

# **Geophysical and Geochemical Assessment Report on the Alexis Property**

Cariboo Mining Division, BC

NTS MAP SHEET 93B

53° 47' North Latitude, 123° 57" West Longitude

UTM Coordinates of 435419 mE, and 5849522 mN, Zone 10

For:

**GOLDMEMBER VENTURES CORP.**

302-675 West Hastings Street

Vancouver, B.C.

By:

George Nicholson, P.Ge., FRGS

May 2007

---

# Table of Contents

<b>TABLE OF CONTENTS .....</b>	<b>2</b>
<b>LIST OF TABLES .....</b>	<b>3</b>
<b>LIST OF FIGURES .....</b>	<b>3</b>
<b>1. INTRODUCTION AND TERMS OF REFERENCE .....</b>	<b>4</b>
<b>2. PROPERTY DESCRIPTION AND LOCATION .....</b>	<b>6</b>
<b>3. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY.....</b>	<b>16</b>
3.1 Access.....	16
<b>4. HISTORY.....</b>	<b>17</b>
4.1 Government Programs .....	18
<b>5. GEOLOGICAL SETTING .....</b>	<b>19</b>
5.1 REGIONAL GEOLOGY .....	19
5.2 Basement Rocks - Lower Upper Cretaceous and Older .....	21
5.3 Upper Cretaceous to Miocene .....	22
5.4 Pliocene-Pleistocene.....	24
5.5 Regional Structure.....	24
5.6 Property Geology .....	25
Endako Group.....	28
Ootsa Lake Group.....	29
Chilcotin Group .....	30
5.7 Stratigraphic Relations.....	30
5.8 DEPOSIT TYPES .....	31
<b>6. MINERALIZATION.....</b>	<b>35</b>
6.1 093C 015 BAEZ, OBOY, CAMP, RIDGE .....	35
6.2 093C 016 CLISBAKO, NORTH, DISCOVERY, CENTRAL, RUBY, BAKO, BARI .....	35
<b>7. EXPLORATION .....</b>	<b>38</b>
<b>8. RESULTS.....</b>	<b>46</b>
8.1 Sample Method and Approach.....	50
8.2 Sample Preparation, Analyses and Security .....	54
8.3 Data Verification.....	54
8.4 Mineral Processing and Metallurgical Testing.....	54
8.5 Mineral Resource and Mineral Reserve Estimates.....	54
<b>9. INTERPRETATION AND CONCLUSIONS .....</b>	<b>55</b>
9.1 Conclusions.....	55
9.2 Recommendations.....	55
9.3 Phase I – Budget.....	56

---

<b>10.</b>	<b>STATEMENT OF COSTS.....</b>	<b>57</b>
<b>11.</b>	<b>STATEMENT OF QUALIFICATIONS .....</b>	<b>58</b>
<b>12.</b>	<b>REFERENCES.....</b>	<b>59</b>

## List of Tables

Table 1. Claim Data Alexis Claims .....	6
Table 2. Work History Alexis Claim Area.....	17
Table 3. Main Geologic Map Units of the Nechako Basin.....	21

## List of Figures

Figure 1. Location Map .....	5
Figure 2. Claim Map .....	15
Figure 3. Regional Geology.....	20
Figure 4. Structural Interpretation.....	26
Figure 5. Property Geology Map.....	27
Figure 6. BC Epithermal Model.....	32
Figure 7. Regional Gravity .....	39
Figure 8. Relative Magnetic Field Intensity: False Colour Contour map .....	40
Figure 9. Regional Magnetic Analysis: Structural Lineament map .....	42
Figure 10. Title for this figure? .....	43
Figure 11. Geological Sample Location Map.....	45
Figure 12. IP Survey Location Map .....	47
Figure 13. Inverted Chargeability Model at 100m Depth.....	48
Figure 14. Inverted Resistivity Model at 100m Depth .....	49
Figure 15. Compilation (Inverted Resistivity Model and Inverted Chargeability Model at 100 m Depth) .....	51
Figure 16. 3D Model – Chargeability Isosurfaces and Resistivity Thresholds / 3D Section: Inverted Resistivity and Chargeability .....	52

---

# 1. Introduction and Terms of Reference

This Technical report was commissioned by Goldmember Resources Ltd. to summarize the geology, mineralization and geophysical exploration programs conducted on the Alexis group of claims situated in the Cariboo Mining Division, British Columbia, Canada (Figure 1). The work described in this report was conducted between Aug 15, 2006 and December 15, 2006; a total of \$451,000.00 dollars was spent which will be applied to the property as exploration assessment credits. The writer, Mr.XXXXXX, P.Geo. of Vancouver BC., was retained by the Directors of Goldmember Resources Ltd. to complete this assessment report.



**FIGURE 1. LOCATION MAP**

## 2. Property Description and Location

The Alexis group of claims consists of 308 newly staked mineral claims using the “cell system” of Mineral Titles Online (BC) totaling approximately 146,365.35 hectares in surface area, the claims are centered at approximately 123° 57' W. Longitude, 53° 47' N. Latitude with UTM coordinates of 435419 mE, 5849522 mN, NAD 83 zone 10 and appear on 1:50,000 NTS map sheets 93B12 & 93B13 and 93C9 & 93C16 and 93F01 and BC Government 1:20,000 maps 93B051,061,071,072,081,082,091,092 and 93C050, 060, 070, 080, 090, 100 and 93F010. The property's shape and boundary are displayed on Figure 2. Details of the claims are tabled as follows:

**Table 1. Claim Data Alexis Claims**

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
534951	ALEXIS 1	208466(100%)	093B	2008/MAR/15	GOOD	486.478
534952	ALEXIS 2	208466(100%)	093B	2008/MAR/15	GOOD	486.482
534953	ALEXIS 3	208466(100%)	093B	2008/MAR/15	GOOD	486.494
534954	ALEXIS 4	208466(100%)	093B	2008/MAR/15	GOOD	486.509
534955	ALEXIS 5	208466(100%)	093B	2008/MAR/15	GOOD	467.058
534956	ALEXIS 6	208466(100%)	093B	2008/MAR/15	GOOD	428.133
534957	ALEXIS 7	208466(100%)	093B	2008/MAR/15	GOOD	447.61
534958	ALEXIS 8	208466(100%)	093B	2008/MAR/15	GOOD	486.544
534959	ALEXIS 9	208466(100%)	093B	2008/MAR/15	GOOD	486.54
534960	ALEXIS 10	208466(100%)	093B	2008/MAR/15	GOOD	486.548
534961	ALEXIS 11	208466(100%)	093B	2008/MAR/15	GOOD	486.582
534962	ALEXIS 12	208466(100%)	093B	2008/MAR/15	GOOD	467.12
534963	ALEXIS 13	208466(100%)	093B	2008/MAR/15	GOOD	467.127
534964	ALEXIS 14	208466(100%)	093B	2008/MAR/15	GOOD	486.574
534965	ALEXIS 15	208466(100%)	093B	2008/MAR/15	GOOD	486.572
534967	ALEXIS 16	208466(100%)	093B	2008/MAR/15	GOOD	486.568
534968	ALEXIS 17	208466(100%)	093B	2008/MAR/15	GOOD	486.564
534970	ALEXIS 18	208466(100%)	093B	2008/MAR/15	GOOD	486.561
534972	ALEXIS 19	208466(100%)	093B	2008/MAR/15	GOOD	486.706
534973	ALEXIS 20	208466(100%)	093B	2008/MAR/15	GOOD	486.711
534975	ALEXIS 21	208466(100%)	093B	2008/MAR/15	GOOD	486.721
534976	ALEXIS 22	208466(100%)	093B	2008/MAR/15	GOOD	486.734
534978	ALEXIS 23	208466(100%)	093B	2008/MAR/15	GOOD	486.745
534979	ALEXIS 24	208466(100%)	093B	2008/MAR/15	GOOD	486.75

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
534982	ALEXIS 25	208466(100%)	093B	2008/MAR/15	GOOD	467.289
534983	ALEXIS 26	208466(100%)	093B	2008/MAR/15	GOOD	486.769
534984	ALEXIS 27	208466(100%)	093B	2008/MAR/15	GOOD	486.768
534986	ALEXIS 28	208466(100%)	093B	2008/MAR/15	GOOD	467.366
534987	ALEXIS 29	208466(100%)	093B	2008/MAR/15	GOOD	428.793
534988	ALEXIS 30	208466(100%)	093B	2008/MAR/15	GOOD	408.912
535089	ALEXIS 31	208466(100%)	093B	2008/MAR/15	GOOD	486.445
535090	ALEXIS 32	208466(100%)	093C	2008/MAR/15	GOOD	486.452
535091	ALEXIS 33	208466(100%)	093C	2008/MAR/15	GOOD	486.466
535092	ALEXIS 34	208466(100%)	093B	2008/MAR/15	GOOD	486.684
535094	ALEXIS 35	208466(100%)	093C	2008/MAR/15	GOOD	486.694
535096	ALEXIS 36	208466(100%)	093C	2008/MAR/15	GOOD	389.366
535097	ALEXIS 37	208466(100%)	093C	2008/MAR/15	GOOD	486.947
535099	ALEXIS 38	208466(100%)	093C	2008/MAR/15	GOOD	486.931
535100	ALEXIS 39	208466(100%)	093B	2008/MAR/15	GOOD	486.924
535101	ALEXIS 40	208466(100%)	093C	2008/MAR/15	GOOD	487.189
535104	ALEXIS 41	208466(100%)	093C	2008/MAR/15	GOOD	487.173
535108	ALEXIS 42	208466(100%)	093B	2008/MAR/15	GOOD	487.161
535110	ALEXIS 43	208466(100%)	093C	2008/MAR/15	GOOD	487.496
535111	ALEXIS 44	208466(100%)	093C	2008/MAR/15	GOOD	487.495
535113	ALEXIS 45	208466(100%)	093B	2008/MAR/15	GOOD	487.493
535114	ALEXIS 46	208466(100%)	093C	2008/MAR/15	GOOD	487.728
535116	ALEXIS 47	208466(100%)	093C	2008/MAR/15	GOOD	487.727
535117	ALEXIS 48	208466(100%)	093B	2008/MAR/15	GOOD	487.726
535118	ALEXIS 49	208466(100%)	093C	2008/MAR/15	GOOD	487.96
535120	ALEXIS 50	208466(100%)	093C	2008/MAR/15	GOOD	487.959
535211	ALEXIS 51	208466(100%)	093B	2008/MAR/15	GOOD	487.958
535213	ALEXIS 52	208466(100%)	093C	2008/MAR/15	GOOD	488.192
535215	ALEXIS 53	208466(100%)	093C	2008/MAR/15	GOOD	488.191
535217	ALEXIS 54	208466(100%)	093B	2008/MAR/15	GOOD	488.19
535218	ALEXIS 55	208466(100%)	093C	2008/MAR/15	GOOD	488.43
535220	ALEXIS 56	208466(100%)	093C	2008/MAR/15	GOOD	488.43
535223	ALEXIS 57	208466(100%)	093B	2008/MAR/15	GOOD	488.432
535226	ALEXIS 58	208466(100%)	093C	2008/MAR/15	GOOD	469.072
535227	ALEXIS 59	208466(100%)	093B	2008/MAR/15	GOOD	410.438
535229	ALEXIS 60	208466(100%)	093B	2008/MAR/15	GOOD	486.936
535230	ALEXIS 61	208466(100%)	093B	2008/MAR/15	GOOD	486.941
535232	ALEXIS 62	208466(100%)	093B	2008/MAR/15	GOOD	486.95
535236	ALEXIS 63	208466(100%)	093B	2008/MAR/15	GOOD	486.961

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
535238	ALEXIS 64	208466(100%)	093B	2008/MAR/15	GOOD	486.971
535240	ALEXIS 65	208466(100%)	093B	2008/MAR/15	GOOD	486.977
535241	ALEXIS 66	208466(100%)	093B	2008/MAR/15	GOOD	486.988
535244	ALEXIS 67	208466(100%)	093B	2008/MAR/15	GOOD	486.948
535247	ALEXIS 68	208466(100%)	093B	2008/MAR/15	GOOD	487.165
535250	ALEXIS 69	208466(100%)	093B	2008/MAR/15	GOOD	487.17
535252	ALEXIS 70	208466(100%)	093B	2008/MAR/15	GOOD	487.177
535253	ALEXIS 71	208466(100%)	093B	2008/MAR/15	GOOD	487.187
535255	ALEXIS 72	208466(100%)	093B	2008/MAR/15	GOOD	487.196
535257	ALEXIS 73	208466(100%)	093B	2008/MAR/15	GOOD	487.201
535259	ALEXIS 74	208466(100%)	093B	2008/MAR/15	GOOD	389.769
535422	ALEXIS 75	208466(100%)	093B	2008/MAR/15	GOOD	428.848
535423	ALEXIS 76	208466(100%)	093B	2008/MAR/15	GOOD	487.489
535424	ALEXIS 77	208466(100%)	093B	2008/MAR/15	GOOD	487.484
535425	ALEXIS 78	208466(100%)	093B	2008/MAR/15	GOOD	487.479
535427	ALEXIS 79	208466(100%)	093B	2008/MAR/15	GOOD	487.477
535428	ALEXIS 80	208466(100%)	093B	2008/MAR/15	GOOD	487.475
535429	ALEXIS 81	208466(100%)	093B	2008/MAR/15	GOOD	487.467
535430	ALEXIS 82	208466(100%)	093B	2008/MAR/15	GOOD	487.464
535431	ALEXIS 83	208466(100%)	093B	2008/MAR/15	GOOD	487.722
535432	ALEXIS 84	208466(100%)	093B	2008/MAR/15	GOOD	487.717
535433	ALEXIS 85	208466(100%)	093B	2008/MAR/15	GOOD	487.714
535435	ALEXIS 86	208466(100%)	093B	2008/MAR/15	GOOD	487.712
535436	ALEXIS 87	208466(100%)	093B	2008/MAR/15	GOOD	487.709
535437	ALEXIS 88	208466(100%)	093B	2008/MAR/15	GOOD	487.701
535438	ALEXIS 89	208466(100%)	093B	2008/MAR/15	GOOD	390.159
535439	ALEXIS 90	208466(100%)	093B	2008/MAR/15	GOOD	292.619
535441	ALEXIS 91	208466(100%)	093B	2008/MAR/15	GOOD	487.954
535442	ALEXIS 92	208466(100%)	093B	2008/MAR/15	GOOD	487.949
535443	ALEXIS 93	208466(100%)	093B	2008/MAR/15	GOOD	487.948
535445	ALEXIS 94	208466(100%)	093B	2008/MAR/15	GOOD	487.947
535446	ALEXIS 95	208466(100%)	093B	2008/MAR/15	GOOD	487.944
535447	ALEXIS 96	208466(100%)	093B	2008/MAR/15	GOOD	487.935
535448	ALEXIS 97	208466(100%)	093B	2008/MAR/15	GOOD	409.824
535449	ALEXIS 98	208466(100%)	093B	2008/MAR/15	GOOD	273.282
535451	ALEXIS 99	208466(100%)	093B	2008/MAR/15	GOOD	488.187
535452	ALEXIS 100	208466(100%)	093B	2008/MAR/15	GOOD	488.182
535463	ALEXIS 101	208466(100%)	093B	2008/MAR/15	GOOD	488.182
535464	ALEXIS 102	208466(100%)	093B	2008/MAR/15	GOOD	488.181



<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
535465	ALEXIS 102	208466(100%)	093B	2008/MAR/15	GOOD	488.178
535466	ALEXIS 103	208466(100%)	093B	2008/MAR/15	GOOD	488.17
535467	ALEXIS 104	208466(100%)	093B	2008/MAR/15	GOOD	488.167
535468	ALEXIS 105	208466(100%)	093B	2008/MAR/15	GOOD	429.595
535469	ALEXIS 106	208466(100%)	093B	2008/MAR/15	GOOD	468.653
535470	ALEXIS 107	208466(100%)	093B	2008/MAR/15	GOOD	468.652
535471	ALEXIS 108	208466(100%)	093B	2008/MAR/15	GOOD	468.665
535472	ALEXIS 109	208466(100%)	093B	2008/MAR/15	GOOD	312.446
535473	ALEXIS 110	208466(100%)	093B	2008/MAR/15	GOOD	468.348
535474	ALEXIS 111	208466(100%)	093B	2008/MAR/15	GOOD	448.995
535475	ALEXIS 112	208466(100%)	093B	2008/MAR/15	GOOD	390.141
535476	ALEXIS 113	208466(100%)	093B	2008/MAR/15	GOOD	390.292
535477	ALEXIS 114	208466(100%)	093B	2008/MAR/15	GOOD	488.433
535478	ALEXIS 115	208466(100%)	093B	2008/MAR/15	GOOD	488.434
535479	ALEXIS 116	208466(100%)	093B	2008/MAR/15	GOOD	488.44
535480	ALEXIS 117	208466(100%)	093B	2008/MAR/15	GOOD	488.443
535481	ALEXIS 118	208466(100%)	093B	2008/MAR/15	GOOD	488.444
535482	ALEXIS 119	208466(100%)	093B	2008/MAR/15	GOOD	488.442
535483	ALEXIS 120	208466(100%)	093B	2008/MAR/15	GOOD	488.445
535484	ALEXIS 121	208466(100%)	093B	2008/MAR/15	GOOD	488.445
535486	ALEXIS 122	208466(100%)	093B	2008/MAR/15	GOOD	488.442
535487	ALEXIS 123	208466(100%)	093B	2008/MAR/15	GOOD	488.442
535489	ALEXIS 124	208466(100%)	093B	2008/MAR/15	GOOD	488.454
535490	ALEXIS 125	208466(100%)	093B	2008/MAR/15	GOOD	488.456
535491	ALEXIS 126	208466(100%)	093B	2008/MAR/15	GOOD	488.665
535492	ALEXIS 127	208466(100%)	093B	2008/MAR/15	GOOD	488.666
535493	ALEXIS 128	208466(100%)	093B	2008/MAR/15	GOOD	488.671
535494	ALEXIS 129	208466(100%)	093B	2008/MAR/15	GOOD	488.674
535495	ALEXIS 130	208466(100%)	093B	2008/MAR/15	GOOD	488.676
535497	ALEXIS 131	208466(100%)	093B	2008/MAR/15	GOOD	490.624
535499	ALEXIS 132	208466(100%)	093B	2008/MAR/15	GOOD	490.622
535500	ALEXIS 133	208466(100%)	093B	2008/MAR/15	GOOD	490.618
535501	ALEXIS 134	208466(100%)	093B	2008/MAR/15	GOOD	490.617
535502	ALEXIS 135	208466(100%)	093B	2008/MAR/15	GOOD	490.612
535503	ALEXIS 136	208466(100%)	093B	2008/MAR/15	GOOD	490.608
535505	ALEXIS 137	208466(100%)	093B	2008/MAR/15	GOOD	392.486
535506	ALEXIS 138	208466(100%)	093B	2008/MAR/15	GOOD	490.393
535508	ALEXIS 139	208466(100%)	093B	2008/MAR/15	GOOD	490.391
535509	ALEXIS 140	208466(100%)	093B	2008/MAR/15	GOOD	490.388

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
535510	ALEXIS 141	208466(100%)	093B	2008/MAR/15	GOOD	490.394
535535	ALEXIS 142	208466(100%)	093B	2008/MAR/15	GOOD	490.625
535536	ALEXIS 143	208466(100%)	093B	2008/MAR/15	GOOD	490.386
535537	ALEXIS 144	208466(100%)	093B	2008/MAR/15	GOOD	490.381
535538	ALEXIS 145	208466(100%)	093B	2008/MAR/15	GOOD	490.377
535539	ALEXIS 146	208466(100%)	093B	2008/MAR/15	GOOD	392.302
535540	ALEXIS 147	208466(100%)	093B	2008/MAR/15	GOOD	490.167
535542	ALEXIS 148	208466(100%)	093B	2008/MAR/15	GOOD	490.167
535543	ALEXIS 149	208466(100%)	093B	2008/MAR/15	GOOD	489.938
535544	ALEXIS 150	208466(100%)	093B	2008/MAR/15	GOOD	489.94
535545	ALEXIS 151	208466(100%)	093B	2008/MAR/15	GOOD	489.705
535546	ALEXIS 152	208466(100%)	093B	2008/MAR/15	GOOD	489.707
535547	ALEXIS 153	208466(100%)	093B	2008/MAR/15	GOOD	489.473
535548	ALEXIS 154	208466(100%)	093B	2008/MAR/15	GOOD	489.475
535549	ALEXIS 155	208466(100%)	093B	2008/MAR/15	GOOD	489.24
535550	ALEXIS 156	208466(100%)	093B	2008/MAR/15	GOOD	489.242
535551	ALEXIS 157	208466(100%)	093B	2008/MAR/15	GOOD	489.006
535553	ALEXIS 158	208466(100%)	093B	2008/MAR/15	GOOD	489.008
535554	ALEXIS 159	208466(100%)	093B	2008/MAR/15	GOOD	488.772
535555	ALEXIS 160	208466(100%)	093B	2008/MAR/15	GOOD	469.118
535576	ALEXIS 161	208466(100%)	093B	2008/MAR/15	GOOD	410.446
535579	ALEXIS 163	208466(100%)	093C	2008/MAR/15	GOOD	489.178
535581	ALEXIS 164	208466(100%)	093C	2008/MAR/15	GOOD	489.175
535584	ALEXIS 164	208466(100%)	093C	2008/MAR/15	GOOD	391.34
535585	ALEXIS 165	208466(100%)	093C	2008/MAR/15	GOOD	488.942
535586	ALEXIS 166	208466(100%)	093C	2008/MAR/15	GOOD	469.205
535587	ALEXIS 167	208466(100%)	093C	2008/MAR/15	GOOD	449.804
535588		208466(100%)	093B	2008/MAR/15	GOOD	469.228
535589	ALEXIS 169	208466(100%)	093B	2008/MAR/15	GOOD	469.407
535590	ALEXIS 170	208466(100%)	093B	2008/MAR/15	GOOD	469.363
535591	ALEXIS 171	208466(100%)	093B	2008/MAR/15	GOOD	489.174
535593	ALEXIS 172	208466(100%)	093B	2008/MAR/15	GOOD	489.175
535594	ALEXIS 173	208466(100%)	093B	2008/MAR/15	GOOD	489.41
535595	ALEXIS 174	208466(100%)	093B	2008/MAR/15	GOOD	489.41
535596	ALEXIS 175	208466(100%)	093C	2008/MAR/15	GOOD	450.505
535597	ALEXIS 176	208466(100%)	093B	2008/MAR/15	GOOD	470.035
535598	ALEXIS 177	208466(100%)	093C	2008/MAR/15	GOOD	470.349
535599	ALEXIS 178	208466(100%)	093C	2008/MAR/15	GOOD	470.348
535600	ALEXIS 179	208466(100%)	093B	2008/MAR/15	GOOD	489.808

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
535601	ALEXIS 180	208466(100%)	093B	2008/MAR/15	GOOD	488.897
535602	ALEXIS 181	208466(100%)	093B	2008/MAR/15	GOOD	489.129
535603	ALEXIS 182	208466(100%)	093B	2008/MAR/15	GOOD	489.364
535604	ALEXIS 183	208466(100%)	093B	2008/MAR/15	GOOD	489.597
535605	ALEXIS 184	208466(100%)	093B	2008/MAR/15	GOOD	391.845
535606	ALEXIS 185	208466(100%)	093B	2008/MAR/15	GOOD	488.9
535607	ALEXIS 186	208466(100%)	093B	2008/MAR/15	GOOD	489.132
535608	ALEXIS 187	208466(100%)	093B	2008/MAR/15	GOOD	489.367
535667	ALEXIS 188	208466(100%)	093B	2008/MAR/15	GOOD	489.599
535668	ALEXIS 189	208466(100%)	093B	2008/MAR/15	GOOD	391.847
535669	ALEXIS 190	208466(100%)	093B	2008/MAR/15	GOOD	488.905
535672	ALEXIS 191	208466(100%)	093B	2008/MAR/15	GOOD	488.907
535673	ALEXIS 192	208466(100%)	093B	2008/MAR/15	GOOD	488.91
535674	ALEXIS 193	208466(100%)	093B	2008/MAR/15	GOOD	489.136
535675	ALEXIS 194	208466(100%)	093B	2008/MAR/15	GOOD	489.138
535676	ALEXIS 195	208466(100%)	093B	2008/MAR/15	GOOD	489.143
535677	ALEXIS 196	208466(100%)	093B	2008/MAR/15	GOOD	489.369
535678	ALEXIS 197	208466(100%)	093B	2008/MAR/15	GOOD	489.37
535679	ALEXIS 198	208466(100%)	093B	2008/MAR/15	GOOD	489.377
535680	ALEXIS 199	208466(100%)	093B	2008/MAR/15	GOOD	489.602
535681	ALEXIS 200	208466(100%)	093B	2008/MAR/15	GOOD	489.603
535682	ALEXIS 201	208466(100%)	093B	2008/MAR/15	GOOD	489.609
535683	ALEXIS 202	208466(100%)	093B	2008/MAR/15	GOOD	490.165
535684	ALEXIS 203	208466(100%)	093B	2008/MAR/15	GOOD	293.989
535685	ALEXIS 204	208466(100%)	093B	2008/MAR/15	GOOD	391.855
536032	ALEXIS 205	208466(100%)	093B	2008/MAR/15	GOOD	490.606
536034	ALEXIS 206	208466(100%)	093B	2008/MAR/15	GOOD	490.605
536037	ALEXIS 207	208466(100%)	093B	2008/MAR/15	GOOD	490.756
536039	ALEXIS 208	208466(100%)	093B	2008/MAR/15	GOOD	451.68
536040	ALEXIS 209	208466(100%)	093B	2008/MAR/15	GOOD	491.056
536042	ALEXIS 211	208466(100%)	093B	2008/MAR/15	GOOD	490.836
536045	ALEXIS 212	208466(100%)	093B	2008/MAR/15	GOOD	491.048
536047	ALEXIS 213	208466(100%)	093B	2008/MAR/15	GOOD	490.837
536048	ALEXIS 214	208466(100%)	093B	2008/MAR/15	GOOD	471.183
536049	ALEXIS 215	208466(100%)	093B	2008/MAR/15	GOOD	490.839
536050	ALEXIS 216	208466(100%)	093B	2008/MAR/15	GOOD	490.845
536051	ALEXIS 217	208466(100%)	093B	2008/MAR/15	GOOD	490.848
536053	ALEXIS 218	208466(100%)	093B	2008/MAR/15	GOOD	490.85
536054	ALEXIS 219	208466(100%)	093B	2008/MAR/15	GOOD	490.854

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
536055	ALEXIS 220	208466(100%)	093B	2008/MAR/15	GOOD	490.855
536056	ALEXIS 221	208466(100%)	093B	2008/MAR/15	GOOD	491.084
536057	ALEXIS 222	208466(100%)	093B	2008/MAR/15	GOOD	491.082
536059	ALEXIS 223	208466(100%)	093B	2008/MAR/15	GOOD	491.078
536060	ALEXIS 224	208466(100%)	093B	2008/MAR/15	GOOD	491.076
536061	ALEXIS 225	208466(100%)	093B	2008/MAR/15	GOOD	491.074
536063	ALEXIS 226	208466(100%)	093B	2008/MAR/15	GOOD	491.068
536065	ALEXIS 227	208466(100%)	093B	2008/MAR/15	GOOD	491.301
536066	ALEXIS 228	208466(100%)	093B	2008/MAR/15	GOOD	491.303
536068	ALEXIS 229	208466(100%)	093B	2008/MAR/15	GOOD	491.305
536070	ALEXIS 230	208466(100%)	093B	2008/MAR/15	GOOD	491.309
536071	ALEXIS 231	208466(100%)	093B	2008/MAR/15	GOOD	491.31
536074	ALEXIS 232	208466(100%)	093B	2008/MAR/15	GOOD	491.533
536076	ALEXIS 233	208466(100%)	093B	2008/MAR/15	GOOD	491.535
536083	ALEXIS 234	208466(100%)	093B	2008/MAR/15	GOOD	491.54
536084	ALEXIS 235	208466(100%)	093B	2008/MAR/15	GOOD	491.541
536085	ALEXIS 236	208466(100%)	093C	2008/MAR/15	GOOD	447.594
536086	ALEXIS 237	208466(100%)	093C	2008/MAR/15	GOOD	486.277
536087	ALEXIS 238	208466(100%)	093F	2008/MAR/15	GOOD	466.836
536088	ALEXIS 239	208466(100%)	093F	2008/MAR/15	GOOD	466.861
536089	ALEXIS 240	208466(100%)	093F	2008/MAR/15	GOOD	486.047
536090	ALEXIS 241	208466(100%)	093F	2008/MAR/15	GOOD	486.083
536091	ALEXIS 242	208466(100%)	093F	2008/MAR/15	GOOD	486.106
536094	ALEXIS 243	208466(100%)	093F	2008/MAR/15	GOOD	485.893
536095	ALEXIS 244	208466(100%)	093F	2008/MAR/15	GOOD	485.841
536097	ALEXIS 245	208466(100%)	093F	2008/MAR/15	GOOD	485.633
536099	ALEXIS 246	208466(100%)	093F	2008/MAR/15	GOOD	466.222
536100	ALEXIS 247	208466(100%)	093F	2008/MAR/15	GOOD	466.488
536101	ALEXIS 248	208466(100%)	093F	2008/MAR/15	GOOD	466.752
536102	ALEXIS 249	208466(100%)	093C	2008/MAR/15	GOOD	486.77
536104	ALEXIS 250	208466(100%)	093C	2008/MAR/15	GOOD	488.945
536110	ALEXIS 251	208466(100%)	093C	2008/MAR/15	GOOD	469.141
536112	ALEXIS 252	208466(100%)	093C	2008/MAR/15	GOOD	488.634
536114	ALEXIS 253	208466(100%)	093C	2008/MAR/15	GOOD	449.688
536116	ALEXIS 254	208466(100%)	093C	2008/MAR/15	GOOD	469.41
536117	ALEXIS 255	208466(100%)	093C	2008/MAR/15	GOOD	469.589
536118	ALEXIS 256	208466(100%)	093C	2008/MAR/15	GOOD	469.771
538458	ALEXIS 257	208466(100%)	093C	2008/MAR/15	GOOD	490.156
538459	ALEXIS 258	208466(100%)	093C	2008/MAR/15	GOOD	490.157

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
538460	ALEXIS 259	208466(100%)	093B	2008/MAR/15	GOOD	490.107
538461	ALEXIS 260	208466(100%)	093B	2008/MAR/15	GOOD	490.015
538462	ALEXIS 261	208466(100%)	093B	2008/MAR/15	GOOD	490.016
538463	ALEXIS 262	208466(100%)	093B	2008/MAR/15	GOOD	490.018
538488	ALEXIS 263	208466(100%)	093B	2008/MAR/15	GOOD	489.835
538490	ALEXIS 264	208466(100%)	093B	2008/MAR/15	GOOD	489.836
538491	ALEXIS 265	208466(100%)	093B	2008/MAR/15	GOOD	392.035
538492	ALEXIS 266	208466(100%)	093B	2008/MAR/15	GOOD	392.036
538494	ALEXIS 267	208466(100%)	093C	2008/MAR/15	GOOD	490.389
538495	ALEXIS 268	208466(100%)	093C	2008/MAR/15	GOOD	490.389
538496	ALEXIS 269	208466(100%)	093B	2008/MAR/15	GOOD	411.921
538497	ALEXIS 270	208466(100%)	093B	2008/MAR/15	GOOD	490.249
538498	ALEXIS 271	208466(100%)	093B	2008/MAR/15	GOOD	490.249
538499	ALEXIS 272	208466(100%)	093B	2008/MAR/15	GOOD	490.251
538500	ALEXIS 273	208466(100%)	093B	2008/MAR/15	GOOD	490.252
538501	ALEXIS 274	208466(100%)	093B	2008/MAR/15	GOOD	490.252
538504	ALEXIS 275	208466(100%)	093B	2008/MAR/15	GOOD	471.019
538505	ALEXIS 276	208466(100%)	093B	2008/MAR/15	GOOD	490.482
538506	ALEXIS 277	208466(100%)	093B	2008/MAR/15	GOOD	490.482
538507	ALEXIS 278	208466(100%)	093B	2008/MAR/15	GOOD	490.715
538508	ALEXIS 279	208466(100%)	093B	2008/MAR/15	GOOD	490.715
538509	ALEXIS 280	208466(100%)	093B	2008/MAR/15	GOOD	471.287
538510	ALEXIS 281	208466(100%)	093B	2008/MAR/15	GOOD	490.948
538511	ALEXIS 282	208466(100%)	093B	2008/MAR/15	GOOD	490.948
538513	ALEXIS 283	208466(100%)	093B	2008/MAR/15	GOOD	491.177
538514	ALEXIS 284	208466(100%)	093B	2008/MAR/15	GOOD	373.409
538515	ALEXIS 285	208466(100%)	093B	2008/MAR/15	GOOD	432.225
538516	ALEXIS 286	208466(100%)	093B	2008/MAR/15	GOOD	392.942
538518	ALEXIS 287	208466(100%)	093B	2008/MAR/15	GOOD	471.729
538519	ALEXIS 288	208466(100%)	093B	2008/MAR/15	GOOD	471.906
538520	ALEXIS 289	208466(100%)	093B	2008/MAR/15	GOOD	470.842
538521	ALEXIS 290	208466(100%)	093B	2008/MAR/15	GOOD	431.58
538522	ALEXIS 291	208466(100%)	093B	2008/MAR/15	GOOD	470.998
538523	ALEXIS 292	208466(100%)	093B	2008/MAR/15	GOOD	471.133
538524	ALEXIS 293	208466(100%)	093B	2008/MAR/15	GOOD	471.266
538525	ALEXIS 294	208466(100%)	093B	2008/MAR/15	GOOD	471.4
538526	ALEXIS 295	208466(100%)	093B	2008/MAR/15	GOOD	471.529
538527	ALEXIS 296	208466(100%)	093B	2008/MAR/15	GOOD	471.662
538528	ALEXIS 297	208466(100%)	093B	2008/MAR/15	GOOD	471.795

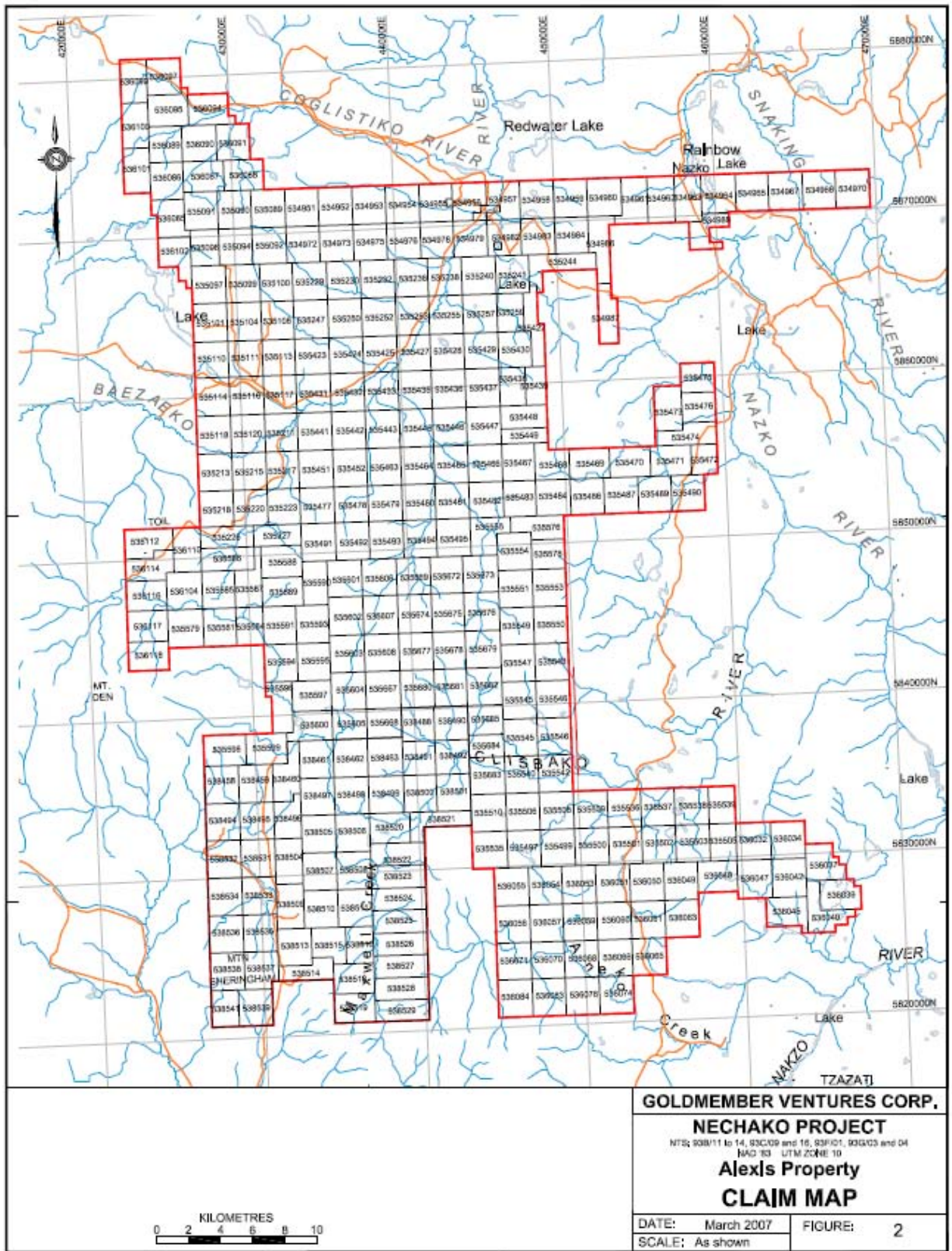
<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Map Number</b>	<b>Good To Date</b>	<b>Status</b>	<b>Area (ha)</b>
538529	ALEXIS 298	208466(100%)	093B	2008/MAR/15	GOOD	471.928
538531	ALEXIS 299	208466(100%)	093C	2008/MAR/15	GOOD	490.621
538532	ALEXIS 300	208466(100%)	093C	2008/MAR/15	GOOD	490.621
538533	ALEXIS 301	208466(100%)	093C	2008/MAR/15	GOOD	490.853
538534	ALEXIS 302	208466(100%)	093C	2008/MAR/15	GOOD	490.853
538535	ALEXIS 303	208466(100%)	093C	2008/MAR/15	GOOD	491.085
538536	ALEXIS 304	208466(100%)	093C	2008/MAR/15	GOOD	491.085
538537	ALEXIS 305	208466(100%)	093C	2008/MAR/15	GOOD	471.658
538538	ALEXIS 306	208466(100%)	093C	2008/MAR/15	GOOD	491.314
538539	ALEXIS 307	208466(100%)	093C	2008/MAR/15	GOOD	491.544
538541	ALEXIS 308	208466(100%)	093C	2008/MAR/15	GOOD	393.236

*\* The good to dates reflect assessment credit applied for in this report*

All claims staked in British Columbia require \$4.00 worth of assessment work per hectare per year to be undertaken in years 1-3, followed by \$8.00 per hectare per year thereafter. There are no known environmental concerns or parks designated for any area contained within the claims. The property has no encumbrances.

The Alexis claims are held in Goldmember Ventures Corp.'s name.

The method of acquiring mineral titles (other than crown grants) has recently changed, and titles may be acquired over the internet by selection of one or more "cells, each approximately 19 hectares in size referenced to a grid in degrees, minutes and seconds of Latitude and Longitude, and subject to payment of fees and completion of assessment work or cash in lieu of work.



**FIGURE 2. CLAIM MAP**

---

### **3. Accessibility, Climate, Local Resources, Infrastructure and Physiography**

#### **3.1 ACCESS**

The properties are located on the Nechako plateau which maintains a fairly constant overall elevation, but contains areas quite dissected at the local scale in a distinctive basin and range (horst and graben) topography. Elevations vary from 1,417m at the top of Deerhorn Hill to 715m on François Lake. To the west, the area abuts on the Quanchus Range with a chain of peaks in the 2,100 to 2,300m range.

Access to and throughout the properties is good. Major highways border the Nechako Basin: to the north (Hwy. 16), the east (Hwy. 97) and the south (Hwy 20), and a paved road reaches Nazko. More locally, access is through several networks of forestry roads starting in the south at Alexis Creek and at Nazko, in the Centre, at Vanderhoof and for the easternmost part at Nazko, and in the north from Vanderhoof and various points along Highway 16 west to Burns Lake.

The main economic activity in the area is logging. There are a few ranches along the lower Nechako River, and some farming northwest of Cheslatta Lake in the Takysie-Grassy Plains area. Tourism is a minor activity and consists mostly of fishing and, in the fall, hunting. Vegetation is dominated by evergreens (pine and spruce) with poplar and cottonwood in low-lying areas. The climate is typical of central British Columbia with below freezing temperatures (0° C to -40° C) from November to April and periods of hot weather in the summer ranging from 20° to 40° C. Precipitation averages 427.8 millimetres a year, with a substantial portion in the form of snow averaging 90.5 centimetres per year.

The region has been severely damaged by infestations of the Rocky Mountain Pine beetle. Vast areas have been affected by this insect which has killed large stands of commercial timber. Because of these infestations forest fires may pose a threat to exploration activities during the summer months. Along the Nechako Reservoir, any area below 300 metres ASL is potentially liable to be flooded, with no compensation.

Goldmember Resources Ltd., at the date of this report has made applications for ground exploration with the B.C. Minister of Mines and Petroleum Resources.



---

## 4. History

The Chilcotin region of British Columbia has undergone various levels of exploration since the 1890's. The Black Dome mine was discovered by Barrier Reef Resources in 1979. In 1980 E&B Exploration was actively searching the belt for epithermal-style deposits concentrating on the Watson Bar property. From 1980 to 1988 Dome Exploration conducted regional reconnaissance throughout several NTS mapsheets in the region. A major oil and gas exploration program was conducted by Canadian Hunter Exploration Ltd. from 1979-1983. Several deep (greater than 10,000 feet) holes were drilled to test the underlying stratigraphy.

In the Alexis area, the first recorded exploration was conducted in 1985 by Rio Algom on the O'Boy claims. Property exploration was focused on a local area culminating in a diamond drill program in 1987. Eighty-Eight Resources Ltd. staked the Clisbako claims in 1989 and optioned the property to Minnova Inc. in 1991. Over their two year option period Minnova spent in excess of one million dollars conducting geological and geophysical surveys, trenching and diamond drilling. In 1992 Phelps Dodge Corporation of Canada Limited staked the Baez 1 to 15 claims and expanded the property by staking the Baez 16 to 24 claims in 1993. Phelps Dodge had two airborne geophysical surveys conducted and investigated the property further by ground geochemical surveys, trenching and diamond drilling.

A summary of the exploration work conducted in the area is tabled below:

**Table 2. Work History Alexis Claim Area**

<b>Year</b>	<b>Company</b>	<b>Claims</b>	<b>Work Conducted</b>	<b>Samples Collected</b>	<b>Drilling metres</b>
1984	Lac minerals	Bob	Geological mapping, geochemical survey	332 soils, 5 silts, 97 rock	
1988	Lornex (Rio Algom)	OBoy	Diamond drilling 6 holes	188 core samples	892.1
1989	Northgate explorations	KW2	Geological mapping, geochemical survey	531 soils	
1990	Minequest	ZAB 1	Geophysical Survey		
1990	Independent Prospectors	BAEZA EKO			
1990	Mingold	Sabre	Geological mapping, geochemical survey, diamond drilling 10	273 soils, 19 rock	708.50

<b>Year</b>	<b>Company</b>	<b>Claims</b>	<b>Work Conducted</b>	<b>Samples Collected</b>	<b>Drilling metres</b>
			holes		
1991	Minnova	Clisbako	Diamond drilling 19 holes		3023.7
1991	88 Resources	Clisbako	Geochemical survey	1320 soils, 253 rocks	
1992	Minnova	Clisbako	Diamond drilling 11 holes		1375.9
1994	Minequest	Chilcotin Redstone	Geological mapping	15 rocks	
1994	Phelps Dodge	Clisbako	Geochemical survey	400 soils	
1994	Armeno Mines	CQ	Geological mapping	7 rocks	
1994	Cogema Resources	Quartz Lake	Geochemical survey	822 till	
1994	Phelps Dodge	Baez	Airborne geophysical survey	862 line kilometres	
1995	Phelps Dodge	Baez	Airborne geophysical survey, geochemical survey	1171 line kilometres (airborne) 320 soils	
1996	Kennecott	Chilanko	Geological mapping		
1996	Phelps Dodge	Clisbako	Resample Minnova 1991 drilling	355 samples	

#### 4.1 GOVERNMENT PROGRAMS

The first recorded work done in the area was a Geological Survey of Canada mapping program, lead by H. W. Tipper in 1949. The results of this program were published in GSC Memoir 324 (Tipper,1963). The GSC has been active in the area, mapping bedrock and surficial deposits of NTS 93F/3 and portions of the 93F/2 and 92F/3 map sheets, map sheets 93F/11, 12, 13, and 14 received a lake sediment geochemical survey. The B.C. Geological Survey also did miscellaneous detailed surveys of showings and geochemical anomalies within the area. The Geological Survey of Canada flew an airborne magnetic survey covering most or all of the area from latitudes 53°15' to 51°15' and from the Fraser River to the Coast Range.

---

## 5. Geological Setting

### 5.1 REGIONAL GEOLOGY

The Tertiary geologic elements of the Nechako Plateau area are part of a regional extensional system that extends from the Republic area of northern Washington State, northwesterly for some 1000 kilometres into the Babine district of north central British Columbia. This belt trends northwest with the approximate dimensions of 1000 X 200 kilometres. It crosses all major terrane boundaries and underlies the Quesnel, Kootenay and Omineca Terranes in the south and the Stikine Terrane in the north, crossing the oceanic Cache Creek Group. It overlaps the southern margin of the Bowser Basin where it continues northward as a thin strip along the eastern margin of the Coast Range.

Stratigraphic and intrusive rocks in the Stikine Terrane range in age from Paleozoic to Pleistocene (Figure 3). With respect to the Eocene mineral setting, the geologic elements of the Stikine Terrane may be divided into three separate packages: basement rocks, latest Upper Cretaceous-Eocene rocks associated with mineralization, and cover rocks (Table 3).

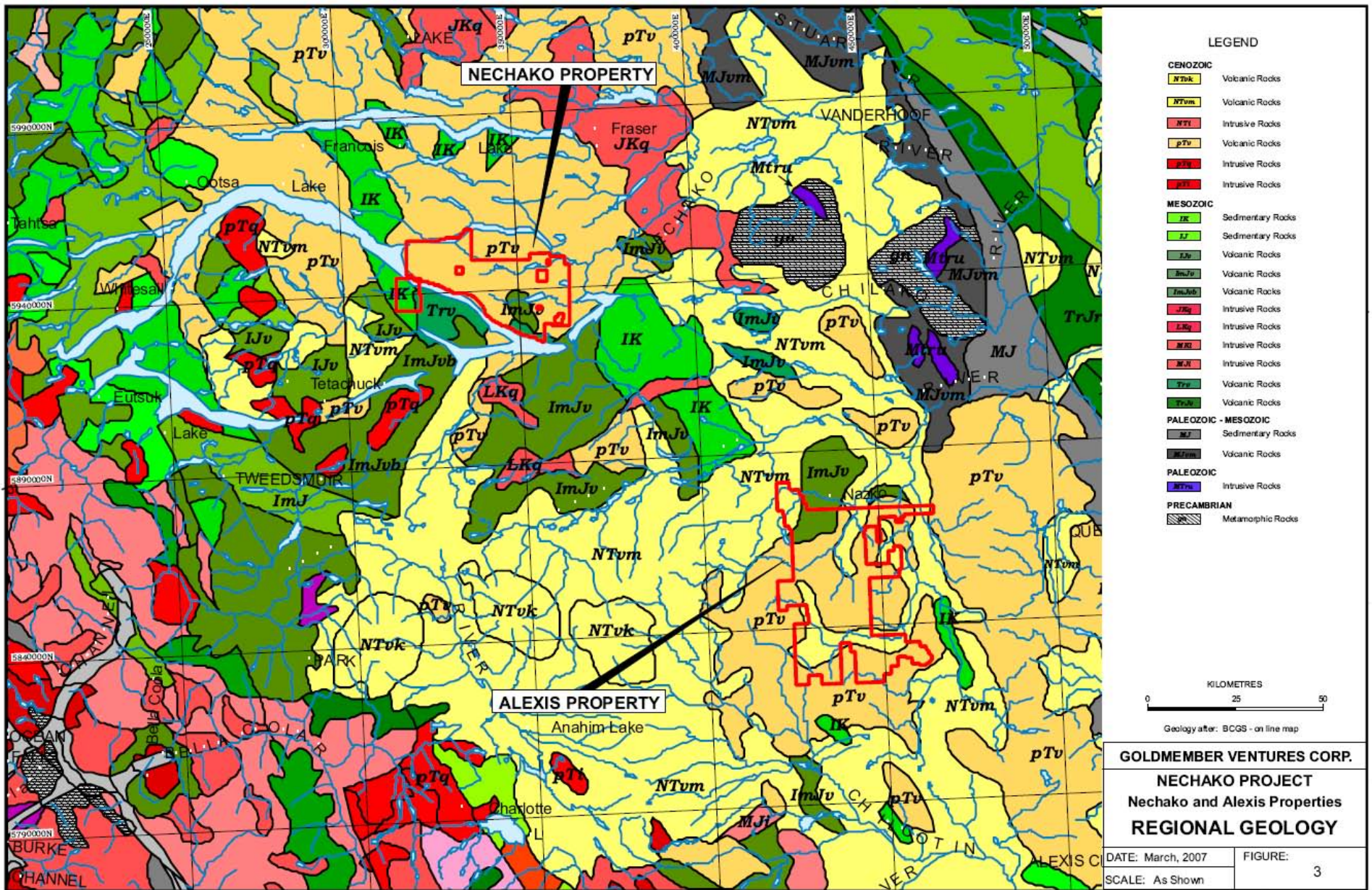


FIGURE 3. REGIONAL GEOLOGY

**Table 3. Main Geologic Map Units of the Nechako Basin**

Stratified Rocks	Intrusive and Metamorphic Rocks
11. Anahim Volcanics (Pliocene-Pleistocene)	
10. Chilcotin Volcanics (Miocene)	
9. Endako Group (Eocene-Oligocene)	
8. Ootsa Lake Group (Eocene and Palaeocene)	G. Eocene (stocks, plugs, dykes, rhyolite, felsite, porphyry, diorite, gabbro)
7. Kasalka-Kingsvale Groups (Upper Cretaceous)	F. Upper Cretaceous-Paleocene (Quanchus Intrusions: stocks and batholiths, diorite to quartz monzonite)
6. Skeena-Jackass Mountain Groups (Lower Cretaceous)	E. Mid-Cretaceous (mainly tonalite to quartz monzonite of Coast Range complex)
5. Gambier Group (Upper Jurassic-Lower Cretaceous)	D. Jurassic-Cretaceous (François Lake Batholith; quartz diorite to granite, includes quartz-feldspar porphyry)
4. Relay Mountain-Bowser Groups (Upper Jurassic-Lower Cretaceous)	
3. Hazelton Group (Lower and Middle Jurassic)	C. Middle Jurassic (locally foliated granodiorite and quartz monzonite)
2. Stuhini Group (Upper Triassic)	
1. Cache Creek Group (Upper Palaeozoic)	B. Permian (mainly granodiorite in lower Chilcotin River)
	A. Metamorphic Rocks (gneiss, schist, metavolcanics, cataclasites)

## 5.2 BASEMENT ROCKS - LOWER UPPER CRETACEOUS AND OLDER

Basement rocks to the Tertiary in the Stikine Terrane comprise Upper Paleozoic to lower Upper Cretaceous strata grouped into two major time-stratigraphic assemblages.

The oldest assemblage consists of arc volcanics of Upper Paleozoic to Middle Jurassic age which includes limestone, volcanics and sediments of the Upper Paleozoic Cache Creek Assemblage, submarine and marine island arc volcanics and sediments of the Carnian to

---

Norian subalkaline, basaltic Stuhini (Takla) Group, and the Sinemurian to Bajocian calc-alkaline Hazelton Group.

The arc volcanic assemblages are overlain by two sedimentary assemblages, the Middle Jurassic to Lower Cretaceous Bowser Lake Group and the Lower and Upper Cretaceous Skeena Group. Deltaic assemblages of the Bowser Lake Group were deposited mainly in the Bower Basin to the north of the Nechako reconnaissance area, except for its basal beds. These basal beds belong to the Ashman Formation and represent a black clastic-chert pebble conglomerate unit that covers much of the Stikine Terrane. Marine and nonmarine sediments of the Neocomian to Cenomanian Skeena and Jackass Mountain Groups blanketed much of the Stikine Terrane and sourced from the east, off the Cache Creek, Quesnel and Omineca Terranes. The blanket of Skeena Group clastics across Stikinia outlines a regional datum to which deformation and deposition of younger strata may be related. This surface represents one of three main erosional surfaces in central B.C.

The basement rocks have been affected by regional compressive tectonics. Westerly verging compression along the east margin of the Stikine Terrane, associated with the amalgamation of Stikinia, Quesnellia and the Cache Creek Terranes to the North American Craton, affects rocks as young as Upper Jurassic. Easterly verging compression along the west margin of the Stikine Terrane, associated with the amalgamation of the Wrangellia with Stikinia affects rocks as young as Late Cretaceous.

Intrusive rocks associated with the basement strata include the Upper Jurassic-Lower Cretaceous François Lake intrusions to the northeast of the reconnaissance area, and mid-Cretaceous plutons of the Coast Crystalline Complex.

Many of the northwest and northeast trending fault zones that control the distribution of the Tertiary geologic elements are fault zones whose activity can be traced back to the Upper Triassic and Lower Jurassic.

### **5.3 UPPER CRETACEOUS TO MIOCENE**

The Upper Cretaceous to Eocene metallogenic event is associated with three stratigraphic assemblages, the late Upper Cretaceous andesitic Kasalka Group, the felsic Eocene Ootsa Lake Group and the basaltic Eocene to Oligocene Endako Group. These assemblages

---

represent a generalized cycle of early andesitic volcanism, explosive felsic volcanism, bimodal felsite-basic volcanism and later basic volcanism. The early andesitic Kasalka Group, and the felsic Ootsa Lake Group strata were deposited in calderas and caldera complexes. The distribution of the older facies of the Endako Group are in part controlled by the felsic calderas. The felsic calderas are large, composite features that may measure more than 50 kilometres in diameter and are nested caldera complexes. The volcanic assemblages are associated with a fault array whose main expression is extensional. This sequence of caldera associated volcanism and extensional faulting is a common sequence through the length of the extensional belt, from the Mexican border to Babine Lake and is associated with a vast array of significant mineral deposits.

The Kasalka Group volcanics (McIntyre, 1985) occur as a number of caldera basins throughout westcentral British Columbia, on the Stikine Terrane between the Blackwater Linear zone and the north flank of the Skeena Arch. They are mainly feldspathic andesitic volcanics but local basins include explosive and passive felsic volcanism. They are associated with granodioritic stocks and plugs of the Quanchus and Bulkley Intrusions. In a number of locations in central B. C., red and green polyolithic volcanic and granitic cobble conglomerate underlies basal Kasalka strata. Age of Kasalka volcanics and associated intrusives range from 85My to 60My and fall mainly in the 72 to 67 My interval.

The Ootsa Lake Group volcanics (Duffel, 1959) are typified by light coloured felsic volcanics. They underlie broad areas of the southern Stikine Terrane from Babine Lake to the Chilcotin River and include a variety of depositional types. They occur in structurally controlled basins and in large caldera complexes. Two caldera complexes underlie the Nechako Reconnaissance area, the Mt. Dent Caldera Complex in the south (South Area) and the Cheslatta Caldera Complex in the north, (North Area). Subvolcanic intrusives are common; coeval plutonic rocks are rare within the caldera complexes but common in the basement. The Ootsa Lake Group ranges in age from 58 to 47 My with the interval of 52 to 48 My representing timing of the main felsic eruptive events.

The Endako Group (Armstrong, 1949) is a wide ranging assemblage of mainly basaltic rocks. In a general sense, the Endako Group overlies and is younger than the Ootsa Lake Group. Basaltic and andesitic rocks are commonly associated with felsic rocks in the calderas. Ages of the Endako Group show a range from 50 to 37 My. The early basaltic rocks of

---

the Endako Group overlap in both ages and depositional sites with the felsites of the Ootsa Lake Group. Although the Ootsa Lake Group and the early Endako Group are mapped as separate entities, the interval of their coincidence in space and time infers a genetic relationship.

Post-Ootsa Lake Group basaltic volcanism occurred intermittently throughout the area, from 45 My to Recent. (Mathews, 1984 and 1989; Rouse, 1988). Basaltic volcanics younger than 35 My are correlated with the Chilcotin Group. Felsic volcanics are known to be locally associated with intervals of this basalt event but no significant centre has yet been recognized.

#### **5.4 PLIOCENE-PLEISTOCENE**

*"During the Pleistocene all of Central British Columbia was covered by glacier ice that molded a multitude of features from which the glacial events can be interpreted"* (Tipper, 1971). The bulk of glacial features in Central British Columbia have been produced by the Fraser Glaciation, the last major advance. Minor late re-advances are observed around the Anahim volcanoes and along the Coast Ranges.

Within the study area glacial transport direction varies from N 0° to 30°, south of the Blackwater lineament, to N 60° to 90° north of it. Glacial deposits consist mostly of lodgement till with some areas of ablation till, esker systems, and fluvio-glacial material. A thin veneer of ablation till may occasionally overlies lodgement till. There are no extensive glacial lake deposits (sands and clays). Evidence of multiple glaciation were observed in a few localities in the form of lodgement till overlying fluvio-glacial deposits.

#### **5.5 REGIONAL STRUCTURE**

The Nechako Basin is within the Intermontane Belt of the Canadian Cordillera, mainly on the Stikinia Terrane, but overlapping onto the Cache Creek Terrane. *"A regional dextral transcurrent strain regime appears to have been important in the evolution of early Cenozoic structures in the southern part of the Intermontane Belt . . . These structures have been related to right lateral transform motions and to regional extension"* (Gabrielse et al., 1992). This regime resulted in alternating basins and arches along the Intermontane Belt:



---

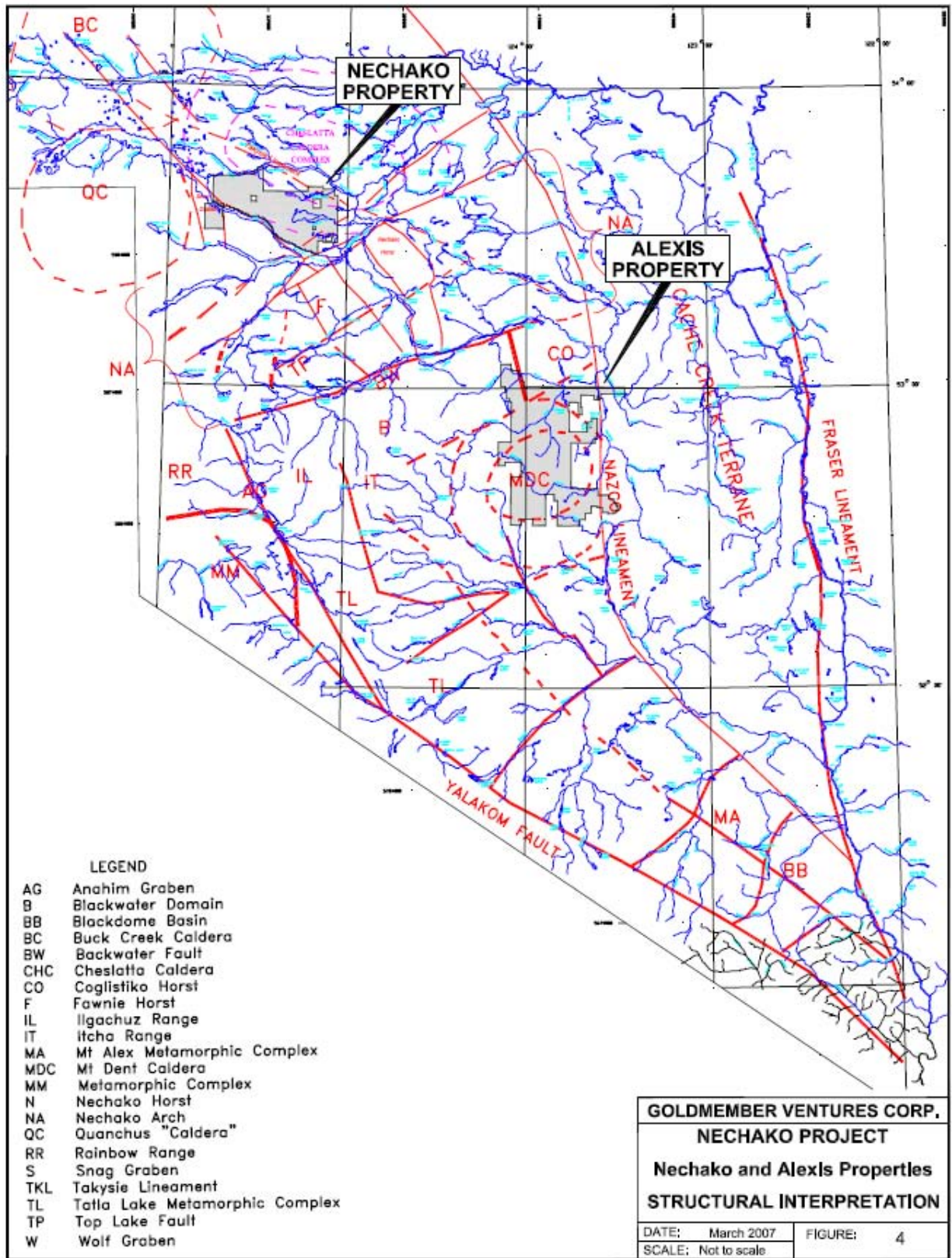
Nechako Basin, Skeena Arch, Bowser Basin, Stikine Arch (Figure 4). The Nechako Basin can be assimilated to a pull-apart basin formed between the Fraser River Fault System and the Coast Range Megalineament or one of its parallel structures extending north from the Yalakom Fault. As will be shown below, the internal structure of the Nechako Basin reflects the same structural regime.

## 5.6 PROPERTY GEOLOGY

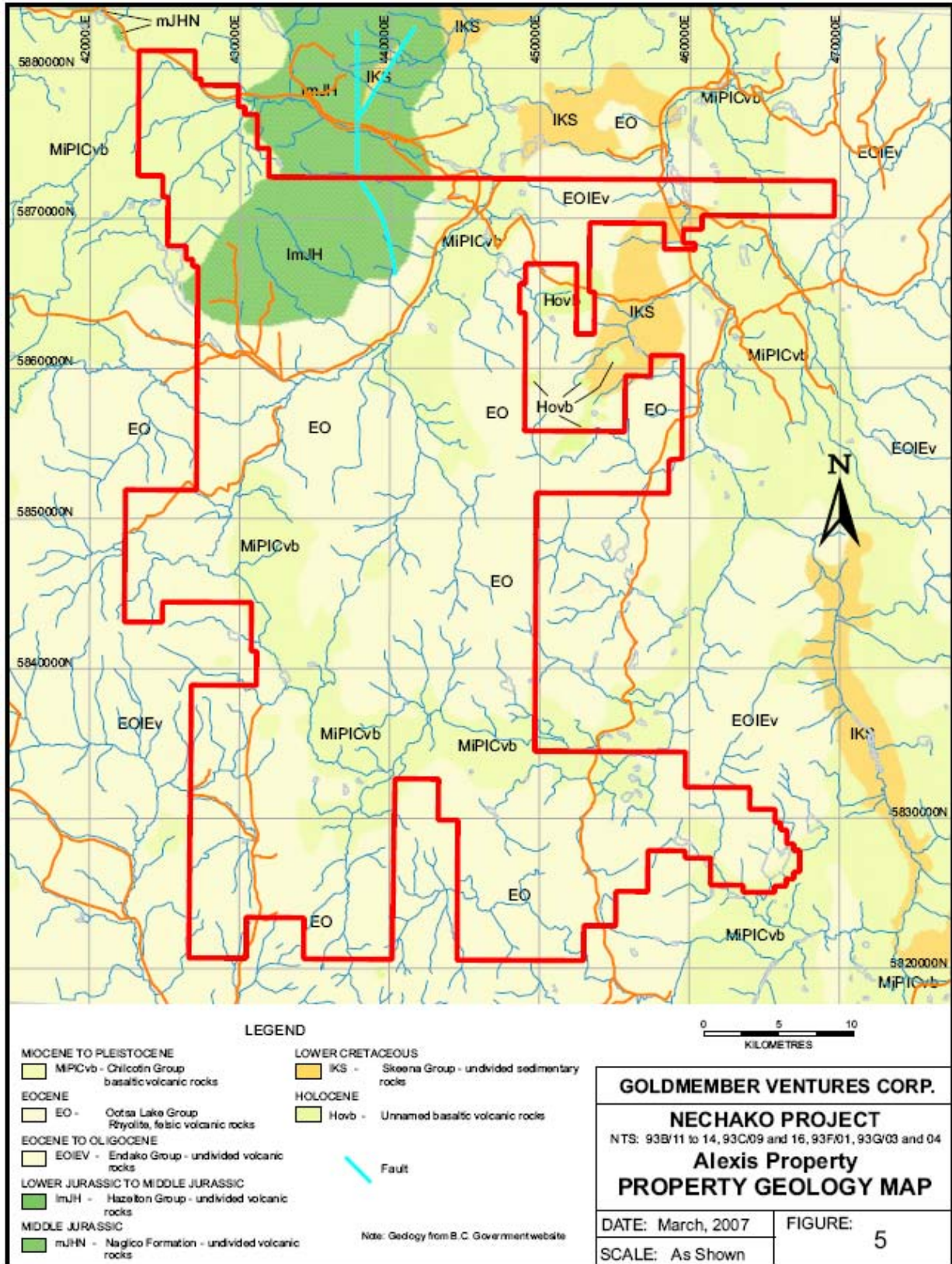
The Alexis property is underlain by an area of very low relief. Hilly topography underlies the northern and southern part of the claims with the central part of the claim of very limited topographic relief. Exposures are limited to the crests of hills as roche moutonnée, in logging slashes and along the edges of former outwash channels. The majority of the outcrop occurs in the hilly northern and southern parts. Nowhere on the claims is outcrop continuous and contacts were never seen.

The property lies within the central part of a large scale (60 km diameter) basalt, andesite and felsite volcanic caldera complex, the Mount Dent Caldera. Three main rock types present as exposure are felsic volcanics, andesites and basalts, the latter correlated with the plateau lavas of the Chilcotin Group (Figure 5). Both felsic and andesitic volcanics may be correlated with the Ootsa Lake and the Endako Group to the north or the Kamloops Group to the southeast, all of Eocene age. Although there is no direct age control on the volcanics within the property, palynomorphs from tuffaceous, lacustrine moat assemblages within the Mount Dent complex indicate a Late Palaeocene to Middle Eocene age (J. White, ASPG, pers. comm.), and K/Ar age dates of 46-50 Ma from the Nazko are, some 40-50 kilometres to the northeast, indicate an early Middle Eocene age (Rouse and Mathews, 1988).

No stratigraphic relationships are exposed on the property. The youngest strata on the claims are the basalts of the Chilcotin Group that occur as very limited exposures mainly in the central, lowland part of the claims and appear to represent valley-fill plateau lavas. The felsic and andesitic volcanics appear to be cogenetic. The strata appear to have been little deformed and reasonably flat-lying. At the southwestern and northeastern corner of the claims, rhyodacitic volcanics are topographically lower than andesites and may suggest that felsite volcanism precedes andesitic volcanism. At the apex of a prominent hill in the northern part of the claim, a northeasterly elongate ridge of quartz-eye, biotite feldspar porphyry



**FIGURE 4. STRUCTURAL INTERPRETATION**



**FIGURE 5. PROPERTY GEOLOGY MAP**

---

appears to be a dyke crosscutting andesites. These apparent contradictory age relationships between felsite and andesite suggest the possibility of two ages of felsite.

### **Endako Group**

The andesites of the Endako Group comprise the dominant lithologies on the property . Three separate assemblages are noted, in speculated stratigraphic order from the base, aphyric basalt, augite-feldspar porphyry basalt andesite and fine-grained, trachytic andesite. All the rocks are flows and flow breccias. Very minor intercalated volcanic sediments, composed entirely of andesite clasts, were noted. No bedding contacts were noted.

In the southern part of the property, the upper parts of the hills are underlain by fine-grained, platy fractured, grey to reddish, aphyric microporphyrific feldspar andesite with a fine trachytic matrix. Common areas of reddish coloured, highly vesiculated andesite are probable flow top breccias. This rock unit was noted only in the southern part of the claims, and underlies the area extending from east of Maxwell Creek to the west side of the claims.

Underlying much of the low hills in the south central part of the property is a black, grey to red, feldspar and augite phyric andesite/dacite with a glassy matrix. The porphyry units are massive to platy with a weakly developed flow lamination, marked by streaky reddish oxidized wisps, and are commonly vesicular to highly scoriaceous. A similar suite of feldspar-augite phyric andesite/dacite underlays the prominent hilly topography in the northern part of the property. A third area of exposure of the feldspar-augite phyric andesite occurs along the central part of the east boundary of the property. Textures range from crowded porphyry to sparsely porphyritic varieties that differ only in the relative percentage of phenocrysts. The similar textures and chemistry of these rocks in both the south, north and east part of the property suggests that they may represent a single unit composed of multiple flows and flow breccias. In two localities there are outcrops of friable sandstone and sharpstone pebble conglomerate composed of red, grey and black clasts of feldspar-augite phyric and aphyric andesite. These highly friable and recessive units are, where noted, zeolitized and likely represent fluvial reworking of the intercalated flow top breccia units.

Areas of generally lower topography in the central part of the property appear to be underlain by a suite of aphyric to weakly porphyritic andesite flow and flow breccias. Red and dark grey, unsorted breccias with vesicular to scoriaceous lapilli to blocks (2 metres in di-

---

ametre) are the dominant lithology. Coarsest grained breccias were noted in exposures near the west boundary of the property. This assemblage is similar to facies associated with andesitic tephra cones. Rocks from this unit are aphyric to sparsely feldspar phyric with a fine-grained matrix composed of finely felted feldspar. Near the central part of the western border of the property, proximal float of greenish, immature andesite-dacite clast conglomerate and sandstone indicate the presence of fluvial reworking of the andesitic rocks.

### **Ootsa Lake Group**

Felsic volcanics are distributed throughout the property and include dykes, domes, flows, and breccias. Two ages may be present, a lower volcanic unit and a younger intrusive unit.

In the southwest corner of the property, a series of small exposures comprise reddish to mauve hornblende-feldspar phyric ash flow tuffs. These rocks are associated with aphyric, highly vesicular dark grey volcanics with a glassy, partly devitrified matrix. These rocks may be interpreted to underlie the augite-feldspar phyric dacites. In the eastern part of the property, widely spaced exposures of rhyodacite and rhyolite were noted. An isolated exposure in the southeast central area comprised reddish-white, weakly flow laminated feldspar, quartz-eye, biotite rhyolite. Similar rocks underlie a small hill in the northeast corner of the property. In both these areas, the units are probably extrusive.

A small outcrop of aphyric, platy, flow banded, glassy matrix rhyolite is exposed on the southwest corner of a small lake in the northeastern part of the area. Shallow flow banding suggests a possible extrusive but is inconclusive.

Quartz-biotite-feldspar rhyolites are exposed in the northwest and southeast portions of the map area. In the northwest area, five small exposures of this white, cream to yellowish, quartz phyric unit are exposed in a linear N30° trend over a strike length of some 4 kilometres that is suggestive of a dyke-like body. Atop the main hill in the north part of the property, this unit is exposed as a 20-metre wide low ridge, traceable for some 300 metres and there appears as a dyke intrusive into feldspar-augite andesite/dacite. To the north, exposures of this unit are locally brecciated with fine opaline silica fillings. At the most northerly exposures of these rocks, adjacent aphyric andesites are bleached.

To the immediate northwest of the property, at the head of a distinctive canyon, felsic breccias and flow units are exposed. Most prominent are coarse breccias with clasts to 2 metres

---

of monolithic biotite, massive, plate to vesicular rhyolite breccia that form impressive hoodoo weathering cliff faces. Interbedded are glassy matrix, perlitic fractured trachytic feldspar-augite felsite with shallow dipping flow banding. Two and one-half kilometres to the south, to the immediate west of the property, a well defined knob is underlain by relatively homogenous, blocky to platy, light grey biotite-feldspar-quartz eye rhyolite that is most plausibly an intrusive dome.

Along and to the immediate east of the east central boundary of the claim, felsic rocks include both feldspar-biotite and feldspar-biotite-smoky quartz phyric units. The latter units are cream, white to pinkish, flow banded, massive to breccias, commonly with local kaolinitic alteration and lithophysae patches. Here, the rhyolite breccia units contain clasts of feldspar-augite phyric andesite. The quartz phyric felsites appear to overlie the biotite-feldspar phyric felsite which in turn appears to overlie andesites.

In the south-central part of the property, an arcuate linear ridge is underlain by hornblende-feldspar  $\pm$  biotite rhyolite interpreted to be a dyke intrusive into aphyric andesite.

### **Chilcotin Group**

The basaltic rocks of the Chilcotin Group underlies the low areas on the property and in the east central part, along and west of Maxwell Creek. The rocks are poorly exposed. The basalts are dark to light grey, fine-grained with scattered phenocrysts of feldspar and olivine. The units are commonly vesicular and, for coarser grained varieties, display a diktytaxitic texture. Boulders of the Chilcotin Group are widespread throughout the property, and the separation of glacial transported float and outcroppings may be difficult to determine.

## **5.7 STRATIGRAPHIC RELATIONS**

The volcanic assemblages of the Alexis area comprise three volcanic episodes, commencing with felsic volcanism, followed by andesite-dacite and terminating with a felsic suite.

Earliest volcanism may be represented by hornblende phyric rhyolites noted in the south-west and eastern parts of the area. These units are overlain by a suite of andesite and dacite flows and flow breccias. Coarse grained andesite breccia units may represent relics of andesite cones. A centre of felsic volcanism appears to be exposed to the immediate north of the

---

property in the Canyon Mountain area and to the east. These felsic volcanics and associated intrusive dome are similar to dyke-like bodies intrusive into the andesite-dacite assemblages to the southeast. Felsite flow and flow breccia overlies the andesite suite to the eastern part of the area.

## **5.8 DEPOSIT TYPES**

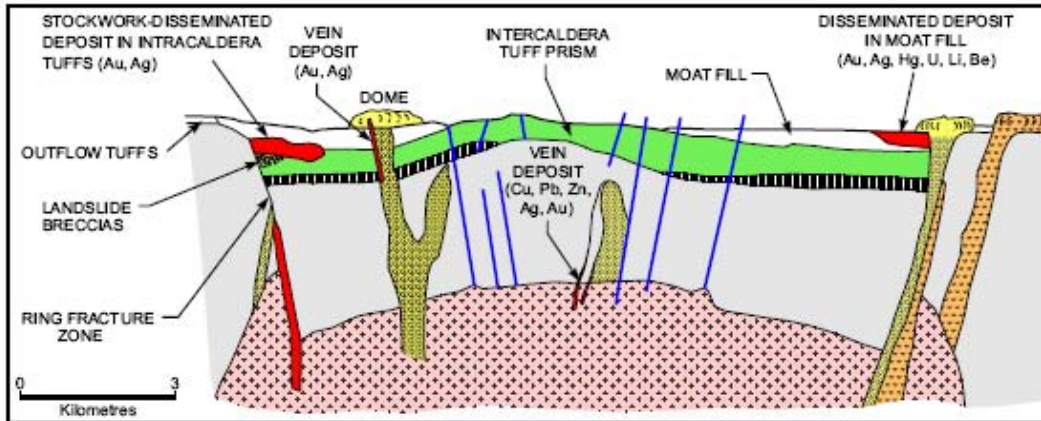
The following description on low sulphidation epithermal goldsilver mineralization is adapted from A. Panteleyev, 1996 from the British Columbia Geological Survey

The depositional environment/geological setting of this type of deposit is generally in high-level hydrothermal systems from depths of ~1 km to surficial hot spring settings (Figure 6). The deposits are hosted in regional-scale fracture systems related to grabens, (resurgent) calderas, flow-dome complexes and rarely, maar diatremes. Extensional structures in volcanic fields (normal faults, fault splays, ladder veins and cymoid loops, etc.) are common, and locally graben or caldera-fill clastic rocks are present. High-level (subvolcanic) stocks and/or dikes and pebble breccia diatremes occur in some areas. Locally resurgent or domal structures are related to underlying intrusive bodies.

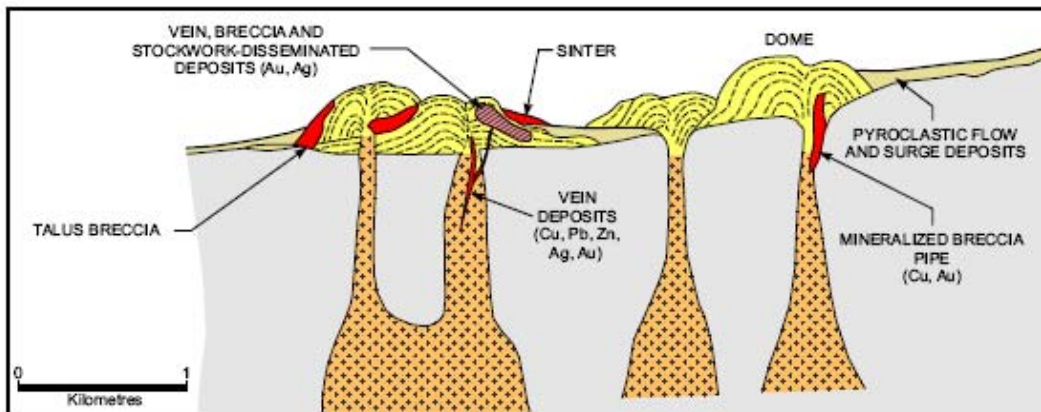
Host lithologies can include most types of volcanic rocks, but calcalkaline andesitic compositions predominate. Some deposits occur in areas with bimodal volcanism and extensive subaerial ashflow deposits. A less common association is with alkalic intrusive rocks and shoshonitic volcanics.

The mineralized zones are typically localized in structures, but may occur in permeable lithologies. Upward-flaring mineralized zones centred on structurally controlled hydrothermal conduits are typical. Large (> 1 m wide and hundreds of metres in strike length) to small veins and stockworks are common with lesser disseminations and replacements. Vein systems can be laterally extensive but ore shoots have relatively restricted vertical extent. High-grade ores are commonly found in dilational zones in faults at flexures, splays and in cymoid loops. Typically the veins display textures including open-space filling, symmetrical and other layering, crustification, comb structure, colloform banding and multiple brecciation. The veins generally consist of quartz, amethyst, chalcedony, quartz pseudomorphs after calcite, calcite, adularia, sericite, barite, fluorite, and Ca-Mg-Mn-Fe carbonate minerals such as rhodochrosite, hematite and chlorite.

**VOLCANIC LANDFORMS, SHOWING MODELS OF IDEALIZED SITES FOR MINERALIZATION,**  
 (After Sillitoe and Bonham 1984)



**CALDERA (RESURGENT)**



**FLOW-DOME COMPLEX**

<b>GOLDMEMBER VENTURES CORP.</b>	
<b>NECHAKO PROJECT</b>	
NTS: 93F/06,11,12	
<b>Nechako and Alexis Properties</b>	
<b>B.C. EPITHERMAL MODEL</b>	
DATE: March, 2007	FIGURE: 6
SCALE: As Shown	

**FIGURE 6. BC EPITHERMAL MODEL**



---

The predominant minerals in these types of deposits include pyrite, electrum, gold, silver, and argentite with lesser amount of chalcopyrite, sphalerite, galena, tetrahedrite, silver sulphosalt and/or selenide minerals. Deposits can be strongly zoned along strike and vertically. Deposits are commonly zoned vertically over 250 to 350 m from a base metal poor, Au-Ag-rich top to a relatively Ag-rich base metal zone and an underlying base metal rich zone grading at depth into a sparse base metal, pyritic zone. From surface to depth, metal zones contain: Au-Ag-As-Sb-Hg, Au-Ag-Pb-Zn-Cu, and Ag-Pb-Zn. In alkalic host rocks tellurides, V-mica (roscoelite) and fluorite may be abundant, with lesser molybdenite.

Silicification is extensive in ores as multiple generations of quartz and chalcedony are commonly accompanied by adularia and calcite. Pervasive silicification in vein envelopes is flanked by sericite-illite-kaolinite assemblages. Intermediate argillic alteration [kaolinite-illite-montmorillonite (smectite)] forms adjacent to some veins; advanced argillic alteration (kaolinite-alunite) may form along the tops of mineralized zones. Propylitic alteration dominates at depth and peripherally.

In some districts the epithermal mineralization is tied to a specific metallogenic event, either structural, magmatic, or both. The veins are emplaced within a restricted stratigraphic interval generally within 1 km of the paleosurface. Mineralization near surface takes place in hot spring systems, or the deeper underlying hydrothermal conduits. At greater depth it can be postulated to occur above or peripheral to, porphyry and possibly skarn mineralization. Normal faults, margins of grabens, coarse clastic caldera moat-fill units, radial and ring dike fracture sets and both hydrothermal and tectonic breccias are all ore fluid channeling structures. Through-going, branching, bifurcating, anastomosing and intersecting fracture systems are commonly mineralized. Ore shoots form where dilational openings and cymoid loops develop, typically where the strike or dip of veins change. Hangingwall fractures in mineralized structures are particularly favourable for high-grade ore.

These deposits form in both subaerial, predominantly felsic, volcanic fields in extensional and strike-slip structural regimes and island arc or continental andesitic stratovolcanoes above active subduction zones. Near-surface hydrothermal systems, ranging from hot spring at surface to deeper, structurally and permeability focused fluid flow zones are the sites of mineralization. The ore fluids are relatively dilute and cool solutions that are mixtures of

---

magmatic and meteoric fluids. Mineral deposition takes place as the solutions undergo cooling and degassing by fluid mixing, boiling and decompression.

---

## **6. Mineralization**

The following descriptions are summarized from the B.C. Minfile database and from various company reports

### **6.1 093C 015\_BAEZ, OBOY, CAMP, RIDGE**

The Oboy occurrence area is underlain by bleached, flat-lying Lower Tertiary Ootsa Lake Group andesite flows, flow breccias and minor tuffs. The rocks are fractured in a predominant north and north-northeast direction with a minor fracture pattern striking east.

The Camp zone as defined by drilling is a broad north-northeast trending zone of pervasively bleached, pyritic, potassium feldspar flooded andesitic flows and flow breccias. Weathering and oxidation extends, on average, to a depth of 35 metres. Within the bleached area are more restricted steeply dipping zones of quartz-pyrite veining, brecciation and pervasive quartz-sericite alteration which are associated with anomalous arsenic, silver and gold values. Silicification occurs most commonly as numerous, vuggy quartz-pyrite druses. Chlorite and calcite occur as fracture-fillings. Highest values in a 2.0 metre drill core sample are 6.2 grams per tonne silver, 0.32 grams per tonne gold and 995 parts per million arsenic (Assessment Report 16962). The Camp zone has been tested by drilling for 300 metres along strike and to a maximum depth of 60 metres.

The Ridge zone covers a small, 50 by 50 metre area at the west edge of the property. Anomalous silver values occur in a quartz stockwork. Rock chip sampling returned a value of 2.5 grams per tonne silver (Assessment Report 15298).

### **6.2 093C 016 CLISBAKO, NORTH, DISCOVERY, CENTRAL, RUBY, BAKO, BARI**

Typically, alteration halos envelope a central zone of siliceous quartz stockwork and breccias within near north trending controlling fault structures. The alteration envelopes are dominantly argillic, generally widespread and locally intense. Gold grades are elevated close to the central silicified zone while the argillic envelope is typically barren which may extend up to 150 metres from the central silicified zone.

---

At least three major hydrothermally altered zones, a number of weaker alteration zones, and extensive areas of quartz float occur within the eastern half of the property. The alteration zones are epithermal in nature and characterized by widespread bleaching and argillic alteration accompanied by a pervasive, moderate to strong stockwork of quartz veinlets and microveinlets. Extensive zones of multistage, intense veining, silicification and brecciation are developed. Very fine-grained pyrite, marcasite and arsenopyrite locally are present in amounts up to 5 per cent. Two hot spring (tufa) deposits are also located on the property.

The three main alteration zones on the Clisbako property are referred to as the North zone, Central zone and South zone. The Central zone is 500 metres south-southeast of the North zone, and the South zone is 2000 metres south of the North zone. The North and South zones have an apparent true width of 350 to 400 metres; the Central zone is at least 150 metres wide. Two smaller zones referred to as the Trail zone and Discovery zone occur along the projected strike of the South zone, approximately 400 and 1200 metres respectively, to the northeast. Two broad, weaker alteration zones occur along the projected strike of the North zone, centred approximately 1500 and 2000 metres respectively to the southwest.

The alteration zones appear to have developed along complex, steeply dipping, north to northeast trending fault structures. Internally, the alteration zones are complex; many appear to be controlled by a series of closely-spaced, subparallel faults rather than a single major structure. The main alteration zones appear to have a long history of development, characterized by episodic periods of strong, resurgent, hydrothermal activity which resulted in several stages of fracturing, brecciation, veining and silicification. Some phases of quartz veining and silicification are sulphide-poor and others are sulphide-rich; pyrite is the main sulphide present, but generally is extremely fine grained and difficult to recognize. Marcasite, arsenopyrite and pyrargyrite have also been identified. In general, better gold-silver values occur in quartz veins which show some banding or in silicified sections which display several stages of brecciation. Carbonate minerals are rare, but coarse bladed carbonate replaced by quartz has been noted in a number of locations. In most zones, argillic alteration accompanied veining and silicification but as silicification advanced, previously argillic altered units became silicified.

In the North zone, rock geochemical values average more than 0.3 grams per tonne gold ranging to a high of 1.07 grams per tonne; silver values are in the 5 to 10 gram per tonne

---

range. In the Central or "Ruby" zone, silver values up to 97.7 grams per tonne have been obtained; gold assayed up to 1.09 grams per tonne. Pyrargyrite was observed in two outcrops in the Central zone (Assessment Report 20864).

---

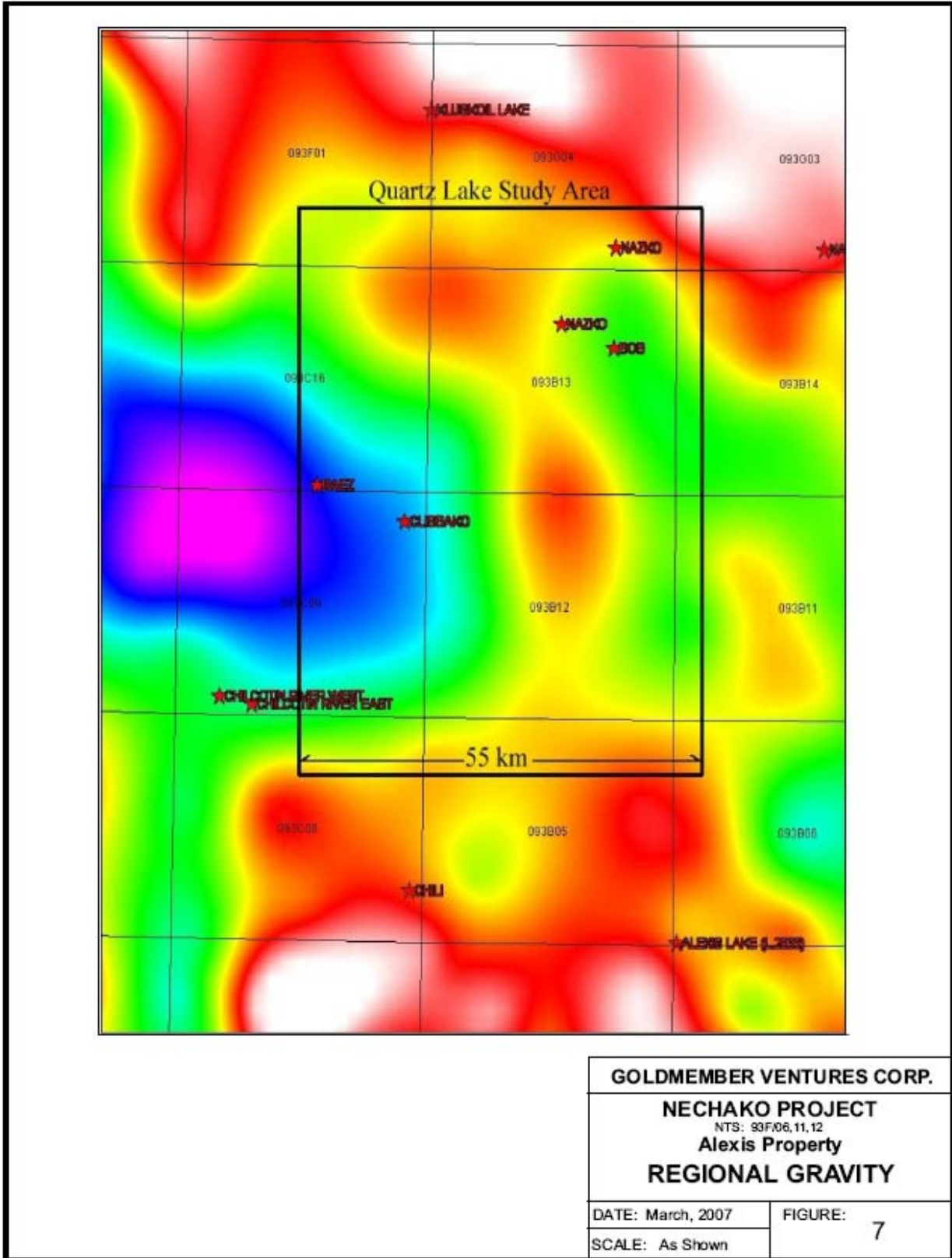
## 7. Exploration

The 2006 exploration program undertaken by the company consisted of a regional study and reprocessing of the existing Government geophysical data. The company employed consultants from SJ Geophysics and SJV Consultants of Delta B.C. to reprocess airborne magnetic and gravity data covering the Nechako project, and to produce a series of 3 dimensional inversion maps and to offer their conclusions and recommendations to aid the company in its exploration programs. The full regional reports produced by SJ Geophysics appear in the Appendix III. The following is summary of the reports.

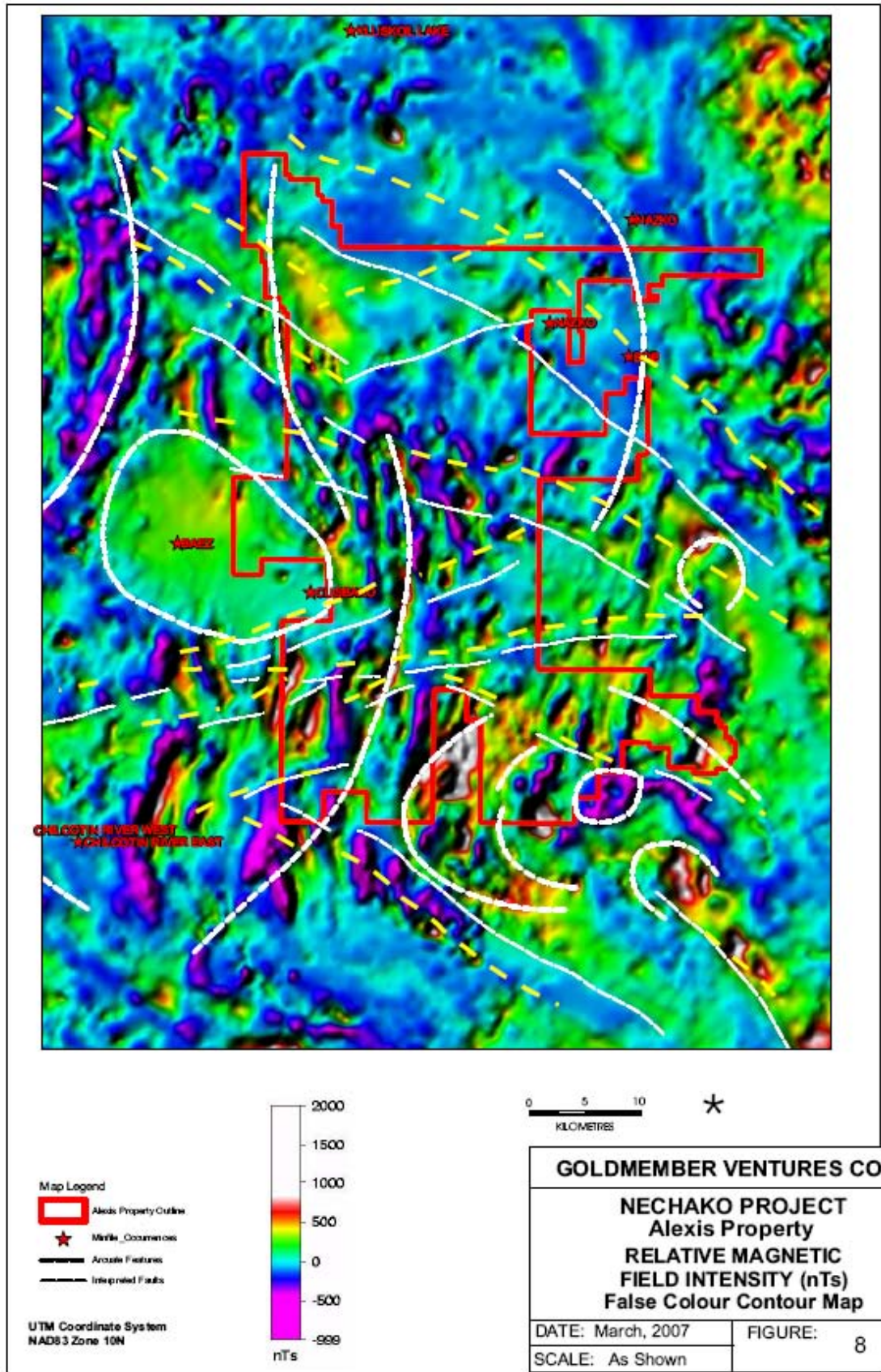
The area covered by this study is centered near 53° 30' North Latitude and 123° 45' West Longitude and encompasses a rectangular block approximately 55 km east-west by 70 km north-south. It straddles 12 NTS map sheets, including all of 93B12 and 93B13 plus portions of adjacent sheets. Four sets of exploration data were examined: regional airborne magnetics, gravity, geochemistry and geology including the MinFile data base. The magnetic and gravity data were examined both as plan maps and as 3D inversion models. The intention of this study was to outline areas of interest for further exploration. The reports of this study are included in Appendix III.

The government gravity map (Figure 7) is based on data gathered at 2000m grid intervals and is consequently reflecting very large, deep structures. The most prominent feature is a large low, approximately 40 km across centred immediately west of the study area. Moderate gravity highs flank this feature and reflect regional arcuate trends that encircle the low. While these responses originate from extremely deep structures (5 – 20 km) and are not specific exploration targets, they do provide a basis for understanding the regional trends evident in the near surface rocks.

The government magnetic data is also considered regional in nature although it was gathered on 1000m spaced survey lines and is therefore denser than the gravity data. The magnetic map (Figure 8) reflects similar regional arcuate features that are evident in the gravity data however it also shows significantly more detail and outlines structures that are generated by rock units closer to the ground surface. The magnetic relief is significant, ~ 3000 nTs over the study area.



**FIGURE 7. REGIONAL GRAVITY**



**FIGURE 8. RELATIVE MAGNETIC FIELD INTENSITY: FALSE COLOUR CONTOUR MAP**

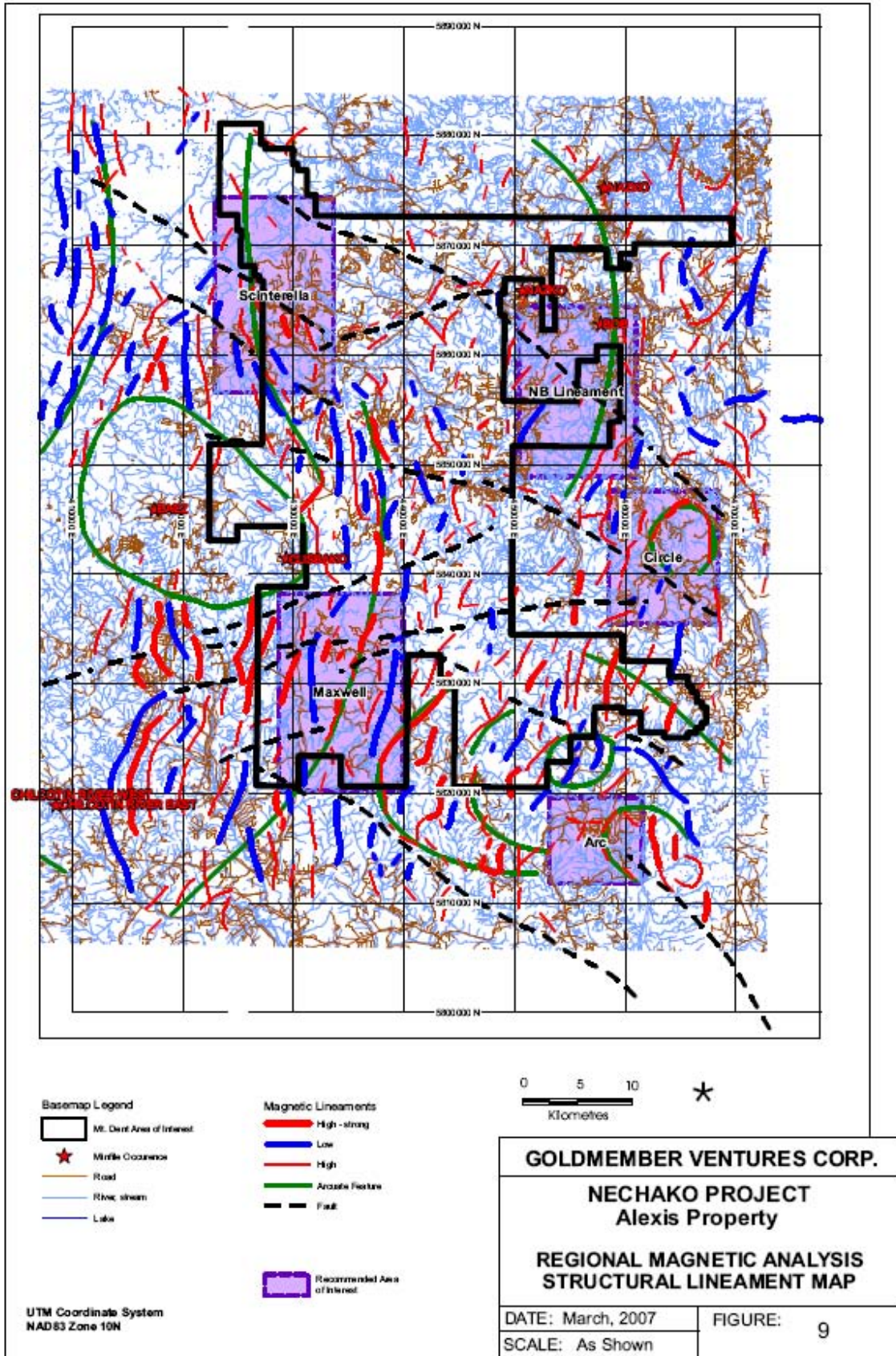


---

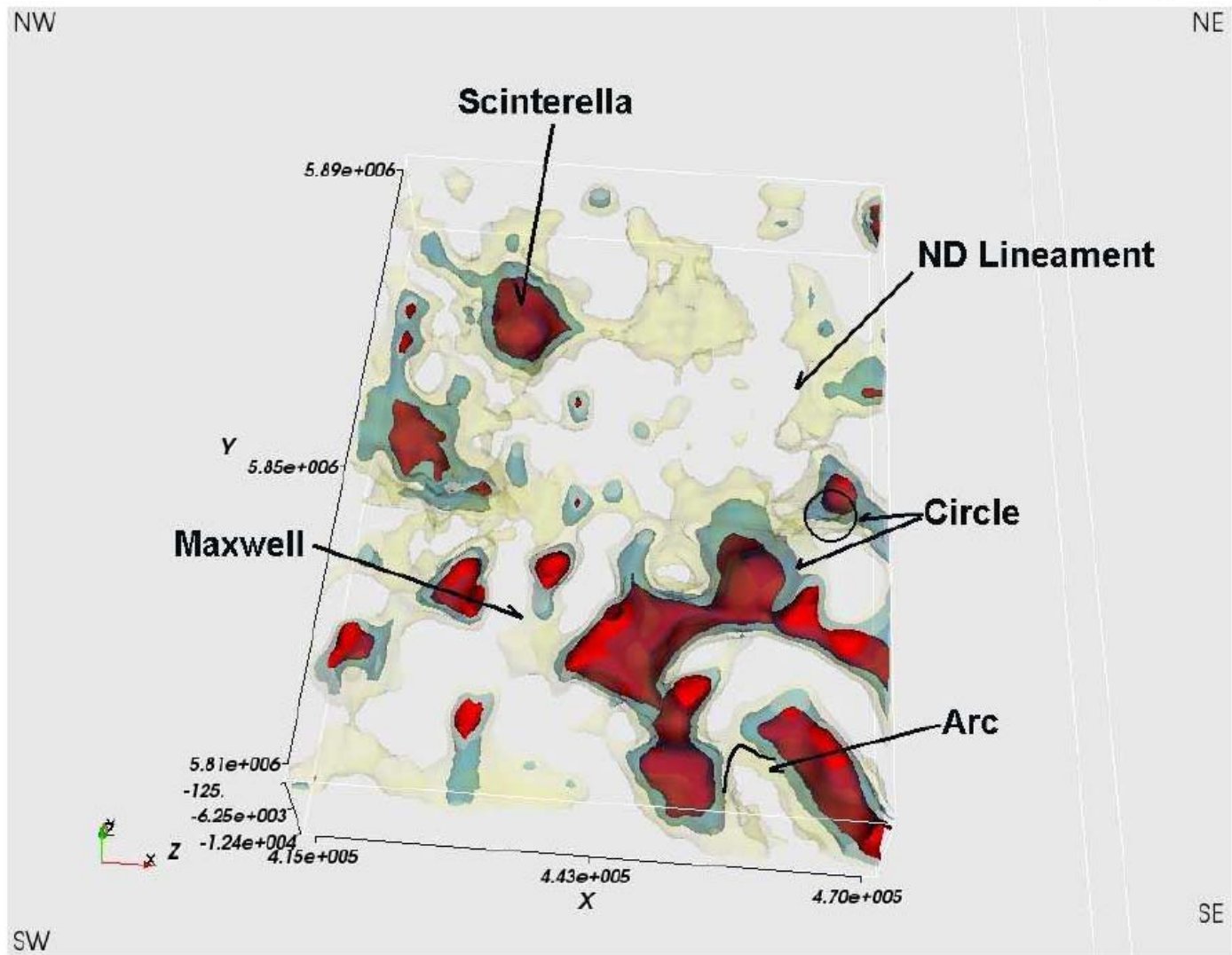
There are several large areas that are reflected by quiet and subdued magnetic amplitudes, suggesting the presence of a large, relatively uniform lithological unit. One of the most prominent of these is in the Mt. Dent area, straddling the western side of the study area. The most distinctive magnetic responses are series of narrow, high and low linears. These generally strike about N20°E but also tend to bend and trace out the regional arcuate lineations. These are undoubtedly tracing discrete lithological or facies units and provide an excellent tool for mapping geological structures. Breaks and offsets in these magnetic linears are a clear indication of significant faulting in the area. There are three dominant orientations to the regional fault patterns across the study area: N45°W, N70°W and N70°E. Detailed analysis of smaller areas shows a large amount of more localized faulting, much of which parallels the regional fault trends. There are several areas where small, localized magnetic highs are mapped, suggesting the presence of intrusions. Many of these localized features align with similar responses and form regional trends, likely indicating they are associated with major, deep-seated structures. Some of these anomalies are surrounded by “ring” patterns, possibly indicating alteration zones typical of epithermal or porphyry style mineralization.

Five areas of interest were recommended for ground follow-up investigations as highlighted on Figures 9, 10. These selections are based on a combination of anomalous geochemistry, previous work and magnetic responses.

- Maxwell – This area is some 11 km x 18 km in size and encompasses an area of geochemical samples that are highly anomalous in many elements. The magnetic data suggests this area has been subjected to intensive deformation with intersecting N70°W and N70°E faults present.
- Sinterella – This target in the NW corner of the study area is centred across a large cinder cone reported by geologists. Limited geochemical samples from the area show anomalous values in Au, As and Pb. The magnetic response is relatively quiet, suggesting the presence of a large, deep structure that is bound to the north and south by N45°W trending faults.
- NB Lineament – This area was selected because of anomalous Au, As, Pb and Mo geochemical values that fall along a regional arcuate magnetic feature that also hosts the Nazko and Bob Minfile occurrences. There is a parallel geochemical



**FIGURE 9. REGIONAL MAGNETIC ANALYSIS: STRUCTURAL LINEAMENT MAP**



This image is viewed from an elevated vantage point to the south of the study area. The shadowed areas reflect three levels of high susceptibility material: red = 0.03, blue = 0.02, yellow = 0.01. The image is annotated with the 5 areas of interest that have been recommended for ground follow-up exploration.

**FIGURE 10. TITLE FOR THIS FIGURE?**

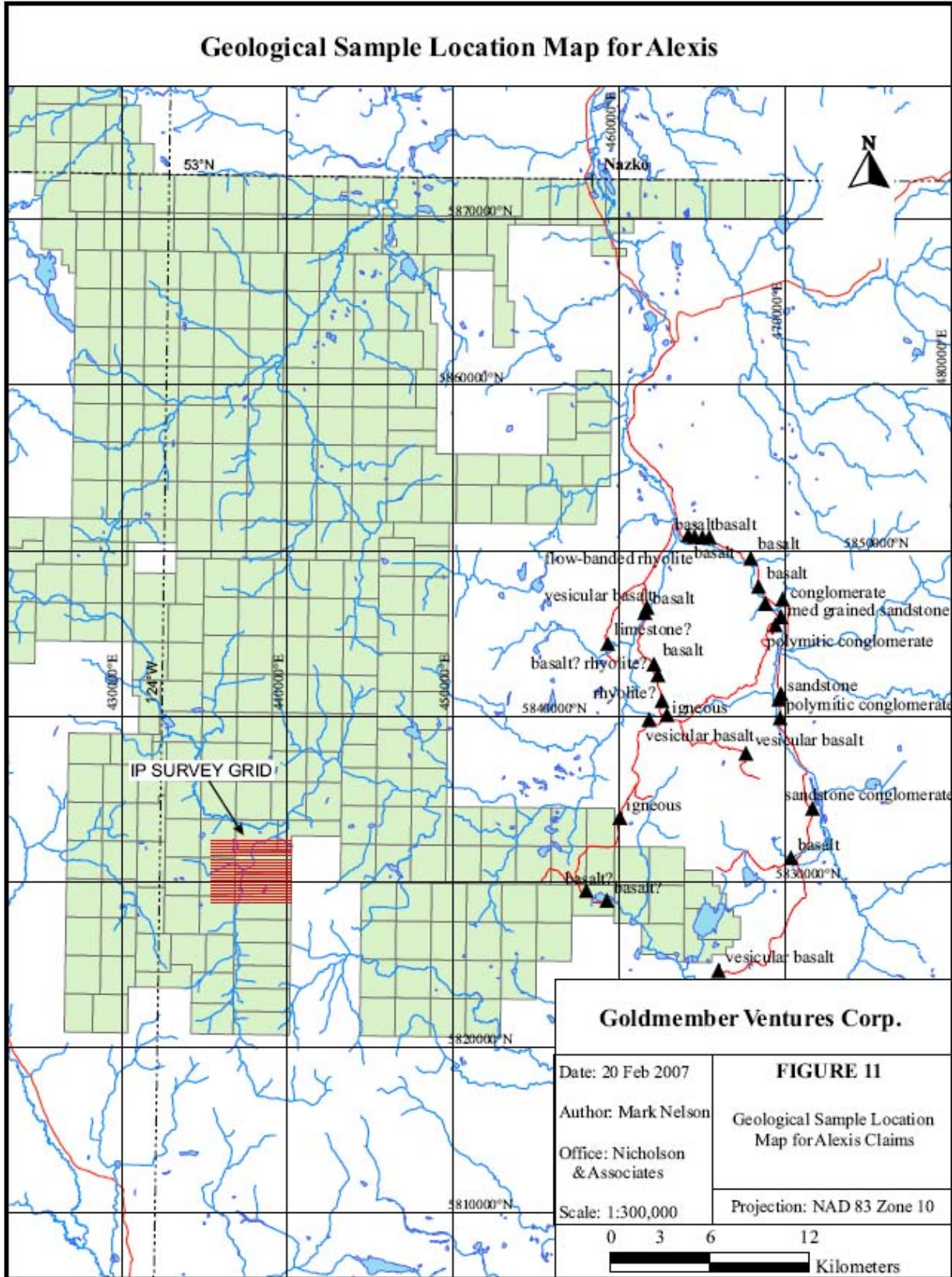
---

trend, located some 5.5 km to the west that is only weakly evident as a magnetic feature. The area has been cut by several intersecting faults.

- Circle – This area includes two separate exploration targets. The first is a circular magnetic anomaly, approximately 6 km across. Anomalous Pb geochemical values surround the magnetic anomaly and anomalous Au and As values are mapped along its western flank. The second target is located some 5.5 km to the southwest and is centred over a cluster of geochemical samples high in Au, As, Pb and Ag. These are also located near the intersection of several major and minor faults.
- Arc – This area is located in the extreme SE corner of the study area where a strong NW trending magnetic high terminates against an equally strong magnetic low. The magnetic patterns suggest the presence of a regional fold structure. The Arc target is located along the southwest flank of this feature, where the edge of a moderate magnetic low exhibits anomalous Au and Ag values. The implication is that the geochemical anomalies are associated with a discrete geological contact that can be mapped magnetically.

On the Alexis property a single grid totaling 103 line-kilometres covering the Maxwell anomaly mentioned above was established. The baseline was again oriented north-south with winglines running east-west, with line spacing of 200 metres and stations established every 50 metres. A full copy of the 3D IP surveys appears in Appendix IV.

Concurrent with the geophysical surveys a program of geological mapping was conducted along the logging roads on the property. Several rock type samples were collected and catalogued for reference for future mapping. The sample locations and rock types are shown on Figure 11, full rock descriptions appear in Appendix I.



**FIGURE 11. GEOLOGICAL SAMPLE LOCATION MAP**

---

## 8. Results

The Alexis property grid was established to test the mineral potential of the Maxwell anomaly identified in the regional study. The grid was established to investigate the geophysical character of the underlying rocks. The Miocene and Pliocene Chilcotin basalts (Mpvb – olivine basalt flows, breccia, tuff) cover most of the central part of the grid and the Ootsa Lake Group of Upper Cretaceous and Lower Tertiary age (Ktol – rhyolite, dacite, trachyte, sandstone, shale, conglomerate) cover the southeastern and northwestern corners of the surveyed area (see Figure 12).

The survey results display a northeast-southwest trending corridor of moderate to high chargeability which runs through the centre of the grid area as outlined by the white annotated lines in Figure 13. The northwest and southeast corners of the survey area are characterized by very low chargeability with values less than 3ms. The boundaries of this corridor closely resemble the historical geological mapping; suggesting that chargeability is closely linked to the geological units. This implies that the Miocene and Pliocene Chilcotin basalts provide a stronger chargeable signature than the other geological units for this project grid. Four relatively high (> 12ms) chargeability features are distinguishable within the chargeability corridor. These are labeled 1 through 4 in Figure 13. Features 1, 2 and 3 chargeable bodies occur parallel to the northern flank of the corridor; whereas, Feature 4, the smallest of the features, is more concentrated near the southern flank. Closer examination of Feature 3 shows a north-south break within the feature itself.

The data reveals that the region has several scattered bodies with moderate to high resistivity values (greater than 125 ohm/m). Two major northeast southwest trending lineations are distinguishable within the data that begin to separate these features as shown in Figure 14. The northern lineations (labeled A) is consistent across the entire grid; however, the southern lineation (B) is split in the centre. The middle section of the lineation appears to be offset to the southeast corner by approximately 1000 metres Figure 14.

A close association exists between the drainage pattern and that of the resistivity breaks as map by the zones of resistive material. The offset lineation (B') is a clear example of this. Where B' is offset to the southeast corner, the creek takes a significant jog to the southeast and then eventually turns back to the northwest. In this case the river may be mapping the location of cross faulting for this offset region.

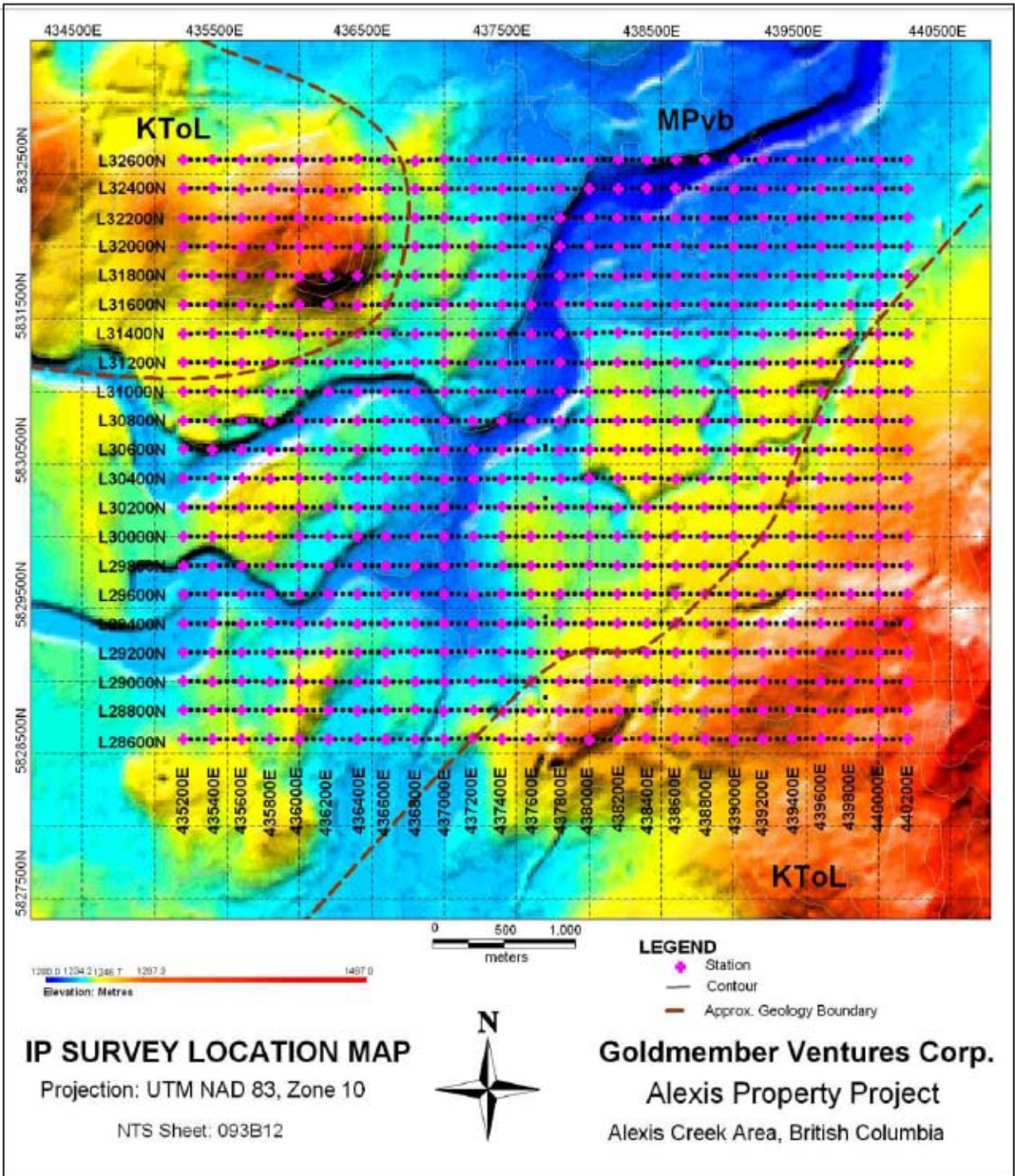
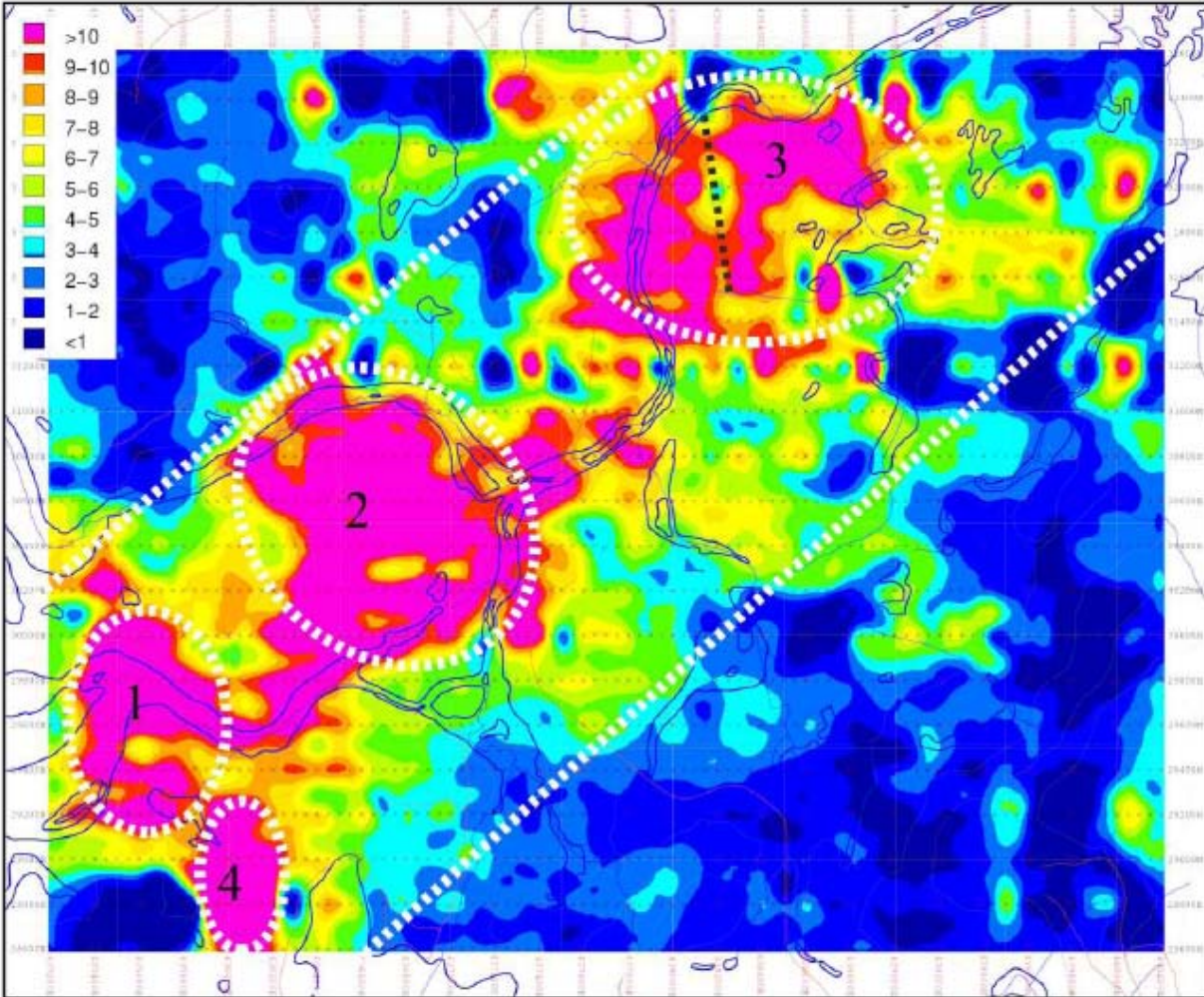


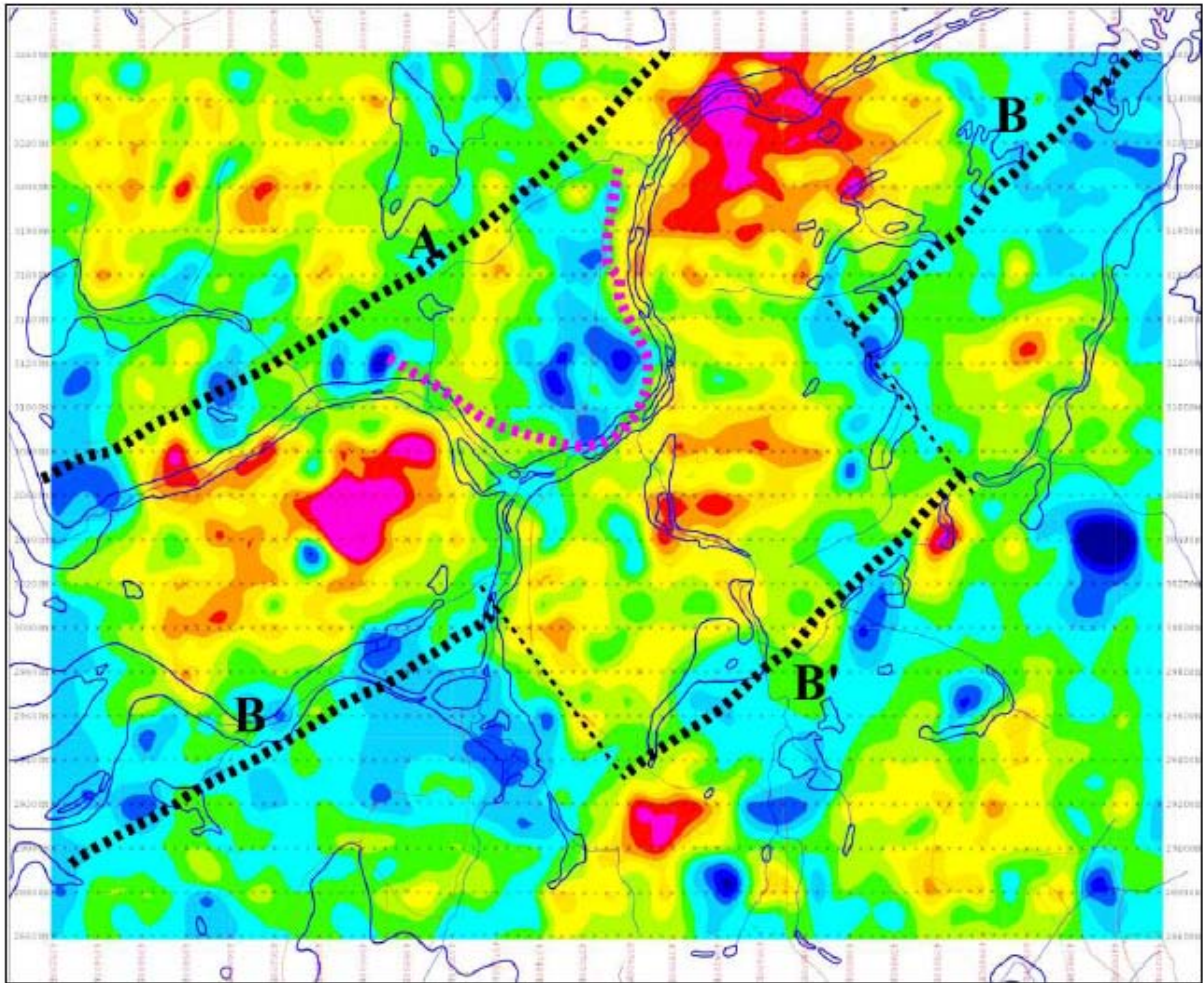
FIGURE 12. IP SURVEY LOCATION MAP



Alexis Property  
 Inverted Chargeability Model at 100m Depth

**FIGURE 13. INVERTED CHARGEABILITY MODEL AT 100M DEPTH**





Alexis Property  
Inverted Resistivity Model at 100m Depth

**FIGURE 14. INVERTED RESISTIVITY MODEL AT 100M DEPTH**

---

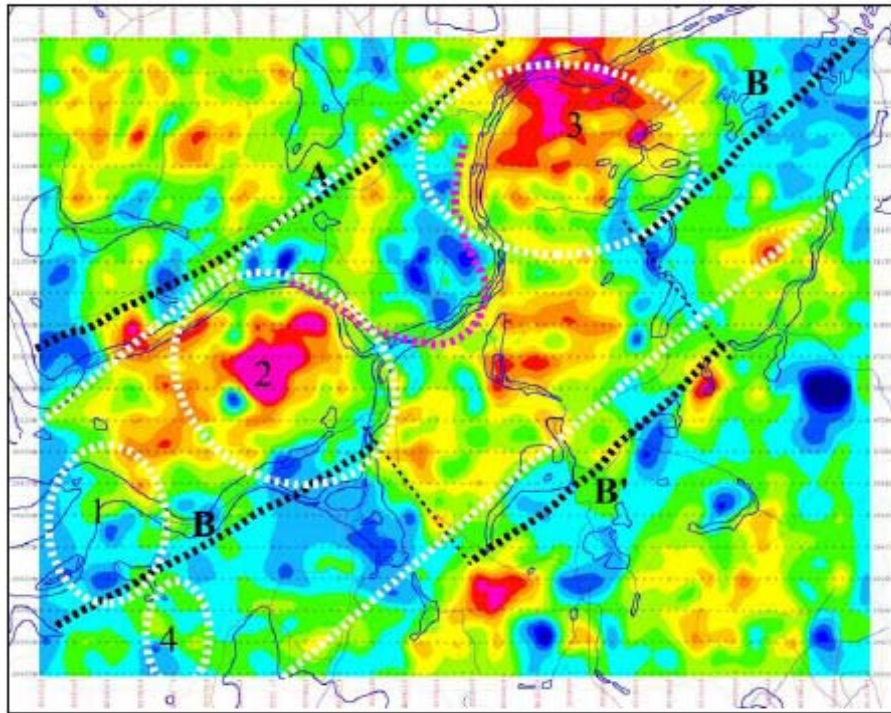
Bringing the two geophysical parameters together to examine their associations can provide further insight into an interpretation. By adding the two lineations/features outlines onto the same image will show the correlation between the chargeability and resistivity. The compilation can be seen in Figure 15, which shows the northern flank of the chargeability corridor being coincident with the resistivity lineation A. This break in both resistivity and a change in the chargeability characteristics may signify that this is a geological contact. The southern flank of the chargeability corridor is more complex. Examining the resistivity features on the chargeability plan map, shows there are also some close associations between the two. It appears that the southern edge of chargeability features 1, 2 and 3 are controlled by the resistivity lineation B. It is also noted that the southern flank corridor does line up with the offset section of B'. The chargeabilities southern flank may also be mapping a geological contact. With the known geological mapping, this is safe assessment.

The other features that stand out is that chargeability feature 2 and 3 are associated with resistive regions with the highest resistivity values near the core of the chargeability feature. Unlike feature 2 and 3, features 1 and 4 are not associated with raised resistivity values. The only notable difference between feature 1 and 4 is that feature 4 is to the south of the resistivity lineation B. We are able to see the spatial relationship between the chargeability and resistivity. Within the visualization software package we can rotate the model around to provide a realistic 3D view of the model which cannot be portrayed on paper Figure 16. This displays that the resistive zone associated with chargeability feature 2 is overlaying a zone of low resistive material that penetrates deeper than other regions, which is not apparent on any of the 3 other chargeability features. This can be seen better in the section plot for line 30800N in Figure 16.

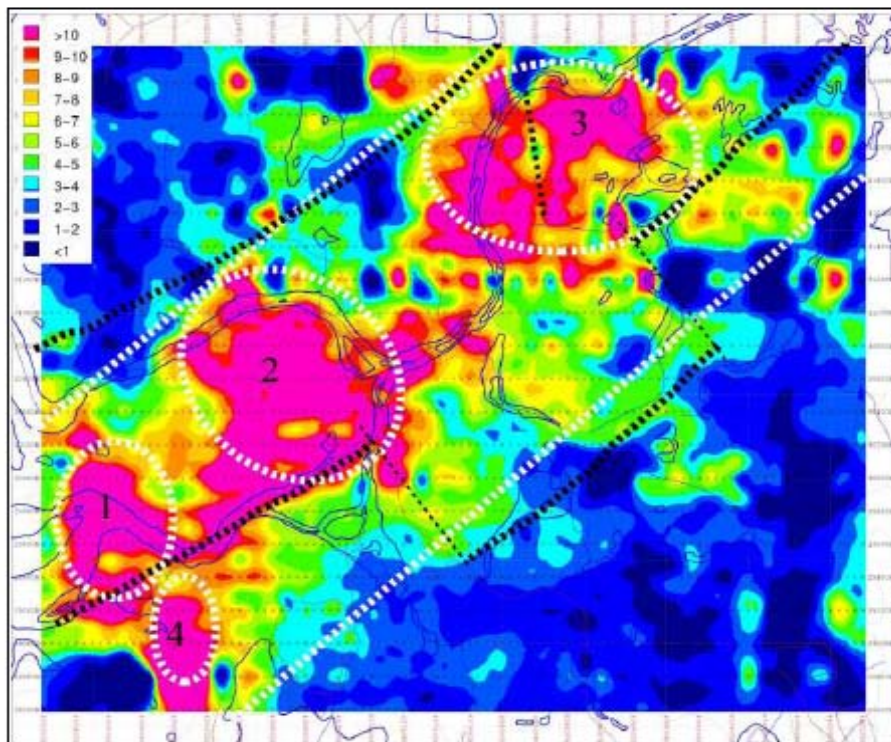
## **8.1 SAMPLE METHOD AND APPROACH**

The writer's have not researched the past sampling programs in detail, but have no reason to doubt that the methods and approach have been typical methods, involving chip and channel sampling and typical core splitting for diamond drilling programs.

The data collection method for the 3D Induced Polarization survey consisted of grid lines being established and cleared to allow line of sight between stations of 50 metres. A wooden

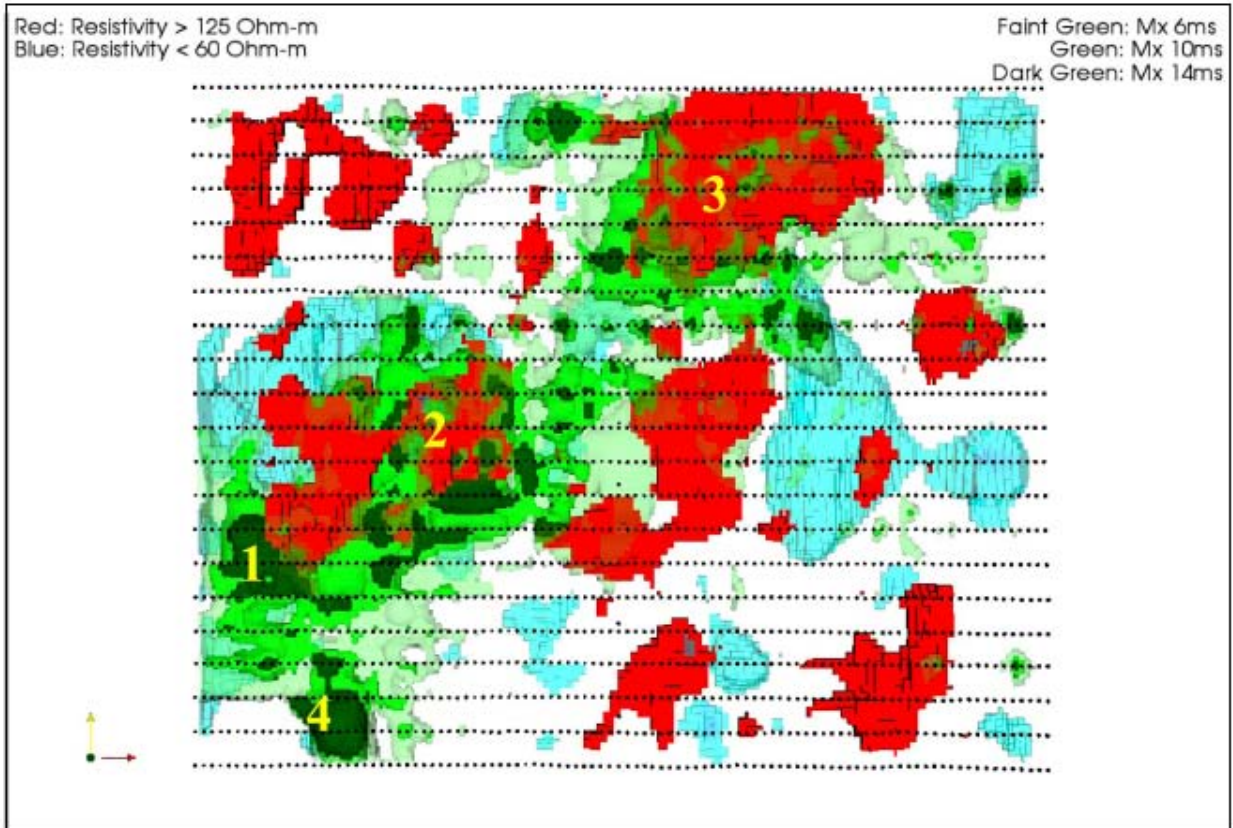


Alexis Property  
 Compilation (Inverted Resistivity Model at 100m Depth)

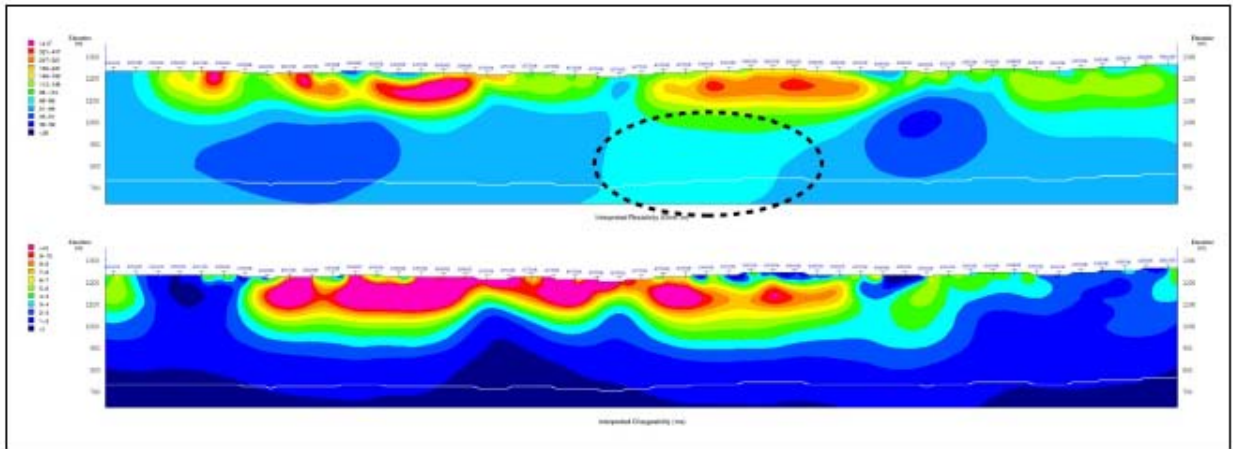


Alexis Property  
 Compilation (Inverted Chargeability Model at 100m Depth)

**FIGURE 15. COMPILATION (INVERTED RESISTIVITY MODEL AND INVERTED CHARGEABILITY MODEL AT 100 M DEPTH)**



Alexis Property  
 3D Model - Chargeability Isosurfaces and Resistivity Thresholds



Alexis Property  
 3D Section Ln30800N: Inverted Resistivity and Chargeability

**FIGURE 16. 3D MODEL – CHARGEABILITY ISOSURFACES AND RESISTIVITY THRESHOLDS / 3D SECTION: INVERTED RESISTIVITY AND CHARGEABILITY**

---

picket with a buttersoft tag identifying the line number and the station number was affixed to the picket with a staple gun; the picket was then flagged with pink flagging.

The three dimensional IP surveys were designed to take advantage of the interpretational functionality offered by 3 dimensional inversion techniques. Unlike conventional IP, the electrode arrays are no longer restricted to in-line geometry. Typically, current electrodes and receiver electrodes are located on adjacent lines. Under these conditions, multiple current locations can be applied to a single receiver electrode array and data acquisition rates can be significantly improved over conventional surveys. In a common 3 dimensional IP configuration, a receiver array is established end-to-end along a survey line while current electrodes are located on two adjacent lines. The survey typically starts at one end of the line and proceeds to the other end. A typical 8 dipole array normally consists of two 100m dipoles, followed by four 50m dipoles and then two more 100m dipoles at the end of the array. In some areas these spacings are modified to compensate for local conditions such as inaccessible sites, streams, and overall conductivity of ground. Current electrodes are advanced along the adjacent lines starting at approximately 200m from the center of the array and advancing approximately 400m through the array at 50m increments. At this point, the receiver array is advanced 400m and the process is repeated down the line.

The dipole array for the Alexis surveys consisted of a modified pole-dipole configuration that was used with a combination of 6 to 12 dipoles depending on ground conditions, for a total array length of 1600m. For both IP surveys, all data was collected using the proprietary SJ-24 Full Waveform Digital Receiver (Rx). The current was injected with a 2 seconds on, 2 seconds off duty cycle into the ground via a transmitter (Tx). A GDD Tx II 3.6 KW transmitter was utilized for the duration of the program.

The dipole array was implemented using standard 8 conductor cables configured with 100m takeouts for the potential rods. At each current station, the electrodes used consisted of 5/8" stainless steel rods of approximately 1m in length. For the potential line, the electrodes consisted of 3/8" stainless steel "pins" of 0.5m length.

All geophysical stations were recorded with UTM coordinates acquired with a handheld Garmin GPS unit.

---

## **8.2 SAMPLE PREPARATION, ANALYSES AND SECURITY**

The author has not independently verified past sample preparation and analytical methods; however there is no reason to believe they were not maintained according to standards common to exploration at the time.

The IP readings from each day's surveying were downloaded to a computer and entered into a database archive every evening. The database program allows the operator to display the IP decay curves in an efficient manner and this provides a visual review of the data quality on site.

## **8.3 DATA VERIFICATION**

No independent data verification was undertaken on samples collected by previous operators.

The sample analysis methods employed by Goldmember Ventures Corp. as described in the "Sample Preparation, Analysis and Security" section of this report are considered to be adequate and within current industry accepted practices.

## **8.4 MINERAL PROCESSING AND METALLURGICAL TESTING**

No detailed mineral processing or metallurgical testing has been conducted on material from this property.

## **8.5 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES**

At present no mineral resource or reserves exist for the either the Nechako or Alexis group of claims.

---

## **9. Interpretation and Conclusions**

The 3D Induced polarization survey successfully identified a broad zone of high chargeability extending in a northeast to southwest direction running through the centre of the property. The southern and northern flanks of this corridor may represent geological contacts based on the change in the chargeability characteristics. Within this corridor are four nodes of higher chargeability values that were anomalous to the material around it. It is debatable if the survey achieved the depth of investigation anticipated based on the survey parameters. Therefore, the model is showing an infinite half space with little variation at depth or the acquisition technique was unable to penetrate the top layer. However, the 3D Induced Polarization clearly mapped some of the geological structure of the region thus providing additional information to the geological and geophysical model of the region.

### **9.1 CONCLUSIONS**

The 2006 exploration program conducted so far on the Alexis project of Goldmember Ventures Corp. have successfully:

- identified geophysical anomalies located at depth which show the characteristics of an epithermal styled mineralized body
- identified regional geophysical trends with coincidental geochemical anomalies suitable to host further epithermal and porphyry style mineralization

### **9.2 RECOMMENDATIONS**

In order to advance the property a Phase I follow up program consisting of a magnetometer survey over the established grid supplemented with 3D induced Polarization survey extended to the north-east and south-west of the existing grid should be conducted. Upon completion of the ground surveys 1000 meters of diamond drilling is recommended to test suitable anomalies.

---

### 9.3 PHASE I – BUDGET

#### PERSONNEL

Senior geologist 40 days @ \$500.00 per day	20,000.00
Junior geologist 40 days @ \$350.00 per day	14,000.00
Field Manager 40 days @ \$350.00 per day	14,000.00
Line cutter 40 days @ \$275 per day	11,000.00
Line cutter 40 days @ \$275 per day	11,000.00
Line cutter 40 days @ \$275 per day	<u>11,000.00</u>
<b>Subtotal</b>	<b>81,000.00</b>

#### ACCOMMODATIONS

560 mandays @ \$100.00 per day (includes food and lodging) (assumes geophysical crew 20 days diamond drill crew 20 days)	56,000.00
4x4 truck 40 days @ \$90.00 per day	3,600.00
4x4 truck 40 days @ \$90.00 per day	3,600.00
ATV 40 days @ 50 per day	2,000.00
ATV 40 days @ 50 per day	2,000.00
Fuel, chainsaws, accessory equipment	18,000.00
Geophysical Surveys (3D IP, Magnetometer) (assumes 30 line kilometres of 3D I.P. @ \$2000.00 per line km 133 line km of mag @ \$100 per line kilometre, 25,000 for reporting)	98,300.00
Property Wide Silt Sampling (incl. labour, assays)	5,000.00
Prospecting, Sampling, Data digitizing	10,000.00

#### DIAMOND DRILLING

1,000 m @ \$200/m (including assays)	200,000.00
Permits, Reclamation Bonding	20,000.00
<b>Subtotal</b>	<b><u>499,500.00</u></b>
Contingency (10%)	50,500.00

<b>TOTAL Phase I</b>	<b>\$ 550,000.00</b>
----------------------	----------------------



---

## 10. Statement of Costs

GOLDMEMBER VENTURES NECHAKO PROJECT			
<b>PERSONNEL</b>	<b>DAYS</b>	<b>RATE/DAY</b>	<b>TOTAL</b>
G. NICHOLSON P.Ge	14	500	7000
W.ROBB P.Ge	7	500	3500
M. MULBERRY Prospector	38	325	12350
R. SIMPSON Prospector	8	425	3400
E.CLASSEN	14	285	3990
B. VALLEE	24	295	7080
R.EWAN	63	300	18900
G. McNAUGHTON	36	285	10260
N. BERNIER	36	285	10260
R. BELANGER	6	325	1950
P. WASHPAN	13	285	3705
D. WILLIAMS	31	285	8835
B. McMICHEALS	13	285	3705
Ty. Johnson	38	285	10830
Travis Johnson	26	285	7410
S. Lowe cook/first aid	35	325	11375
<b>ACCOMMODATION</b>	640	100	64000
INCLUDES GEOPHYSICS CREWS			
<b>TRUCKS</b>			
4X4	63	90	5670
4X4	63	90	5670
ATV	24	50	1200
FUEL EQUIPMENT RENTALS, COMMUNICATION			30000
<b>GEOPHYSICS</b>	103 LINE KM	2000/LINE KM	206000
<b>GEOPHYSICS REPORTING</b>			25000
<b>FINAL REPORTING and DRAFTING</b>			25000
<b>TOTAL</b>			<b>\$487,090.00</b>

---

## 11. Statement of Qualifications

I, GEORGE E. NICHOLSON, of 21910-61st Avenue, Langley, British Columbia hereby certify that:

1. I am a graduate of the University of British Columbia with a degree in Geology (B.Sc., 1986);
2. I have practiced my profession as a geologist continuously since graduation;
3. I directed the work described in this report;
4. I am a member of the Association of Professional engineers and Geoscientists of the Province of British Columbia (NO. 19796);
5. I am a Fellow of the Royal Geographical Society (No. 423161);
6. I hereby grant my permission for Goldmember Ventures Corp. to use this report for any corporate use normal to their business.

DATED at Vancouver, British Columbia this \_\_\_\_\_ day of May, 2007

---

---

## 12. References

- Armstrong, J.E. (1949), Fort St. James map area, Cassiar and Coast Districts, B.C., GSC Memoir, 252.
- Armstrong, R.L. (1988), Mesozoic and Early Cenozoic magmatic evolution of the Canadian Cordillera, Geol. Soc. Amer., Special Paper 218, pp 55-91.
- Armstrong, R.L. and Ward, P. (1991), Evolving Geographic Patterns of Cenozoic Magmatism in the North American Cordillera: The Temporal and Spatial Association of Magmatism and Metamorphic Core Complexes, Journ. of Geophysical Research, Vol 96, No. 88, pp 13,201-13,224.
- Andrew, K.P.E. (1988), Geology and Genesis of the Wolf Precious Metal Epithermal Prospect and the Capoose Base and Precious Metal Porphyry Style Prospect, Capoose Lake Area, Central British Columbia, M.Sc. Thesis UBC.
- Carter, N.C. (1981), Porphyry Copper and Molybdenum deposits, west central B.C., MEMPR, Bull 64.
- Crawford, M.L., Hollister, L.S., and Woodsworth, G.J. (1987), Crustal deformations and regional metamorphism across a terrane boundary, Coast Plutonic Belt, B.C., Tectonics, Vol 6, No. 3, pp 343-361.
- Cyr, J.B., Pease, R.B., and Schroeter, T.G. (1984), Geology and Mineralization at Equity Silver, Ec., Geol., Vol 79, pp 947-968.
- Dawson, G.M. (1875), Chilcotin Area, GSC Rept, 1875.
- Diakow, L.J. and Mihalynuk, M. (1987), Geology of Whitesail Reach and Troitsa Lake map areas, MEMPR Paper 1987-1, pp 171-180.
- Duffell, S. (1959), Whitesail Lake map area, GSC Memoir 299.
- Ewing, T.E. (1980), Paleogene tectonic evolution of the Pacific Northwest, Journ. of Geol., Vol 88, pp 619-639.
- Ewing, T.E. (1981), Regional stratigraphy and structural setting of the Kamloops Group, south-central British Columbia, Can. J. Earth Sci, Vol 18, pp 1,464-1,477.
- Friedman, R.M. (1988), Geology and geochronology of the Eocene Tatla Lake Metamorphic Core Complex, western edge of the Intermontane Belt, B.C., unpub Ph.D. Thesis, UBC.
- Gabrielse, H. (1986), Major dextral transcurrent displacements along the Northern Rocky Mountain Trench and related lineations in north-central B.C., G.S.A., Bull, Vol 96, pp 1-14.
- Gabrielse, H., Monger, J.W.H., Tempelman-Kluit, and Woodsworth, G.J. (1992), Chapt. 17, Structural Styles, Part C. Intermontane Belt in Geology of Canada, No. 4, Geology of the Cordilleran Orogen in Canada, Gabrielse H. and Yorath. E.J. ed. (DNAG).
- Gans, P.B., Mahood, B.A. and Schedrmer, E. (1989), Synextensional magmatism in the Basin and Range Province, A case study form the eastern Great Basin, G.S.A. Special Paper, 233.
- Green, K.C., and Diakow, L.J. (1993), The Fawnie Range Project, Geology of the Natalkuz Lake Map Area (93/F6), MEMPR Paper 1993-1, pp 57-68.

- 
- Heah, T.S.T. (1990), Eastern margin of the Central Gneiss Complex in the Shames River area, Terrace, B.C., GSC, Paper 90-1A, pp 159-169.
- Hickson, C.J., Read, P., Mathews, W.H., Hunt, J., Johansson, G. and Rouse, G.E. (1991), Revised geological mapping of northeastern Taseko Lake map sheet, B.C., GSC, Paper 91-1A, pp 207-217.
- Holland, S.S. (1964), Landforms of British Columbia, A physiographic outline, BCDMPR, Bull 48.
- Hutchinson, W.W., Berg, H.C. and Okulitch, A.V. (1979), Skeena River map sheet-103, GSC map 1385A, 1:1,000,000.
- Klienspehn, K.L. (1985), Cretaceous sedimentation and tectonics, Tyaughton-Methow Basin, southwestern B.C., Can. J. Earth Sci, Vol 22, pp 154-174.
- Lipman, P.W. (1975), Evolution of the Platoro Caldera Complex and Related Volcanic Rocks, southeastern San Juan Mountains, Colorado, USGS Professional Paper, 852.
- Long, D.G.G. (1981), Dextral strike-slip faults in the Canadian Cordillera and deposition environments of related fresh water Intermontane coal basins, *in* Sedimentation and Tectonics in Alluvial Basins, ed. A.D. Maill, GAC Special Paper 23, pp 154-186.
- Mathews, W.H. and Rouse, G.E. (1984), the Gang Ranch-Big Bar area, south-central British Columbia: stratigraphy, geochronology and palynology of the Tertiary beds and their stratigraphic relationship to the Fraser Fault, Can. J. Earth Sci, Vol 21, pp 1,132-1,144.
- Mathews, E.H. (1989), Neogene Chilcotin basalts in south-central British Columbia: geology, ages and geomorphic history, Can. J. Earth Sci, Vol 26, pp 969-982.
- MacIntyre, D.G. (1985), Geology and Mineral Deposits of the Tahtsa Lake District, west central British Columbia, MEMPR Bull 75.
- Parrish, R.R., Carr, S.D. and Parkinson, D.L. (1988), Eocene extensional tectonics of the southern Omineca Belt, British Columbia and Washington, Tectonics, Vol 7, No. 2, pp 181-212.
- Richards, T.A. (1988), Geologic setting of the Stikine Terrane, *in* Geology and metallogeny of Northwest B.C., GAC Oct, abs., pp 75-81.
- Rouse, G.E. and Mathews, W.H. (1988), Palynology and geochronology of Eocene Beds from Cheslatta Falls and Nazko areas; central British Columbia, Can. J. of Earth Sci, pp 1,268-1,276.
- Schimann, K (1992) Cogema internal reports on the Nechako basin
- Schimann, K (1993) Cogema internal reports on the properties of the Nechako basin
- Schimann, K (1993) Cogema assessment reports
- Sinclair, A.J. (1986), Statistical Interpretation of Soil Geochemical Data. Review in Economic Geology, v.3, 97-116.
- Tipper, H.W. (1959), Geology, Quesnel (93B), GSC Map 12-1959, 1:253,440.
- Tipper, H.W. (1960), Geology, Prince George (93G), GSC Map 49-1960, 1:253,440.
- Tipper, H.W. (1963), Nechako River Map Area, B.C., GSC Memoir 324.

- 
- Tipper, H.W. (1969a), Geology, Anahim Map Area, 93C, GSC Map 1202A.
- Tipper, H.W. (1969b), Mesozoic and Cenozoic geology of the northwest part of the Mt. Waddington Map Sheet (92N), Coast District, B.C., GSC Paper 68-33, 103p.
- Tipper, H.W. (1971), Glacial Geomorphology and Pleistocene History of Central British Columbia, GSC Bull 196.
- Tipper, H.W. (1978), Geology, Taseko Lake (920), GSC Open File 534, 1:250,000.
- Tipper, H.W. and Richards, T.A. (1976), Geology, Smithers Map Area (93L), GSC Open File 351.
- Tipper, H.W., Woodsworth, G.W. and Gabrielse, H. (1982), Tectonic assemblage map of the Canadian Cordillera, GSC Map 1505A.
- Woodsworth, G.J. (1979), Geology of the Whitesail Lake Map Area, B.C. GSC Paper 79-1A, pp 25-29.
- Woodsworth, G.J. (1980), Geology, Whitesail Lake (93E), GSC Open File 708, 1:250,000.



# ***SJ Geophysics Ltd.*** ***S.J.V. Consultants Ltd.***



11762-94<sup>th</sup> Avenue,  
Delta BC V4C 3R7 CANADA

Bus: (604) 582-1100  
E-mail: [trent@sjgeophysics.com](mailto:trent@sjgeophysics.com)

Fax: (604) 589-7466  
[www.sjgeophysics.com](http://www.sjgeophysics.com)

## Memorandum

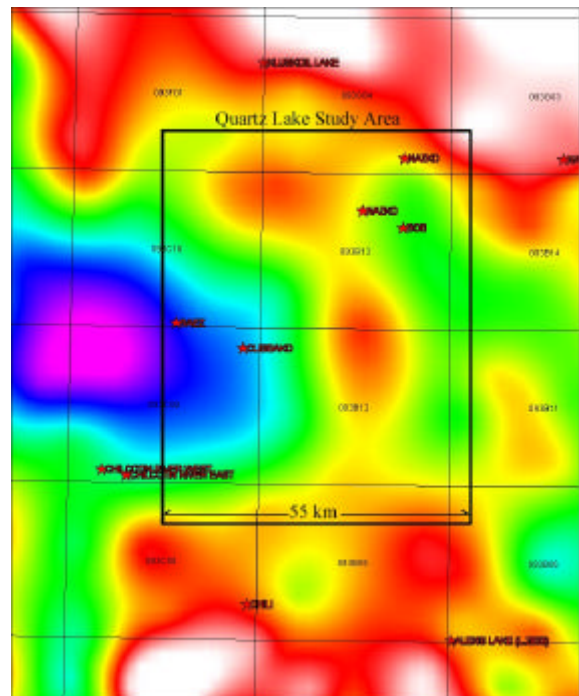
**To: Mt. Dent Resources Inc.**  
**From: E. Trent Pezzot**  
**Date: August 4, 2006**

**Re: Quartz Lake Project – Magnetic Study**

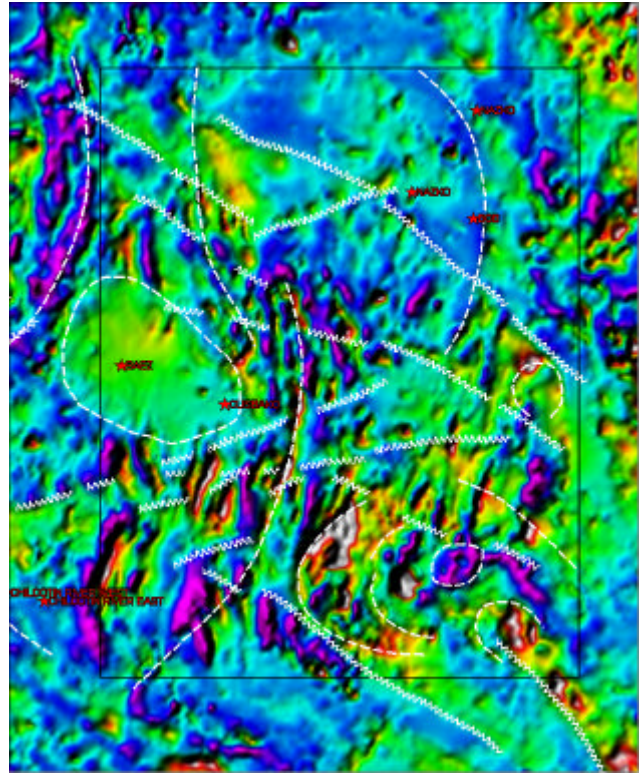
Sirs:

This memo documents the results of a regional geophysical study completed in the Mt. Dent area of B.C. The study is referred to as the Quartz Lake project covers an area approximately 70 km x 55 km. It straddles 12 NTS map sheets, including all of 93B12 and 93B13 plus portions of adjacent sheets. Four sets of exploration data were examined: regional airborne magnetics, gravity, geochemistry and geology (including the MinFile data base). The magnetic and gravity data were examined both as plan maps and as 3D inversion models. Thirty-five BC government topographic TRIM maps were purchased for the area and merged to provide customized base maps for this study and future ground exploration. The intention of this study was to outline areas of interest for further exploration.

The government gravity map (right) is based on data gathered at 2000m grid intervals and is consequently reflecting very large, deep structures. The most prominent feature is a large low, approximately 40 km across centred immediately west of the study area. Moderate gravity highs flank this feature and reflect regional arcuate trends that encircle the low. While these responses originate from extremely deep structures (5 – 20 km) and are not specific exploration targets, they do provide a basis for understanding the regional trends evident in the near surface rocks.



The government magnetic data is also considered regional in nature although it gathered on 1000m spaced survey lines and is therefore denser than the gravity data. The magnetic map (right) reflects similar regional arcuate features that are evident in the gravity data however it also shows significantly more detail and outlines structures that are generated by rock units closer to the ground surface. The magnetic relief is significant, ~ 3000 nTs over the study area. There are several large areas that are reflected by quiet and subdued magnetic amplitudes, suggesting the presence of a large, relatively uniform lithological unit. One of the most prominent of these is in the Mt Dent area, straddling the western side of the study area.



The most distinctive magnetic responses are series of narrow, high and low linears. These generally strike about N20°E but also tend to bend and trace out the regional arcuate lineations. These are undoubtedly tracing discrete lithological or facies units and provide an excellent tool for mapping geological structures.

Breaks and offsets in these magnetic linears are a clear indication of significant faulting in the area. There are three dominant orientations to the regional fault patterns across the study area: N45°W, N70°W and N70°E. Detailed analysis of smaller areas shows a large amount of more localized faulting, much of which parallels the regional fault trends.

There are several areas where small, localized magnetic highs are mapped, suggesting the presence of intrusions. Many of these localized features align with similar responses and form regional trends, likely indicating they are associated with a major, deep-seated structures. Some of these anomalies are surrounded by “ring” patterns, possibly indicating alteration zones typical of epithermal or porphyry style mineralization.

Five areas of interest have been recommended for ground follow-up investigations as highlighted on the map below. These selections are based on a combination of anomalous geochemistry, previous work and magnetic responses.

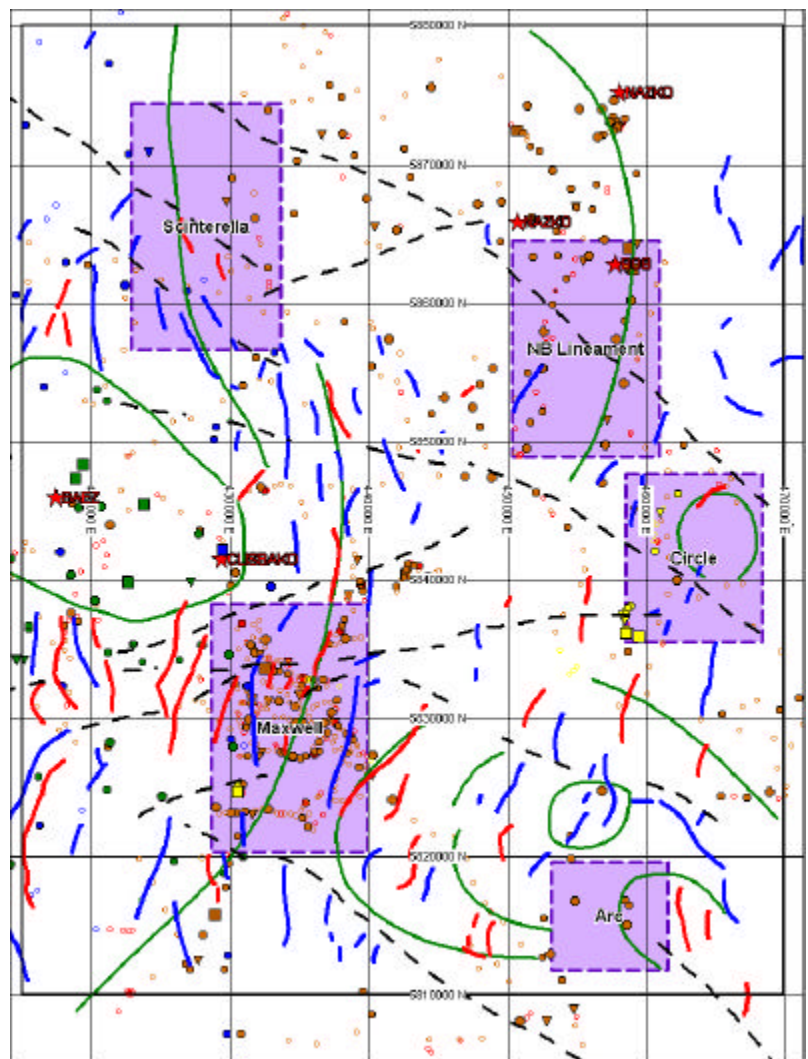
- Maxwell – This area is some 11 km x 18 km in size and encompasses an area of geochemical samples that are highly anomalous in many elements. The magnetic data suggests this area has been subjected to intensive deformation with intersecting N70°W and N70°E faults present.
- Sinterella – This target in the NW corner of the study area is centred across a large cinder cone reported by geologists. Limited geochemical samples from the area show anomalous values in Au, As and Pb. The magnetic response is relatively quiet, suggesting the presence of a large, deep structure that is bound to the north and south by N45°W trending faults.

- NB Lineament – This area was selected because of anomalous Au, As, Pb and Mo geochemical values that fall along a regional arcuate magnetic feature that also hosts the Nazko and Bob Minfile occurrences. There is a parallel geochemical trend, located some 5.5 km to the west that is only weakly evident as a magnetic feature. The area has been cut by several intersecting faults.
- Circle – This area includes two separate exploration targets. The first is a circular magnetic anomaly, approximately 6 km across. Anomalous Pb geochemical values surround the magnetic anomaly and anomalous Au and As values are mapped along its western flank. The second target is located some 5.5 km to the southwest and is centred over a cluster of geochemical samples high in Au, As, Pb and Ag. These are also located near the intersection of several major and minor faults.
- Arc – This area is located in the extreme SE corner of the study area where a strong NW trending magnetic high terminates against an equally strong magnetic low. The magnetic patterns suggest the presence of a regional fold structure. The Arc target is located along the southwest flank of this feature, where the edge of a moderate magnetic low exhibits anomalous Au and Ag values. The implication is that the geochemical anomalies are associated with a discrete geological contact that can be mapped magnetically.

3D IP surveys are being considered as the primary geophysical exploration technique for these targets. Detailed magnetic surveying should be acquired at the same time.

Sincerely  
Per S.J.V. Consultants Ltd.

E. Trent Pezzot, BSc., PGeo.  
Geology, Geophysics







***SJ Geophysics Ltd.***  
***S.J.V. Consultants Ltd.***



11762-94<sup>th</sup> Avenue,  
Delta BC V4C 3R7 CANADA

Bus: (604) 582-1100  
E-mail: [trent@sjgeophysics.com](mailto:trent@sjgeophysics.com)

Fax: (604) 589-7466  
[www.sjgeophysics.com](http://www.sjgeophysics.com)

## Memorandum

**To: Mt. Dent Resources Inc.**

**From: E. Trent Pezzot**

**Date: August 8, 2006**

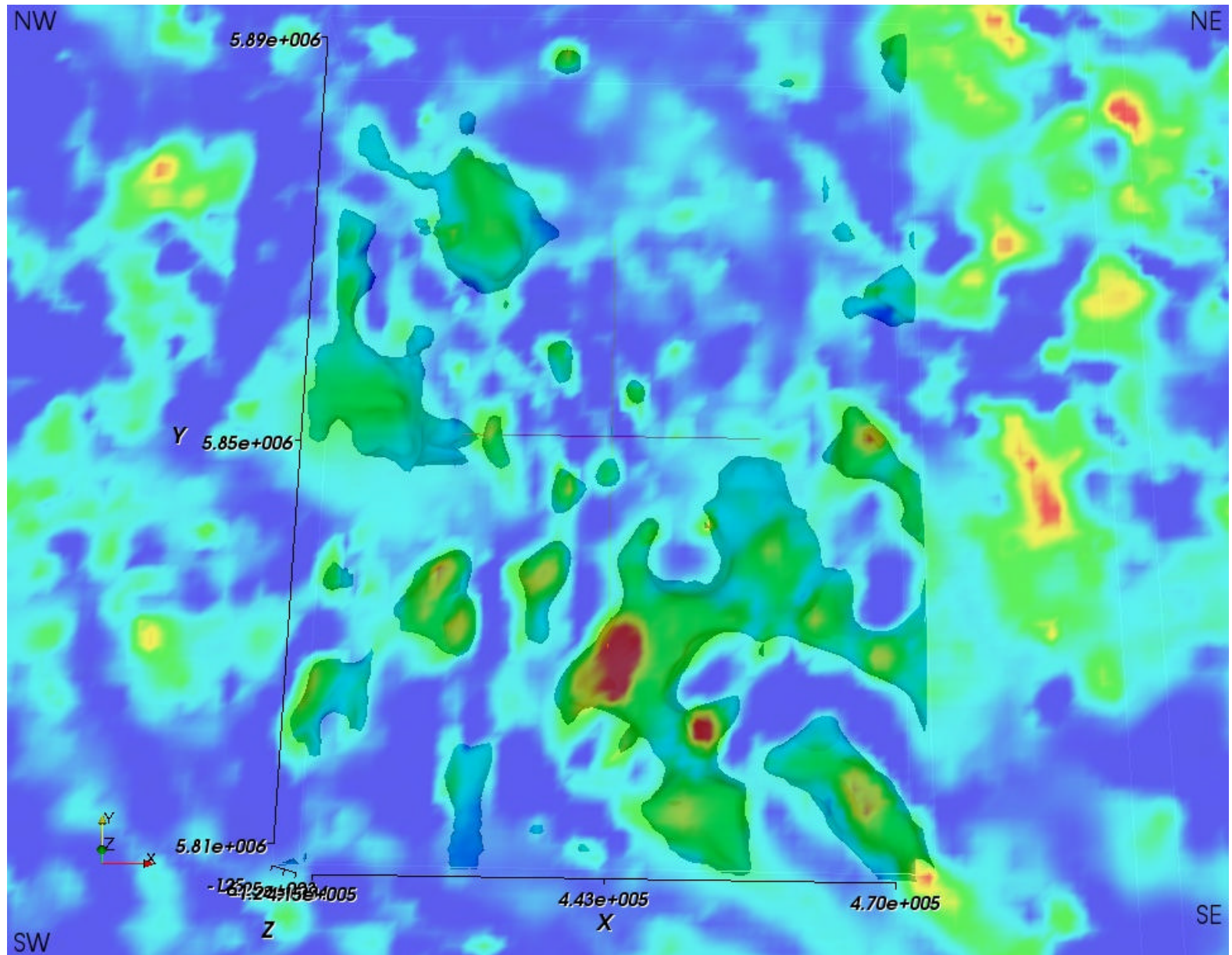
**Re: Quartz Lake Project – Mag3D inversion images.**

The following pages contain images of the Mag3D inversion results. The images were generated from Paraview, a free 3D viewing program. This program can be freely downloaded from the internet ([www.paraview.org](http://www.paraview.org)) and is the best way for viewing the 3D models generated by the gravity and magnetic inversions.

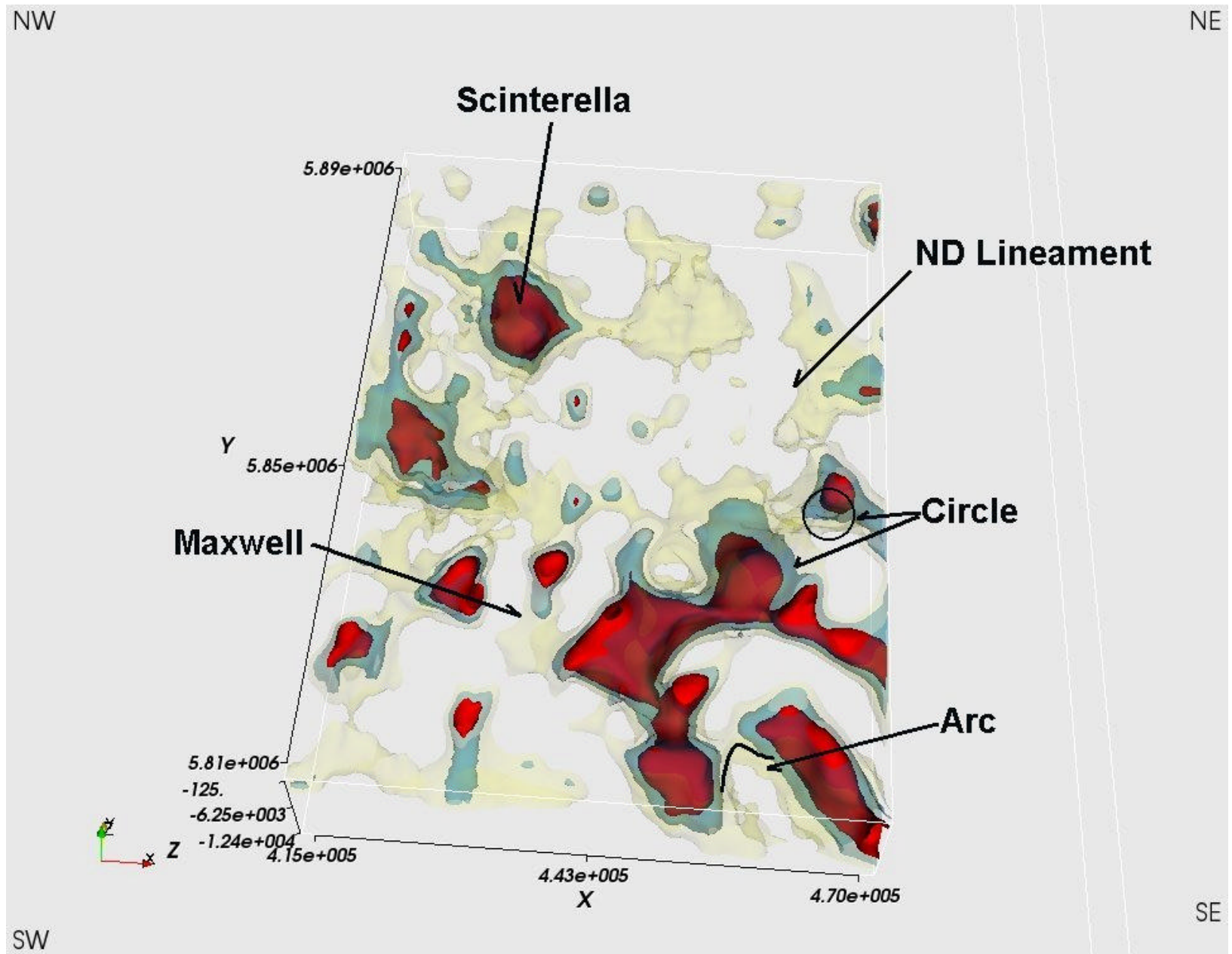
The following images were selected to highlight some of the trends and responses discussed in earlier memos.

Both the magnetic and gravity data was obtained from the NRCAN website as digital files of gridded exploration data. These data were processed and formatted for input tot the UBC GIF Inversion programs mag3D and grav3D. The data covering the Quartz Lake Project study area was processed as part of a larger, regional study.

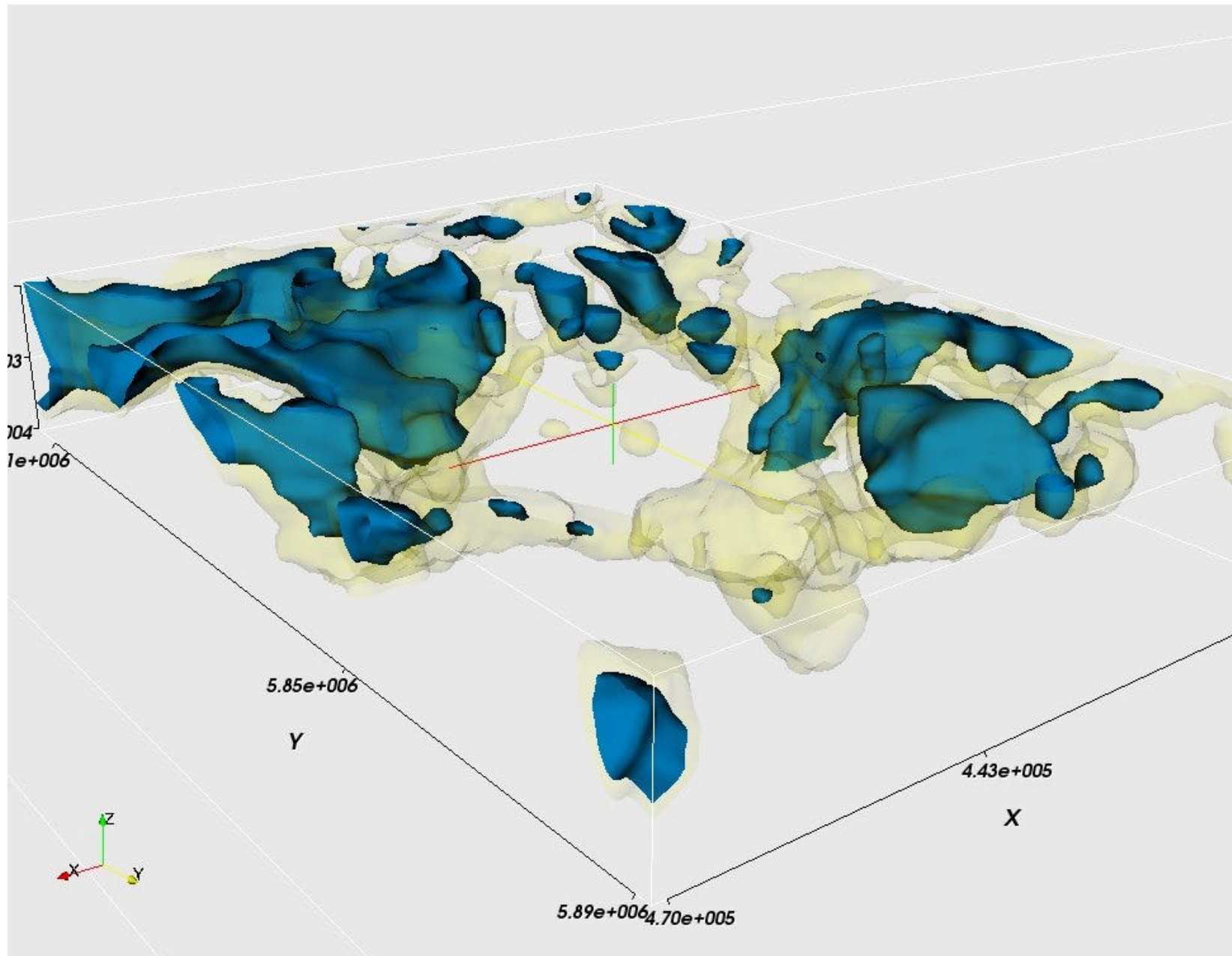
The digital files necessary to view these results in both the paraview and meshtools3D viewing programs are available.



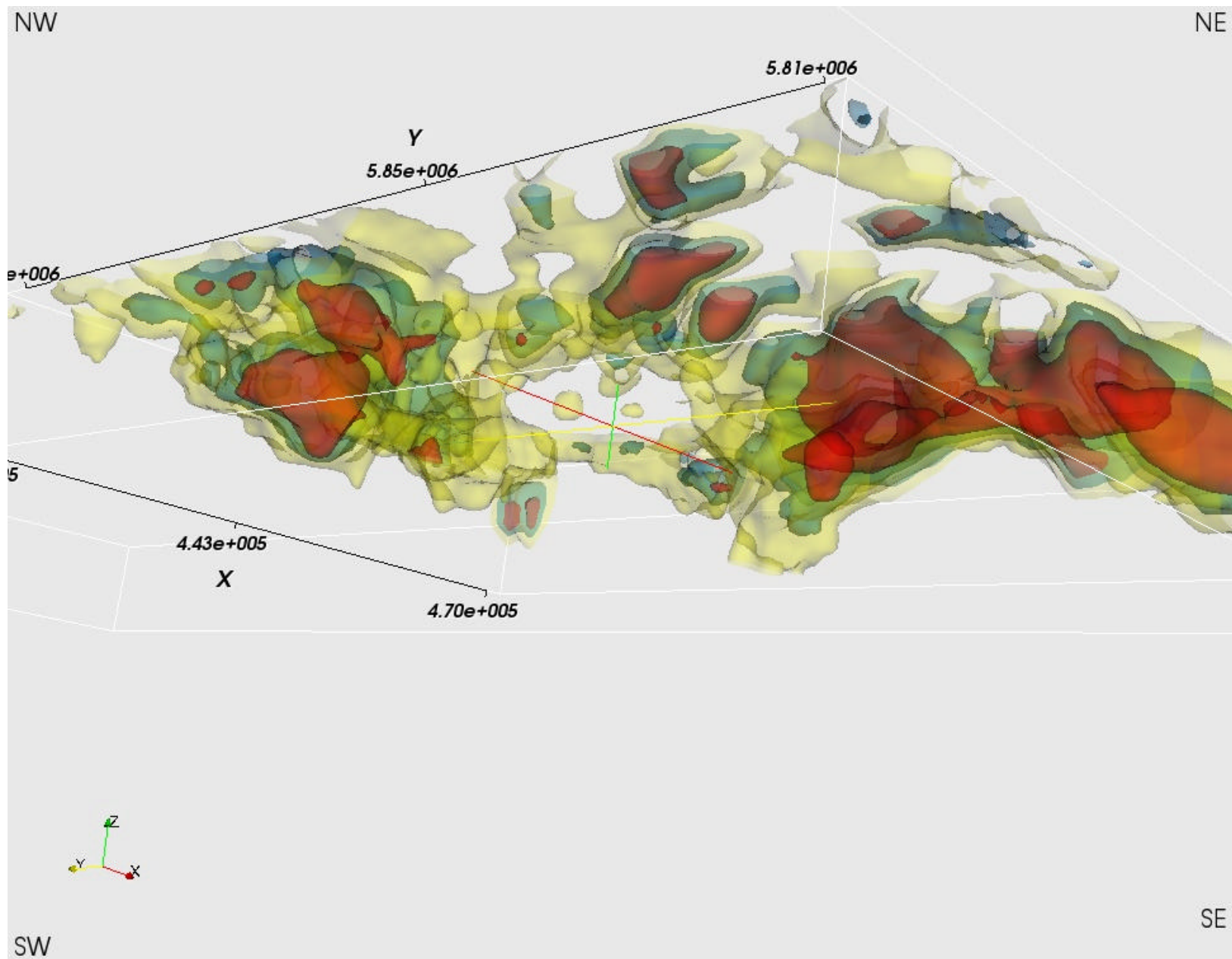
This image is a composite of two maps. The larger color map represents the total magnetic field data input the to the inversion study. The outlined area, extending from 5810000N to 5890000E and 415000E to 470000E represents the Quartz Lake Study area. The shadows within this area represent outlines of high susceptibility material ( $>0.02$  SI) that have helped to generate the observed magnetic field intensity map.



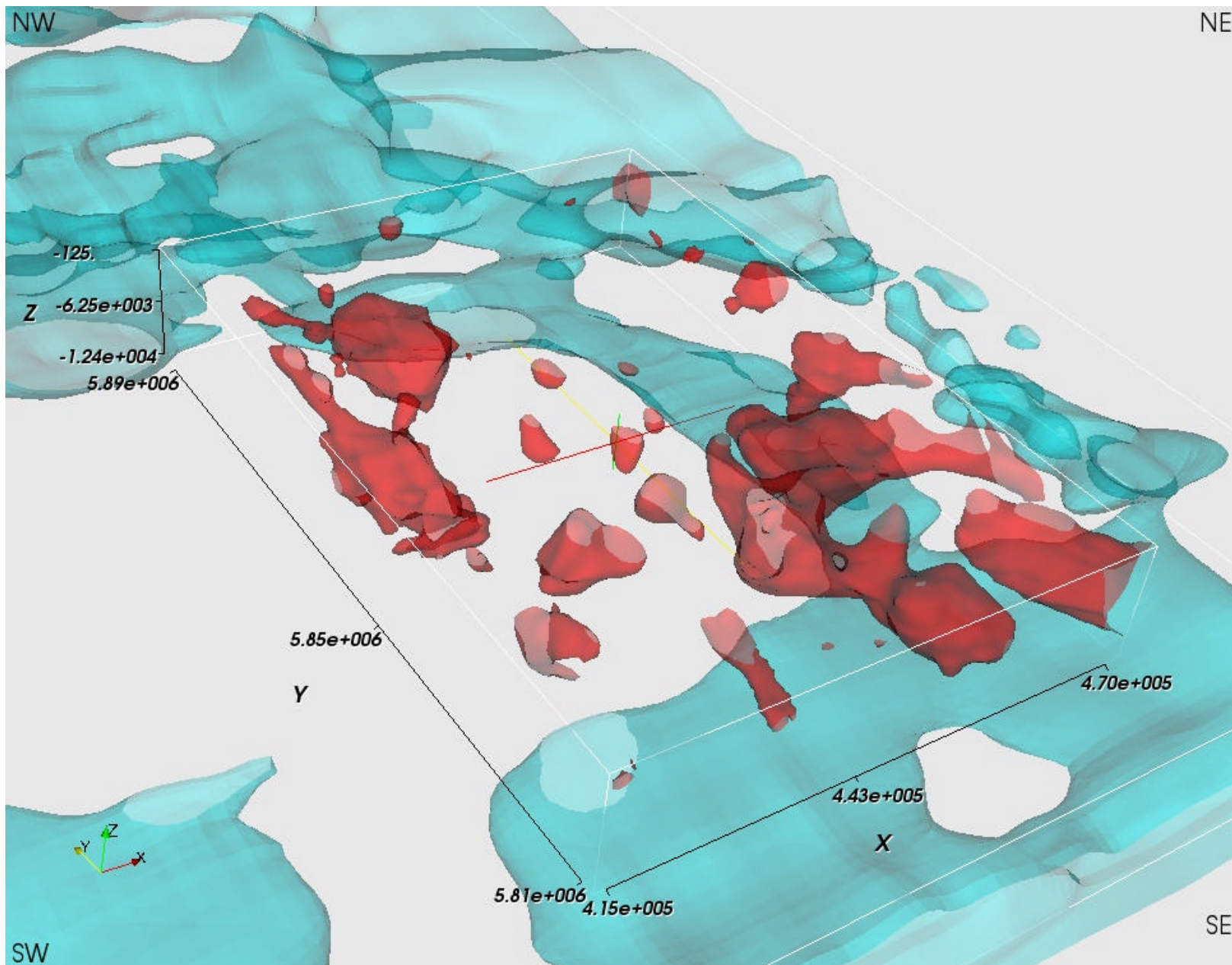
This image is viewed from an elevated vantage point to the south of the study area. The shadowed areas reflect three levels of high susceptibility material: red = 0.03, blue = 0.02, yellow = 0.01. The image is annotated with the 5 areas of interest that have been recommended for ground follow-up exploration.



This image is a view of the blue (0,02) and yellow (0,01) high susceptibility iso-surfaces, viewed from the northeast corner of the study block and a lower elevation than the previous image.



This image is a view of the red (0.03), blue (0.02) and yellow (0.01) high susceptibility iso-surfaces, viewed from the southwest corner of the study block, from below the ground surface looking up.



This image overlays the results of the mag3D and grav3D inversions, viewed from an elevated location to the southwest of the study area. The blue isosurface represents higher density rocks (>0.06 gm/cc). The red isosurface reflects higher magnetic susceptibility materials (>0.02 SI)

**GEOPHYSICAL REPORT**  
**FOR**  
**GOLDMEMBER VENTURES CORP.**

**3D INDUCED POLARIZATION**  
**ON THE**  
**ALEXIS PROPERTY PROJECT**

*437800E 5830600N - NAD83 UTM Zone10 (Station 437800E, Line 30600N of Grid)*

*Location: Alexis Creek, British Columbia*

*NTS Sheet: 093B/12 Quesnel*

*Mining Zone: Cariboo Mining Division*

**SURVEY CONDUCTED BY**  
**SJ GEOPHYSICS LTD.**  
**SEPTEMBER - NOVEMBER 2006**

**REPORT WRITTEN BY:**

**JAN DOBRESCU (LOGISTICS)**  
**SHAWN RASTAD (RESULTS)**

**AS PER S.J.V. CONSULTANTS LTD.**  
**FEBRUARY 2007**

## TABLE OF CONTENTS

1 Summary.....	1
2 Introduction.....	2
3 Location and Line Information.....	3
4 Field Work and Instrumentation.....	5
4.1 Field Logistics.....	5
4.2 Survey Parameters and Instrumentation.....	6
5 Geophysical Techniques.....	7
5.1 IP Method.....	7
5.2 3DIP Method.....	8
5.3 Inversion Programs.....	8
6 Data Presentation.....	9
6.1 Cross Sections.....	9
6.2 Plan Maps.....	9
6.3 Inversion Model.....	10
7 Discussion of Results.....	10
7.1 Data Processing.....	10
7.2 Discussion of Results.....	11
7.2.1 Target Description.....	11
7.2.2 Chargeability.....	11
7.2.3 Resistivity.....	13
7.2.4 Compilation.....	14
8 Conclusions.....	20
Appendix 1 – Statement of Qualifications.....	21
Appendix 2 – Summary Tables (IP Only).....	23
Appendix 3 – Instrument Specifications.....	24
SJ-24 Full Waveform Digital IP Receiver.....	24
GDD Tx II IP Transmitter.....	24
Appendix 4 – Plates.....	25



## ILLUSTRATIONS

Figure 1: Quartz Lake Project Location Map, Northwest of Alexis Creek – B.C.....	3
Figure 2: Quartz Lake Project 3DIP Grid Map .....	4
Figure 3: Inverted Chargeability Model at 100m Depth.....	12
Figure 4: Inverted Resistivity Model at 100m Depth .....	13
Figure 5: Compilation (Inverted Resistivity Model at 100m Depth) .....	15
Figure 6: Compilation (Inverted Chargeability Model at 100m Depth) .....	16
Figure 7: 3D Model – Chargeability Isosurfaces.....	17
Figure 8: 3D Model – Chargeability Isosurfaces and Resistivity Thresholds.....	18
Figure 9: 3D Section Ln30800N: Inverted Resistivity and Chargeability.....	18

## LIST OF PLATES (situated as Appendix 4 at end of report)

<b>PLATE #</b>	<b>3DIP Plan Maps – Quartz Lake Property</b>
Plate R-1	Interpreted Resistivity – 50m Below Surface
Plate C-1	Interpreted Chargeability – 50m Below Surface
Plate R-2	Interpreted Resistivity – 75m Below Surface
Plate C-2	Interpreted Chargeability – 75m Below Surface
Plate R-3	Interpreted Resistivity – 100m Below Surface
Plate C-3	Interpreted Chargeability – 100m Below Surface
Plate R-4	Interpreted Resistivity – 150m Below Surface
Plate C-4	Interpreted Chargeability – 150m Below Surface
Plate R-5	Interpreted Resistivity – 200m Below Surface
Plate C-5	Interpreted Chargeability – 200m Below Surface
Plate R-6	Interpreted Resistivity – 250m Below Surface
Plate C-6	Interpreted Chargeability – 250m Below Surface
Plate R-7	Interpreted Resistivity – 300m Below Surface
Plate C-7	Interpreted Chargeability – 300m Below Surface

<b>PLATE #</b>	<b>3DIP Resistivity and Chargeability Models – Quartz Lake Property</b>
Line 28600N	3D Inversion Model – False Color Contour Cross Section Map
Line 28800N	3D Inversion Model – False Color Contour Cross Section Map
Line 29000N	3D Inversion Model – False Color Contour Cross Section Map
Line 29200N	3D Inversion Model – False Color Contour Cross Section Map
Line 29400N	3D Inversion Model – False Color Contour Cross Section Map
Line 29600N	3D Inversion Model – False Color Contour Cross Section Map
Line 29800N	3D Inversion Model – False Color Contour Cross Section Map
Line 30000N	3D Inversion Model – False Color Contour Cross Section Map
Line 30200N	3D Inversion Model – False Color Contour Cross Section Map
Line 30400N	3D Inversion Model – False Color Contour Cross Section Map
Line 30600N	3D Inversion Model – False Color Contour Cross Section Map

<b>PLATE #</b>	<b>3DIP Resistivity and Chargeability Models – Quartz Lake Property</b>
Line 30800N	3D Inversion Model – False Color Contour Cross Section Map
Line 31000N	3D Inversion Model – False Color Contour Cross Section Map
Line 31200N	3D Inversion Model – False Color Contour Cross Section Map
Line 31400N	3D Inversion Model – False Color Contour Cross Section Map
Line 31600N	3D Inversion Model – False Color Contour Cross Section Map
Line 31800N	3D Inversion Model – False Color Contour Cross Section Map
Line 32000N	3D Inversion Model – False Color Contour Cross Section Map
Line 32200N	3D Inversion Model – False Color Contour Cross Section Map
Line 32400N	3D Inversion Model – False Color Contour Cross Section Map
Line 32600N	3D Inversion Model – False Color Contour Cross Section Map

## **1 SUMMARY**

A 3D Induced Polarization survey was conducted on the Alexis property for Gold Member Ventures Corp. The property is situated in British Columbia, 100 kilometers northwest of Alexis Creek, within the Cariboo Mining Division. The ground geophysical program was completed by SJ Geophysics Ltd. from September 29, 2006 to November 16, 2006. The inverted results were forwarded to the client in the form of maps (plans and sections) and 3D models of spatial distribution, both of resistivity and chargeability.

The underlying purpose of the geophysical survey was to evaluate the mineral potential and provide information to assist in defining viable targets for future drilling. The inverted results highlighted an anomalous chargeable body which may be interpreted as being mineralized with sulphides, hosted in an area with Miocene and Pliocene olivine basalts.

This geophysical report summarizes the logistical aspects and methodologies of this particular survey, as well as providing a discussion of the results. The discussions of the results is intended to be a brief description of the geophysical data based solely on this survey and does not provide a detailed interpretation that takes into account the local and regional geology.

## **2 INTRODUCTION**

A 3D Induced Polarization survey was conducted on the Alexis property. This property is situated in British Columbia, approximately 100 kilometers northwest of the town of Alexis Creek, which is situated on Highway 20, approximately 114km west of Williams Lake. SJ Geophysics Ltd. acquired approximately 103km of IP data between September 29, 2006 and November 16, 2006. Initial quality control and data reduction was performed on site by a field geophysicist, while the final inversion of the data and its subsequent interpretation was completed by S.J.V. Consultants Ltd.

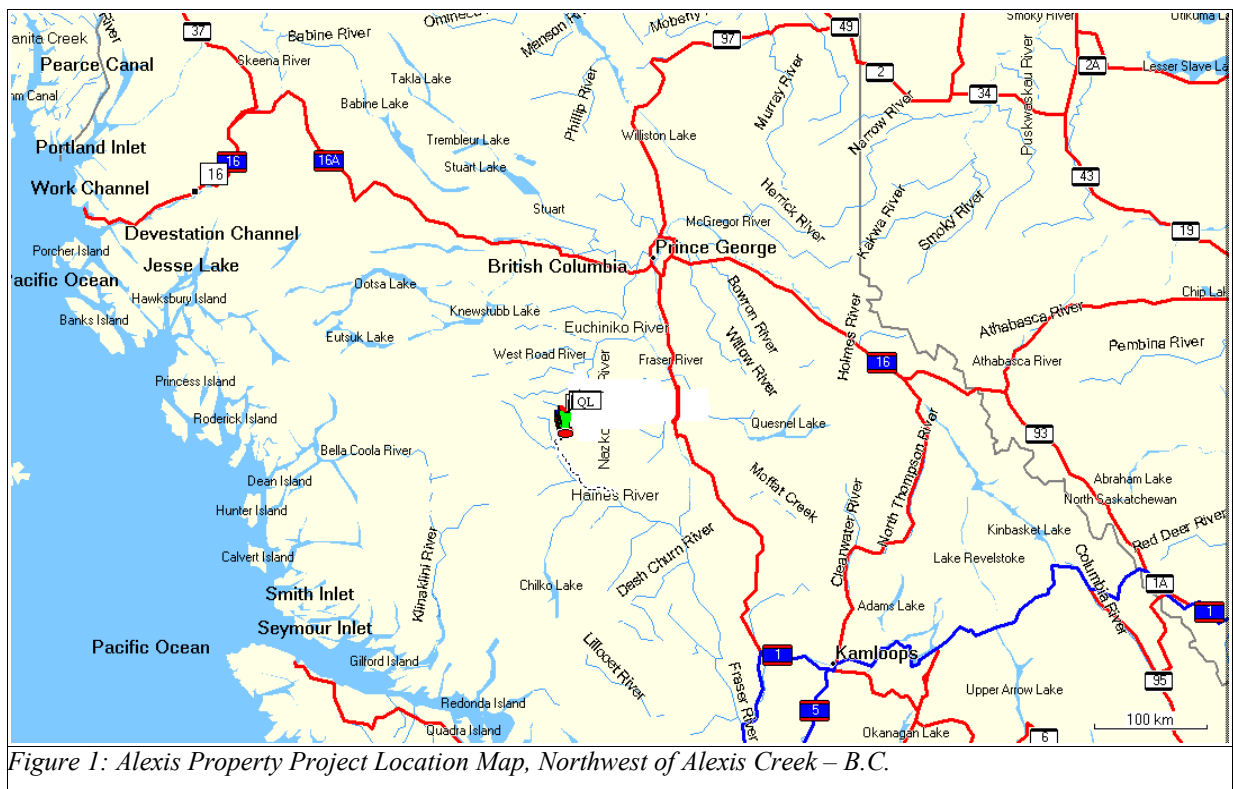
The underlying purpose of the geophysical survey was to provide information in order to better evaluate the mineral potential of the area and provide further information to develop an exploration model that would assist in defining viable targets for future drilling. To achieve this goal, the 3DIP methodology with a modified pole-dipole array was used in acquiring the geophysical survey data. This particular 3DIP methodology and corresponding hardware to gather the data is proprietary to SJ Geophysics Ltd.

This geophysical report summarizes the operational aspects of the project, the survey methodologies used and provides a brief geophysical interpretation. This interpretation of the 3DIP results are solely based on this geophysical program, and little was derived from local geology or previous conclusions provided by the client. This report is expected to be an addendum to a more complete geological report; therefore, does not cover such items as previous exploration work, regional and local geology, costs associated with the survey or history of the property.

### 3 LOCATION AND LINE INFORMATION

The Quartz Lake property is situated within the basin of Maxwell Creek, a few kilometers south of Clisbako River and approximately 100 kilometers northwest of the town of Alexis Creek, which is situated on Highway 20 approximately 114 km west of Williams Lake, British Columbia. Figure 1 shows the location of the Quartz Lake property.

Situated within the Cariboo Mining Division, the property was accessed from Vancouver driving Highway 1 up to Cache Creek, then Highway 97 to Williams Lake, then along Highway 20 to Alexis Creek and then again driving approximately 100 km on mostly gravel road, towards northwest.



The survey grid consisted of a total of 21 east-west lines which were cut by a crew of line cutters organized by the client. The lines were labeled 28600N through 32600N with a line spacing of 200m. All lines were 5 km in length, with a base line basically running through the centre of the grid. Stations were placed every 50 meters and inclinometer measurements were taken between every station. GPS waypoints were collected by the line cutters crew about every

200m, in NAD83 coordinates, zone 10. See Figure 2 above for a grid map and the table in Appendix 2 for more information on the grid.

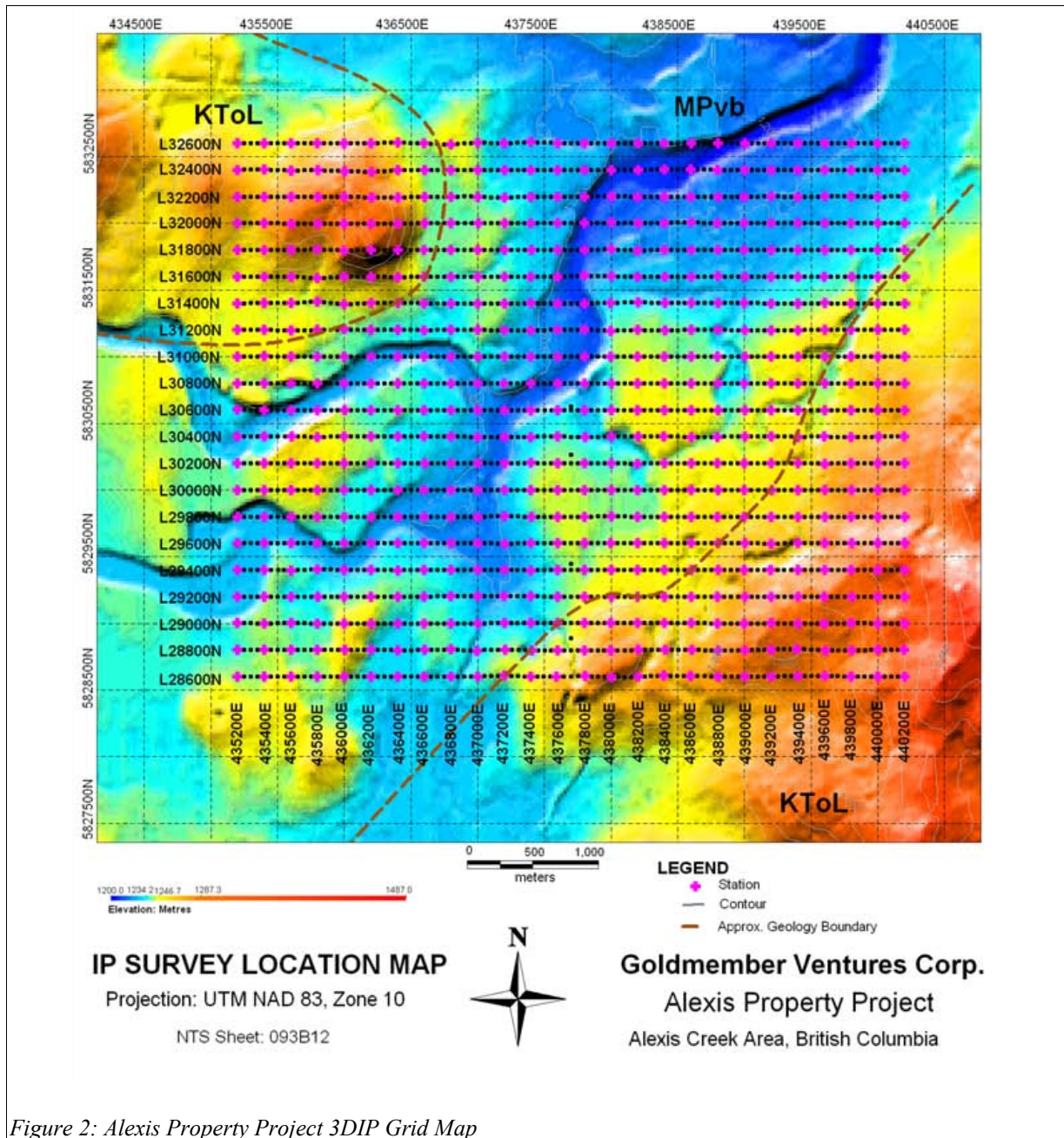


Figure 2: Alexis Property Project 3DIP Grid Map

## **4 FIELD WORK AND INSTRUMENTATION**

### ***4.1 Field Logistics***

The SJ Geophysics Ltd. crew consisted most of the time of six SJ Geophysics employees, but the number was increased to 9 employees towards the end of the job for logistical reasons.

Jan Dobrescu (geophysicist), John Wilkinson (technician), Ryan Nelson and Joshua Mayall were mobilized by vehicle with the geophysical instrumentation from Vancouver on 29<sup>th</sup> of September. They picked up Trevor Stepleton and Travis Forsyth in Williams Lake and drove to Alexis Creek, where they met up with the line-cutting crew. The next day, the SJ crew set up transmitter site (Tx) and layed out current lines. On October 1<sup>st</sup> the generator was stolen at the site and caused a delay for the geophysical operations to start according to plan. Equipment and ground conditions tests done prior to the survey also took more time than anticipated, as transmitters were tested to fit the survey, so actual acquisition of the data started on the 4<sup>th</sup> of October and continued through 15<sup>th</sup> of November. During this period of time, all lines of the grid from 28600N through 32600N were surveyed, and data were acquired using the 3DIP methodology.

During the job there were several changes of staff in the crew. Joshua Mayall left the project on 11<sup>th</sup> of October and Michael Pettersson (geophysicist) joined the crew on 18<sup>th</sup> of October, when he arrived in Alexis Creek with the motor home to help with crew logistics. On 21<sup>st</sup> of October, Travis Forsyth left for a few days break and Franzi Unterbergen replaced him on the job. On October the 31<sup>st</sup> there was a switch on the crew again when John Wilkinson, Jan Dobrescu, Trevor Stepleton and Ryan Nelson left the job site for the break, and they were replaced by Lauren Devlin, Travis Forsyth, Grady McNaughton and Nicolas Bernier. A last switch was done on November the 9<sup>th</sup> when Michael Pettersson and Franzi Unterbergen left the job site for a break and other 4 persons (Mas Akala, Ryan Nelson, Chris Denyes, Matt Harris) came to give more strength for the crew which was supposed to finish this IP job as soon as possible, under weather conditions that were deteriorating with each week.

There were 2 down days because of mechanical problems with the truck on 11<sup>th</sup> and 12<sup>th</sup> of October, and there was a move day for part of the crew and geophysical equipment on 26<sup>th</sup> of



October. A significant amount of time was required for moving wire and cables each day on a grid with an increasing amount of snow fall.

The average IP production was approximately 2100 meters/day for the entire survey. In the end there were in total 38 production days, 7 down days and 2 mobilization days.

## ***4.2 Survey Parameters and Instrumentation***

The geophysical survey started on Line 28600N and progressed to the north up to Line 29600N using remote current A, then continued again northward up to Line 30000N using remote current B. Then the survey continued to the north up to Line 30800N using remote current C, and then continued again towards north up to Line 32600N using remote current D. Lines 28600N, 29000N, 29400N, 29800N, 30200N, 30600N, 31000N, 31400N, 31800N, 32200N and 32600N were current lines, while lines 28800N, 29200N, 29600N, 30000N, 30400N, 30800N, 31200N, 31600N, 32000N and 32400N acted as receiver lines.

For receiver lines 28800N and 29200N, the remote current A was placed on Line 30200N at station 437700E. For the set up of the read Line 29600N, most of the read stations used the remote current B which was set on Line 30600N at station 437700E. For receiver lines 30000N, 30400N and 30800N, the remote current C was placed on Line 29400N at station 437700E. And finally, for receiver lines 31200N through 32400N, the remote was D, set up on Line 29400N at same station 437700E.

The dipole array consisted of a modified pole-dipole configuration that was used with a combination of 6 to 12 dipoles depending on ground conditions, for a total array length of 1600m.

For the entire IP survey, all data were collected using the proprietary SJ-24 Full Waveform Digital Receiver (Rx). The current was injected with a 2 seconds on, 2 seconds off duty cycle into the ground via a transmitter (Tx). GDD Tx II 3.6 KW transmitter was utilized for the duration of the program. For further information on the instrumentation, see Appendix 3 at the end of this report.

The dipole array was implemented using standard 8 conductor cables configured with 100m takeouts for the potential rods. At each current station, the electrodes used consisted of 5/8"

stainless steel rods of approximately 1m in length. For the potential line, the electrodes consisted of 3/8" stainless steel “pins” of 0.5m length.

The IP readings from each day's surveying were downloaded to a computer and entered into a database archive every evening. The database program allows the operator to display the IP decay curves in an efficient manner, and this provides a visual review of the data quality on site.

## **5 GEOPHYSICAL TECHNIQUES**

### ***5.1 IP Method***

The time domain IP technique energizes the ground surface with an alternating square wave pulse via a pair of current electrodes. On most surveys, such as this one, the IP/Resistivity measurements are made on a regular grid of stations along survey lines.

After the transmitter (Tx) pulse has been transmitted into the ground via the current electrodes, the IP effect is measured as a time diminishing voltage at the receiver electrodes. The IP effect is a measure of the amount of IP polarizable materials in the subsurface rock. Under ideal circumstances, IP chargeability responses are a measure of the amount of disseminated metallic sulfides in the subsurface rocks.

Unfortunately, there are other rock materials that give rise to IP effects, including some graphitic rocks, clays and some metamorphic rocks (serpentinite for example). So from a geological point of view, IP responses are almost never uniquely interpretable. Because of the non-uniqueness of geophysical measurements it is always prudent to incorporate other data sets to assist in interpretation. Also, from the IP measurements the apparent (bulk) resistivity of the ground is calculated from the input current and the measured primary voltage.

IP/resistivity measurements are generally considered to be repeatable to within about five percent. However, they will exceed that if field conditions change due to variable water content or variable electrode contact. IP/resistivity measurements are influenced, to a large degree, by the rock materials nearest the surface (or, more precisely, nearest the measuring electrodes), and the interpretation of the traditional pseudosection presentation of IP data in the past has often been uncertain. This is because stronger responses that are located near surface could mask a weaker one that is located at depth.

## **5.2 3DIP Method**

Three dimensional IP surveys are designed to take advantage of the interpretational functionality offered by 3D inversion techniques. Unlike conventional IP, the electrode arrays are no longer restricted to in-line geometry. Typically, current electrodes and receiver electrodes are located on adjacent lines. Under these conditions, multiple current locations can be applied to a single receiver electrode array and data acquisition rates can be significantly improved over conventional surveys.

In a common 3DIP configuration, a receiver array is established, end-to-end along a survey line while current electrodes are located on two adjacent lines. The survey typically starts at one end of the line and proceeds to the other end. A typical 8 dipole array normally consists of two 100m dipoles, followed by four 50m dipoles and then two more 100m dipoles at the end of the array. In some areas these spacings are modified to compensate for local conditions such as inaccessible sites, streams, and overall conductivity of ground. Current electrodes are advanced along the adjacent lines, starting at approximately 200m from the center of the array and advancing approximately 400m through the array at 50m increments. At this point, the receiver array is advanced 400m and the process is repeated down the line. Receiver arrays are typically established on every second line (200m apart) thereby providing subsurface coverage at 100m increments.

## **5.3 Inversion Programs**

“Inversion” programs that have recently become available allow a more definitive interpretation, although the process remains subjective.

The purpose of the inversion process is to convert surface IP/Resistivity measurements into a realistic “Interpreted Depth Section.” However, note that the term is left in quotation marks. The use of the inversion routine is a subjective one because the input into the inversion routine calls for a number of user selectable variables whose adjustment can greatly influence the output. The output from the inversion routines do assist in providing a more reliable interpretation of IP/Resistivity data, however, they are relatively new to the exploration industry and are, to some degree, still in the experimental stage.

The inversion programs are generally applied iteratively to evaluate the output with regard to what is geologically known, to estimate the depth of detection, and to determine the viability of specific measurements.

The Inversion Program (DCINV3D) used by the SJ Geophysical Group was developed by a consortium of major mining companies under the auspices of the UBC-Geophysical Inversion Facility. It solves two inverse problems. The DC potentials are first inverted to recover the spatial distribution of electrical resistivity, and, secondly, the chargeability data (IP) are inverted to recover the spatial distribution of IP polarizable particles in the rocks.

The interpreted depth section maps represent the cross sectional distribution of polarizable materials, in the case of IP effect, and the cross sectional distribution of the apparent resistivity, in the case of the resistivity parameter.

## **6 DATA PRESENTATION**

### ***6.1 Cross Sections***

As described above, the IP data is processed through an inversion program that outputs one possible subsurface distribution of resistivity and polarizable materials that would produce the observed data. These results are presented in a false-color cross section and these displays can be directly interpreted as geological cross sections.

For the purposes of the report, page size scaled plots have been included in Appendix 4 at the back of this report.

### ***6.2 Plan Maps***

False color contour maps of the inverted resistivity and chargeability results can be produced for selected depths. Data is positioned using UTM NAD83 zone 10 coordinates gathered during the field work. This display illustrates the regional distribution of the geophysical trends, outlining strike orientations and possible fault offsets.

Plan maps can be displayed in two ways: depth below topography or as horizontal slices in terms of elevation. For the purposes of this report, the plan maps produced were created as depths below the surface. However, elevation slices may be easily viewed from the 3D inversion

model with the use of a 3D viewer described in the next section.

Plan maps are plotted for both resistivity and chargeability at depths of 50m, 75m, 100m, 150m, 200m, 250m and 300m and are included as page size plots in Appendix 4.

### ***6.3 Inversion Model***

With the computer technology that exists today, the 3D inversion results can be easily viewed using a 3D visualization program such as UBC-GIF's Mesh tools 3D program or open-source software packages such as ParaView. These programs use a block model format to manipulate the data and allow a user to view the model from infinite viewing angles, or to create infinite cross-sections or plan maps. In addition, these visualization programs allow the user to isolate different isosurfaces/volumes to facilitate interpretation of the data.

## **7 DISCUSSION OF RESULTS**

### ***7.1 Data Processing***

The array implemented over the line separation of 200m with 100m dipoles allowed the volume to be broken down to a cell size of 25m. The inversion “mesh” or array of cells is oriented along the lines, that is along the local coordinates axis. This orientation provides the most efficient representation of the volume in terms of cell economy. The volume must also be arranged to be within a rectangular area with ample extension or “padding” to permit the calculations to proceed unconstrained within the actual survey region. The final models are then trimmed to remove the “padding” to just beyond the data.

For this survey the very near surface (<50m) is not very well resolved due to the 200m line separation and 100 meters dipoles. There appears to be certain features which do not extend to depth and these must be considered as being under determined, primarily for the regions between lines. The survey was designed to delineate large scale features at depth; therefore, longer lines with a wide spacing was used.

Also, there is no control on the edge of survey due to boundary condition limitation, so features which are developed very near the edges must be viewed with skepticism.

## **7.2 Discussion of Results**

### **7.2.1 Target Description**

The Alexis Property Project grid map, Figure 2, shows two boundaries of the geological units covering the grid as outlined by historical geology mapping of the region (“Minfile Map 093B Quesnel – Mineral Occurrence Map” published by Province of British Columbia – Ministry of Energy, Mines and Petroleum Resources). The Miocene and Pliocene units (Mpvb – olivine basalt flows, breccia, tuff) cover most of the central part of the grid and the Ootsa Lake Group of Upper Cretaceous and Lower Tertiary age (Ktol – rhyolite, dacite, trachyte, sandstone, shale, conglomerate) cover the southeastern and northwestern corners of the surveyed area. Within this geological frame, we are looking for a possible mineralization present in the mapped geological units, or at their contact, or eventually underneath them.

The geophysical parameter chargeability and resistivity will be discussed individually then the associations between the two will be brought together to discuss the associations between chargeability and resistivity for a complete compilation of the data. The chargeability will be discussed first because it provides a more simplistic picture of the geological environment.

### **7.2.2 Chargeability**

A northeast-southwest trending corridor of moderate to high chargeability runs through the centre of the project, as outlined in Figure 3 below by the white annotated lines. Outside this corridor (northwest and southeast corners) is characterized by very low chargeability values less than 3ms. The boundaries of this corridor closely resemble the historical geological mapping; therefore, suggesting that chargeability is closely linked to the geological units. Thus it appears that the Miocene and Pliocene units (Mpvb) provide a stronger chargeable signature than the other geological units for this project grid.

Within the corridor, four relatively high (> 12ms) chargeability features are distinguishable from the rest. These have been labeled 1 through 4 for ease of discussion. Features 1, 2 and 3 chargeable bodies parallel the northern flank of the corridor; whereas, Feature 4, the smallest of the features, is more concentrated near the southern flank. Closer examination of Feature 3 shows a north-south break within the feature itself.

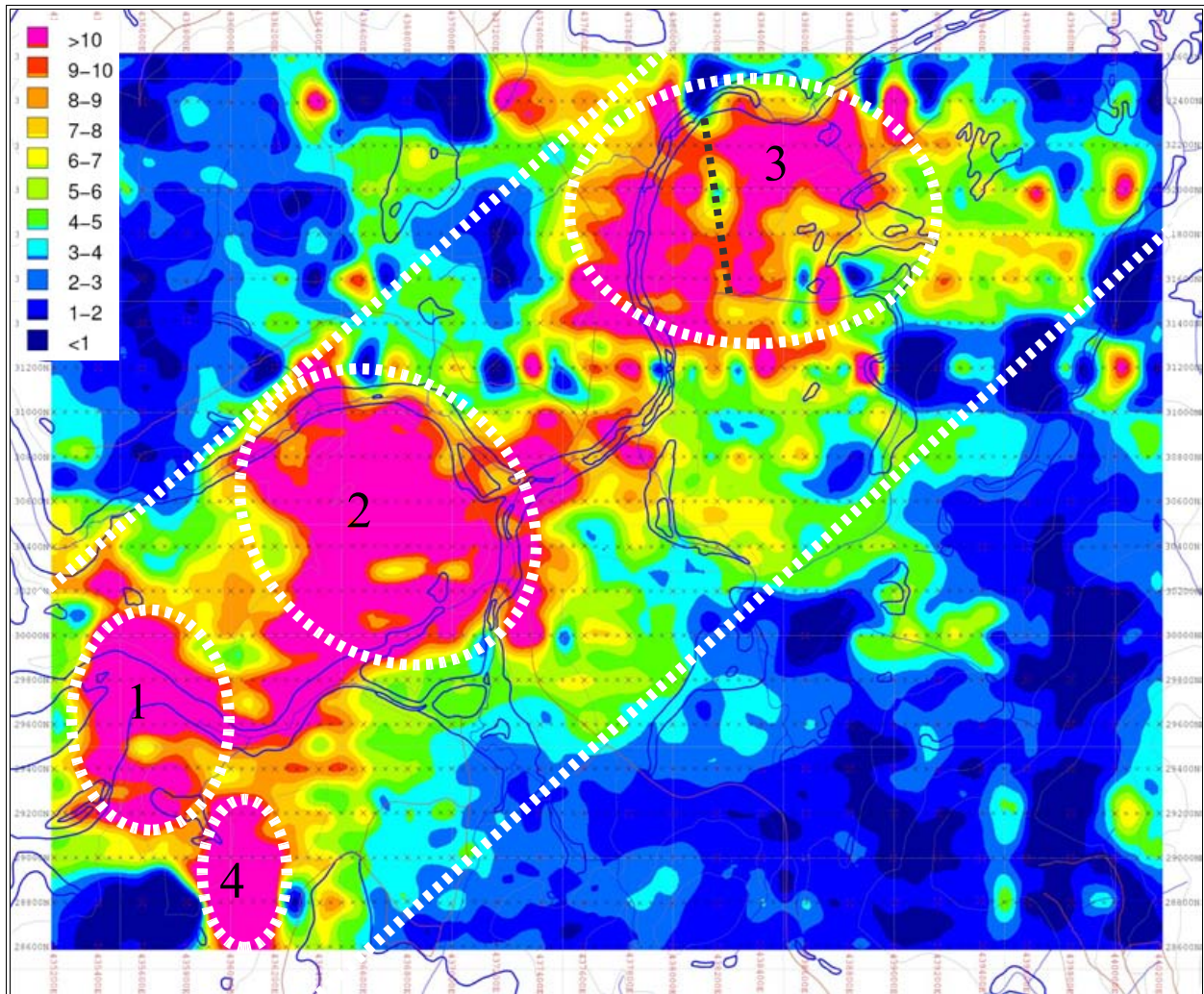


Figure 3: Inverted Chargeability Model at 100m Depth

### 7.2.3 Resistivity

The range of resistivity values (everything less than 650 ohm-m) calculated by the inversion model demonstrates that the survey grid is in a relatively low resistive geological environment. However, for the purposes of this discussion the model will be described in terms of high (> 125 Ohm-m) and low (< 60 Ohm-m) resistivity features based on the grids background values.

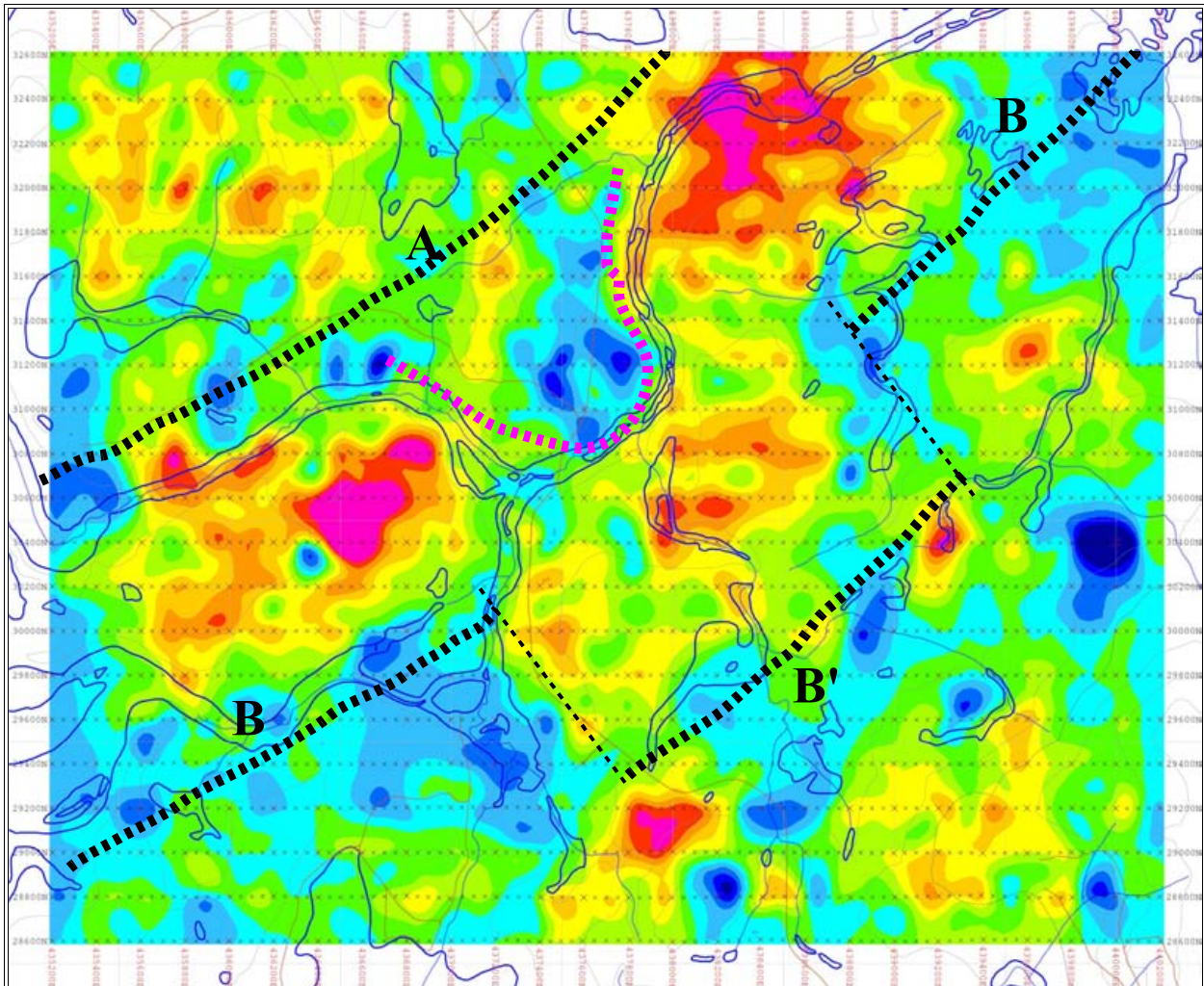


Figure 4: Inverted Resistivity Model at 100m Depth

Figure 4 above illustrates the inverted resistivity model at 100m depth which will be used to describe the distinguishable resistivity features. In this figure, the data reveals that the region has several scattered bodies with moderate to high resistivity values. A couple major northeast-southwest trending lineations are distinguishable within the data that begin to separate these



features. The northern lineations (labelled A) is consistent across the entire grid; however, the southern lineation (B) is split in the centre. The middle section of the lineation appears to be offset to the southeast corner by approximately a 1000m.

A close association exists between the drainage pattern and that of the resistivity breaks as map by the zones of resistive material. The offset lineation (B') is a clear example of this. Where B' is offset to the southeast corner, the creek takes a significant jog to the southeast and then eventually turns back to the northwest. In this case the river can easily map the location of cross faulting for this offset region.

#### **7.2.4 Compilation**

Bringing the two geophysical parameters together to examine their associations can provide further insight into an interpretation. By adding the two lineations/features outlines of Figure 3 and Figure 4 onto the same image will show the correlation between the chargeability and resistivity. The compilation can be seen in Figure 5 (Resistivity) and Figure 6 (Chargeability).

From Figure 5, it is evident that the northern flank of the chargeability corridor is coincident with the resistivity lineation A. This obvious break in both resistivity and a change in the chargeability characteristics may signify that this is a geological contact.

As for the southern flank of the chargeability corridor things are more complicated. By looking at the resistivity features on the chargeability plan map (Figure 6), shows there are also some close associations between the two. It appear that the southern edge of chargeability features 1, 2 and 3 are controlled by the resistivity lineation B. It is also noted that the southern flank corridor does line up with the offset section of B'. The chargeability's southern flank may also be mapping a geological contact. With the known geological mapping, this is safe assessment.

The other features that stand out is that chargeability feature 2 and 3 are associated with resistive regions with the highest resistivity values near the core of the chargeability feature. Unlike feature 2 and 3, feature 1 and 4 are not associated with raised resistivity values. The only notable difference between feature 1 and 4 is that feature 4 is to the south of the resistivity lineation B.

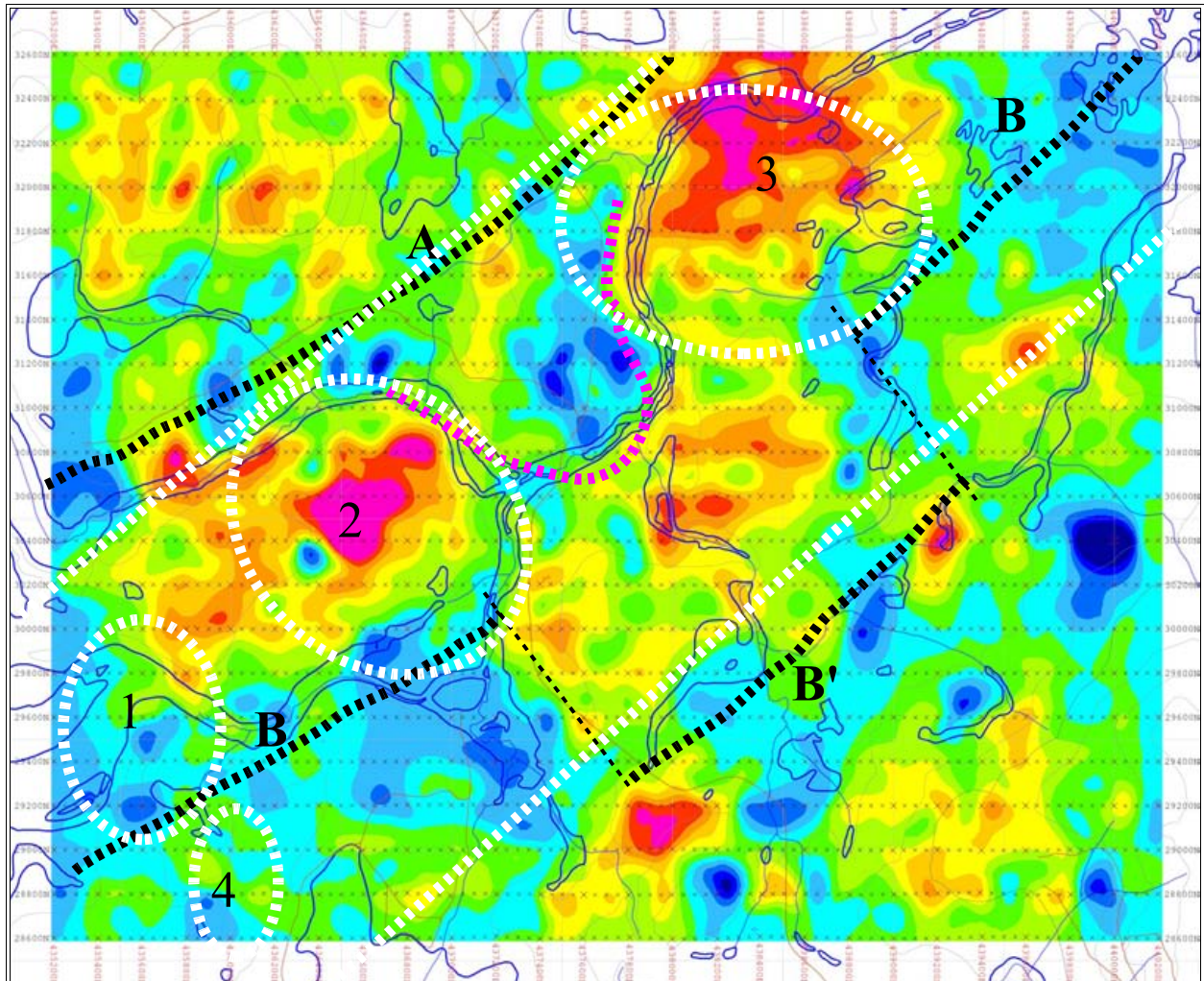


Figure 5: Compilation (Inverted Resistivity Model at 100m Depth)

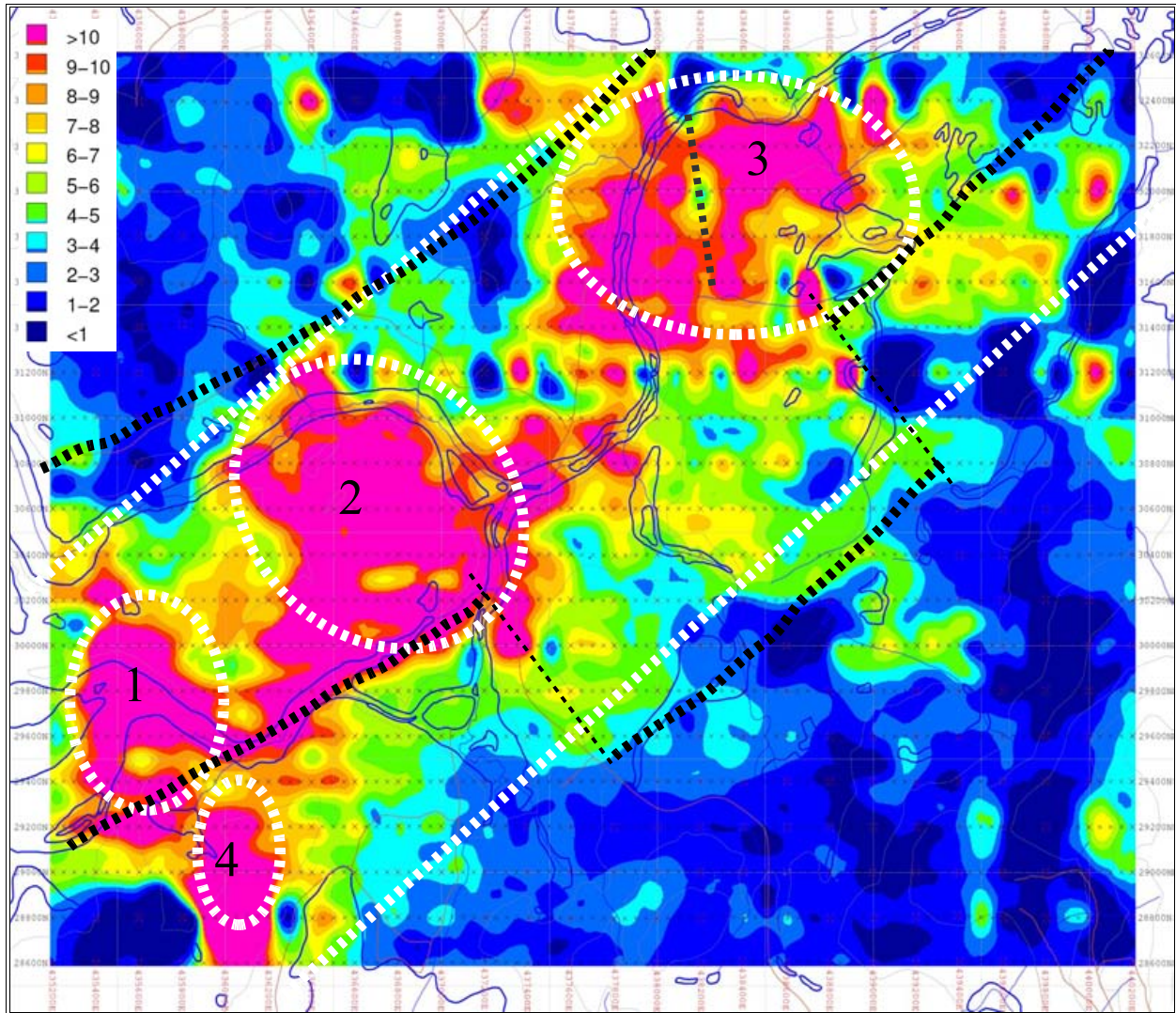
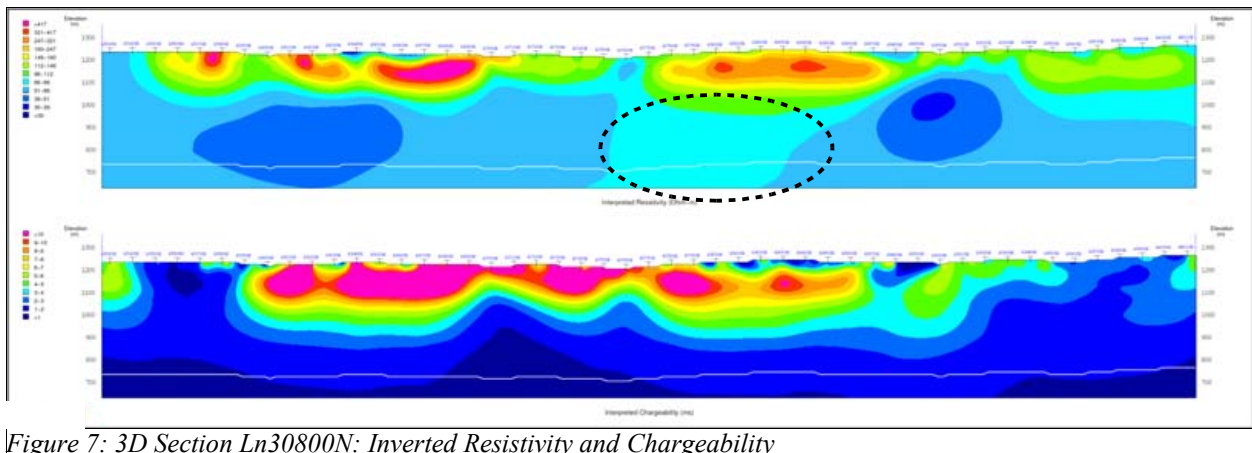


Figure 6: Compilation (Inverted Chargeability Model at 100m Depth)

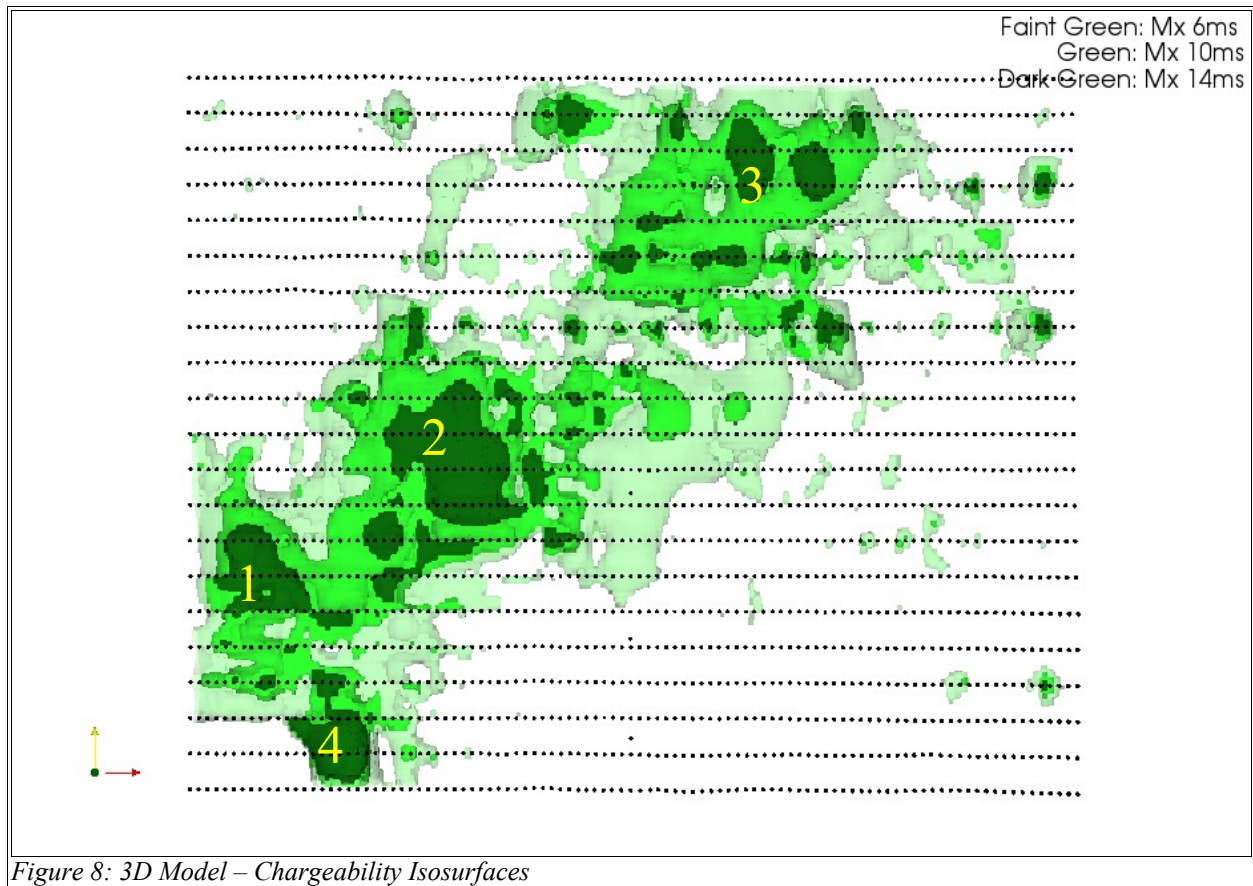
By examining the plan maps for several depths (Appendix 4; 100m, 150m, 200m, 300m etc.) it is clear that the apparent resolution dissipates to a smooth background value by a depth of 250m. There are two possible explanations for this. This dissipation of resolution may suggest that the acquisition of the data is not achieving the depth of investigation; hence, we may not be getting below these surface geological units. A second explanation may be that we have a layered system, which may suggest that we may be in an infinite half space with little variation to be seen. As shown in Figure 7 below, there are some subtle features to be seen in the resistivity data. The black dashed circle shows a zone of low resistivity penetrating down into this possible second layer.



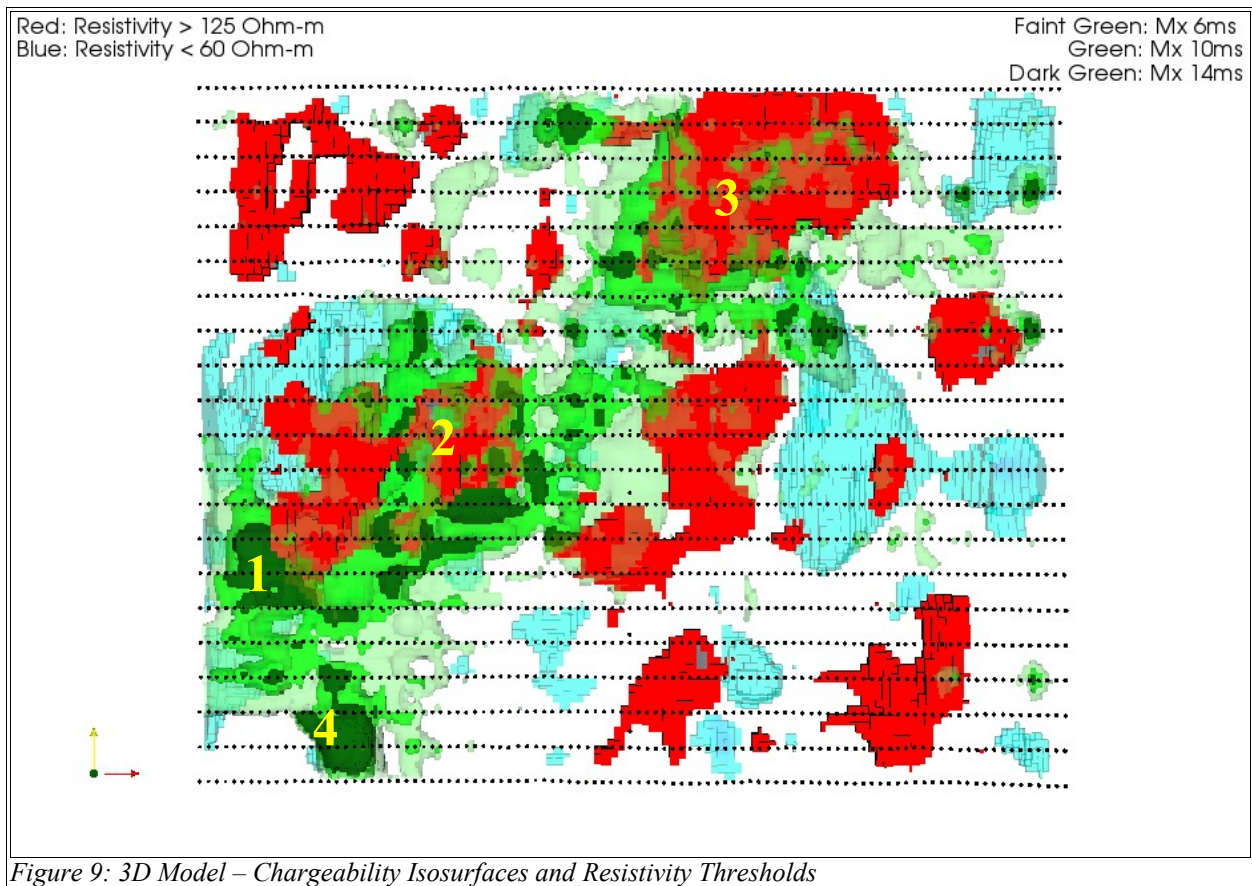
*Figure 7: 3D Section Ln30800N: Inverted Resistivity and Chargeability*

Another very useful tool in determining the relation between the different geophysical parameters is a visualization package. For this project the data was also examined with a visualization package. The following images, figure 8 and 9 provide some snapshots of the 3D models from the visualization package.

The light green contour sort of outlines the chargeability corridor while the dark green shows the 4 features. Introducing the resistivity volume to this image provides us the image as illustrated in Figure 9.



We are able to see the spatial relationship between the chargeability and resistivity. Within the visualization software package we can rotate the model around to provide a realistic 3D view of the model which can not be portrayed on paper. This allow us to see that the resistive zone associated with chargeability feature 2 is overlaying a zone of low resistive material that penetrates deeper than other regions, which is not apparent on any of the 3 other chargeability features. This can be seen better in the section plot for line 30800N in Figure 7



## **8 CONCLUSIONS**

SJ Geophysics Ltd. acquired approximately 103 line kilometres of 3D Induced Polarization data over the Alexis property project. Interpreted from the inverted geophysical models is a noticeable chargeability corridor trending northeast-southwest. The southern and northern flanks of this corridor may represent geological contacts based on the change in the chargeability characteristics. Within this corridor existed four nodes of higher chargeability values that were anomalous to the material around it. Extension of the grid would be recommended to determine if this chargeability corridor extends to the southwest and to the northeast.

It is debatable if the survey achieved the depth of investigation anticipated based on the survey parameters. Therefore, the model is showing an infinite half space with little variation at depth or the acquisition technique was unable to penetrate the top layer. However, the 3DIP clearly mapped some of the geological structure of the region thus providing additional information to the geological and geophysical model of the region.

Further investigation with regional geophysical data, any geochemical and geological data may unearth more subtle features that may provide further insight in providing future drill targets. When some drill data is available for this property, the geophysical data should definitely be revisited and a detailed review of the inversion models should be conducted. Examination of the geophysical data with drill data can act as a control and greatly enhance the interpretation of the geophysics by relating the cores with resistivity values and then tracking the associated trends.

Respectfully submitted,

As per S.J.V. Consultants Ltd.

Jan Dobrescu, B.Sc. Hon., (Geophysics/Geology)

Shawn Rastad, B.Sc. (Geophysics)

## **APPENDIX 1 – STATEMENT OF QUALIFICATIONS**

### ***Jan Dobrescu***

I, Jan Dobrescu, of the city of Burnaby, Province of British Columbia, hereby certify that:

- 1) I graduated from the University of Bucharest in 1985 with a B. Sc. Hon degree in geological and geophysical engineering.
  
- 2) I have practised my profession continuously from that date.
  
- 3) I have no interest in Goldmember Ventures Corp. or any of their subsidiaries or related companies, nor do I expect to receive any.

Signed by: \_\_\_\_\_

Jan Dobrescu, B. Sc. Hon.,  
(Geophysics/Geology)



***Shawn Rastad***

I, Shawn Rastad, of the city of Coquitlam, Province of British Columbia, hereby certify that:

- 1) I graduated from the University of British Columbia in 1996 with a Bachelor of Science degree majoring in geophysics.
- 2) I have been working in mineral and oil exploration since 1997.
- 3) I have no interest in Goldmember Ventures Corp., Inc. or in any property within the scope of this report, nor do I expect to receive any.

Signed by: \_\_\_\_\_

Shawn Rastad, B.Sc. (Geophysics)

Date: \_\_\_\_\_

**APPENDIX 2 – SUMMARY TABLES (IP ONLY)**

<i>Line</i>	<i>BOL Station</i>	<i>EOL Station</i>	<i>Remote used</i>	<i>Type</i>	<i>Surveyed Length</i>
28600	435200	440200	A [437700E 30201N]	Cx	5000
28800	435300	440100	A [437700E 30201N]	Rx	4800
29000	435200	440200	A [437700E 30201N]	Cx	5000
29200	435300	440100	A [437700E 30201N]	Rx	4800
29400	435200	440200	A [437700E 30201N]; B [437700E 30601N]	Cx	5000
29600	435300	440100	A [437700E 30201N]; B [437700E 30601N]	Rx	4800
29800	435200	440200	A [437700E 30201N]; B [437700E 30601N]; C [437700E 28901N]	Cx	5000
30000	435300	440100	C [437700E 28901N]	Rx	4800
30200	435200	440200	C [437700E 28901N]	Cx	5000
30400	435300	440100	C [437700E 28901N]	Rx	4800
30600	435200	440200	C [437700E 28901N]	Cx	5000
30800	435300	440100	C [437700E 28901N]	Rx	4800
31000	435200	440200	C [437700E 28901N]; D [437700E 29401N]	Cx	5000
31200	435300	440100	D [437700E 29401N]	Rx	4800
31400	435200	440200	D [437700E 29401N]	Cx	5000
31600	435300	440100	D [437700E 29401N]	Rx	4800
31800	435200	440200	D [437700E 29401N]	Cx	5000
32000	435300	440100	D [437700E 29401N]	Rx	4800
32200	435200	440200	D [437700E 29401N]	Cx	5000
32400	435300	440100	D [437700E 29401N]	Rx	4800
32600	435200	440200	D [437700E 29401N]	Cx	5000

*Total Linear Meters = 103000 m*

## APPENDIX 3 – INSTRUMENT SPECIFICATIONS

### *SJ-24 Full Waveform Digital IP Receiver*

Technical:	
Input impedance:	10 Mohm
Input overvoltage protection:	up to 1000V
External memory:	Unlimited readings
Number of dipoles:	4 to 16 +, expandable.
Synchronization:	Software signal post-processing user selectable
Common mode rejection:	More than 100 dB (for $R_s = 0$ )
Self potential (Sp):	Range: -5V to + 5V Resolution: 0.1 mV Proprietary intelligent stacking process rejecting strong non-linear SP drifts
Primary voltage:	Range: 1 $\mu$ V – 10V (24bit) Resolution: 1 $\mu$ V Accuracy: typ. <1.0%
Chargeability:	Resolution: 1 $\mu$ V/V Accuracy: typ. <1.0%
General (4 dipole unit):	
Dimensions:	18x16x9 cm
Weight:	1.1 Kg
Battery:	12V External
Operating temperature range:	-20°C to 40°C

### *GDD Tx II IP Transmitter*

Input voltage:	240V / 60Hz 50Hz (optional)
Output power:	3.6 Kw maximum.
Output voltage:	150 to 2800 Volts
Output current:	5 ma to 10Amperes
Time domain:	Transmission cycle is 2 seconds ON, 2 seconds OFF
Operating temp. range:	-40 <sup>0</sup> to +65 <sup>0</sup> C
Display:	Digital LCD read to 0.001A
Dimensions (h w d):	34 x 21 x 39 cm
Weight:	50kg.

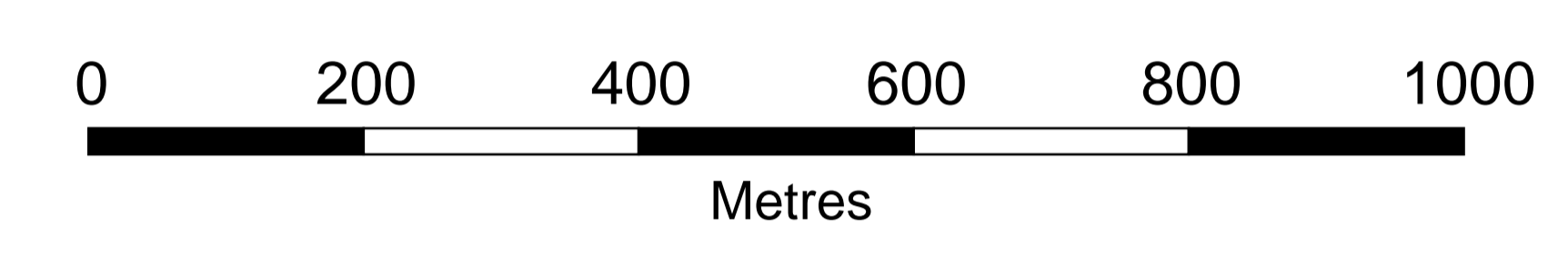
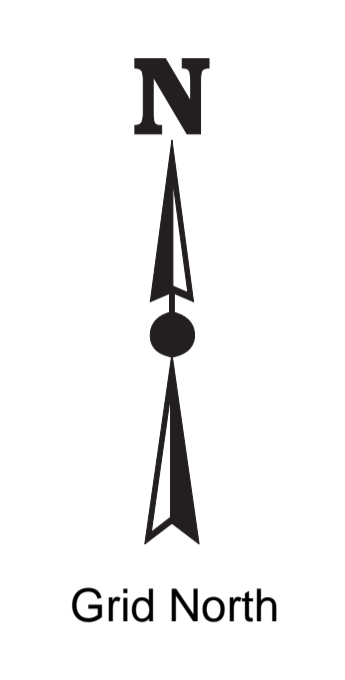
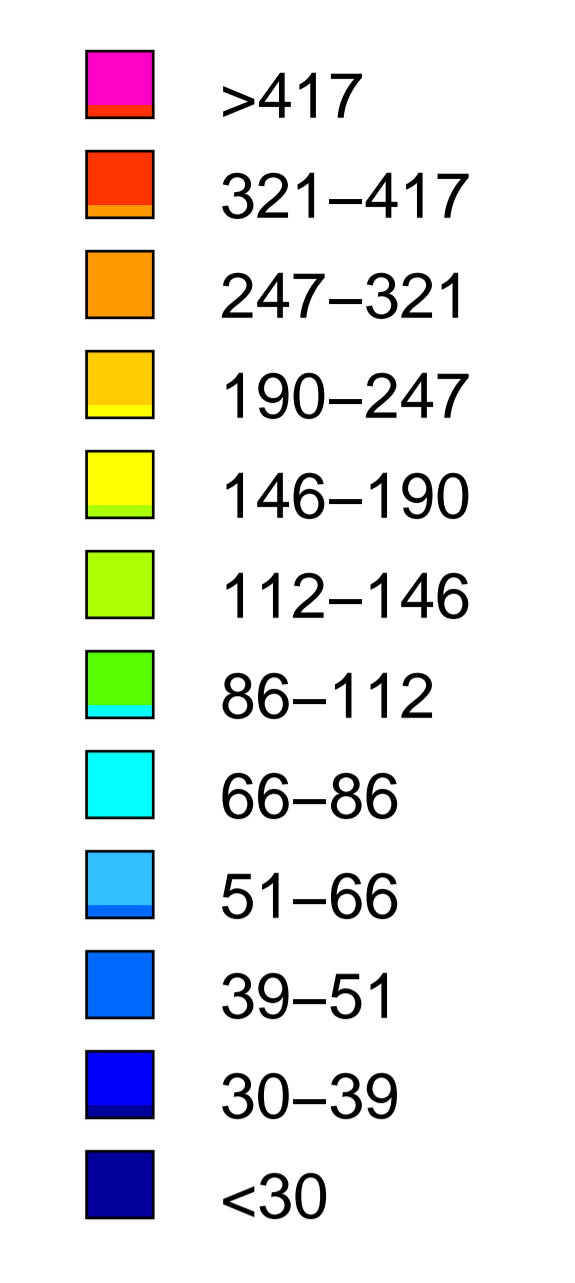
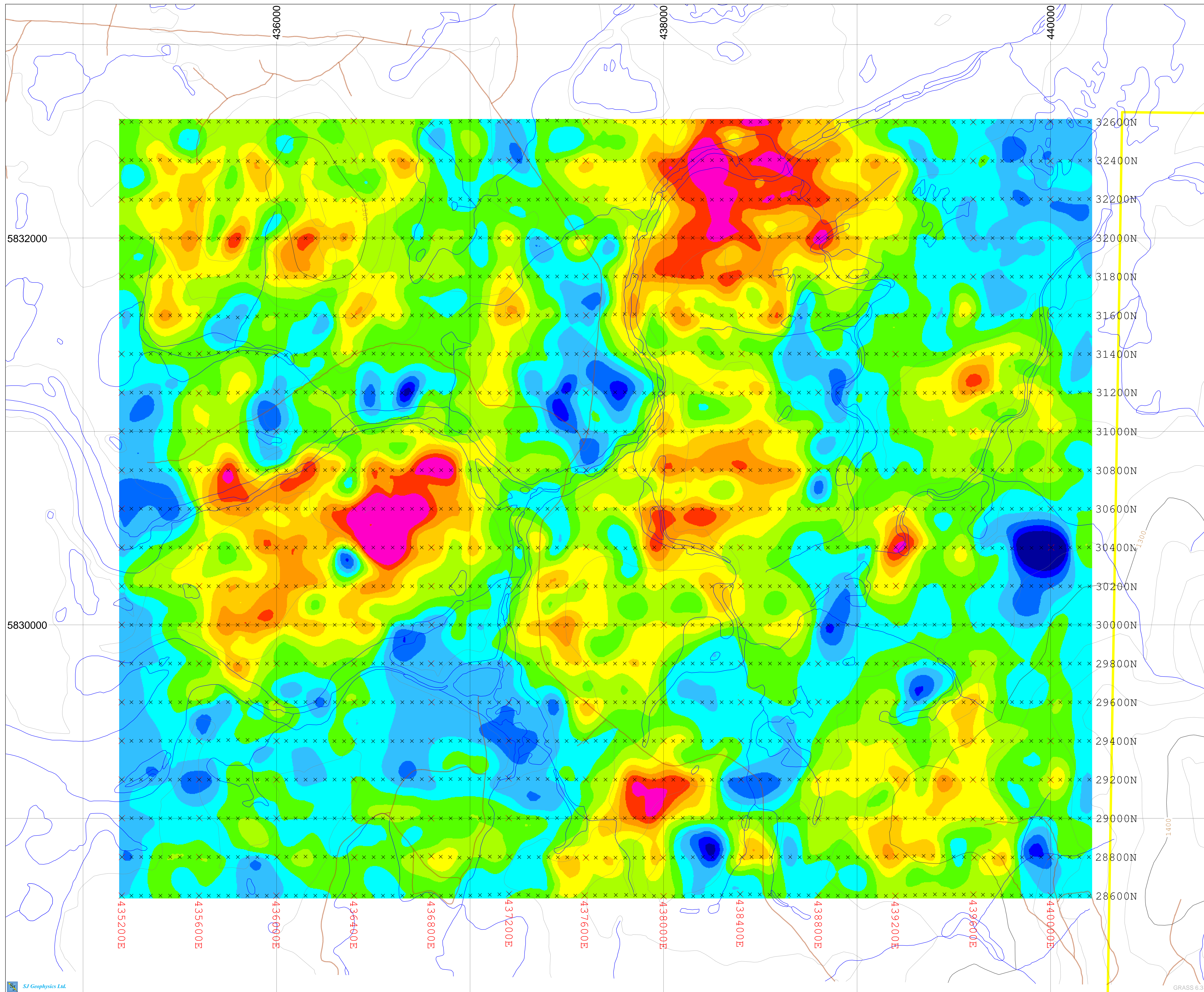
## **APPENDIX 4 – PLATES**

Included as separate PDF files:

“Alexis\_Planmaps\_Res.pdf” contains interpreted resistivity at 50m, 75m, 100m, 150m, 200m, 250m and respectively 300m below the surface.

“Alexis\_Planmaps\_Chg.pdf” contains interpreted chargeability at 50m, 75m, 100m, 150m, 200m, 250m and respectively 300m below the surface.

“Alexis\_3Dsections.pdf” contains false color contour cross section maps of the 3D Inversion Model, both resistivity and chargeability, for lines 28600E, 29200E, 29600E, 30000E, 30400E, 30800E, 31200E, 31600E, 32000E, and 32400E.



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

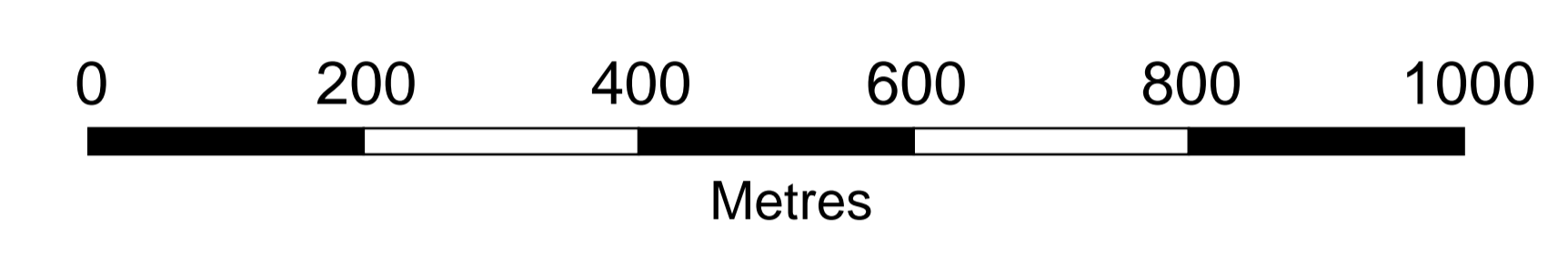
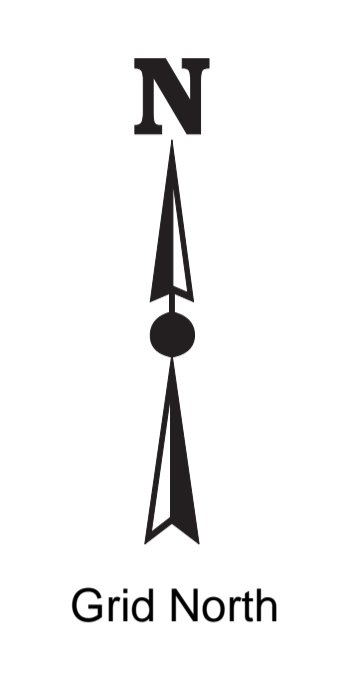
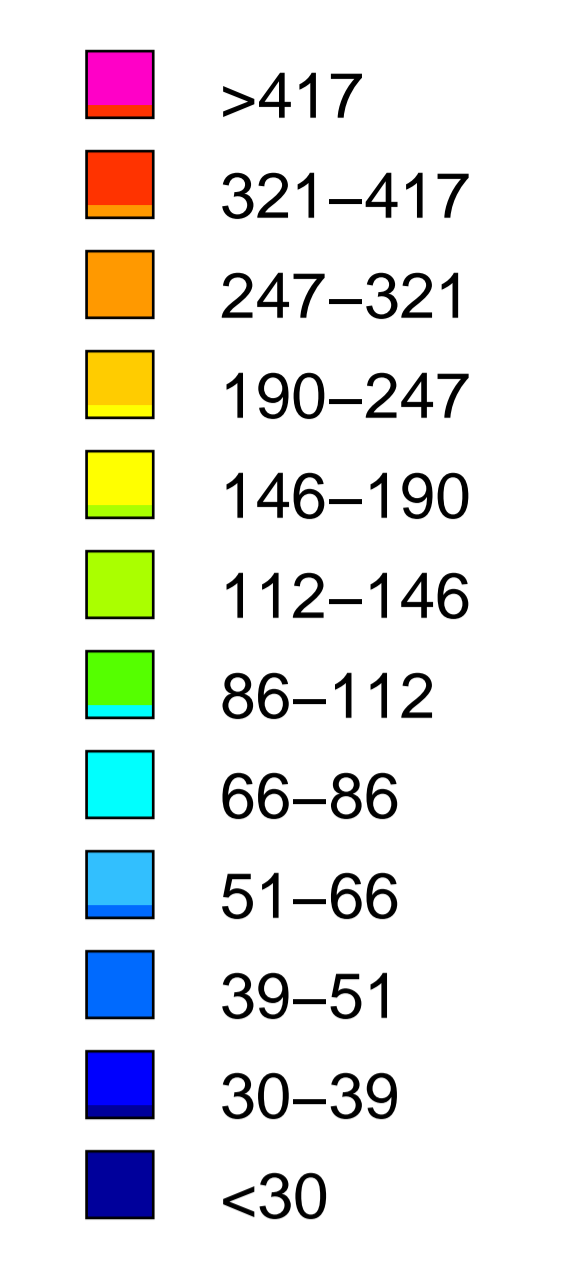
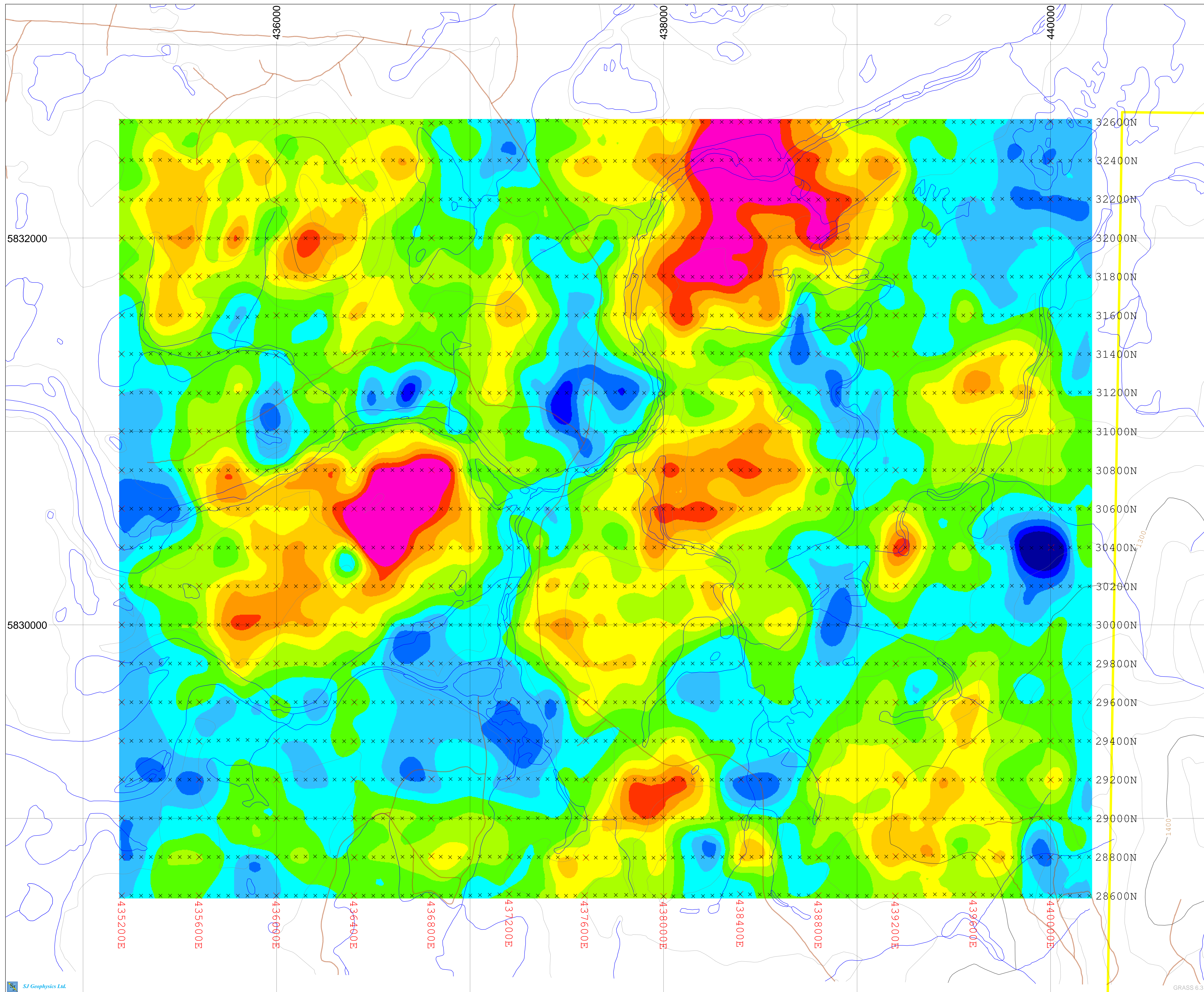
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

Depth 50m Below Topography



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

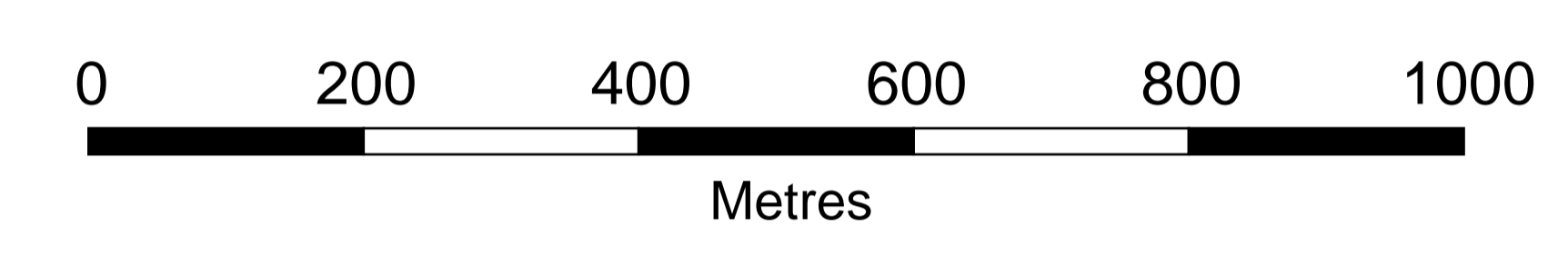
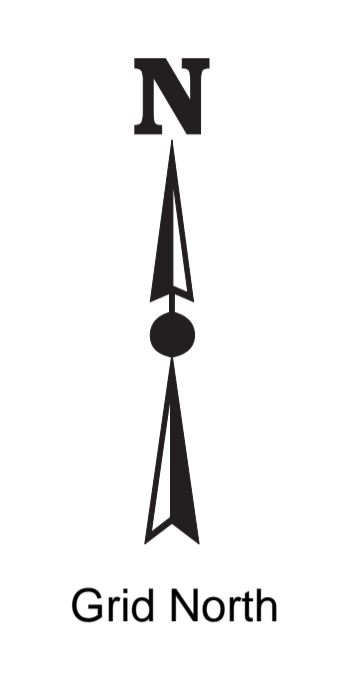
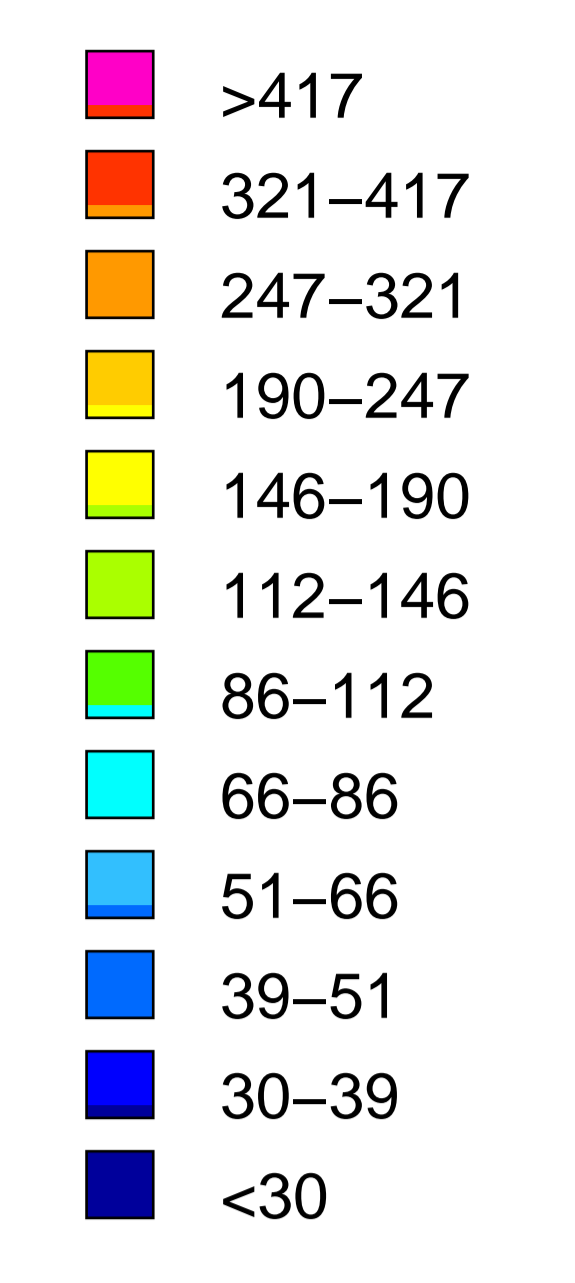
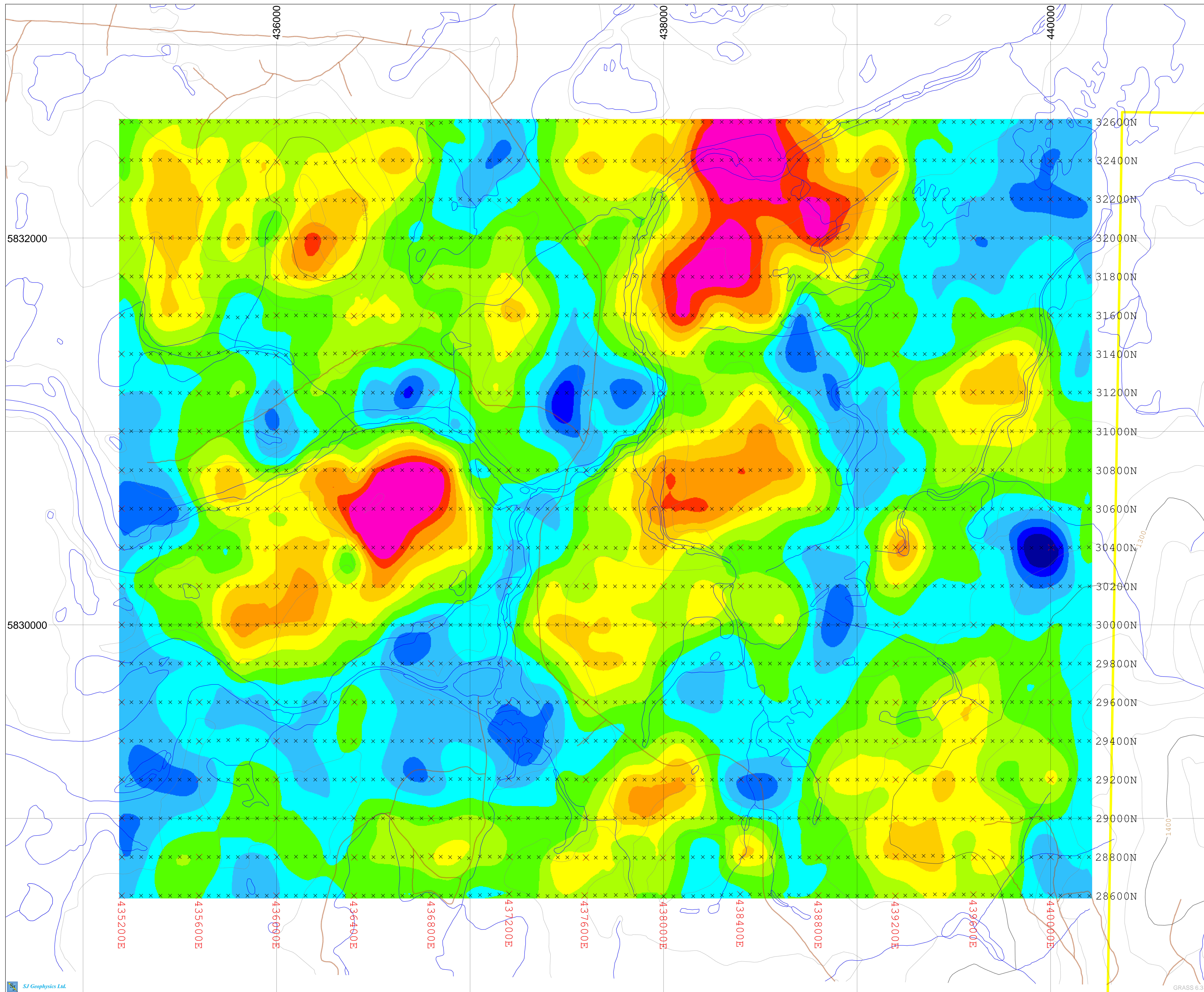
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

**Depth 75m Below Topography**



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

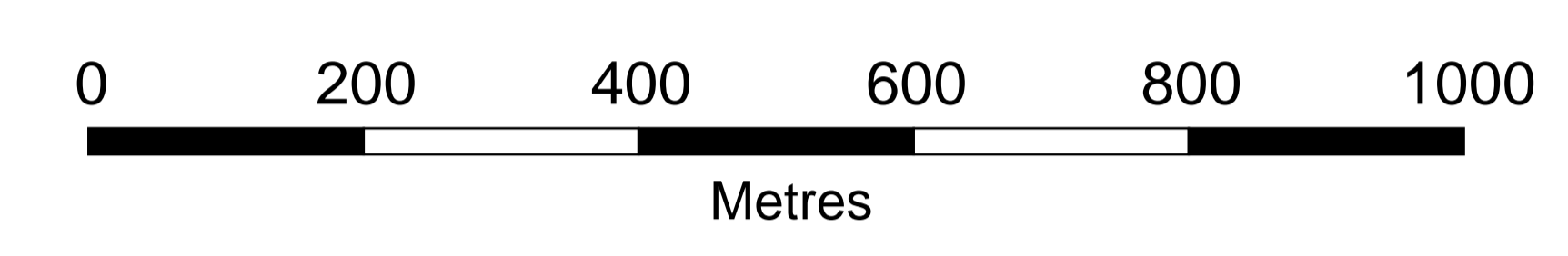
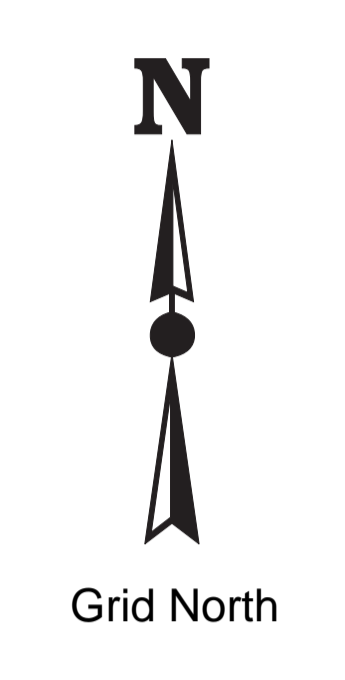
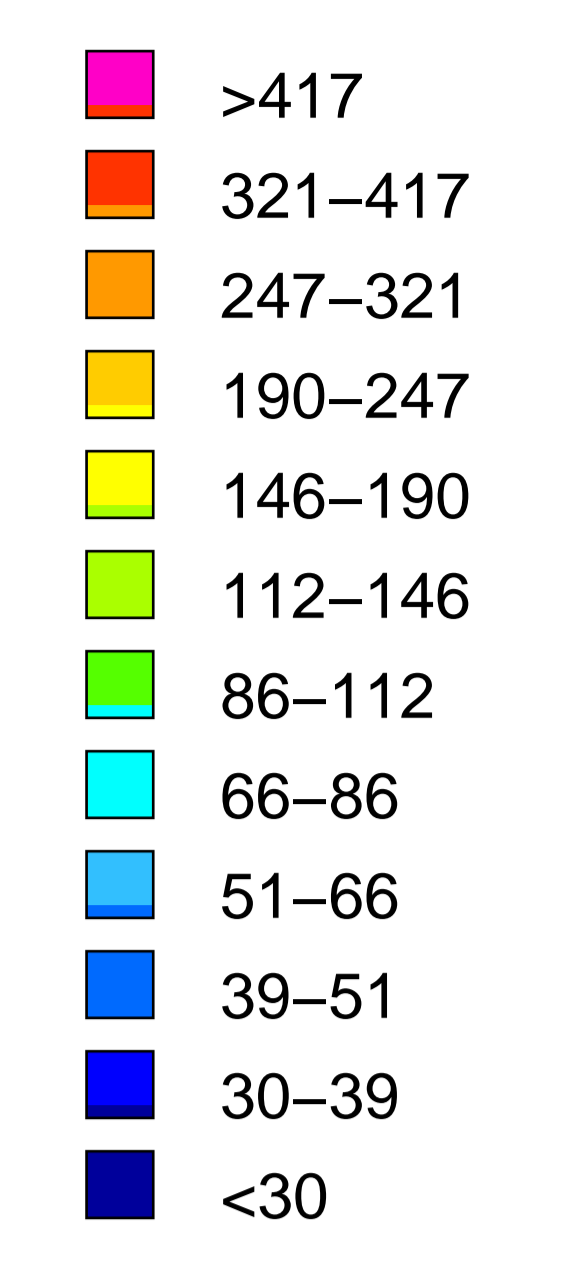
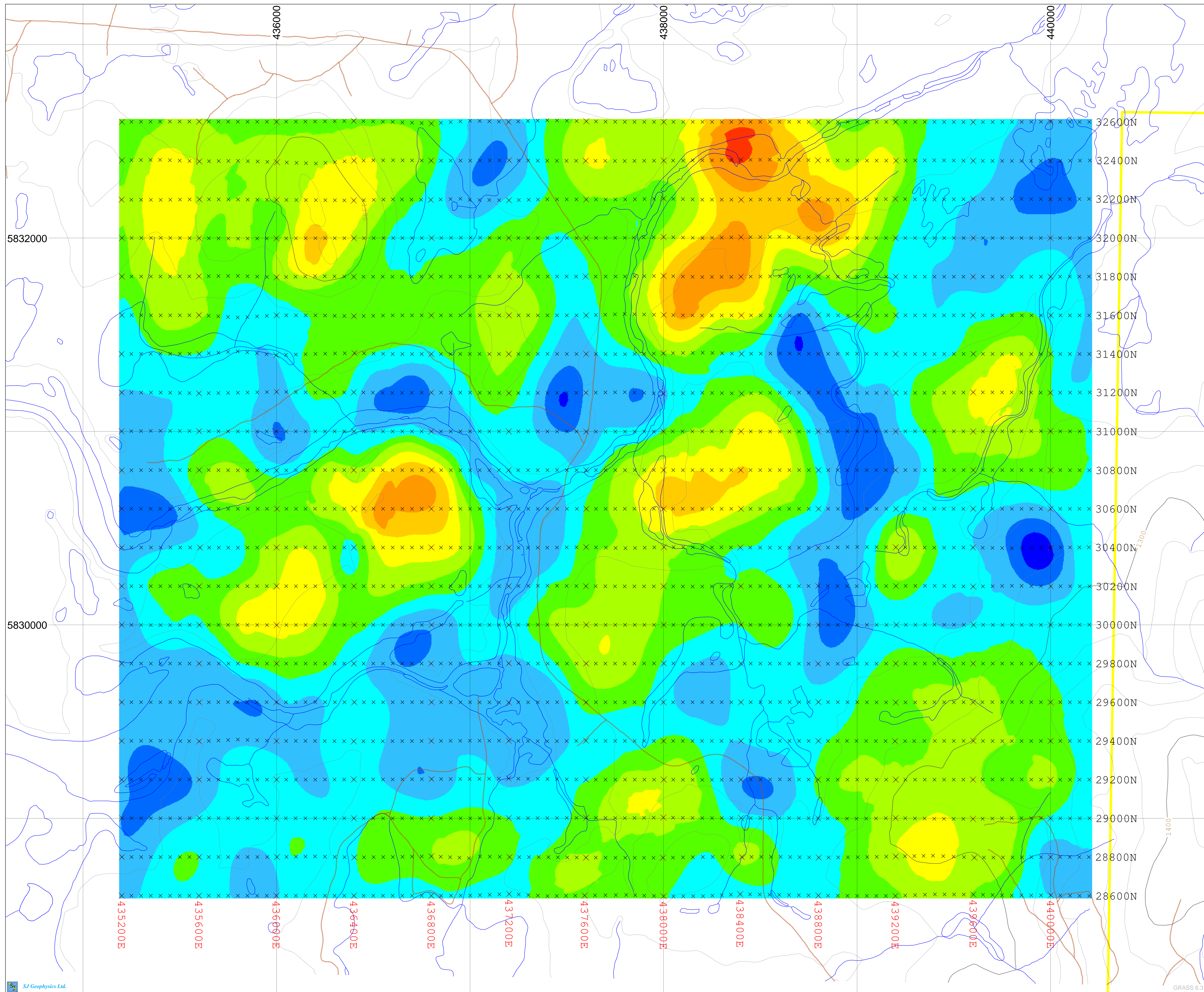
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity ( $\Omega\text{-m}$ )  
 False Colour Contour Map

Depth 100m Below Topography



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

PROJECTION: UTM NAD83, ZONE 10

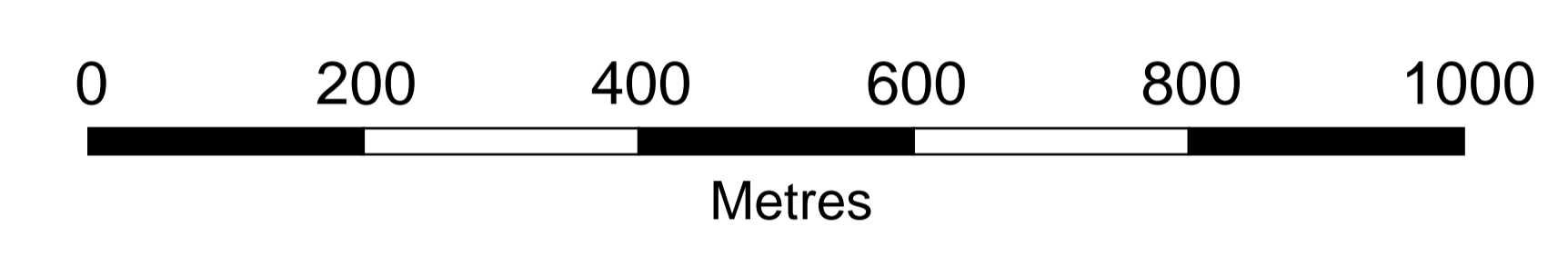
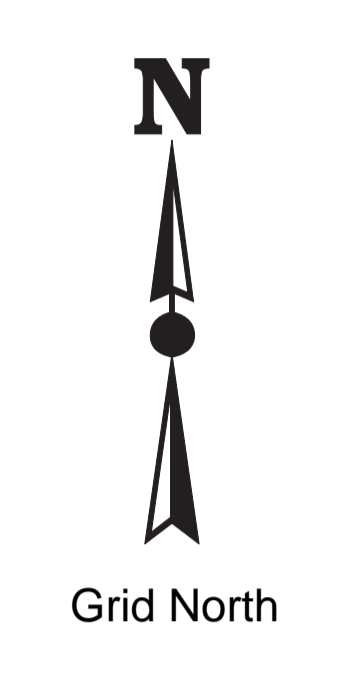
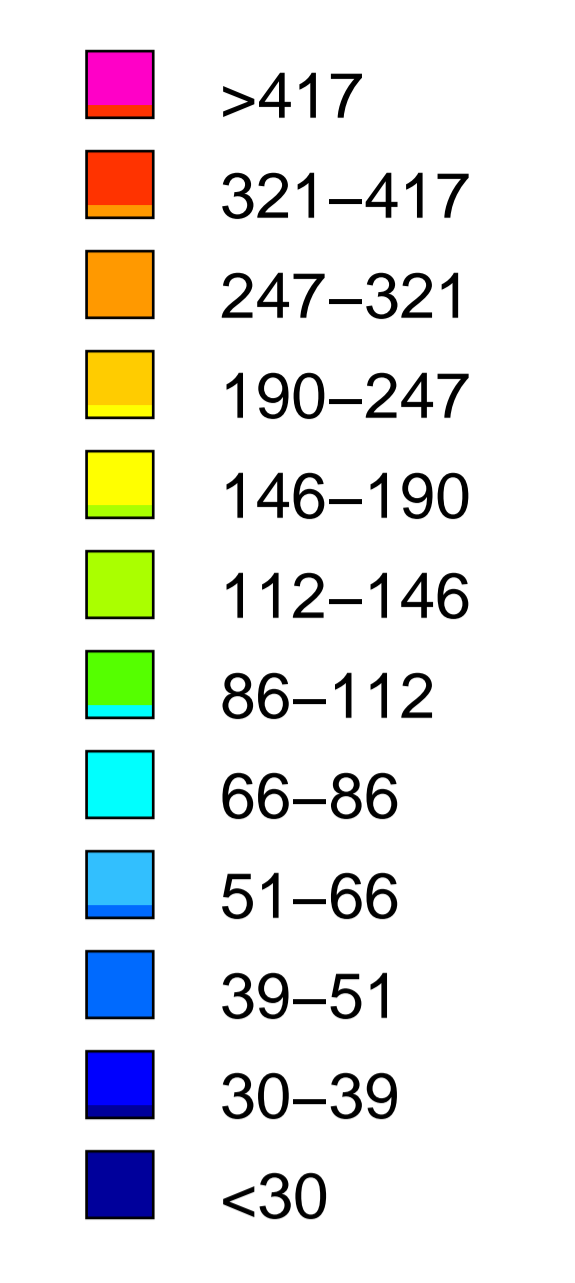
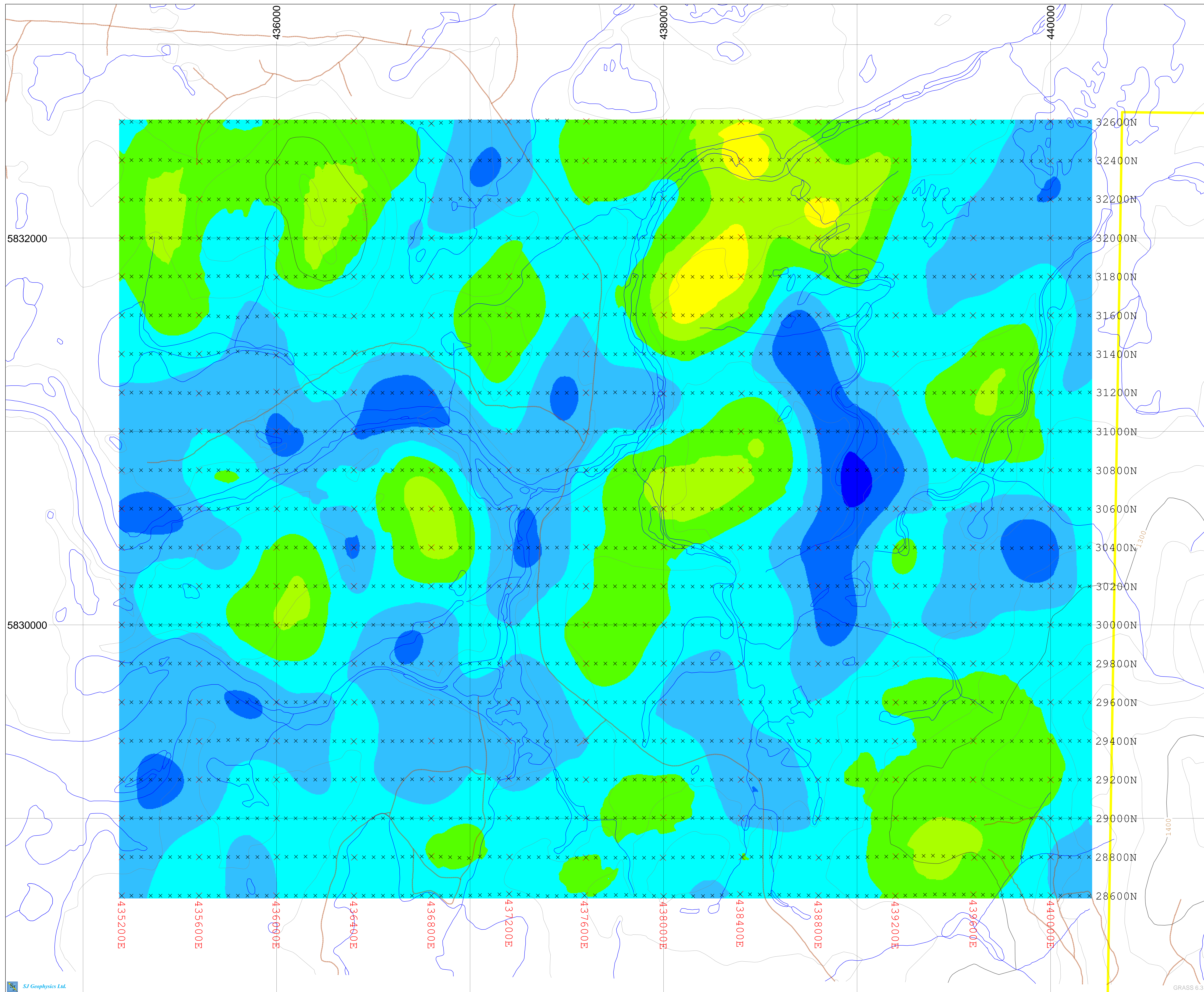
BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

Depth 150m Below Topography





- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 $n=12$   
 $a=100-200m$

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

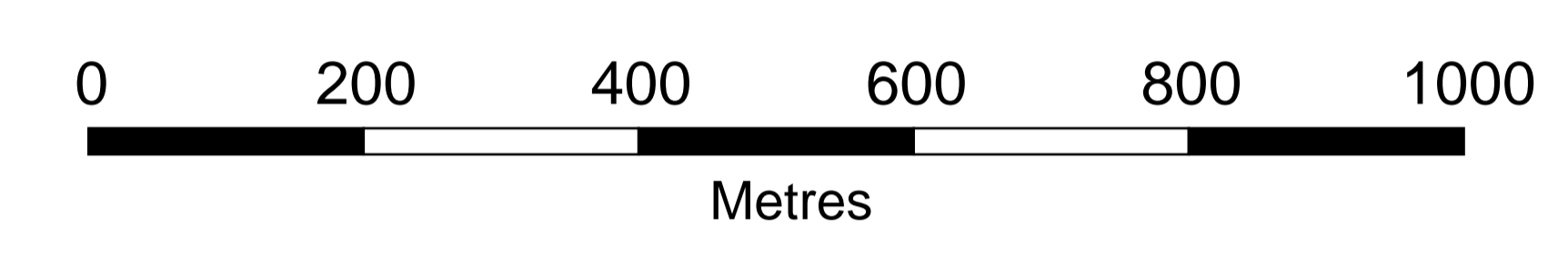
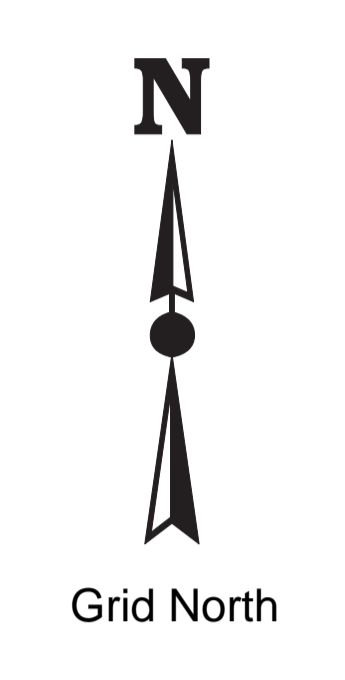
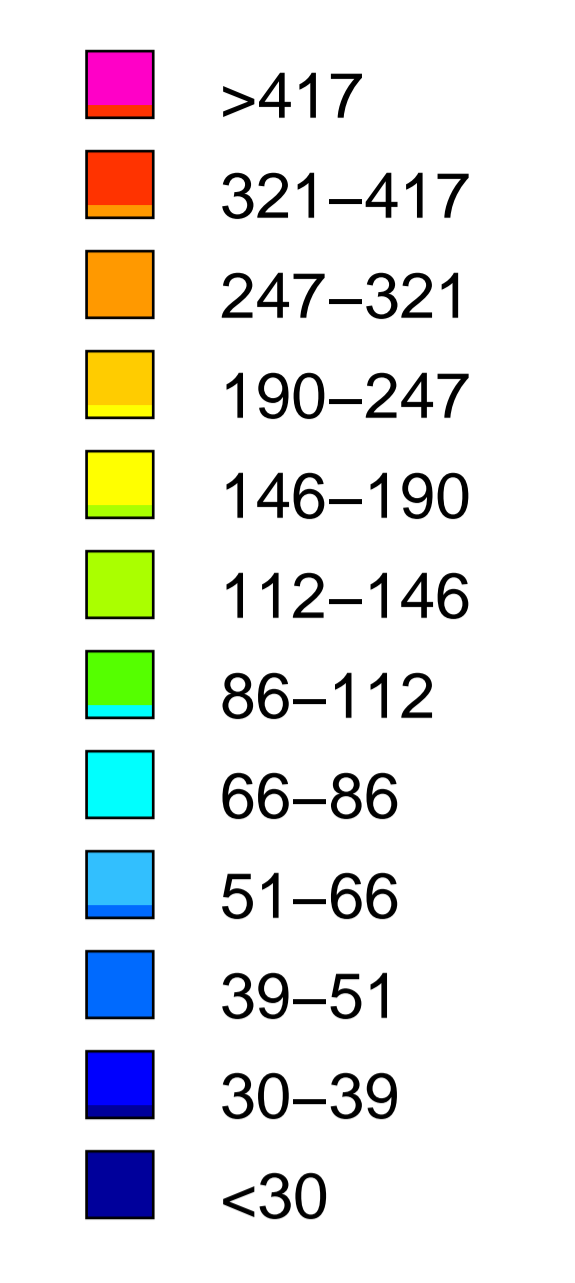
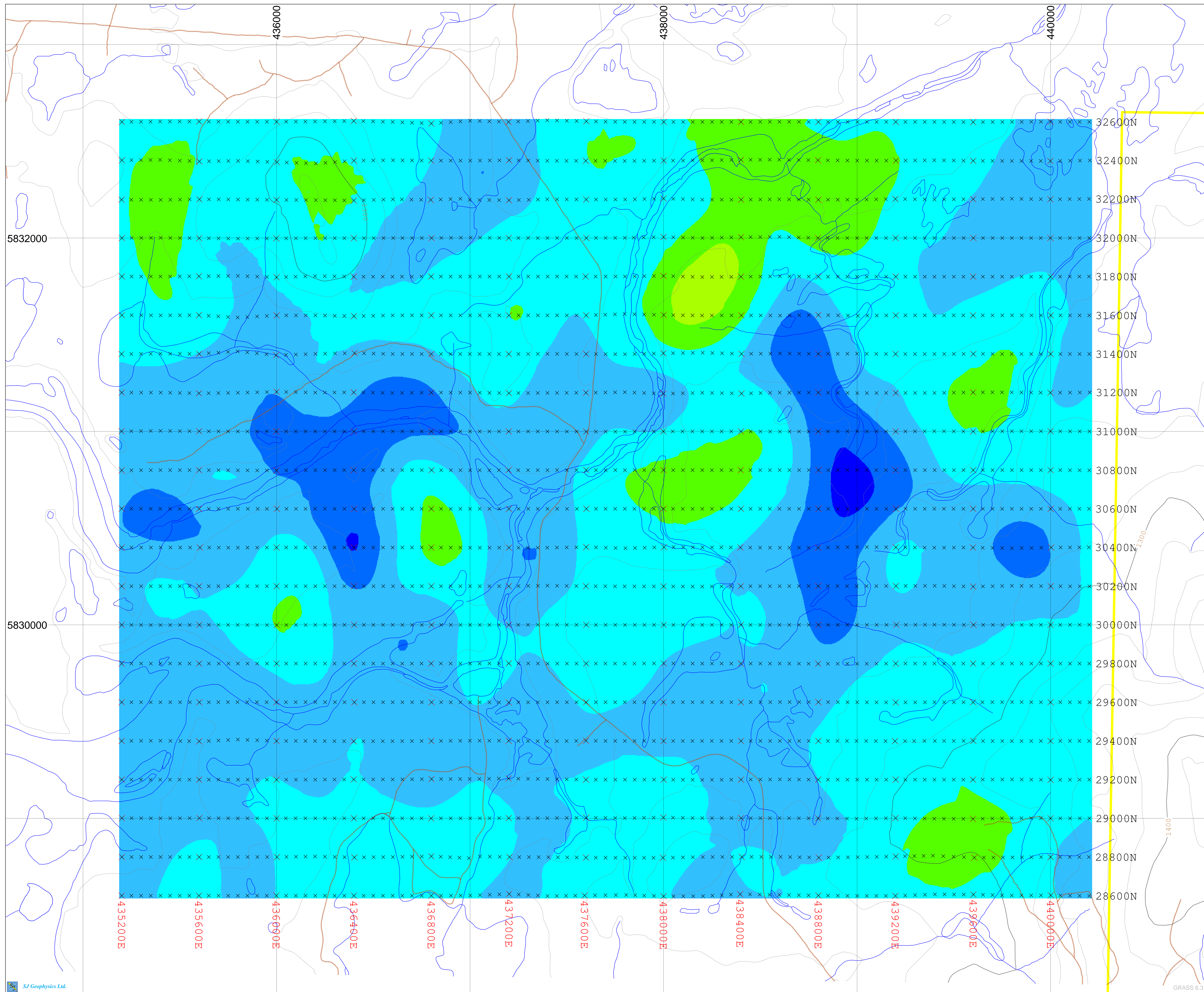
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

Depth 200m Below Topography



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 $n=12$   
 $a=100-200m$

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

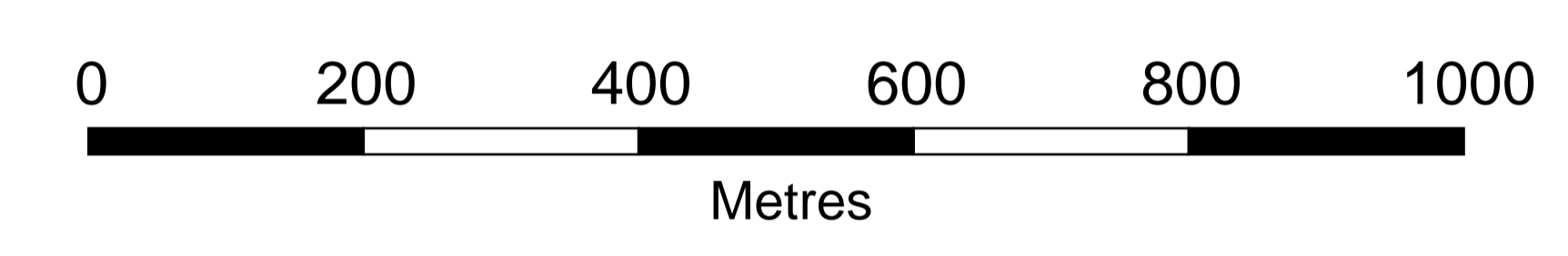
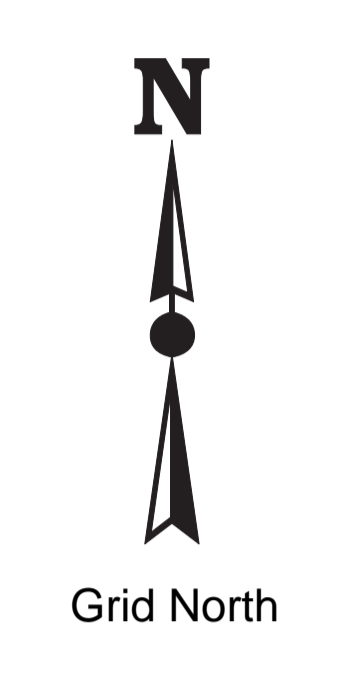
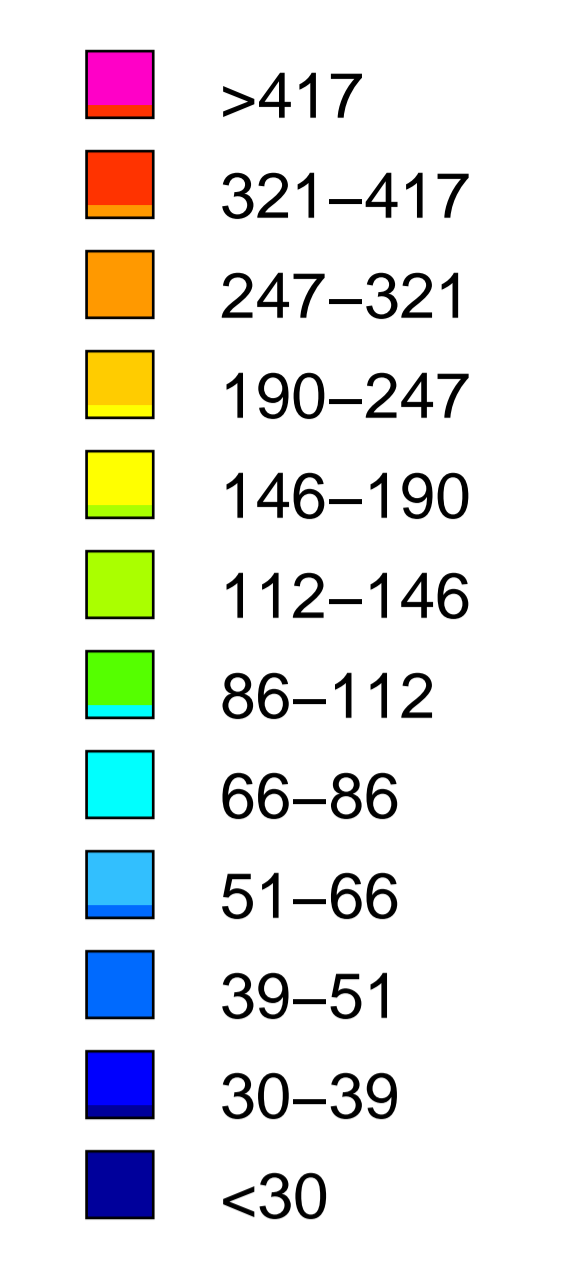
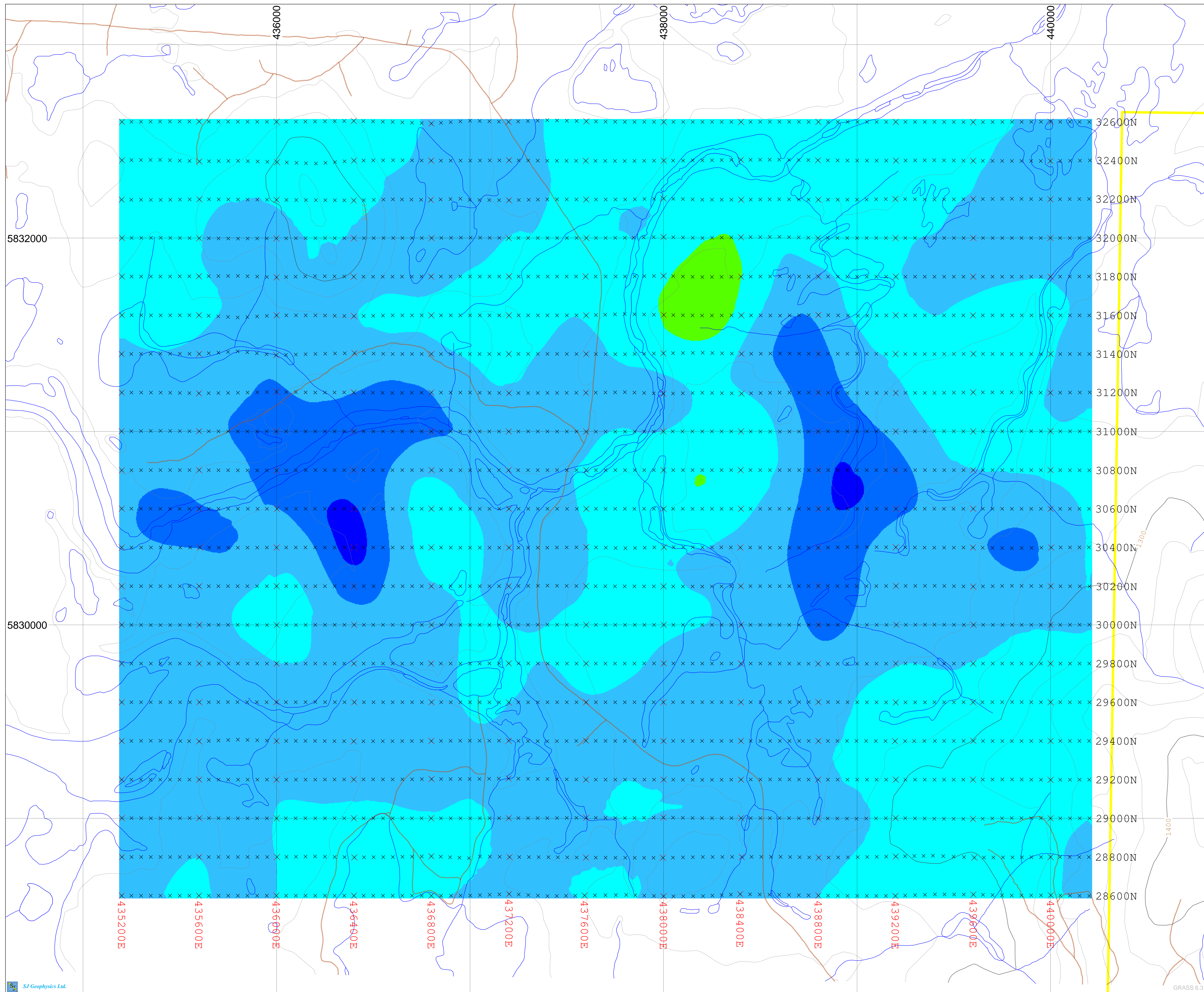
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

Depth 250m Below Topography



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

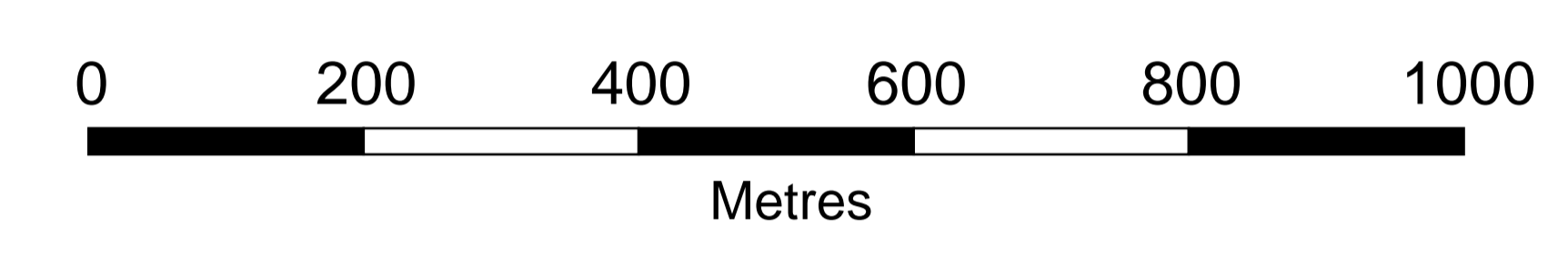
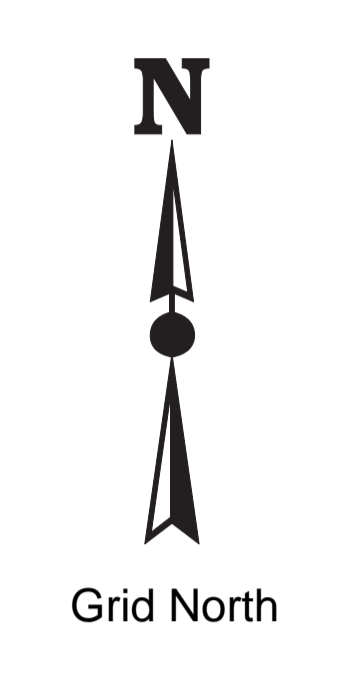
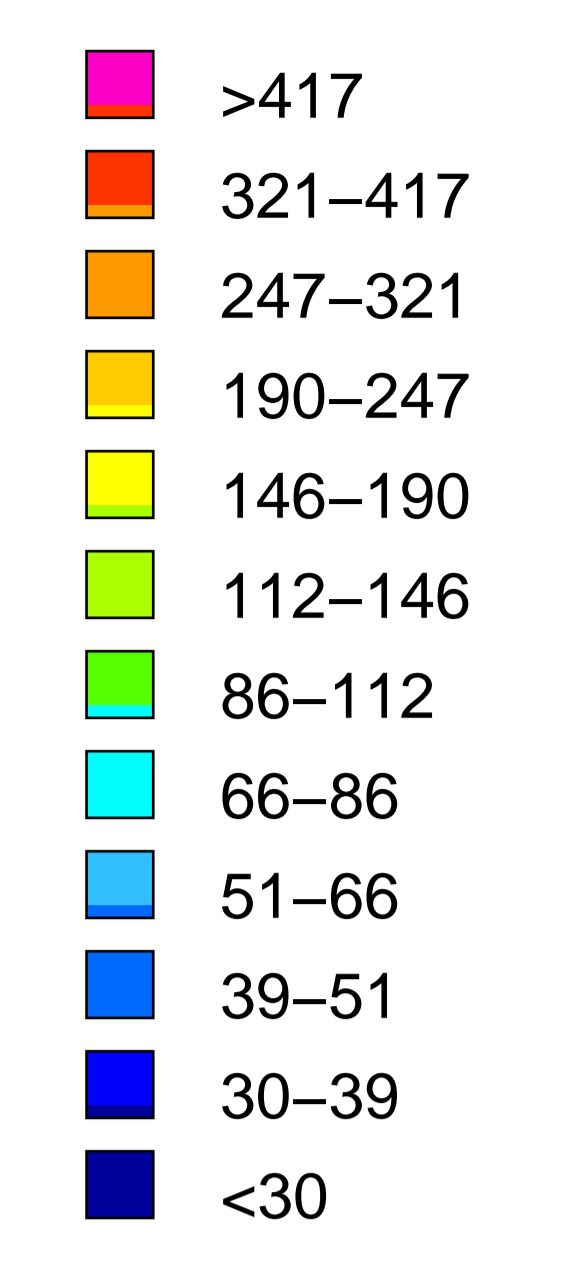
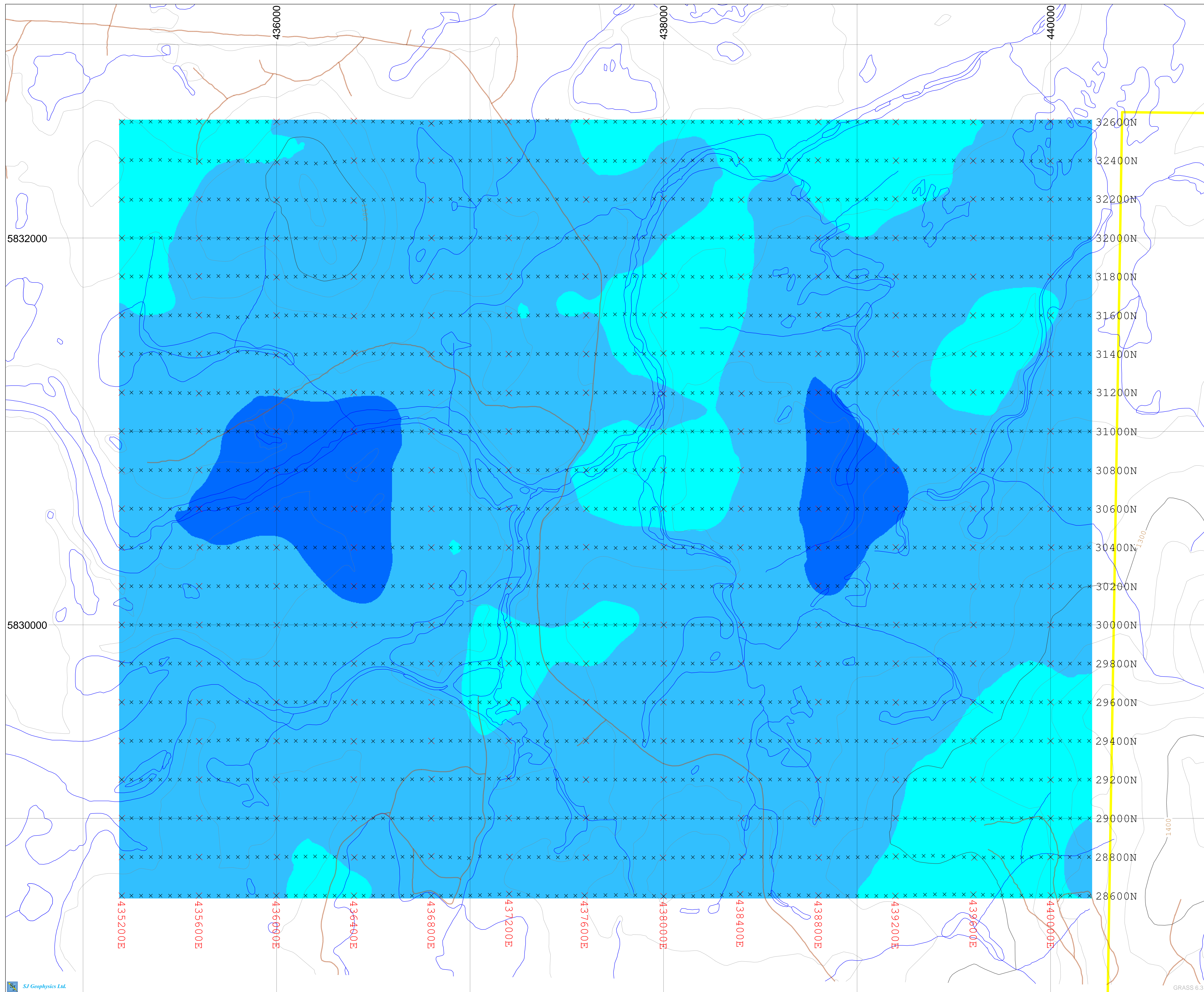
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

Depth 300m Below Topography



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

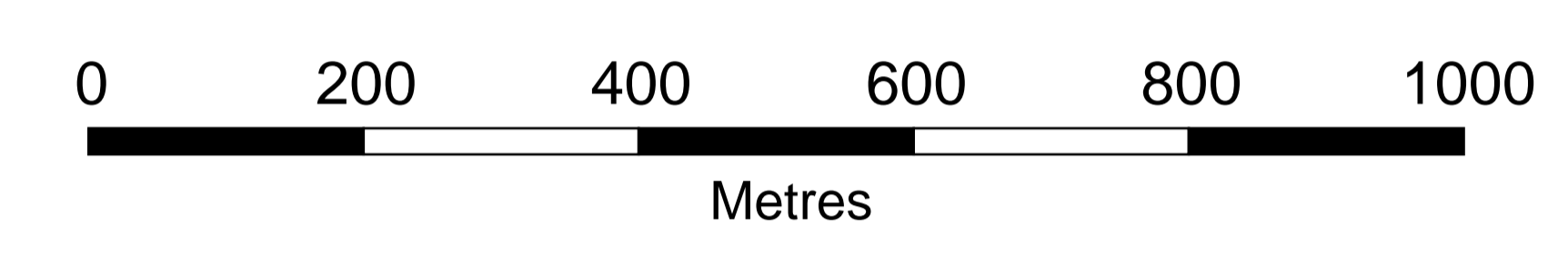
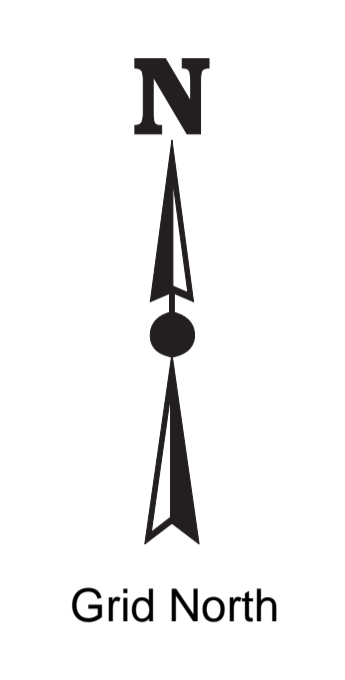
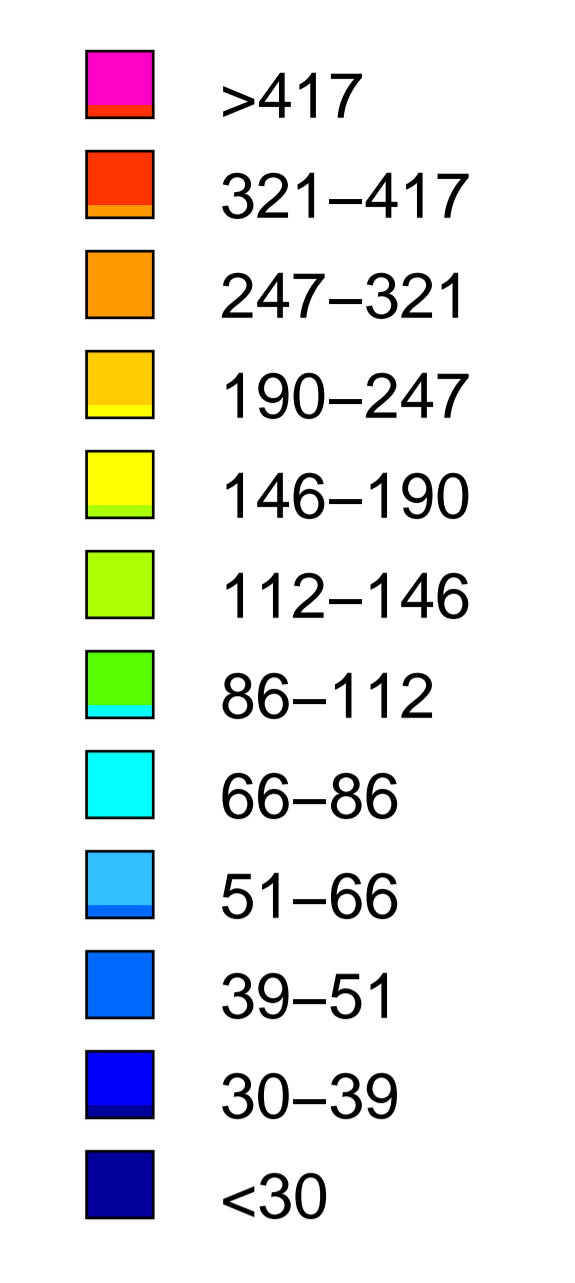
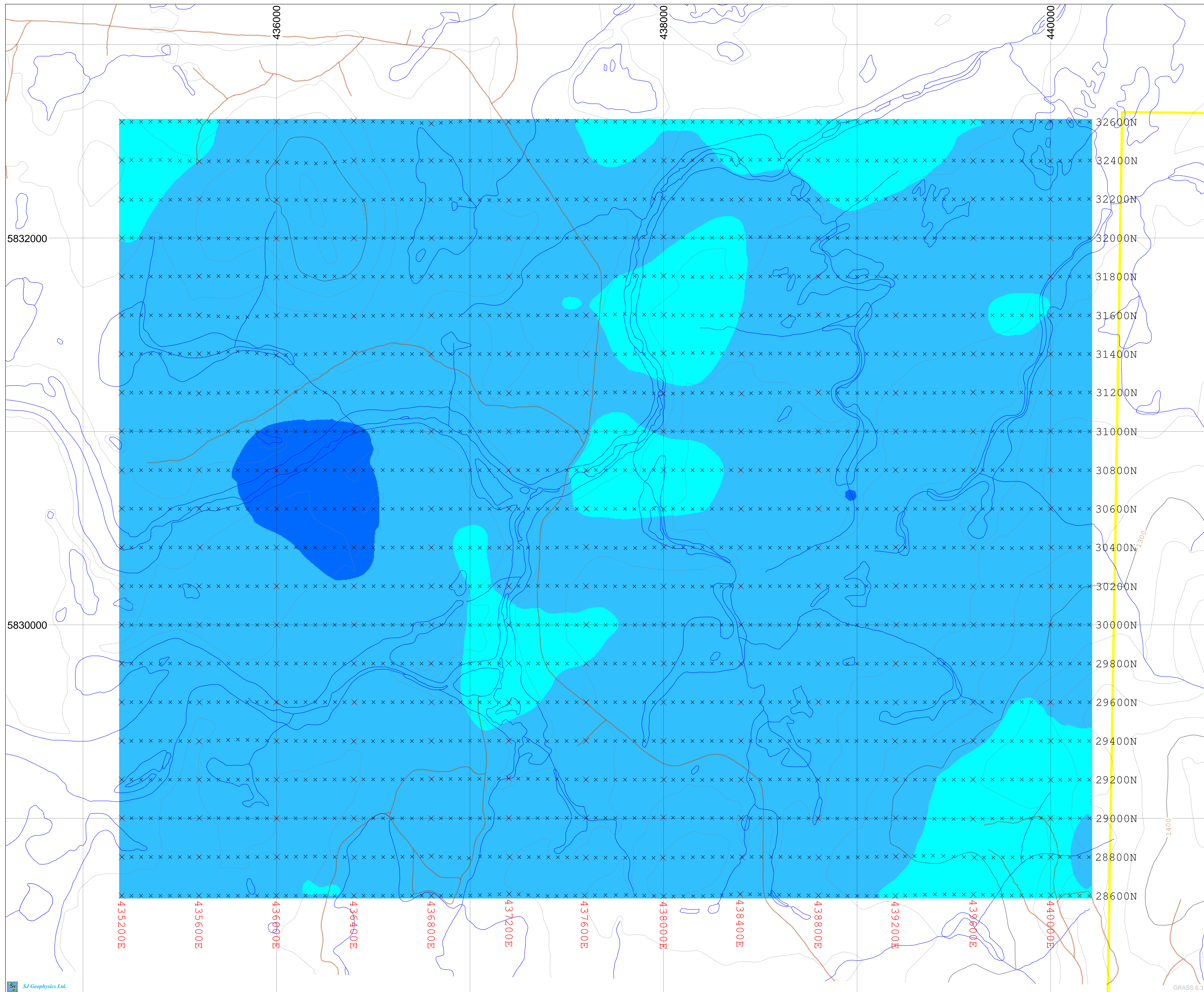
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

Depth 400m Below Topography



- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

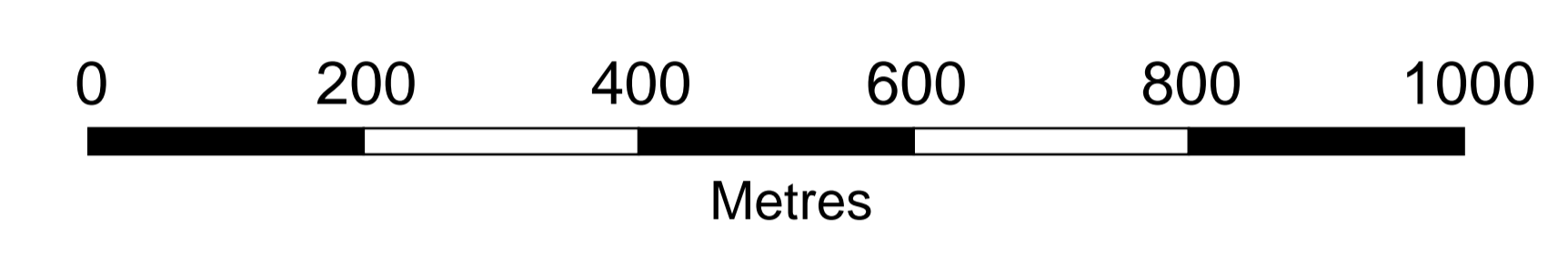
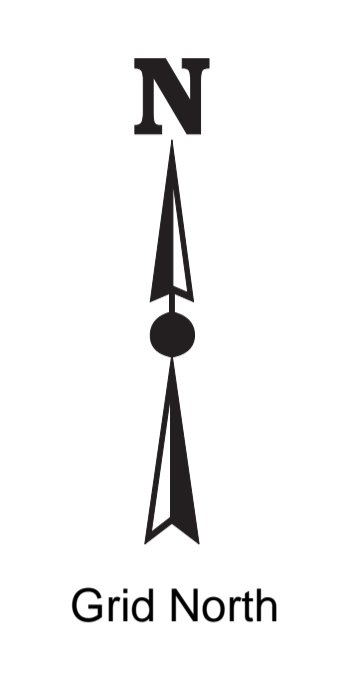
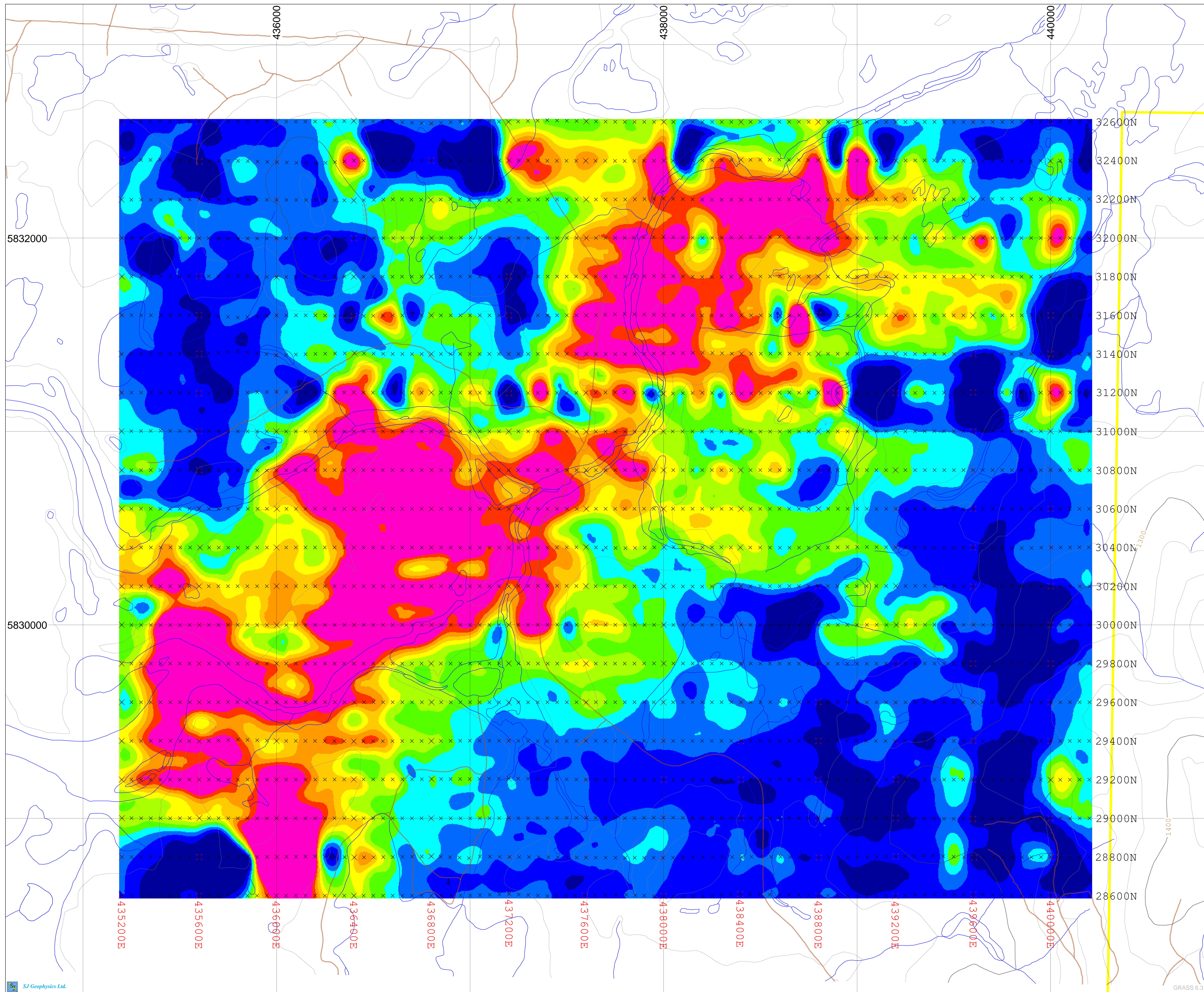
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Resistivity (Ohm-m)  
 False Colour Contour Map

**Depth 500m Below Topography**



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100–200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

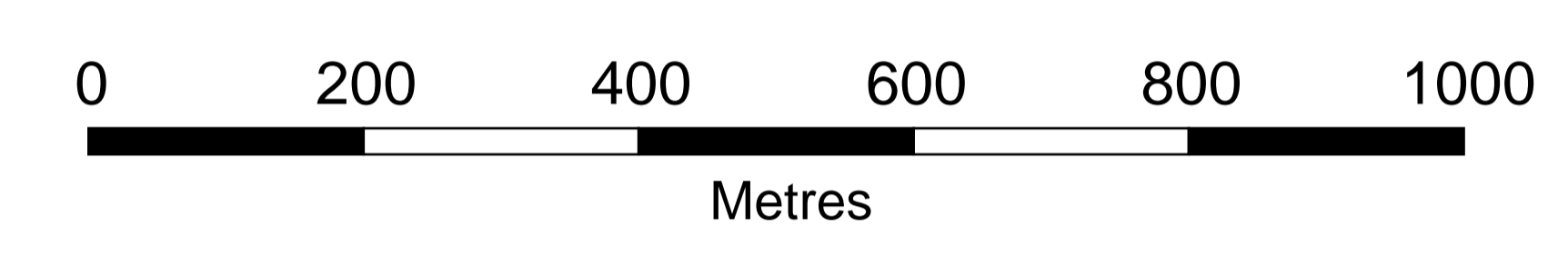
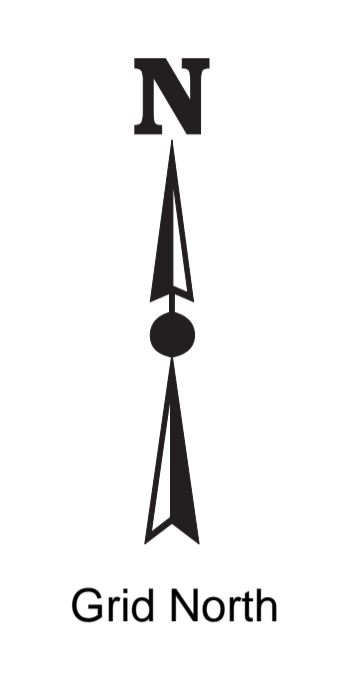
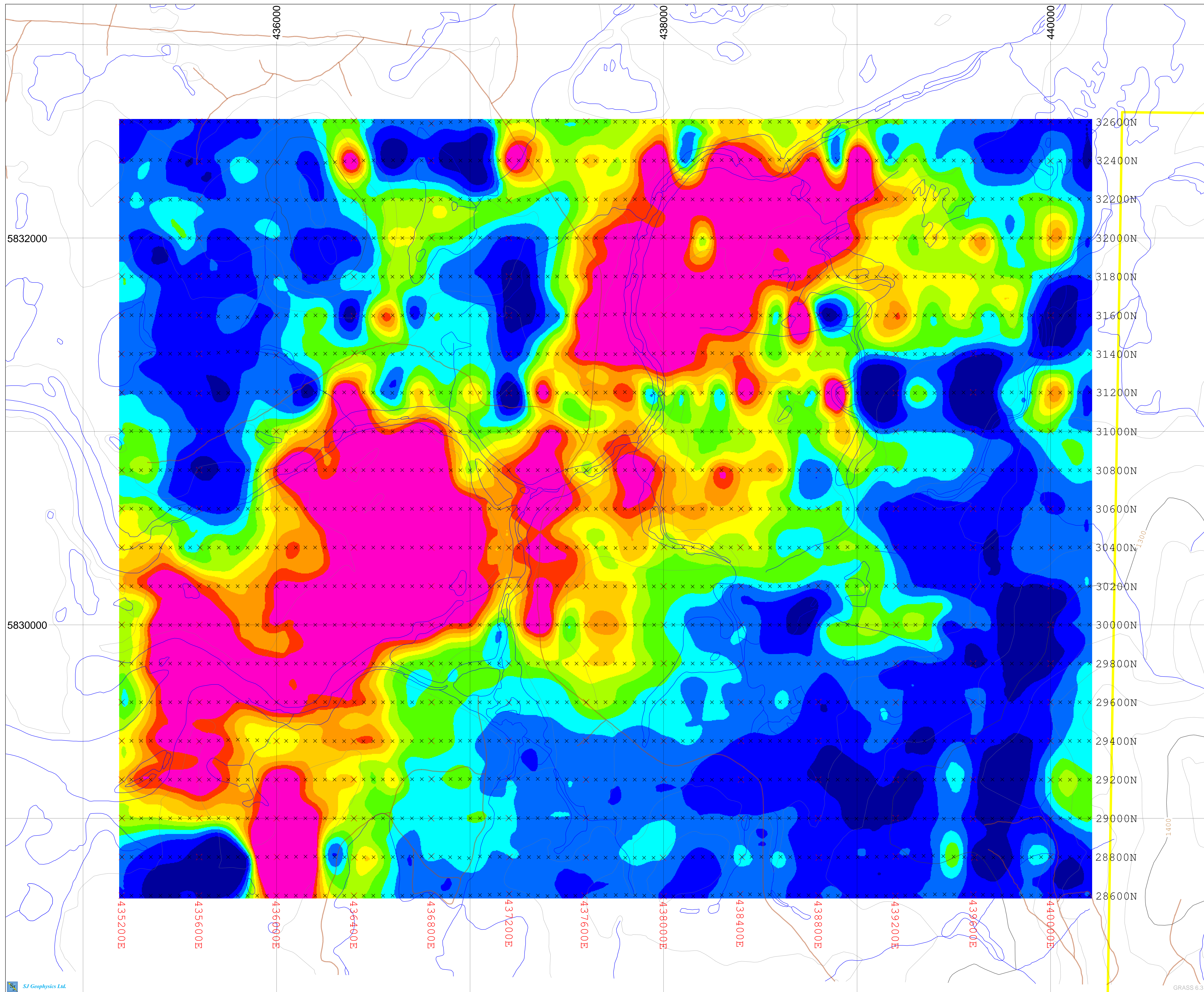
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Chargeability (ms)  
 False Colour Contour Map

Depth 50m Below Topography



- LEGEND**
- × Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
n=12  
a=100-200m

INSTRUMENTATION  
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
3D Inversion by: S.J.V. Consultants Ltd.  
Processing Date: Feb., 2007  
Mapping Date: Feb., 2007

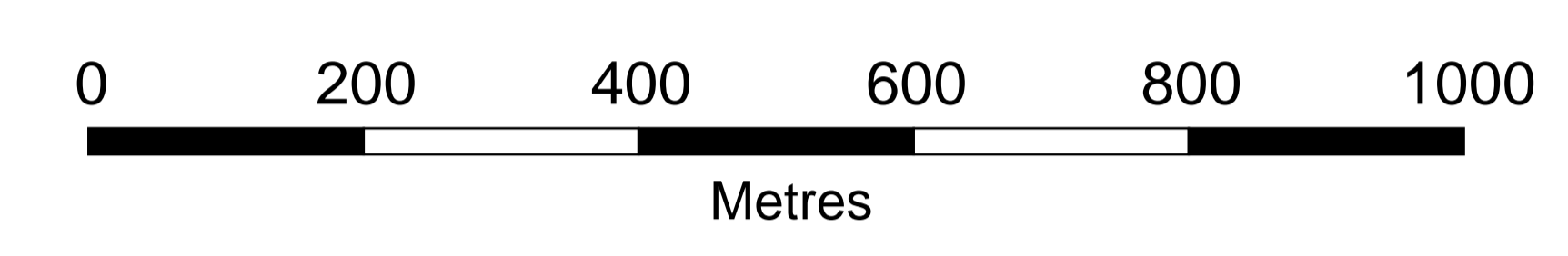
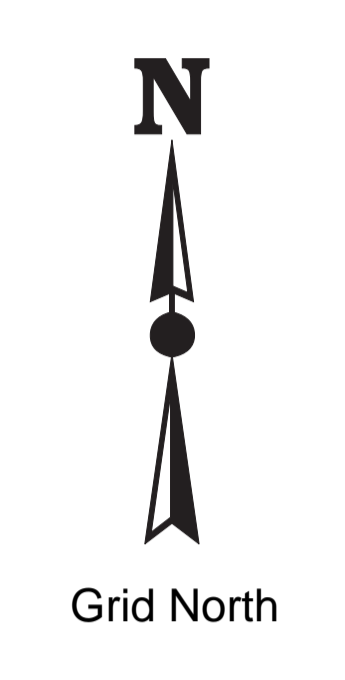
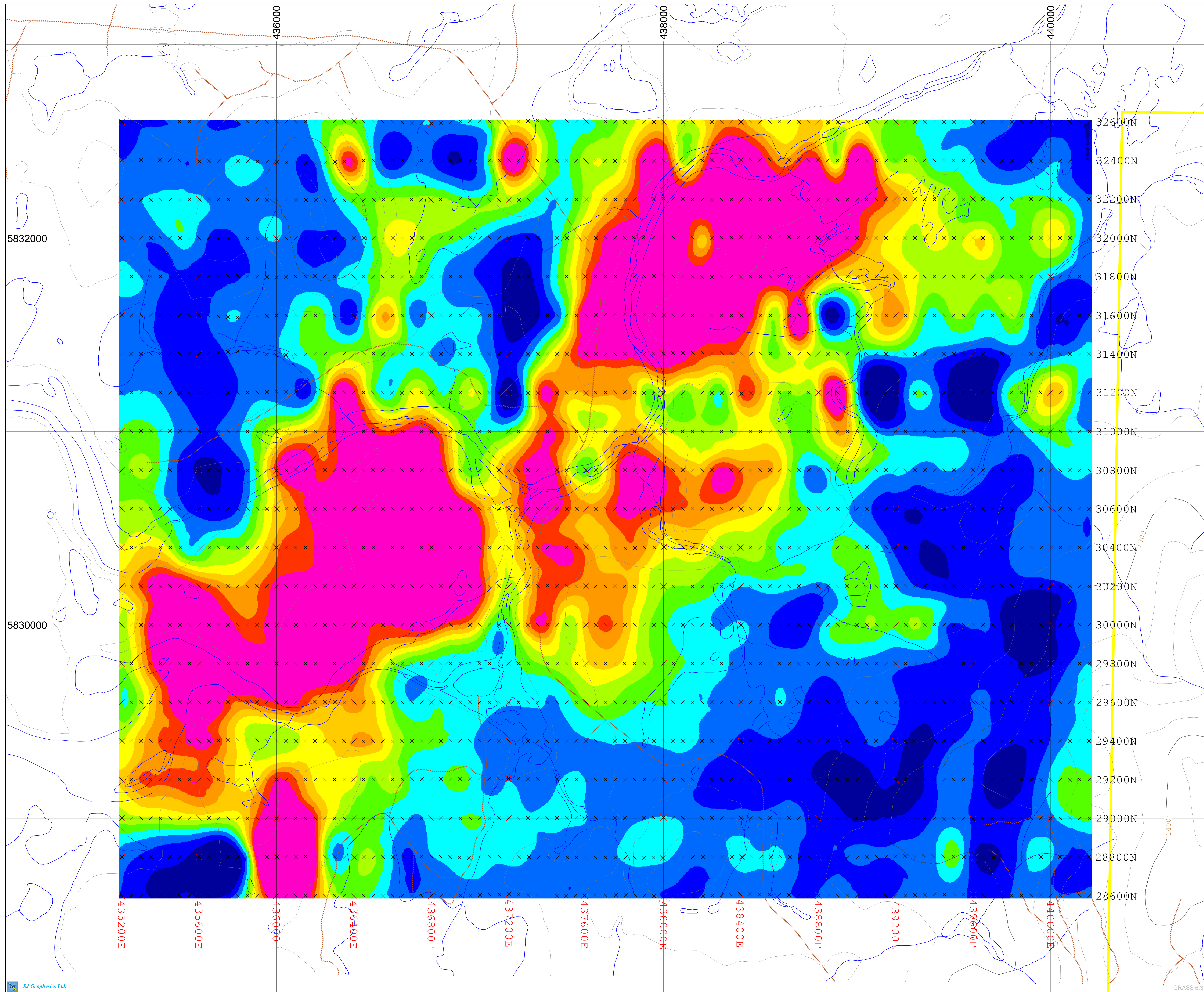
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
Alexis Creek, British Columbia

**3D INVERSION MODEL**  
**Interpreted Chargeability (ms)**  
False Colour Contour Map

**Depth 75m Below Topography**



- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100–200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

PROJECTION: UTM NAD83, ZONE 10

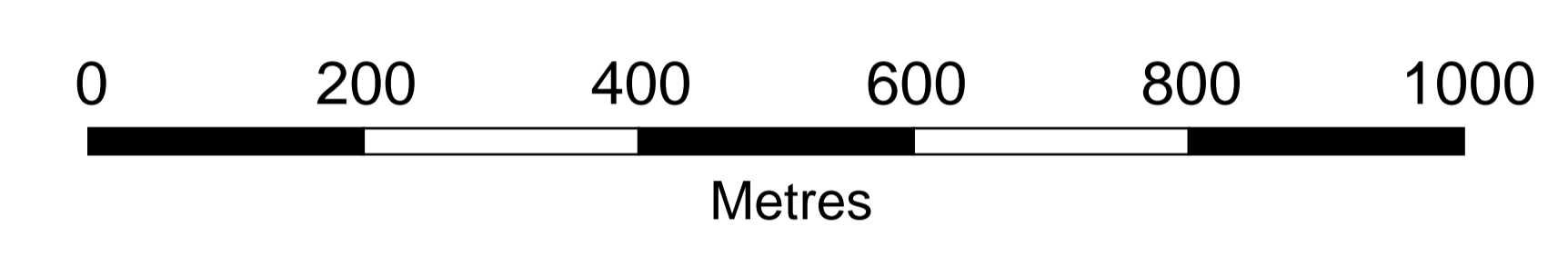
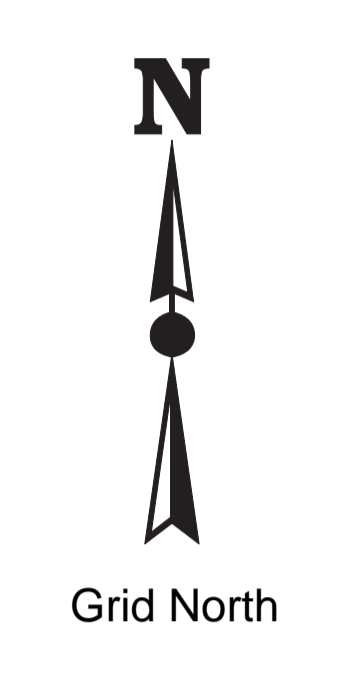
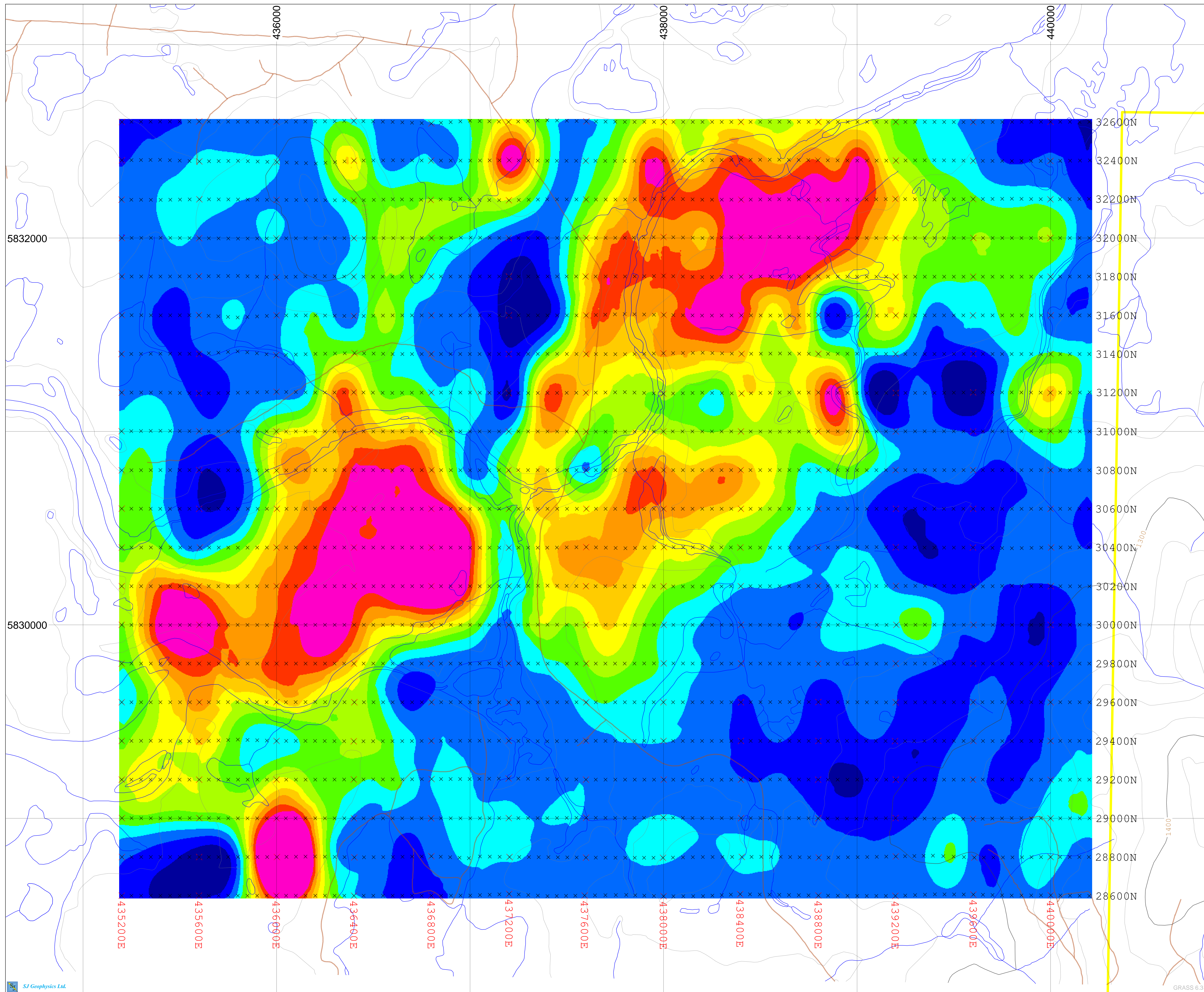
BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Chargeability (ms)  
 False Colour Contour Map

Depth 100m Below Topography





- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
n=12  
a=100-200m

INSTRUMENTATION  
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
3D Inversion by: S.J.V. Consultants Ltd.  
Processing Date: Feb., 2007  
Mapping Date: Feb., 2007

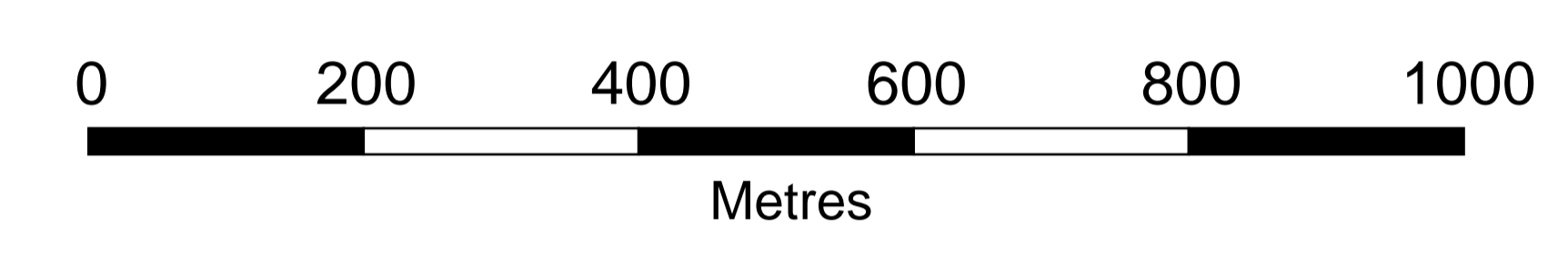
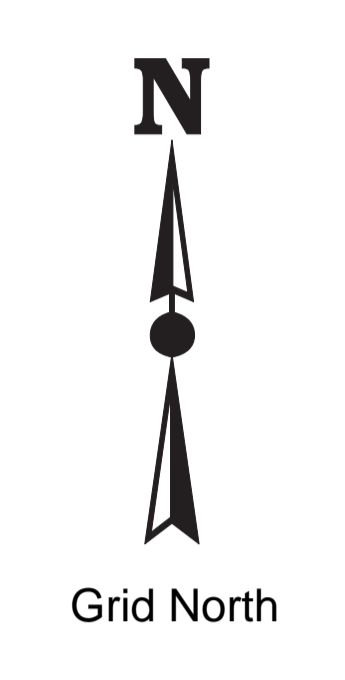
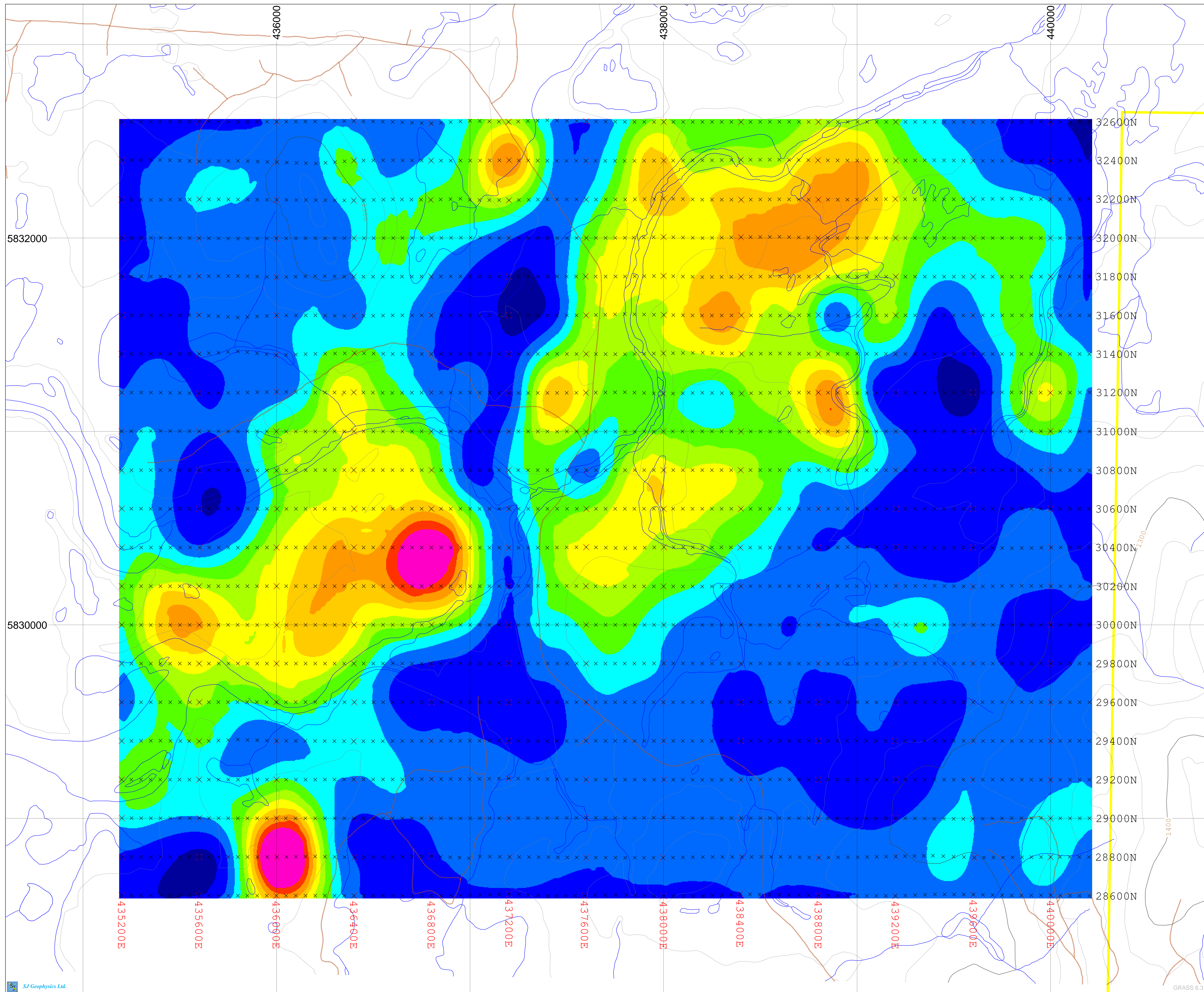
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
Alexis Property Project  
Alexis Creek, British Columbia

**3D INVERSION MODEL**  
Interpreted Chargeability (ms)  
False Colour Contour Map

Depth 150m Below Topography



- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 $n=12$   
 $a=100-200m$

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

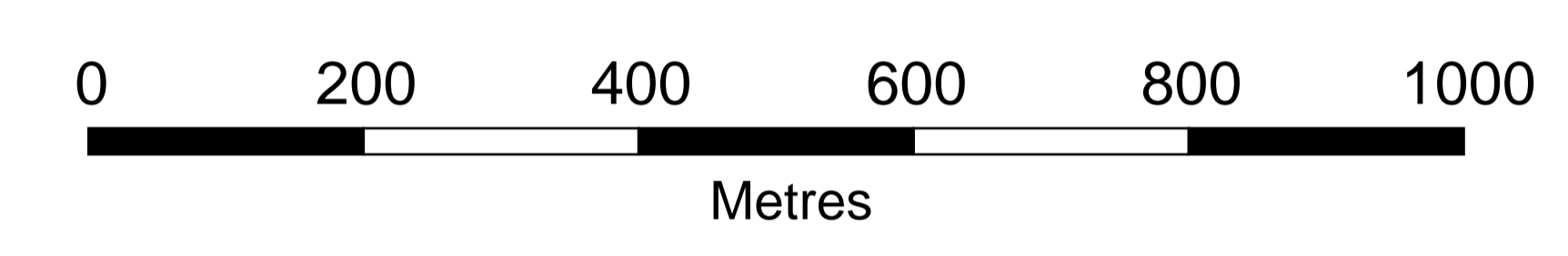
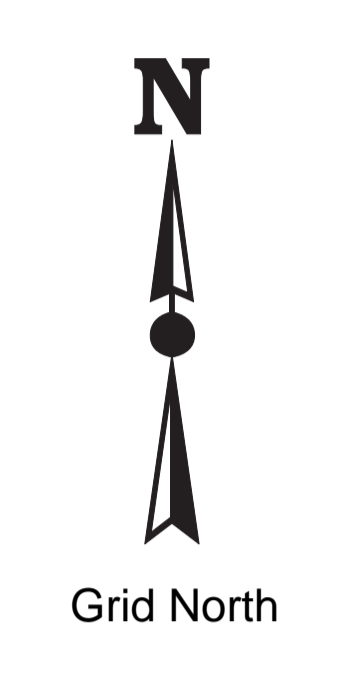
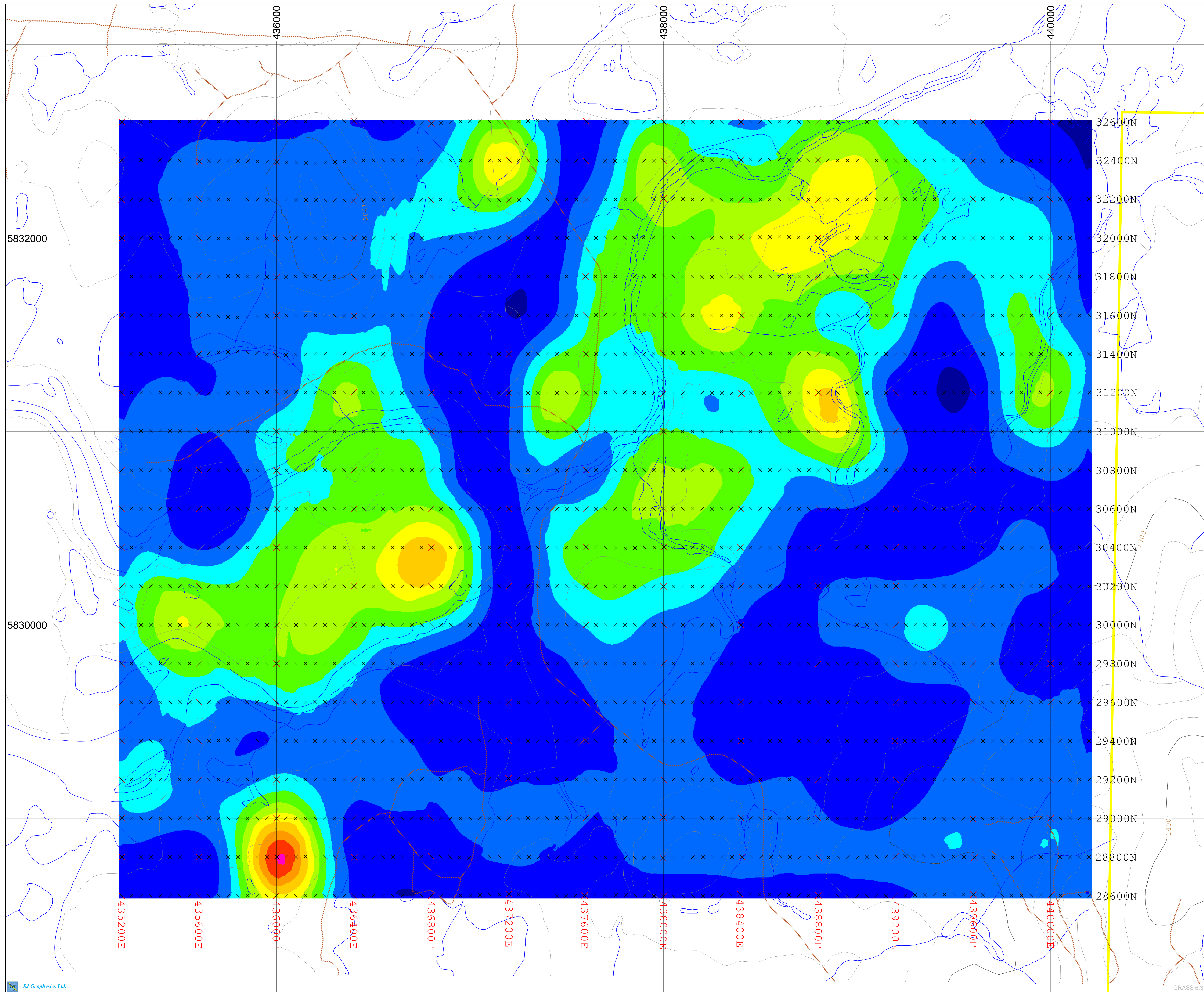
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Chargeability (ms)  
 False Colour Contour Map

Depth 200m Below Topography



- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100–200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

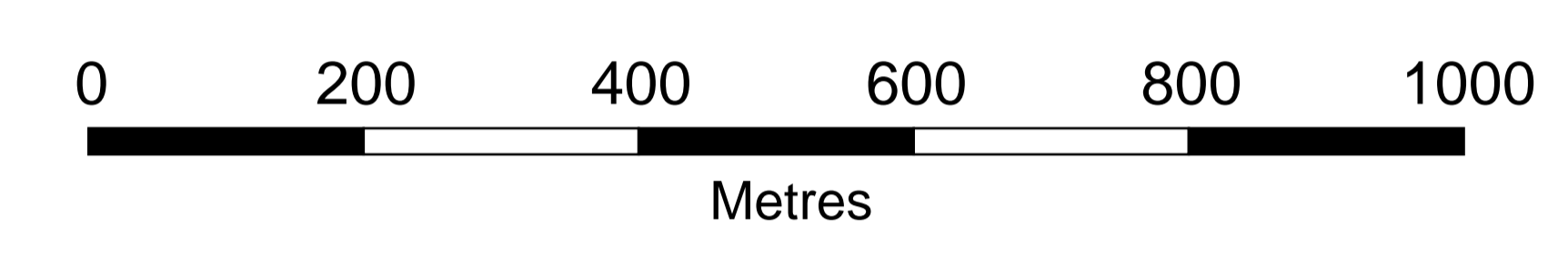
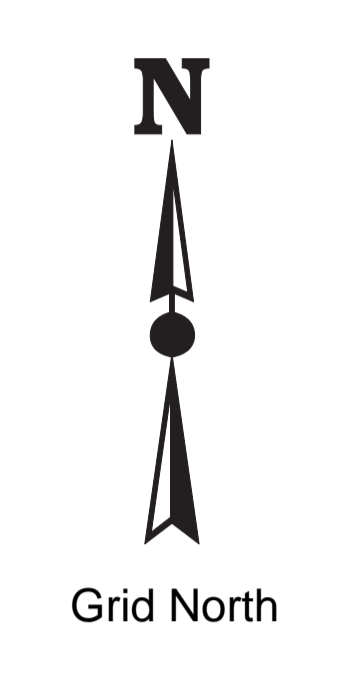
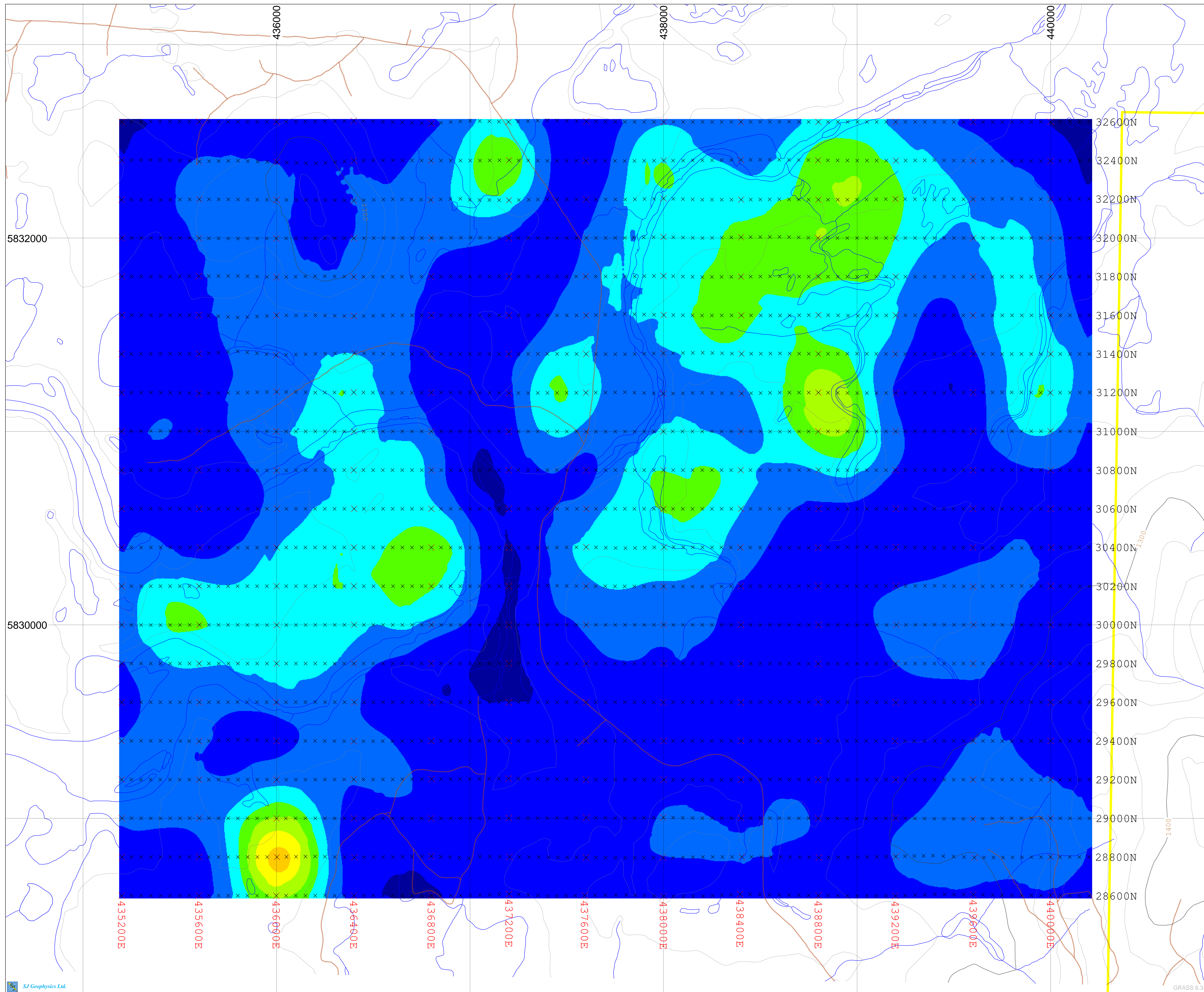
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Chargeability (ms)  
 False Colour Contour Map

Depth 250m Below Topography



- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100-200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

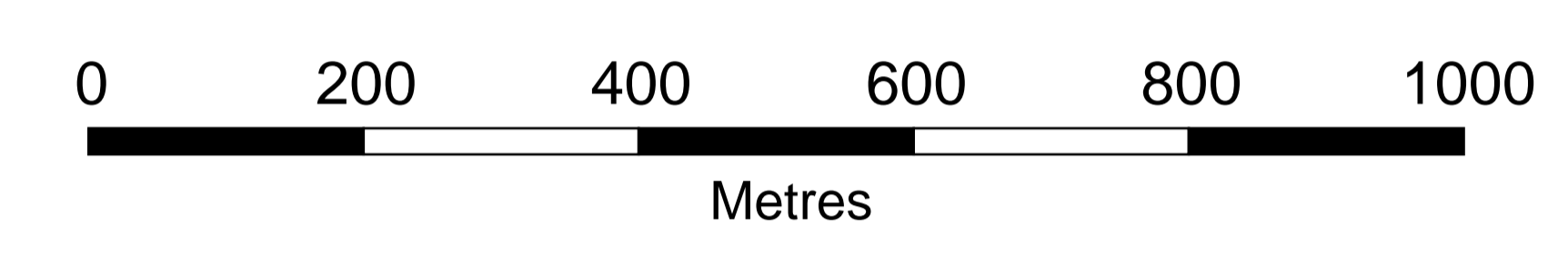
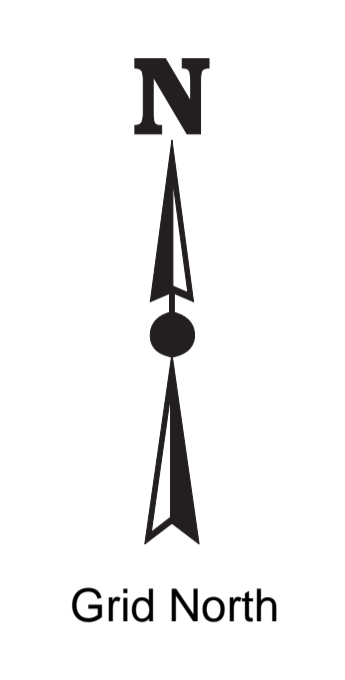
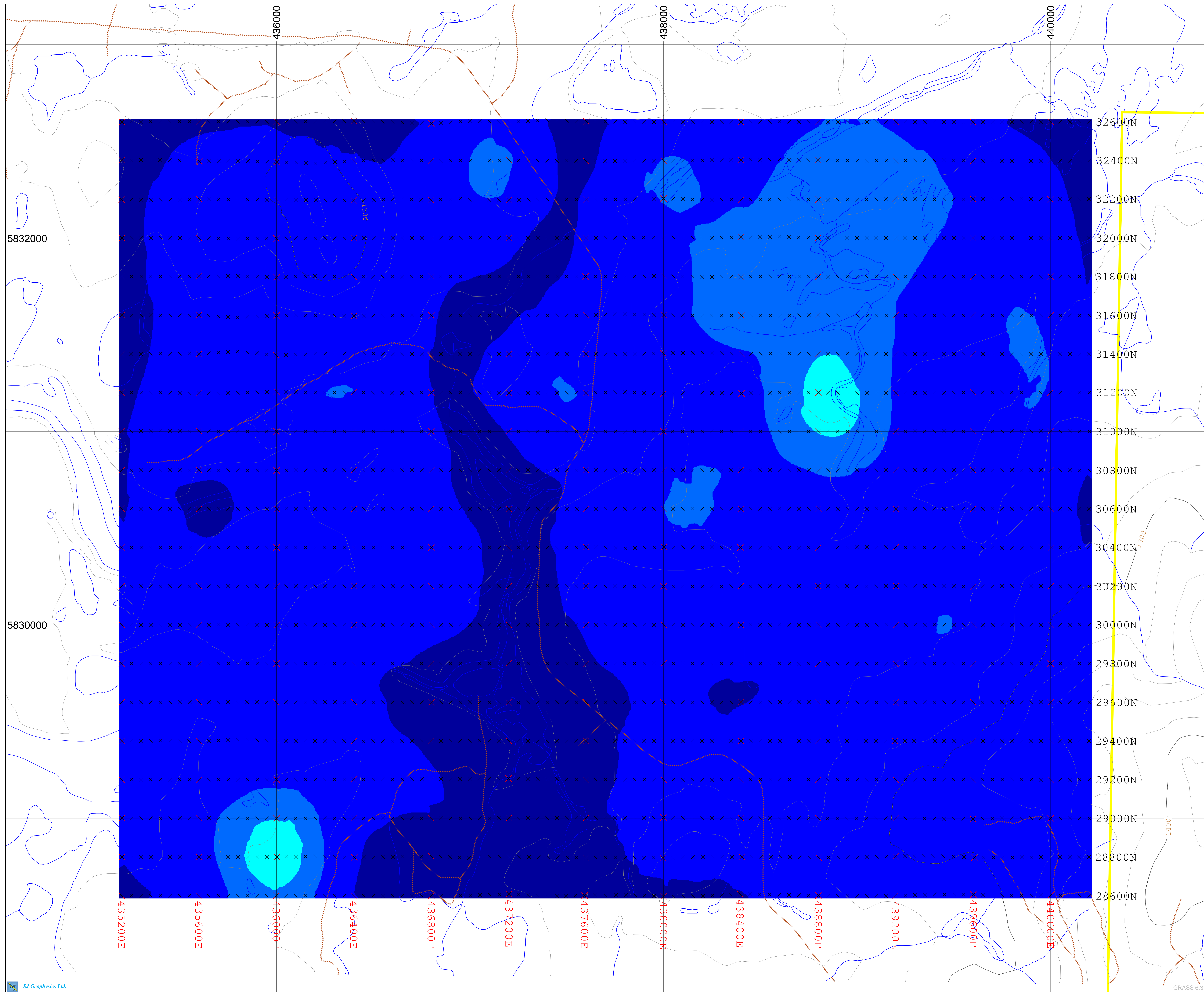
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

**3D INVERSION MODEL**  
 Interpreted Chargeability (ms)  
 False Colour Contour Map

**Depth 300m Below Topography**



- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
n=12  
a=100-200m

INSTRUMENTATION  
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
3D Inversion by: S.J.V. Consultants Ltd.  
Processing Date: Feb., 2007  
Mapping Date: Feb., 2007

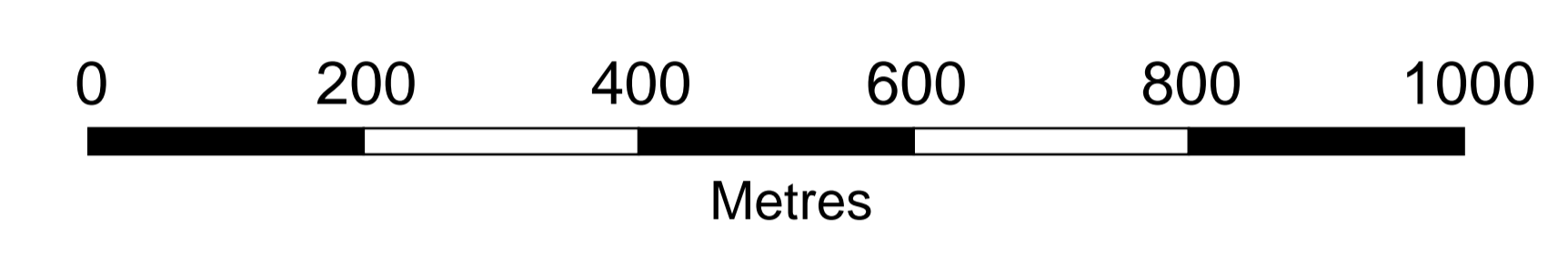
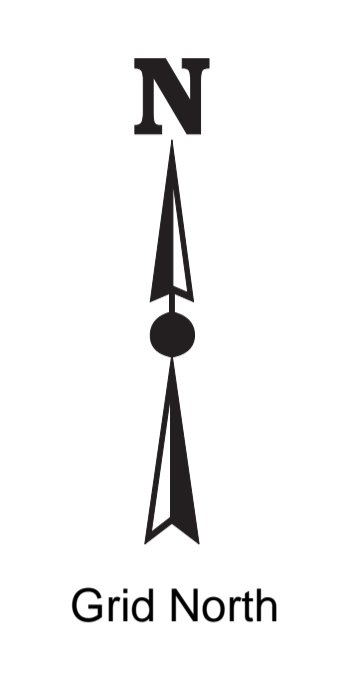
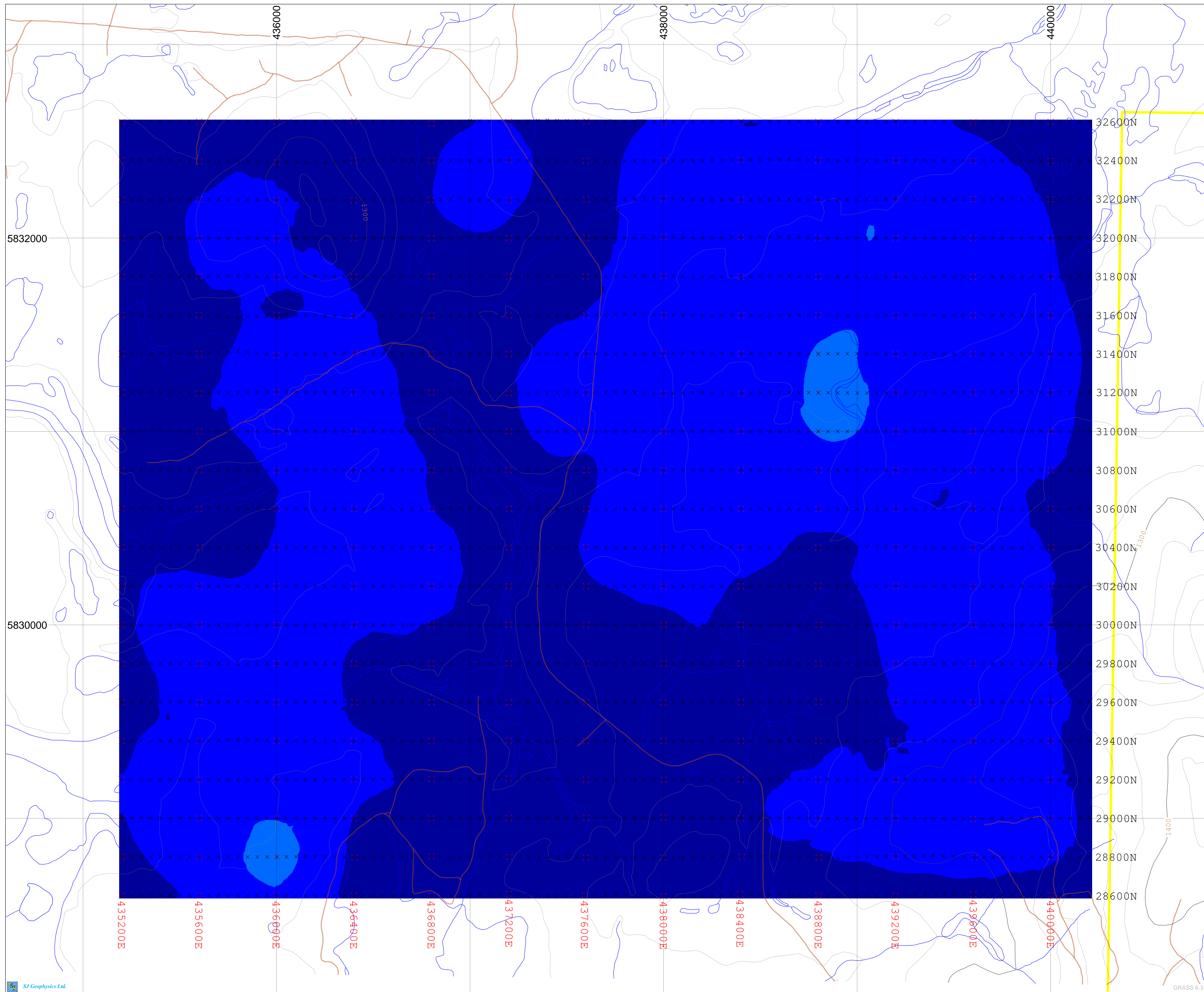
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
Alexis Creek, British Columbia

**3D INVERSION MODEL**  
**Interpreted Chargeability (ms)**  
False Colour Contour Map

**Depth 400m Below Topography**



- LEGEND**
- x Survey Stations
  - Contour Lines
  - Road
  - River
  - Water Boundary
  - Claim Boundary

3D IP ARRAY  
 n=12  
 a=100–200m

INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007  
 Mapping Date: Feb., 2007

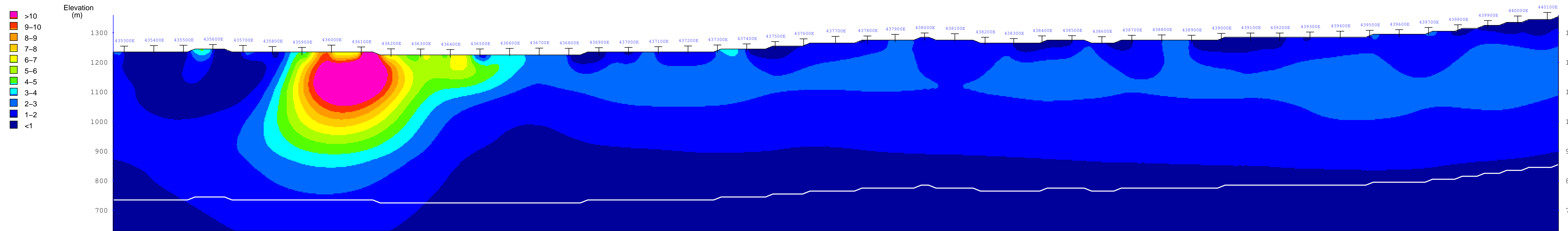
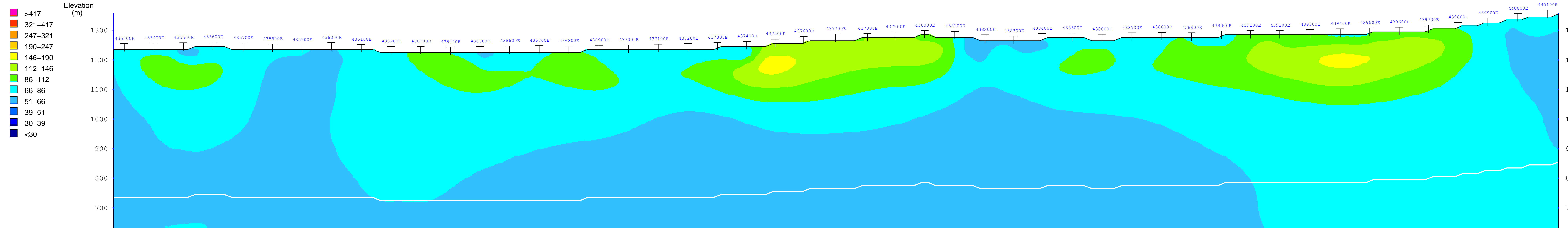
PROJECTION: UTM NAD83, ZONE 10

BASE MAP:BCGS TRIM Mapsheets 93b051 / 93b061  
 Contours Interval: 20m

**GOLD MEMBER VENTURES CORP.**  
**Alexis Property Project**  
 Alexis Creek, British Columbia

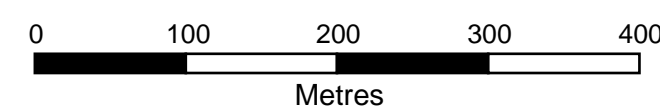
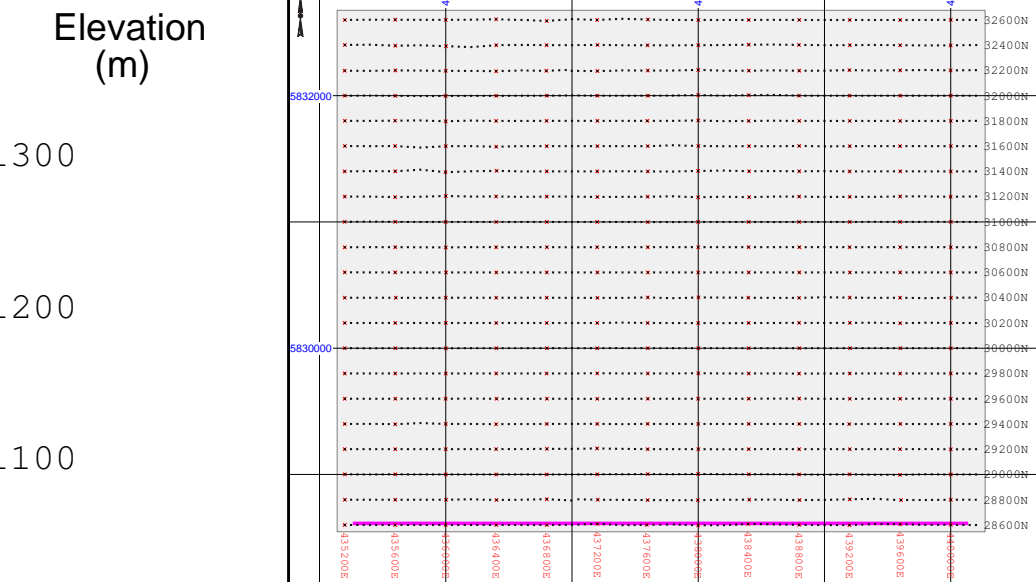
**3D INVERSION MODEL**  
**Interpreted Chargeability (ms)**  
 False Colour Contour Map

**Depth 500m Below Topography**



- Elevation (m)
- >417
  - 321-417
  - 247-321
  - 190-247
  - 146-190
  - 112-146
  - 86-112
  - 66-86
  - 51-66
  - 39-51
  - 30-39
  - <30

- Elevation (m)
- >10
  - 9-10
  - 8-9
  - 7-8
  - 6-7
  - 5-6
  - 4-5
  - 3-4
  - 2-3
  - 1-2
  - <1



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m

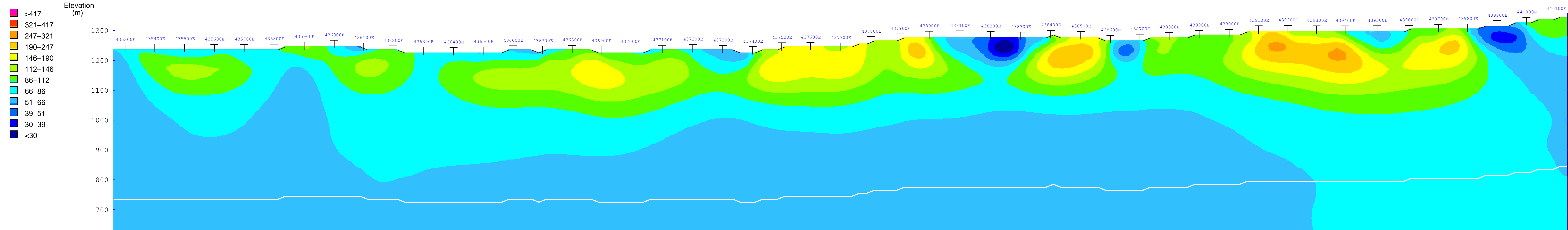
INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

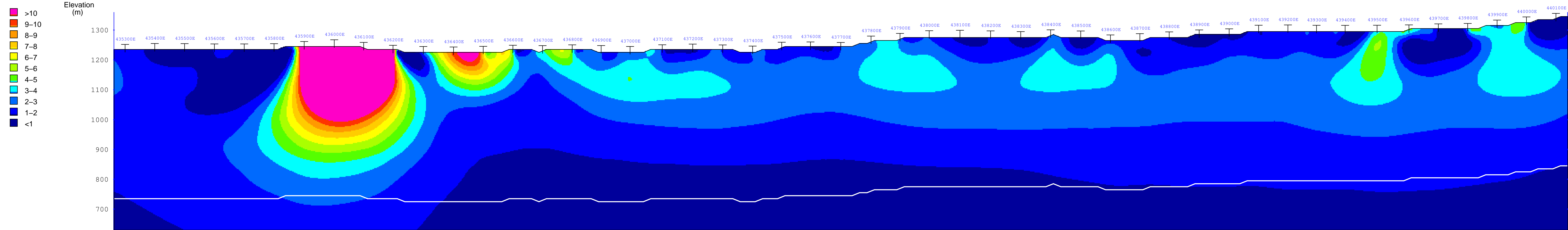
**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

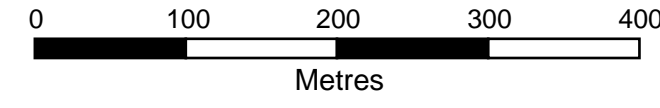
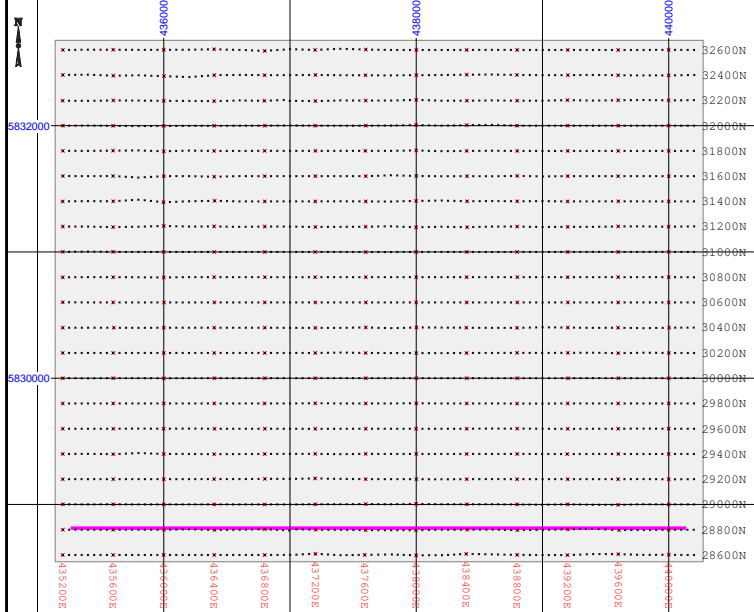
Line 28600N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

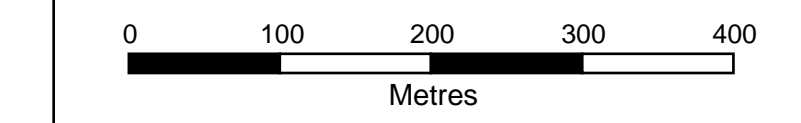
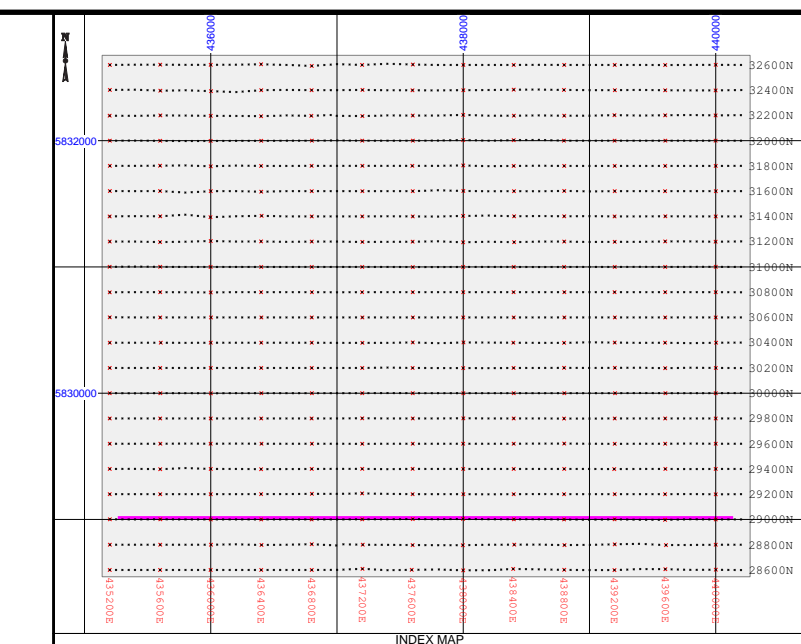
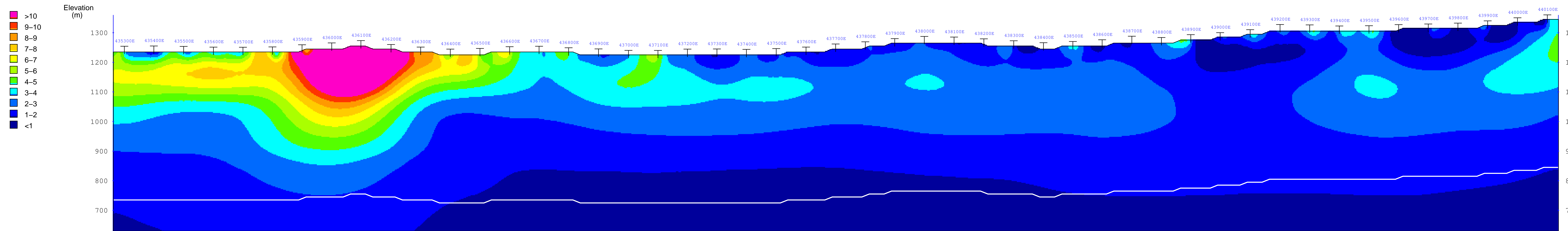
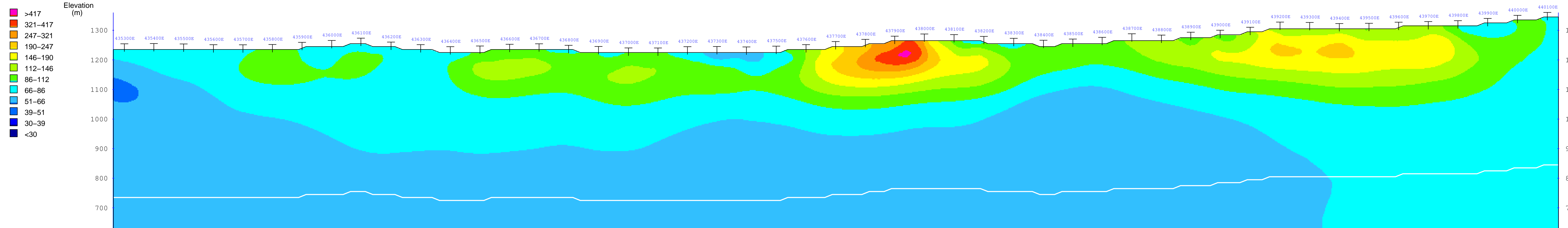
3D IP ARRAY  
 $n = 12$   
 $a = 100-200m$   
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 28800N





**LEGEND**

WHITE LINE: Estimated Depth of Investigation

Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m

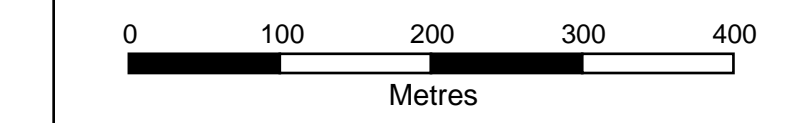
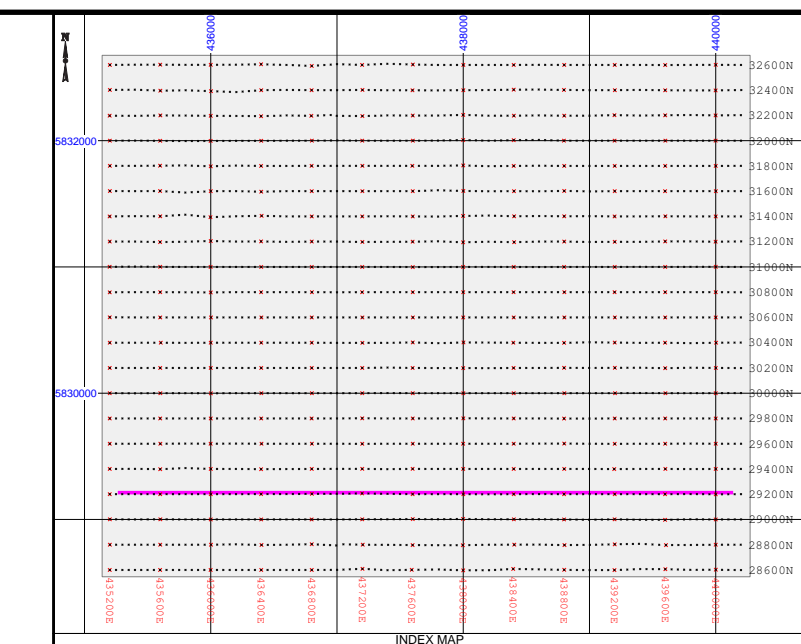
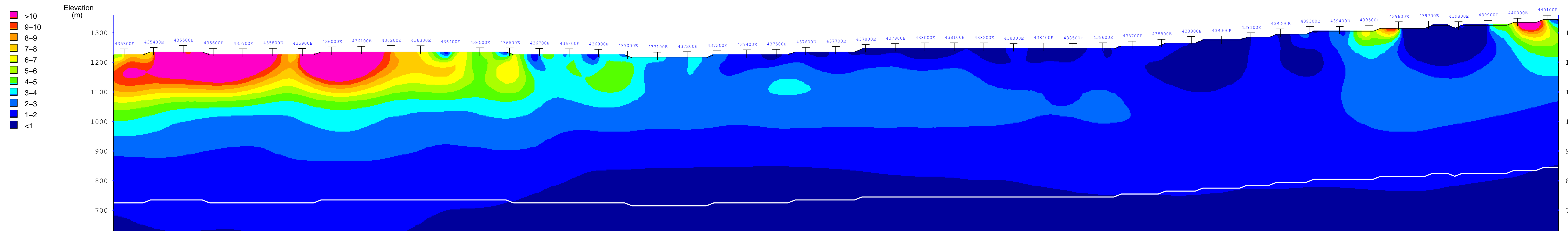
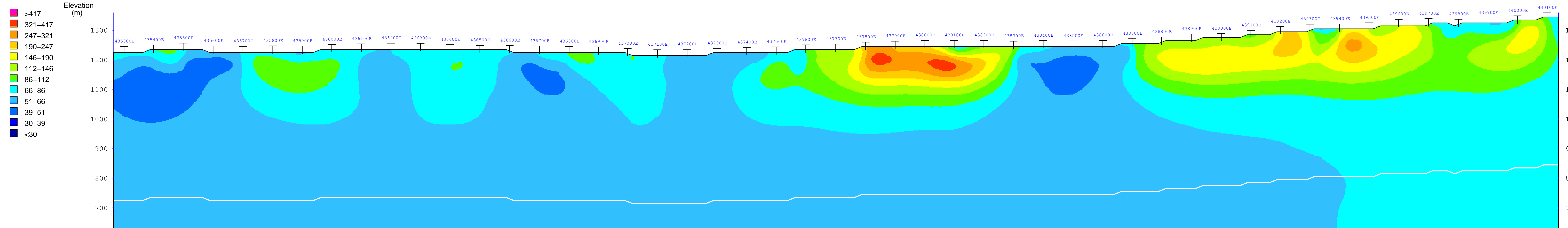
INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 29000N



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

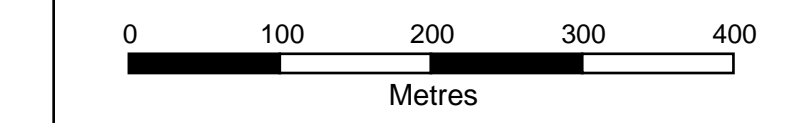
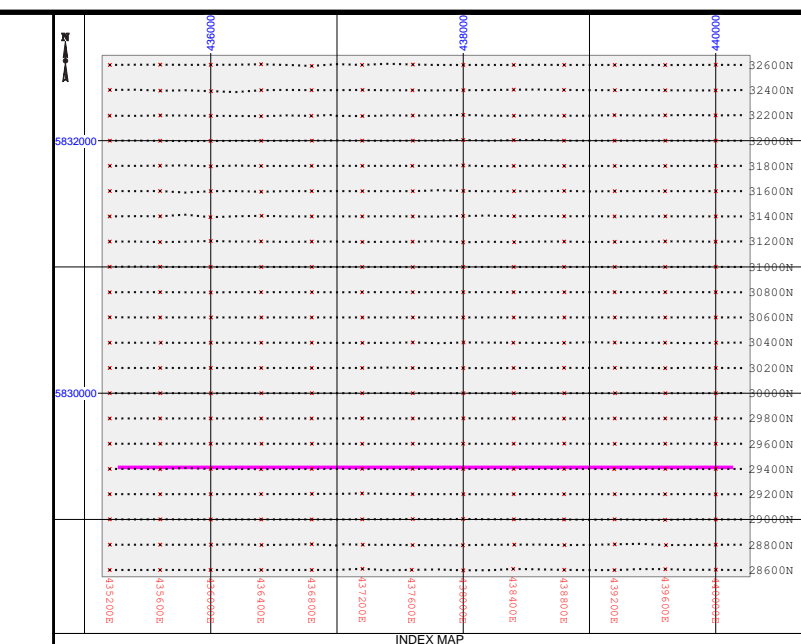
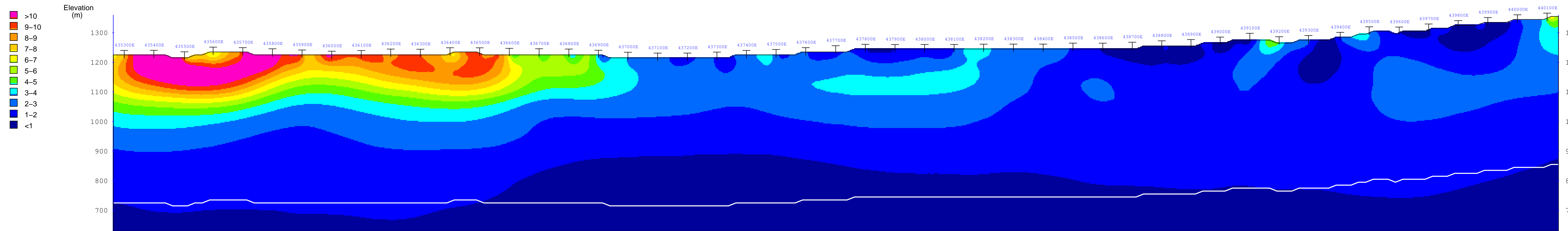
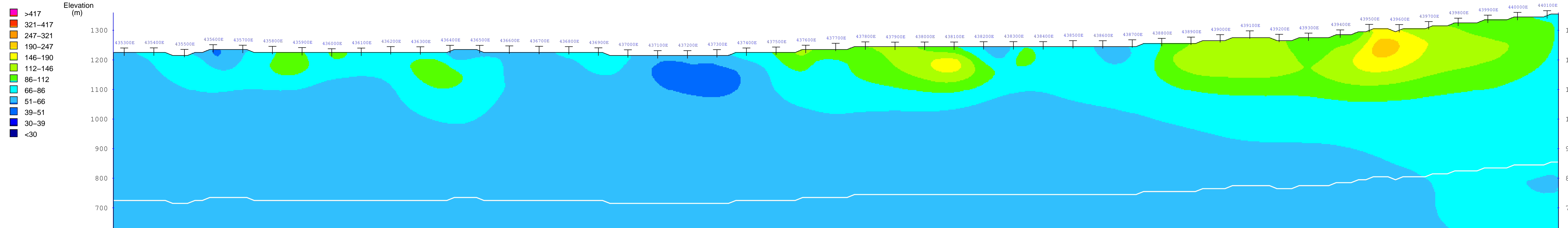
3D IP ARRAY  
 n= 12  
 a= 100-200m  
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 29200N



**LEGEND**

WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m

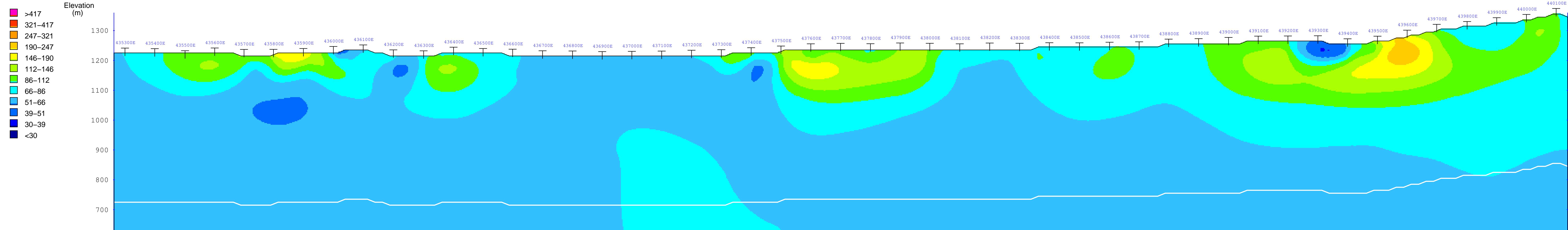
INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

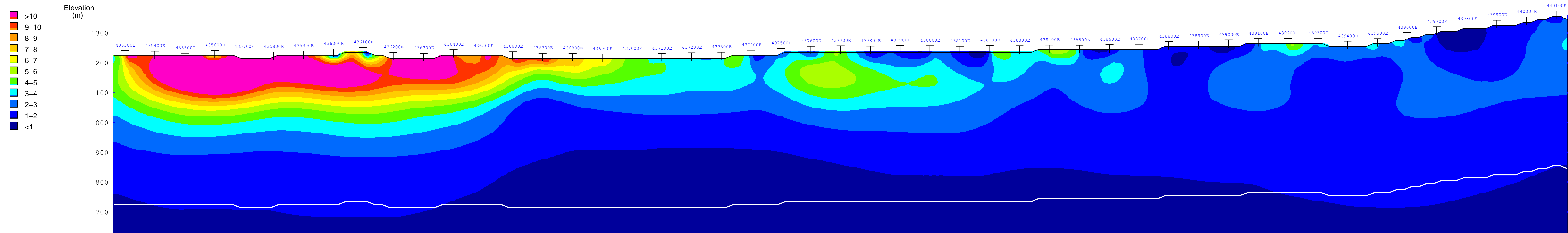
**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

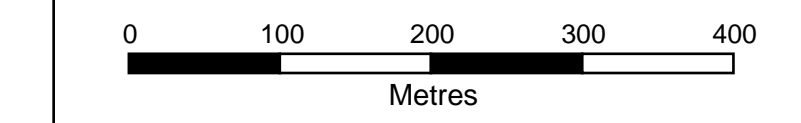
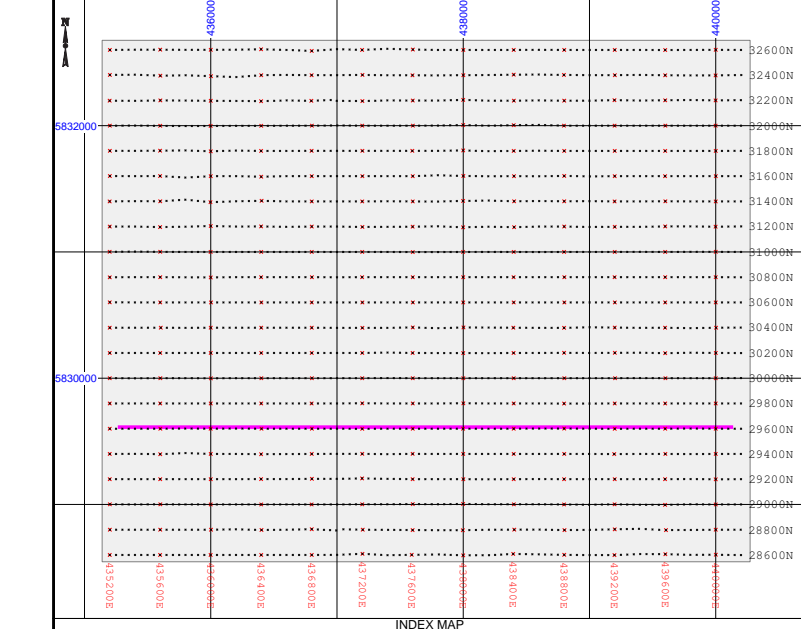
Line 29400N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

**3D IP ARRAY**  
 n= 12  
 a= 100-200m

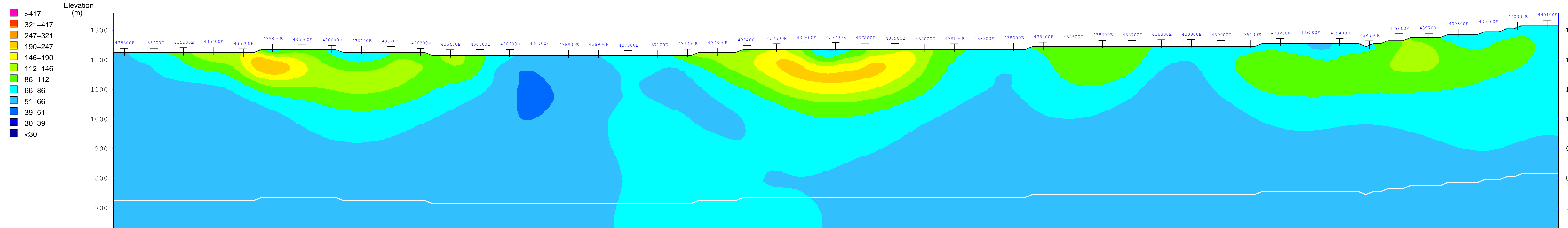
**INSTRUMENTATION**  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

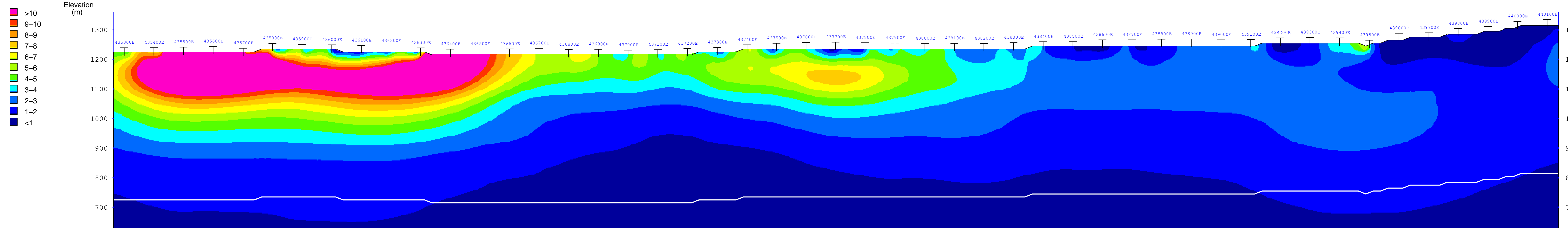
**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

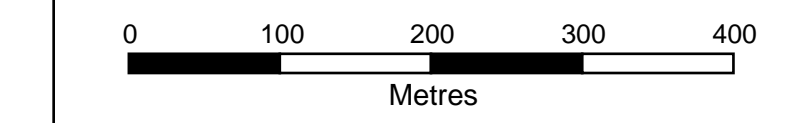
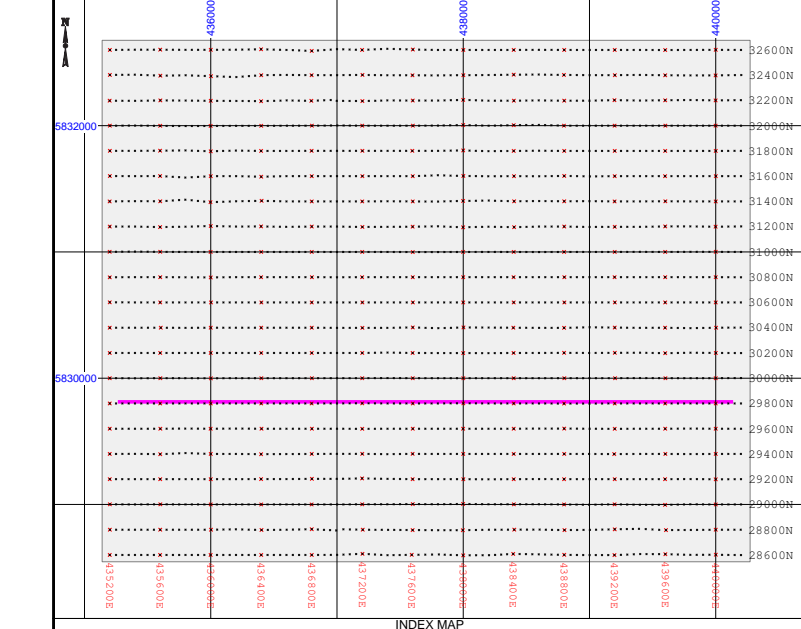
Line 29600N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

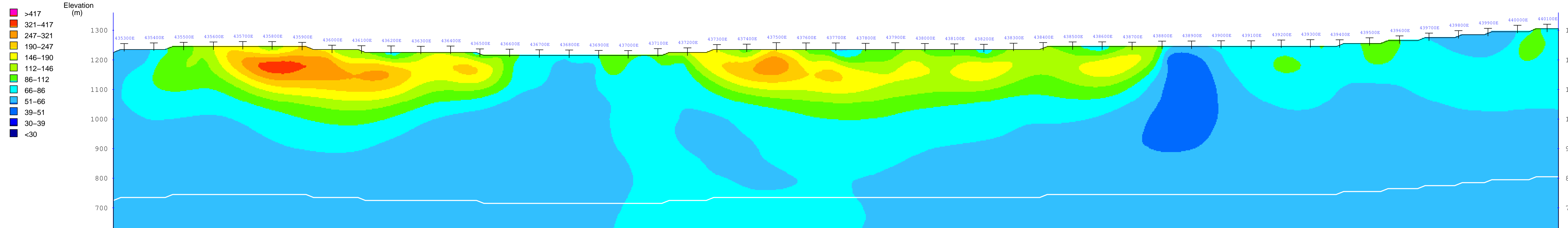
3D IP ARRAY  
 n= 12  
 a= 100-200m  
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

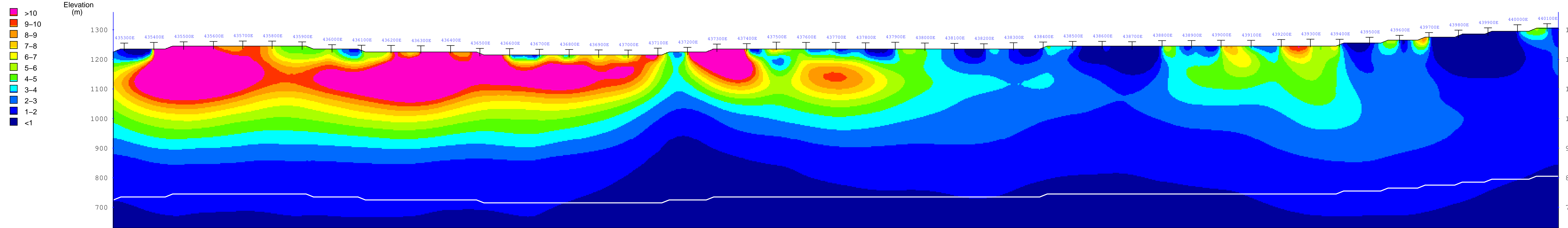
**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

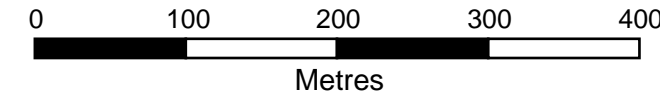
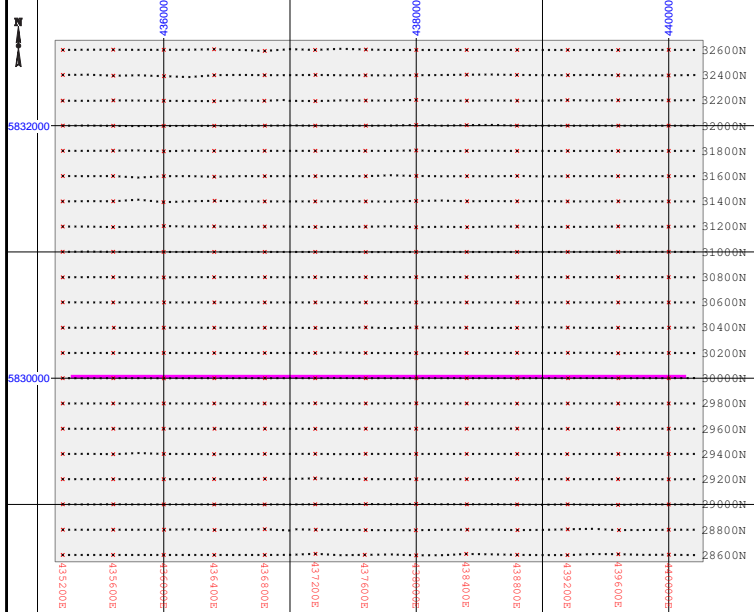
Line 29800N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



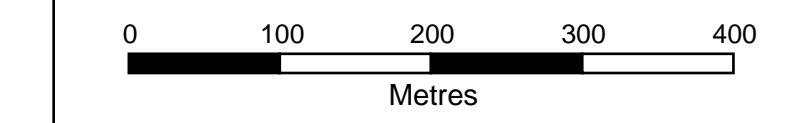
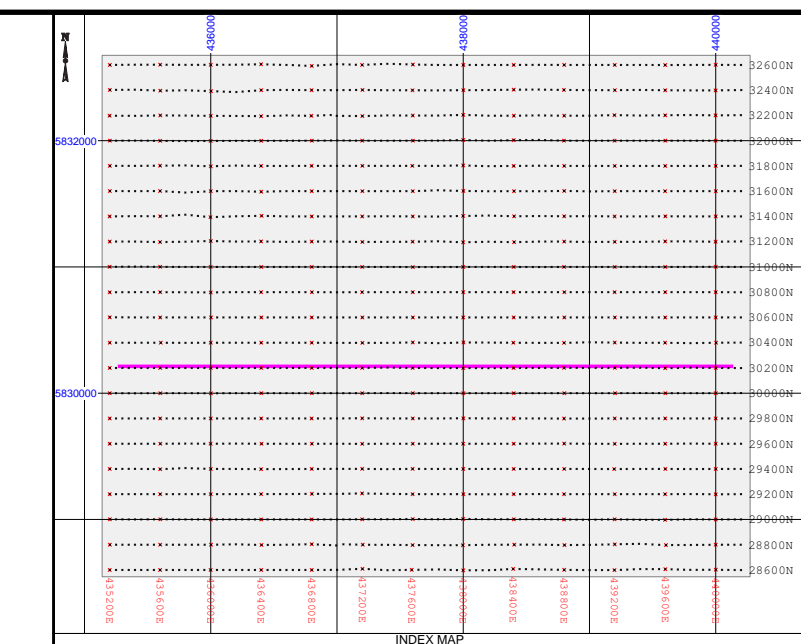
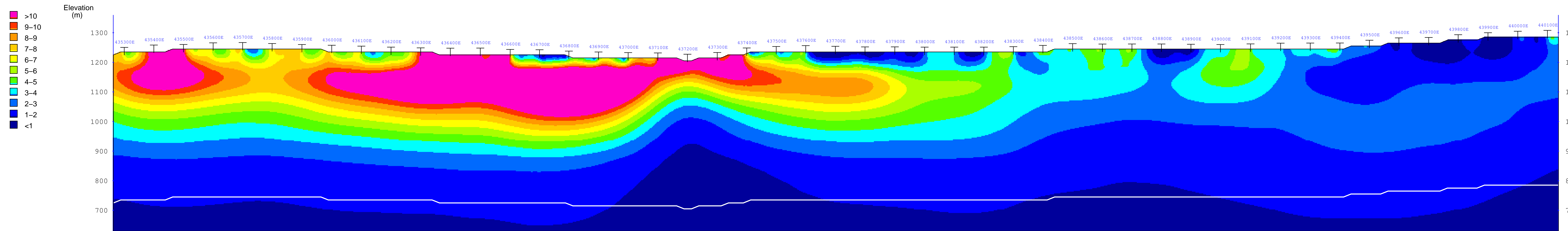
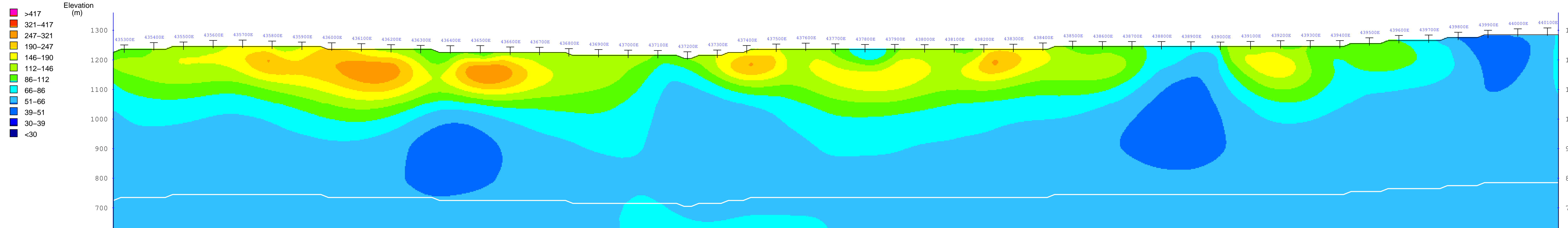
**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m  
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 30000N



**LEGEND**

WHITE LINE: Estimated Depth of Investigation  
 T Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m

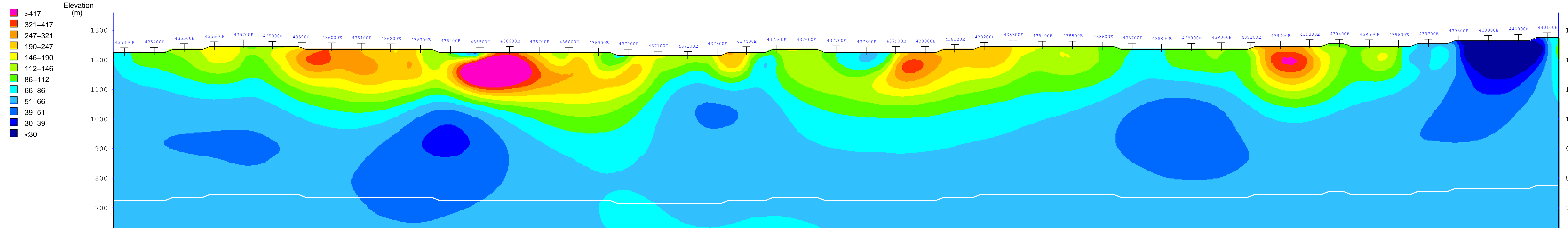
INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

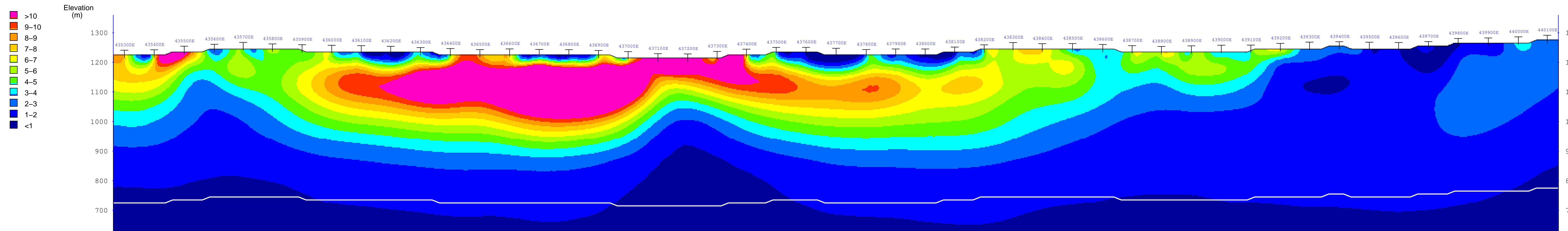
**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

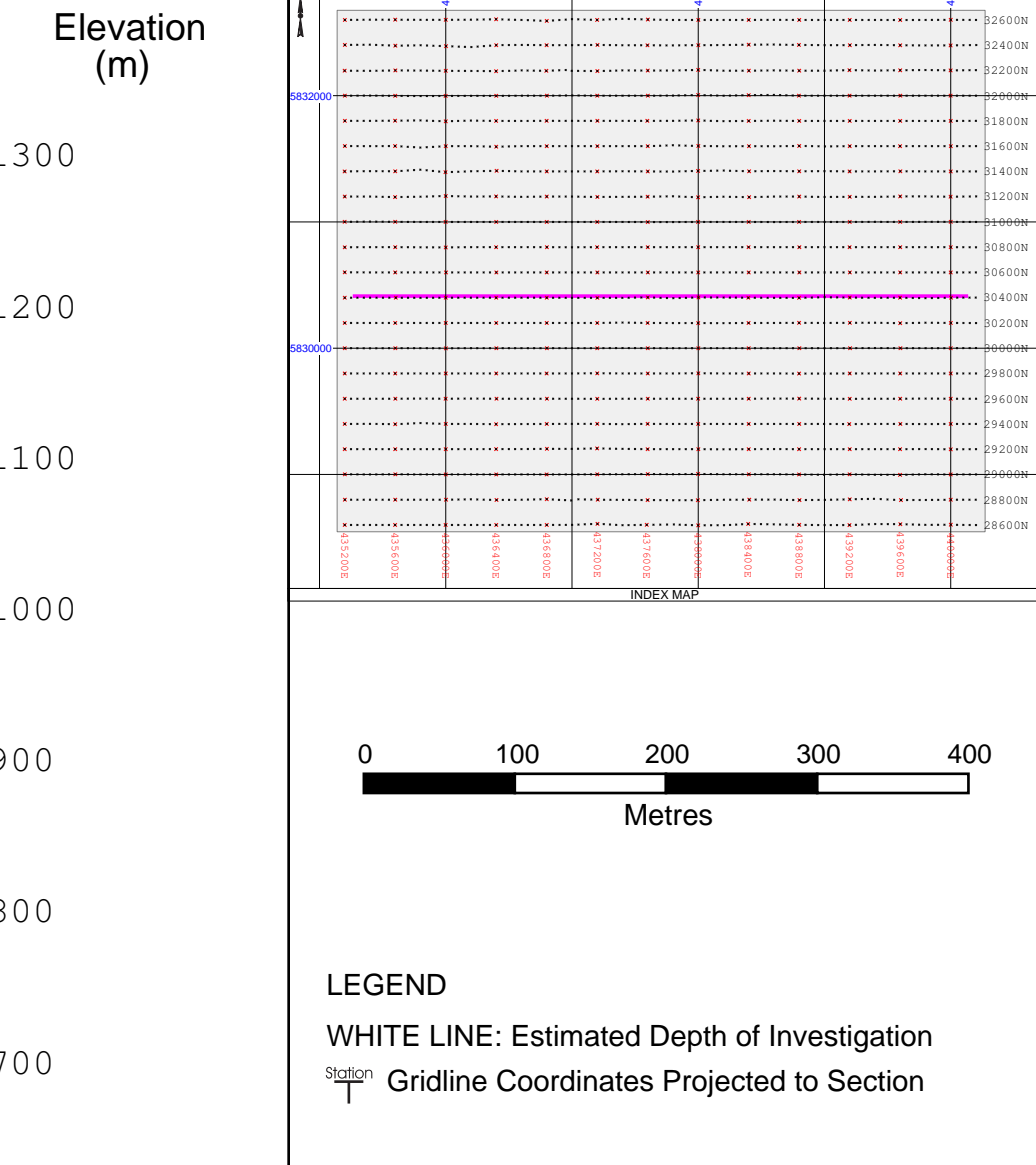
Line 30200N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



LEGEND  
 WHITE LINE: Estimated Depth of Investigation  
 T Gridline Coordinates Projected to Section

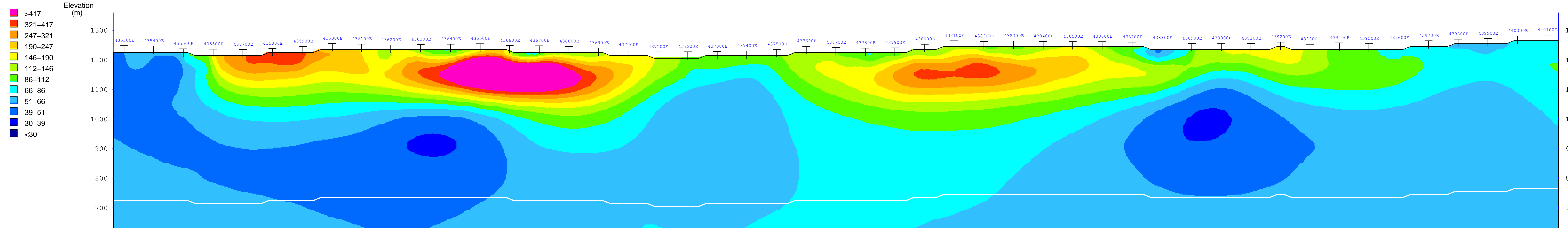
3D IP ARRAY  
 n= 12  
 a= 100-200m  
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

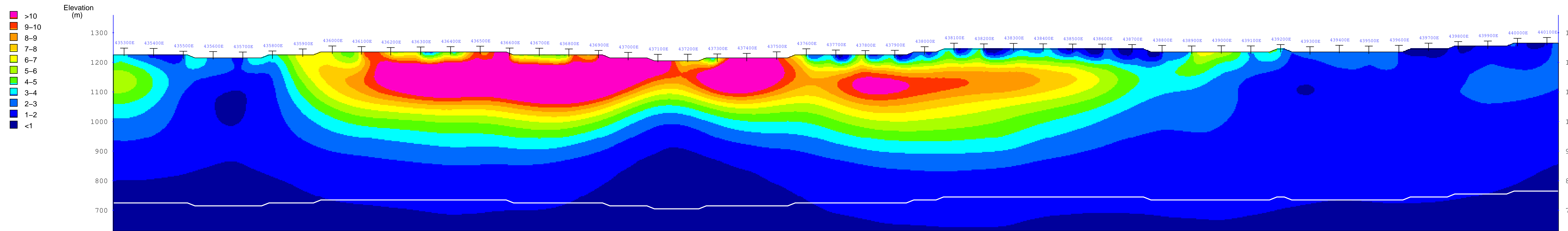
**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 30400N

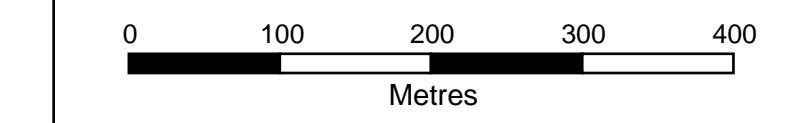
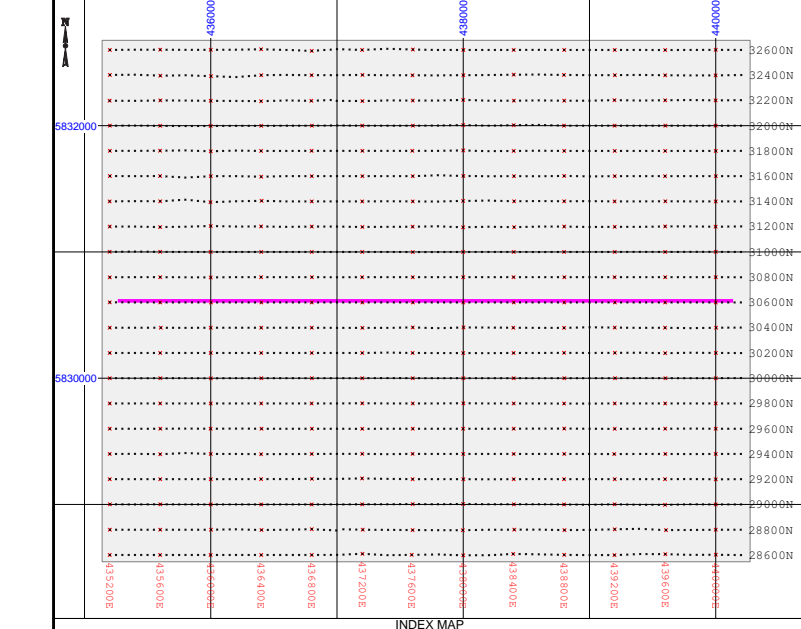




Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



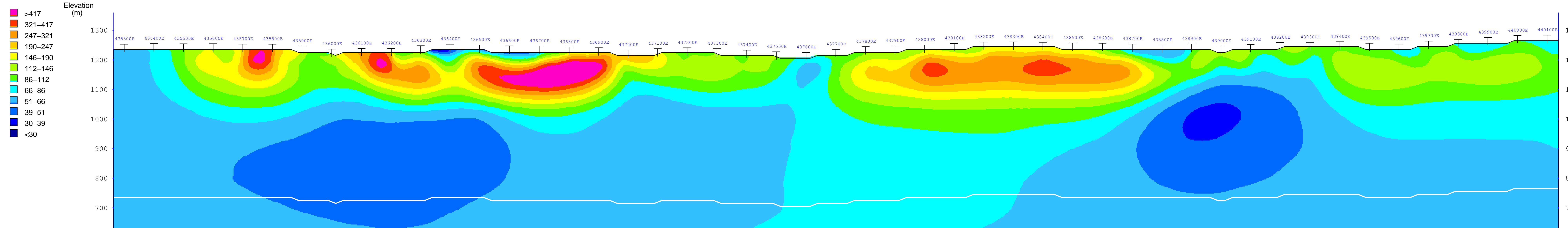
**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

3D IP ARRAY  
 $n = 12$   
 $a = 100-200m$   
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

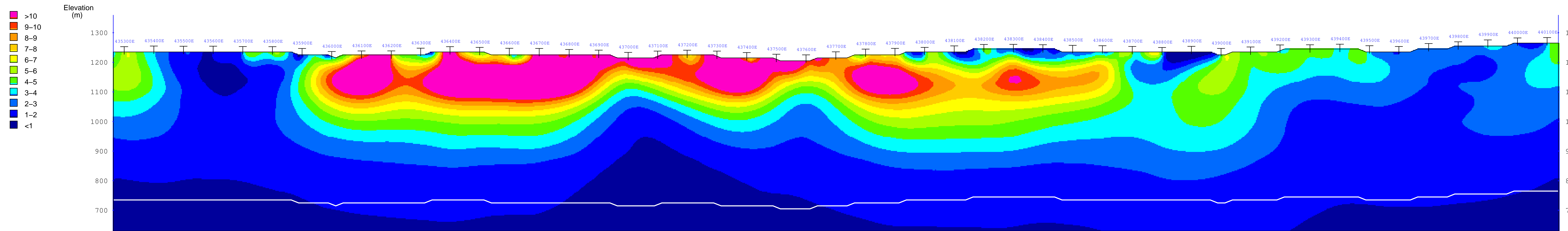
**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

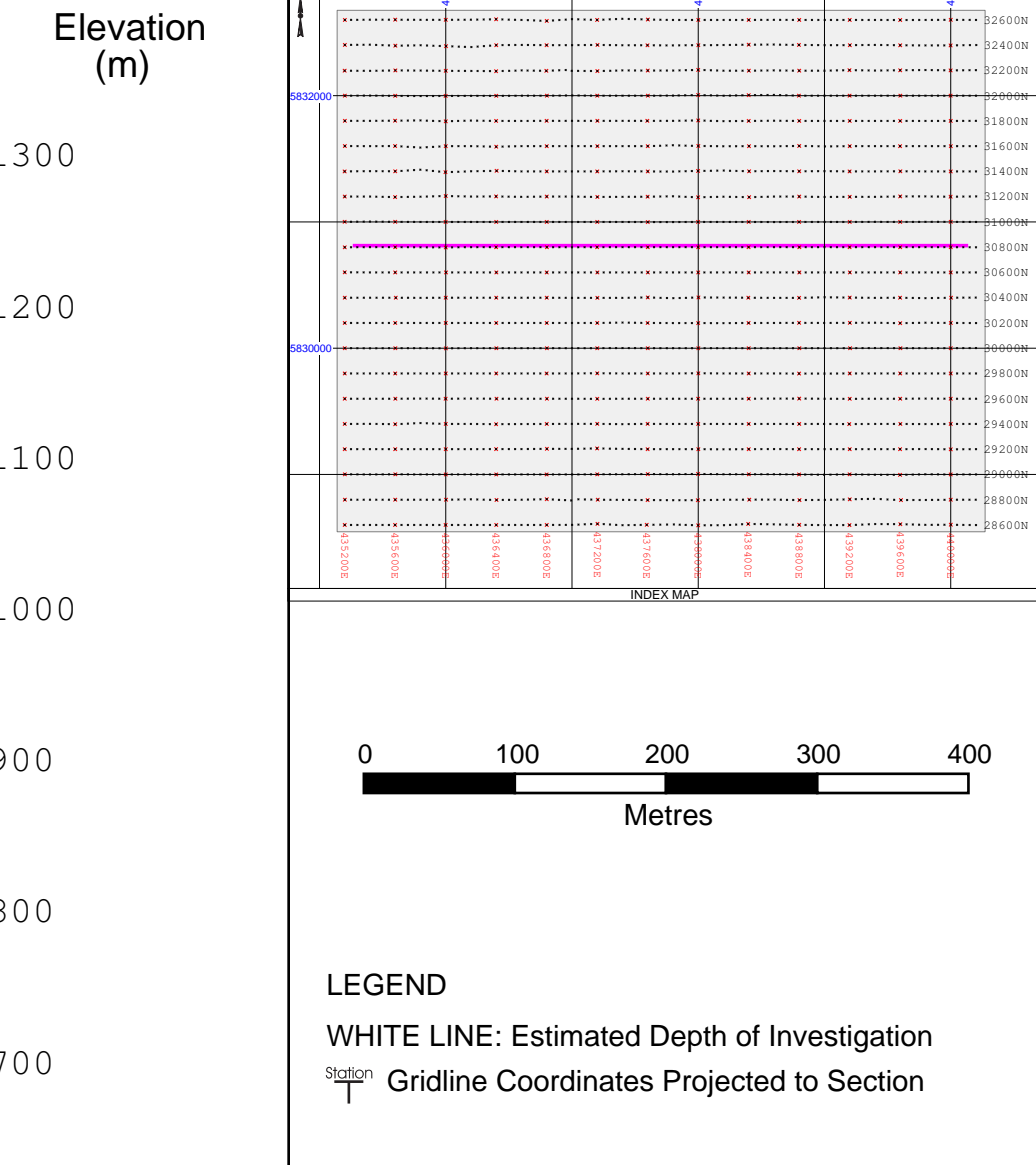
Line 30600N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



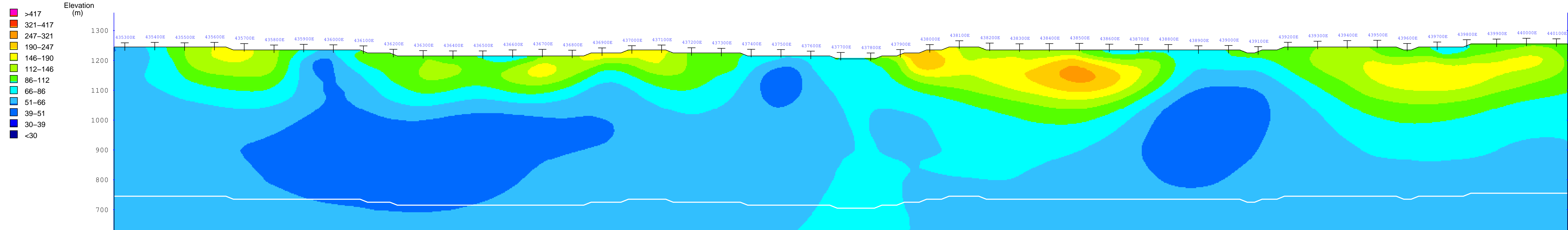
LEGEND  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m  
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

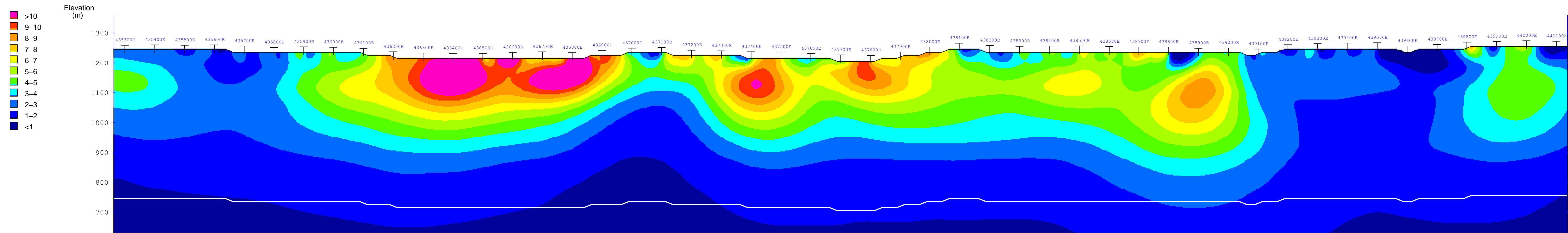
**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

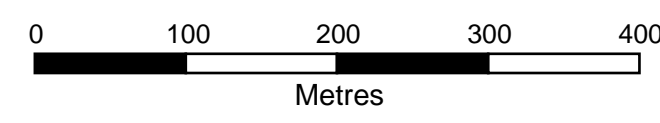
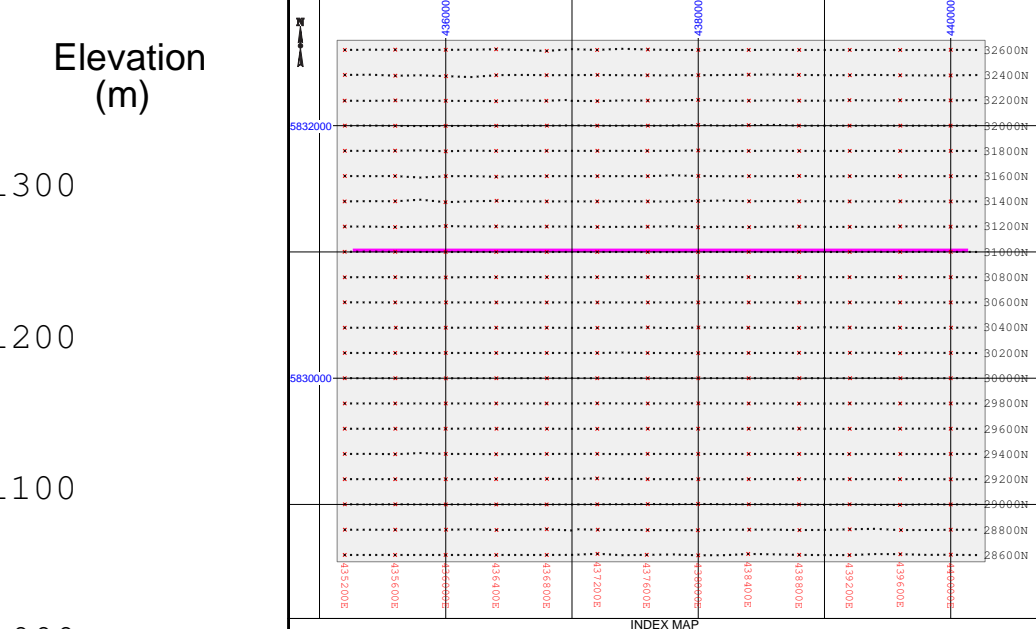
Line 30800N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

**3D IP ARRAY**  
 n= 12  
 a= 100-200m

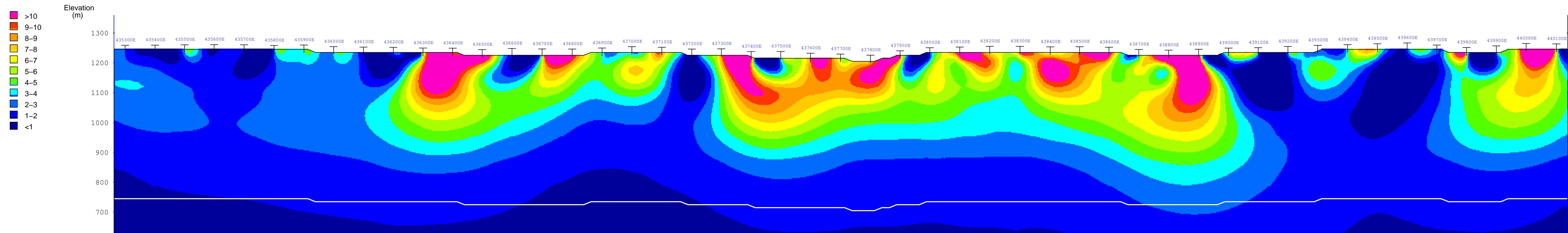
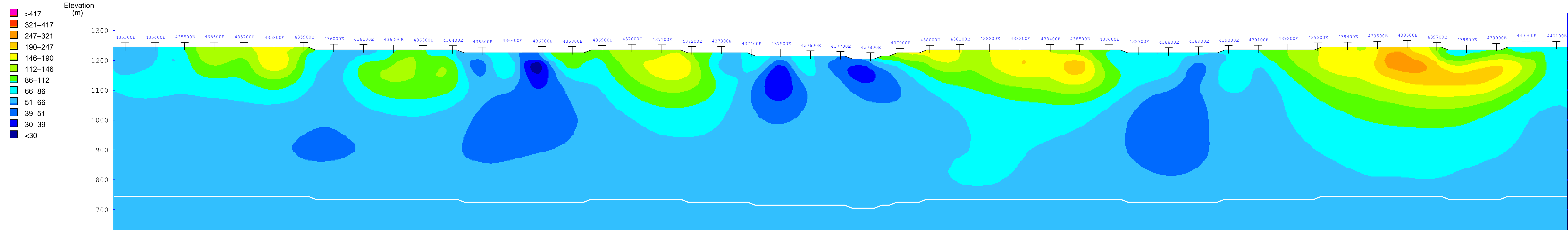
**INSTRUMENTATION**  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

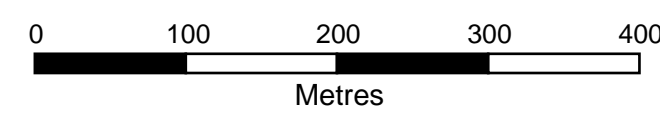
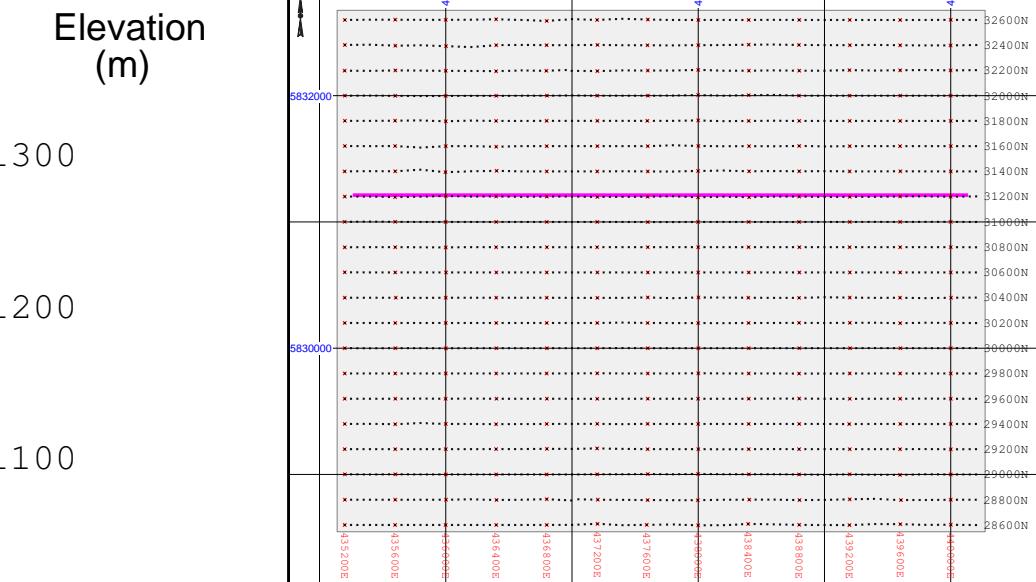
**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 31000N



- >417
- 321-417
- 247-321
- 190-247
- 146-190
- 112-146
- 86-112
- 66-86
- 51-66
- 39-51
- 30-39
- <30

- >10
- 9-10
- 8-9
- 7-8
- 6-7
- 5-6
- 4-5
- 3-4
- 2-3
- 1-2
- <1



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 Gridline Coordinates Projected to Section

**3D IP ARRAY**  
 n= 12  
 a= 100-200m

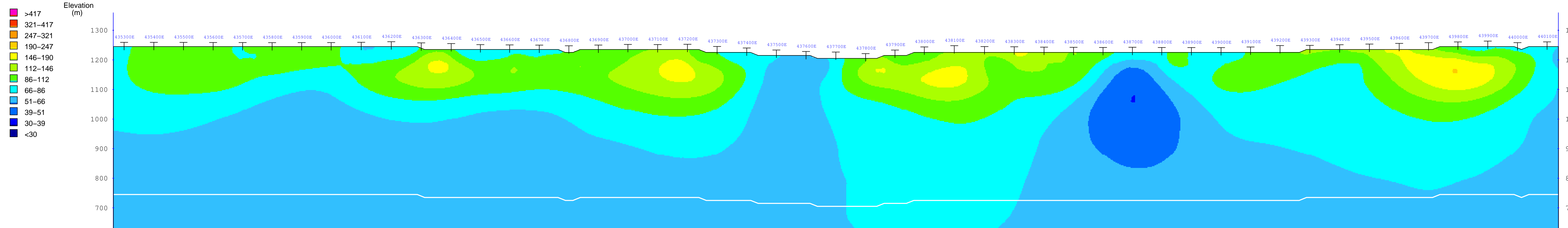
**INSTRUMENTATION**  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

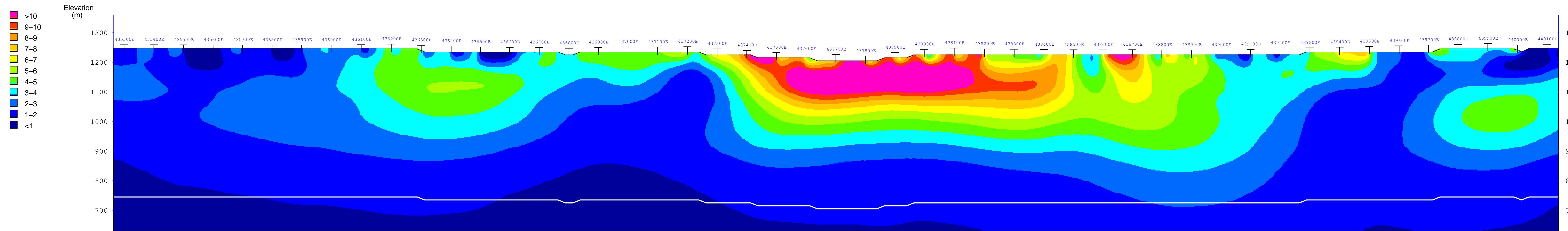
**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

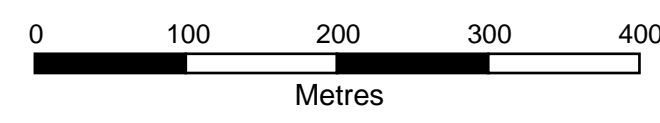
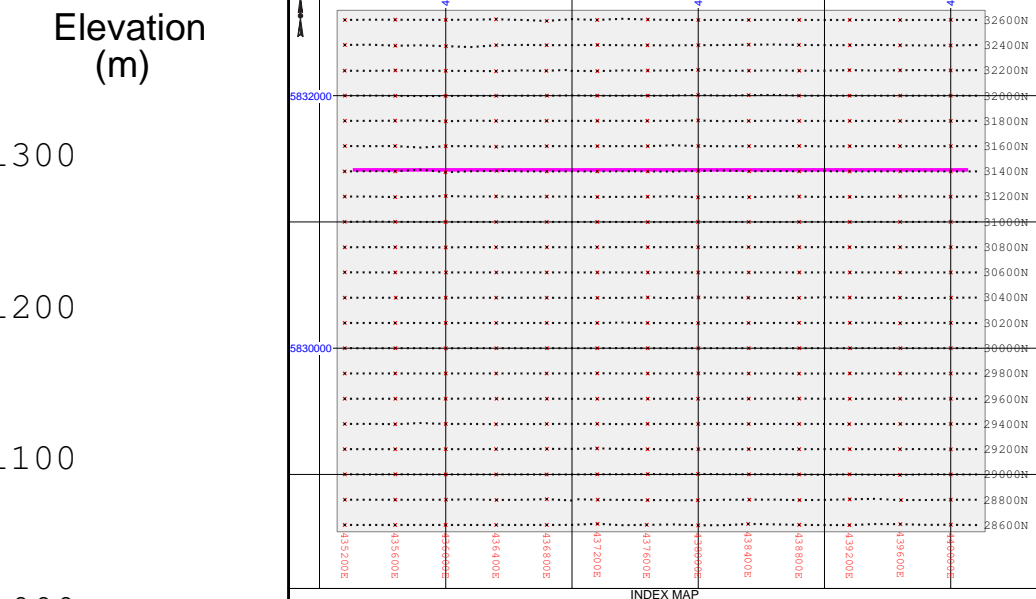
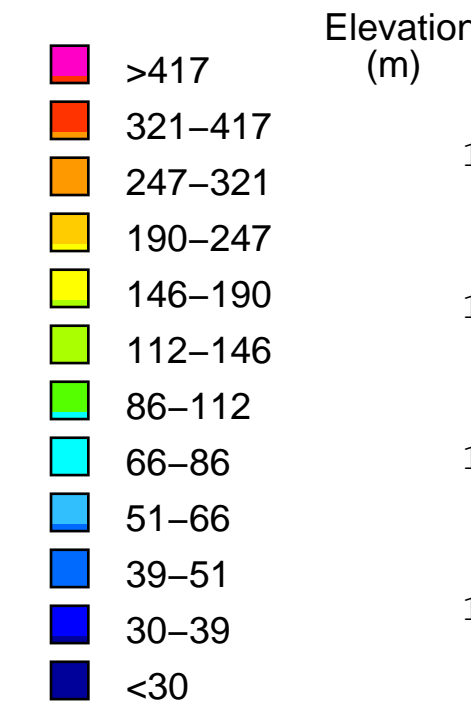
Line 31200N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



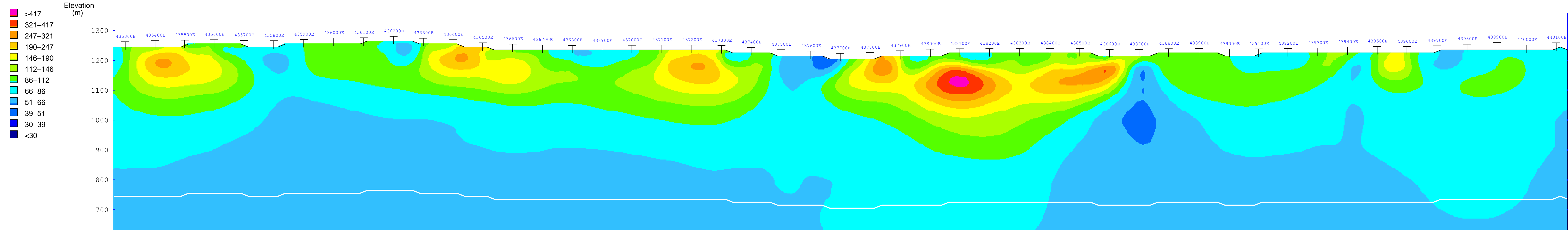
LEGEND  
 WHITE LINE: Estimated Depth of Investigation  
 Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m  
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

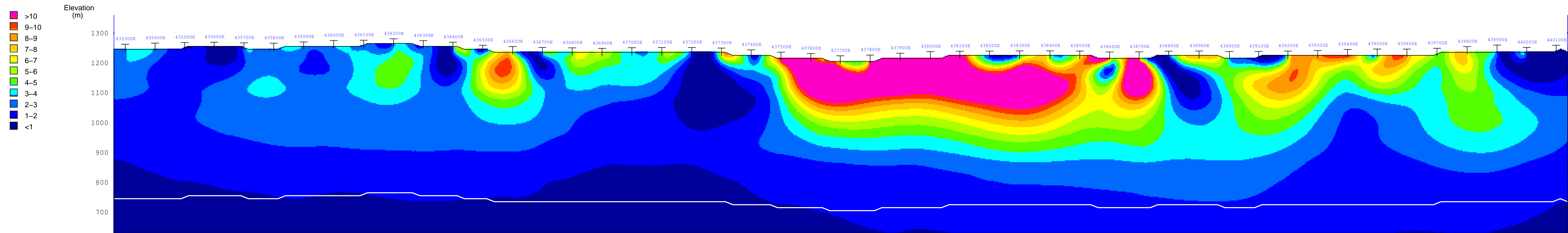
**GOLD MEMBER**  
**VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

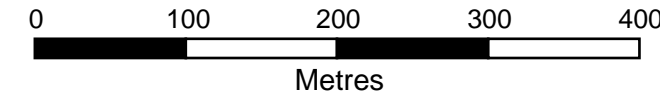
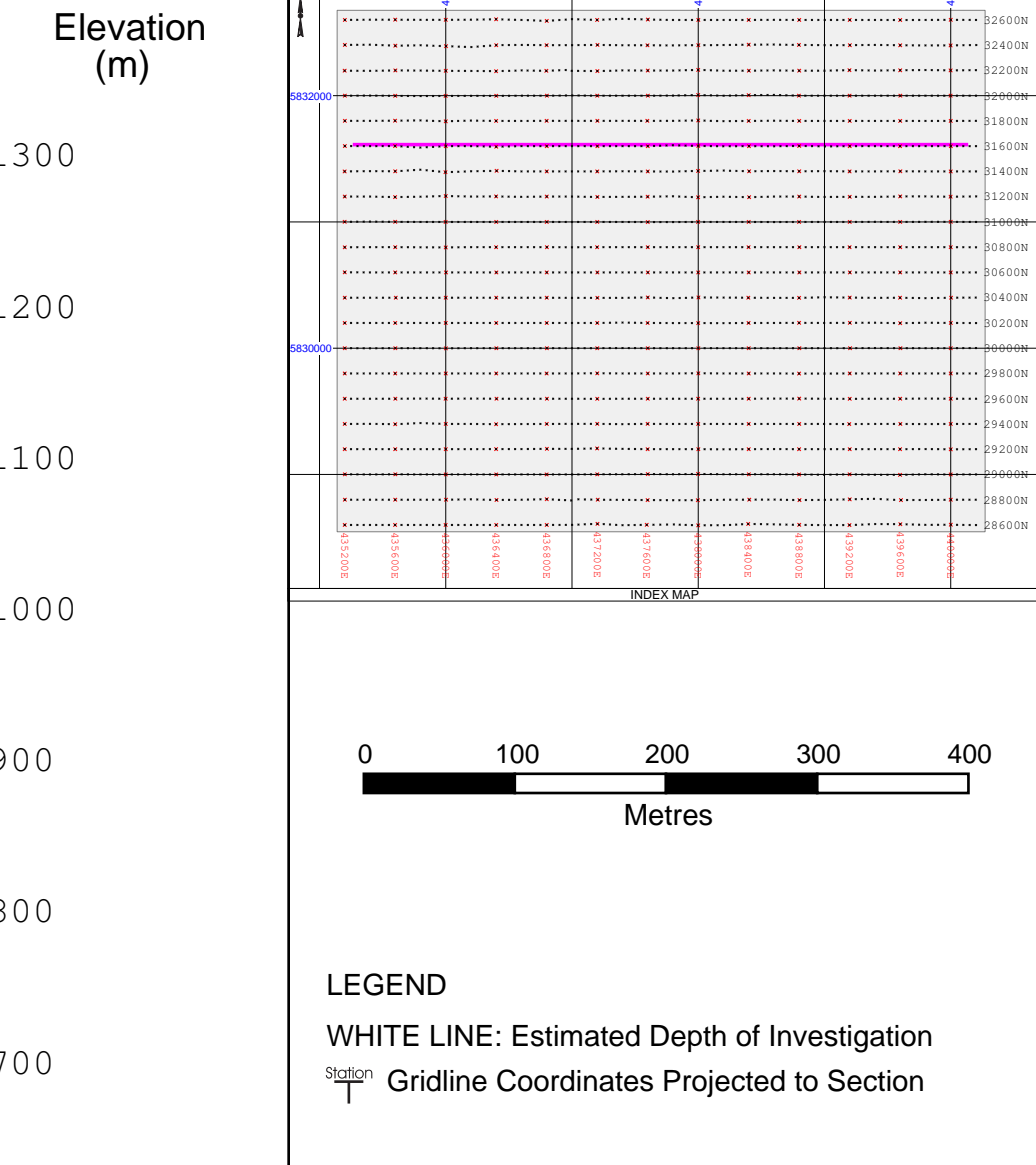
Line 31400N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



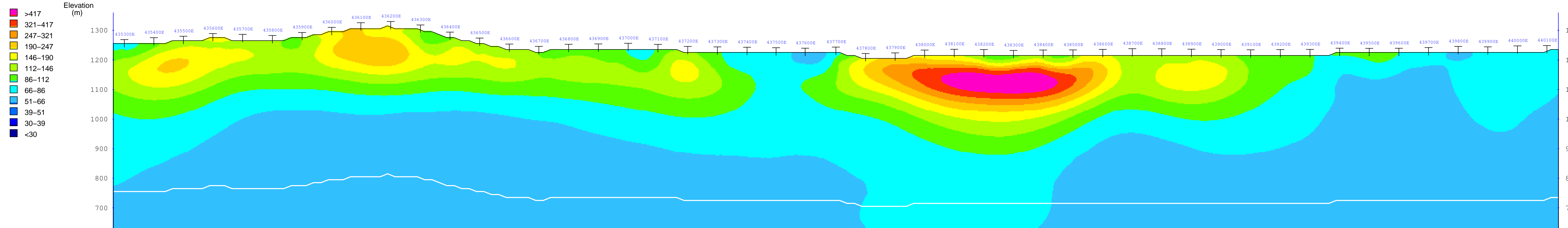
LEGEND  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m  
 INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

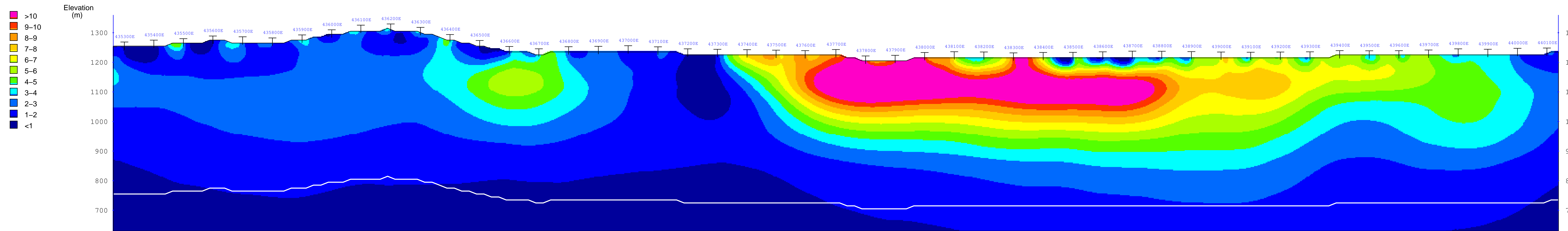
**GOLD MEMBER**  
**VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

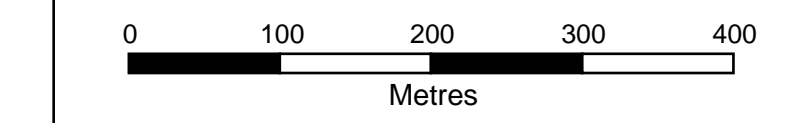
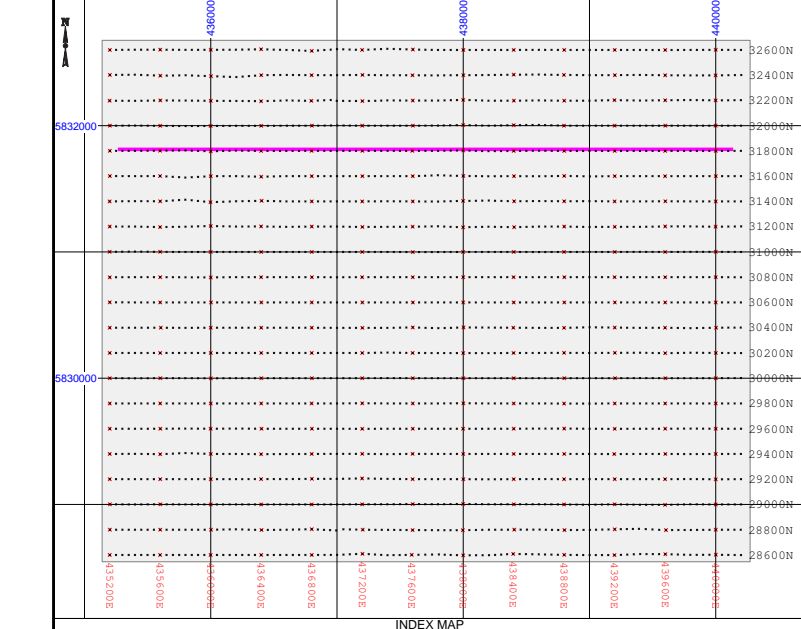
Line 31600N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T Gridline Coordinates Projected to Section

**3D IP ARRAY**  
 n= 12  
 a= 100-200m

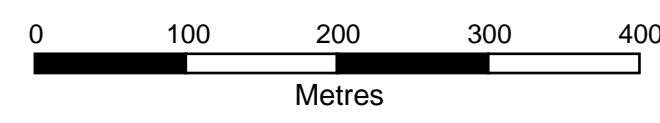
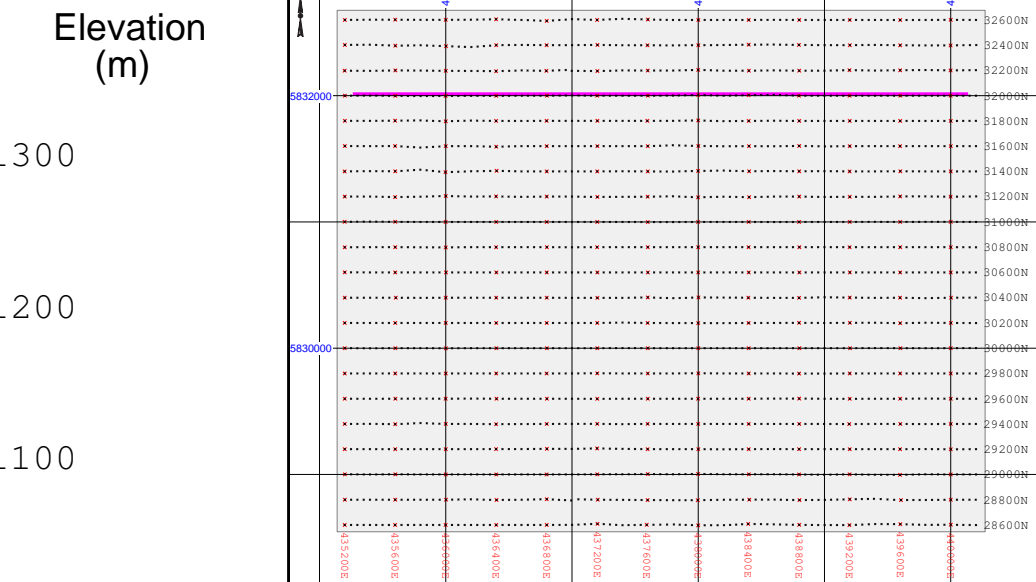
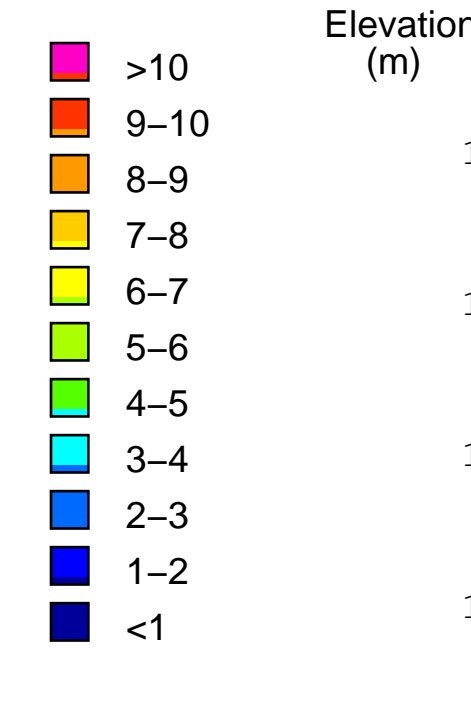
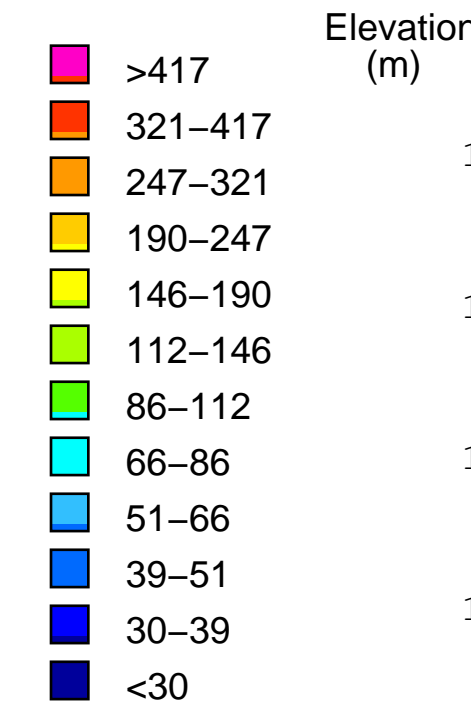
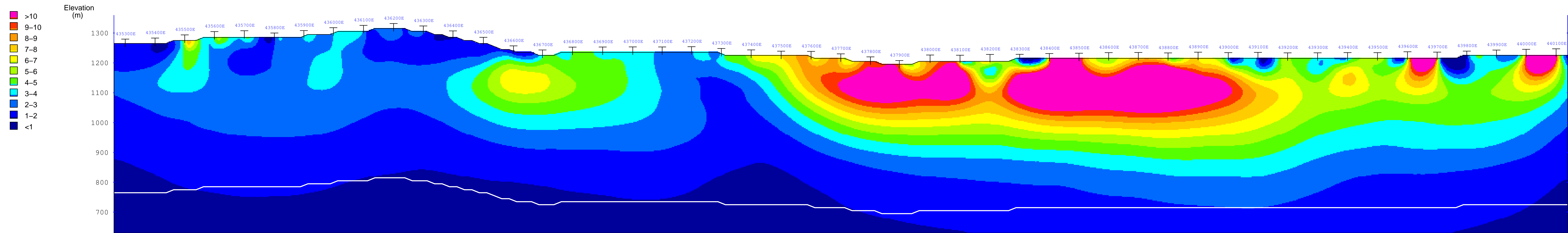
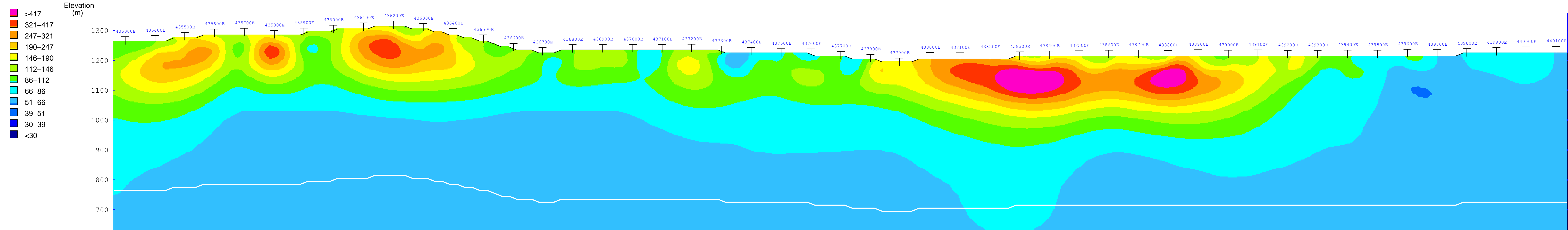
**INSTRUMENTATION**  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 31800N



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

**3D IP ARRAY**  
 n= 12  
 a= 100-200m

**INSTRUMENTATION**  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

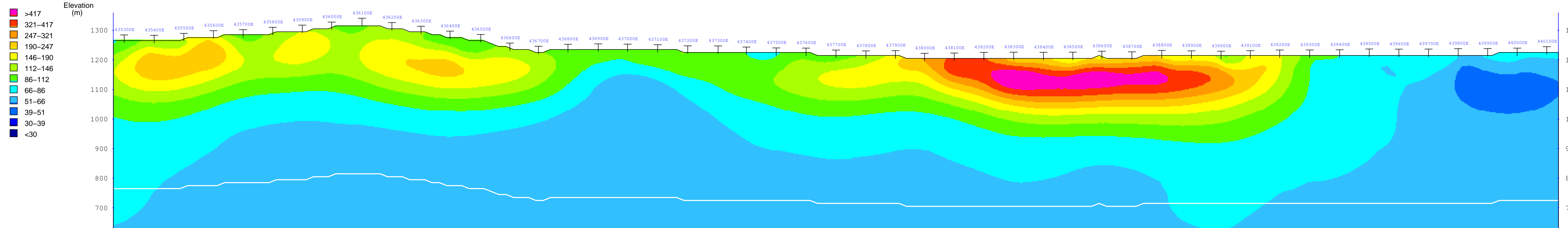
Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

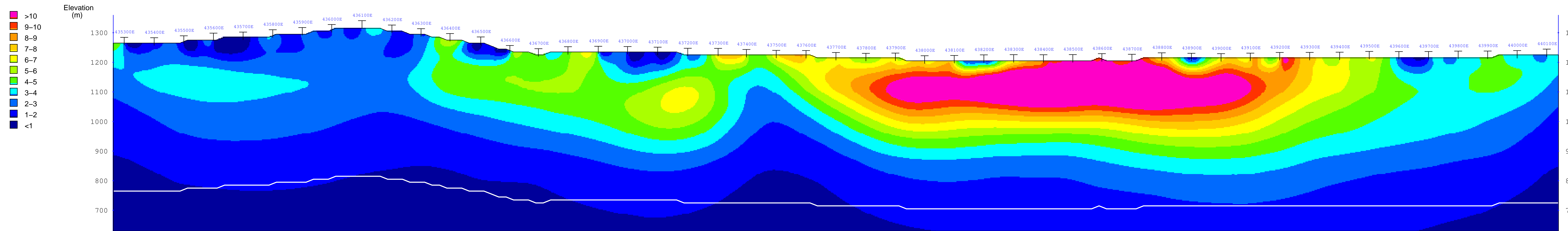
**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 32000N





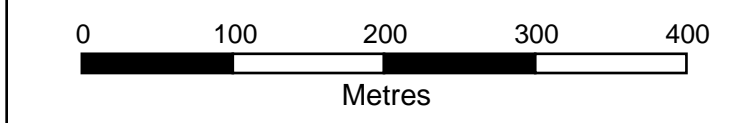
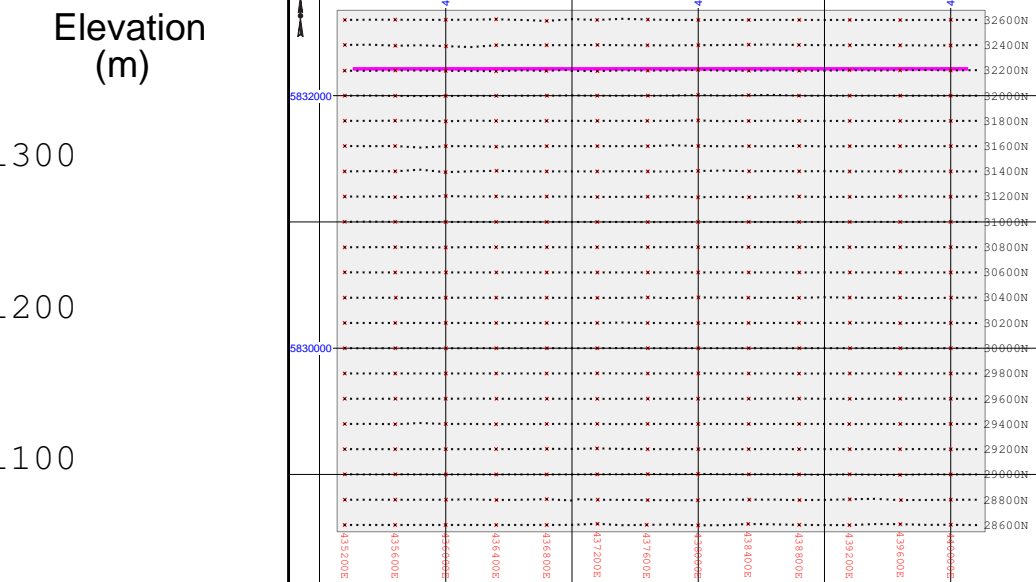
Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)

- Elevation (m)
- >417
  - 321-417
  - 247-321
  - 190-247
  - 146-190
  - 112-146
  - 86-112
  - 66-86
  - 51-66
  - 39-51
  - 30-39
  - <30

- Elevation (m)
- >10
  - 9-10
  - 8-9
  - 7-8
  - 6-7
  - 5-6
  - 4-5
  - 3-4
  - 2-3
  - 1-2
  - <1



LEGEND  
 WHITE LINE: Estimated Depth of Investigation  
 T Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m

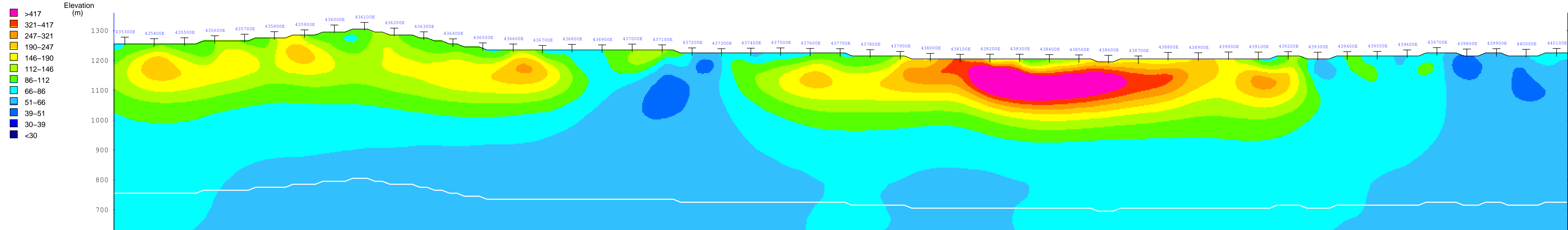
INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

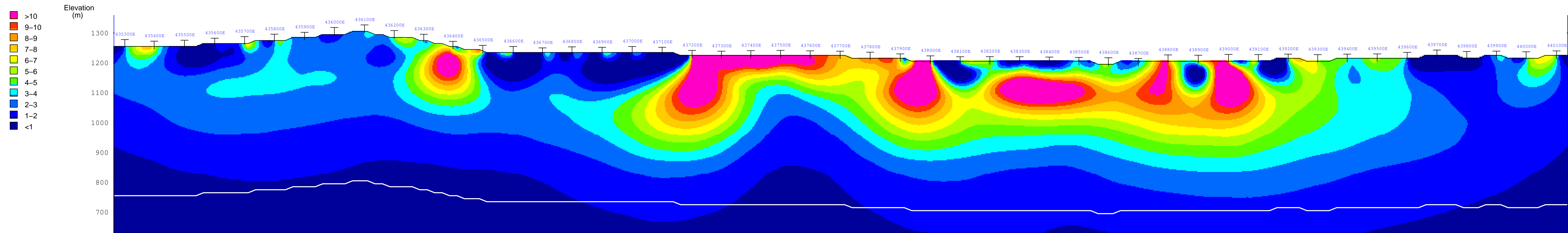
**GOLD MEMBER**  
**VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

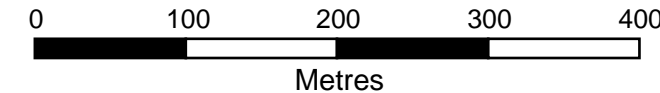
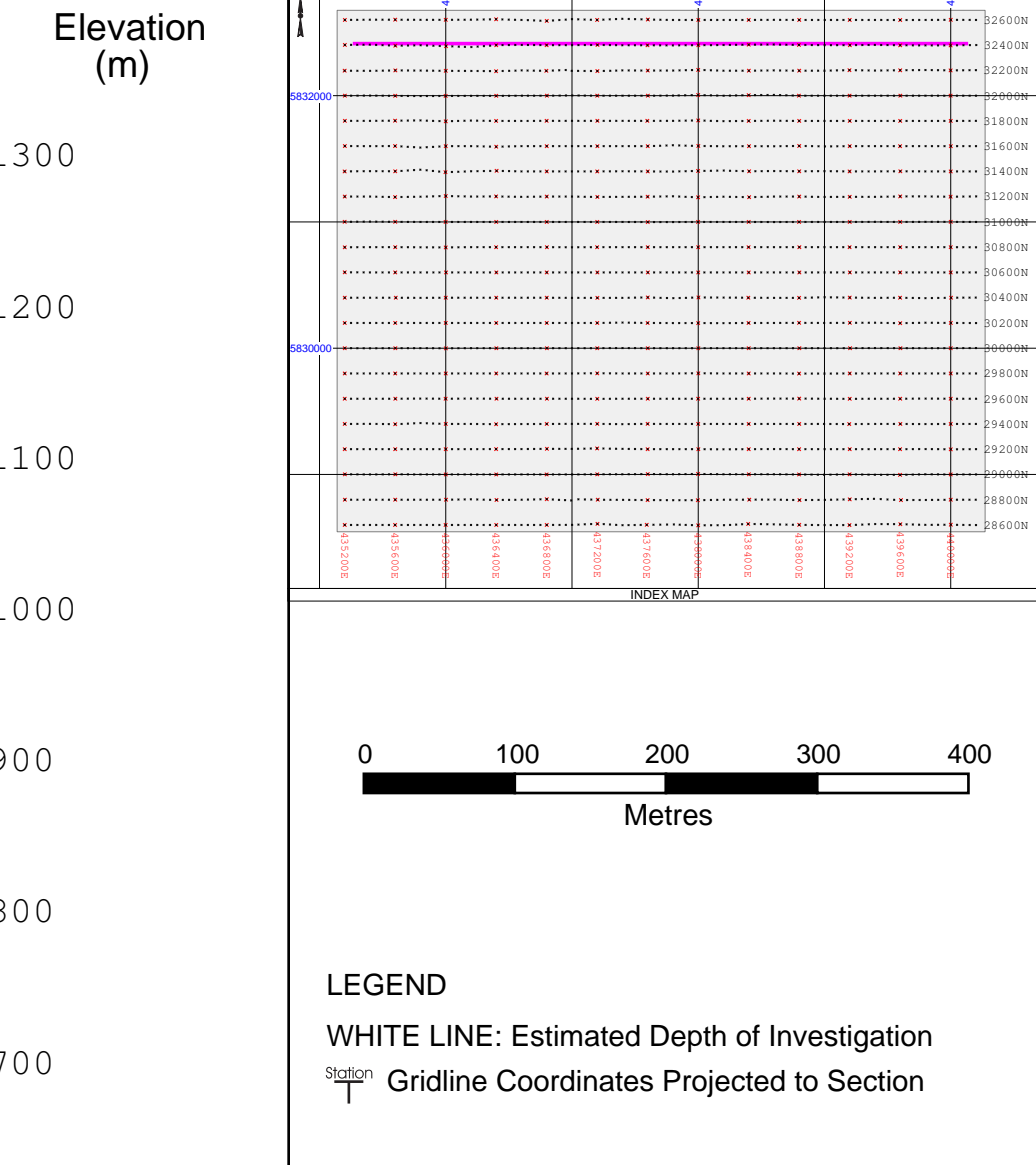
Line 32200N



Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)



LEGEND  
 WHITE LINE: Estimated Depth of Investigation  
 T Gridline Coordinates Projected to Section

3D IP ARRAY  
 n= 12  
 a= 100-200m

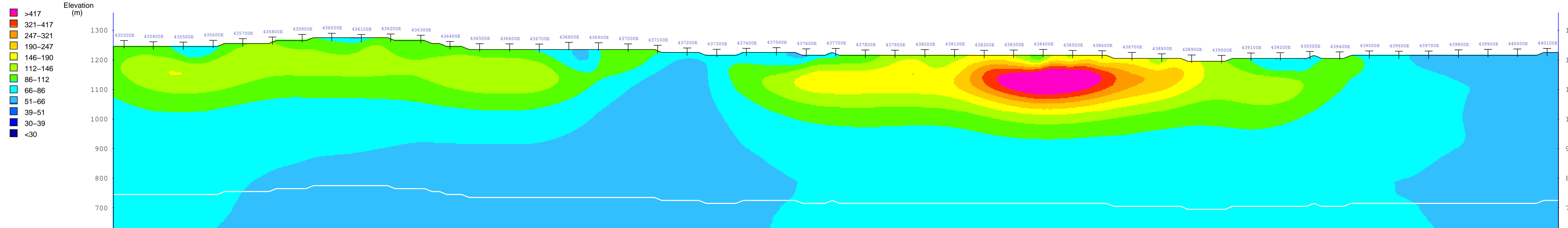
INSTRUMENTATION  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

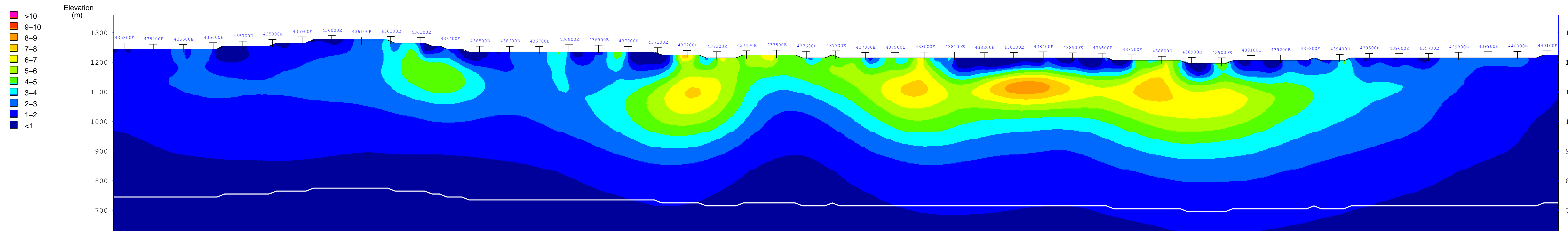
**GOLD MEMBER  
 VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 32400N



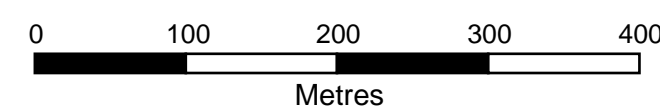
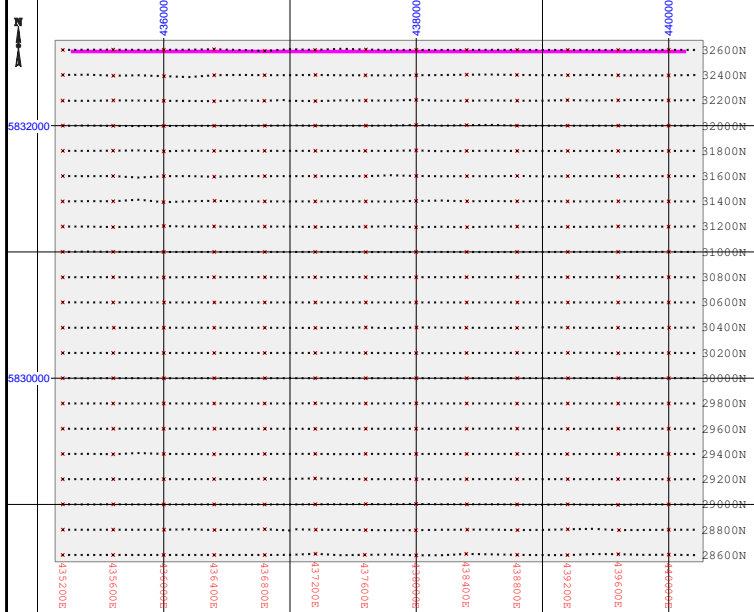
Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)

- Elevation (m)
- >417
  - 321-417
  - 247-321
  - 190-247
  - 146-190
  - 112-146
  - 86-112
  - 66-86
  - 51-66
  - 39-51
  - 30-39
  - <30

- Elevation (m)
- >10
  - 9-10
  - 8-9
  - 7-8
  - 6-7
  - 5-6
  - 4-5
  - 3-4
  - 2-3
  - 1-2
  - <1



**LEGEND**  
 WHITE LINE: Estimated Depth of Investigation  
 T: Gridline Coordinates Projected to Section

**3D IP ARRAY**  
 n= 12  
 a= 100-200m

**INSTRUMENTATION**  
 RECEIVER: SJ-24 Full-Waveform Digital IP Receiver  
 TRANSMITTER: GDD Tx II

Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Processing Date: Feb., 2007

**GOLD MEMBER VENTURES CORP.**  
 Alexis Property Project  
 Alexis Creek, British Columbia

**3D IP SURVEY**  
 3D Cross Sections  
 False Colour Contour Map

Line 32600N

Sample Number	Claim	UTM N	UTM E	altitude (m)	Rock Type	Field Description	Strike	Dip	Photo	Sample
WHY-MN-15	ALEXIS	5829138	457953	1152	basalt?	large outcrop set back from road, technically in Dent claim? Weathered surface, fresh surface a dark, elongated voids like elongate vesicles, fractures easily				y
WHY-MN-16	ALEXIS	5828547	459172	1165	basalt?	small outcrop set back from road, dark subrounded fresh surfaces, fractures at cm scale, weathers dark brown similar to 15 - in Dent claim?				1 y
WHY-MN-01	REGIONAL	5849320	467893	890	basalt	highly oxidized flow top of aa basalt flow, orange oxidation, fist sized clasts, this is a prevalent rock unit driving south from Nazco				1 y
WHY-MN-02	REGIONAL	5847617	468386	917	basalt	as 01 conglomerate, floats of vesicular basalt nearby, maybe flow top conglomerate, pebbles in conglomerate included rounded quartz and basalt? Or cherty? This outcrop might represent a river environment or lahar or mudflow?				y
WHY-MN-03	REGIONAL	5846640	469783	885	conglomerate	10-20m from road towards edge of claim block, sedimentary rocks, basal unit is conglomerate, upper unit is red grained sandstone, no obvious bedding or flow structures on weathered surfaces. Sandstone is immature				2 y
WHY-MN-04	REGIONAL	5840992	469650	952	conglomerate and sandstone	pale grey/beige, with orange oxidation limited to veins, possibly flow-banded rhyolite, on northern edge of property, bands dipping about 50 degrees to south, might be folds as well.				1 y
WHY-MN-05	REGIONAL	5850576	464608	869	flow-banded rhyolite	090/50 degrees	90	50		2 y
WHY-MN-06	REGIONAL				basalt	boulder field, probably float for nearby lava field. Basalt massive and vesicular, dark grey, some slight weathering				1 y
WHY-MN-07	REGIONAL	5844148	459242	1076	limestone?	dm scale bedded, weathered surface is dark brown, fresh is aphanitic and gray, might be basalt or more likely limestone. Beds 038/46 degrees	38	46		1 y
WHY-MN-08	REGIONAL	5846240	461637	945	vesicular basalt	road cut with large number of rounded boulders - vesicular basalt, some appear very mafic/black, others have light orange oxidation, vesicles are occasionally filled amygdules massive basalt flow with columnar jointing oriented sub horizontal, overlain by boulders and conglomerate, overlain by layered soils, overlain by another boulder and conglomerate, fault/cooling fracture set perpendicular to columnar 068 degrees/80 degrees - some gauge,				1 y
WHY-MN-09	REGIONAL	5846068	461557	932	basalt		68	80		3 y
WHY-MN-10	REGIONAL	5842902	462098	1168	basalt	large outcrop on west side f road, basalt with vertical columnar jointing, some white and rare orange staining, basalt is dark with occasional pyroxene and quartz basaltic flow unit, appears very dark and hard and fractures conchoidally in places - perhaps glassy rhyolite? Rare yellow oxidation, light brown/orange oxidation - in Dent claim?				2 y
WHY-MN-11	REGIONAL	5842228	462289	1154	basalt? rhyolite?					1 y
WHY-MN-12	REGIONAL	5840647	462488	1296	rhyolite?	weathering pale grey, fresh surface is dark, smooth fractures - perhaps rhyolite? Yellowish and brown oxidation, outcrop is fractured at 5-10m intervals - in Dent claim?				2 y

WHY-MN-13	REGIONAL	5839561	461742	1261	igneous	small outcrop partially buried in snow, the dark igneous rock has sub parallel veins running sub horizontally throughout, veins are white on fresh surface - in Dent claim?	y
WHY-MN-14	REGIONAL	5833567	459948	1313	igneous	rill/gorge with dark igneous rock that weathers light, is highly weathered and broken up/brecciated, vesiculated and small (dm scale) massive sections - in Dent claim	1 y
WHY-MN-17	REGIONAL	5839912	462768	1297	vesicular basalt	vesicular basalt flow, purple/blue and orange oxidations along fractures, fresh surfaces are dark and aphanitic	1 y
WHY-MN-18	REGIONAL	5837494	467637	1393	vesicular basalt	vesicular basalt boulders on top of hill, weathering to a medium brown, fresh surface is dark grey polymitic conglomerate, rust outcrop of very coarse grained conglomerate, quartz and basalt? Clasts. POLISHED SECTION at same outcrop also biotite phyric rhyolite float was not sampled	1 y
WHY-MN-19	REGIONAL	5845310	469459	913	polymitic conglomerate	polymitic conglomerate, rust outcrop of very coarse grained conglomerate, quartz and basalt? Clasts. POLISHED SECTION at same outcrop also biotite phyric rhyolite float was not sampled	1 y
WHY-MN-20	REGIONAL	5845842	469676	892	polymitic conglomerate		
WHY-MN-21	REGIONAL	5846565	468813	904	med grained sandstone	med grained sandstone, occasional pebble in sand matrix, fairly immature sandstone, underlies conglomerate? Outcrop is hole left from ripped up tree.	1 y
WHY-MN-22	REGIONAL	5850704	463961	902	basalt	basalt lava flow, samples from the massive and vesicular portions of a single flow unit (in photo blue ribbon on hammer is massive/vesicular boundary) weathered surfaces are medium brown. Samples was taken at top of ridge (about 30m west of road) not at GPS	1 y
WHY-MN-23	REGIONAL	5850540	465049	868	basalt	basaltic, vesicular, scoria? Oxidised red and brown, somewhat fractured, sample take from roadside subcrop downhill of outcrop	1 y
WHY-MN-24	REGIONAL	5850500	465281	867	basalt	highly oxidized scoria outcrop on edge of road, abundant orange to pink oxidation, faults? Or flow features? Vesicular basalt clasts etc common in scoria breccia	1 y
WHY-MN-25	REGIONAL	5840774	469633	963	sandstone	immature sandstone with minor conglomerate, potentially bedded sub horizontally	1 y
WHY-MN-26	REGIONAL	5839641	469588	933	polymitic conglomerate	polymitic conglomerate - evidence of large boulders or carstic environment, outcrop sporadic over 10-100s of meters south along road	0 n
WHY-MN-27	REGIONAL	5834186	471612	1043	sandstone conglomerate	sandstone and conglomerate	0 n
WHY-MN-28	REGIONAL	5831181	470282	1110	basalt	basalt float near conglomerate float, no obvious outcrop in area, topography reminiscent of lava flows	0 n
WHY-MN-29	REGIONAL	5824397	465923	1123	vesicular basalt	vesicular basalt boulder field, many cm to dm scale boulders of variable oxidised basalt, this field extends all along the 8000? road to the north and seems very extensive	2 y