EXPLORATION REPORT

ON

GEOPHYSICAL and GEOCHEMISTRY SURVEYS

OVER THE

EXTENSION and OPHIR NORTH GRIDS

WITHIN THE

TATSAMENIE PROPERTY

TATSAMENIE LAKE AREA

ATLIN MINING DIVISION, BRITISH COLUMBIA

LOCATED:	82 km northwest of the village of Telegraph Creek, BC 58° 17' 43" N Latitude, and 132° 19' 10" W Longitude NTS: 104K/01 and 104K/08
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SUMMARY

The Tatsamenie Project claims lie within rocks of the Stikine Terrane along the western margin of the Intermontane Belt. The stratigraphy is dominated by the Stikine Assemblage, which is basal to the Stikine Terrane, and in the property area comprises Permian limestones; Upper Carboniferous felsic to mafic volcanics, phyllite and limestone; and Lower Carboniferous rocks consisting of pyroxene-phyric mafic flows and tuffs, as well as intercalated sediments which include limestone, black, carbonaceous, slightly fetid calcsiltite and argillite. Large areas of the region are intruded by plutons that are Triassic, Jurassic, Cretaceous or Eocene and which are overlain by Tertiary volcanic rocks. Faulting in the area is dominated by north to northwest-trending high-angle, strike-slip faults, which are significant in representing first order structural controls on gold mineralization. The Ophir Break is an economically important fault zone that extends at least 15 kilometres from Bearskin Lake to Tatsamenie Lake. This structure diverges into two main strands, the eastern Black fault and the western Fleece fault in the area of the Golden Bear deposit. The Fleece fault is called the West Wall fault north of Sam Creek. This fault zone is defined by areas of intense fracturing with abundant slickensiding; areas of carbonaceous and siliceous black siltstone and gouge; and linear quartz-carbonate alteration zones.

The area presently held as the Tatsamenie Project property received substantial exploration from 1981 to 1994 by Chevron Canada Resources Ltd. and several partners. An important phase of drilling in 1987 targeted the West Wall fault every 200 metres with 30 drillholes (including one on the Nie 3 occurrence). Gold-bearing silicified limestone on the western component of the Tatsamenie property also received considerable exploration in this time period including 3 holes drilled in 1987 and 4 in 1990. At least 22 documented areas of mineralization were defined by previous work:

Nie (2 Oz Notch) – two north trending quartz veins about 3 metres apart exposed in a 14.6 metre long trench along the West Wall fault. The easternmost vein is 30 centimetres thick and the westernmost vein is about 60 centimetres thick. Mineralization consists of disseminated and massive pyrite and minor pyrrhotite. Up to 14.0 grams per tonne gold were obtained from across the 0.3-metre vein (Shaw, 1984).

Misty – minor gold mineralization is associated with pyrite and occurs within tuff near the West Wall fault. A sample assayed over 10.0 grams per tonne gold (Brown and Walton, 1983).

Nie 3 (Spire) – a mineralized 1987 drillhole intersected carbonaceous, graphitic siltstones interbedded with grey limestone. Mineralization consists of disseminations, blebs and stringers of pyrite and sphalerite associated with calcite and quartz veins. A 1.5 metre sample of drill core assayed 0.37 per cent zinc (Walton, 1987). The nearby Spire grid examined quartz-carbonate breccia zones with pyrite, sphalerite, chalcopyrite and galena in an area of mafic volcanics and siliceous to calcareous sediments and carbonate units. Up to

2.71 grams per tonne gold, 13.77 per cent zinc and 1.71 per cent lead were reported from three different samples (McBean, 1990).

Honk – a shear hosted quartz pyrite vein with local chalcopyrite hosted in sheared mafic volcanic rock along a north-trending splay of the Ophir Break. A grab sample assayed 18.07 grams per tonne gold and 64.80 grams per tonne silver (McBean, 1990).

Barron – pods of semi massive pyrite, pyrrhotite and chalcopyrite occur within strongly sheared, silicified and pyritized diorite and mafic volcanic rock that are cut by a north-trending fault. A grab sample assayed 1.48 per cent copper and 6.0 parts per million silver (Bradford and Brown, 1993).

Patella – a carbonate vein, at least 100 metres long, averaging 0.55 metre wide and containing up to 15 per cent sphalerite and galena. Hosted in intermediate to mafic volcanic rocks near and west of the Ophir Break fault zone.

Backbone – local high gold and polymetallic anomalies occur in discontinuous massive quartz veins in mafic volcanics as well as along north-northwest trending faults. A rock chip of a massive quartz vein pod yielded 9.8 grams per tonne gold (Zuran, 1994).

Shoulder – two parallel quartz veins, about 2 metres apart and traceable for 40 metres, are hosted in chloritized mafic volcanics. The smaller, 5 centimetre wide vein contains up to 50 per cent sulphides consisting of pyrite, galena, stibnite, and trace sphalerite. The second vein is 30 centimetres wide and consists of massive white quartz with 4 per cent pyrite and a trace of chalcopyrite. Up to 15.3 grams per tonne gold were obtained from grab samples (McBean, 1990). Further veining was reported to have been encountered in follow-up work.

Tatsamenie Lake – asbestos and talc mineralization related to the Ophir Break fault zone.

Tut – this zone occurs within a 900 metre long belt of dolomitized and silicified Permian limestone, approximately 100 to 150 metres wide, between strong east-northeast trending faults. R-37 was a 1987 drillhole drilled into the south bounding fault which contains abundant scorodite and silica. Only anomalous values were obtained from drill core. The best values came from near the north bounding fault where trenched dolomitized limestone yielded up to 3900 ppb gold over 1.1 metres (Bruaset, 1984).

LCZ (Limestone Contact Zone) – a 1.5 kilometre long zone of silicification and brecciation within Permian limestone along an overlying thrust contact with a Carboniferous phyllite unit. One significant drillhole interval from 1987 yielded 2.10 grams per tonne gold over 1.75 metres (Moffat and Walton, 1987). Much of this zone remains untested.

LCZ Extension – mineralization in silicified limestone outcrop near a contact with overlying phyllites consists of sparse, fine grained, euhedral pyrite with a trace of very fine dark grey sulphides. The phyllites host narrow, silicified, pyritic shear zones with minor quartz veining. While the silicified limestone yielded only anomalous values in gold, the phyllite-

hosted shears assayed up to 2000 ppb gold over 1.8 metres (Hamilton, 1994). This zone promises to add a further 1 kilometre to the LCZ zone, already a prime exploration target.

Several showings occur south of Bearskin Lake in the area that could be defined as an extension of the Ophir Break fault zone. These included the Oro (104K 039), Tan 3 (104K 101), Tan 4 (104K 102), Tan (104K 103) and Muse (104K 119). In general, these are small copper sulphide and pyrite zones.

The Thor (104K 077) showing occurs in the area just south of the Ram-Tut area. An area of quartz veins and fractures with various minerals including copper and iron sulphides yielded a 1 metre chip sample assaying 58.9 grams per tonne silver. A sample of a chalcedony vein assayed 1.35 grams per tonne gold.

The Dot (104K 125) showing occurs in the Thor area. A quartz vein up to 0.6 metres wide contains minor chalcopyrite. Grab sample assayed 1.12 per cent copper.

The following three MinFile showings occur within the recently-acquired northwest part of the property northwest of Tatsamenie Lake.

The Tot showing (104K 098) mineralization consists of pyrite, chalcopyrite, stibnite and scorodite occurring near a north trending fault. A 2.42 metre sample from a trench across a shear zone assayed 3.4 grams per tonne gold. A sample of chalcopyrite stringers cutting phyllite assayed 0.3 per cent copper. A drill hole across the zone intersected 3.81 grams per tonne gold over 2.26 metres and an arsenic value of 1.0 per cent over 0.76 metres . Tetrahedrite, stibnite, malachite and azurite also occur in veins within phyllites and dolomitic limestone. A sample, 500 metres northwest of the trench, assayed 93.0 grams per tonne silver and over 0.1 per cent antimony.

The Tot 2 showing (104K 037) consists of a 5 to 10 centimetre chalcopyrite vein occurring within the chlorite schist. A sample assayed over 1.0 per cent copper and 14.8 grams per tonne silver. Stibnite and barite veins also occur in this area.

At the Tatsa showing (104K 138), a 0.9 metre chip sample taken from sheared carbonate altered sericite schist with malachite staining assayed 3.9 grams per tonne silver, 0.35 per cent copper, 0.2 per cent arsenic and 0.11 per cent antimony. A number of float boulders mineralized with up to 0.27 per cent molybdenum and 0.10 per cent copper were found in the large glacial bowl draining east through the Tatsa #3 claim, about 250 metres south-southwest of the 0.9 metre. The Molybdenum rich boulders are likely deposited by the glacier and originated further to the west. They are typically composed of semi-massive to massive siliceous pyrite and minor molybdenite.

Based on a significant Mobile Metal Ion gold-silver-arsenic-lead-zinc soil anomaly discovered beneath the 2007/2008/2010 Extension grid, along with corroborating 2008/2010 Induced Polarization results, potential for a sediment hosted gold deposit is indicated.

A 2012 Phase 1 program of extending the MMI soil sampling and IP surveys as well as detailed geological mapping and sampling of existing and new mineral showings is recommended. Areas along the West Wall fault and the LCZ trend area are prospective for carbonate-hosted gold deposits, such as the nearby Golden Bear mine, and a program of exploration MMI soil sampling and IP surveying is recommended. The budget for Phase 1 recommendations totals C$200,000. A 2013 Phase 2 exploration program, while contingent on Phase 1 results, would focus on definition drilling of the Extension grid mineralization. Geochemical and/or geophysical anomalies highlighted in Phase 1 surveys outside the Extension area should be investigated and defined by further detailed geochemistry and geophysical work. A small exploration drill program is recommended to test any well-defined targets outside the Extension area. The budget for Phase 2 is estimated to be C$800,000.

The IP and resistivity results were plotted, both in pseudosection form, and contoured. A 2-D inversion interpretation using Geotomo software, a least squares method, was also carried out along each of the IP lines and the results plotted and contoured. Furthermore, a 3-D inversion using the same software was carried out on each of the IP and resistivity data sets. The inversion interpretation was displayed in two sets; one on 16 different plan maps for each survey (IP and resistivity) with each at a specific elevation every 25 meters from 950 meters to 1325 meters, and two on 3 different plan maps for each survey with each at 50, 100, and 150 meters below surface.

1 RECOMMENDATIONS

A two phase exploration program is recommended for the Tatsamenie property in 2012 and 2013.

Phase 1 should commence in 2012 and consist of geological mapping and rock sampling in and around the Extension grid area in advance of trenching and drilling of the coincident gold-silver-base metal MMI soil anomaly. Grid extension is recommended where anomalies appear to continue beyond the sample lines. MMI should be completed where the grid is expanded and, given the good correlation of the Induced Polarization (I.P.) surveys with the geochemical anomalies, further select I.P. surveying should be conducted.

Phase one should also contain a preliminary exploration program along the Ophir Break (West Wall Fault) and the southern limits of the LCZ trend. Based on the potential for discovery of Golden Bear-type carbonate-hosted gold mineralization in these areas, geological mapping, geochemical sampling, including stream silt, soil and rock, and VLF-EM surveying is recommended. These exploration techniques should especially be focused on the relatively unexplored area north of the Nie 3 mineral occurrence where anomalous areas along the West Wall fault may be indicative of deeper mineralization. The entire southern extent of the LCZ mineralized trend, immediately north of the Extension grid, has a length of about 1 kilometre that has yet to be tested by drilling.

Phase 2 should proceed in 2013 contingent on the results of Phase 1 exploration on the Extension grid anomalies and the development of new targets along the LCZ trend and in the West Wall Fault area. Any new targets developed in Phase 1 should be explored through additional rock and soil geochemical sampling and VLF-EM surveying, followed by drilling.

Further definition of Extension grid mineralized zones should be the primary focus of the 2013 work program with up to 2500 metres available for drilling. Significant preliminary results in target areas outside the Extension grid may warrant the commitment of an unspecified allocation of drill footage to those areas

1.1

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2 INTRODUCTION and GENERAL REMARKS

This report discusses survey procedure, compilation of data, interpretation methods, and the results of MMI soil geochemistry surveying carried out over the Ophir North Grid located within the Tatsamenie Property belonging to Nakina Resources Inc. Also, over the Extension Grid, it contains a re-interpretation of the MMI results by Dr. Mark Fedikow and a 3-D interpretation of the induced polarization (IP) and resistivity results. The property is located in the Tatsamenie Lake area about 160 km south-southeast of the village of Atlin within the Atlin Mining Division, British Columbia.

The Ophir North Grid work fieldwork was carried out by a Geotronics crew between the periods of September 20th and October 4th, 2012. Work consisted of an induced polarization/resistivity survey, a magnetic/VLF-EM survey and MMI soil geochemistry survey. Complete analytical results of all sampling may be found in Appendix A.

The 2012 exploration program on the Tatsamenie Property of Nakina Resources Inc. was designed to locate and evaluate previously identified mineral prospects; to perform limited grassroots exploration over a large, rugged area not yet fully explored; and to gain a better understanding of the geological setting of the property. The ultimate objective of the program was to locate new mineral deposits and to define drill targets on previously advanced prospects.

3 PROPERTY and OWNERSHIP

The Tatsamenie property presently consists of 7 mineral claims that are all contiguous. The claim area is about 28 kilometres in a north-northwesterly direction by up to 14 kilometers in an east-northeasterly direction. Table 1 lists all the claims which are held in the name of

Nash Megjhi (Nakina Resources Inc.) as the Tatsamenie property. The 7 claims total 26,831.39 hectares in area. The Tatsamenie property has not been legally surveyed.

TENURE NUMBER	TYPE	CLAIM NAME	GOOD UNTIL	AREA (ha)
948169	Mineral	WIND KITE	June 02, 2012	579.6407
948190	Mineral	BEARSKIN GROUP	June 02, 2012	2522.1366
948193	Mineral	LC ZONE	June 02, 2012	5817.7829
948195	Mineral	LCZ EXTENTION	June 02, 2012	2501.6036
948197	Mineral	TASTA BLOCK	June 02, 2012	4927.442
948198	Mineral	TAGISH BLOCK	Jan. 25 2013	9184.8212
948199	Mineral	TAGISH LAKE	Jan. 25 2013	1297.9615

Total Area: 26,831.3885 ha

4 LOCATION AND ACCESS

The Tatsamenie Project area is situated in the Atlin Mining Division in northwest British Columbia, 160 kilometres south of the community of Atlin or 136 kilometres west of the community of Dease Lake. The village of Telegraph Creek is 82 kilometres southeast (Figure 2). The property is located on NTS mapsheet 104K/01 and 08 (TRIM mapsheets 104K.018, 019, 028, 029, 038, 039) at a latitude of 58˚17'43" N and longitude 132˚19'10" W (Figure 3).

Access to the property is generally via helicopter either from the communities of Atlin, Dease Lake or Telegraph Creek, or staged from the terminus of the Golden Bear Mine road. There is no significant infrastructure on the property. The community of Dease Lake, population 700, is 136 kilometres east of the property and is a government centre and supply and service point for fuel, groceries, accommodation, etc. Dease Lake is located on Highway 37, often referred to as the Stewart-Cassiar Highway. Dease Lake is also the cut-off for Telegraph Creek, population 450, a historic village 98 kilometres to the southwest. The 155 kilometre, two wheel drive private haul road to the Golden Bear mine joins the Dease Lake-Telegraph Creek road. There is also an airstrip that can accommodate fixed wing aircraft at the Golden Bear mine. In early 2006, the Golden Bear mine road was still active but may not presently be in service. Atlin, population 450, is 160 kilometres north of the property and is accessed via Highway 7, also referred to as the Atlin Road. Atlin is a government centre and supply and service point for fuel, groceries, accommodation, etc. There are charter flights to Dease Lake, Telegraph Creek and Atlin.

5 PHYSIOGRAPHY

The Tatsamenie property consists of steep, mountainous terrain. Topography consists of steeply sloped bluffs incised by numerous streams and creeks. Elevations range from 800 metres in the northern part of the claim where it borders Tatsamenie Lake, to glaciers in the south and southwest part at 2360 metres elevation. Most of the property is above treeline except in the northern portion where it is wooded along the slopes down to Tatsamenie Lake. The property is located in the Northern and Central Plateaus and Mountains climatic zone. This region of northwestern British Columbia has much colder winters and cooler summers. In Dease Lake, for example, the average maximum temperature in January is minus 13°C and in July is 19°C. Precipitation, though quite light, is distributed evenly throughout the year. Higher elevations get heavy snowfall in the winter.

6 HISTORY

Pertinent exploration history is documented from 1959 to the present and summarized according to years worked. Mineralization that was the focus of historical work on the now lapsed Nie 1-4, Tut and Ram claims staked by Chevron in the early 1980's is now found within the boundaries of Nakina Resources' "The Tatsam Claim", Tatsam Lake 2 and LCZ claims. Chevron's lapsed Misty, Sam and Pole claims occur adjacent to the east of Nakina's Tatsamenie Project area (Figures 3 and 6). The history of Chevron's Ram-Tut area is defined separately from that of Chevron's Nie area as they were historically explored as separate claim groups. In general, the old Ram-Tut group was just over 2 kilometres to the southwest of the Nie group. The relationship of the old claims can be seen on Figure 4 which is derived from Zuran (1994).

The Oro and Tan showings were recently added to the Tatsamenie property's southern area (and south of the Golden Bear mine) by staking in 2007. The Oro was originally staked in 1983 and transferred to Sage Resources Ltd. later in the year. Work by Sage in 1984 included reconnaissance geological mapping, soil and rock sampling, and VLF-EM surveying. A program of mapping and sampling was conducted by Sage in 1986. The Tan group was staked by Chevron Minerals in 1983 adjacent the Oro claims and just south of Bearskin Lake. Chevron conducted a soil and rock sampling program on the Tan Group in 1983 and a soil sampling and VLF survey in 1985.

The Thor claims were staked in 1982 and 1983 by Chevron Canada in the area immediately south of the Ram-Tut group. Chevron conducted a rock sampling and trenching program in 1983. In 1985, Chevron collected 453 soil samples and reported poor results.

6.1 1 NIE-MISTY HISTORY

1959 Regional stream sediment geochemical and water sampling conducted by Kennco Explorations Ltd. The program targeted copper-molybdenum porphyry-type mineralization.

1981 Staking of Misty 1, 2; Nie 1, 2; Pole and Sam 1, 2 by Chevron Canada Resources Ltd.

1982 Misty and Nie claims: reconnaissance contour soil and rock sampling and prospecting at 1:10,000 scale (37 rocks, 76 soils). Sam and Pole claims: rock, soil and silt sampling, and prospecting at 1:10,000 scale.

1983 Misty and Nie claims: reconnaissance rock and soil sampling, and geologic mapping at 1:10,000 scale. Detailed rock sampling on ridge west of Shoulder Vein (103 rocks, 20 soils) was carried out. Pole and Sam 2 work included geophysics (VLF-EM and magnetometer).

1984 Misty and Nie claims: grid soil sampling, trenching, geophysics, and geologic mapping. "Nie Grid" established (68.2 kilometres covering Nie 3 and 4 as well). One trench (DS-337) 14.6 metres long was blasted on ridge exposing the Nie (2 Oz Notch) mineral occurrence. VLF-EM and magnetic surveying on grid were carried out. Geologic mapping at 1:10,000 scale was conducted.

1985 Misty claims: reconnaissance rock and contour soil sampling completed. Confirmation of previous anomalies (109 soils, 31 rocks) done. Sam 1 work included reconnaissance rock sampling (6 rocks).

1987 Misty and Nie claims work included: diamond drilling, geophysics, detailed geologic mapping and sampling. The West Wall fault was targeted every 200 metres with 30 drill holes (including one on Nie 3); 940 drill core samples, 15 overburden samples. Geophysics included 15.7 kilometres of VLF-EM. Detailed geologic mapping at 1:2000 scale was done in two blocks: 250 x 600 metres and 250 x 1600 metres. Sam 1 work included: geologic mapping at 1:5000 scale on orthophotos. Rock and silt sampling (12 rock, 4 silt). The work was conducted by the Chevron-Dia Met Joint Venture.

1988 Shannon Energy Ltd. entered into Chevron-Dia Met Joint Venture - some field work done by Stetson Resource Management Corporation but no reports are available.

1990 In 1990, Homestake Mineral Development Company, under contract to North American Metals Corp., performed: reconnaissance mapping and sampling on the Misty and Nie claims under an option agreement with Chevron to earn 50 per cent interest in the property. The Shoulder Vein and Honk occurrence were discovered and Spire (Nie 3) showings were explored.

1991 Work was completed on Misty and Nie claims by Homestake Mineral Development Company under contract to North American Metals Corp. under an option agreement with Chevron Canada Resources Ltd. Geophysics included 6.9 line kilometres of VLF-EM and magnetometer surveys. Detailed geologic mapping around the Shoulder Vein and 2 Oz Notch (1:2000) was done and the northwest corner of the Nie 3 claim was mapped at 1:10,000 scale. Five of the 1987 diamond-drill holes in the

2 Oz Notch (Nie) zone were re-logged. Seventy-two silt samples, 361 soil samples and 182 rock samples were collected from the property for analysis. The Honk (Ultramafic Vein showing) was trenched using a high pressure water pump. Sixty-five metres in 8 trenches were reported excavated on the property.

1992 Sam claims: A new grid established over 1982 grid with mine grid coordinates. Soil sampling on grid occurred. Geologists John Bradford and Derek Brown of the provincial Geological Survey Branch mapped the area at a 1:50,000 scale and discovered new showings such as the Barron.

1994 The owner/operator is North American Metals Corp. Activities during the 1994 exploration on the Misty-Nie-Sam Property which encompasses much of the eastern portion of the present Tatsamenie property included: establishing mine grid survey control stations, establishing the Backbone and Shoulder grids, grid and reconnaissance soil sampling, rock sampling, grid geophysics, 1:5000 scale geologic mapping, and prospecting. Eight mine grid survey stations were established on the property.

Grid soil sampling was done on the Backbone and Shoulder grids at 25 metre intervals along lines spaced every 100 metres. Stations between pickets were located by compass bearing and hip chain. Soil sampling on the Backbone grid was incomplete due to snow cover. Soil sampling on the Shoulder grid was selective. Reconnaissance-style contour soil sampling includes lines S-I to S-7.

Geophysics comprising a magnetometer and VLF-EM survey was conducted on the Backbone and Shoulder grids. A total of 19.0 line kilometres of each survey were completed.

Geologic mapping at 1:5000 scale was conducted on and around the Backbone and Shoulder grids covering an area of approximately 3.5 square kilometres. Detailed mapping at 1:500 scale was conducted on the Patella Vein.

2005 On September 21st, 2005 Garry Payie, P.Geo., along with two assistants, flew via helicopter onto the Tatsamenie Project property of Nakina Resources Inc. from Atlin, B.C. Sampling and geological examination was conducted in the area of the Nie and Honk showings.

6.2 RAM-TUT HISTORY

1981 The Ram-Tut-Tot property was first staked in 1981 by Chevron Minerals Ltd. The Tut 1-4 claims covered an area of anomalous silt geochemistry discovered during a reconnaissance program south of the east end of Tatsamenie Lake.

1982 Chevron completed a program of mapping and rock sampling on the property in 1982, when 16 rocks and 96 soils were collected; the previous year 68 rocks and 237 soils were taken (Shannon 1982, Brown and Shannon, 1982).

1983 A more thorough program of detailed geological mapping, rock and soil sampling, and minor trenching was conducted (Brown and Walton, 1983). The property was expanded in 1983 with the addition of the Tot 1-4 claims on the north side of Tatsamenie Lake but do not cover the area of present interest south of the lake in the Ram-Tut area. The Snow 1-6, adjacent to the east the Ram-Tut claims, were staked by Chevron and 207 soils and 24 rock samples were collected (Thicke and Shannon, 1983).

1984 Further trenching and sampling was completed by Chevron Canada with 294 rock chip samples taken (Bruaset, 1984).

1985 A student from the University of British Columbia completed a study of the albitized unit on the Tut claims (Hewgill, 1985a,b).

1987 In 1987, Chevron conducted a 674 metre diamond drill program to test the silicified limestone contact mineralization on the Ram-Tut claims, and a narrow shear zone on the Tot 4 claim (Walton et al., 1987, Walton, 1987). A total of 434.65 metres in 3 NQ drill holes were drilled on the Tut claims. The Ying claim was staked in 1987 to hold tenure in the area of the Tatsamenie Lake Base Camp.

1988 The Ram claim was optioned to Shannon Energy Ltd., and on behalf of Shannon Energy, Stetson Resource Management Corp. carried out an exploration program in 1988. Seven heavy mineral stream sediment samples were taken and geological mapping was conducted. Anomalous gold concentrations were obtained from one of the heavy mineral samples.

1989 The Ram Baa claim was staked.

1990 Chevron and Armeno Resources Inc. entered into an option agreement. Between July and September 1990, Armeno drilled 437.78 metres in four BQ diamond- drill holes to further evaluate the silicified limestone mineralization on the Tut claims (Allen, 1990). Further work included an 11.6 kilometre VLF-EM survey, a 7.2 kilometre ground magnetics survey and the collection of 35 silt, 110 soil and 30 rock samples.

1992 North American Metals Corp. (NAMC) acquired 100% interest in the property, as part of the Asset Sale Agreement between Chevron and NAMC, prior to the 1992 field season. Homestake Canada Ltd. was contracted by NAMC to carry out the 1992 exploration program during which several known zones were re-evaluated and several new showings were discovered and evaluated (Howe and Reddy, 1993). In 1992, 184 rock and 185 soil samples were collected for analysis. Geologists John Bradford and Derek Brown of the provincial Geological Survey Branch mapped the area at a 1:50,000 scale.

1994 In 1994, work on the Tut claims consisted of soil sampling, rock chip sampling and limited geological mapping at a scale of 1:10,000 by owner/operator, North American Metals Corp. (Hamilton, 1994). A total of 19 soil samples and 45 rock

samples were collected from the Tut claims. The work was not applied for assessment. The Ram Baa 4 claim was added in 1994 to cover a fraction between the Tot 4 and Ram Baa claims.

7 GEOLOGICAL SETTING

The following regional setting and the Tatsamenie Property is derived in whole or in part from (Mihalynuk *et al.,* 1994a, b; 1995a, b).

7.1 REGIONAL GEOLOGY

Four major building blocks constitute the terrane superstructure of northwestern British Columbia: a western block of polydeformed, metamorphosed Proterozoic to middle Paleozoic pericontinental rocks (Nisling Assemblage**)**; an eastern block of exotic oceanic crustal and low-latitude marine strata (Cache Creek Terrane); central blocks including Paleozoic Stikine Assemblage and Triassic arc-volcanic and flanking sedimentary rocks of Stikine Terrane; and overlying Late Triassic to Middle Jurassic arc-derived strata of the Whitehorse Trough (including the Inklin overlap assemblage)**.** Mesozoic rocks dominate the region, consisting of arc-flanking strata of the Whitehorse Trough: parts of the Upper Triassic Stuhini Group and the Lower to Middle Jurassic Laberge Group. These are overlain by Tertiary continental arc volcanic rocks of the Sloko Group which are intruded by partly comagmatic Coast Plutonic Complex plutons. The Stikine Assemblage is restricted mainly to the south and western margins of the region, but probably extends beneath much of the Mesozoic and Tertiary cover. On the northern and southern edges of the area, the geology is influenced by two major crustal structures. Eastern splays of the transcurrent Llewellyn fault system juxtapose ductilely deformed Paleozoic rocks with Mesozoic rocks between Sittakanay River and Stuhini Creek. To the north, southwest-verging frontal thrusts of the King Salmon fault system interleave Jurassic and Triassic Whitehorse Trough strata. Second order normal, or high-angle reverse faults, juxtapose Tertiary volcanics with Mesozoic and Paleozoic rocks. Deformation generally increases in intensity with age.

7.2 PROPERTY GEOLOGY

This section discusses the geology of 1) the entire Tatsamenie claim group, which stretches about 37 kilometres in a northeast-southwest direction, varying up to 18 kilometres in width; and 2) the Tatsamenie prospect, a mineralized region west of Mount Lester Jones between 10 and 16 square kilometres in area. The recent mapping (Mihalynuk *et al.,* 1994a, b; 1995a, b) and subsequent recompilation of data by the provincial geological survey (Massey *et al*.) has resulted in the reassignment of much of the strata beneath the Tatsamenie claim group as shown in Figure 4 and more specifically of that strata beneath the Tatsamenie prospect from Stuhini Group to Laberge Group. However, property scale mapping in the area of the prospect indicates a more complex stratigraphy and further detailed mapping is needed to determine formational assignments.

In general, the stratigraphy underlying the Tatsamenie claim is dominated by northwest trending belts of the Upper Triassic Stuhini Group and the Lower to Middle Jurassic Laberge Group. The upper contact of the Stuhini rocks with the Laberge Group is exposed on the southeast flank of Mount Lester Jones but is thought to be disconformable. Both groups have been subdivided into several regionally mappable units in the claim area. Stuhini rocks by unit consist of: argillite, greywacke, wacke, and conglomerate turbidites (uTrSst); basaltic volcanic rocks (uTrSvb); conglomerate and coarse clastic sedimentary rocks (uTrScg); limestone, marble and calcareous sedimentary rocks (uTrSlm); undivided sedimentary rocks (uTrSs); undivided volcanic rocks (uTrSv); and volcaniclastic rocks (uTrSvc). The three designated Laberge units form part of the Takwahoni Formation and consist of andesitic volcanic rocks (lJLTva); argillite, greywacke, wacke and conglomerate turbidites and; (lJLTst), conglomerate and coarse clastic sedimentary rocks (lJLTcg). Laberge and Stuhini rocks are overlain by Tertiary continental arc volcanic rocks of the Sloko Group. On the claim group, these are largely restricted to the extreme north and south regions and to an area between Tatsamenie and Zohini creeks. Rock types include coarse volcaniclastic and pyroclastic volcanic rocks (ESvl); conglomerate and coarse clastic sedimentary rocks (EScg); and rhyolite and felsic volcanic rocks (ESvf). Rocks of the Stikine Assemblage are restricted mainly to a small area to the east of Mount Stapler on the western edge of the claim block.

Plutons and stocks of the Paleocene to Eocene Sloko-Hyder Plutonic Suite (PeEShqp, PeEShgr) are spatially associated with and probably comagmatic with Sloko Group volcanics. The suite consists of east-west elongated, high-level, multiphase plutons and stocks. In outcrop, these intrusions weather white, light grey, tan, pink or orange. They are compositionally and texturally variable, ranging from fine to medium grained quartz-feldspar porphyritic monzonite and diorite to granite with as much as 15 per cent biotite, magnetite, and/or hornblende. The polyphase porphyry intrusions (LKWqd) in the Tatsamenie Creek area and to the southeast were thought to be part of the Sloko-Hyder Suite until recent age dating revealed them to be Late Cretaceous resulting in their reassignment to the Windy Table Complex.

Davis and Jamieson (1999) describe the Tatsamenie prospect area as being underlain by volcanic flows, pyroclastic rock units, and sedimentary rocks. Volcanic rock units consist of rhyolitic(?) to basaltic flows, volcanic breccia, agglomerate, tuffs, and minor volcanic sandstone. The volcanic units are underlain by sedimentary rock units consisting of thick-bedded, dark greywacke, conglomerate, mudstone, siltstone, and shale with minor volcanic flows, tuffs, breccia, limy shale, and limestone. Laberge Group sediments are reported along the southern margin of the prospect area and are composed of conglomerate, sandstone, shale, and greywacke. Hornblende-biotite granodiorite stocks and associated feldspar porphyry dikes intrude the strata. In the prospect area, these intrusive rocks consist of light grey, medium crystalline granodiorite and a darker grey diorite or quartz diorite.

Later petrographic analysis of rock mapped in the field as rhyolite indicated that they were in fact a bleached and silicified intermediate rock (Bergvinson, E., personal communication, 2007). This fact must be kept in mind with respect to those sections of this report that refer to rhyolite as part of the mineralized package.

There are three main structural components in the Tatsamenie prospect area (Appendix E). The most pronounced of these is an east-northeast trending fault, located in the northern part of the claims in Fault Creek. The second major structure strikes in a northeast direction and runs through the core of the porphyry intrusion. The third structure cuts the northeast part of the claims. A system of east-west and northeast-southwest faults and fractures form the basic fabric of the area. According to Davis and Jamieson (1999), the presence of these structures controlled subsequent development of stockworks within the porphyry system and appears to have influenced the distribution of the associated mineralization.

7.2.1 Deposit Types

Significant known mineralization on the Tatsamenie Property and nearby in areas of similar geological setting represent key deposit types that are targets for exploration (Figure 3). These include: porphyry molybdenum, porphyry copper, skarn, vein related and possibly volcanogenic massive sulphide (VMS). It is likely that other types of mineralization have not yet been recognized in this region and cannot be overlooked in the search for new systems.

7.2.1.1 Volcanogenic Massive Sulphide (VMS)

Kuroko-type volcanogenic massive sulphide deposits occur in the region and include the Tulsequah Chief and Big Bull ore bodies, located within 12 kilometres of the western boundary of the Tatsamenie block. The Tulsequah Chief deposit occurs at the base of a Mississippian package of the Stikine Assemblage consisting of a rhyolite-dominated sequence of volcanic flows and fragmental units. A small area of Stikine Assemblage rocks occurs along the northwest edge of the Tatsamenie Property, though regional mapping indicates primarily clastic and basaltic rocks rather than the desired felsic rocks. However, Rayner (1983) reports that in the vicinity of the Tatsamenie porphyry system, rhyolites and acidic pyroclastics make up large portions of the upper part of the volcanic section. He further states that “within these upper acid rocks are lenses and horizons of massive sulphides”. In 1982, a drillhole intersected a 2.15 metre section of “conformable” massive sulphide material, hosted in rhyolite, consisting mainly of pyrrhotite with pyrite and minor chalcopyrite and traces of sphalerite. Wilkins and MacKinnon (1989) imply that the material is probably part of an extremely sulphide-rich vein and more investigation is needed.

7.2.1.2 Skarn

The Ericksen-Ashby massive sulphide deposit, about 10 kilometres west of the Tatsamenie claims, has been described as a VMS deposit with a skarn overprint. More

recent evidence (Mihalynuk *et al.,* 1996) has pointed to it being a lead-zinc skarn. Mineralization occurs within at least thirteen different zones enclosed in upper Paleozoic volcano-sedimentary strata of the Stikine Assemblage. Sulphides are mostly a mixture of pyrrhotite, sphalerite, pyrite and galena. Assemblages range from massive pyrrhotite or pyrite with up to 25 per cent sphalerite and galena to massive sphalerite or sphalerite and galena in equal proportions. Potential for other skarns of different types to occur on the Tatsamenie Property is likely and could occur in a variety of host strata that occur on the property. In particular, limestones and calcareous sediments occur throughout the claims as to do various intrusive types.

7.2.1.3 Porphyry

Porphyry molybdenum mineralization is documented at the Mt. Ogden and Moly Taku (Y zone) occurrences about 24 kilometres southwest of the Tatsamenie claim block. Carboniferous to Permian rocks of the Stikine Assemblage are intruded by a Cretaceous granitic stock exposed in nine locations on Mount Ogden. The mineralized stock is a light coloured, fine-grained alaskite with quartz and feldspar phenocrysts. The mineralized stock at Mt. Ogden is part of same Windy Table Complex that is the source of the mineralized system at the Tatsamenie prospect. The Tatsamenie prospect has a striking gossanous alteration zone developed within the country rock and a polyphase porphyry intrusion related to the Late Cretaceous Windy Table Complex. A propylitic alteration zone extends well into the clastic country rocks, overprinted by biotite, localized bleaching and argillic alteration within the gossanous cap. Soil geochemistry across the altered zone yielding copper, molybdenum and silver indicate its porphyry copper potential. Mineralization at the Icefall showing found in 1993 just northwest of the claim block is suggestive of a high-level porphyry system involving rocks of Sloko age (Mihalynuk *et al.,* 1994a). Porphyry potential throughout the Tatsamenie Property is significant and not necessarily restricted to any one package or intrusive event.

7.2.1.4 Vein Related

Quartz-massive sulphide veins up to 2.5 metres wide are reported at the Tatsamenie prospect mineralized system. The veins occur within gossanous, limonitic quartz, sericite, clay and chlorite altered felsic and intermediate volcanics and agglomerates. Sulphides include arsenopyrite, sphalerite, pyrrhotite, galena, chalcopyrite and pyrite. The best precious metal showing from 1988 was from the RV showing which consisted of 128.6 grams per tonne silver, 34.99 grams per tonne gold and 9.33 per cent zinc over 90 centimetres of vein width (Wilkins and MacKinnon,1989).

The presence of a silica cap on the Tatsamenie Property may indicate that a late-staged high-sulphidation epithermal gold system has overprinted the porphyry mineralization. Such a silica cap may overlie feeder veins, which may contain economically significant precious metals.

Other significant vein occurrences near the Tatsamenie Property include the Zohini auriferous antimonial shear-hosted veins within Sloko Group volcanics; auriferous arsenical porphyry-hosted veins at the Go showing hosted by quartz monzonite; magnetite-chalcopyrite veins as at Oksarah that contain silver; tetrahedrite-chalcopyrite-sphalerite veins at Lisadelle; and galena-chalcopyrite-sphalerite veins at Blackfly.

Mineralized vein systems may occur peripherally to virtually all types of porphyry mineralization and some skarns, or as feeder systems in VMS deposits. As such they can be key exploration indicators of more significant deposits.

7.2.2 Mineralization

A variety of potential deposit types occur on the Tatsamenie Property. These include an upper level porphyry system with stockworks, sheeted veins, massive sulphides (volcanogenic?) and a possible epithermal system. Most of this section describing Tatsamenie mineralization and its various zones is derived from Wilkins and MacKinnon (1989); Appendix D, a figure also from this source, indicates the locations of all zones and showings referred to in this section. Table 2 highlights some of the best assays from various zones taken mostly in 1988. Provincial MINFILE documentation of the Tatsamenie prospect (104K 010 and 085) provides only cursory and overlapping descriptions and inaccurate locations.

Most of the work on the Tatsamenie Property has focused in the area east of Tatsamenie Lake known as the **Slope zone**, presumed to represent the core of a high-level porphyry copper-molybdenum system. The Slope zone is located just above the **Silica Cap zone** in elevation and just below the **Ridge** zone. The area is poorly exposed and contains a substantial molybdenum in-soil anomalous zone. The Slope zone was tested in 1981 by 5 drillholes (holes 81-3 to 7) and 6 six short vertical x-ray drillholes in 1971. Results are described in Section 11 (Drilling).

Table 2. Best Assays from Mineralized Showings*

Showing or Sample #	**Gold (g/t)**	**Silver (g/t)**	**Copper (%)**	**Lead (%)**	**Zinc (%)**	**Arsenic(%)**
Ridge	12.76	185.6	1.71	2.70	5.65	13.76
Ridge Ext.	20.79	366.7		9.85	1.40	17.54
North Face	4.73	127.6			4.98	14.72
Bergie	28.81	419.8	1.65	1.18	2.07	25.84
RV	34.99	128.6			9.33	3.89
Berg (X-Berg)	8.44	359.5		1.01	1.23	35.34
PF~	30.53	520.3	1.05	7.00	4.59	25.27
Goat	18.59	105.0		1.75	1.31	26.42
Abandon	3.88	1390.2		6.53	3.71	0.71

Couloir	7.68	63.8	0.26		2.64	11.31
LJ	8.29	419.3	0.47		1.54	
4F12	2.47	463.7				
4R12	16.50	56.6		3.84		10.25
4R45	16.26	44.6				27.16

*Wilkins and MacKinnon (1989) ˜Davis and Jamieson, (1999)

Peripheral to the main granodiorite intrusion, extensive zones of hornfelsing are accompanied by hydrothermal alteration and stockwork veining. In the **Slope Zone**, sheeted to stockwork quartz veining is intense, extending southwest through the Copper and Moly creeks areas. Pyrite is the most common sulphide present, occurring as fine disseminations and as fracture fillings with or without quartz. In the Slope zone, chalcopyrite is noted to be common in areas associated with intense quartz flooding. Molybdenite is widely distributed in narrow quartz veinlets. Although masked on surface by oxidation, potassic alteration characterizes the core of the porphyry system as evidenced by the presence of secondary biotite and k-feldspar along with accompanying silica and tourmaline. Pyrite and chlorite at the margins of the intrusion indicate a propylitic alteration halo.

The **Ridge**, **Ridge Extension** and **North Face** zones occur to the northeast of the **Slope zone** and are characterized by more felsic volcanic rocks, lapilli tuffs and agglomerates than granodiorite. Mineralization consists of vuggy, sheeted, euhedral quartz-sulphide veins up to 15 centimetres wide which strike in east and northeast directions and are associated with very gossanous quartz-carbonate-pyrite alteration zones which trend northeast. Sulphides include pyrite, arsenopyrite, pyrrhotite, chalcopyrite, sphalerite and galena. Drilling in 1982 on the Ridge zone intersected 2.15 metres of massive sulphide mineralization that assayed 96.04 grams per tonne silver and 1.84 per cent copper (Rayner, 1983). This massive sulphide has been interpreted as both a conformable deposit of possible volcanogenic origin and as a vein. Rayner (1983) plots the drillhole just above the Bergie showing of the East Cirque zone but Wilkins and MacKinnon (1989) show the drillhole at the Ridge zone to the east (Appendix D).

The **RV**, **PF**, **Bergie**, **X-Berg (Berg)**, **Goat** and **LJ** showings are all part of the **East Cirque zone** and consist of quartz-massive sulphide veins up to 2.5 metres wide. The veins occur within gossanous, limonitic quartz, sericite, clay and chlorite altered felsic and intermediate volcanics and agglomerates. Sulphides include arsenopyrite, sphalerite, pyrrhotite, galena, chalcopyrite and pyrite. The veins strike in a northeast-southwest and an east-west direction. The best precious metal showing from 1988 was from the RV showing which yielded 128.6 grams per tonne silver, 34.99 grams per tonne gold and 9.33 per cent zinc over 90 centimetres of vein width. In 1998, a twelve-hole diamond drilling program was designed to test the LJ, RV, Bergie, and X-Berg showings (Davis and Jamieson, 1999). Gold and silver mineralization was intersected in holes LJ-98-5B and RV-98-10. In hole LJ-98-5B, 3 metres grading 3.7 grams per tonne gold and 26.0 grams per tonne silver were intersected.

In RV-98-10, there were two intersections of note: 7.15 metres grading 12.05 grams per tonne gold and 49.50 grams per tonne silver; and a second adjacent 4.73 metre interval grading 2.50 grams per tonne gold and 18.37 grams per tonne silver.

The **Slope**, **Ridge** and **East Cirque zones** are considered by Wilkins and MacKinnon (1989) to be part of one large porphyry system with the Slope representing the stockwork and sheeted vein-hosted copper and molybdenum mineralized core. The Ridge and East Cirque zones to the northeast and possibly Moly and Copper creeks to the southwest may represent structurally controlled conduits for sulphide bearing hydrothermal solutions. These are characterized by massive sulphide veins up to 2 metres in size with associated precious metals. Gold and silver mineralization occurs throughout the system with higher grades concentrated away from the copper-molybdenum core.

The **Silica Cap zone** was identified by Wahl (1982) and is found to the southwest of the Slope zone along the lower reaches of Copper and Moly creeks (Figure 5 and Appendix E). The Silica Cap zone has been considered to represent a high temperature skarn feature by virtue of characteristic alteration mineralogy of: silica, actinolite, epidote, garnet, magnetite, tourmaline, and pyrrhotite, plus sulphides of molybdenum and arsenic. Samples collected by Wahl were anomalous for gold and strongly anomalous in silver. The highest value from a rock sample taken from a broken quartz-copper, lead, zinc molybdenum vein in the Moly Creek shear, was 16.55 grams per tonne gold and 214.5 grams per tonne silver. Davis and Jamieson, (1999) suggest that the presence of a silica cap on the property would indicate that a late-staged epithermal gold system may have overprinted porphyry mineralization once the intrusion had been unroofed by erosion.

The **Roof Top zone** is reported to lie at a higher elevation than the **Slope zone**, which is intermediate between the Roof Top and the **Silica Cap zone** (Wahl 1997). The Roof Top was considered to represent the carapace of intruded volcanic stratigraphy. The zone is reported to contain numerous gold-silver quartz-massive sulphide vein showings within pyritic quartz, sericite, chlorite and clay altered volcanic rock. The author has not seen a plotted location of the Roof Top zone and it is likely that the term represents the same area as the Ridge, Ridge Extension and/or North Face zones.

Other significant discoveries include the **Abandon** showing which occurs at the intersection of two major faults. The showing consists of a breccia zone with argillaceous and intermediate to mafic volcanic fragments with a quartz-carbonate-sulphide-graphite matrix. Sulphides include galena, sphalerite and arsenopyrite. A grab sample from this showing yielded 1390.2 grams per tonne silver and contained the best silver values found to 1988.

The **Couloir** showing occurs along a major structure close to the contact of two volcanic packages. It consists of a 30 centimetre wide pod or vein of massive pyrrhotite, chalcocite, sphalerite and arsenopyrite in felsic volcanics and in close association with limestone.

Other small mineralized veins less than or equal to 10 centimetres in width occur throughout the Tatsamenie prospect area.

Tatsamenie II (MINFILE 104K 060)

Graphite is reported to occur on the top of a ridge about 1.6 kilometres northwest of Mount Lester Jones. Samples weighing more than 0.5 kilogram were collected and were described as high-grade graphite with a somewhat sheared texture. The graphite is thought to be fissure vein-type material. No coal or carbon, from which graphite might be formed, has been reported in the strata. Rocks in the area are mapped as andesitic volcanic rocks of the Laberge Group and sediments of the Stuhini Group.

8 INDUCED POLARIZATION AND RESISTIVITY SURVEYS – 3D INVERSION

The IP and resistivity surveys were carried out on the Extension Grid in previous years, 2008 and 2010, and the data reduction and interpretation included 2D inversion. This year's work has taken the same data and interpreted it with 3D inversion software. However, for background purposes, the writer has included descriptions of the instrumentation and survey procedure.

8.1 INSTRUMENTATION

The transmitter used was a BRGM model VIP 4000. It was powered by a Honda 6.5 kW motor generator. The receiver used was a six-channel BRGM model Elrec-6. This is state-of the-art equipment, with software-controlled functions, programmable through a keyboard located on the front of the instrument. It can measure up to 6 chargeability windows and store up to 2,500 measurements within the internal memory.

8.2 THEORY

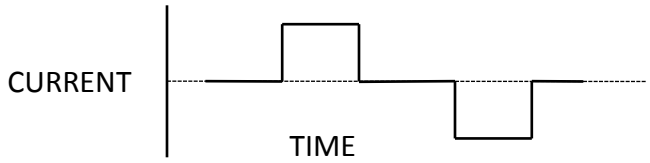
When a voltage is applied to the ground, electrical current flows, mainly in the electrolyte-filled capillaries within the rock. If the capillaries also contain certain mineral particles that transport current by electrons (mostly sulphides, some oxides and graphite), then the ionic charges build up at the particle-electrolyte interface, positive ones where the current enters the particle and negative ones where it leaves. This accumulation of charge creates a voltage that tends to oppose the current flow across the interface. When the current is switched off, the created voltage slowly decreases as the accumulated ions diffuse back into the electrolyte. This type of induced polarization phenomena is known as electrode polarization.

A similar effect occurs if clay particles are present in the conducting medium. Charged clay particles attract oppositely-charged ions from the surrounding electrolyte; when the current stops, the ions slowly diffuse back to their equilibrium state. This process is known as membrane polarization and gives rise to induced polarization effects even in the absence of metallic-type conductors.

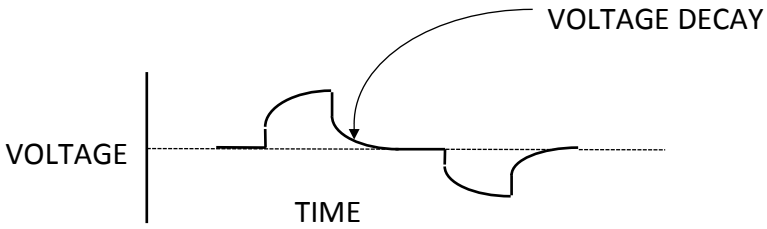
Most IP surveys are carried out by taking measurements in the "time-domain" or the "frequency-domain".

Time-domain measurements involve sampling the waveform at intervals after the current is switched off, to derive a dimensionless parameter, the chargeability "M", which is a measure of the strength of the induced polarization effect. Measurements in the frequency domain are based on the fact that the resistance produced at the electrolyte-charged particle interface decreases with increasing frequency. The difference between apparent resistivity readings at a high and low frequency is expressed as the percentage frequency effect, or "PFE".

The quantity, apparent resistivity, ρ_a , computed from electrical survey results is only the true earth resistivity in a homogenous sub-surface. When vertical (and lateral) variations in electrical properties occur, as they almost always will, the apparent resistivity will be influenced by the various layers, depending on their depth relative to the electrode spacing. A single reading, therefore, cannot be attributed to a particular depth.



TRANSMITTED WAVEFORM



RECORDED VOLTAGE

The ability of the ground to transmit electricity is, in the absence of metallic-type conductors, almost completely dependent on the volume, nature and content of the pore space. Empirical relationships can be derived linking the formation resistivity to the pore water resistivity, as a function of porosity. Such a formula is Archie's Law, which states (assuming complete saturation) in clean formations:

$$R_o = O^{-2} R_w$$

Where: R_o is formation resistivity

R_w is pore water resistivity

O is porosity

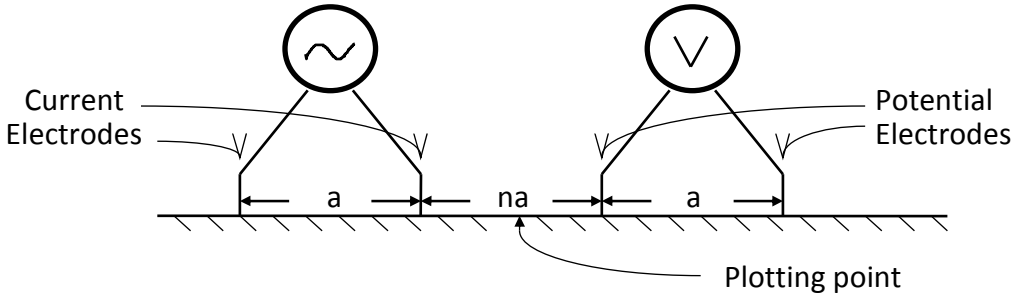
8.3 SURVEY PROCEDURE

Seven IP/resistivity survey lines were carried out as shown on the plan map. Grid emplacement was put in as the survey was being carried out. The seven lines were emplaced in order to survey the maximum area

The IP and resistivity measurements were taken in the time-domain mode using an 8-second square wave charge cycle (2-seconds positive charge, 2-seconds off, 2-seconds negative charge, 2-seconds off). The delay time used after the charge shuts off was 80 milliseconds and the integration time used was 1,760 milliseconds divided into 10 windows.

The array chosen was the dipole-dipole, shown as follows:

DIPOLE-DIPOLE ARRAY



The lines run in a due northeast direction (45ºE) and are 100 meters apart. The electrode separation, or 'a' spacing, and reading interval was chosen to be 30 meters read to 12 separations, which is the 'na' in the above diagram, for all three lines. The 12 separations give a theoretical depth penetration of about 200 meters, or 650 feet.

Stainless steel stakes were used for current electrodes as well as for the potential electrodes.

The surveying was done on the following lines in the order as shown and to the following lengths.

LINE NUMBER	SURVEY STATIONS	SURVEY LENGTH	PSEUDOSECTION MAP #	2D INVERSION MAP #
60200N	51	1,275	5	12
60300N	51	1,275	6	13
60400N	55	1,375	7	14
60500N	64	1,600	8	15
60600N	63	1,575	9	16
60700N	69	1,775	10	17
60800N	42	1,050	11	18

The total amount of IP and resistivity surveying carried out was 9,875 meters.

The maps shown in the above table are not included within this report but are found in the writer's previous reports.

8.4 COMPILATION OF DATA

All the data were reduced by a computer software program developed by Geosoft Inc. of Toronto, Ontario. Parts of this program have been modified by Geotronics Surveys Inc. for its own applications. The computerized data reduction included the resistivity calculations, pseudosection plotting, survey plan plotting and contouring.

The chargeability (IP) values are read directly from the instrument and no data processing is therefore required prior to plotting. However, the data is edited for errors and for reliability. The reliability is usually dependent on the strength of the signal, which weakens at greater dipole separations. In the case of this survey, many of the values at greater dipole separations and therefore at greater depths, had to be edited out because of weak signals due to the very low resistivity values.

The resistivity values are derived from current and voltage readings taken in the field. These values are combined with the geometrical factor appropriate for the dipole-dipole array to compute the apparent resistivity. The resistivity data were relatively reliable to the 12 separations.

All the data have been plotted in pseudosection form with one map being plotted for each of the 7 pseudosections, as shown on the above but are not included within this report. The pseudosection is formed by each value being plotted at a point formed from the intersection of a line drawn from the mid-point of each of the two dipoles. The result of this method of plotting is that the farther the dipoles are separated, the deeper the reading is plotted. The resistivity pseudosection is plotted on the upper part of the map for each of the lines, and the chargeability pseudosection is plotted on the lower part.

All pseudosections were contoured at an interval of 0.5 milliseconds for the chargeability results, and at a logarithmic interval to the base 10 for the resistivity results.

8.5 2-D INVERSION INTERPRETATION

A 2-D inversion interpretation was carried out on the IP and resistivity data using computer software produced by Geotomo Software. This purpose of inversion interpretation is to eliminate the electrode effect that is endemic with IP and resistivity data and thus locate the causative sources more accurately. The Geotomo inversion is a rapid method that uses the least squares interpretation. 3-D Inversion Interpretation

A 2-D inversion interpretation by a least squares method using computer software produced by Geotomo Software was carried out on the IP and resistivity data on a line

by line basis. This program uses the smoothness-constrained least-squares method inversion technique. The purpose of inversion interpretation is to eliminate the electrode effect that is endemic with IP and resistivity data and thus locate the causative sources more accurately. These results are displayed

8.6 3-D INVERSION INTERPRETATION

For this report the data was interpreted by 3-D inversion software of the entire survey area also using Geotomo Software. The resulting interpretation was then exported to Geosoft for display purposes. Plan maps were then produced, each one at a different elevation level to depth and at every 25 meters from 1450 meters to 1725 meters resulting in 24 maps, 12 IP plan maps and 12 resistivity plan maps.

Soil geochemistry combination metal highs were plotted on the plan maps as solid lines. These traces were taken from a maps previously produced by the writer in his previous reports.

9 GEOCHEMISTRY

9.1 SAMPLING PROCEDURE

The soil sampling was carried out on the Ophir North Grid, which occurs along the Ophir break just south of Tatsamenie Lake as shown on figures 1, 3, and 6.

The soil sampling was carried out along the 12 lines, 66300N to 67400N, inclusive, with samples dug every 25 meters. The number of samples picked up were 256.

The sampling procedure was to first remove the organic material from the sample site (A_0 layer) and then dig a pit over 25 cm deep with a shovel. Sample material was then scraped from the sides of the pit over the measured depth interval of 10 centimeters to 25 centimeters. About 250 grams of sample material was collected and then placed into a plastic Zip-loc sandwich bag with the sample location marked thereon. The 256 samples were then packaged and sent to SGS Minerals located at 3260 Production Way, Burnaby, British Columbia.

9.2 ANALYTICAL METHODS

At SGS Minerals, the testing procedure begins with weighing 50 grams of the sample into a plastic vial fitted with a screw cap. Next is added 50 ml of the MMI-M solution to the sample, which is then placed in trays and put into a shaker for 20 minutes. (The MMI-M solution is a neutral mixture of reagents that are used to detach loosely bound ions of a 53 different elements from the soil substrate and formulated to keep the ions in solution.) These are allowed to sit overnight and subsequently centrifuged for 10 minutes. The solution is then diluted 20 times for a total dilution factor of 200 times and then transferred into plastic test tubes, which are then analyzed on ICP-MS instruments.

Results from the instruments for the 53 elements are processed automatically, loaded into the LIMS (laboratory information management system which is computer

software used by laboratories) where the quality control parameters are checked before final reporting.

9.3 COMPILATION OF DATA

Six elements were chosen out of the 9 reported on and these were copper, nickel, gold, silver, zinc, and cobalt. The mean background value was calculated for each of the six elements and this number was then divided into the reported value to obtain a figure called the response ratio. A stacked histogram was then made for each of the three lines of samples of the response ratios as shown on figures #4, #5, and #6

10 DISCUSSION OF RESULTS

10.1 EXTENSION GRID

10.2 OPHIR NORTH GRID

As on the Extension Grid, the MMI survey results revealed numerous elements with anomalous results resulting in 14 plan maps being plotted and contoured for most of these and included silver, arsenic, gold, cadmium, cerium, cobalt, copper potassium, molybdenum, nickel, lead and zinc.

The anomalies have been grouped into four anomalies, or anomalous zones, labeled by the upper case letters, ON-A to ON-D, respectively. Three of these have been defined by gold anomalous results, and include anomalies ON-A to ON-C, inclusively; the remaining anomaly, ON-D, has been delineated by zinc anomalous results.

Anomaly ON-A is a gold-silver-copper anomaly with some correlating anomalous values in molybdenum, antimony, and arsenic. It is lineal-shaped striking in north-northeasterly direction. Its minimum strike length is 1,025 meters with it being open both to the north-northeast and south-southwest, and its average width is about 100 meters. The gold up to 50 times background, the silver, 29, and the copper, 30. The correlation with the antimony and arsenic anomalous results is partial with the antimony-arsenic anomaly occurring along the west side of the gold-silver-copper anomaly. The molybdenum is strongest within ON-A with its values being up to 127 times background.

Anomaly ON-B is a gold-silver-copper-molybdenum anomaly that is lineal-shaped and strikes parallel to ON-A, that is, in a north-northeasterly direction. It has a minimum strike length of 500 meters with it being open both to the north-northeast and south-southwest, and its average width is about 125 meters. The gold is up to 42 times background, silver, 24, copper, 17, and molybdenum, 103. There is no correlating anomalous values in arsenic and antimony.

Anomaly ON-C is a gold-silver-copper anomaly occurring at the northwest corner of the grid. Thus its strike and dimensions are unknown. However, it is a strong anomaly with its values being up to 66 times background in gold, 63 in silver, and 24 in copper.

Anomaly ON-D is a strong zinc-cadmium anomaly occurring within the southern part of the grid and over the south-western part of anomalies ON-A and ON-B. The zinc reaches a high of 152 time background, and the cadmium, 60. Anomalous nickel values also correlate with ON-D which could be due to nickel mineralization, or a basic to ultrabasic host rock to the possible zinc-cadmium mineralization. The anomaly appears to be striking easterly and its size appears to be a minimum 500 meters in strike length being open to the east or southeast, by 250 meters in width.

The anomalies are indicative of possible mineralization of economic interest and thus follow-up exploration is warranted. The results are lower than those of the Extension Grid, but the environment, both soil cover and lithology, is different and thus the results will be different and need to be examined with different parameters.

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12 GEOPHYSICIST'S CERTIFICATE

I, DAVID G. MARK, of the City of Surrey, in the Province of British Columbia, do hereby certify that:

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices at 6204 – 125th Street, Surrey, British Columbia.

I further certify that:

1.I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.

2. I have been practicing my profession for the past 45 years, and have been active in the mining industry for the past 48 years.

This report is compiled from data obtained from IP, resistivity, magnetic, and MMI soil sampling surveys over a portion of the Tatsamenie Property from September 20th to October 15th 2012.

I do not hold any interest in Nakina Resources Ltd, nor in the Tatsamenie Property, nor in any other property of Nakina, nor do I expect to be receiving any interest as a result of writing this report.

David G. Mark, P.Geo. October 22, 2013
Geophysicist

13 AFFIDAVIT OF EXPENSES

Grid emplacement, IP, resistivity, and MMI soil sample surveying was carried out over a portion of the Tatsamenie Property, which occurs near Tatsamenie Lake, located 82 km northwest of the village of Telegraph Creek, B.C, from September 20th to October 15th 2012, to the value of the following:

FIELD:		
Mob/demob (Crew wages, truck rental, room and board)	$20,800.00	
Helicopter and Float Plane with fuel	46,358.00	
IP Survey, 6-man crew, 9 days @ $3,600/day	32,400.00	
	7,800.00	
MMI Survey, 2-man crew, 8 days @ $1,050/day	8,400.00	
Atlin Inn	3,000.00	
Helicopter Fuel for cache	1,681.00	
Lumber for camp	1,000.00	
Mag, MMI, and camp set-up, 7-man crew, 1 day @ 3500/day	3,500.00	
Courier costs for sample shipping to Toronto	985.00	
TOTAL	$125,924.0	$125,924.00
LABORATORY:		
Laboratory testing of 663 samples @ $37/sample	$24,531.00	$24,531.00
DATA REDUCTION and REPORT:		
IP, magnetic, and MMI data organizing and reduction	$4,775.00	
Autocad Drafting (Terracad)	4,000.00	
Interpretive Report	4,450.00	
TOTAL	$13,225.00	$13,225.00
GRAND TOTAL		$163,680.00

Respectfully submitted,
Geotronics Consulting Inc.

David G. Mark, P.Geo,
Geophysicist August 20, 2009

14 APPENDIX I –GEOCHEMISTRY DATA

MMI DATA

OPHIR NORTH GRID

Line	Station	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cs	Cu	Dy	Er	Eu	Fe	Ga
66300	55200	<1	17	10	<0.1	1590	<1	450	10	<5	21	<0.5	680	<1	<0.5	<0.5	9	<1
66300	55225	<1	29	20	<0.1	170	<1	340	17	<5	98	<0.5	510	2	2.1	<0.5	139	1
66300	55250	21	19	10	0.3	860	<1	420	10	6	74	<0.5	1160	2	0.9	0.6	19	<1
66300	55275	37	30	<10	0.9	1350	<1	410	16	26	61	0.9	5130	7	3.6	2.6	10	<1
66300	55300	42	55	<10	0.5	960	<1	420	36	14	21	1	6710	7	4	2.5	11	<1
66300	55325	49	20	30	2.5	1320	<1	350	29	14	34	0.8	3430	8	4.2	2.7	11	<1
66300	55350	19	49	70	2.4	2300	<1	390	62	60	30	1.1	3280	24	12.9	8.2	19	<1
66300	55375	22	183	290	0.9	3470	1	100	90	128	600	1.8	830	63	35.7	11.5	246	5
66300	55400	5	>200	120	0.2	1670	1	40	37	92	309	3.1	570	29	17.2	5.7	229	16
66300	55425	17	110	10	0.2	6410	<1	370	65	37	13	2	390	19	11.2	5	23	1
66300	55450	19	154	80	0.4	3170	<1	210	45	95	59	6.1	770	22	11.5	6.1	66	5
66300	55475	24	135	20	1.1	4630	<1	290	107	122	19	2.1	1490	55	31.7	11.5	52	1
66300	55500	110	12	20	1	1980	<1	550	125	<5	42	0.7	6350	3	1.9	0.7	10	<1
66300	55525	57	13	20	0.9	2150	<1	620	204	9	37	2.3	7200	9	5.4	2.9	15	<1
66300	55550	109	13	40	2.1	980	<1	400	137	<5	13	3.9	4250	13	8.8	3	12	<1
66300	55575	40	18	30	0.6	1570	<1	590	324	19	47	3.5	1400	8	5	2.7	17	<1
66300	55600	17	141	50	1	5310	<1	310	81	136	161	1.2	2650	69	38.7	15.5	78	<1
66300	55625	19	134	50	1.2	8060	<1	210	184	103	69	1.1	13200	124	90.7	20.1	142	<1
66300	55650	35	156	80	0.3	2400	<1	220	167	117	127	5.5	1150	24	14.7	6.8	116	2
66300	55675	20	>200	110	0.2	5680	<1	120	398	62	455	1.1	980	52	34	7.6	139	3
66300	55700	18	94	20	0.3	1890	<1	530	26	29	10	3	840	6	2.9	1.7	18	3
66300	55725	7	>200	40	0.3	2420	<1	180	52	127	874	2	1330	61	35.9	11.2	125	2
66300	55750	16	>200	120	0.5	1940	<1	120	21	201	159	21.4	1030	46	25.4	11.2	117	8
66400	55200	9	>200	50	<0.1	1020	2	<10	10	40	120	1.3	400	11	6.4	1.8	155	15
66400	55225	2	67	10	<0.1	220	<1	360	24	7	27	<0.5	310	4	3.5	0.7	37	2
66400	55250	2	18	40	0.1	120	<1	300	48	13	74	0.5	860	8	7	2.1	108	<1
66400	55275	6	61	180	0.7	220	<1	260	111	197	1190	2.4	9480	68	44.6	20.2	157	1
66400	55300	<1	3	90	<0.1	570	<1	210	4	<5	238	<0.5	1040	<1	0.5	<0.5	36	<1
66400	55325	47	11	30	1.2	2620	<1	460	225	<5	251	<0.5	11700	6	4	1.2	10	<1
66400	55350	35	53	20	0.7	3710	<1	550	302	32	41	<0.5	1130	10	6	2.7	71	<1
66400	55375	25	108	190	0.8	5480	<1	320	470	211	197	1	2850	67	43.1	16.8	128	1
66400	55400	57	32	70	0.8	2710	<1	430	306	112	49	5.5	5120	50	29.8	17.2	56	<1
66400	55425	36	108	60	0.7	5430	<1	330	696	100	89	0.9	1920	51	33.4	11.2	130	<1
66400	55450	71	27	70	0.8	2290	<1	540	272	40	50	2.1	7600	21	11.9	6.9	27	<1
66400	55475	21	53	50	0.4	2290	<1	550	418	77	48	1.4	570	23	12.6	7.6	37	<1
66400	55500	31	65	20	0.2	1600	<1	420	549	206	42	4.1	560	35	20.4	12.4	59	1
66400	55525	5	55	40	0.2	3170	<1	420	498	73	156	1.1	860	31	23.3	7.1	114	2
66400	55550	15	74	20	0.2	4890	<1	350	384	31	71	0.6	1210	36	25.4	6.6	163	1
66400	55575	2	154	20	<0.1	1950	<1	80	454	12	168	0.6	260	3	2.2	<0.5	232	5
66400	55600	71	98	10	1	6440	<1	450	378	153	23	1.2	3940	65	39.3	15.1	60	<1
66400	55625	66	65	20	0.8	4560	<1	590	201	46	25	0.9	5180	17	10.5	5.5	33	<1
66400	55650	10	>200	80	<0.1	3070	<1	70	145	23	744	<0.5	680	25	16.6	2.8	165	2
66400	55675	57	67	20	0.6	5650	<1	610	589	43	61	<0.5	2520	29	20.8	7.1	25	<1
66400	55700	6	>200	30	0.1	1850	<1	30	55	26	277	0.9	430	13	10.1	1.9	211	4
66400	55725	13	>200	220	<0.1	3160	<1	70	58	117	408	1.8	350	24	13.7	5.4	192	5
66400	55750	10	>200	180	0.1	4420	2	50	127	78	923	4.3	1010	42	30.4	6	214	17

MMI DATA
OPHIR NORTH GRID

Line	Station	Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb
66300	55200	<1	<1	<0.5	12	<1	<5	54	5250	25	<0.5	2	149	0.2	20	<1	<1	<1	<5	1
66300	55225	2	<1	<0.5	12.1	1	<5	36	5780	33	<0.5	3	158	0.2	40	<1	<1	<1	<5	4
66300	55250	2	<1	<0.5	9.1	3	<5	91	7240	40	<0.5	7	80	0.4	20	<1	1	<1	<5	1
66300	55275	10	<1	<0.5	9.6	8	<5	89	3680	27	<0.5	23	173	0.1	<10	<1	4	<1	71	1
66300	55300	10	<1	<0.5	5	11	<5	79	1580	12	<0.5	28	293	0.3	<10	<1	5	<1	30	<1
66300	55325	11	<1	<0.5	7.7	8	<5	74	1720	66	<0.5	26	245	0.3	<10	<1	4	<1	26	2
66300	55350	33	<1	<0.5	19.2	35	<5	50	2940	17	<0.5	87	476	1	30	<1	15	<1	11	2
66300	55375	51	<1	<0.5	10.7	53	<5	33	6090	9	1.4	111	329	5.7	430	<1	21	<1	25	10
66300	55400	25	<1	0.5	15.8	32	7	19	3450	8	2.8	65	193	5.6	780	<1	13	<1	70	9
66300	55425	20	<1	<0.5	14	22	<5	58	2300	8	<0.5	47	211	0.7	60	<1	9	<1	48	<1
66300	55450	25	<1	<0.5	16.6	33	<5	21	1840	16	0.8	64	137	1.7	100	<1	12	<1	137	5
66300	55475	50	<1	<0.5	17.3	46	<5	44	2550	5	<0.5	106	579	0.6	80	<1	19	<1	104	2
66300	55500	3	<1	<0.5	24.7	<1	<5	29	2140	55	<0.5	2	857	0.2	<10	<1	<1	<1	14	2
66300	55525	11	<1	<0.5	12.3	9	<5	19	1690	32	<0.5	21	874	0.4	10	<1	4	<1	27	1
66300	55550	15	1	<0.5	13.4	3	<5	36	1120	32	<0.5	11	507	0.3	10	<1	1	<1	33	1
66300	55575	10	<1	<0.5	21.8	12	<5	55	5110	20	<0.5	24	1150	0.5	30	<1	4	<1	37	1
66300	55600	63	<1	<0.5	13.4	56	<5	42	4150	<5	<0.5	115	792	0.6	320	<1	21	<1	34	3
66300	55625	84	1	<0.5	11.3	52	<5	25	1840	<5	<0.5	128	4670	0.7	70	<1	23	<1	21	3
66300	55650	25	<1	<0.5	20.6	46	<5	25	4490	14	<0.5	72	519	3.4	220	<1	15	<1	108	3
66300	55675	34	<1	<0.5	22.7	23	<5	23	9170	8	<0.5	55	549	3.3	560	<1	10	<1	25	5
66300	55700	7	<1	<0.5	10.8	10	<5	79	580	22	<0.5	19	411	0.6	10	<1	4	<1	159	4
66300	55725	51	<1	<0.5	7.8	41	<5	83	2760	<5	<0.5	116	777	1.8	200	<1	21	<1	55	1
66300	55750	46	<1	<0.5	15.8	63	<5	19	2370	12	1.2	126	658	4.3	190	<1	25	<1	349	4
66400	55200	8	<1	<0.5	10.2	15	<5	4	1550	<5	3.9	23	83	7.9	310	<1	5	<1	28	2
66400	55225	3	<1	<0.5	3.3	3	<5	62	1730	19	<0.5	5	85	0.4	110	<1	1	<1	<5	3
66400	55250	8	<1	<0.5	5.7	6	<5	38	13100	102	<0.5	17	1050	0.2	30	<1	3	<1	<5	5
66400	55275	74	<1	0.6	6.4	84	<5	36	11900	313	<0.5	197	3940	0.6	360	<1	37	<1	22	35
66400	55300	<1	<1	<0.5	13.1	<1	<5	24	24300	318	<0.5	2	1940	0.3	<10	<1	<1	<1	<5	16
66400	55325	6	<1	<0.5	3.3	1	<5	70	3850	114	<0.5	5	1620	0.1	60	<1	<1	<1	<5	10
66400	55350	11	<1	<0.5	12	12	<5	38	2250	12	<0.5	24	619	0.4	110	<1	5	<1	6	2
66400	55375	67	<1	<0.5	11.3	62	<5	21	9850	14	<0.5	139	1640	2.1	140	<1	26	<1	9	6
66400	55400	63	<1	<0.5	16.8	96	<5	18	4520	25	<0.5	174	2060	1.1	50	<1	34	<1	40	4
66400	55425	45	<1	<0.5	15.6	40	<5	25	3920	6	<0.5	84	2300	0.9	80	<1	16	<1	11	3
66400	55450	27	<1	<0.5	29.9	29	<5	19	3180	32	<0.5	62	1590	0.9	30	<1	11	<1	19	2
66400	55475	28	<1	<0.5	15	32	<5	34	3620	12	<0.5	68	663	0.8	60	<1	13	<1	22	<1
66400	55500	42	<1	<0.5	20.1	63	<5	26	6410	6	<0.5	127	698	0.9	80	<1	25	<1	121	1
66400	55525	29	<1	<0.5	46.5	28	6	17	13100	7	<0.5	60	347	1.4	170	<1	12	<1	22	2
66400	55550	29	<1	<0.5	9.3	16	<5	39	3990	<5	<0.5	42	715	0.4	210	<1	7	<1	16	1
66400	55575	2	<1	<0.5	15.4	7	<5	23	590	<5	1.3	7	241	5.2	60	<1	2	<1	39	<1
66400	55600	64	<1	<0.5	10.5	51	<5	39	2480	<5	<0.5	112	2260	0.3	120	<1	20	<1	34	2
66400	55625	21	<1	<0.5	10.1	22	<5	25	2160	26	<0.5	45	1150	0.7	40	<1	8	<1	24	2
66400	55650	13	<1	<0.5	19.4	7	<5	23	4830	<5	<0.5	17	332	2.3	820	<1	3	<1	11	3
66400	55675	29	<1	<0.5	27.5	23	<5	25	5250	5	<0.5	52	1780	0.3	100	<1	9	<1	<5	<1
66400	55700	9	<1	<0.5	20.5	9	<5	19	1590	8	0.8	22	285	3.7	370	<1	4	<1	107	2
66400	55725	21	<1	<0.5	28.1	36	7	22	5730	8	0.9	64	328	5.3	440	<1	13	<1	155	7
66400	55750	26	<1	<0.5	20.8	36	13	18	15100	23	4.6	58	332	7.8	510	<1	12	<1	52	9

MMI DATA
OPHIR NORTH GRID

Line	Station	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
66300	55200	<5	<1	<1	2630	<1	<1	<10	0.6	5	<0.5	6	<1	5	<1	390	<5	
66300	55225	9	<1	<1	1730	<1	<1	<10	0.7	15	<0.5	22	<1	18	2	620	<5	
66300	55250	6	2	<1	4040	<1	<1	<10	1.5	12	<0.5	14	<1	11	<1	130	<5	
66300	55275	13	8	<1	4280	<1	1	<10	4	5	<0.5	63	<1	44	3	<20	<5	
66300	55300	9	8	<1	4170	<1	1	<10	3.2	6	<0.5	75	<1	51	3	<20	<5	
66300	55325	22	9	<1	2720	<1	1	<10	6.4	7	<0.5	41	<1	49	4	60	5	
66300	55350	36	27	<1	1720	<1	4	<10	22.1	34	<0.5	22	<1	143	11	600	11	
66300	55375	131	37	<1	610	<1	9	<10	27.2	278	<0.5	20	<1	344	26	1350	24	
66300	55400	84	20	<1	250	<1	5	<10	21.1	1150	<0.5	8	1	156	13	810	37	
66300	55425	28	15	<1	1230	<1	3	<10	4	79	<0.5	18	<1	115	8	240	6	
66300	55450	57	20	<1	520	<1	4	<10	14.4	311	<0.5	12	<1	110	9	290	17	
66300	55475	143	35	<1	1290	<1	8	<10	14.9	40	<0.5	34	<1	333	24	3110	20	
66300	55500	9	1	<1	2370	<1	<1	<10	1.2	<3	<0.5	46	<1	23	2	260	<5	
66300	55525	16	8	<1	2240	<1	2	<10	2.4	<3	<0.5	38	<1	66	4	670	<5	
66300	55550	41	6	<1	1120	<1	2	<10	3.8	<3	<0.5	23	<1	100	8	510	7	
66300	55575	15	8	<1	2420	<1	1	<10	3.5	6	<0.5	21	<1	59	5	3720	<5	
66300	55600	177	42	<1	1200	<1	11	<10	16.9	14	<0.5	42	<1	426	29	3160	21	
66300	55625	362	51	<1	1380	<1	16	<10	23	25	<0.5	94	<1	978	82	8670	30	
66300	55650	67	20	<1	650	<1	4	<10	19.9	83	<0.5	22	<1	144	12	5000	19	
66300	55675	170	20	<1	1360	<1	7	<10	23.3	85	<0.5	30	<1	329	27	6080	20	
66300	55700	18	6	<1	2480	<1	<1	<10	6.1	139	<0.5	21	<1	30	2	80	19	
66300	55725	149	36	<1	1160	<1	9	<10	21.2	83	<0.5	52	<1	407	27	980	13	
66300	55750	146	37	<1	320	<1	7	<10	29.5	413	<0.5	31	<1	246	20	480	26	
66400	55200	48	6	<1	70	<1	1	<10	10.5	1240	<0.5	4	<1	51	5	260	26	
66400	55225	6	2	<1	1990	<1	<1	<10	0.9	21	<0.5	6	<1	27	3	340	<5	
66400	55250	51	5	<1	770	<1	1	<10	2.5	7	<0.5	49	<1	63	7	2650	6	
66400	55275	371	57	<1	600	<1	11	<10	27.8	40	<0.5	94	<1	449	44	7040	70	
66400	55300	7	<1	<1	610	<1	<1	<10	1.2	3	<0.5	42	<1	5	<1	360	<5	
66400	55325	19	3	<1	2010	<1	<1	<10	1.9	<3	<0.5	32	<1	41	3	830	<5	
66400	55350	47	8	<1	2070	<1	2	<10	5.3	6	<0.5	22	<1	63	6	3410	8	
66400	55375	266	47	<1	1260	<1	11	<10	21.4	39	<0.5	73	<1	447	37	7160	46	
66400	55400	62	49	<1	1440	<1	8	<10	15.5	17	<0.5	40	<1	377	27	2770	18	
66400	55425	218	30	<1	2250	<1	7	<10	14.2	15	<0.5	73	<1	377	30	15500	22	
66400	55450	37	19	<1	1740	<1	4	<10	10.8	16	<0.5	40	<1	160	11	1390	12	
66400	55475	34	21	<1	1920	<1	4	<10	9.4	16	<0.5	32	<1	145	11	3620	7	
66400	55500	56	36	<1	1360	<1	6	<10	8.4	14	<0.5	22	<1	209	19	9560	8	
66400	55525	69	20	<1	1880	<1	5	<10	4.5	23	<0.5	35	<1	202	23	7040	11	
66400	55550	114	15	<1	1750	<1	5	<10	4.3	25	<0.5	43	<1	258	20	6430	7	
66400	55575	27	2	<1	1050	<1	<1	<10	6	277	<0.5	7	<1	14	2	11300	10	
66400	55600	126	40	<1	2040	<1	10	<10	6.8	11	<0.5	58	<1	455	31	4100	13	
66400	55625	23	15	<1	2210	<1	3	<10	6.8	9	<0.5	29	<1	130	10	670	8	
66400	55650	51	7	<1	610	<1	3	<10	9.7	76	<0.5	10	<1	144	13	2730	8	
66400	55675	33	19	<1	2020	<1	5	<10	4	5	<0.5	39	<1	245	17	3650	<5	
66400	55700	38	6	<1	310	<1	2	<10	7.3	196	<0.5	6	<1	77	8	2050	9	
66400	55725	47	17	<1	380	<1	4	<10	19.6	326	<0.5	7	<1	123	11	1280	16	
66400	55750	145	17	<1	590	<1	5	<10	37.6	1280	<0.5	73	1	287	24	2000	52	

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Line	Station	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cs	Cu	Dy	Er	Eu	Fe	Ga
66500	55200	15	>200	20	<0.1	2120	<1	140	37	27	174	0.6	820	12	7.7	2	83	3
66500	55225	14	>200	140	<0.1	2470	1	40	77	25	182	2	280	9	5.4	1.7	119	9
66500	55250	8	>200	10	<0.1	2710	<1	40	153	7	218	<0.5	480	7	6.4	0.7	155	5
66500	55275	14	155	150	<0.1	2600	<1	150	104	101	67	1.6	330	28	16.9	7.9	146	8
66500	55300	103	164	9200	0.1	2370	1	60	180	57	224	2	550	15	7.8	3.5	235	6
66500	55325	25	128	1400	<0.1	4240	1	240	407	47	531	6.5	650	8	5.3	2.1	217	10
66500	55350	33	51	40	<0.1	3240	<1	470	38	20	37	2.7	800	4	2.3	1.5	20	1
66500	55375	23	132	130	0.1	1790	<1	240	56	68	80	4.4	1180	18	9.8	4.8	54	4
66500	55400	35	51	30	1	3360	<1	390	160	35	9	2.9	2890	18	10.3	5.6	30	<1
66500	55425	153	24	20	2.3	8730	<1	590	210	28	38	1.6	10600	17	10.3	5.8	21	1
66500	55450	90	22	10	0.8	2690	<1	570	227	10	28	1.3	3340	8	4.4	2.5	14	<1
66500	55475	12	51	30	0.5	3700	<1	380	607	69	124	1.5	1020	18	11.4	5.1	99	1
66500	55500	24	59	20	0.4	4900	<1	410	578	92	43	0.8	1400	39	25.9	9.9	122	<1
66500	55525	31	>200	70	0.2	3390	<1	150	150	55	507	0.8	1410	65	38.5	9.4	102	3
66500	55550	43	87	10	0.5	11700	<1	540	168	49	75	1.2	730	13	7.7	3.7	42	2
66500	55575	28	86	<10	0.5	8320	<1	500	322	41	48	1	930	18	10.2	4.2	34	<1
66500	55600	29	110	<10	0.4	7390	<1	360	255	142	32	1.2	1210	36	21	8.2	40	<1
66500	55625	36	90	20	0.4	6640	<1	500	222	47	24	1.1	1190	14	8.5	4.1	19	<1
66500	55650	31	129	60	0.7	6880	<1	250	217	113	101	1.8	2250	49	29.9	10	121	1
66500	55675	33	67	20	0.3	7670	<1	520	721	109	28	<0.5	1870	30	18.7	8.6	31	<1
66500	55700	26	11	60	0.3	1120	<1	370	112	<5	50	1.5	1910	2	1.3	0.6	10	2
66500	55725	13	>200	120	0.2	2950	1	20	48	140	184	2.7	710	38	20.1	9	193	11
66500	55750	10	>200	110	0.2	1320	<1	10	47	104	134	2.6	690	32	16.9	7	157	13
66600	55200	4	>200	50	<0.1	2400	<1	30	23	23	201	3.1	3070	8	6.5	1.1	211	13
66600	55225	9	>200	<10	<0.1	2360	<1	60	13	<5	262	2.7	320	5	5.2	<0.5	72	3
66600	55250	18	>200	130	<0.1	1630	<1	10	34	17	187	2	440	7	4.7	1.2	139	4
66600	55275	29	>200	140	2.4	6910	6	20	332	507	349	<0.5	2170	338	198	61.2	171	2
66600	55300	7	78	20	0.4	3700	<1	460	34	14	12	2.1	1060	9	6.3	2.1	12	<1
66600	55325	32	142	200	0.8	4400	<1	230	43	166	48	3.9	4840	133	85.1	25.2	52	2
66600	55350	11	>200	20	<0.1	1640	<1	50	29	<5	243	0.5	470	6	6.2	0.6	108	3
66600	55375	74	>200	650	<0.1	3100	<1	10	29	56	113	2	5250	26	12.8	4.3	147	6
66600	55400	121	119	90	0.4	3010	<1	280	55	66	37	4.6	2270	26	15.6	5.5	71	2
66600	55425	24	>200	140	0.3	2640	1	10	35	46	145	2	500	16	9.2	2.8	111	6
66600	55450	38	97	50	1	4870	<1	350	48	164	17	2.3	3160	52	32.5	15.7	37	1
66600	55475	114	29	30	1.1	2210	<1	520	81	<5	13	2.2	5550	8	4.2	1.9	13	1
66600	55500	30	>200	290	0.5	3370	2	30	13	202	238	5.8	1500	37	18	8.5	201	13
66600	55525	17	>200	90	<0.1	920	1	<10	18	39	181	1	540	11	7	2.1	153	13
66600	55550	11	>200	150	0.1	2320	1	20	12	180	207	10.3	540	29	14	7.3	196	14
66600	55575	5	>200	<10	<0.1	2020	<1	130	20	96	460	18.2	310	10	5.4	2.9	86	3
66600	55600	103	21	<10	1.3	2870	<1	510	75	<5	31	0.7	6130	6	3.1	1.6	6	<1
66600	55625	129	26	<10	1.2	4050	<1	560	110	5	29	<0.5	1960	7	3.8	2.2	3	<1
66600	55650	115	22	20	1.6	3780	<1	570	105	<5	35	0.8	3290	6	3.3	1.5	3	<1
66600	55675	111	6	10	1.8	2330	<1	440	191	<5	57	0.7	6450	7	3.7	2	4	<1
66600	55700	73	17	<10	0.6	3720	<1	610	109	<5	32	<0.5	4980	4	2.6	1.4	3	<1
66600	55725	76	23	<10	0.9	5300	<1	530	215	14	26	0.8	4570	9	5	2.9	16	<1
66600	55750	19	>200	80	0.1	1100	1	<10	42	75	116	0.8	690	20	11	3.4	172	10

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OPHIR NORTH GRID

Line	Station	Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb
66500	55200	9	<1	<0.5	14.8	9	<5	38	5440	<5	<0.5	22	307	1.4	120	<1	4	<1	51	5
66500	55225	8	<1	<0.5	17.8	9	9	18	4640	<5	2.4	21	112	3.4	440	<1	4	<1	37	5
66500	55250	3	<1	<0.5	20	2	<5	14	2370	<5	0.7	6	181	2.8	150	<1	1	<1	8	1
66500	55275	25	<1	<0.5	27.6	27	6	18	27600	<5	1.4	64	234	8.5	70	<1	12	<1	53	5
66500	55300	14	<1	0.6	19.7	16	<5	5	5660	<5	0.7	36	360	4.7	260	<1	7	<1	38	74
66500	55325	8	<1	<0.5	85.6	21	9	44	14400	6	1.9	27	599	2.8	120	<1	6	<1	166	8
66500	55350	5	<1	<0.5	66.5	6	<5	34	2100	8	<0.5	14	121	0.7	10	<1	3	<1	149	<1
66500	55375	18	<1	<0.5	19.2	24	<5	21	2420	10	<0.5	45	203	1.4	80	<1	9	<1	113	3
66500	55400	21	<1	<0.5	32.2	17	<5	36	490	19	<0.5	47	734	0.6	40	<1	8	<1	71	3
66500	55425	22	1	<0.5	7.8	16	<5	26	1150	24	<0.5	39	1400	0.2	20	<1	7	<1	16	2
66500	55450	10	<1	<0.5	11.6	9	<5	23	2130	23	<0.5	18	877	0.3	20	<1	4	<1	29	1
66500	55475	19	<1	<0.5	13.5	23	6	40	8880	<5	<0.5	47	736	0.4	110	<1	9	<1	20	2
66500	55500	39	<1	<0.5	35.2	39	<5	35	5430	6	<0.5	84	1800	0.7	120	<1	16	<1	16	2
66500	55525	42	<1	<0.5	19.5	17	<5	30	4330	7	<0.5	63	350	1.8	640	<1	10	<1	10	3
66500	55550	13	<1	<0.5	10.2	16	<5	49	2490	6	<0.5	31	456	0.3	130	<1	6	<1	22	1
66500	55575	17	<1	<0.5	21	15	<5	80	1940	7	<0.5	33	588	0.3	110	<1	6	<1	67	<1
66500	55600	33	<1	<0.5	16.7	34	<5	37	2880	<5	<0.5	66	873	0.3	150	<1	13	<1	62	1
66500	55625	16	<1	<0.5	11.5	18	<5	56	2620	9	<0.5	37	436	0.5	80	<1	7	<1	32	<1
66500	55650	42	<1	<0.5	9.6	36	<5	17	2690	7	<0.5	80	1240	0.9	210	<1	15	<1	57	4
66500	55675	34	<1	<0.5	21.5	35	<5	31	4890	7	<0.5	74	1840	0.4	50	<1	14	<1	10	<1
66500	55700	2	<1	<0.5	19.3	3	<5	76	3460	45	<0.5	4	397	0.8	<10	<1	<1	<1	41	1
66500	55725	35	<1	<0.5	12.9	62	<5	6	4080	15	1.8	101	193	8.8	410	<1	21	<1	103	5
66500	55750	27	<1	<0.5	17.8	40	<5	7	2040	18	3.4	79	171	8.4	240	<1	16	<1	94	4
66600	55200	5	<1	<0.5	52.3	9	6	22	7840	<5	3.7	14	137	7.2	130	<1	3	<1	53	2
66600	55225	<1	<1	<0.5	8.5	<1	<5	24	670	<5	<0.5	<1	90	0.4	20	<1	<1	<1	64	<1
66600	55250	5	<1	<0.5	8.6	6	<5	5	1180	<5	0.8	11	194	3.3	160	<1	2	<1	65	7
66600	55275	240	1	4.1	11.6	137	<5	3	7990	11	<0.5	485	416	4.2	140	<1	83	<1	21	11
66600	55300	8	<1	<0.5	11.5	6	<5	72	1420	24	<0.5	16	232	0.4	20	<1	3	<1	48	3
66600	55325	106	<1	<0.5	15.4	101	<5	30	3010	<5	<0.5	207	463	1	40	<1	40	<1	70	5
66600	55350	3	<1	<0.5	15.5	1	<5	13	1610	<5	<0.5	4	109	0.6	80	<1	<1	<1	72	1
66600	55375	18	<1	<0.5	14.7	17	<5	3	6570	18	0.9	38	80	10.3	110	<1	7	<1	56	73
66600	55400	23	<1	<0.5	15.1	28	<5	40	2060	10	<0.5	51	208	1.1	40	<1	10	<1	145	20
66600	55425	13	<1	<0.5	8.9	20	<5	4	650	8	0.6	34	200	3.7	150	<1	7	<1	116	3
66600	55450	61	<1	<0.5	17.3	87	<5	28	850	<5	<0.5	170	707	0.8	20	<1	34	<1	66	4
66600	55475	8	<1	<0.5	12.3	3	<5	30	500	17	<0.5	11	539	0.3	10	<1	2	<1	58	2
66600	55500	33	<1	<0.5	13.8	72	7	12	4410	8	2.5	99	252	7.7	170	<1	22	<1	136	16
66600	55525	9	<1	<0.5	14.6	13	<5	4	1790	9	1.8	25	241	7.9	180	<1	5	<1	131	4
66600	55550	29	1	<0.5	12.3	62	<5	5	2910	22	2.6	96	303	10.2	180	<1	22	<1	222	5
66600	55575	12	<1	<0.5	8.2	35	<5	84	2580	<5	<0.5	58	875	1.8	30	<1	12	<1	146	<1
66600	55600	7	<1	<0.5	10.1	4	<5	109	1250	220	<0.5	12	549	<0.1	10	<1	2	<1	83	2
66600	55625	9	<1	<0.5	12.9	4	<5	121	1860	148	<0.5	14	687	<0.1	10	<1	2	<1	85	2
66600	55650	7	<1	<0.5	10.5	3	<5	102	1670	257	<0.5	10	446	<0.1	<10	<1	2	<1	91	2
66600	55675	8	<1	<0.5	11.3	3	<5	98	1840	232	<0.5	11	707	<0.1	<10	<1	2	<1	22	1
66600	55700	5	<1	<0.5	11	4	<5	99	2540	95	<0.5	10	1320	<0.1	<10	<1	2	<1	52	2
66600	55725	11	<1	<0.5	9.6	11	<5	57	1890	37	<0.5	24	1140	<0.1	20	<1	4	<1	16	2
66600	55750	15	<1	<0.5	11.3	25	<5	5	3880	10	2.3	43	156	8.2	320	<1	9	<1	44	4

MMI DATA
OPHIR NORTH GRID

Line	Station	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
66500	55200	67	6	<1	510	<1	2	10	2.9	104	<0.5	1	<1	87	6	1260	<5	
66500	55225	37	6	<1	230	<1	1	<10	4.7	570	<0.5	3	<1	56	4	1490	19	
66500	55250	29	2	<1	290	<1	<1	<10	2.8	160	<0.5	6	<1	44	6	1850	6	
66500	55275	98	20	<1	240	<1	4	<10	6.5	363	<0.5	6	<1	171	14	2320	11	
66500	55300	57	11	<1	120	<1	2	<10	15.5	241	<0.5	7	<1	67	7	1310	27	
66500	55325	63	8	<1	920	<1	1	<10	9.2	545	<0.5	9	<1	48	4	3230	16	
66500	55350	12	4	<1	1230	<1	<1	<10	3	25	<0.5	2	<1	25	2	150	<5	
66500	55375	48	14	<1	670	<1	3	<10	7.5	181	<0.5	7	<1	94	8	640	12	
66500	55400	31	16	<1	1520	<1	3	<10	14.2	10	<0.5	43	<1	108	8	1500	24	
66500	55425	33	14	<1	2780	<1	3	<10	6.4	21	<0.5	41	<1	140	8	750	7	
66500	55450	12	6	<1	2400	<1	1	<10	2.6	<3	<0.5	48	<1	63	4	1500	<5	
66500	55475	92	15	<1	1700	<1	3	<10	4.8	14	<0.5	23	<1	113	11	11600	9	
66500	55500	104	27	<1	1740	<1	6	<10	4.9	17	<0.5	42	<1	301	23	6630	10	
66500	55525	95	25	<1	1010	<1	9	<10	15.8	99	<0.5	21	<1	417	28	2760	11	
66500	55550	46	10	<1	3060	<1	2	<10	3.5	34	<0.5	28	<1	78	6	4140	5	
66500	55575	50	11	<1	3520	<1	3	<10	3.8	4	<0.5	26	<1	98	7	1520	5	
66500	55600	104	24	<1	1970	<1	6	<10	7	8	<0.5	44	<1	229	17	3880	9	
66500	55625	20	12	<1	2600	<1	2	<10	3.5	10	<0.5	13	<1	95	7	660	<5	
66500	55650	151	29	<1	1490	<1	7	<10	14.7	35	<0.5	39	<1	306	26	4550	18	
66500	55675	46	24	<1	2500	<1	5	<10	5.8	9	<0.5	46	<1	225	17	5570	9	
66500	55700	15	1	<1	2140	<1	<1	<10	1.2	30	<0.5	17	<1	14	1	480	<5	
66500	55725	104	29	<1	160	<1	6	<10	24.6	838	<0.5	17	<1	177	14	1110	28	
66500	55750	79	22	<1	140	<1	5	<10	21.9	880	<0.5	19	1	169	13	760	40	
66600	55200	74	4	<1	190	<1	<1	<10	10.2	1580	<0.5	7	<1	41	7	1120	27	
66600	55225	43	<1	<1	280	<1	<1	<10	1.6	51	<0.5	2	<1	27	6	230	<5	
66600	55250	31	4	<1	90	<1	<1	<10	5.2	236	<0.5	3	<1	35	4	1110	8	
66600	55275	327	158	<1	80	<1	48	<10	41.1	56	<0.5	37	2	1750	144	4030	59	
66600	55300	22	6	<1	1540	<1	1	<10	2.6	16	<0.5	140	<1	70	6	130	<5	
66600	55325	257	67	<1	890	<1	19	<10	10.3	52	<0.5	77	<1	1050	65	120	15	
66600	55350	34	2	<1	440	<1	<1	<10	1.5	57	<0.5	2	<1	39	7	640	<5	
66600	55375	57	12	<1	110	<1	4	<10	8	389	<0.5	6	<1	120	9	540	13	
66600	55400	54	16	<1	1000	<1	4	<10	3.6	40	<0.5	9	<1	159	11	690	<5	
66600	55425	35	9	<1	130	<1	2	<10	8.6	268	<0.5	6	<1	98	7	490	9	
66600	55450	106	49	<1	890	<1	9	<10	13.7	4	<0.5	14	<1	370	28	400	10	
66600	55475	21	5	<1	2380	<1	1	<10	3.1	27	<0.5	27	<1	53	4	340	<5	
66600	55500	113	29	<1	180	<1	6	<10	35.6	1100	0.5	10	2	161	13	350	50	
66600	55525	50	7	<1	110	<1	2	<10	10.6	810	<0.5	6	<1	55	6	390	19	
66600	55550	64	26	<1	170	<1	5	<10	24.6	959	<0.5	13	<1	133	11	340	27	
66600	55575	34	11	<1	1170	<1	2	<10	3.9	229	<0.5	5	<1	67	4	660	<5	
66600	55600	12	4	<1	4820	<1	1	<10	1.9	17	<0.5	246	<1	42	2	180	<5	
66600	55625	12	6	<1	5940	<1	1	<10	1.6	9	<0.5	177	<1	52	3	100	<5	
66600	55650	12	4	<1	5240	<1	1	<10	1.1	21	<0.5	119	<1	42	3	80	<5	
66600	55675	20	4	<1	3660	<1	1	<10	1.7	<3	<0.5	133	<1	50	3	500	<5	
66600	55700	7	3	<1	4900	<1	<1	<10	0.7	<3	<0.5	113	<1	38	2	280	<5	
66600	55725	13	8	<1	2750	<1	1	<10	3.4	<3	<0.5	34	<1	65	5	1010	<5	
66600	55750	52	12	<1	80	<1	3	<10	19.8	711	<0.5	9	<1	86	8	700	26	

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OPHIR NORTH GRID

Line	Station	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cs	Cu	Dy	Er	Eu	Fe	Ga
66700	55200	364	47	50	0.9	5670	<1	330	145	28	31	<0.5	4940	47	29.8	10.4	27	<1
66700	55225	26	>200	480	<0.1	5460	<1	30	202	71	613	1.5	1510	67	40.7	10.8	165	8
66700	55250	27	200	150	0.2	6340	2	60	28	152	705	3.2	910	50	27.8	11.4	238	2
66700	55275	18	183	120	<0.1	1490	<1	110	15	22	150	0.7	310	11	6.9	2.1	187	6
66700	55300	31	59	40	0.1	1720	<1	440	15	56	31	5	840	20	11.2	6.1	13	<1
66700	55325	2	133	30	<0.1	620	<1	40	16	7	192	0.7	400	3	3.9	<0.5	242	10
66700	55350	2	79	40	<0.1	1960	<1	450	75	33	82	1.7	1720	18	14.8	4	137	5
66700	55375	3	44	10	<0.1	1030	<1	530	35	5	49	<0.5	1360	6	5.2	1.2	10	<1
66700	55400	13	199	10	<0.1	4990	3	310	29	88	366	29.5	630	30	16.8	7.1	92	2
66700	55425	3	42	30	0.1	980	<1	420	12	7	52	<0.5	2030	2	1.4	0.8	12	<1
66700	55450	17	154	50	0.6	5330	<1	230	50	171	102	<0.5	1950	99	60.3	18.3	91	2
66700	55475	65	186	240	0.3	2620	<1	140	82	191	348	5.1	1860	59	33.9	13.2	159	8
66700	55500	8	>200	120	<0.1	1470	1	30	71	21	554	0.9	570	23	17.9	2.3	185	9
66700	55525	24	7	20	0.3	1480	<1	550	122	<5	39	0.5	2750	2	1.2	0.6	6	<1
66700	55550	13	>200	160	0.2	990	1	20	51	38	285	4.4	920	16	9.5	2.8	143	11
66700	55575	23	>200	100	0.3	360	2	90	18	50	204	10.3	930	14	7.2	2.9	78	9
66700	55600	24	100	60	0.5	210	2	60	5	56	85	7.5	1020	13	6.3	4.2	70	9
66700	55625	35	120	70	0.4	190	<1	20	5	96	6	10.6	220	16	7.4	4.7	37	6
66700	55650	6	>200	40	0.4	220	1	<10	11	135	113	6.8	1780	27	14.9	5.9	79	8
66700	55675	8	>200	20	<0.1	530	<1	30	32	16	433	0.8	840	12	7.8	1.5	134	11
66700	55700	30	56	10	<0.1	1050	<1	350	33	6	<5	1.4	460	2	1.7	0.6	4	<1
66700	55725	15	179	140	0.1	1380	<1	150	46	53	162	2.6	460	13	6.6	3.1	130	10
66700	55750	49	44	<10	1	2400	<1	470	43	10	6	1.7	3000	8	4.5	2.7	9	<1
66800	55200	51	>200	180	<0.1	1720	<1	30	140	35	196	1.4	630	25	16.4	3	173	7
66800	55225	80	111	20	<0.1	5660	<1	380	327	37	8	1.2	520	14	8.4	3.1	48	2
66800	55250	28	51	70	<0.1	3950	<1	340	255	25	21	1.3	640	18	9.5	4.2	21	<1
66800	55275	16	128	720	<0.1	10200	2	160	86	96	268	1.4	1060	38	22.2	8.7	216	6
66800	55300	6	55	10	<0.1	2940	<1	590	101	10	10	0.9	430	11	7.7	2.3	12	1
66800	55325	25	86	<10	0.2	2120	<1	470	20	12	6	1.2	500	4	2.4	1.1	36	<1
66800	55350	16	143	20	0.1	2240	<1	260	50	54	186	<0.5	680	36	22.6	6.5	115	4
66800	55375	5	59	<10	<0.1	2090	<1	570	135	12	28	<0.5	570	10	8.6	1.9	19	<1
66800	55400	90	25	<10	1.1	2390	<1	480	159	21	8	1.9	4020	16	8.8	5.4	20	<1
66800	55425	38	84	30	0.7	3660	<1	390	378	80	55	1.4	1290	35	21.7	9.3	138	<1
66800	55450	41	32	10	0.2	1380	<1	430	18	8	6	2.7	3040	4	2.5	1.7	10	<1
66800	55475	5	>200	310	0.3	1010	2	10	13	137	283	7.4	870	21	10.9	5.3	163	12
66800	55500	7	>200	210	<0.1	2870	2	20	31	47	158	0.9	370	10	6.8	2.1	270	18
66800	55525	23	50	<10	<0.1	920	<1	560	33	11	13	1.1	1600	2	1.4	0.8	15	<1
66800	55550	14	>200	50	<0.1	1580	<1	50	18	75	156	8.6	660	19	9.5	4.4	130	6
66800	55575	25	132	220	0.5	440	<1	250	22	46	205	8.7	2030	13	8	3.1	61	3
66800	55600	14	>200	110	<0.1	1210	1	<10	14	77	209	7	1120	21	10.9	3.6	167	15
66800	55625	21	>200	90	0.2	610	1	10	15	62	127	8.2	1280	16	8.6	3	176	10
66800	55650	22	>200	50	<0.1	420	<1	<10	30	14	161	<0.5	820	9	7.2	0.9	123	11
66800	55675	11	166	280	1.6	2220	<1	200	11	150	105	4.8	1780	19	9.2	5.6	105	7
66800	55700	13	141	110	0.2	1600	1	120	56	78	283	3	1460	25	13.9	5.5	159	6
66800	55725	78	22	20	1.7	1650	<1	360	22	<5	18	2.6	2780	2	1.3	0.6	7	<1
66800	55750	35	15	40	0.6	1570	<1	450	63	<5	35	3.1	3280	2	1.1	0.6	11	2

MMI DATA

OPHIR NORTH GRID

Line	Station	Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb
66700	55200	53	1	<0.5	10.1	26	<5	46	1740	8	<0.5	74	1180	0.4	30	<1	12	<1	15	14
66700	55225	54	<1	0.9	13	27	<5	7	4590	14	0.9	80	480	7.4	160	<1	14	<1	50	19
66700	55250	42	<1	<0.5	28.7	44	<5	10	3700	<5	<0.5	103	312	7.5	160	<1	19	<1	56	4
66700	55275	9	<1	<0.5	6	8	<5	15	740	<5	1.5	19	110	4.1	210	<1	3	<1	27	9
66700	55300	24	<1	<0.5	18.7	21	<5	36	1700	6	<0.5	58	116	0.4	<10	<1	10	<1	54	1
66700	55325	2	<1	<0.5	17.3	3	30	17	860	<5	<0.5	4	33	2.7	40	<1	1	<1	66	<1
66700	55350	15	<1	<0.5	22.9	17	13	28	12600	63	<0.5	34	54	1.9	60	<1	6	<1	42	2
66700	55375	5	<1	<0.5	14.6	3	<5	51	4830	23	<0.5	8	71	0.5	40	<1	1	<1	<5	<1
66700	55400	28	<1	<0.5	7.7	31	<5	161	2480	<5	<0.5	69	1480	0.5	40	<1	13	<1	96	2
66700	55425	3	<1	<0.5	10.6	5	<5	55	7490	83	<0.5	8	284	0.3	20	<1	2	<1	<5	8
66700	55450	81	<1	<0.5	13.4	64	<5	42	3930	<5	<0.5	153	786	0.6	290	<1	28	<1	43	2
66700	55475	54	<1	<0.5	46.2	74	8	50	9120	25	2.5	140	480	5	120	<1	28	<1	404	11
66700	55500	11	<1	<0.5	13.4	7	<5	19	1100	12	1.7	20	409	3.3	290	<1	4	<1	11	5
66700	55525	2	<1	<0.5	13.3	1	<5	125	2420	66	<0.5	4	635	0.4	10	<1	<1	<1	64	1
66700	55550	12	<1	<0.5	16.3	13	<5	12	1160	8	1.6	27	315	4.6	270	<1	5	<1	182	5
66700	55575	11	<1	<0.5	14.2	20	<5	21	650	11	2.4	30	236	2.4	150	<1	6	<1	155	3
66700	55600	16	<1	<0.5	6.5	22	<5	8	940	35	0.9	45	89	0.9	130	<1	8	<1	73	4
66700	55625	18	<1	<0.5	7	36	<5	2	270	13	1.3	66	9	0.5	220	<1	14	<1	133	2
66700	55650	26	<1	<0.5	5.7	47	<5	1	210	17	1.2	85	83	1.5	140	<1	17	<1	73	3
66700	55675	7	<1	<0.5	13.6	6	<5	9	920	<5	0.9	13	201	3.9	230	<1	2	<1	32	<1
66700	55700	3	<1	<0.5	6.6	3	<5	57	750	84	<0.5	6	250	0.4	<10	<1	1	<1	45	1
66700	55725	13	<1	<0.5	11.4	19	<5	20	2360	21	2.1	35	188	2	250	<1	7	<1	106	5
66700	55750	11	<1	<0.5	5.6	9	<5	68	420	50	<0.5	24	264	0.1	<10	<1	4	<1	74	<1
66800	55200	14	<1	<0.5	23.1	13	<5	7	11200	12	1.3	24	353	6.9	400	<1	5	<1	28	6
66800	55225	14	<1	<0.5	11.5	13	<5	33	2060	<5	<0.5	29	310	0.7	60	<1	5	<1	64	2
66800	55250	20	<1	<0.5	18	12	<5	93	4910	26	<0.5	35	275	1.3	10	<1	6	<1	41	1
66800	55275	37	<1	<0.5	15.1	37	<5	19	14700	6	1	81	494	6.4	250	<1	15	<1	54	18
66800	55300	10	<1	<0.5	13.3	6	<5	72	3150	<5	<0.5	16	102	0.7	30	<1	3	<1	8	2
66800	55325	4	<1	<0.5	4	5	<5	64	460	<5	<0.5	11	80	0.4	10	<1	2	<1	55	1
66800	55350	29	<1	<0.5	9.9	20	<5	48	3110	<5	<0.5	54	150	1	170	<1	9	<1	5	1
66800	55375	8	<1	<0.5	3.2	6	<5	67	2690	20	<0.5	13	147	0.3	70	<1	2	<1	10	<1
66800	55400	21	<1	<0.5	8.4	18	<5	38	540	29	<0.5	47	578	0.3	10	<1	8	<1	68	1
66800	55425	36	<1	<0.5	8.6	35	6	27	3910	7	<0.5	75	1780	0.5	90	<1	14	<1	19	3
66800	55450	6	<1	<0.5	9.5	7	<5	70	280	35	<0.5	17	199	0.3	<10	<1	3	<1	123	<1
66800	55475	20	<1	<0.5	16.8	44	<5	4	3750	17	2.6	67	162	3.8	410	<1	14	<1	114	8
66800	55500	9	<1	<0.5	9.5	19	<5	8	1210	16	5.9	28	135	12.7	210	<1	6	<1	40	5
66800	55525	3	<1	<0.5	6.3	4	<5	27	1290	34	<0.5	9	203	0.4	<10	<1	2	<1	75	<1
66800	55550	18	<1	<0.5	13.6	24	<5	17	1610	7	0.8	46	297	4	150	<1	9	<1	236	2
66800	55575	13	<1	<0.5	14.5	15	<5	12	4120	26	0.7	30	114	1	60	<1	5	<1	245	6
66800	55600	15	<1	<0.5	10.3	22	<5	4	2770	9	2	40	200	7.8	270	<1	8	<1	192	4
66800	55625	12	<1	<0.5	11.6	21	<5	3	1590	15	1.3	33	141	7.3	230	<1	7	<1	158	3
66800	55650	4	<1	<0.5	16.1	5	<5	8	510	<5	1.3	9	136	3	150	<1	2	<1	11	2
66800	55675	21	<1	<0.5	9.7	50	<5	26	2980	12	1.1	75	95	3.4	50	<1	16	<1	129	16
66800	55700	23	<1	<0.5	14.1	25	<5	18	5090	18	1.1	54	301	2.9	130	<1	10	<1	61	5
66800	55725	2	<1	<0.5	15.3	<1	7	76	500	33	<0.5	2	135	0.2	<10	<1	<1	<1	291	1
66800	55750	2	<1	<0.5	16.1	2	6	86	1870	96	<0.5	5	770	0.2	10	<1	<1	<1	147	3

MMI DATA

OPHIR NORTH GRID

Line	Station	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
66700	55200	45	28	<1	540	<1	8	<10	9	17	<0.5	27	<1	398	26	690	17	
66700	55225	109	31	<1	150	<1	10	<10	26.1	377	<0.5	44	<1	406	31	2740	33	
66700	55250	85	32	<1	240	<1	8	<10	15.7	77	<0.5	9	<1	198	22	1160	7	
66700	55275	39	6	<1	490	<1	2	<10	5.5	355	<0.5	4	<1	64	5	360	10	
66700	55300	32	18	<1	800	<1	3	<10	5.8	5	<0.5	12	<1	115	9	50	<5	
66700	55325	44	1	<1	170	<1	<1	<10	2.8	188	<0.5	2	<1	17	6	950	7	
66700	55350	78	11	<1	1360	<1	3	<10	3.4	113	0.9	6	<1	124	15	2150	6	
66700	55375	7	3	<1	3680	<1	<1	<10	<0.5	5	<0.5	4	<1	52	4	690	<5	
66700	55400	74	20	<1	1550	<1	5	<10	4.3	10	<0.5	3	<1	196	13	580	<5	
66700	55425	<5	2	<1	1790	<1	<1	<10	1.8	<3	<0.5	66	<1	16	1	140	<5	
66700	55450	238	50	<1	1900	<1	15	<10	21	53	<0.5	57	<1	636	45	700	14	
66700	55475	173	42	<1	800	<1	9	<10	24.9	606	<0.5	33	2	299	26	1700	46	
66700	55500	95	6	<1	420	<1	3	<10	9.7	505	<0.5	11	<1	129	15	1150	14	
66700	55525	6	1	<1	5000	<1	<1	<10	0.7	<3	<0.5	85	<1	15	<1	490	<5	
66700	55550	44	9	<1	200	<1	2	<10	12.7	743	<0.5	8	<1	77	7	530	19	
66700	55575	66	9	<1	220	<1	2	<10	11.2	1650	<0.5	6	4	65	6	200	31	
66700	55600	71	13	<1	70	<1	2	<10	7.5	1340	<0.5	7	192	63	5	70	20	
66700	55625	45	18	<1	30	<1	3	<10	10.1	709	<0.5	8	10	79	6	<20	14	
66700	55650	75	22	<1	10	<1	5	<10	15.4	537	<0.5	12	14	131	11	70	26	
66700	55675	36	4	<1	250	<1	1	<10	5.4	362	<0.5	5	1	64	7	690	10	
66700	55700	7	2	<1	2290	<1	<1	<10	0.9	22	<0.5	52	<1	18	1	170	<5	
66700	55725	44	10	<1	660	<1	2	<10	13.2	887	<0.5	10	2	66	6	760	21	
66700	55750	14	8	<1	2300	<1	1	<10	3.5	<3	<0.5	45	<1	55	4	140	<5	
66800	55200	60	8	<1	230	<1	3	<10	15.3	332	<0.5	9	<1	143	13	1990	29	
66800	55225	40	9	<1	1150	<1	2	<10	3.8	65	<0.5	18	<1	95	6	790	5	
66800	55250	11	12	<1	650	<1	3	<10	5.4	14	<0.5	32	<1	102	7	800	6	
66800	55275	90	26	<1	280	<1	6	<10	20.4	537	<0.5	17	<1	204	18	1770	26	
66800	55300	11	6	<1	1340	<1	2	<10	1.2	28	<0.5	12	<1	89	6	370	<5	
66800	55325	19	3	<1	1290	<1	<1	<10	1.8	4	<0.5	3	<1	27	2	110	<5	
66800	55350	70	18	<1	1050	<1	5	<10	6	97	<0.5	11	<1	234	17	610	6	
66800	55375	12	5	<1	2620	<1	1	<10	0.9	3	<0.5	20	<1	87	7	580	<5	
66800	55400	27	15	<1	1590	<1	3	<10	7.6	<3	<0.5	26	<1	103	7	1300	6	
66800	55425	167	23	<1	2030	<1	6	<10	8.7	14	<0.5	73	<1	258	19	13800	15	
66800	55450	11	5	<1	2380	<1	<1	<10	2.2	<3	<0.5	56	<1	32	2	50	<5	
66800	55475	69	18	<1	90	<1	4	<10	31	996	<0.5	10	2	90	9	150	40	
66800	55500	49	8	<1	200	<1	2	<10	11.7	1540	<0.5	7	2	56	6	670	33	
66800	55525	7	3	<1	1110	<1	<1	<10	3.7	12	<0.5	6	<1	15	<1	80	<5	
66800	55550	36	14	<1	290	<1	3	<10	13.1	292	<0.5	7	<1	86	6	190	13	
66800	55575	39	9	<1	320	<1	2	<10	5.5	330	<0.5	5	1	74	6	240	10	
66800	55600	56	12	<1	90	<1	3	<10	20.8	953	<0.5	11	1	100	9	420	23	
66800	55625	41	9	<1	80	<1	2	<10	17.1	731	<0.5	6	2	68	6	420	21	
66800	55650	32	2	<1	70	<1	1	<10	6.5	558	<0.5	4	<1	45	6	310	11	
66800	55675	59	20	<1	650	<1	3	<10	21	802	<0.5	6	2	89	7	170	28	
66800	55700	63	17	<1	670	<1	4	<10	11.9	395	<0.5	17	<1	142	12	1040	14	
66800	55725	13	1	<1	2670	<1	<1	<10	2.6	20	<0.5	18	<1	16	1	30	<5	
66800	55750	11	1	<1	3220	<1	<1	<10	1	20	<0.5	126	<1	14	1	190	<5	

MMI DATA
OPHIR NORTH GRID

Line	Station	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cs	Cu	Dy	Er	Eu	Fe	Ga
66900	55200	39	>200	630	<0.1	3100	8	<10	31	46	46	5.4	550	6	3.2	1.7	223	29
66900	55225	15	143	250	0.1	6220	<1	220	27	66	384	6.7	380	33	21.4	7.9	149	9
66900	55250	12	122	350	<0.1	13900	<1	270	18	104	353	1.6	780	46	28.5	9	163	3
66900	55275	8	>200	80	<0.1	2400	<1	60	20	14	440	2.4	370	13	7.9	1.6	119	5
66900	55300	5	187	30	<0.1	2530	<1	160	74	28	712	2.6	750	17	10.2	2.8	160	4
66900	55325	4	105	100	<0.1	2000	1	290	51	22	163	3.3	310	5	3.3	1.3	119	9
66900	55350	27	149	50	0.1	750	2	240	24	41	465	11.2	860	10	5.7	2.5	93	3
66900	55375	10	120	30	<0.1	2720	<1	300	37	18	102	2.5	380	5	3.6	1.3	69	4
66900	55400	15	99	10	<0.1	1530	<1	380	45	12	73	3.9	400	3	1.7	0.9	33	2
66900	55425	16	>200	100	0.1	2470	<1	80	67	65	328	4.8	740	24	13.4	4.1	169	10
66900	55450	<1	30	60	<0.1	1060	<1	340	45	<5	74	<0.5	140	1	0.9	<0.5	16	1
66900	55475	18	29	20	0.2	1330	<1	350	115	7	55	<0.5	2520	3	2	0.9	17	<1
66900	55500	<1	4	40	<0.1	240	<1	310	7	<5	<5	<0.5	280	<1	<0.5	<0.5	27	<1
66900	55525	24	95	<10	0.6	2010	<1	390	47	32	22	2.6	2220	16	9.8	3.2	44	1
66900	55550	29	107	10	0.9	2800	<1	360	79	40	69	0.7	5500	49	34.7	7.7	69	2
66900	55575	31	101	80	0.6	1960	<1	330	14	54	82	3.4	1860	13	6.9	3.7	38	2
66900	55600	23	87	80	0.2	1820	<1	410	22	18	9	3.5	500	5	3.2	1.3	31	2
66900	55625	10	182	70	0.2	2050	<1	140	39	130	179	1.8	1400	69	39.8	12.1	149	9
66900	55650	13	>200	110	0.2	1580	<1	60	23	44	165	3.2	860	16	8.8	3.1	162	16
66900	55675	6	>200	20	<0.1	1010	<1	50	29	15	140	0.7	490	8	6.7	1	152	10
66900	55700	14	>200	30	<0.1	2220	<1	120	29	40	331	6.3	700	32	18.1	5.3	110	7
66900	55725	8	193	50	<0.1	960	<1	150	13	43	763	1.9	560	23	14.6	3.8	155	6
66900	55750	24	>200	60	1	1660	3	40	8	31	279	4.3	650	14	8.1	2.5	110	9
67000	55275	14	91	20	<0.1	1520	<1	440	12	47	36	16.5	750	19	12.3	5	31	1
67000	55300	6	156	40	<0.1	2340	<1	200	31	64	104	16.7	1170	44	28.6	7.7	122	6
67000	55325	8	198	50	<0.1	2200	<1	90	32	117	189	5.5	1030	83	49.7	13.1	129	3
67000	55350	11	91	<10	<0.1	2830	<1	480	34	17	16	2	790	10	6.3	2.2	19	<1
67000	55375	10	>200	20	<0.1	450	<1	50	9	32	174	4.7	690	9	4.9	2	169	17
67000	55400	8	>200	50	0.2	870	2	40	11	44	360	8.7	1420	13	7.7	2.5	182	20
67000	55425	16	>200	120	<0.1	630	2	70	15	35	176	15.9	640	7	3.8	1.7	208	16
67000	55450	14	>200	90	<0.1	840	1	40	39	16	165	2.1	720	9	6.1	1.2	184	9
67000	55475	43	>200	120	0.1	1440	2	90	40	22	124	3.3	370	6	3.8	1.1	174	14
67000	55500	44	>200	360	0.2	1470	2	<10	21	21	540	4.2	620	8	6	1	220	29
67000	55525	43	>200	450	1	1840	2	10	7	216	123	7.9	1300	30	14.5	8.1	176	16
67000	55550	13	>200	230	0.2	2140	2	20	14	87	193	1.8	760	11	5.9	2.4	259	19
67000	55575	21	>200	460	0.4	1750	3	<10	23	119	370	10.5	1260	22	12.9	4.5	215	18
67000	55600	35	43	20	1.4	2010	<1	470	11	13	34	0.7	2240	5	2.5	1.6	15	<1
67000	55625	34	29	10	0.5	2410	<1	580	11	<5	10	0.8	1650	1	0.7	<0.5	11	<1
67000	55650	33	96	<10	1	2310	<1	450	9	72	39	0.6	4800	35	21.4	9	18	<1
67000	55675	25	55	<10	1	1490	<1	450	28	33	27	<0.5	1180	6	3.2	1.9	16	<1
67000	55700	4	173	<10	<0.1	770	<1	200	108	31	264	0.6	600	21	12.8	3.2	119	6
67000	55725	6	>200	30	0.1	770	<1	120	13	33	162	17.3	1480	10	6	2.5	86	7
67000	55750	5	>200	50	<0.1	410	<1	<10	12	10	92	0.7	500	5	4	0.5	181	13
67100	55275	14	169	1060	0.4	1890	<1	150	18	68	320	2.8	1540	96	61	14.7	152	2
67100	55300	14	86	<10	0.1	2290	<1	610	47	18	69	0.8	2580	10	6.9	2.5	23	<1
67100	55325	17	111	<10	<0.1	1190	<1	510	24	14	139	4.8	1820	10	8.1	1.8	71	2

MMI DATA

OPHIR NORTH GRID

Line	Station	Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb
66900	55200	6	<1	<0.5	23	24	7	7	1360	31	7	26	139	11.1	250	<1	6	<1	30	33
66900	55225	27	<1	<0.5	37.7	21	9	46	6120	11	0.6	54	299	2.3	80	<1	10	<1	103	6
66900	55250	38	<1	<0.5	22.4	42	<5	33	5570	10	<0.5	82	371	1.8	70	<1	16	<1	101	13
66900	55275	7	<1	<0.5	26.1	5	<5	38	2040	<5	0.9	12	659	2.1	80	<1	2	<1	42	<1
66900	55300	10	<1	<0.5	16.1	13	6	89	4710	<5	<0.5	22	1180	3.1	120	<1	4	<1	147	<1
66900	55325	5	1	<0.5	68.9	9	8	49	16000	7	1	14	167	5.9	100	<1	3	<1	165	<1
66900	55350	10	<1	<0.5	19.3	16	<5	88	2220	<5	<0.5	26	430	1.4	50	<1	5	<1	227	<1
66900	55375	5	<1	<0.5	117	8	<5	45	8060	12	0.7	13	231	3	100	<1	3	<1	308	<1
66900	55400	3	<1	<0.5	53.2	5	<5	54	2390	6	<0.5	8	241	1.1	40	<1	2	<1	206	<1
66900	55425	18	<1	<0.5	41.3	24	<5	20	6780	6	4.9	41	418	5.3	120	<1	8	<1	149	3
66900	55450	<1	<1	<0.5	15.3	1	<5	44	15300	13	<0.5	2	82	1.9	40	<1	<1	<1	8	5
66900	55475	3	<1	<0.5	3.1	3	<5	43	3660	150	<0.5	8	734	0.2	40	<1	1	<1	<5	4
66900	55500	<1	<1	<0.5	10.6	<1	<5	40	1600	215	<0.5	<1	57	0.4	<10	<1	<1	<1	8	2
66900	55525	15	<1	<0.5	10	15	<5	29	1370	11	0.5	31	284	0.2	90	<1	6	<1	140	<1
66900	55550	36	<1	<0.5	18.5	30	<5	39	4400	11	<0.5	59	357	0.5	90	<1	11	<1	30	2
66900	55575	14	<1	<0.5	8.2	21	<5	33	2720	14	<0.5	41	206	0.7	30	<1	8	<1	140	4
66900	55600	5	<1	<0.5	9.6	7	<5	54	580	9	0.5	12	218	0.4	30	<1	3	<1	124	3
66900	55625	56	<1	<0.5	23.5	49	<5	41	1850	5	1.4	120	603	2.5	190	<1	22	<1	102	3
66900	55650	13	<1	<0.5	19.4	19	8	30	1020	6	3.3	35	281	3	280	<1	7	<1	109	6
66900	55675	4	<1	<0.5	15.4	6	<5	20	890	<5	4	10	129	2.8	150	<1	2	<1	16	<1
66900	55700	22	<1	<0.5	14.5	19	<5	68	2770	<5	1.1	45	718	1.3	190	<1	8	<1	176	<1
66900	55725	15	<1	<0.5	86.8	12	<5	127	6520	<5	0.8	30	1490	1.7	90	<1	5	<1	163	<1
66900	55750	10	<1	<0.5	10	12	<5	21	940	<5	1.9	23	381	1.8	160	<1	5	<1	258	2
67000	55275	20	<1	<0.5	23.8	17	<5	50	3220	7	<0.5	42	146	0.2	20	<1	8	<1	101	<1
67000	55300	32	<1	<0.5	36.1	25	<5	31	3030	<5	<0.5	62	166	1.5	70	<1	12	<1	90	<1
67000	55325	62	<1	<0.5	18.9	35	<5	43	5590	8	<0.5	117	836	2.2	50	<1	20	<1	176	<1
67000	55350	9	<1	<0.5	19.4	7	<5	141	1440	8	<0.5	16	1790	0.2	<10	<1	3	<1	92	<1
67000	55375	8	<1	<0.5	13.5	14	<5	17	1740	10	3.6	21	499	3.7	120	<1	4	<1	51	<1
67000	55400	10	<1	<0.5	17.8	20	10	15	900	14	3.7	27	430	2.4	210	<1	6	<1	109	2
67000	55425	6	<1	<0.5	8.8	16	<5	18	2590	35	3	20	268	5.7	110	<1	4	<1	84	2
67000	55450	5	<1	<0.5	13.9	6	<5	15	2680	5	2.2	11	153	6.1	110	<1	2	<1	109	1
67000	55475	5	<1	<0.5	34.1	10	<5	24	5030	7	4.8	14	227	4	230	<1	3	<1	185	5
67000	55500	5	<1	<0.5	26.6	11	8	20	2180	12	8.2	13	286	4.9	200	<1	3	<1	123	9
67000	55525	35	<1	<0.5	18.5	74	<5	8	2540	24	4	123	116	6.6	220	<1	26	<1	312	20
67000	55550	11	<1	<0.5	32.9	28	6	16	6580	8	4.5	36	227	11.8	230	<1	8	<1	27	11
67000	55575	21	<1	<0.5	17	42	7	12	1600	15	3	62	444	6.5	230	<1	13	<1	180	17
67000	55600	6	<1	<0.5	13.8	7	<5	53	1360	20	<0.5	16	184	0.1	<10	<1	3	<1	47	2
67000	55625	2	<1	<0.5	19.8	2	<5	82	180	17	<0.5	5	126	<0.1	<10	<1	<1	<1	113	<1
67000	55650	37	<1	<0.5	8	43	<5	81	2120	<5	<0.5	85	571	<0.1	20	<1	16	<1	46	<1
67000	55675	8	<1	<0.5	17.7	11	<5	143	2330	<5	<0.5	22	137	<0.1	30	<1	4	<1	16	<1
67000	55700	15	<1	<0.5	26.3	12	<5	44	4010	<5	<0.5	29	265	1.2	100	<1	5	<1	66	<1
67000	55725	10	<1	<0.5	12.8	12	<5	32	3160	<5	<0.5	23	359	4.6	60	<1	5	<1	147	1
67000	55750	2	<1	<0.5	10.8	6	<5	8	90	<5	3.3	6	178	6.8	60	<1	1	<1	23	<1
67100	55275	65	<1	<0.5	17.3	27	<5	76	7690	<5	<0.5	79	1490	1.6	90	<1	13	<1	95	30
67100	55300	10	<1	<0.5	28.4	9	<5	76	4010	16	<0.5	20	2760	0.3	20	<1	4	<1	77	<1
67100	55325	7	<1	<0.5	13.7	6	<5	114	1850	6	<0.5	13	1110	0.1	30	<1	2	<1	103	<1

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OPHIR NORTH GRID

Line	Station	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
66900	55200	58	6	2	90	1	<1	<10	10.8	2580	0.6	10	2	31	3	330	51	
66900	55225	119	18	<1	330	<1	5	<10	7	336	<0.5	7	<1	165	18	390	7	
66900	55250	126	25	<1	500	<1	7	<10	9.8	79	<0.5	14	<1	261	22	370	12	
66900	55275	48	4	<1	430	<1	2	<10	4.9	515	<0.5	3	<1	66	6	780	8	
66900	55300	90	7	<1	810	<1	2	<10	6.1	249	<0.5	5	<1	96	8	1590	<5	
66900	55325	46	4	<1	740	<1	<1	<10	4.4	438	0.7	4	<1	28	3	1780	9	
66900	55350	66	8	<1	1070	<1	2	<10	8.2	116	<0.5	3	<1	55	5	200	8	
66900	55375	30	4	<1	790	<1	<1	<10	3.8	204	<0.5	4	<1	31	3	970	6	
66900	55400	14	2	<1	1350	<1	<1	<10	3.2	128	<0.5	2	<1	16	1	540	<5	
66900	55425	72	13	<1	380	<1	3	<10	12.8	980	<0.5	8	<1	123	10	1830	31	
66900	55450	6	<1	<1	1530	<1	<1	<10	0.9	34	<0.5	6	<1	6	<1	860	<5	
66900	55475	7	2	<1	1730	<1	<1	<10	2.3	4	<0.5	100	<1	21	2	1770	<5	
66900	55500	<5	<1	<1	1540	<1	<1	<10	<0.5	7	<0.5	23	<1	1	<1	280	<5	
66900	55525	37	11	<1	2610	<1	2	<10	5.3	41	<0.5	34	<1	101	9	190	6	
66900	55550	152	21	<1	2710	<1	7	<10	8.8	53	<0.5	74	<1	395	29	260	18	
66900	55575	37	12	<1	1510	<1	2	<10	7.9	118	<0.5	9	<1	67	5	200	9	
66900	55600	17	4	<1	2430	<1	<1	<10	1.8	108	<0.5	12	<1	31	2	50	<5	
66900	55625	81	37	<1	1080	<1	10	<10	9.9	524	<0.5	8	<1	421	28	570	16	
66900	55650	52	10	<1	580	<1	2	<10	12.9	1170	<0.5	7	<1	82	7	360	31	
66900	55675	37	3	<1	340	<1	1	<10	5.9	970	<0.5	4	<1	46	5	430	25	
66900	55700	81	14	<1	780	<1	4	<10	5.4	376	<0.5	4	<1	184	14	290	12	
66900	55725	137	11	<1	760	<1	3	<10	6.5	306	<0.5	4	<1	121	12	210	10	
66900	55750	54	7	<1	550	<1	2	<10	6.5	825	0.7	3	<1	70	6	210	17	
67000	55275	53	14	<1	1050	<1	3	<10	2.5	16	<0.5	6	<1	122	10	70	<5	
67000	55300	76	21	<1	850	<1	6	<10	5.5	326	<0.5	11	<1	281	22	370	8	
67000	55325	148	40	<1	370	<1	12	<10	9.3	168	<0.5	16	<1	510	36	990	5	
67000	55350	66	6	<1	1600	<1	2	<10	1.7	18	0.6	9	<1	67	5	180	6	
67000	55375	26	6	<1	310	<1	1	<10	5.9	3350	<0.5	3	2	46	4	190	15	
67000	55400	38	8	<1	210	<1	2	<10	9.8	2660	<0.5	4	11	73	6	240	32	
67000	55425	34	5	<1	300	<1	1	<10	8.2	2230	<0.5	4	12	37	3	470	24	
67000	55450	52	4	<1	220	<1	1	<10	4.5	813	<0.5	3	<1	47	5	1420	16	
67000	55475	41	4	<1	460	<1	<1	<10	7.2	1710	<0.5	3	2	33	3	760	25	
67000	55500	56	3	1	120	<1	<1	<10	7.6	3780	<0.5	5	3	48	5	240	40	
67000	55525	81	32	<1	80	<1	5	<10	24.1	2660	<0.5	10	6	137	10	160	42	
67000	55550	57	10	<1	120	<1	2	<10	20.5	1760	<0.5	6	2	52	4	590	36	
67000	55575	79	17	<1	60	<1	3	<10	24.5	1870	<0.5	8	4	108	10	540	39	
67000	55600	14	5	<1	1540	<1	<1	<10	6.5	51	<0.5	19	<1	25	2	80	5	
67000	55625	6	1	<1	3000	<1	<1	<10	1.5	17	<0.5	10	<1	8	<1	30	<5	
67000	55650	80	26	<1	1350	<1	6	<10	7.7	7	<0.5	9	<1	240	17	60	6	
67000	55675	15	7	<1	1870	<1	1	<10	9.9	11	<0.5	3	<1	30	3	150	<5	
67000	55700	77	9	<1	1110	<1	3	<10	4.5	325	<0.5	3	<1	127	10	2480	<5	
67000	55725	42	7	<1	510	<1	1	<10	5.5	469	<0.5	4	<1	53	4	300	12	
67000	55750	33	1	<1	150	<1	<1	<10	5.6	1180	<0.5	5	<1	24	5	160	21	
67100	55275	231	35	<1	530	<1	13	<10	8.5	110	<0.5	6	<1	590	43	590	8	
67100	55300	38	7	<1	2640	<1	1	<10	0.9	35	1	11	<1	79	6	180	<5	
67100	55325	58	4	<1	2570	<1	1	<10	0.7	22	<0.5	3	<1	70	8	160	<5	

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Line	Station	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cs	Cu	Dy	Er	Eu	Fe	Ga
67100	55350	27	45	20	0.2	6130	<1	560	9	18	11	1.4	1600	14	8.1	4.3	17	<1
67100	55375	4	>200	30	<0.1	2270	<1	160	23	21	366	2.5	420	35	25.8	4.4	134	3
67100	55400	10	132	30	<0.1	4350	<1	280	34	86	66	8.4	540	58	35	13.2	74	2
67100	55425	6	177	100	0.1	4610	<1	150	55	296	581	4.2	520	139	90.2	28.4	225	5
67100	55450	5	163	120	<0.1	2270	<1	210	79	49	147	33.8	1080	50	34	7.9	108	5
67100	55475	15	187	290	0.1	3510	<1	90	72	88	222	18.6	790	35	21.5	6.8	282	10
67100	55500	21	182	170	0.3	4010	1	100	55	139	282	3.2	1240	45	24.6	10.2	181	9
67100	55525	24	160	150	0.3	2330	<1	190	44	69	178	7.5	780	16	9.7	3.9	137	9
67100	55550	29	170	150	<0.1	2300	<1	70	97	46	140	2.5	800	24	14.8	4.1	281	14
67100	55575	39	129	60	1	2220	<1	240	29	146	59	5	2620	78	48	19.9	98	4
67100	55600	2	>200	280	0.3	520	2	<10	5	22	59	5.2	610	5	4.4	0.8	216	27
67100	55625	5	>200	260	0.5	2670	1	30	6	270	161	7.3	1410	65	30.6	13.5	142	18
67100	55650	4	184	220	<0.1	2000	1	100	10	82	281	11.9	890	13	7.1	3.2	152	16
67100	55675	7	>200	210	0.2	610	2	30	13	66	189	11.5	810	15	8.2	3	188	19
67100	55700	6	38	60	0.8	3510	<1	540	333	34	61	<0.5	2730	20	14.5	4.4	60	<1
67200	55300	11	87	<10	<0.1	2980	<1	330	29	23	36	9.3	260	13	9	2.9	61	2
67200	55325	32	43	<10	0.3	8980	<1	680	14	6	10	0.5	940	7	3.9	2.1	9	<1
67200	55350	9	72	50	<0.1	5500	<1	400	53	50	41	1.6	420	34	21.9	8.3	17	1
67200	55375	8	44	80	0.2	3230	<1	200	25	102	80	2.4	300	34	19.8	10.4	81	4
67200	55400	10	58	<10	0.2	2880	<1	500	43	49	19	2.3	410	21	12.7	6.3	17	<1
67200	55425	5	>200	30	<0.1	3110	<1	60	29	<5	460	0.6	450	14	17.7	0.8	101	2
67200	55450	4	197	30	<0.1	1590	<1	70	49	59	287	15.3	560	19	10.2	4	141	10
67200	55475	17	73	<10	0.1	2320	<1	400	63	40	33	10.1	1010	16	9.7	4.9	34	<1
67200	55500	25	80	<10	0.3	3540	<1	450	20	46	9	2.1	1450	14	8.4	4.2	27	<1
67200	55525	28	106	30	0.5	6500	<1	300	58	78	79	2.2	1120	27	18	6.4	53	1
67200	55550	14	72	<10	<0.1	5450	<1	610	42	23	22	0.7	1230	7	4.3	2.1	34	<1
67200	55575	25	65	<10	0.5	2250	<1	550	13	20	9	<0.5	3680	8	4.6	2.6	22	<1
67200	55600	24	126	40	0.4	2690	<1	300	14	75	43	6.4	1590	22	14.3	5.7	54	1
67200	55625	6	>200	60	<0.1	760	<1	50	10	33	186	1.8	370	14	8.6	2.6	80	7
67200	55650	16	182	70	0.3	480	<1	90	17	94	119	3.4	790	23	12.8	5.3	58	8
67200	55675	13	>200	50	<0.1	890	<1	120	15	53	363	4.2	870	34	22.2	5.1	109	6
67200	55700	14	>200	410	0.3	1020	2	10	19	89	686	4.6	1370	11	6.7	2.6	316	33
67200	55725	26	131	140	1.6	570	<1	110	5	307	73	8.2	1550	33	15.6	12.5	53	6
67200	55750	14	132	50	0.4	1660	<1	310	30	190	167	<0.5	1620	51	34.3	11.1	96	1
67300	55300	14	67	170	0.4	4120	<1	430	41	80	50	3.8	680	37	25.2	10.8	30	<1
67300	55325	46	49	20	0.6	4760	<1	510	101	46	19	1.3	2250	15	9.1	4.6	12	<1
67300	55350	15	126	20	0.3	1820	<1	260	129	58	77	15.6	1180	74	55.3	15.2	91	2
67300	55375	24	26	10	0.5	3830	<1	520	25	19	27	1.3	890	9	5.4	2.7	17	<1
67300	55400	36	114	10	0.9	7490	<1	350	88	237	108	<0.5	1320	81	46.7	20.3	73	<1
67300	55425	12	69	10	0.2	2320	<1	370	52	20	31	3.3	620	11	7.2	2.6	51	<1
67300	55450	12	163	20	0.1	1070	<1	240	18	59	275	16.3	1430	18	10.3	4.6	67	2
67300	55475	8	122	40	<0.1	1090	<1	290	46	52	215	12.9	890	26	16.7	5.8	82	2
67300	55500	4	>200	230	<0.1	1150	<1	40	16	32	397	2.4	470	17	10.9	2.9	161	8
67300	55525	4	>200	10	<0.1	1320	<1	200	6	17	723	1.9	440	15	11.1	1.5	44	1
67300	55550	11	93	<10	0.1	1360	<1	420	25	54	64	1	1010	17	11.6	4.6	41	<1
67300	55575	34	39	<10	0.2	3540	<1	750	10	7	12	<0.5	4650	6	4.2	2	10	<1

MMI DATA
OPHIR NORTH GRID

Line	Station	Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb
67100	55350	15	<1	<0.5	9.3	10	<5	137	530	<5	<0.5	28	218	<0.1	<10	<1	4	<1	38	<1
67100	55375	20	<1	<0.5	16.3	6	<5	40	1910	<5	<0.5	26	115	1.4	80	<1	4	<1	54	<1
67100	55400	48	<1	<0.5	24.3	32	<5	61	5330	<5	<0.5	83	488	0.9	60	<1	14	<1	208	1
67100	55425	114	<1	0.5	20.6	82	<5	40	29700	<5	0.7	223	195	5.1	120	<1	40	<1	71	3
67100	55450	34	<1	<0.5	47.3	18	<5	44	9650	<5	<0.5	52	388	1.9	80	<1	9	<1	277	2
67100	55475	26	<1	<0.5	35.4	19	6	21	28300	6	2	44	325	11.5	180	<1	8	<1	150	7
67100	55500	41	<1	<0.5	20.7	47	<5	30	3680	9	1.1	94	381	4.4	160	<1	19	<1	132	5
67100	55525	15	<1	<0.5	18.5	25	<5	37	5540	15	1.9	44	273	4	240	<1	9	<1	205	9
67100	55550	17	<1	<0.5	14.3	18	<5	28	4800	10	4.6	35	412	5.6	130	<1	6	<1	49	5
67100	55575	78	<1	<0.5	17	114	<5	22	1700	<5	0.7	187	245	1.4	60	<1	37	<1	101	2
67100	55600	3	<1	<0.5	5.8	10	<5	4	560	14	4.8	11	84	3.2	80	<1	2	<1	67	5
67100	55625	61	<1	<0.5	11.8	104	8	16	1720	11	3.5	170	296	5.7	210	<1	34	<1	136	13
67100	55650	14	<1	<0.5	13.8	35	7	29	3000	7	1.9	46	380	3.4	150	<1	10	<1	82	3
67100	55675	14	<1	<0.5	9.3	26	7	9	340	9	3.8	41	265	3.7	350	<1	8	<1	215	7
67100	55700	19	<1	<0.5	24.7	18	<5	76	6050	14	<0.5	36	831	0.3	90	<1	7	<1	8	3
67200	55300	11	<1	<0.5	13.4	10	<5	112	1430	<5	<0.5	22	201	0.4	30	<1	4	<1	74	<1
67200	55325	7	<1	<0.5	3.1	5	<5	133	1430	<5	<0.5	13	182	<0.1	<10	<1	2	<1	10	<1
67200	55350	31	<1	<0.5	24.1	16	<5	72	6250	<5	<0.5	47	214	0.6	20	<1	8	<1	17	<1
67200	55375	36	1	<0.5	7.8	31	<5	28	12200	<5	0.6	84	176	2.9	10	<1	15	<1	30	3
67200	55400	24	<1	<0.5	25.1	21	<5	99	6720	<5	<0.5	52	105	0.5	10	<1	9	<1	14	<1
67200	55425	3	<1	<0.5	11.9	1	13	24	4510	<5	<0.5	4	49	0.8	30	<1	<1	<1	56	<1
67200	55450	17	<1	<0.5	22.9	17	<5	18	10600	6	1	43	101	5.8	70	<1	8	<1	159	<1
67200	55475	17	<1	<0.5	16	17	<5	32	2610	<5	<0.5	45	210	0.4	10	<1	8	<1	65	<1
67200	55500	16	<1	<0.5	8.2	21	<5	55	770	<5	<0.5	44	237	0.3	40	<1	8	<1	77	<1
67200	55525	27	<1	<0.5	11.3	27	<5	50	1910	<5	<0.5	61	298	0.7	80	<1	12	<1	53	1
67200	55550	7	<1	<0.5	7	11	<5	98	410	<5	<0.5	21	325	0.2	20	<1	4	<1	26	<1
67200	55575	9	<1	<0.5	9.1	13	<5	46	720	<5	<0.5	30	521	0.1	<10	<1	6	<1	62	<1
67200	55600	23	<1	<0.5	11.6	35	<5	42	1790	<5	<0.5	68	458	0.7	40	<1	13	<1	231	1
67200	55625	11	<1	<0.5	8.2	12	<5	41	340	<5	0.7	27	383	1.2	180	<1	5	<1	115	1
67200	55650	22	<1	<0.5	5.8	37	<5	6	730	<5	1.1	66	104	1.5	260	<1	13	<1	33	1
67200	55675	22	<1	<0.5	17	18	<5	43	3020	<5	0.8	43	464	0.8	100	<1	8	<1	137	1
67200	55700	11	<1	<0.5	29.8	36	15	25	3320	12	10.1	43	456	5.6	180	<1	10	<1	112	8
67200	55725	46	<1	<0.5	6.4	105	<5	6	3570	8	0.7	173	56	2.1	50	<1	37	<1	133	5
67200	55750	47	<1	<0.5	40.8	61	<5	70	7130	<5	<0.5	119	1030	0.7	150	<1	23	<1	63	<1
67300	55300	37	<1	<0.5	14	25	<5	65	5160	<5	<0.5	72	226	0.4	20	<1	12	<1	32	2
67300	55325	16	<1	<0.5	9.7	13	<5	85	2620	<5	<0.5	35	331	0.4	20	<1	6	<1	8	<1
67300	55350	53	<1	<0.5	23.8	31	<5	39	5930	<5	<0.5	90	301	0.9	80	<1	16	<1	59	<1
67300	55375	10	<1	<0.5	7.5	9	<5	154	1380	<5	<0.5	24	212	0.1	20	<1	4	<1	17	<1
67300	55400	85	<1	<0.5	10.3	81	<5	76	3960	<5	<0.5	178	633	0.7	40	<1	32	<1	23	<1
67300	55425	10	<1	<0.5	13.3	10	<5	125	2340	<5	<0.5	21	643	0.3	40	<1	4	<1	126	<1
67300	55450	17	<1	<0.5	10.9	33	<5	89	1160	<5	<0.5	52	634	1	40	<1	11	<1	57	<1
67300	55475	21	<1	<0.5	13.6	19	<5	72	2390	<5	<0.5	42	1020	0.5	370	<1	8	<1	63	<1
67300	55500	12	<1	<0.5	11.8	11	<5	16	2360	<5	1.7	27	420	2.8	270	<1	5	<1	76	5
67300	55525	7	<1	<0.5	15.4	5	<5	106	1540	<5	<0.5	13	724	0.2	50	<1	2	<1	116	<1
67300	55550	18	<1	<0.5	22.6	19	<5	73	3340	<5	<0.5	41	503	0.5	20	<1	8	<1	54	<1
67300	55575	7	<1	<0.5	15.9	8	<5	102	1010	<5	<0.5	18	317	<0.1	<10	<1	3	<1	31	<1

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OPHIR NORTH GRID

Line	Station	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
67100	55350	31	10	<1	1640	<1	2	<10	2.2	<3	<0.5	6	<1	92	7	60	<5	
67100	55375	58	11	<1	730	<1	4	<10	4.5	131	<0.5	4	<1	236	21	900	6	
67100	55400	101	30	<1	990	<1	8	<10	4.8	70	<0.5	8	<1	367	25	530	<5	
67100	55425	460	81	<1	290	<1	20	<10	15.6	212	<0.5	9	<1	739	78	690	13	
67100	55450	135	19	<1	650	<1	6	<10	4.9	262	<0.5	9	<1	315	26	700	7	
67100	55475	110	17	<1	250	<1	5	<10	11.4	1050	0.5	8	<1	153	17	1350	21	
67100	55500	93	30	<1	490	<1	7	<10	11.7	604	<0.5	9	1	246	19	730	17	
67100	55525	56	13	<1	660	<1	3	<10	21.4	760	<0.5	8	1	87	7	630	19	
67100	55550	117	11	<1	440	<1	3	<10	9.1	1340	<0.5	7	1	131	12	1140	23	
67100	55575	291	57	<1	460	<1	12	<10	14.6	261	<0.5	19	<1	574	37	200	19	
67100	55600	38	3	<1	30	<1	<1	<10	9.1	2360	<0.5	6	3	28	4	110	29	
67100	55625	145	49	<1	210	<1	10	<10	22.7	2600	<0.5	13	4	295	21	130	53	
67100	55650	46	11	<1	390	<1	2	<10	10.3	2330	<0.5	4	2	70	5	160	21	
67100	55675	47	11	<1	110	<1	2	<10	17.1	2060	<0.5	7	3	72	7	250	38	
67100	55700	91	12	<1	3740	<1	3	<10	5.3	12	<0.5	53	<1	161	13	3470	11	
67200	55300	51	8	<1	950	<1	2	<10	1.6	69	<0.5	4	<1	86	7	390	<5	
67200	55325	15	5	<1	1750	<1	1	<10	1.1	4	<0.5	16	<1	39	3	40	<5	
67200	55350	45	19	<1	520	<1	5	<10	2.7	21	<0.5	13	<1	216	18	170	<5	
67200	55375	53	26	<1	360	<1	6	<10	8.2	239	<0.5	7	<1	192	17	270	12	
67200	55400	19	16	<1	1350	<1	3	<10	2.5	22	<0.5	9	<1	150	10	270	<5	
67200	55425	74	2	<1	190	<1	1	<10	2.5	70	<0.5	2	<1	77	19	470	<5	
67200	55450	38	13	<1	240	<1	3	<10	7.5	816	<0.5	6	<1	99	8	880	6	
67200	55475	21	14	<1	730	<1	3	<10	1.8	34	<0.5	7	<1	99	9	400	<5	
67200	55500	19	13	<1	1060	<1	2	<10	1.6	25	<0.5	7	<1	91	6	40	<5	
67200	55525	102	19	<1	820	<1	4	<10	11.5	52	<0.5	27	<1	166	15	380	16	
67200	55550	21	6	<1	1780	<1	1	<10	2.5	13	<0.5	6	<1	49	3	130	<5	
67200	55575	21	8	<1	2130	<1	1	<10	2.3	5	<0.5	10	<1	59	4	<20	<5	
67200	55600	63	18	<1	1050	<1	4	<10	4.4	131	<0.5	7	<1	144	11	120	7	
67200	55625	30	7	<1	500	<1	2	<10	3.3	753	<0.5	2	<1	81	6	100	7	
67200	55650	63	18	<1	130	<1	4	<10	10.6	1020	<0.5	5	<1	131	10	100	23	
67200	55675	174	14	<1	480	<1	5	<10	5.1	496	<0.5	2	<1	227	18	240	12	
67200	55700	72	10	2	120	<1	2	<10	15.4	4400	<0.5	7	4	55	6	280	57	
67200	55725	96	43	<1	120	<1	6	<10	20.6	398	<0.5	16	1	149	12	50	40	
67200	55750	167	37	<1	740	<1	8	<10	17.7	53	<0.5	8	<1	306	28	170	10	
67300	55300	44	24	<1	930	<1	6	<10	2.5	11	<0.5	9	<1	255	22	290	<5	
67300	55325	34	12	<1	1240	<1	2	<10	3.4	4	<0.5	13	<1	95	7	60	<5	
67300	55350	105	32	<1	850	<1	10	<10	4.3	46	<0.5	10	<1	573	45	1340	<5	
67300	55375	28	8	<1	1300	<1	2	<10	4.3	5	<0.5	7	<1	51	5	80	<5	
67300	55400	216	56	<1	850	<1	13	<10	7.9	12	<0.5	30	<1	436	35	550	8	
67300	55425	44	7	<1	1130	<1	2	<10	1.7	28	<0.5	4	<1	79	6	310	<5	
67300	55450	57	13	<1	770	<1	3	<10	4.5	191	<0.5	3	<1	106	8	340	5	
67300	55475	107	14	<1	980	<1	4	<10	3.1	80	<0.5	4	<1	166	13	260	<5	
67300	55500	73	8	<1	180	<1	2	<10	5.4	608	<0.5	4	<1	97	9	900	13	
67300	55525	57	4	<1	980	<1	2	<10	1.6	28	<0.5	<1	<1	95	8	110	<5	
67300	55550	68	12	<1	1100	<1	3	<10	2.3	20	<0.5	4	<1	111	9	110	<5	
67300	55575	18	5	<1	2550	<1	1	<10	0.6	<3	<0.5	4	<1	50	4	20	<5	

MMI DATA

OPHIR NORTH GRID

Line	Station	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cs	Cu	Dy	Er	Eu	Fe	Ga
67300	55600	50	16	10	0.7	2330	<1	740	3	<5	9	<0.5	5430	6	3.6	1.3	8	<1
67300	55625	4	>200	20	<0.1	510	<1	30	39	<5	91	<0.5	180	3	2.8	<0.5	121	5
67300	55650	4	>200	50	0.1	680	<1	<10	12	60	148	14.3	2280	18	9.4	3.9	124	7
67300	55675	21	104	20	0.1	1140	<1	360	38	31	8	4	1830	6	3.6	1.8	21	2
67300	55700	10	104	40	<0.1	1350	<1	330	72	78	115	2.9	950	16	9.2	4.7	90	6
67300	55725	22	>200	510	0.9	1720	1	70	12	298	297	7.9	1770	39	18.7	12.3	182	11
67400	55275	178	31	20	2.2	3820	<1	520	12	7	7	<0.5	4270	8	4.4	2.5	9	<1
67400	55300	32	47	50	0.4	3110	<1	630	103	32	64	0.6	1550	22	13.6	5.2	22	<1
67400	55325	190	6	50	2.5	1950	<1	450	44	<5	32	2	4750	5	3.1	0.9	8	<1
67400	55350	332	10	1000	3.3	990	<1	350	20	<5	39	3.5	4960	4	3.3	0.9	17	<1
67400	55375	16	28	20	<0.1	1500	<1	640	33	14	38	5.4	1130	10	5.3	2.9	12	<1
67400	55400	69	24	10	0.8	1110	<1	560	22	11	11	2.4	3520	9	5.4	3.1	11	<1
67400	55425	68	6	30	0.7	1620	<1	510	19	<5	55	0.9	6900	2	1.5	<0.5	5	<1
67400	55450	23	66	260	0.6	1160	<1	260	72	117	315	3.5	1470	29	18.2	8.7	142	2
67400	55475	49	3	50	0.8	500	<1	370	9	10	102	46.2	10400	5	2.9	1.2	21	<1
67400	55500	55	7	10	0.6	2800	<1	630	5	<5	11	0.6	6780	6	3.5	1.7	11	<1
67400	55525	23	49	<10	0.3	6190	<1	530	10	34	70	<0.5	8540	20	11.5	5.5	23	<1
67400	55550	40	15	10	0.6	2230	<1	500	23	<5	18	2.4	1590	4	2.1	0.8	10	<1
67400	55575	27	64	<10	0.6	2770	<1	490	17	22	7	<0.5	2730	9	5.8	2.7	15	<1
67400	55600	14	51	20	0.3	2940	<1	600	20	11	18	0.9	1790	5	2.9	1.4	11	<1
67400	55625	8	>200	<10	<0.1	2480	<1	140	17	48	709	7.9	750	16	7.9	3.6	77	3
67400	55650	17	86	<10	0.4	2650	<1	470	7	50	22	1.3	1920	13	7.6	4.2	27	<1
67400	55675	13	55	<10	0.2	1860	<1	570	49	12	19	0.7	1310	7	4.8	1.6	19	<1
67400	55700	34	35	10	0.8	2410	<1	750	12	21	21	1.8	4390	7	3.8	2.1	12	<1
67400	55725	27	38	<10	0.3	1630	<1	520	15	18	13	0.6	1520	7	4.5	2.2	23	<1
67400	55750	4	38	<10	0.2	2060	<1	600	38	8	30	0.6	910	8	5.5	1.8	17	<1

MMI DATA

OPHIR NORTH GRID

Line	Station	Gd	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb
67300	55600	6	<1	<0.5	21.9	<1	<5	56	140	<5	<0.5	5	75	<0.1	<10	1	<1	<1	29	<1
67300	55625	1	<1	<0.5	13.5	1	<5	17	1430	<5	0.9	3	135	1.4	170	<1	<1	<1	39	<1
67300	55650	15	<1	<0.5	8.4	23	<5	3	370	<5	1.6	43	371	4.5	140	<1	9	<1	188	1
67300	55675	7	<1	<0.5	21.7	12	<5	28	2290	6	0.5	23	329	0.8	10	<1	4	<1	160	<1
67300	55700	18	<1	<0.5	32.2	33	<5	26	12400	10	1	56	193	4.1	50	<1	12	<1	66	1
67300	55725	46	<1	<0.5	11.4	78	<5	9	4940	15	1.8	140	259	5.4	460	1	28	<1	148	14
67400	55275	9	<1	<0.5	10.1	7	<5	99	350	5	<0.5	18	402	0.2	<10	<1	3	<1	14	<1
67400	55300	22	<1	<0.5	25	16	<5	99	5460	<5	<0.5	37	709	0.5	70	<1	6	<1	6	<1
67400	55325	4	<1	<0.5	31.7	1	<5	119	1940	<5	<0.5	3	468	0.2	<10	<1	<1	<1	20	<1
67400	55350	4	1	<0.5	7.4	1	<5	88	1250	7	<0.5	4	658	0.4	<10	<1	<1	<1	21	6
67400	55375	11	<1	<0.5	20.1	6	<5	44	4360	<5	<0.5	18	152	0.7	<10	<1	3	<1	33	<1
67400	55400	12	<1	<0.5	10.7	7	<5	23	930	<5	<0.5	23	130	0.3	<10	<1	4	<1	27	<1
67400	55425	2	<1	<0.5	11.8	<1	6	196	2150	15	<0.5	1	654	0.1	<10	<1	<1	<1	17	1
67400	55450	33	<1	<0.5	26.6	32	<5	76	10400	<5	<0.5	87	573	1	40	<1	16	<1	68	2
67400	55475	6	<1	<0.5	43.9	7	<5	69	2980	5	<0.5	15	1060	0.5	<10	2	3	<1	129	3
67400	55500	7	<1	<0.5	29.7	4	6	273	450	<5	<0.5	13	524	<0.1	<10	1	2	<1	22	<1
67400	55525	23	<1	<0.5	41.6	26	<5	210	3630	<5	<0.5	53	1910	0.3	<10	<1	9	<1	56	<1
67400	55550	3	<1	<0.5	12.3	2	<5	164	740	<5	<0.5	5	671	0.2	<10	<1	<1	<1	52	<1
67400	55575	11	<1	<0.5	15.3	11	<5	99	640	<5	<0.5	24	507	0.1	10	<1	4	<1	80	<1
67400	55600	6	<1	<0.5	15.7	5	<5	75	1010	<5	<0.5	11	271	0.2	10	<1	2	<1	36	<1
67400	55625	14	<1	<0.5	16.9	16	<5	116	850	<5	<0.5	36	1250	1.1	90	<1	6	<1	141	<1
67400	55650	15	<1	<0.5	16.4	23	<5	120	710	<5	<0.5	45	554	0.2	20	<1	9	<1	83	<1
67400	55675	6	<1	<0.5	7.1	5	<5	71	3530	<5	<0.5	12	1300	0.3	20	<1	2	<1	44	2
67400	55700	7	<1	<0.5	8.9	8	<5	101	1800	<5	<0.5	19	439	0.2	10	<1	3	<1	39	<1
67400	55725	8	<1	<0.5	8	7	<5	80	660	<5	<0.5	17	820	0.1	<10	<1	3	<1	55	<1
67400	55750	6	<1	<0.5	25.8	5	<5	89	2780	<5	<0.5	11	539	0.2	40	<1	2	<1	36	<1

MMI DATA

OPHIR NORTH GRID

Line	Station	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
67300	55600	20	2	<1	2770	<1	<1	<10	1	<3	<0.5	6	<1	37	3	<20	<5	
67300	55625	22	<1	<1	170	<1	<1	<10	2.2	548	<0.5	1	<1	17	3	690	6	
67300	55650	55	12	<1	80	<1	3	<10	8.7	462	<0.5	6	<1	80	7	260	16	
67300	55675	15	6	<1	1100	<1	1	<10	1.8	196	<0.5	6	<1	38	3	100	7	
67300	55700	77	15	<1	840	<1	3	<10	8	622	<0.5	11	<1	93	7	480	18	
67300	55725	114	41	<1	150	<1	7	<10	28.4	1180	0.6	15	2	154	14	540	47	
67400	55275	13	6	<1	1320	<1	1	<10	1.5	4	<0.5	17	<1	54	3	<20	<5	
67400	55300	38	13	<1	1590	<1	3	<10	3.1	10	<0.5	14	<1	149	12	160	<5	
67400	55325	23	1	<1	990	<1	<1	<10	<0.5	<3	<0.5	6	<1	33	3	120	<5	
67400	55350	23	2	<1	450	<1	<1	<10	0.6	<3	<0.5	6	<1	40	3	50	<5	
67400	55375	11	7	<1	1340	<1	2	<10	1	13	<0.5	2	<1	61	4	80	<5	
67400	55400	14	7	<1	1040	<1	2	<10	1.2	18	<0.5	7	<1	64	5	20	<5	
67400	55425	15	<1	<1	1400	<1	<1	<10	<0.5	<3	<0.5	14	<1	14	1	<20	<5	
67400	55450	191	26	<1	550	<1	5	<10	13	56	0.7	9	<1	140	16	1970	7	
67400	55475	34	4	<1	480	<1	<1	<10	1	9	<0.5	2	<1	34	3	90	<5	
67400	55500	34	4	<1	1820	<1	<1	<10	<0.5	<3	<0.5	2	<1	42	3	<20	<5	
67400	55525	72	16	<1	2150	<1	3	<10	2.6	8	0.8	2	<1	144	10	80	<5	
67400	55550	25	2	<1	1440	<1	<1	<10	0.6	<3	<0.5	1	<1	26	2	120	<5	
67400	55575	17	8	<1	1790	<1	2	<10	2.6	5	<0.5	9	<1	62	4	40	<5	
67400	55600	15	4	<1	2090	<1	<1	<10	3.7	4	<0.5	10	<1	29	2	<20	<5	
67400	55625	46	11	<1	780	<1	2	<10	3.1	145	<0.5	2	<1	86	6	340	<5	
67400	55650	47	12	<1	1960	<1	2	<10	3.2	4	<0.5	2	<1	75	6	60	<5	
67400	55675	32	3	<1	2220	<1	<1	<10	0.7	15	<0.5	8	<1	56	4	40	<5	
67400	55700	25	5	<1	4680	<1	1	<10	1.8	10	0.5	4	<1	45	3	<20	<5	
67400	55725	36	6	<1	2080	<1	1	<10	1.9	<3	<0.5	2	<1	46	4	60	<5	
67400	55750	18	4	<1	2890	<1	1	<10	0.6	5	<0.5	3	<1	59	4	530	<5	

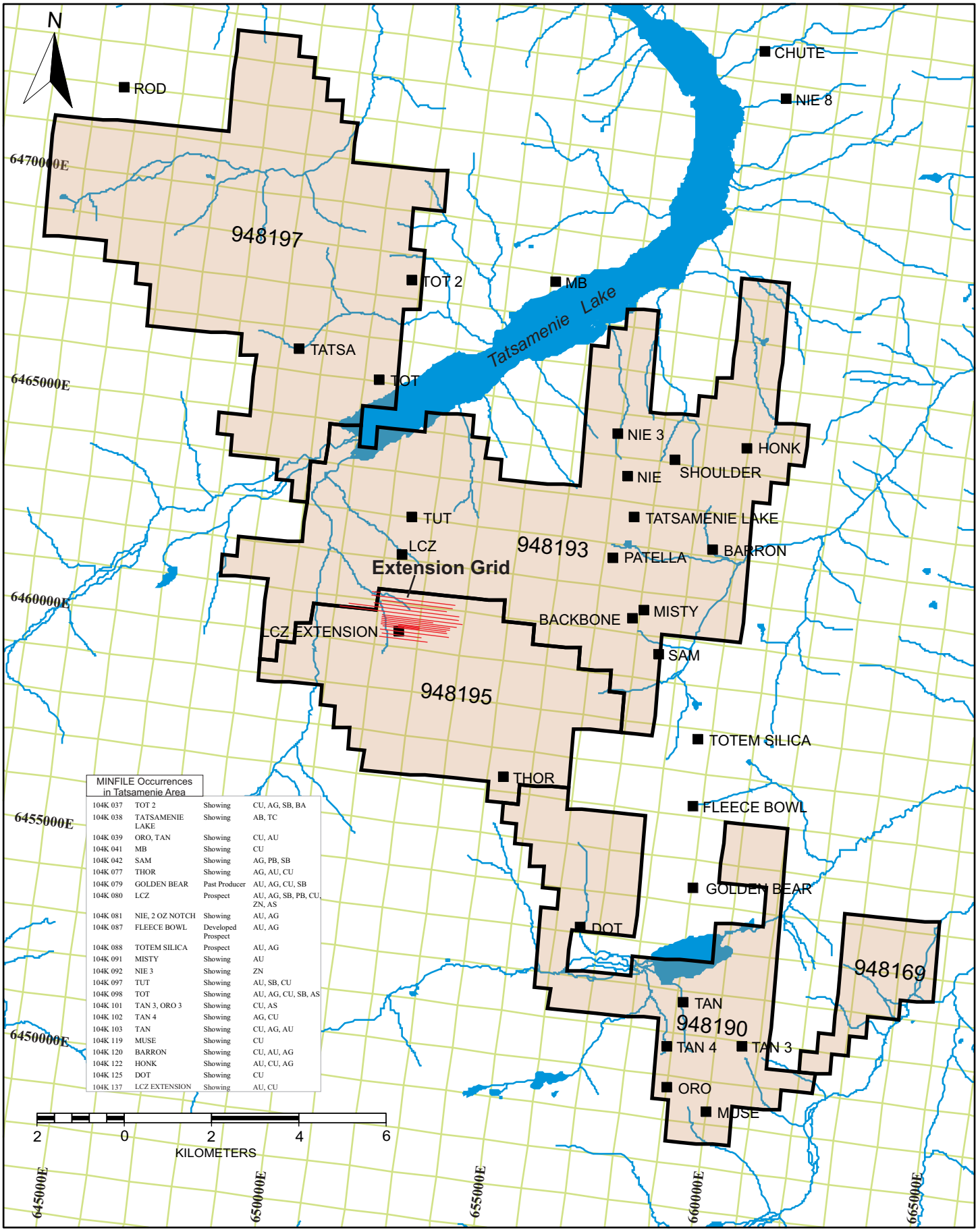


Figure 1. MINFILE Occurrences on and near Tatsamenie Claim Group.

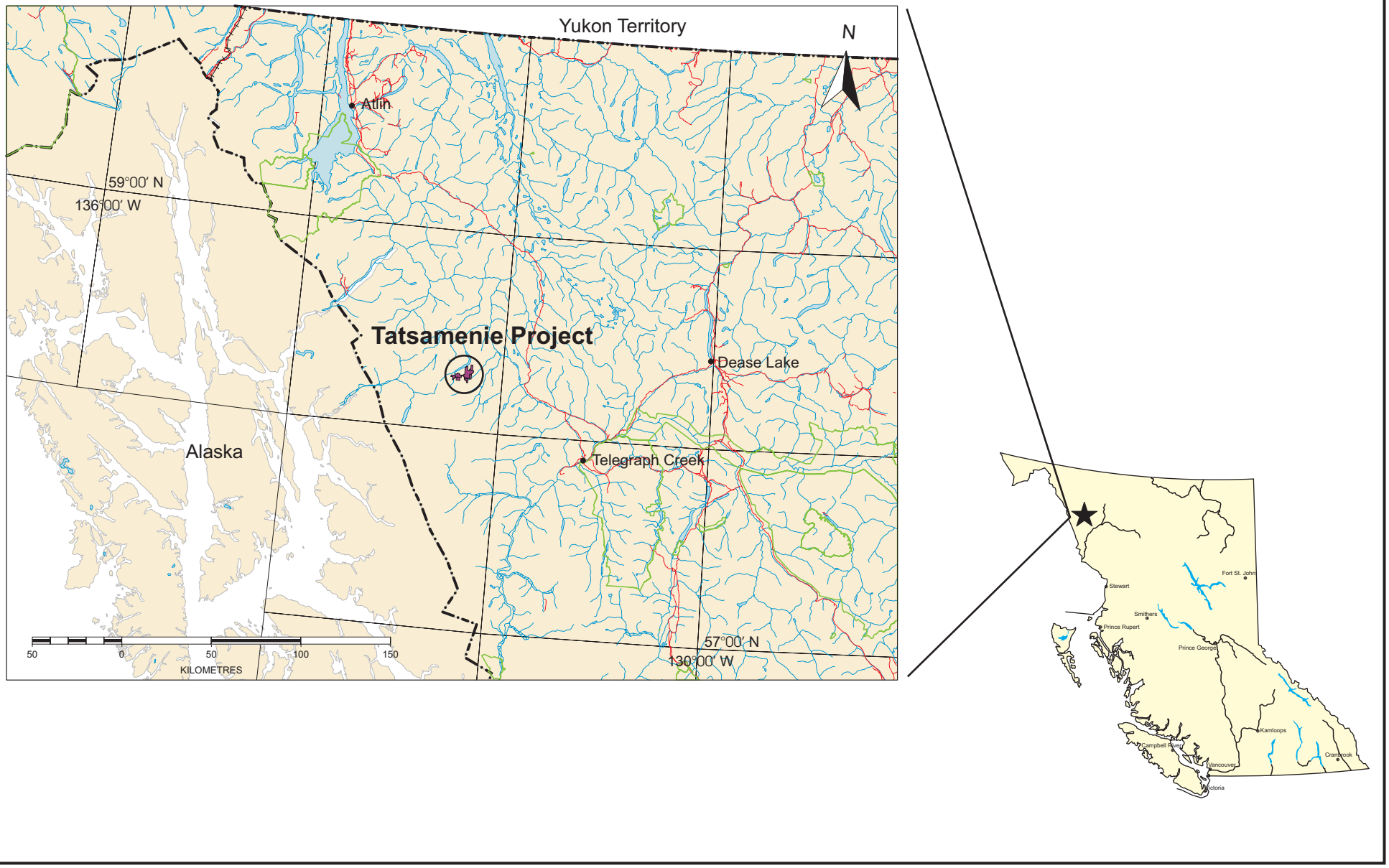


Figure 2. Location Map, Tatsamenie Project.

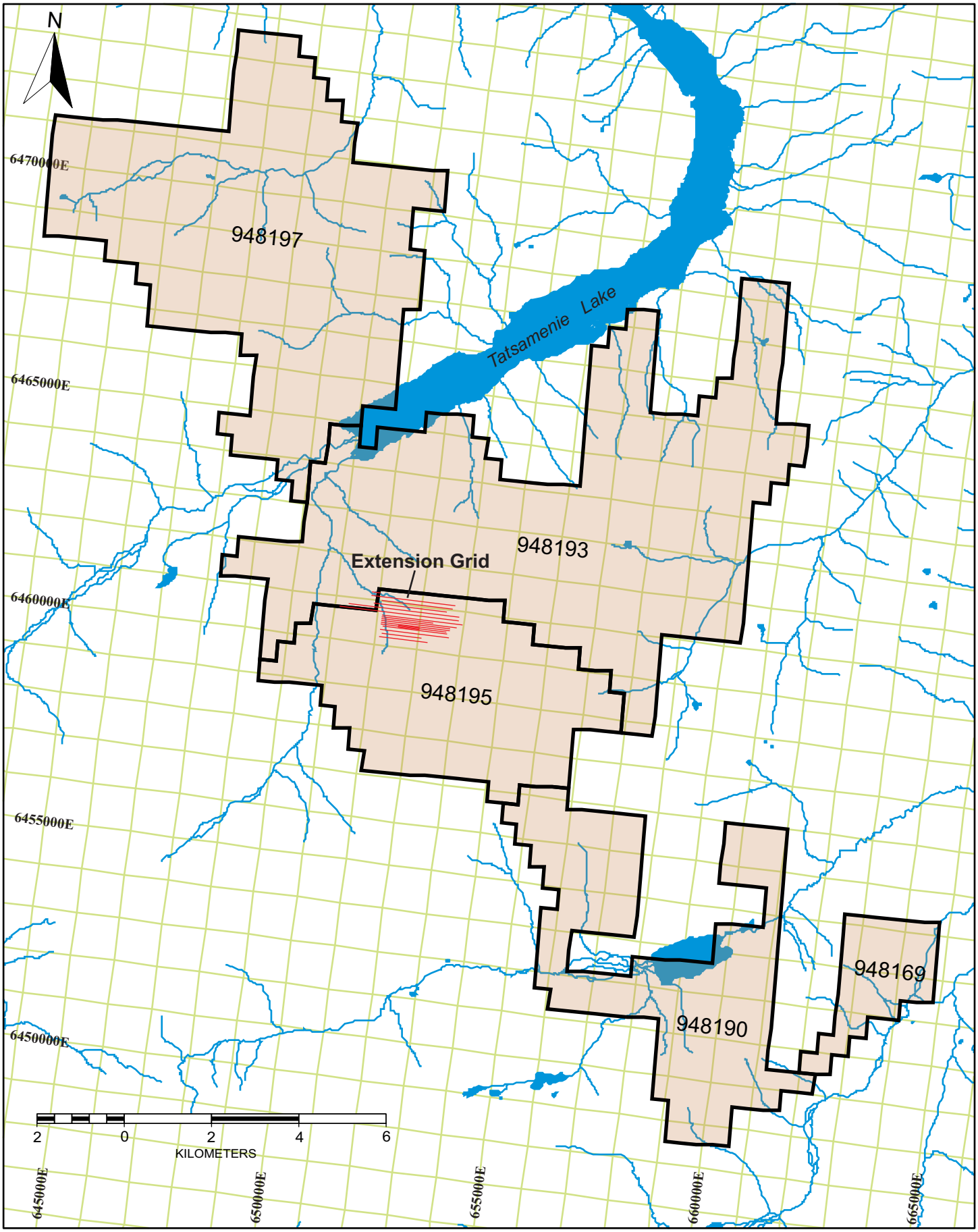


Figure 3. Tatsamenie Project Mineral Claims Map.

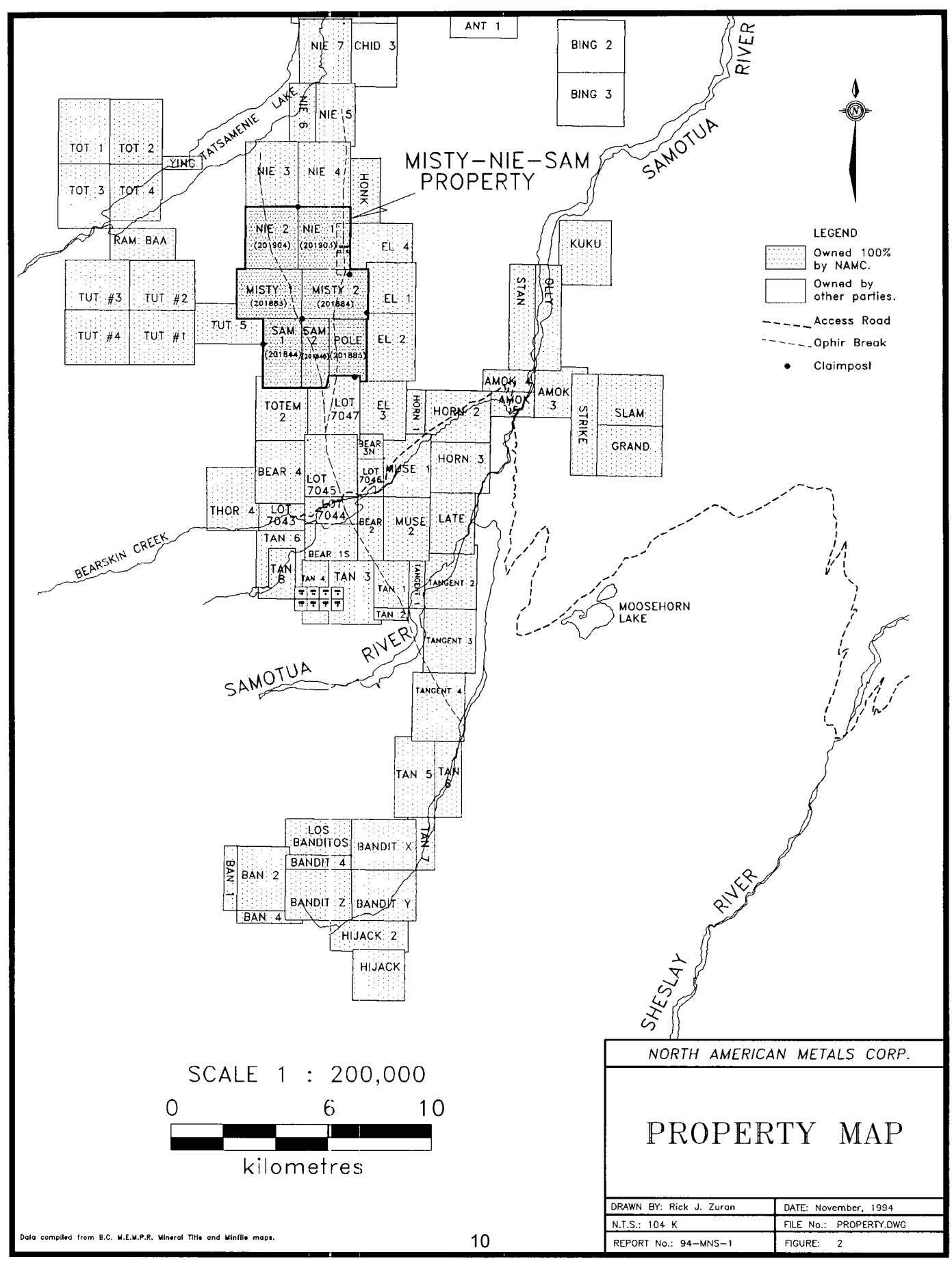
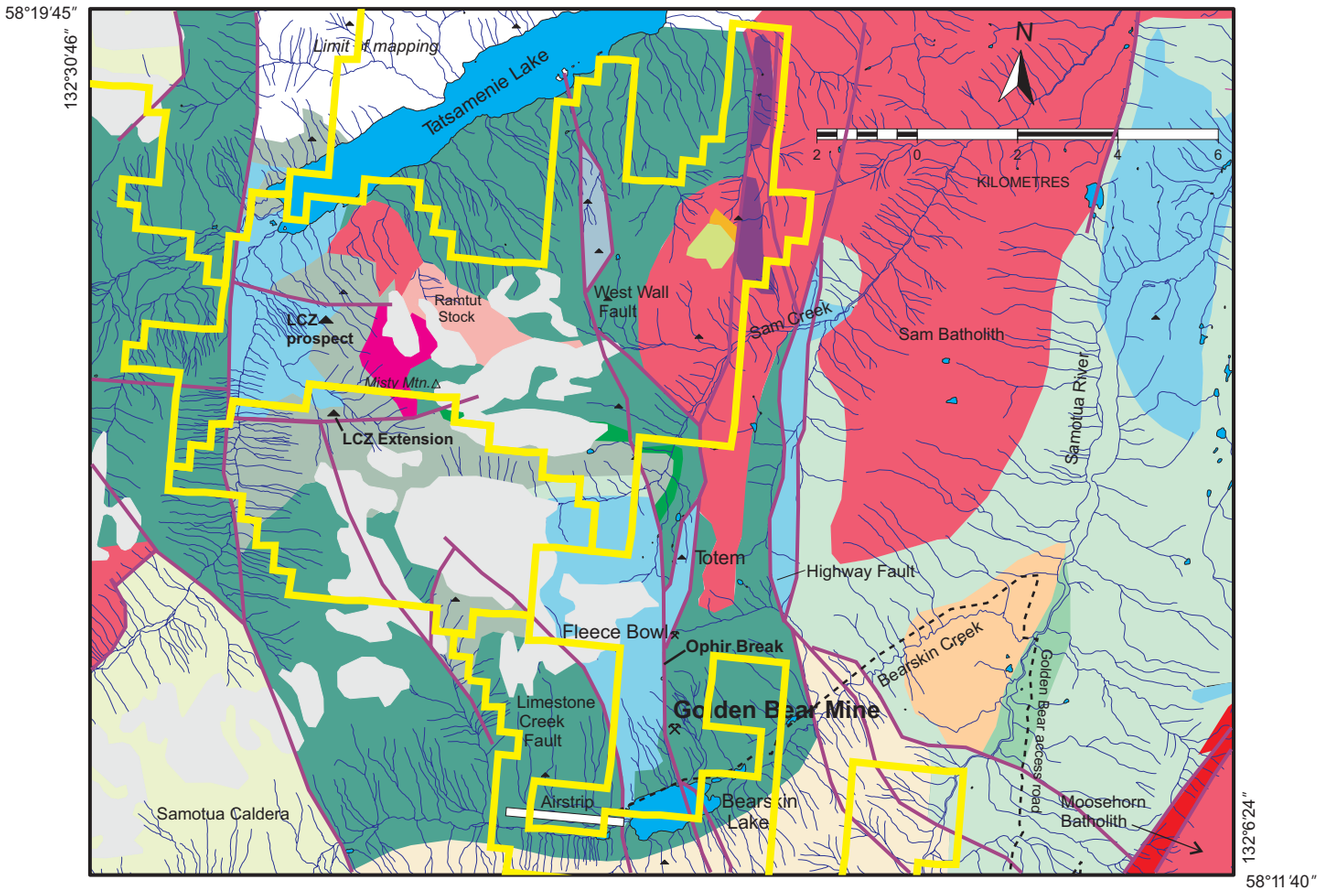


Figure 4. Historical Claim Map.



GEOLOGICAL LEGEND

STRATIFIED ROCKS

MIOCENE

Mb — **LEVEL MOUNTAIN GROUP:** Basalt - flat lying, columnar jointed

EOCENE

ESv — **SLOKO GROUP:** Intermediate to felsic volcanic breccia, tuff and lesser flows

TERTIARY

Tcg — Polymictic conglomerate - poorly indurated

LOWER JURASSIC

lJTs — **TAKWAHONI FORMATION (LABERGE GROUP)** : Sandstone, siltstone, polymictic conglomerate

UPPER TRIASSIC

uTrSv — **STUHINI GROUP**: Volcanics, volcaniclastics
uTrSp - megacrystic, "bladed" plagioclase porphyry
Hbgb - hornblende gabbro

LOWER TO MIDDLE TRIASSIC

lmTrlm — Limestone, marble, calcareous sedimentary rocks

PERMIAN AND OLDER

STIKINE ASSEMBLAGE

Lower Permian

PSls — Limestone - variably recrystallized

UPPER CARBONIFEROUS

uCSvsl — Felsic to mafic volcanics, phyllite, limestone

CARBONIFEROUS (?)

CSs — Slate, siltstone, limestone

CSvs — Andesitic tuff, argillite, tuffaceous sandstone

CSv — Foliated, chloritic metavolcanic rocks containing lithologies similar to Stuhini Group

LOWER CARBONIFEROUS

lCSv — Pyroxene-phyric mafic flows and tuffs; intercalated sediments include limestone, black, carbonaceous, slightly fetid calcsiltite and argillite

DEVONIAN

DSv — Undivided volcanic rocks

INTRUSIVE ROCKS

EOCENE

Egr — Biotite hornblende granite, plagioclase porphyritic granite, bioite hornblende granodiorite, quartz plagioclase porphyritic rhyolite, plagioclase porphyritic and felsite dikes (Sloko-Hyder Plutonic Suite)

LATE CRETACEOUS

lKqm — Quartz monzonite (Ramtut Stock)

EARLY TO MIDDLE JURASSIC

emJqm — Hornblende biotite quartz monzonite, albitic granodiorite, gabbro to diorite, granodiorite, diorite

MIDDLE TO LATE TRIASSIC

mlTrqd — Quartz diorite, hornblende diorite, monzodiorite

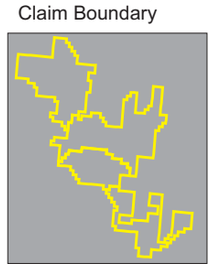
lTrcpx — Clinopyroxenite

Fault

Glacier

MINFILE Occurrence

Tatsamenie Project
Claim Boundary



Geological map and legend compiled from:

Bradford, J.A. and Brown, D.A. (1993): Geology of the Bearskin Lake and Southern Tatsamenie Lake Map Areas, Northwestern British Columbia (104K/1 and 8); *in* Geological Fieldwork 1992, *B.C. Ministry of Energy, Mines and Petroleum Resources*, Paper 1993-1, pp. 159-176.

Mihalynuk, M., Bellefontaine, K., Brown, D., Logan, J., Nelson, J., Legun, A. and Diakow, L. (1996): Digital Geology, Northwest British Columbia (94/E, L, M; 104/F, G, H, I, J, K, L, M, N, O, P; 114/I, O, P); *B.C. Ministry of Energy, Mines and Petroleum Resources*, Open File 1996-11.

Figure 5. Regional Geology Map.

Tatsamenie Project Property
Major Work Areas

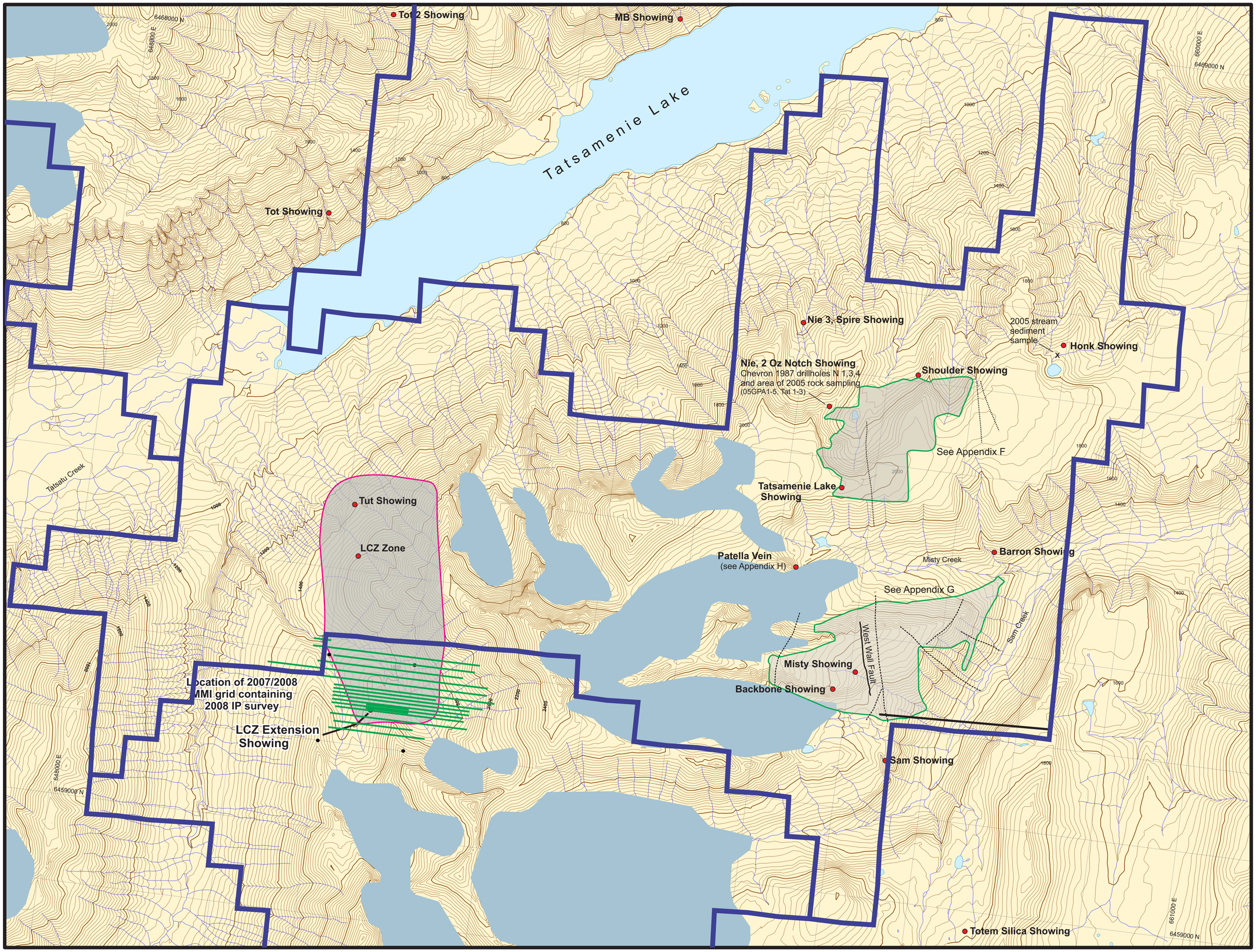


Figure 6. Tatsamenie Project - Primary Historic Work Areas and Mineral Showings.

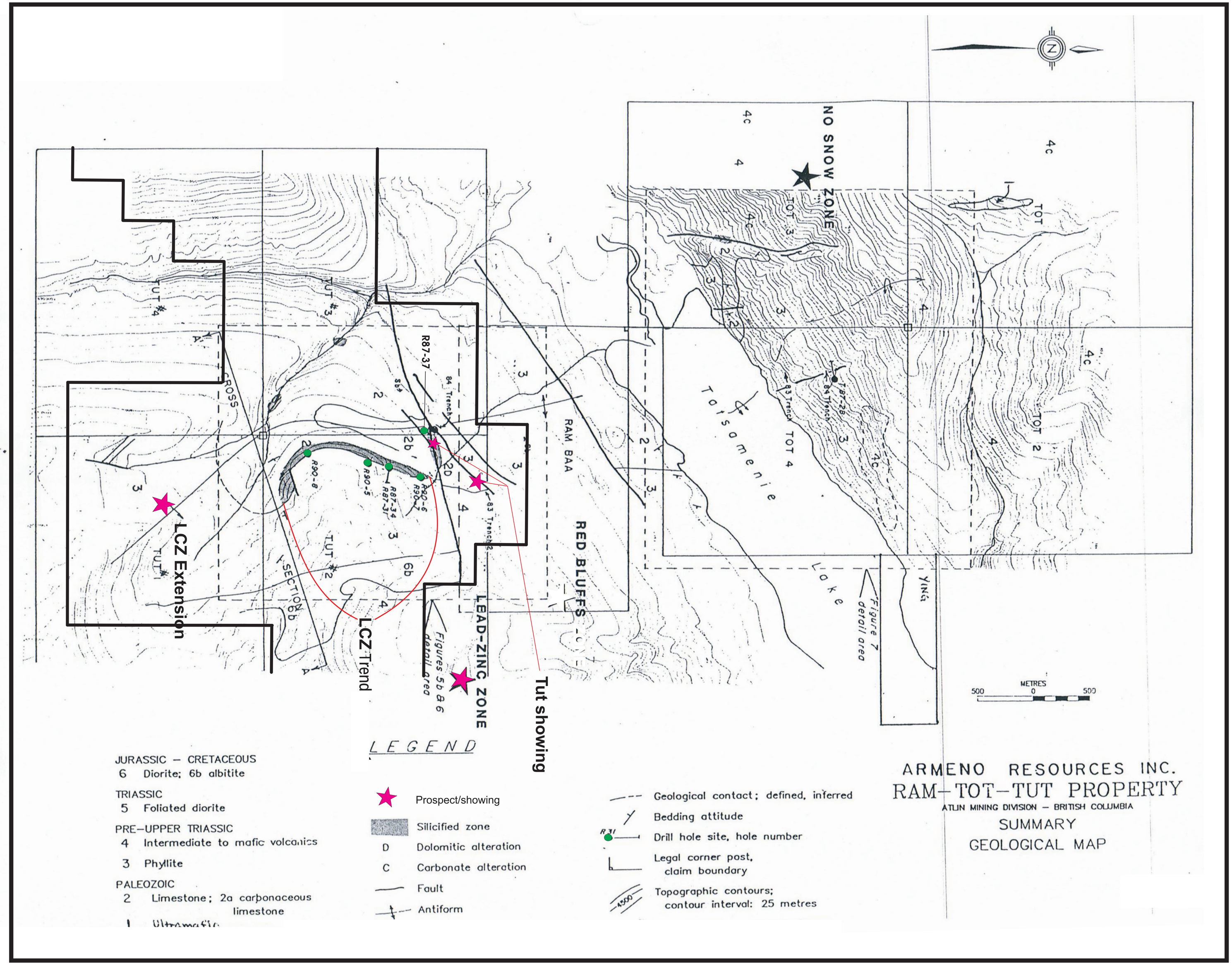
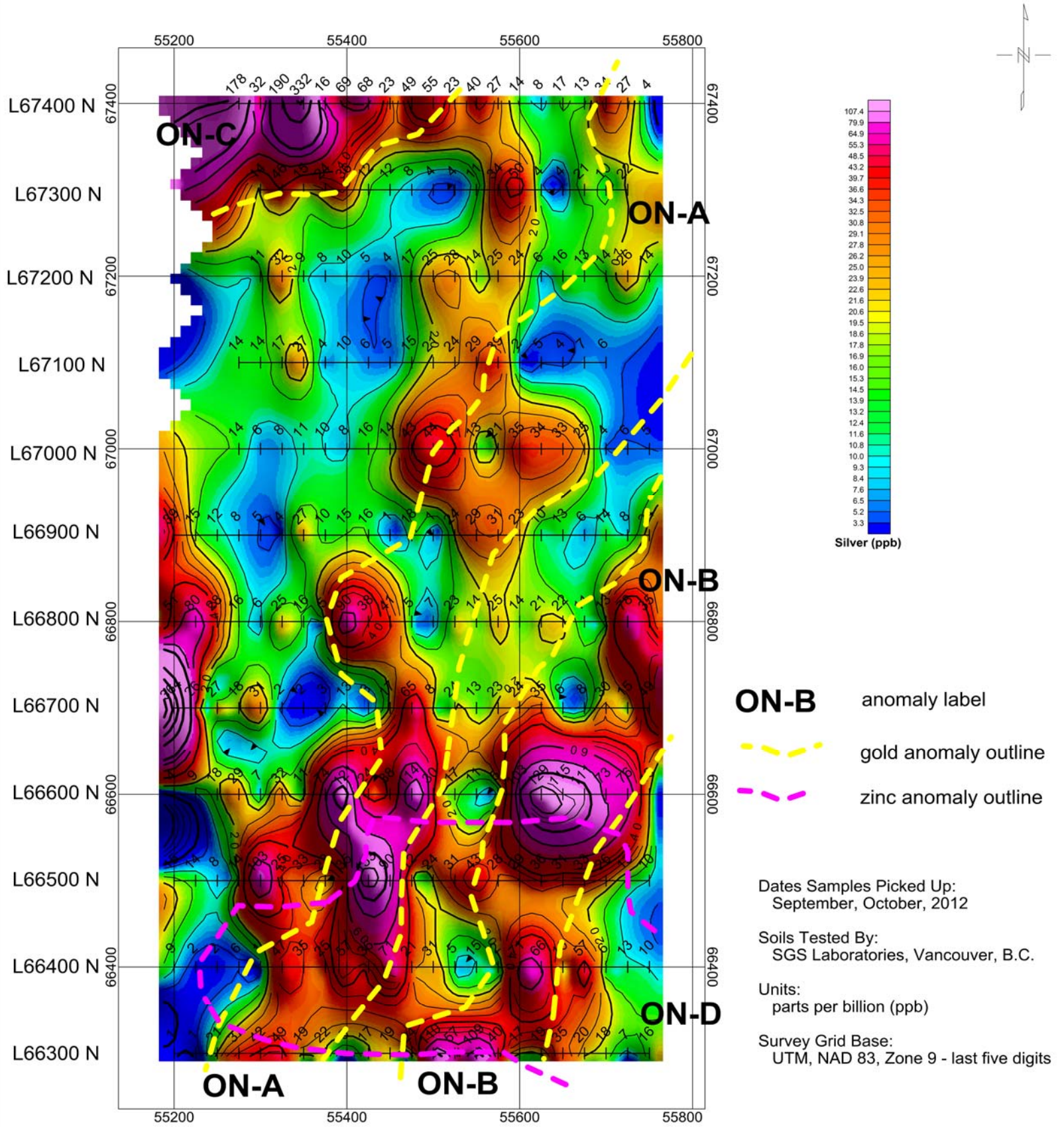


Figure 7. LCZ and Tut Zone Location Map.



Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

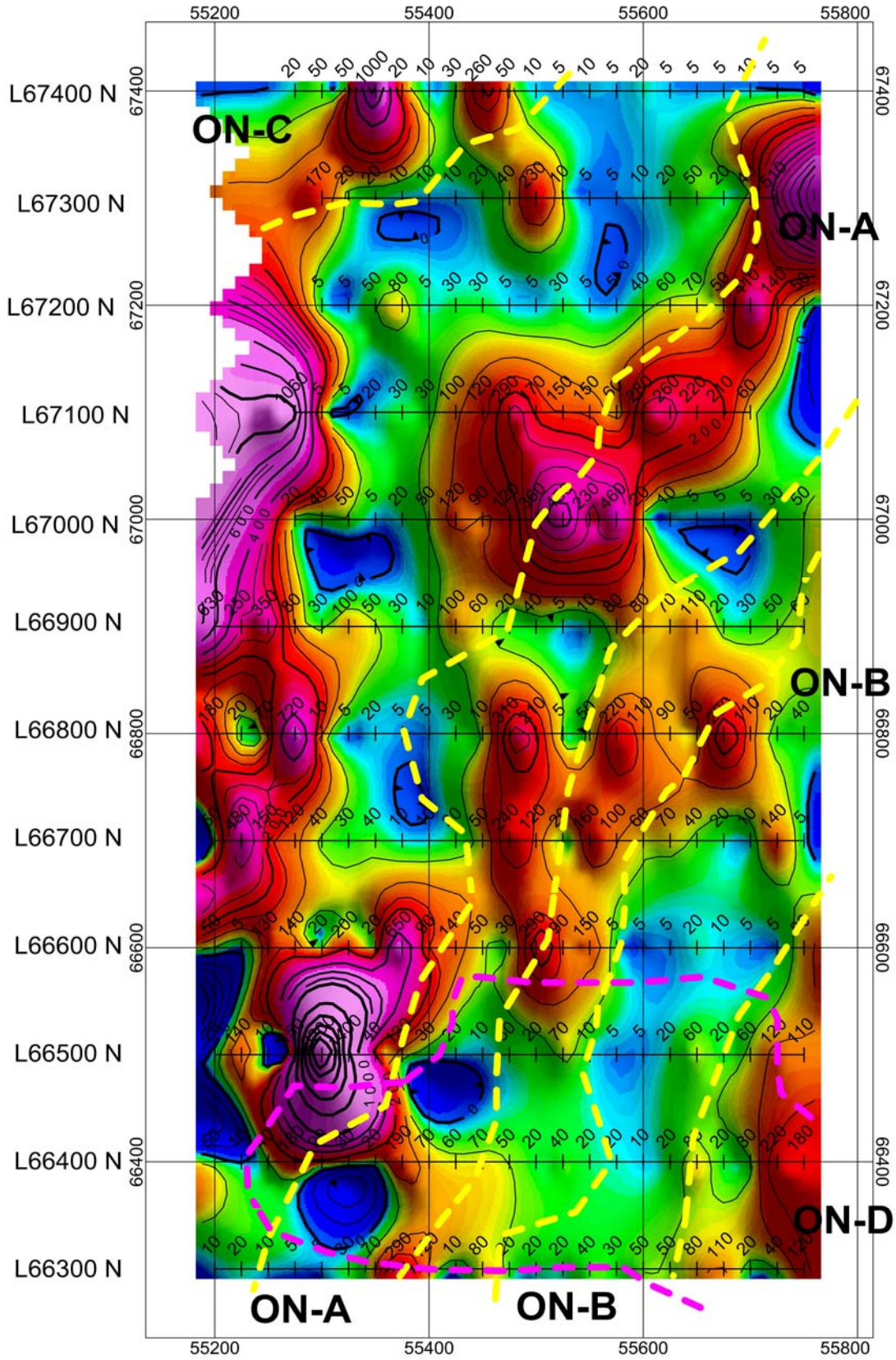
Geotronics Consulting Inc
Surrey B.C.

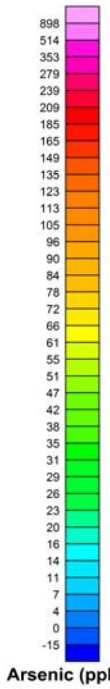
NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
SILVER (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON1





ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

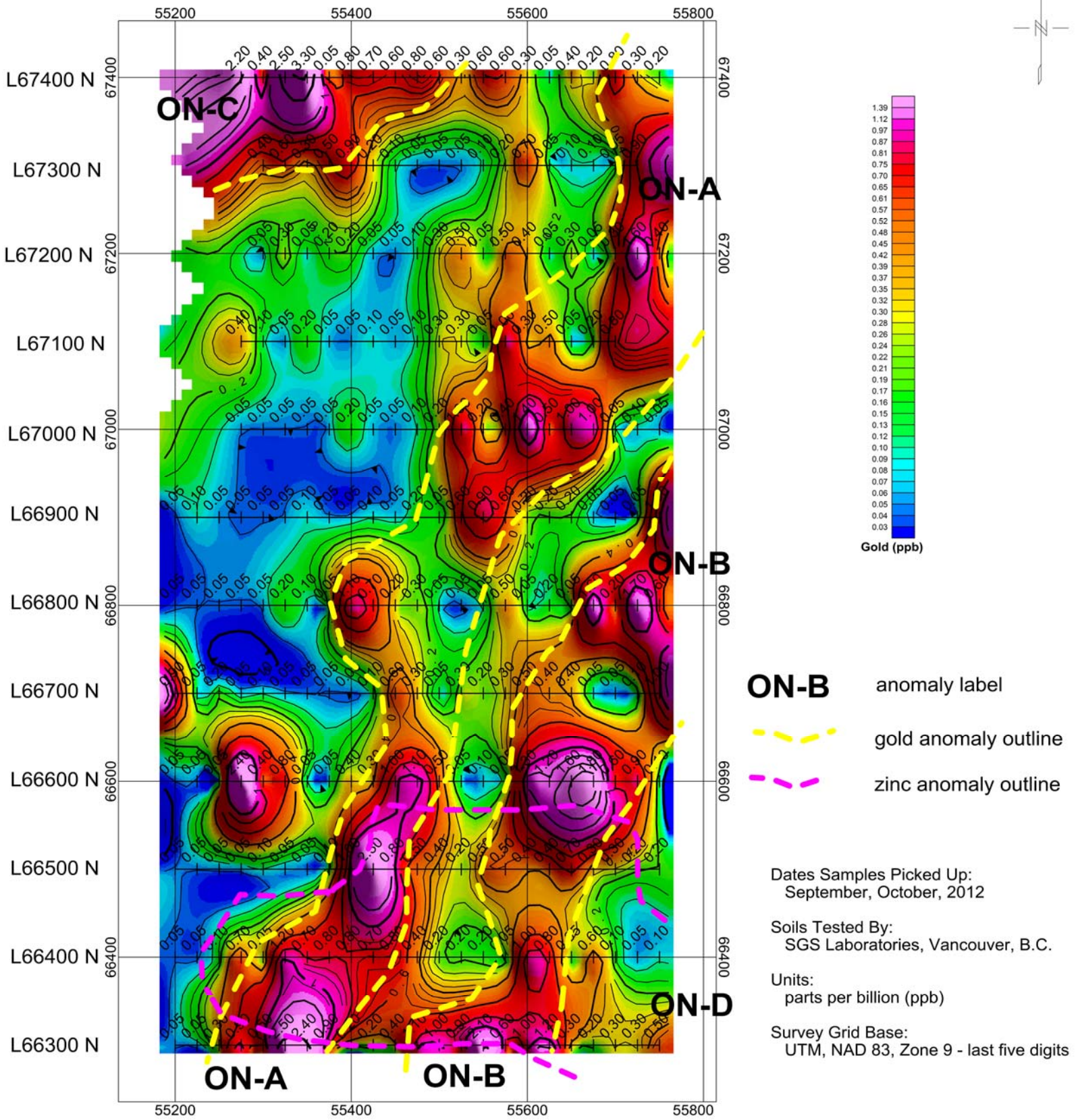
Geotronics Consulting Inc
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
ARSENIC (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON2



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

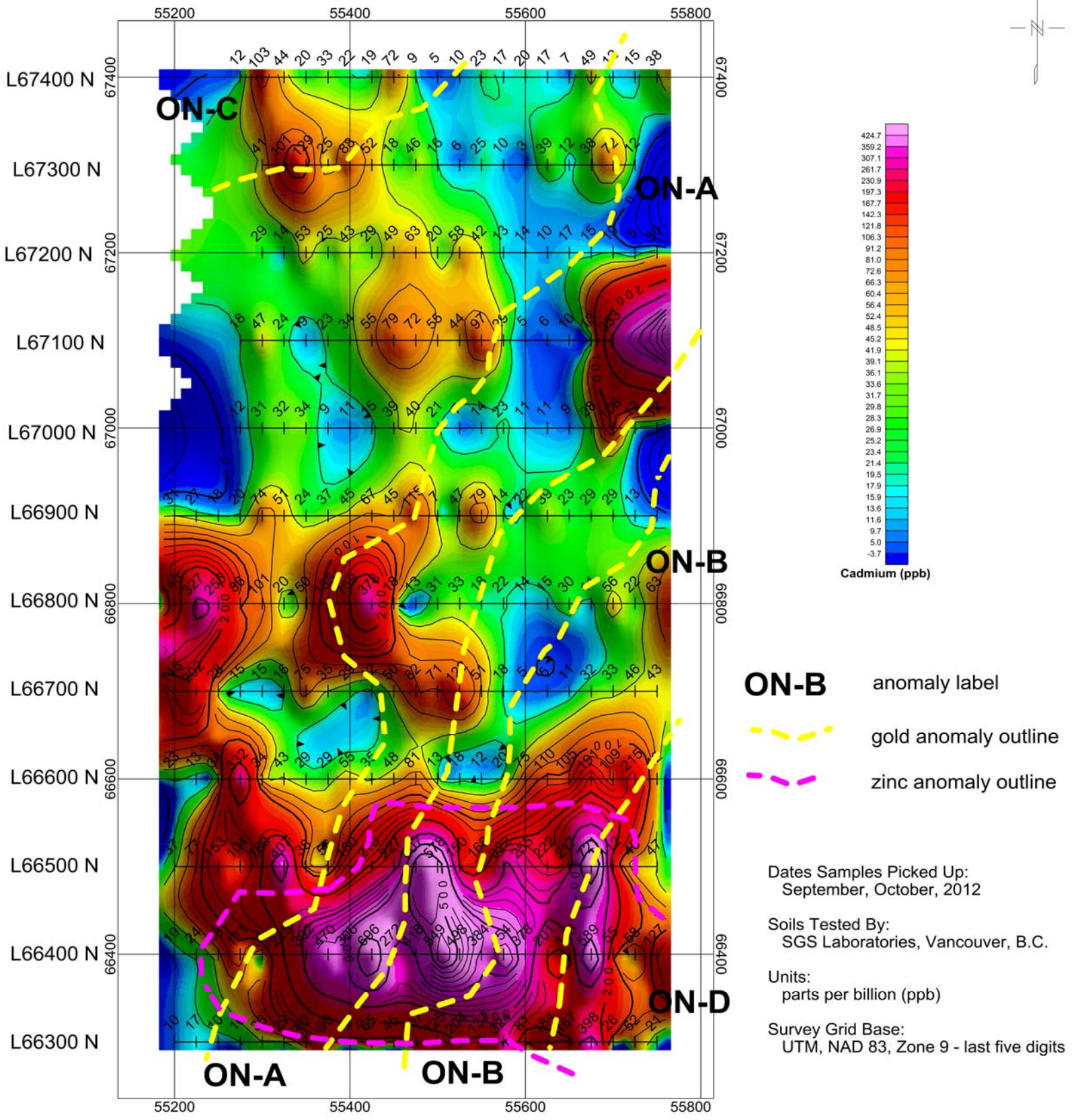
Geotronics Consulting Inc
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
GOLD (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON3



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

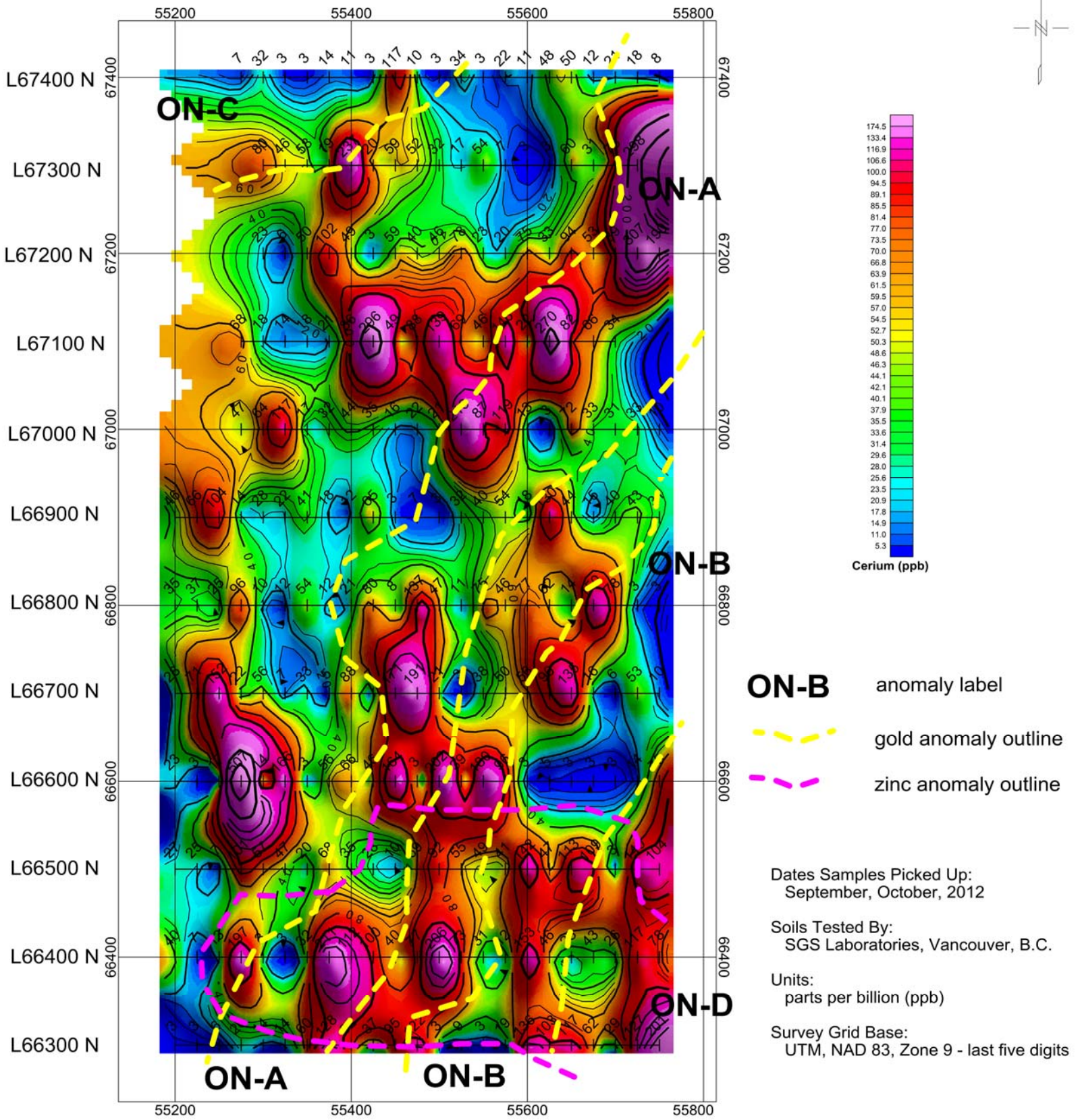
Geotronics Consulting Inc
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
CADMIUM (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON4



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

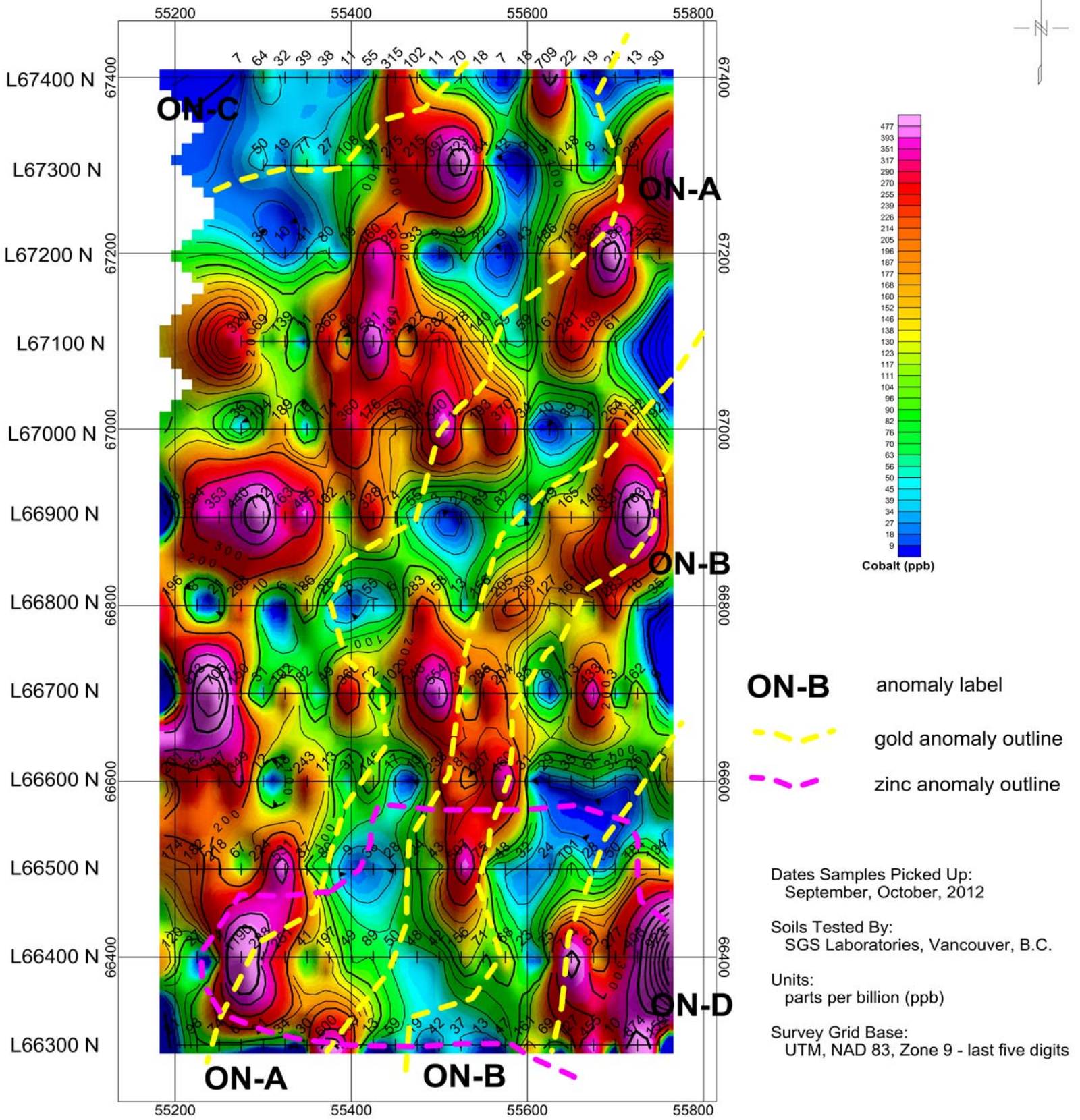
Geotronics Consulting Inc
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
CERIUM (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON5



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

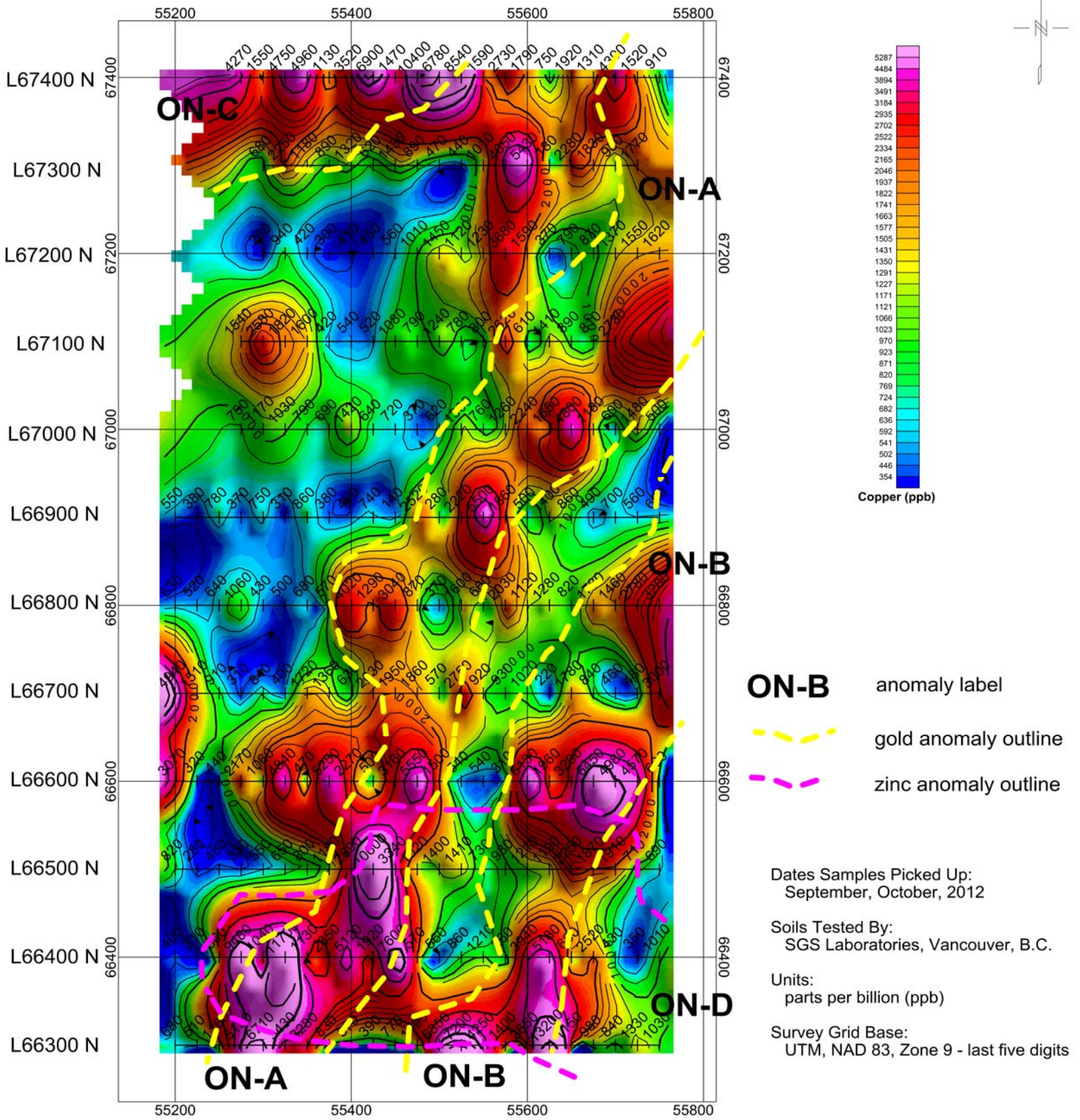
Geotronics Consulting Inc
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
COBALT (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON6



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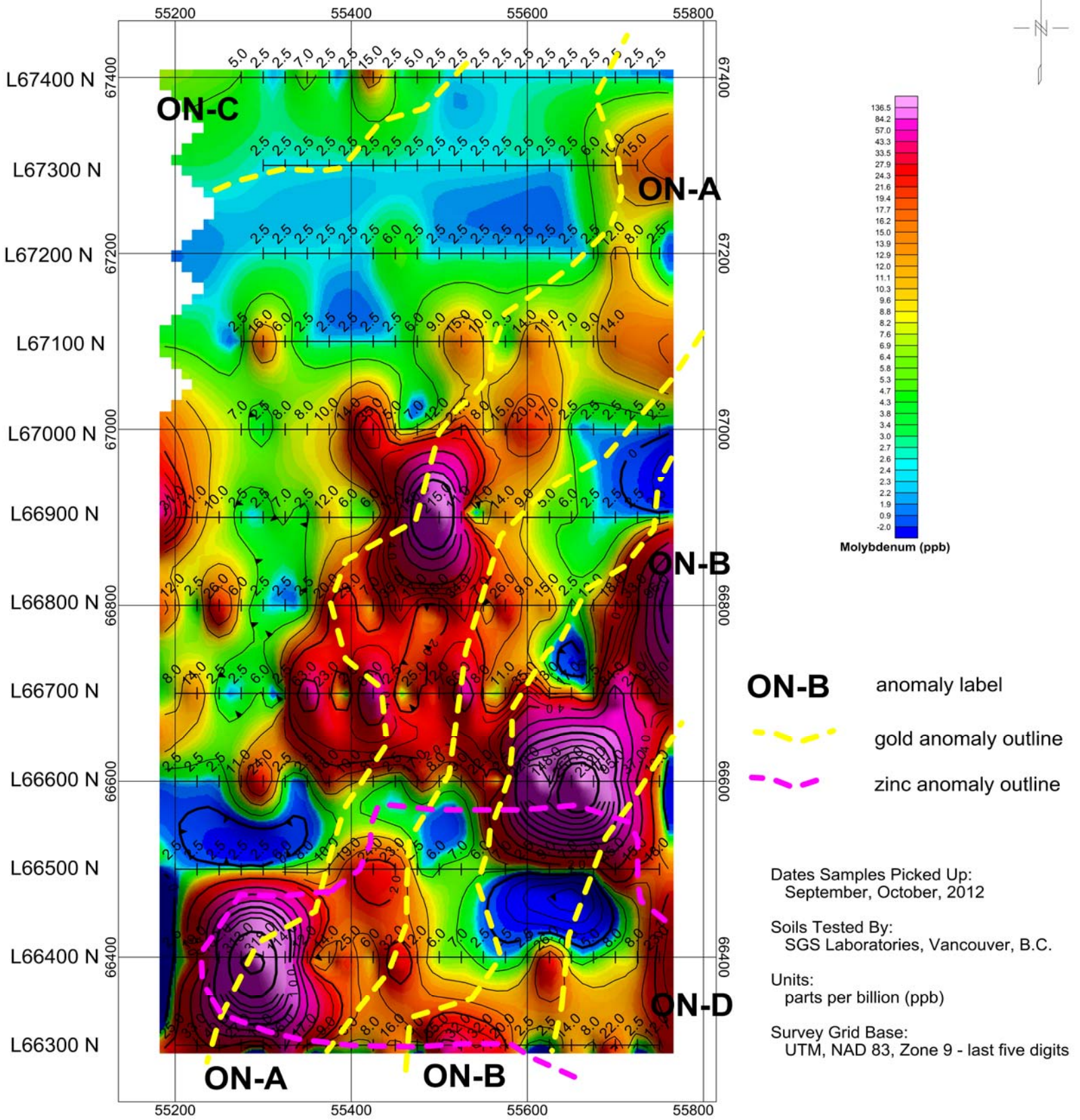
NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
COPPER (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON7



Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

Geotronics Consulting Inc
Surrey B.C.

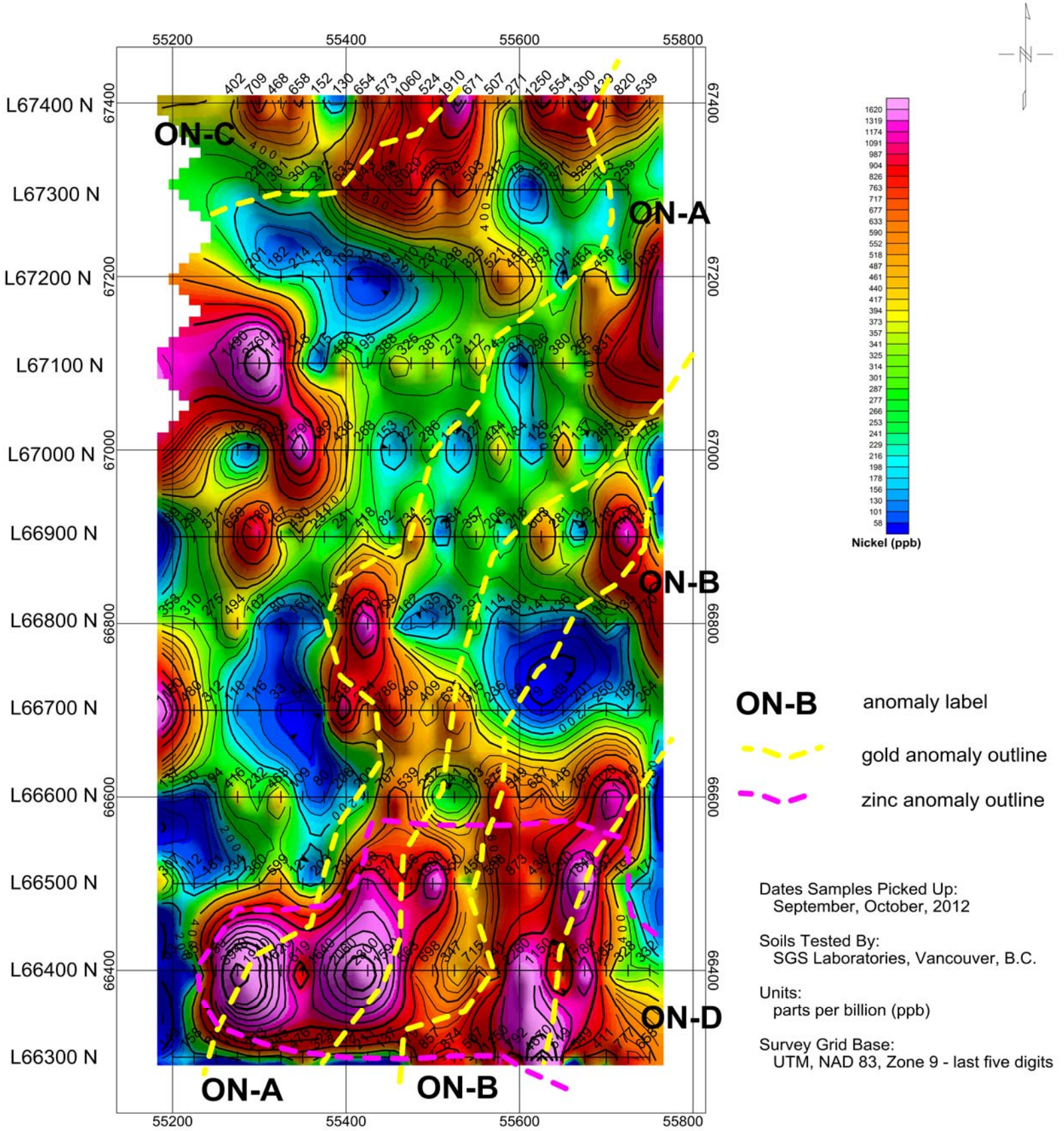
NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN

MOLYBDENUM (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON8



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

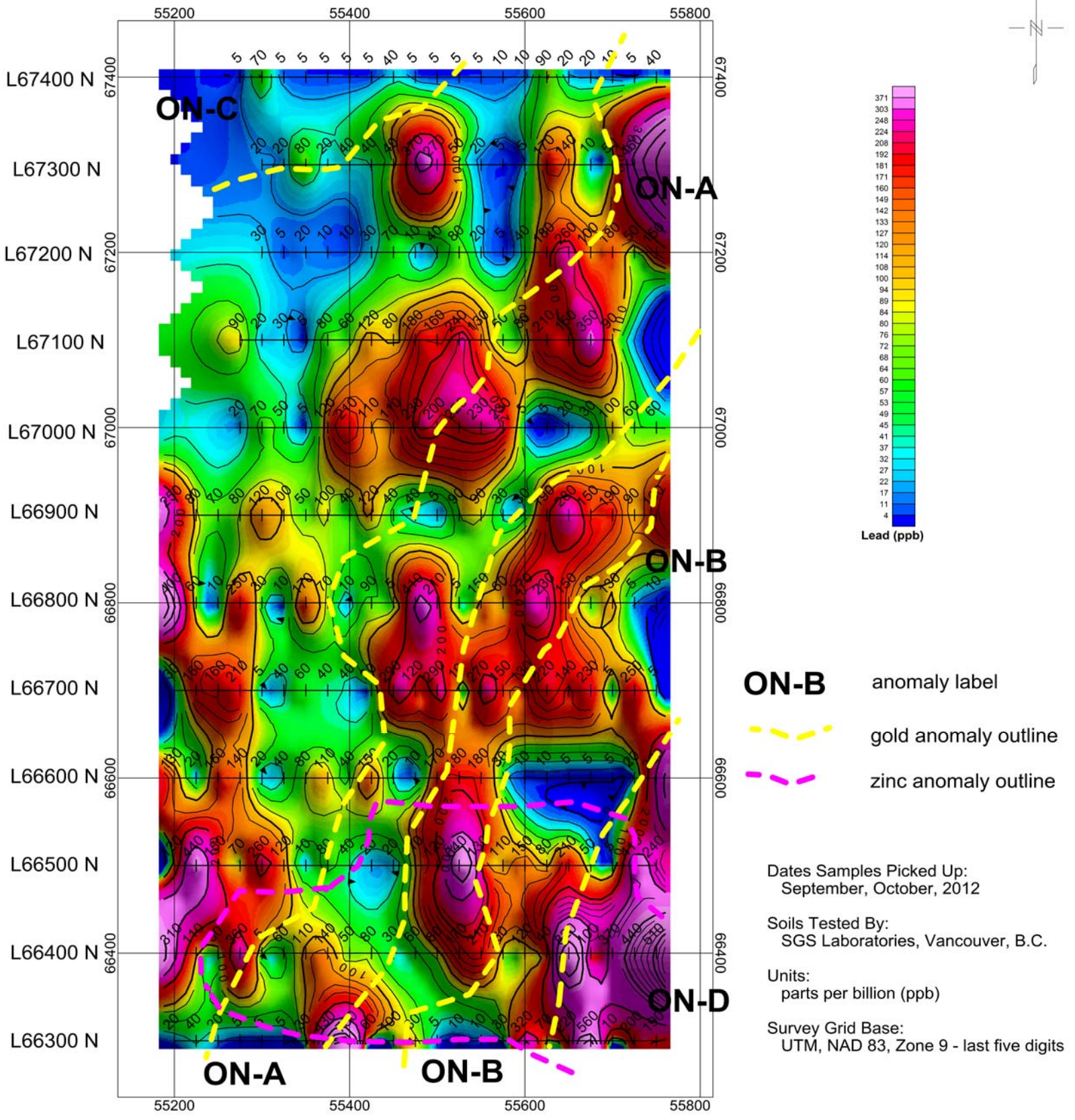
Geotronics Consulting Inc
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
NICKEL (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON9



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

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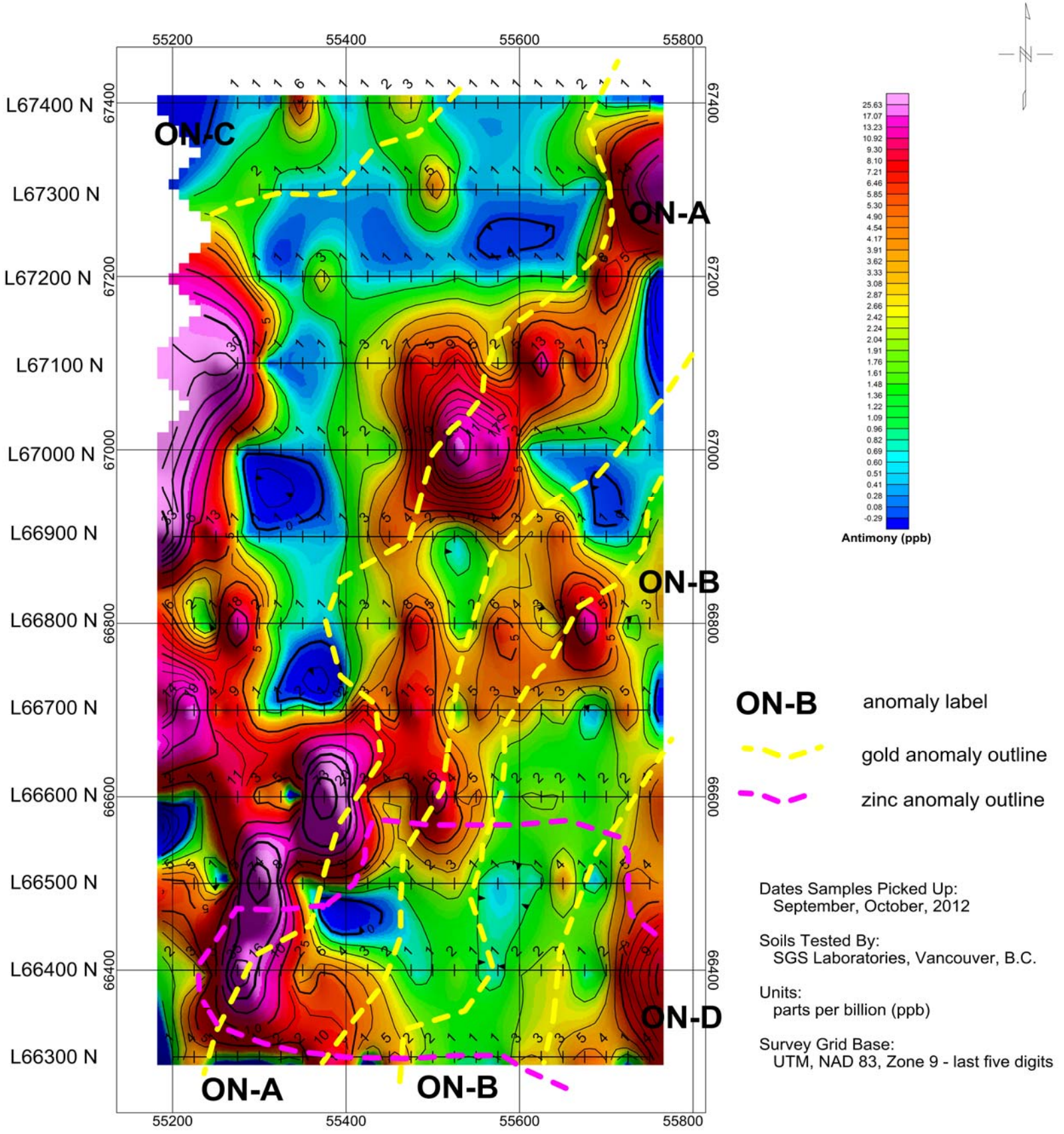
NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
LEAD (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON10



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

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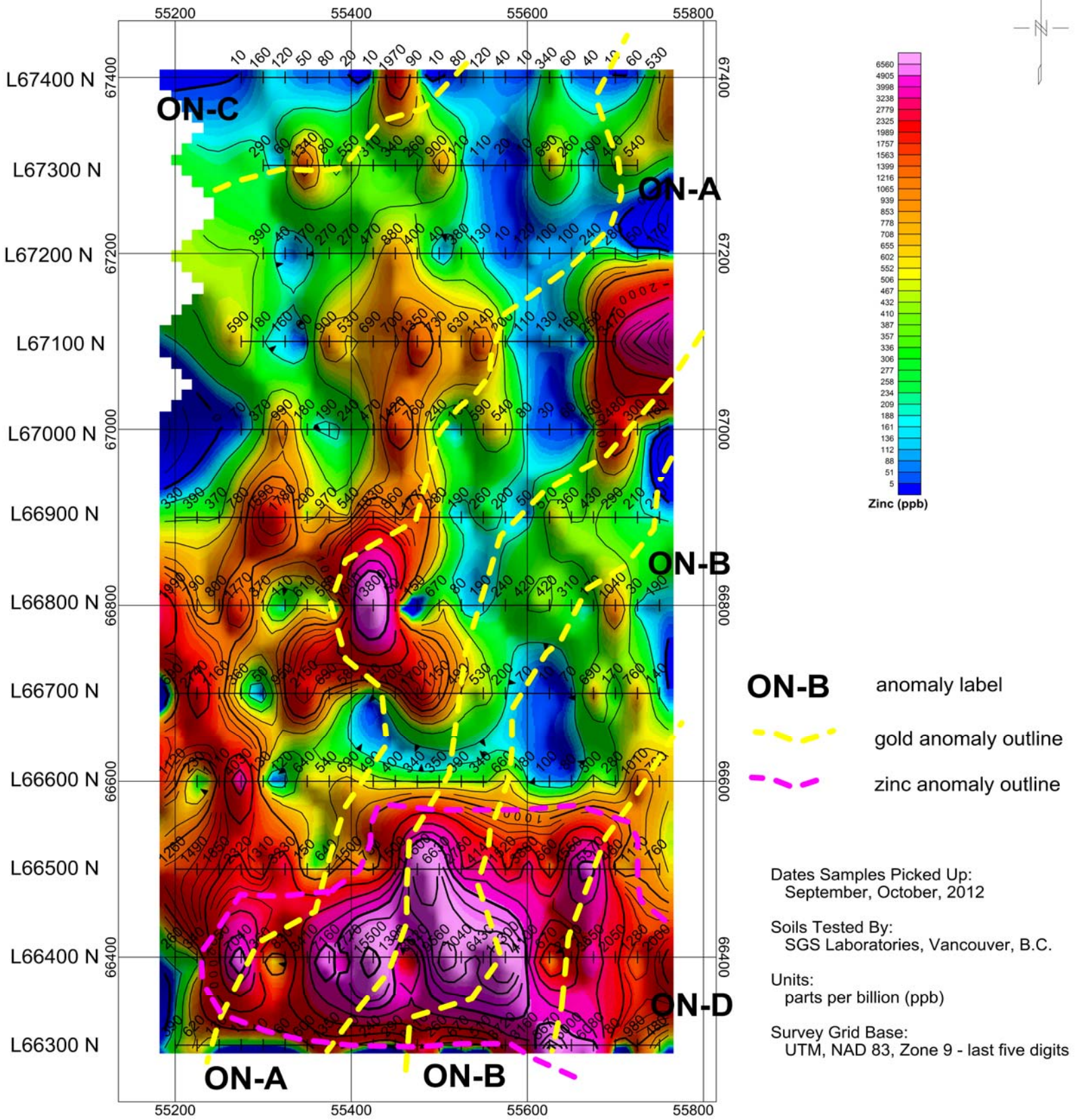
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
ANTIMONY (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON11



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

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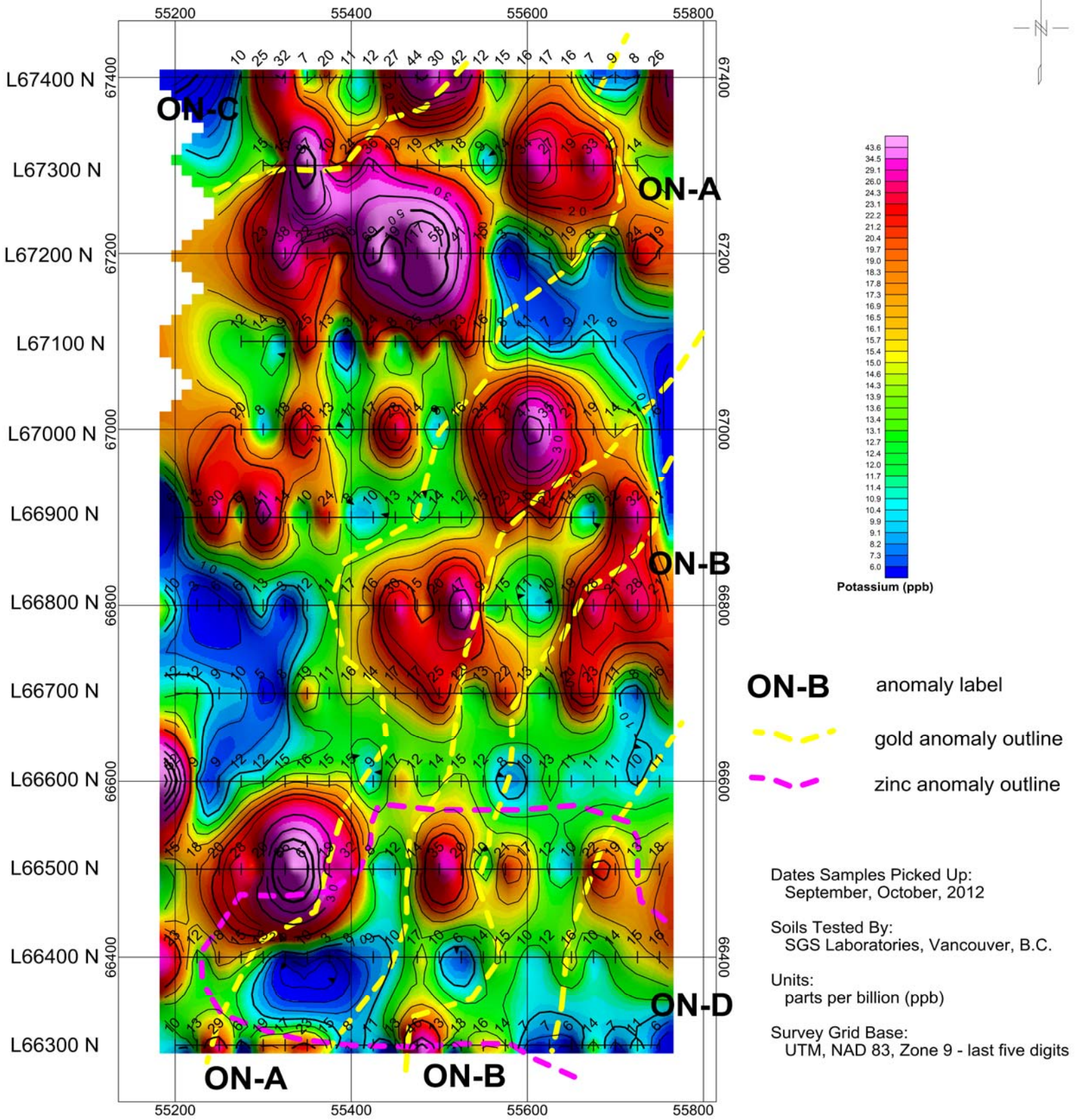
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
ZINC (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON12



ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

Geotronics Consulting Inc
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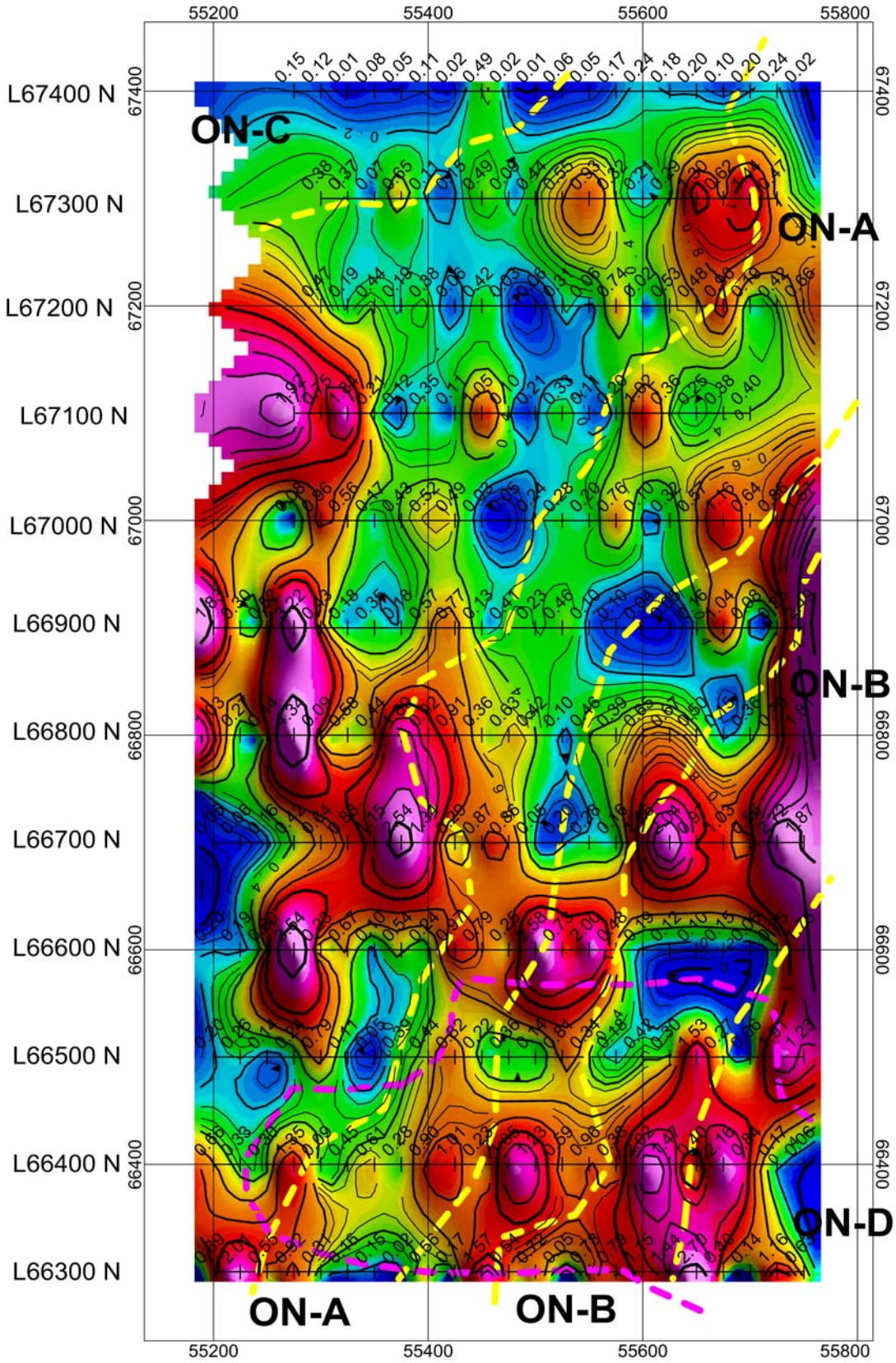
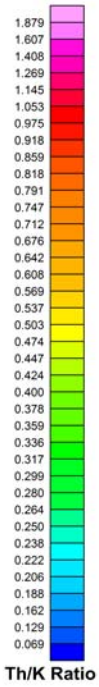
NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
POTASSIUM (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON13





ON-B anomaly label

gold anomaly outline

zinc anomaly outline

Dates Samples Picked Up:
September, October, 2012

Soils Tested By:
SGS Laboratories, Vancouver, B.C.

Units:
parts per billion (ppb)

Survey Grid Base:
UTM, NAD 83, Zone 9 - last five digits

100 0 100 200
(meters)

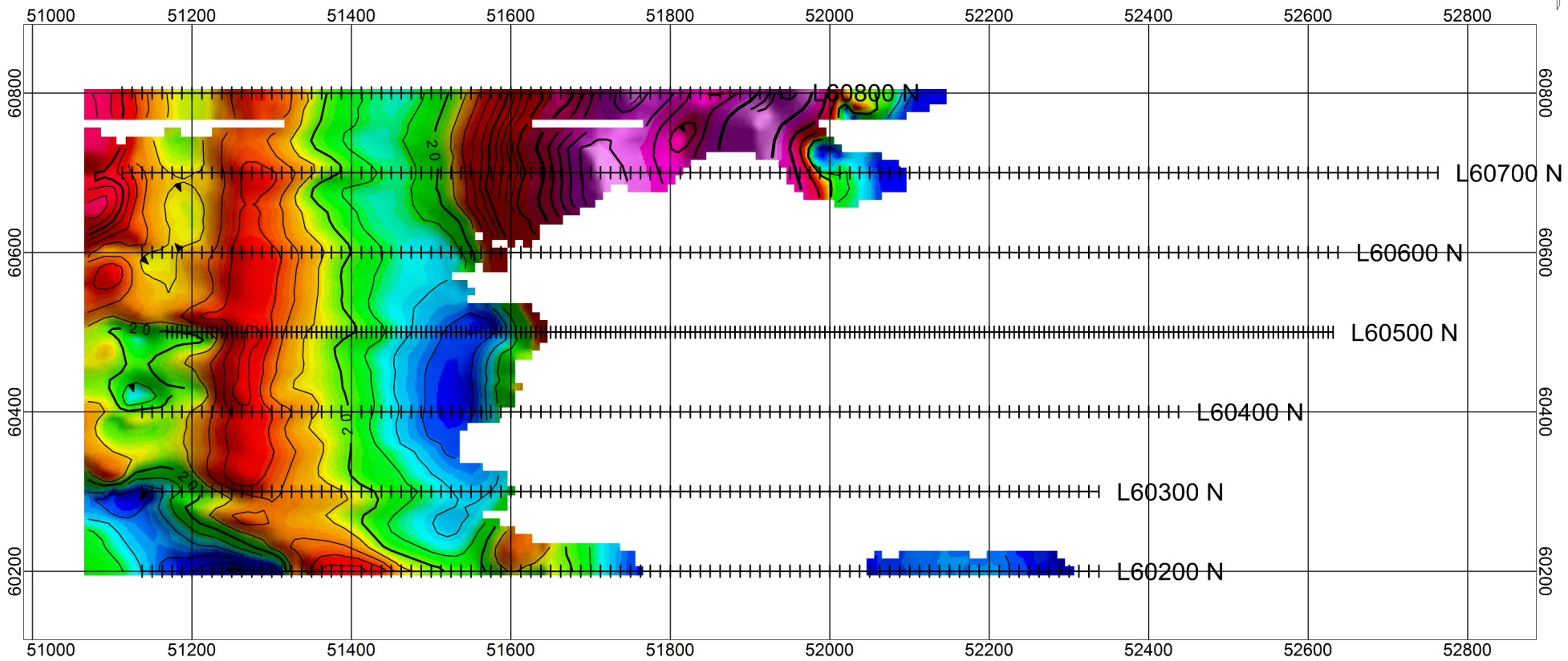
Geotronics Consulting Inc
Surrey B.C.

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT
OPHIR NORTH GRID
Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

MMI SOIL GEOCHEMISTRY SURVEY
CONTOUR PLAN
THORIUM/POTASSIUM (ppb)

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	12-19	93L/14	SEP' 13	GC-ON14

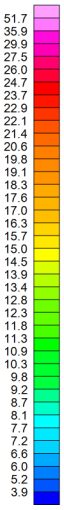


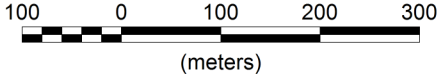
LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave





NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

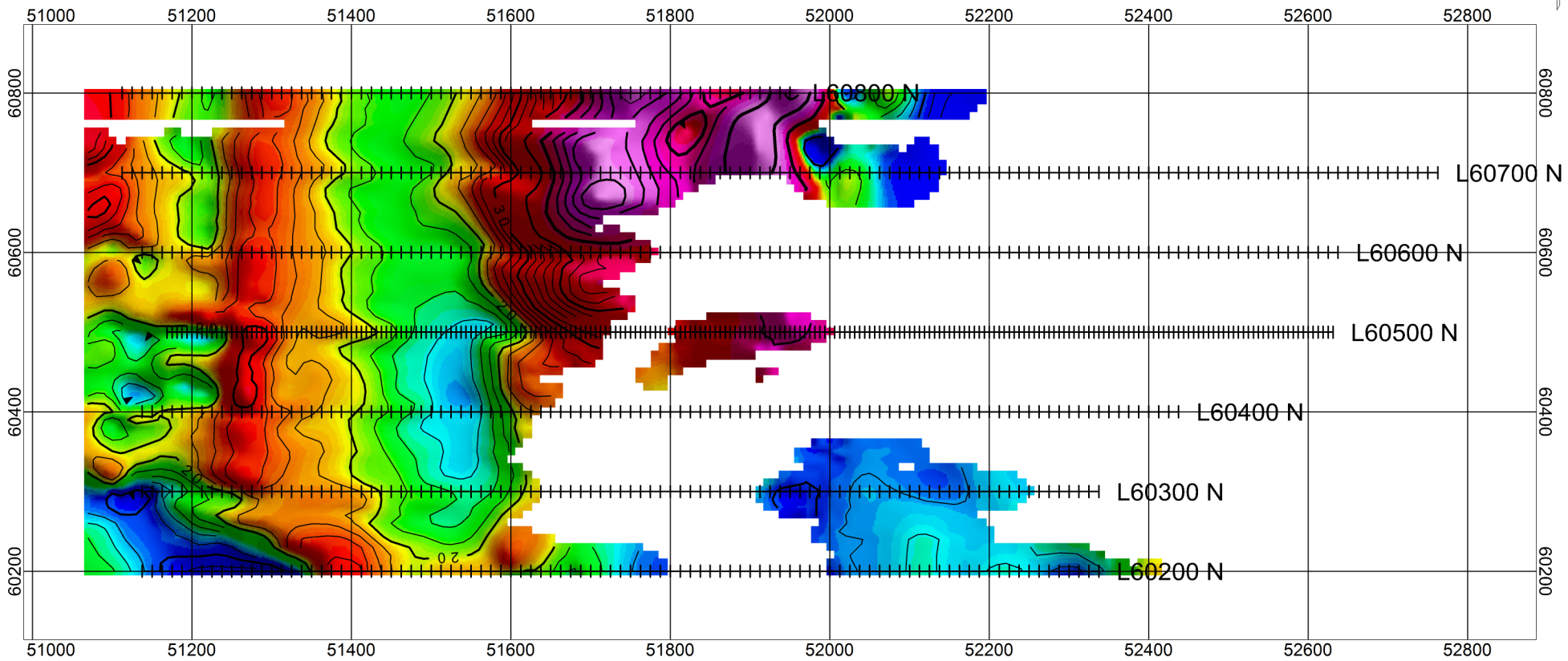
INDUCED POLARIZATION and RESISTIVITY SURVEYS

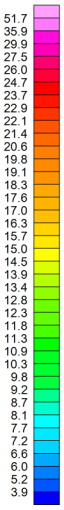
3D IP INVERSION PLAN MAPS

ELEVATION 1450m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17a

Geotronics Consulting Inc
Surrey B.C.



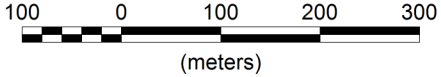


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

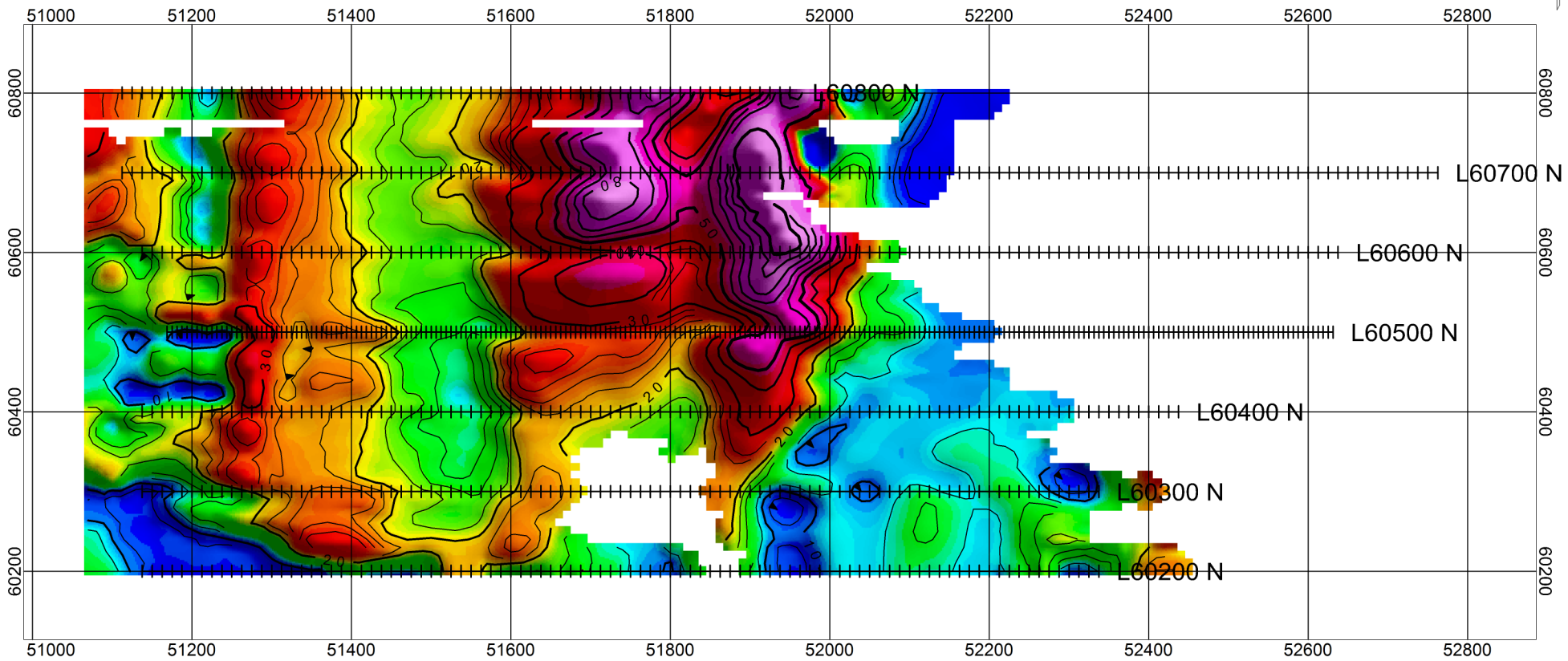
INDUCED POLARIZATION and RESISTIVITY SURVEYS

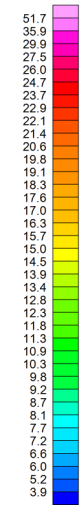
3D IP INVERSION PLAN MAPS

ELEVATION 1475m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17b

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

100 0 100 200 300
(meters)

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D IP INVERSION PLAN MAPS

ELEVATION 1500m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17c

Geotronics Consulting Inc
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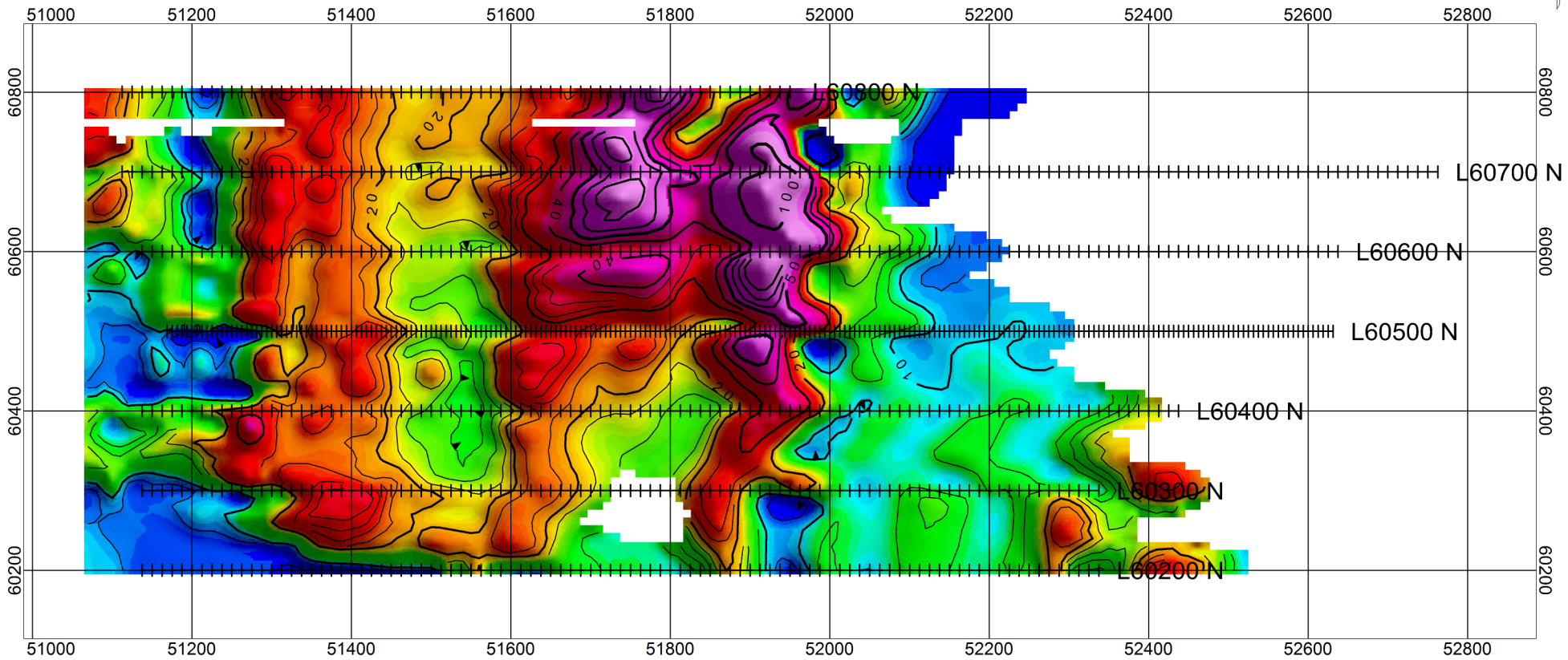
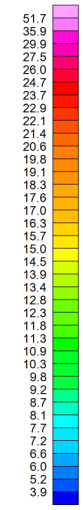


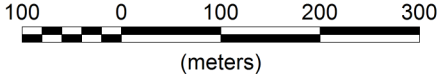


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

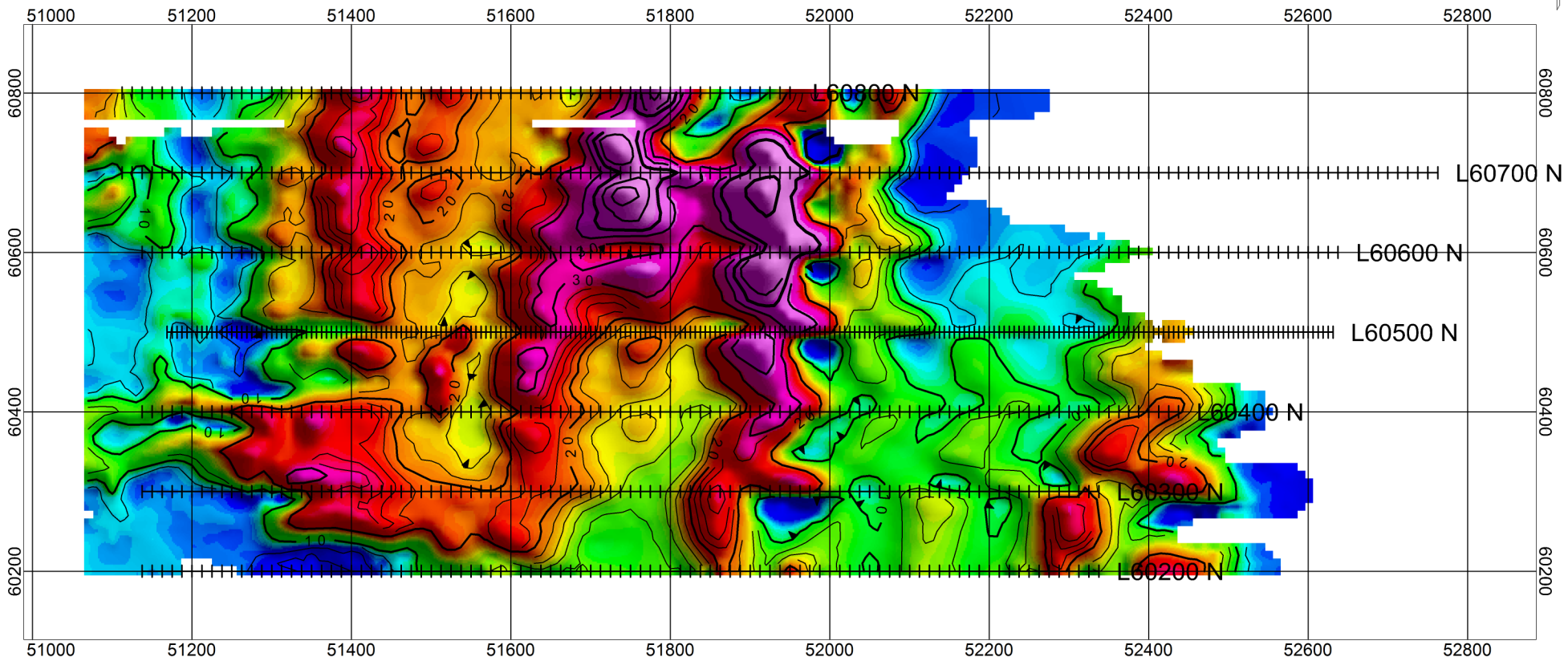
INDUCED POLARIZATION and RESISTIVITY SURVEYS

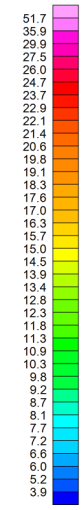
3D IP INVERSION PLAN MAPS

ELEVATION 1525m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17d

Geotronics Consulting Inc
Surrey B.C.



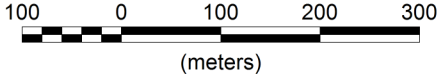


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

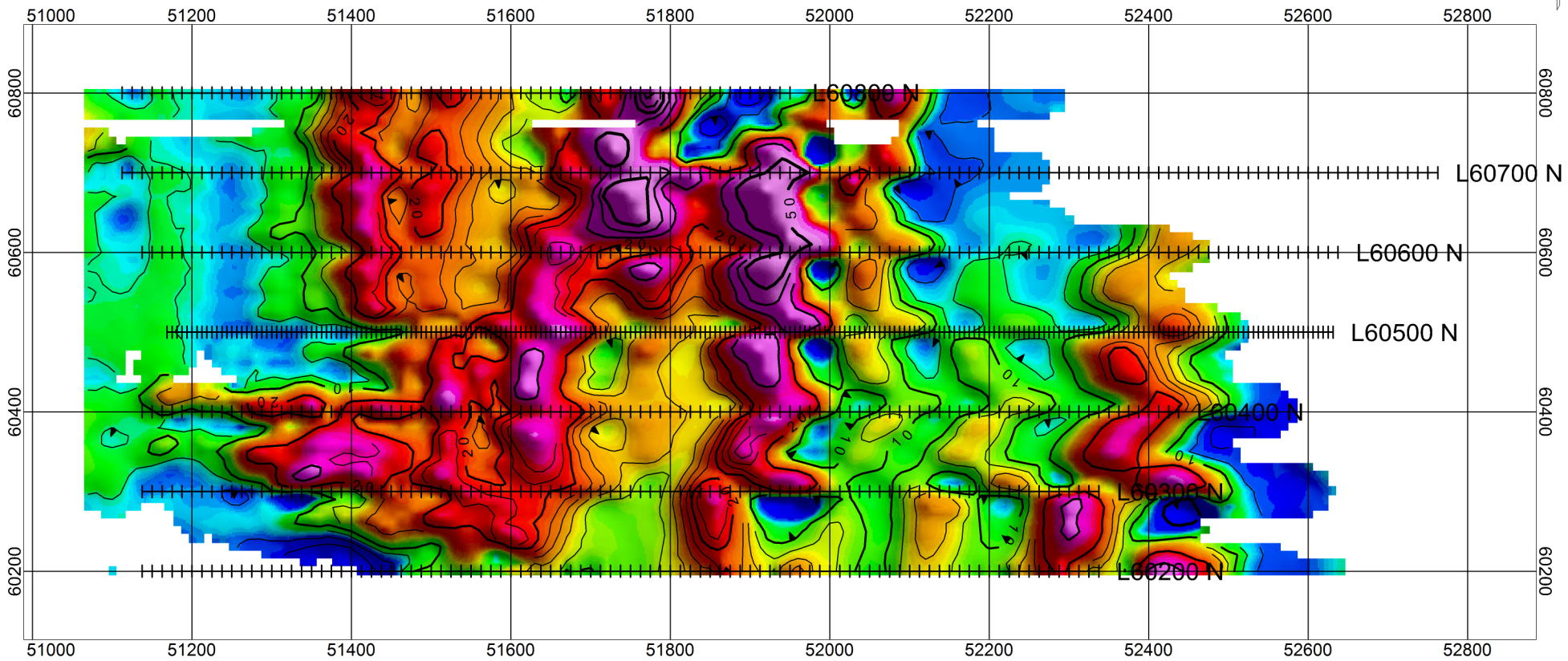
INDUCED POLARIZATION and RESISTIVITY SURVEYS

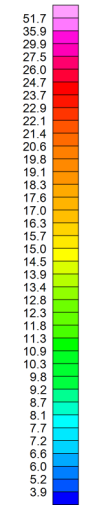
3D IP INVERSION PLAN MAPS

ELEVATION 1550m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17e

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

100 0 100 200 300
(meters)

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

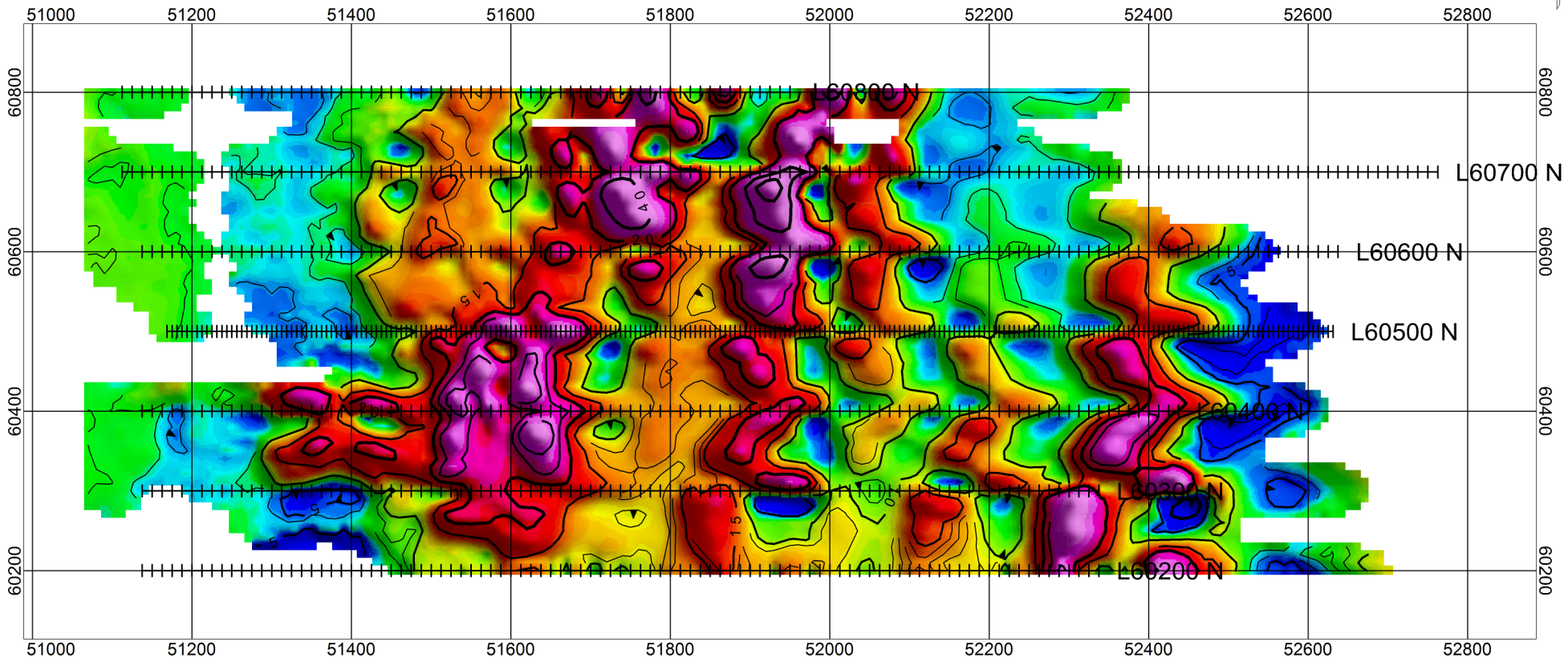
INDUCED POLARIZATION and RESISTIVITY SURVEYS

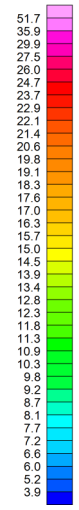
3D IP INVERSION PLAN MAPS

ELEVATION 1575m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17f

Geotronics Consulting Inc
Surrey B.C.



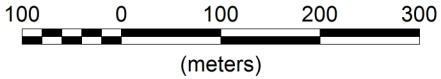


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

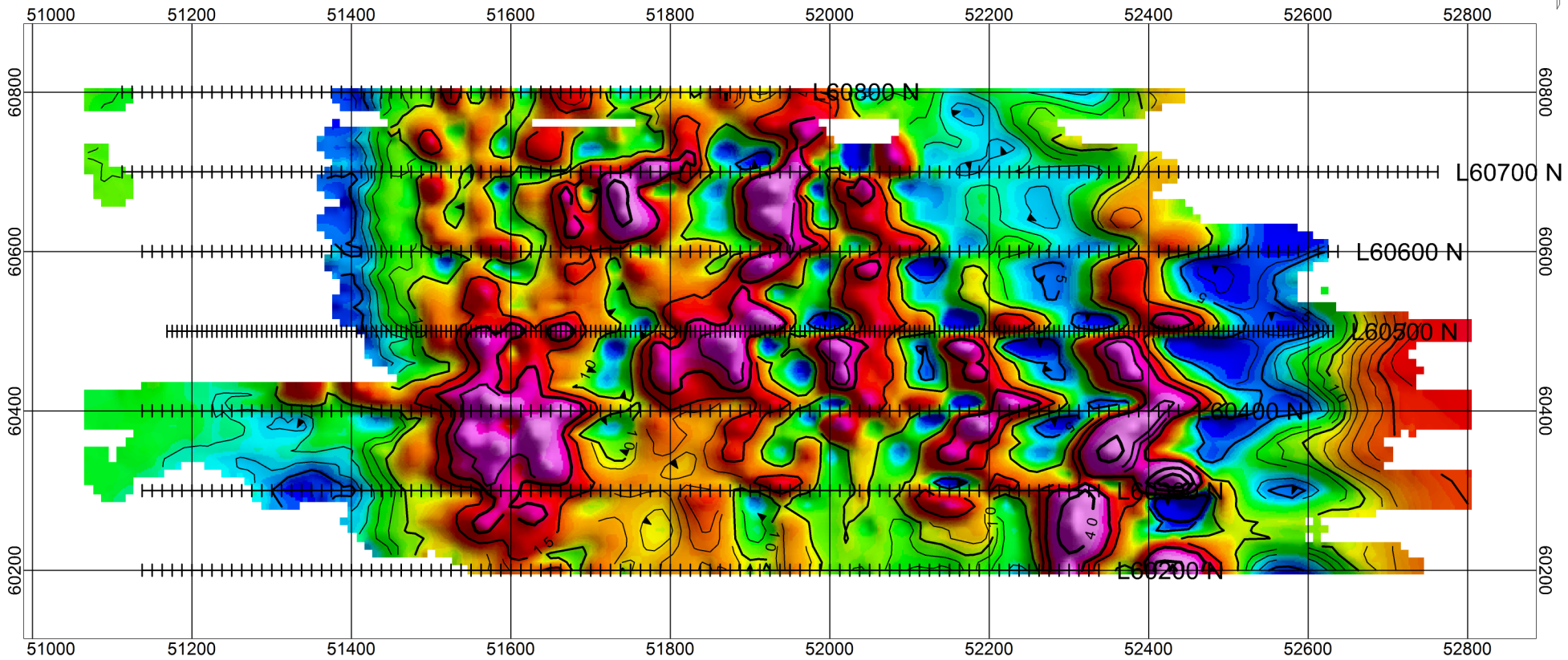
INDUCED POLARIZATION and RESISTIVITY SURVEYS

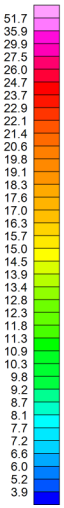
3D IP INVERSION PLAN MAPS

ELEVATION 1600m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17g

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

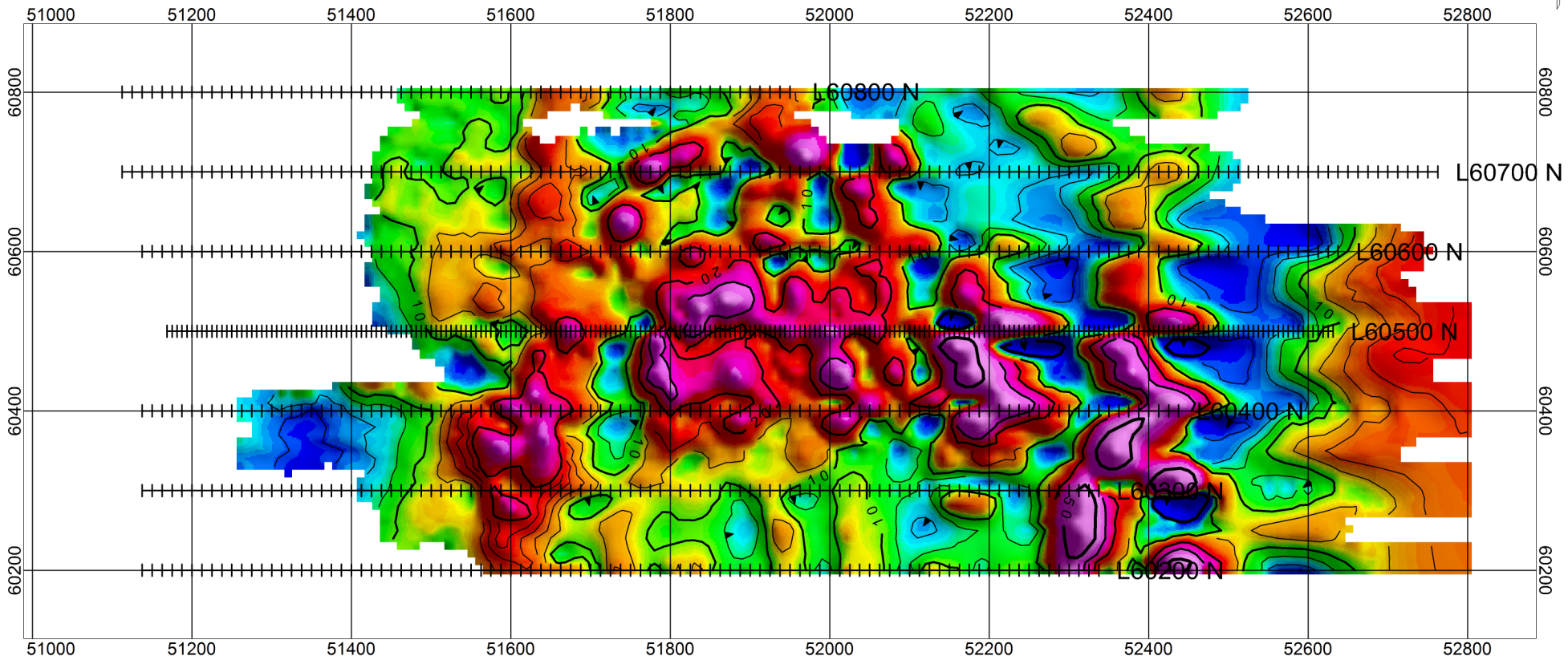
INDUCED POLARIZATION and RESISTIVITY SURVEYS

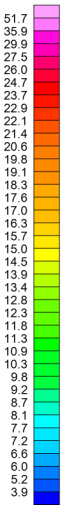
3D IP INVERSION PLAN MAPS

ELEVATION 1625m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17h

Geotronics Consulting Inc
Surrey B.C.



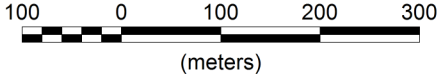


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D IP INVERSION PLAN MAPS

ELEVATION 1650m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17i

Geotronics Consulting Inc
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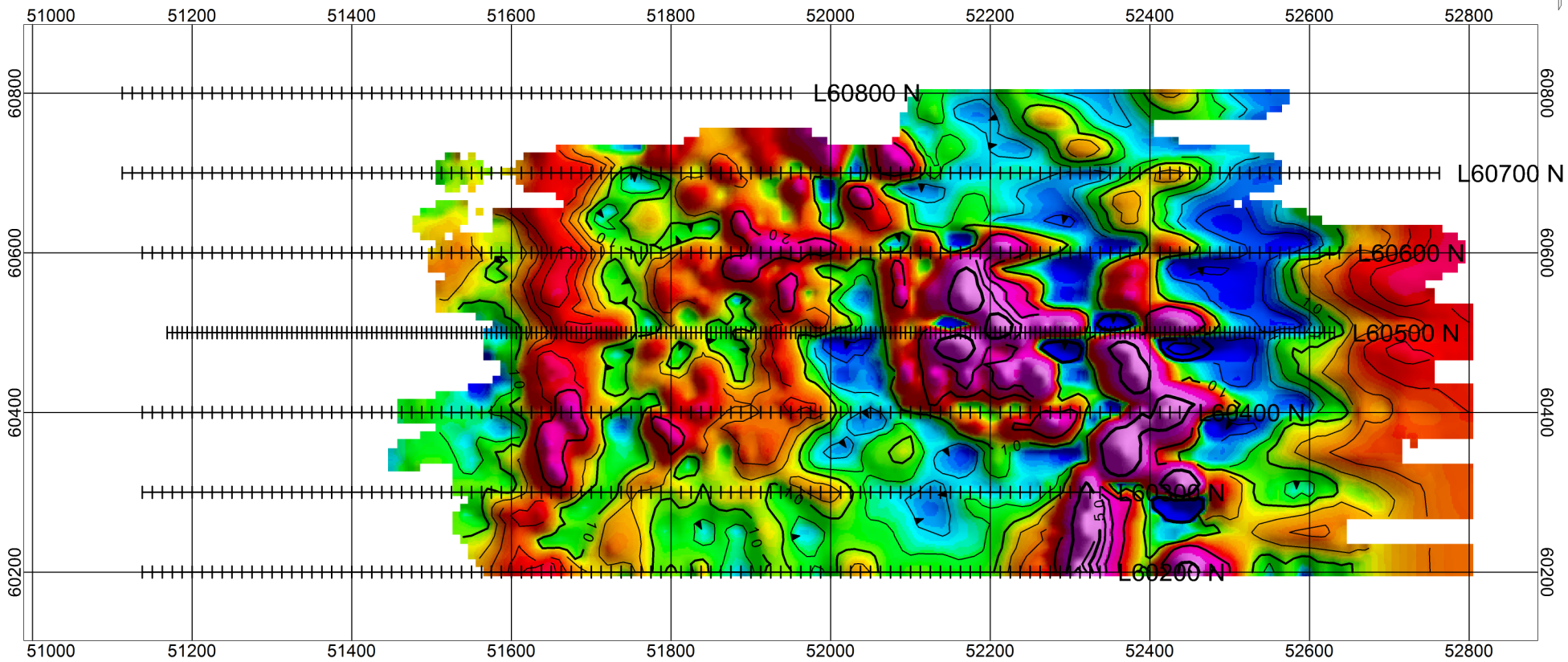
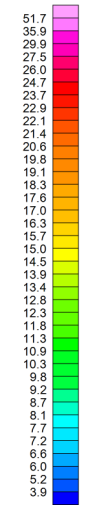


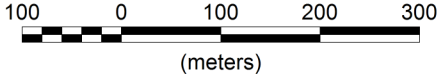


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



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TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

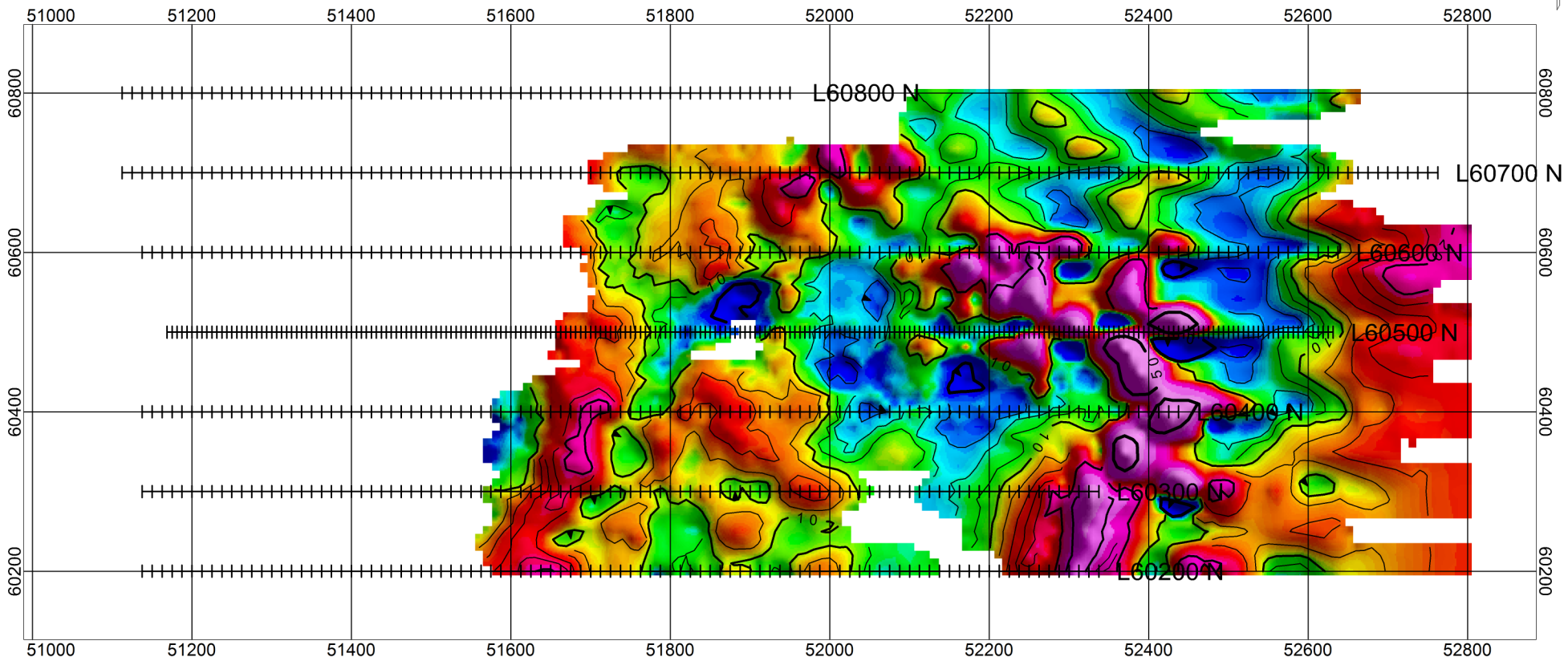
INDUCED POLARIZATION and RESISTIVITY SURVEYS

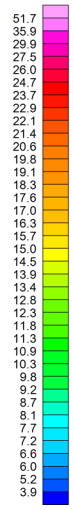
3D IP INVERSION PLAN MAPS

ELEVATION 1675m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17j

Geotronics Consulting Inc
Surrey B.C.



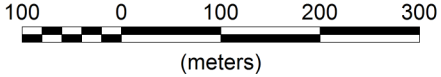


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D IP INVERSION PLAN MAPS

ELEVATION 1700m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17k

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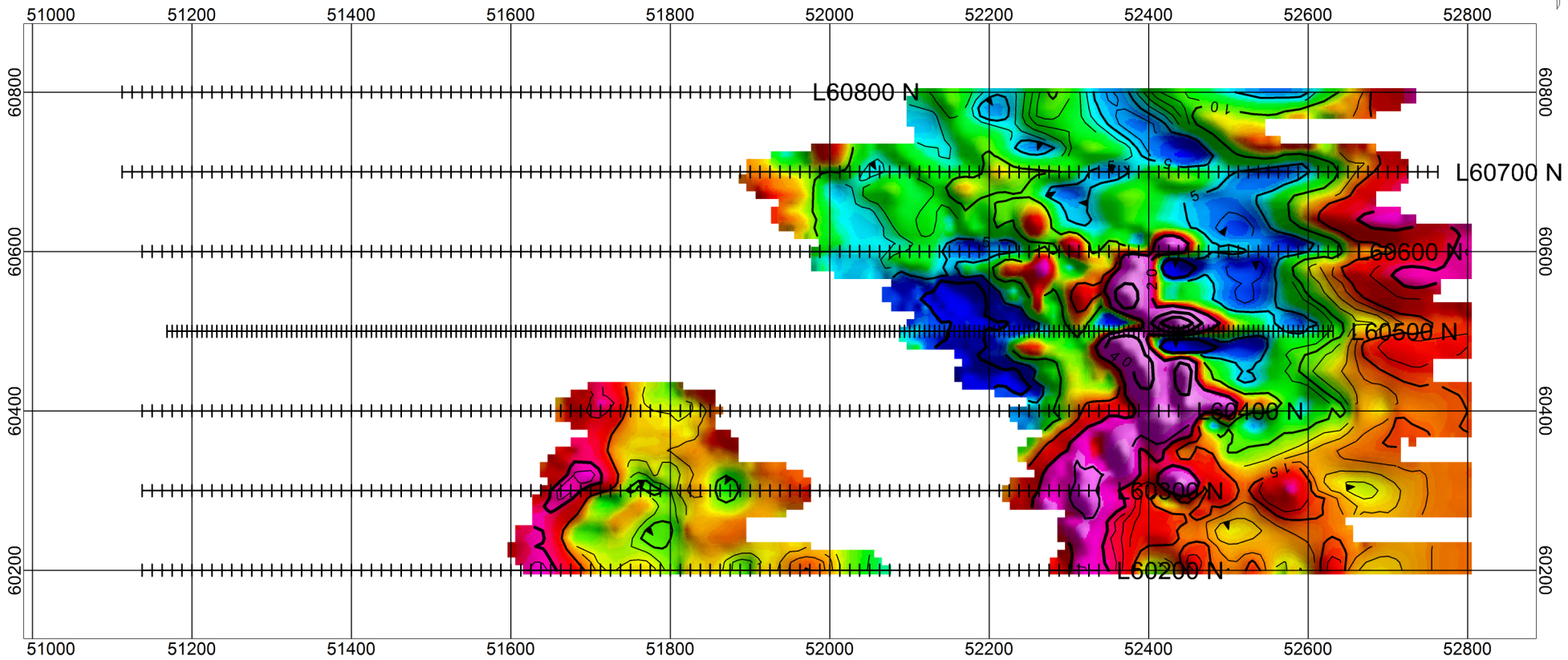
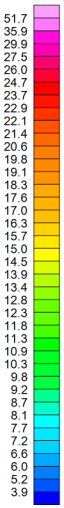
Surrey B.C.



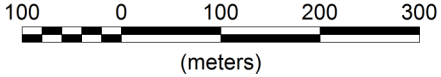


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

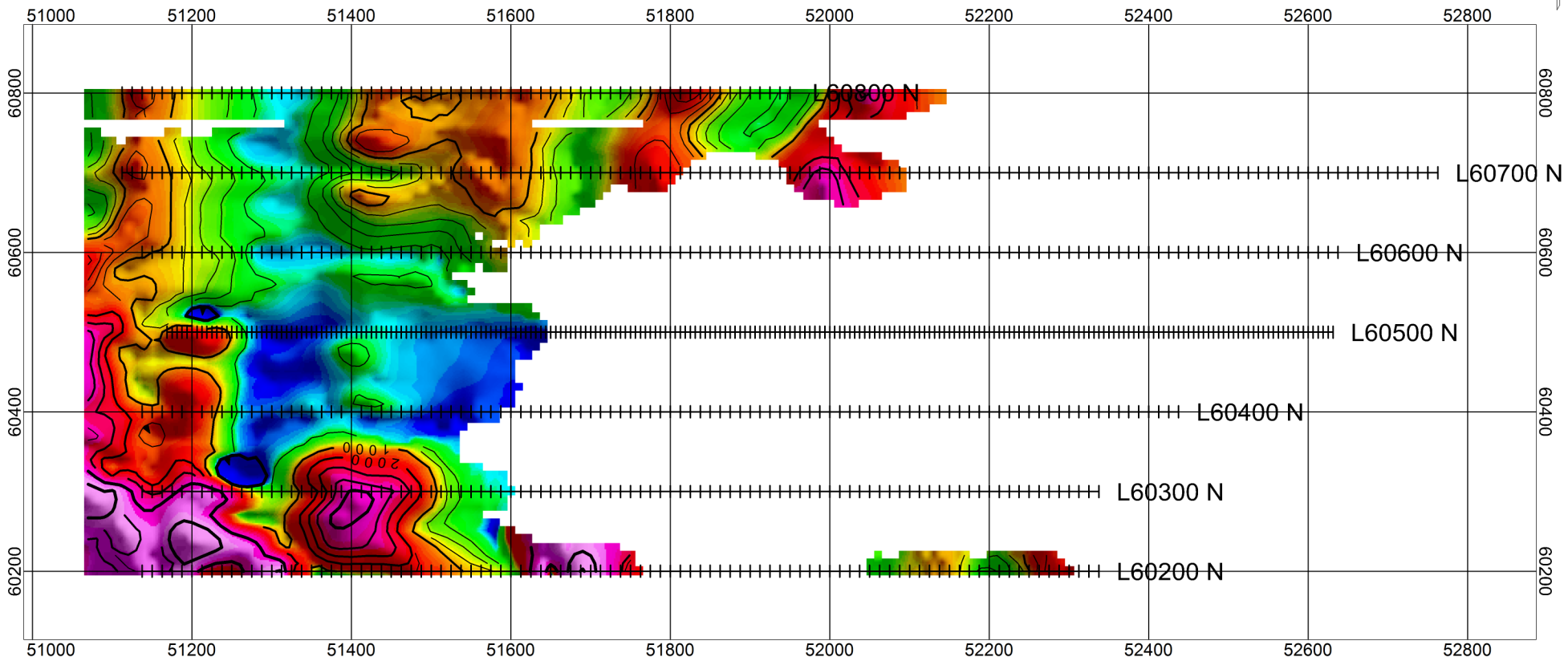
INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D IP INVERSION PLAN MAPS

ELEVATION 1725m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-17I

Geotronics Consulting Inc
Surrey B.C.

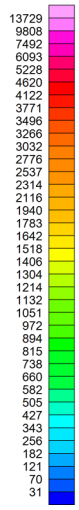


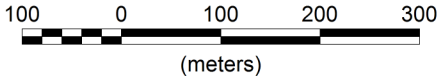
LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave





NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1450m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18a

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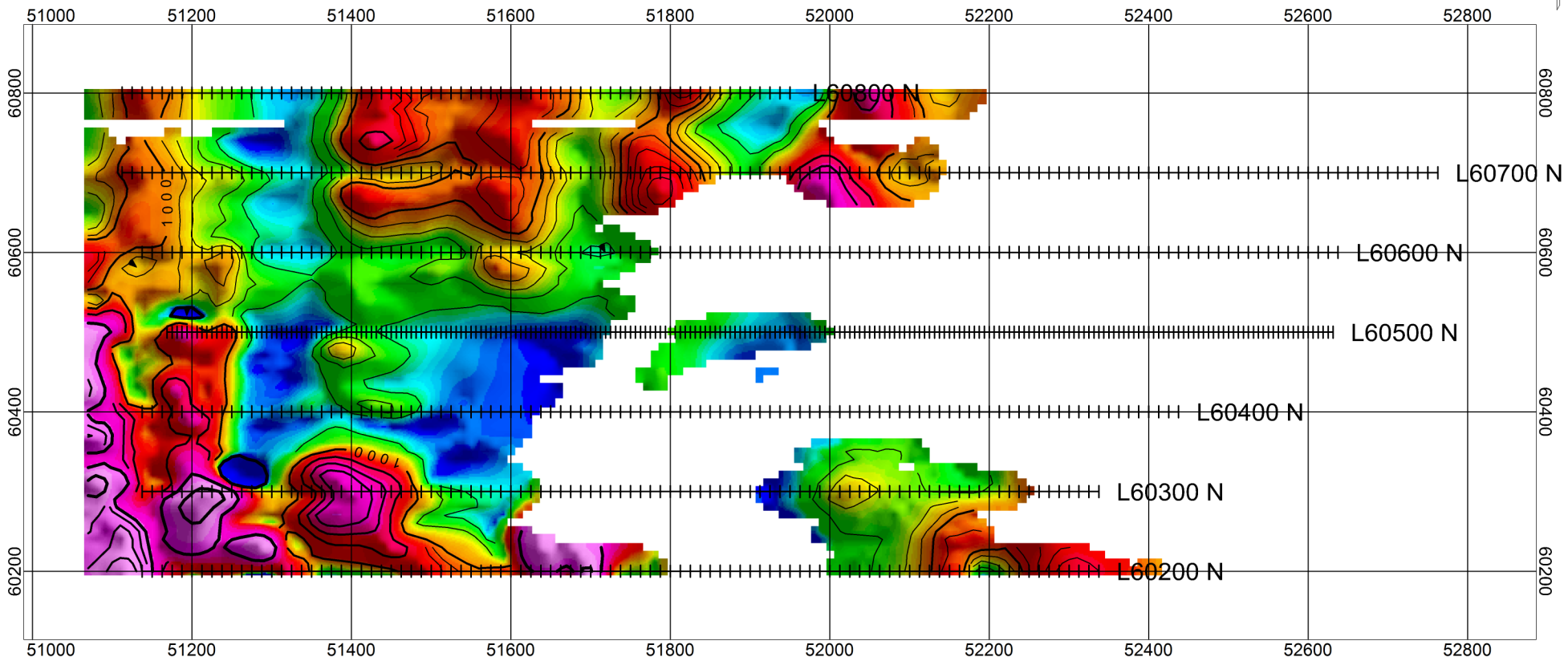
Surrey B.C.

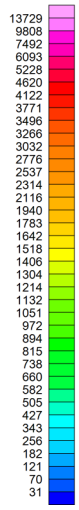


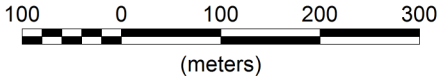
LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave





NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

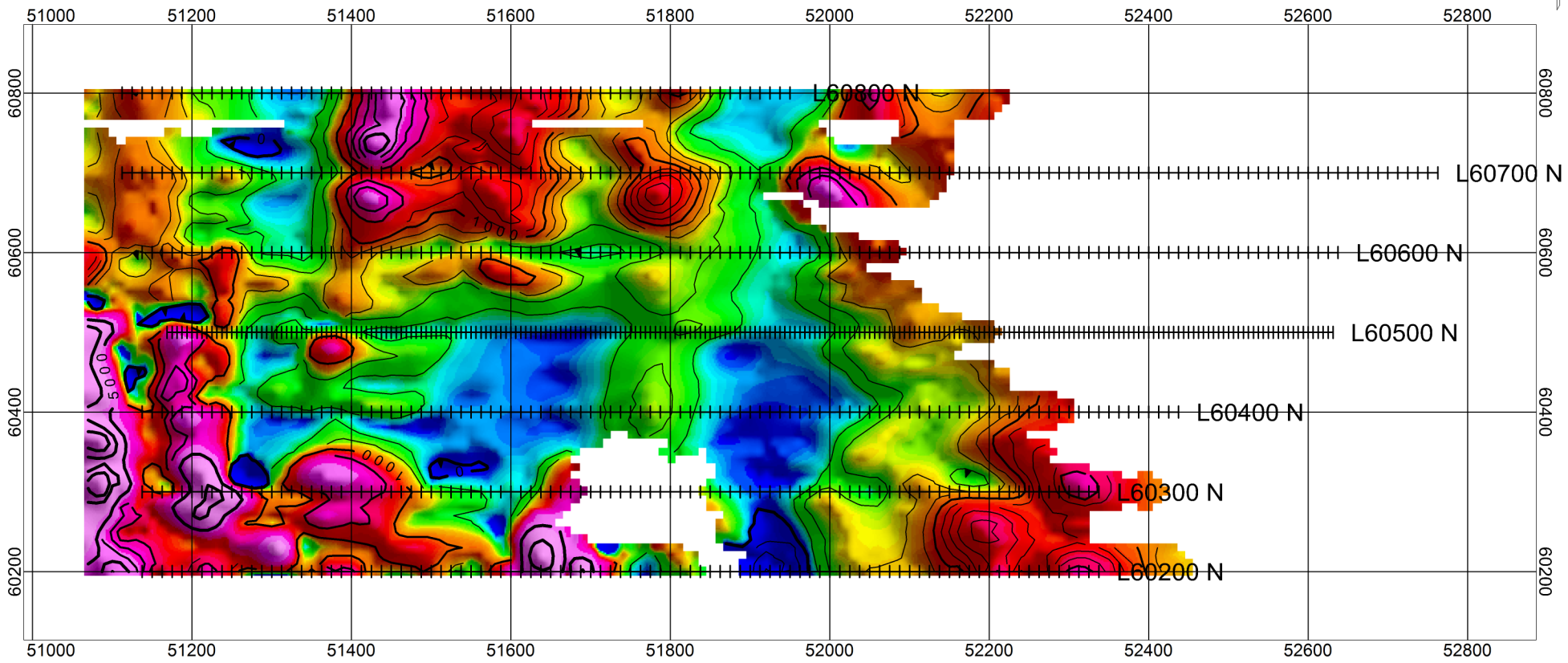
INDUCED POLARIZATION and RESISTIVITY SURVEYS

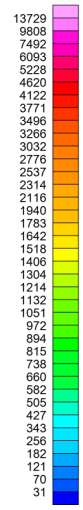
3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1475m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18b

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

100 0 100 200 300
(meters)

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

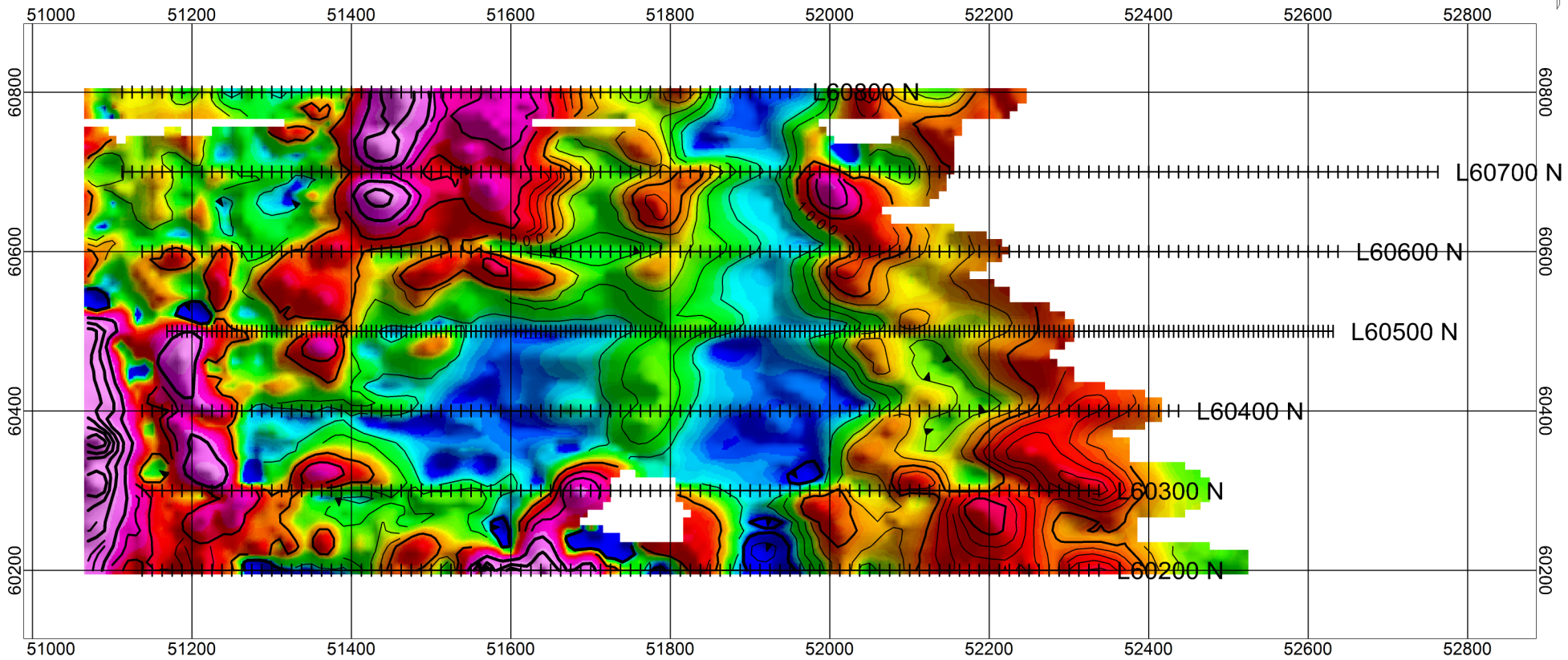
INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1500m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18c

Geotronics Consulting Inc
Surrey B.C.

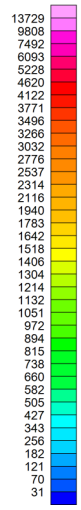


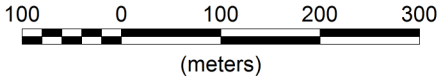
LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave





NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

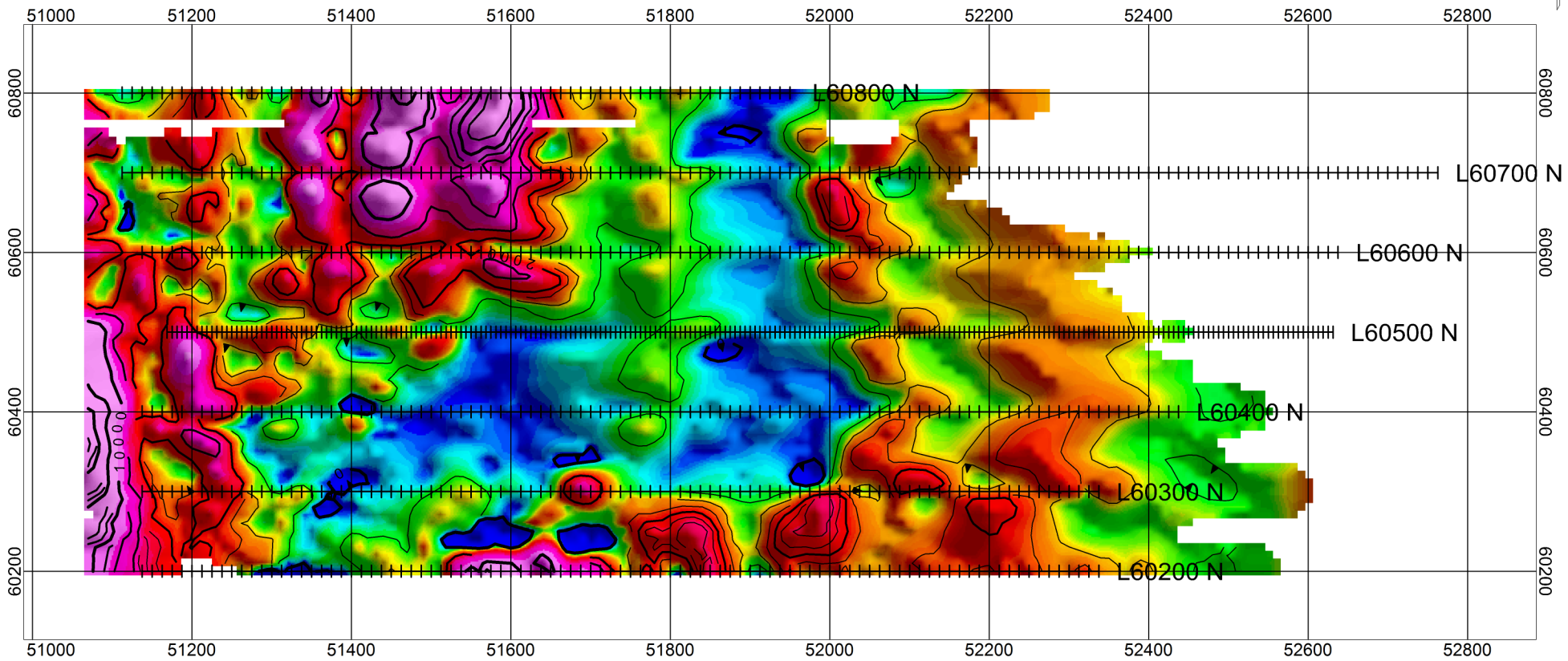
INDUCED POLARIZATION and RESISTIVITY SURVEYS

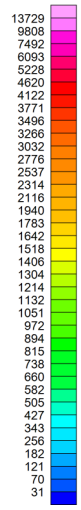
3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1525m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18d

Geotronics Consulting Inc
Surrey B.C.



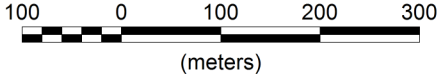


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

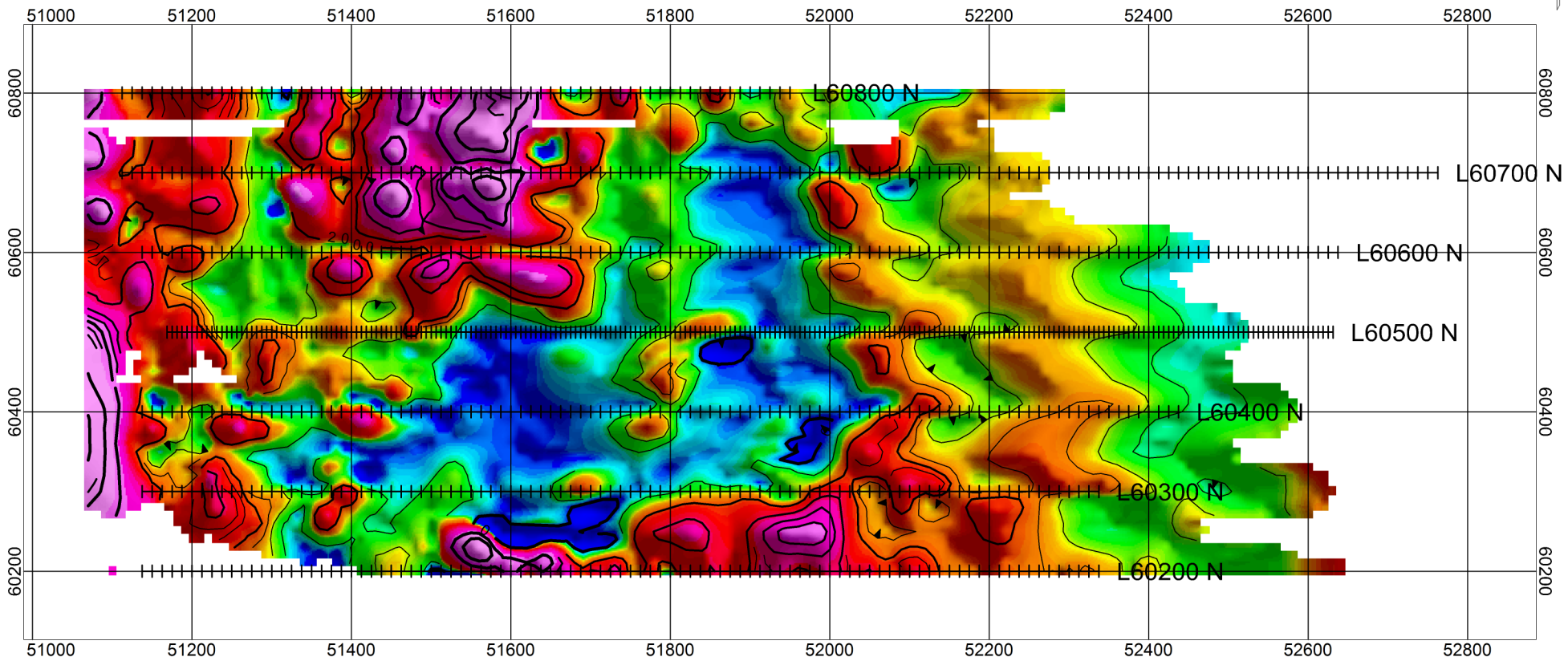
INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1550m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18e

Geotronics Consulting Inc
Surrey B.C.

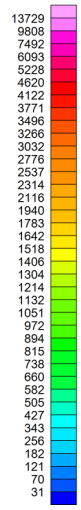


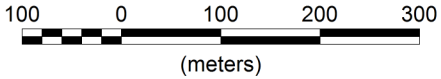
LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave





NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1575m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18f

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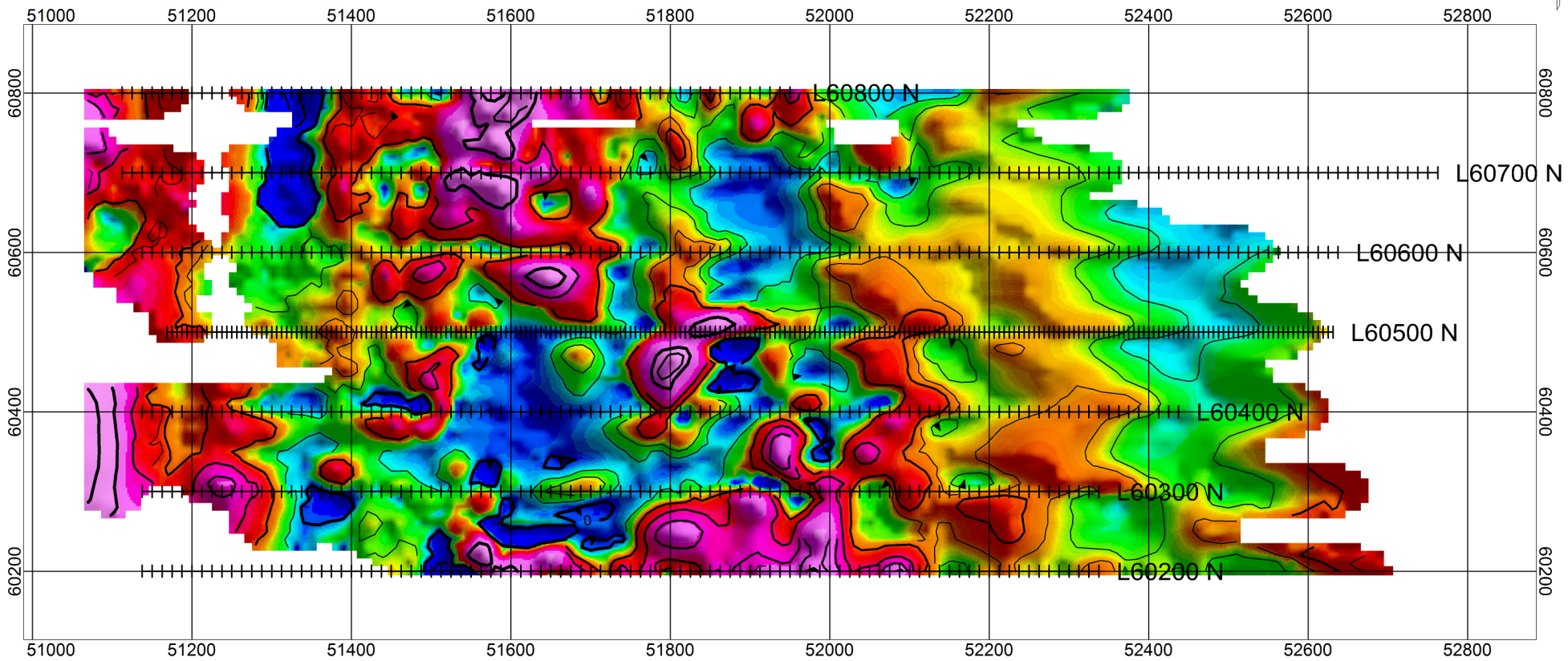
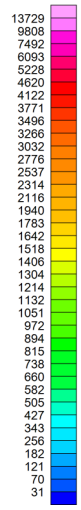


LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave



100 0 100 200 300
(meters)

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

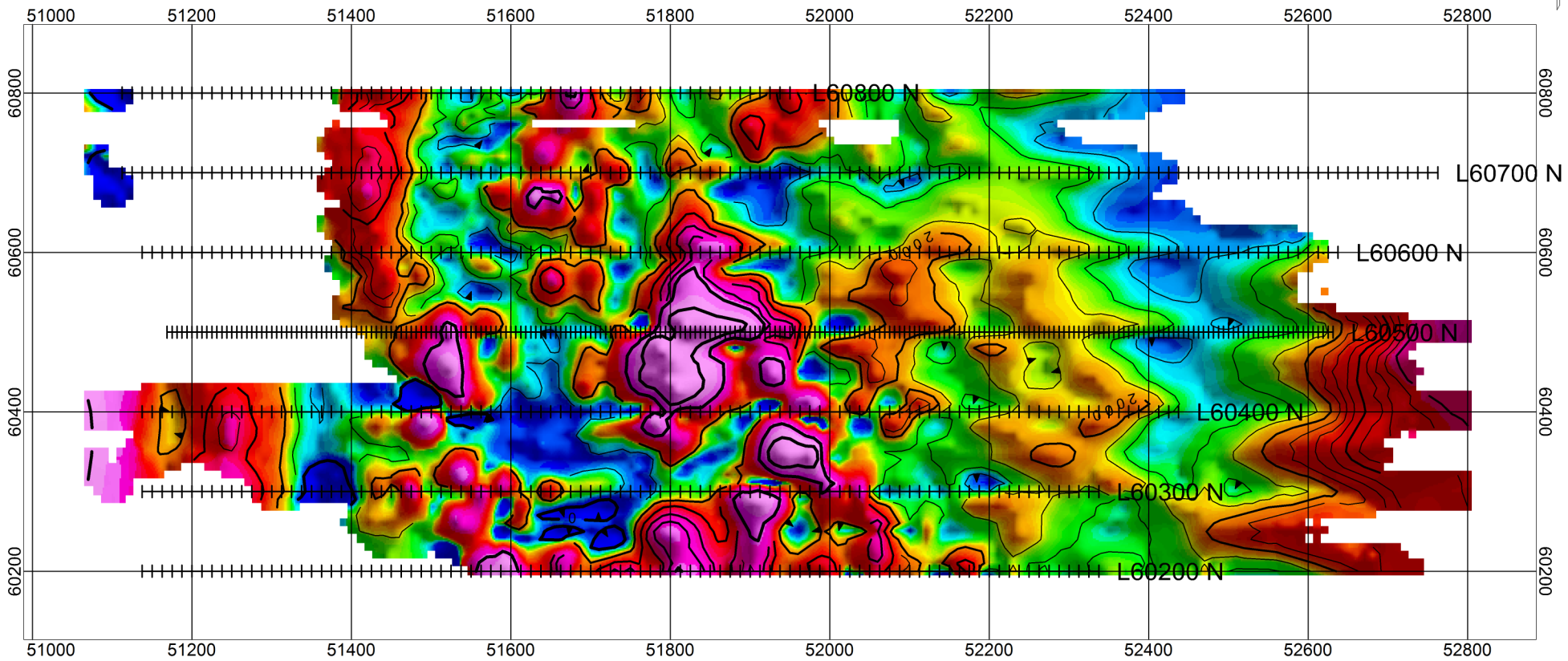
INDUCED POLARIZATION and RESISTIVITY SURVEYS

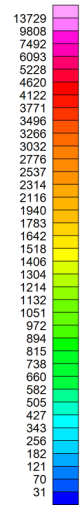
3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1600m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18g

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

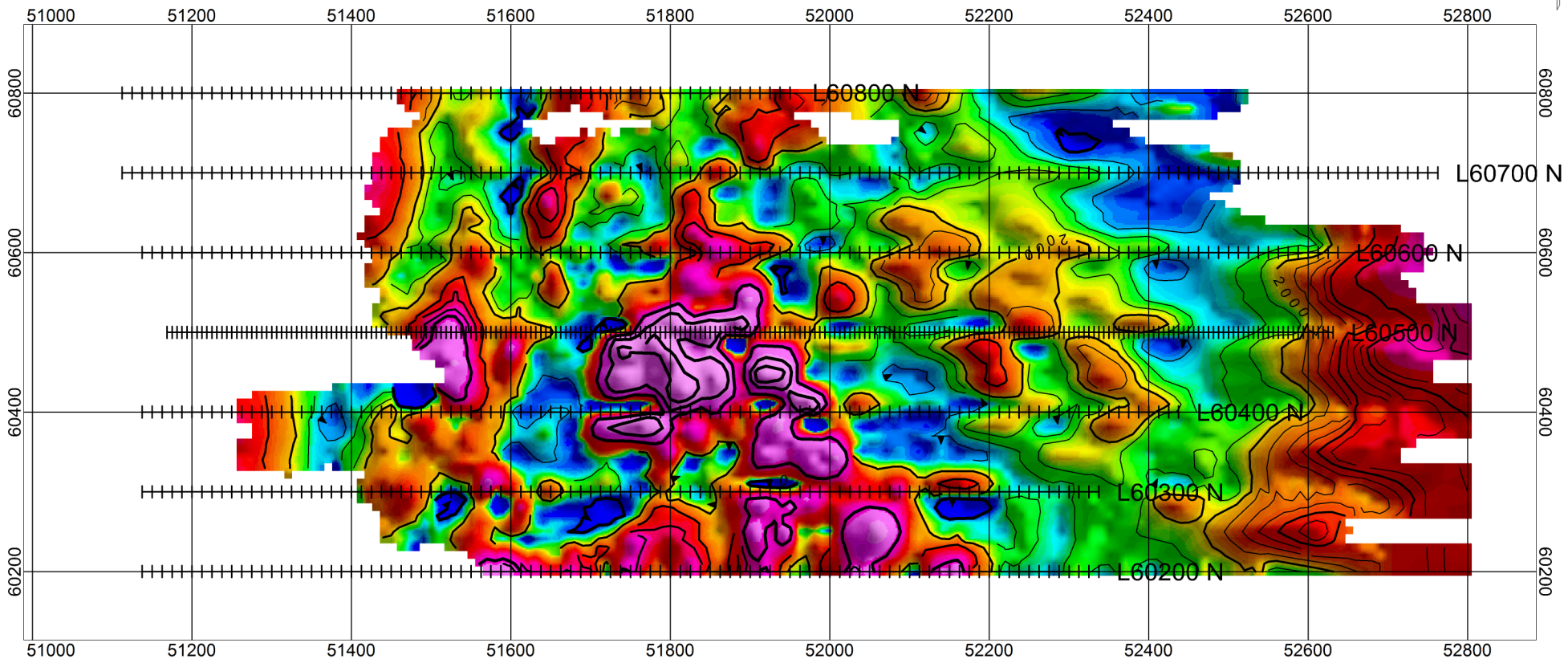
INDUCED POLARIZATION and RESISTIVITY SURVEYS

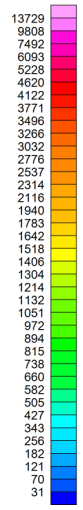
3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1625m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18h

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

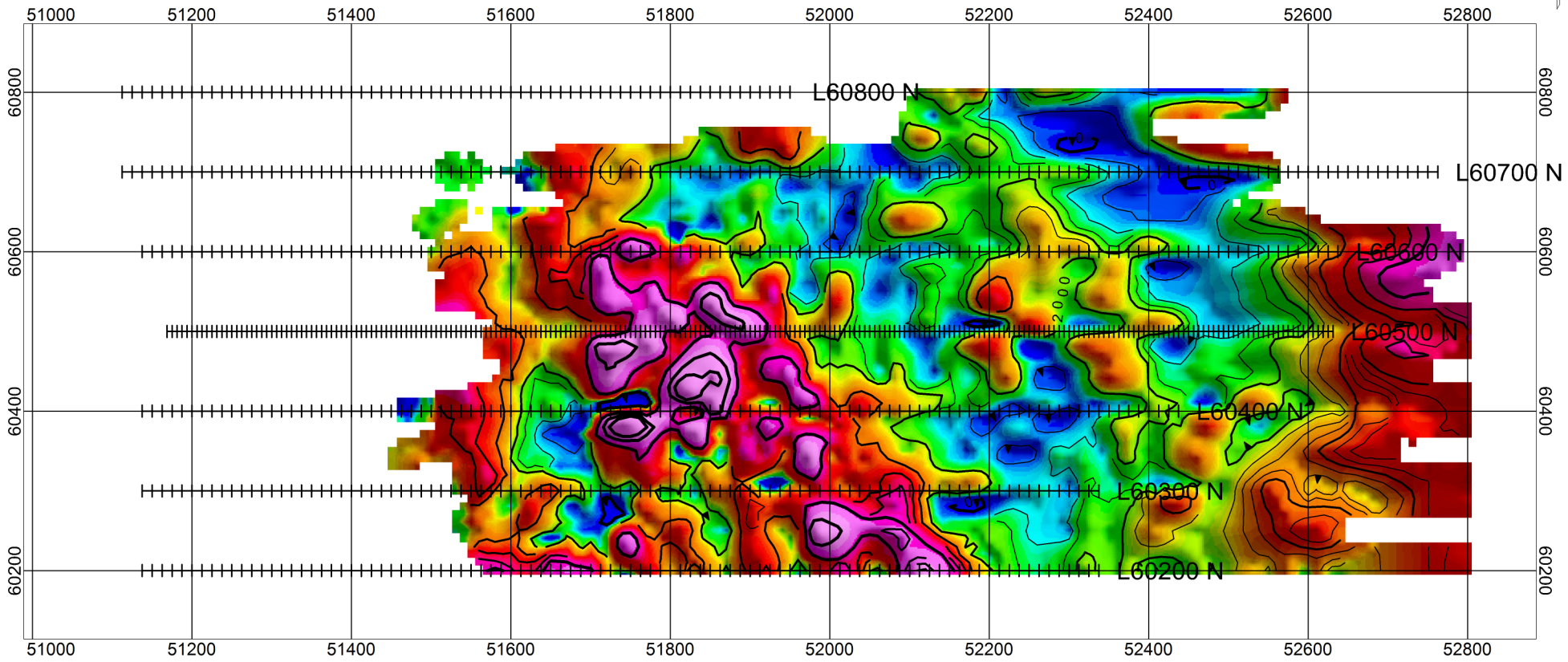
INDUCED POLARIZATION and RESISTIVITY SURVEYS

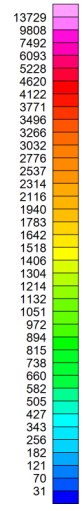
3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1650m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18i

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

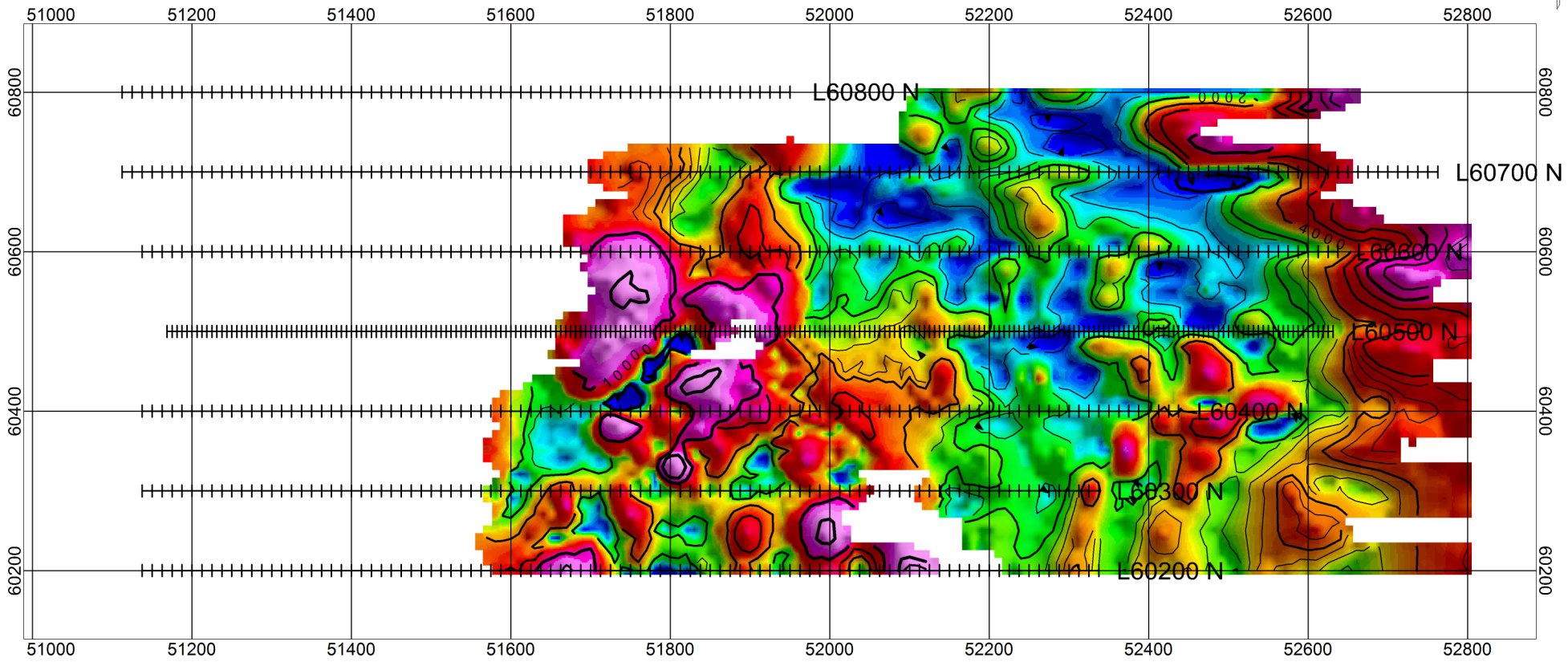
INDUCED POLARIZATION and RESISTIVITY SURVEYS

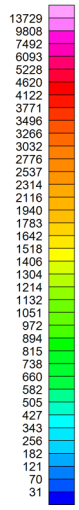
3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1675m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18j

Geotronics Consulting Inc
Surrey B.C.





LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1700m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18k

Geotronics Consulting Inc
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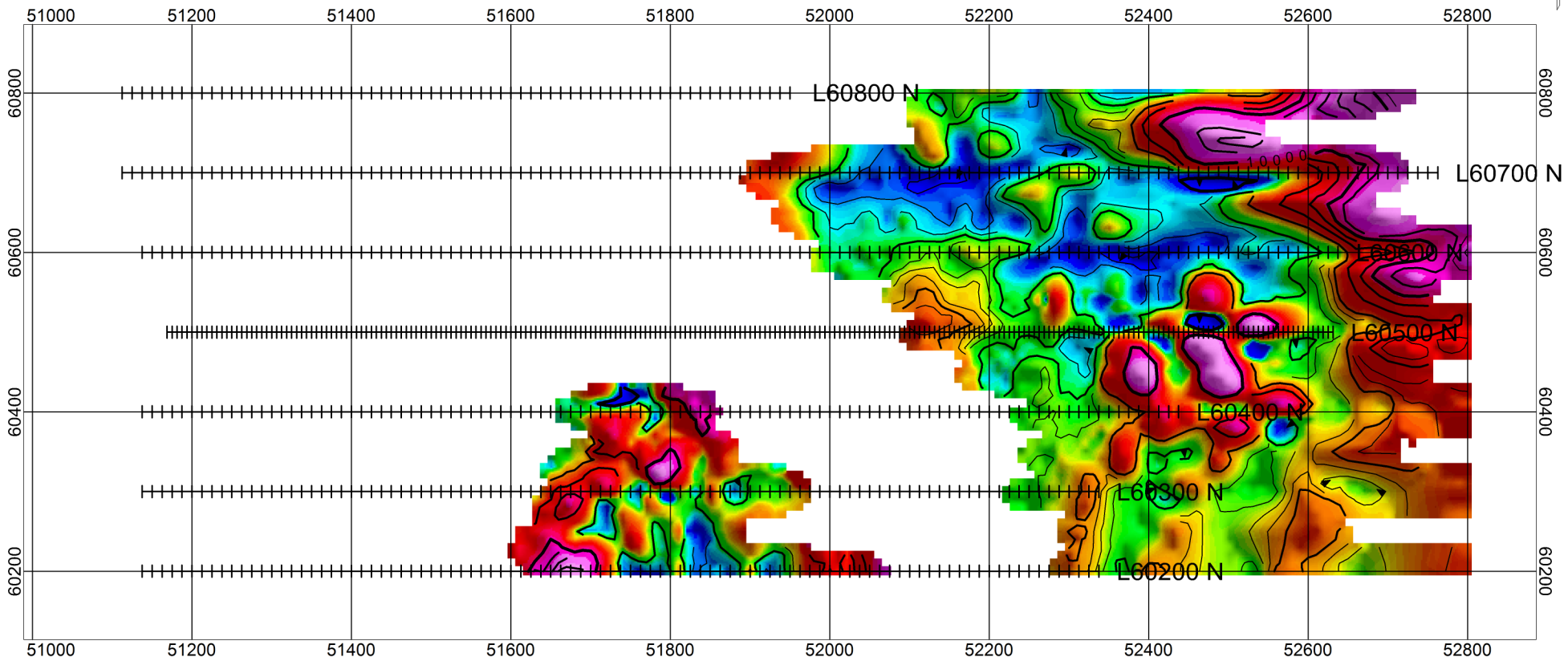

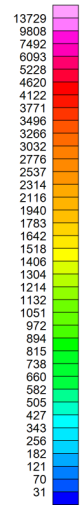

LEGEND:

CONTOUR INTERVALS:
Resistivity: log base 10 ohm-meters
Chargeability (IP): log base 10 ohm-meters

INSTRUMENTATION:
IP Receiver: BRGM Iris Elrec 6
IP Transmitter: BRGM VIP 4000
IP Generator: 6.5 kWatt Honda

IP SURVEY PARAMETERS:
Survey Mode: Time Domain
Array: Dipole-dipole
Dipole Length: 25 meters (82 feet)
Dipole Separation: n=1 to n=12
Delay Time: 240 milliseconds
Integration Time: 1600 milliseconds
Charge Cycle: 8 second square wave

100 0 100 200 300
(meters)

NAKINA RESOURCE CORP.

TATSAMENIE PROJECT

EXTENSION GRID

Tatsamenie Lake, Golden Bear Mines Area, Atlin MD, BC

INDUCED POLARIZATION and RESISTIVITY SURVEYS

3D RESISTIVITY INVERSION PLAN MAPS

ELEVATION 1725m

DRAWN BY:	JOB NO.:	NTS:	DATE:	FIG NO.:
CAM	13-06	104K/08	Oct '13	GP-18I

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15 APPENDIX II –DR. MARK FEDIKOW'S REPORT