

LEGEND

Helicopter Type: Eurocopter AS350B2
Helicopter Registration: C-GTNT
Survey Period: September-October, 2006

SURVEY PARAMETERS:

Mean Terrain Clearance: 85 m (Helicopter)
Traverse Line Spacing: 100 m
Traverse Line Direction: 90°
Control Line Spacing: 1000 m
Control Line Direction: 180°

AIRBORNE MAGNETOMETER SYSTEM:

Geometrics G822A Cesium magnetometer
Sensitivity: 0.0005 nT
Noise Level: +/- 0.001 nT
Sensor Height: Nominally 60 m above ground level
Sensor Location: Mounted in aerofoil towed 25 m beneath the helicopter
Sampling Rate: 10 readings/second

AIRBORNE ELECTROMAGNETIC SYSTEM:

T.H.E.M. Helicopter-borne Digital Time-domain Electromagnetic System

Receiver:

Three axis (X,Y and Z) dipole coils with coplanar configuration
Sensor Height: Nominally 60 m above ground level
Sensor Location: Mounted in aerofoil towed 25 m beneath the aircraft
Sampling Rate: 10 readings/second

Transmitter:

Horizontal transmitter loop of 7.5 m diameter
Sensor Height: Nominally 36 m above ground level
Sensor Location: Horizontal loop towed 49 m beneath the aircraft
Frequency: 30 Hz; 60 half-sine pulses per second

DATA ACQUISITION SYSTEM:

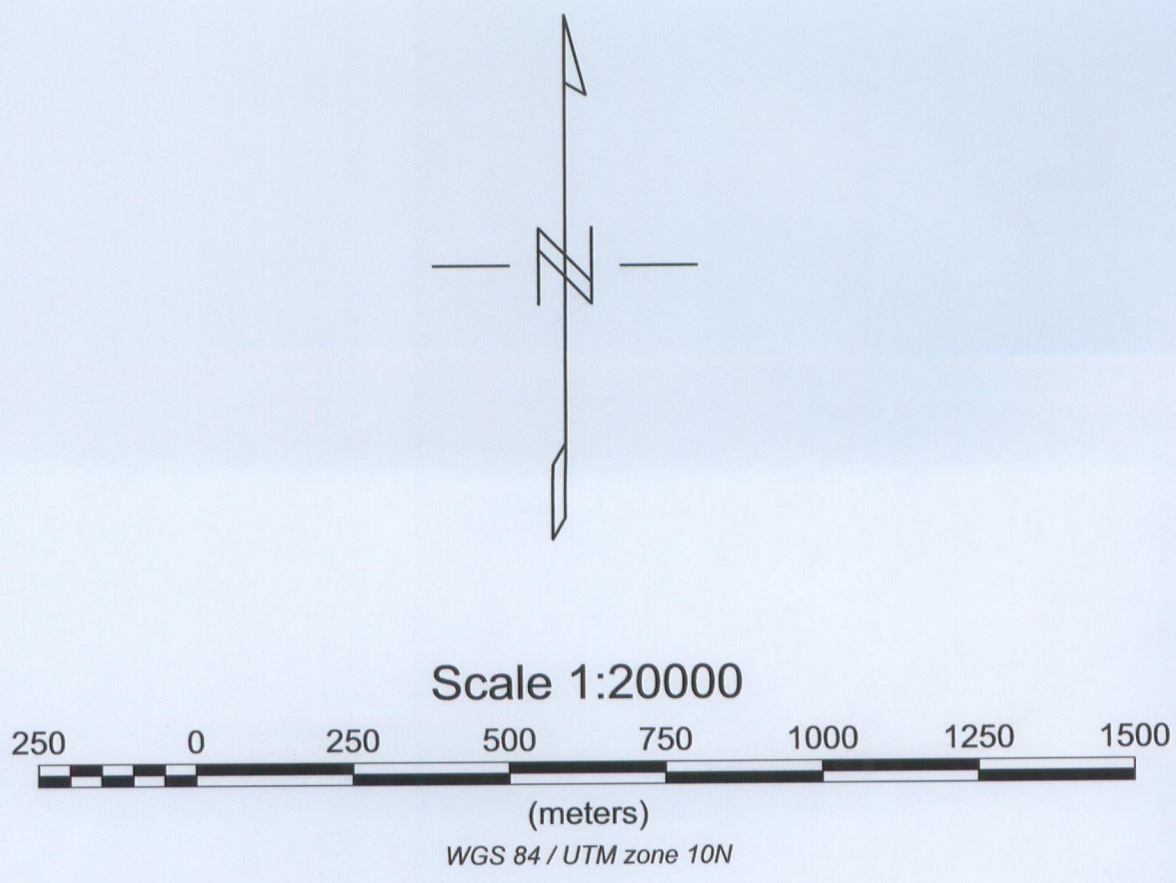
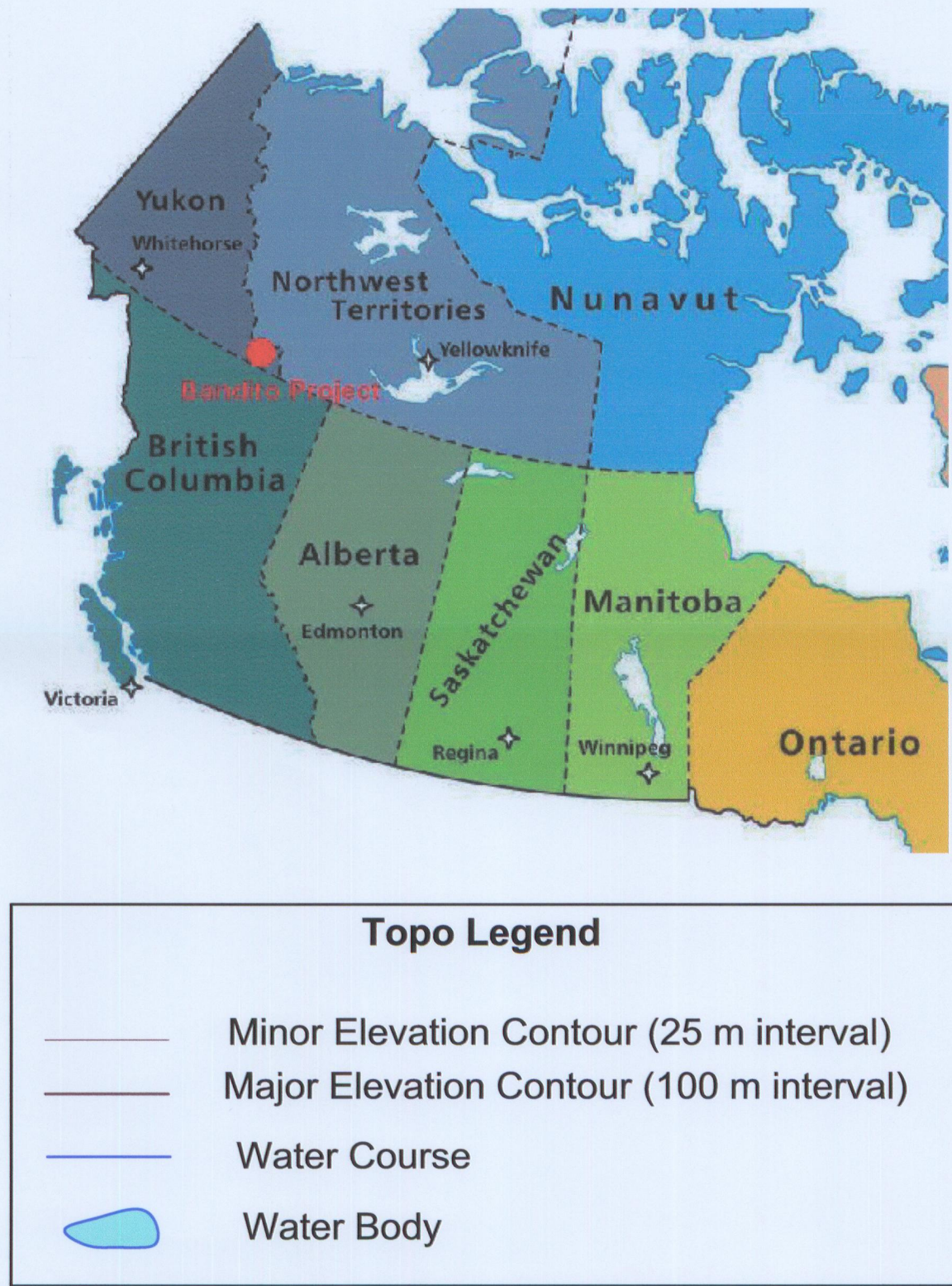
T.H.E.M. Data Collector

AIRBORNE NAVIGATION SYSTEM:

T.H.E.M. navigation system
OmniSTAR 3000LR DGPS receiver.
Pilot steering and navigation computer.

BASE STATIONS SYSTEMS:

GEM GSM-19 Overhauser Magnetometer
Sample Interval: 1 second
Sensitivity: 0.001 nT



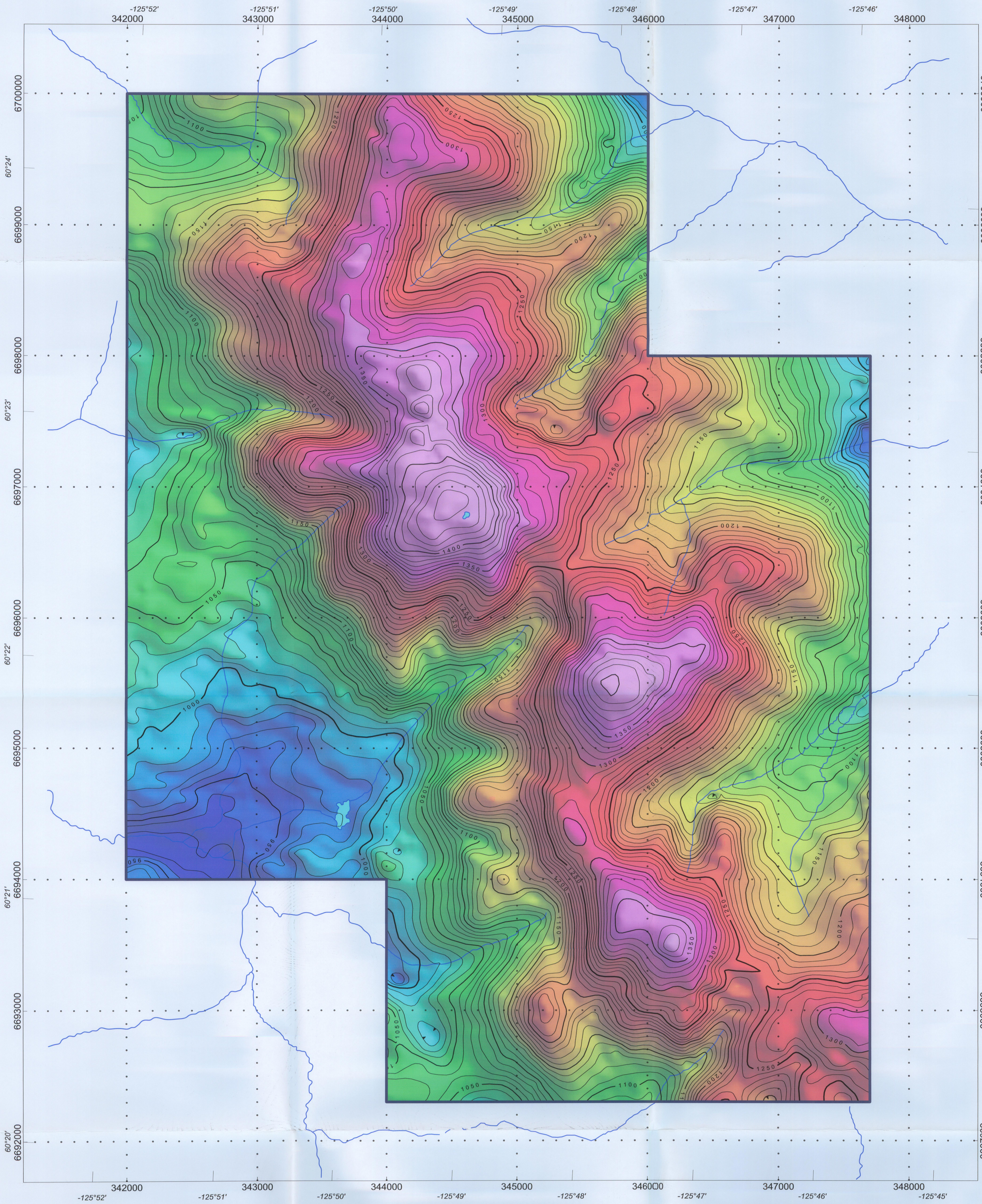
McPHAR

True North Gems Inc.

Differentially Corrected GPS Flight Path
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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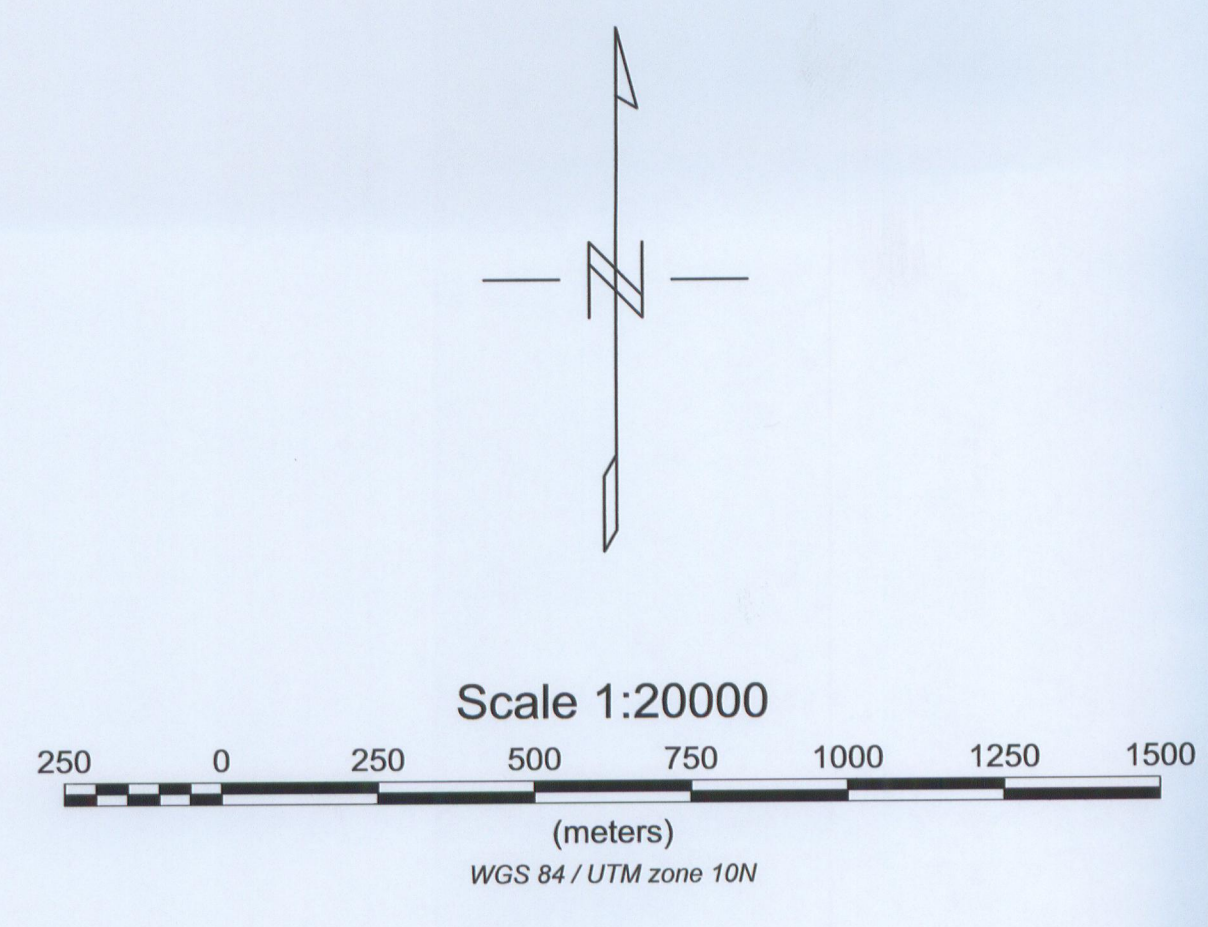
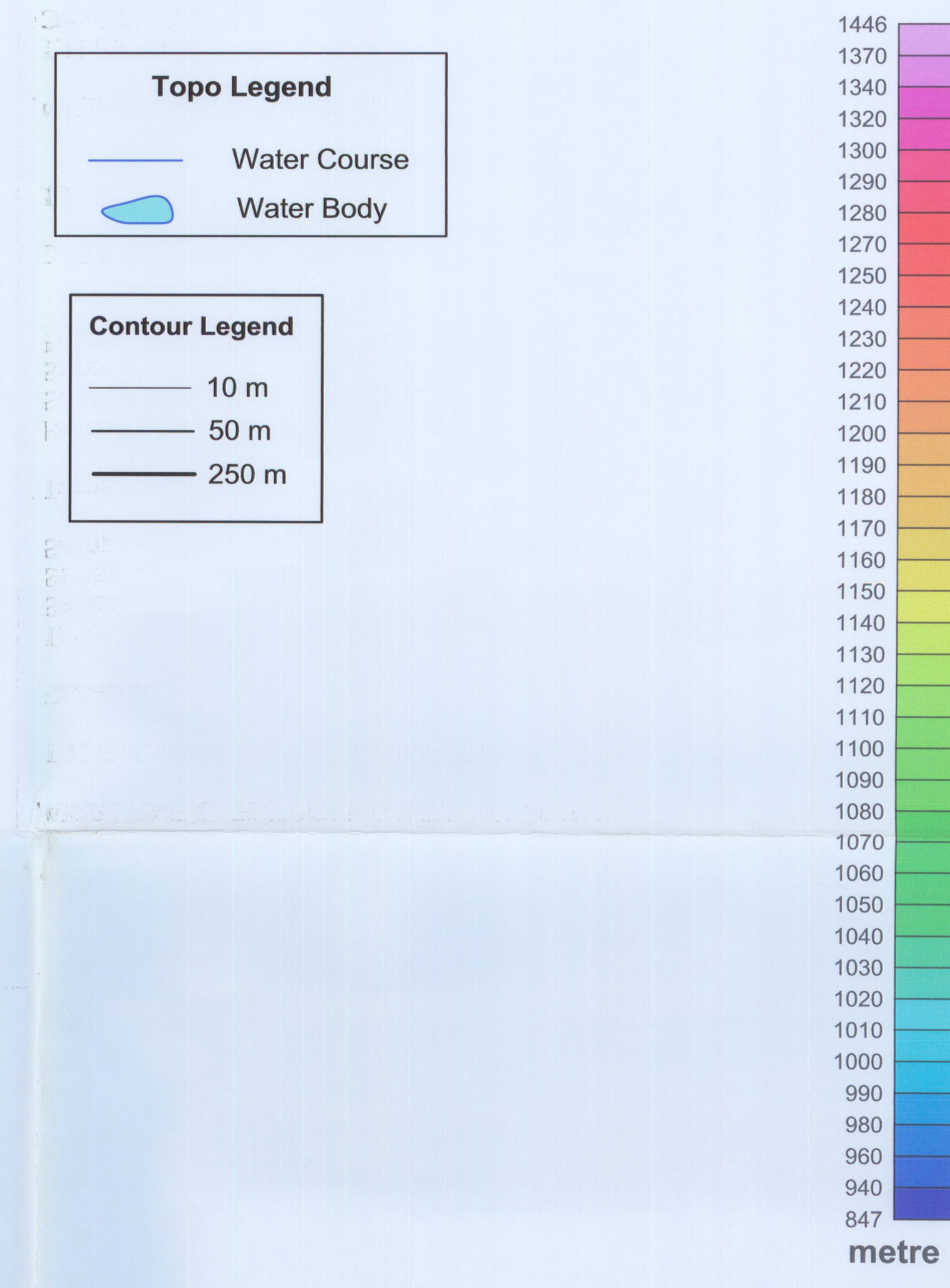
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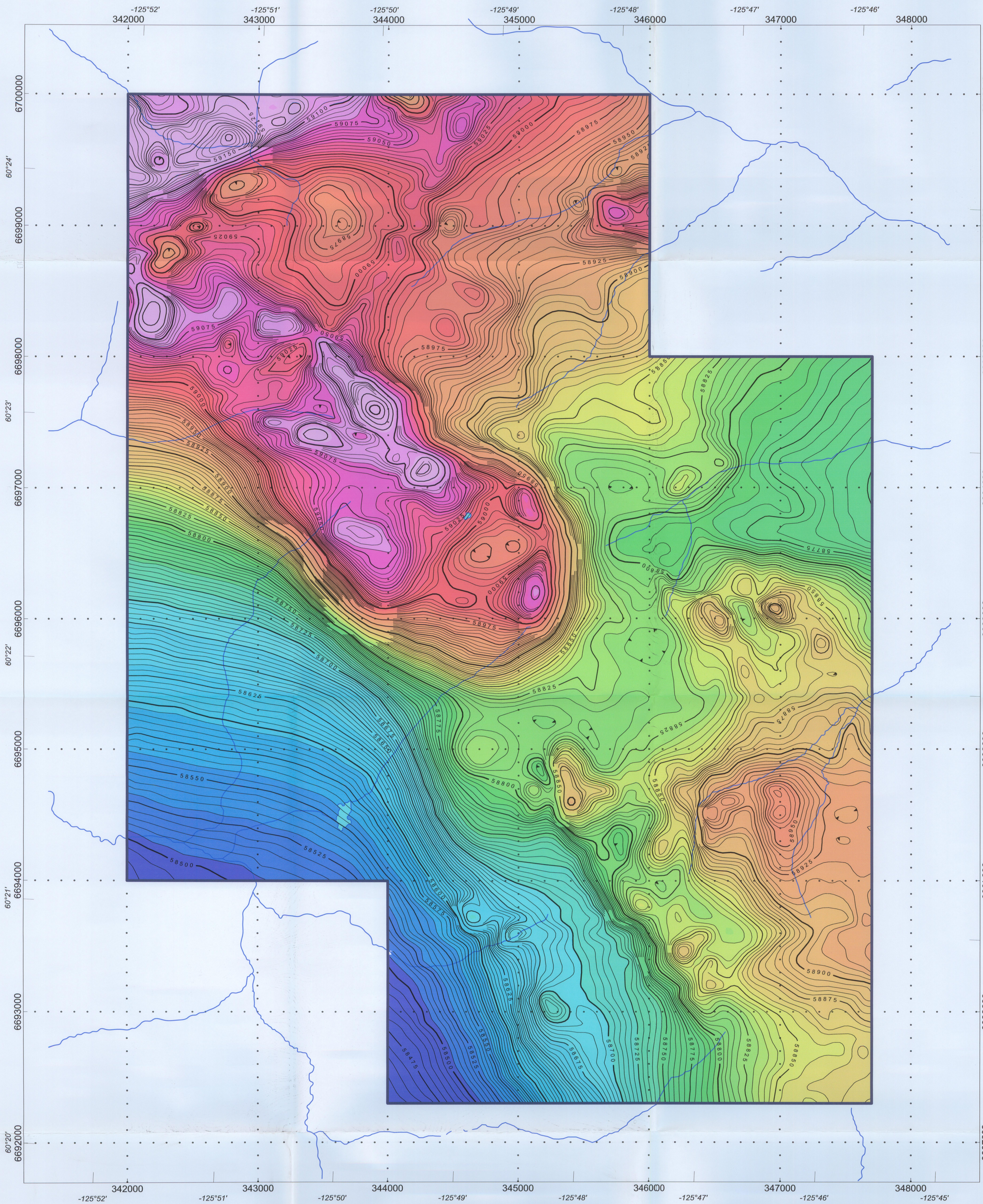
McPHAR

True North Gems Inc.

Digital Terrain Model Calculated from Survey Data
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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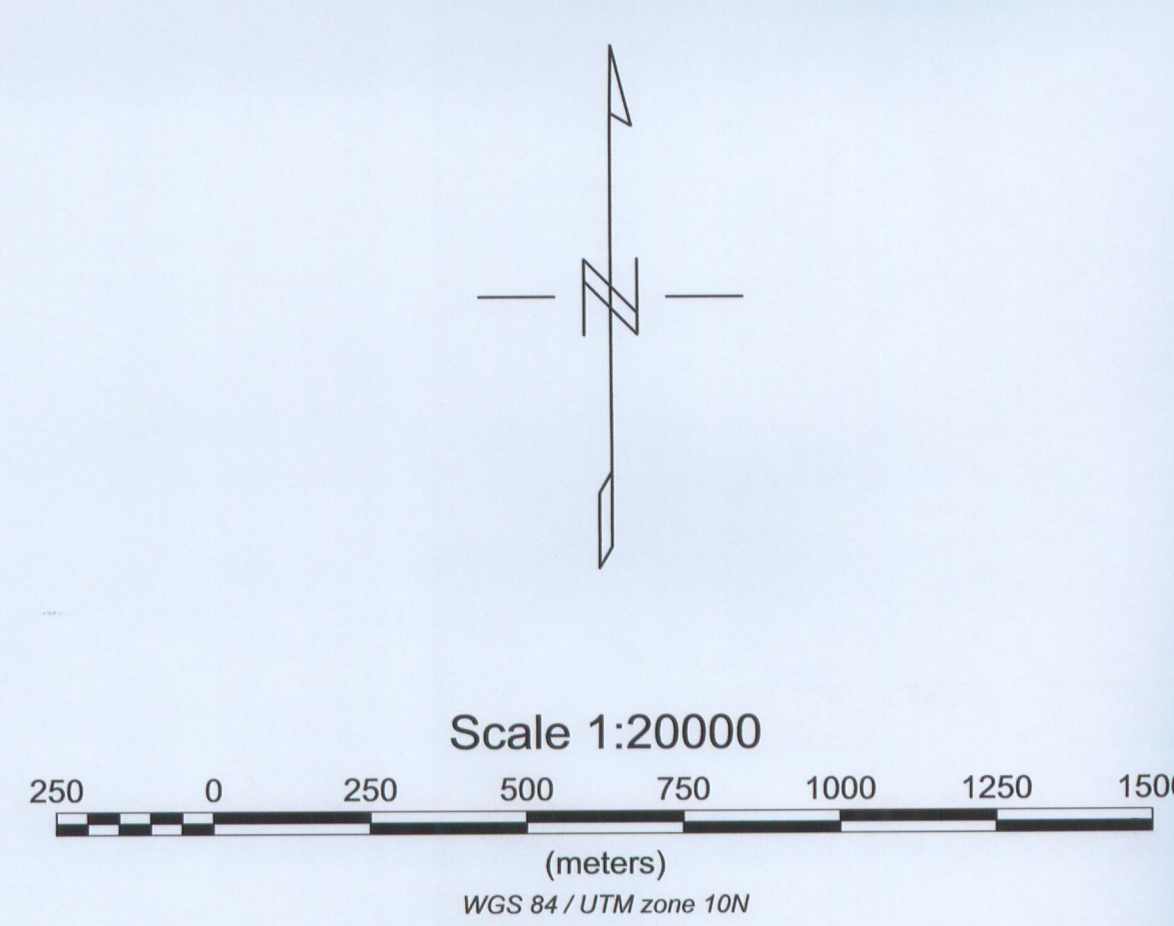
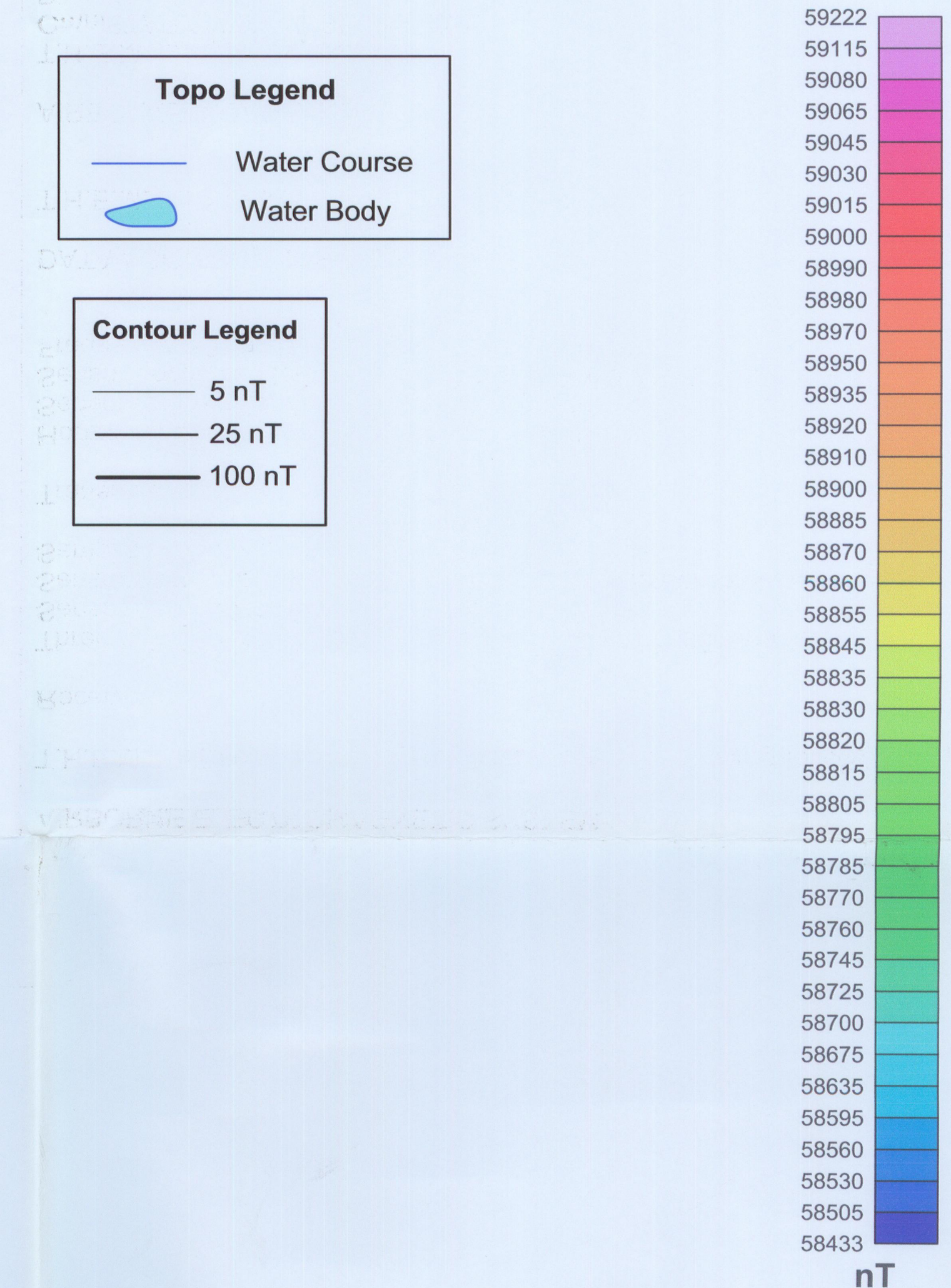
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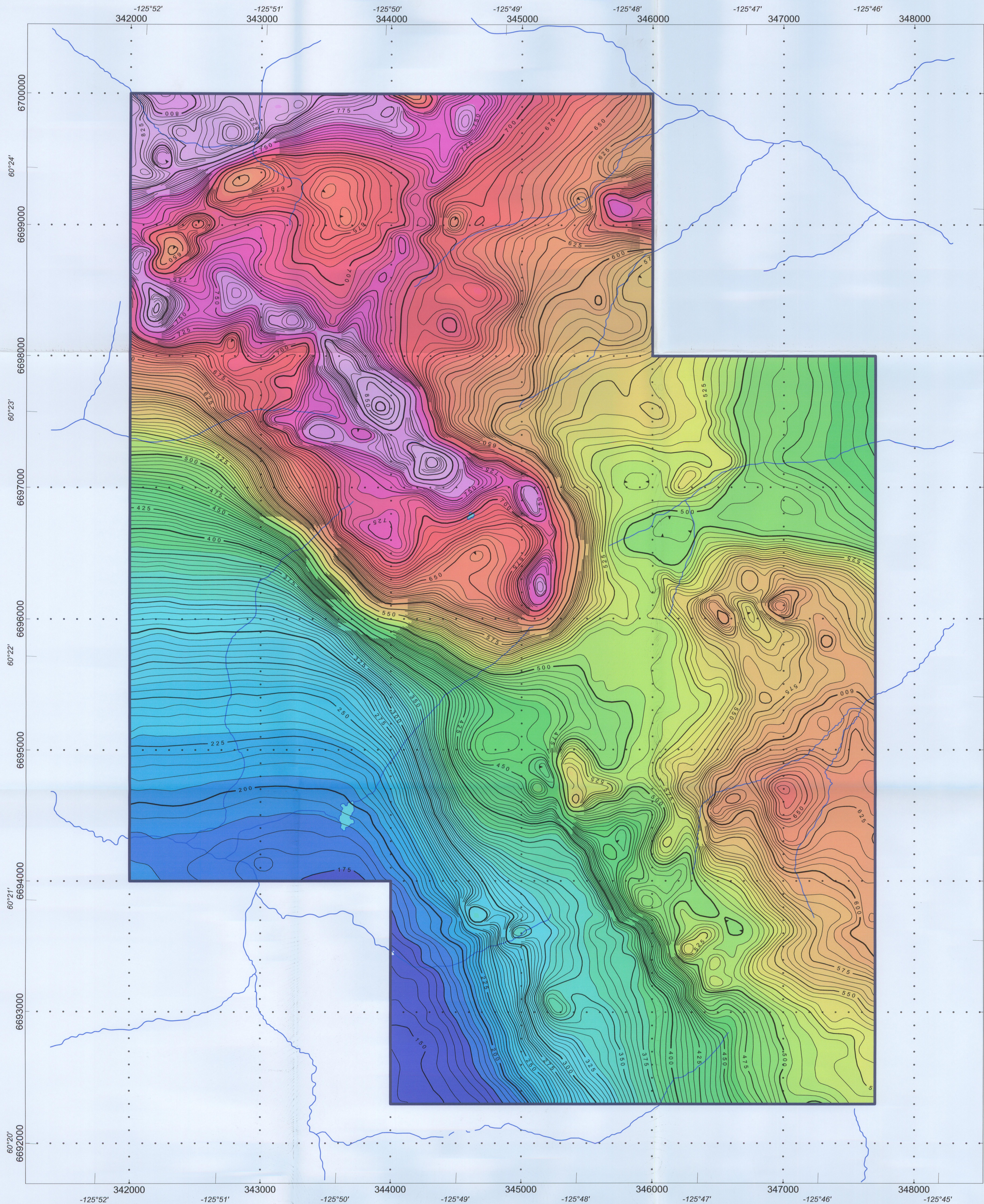
McPHAR

True North Gems Inc.

Total Magnetic Intensity
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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IGRF Model 2005

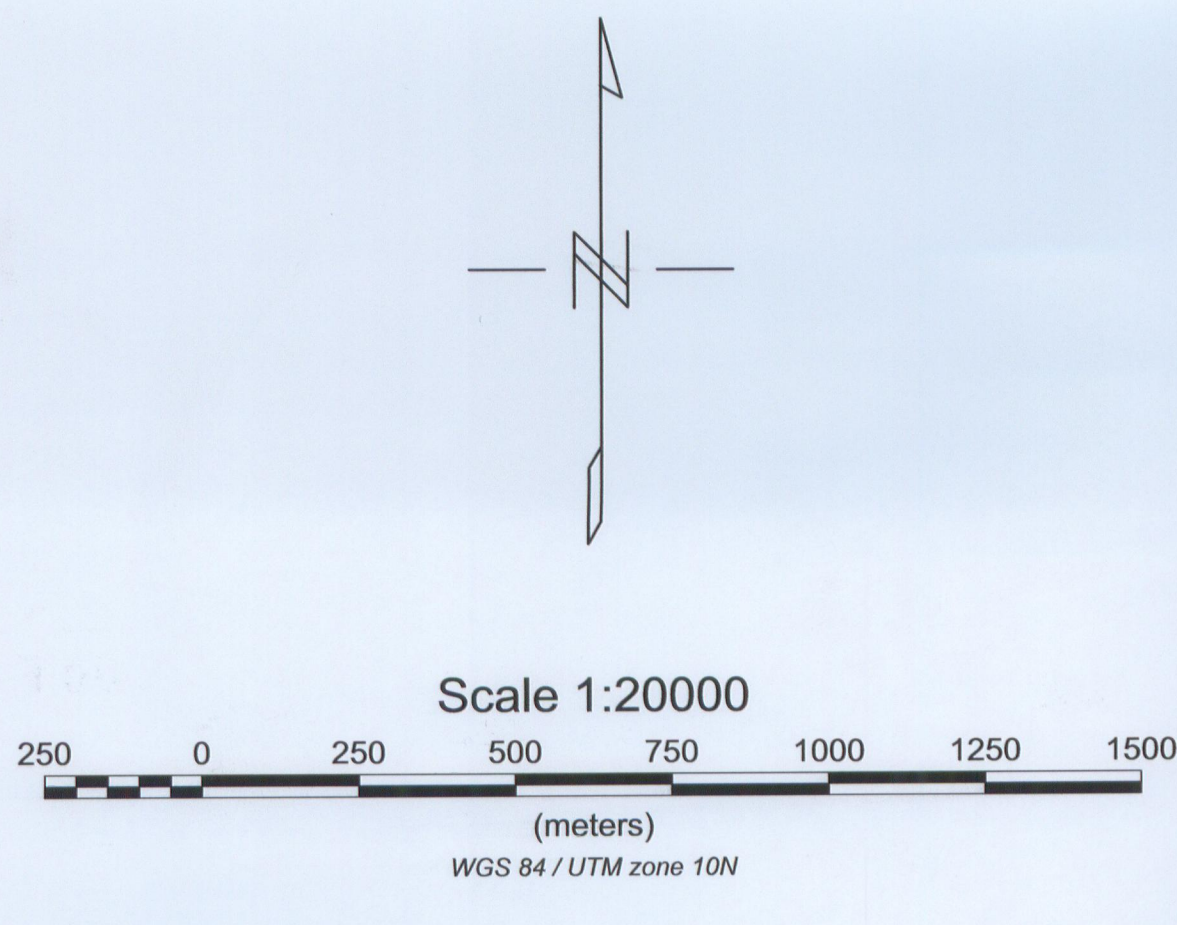
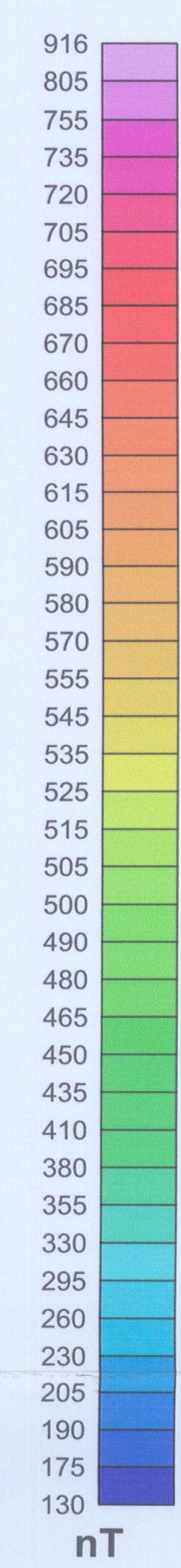
Date : 20 September 2006
Elevation : DTM - Survey Data

Topo Legend

Water Course
Water Body

Contour Legend

5 nT
25 nT
100 nT



McPHAR

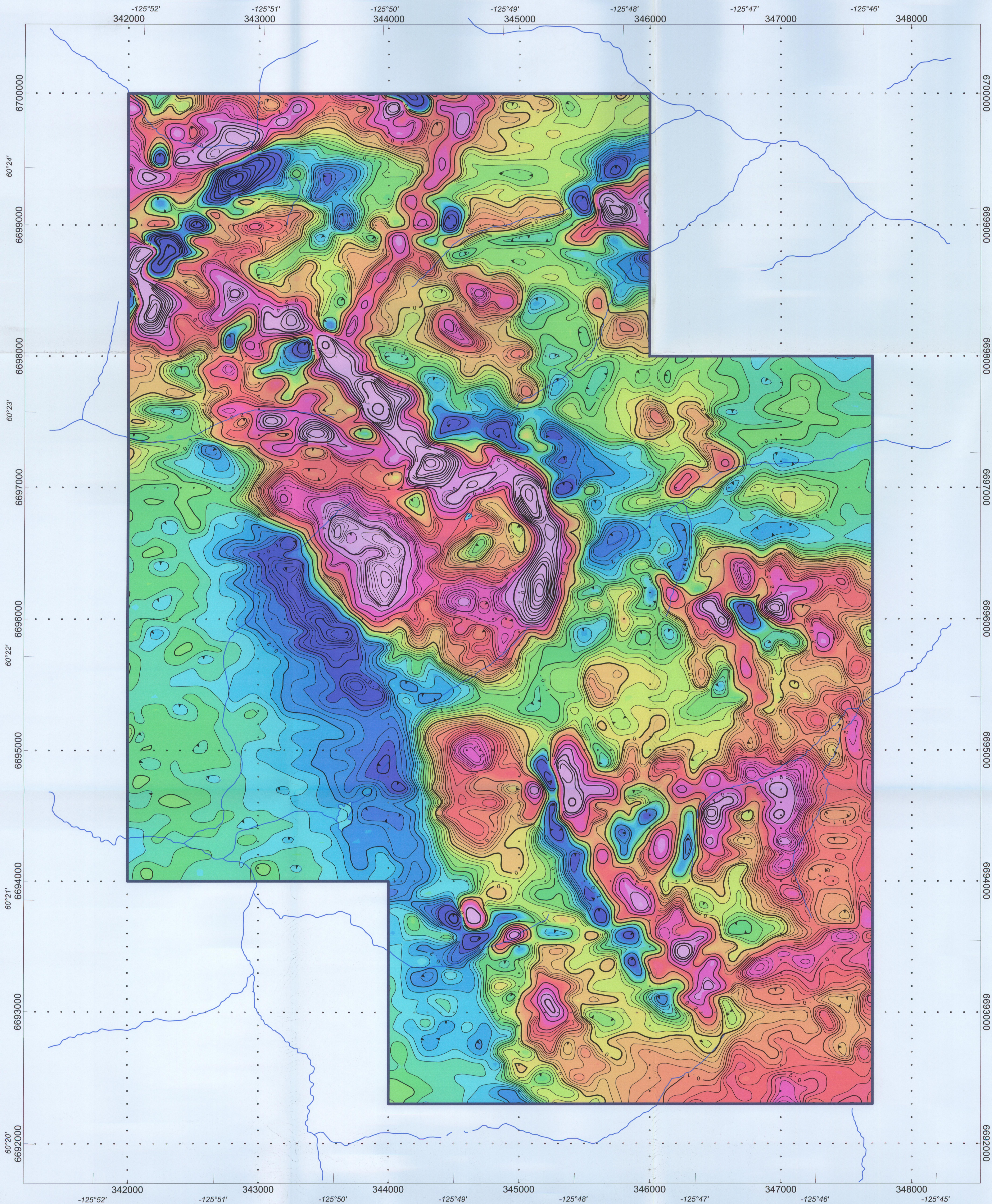
True North Gems Inc.

Total Magnetic Intensity Reduced to the Magnetic Pole (IGRF Removed)

Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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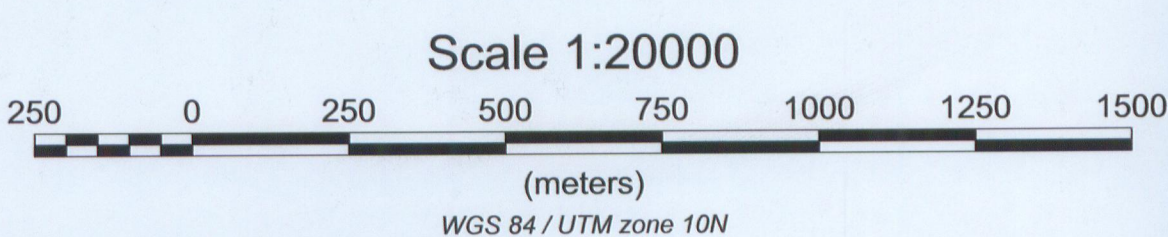
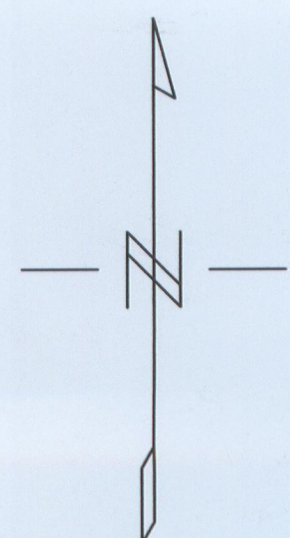


Topo Legend

Water Course
Water Body

Contour Legend

0.02 nT/m
0.1 nT/m
0.5 nT/m

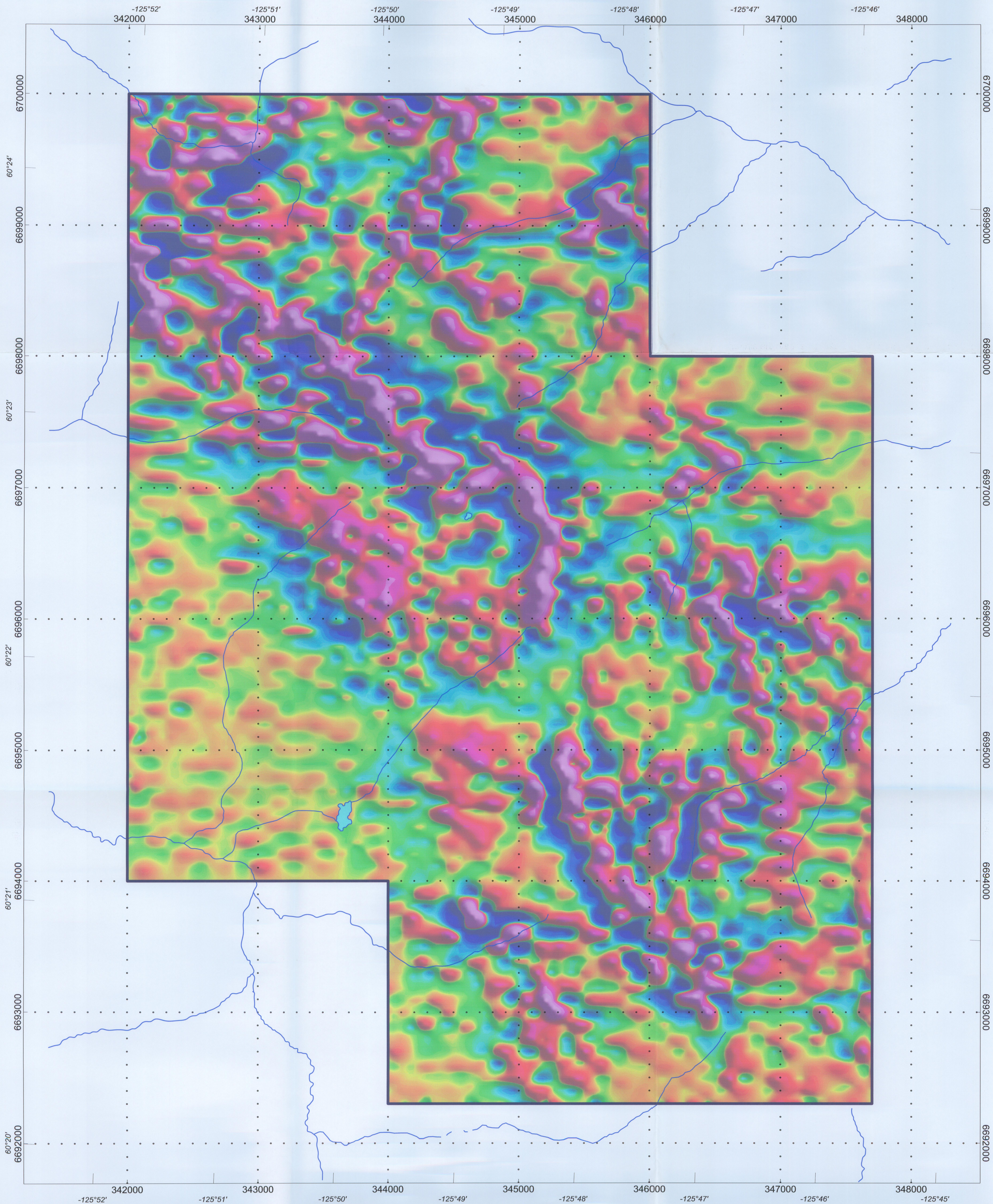


True North Gems Inc.

Calculated First Vertical Derivative of TMI
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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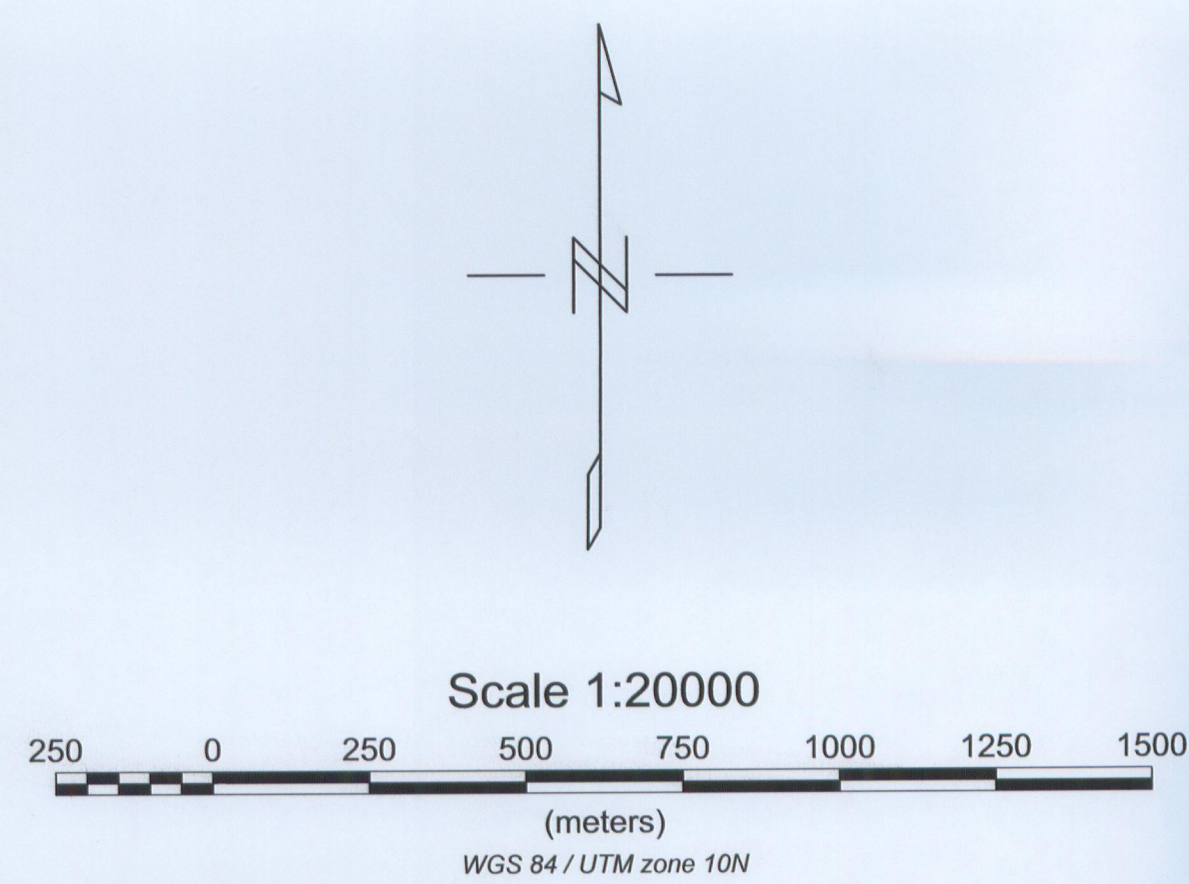
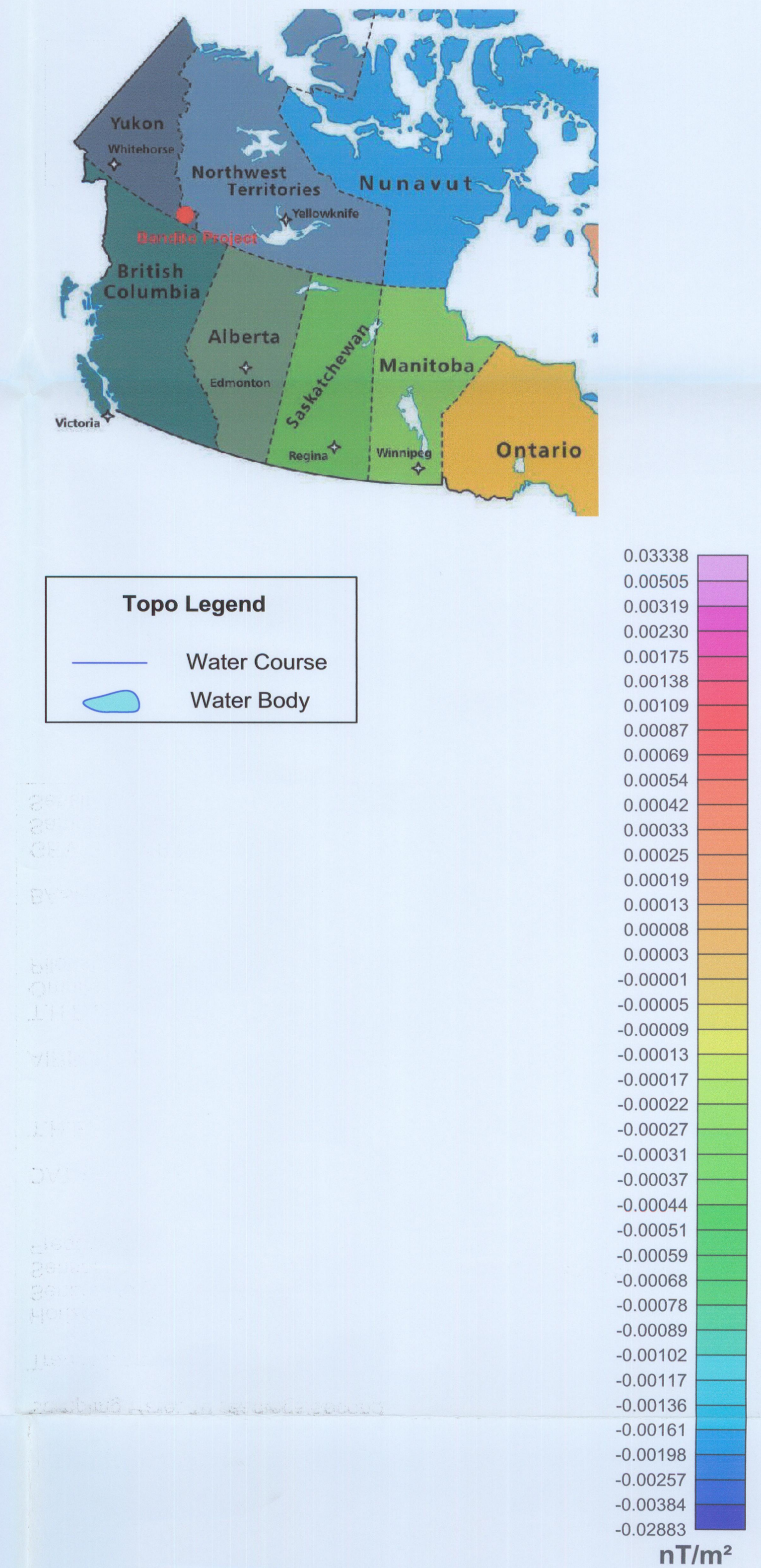
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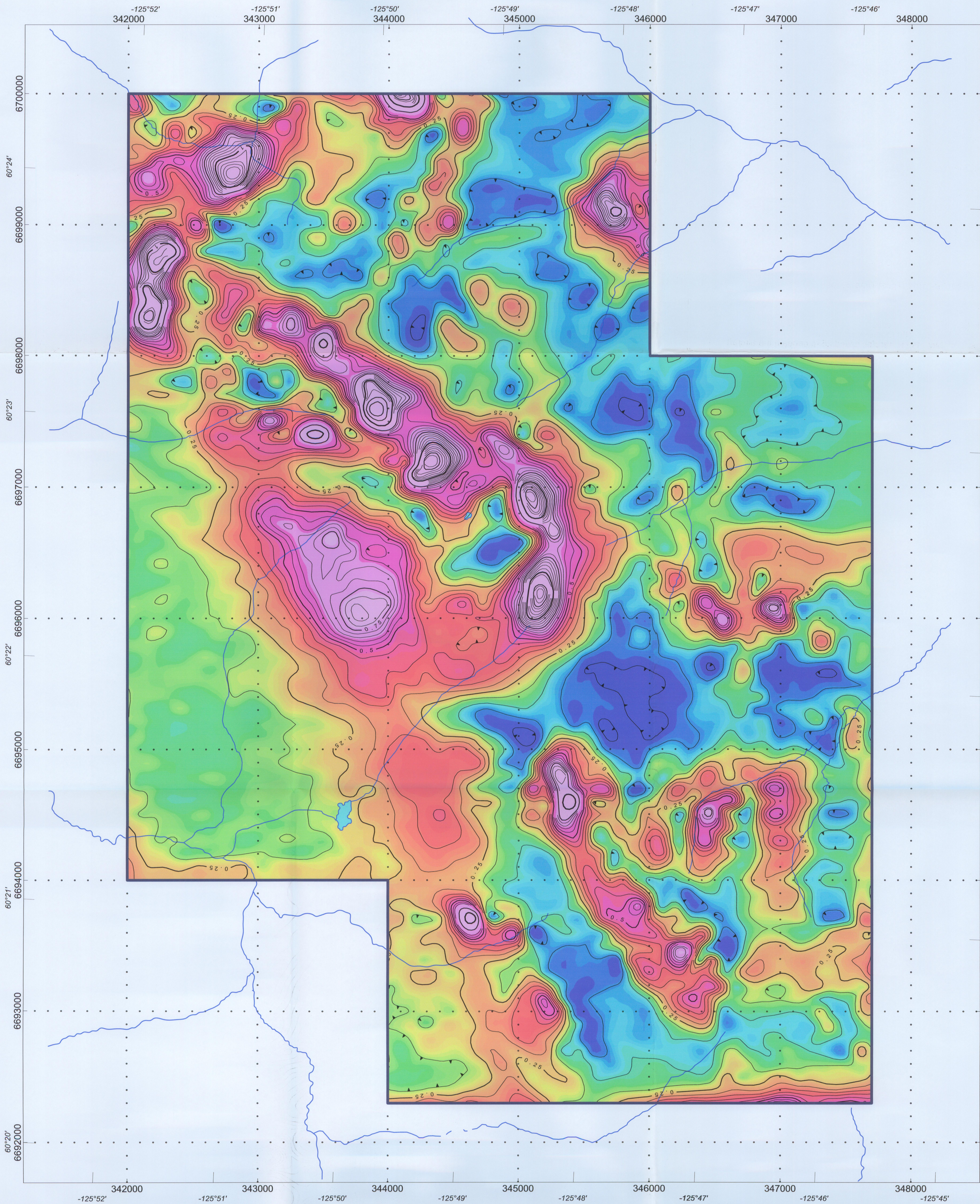
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Calculated Second Vertical Derivative of TMI

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Airborne TDEM and Magnetic Survey

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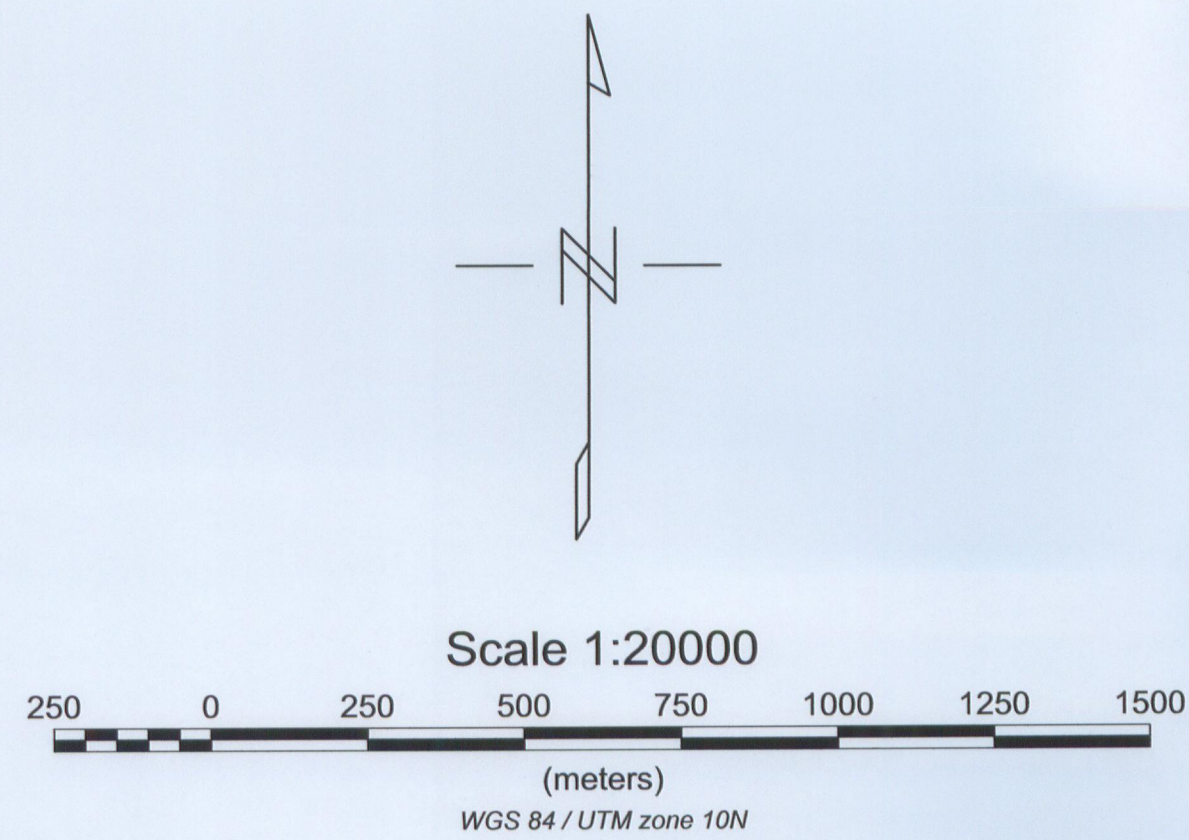
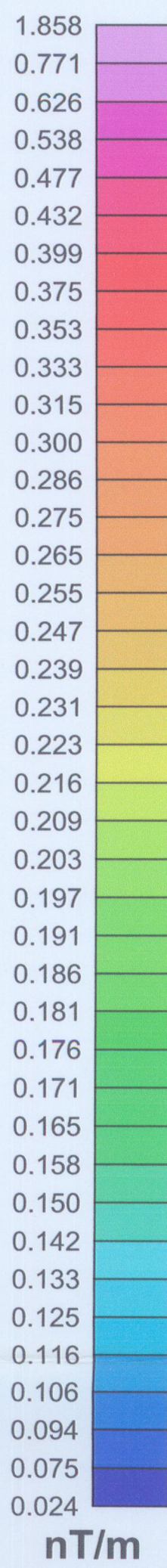
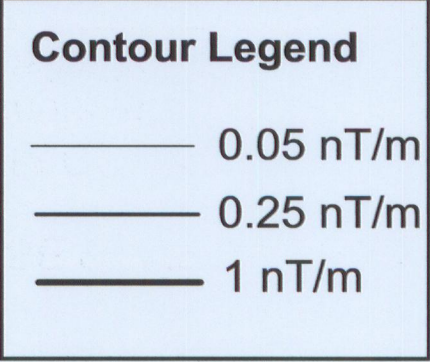
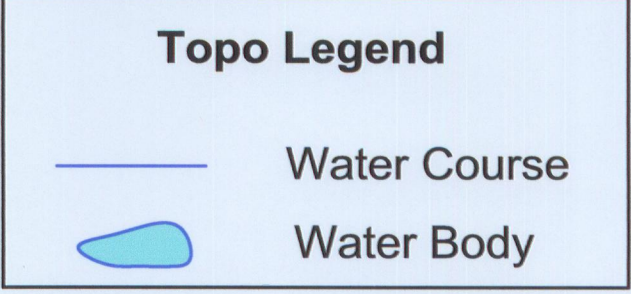
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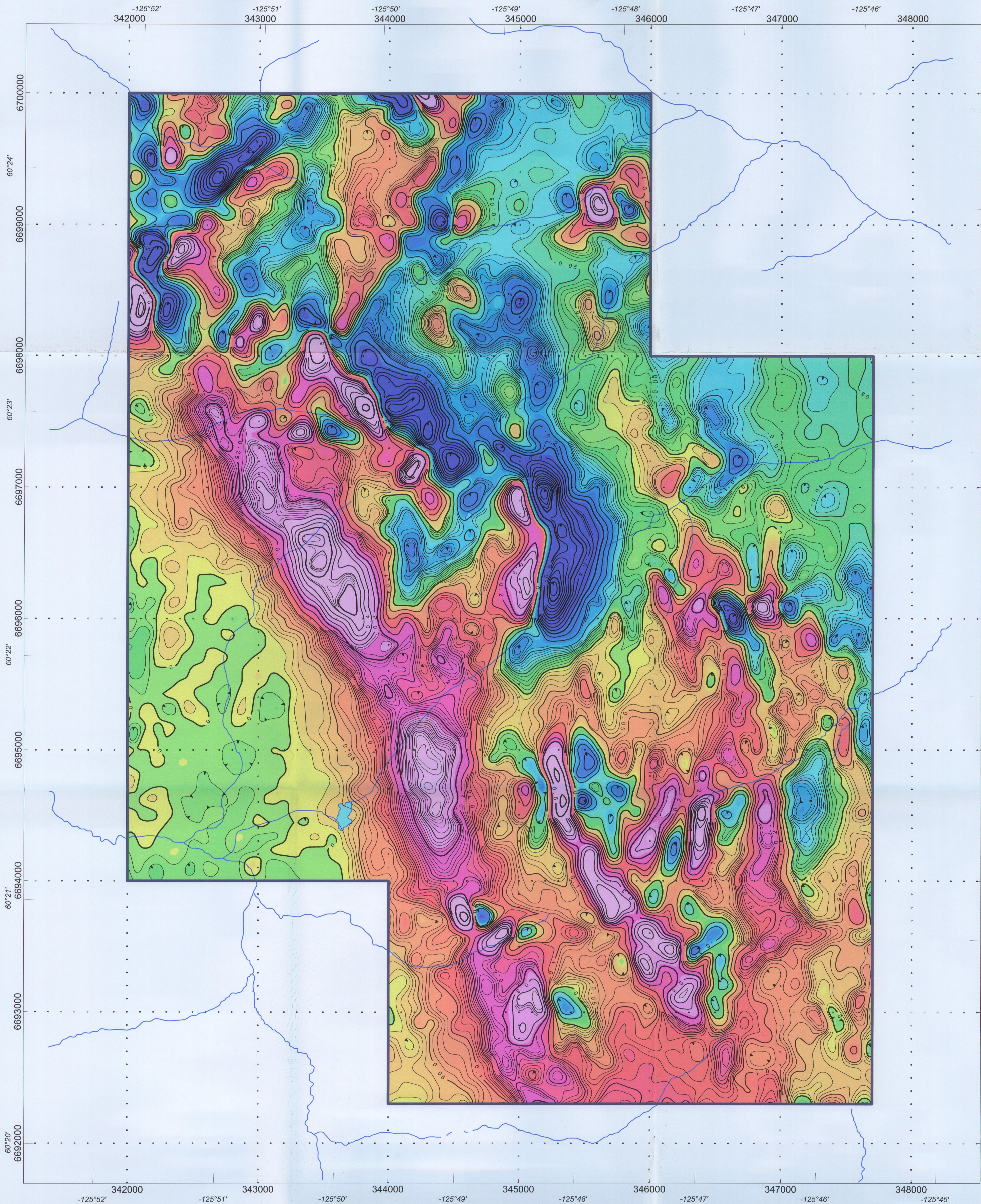
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True North Gems Inc.
Calculated Analytical Signal of TMI Bandito Project
Airborne TDEM and Magnetic Survey
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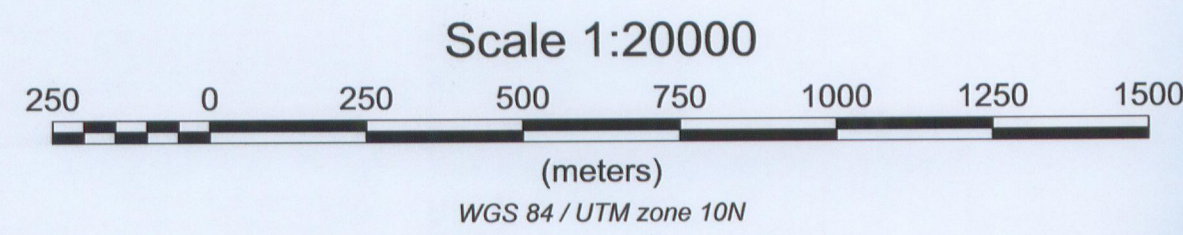
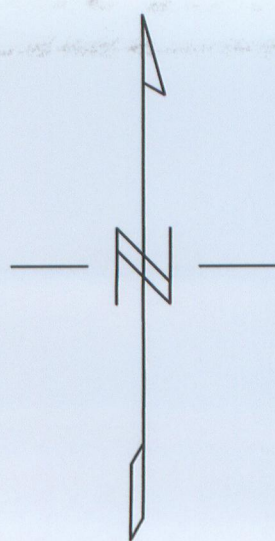
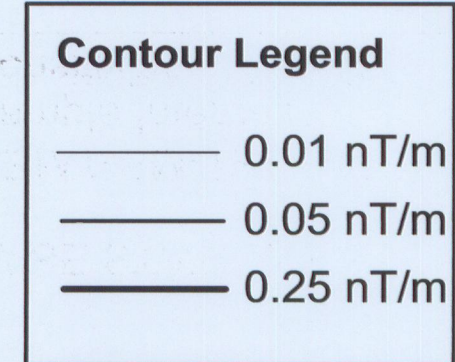
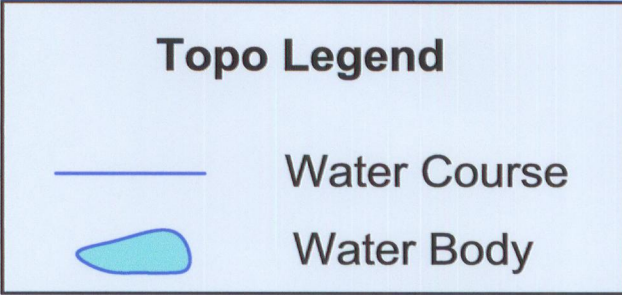
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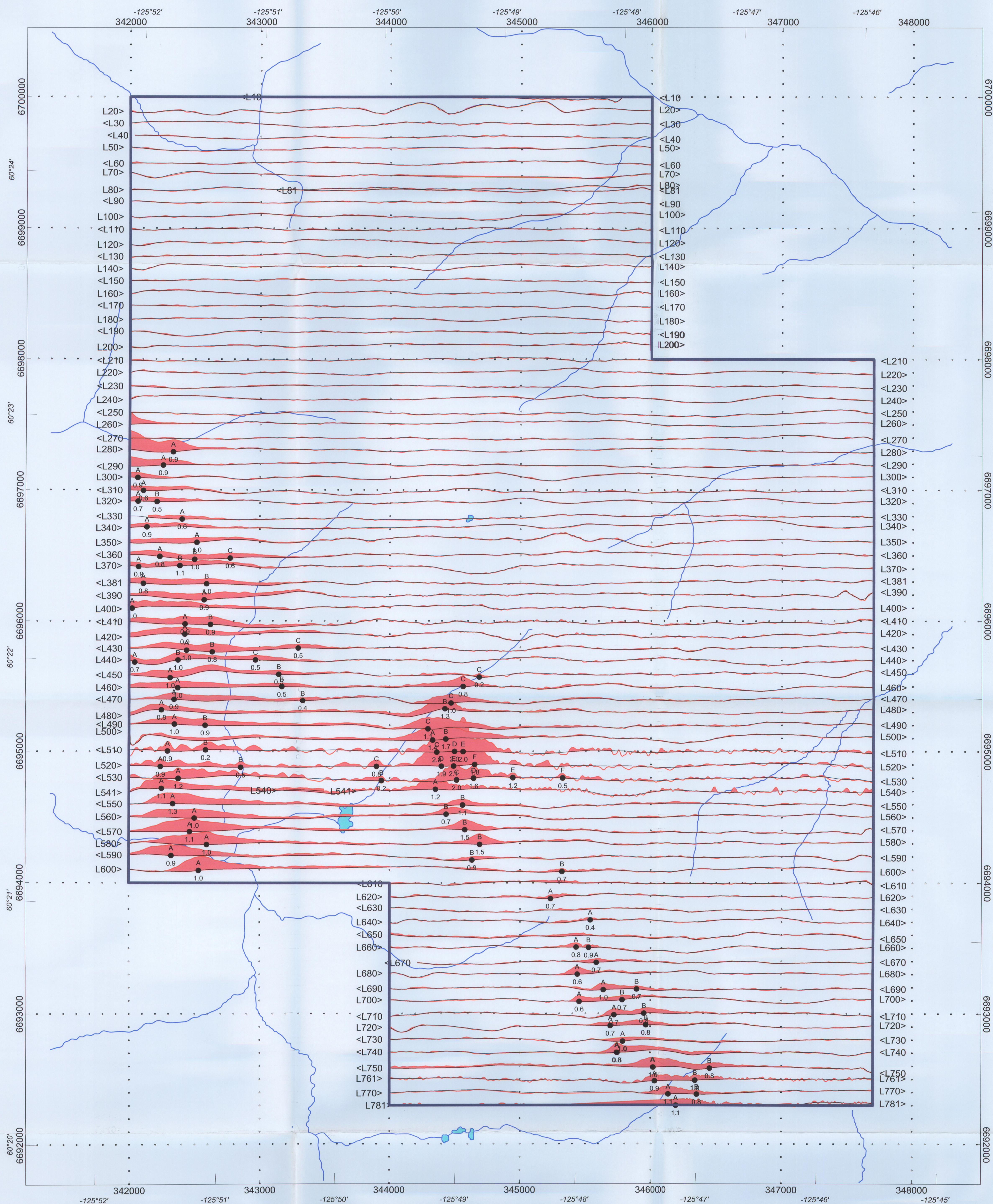


True North Gems Inc.

Calculated Horizontal Gradient of TMI
Bandito Project

Airborne TDEM and Magnetic Survey

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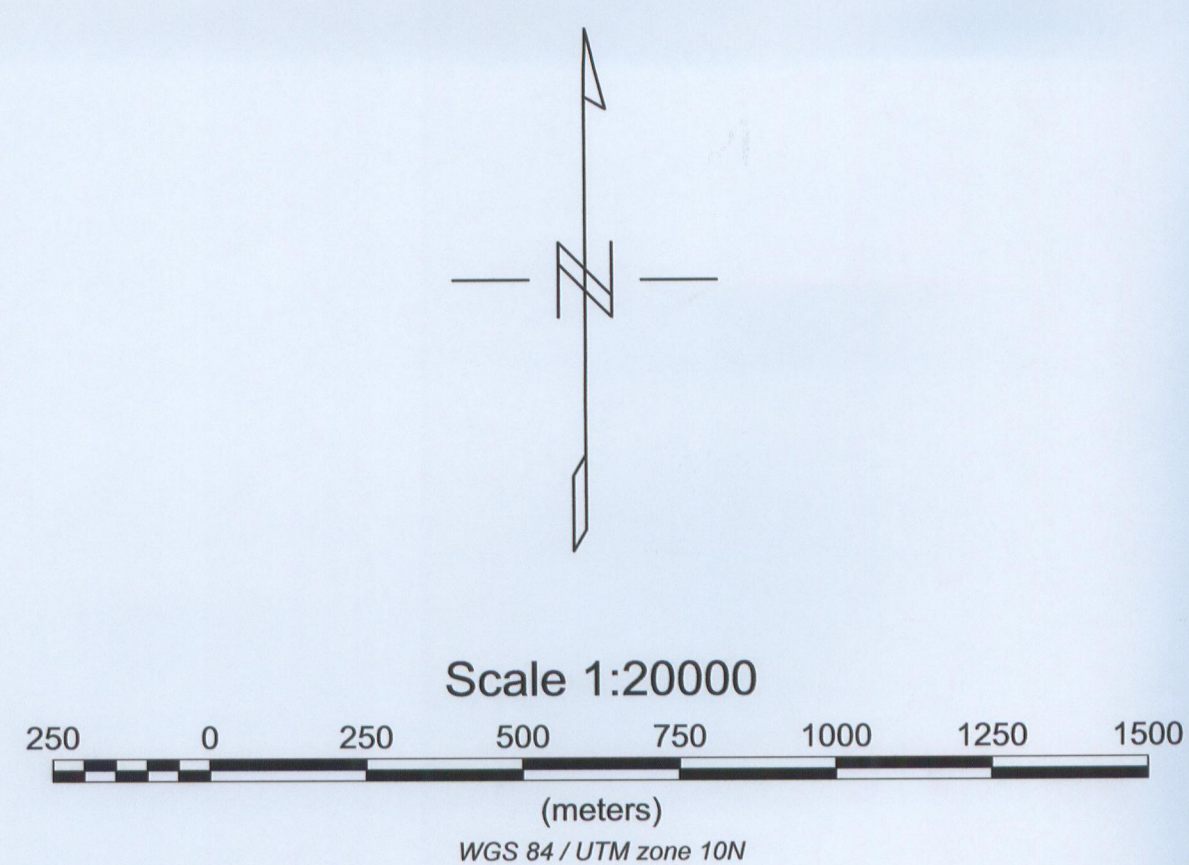
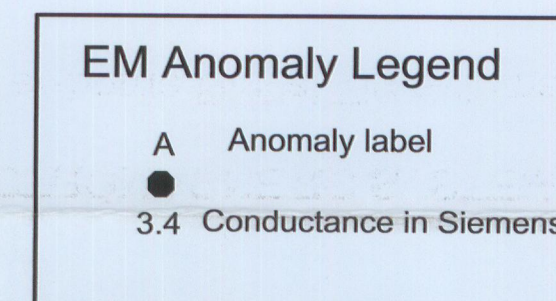
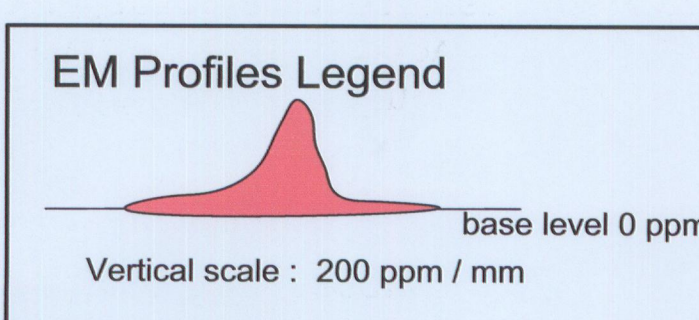
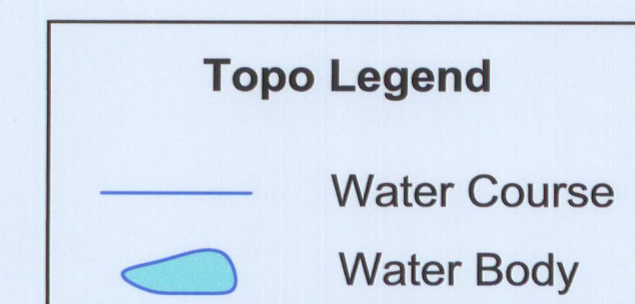
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Settings of Time Windows of THEM System				
Window #	Start at sample	# of samples in window	Start Time	End Time
1	7	2	0.114	0.125
2	44	2	0.716	0.716
3	69	1	1.123	1.123
4	91	1	1.481	1.481
5	108	2	1.758	1.774
6	131	1	2.132	2.132
7	157	1	2.555	2.555
8	197	1	3.206	3.206
9	219	1	3.564	3.564
10	227	3	3.686	3.710
11	229	3	3.727	3.743
12	232	3	3.760	3.762
13	233	5	3.762	3.857
14	238	5	3.874	3.909
15	242	5	3.930	4.004
16	248	11	4.054	4.167
17	249	17	4.053	4.153
18	258	23	4.189	4.357
19	265	29	4.313	4.399
20	272	35	4.427	4.708
21	282	41	4.586	5.057
22	298	47	4.850	5.224
23	312	53	5.078	5.564
24	329	59	5.339	5.953
25	345	65	5.615	6.057
26	364	71	5.954	7.064
27	382	77	6.217	7.454
28	400	83	6.510	7.777
29	415	89	6.755	8.187
30	432	95	7.031	8.561
31	452	101	7.357	8.984
32	478	107	7.747	9.412
33	495	113	8.057	9.860
34	525	119	8.464	10.384
35	540	125	8.788	10.807



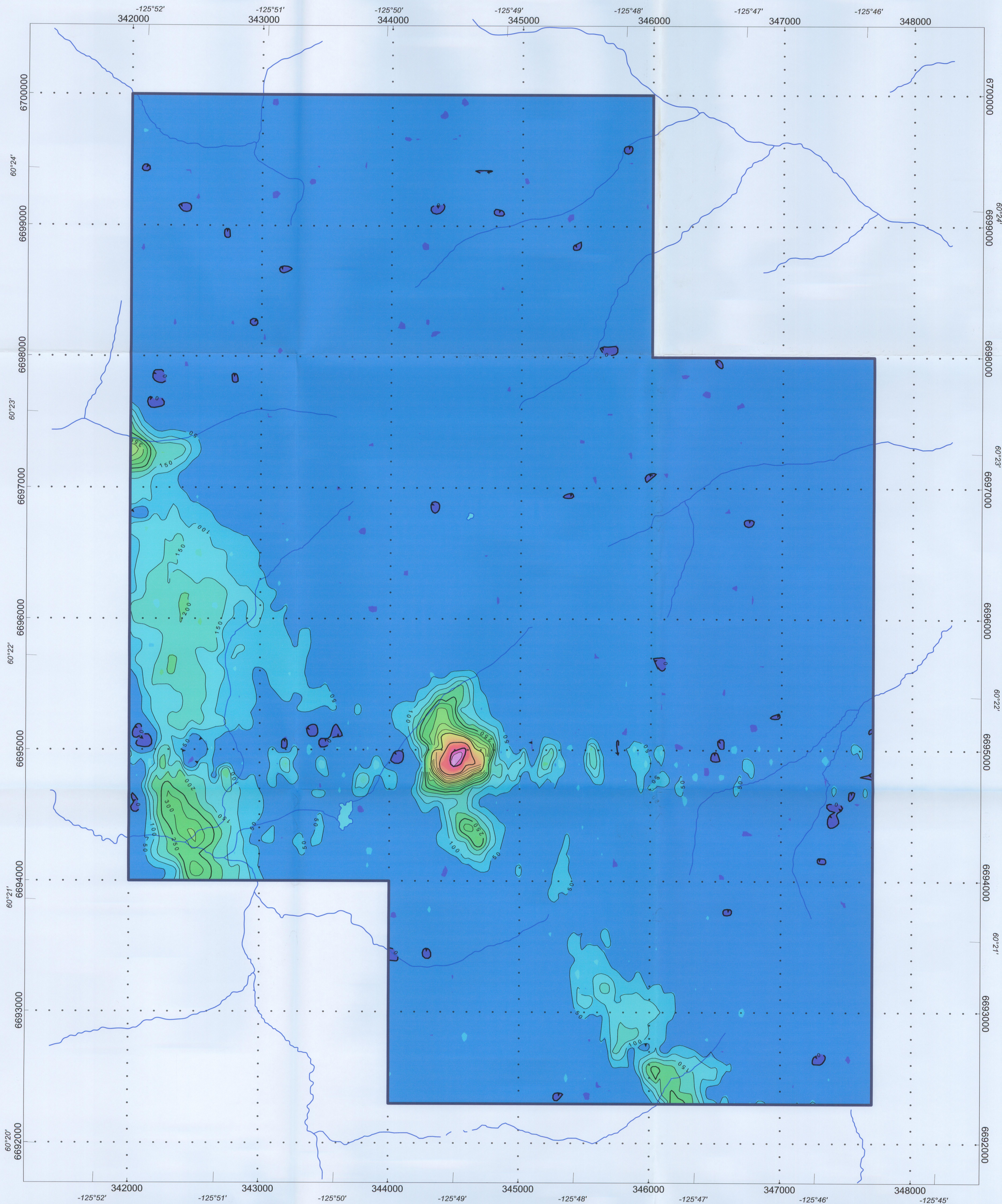
True North Gems Inc.

EM Offset Profiles with Picked Anomalies
dB/dt - Z-channel - Time Window No. 12

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AIRBORNE ELECTROMAGNETIC SYSTEM:

T.H.E.M. Helicopter-borne Digital Time-domain Electromagnetic System

Receiver:

Three axis (X,Y and Z) dipole coils with coplanar configuration
Sensor Height: Nominally 60 m above ground level
Sensor Location: Mounted in aerofoil towed 25 m beneath the aircraft
Sampling Rate: 10 readings/second

Transmitter:

Horizontal transmitter loop of 7.5 m diameter
Sensor Height: Nominally 36 m above ground level
Sensor Location: Horizontal loop towed 49 m beneath the aircraft
Frequency: 30 Hz; 60 half-sine pulses per second

DATA ACQUISITION SYSTEM:

T.H.E.M. Data Collector

AIRBORNE NAVIGATION SYSTEM:

T.H.E.M. navigation system
OmniSTAR 3000LR DGPS receiver.
Pilot steering and navigation computer.

BASE STATIONS SYSTEMS:

GEM GSM-19 Overhauser Magnetometer
Sample Interval: 1 second
Sensitivity: 0.001 nT



Topo Legend

Water Course
Water Body

Contour Legend

50 ppm
250 ppm
1000 ppm



Settings of Time Windows of THEM System

Window #	Start at sample	# of samples in window	Start Time	End Time	Window Centre
1	7	2	0.114	0.130	0.122
2	44	1	0.716	0.716	0.716
3	69	1	1.133	1.133	1.133
4	91	1	1.481	1.481	1.481
5	108	2	1.758	1.774	1.766
6	131	1	2.132	2.132	2.132
7	157	1	2.505	2.505	2.505
8	197	1	3.208	3.208	3.208
9	219	1	3.564	3.564	3.564
10	277	3	3.695	3.727	3.710
11	299	3	3.727	3.760	3.743
12	311	3	3.760	3.792	3.776
13	333	5	3.792	3.857	3.824
14	358	5	3.814	3.939	3.876
15	342	5	3.939	4.004	3.971
16	349	11	4.004	4.167	4.085
17	349	17	4.053	4.313	4.183
18	358	23	4.156	4.367	4.261
19	385	29	4.313	4.769	4.541
20	372	35	4.457	4.980	4.718
21	383	41	4.606	5.257	4.931
22	399	47	4.850	5.559	5.204
23	312	53	5.078	5.924	5.501
24	336	59	5.239	6.253	5.746
25	345	65	5.615	6.657	6.136
26	364	71	5.854	7.064	6.459
27	382	77	6.217	7.454	6.835
28	400	83	6.510	7.849	7.177
29	415	89	6.755	8.157	7.457
30	432	95	7.031	8.561	7.792
31	452	101	7.357	8.964	8.170
32	476	107	7.747	9.473	8.610
33	495	113	8.057	9.980	9.018
34	520	119	8.484	10.384	9.433
35	549	125	8.767	10.807	9.787

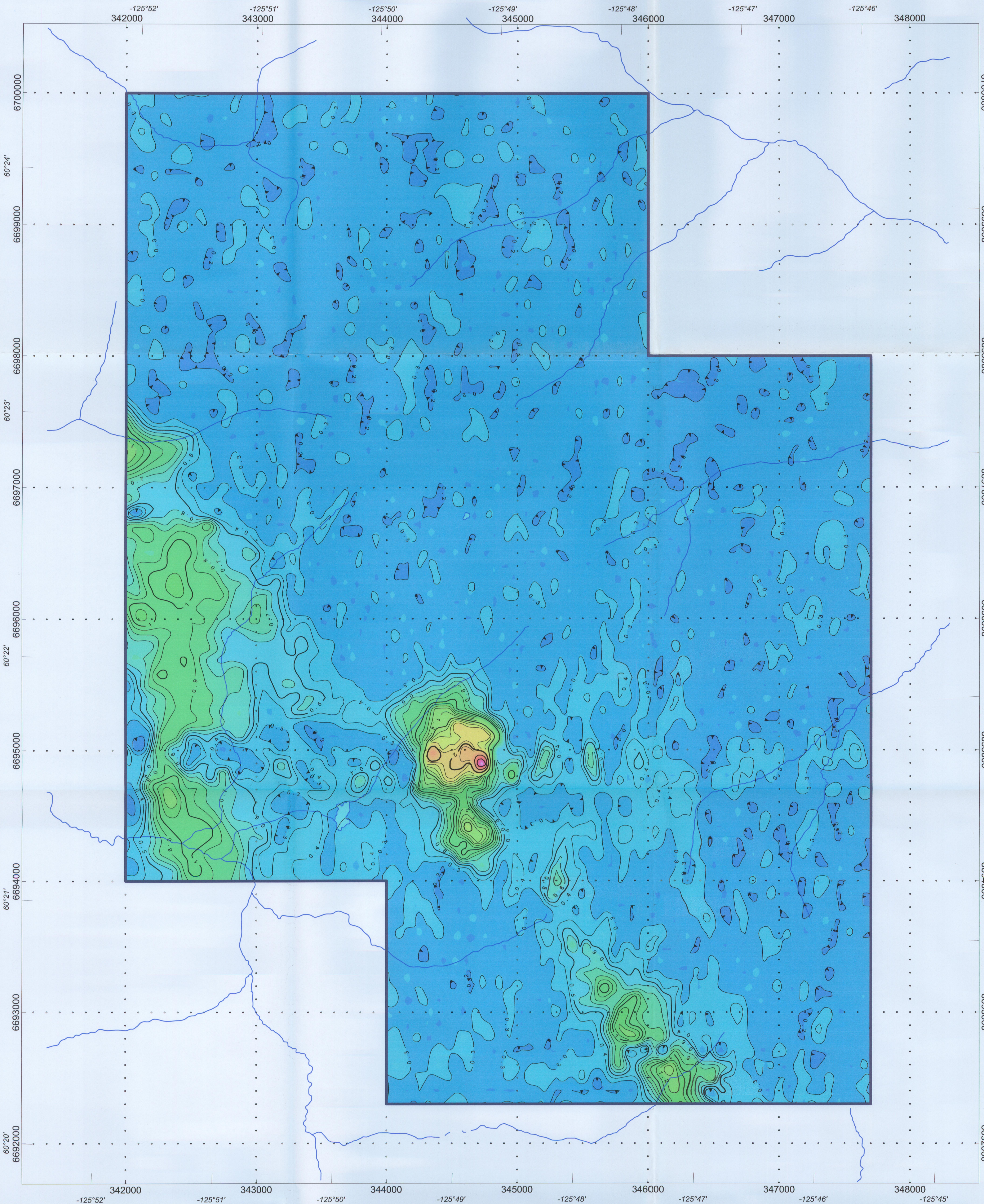


True North Gems Inc.

EM Anomaly Map
dB/dt - Z-channel - Window No. 15
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



LEGEND

Helicopter Type: Eurocopter AS350B2
Helicopter Registration: C-GTNT
Survey Period: September-October, 2006

SURVEY PARAMETERS:

Mean Terrain Clearance: 85 m (Helicopter)
Traverse Line Spacing: 100 m
Traverse Line Direction: 90°
Control Line Spacing: 1000 m
Control Line Direction: 180°

AIRBORNE MAGNETOMETER SYSTEM:

Geometrics G822A Cesium magnetometer
Sensitivity: 0.0005 nT
Noise Level: +/- 0.001 nT
Sensor Height: Nominally 60 m above ground level
Sensor Location: Mounted in aerofoil towed 25 m beneath the helicopter
Sampling Rate: 10 readings/second

AIRBORNE ELECTROMAGNETIC SYSTEM:

T.H.E.M. Helicopter-borne Digital Time-domain Electromagnetic System

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Sensor Location: Horizontal loop towed 49 m beneath the aircraft
Frequency: 30 Hz; 60 half-sine pulses per second

DATA ACQUISITION SYSTEM:

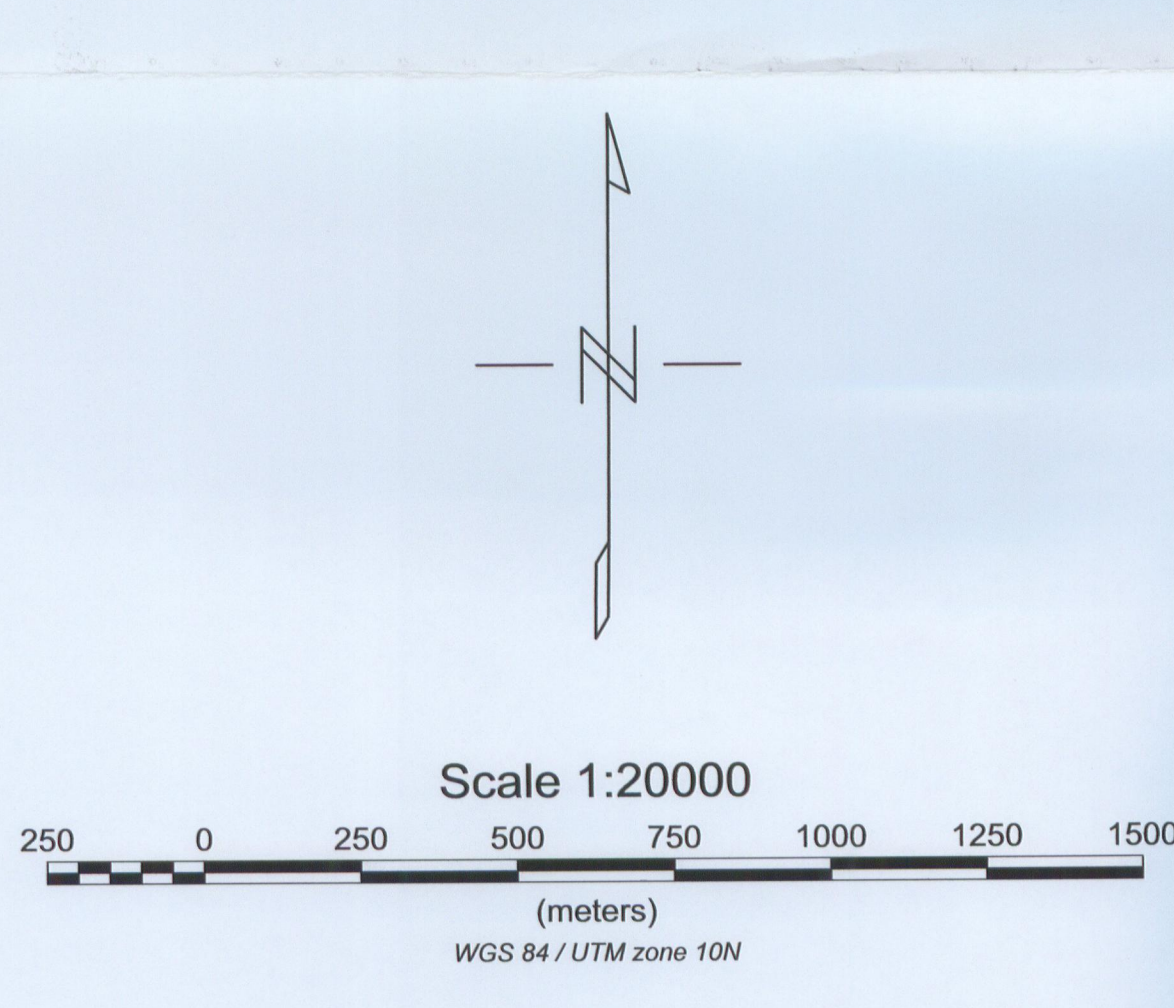
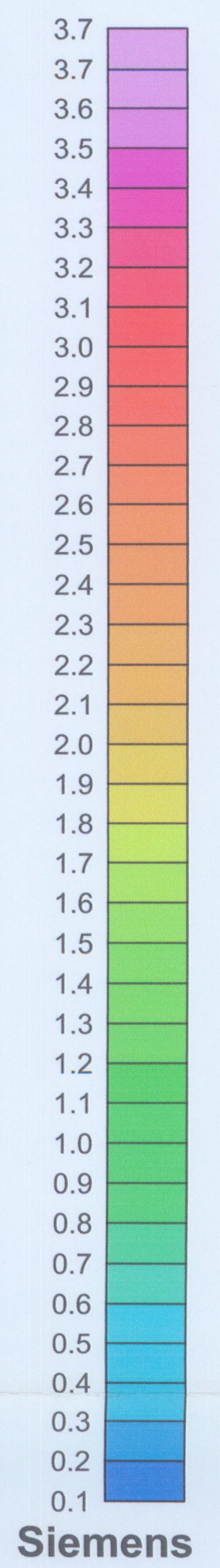
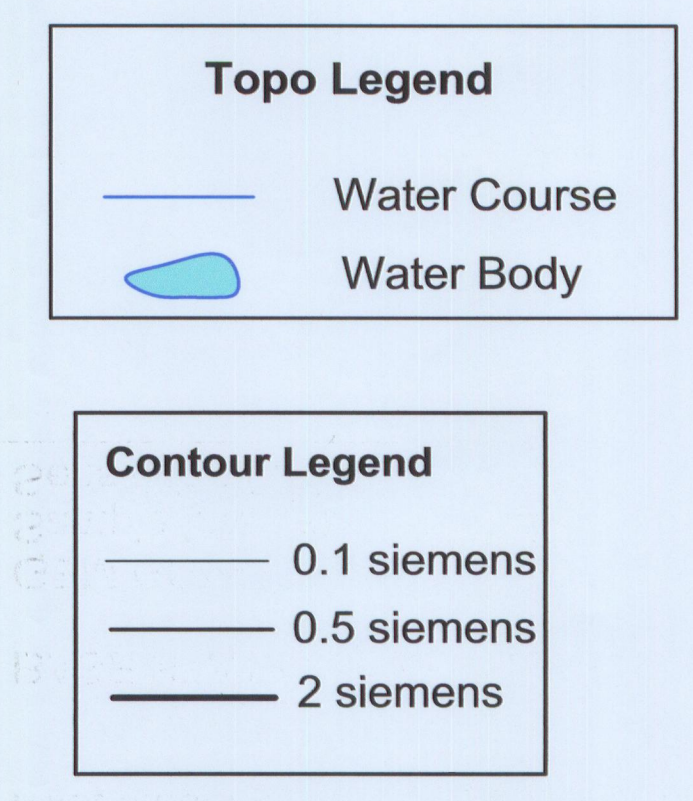
T.H.E.M. Data Collector

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Sensitivity: 0.001 nT



Settings of Time Windows of THEM System					
Window #	Start at sample	# of samples in window	Start Time in milliseconds	End Time in milliseconds	Window Centre in milliseconds
1	7	2	0.114	0.130	0.1221
2	44	1	0.716	0.716	0.7161
3	89	1	1.125	1.125	1.1250
4	89	1	1.481	1.481	1.4811
5	108	2	1.758	1.774	1.7659
6	131	1	2.132	2.132	2.1320
7	157	1	2.555	2.555	2.5553
8	197	1	3.206	3.206	3.2064
9	219	1	3.564	3.564	3.5644
10	227	3	3.695	3.727	3.7109
11	229	3	3.727	3.760	3.7435
12	231	3	3.760	3.792	3.7760
13	233	5	3.792	3.857	3.8249
14	238	5	3.874	3.939	3.9062
15	242	5	3.939	4.004	3.9713
16	245	11	4.004	4.167	4.0853
17	249	17	4.053	4.313	4.1829
18	258	23	4.199	4.567	4.3782
19	265	29	4.313	4.700	4.5110
20	272	35	4.427	4.980	4.7038
21	283	41	4.608	5.257	4.9316
22	298	47	4.850	5.599	5.2246
23	312	53	5.076	5.924	5.5013
24	328	59	5.339	6.283	5.8105
25	345	65	5.615	6.657	6.1360
26	364	71	5.924	7.054	6.4891
27	382	77	6.217	7.454	6.8359
28	400	83	6.515	7.865	7.1777
29	415	89	6.755	8.187	7.4707
30	432	95	7.031	8.581	7.7962
31	452	101	7.357	8.984	8.1705
32	476	107	7.747	9.413	8.5190
33	495	113	8.057	9.860	8.9681
34	519	119	8.464	9.938	9.2513
35	540	125	8.789	10.807	9.7981



True North Gems Inc.

Apparent Conductance for Selected Time Window No. 15

dB/dt - Z-channel

Bandito Project

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