[ARIS11A]

ARIS Summary Report

Regional Geologist, Prince George

Date Approved: 2005.06.14

Off Confidential: 2005.09.03

ASSESSMENT REPORT: 27614

Mining Division(s): Omineca

Property Name: Ingenika/Swannell

Location:

NAD 27	**Latitude:**	56 41 01	**Longitude:**	125 10 00	**UTM:**	10	6284052	367272
NAD 83	**Latitude:**	56 41 00	**Longitude:**	125 10 06	**UTM:**	10	6284238	367174
NTS:	094C11E							
BCGS:	094C065							

Camp:

Claim(s): DEL 1, Blue Bell No.1-2, Trout Lake 1

Operator(s): Cross Lake Minerals Ltd
Author(s): Miller-Tait, Jim

Report Year: 2005

No. of Pages: 47 Pages

Commodities Searched For: Silver, Lead, Zinc

General Work Categories: GEOP, PHYS

Work Done:
Geophysical
IPOL Induced Polarization (17.0 km;) No. of maps : 23 ; Scale(s) : 1:4000, 1:5000, 1:10 000
Physical
LINE Line/grid (18.8 km;)

Keywords: Cambrian-Ordovician, Kechika Group, Siltstones, Sandstones, Quartzites, Limestones, Sphalerite, Galena, Pyrite

Statement Nos.: 3216418

MINFILE Nos.: 094C 002, 094C 086

Related Reports: 00152, 00153, 00154, 01136, 01584, 13452, 14032, 21434, 26608, 26702, 26794, 27253

GEOPHYSICAL SURVEY REPORT

on the

INGENIKA / SWANNELL PROPERTY

DEL 1, Trout Lake No. 1, Blue Bell No. 1 and Blue Bell No. 2 Mineral Claims

Omineca Mining Division

NTS: 94C/11E

B.C. Geographic System Map Sheet: 094C.065

Latitude: 56° 41.5′ N; Longitude 125° 10.2′ W

UTM NAD 83: 6 284 900 N; 367 100 E; Zone 10

Owner and Operator: Cross Lake Minerals Ltd.
Owner: Teck Cominco Limited
(Cominco Mining Worldwide Holdings Ltd.)

Authors: Jim Miller-Tait, P.Geo.
Sikanni Mine Development Ltd.

and

Shawn Rastad, B.Sc.
Syd Visser, B.Sc., P.Geo.
SJ Geophysics Ltd.

Janaury 17, 2005

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	Plan Number	Title	Scale
	ING-04-2e (pocket)	Interpreted Chargeability – 150 m below surface	1:5 000
	ING-04-2f (pocket)	Interpreted Chargeability – 200 m below surface	1:5 000
		3D Inversion Model - Cross Section 500 S	1:5 000
		3D Inversion Model - Cross Section 400 S	1:5 000
		3D Inversion Model - Cross Section 300 S	1:5 000
		3D Inversion Model - Cross Section 200 S	1:5 000
		3D Inversion Model - Cross Section 100 S	1:5 000
		3D Inversion Model - Cross Section 0 N	1:5 000
		3D Inversion Model - Cross Section 100 N	1:5 000
		3D Inversion Model - Cross Section 200 N	1:5 000
		3D Inversion Model - Cross Section 300 N	1:5 000
		3D Inversion Model - Cross Section 400 N	1:5 000

SECTION A: REPORT

INTRODUCTION:

Cross Lake Minerals Ltd. owns 100% interest in the Ingenika Zn-Pb-Ag Property (DEL 1-3 mineral claims) and also holds an option to acquire a 100% interest in the adjacent Swannell Property (KLUZ 1-5, DEL 4 and DEL 5 mineral claims) from Teck Cominco Limited under the terms of an option agreement dated April 24, 2001 and amended April 29, 2003. Teck Cominco also holds a 100% interest in three Crown granted mineral claims on which the abandoned Ingenika Mine is located.

This report documents the Phase 1 program carried out in 2004 on Grid A, a program of linecutting in June, August and October 2004 and geophysical surveying in August, September and November 2004. The program was designed to conduct a 3D inversion IP survey over the area in and around the Ingenika Mine in order to test these survey methods over a known mineral occurrence. This test survey was carried out with the approval of Teck Cominco Limited. The total grid established including tie lines was 18.8 km while 17.0 km of geophysical surveying was carried out.

This work was a follow up to previous programs completed on the two properties since 2001 by Cross Lake and which are summarized in Assessment Report Nos. 26608, 26702, 26794 and 27253.

PROPERTY:

The Ingenika Property is comprised of three contiguous 4 post mineral claims, the DEL 1-3, totaling 54 claim units and covering 1,300 hectares. The claims were staked in July, 2000 and are held by Cross Lake Minerals Ltd. The Ingenika Property surrounds the abandoned Ingenika Mine, three Crown granted mineral claims, the Trout Lake No. 1 (L. 3717), Blue Bell No. 1 (L. 3719) and Blue Bell No. 2 (L. 3718) covering 50.97 hectares that are held by Teck Cominco Limited and are not subject to any agreement with Cross Lake.

The adjacent Swannell Property is comprised of seven contiguous 4 post mineral claims totaling 76 claim units and covering 1,900 hectares. Four of these claims were staked in September, 1981, one dates from May, 1985 and the two most recent claims were staked in May and October, 2001. Five of the claims (KLUZ 1-5) are presently registered in the name of Cominco Mining Worldwide Holdings Ltd., a subsidiary of Teck Cominco Limited, while the two most recent claims, the DEL 4 and 5 are held by Cross Lake Minerals Ltd. All mineral claims are in the Omineca Mining Division.

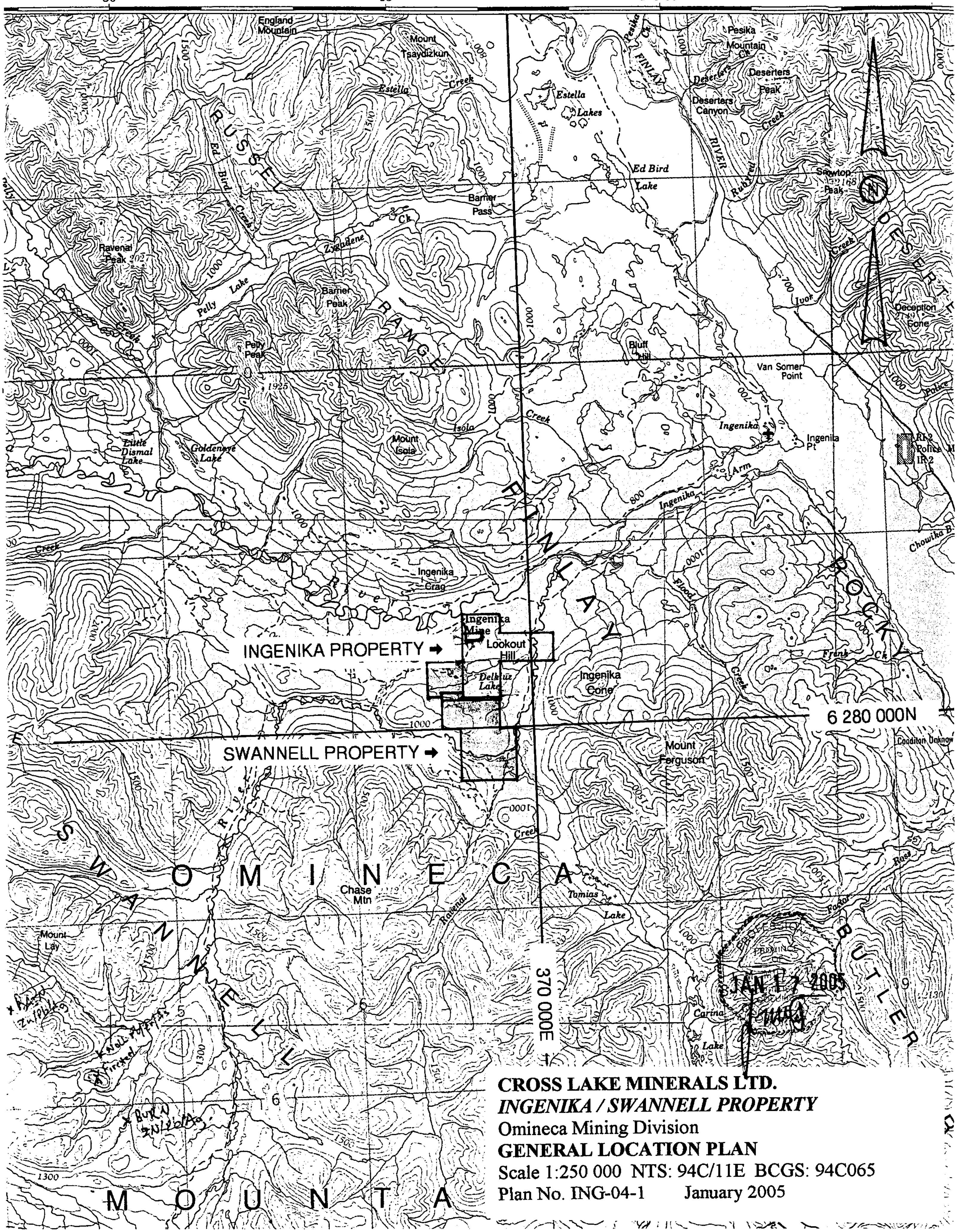
A complete list of the mineral claims that comprise these properties is set out in Section B of this report. The expiry dates shown are based on the Statement of Work filed on September 3, 2004 (Event #3216418) and assume that the work contained in this report will be accepted for assessment purposes.

LOCATION AND ACCESS:

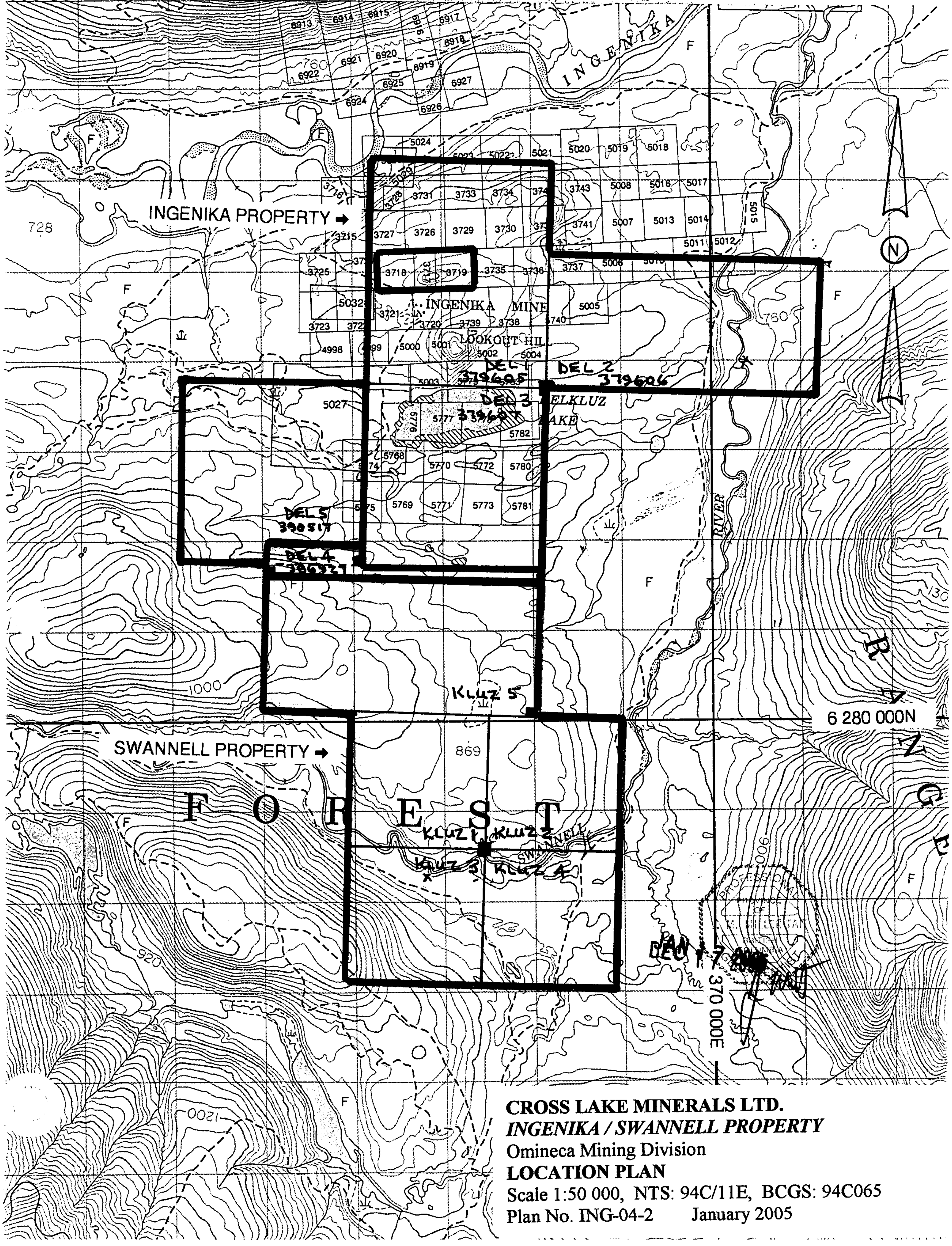
The Ingenika and Swannell Properties are located in the Swannell Ranges of the Omineca Mountains. They are situated some 195 km northwest of Mackenzie, B.C. and fall within the Omineca Mining Division.

The property covers the area to the south of the old Ingenika Mine and is situated primarily on the west side of the Swannell River just upstream from its confluence with the Ingenika River. The claims sit on NTS map sheet 94C/11E and B.C. Geographic System map sheet 094C.065. Geographic coordinates at the centre of the work area covered in this report are latitude 56° 41.5′ N; longitude 125° 10.2′ W and the UTM NAD 83 coordinates are 6 284 900 N and 367 100 E in Zone 10.

There is excellent access to the property as a result of intense logging activity in the area. Access to the property is gained by driving 216 km north from Mackenzie along the west side of Williston Lake on a main logging haulage road, then west for 18 km, south for 10 km and west for 3 km to Delkluz Lake. Secondary logging roads are used to access the claims. Care must be taken on some of the secondary logging access roads because they cannot be driven by four-wheel drive vehicles as a result of the roads being deactivated by the logging contractor.



CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
GENERAL LOCATION PLAN
Scale 1:250 000 NTS: 94C/11E BCGS: 94C065
Plan No. ING-04-1 January 2005



CROSS LAKE MINERALS LTD.

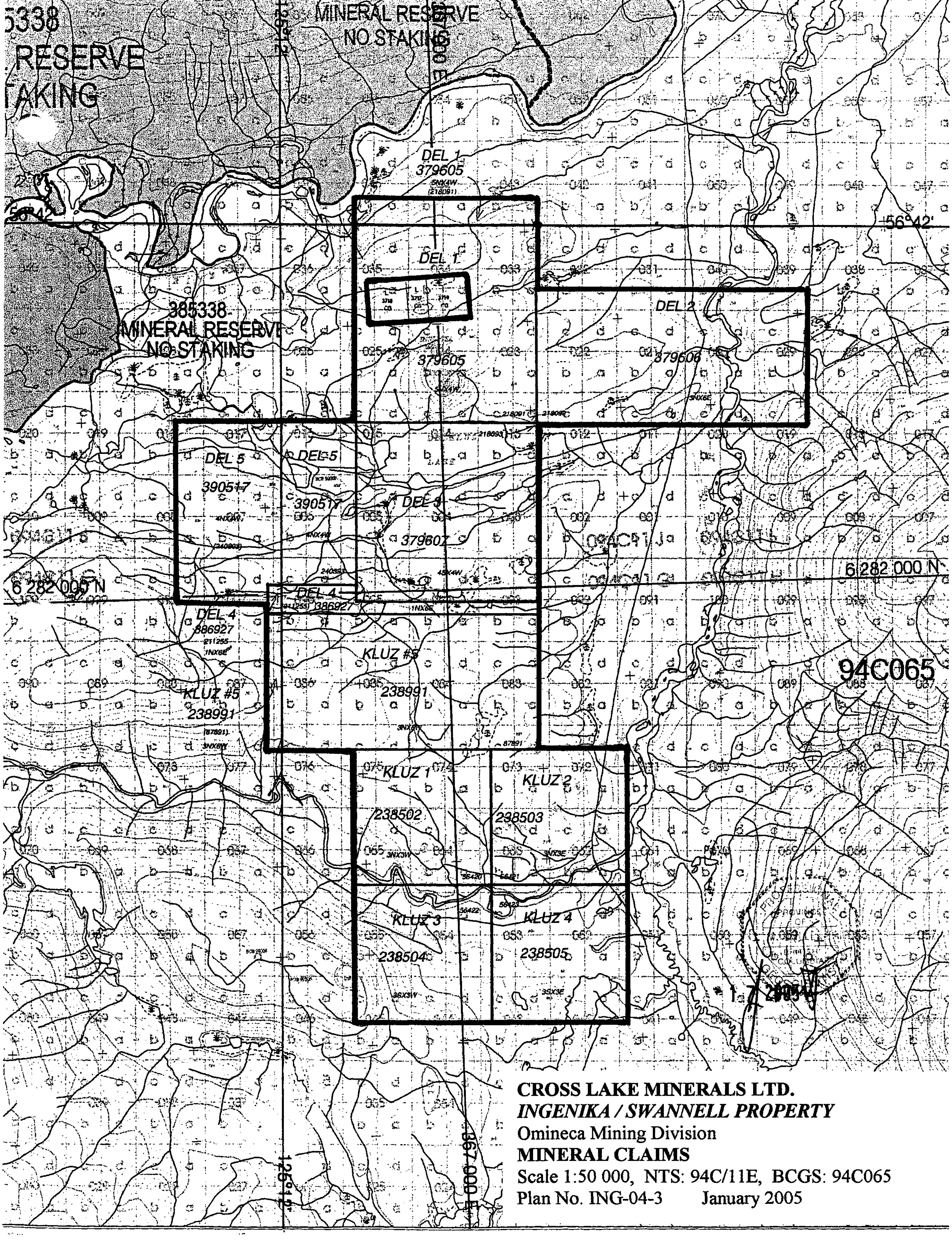
INGENIKA / SWANNELL PROPERTY

Omineca Mining Division

LOCATION PLAN

Scale 1:50 000, NTS: 94C/11E, BCGS: 94C065

Plan No. ING-04-2 January 2005



CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
MINERAL CLAIMS
Scale 1:50 000, NTS: 94C/11E, BCGS: 94C065
Plan No. ING-04-3 January 2005

CLIMATE, TOPOGRAPHY AND VEGETATION:

The Ingenika area has cold, medium snowfall winters and warm, dry summers. The topography of the claims is relatively flat with low rolling hills. The lowest elevation is 700 m on the northwest corner of the DEL 1 beside the Ingenika River while the highest point is 1130 m on the ridge located at the southwest corner of the KLUZ 3 claim. The area is heavily timbered by pine and spruce. In the clear cuts deciduous willows and poplars predominate.

HISTORY:

The original claims in the Ingenika area were staked in 1917 by S. Ferguson to cover the oxidized limestone hill, named Ferguson Hill. The oxidized limestone hill, located on the south bank of the Ingenika River, contains stratabound zinc, lead and silver sulphide mineralization consisting of sphalerite, galena and pyrite. The mineralization ranges from 1 m to 3 m in thickness, strikes at 100° and dips north from 20° to 40°.

In 1926 these claims were acquired by the Selkirk Mining Syndicate of Victoria. In 1927 Ingenika Mines Ltd. was formed and from 1927 to 1932 completed the existing historic underground development of drifts, crosscuts and raises. There was also extensive trenching completed and some diamond drilling. The assessment report database has very limited information because the Ingenika Mine was covered by crown granted mineral claims and therefore assessment reports were not required.

The work completed from 1927 to 1932 was summarized in the Geological Survey of Canada, Memoir 274, by E.F. Roots. The underground development explored four base metal zones from four levels, the 1, 2, 4 and 5 levels. Ore was encountered in all levels except for the lowest level, 5-level, which is postulated as being driven too low in stratigraphy.

During the summers of 1956 and 1957 Consolidated Mining and Smelting Ltd. conducted geophysical and geological work in and around the Ingenika Mine, Onward, Onward South and Swannell showings. This work was followed by 3,602 m of AQ core size diamond drilling.
Dorita Silver Mines acquired the Ingenika Property in 1969 and completed surface and underground mapping and diamond drilled 550 m in 21 drill holes. Dorita Silver Mines

estimated the Ingenika Mine reserve at 22,677 tonnes grading 119.9g/t silver, 9.8% lead and 6.1% zinc. International Impala Resources acquired the Ingenika property in 1991 and completed 24 km of VLF and magnetometer surveying, 7 km of I.P. surveying, collected 490 soil geochemical samples and 14 rock samples. The company concluded that drilling east of the No.5 level workings would intersect the ore if it rakes northeast.

Since 2001 Cross Lake has carried out extensive geochemical surveys, both conventional and Mobile Metal Ions, trenching (4 trenches, 175 m) and diamond drilling (7 holes, 892.04 m).

REGIONAL GEOLOGY:

The Ingenika area was mapped by Roots, whose work is documented in Geological Survey of Canada, Memoir 274, and published in 1954. There is no detailed stratigraphic correlation or fossil dates available from the rocks in the area of the Ingenika Property. The present interpretation of the rocks underlying the Ingenika area, in the vicinity of the claims, are correlated with the Upper Cambrian – Lower Ordovician Kechika Group which lies unconformably on Upper Proterozoic rocks of the Ingenika Group, correlated with the Windermere Supergroup.

The rock units underlying the Ingenika claims can be subdivided into the Ingenika and Kechika Groups. The lowest stratigraphic unit is sandstone and grit belonging to the Upper Proterozoic Ingenika Group. The carbonate bearing strata of the Kechika Group overlies it and forms the core of a broad northerly plunging syncline, mapped by the G.S.C. The Kechika Group rocks disappear 3 km south of the Swannell River because the syncline intersects the surface here.

PROPERTY GEOLOGY:

The Ingenika area was mapped by E.F. Roots, whose work is documented in Geological Survey of Canada, Memoir 274, and published in 1954. The lowermost unit consists of the Upper Proterozoic Ingenika Group, exposed by the Swannell River, consists of brown siltstone with several thin coarse sandstone and quartzite beds and schist. A 5-20 m thick impure limestone bed caps the brown siltstone and underlies a group of distinctly carbonaceous siltstone, which is approximately 50 m thick. The carbonaceous siltstone unit becomes less carbonaceous and distinctly carbonate-rich up-section where it is interbedded with limestone-dolomite beds of the Upper-Cambrian-Lower Ordovician Kechika Group. This carbonate-rich section hosts the mineralization, strikes at 100° and dips at 20° to 40° degrees to the north. This section is a mixture of coarse to fine clastic rocks with layers and beds of pure crystalline to impure silty limestone a few metres to 60 m thick with an overall unit thickness of 80 m. The mineralized sequence is overlain by a fine to coarse clastic sequence, which shows a gradational contact from limy siltstone to sandstone, grit and sericite phyllite.

The important showings that were also mapped by Roots consist of the Ingenika, Onward, Onward South and Burden. The Ingenika showing is not held by Cross Lake but is on three crown granted mineral claims surrounded by Cross Lake's claims and it is important to describe in order to provide a comparison with the other showings and the interpretation of the soil sampling anomalies.

The Ingenika showing has been extensively explored by soil and geophysical surveying (VLF, magnetometer, and I.P.), geological mapping on surface and underground, trenching, diamond drilling and underground drifting, crosscutting and raises from four levels. Most of the work is confined on Ferguson Hill where the base metal mineralization is exposed. The mineralization is confined to the cream colored crystalline limestone of the Ingenika Group of Lower Cambrian age. The mineralization, 1 m to 3 m in thickness, consists of four parallel zones that are controlled by bedding. The strike of the bedding and mineralization is 100° at dips ranging from 20° to 40° to the north. The mineralization replaces limestone-quartz-siderite host and consists of pyrite, galena and sphalerite with lessor amounts of copper and silver sulphides. The upper three levels of underground development, the 1, 2 and 4-levels, intersected strong mineralization in the limestone host. However, the lowest level, 5-level, was driven through the limestone host and intersected schist where the mineralization was projected to from the upper levels.

The Onward and Onward South mineralization are in the same Lower Cambrian limestone host as the Ingenika mineralization and consist of galena, sphalerite and pyrite but differ in that they appear to cross-cut the limestone. At the Onward showing, on the south side of Delkluz Lake, the mineralization exposed by trenching is a siderite, quartz flooded brecciated vein system with galena, pyrite and sphalerite mineralization. The vein system strikes at 010° and dips vertical. At the Onward South trenches and old shaft, located 500 m south of the Onward showing, Roots described the mineralization as consisting of sphalerite, galena and pyrite cross-cutting the stratigraphy and confined to a brecciated vein system. The mineralization is not exposed in place because the trenches and shaft are now filled with slumping overburden but rock samples collected from the dumps confirm the mineralization.

The Burden showing was not examined by the author but the following description is compiled from Roots G.S.C. Memoir 274. The Burden showing is located on the east side of the Swannell River, eight kilometres above its confluence with the Ingenika River. The Swannell River has exposed several irregular masses of white vein quartz in highly calcareous talc-sericite schist of the Ingenika Group. The quartz is cut by stringers of cream-colored crystalline calcite, and contains blebs and stringers of pyrite and chalcopyrite. About 30 m downstream from the main quartz occurrence is a rounded massive sulphide boulder 0.6 x 0.6 x 1.2 m in size comprised of massive, fine-grained pyrite, chalcopyrite, covellite and bornite.

SURVEY GRID:

Sabre Exploration Services of Quesnel B.C. were retained to establish the Phase 1 survey grid on the property over an area of 400 m by 2000 m, the area being designated as Grid "A". The grid starting point was established by GPS and then the lines were cut using compass and chain control. Five parallel 2000 m E-W lines (0N, 100N, 200N, 300N and 400N) on 100 m spacing were initially cut along with two 400 m N-S control tie lines. Two additional 1000 m intermediate lines, 150N and 250N, were cut from 300E to 1300E following the initial geophysical survey in order to provide tighter spacing over the area of the Ingenika Mine. Based on the initial results the eastern half of the grid was later extended to the south by 500 m with the establishment of five 1000 m E-W lines (100S, 200S, 300S 400S and 500S) from station 1000E to 2000E and two 500 m N-S tie lines. A total of 18800 m of grid was surveyed. The location of the survey area is shown on Plan Number ING-04-4 and the work was carried out on the DEL 1, Trout Lake No. 1, Blue Bell No. 1 and Blue Bell No. 2 mineral claims.

GEOPHYSICAL SURVEY:

SJ Geophysics Ltd. of Delta, B.C. was engaged to carry out the 3D Induced Polarization survey on the property and the interpretation was conducted by S.J.V. Consultants Ltd. Their report summarizing the field work and data interpretation is appended in Section D. The table below sets out the quantities of work performed on the property.

Claim	Tenure / Lot No.	Grid Surveyed (km)	IP Surveyed (km)
DEL 1	379605	13.115	11.315
Trout Lake No. 1	L. 3717	1.125	1.125
Blue Bell No. 1	L. 3719	2.310	2.310
Blue Bell No. 2	L. 3718	2.250	2.250
Total		**18.80**	**17.00**

CONCLUSIONS:

The test survey using the 3-Dimensional UBC Induced Polarization Survey (IP) method and analysis outlined the known zinc-lead-silver mineralization at the Ingenika Mine extremely well. The known mineralization is indicated by a chargeability high as well as a resistivity high on Line 200N at station 800E which is probably due to the fact that there is an abundance of siderite, carbonate and silicification in conjunction with the sulphides which consist of sphalerite, galena and pyrite. The sphalerite is non-conductive but there is enough galena and pyrite to create a conductivity high. Due to the small size of the known deposit which is located on the three crown granted claims of Teck Cominco Limited, the grid had to be surveyed at a closer spacing of 50 m. The majority of the survey was completed at a more conventional 100 m spacing due to the fact that any deposit must be substantially larger to be economic.

There are several I.P. anomalies located east and southeast of the known Ingenika Mine mineralization that should be drill tested. Emphasis should be on both the conductivity and resistivity highs but the resistivity lows with chargeability highs should be drill tested as well in case the alteration is not as intense to create a resistivity high.

RECOMMENDATIONS:

Based on the positive results of this test survey over the Ingenika Mine mineralization and the anomalies outlined to the east and southeast, the next phase of exploration on the Ingenika Property should consist of a diamond drill program of approximately 1,000 m of NQ2 size drill core in a series of four drill holes to test the 3-D Inversion IP geophysical anomalies. There is a corridor striking southwest to northeast from station 300S by 1000E to station 400N by 1600E which contains four high priority drill targets. These four targets are set out in the following table.

Hole	Line	Station	Azimuth	Dip	Length
A	400S – 500S	1600E	~270°	50°	250 m
B	300S – 400S	1300E	~270°	50°	250 m
C	0N	1300E	0°	90°	250 m
D	300N	1850E	0°	90°	250 m
Note: *Letters are for designation purposes only and do not suggest any priority.*					

None of these recommended drill holes should exceed 250 m in length.

A second phase of drilling would be contingent upon the results of this recommended drill program.

Respectfully submitted,

PROFESSIONAL PROVINCE OF J. M. MILLER-TAIT BRITISH COLUMBIA GEOSCIENTIST

JAN 17 2005

Jim Miller-Tait, P.Geo.

LIST OF REFERENCES:

J. Chapman, T. Lewis, (Jan.10, 1991): Geological, Geophysical and Geochemical Report on the Ferguson Project for International Impala Resources Ltd.

Gabrielse, H.: Unpublished GSC Map of the Mesilinka Map Area, 94C.

Mawer, A.B., (1982): Cominco Year End Report on the Swannell Group.

Mawer, A.B., (1986): Cominco Year End Report on the Swannell Group.

Mansy, J.L. and Gabrielse, (1978): Stratigraphic Terminology and Correlation of Upper Proterozoic Rocks in Omineca and Cassiar Mountains, North-Central B.C., GSC Paper 77-19.

Miller-Tait, J. (August 2001): Geochemical Sampling Report on the Swannell Property, KLUZ 1-5 Mineral Claims, for Cross Lake Minerals Ltd.; NTS 94C/11E; B.C. Assessment Report #26,608

Miller-Tait, J. (November 2001): Diamond Drilling Report on the Swannell Property, KLUZ 1-5, DEL 4 and 5 Mineral Claims, for Cross Lake Minerals Ltd.; NTS 94C/11E; B.C. Assessment Report #26,702

Miller-Tait, J. (December 2001): Geochemical Sampling Report on the Ingenika Property, DEL 3 Mineral Claim, for Cross Lake Minerals Ltd.; NTS 94C/11E; B.C. Assessment Report #26,794

Miller-Tait, J. (August 2003): Trenching and Diamond Drilling Report on the Ingenika and Swannell Properties, DEL 3 Mineral Claim, for Cross Lake Minerals Ltd.; NTS 94C/11E; B.C. Assessment Report #27,253

Roots, E.F., (1954): Geology and Mineral Deposits of the Aiken Lake Map Area, B.C., GSC Memoir 274

STATEMENT OF QUALIFICATIONS:

For: Jim Miller-Tait of 828 Whitchurch Street, North Vancouver, B.C. V7L 2A4

I graduated from the University of British Columbia with a Bachelor of Sciences Degree in Geology (1987);

I have been practicing my profession as a geologist in mineral exploration and mining continuously since 1987;

I am a fellow in good standing with the Geological Association of Canada;

I am a registered member in good standing as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia;

The observations, conclusions and recommendations contained in the report are based on field examinations, personal sampling, and the evaluation of results of the exploration programs completed by the operator and agreement holder of the property.

PROFESSIONAL PROVINCE OF J. M. MILLER-TAIT BRITISH COLUMBIA GEOSCIENTIST

JAN 17 2005

Jim Miller-Tait, P.Geo.

SECTION B: PROPERTY

INGENIKA / SWANNELL			*SCHEDULE OF MINERAL CLAIMS*			
PROVINCE: British Columbia			**CLAIMS: 10**	**UNITS: 130**	**AREA: 3250 ha**	
MINING DIVISION: Omineca			**NTS: 94C/11E**		**BCGS: 094C.065**	
LOCATION: near the Ingenika Mine and Delkluz Lake some 195 km northwest of Mackenzie and 108 km north-northwest of Germansen Landing			**LATITUDE: 56° 40'**		**LONGITUDE: 125° 10'**	
			UTM: NAD 83	**ZONE 10**	**6 282 000N**	**367 000E**
			PROPERTY INTERESTS: **Ingenika: Cross Lake Minerals Ltd. - 100%** **Swannell: Teck Cominco Limited - 100%** **Ingenika/Swannell: Bard Ventures Ltd. - 0%** **Ingenika Mine: Teck Cominco Limited - 100%**			
MAP:	**1:250 000**	**94C Mesilinka River**				
	1:50 000	***94C/11* Ingenika Mine**				
	1:20 000	**94C.064 Ingenika River**				
	1:20 000	**94C.065 Ingenika Cone**				
	1:20 000	**94C.075 Ingenika Arm**				

AGREEMENT SUMMARY: Option Agreement with Teck Cominco Limited dated April 24, 2001 and amended June 11 and October 31, 2001 and April 29, 2003 whereby Cross Lake may earn a 100% interest in the Swannell Property subject to a 2% Net Smelter Return Royalty by issuing up to 180,000 shares by May 2004 and incurring $500,000 in exploration expenditures by May 2007.

Letter Option Agreement dated September 1, 2004 between Cross Lake Minerals Ltd. and Bard Ventures Ltd. whereby Bard may earn a 50% interest in the combined Ingenika/Swannell Property by incurring aggregate exploration expenditures of $1,200,000 by December 31, 2006.

CLAIM NAME	**TENURE NUMBER**	**UNITS**	**RECORD DATE (yyyy-mm-dd)**	**DUE DATE (yyyy-mm-dd)**	**ANNUAL WORK REQUIRED**	**RECORDED HOLDER**
INGENIKA PROPERTY						
DEL 1	379605	20	2000-07-29	2006-07-29	4000.00	Cross Lake Minerals Ltd.
DEL 2	379606	18	2000-07-29	2006-07-29	3600.00	Cross Lake Minerals Ltd.
DEL 3	379607	16	2000-07-28	2006-07-28	3200.00	Cross Lake Minerals Ltd.
		54			10800.00	
SWANNELL PROPERTY						
KLUZ 1	238502	09	1981-09-09	2006-09-09	1800.00	Cominco Mining Worldwide Holdings Ltd.
KLUZ 2	238503	09	1981-09-09	2006-09-09	1800.00	"
KLUZ 3	238504	09	1981-09-09	2006-09-09	1800.00	"
KLUZ 4	238505	09	1981-09-09	2006-09-09	1800.00	"
KLUZ 5	238991	18	1985-05-29	2006-05-29	3600.00	"
DEL 4	386927	06	2001-05-23	2006-05-23	1200.00	Cross Lake Minerals Ltd.
DEL 5	390517	16	2001-10-16	2006-10-16	3200.00	Cross Lake Minerals Ltd.
		76			15200.00	
		130			**$26000.00**	
INGENIKA MINE						
CLAIM NAME		**UNITS**	**LOT NO.**	**AREA (ha)**		
Trout Lake No. 1		1	3717	10.13		Teck Cominco Limited or Cominco Mining Worldwide Holdings Ltd.
Blue Bell No. 1		1	3719	20.44		
Blue Bell No.2		1	3718	20.40		
				50.97		

ASSESSMENT WORK SUMMARY

Date of Filing (yyyy-mm-dd)	Work Filed	New Work Applied $	PAC Credits Applied	PAC Credits Saved	Total PAC Credits	Date of Approval (yyyy-mm-dd)	Event Number
2001-01-24	5400.00	5400.00	0	0	-	2001-01-24	3159810
2001-05-28	3600.00	3600.00	0	0	-	2001-10-24	3165802
2001-08-24	Notice to Group: 9 claims				-	2001-08-24	3170261
2001-08-24	20236.35	18600.00	0	1636.35	-	2001-10-24	3170262
2001-09-07	43389.96	22800.00	0	0	-	2001-10-24	3170821
2002-02-18	Notice to Group: 10 claims					2002-02-18	3176212
2002-02-18	6776.59	15600.00	0	7070.23	-	2002-04-22	3176213
2003-07-29	60231.17	10800.00	0	49431.17	-	2004-01-15	3197792
2004-09-03	Notice to Group: 13 claims					2004-09-03	3216417
2004-09-03	26000.00	20000.00	6000.00	-	-		3216418

SECTION C: EXPENDITURES (Ingenika-Swannell 2004 Phase 1 – Grid "A")

Item	Work Performed	Quantities / Rates	Amount
Project Geologist: J. Miller-Tait, P.Geo., Sikanni Mine Development Ltd.	Project supervision Period: June to December, 2004	 5 days @ $428.00	 $2140.00
Transportation: Quesnel to property, onsite and return	4x4 pickup truck: Period: June to December, 2004	 5 days @ $100.00	 500.00
Accommodation and Meals	Period: June to December, 2004	5 days @ $100.00	500.00
Grid Survey: Sabre Exploration Services	Geophysical Grid "A": Initial grid – 5 E-W, 2 N-S lines 1st addition – 2 E-W lines 2nd addition – 5 E-W, 2 N-S lines	 10.8 km @ $739.98 2.0 km @ $726.53 6.0 km @ $726.53 18.8 km	 7991.83 1453.06 4359.18 13804.07
Grid Survey: Sabre Exploration Services	Transportation: Initial grid 1st addition 2nd addition	 2004 km @ 0.3745 1500 km @ 0.3745 2000 km @ 0.3745	 750.50 561.75 749.00 2061.25
Geophysical Survey: SJ Geophysics Ltd.	Field Work: Initial Survey: Aug 10-22, 2004 Mobilization / Demobilization Field Crew (5 persons) Vehicle Expenses Room and board and expenses 1st addition: Sep 22-27, 2004 Mobilization / Demobilization Field Crew (5 persons) Vehicle Expenses Room and board and expenses 2nd addition: Nov 20 – Dec 01 Mobilization / Demobilization Field Crew (5 persons) Vehicle Expenses Room and board and expenses Total	 13 days @ $1940.40 13 days @ $239.27 13 days @ $497.45 4 days @ $1310.55 4 days @ $219.67 4 days @ $524.30 8 days @ $1817.66 8 days @ $220.00 8 days @ $535.00	 6119.06 25225.25 3110.55 6466.80 40921.66 2487.75 5243.00 878.68 2097.20 10706.63 2487.75 14541.30 1760.00 4280.00 23069.05 74697.34

Item	Work Performed	Quantities / Rates	Amount
S.J.V Consultants Ltd.	Survey Interpretation: Logistics report Inversion Interpretation and final report		 600.00 2000.00 600.00 3200.00
Project Geologist: J. Miller-Tait, P.Geo., Sikanni Mine Development Ltd.	Data Compilation, Analysis and Report Preparation:	3 days @ $428.00	1284.00
Total			**$98186.66**

Expenditure Apportionment:

Claim	Tenure / Lot No.	IP Surveyed (km)	% of Total	Expenditure
DEL 1	379605	11.315	66.6	$65392.32
Trout Lake No. 1	L. 3717	1.125	6.6	6480.32
Blue Bell No. 1	L. 3719	2.310	13.6	13353.38
Blue Bell No. 2	L. 3718	2.250	13.2	12960.64
Total		**17.00**	**100.0**	**$98186.66**

SECTION D: GEOPHYSICAL REPORT

3D Induced Polarization Report on the Ingenika / Swannell Property – Grid "A"
Survey Conducted by: SJ Geophysics Ltd.
Authors: Shawn Rastad, B.Sc.
Syd Visser, B.Sc., P.Geo.

GEOPHYSICAL REPORT

3D INDUCED POLARIZATION

ON THE

INGENIKA / SWANNELL PROPERTY – GRID A

FOR

CROSS LAKE MINERALS LTD.

INGENIKA/SWANNELL PROJECT 2004
367070E 6284950N - NAD83 ZONE10 (STATION 0N, 1000E OF GRID)

Location: Swannell Range, Central British Columbia

NTS Sheet: 94C/11

Mining Zone: Omineca Mining Division

SURVEY CONDUCTED BY
SJ GEOPHYSICS LTD.
AUGUST – DECEMBER 2004

REPORT WRITTEN BY
SHAWN RASTAD
S.J.V. CONSULTANTS LTD.
JANUARY 2005

Table of Contents

ILLUSTRATIONS

LIST OF PLATES (situated in map pockets at end of report)

1. Introduction

This report describes the ground geophysical exploration project that was undertaken for Cross Lake Minerals Ltd. on its Ingenika Property between August and December of 2004. The geophysical program consisted of two phases: a feasibility study with an initial test survey to review the capabilities of the 3D Induced Polarization (3D-IP) methodology and its resulting 3D inversion, and a production phase after the test results showed favourable results.

The feasibility phase of the geophysical survey was to prove that the 3D-IP methodology could image a known zinc-lead-silver mineralization consisting of sphalerite and galena hosted in Cambrian dolomite and limestone. From the geophysical data collected during the testing phase, a small anomalous feature was detected; however, as a result of the small size target the original results made it difficult to delineate the known target. A crew returned a few weeks later and gathered some additional data (infill) with tighter parameters directly over the target region. The geophysical response from the target was easily imaged with the tighter parameters and confirmed the results of the feasibility inversion results.

As a result of the positive feasibility results, an additional five survey lines were added to the southeast portion of the grid. The exploratory target was expected to be significantly larger than the known target; therefore, the original parameters were used for the production extension.

This report's interpretation of the 3D-IP survey is solely based on this geophysical program. This report is written as an addendum to a more complete report; therefore, this does not cover items such as location maps, discussion of the background geology, or costs associated with the survey.

2. Location and Line Information

The Ingenika property is located in the Swannell Ranges of the Omineca Mountains in the Omineca Mining Division. The property claims are found on NTS map sheet 94C/11E and the approximate UTM coordinates of Station 0N, 1000E *(near centre of grid)* are 367070E 6284950N (NAD83 Zone10). The survey grid is located approximately 300 kilometres northwest of Mackenzie, B.C. Access to the property is gained by driving north of Mackenzie along the western edge of Williston Lake on well developed system of logging roads. Travel time to the grid takes approximately 6 hours from Mackenzie. During the feasibility phase the geophysical crew was provided accommodation at the Finbow/Buffalo Camp approximately 1.5 hours drive from the grid. For the production extension phase of the survey, the geophysical crew was provided camp accommodations closer to the grid. ATCO trailers were set up along the Swannell main logging access and was placed on Delkluz Lake.

The test survey phase consisted of a single grid consisting of 5 lines. The lines were spaced 100m apart and were labeled 0N through to 4N. Each line had a length of 2000m with stations marked every 50m from 0E to 2000E. The infill data included 2 additional 150N and 250N, each 1000m in length from 300E to 1300E.

For the production extension, 5 additional survey lines were added to the southeast portion of the grid. The 3D-IP lines also had a separation of 100m and were labeled 100s through to 500S. The extended lines all had a length of 1000m with pickets labeled from station 1000E through to 2000E at 50m intervals. Figure 1 below shows the two phases combined as a single survey grid of the Ingenika project and for a detailed summary of the line breakdown for both grids is located in Appendix 2. Two lines (0N,100N) were repeated to assist in the merging of the two data sets.

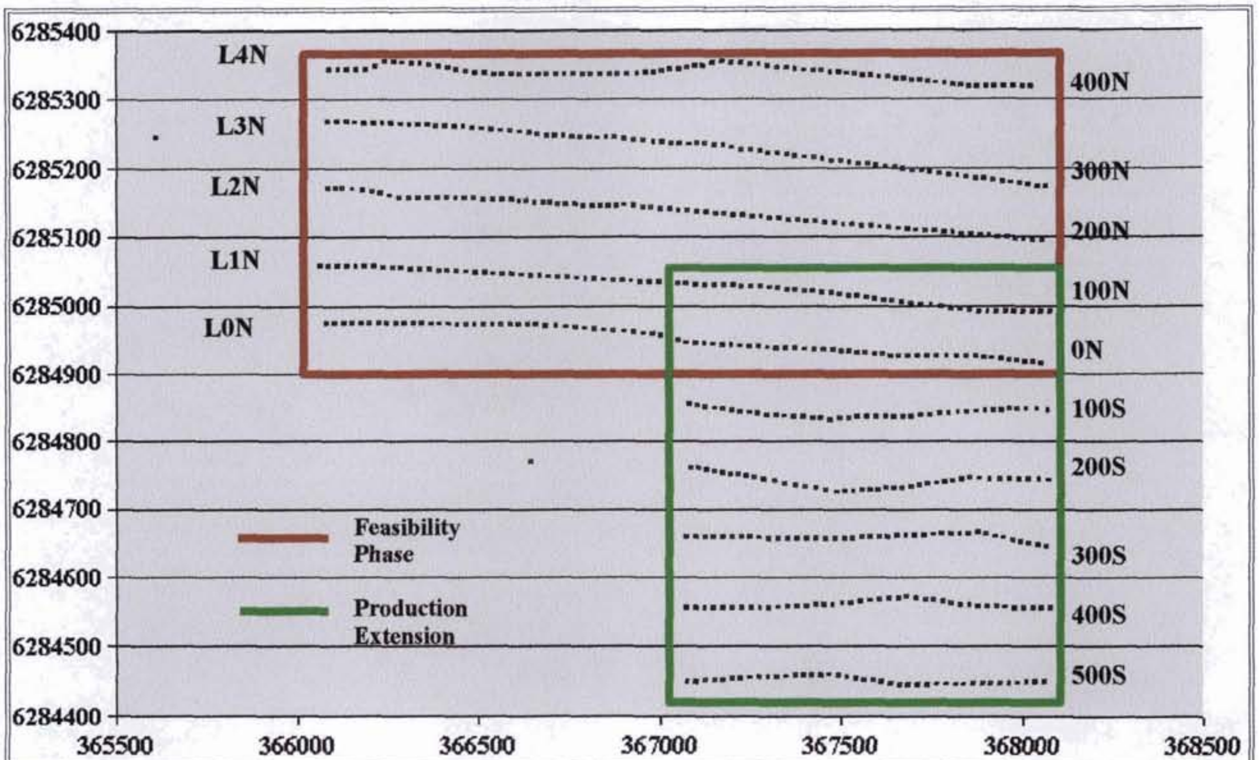


Figure 1: Grid map

3. Field Work and Instrumentation

3.1. Phase 1: Feasibility Study

The initial phase of the project was conducted between August 11th and August 20th, 2004 which included 7 production days. The SJ Geophysics crew consisted of five SJ Geophysics employees: Cameron Wallace (geophysical technician), Tony Cade (operator), Jesse Corrigan, Paul Sheldrake, and Kyle Reynolds. Tony Cade was replaced by Tom Flynn on August 16th.

For this phase the IP data was collected using the Elrec 10 receiver (Rx). The current was injected with a 2 seconds on, 2 seconds off duty cycle into the ground via a GDD Tx II 3.6 KW transmitter (Tx). The 3D-IP configuration consisted of three current lines being recorded into the receiver line. Two current injection locations were on the two adjacent survey lines 100m away from the receiver, while the third current was situated on the receiver line. The technical specifications for the equipment can be found in Appendix 3.

The data was collected using a modified pole-dipole 3D-IP configuration with nominal array of 6-50m dipoles, 2-100m dipoles and 2-150m dipoles for an array length of 800 metres. The potential array was implemented using standard, 8 conductor cables configured with 50m 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 in length. The exact location of the remote current is used in the geophysical calculations.

Although the known target of the feasibility study was detected as outlined in Figure 2, two factors influenced the decision for a second SJ Geophysics Ltd. crew in the area to collect some infill data with tighter parameters (Line spacing of 50m; Dipole spacing of 25m). The factors included a small portion of data near the target that could not be used as part of the input dataset for the inverted solution and it was determined that the target was not properly imaged because of its small size. This crew gathered 2 lines (150N,250N) of 3D-IP data between September 23rd and September 26th, 2004. Reviewing the processed raw data (qc pseudosections), it was evident that the geophysical response from the target was being picked up by the 3D-IP methodology.

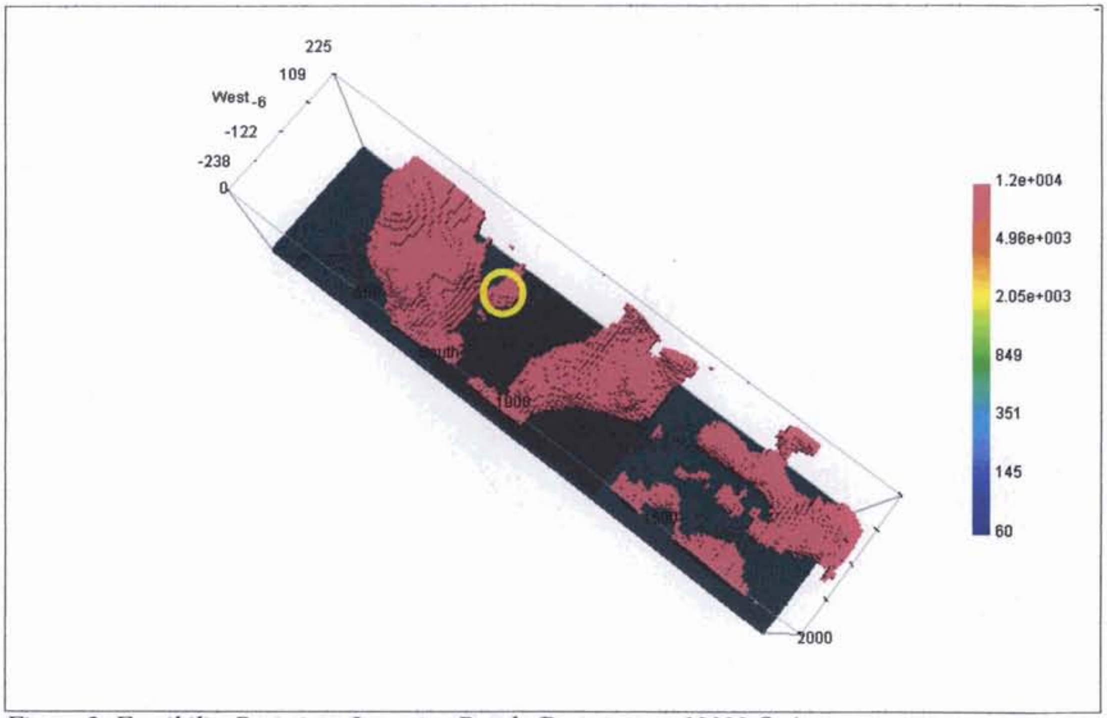


Figure 2: Feasibility Resistivity Inversion Result (Resistivity > 10000 Ωm)

3.2. Phase 2: Production Extension

After the successful feasibility study, the client extended the eastern half of the survey to the south by adding 5 lines to the grid. Considering the different periods the two stages were conducted, portions of two lines from the first phase were incorporated in the production extension to allow an overlap in data. This is demonstrated in Figure 1.

The SJ Geophysics crew consisted of five SJ Geophysics employees: Neil Visser (Geophysical Technician), John Wilkinson (technician), Robert Sweatman, Jeff Moorcroft, and Lauren Devlin. The IP crew collected the 3D-IP data in two separate time periods due to the camp being relocated part way through the grid. IP data was acquired on the North Grid from November 20th to November 23rd and November 28th to December 1st, 2004. Within these 2 time periods there were 2 IP/camp setup days, 2 mobilization days, 1 equipment day, and 3 production days.

For the 3D-IP survey a modified pole-dipole 3D-IP configuration array was used with a combination of 12 dipoles of 50m, and 100m separation. The nominal dipole array used was as follows 100, 100, 50, 50, 50, 50, 50, 50, 50, 50, 100, 100. The IP data was collected using SJ Geophysics' Full Wave Form receiver. The current was injected with a 2 seconds on, 2 seconds off duty cycle into the ground via a transmitter (Tx). As for the transmitter, a GDD Tx II 3.6 KW was used during the duration of the program. For the production phase, the 3D configuration consisted of two current lines being recorded into the receiver line. The two current injection locations were on the two adjacent survey lines 100m away from the receiver line.

The potential array was implemented using specialized 26 conductor IP cables for cold weather applications configured with 50m 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 in length. The exact location of the remote current is used in the geophysical calculations.

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.

4. Geophysical Techniques

4.1. 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.

4.2. 3D-IP Method

Three dimensional IP surveys are designed to take advantage of the interpretational functionality offered by 3-D 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 3D-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 a 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 approximate 200m from the centre of the array and advance 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.

4.3. Inversion Programs

"Inversion" programs have recently become available that 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.

5. Data Presentation

5.1. 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-colour cross section and these displays can be directly interpreted as geological cross sections.

Cross sections are presented as 1:5000 scale plots in map folders at the back of this report.

5.2. Plan Maps

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

Plan maps are plotted for both resistivity and chargeability at depths of 25m, 50m, 75m, 100m, 150m, and 200m below surface at a 1:5000 scale and included in map folders at the back of this report. The labeling for the line numbering using our internal format; therefore, for southern lines (100S to 500S), they are labeled -100N through to -500N.

5.3. Inversion Model

With computer technology that exists today, the 3D inversions results can be easily viewed using a 3D visualization program such as UBC-GIF's dicer3d 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 to facilitate interpretation of the data.

6. Discussion of Results

After the two phases of geophysical data were gathered, the two datasets were merged as a single dataset for the combined grid. This report only includes the merged results. The results of the individually inversion models are comparable as demonstrated in Figure 3 below. The yellow line annotated on Figure 3 dictates the boundary between the two phases.

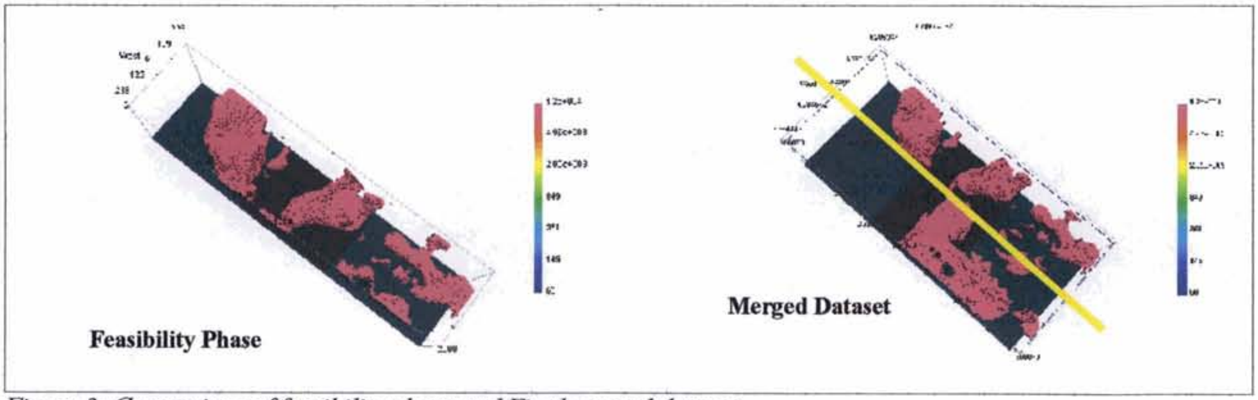


Figure 3: Comparison of feasibility phase and Final merged dataset

Examination of the interpreted resistivity and chargeability results on the produced plan maps and cross sections indicate a few interesting features. There appears a distinct break around Line 200S that separates the grid into two regions as depicted by the resistivity distribution: the north zone with a few high anomalous resistivity features and the southeast zone with an extremely high resistive feature. Figure 4 below shows a snap shot of the plan map for resistivity at 100m depth below surface which illustrates this break.

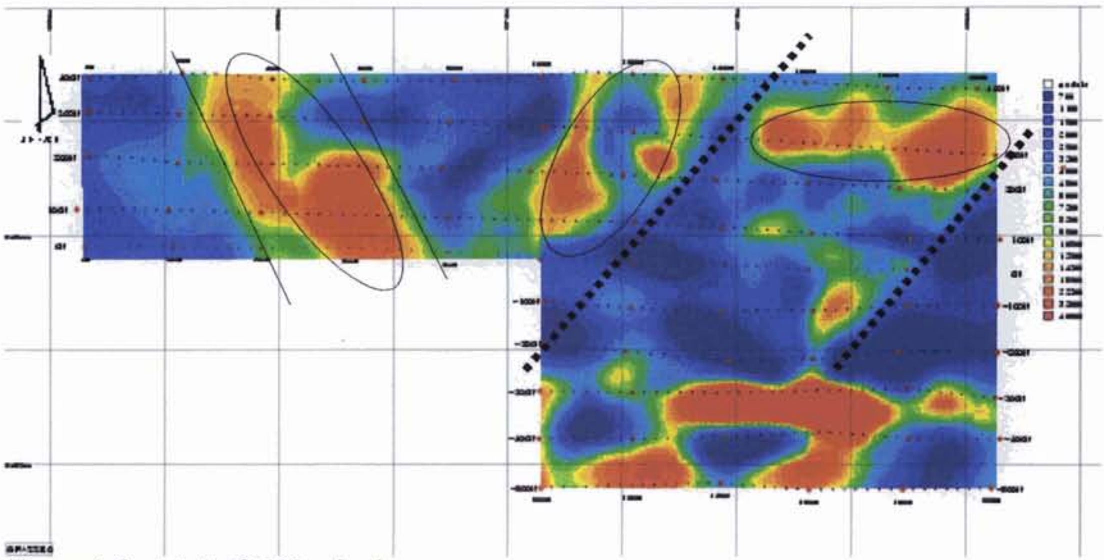


Figure 4: Resistivity @ 100m depth

In the northern zone, three resistivity features have also been outlined in Figure 4. All three appear to be trending in different directions as indicated by the long axis of their annotated ovals. This makes it difficult to place any structural control on the region. However, the chargeability plan maps give additional insight that may indicate a linear feature trending SW to NE from 300S,1000E to station 400N,1600E.

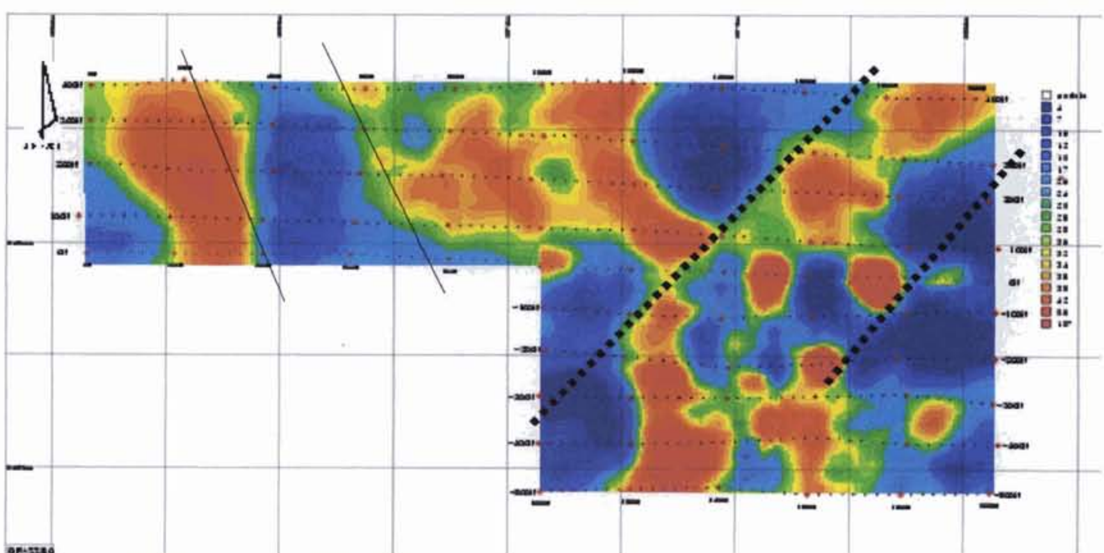


Figure 5: Chargeability @ 100m depth

Further examination of the northern zone shows that the most western resistivity feature is correlated with a zone of low chargeability material. This resistivity feature has been overlayed onto the chargeability plan map in Figure 5 to illustrate this point.

The southern zone is dominated by a very high resistive body with resistivity values greater than 20,000 Ωm which may indicate clean limestones. From the plan maps, this body appears as two east-west linear features running along Lines 300S and 500S. The two bodies are dipping to the east and coalesce at depths greater than 100m. A snapshot (Figure 6) from UBC-GIF's Meshtools shows the resistivity volumes greater than 20,000 Ωm.

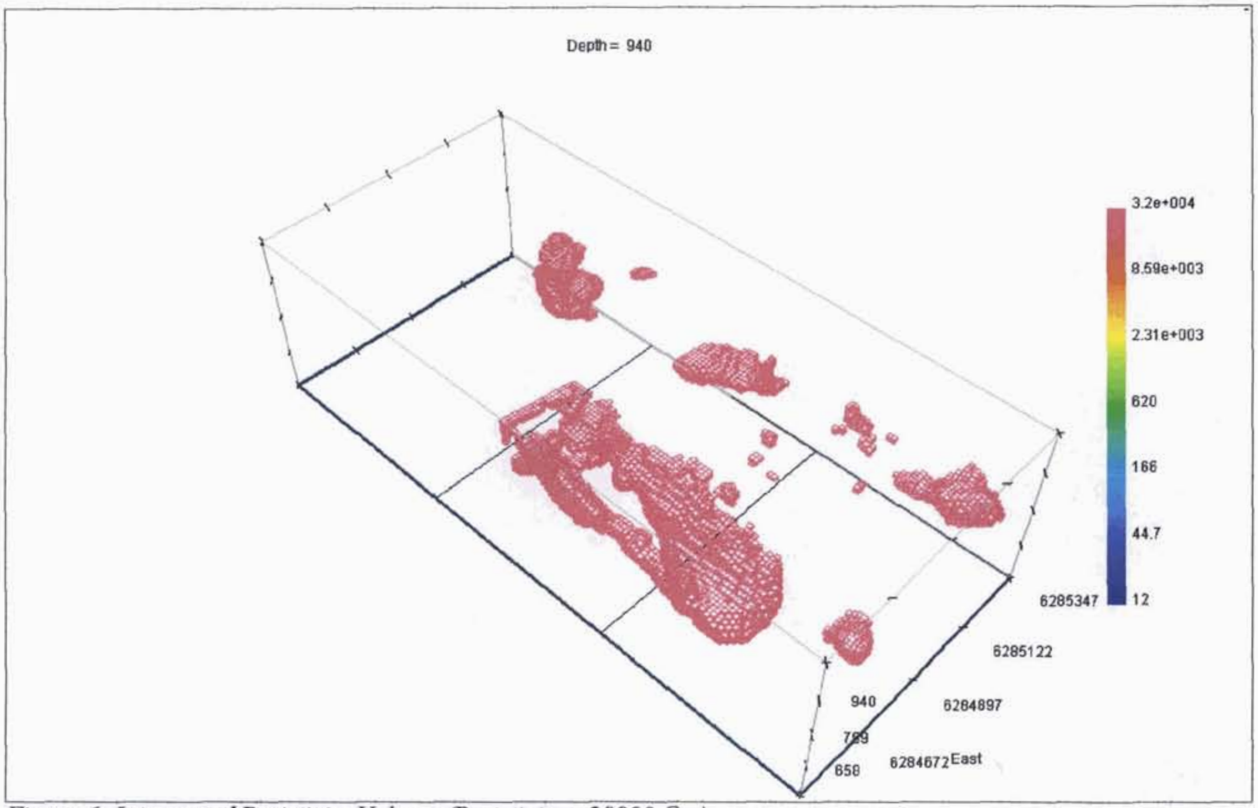


Figure 6: Interpreted Resistivity Volume (Resistivity >20000 Ωm)

Associated with this high resistivity body, is a region of chargeability material. Figure 7, shows the interpreted inverted model for chargeability volumes greater than 35ms. In this image you can see a break in the chargeability volume near line 200S as was earlier pointed out by the resistivity. South of this break it appears the chargeability follows the resistivity trend of dipping to the east; however, the chargeability body north of the break no longer dips to the east and appears to be more vertical.

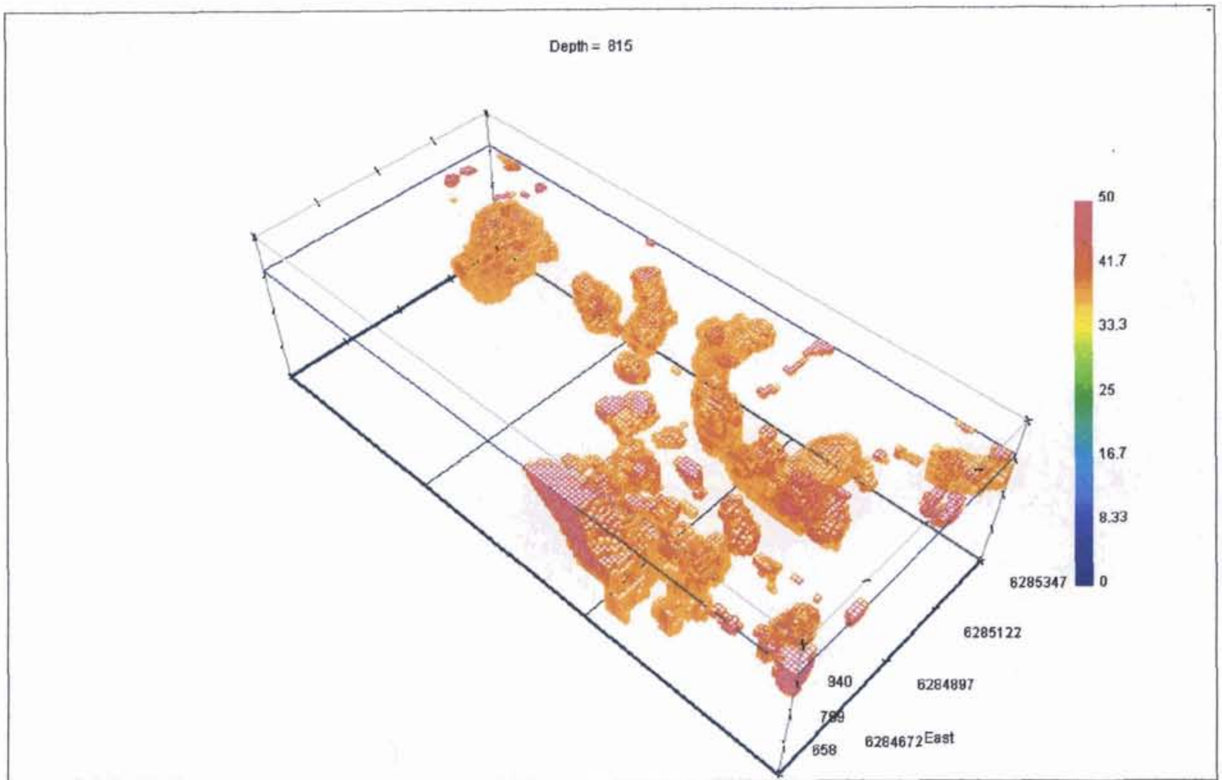


Figure 7: Interpreted Chargeability Volume (Chargeability >35 ms)

The final noticeable feature of interest within the geophysical data is a possible conductive overburden of 50-75m thick. Both the resistivity and chargeability is highly scattered and broken up in the near surface which may be indicative of this overburden effect. This may also be the result of a layer of graphitic phyllite which may give the same response as overburden in this case. Figure 8 shows the scattered conductive bodies (green-blue colour) overlying the more resistive features at depth.

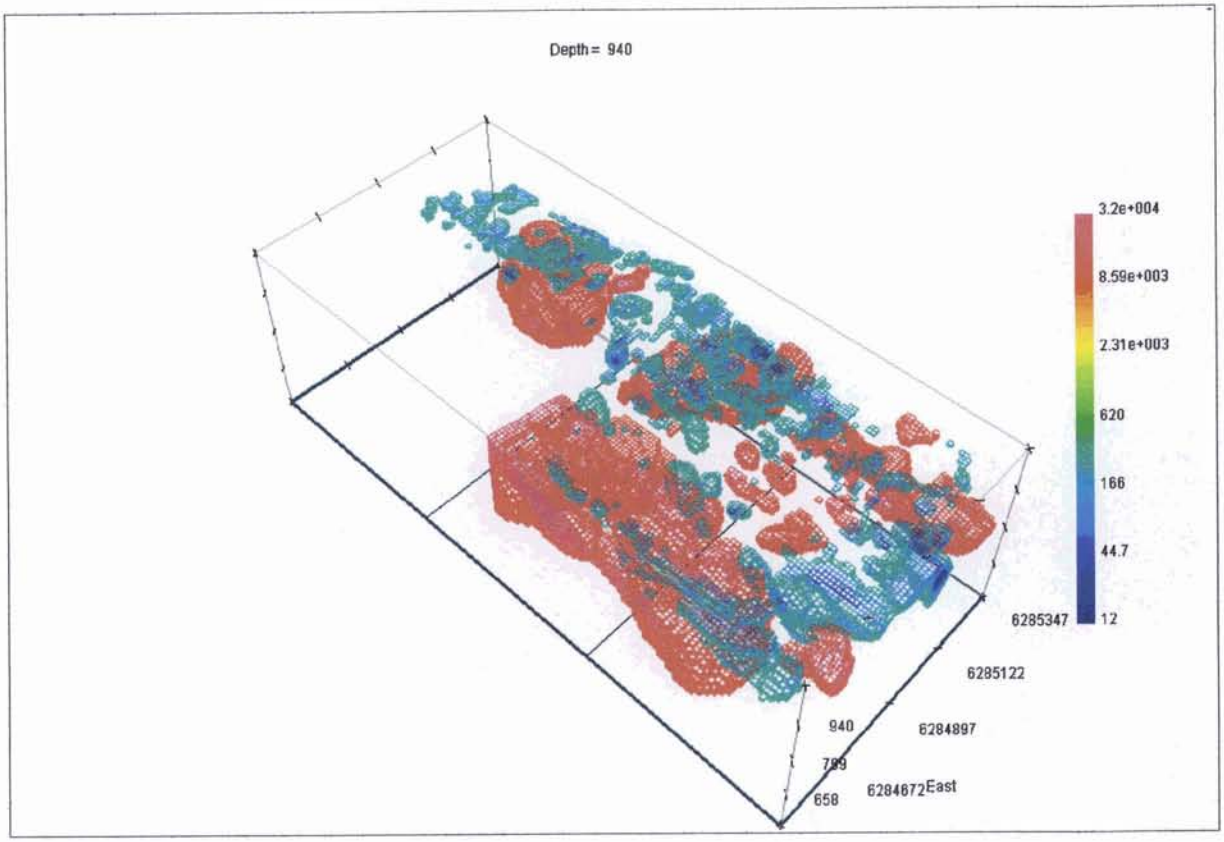


Figure 8: Interpreted Resistivity Volume (Resistivity <300 Ωm and >10000 Ωm)

7. Conclusions and Recommendations

SJ Geophysics Ltd. conducted a feasibility study to show that the 3D-IP methodology could image a known zinc-lead-silver mineralization consisting of sphalerite and galena hosted in Cambrian dolomite and limestone. The inverted 3D-IP geophysical data was able to image the geophysical target; therefore, Cross Lake Minerals Ltd. extended the feasibility survey to cover a more extensive region.

The feasibility survey and the production extension grid were merged in the end to produce a single inverted model of the chargeability and resistivity volumes. Interpretation of the merged geophysical data sets shows a possible conductive layer of 50-75m thickness at surface. This may be a conductive overburden or a layer of graphitic phyllite. Both chargeability and resistivity models give evidence of anomalous bodies; however, it seems to be a complex system. From this, it is believed that the geophysical data gives enough evidence to warrant further investigation. Initially, a detailed interpretation of the area should be conducted that should include regional geology, geochemistry and other geophysical data.

Respectfully Submitted,
per S.J.V. Consultants Ltd.

Shawn Rastad, B.Sc. (Geophysics)
Syd Visser, P.Geo. (Geophysicist/Geologist)

8. Appendix 1 – Statement of Qualifications

8.1. 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 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 Cross Lake Minerals Ltd., or in any property within the scope of this report, nor do I expect to receive any.

Signed by: S Rastad

Shawn Rastad, B.Sc.
Geophysics

Date: Jan. 20, 2005

8.2. Syd Visser

I, Syd J. Visser, of 11762 - 94th Avenue, Delta, British Columbia, hereby certify that,

1) I am a graduate from the University of British Columbia, 1981, where I obtained a B.Sc. (Hon.) Degree in Geology and Geophysics.

2) I am a graduate from Haileybury School of Mines, 1971.

3) I have been engaged in mining exploration since 1968

4) I am a professional Geoscientist registered in British Columbia

Signed by: ______________________

Syd Visser, B.Sc., P.Geo.

Geophysicist/Geologist

9. Appendix 2 – Summary Tables

Ingenika\Swannell Project - Merged Grid

Line	***BOL Station***	***EOL Station***	***Length***
400N (L4N)	0E	2000E	2000
300N (L3N)	0E	2000E	2000
200N (L2N)	0E	2000E	2000
250N	300E	1300E	1000
100N (L1N)	0E	2000E	2000
150N	300E	1300E	1000
0N (L0N)	0E	2000E	2000
100S	1000E	2000E	1000
200S	1000E	2000E	1000
300S	1000E	2000E	1000
400S	1000E	2000E	1000
500S	1000E	2000E	1000

Total Linear kilometres for Grid: 17km

10. Appendix 3 – Instrument Specifications

10.1. IRIS ELREC 10 IP Receiver

Technical:

Input impedance:	10 Mohm
Input overvoltage protection up to 1000V	
Automatic SP bucking with linear drift correction	
Internal calibration generator for a true calibration on request of the operator	
Internal memory:	3200 dipoles reading
Automatic synchronization and re-synchronization process on primary voltages signals whenever needed	
Proprietary intelligent stacking process rejecting strong non-linear SP drifts	
Common mode rejection:	More than 100 dB (for Rs =0)
Self potential (Sp)	: range:-15V - + 15V
	: resolution: 0.1 mV
Ground resistance measurement range:	0.1-100 kohms
Primary voltage	: range: 10µV - 15V
	: resolution: 1µV
	: accuracy: typ. 1.3%
Chargeability	: resolution: 10µV/V
	: accuracy: typ. 0.6%

General:

Dimensions:	31x21x25 cm
Weight (with the internal battery):	9 kg
Operating temperature range:	-30°C to 70°C
Case in fiber-glass for resisting to field shocks and vibrations	

10.1. GDD Tx II IP Transmitter

Input voltage:	120V / 60 Hz or 240V / 50Hz (optional)
Output power:	1.4 kW maximum.
Output voltage:	150 to 2000 Volts
Output current:	5 ma to 10Amperes
Time domain:	Transmission cycle is 2 seconds ON, 2 seconds OFF
Operating temp. range	-40^0 to $+65^0$ C
Display	Digital LCD read to 0.001A
Dimensions (h w d):	34 x 21 x 39 cm
Weight:	20kg.

SECTION E: ILLUSTRATIONS

Plan Number	Title	Scale
ING-04-1 (after p.5)	General Location Plan	1:250 000
ING-04-2 (after p.5)	Location Plan	1:50 000
ING-04-3 (after p.5)	Mineral Claims	1:50 000
ING-04-4 (in pocket)	Survey Grid	1:10 000
	Geophysical Report:	
ING-04-1a (pocket)	Interpreted Resistivity – 25 m below surface	1:5 000
ING-04-1b (pocket)	Interpreted Resistivity – 50 m below surface	1:5 000
ING-04-1c (pocket)	Interpreted Resistivity – 75 m below surface	1:5 000
ING-04-1d (pocket)	Interpreted Resistivity – 100 m below surface	1:5 000
ING-04-1e (pocket)	Interpreted Resistivity – 150 m below surface	1:5 000
ING-04-1f (pocket)	Interpreted Resistivity – 200 m below surface	1:5 000
ING-04-2a (pocket)	Interpreted Chargeability – 25 m below surface	1:5 000
ING-04-2b (pocket)	Interpreted Chargeability – 50 m below surface	1:5 000
ING-04-2c (pocket)	Interpreted Chargeability – 75 m below surface	1:5 000
ING-04-2d (pocket)	Interpreted Chargeability – 100 m below surface	1:5 000
ING-04-2e (pocket)	Interpreted Chargeability – 150 m below surface	1:5 000
ING-04-2f (pocket)	Interpreted Chargeability – 200 m below surface	1:5 000
	3D Inversion Model - Cross Section 500 S	1:5 000
	3D Inversion Model - Cross Section 400 S	1:5 000
	3D Inversion Model - Cross Section 300 S	1:5 000
	3D Inversion Model - Cross Section 200 S	1:5 000
	3D Inversion Model - Cross Section 100 S	1:5 000
	3D Inversion Model - Cross Section 0 N	1:5 000
	3D Inversion Model - Cross Section 100 N	1:5 000
	3D Inversion Model - Cross Section 200 N	1:5 000
	3D Inversion Model - Cross Section 300 N	1:5 000
	3D Inversion Model - Cross Section 400 N	1:5 000

CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
SURVEY GRID
UTM: NAD 83 ZONE 10
BCGS: 94C.065
SCALE: 1:10 000
NTS: 94C/11E
DATE: January 2005
FIGURE NO. ING-04/04
INGENIKA RIVER
SWANNELL RIVER
DELKLUZ LAKE
LOOKOUT HILL
INGENIKA MINE
DEL 1
DEL 2
DEL 3
DEL 4
DEL 5
L.3718
L.3717
L.3719
GRID "A"
LINE 400N
LINE 300N
LINE 200N
LINE 100N
LINE 0N
LINE 100S
LINE 200S
LINE 300S
LINE 400S
LINE 500S
LINE 250N
LINE 150N
1000E
2000E
364 000
365 000
366 000
367 000
368 000
369 000
370 000
371 000
6 286 000
6 285 000
6 284 000
6 283 000
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125°09'00"
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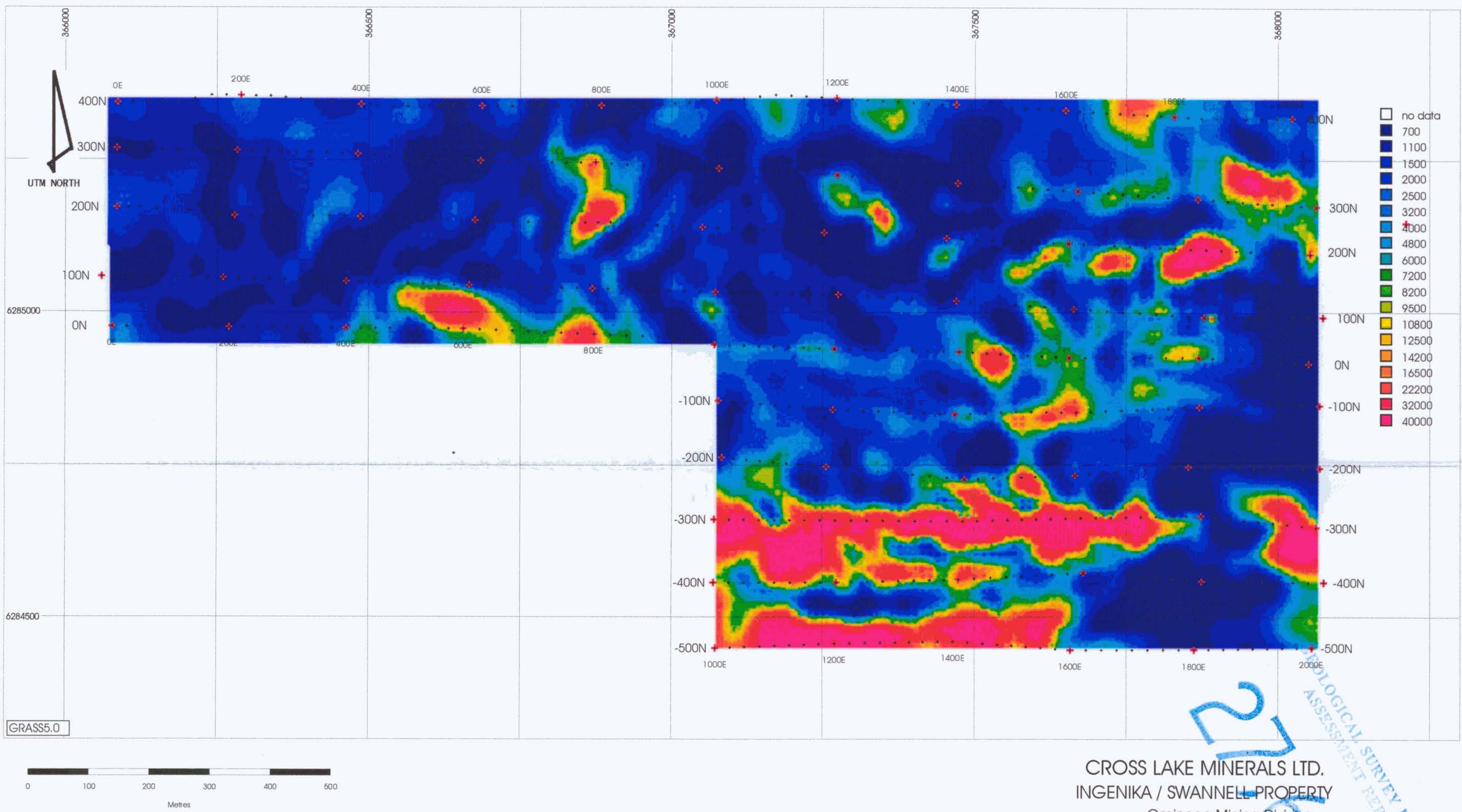
56°40'00"
JAN 17 2005
27,514

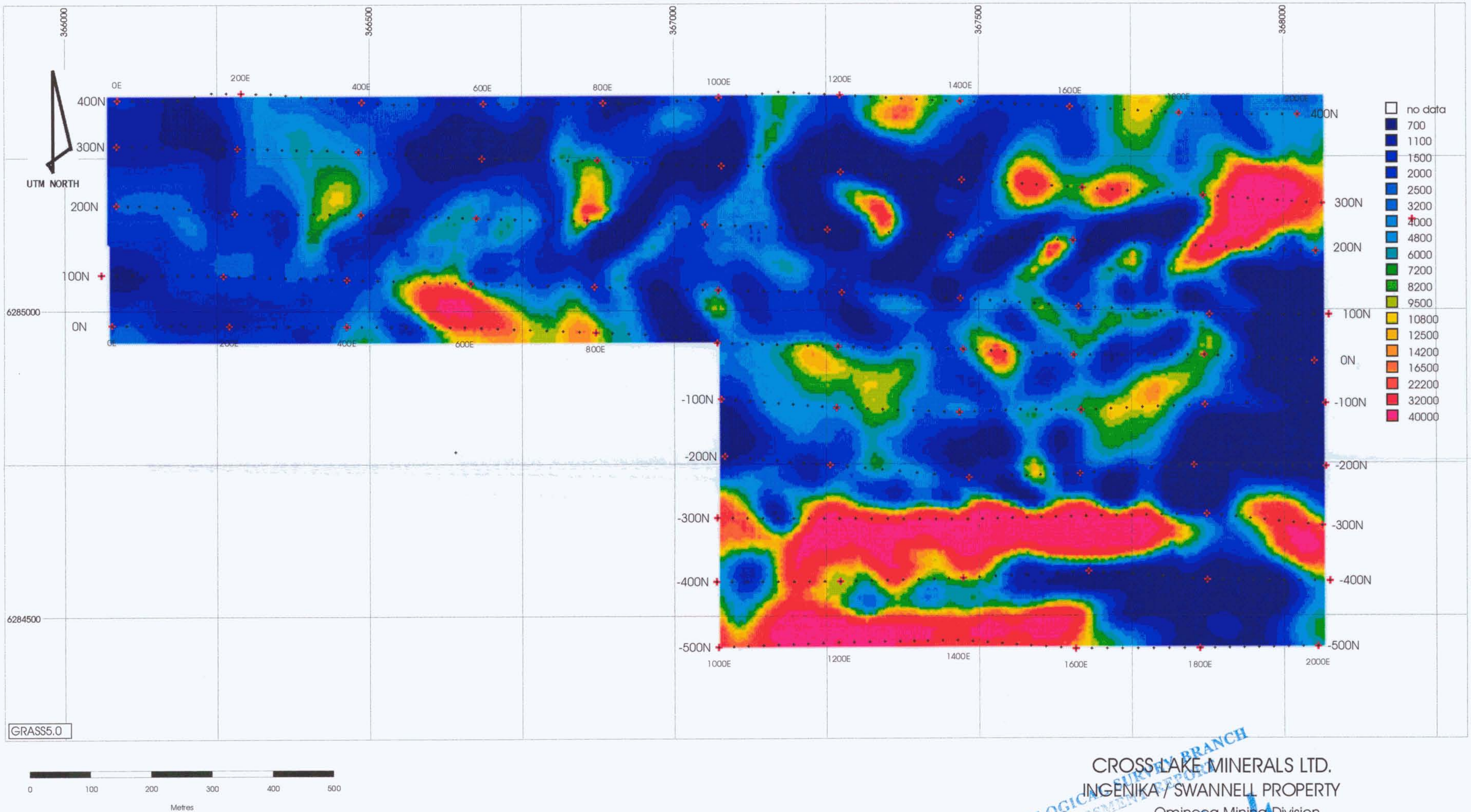


Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Resistivity (Ohm-m)
25m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-1a

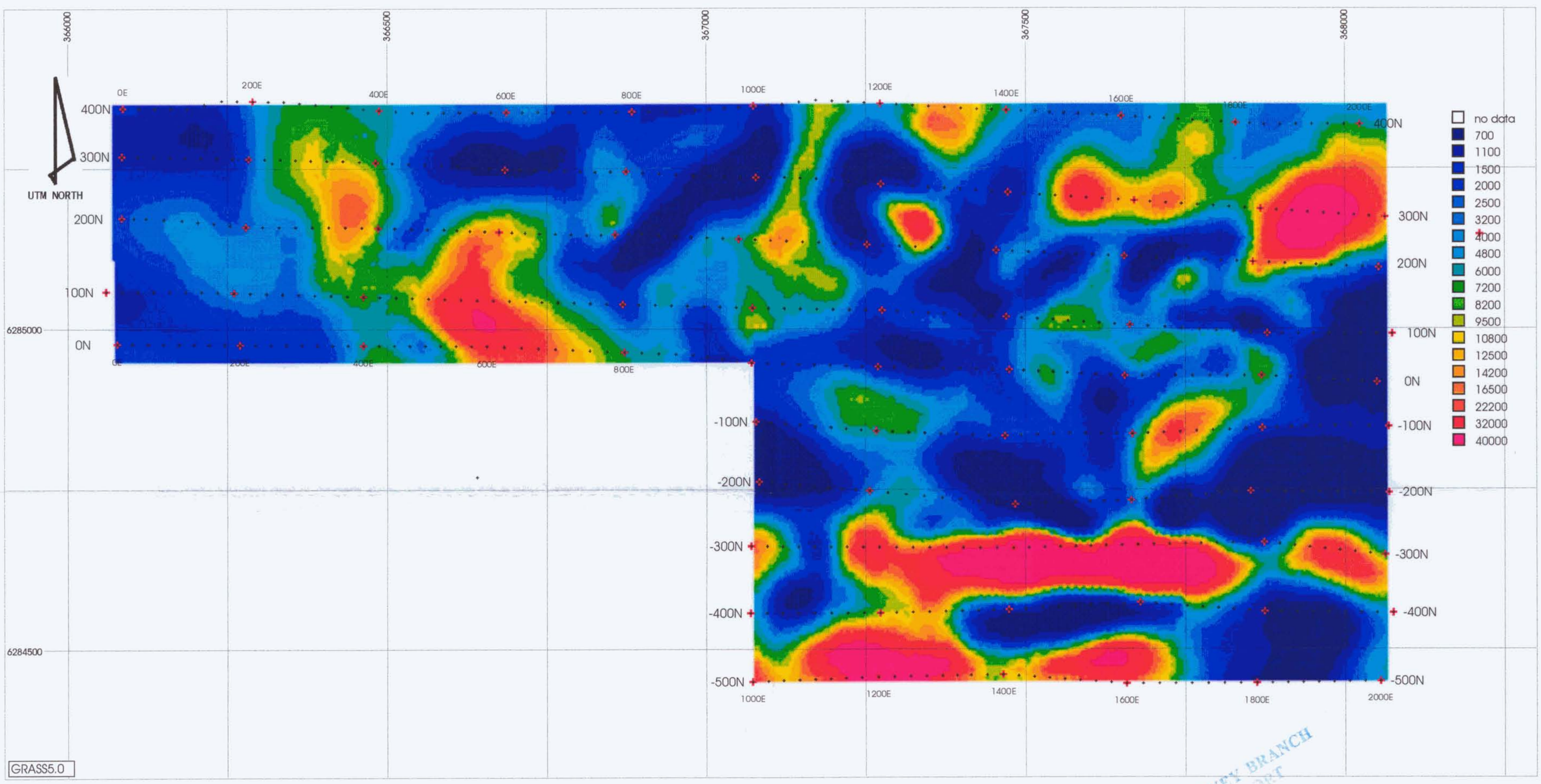


Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Resistivity (Ohm-m)
50m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-1b



0 100 200 300 400 500

Metres

Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

3D Inversion Model

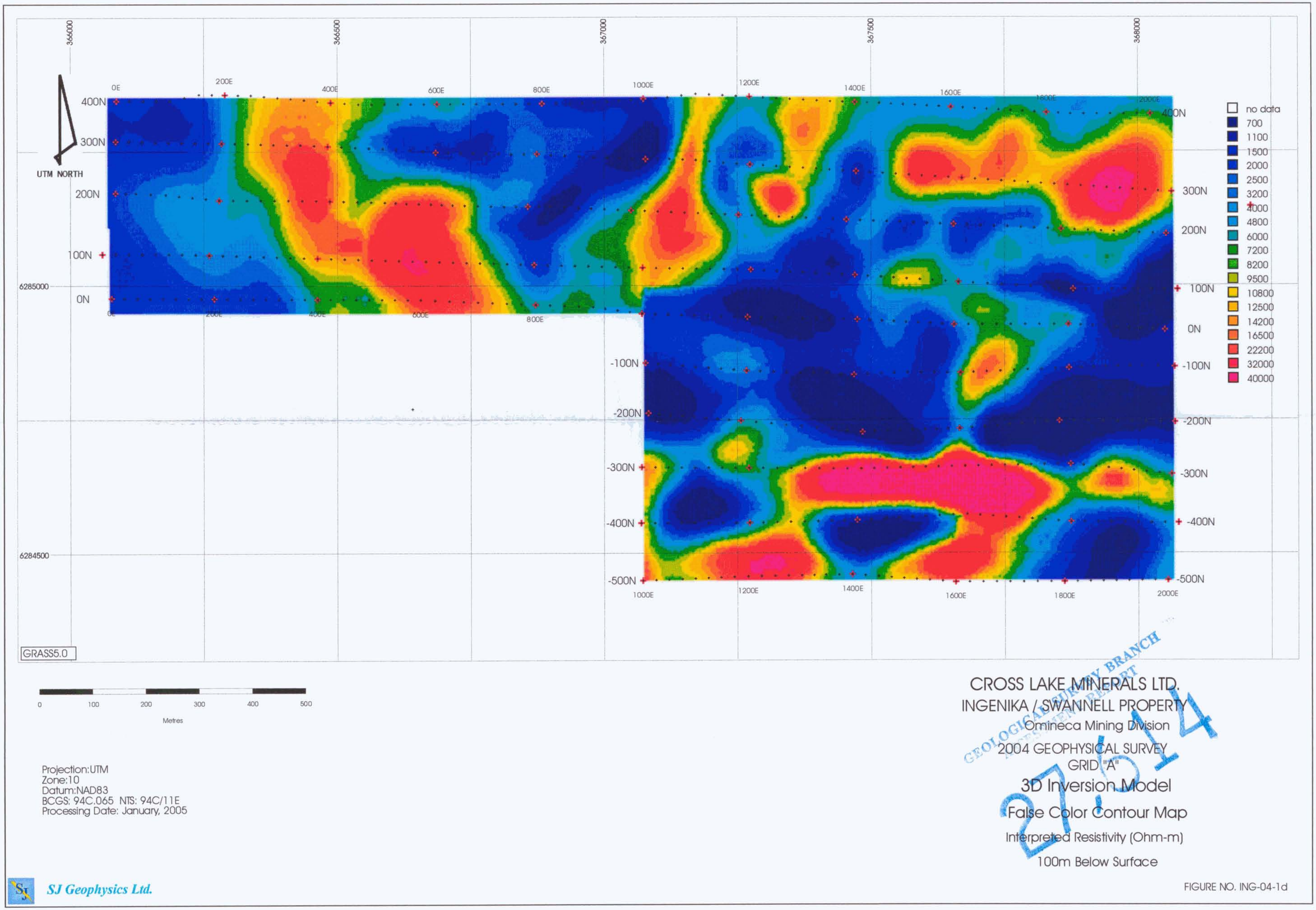
False Color Contour Map

Interpreted Resistivity (Ohm-m)

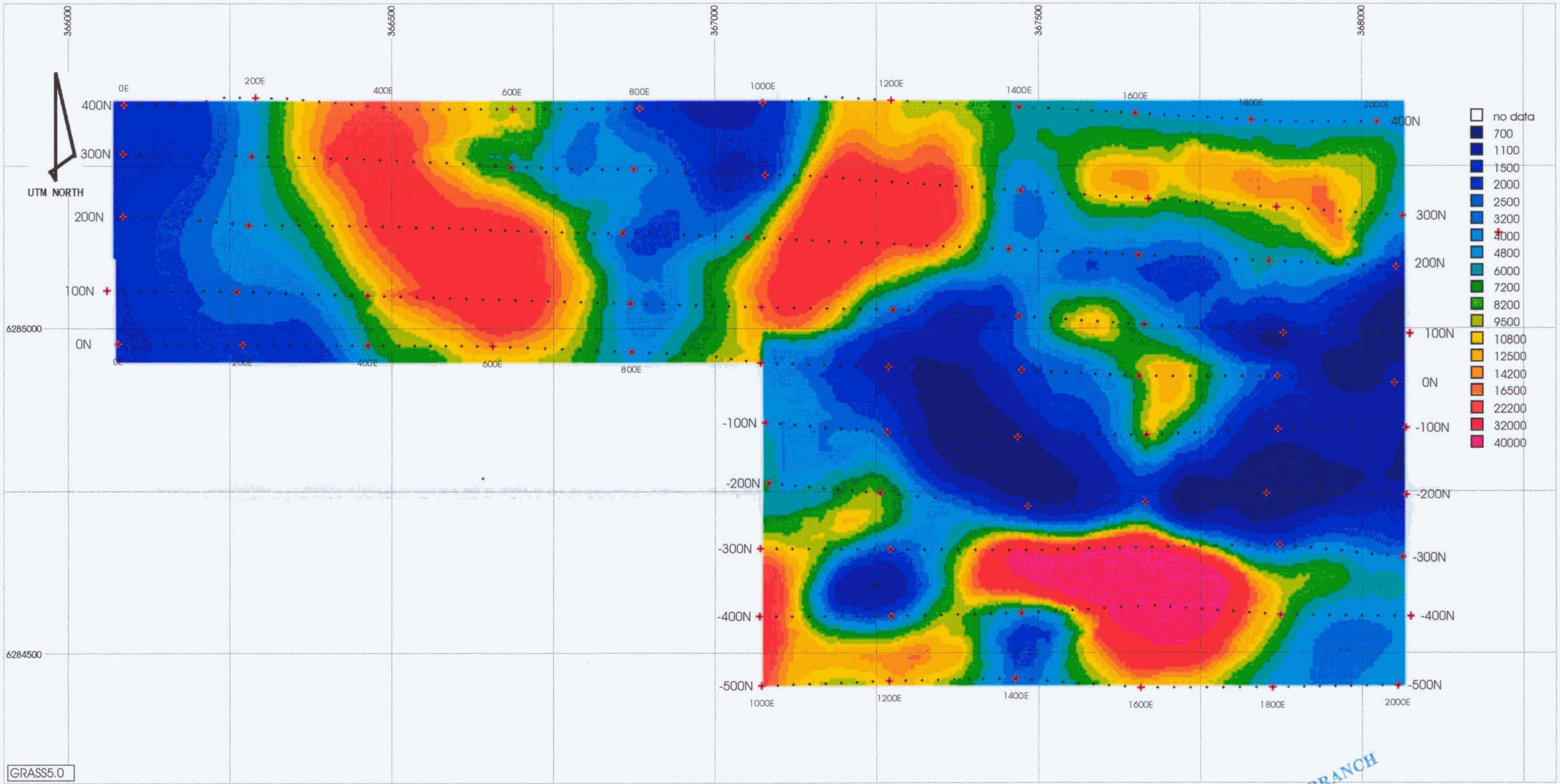
75m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-1c



UTM NORTH
no data
700
1100
1500
2000
2500
3200
4000
4800
6000
7200
8200
9500
10800
12500
14200
16500
22200
32000
40000
GRASS5.0
0 100 200 300 400 500
Metres
Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005
CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Resistivity (Ohm-m)
100m Below Surface
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
27,514
SJ Geophysics Ltd.
FIGURE NO. ING-04-1d



0 100 200 300 400 500

Metres

Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.

INGENIKA / SWANNELL PROPERTY

Omineca Mining Division

2004 GEOPHYSICAL SURVEY

GRID "A"

3D Inversion Model

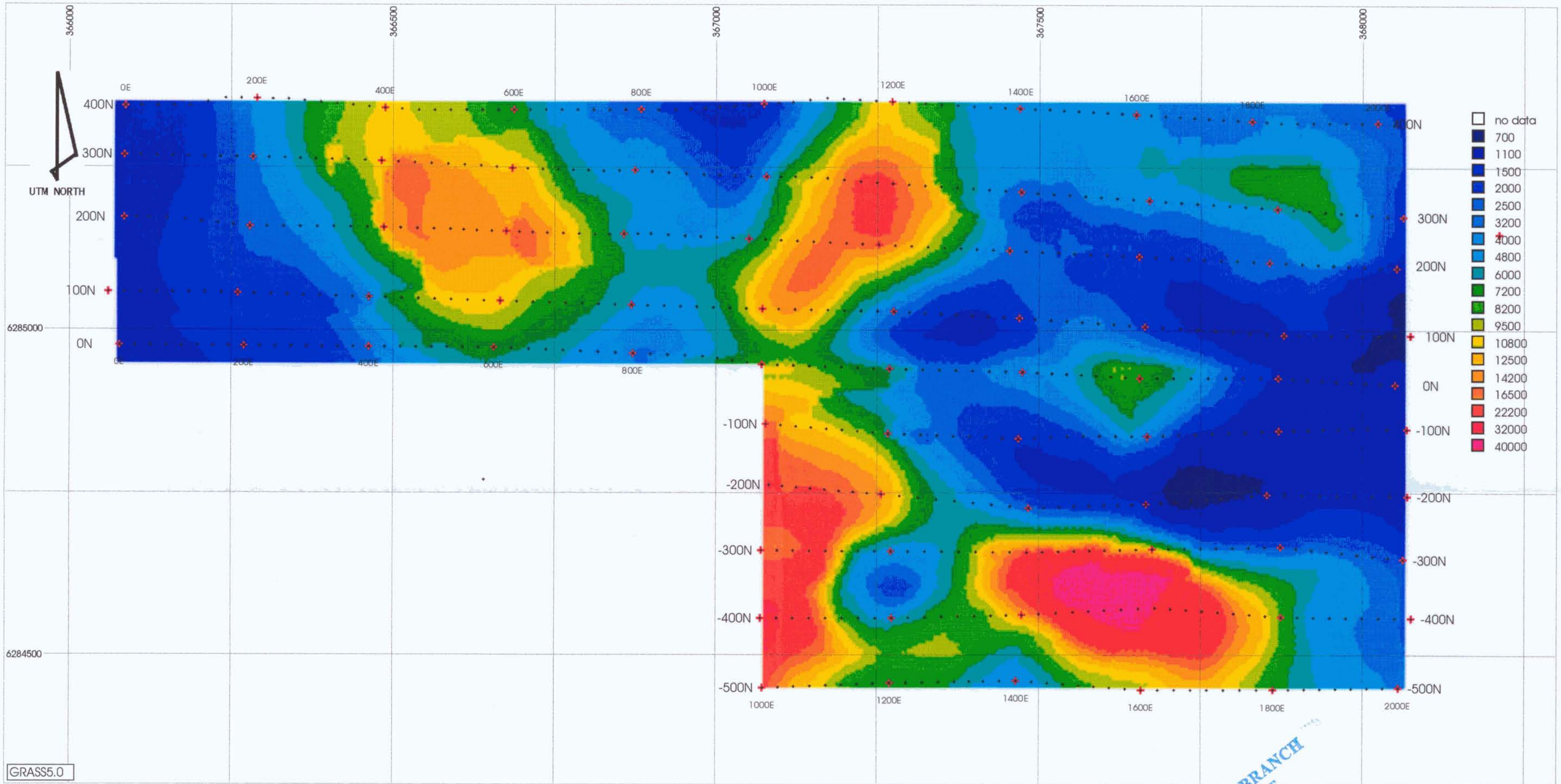
False Color Contour Map

Interpreted Resistivity (Ohm-m)

150m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-1e



0 100 200 300 400 500

Metres

Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.

INGENIKA / SWANNELL PROPERTY

Omineca Mining Division

2004 GEOPHYSICAL SURVEY
GRID "A"

3D Inversion Model

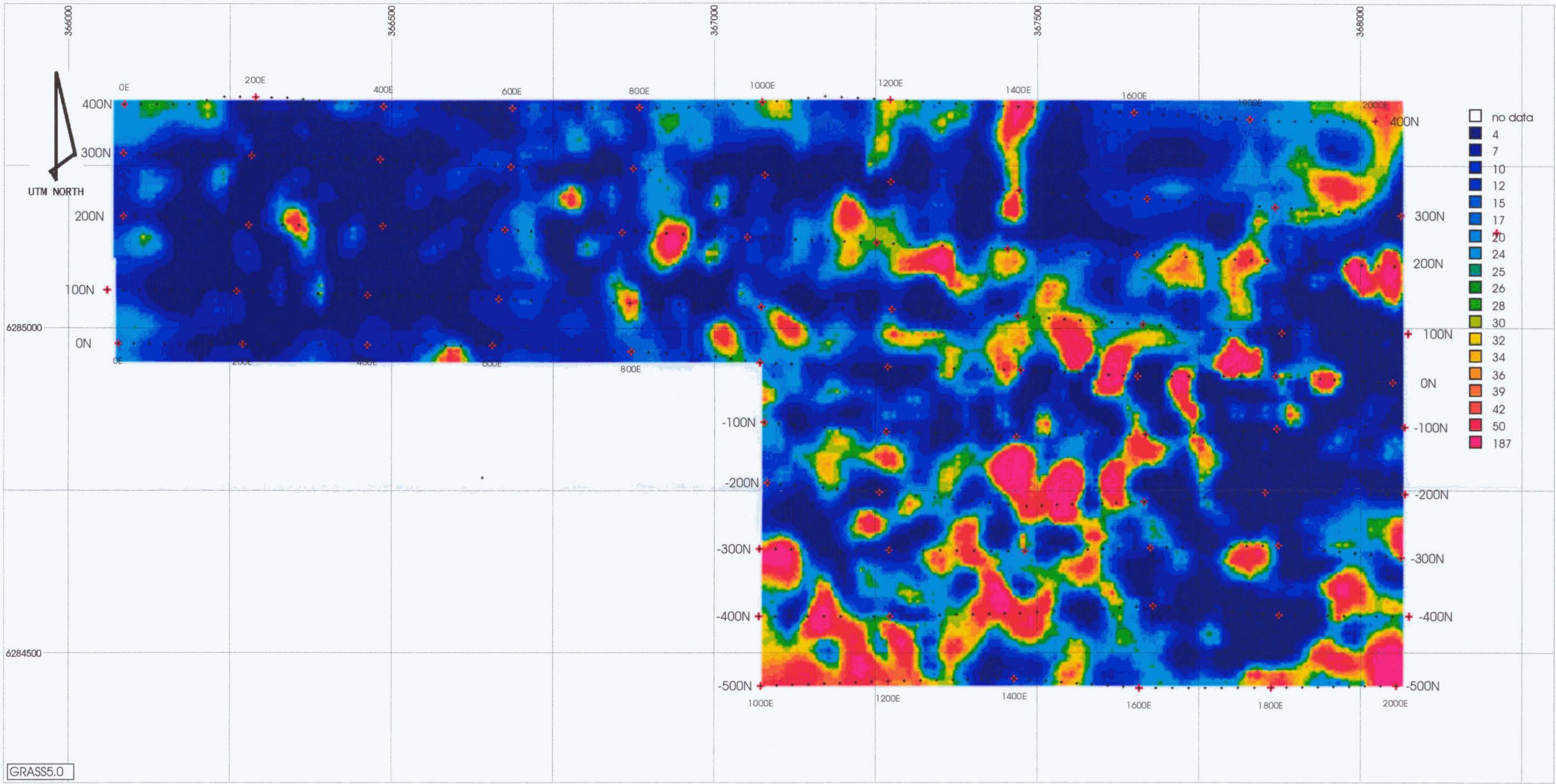
False Color Contour Map

Interpreted Resistivity (Ohm-m)

200m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-1f



0 100 200 300 400 500
Metres

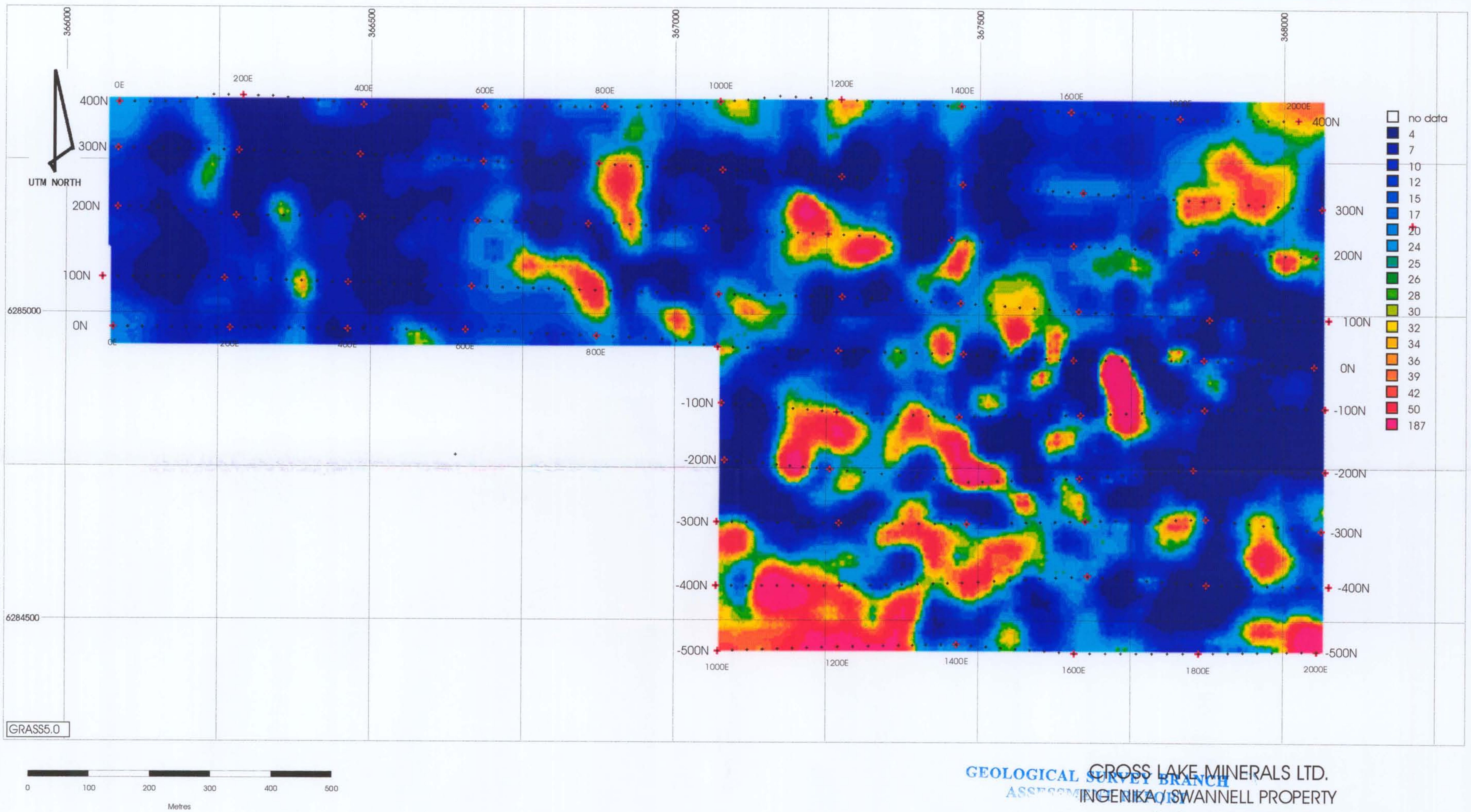
Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
27,614

CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Chargeability (ms)
25m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-2a

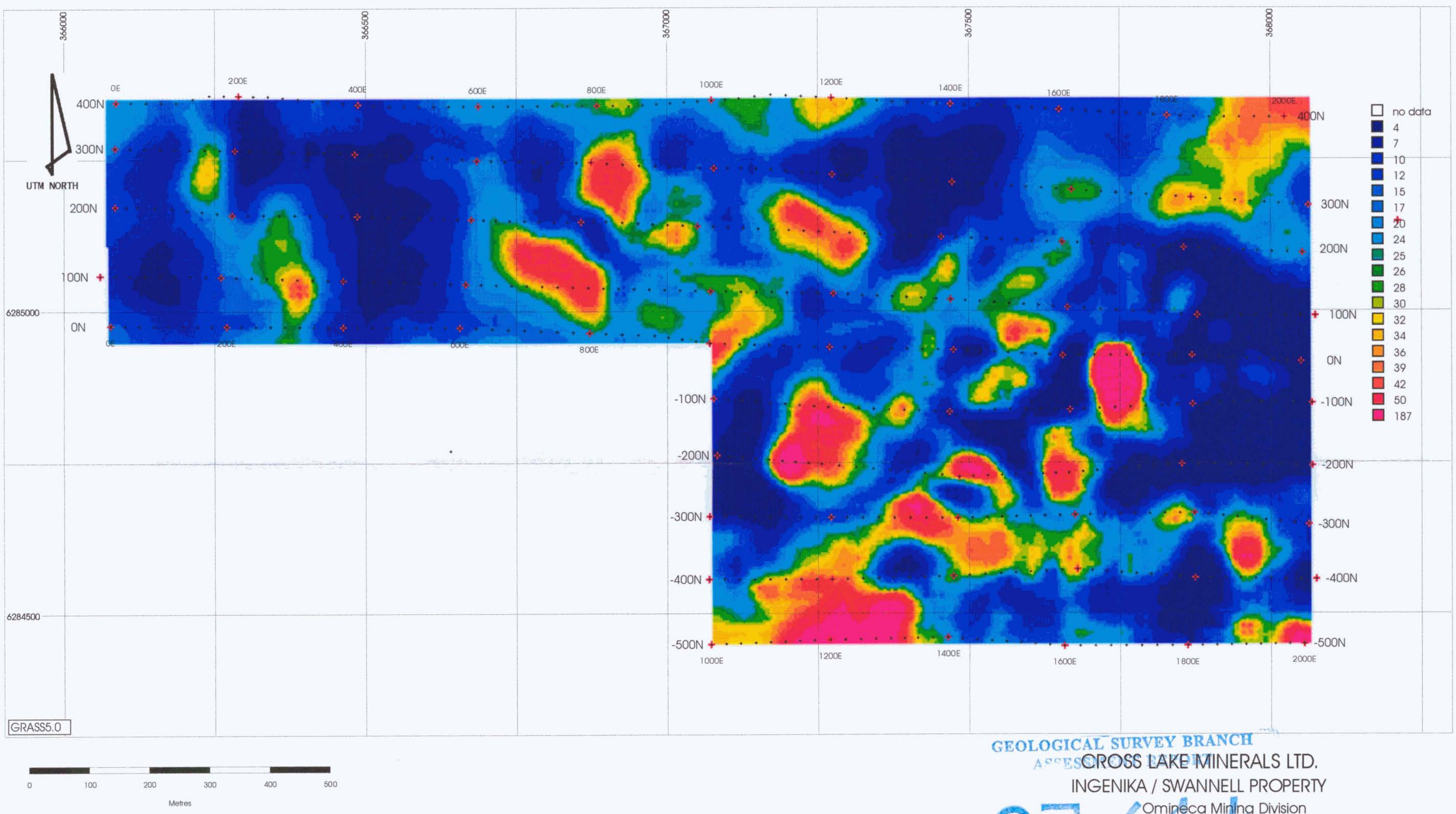


Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Chargeability (ms)
50m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-2b

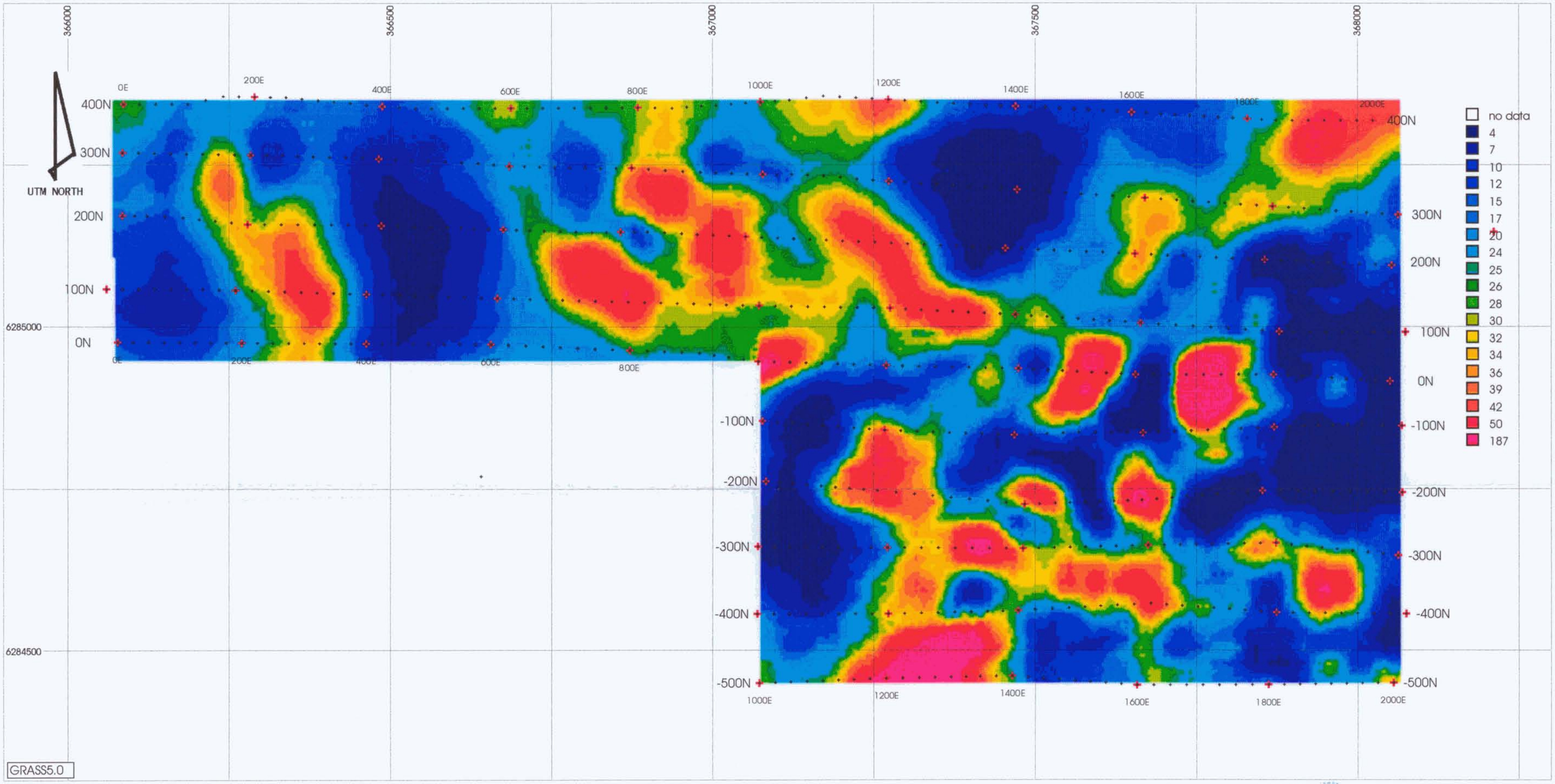


CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Chargeability (ms)
75m Below Surface

Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

SJ Geophysics Ltd.

FIGURE NO. ING-04-2c



0 100 200 300 400 500

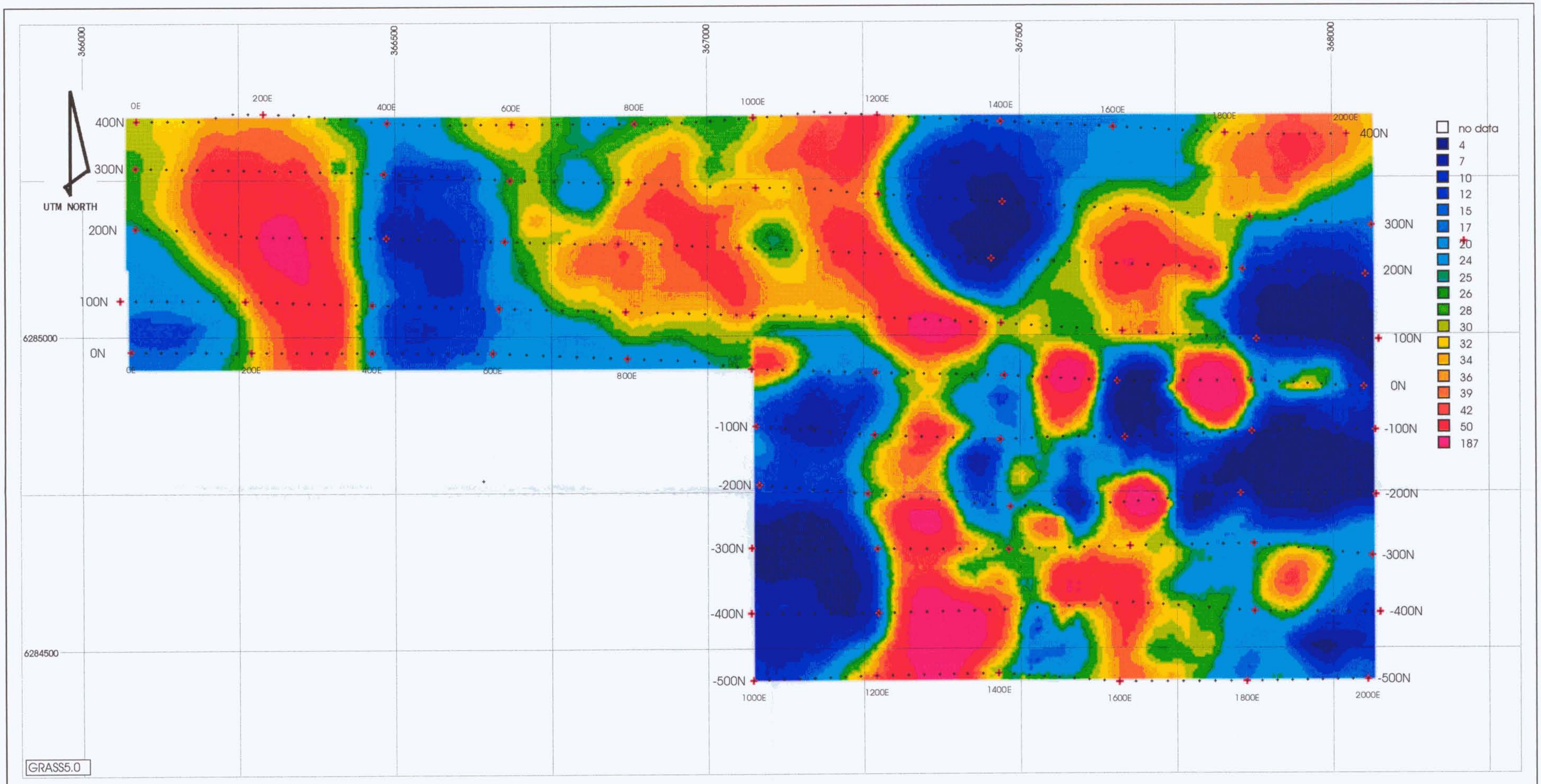
Metres

Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Chargeability (ms)
100m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-2d



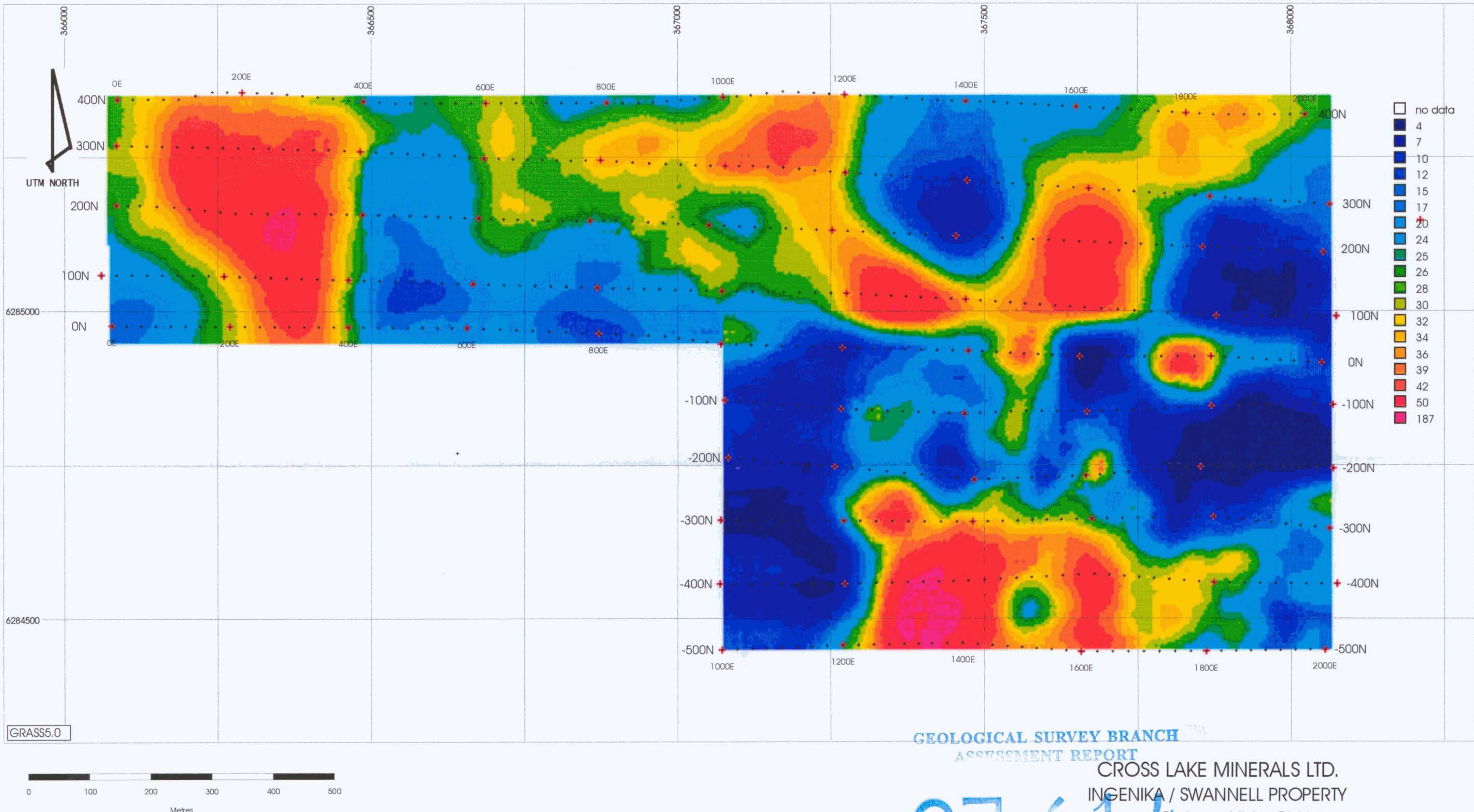
Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division

2004 GEOPHYSICAL SURVEY
GRID "A"
3D Inversion Model
False Color Contour Map
Interpreted Chargeability (ms)
150m Below Surface

SJ Geophysics Ltd.

FIGURE NO. ING-04-2e



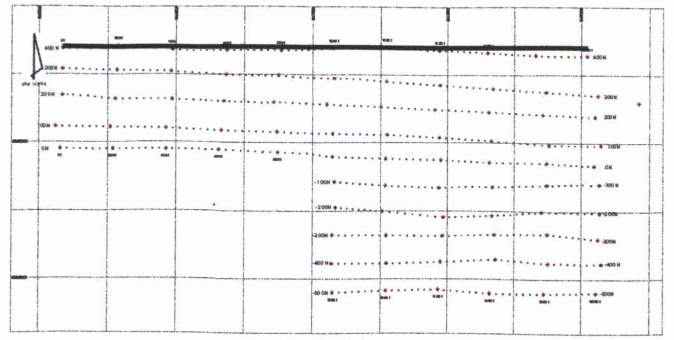
CROSS LAKE MINERALS LTD.
INGENIKA / SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

3D Inversion Model
False Color Contour Map
Interpreted Chargeability (ms)
200m Below Surface

Projection:UTM
Zone:10
Datum:NAD83
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

SJ Geophysics Ltd.

FIGURE NO. ING-04-2f


Index Map

ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

Metres

CROSS LAKE MINERALS LTD.

INGENIKA/SWANNELL PROPERTY

Omineca Mining Division

2004 GEOPHYSICAL SURVEY

GRID "A"

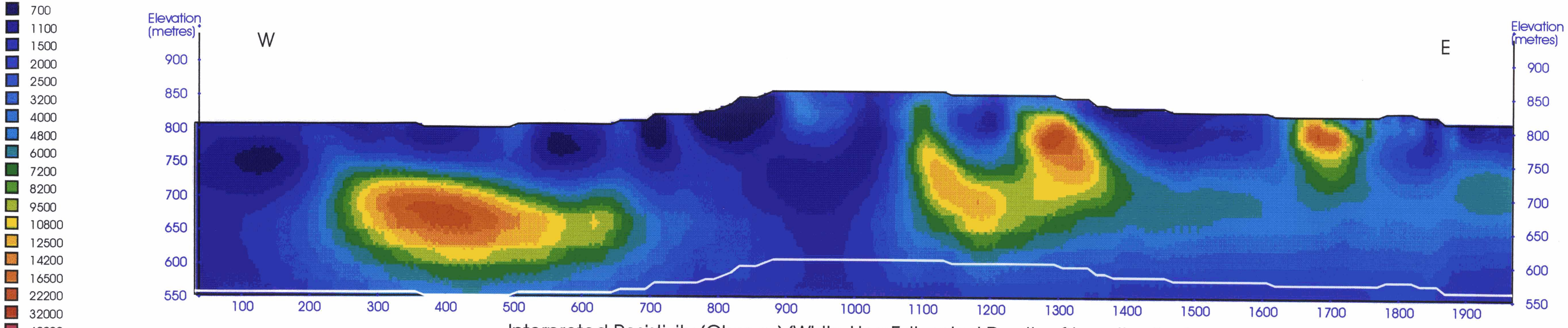
3D IP Survey

3D Inversion Model

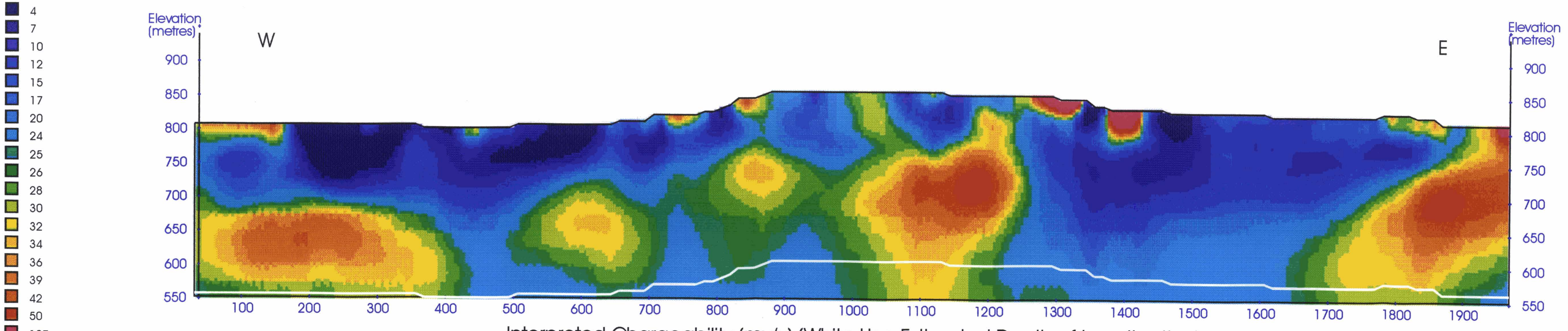
Cross Section 400N

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

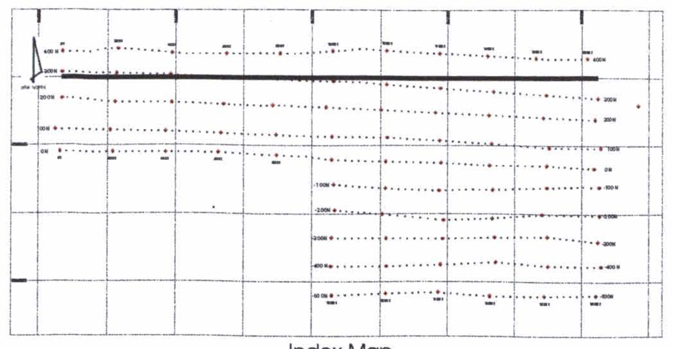
GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)



ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

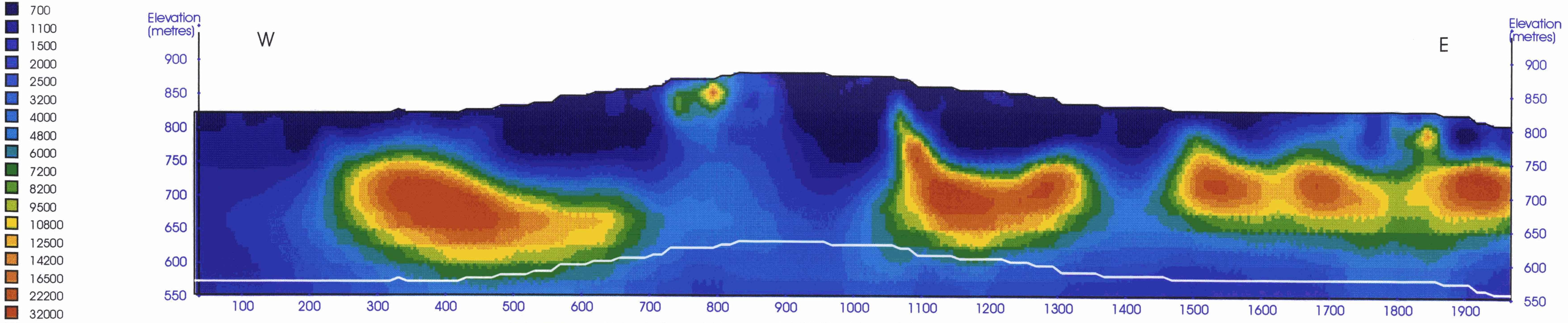
0 40 80 120 160 200
Metres

CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

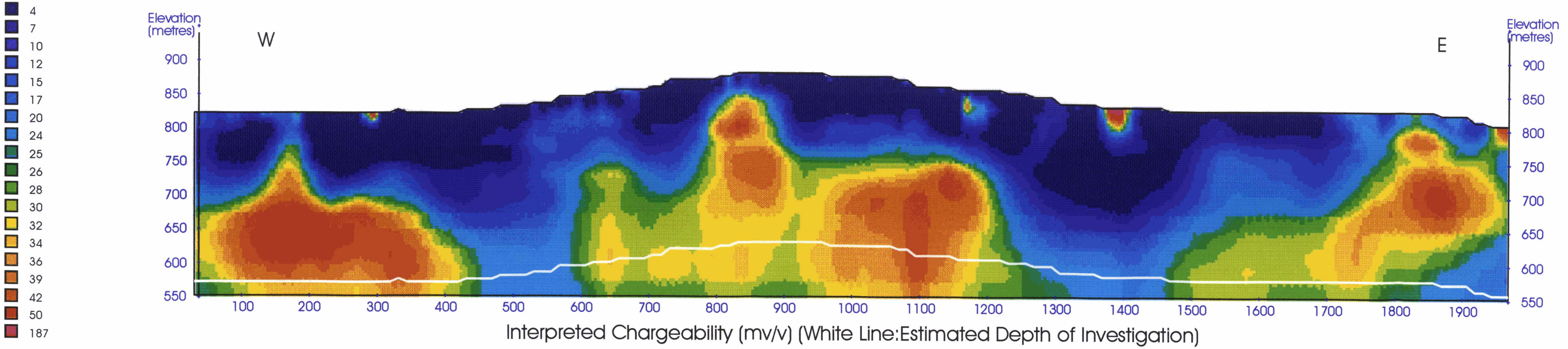
3D IP Survey
3D Inversion Model
Cross Section 300N

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

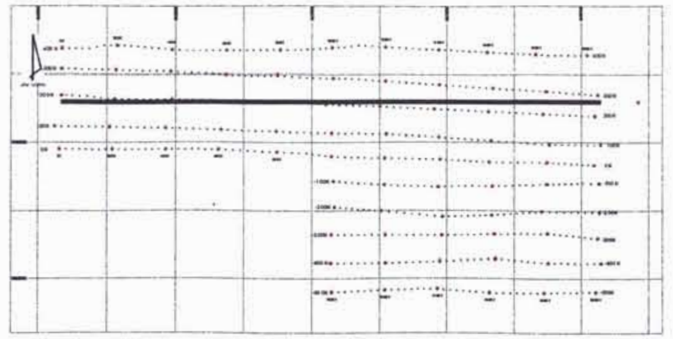
GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)



ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

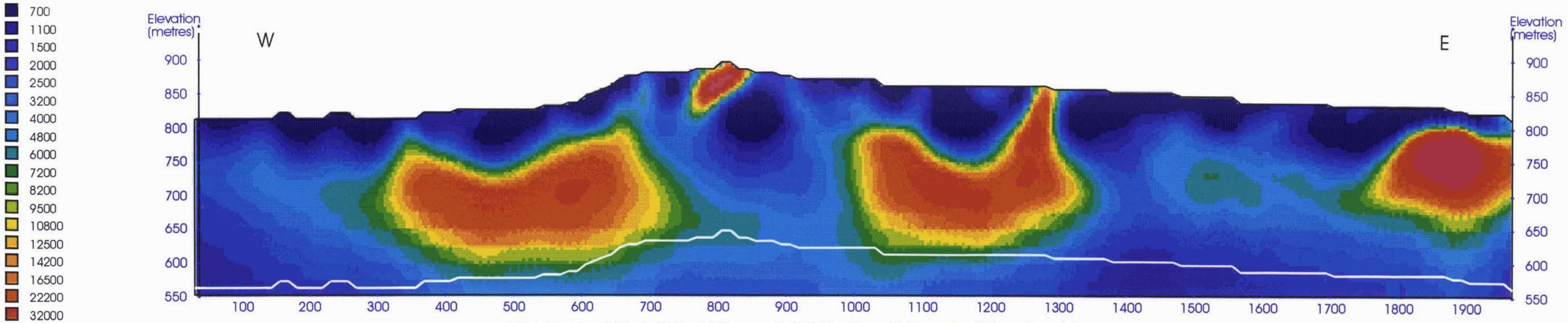
Metres

CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

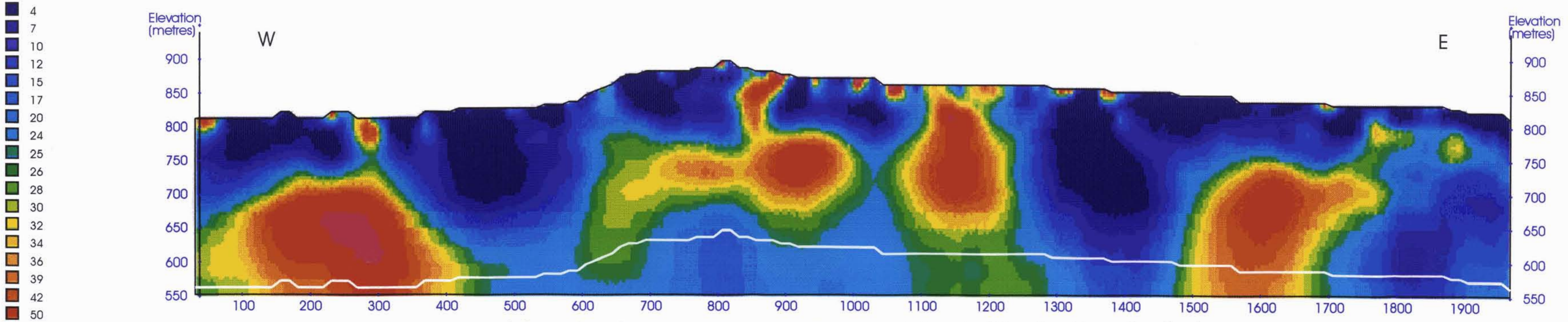
3D IP Survey
3D Inversion Model
Cross Section 200N

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

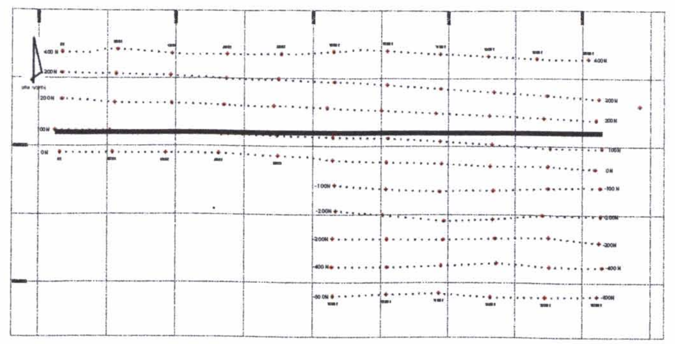
GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)



ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

Metres

CROSS LAKE MINERALS LTD.

INGENIKA/SWANNELL PROPERTY

Omineca Mining Division

2004 GEOPHYSICAL SURVEY

GRID "A"

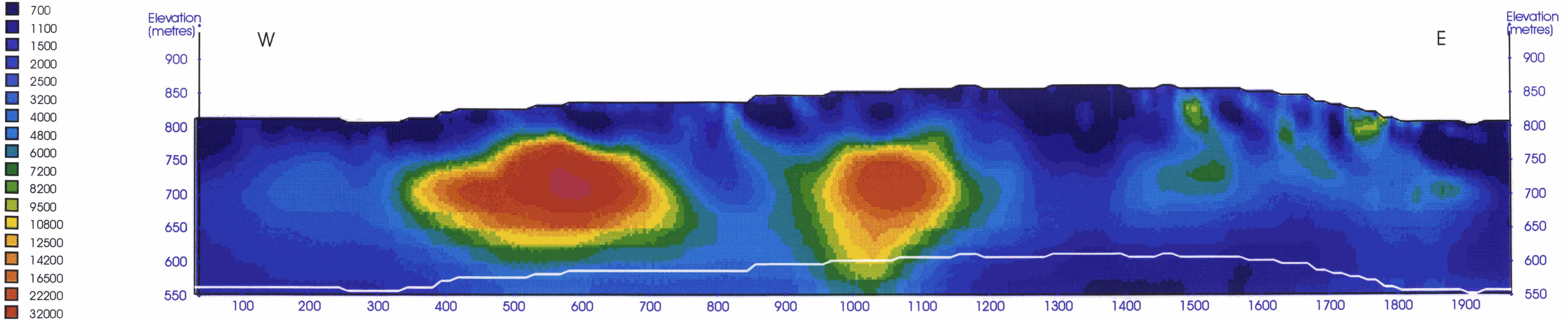
3D IP Survey

3D Inversion Model

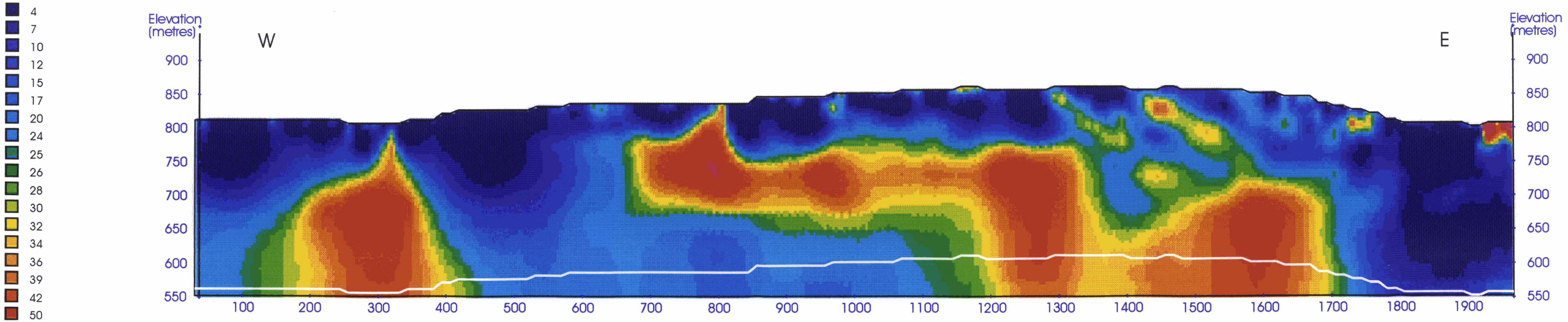
Cross Section 100N

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

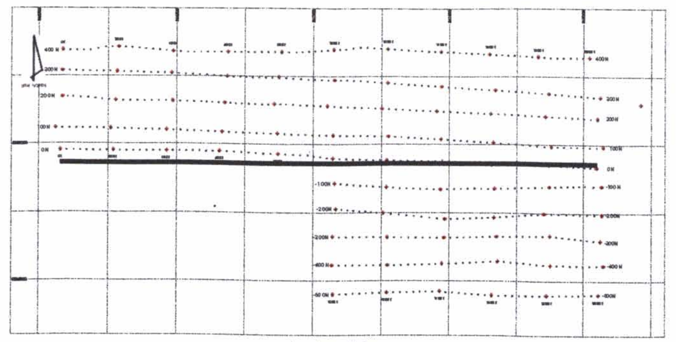
GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)



Index Map

ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

Metres

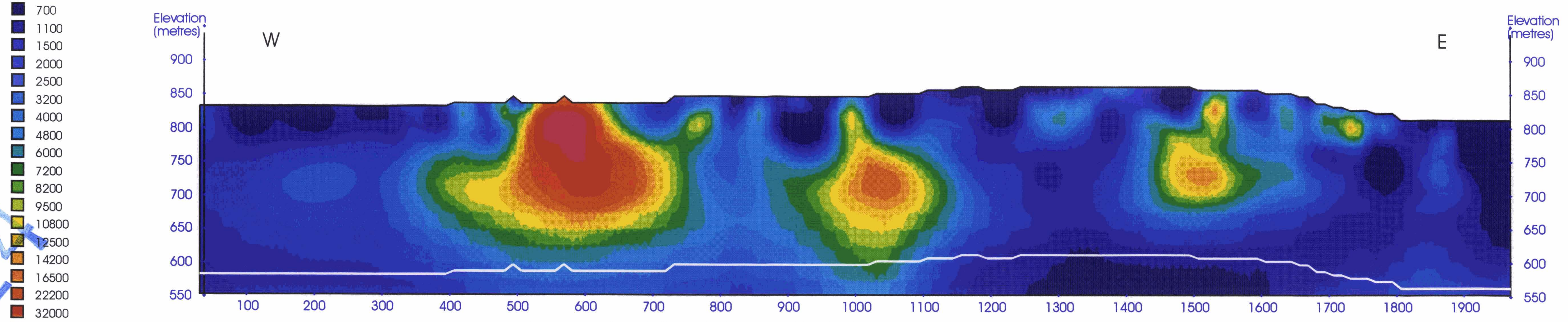
CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY

Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

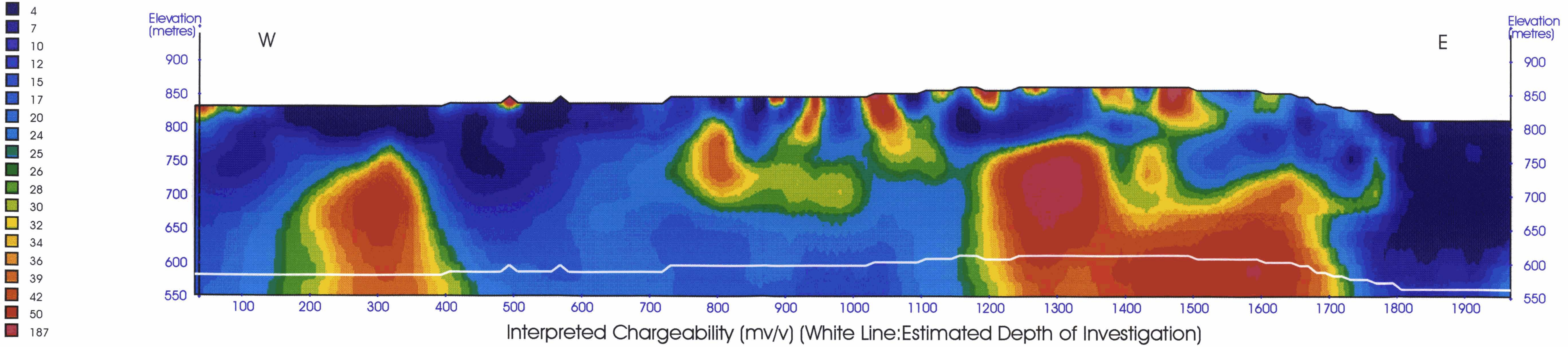
3D IP Survey
3D Inversion Model
Cross Section 0N

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

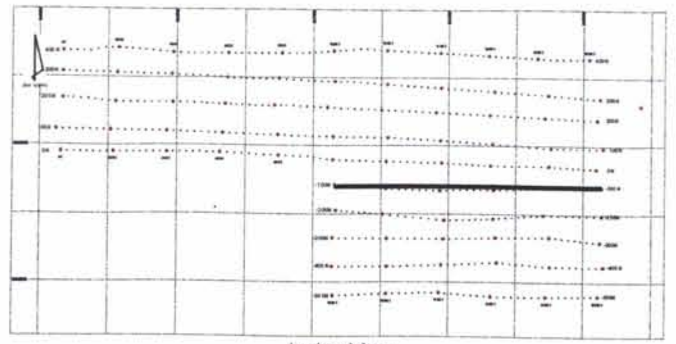
GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)



Index Map

ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

0 40 80 120 160 200
Metres

CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

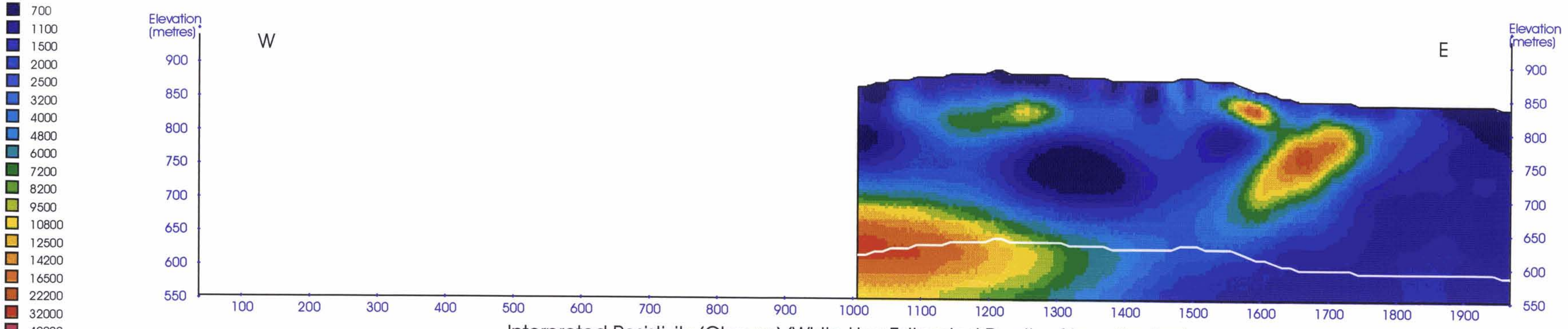
3D IP Survey

3D Inversion Model

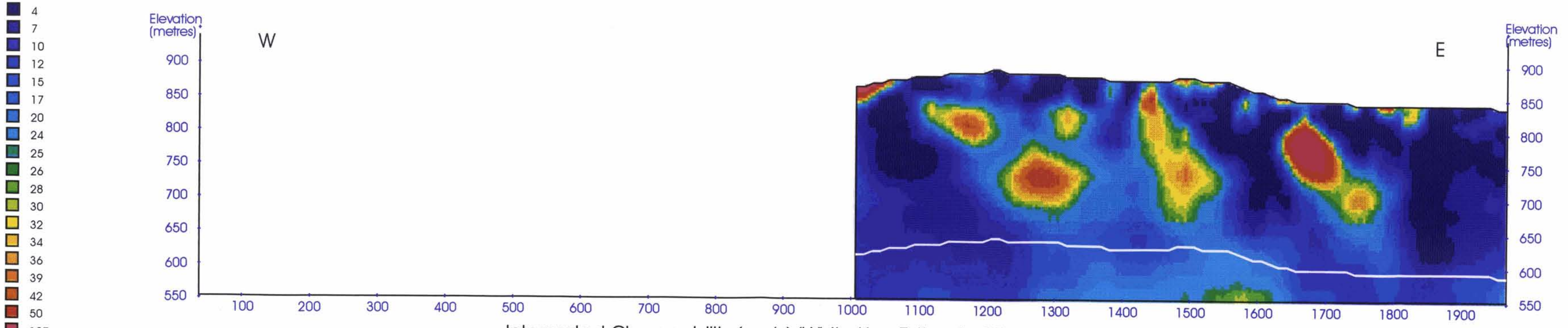
Cross Section 100S

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

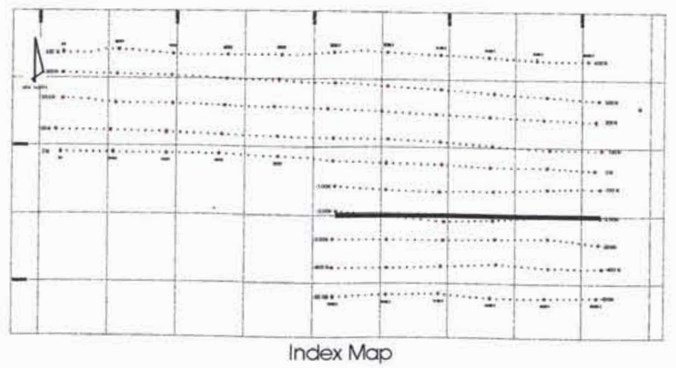
GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)



ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

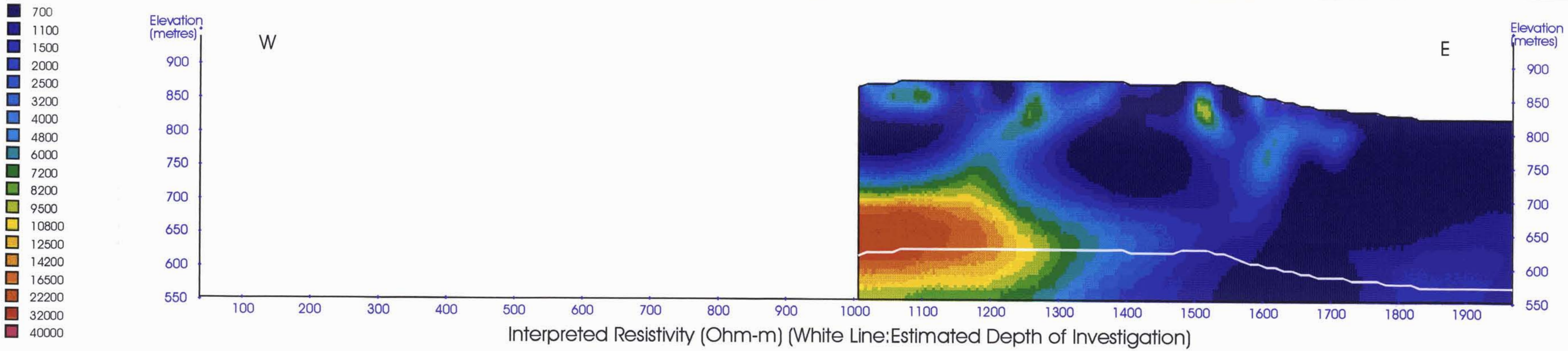
INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

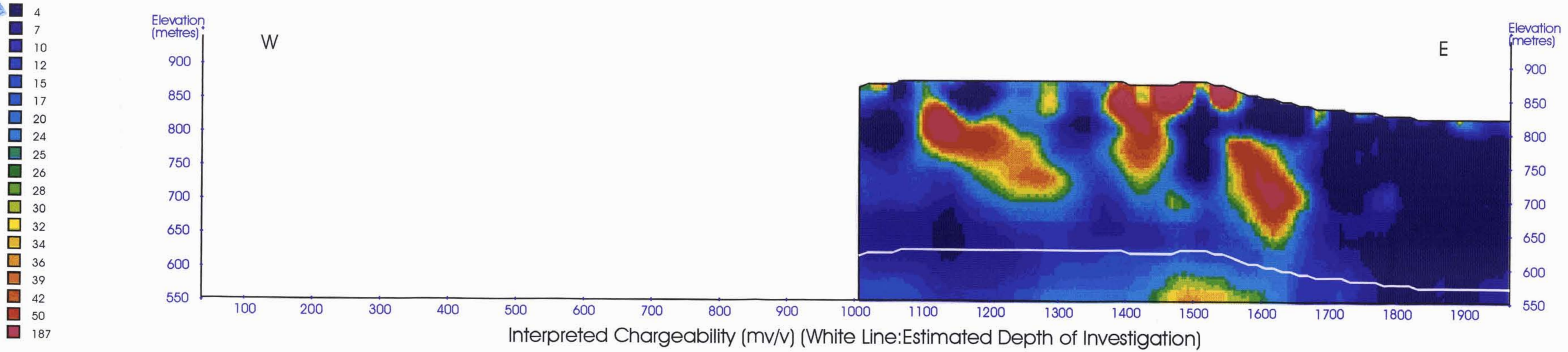
CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

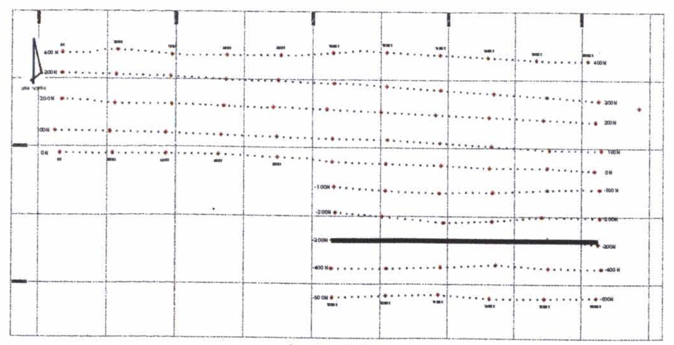
3D IP Survey
3D Inversion Model
Cross Section 200S

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

GRASS5.0 S.J.V. Consultants Ltd.







Index Map

ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

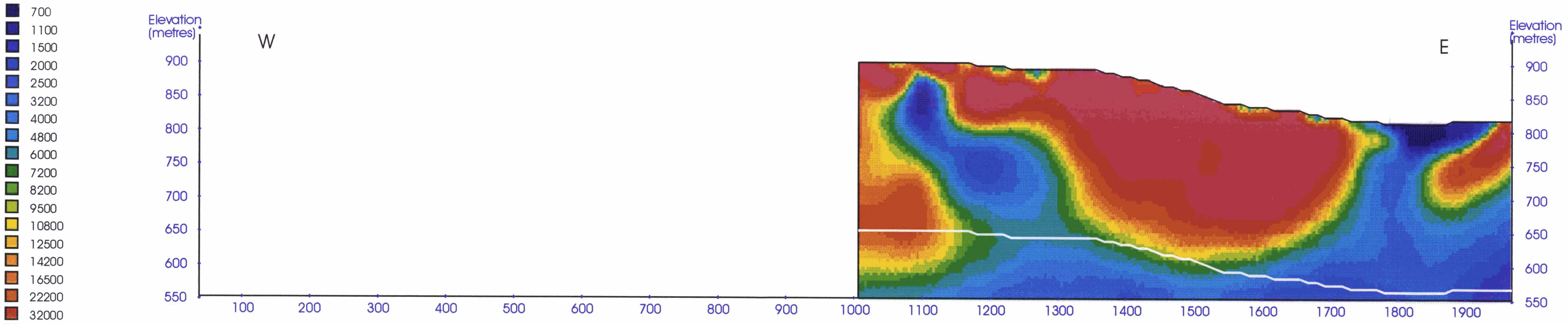
0 40 80 120 160 200
Metres

CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

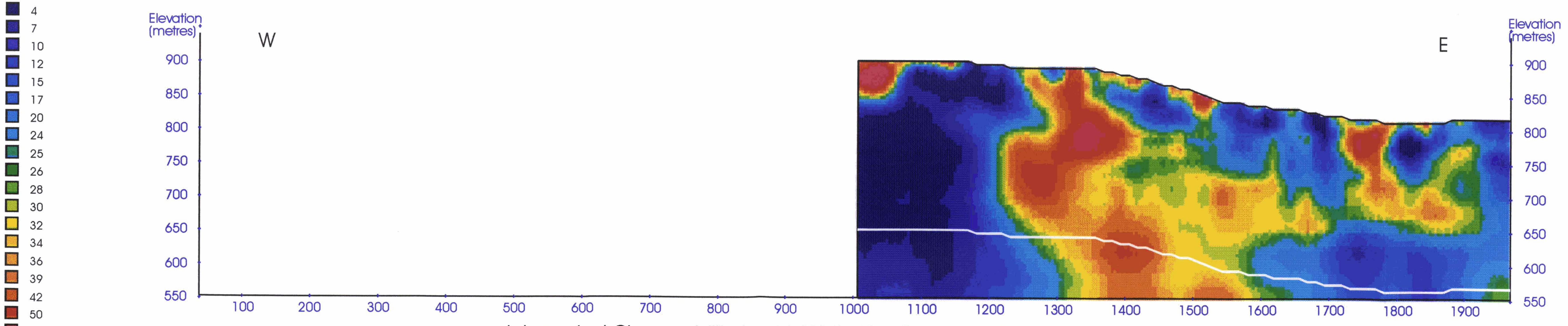
3D IP Survey
3D Inversion Model
Cross Section 300S

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

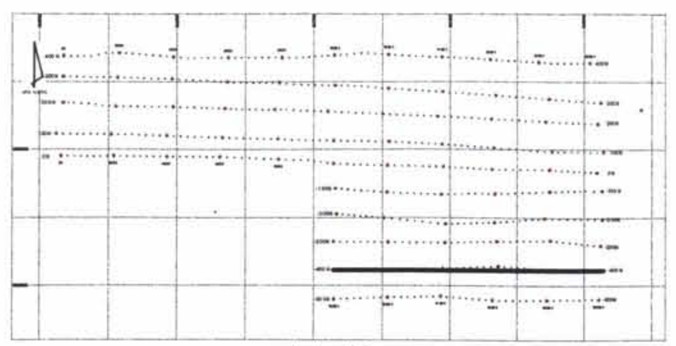
GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)



Index Map

ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

CROSS LAKE MINERALS LTD.

INGENIKA/SWANNELL PROPERTY

Omineca Mining Division

2004 GEOPHYSICAL SURVEY

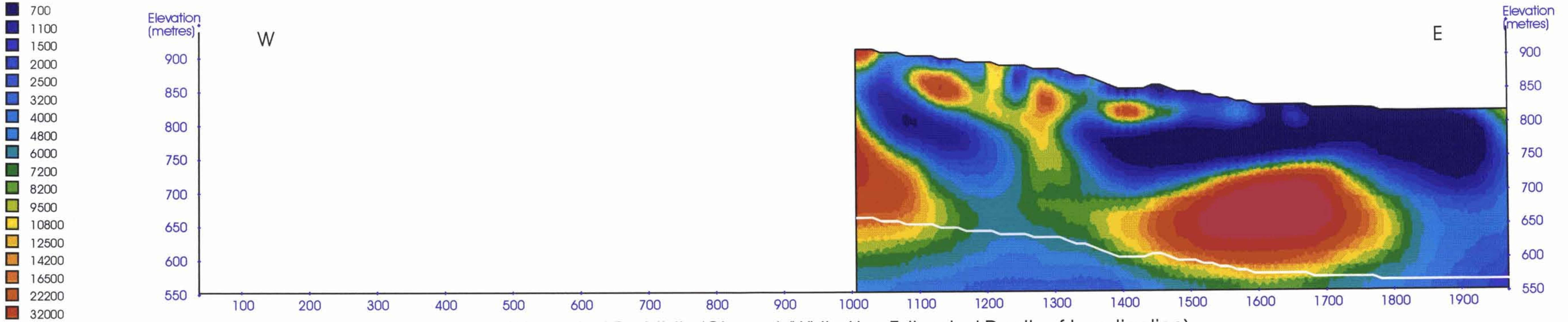
GRID "A"

3D IP Survey

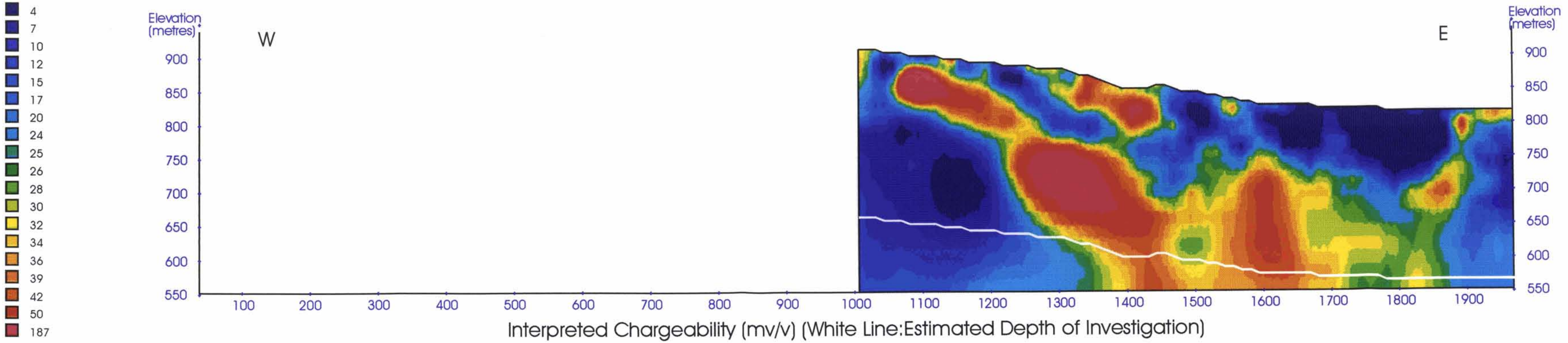
3D Inversion Model

Cross Section 400S

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

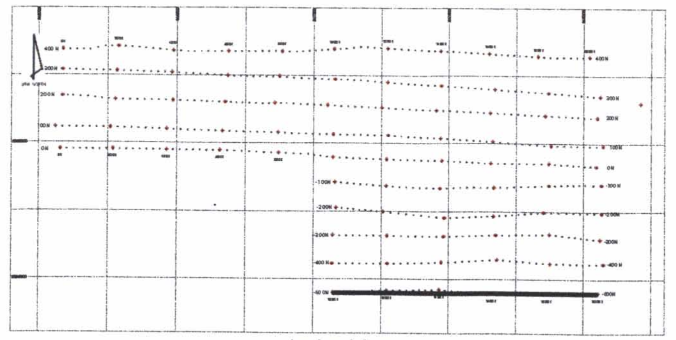


Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



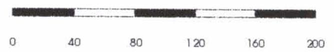
Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)

GRASS5.0 S.J.V. Consultants Ltd.



ARRAY
OFFSET POLE-DIPOLE
a=50,100m N=8,10,12

INSTRUMENTATION
RECEIVER: TDR-6,IPR-12,SJ-Digital
TRANSMITTER: GDD TX-II

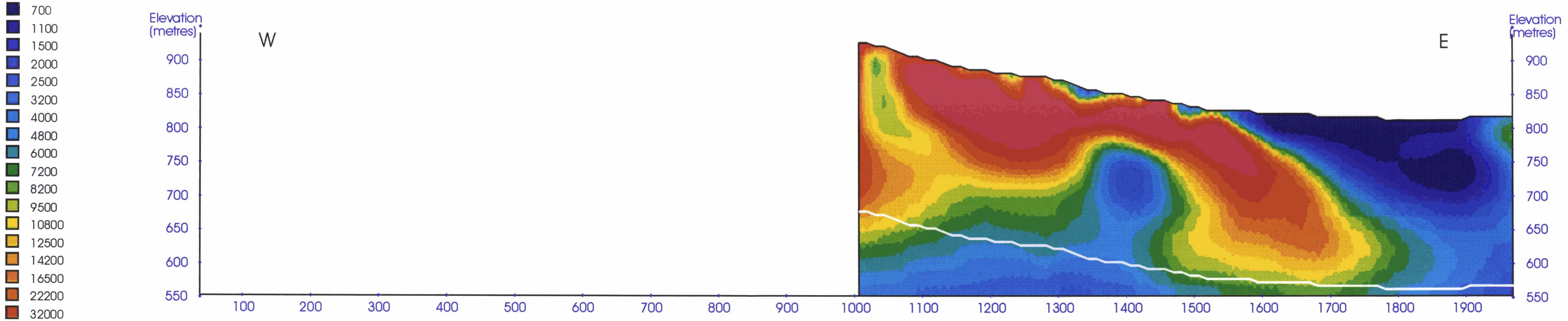


CROSS LAKE MINERALS LTD.
INGENIKA/SWANNELL PROPERTY
Omineca Mining Division
2004 GEOPHYSICAL SURVEY
GRID "A"

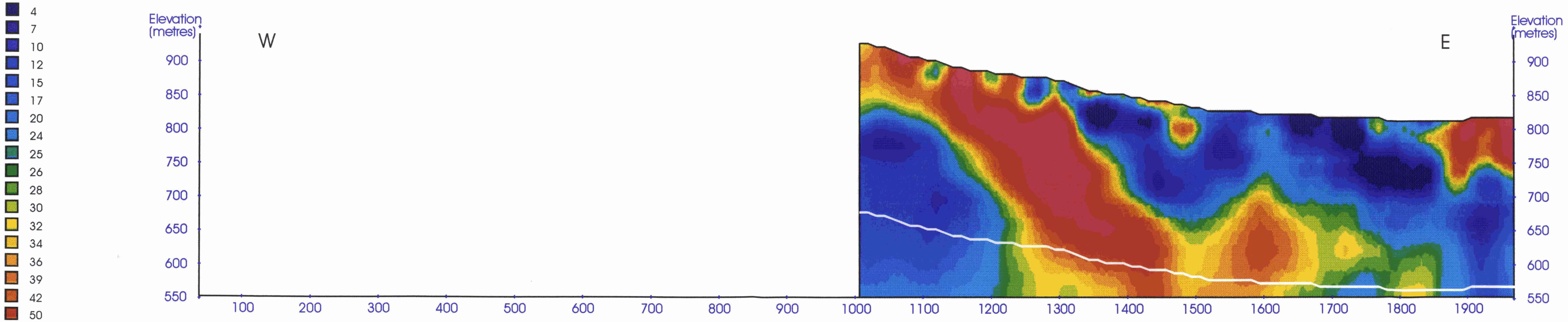
3D IP Survey
3D Inversion Model
Cross Section 500S

Survey by: SJ Geophysics Ltd.
IP Inversion by: S.J.V. Consultants Ltd.
BCGS: 94C.065 NTS: 94C/11E
Processing Date: January, 2005

GRASS5.0 S.J.V. Consultants Ltd.



Interpreted Resistivity (Ohm-m) (White Line:Estimated Depth of Investigation)



Interpreted Chargeability (mv/v) (White Line:Estimated Depth of Investigation)