

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:

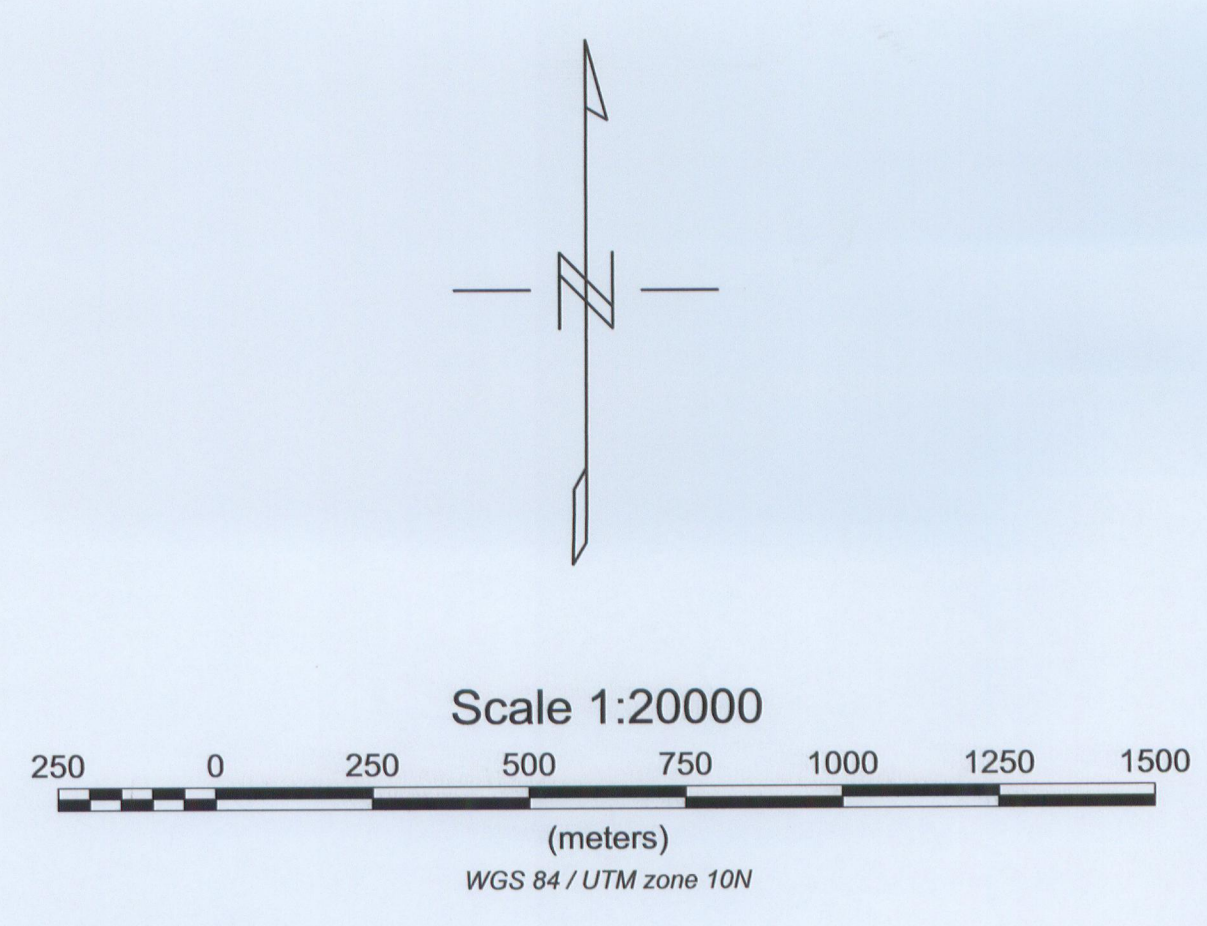
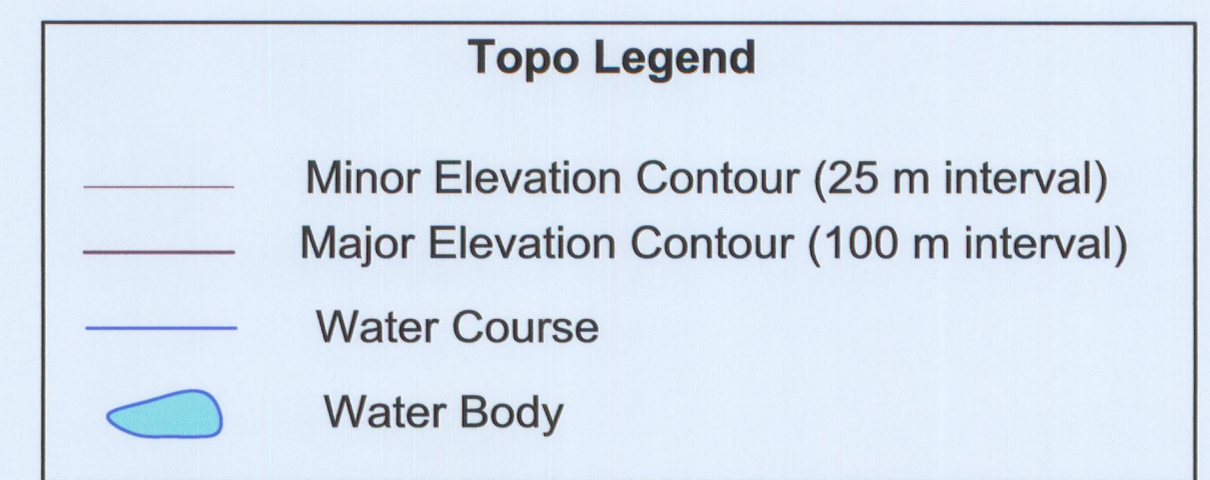
T.H.E.M. Data Collector

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

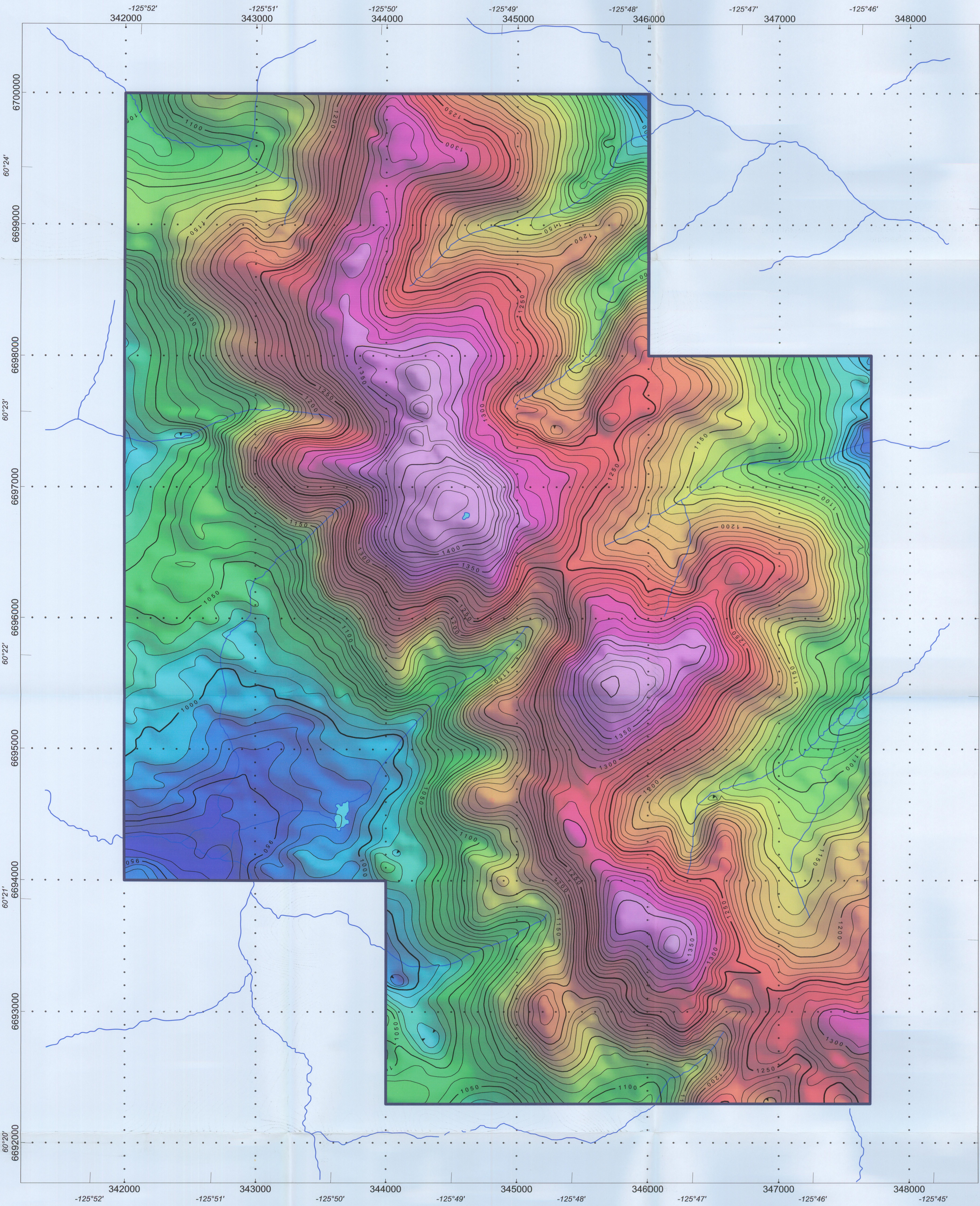


True North Gems Inc.

Differentially Corrected GPS Flight Path
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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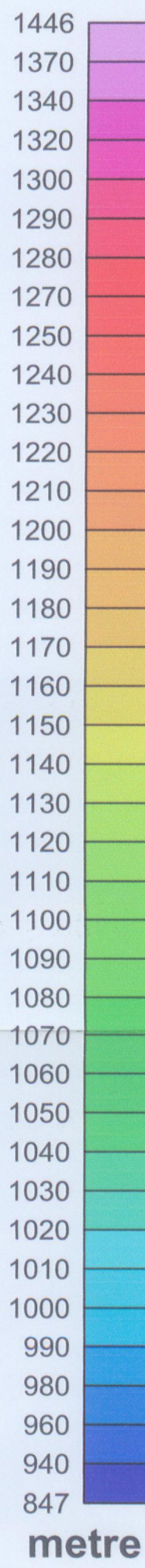
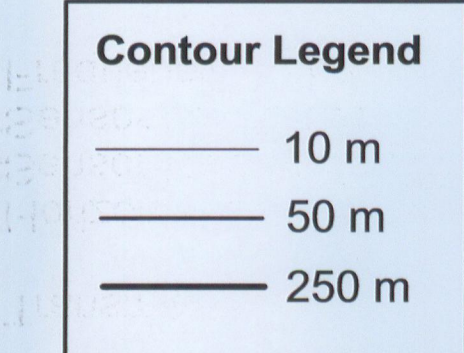
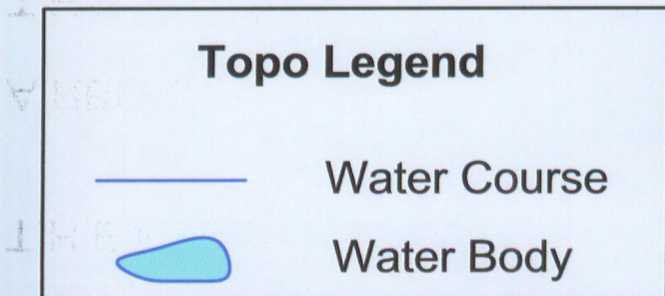
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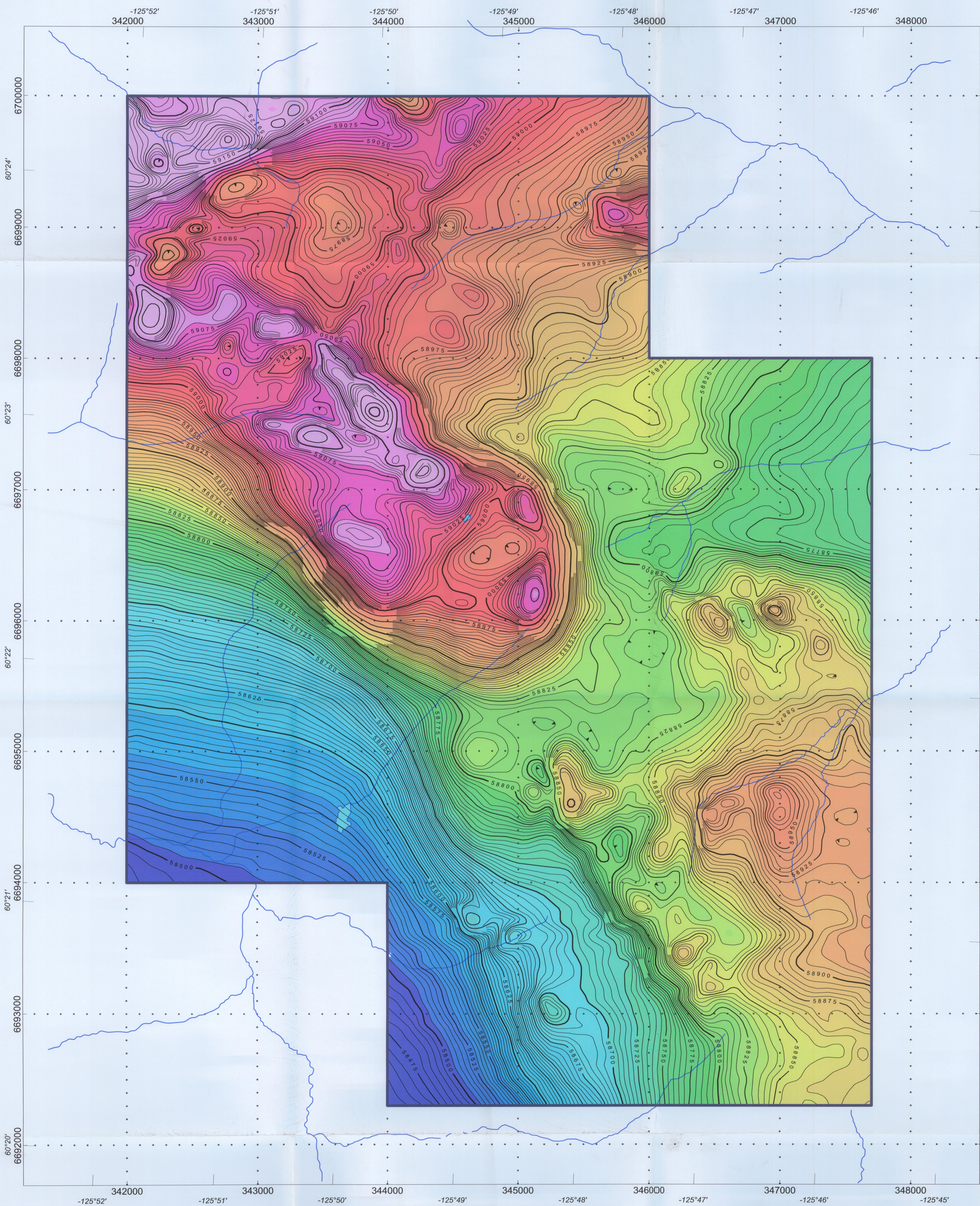


True North Gems Inc.

Digital Terrain Model Calculated from Survey Data
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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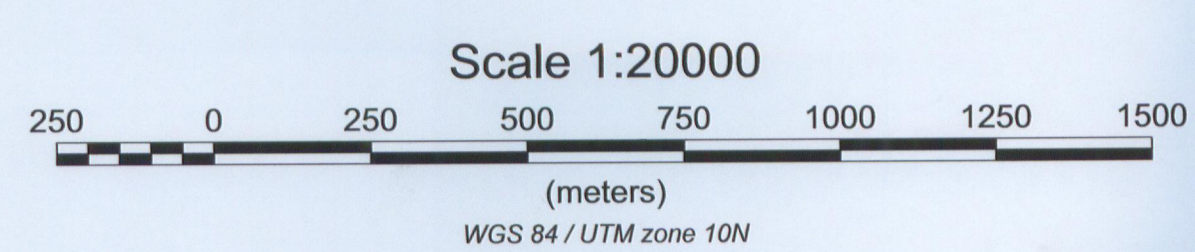
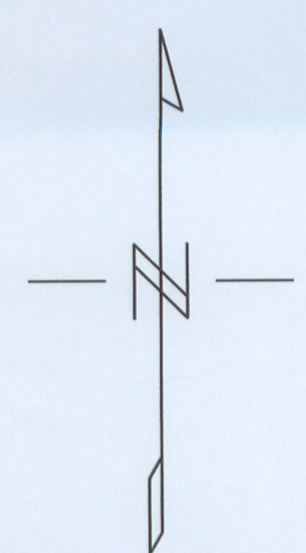
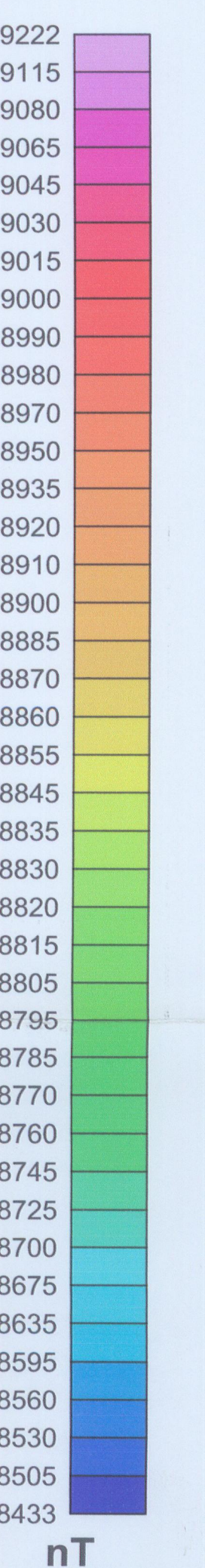
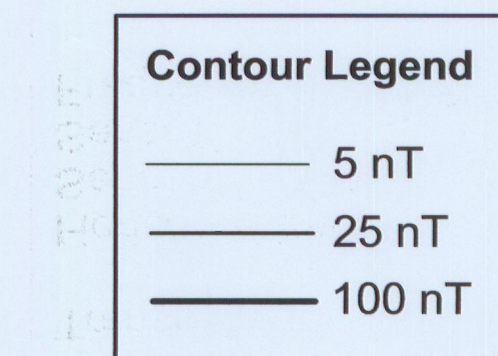
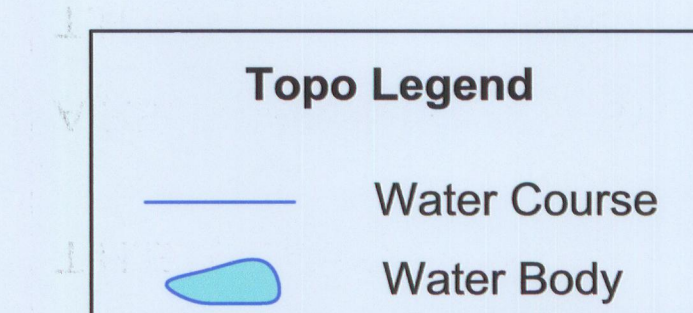
T.H.E.M. Data Collector

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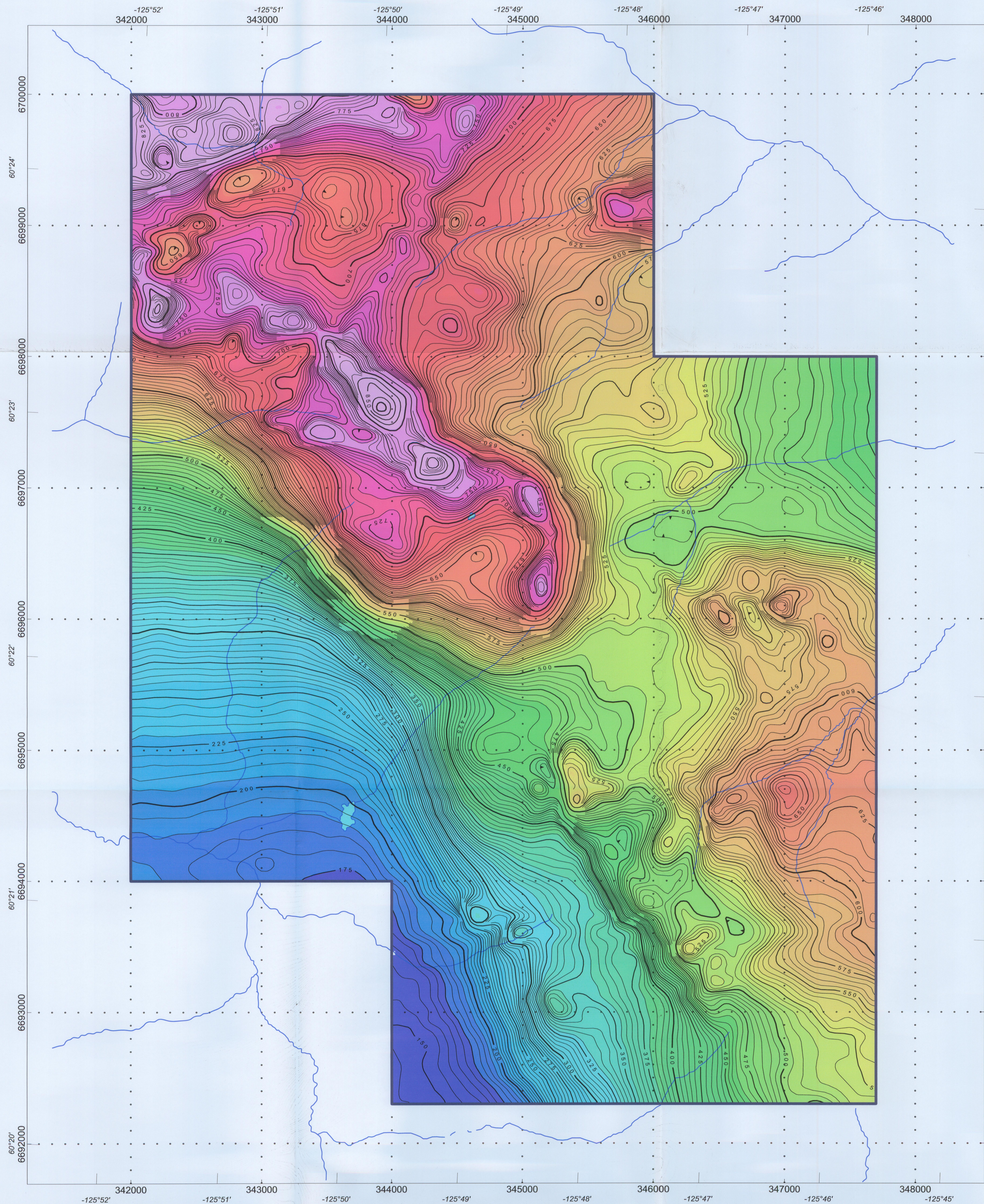


True North Gems Inc.

Total Magnetic Intensity
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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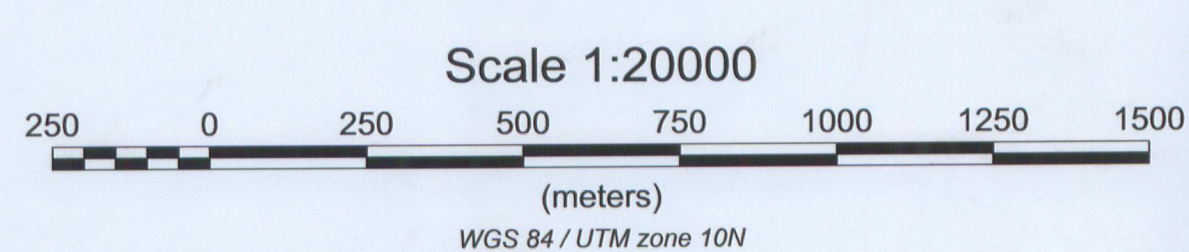
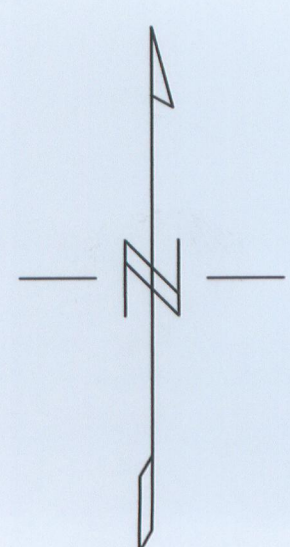
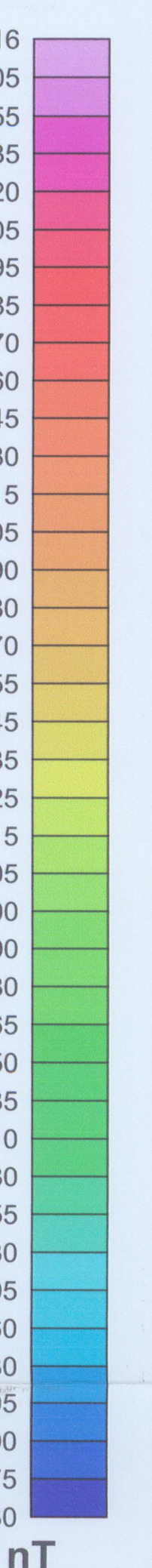
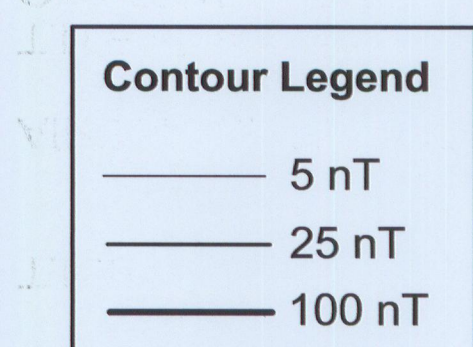
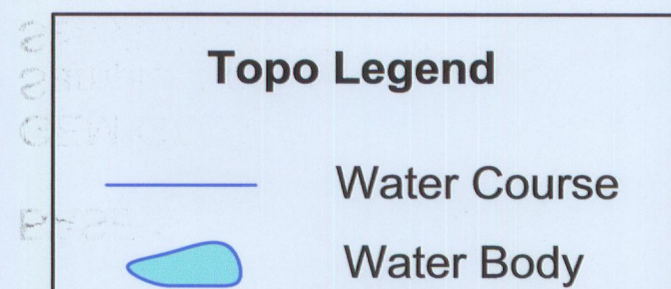
BASE STATIONS SYSTEMS:

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



IGRF Model 2005

Date : 20 September 2006
Elevation : DTM - Survey Data



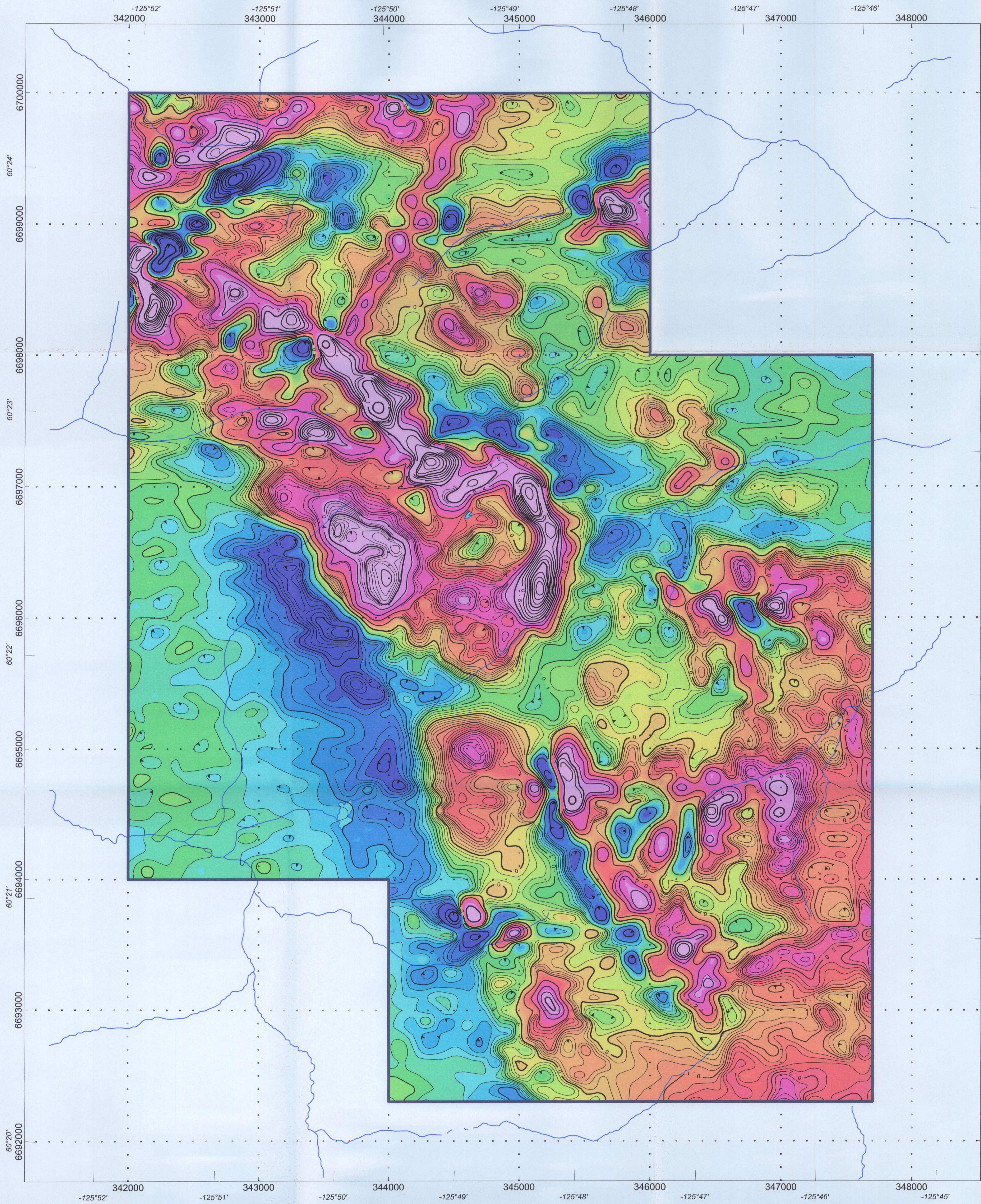
True North Gems Inc.

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

Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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T.H.E.M. Data Collector

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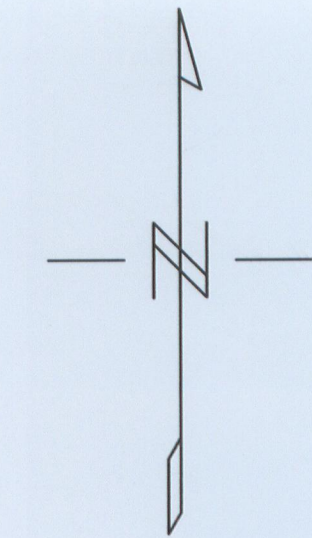
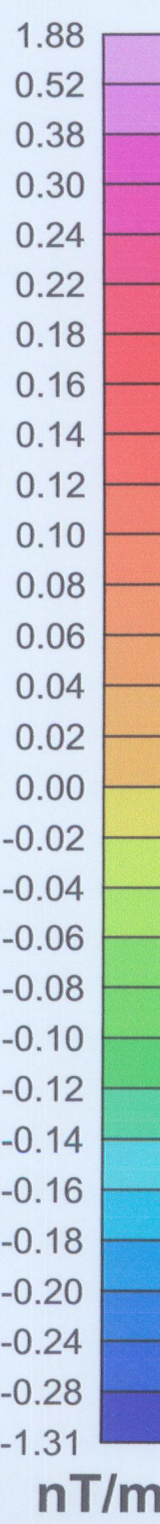


Topo Legend

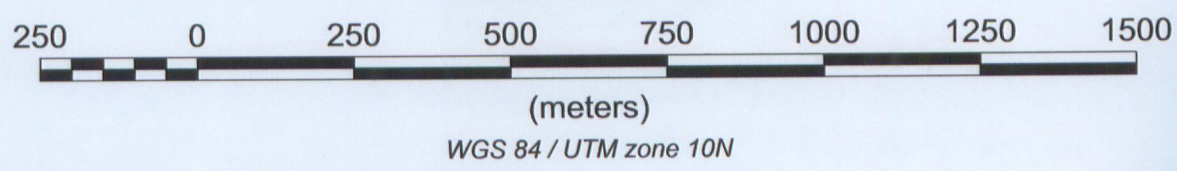
Water Course
Water Body

Contour Legend

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



Scale 1:20000



WGS 84 / UTM zone 10N

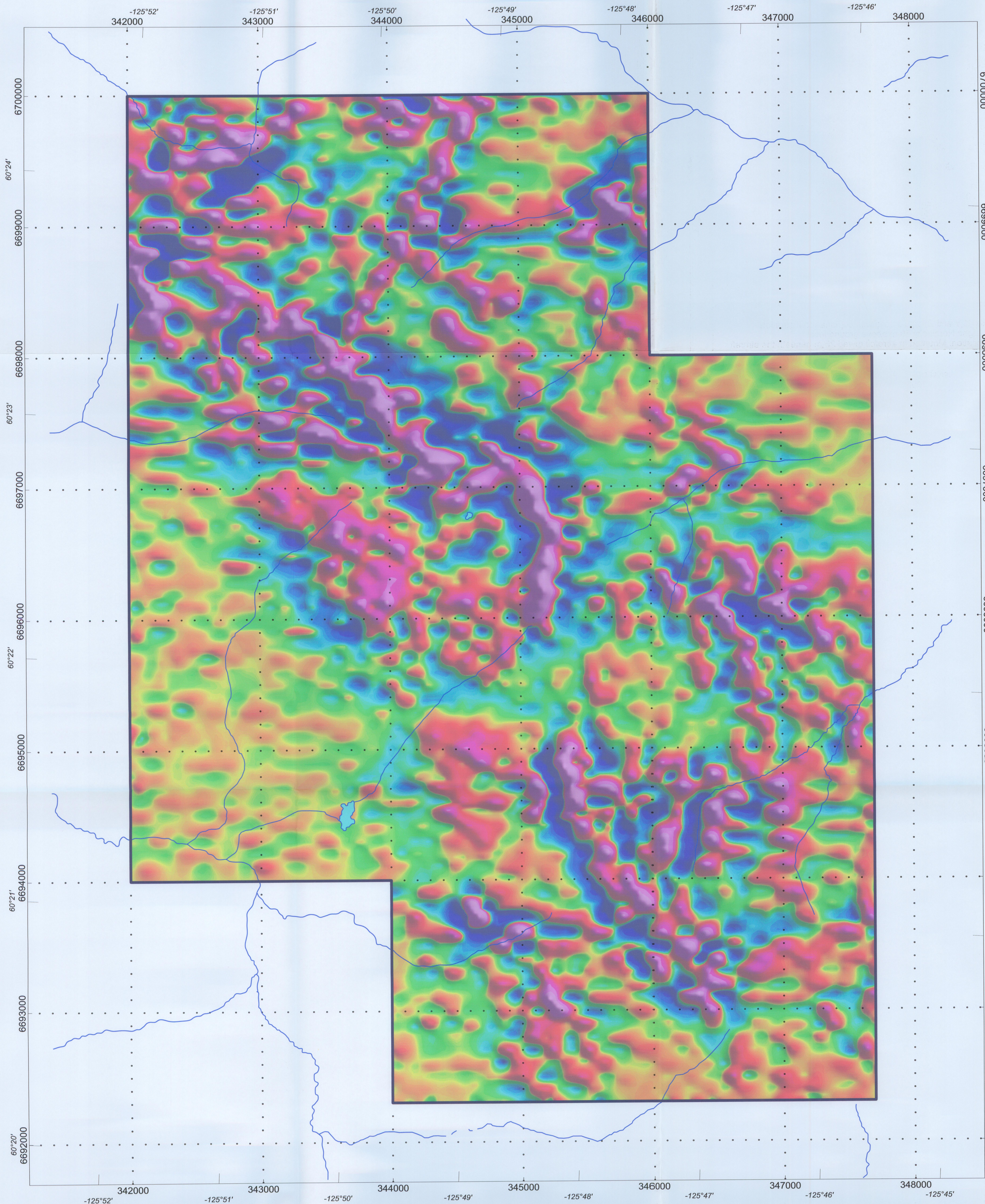


True North Gems Inc.

Calculated First Vertical Derivative of TMI
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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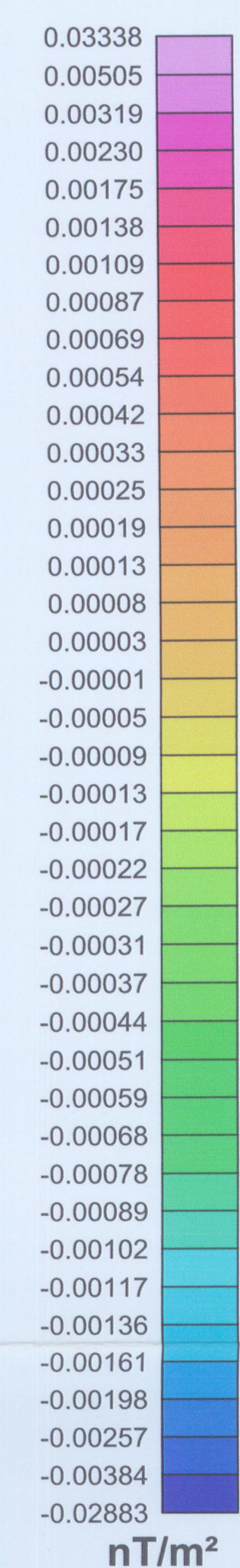
BASE STATIONS SYSTEMS:

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



Topo Legend

Water Course
Water Body

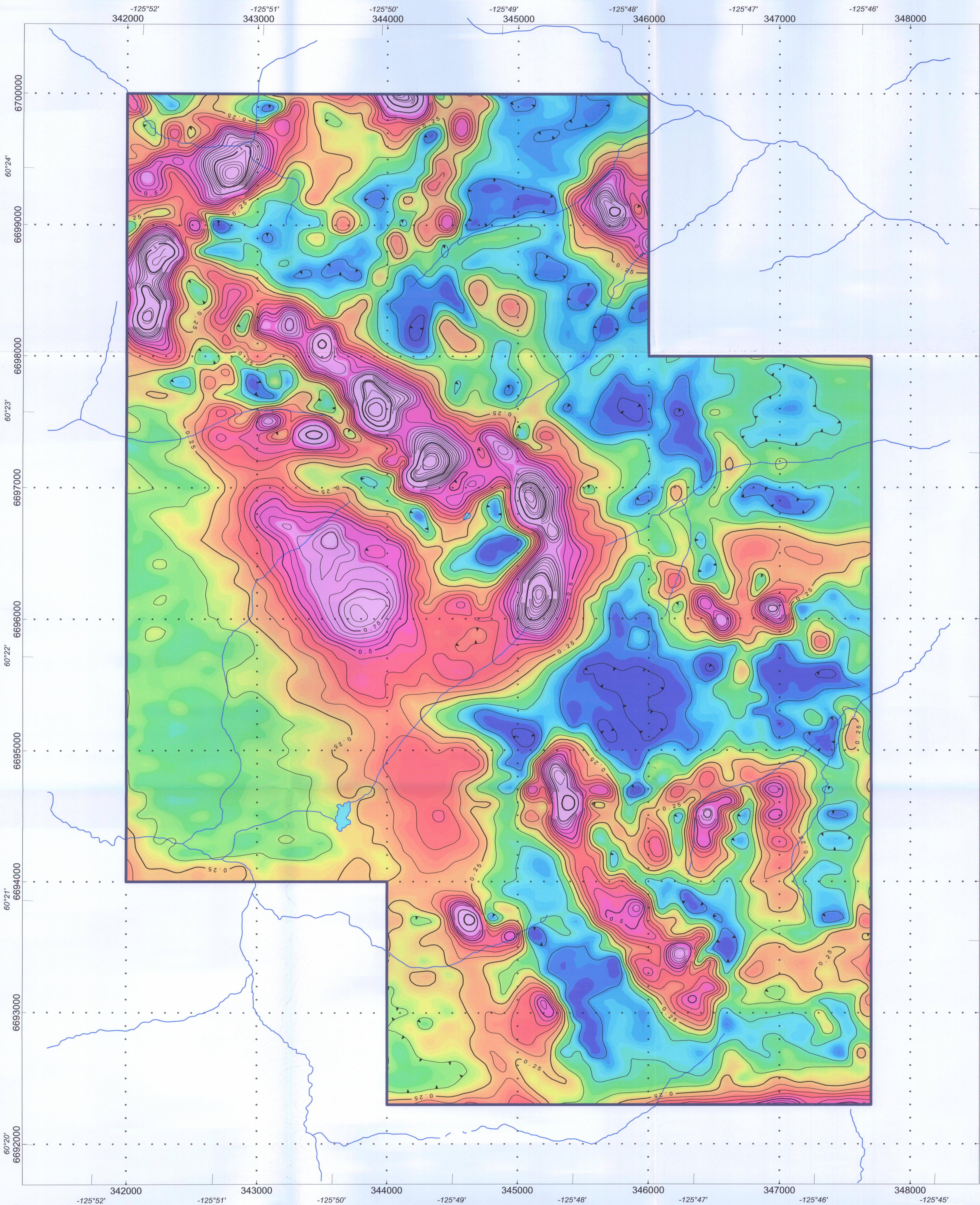


True North Gems Inc.

Calculated Second Vertical Derivative of TMI
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.



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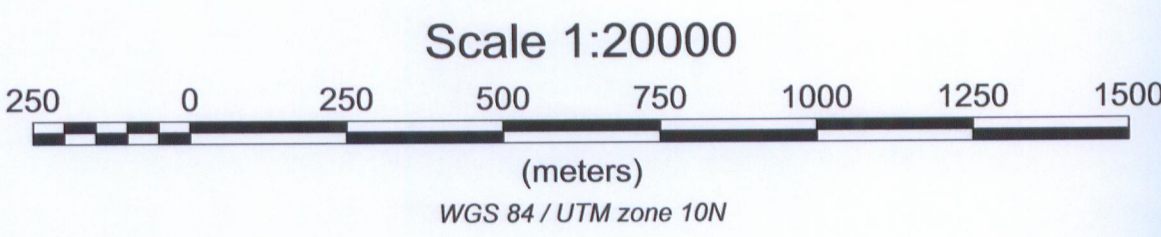
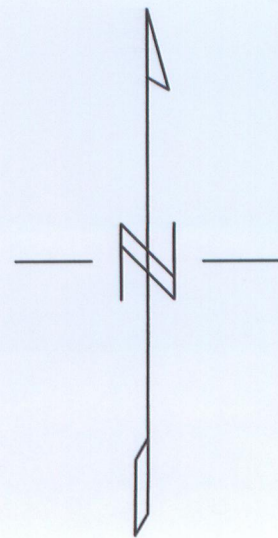
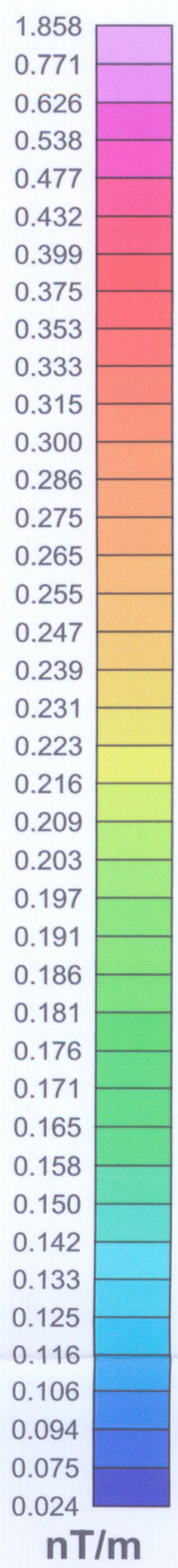
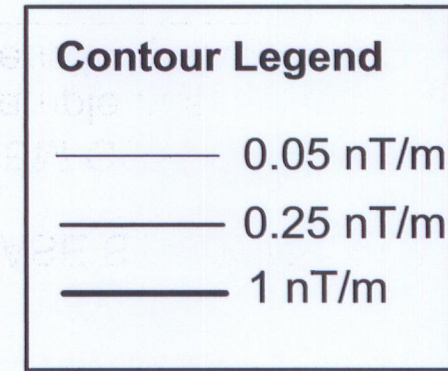
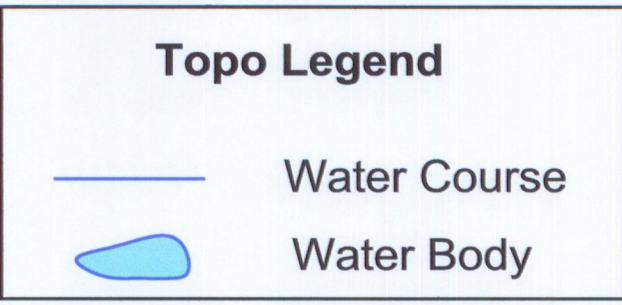
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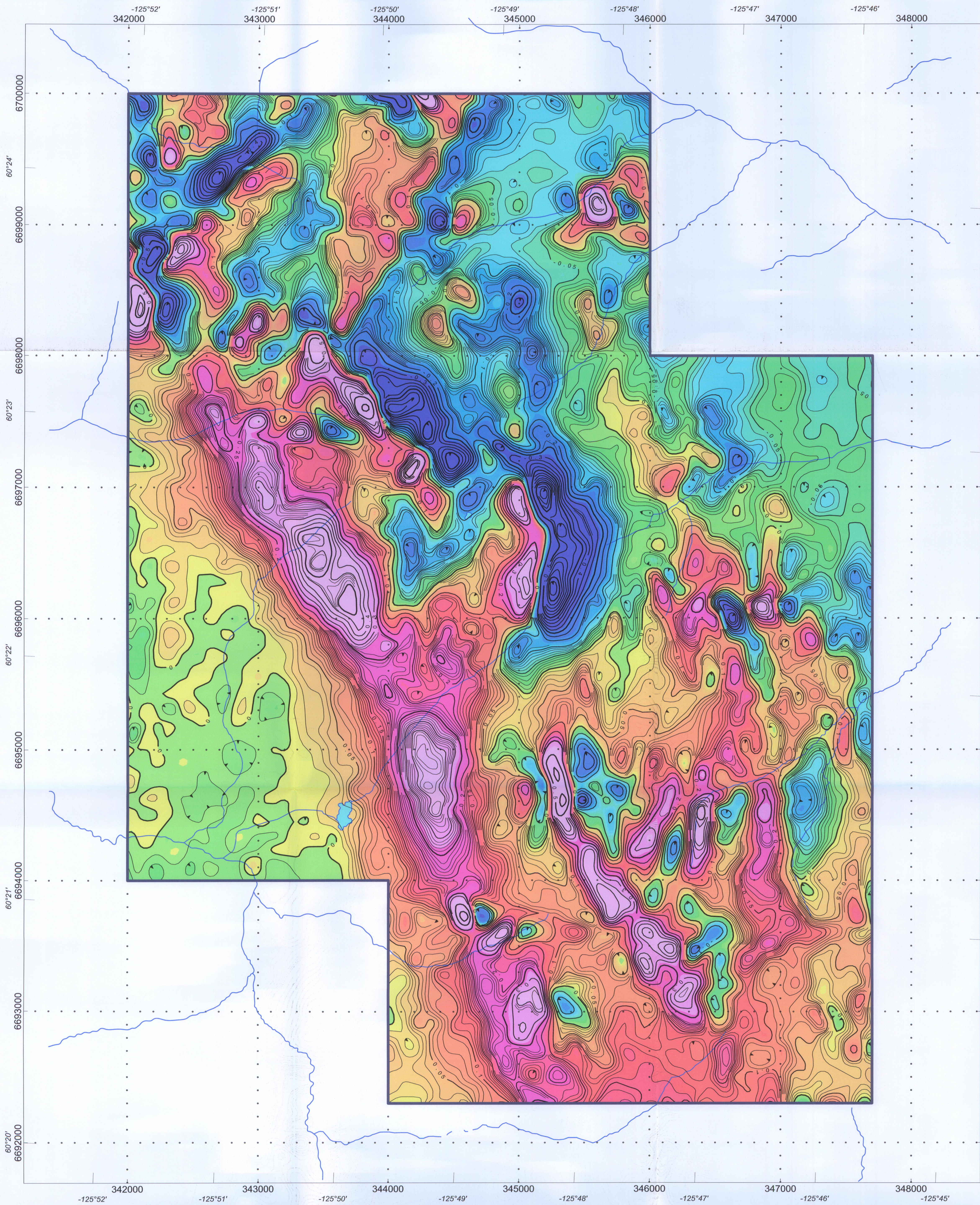
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True North Gems Inc.
Calculated Analytical Signal of TMI Bandito Project
Airborne TDEM and Magnetic Survey
McPhar Geosurveys Ltd.



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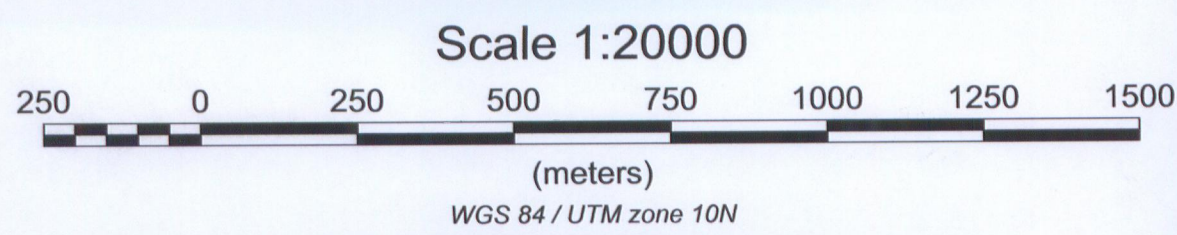
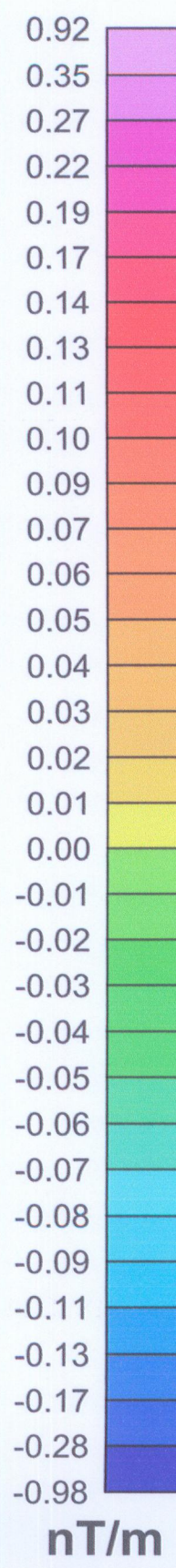
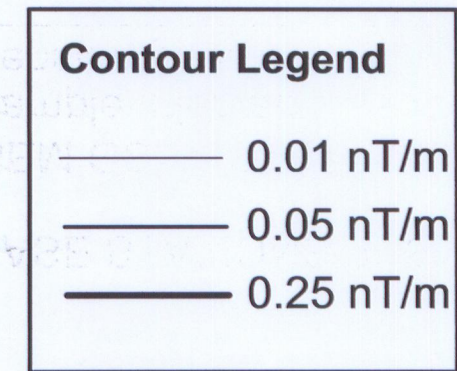
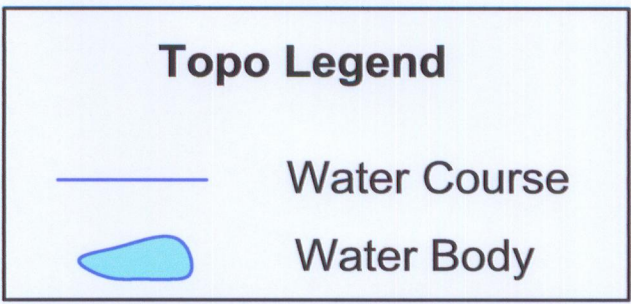
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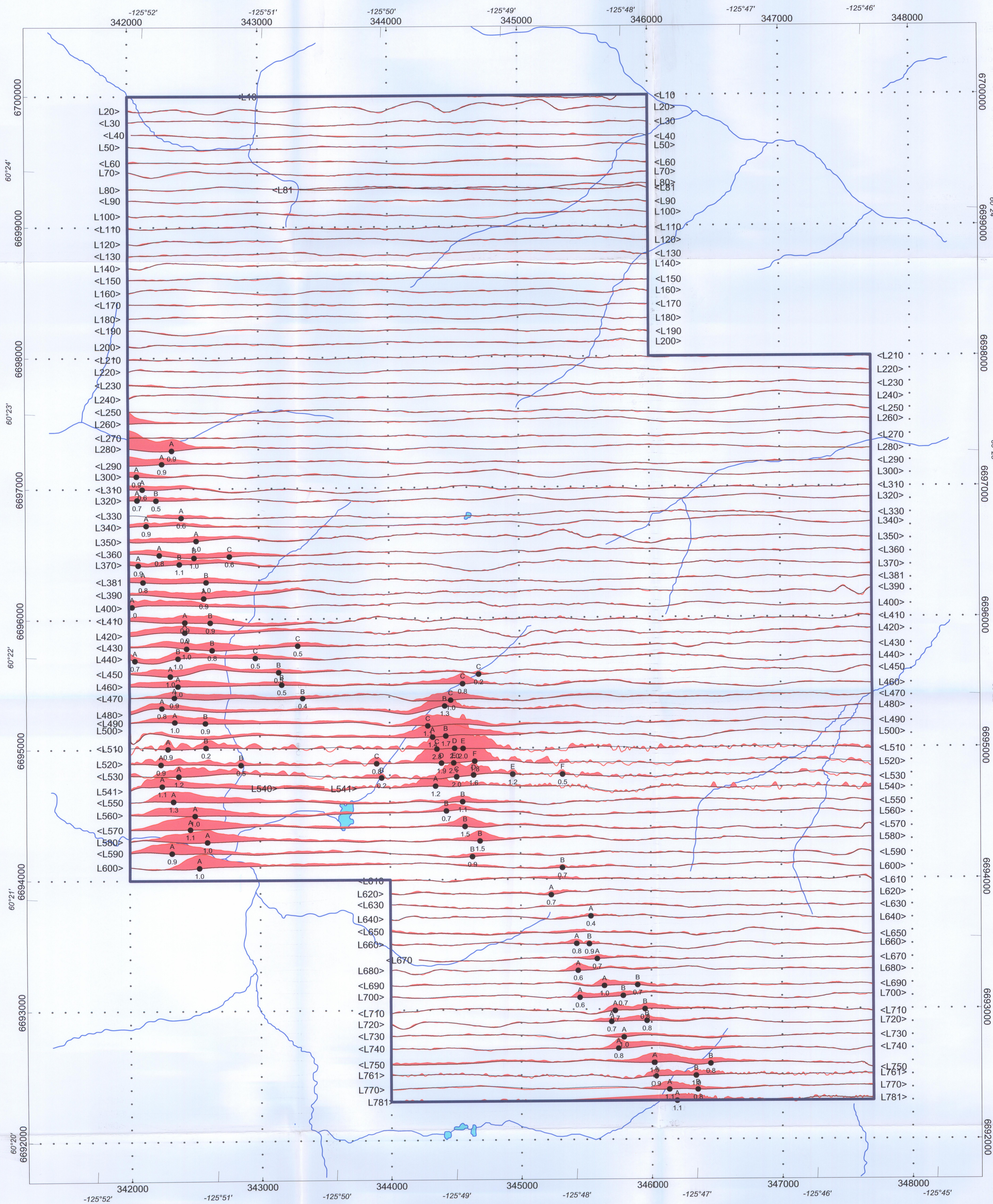
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True North Gems Inc.
Calculated Horizontal Gradient of TMI Bandito Project
Airborne TDEM and Magnetic Survey
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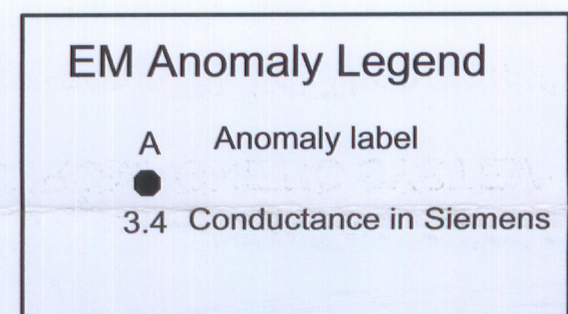
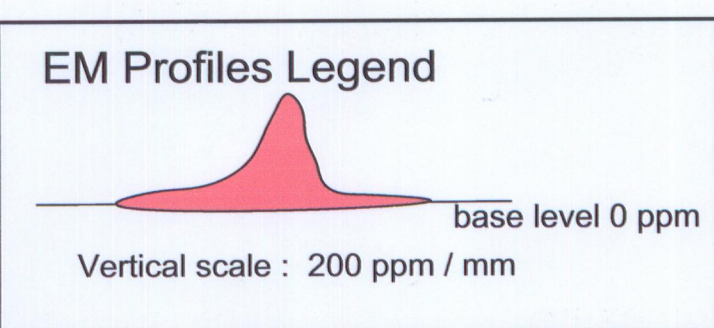
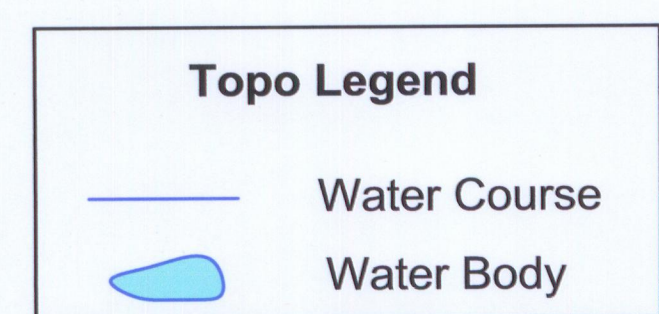
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Settings of Time Windows of THEM System									
Window #	Start at sample	# of samples in window	Start Time	End Time	Window Centre	in milliseconds			
1	7	2	0.114	0.130	0.1221				
2	44	1	0.716	0.716	0.7161				
3	89	1	1.129	1.129	1.1291				
4	91	1	1.481	1.481	1.4811				
5	108	2	1.768	1.774	1.7709				
6	131	1	2.135	2.135	2.1352				
7	167	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	3.685	3.727	3.7109				
11	229	3	3.727	3.780	3.7435				
12	231	5	3.780	3.782	3.7810				
13	233	5	3.782	3.857	3.8249				
14	238	5	3.874	3.889	3.8812				
15	242	5	3.899	4.004	3.9513				
16	245	11	4.004	4.167	4.0853				
17	248	17	4.055	4.313	4.1829				
18	258	23	4.199	4.557	4.3782				
19	265	29	4.313	4.769	4.5410				
20	272	35	4.427	4.880	4.7038				
21	283	41	4.608	5.257	4.9116				
22	298	47	4.850	5.589	5.2245				
23	312	53	5.070	5.824	5.4513				
24	328	59	5.339	6.283	5.8105				
25	335	65	5.610	6.857	6.2350				
26	364	71	5.920	7.064	6.4941				
27	382	77	6.217	7.454	6.8359				
28	400	83	6.510	7.845	7.1777				
29	415	89	6.755	8.187	7.4707				
30	432	95	7.031	8.561	7.7962				
31	452	101	7.307	8.984	8.1705				
32	476	107	7.747	9.473	8.6105				
33	495	113	8.057	9.880	8.9681				
34	520	119	8.464	10.384	9.4238				
35	540	125	8.789	10.807	9.7981				

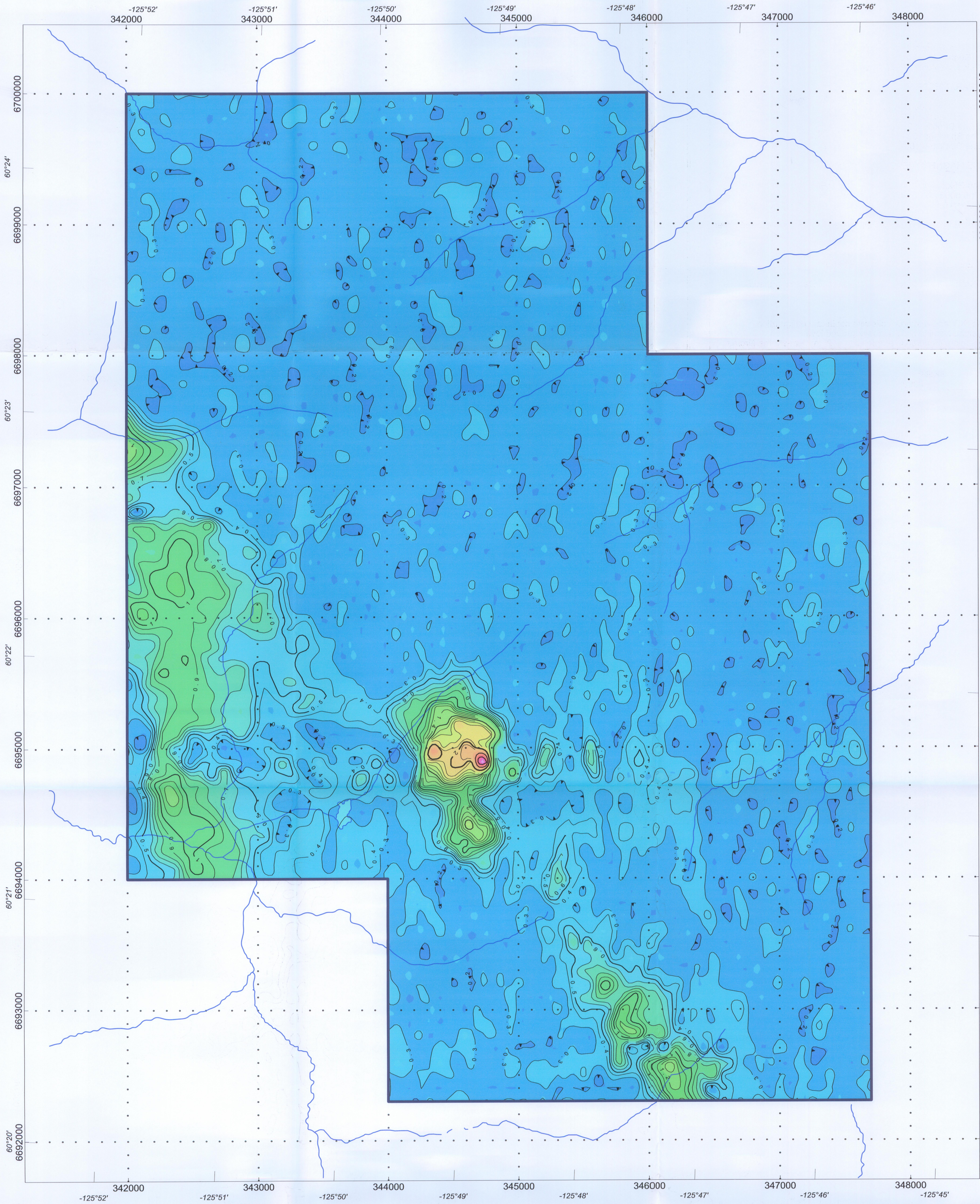


True North Gems Inc.

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

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

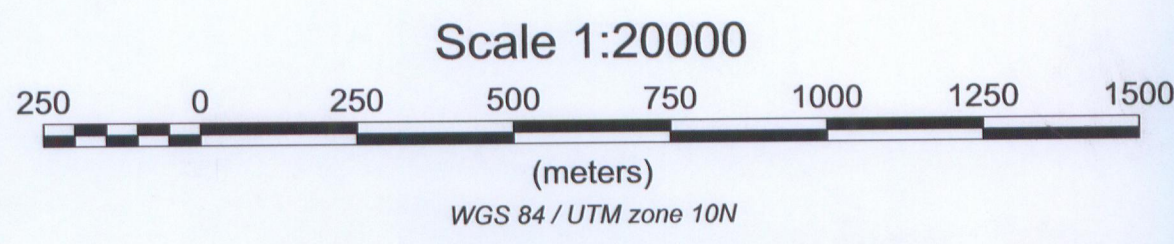
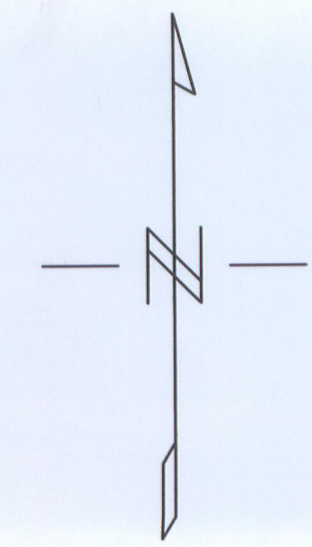
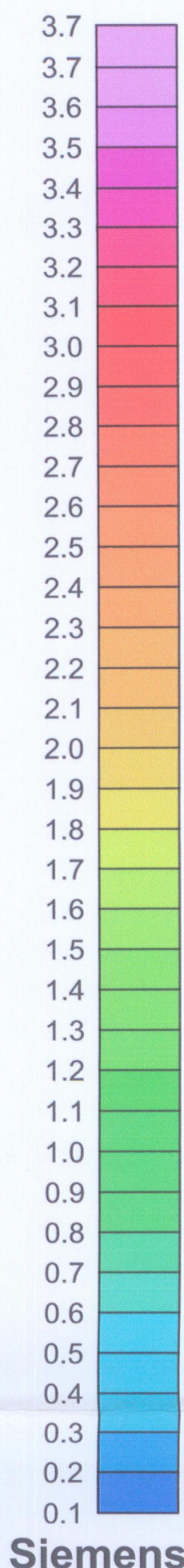


Topo Legend

Water Course
Water Body

Contour Legend

0.1 siemens
0.5 siemens
2 siemens



Settings of Time Windows of THEM System					ON TIME
Window #	Start at sample	# of samples in window	Start Time (milliseconds)	Window Centre (milliseconds)	
1	7	2	0.114	0.130	ON TIME
2	44	1	0.716	0.716	
3	69	1	1.123	1.123	
4	91	1	1.481	1.481	
5	108	2	1.798	1.774	
6	131	1	2.132	2.132	
7	167	1	2.555	2.555	
8	197	1	3.206	3.206	
9	219	1	3.564	3.564	
10	227	3	3.685	3.727	
11	229	3	3.727	3.760	
12	231	3	3.760	3.792	
13	233	5	3.792	3.857	
14	236	5	3.854	3.930	
15	242	5	3.939	4.004	
16	246	11	4.004	4.107	
17	249	17	4.103	4.313	
18	258	23	4.199	4.557	
19	265	29	4.313	4.769	
20	272	35	4.427	4.980	
21	283	41	4.658	5.257	
22	298	47	4.850	5.599	
23	312	53	5.078	5.904	
24	328	59	5.339	6.263	
25	345	65	5.615	6.657	
26	364	71	5.924	7.064	
27	382	77	6.217	7.484	
28	400	83	6.530	7.895	
29	415	89	6.785	8.187	
30	432	95	7.031	8.561	
31	452	101	7.357	8.984	
32	476	113	7.747	9.473	
33	495	119	8.057	9.880	
34	512	125	8.464	10.308	
35	540	125	8.789	10.807	



True North Gems Inc.

Apparent Conductance for Selected Time Window No. 15
dB/dt - Z-channel
Bandito Project

Airborne TDEM and Magnetic Survey

McPhar Geosurveys Ltd.