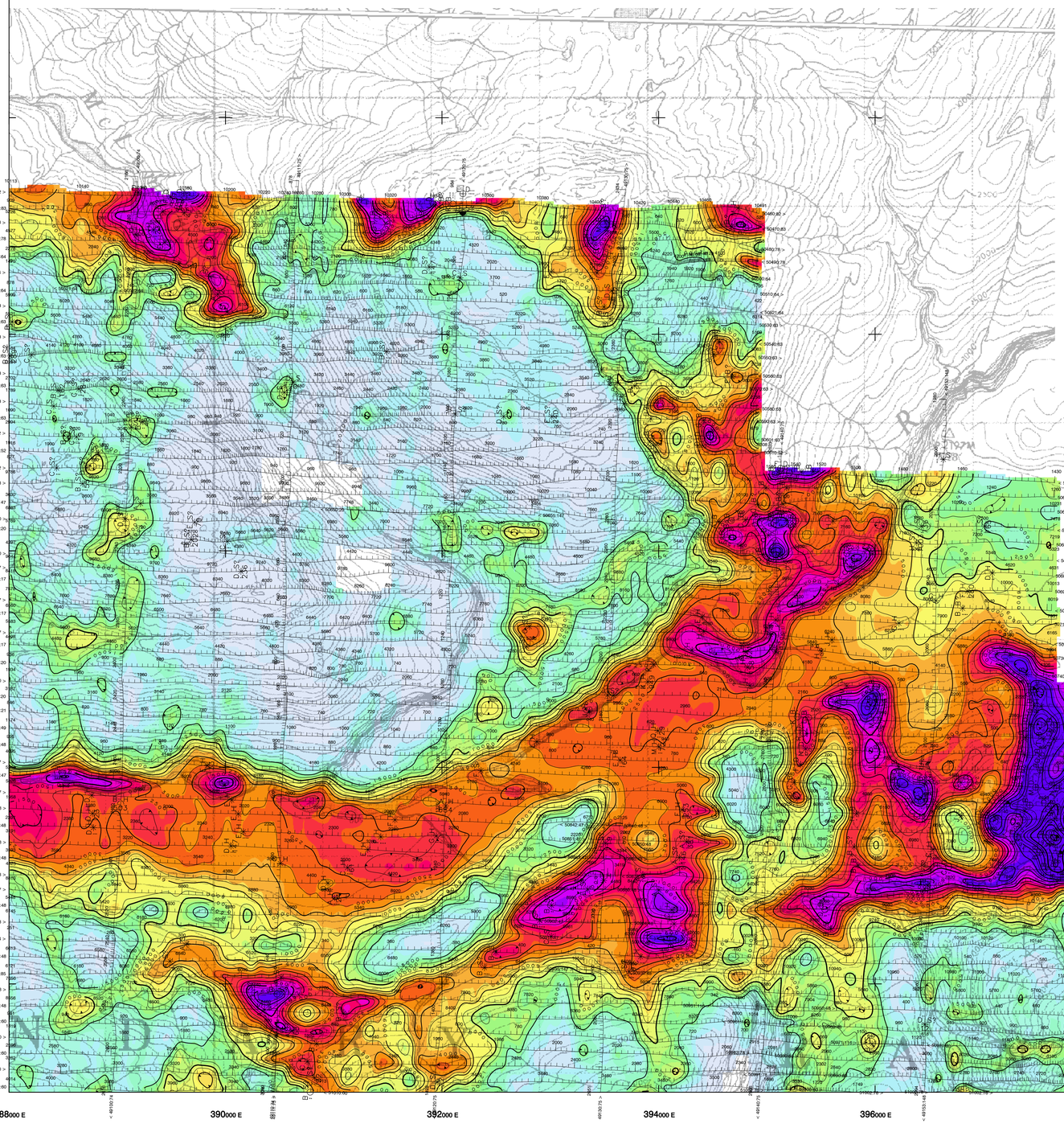
FUGRO DIGHEM^V/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 3
Fugro Airborne Surveys		

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS

388000 E 390000 E 392000 E 394000 E 396000 E 398000 E 400000 E 402000 E

6296000 N 6294000 N 6292000 N 6290000 N 6288000 N 6286000 N 6284000 N 6282000 N



TECHNICAL SUMMARY

Navigation	Differentially–corrected GPS
Data reduction grid interval	30 metres
Terrain clearance	Helicopter, Spectrometer 57 m Electromagnetic sensor 30 m Magnetometer 30 m
Data sampling interval	0.1 second
Magnetometer / sensitivity	Cesium / 0.01 nT
Electromagnetic system	DIGHEM*
Spectrometer	GR820

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

Anomaly identifier; Interpretive symbol; Inphase and Quadrature of coaxial coil is greater than 5 ppm, 10 ppm, 15 ppm, 20 ppm; Depth is greater than 15 m, 30 m, 45 m, 60 m

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

ohm·m

20000
19654
18321
16725
15080
13415
11679
9793
7830
6104
4801
3798
2989
2335
1749
1281
918
664
452

FLIGHT LINES WITH EM ANOMALIES

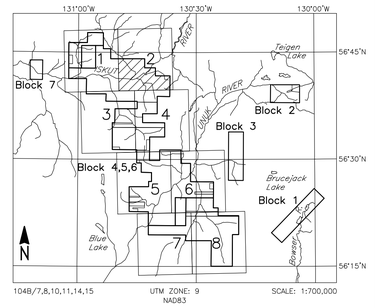
Flight number; Flight direction; Flight line number; Reflight Number; Line Number; Area Number; Fiducials identified on profiles; Dip direction; EM anomaly (see EM legend); Conductor axis (on EM maps only); Arcs indicate the conductor has a thickness > 10m; Magnetic correlation in nT (gammas)

RESISTIVITY CONTOURS

1000 800 600 500 400 300 250 200 150 125 100

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

LOCATION MAP



104B/7,8,10,11,14,15 UTM ZONE: 9 NAD83 SCALE: 1:700,000

HATHOR EXPLORATION LIMITED

ESKAY AREA BLOCKS 4–6, B.C.

APPARENT RESISTIVITY 56,000 Hz COPLANAR

FUGRO DIGHEM*/RAD SURVEY	NTS: 104B/7,8,10,11,14,15	GEOPHYSICIST:
DATE: DECEMBER, 2007	JOB: 06041	SHEET: 2
Fugro Airborne Surveys		

0 1 2 Km
0 1 Mi
Scale 1:20 000

FUGRO AIRBORNE SURVEYS