

ASSESSMENT REPORT

ON THE YEAR 2001

ENHANCED ENZYME LEACH AND GEOLOGICAL

SURVEYS OF THE GOLDEN RUNNER PROJECT

G.R. 3, 4, 7, 8, RABBIT # 1, #2, #3, #5, 41, 43 M.C.s

IN THE ANDREW LAKE AREA, KAMLOOPS M.D., B.C.

LAT. AND LONG.: 50° 34' 00'', 120° 40' 30''

NTS 92I/10E

OWNERS: R. U. BRUASET, D. L. COOKE

OPERATOR: R. U. BRUASET

REPORT BY: R. U. BRUASET, BSc

JANUARY 30, 2002

WORK CARRIED OUT: JULY 13-SEPTEMBER 15, 2001

TABLE OF CONTENTS

INTRODUCTION	1.
PROPERTY, TOPOGRAPHY, ACCESS AND GLACIAL DIRECTION	2.
REGIONAL GEOLOGY	2.
PROPERTY GEOLOGY	3.
EXPLORATION HISTORY OF THE 2001 GRID AREA	5.
ENZYME LEACH THEORY	5.
ENZYME LEACH SAMPLING: GROUND CONTROL, SAMPLE COLLECTION, SAMPLE HANDLING, PREPARATION AND ANALYSIS	7.
TABLE 1. ELEMENTS FORMING HALOS	9.
INTERPRETATION	10.
RERERENCES	11.
STATEMENT OF QUALIFICATIONS	12.
STATEMENT OF COSTS	13.

LIST OF ATTACHMENTS

Plate 1.	Location Map	1:250,000
Plate 2.	Claim Map	1:50,000
Plate 3.	Grid Plan incl. sample key, geology	1:5,000
Plate 4.	Haloos for Cl, I, Br and respective central lows	1:20,000
Plate 5.	Haloos for V, Se, Mo, and respective central lows	"
Plate 6.	Central lows for Cl, Br, I, V, Se and Mo	"
Plate 7.	Central lows for Sb, W, Re, Au, Hg, Th, U	"
Plate 8.	Metals group: central lows: Ni, Cu, Ge, Cd, Sn, Bi	"
Plate 9.	High field strength elements: Y, Zr, Nb, Hf, Ta	"
Plate 10.	Rare earths central lows	"
Plate 11.	Platinum group central lows	"
Plate 12.	Possible structural trends: Sr, Ba, Hg, Bi, Zr, Hf, Nb, In	"
Plate 13.	Modified model of Reed Tompkins	
Plate 13b.	Model of Reed Tompkins	
Plate 15b.	Br haloos and miscellaneous background data	1:20,000

APPENDIX A

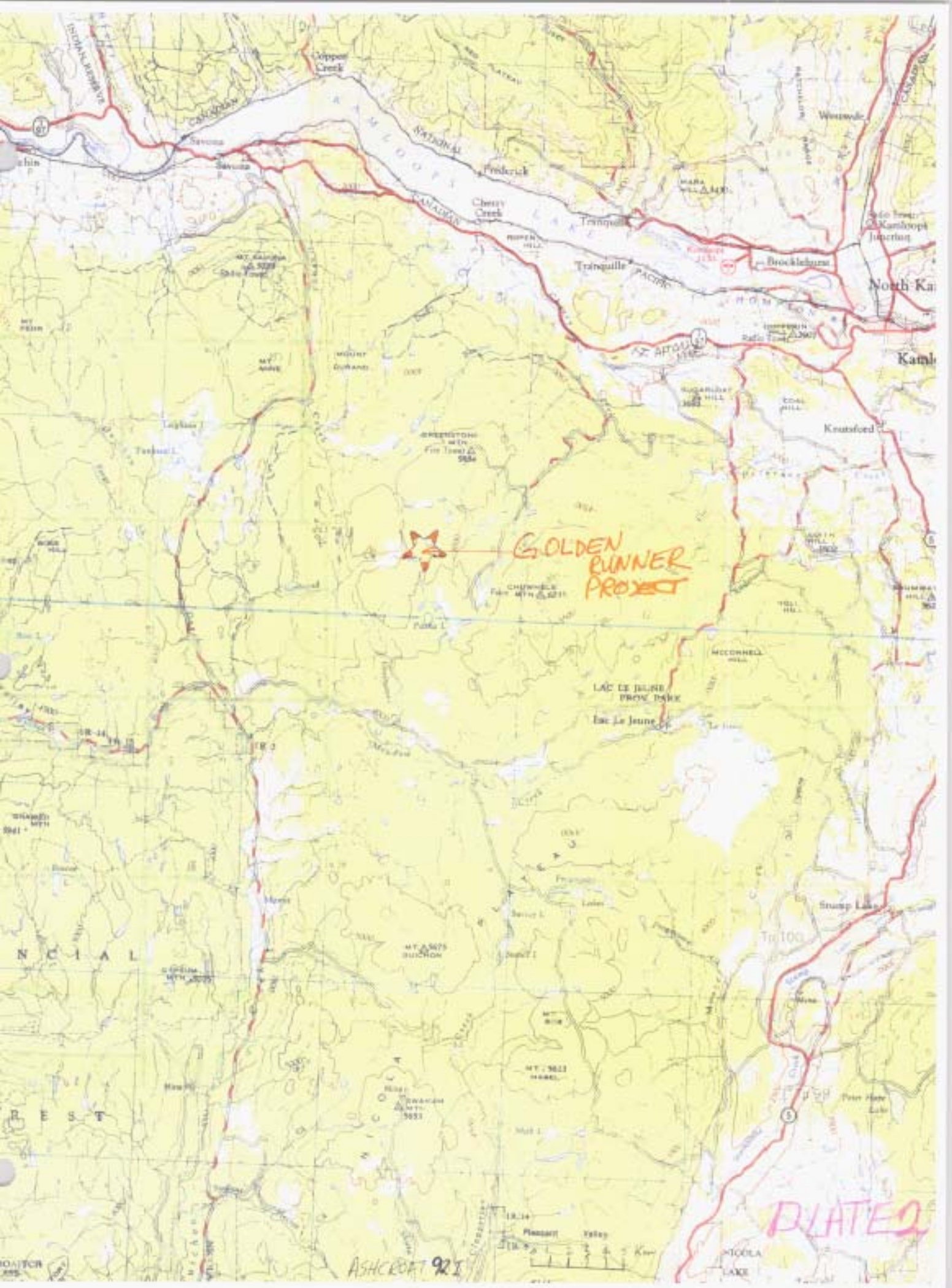
Plate 14b	Sample key for Enhanced Enzyme leach samples	"
Plate 14.	Contoured data: chlorine	"
Plate 15.	" bromine	"
Plate 16.	" iodine	"
Plate 17.	" vanadium	"
Plate 18.	" arsenic	"
Plate 19.	" selenium	"
Plate 20.	" molybdenum	"
Plate 21.	" antimony	"
Plate 22.	" tungsten	"
Plate 23.	" rhenium	"
Plate 24.	" gold	"
Plate 25.	" mercury	"
Plate 26.	" thorium	"
Plate 27.	" uranium	"
Plate 28.	" cobalt	"
Plate 29.	" nickel	"
Plate 30.	" copper	"
Plate 31.	" zinc	"
Plate 32.	" lead	"
Plate 33.	" gallium	"
Plate 34.	" germanium	"
Plate 35.	" silver	"
Plate 36.	" cadmium	"
Plate 37.	" indium	"
Plate 38.	" tin	"
Plate 39.	" thallium	"

Plate 40.	“	bismuth	“
Plate 41.	“	titanium	“
Plate 42.	“	chromium	“
Plate 43.	“	yttrium	“
Plate 44.	“	zirconium	“
Plate 45.	“	niobium	“
Plate 46.	“	hafnium	“
Plate 47.	“	tantalum	“
Plate 48.	“	lanthanum	“
Plate 49.	“	cerium	“
Plate 50.	“	praseodymium	“
Plate 51.	“	neodymium	“
Plate 52.	“	samarium	“
Plate 53.	“	europium	“
Plate 54.	“	gadolinium	“
Plate 55.	“	terbium	“
Plate 56.	“	dysprosium	“
Plate 57.	“	holmium	“
Plate 58.	“	erbium	“
Plate 59.	“	thulium	“
Plate 60.	“	ytterbium	“
Plate 61.	“	lutetium	“
Plate 62.	“	lithium	“
Plate 63.	“	beryllium	“
Plate 64.	“	manganese	“
Plate 65.	“	rubidium	“
Plate 66.	“	strontium	“
Plate 67.	“	cesium	“
Plate 68.	“	barium	“
Plate 69.	“	palladium	“

APPENDIX B.
ANALYTICAL CERTIFICATES:

ENHANCED ENZYME LEACH DATA SHEETS Lab. RPT 22673.RPT.XLS
ECO-TECH LABORATORIES ICP Cert. 2001-246

GoldenrunnerA.R.11



GOLDEN
RUNNER
PROJECT

DLATED

ASHCROFT 921



N C I A L

R E S T

1:50,000

INTRODUCTION

The Golden Runner Project of 2001 was an integrated geological and geochemical program targeting alkaline Cu-Au porphyry and epithermal gold. It involved 1:5000 scale mapping and Enhanced Enzyme Leach (EEL) sampling. The results of the geochemical survey are highly encouraging, with three oxidation-halo anomalies indicated (Plate 6). Magnetic volcanics and a monzodiorite dyke in the principal target suggest the presence of an alkaline porphyry environment. The favourable geology and the encouraging results in the EEL survey have dramatically enhanced the attractiveness of this property.

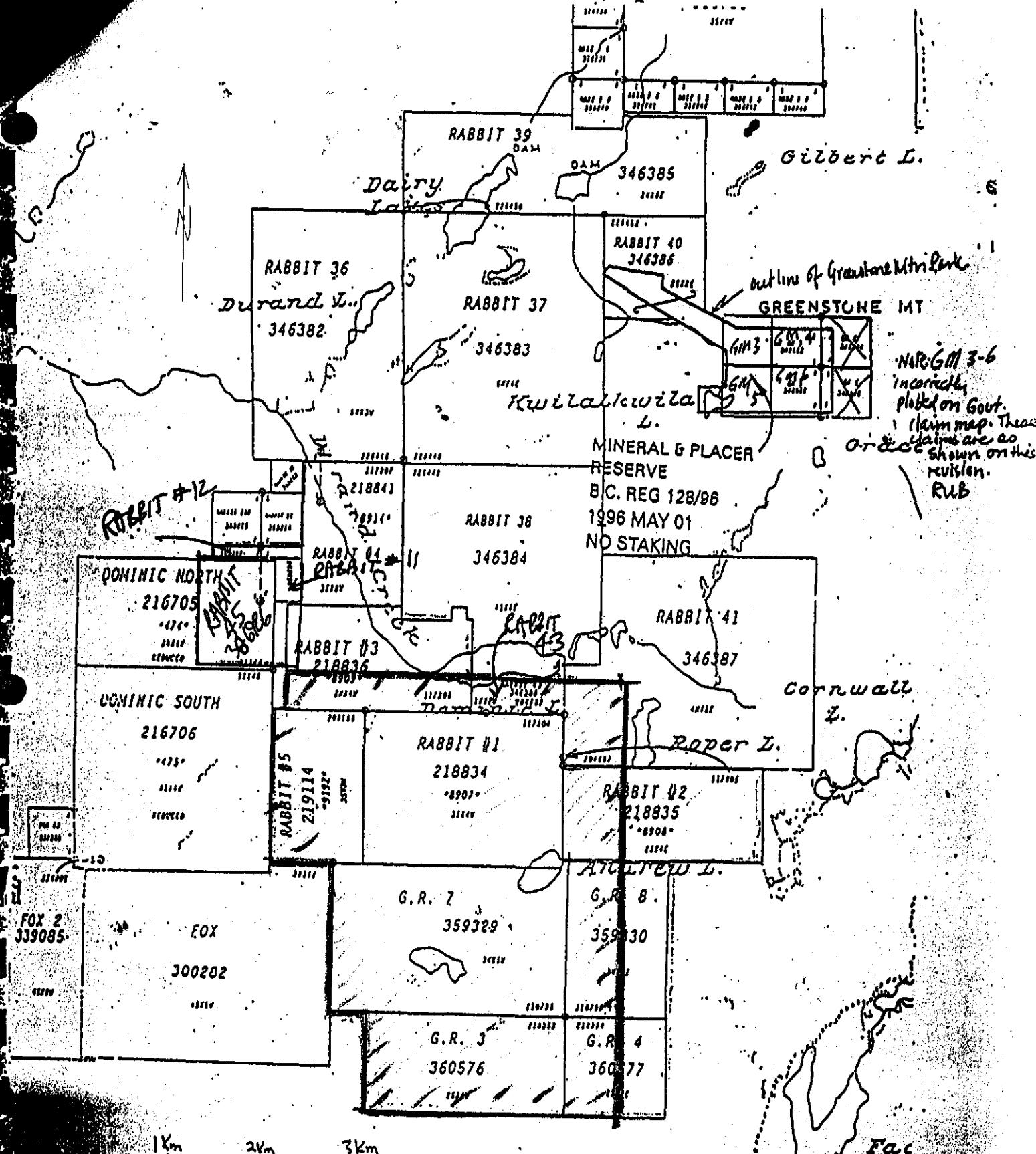
The project-area is 12 square km and is centered on Andrew Lake which is located about 25 km WSW of downtown Kamloops in south-central B. C. (Plate 1).

The local physiographic division is the Thompson Plateau (Physiographic Map of the Canadian Cordillera, GSC map 1701 A).

The Eastern volcanic facies (EVF) of the Upper Triassic Nicola Group underlie most of the project area (Monger, McMillan, 1989). The EVF, and correlative facies in the Takla Group to the north, comprise the main alkaline porphyry belt of B.C. That belt includes the following mineralized districts: Copper Mountain, the Aspen Grove area, Iron Mask-Durand stock district, in which the current project is located, Mount Polley-Quesnel River and Mount Milligan. The most authoritative publication on alkaline porphyries of the northwestern Cordillera of North America is CIM Special Volume 46 edited by T.G. Schroeter.


A comprehensive compilation of geological, geochemical, geophysical and drilling information was completed in early 2001 prior to the 2001 Golden Runner project. That compilation indicated two drill targets in the current project area: one 0.8 km by 1.4 km and the other 0.4 km by 2 km. The first is known as Target A and the second as Golden Runner (Plate 6). The dimensions of these targets and the scarcity of exploration funds, made it highly desirable to achieve more precise target definition prior to drilling. Enhanced Enzyme leach was considered the most cost-effective method for achieving the improved target definition. The author had previously carried out successful Enzyme Leach surveys. The order-of-magnitude improvement in detection limits of EEL versus regular Enzyme leach, for many elements, is well-worth the extra cost.

The EEL survey was conducted on claims variously owned by R.U. Bruaset and David L. Cooke.



Scale 1:50,000

GOLDEN RUNNER
 2001-1 GROUP
 (TOTAL 82 units) RABBIT PROPERTY
 CLAIM MAP PLATE 2
 922/01

 Project area

PROPERTY, TOPOGRAPHY, ACCESS AND GLACIAL DIRECTION

The property is situated on the interior plateau. The terrain is gently rolling and forested with lodgepole pine, spruce, balsam fir and, locally, douglas fir. Maximum relief is about 170 m with elevations ranging from 1539 m at Dominic Lake in the north to 1662m in the "hill area" about 1 km to the south, and 1493m in the south end of the grid. Numerous areas of low wet ground occur within the grid, including three small lakes (Plate 3).

Substantial portions of the project area were clear-cut during the mid-1980s and early 1990s. Plate 3 provides some indications of the location of clearcuts.

The project area is typically snow-covered from November to the end of April-rarely deeper than one meter.

Access to the project area from the Lac Le Jeune interchange on the Coquihalla Highway is via Meadow Creek Road, a distance of 8 km of paved road westward towards the village of Logan Lake. Then one travels part of the all-weather Paska Lake Road, a gravel road, and the seasonal Dominic Lake logging road, for a combined distance of 12 km, to the south-eastern grid area.

The general direction of glacial transport in the area is SSE based on drift ridges and striae (GSC Memoir 249). The general float-distribution of the very distinctive Durand monzonite lithology, (DM), had suggests a SSE direction of transport. However, the current project reveals DM float too far to the west to be accounted for by the monzonite core of the Durand stock raising the possibility of a second source of this material, possibly one located in the above noted "hill area" (Plate 3).

Parts, or all of, the following claims were surveyed:

Claim name	Owner	Tenure number
G.R. 3, 4	R. Bruaset	360576, 77
G.R. 7, 8	"	359329, 30
RABBIT # 1, #2, #3	R. Bruaset, D.Cooke	218834,35, 36
RABBIT # 5	"	219114
RABBIT 41, 43	"	346387,

REGIONAL GEOLOGY

The principal current regional geological reference is the 1: 250,000 scale Ashcroft sheet (G.S.C. Map 42-1989 by Monger, J.W.H. and McMillan, W.J.) The region is underlain by the Eastern volcanic facies of the Upper Triassic Nicola Group. Regionally, the EVF facies is described as mafic, augite and hornblende porphyry bearing breccias and tuff and locally intercalated argillite.

The project area encompasses the southern extension of a prominent aeromagnetic anomaly centered 1 km north of Dominic Lake (GSC Geophysics Paper 5217). That anomaly is centered on the Durand stock, which is a zoned diorite-monzonite intrusion indicated to be coeval with the Nicola volcanics. The GSC-designated granodiorite composition of this stock, is the classification of the preceding regional geological map, the 1947 Nicola sheet, Map 886A. The composition of the Durand stock was established through extensive feldspar etching and staining and petrographic work by the author, and others, in the early 1970s. J. Monger (pers. comm.) has indicated that he does not dispute the alkaline classification of this intrusion, acknowledging a lack of modern GSC lithologic data.

Gold and copper are the principal valuable metals found to date in the Upper Triassic rocks of the survey-area.

The Upper Triassic in the general Dominic Lake project area is intruded by Early Cretaceous granite and dioritic feldspar porphyry collectively referred to as the Roper Lake intrusives (Plate 3 Unit 2). Small outcrop areas of Unit 2 are found in the project area. These are thought to represent cupulas and dykes related to a substantial calc-alkaline body occurring at shallow depth in the general project area. Gold and molybdenum are the principal commodity elements found to date in the Roper Lake intrusives.

Strong through-going northerly trending faults can be inferred from drilling, mapping and regional aeromagnetic trends. Similarly, east-west structural trends are indicated. North of Dominic Lake, evidence of Tertiary magmatism occur along an E-W structural trend suggesting potential for epithermal gold. Epithermal vein textures are present. Similar E-W structural trends occur in the survey area and locally rhyolite float contains Au.

PROPERTY GEOLOGY

Mapping at a scale of 1: 5000 was carried out (Plate 3). The current grid was used for general ground control. In the northern third of the map-area, extensive traversing was also done in search of outcrop using the underlying Noranda grid from 1990. That grid provides 200 m spaced lines, some of which were originally cut by chainsaw but are now extensively covered by deadfall.

Intrusive rocks were classified with aid by a ternary diagram from the IUGS Streckeisen classification (GEOTIMES Oct. 1973). Volcanic rocks were classified according to Robert R. Compton, 1965, Manual of Field Geology.

Specimens were diamond-sawn and were then subjected to feldspar etching and staining involving hydrofluoric acid and sodium cobaltinitrite.

4.

Outcrops are shown on a grid plan that includes fracture-attitudes and bedding. The area is almost completely drift covered. However, the general overburden depth is probably rarely more than a few meters.

The main elements of the geology are as follows:

1. The area is mainly underlain by flows and pyroclastics of the Upper Triassic Nicola Group.
2. In the "hill area" near 3+00N on L. 18+00W, a 1 m wide monzodiorite dyke containing minor disseminated chalcopyrite was found. This dyke is thought to be Nicola-age, and if that is correct, a possible alkaline porphyry environment is indicated, most likely under the central low known as AREA A (Plate 15b). Another interesting aspect of the geology of the "hill area" is the occurrence of disseminated magnetite in the volcanics. Mapping in the known alkaline porphyry environment of the Durand stock north of Dominic Lake has indicated that the country rock of that intrusion contain substantial magnetite only in close proximity to the intrusion. In the "hill area", most of the volcanics are classified as moderately magnetic suggesting these volcanics could cap near-surface comagmatic intrusive. Accordingly, the position of the principal central low in the current Enhanced Enzyme Leach survey is most interesting and encouraging.
3. On the eastern edge of the grid at 6+00S on L. 0+00W a lapilli tuff outcrop contains fragments of medium grained syenite indicating rocks typically associated with alkaline porphyry systems have erupted. This material is similar to Nicola volcanic breccia a short distance west of the Afton deposit. There, Cherry Creek monzonite, the host of the Afton deposit, form fragments in the breccia. Further, on the Golden Runner, fine, well-bedded clastics outcrop about 0.7 km WSW of the syenitic lapilli-tuff forming what appears to be a distal volcanic facies.
4. Leucocratic intrusive with minor quartz eyes and low K-spar occur in the western grid area and extending intermittently for about 2.5 km in a NNW direction. Compositions are diorite to quartz monzodiorite. This material is considered to be related to the Early Cretaceous Roper Lake magmatic event. Some of the Roper Lake rocks contain geochemical levels in gold to 500 ppb over 5.1 m in the area north of Dominic Lake. Two samples of leucocratic intrusive from the current project were analyzed for gold yielding up to 25 ppb. In one particular case, at 25+16S on L. 15 W, a large angular mass of diorite cut by an impressive set of parallel quartz veins was found. The source of the material remains unknown. The intensity of veining suggests a need for further prospecting.
5. No example of high-grade copper mineralization has ever been uncovered in the grid area. It appears that disseminated chalcopyrite and structurally controlled copper mineralization are more prevalent in the general hill-area of Rabbit #1 M.C. than anywhere else in the grid.

EXPLORATION HISTORY OF THE 2001 GRID AREA

Various exploration companies have contributed to the knowledge of the grid commencing with Kennco in 1960. The B.C. Assessment Report file records important work by Dominic Lake Mining, Noranda and Cominco.

The earliest operators targeted stockwork molybdenum and Cu-Mo porphyries. The author was the first operator to target gold deposits and this began with systematic bark sampling using the methods advocated by Colin E. Dunn, then a geochemist with the Geological Survey of Canada. This led to the definition of the Golden Runner, a gold anomaly indicated by lodgepole pine outer bark sampling. The "head" and the "chest" areas of the 'Runner' featured strong multi-element anomalies and unusually strong gold response, respectively. An orientation survey in 1993 which employed Enzyme Leach sampling and the current systematic grid-based Enhanced Enzyme leach program have enhanced the various biogeochemical anomalies occurring within the 'Runner'.

ENZYME LEACH THEORY

This section provides some basic information on the theories and nomenclature of Enzyme Leach. Dr. J. Robert Clark of Activation Laboratories Ltd. has provided a Manual describing concepts, and models for interpretation of Enzyme Leach data in mineral and petroleum exploration (34pp. of text). Information about the basic genetic model - the Tompkins Model - is found in Oil & Gas Journal, Sept. 24, 1990 p. 128. Additional information has come from notes from Enzyme Leach workshops given by Dr. Clark. Please refer to the models (Plates 13 and 13b) in the present report.

Comprehensive papers describing Enzyme Leach surveys are not plentiful. An excellent paper on the subject is Dunn, et al, 1998. This most interesting survey shows the Enzyme Leach response of the Bromhead oil pool situated at a depth of 2850 in southeastern Saskatchewan. This paper is pertinent to metals environments because similar patterns occur in both environments.

Enzyme Leach (EL) is a highly selective analytical extraction method used primarily for detecting extremely subtle geochemical anomalies in B-horizon soils. Pattern recognition is the key to proper interpretation of EL data, since anomaly patterns are quite different from conventional geochemical data. The analyses in the current survey were done by Enhanced Enzyme Leach (EEL) a technique providing enzyme leach data with detection limits frequently an order of magnitude lower than standard EL.

Over geologic time, extremely small amounts of trace elements related to an ore body or petroleum reservoir, move by various mechanisms towards the surface where they are trapped in oxide coatings on mineral grains in the soil. Amorphous MnO₂ is one

6.

of the most effective traps for a wide variety of cations, anions and polar molecules that may be migrating to the surface. Because of the efficiency of this trapping material, the locations of EL anomalies are generally independent of the quantity of leachable Mn in the soils.

EL makes use of an enzyme-catalyzed reaction to selectively dissolve the most reactive form of MnO₂ in soils, the amorphous form of the compound.

Currently EL anomalies are classified two ways: by morphology and by genesis. Morphologically, the three commonly recognized forms are: 1. halo anomalies; 2. apical anomalies and, 3. combination anomalies. Genetically, there are also three classes: A. oxidation anomalies (sometimes referred to as oxidation halos, where they form a morphological halo); B. diffusion anomalies, which result from gradual thermodynamic dispersion of a highly concentrated source; C. mechanical/hydromorphic dispersion anomalies.

Oxidation anomalies appear to be caused by very subtle electrochemical cells that develop at the top of reduced bodies in the subsurface. A reduced body is a concentration of reduced material, whether sulphide or hydrocarbon material such as bitumen, or material that has deficiency in oxygen; the term "most reduced" is often used and refer to the greatest concentration of reduced material (J.R. Clark, pers. comm. May/2001). Please refer to the modified Tompkins model and the Tompkins model (Plates 13 and 13b). According to Dr. J.R. Clark: "a reduced chimney forms between the reduced body and the surface and the central low is a surficial geochemical expression of the reduced chimney. The area of oxidation (anode) is at the edges of the cathode (the reduced body and the overlying reduced chimney). Multiple cathodes occur when the reduced body has been physically disrupted. The reduced chimney is a zone of excess electrons hence reduction is occurring. There is no HUGE flux of CH₄ and H₂. This is an extremely subtle process. CO₂ is an uncharged molecule, and will migrate vertically, regardless of current flow, and it probably is the carrier for the low-boiling point halides. (Clark: Written comm. May 1, 2001.)

Oxidation anomalies are characterized by very high contrast values for oxidation suite elements and this includes Cl, Br, I, As, Sb, Mo, W, Re, Se, Te, Au, V, U and Th. Rare-earth elements often accompany the oxidation suite. Base metals are sometimes anomalous in the same samples. Oxidation anomalies often form asymmetrical halos or partial haloes directly above the buried reduced body.

Oxidation anomalies have been found associated with reduced bodies located up to thousands of meters below the surface. In general, the contrast of the anomaly and the number of anomalous elements in a halo decline as the depth of reduced bodies increase. Oxidation anomalies can be associated with any reduced body: porphyry copper deposits, base metal massive sulphide deposits, epithermal Au deposits, barren disseminated

pyritic alteration, blocks of barren pyritic shale or black shale isolated as a horse within a fault or occurring as a graben between two normal faults. Any body of rock that contains more oxidizable material than the surrounding rock has the potential to produce one of these anomalies.

The suite of trace elements in the halo often is not indicative of the composition of the source.

Apical anomalies are the most common morphological form of EL anomalies, and most of these are related to faults. Trace elements that are representative of the source are found as an anomaly directly over that source. If the source is a mineral deposit, many of the commodity/pathfinder/alteration trace elements that characterize the source are anomalous in the surface. When an apical anomaly is found associated with a sulphide-rich mineral deposit, it is because something is preventing a strong oxidation halo from forming.

Combination anomalies have characteristics of both oxidation and apical anomalies. They usually occur where a weak to moderately strong oxidation cell occurs in the subsurface. As the strength of the oxidation cell increases, the trace elements that characterize the source migrate more and more into the halo anomaly, until the apical anomaly disappears.

ENZYME LEACH SAMPLING: GROUND CONTROL, SAMPLE COLLECTION, SAMPLE HANDLING, PREPARATION AND ANALYSIS

All sampling was done by the author using long handled tree planter's spades with spade dimensions 19 by 25 cm. Spade surfaces were clean steel.

Samples were collected at 150m-intervals along 300 m- spaced hip-chained and orange flagged lines. Sample bags were numbered with the project code RB, a numerical code for the year followed by a station identifier (10 to 316 except 273). The complete sample number was written on flagging at the sample site. Grid coordinates were not noted on sample bags. The approximate depth of each sample and the colour of the soil were recorded as well as the nature of any local disturbances, such as logging. Many sample sites in the northern grid area were found to have high-water table and boggy surface soils hindering efforts to reach the B-Horizon.

In the course of this survey, tie-ins were made to old grid lines and old identifiable sample sites. Relatively permanent features such as road, claim posts, trenches, cattle-guards, cut-block margins and drill holes were also tied-in.

Such tie-ins are expected to assist in future ground control. Grids in this area tend to be heavily impacted by loggers, cows and game animals.

The B Horizon soils range from brown to reddish-brown and ranged from clay to fine sand. The parent materials are variously till and fluvialite. Residual soil is occasionally present.

This B Horizon was sampled at depths generally ranging from 17 to 25 cm. Samples were collected in conventional 10 by 26 cm gusseted Kraft soil envelopes. During a traverse soil samples were accumulated in large plastic sample bags in the pack-sack. Whenever samples were dropped off for later pick-up on hot days, care was taken to store samples in a shady location under cover of coarse woody debris. This eliminated any possibility of samples being damaged in direct sun.

At camp, EEL sample were placed on sheets of plywood in a shelter and allowed to air-dry. Vertically positioned plywood protected the samples from direct sun. In the course of this drying, the daytime air temperature generally exceeded 22 °C and occasionally reached 27°. Even at the highest temperatures, samples were well below the 40° C. above which amorphous manganese dioxide coatings begin to break down and drive off volatile halogens and halide compounds.

As part of preparation for shipping, sample bags were sealed with cellophane tape and placed in Ziploc bags. They were next placed upright and tightly packed in apple boxes and sent by over- night FedEx courier.

The sample-suite consisted of 306 samples. These were broken into 3 shipments. Samples were sent to Activation Laboratories Ltd., Ancaster, Ontario. Preparation commenced upon the arrival of the last shipment.

Following release of the analyses to the author, sample locations were digitized from a field plot. Sample locations were e-mailed to Greg T. Hill of Actlab at Reno, Nevada. Mr. Hill prepared 56 single element colour plots at a scale of 1:20,000 using Surfer Version 7. Copies of these plots are found in APPENDIX A, with analyses found in APPENDIX B. Mr. Hill included a transparent overlay in which he pointed out the haloes in Areas A and B based on lutetium, including the central lows of rhenium and antimony.

The standard procedure for interpreting EL data, as recommended by J.R. Clark, involves tracing out haloes and their central lows for oxidation suite elements. Gradually the common central lows are built up on consideration of many elements and those results are frequently supported by the metals group and the rare earths in the case of strong oxidation cells.

The common central lows of the oxidation suite tend to develop directly above the reduced body (Plate 13). Copies of some of the interpretive plots are attached.

TABLE 1. Elements forming haloes

AREA "A" Anomaly

Group	Share of total elements	haloing elements
Oxidation suite	12/15	Cl, B, I, Mo, Se, V, Au, Sb, U, Th, Re, W
Metals + chalcophile assoc.	6/13	Cu, Ni, Ge, Cd, Sn, Bi
High field strength elements	2/7	Ta, Y
Rare earths	14/14	La, Pr, Ce, Sm, Nd, Ho, Gd, Dy, Er, Tm, Tb, Yb, Lu, Eu
Lithophile elements	1/8	Li
P.G.E.	0/4	

AREA "B" Anomaly

Oxidation suite	9/15	Cl, Br, I, Se, V, Mo, Re, Th, U
Metals + chalcophile assoc.	4/13	Cu, Ni, Ge, Cd,
High field strength	4/7	Ta, Y, Zr, Ta, Y, Nb.
Rare earths	14/14	La, Pr, Ce, Sm, Nd, Ho, Gd, Dy, Er, Tm, Tb, Yb, Lu, Eu
Lithophile elements	2/8	Li, Be
P.G.E.	0/4	

AREA "C" Anomaly

Oxidation suite	10/15	Cl, Br, I, Se, V, Mo, Re, U, Th, W
Metals + chalcophile assoc.	4/13	Cu, Ni, Ge, Cd,
High field strength	5/7	Ta, Y, Zr, Hf, Nb
Rare earths	14/14	La, Pr, Ce, Sm, Nd, Ho, Gd, Dy, Er, Tm, Tb, Yb, Lu, Eu
Lithophile elements	2/8	Be, Li
P.G.E.	0/4	

(Plates 4-11). An overlay showing apparent trends is also included (Plate 12). A set of the colour contour plots and Plates 4-12 were sent to J. Robert Clark for his comments. Dr. Clark's comments, which form a key portion of the report, are attached (Clark, 15 Oct. 2001).

INTERPRETATION

Based on the tracings of haloes and their respective central lows for the oxidation suite elements, it appears that three common central lows are indicated. A total of three reduced bodies would be inferred. These anomalies are designated as AREAs A, B and C. on interpretive Plan 6. It is further apparent that some of the metals such as Cu, Ni and Cd, and others in some cases, have migrated into these haloes, as have the rare earths.

Table 1 lists elements which form haloes and central lows in each of the three areas of EEL response (AREAs A to C (Plates 6, 15b) . The principal halo is Area A based on its strength and size. The reduced body causing this anomaly is postulated to occur under the hill (Clark, Oct. 15, 2001). A few small outcrops of lapilli tuff and tuff of the Nicola Group occur in Area A, and at one location, a 1 m wide monzodiorite dyke was found (L18W 3+00N.). The fact that this dyke and many of the volcanic rocks in the area are moderately magnetic due to the presence of disseminated magnetite is considered most encouraging. This may indicate the existence of a covered Cu-Au associated alkaline intrusion in the "hill area". Mapping in the alkaline Durand stock and testing of rock specimens with the pencil magnet has suggested rapidly diminishing susceptibilities in the Nicola volcanics away from dioritic intrusive. Ground magnetics carried out in 1970 over portions of the former Rag claims enabled the operator to project contacts of alkaline intrusions through drift-covered areas. These projections were generally confirmed by percussion drilling. It is instructive to examine the various geological, geochemical and geophysical patterns in this area to determine how anomalies defined by those surveys compare to those of EEL. Most of the exploration data from the survey area is available in Assessment Reports. The present 1:5000 scale map enables one to look at the various Assessment Report files and to compare the data on a unified grid basis.

Dr. Clark's two-page report, considered in conjunction with Maps 4-12 and the model-Plate 13, illustrate the simple and effective interpretation techniques that can be employed on data of this type. Dr. Clark is the principal authority on Enzyme Leach having substantially developed the techniques and commercialized the process.

It is hoped that readers of this report will decide to try their own systematic Enzyme Leach surveys. With reasonable geological control and high confidence in the Enzyme Leach method one may be able to progress quickly from concept to drill target selection lessening reliance on conventional geochemical and geophysical techniques.

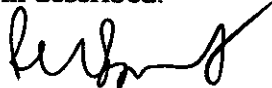
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Sask. Geo. Society, Special Publication No. 13, p. 254-265)
- Jackisch, Ingo, 1992, Assessment Report on IP/Resistivity Survey
Wyse-Rabbit Property. Report # 22,531
- Monger, J.W.H., McMillan, W.J., 1989, Geology of Ashcroft Map area
G.S.C. Map 42-1989 1:250,000
- Pearson, K, Wong, T., 1990, Report on Prospecting, Geochemistry and Geophysics on
the Rabbit Claims. Assessment Report 21,125

STATEMENT OF QUALIFICATIONS

I certify that:

1. I am a 1967 graduate of the University of British Columbia with a BSc degree majoring in geology. I have practiced my profession since graduation.
2. I conducted field-work in the Dominic Lake area during the years: 1969, 1970, 1975, 1978-81, 1989-2001. This consisted of geological mapping, soil sampling-both for conventional and Enzyme Leach analyses, bark sampling, percussion and diamond drill supervision, including core-logging, percussion sampling, percussion chip-logging, excavator trenching and road building. Resource calculations, compilation work involving conventional soil geochemistry, IP and percussion drilling were also carried out.
3. I have completed three grid-based Enzyme Leach surveys prior to the present survey.
4. I carried out the mapping and sampling herein described.

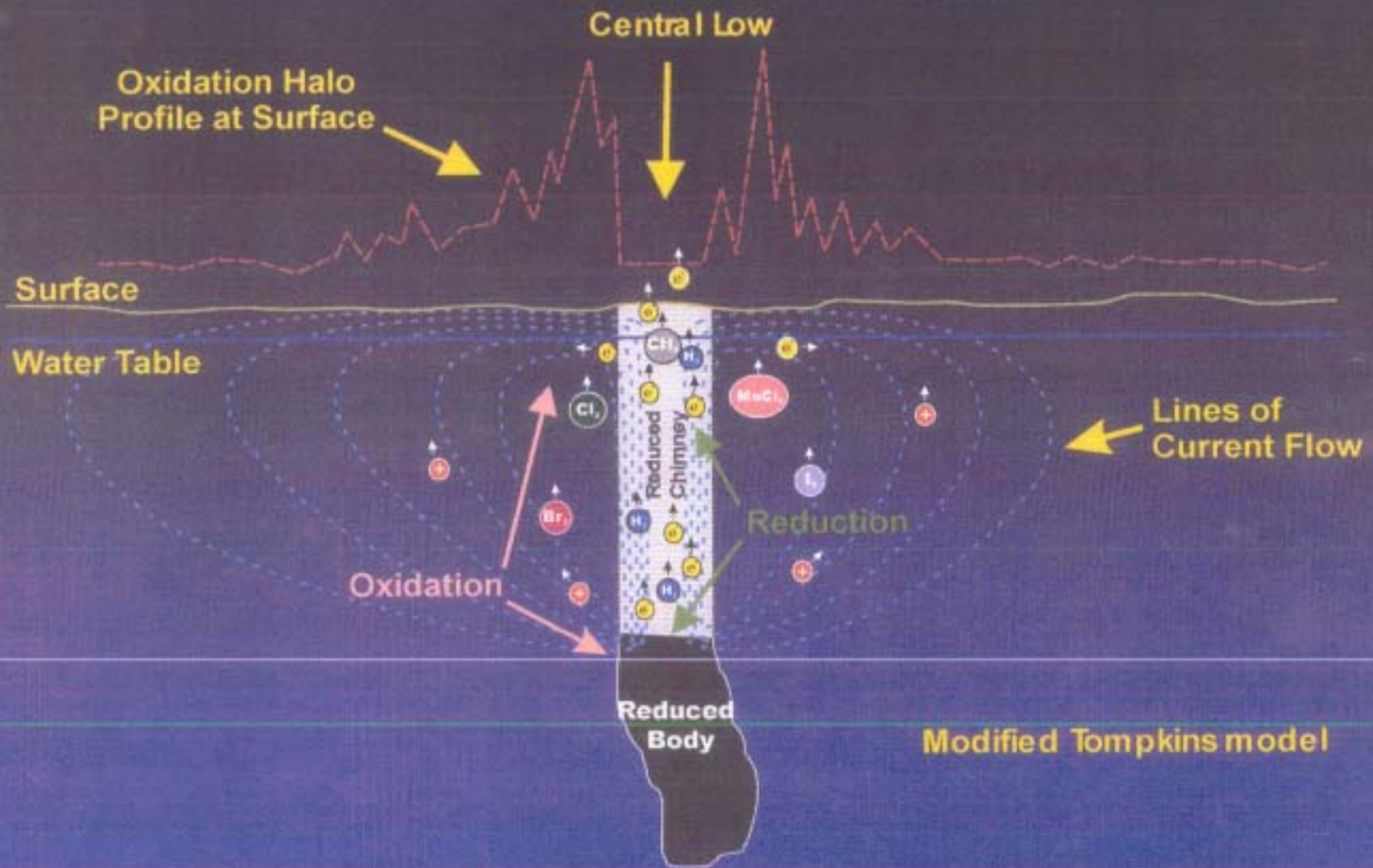


Ragnar U. Bruaset, BSc
January 29, 2002

STATEMENT OF COSTS

Sample bags, flagging, string, pickets, notebooks	\$ 642.76
Domicile: 49 days @ \$50.06	\$ 2452.94
Geological and geochemical field time: 49 days @ \$300	\$ 14,700.00
Surface transportation: gas, repairs, insurance, daily rental	\$ 2,135.24
Freight on samples shipped to Actlab by air.	\$ 498.62
Drafting supplies, reproductions	\$ 571.71
Enzyme Lab, Inc. Preparing element distribution plots	\$ 594.21
Digitizing Enhanced Enzyme leach sample locations	\$ 53.50
Analytical costs:Eco-Tech inv. # AK01-246, ActLab inv.# 22673	\$ 10,680.74
Rock-cutting, etching and staining rocks, map-work, interpretation, report preparation, 7 days @ \$300	\$ 2,100.00
Total	\$ 34,429.72

Electrochemical Cell Between Reduced Body in Subsurface and Atmosphere



Modified Tompkins model

Tompkins Model

Multi-Anomaly Generation Concept
for Direct Location Technologies

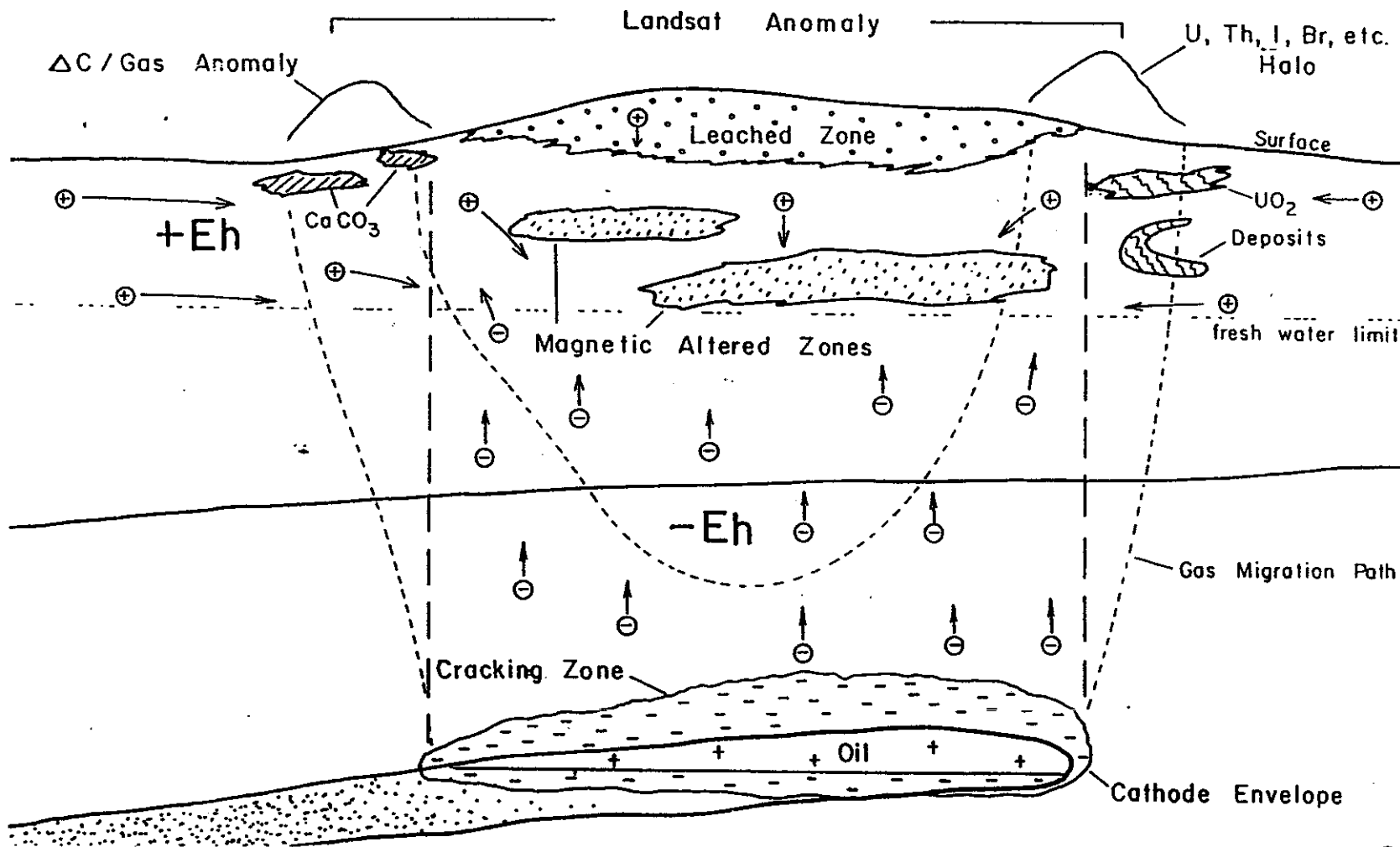
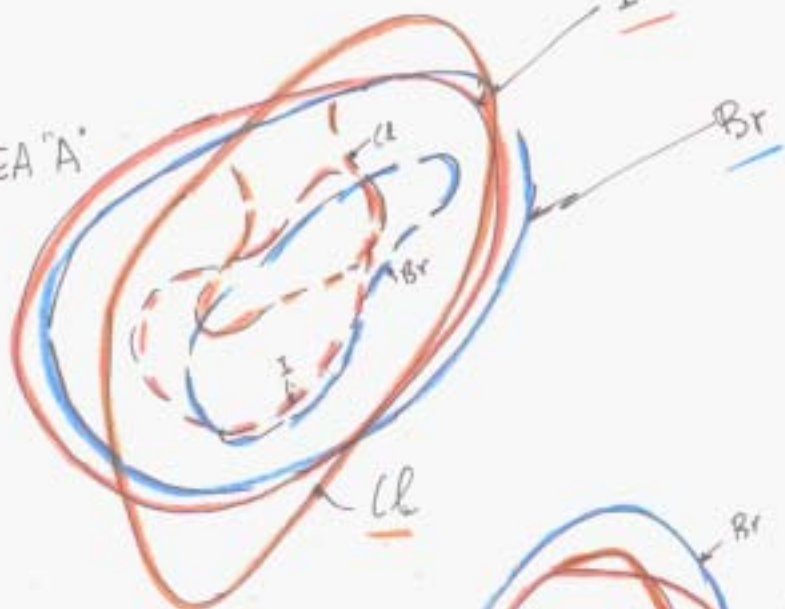


Plate 136
Ref. Tompkins, Reed
Oil & Gas Journal
Sept. 24 1990 p. 126

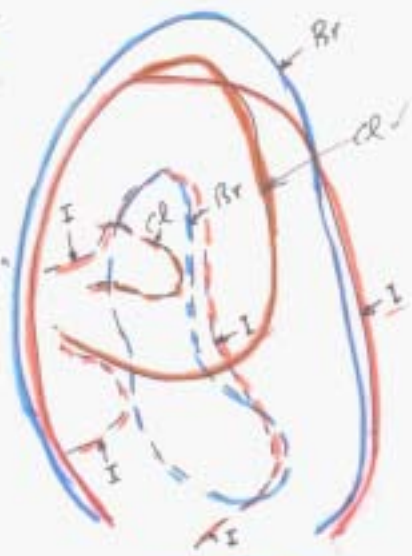
Halos for Cl, I and Br and respective central +

AREA 'A'



9700N

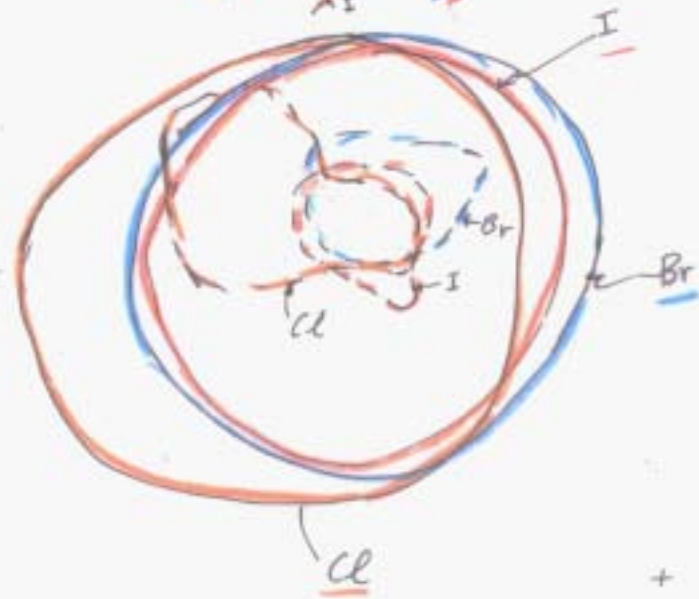
AREA 'C'



8000N

8000N

AREA 'B'



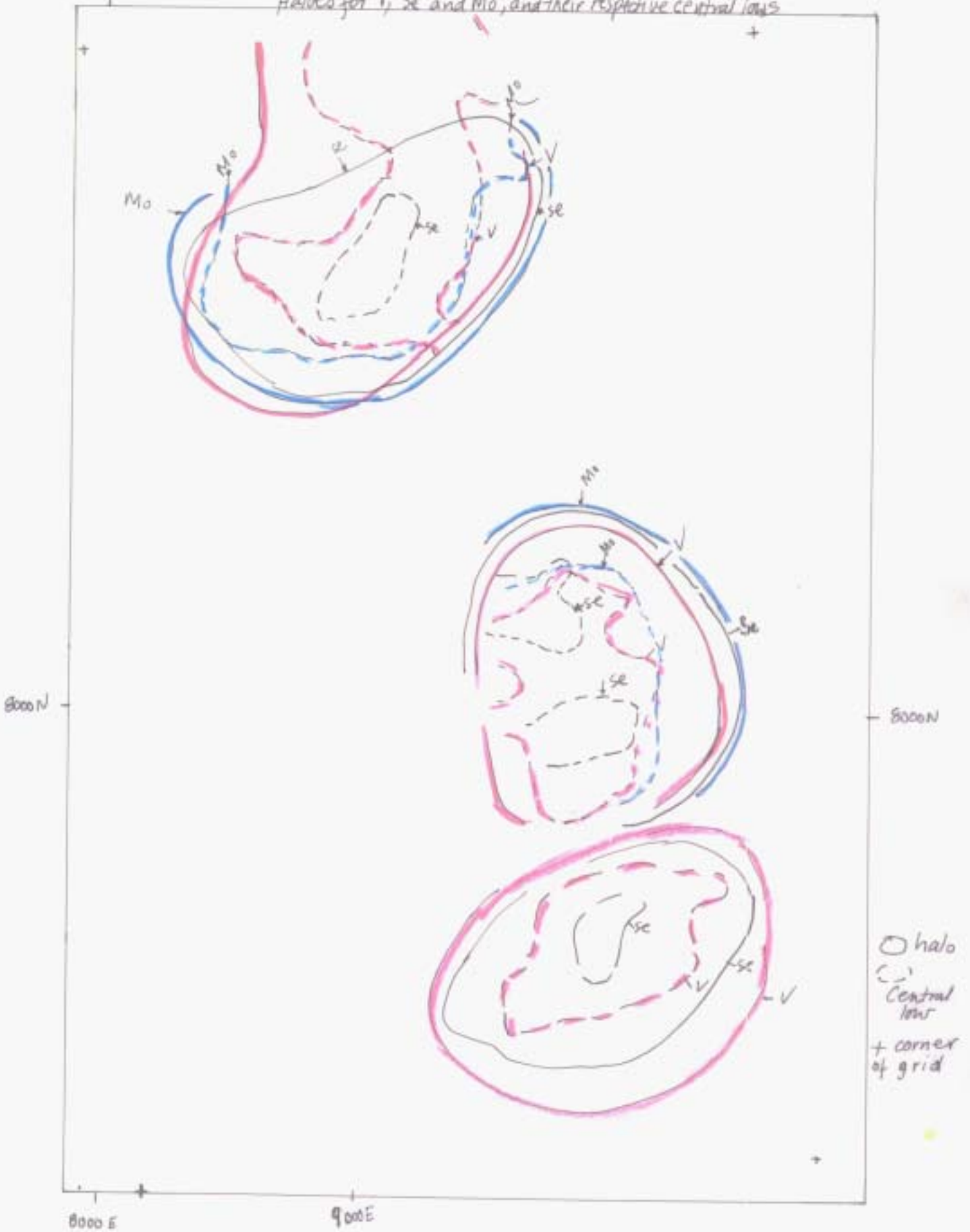
○ halo
 ○ central-low
 + corner of grid

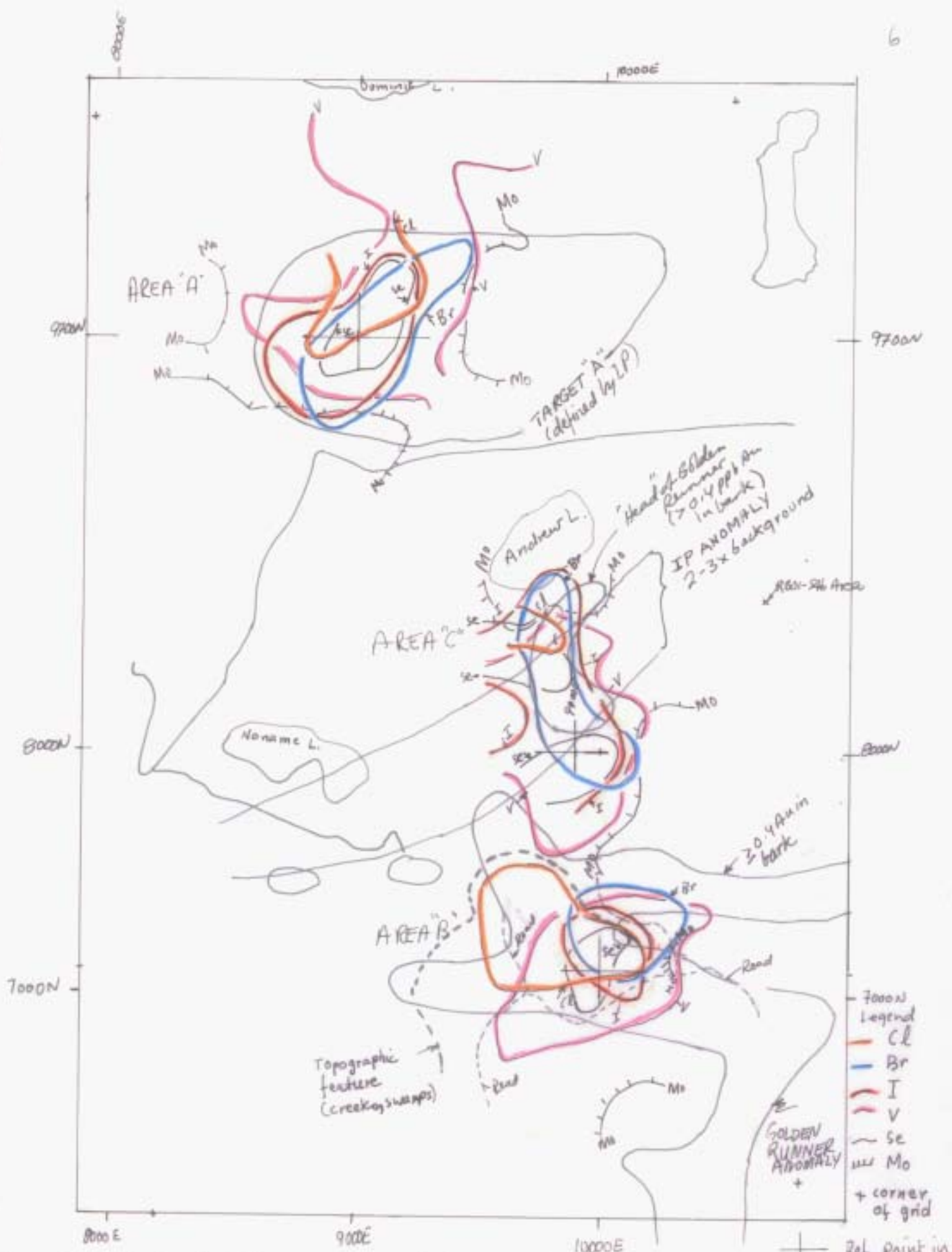
8000E

9000E

+

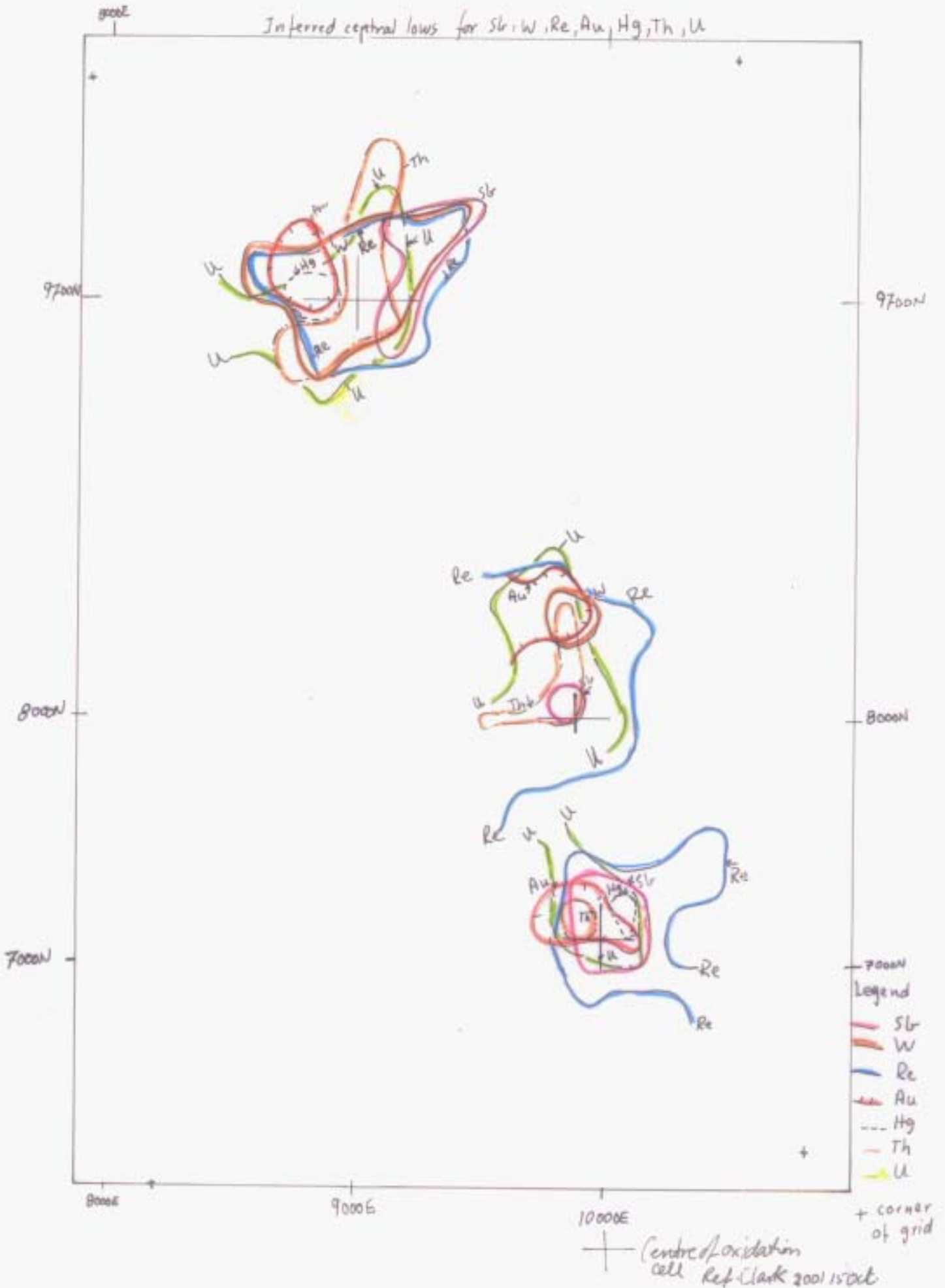
Halo for V, Se and Mo, and their respective central lows





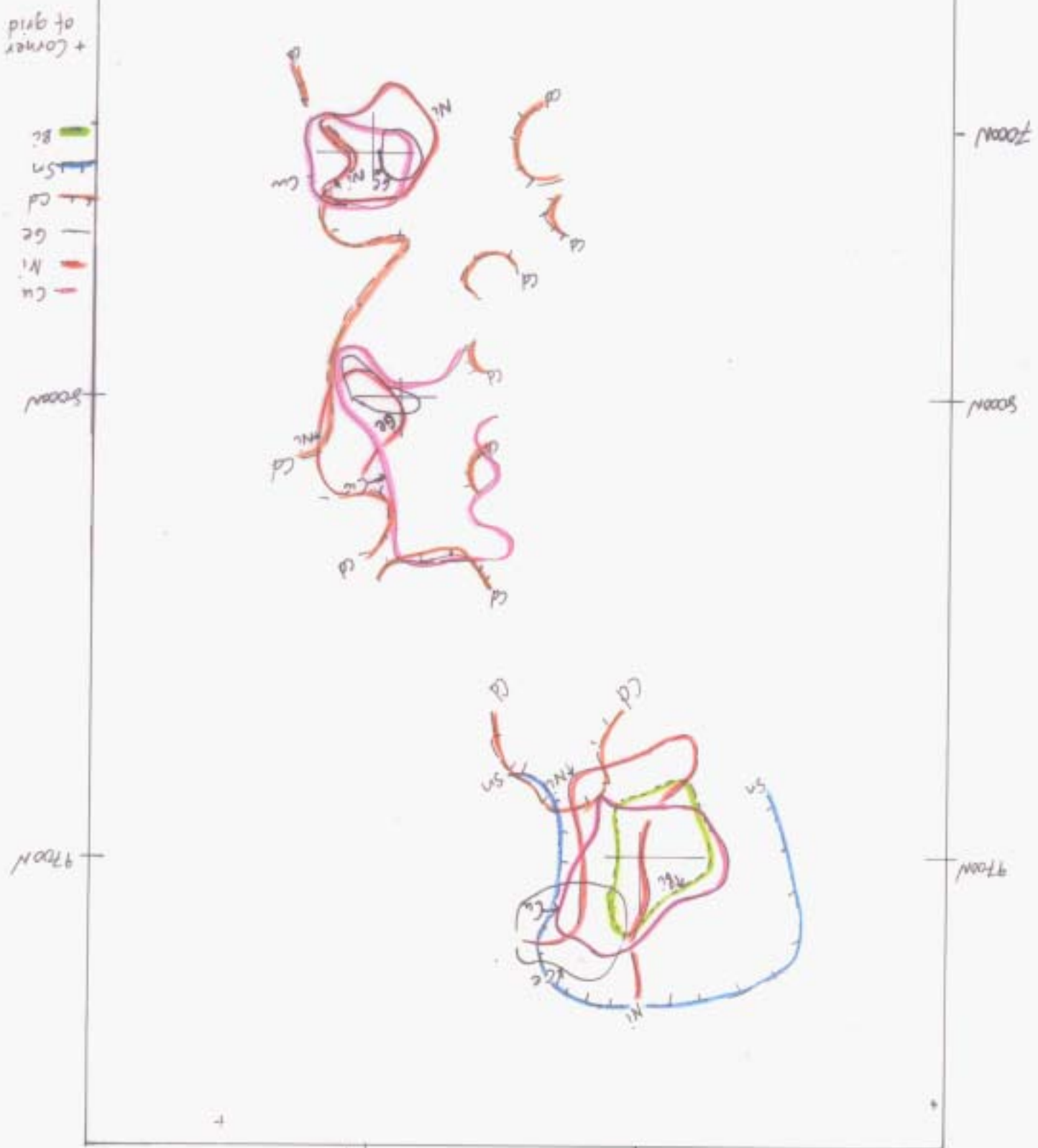
Inferred central lines for Cl, Br, I, V, Se, Mo (oxidation units) + Ref. point in J.R. Clark rpt dated 15 Oct 2001 Ref Clark 15 Oct 2001

Inferred ceptral lows for Sr, W, Re, Au, Hg, Th, U



B

Metals Group : Inferred central laws for Ni, Cu, Ag, Cd, Sn, Bi



(center of oxidation cell (Clark 15 Oct / 2001))

9000E

9000E

9700H

9700H

9700H

+ Corner of grid

- Bi
- Sn
- Cd
- Ag
- Ni
- Cu

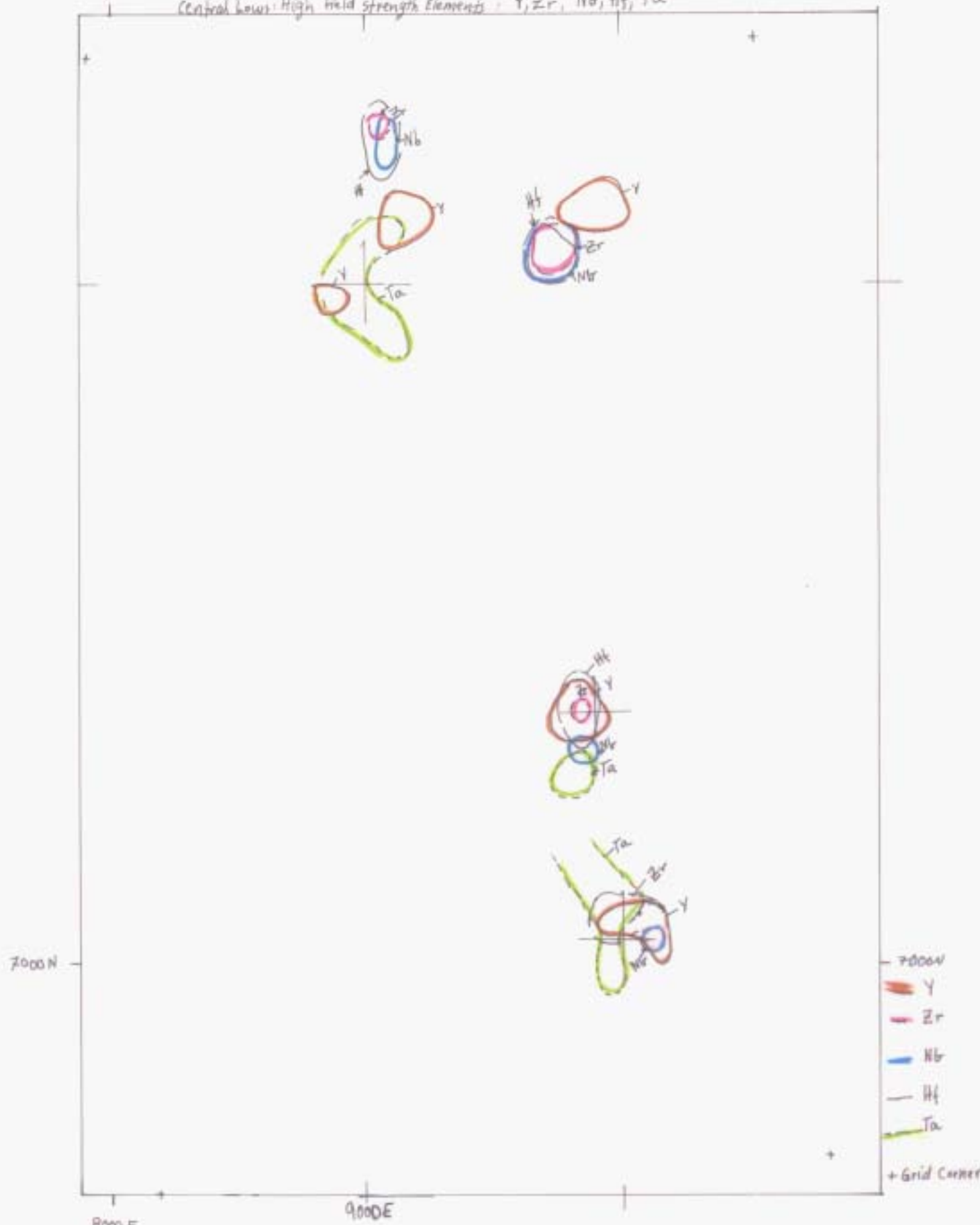
9000E

9700H

+

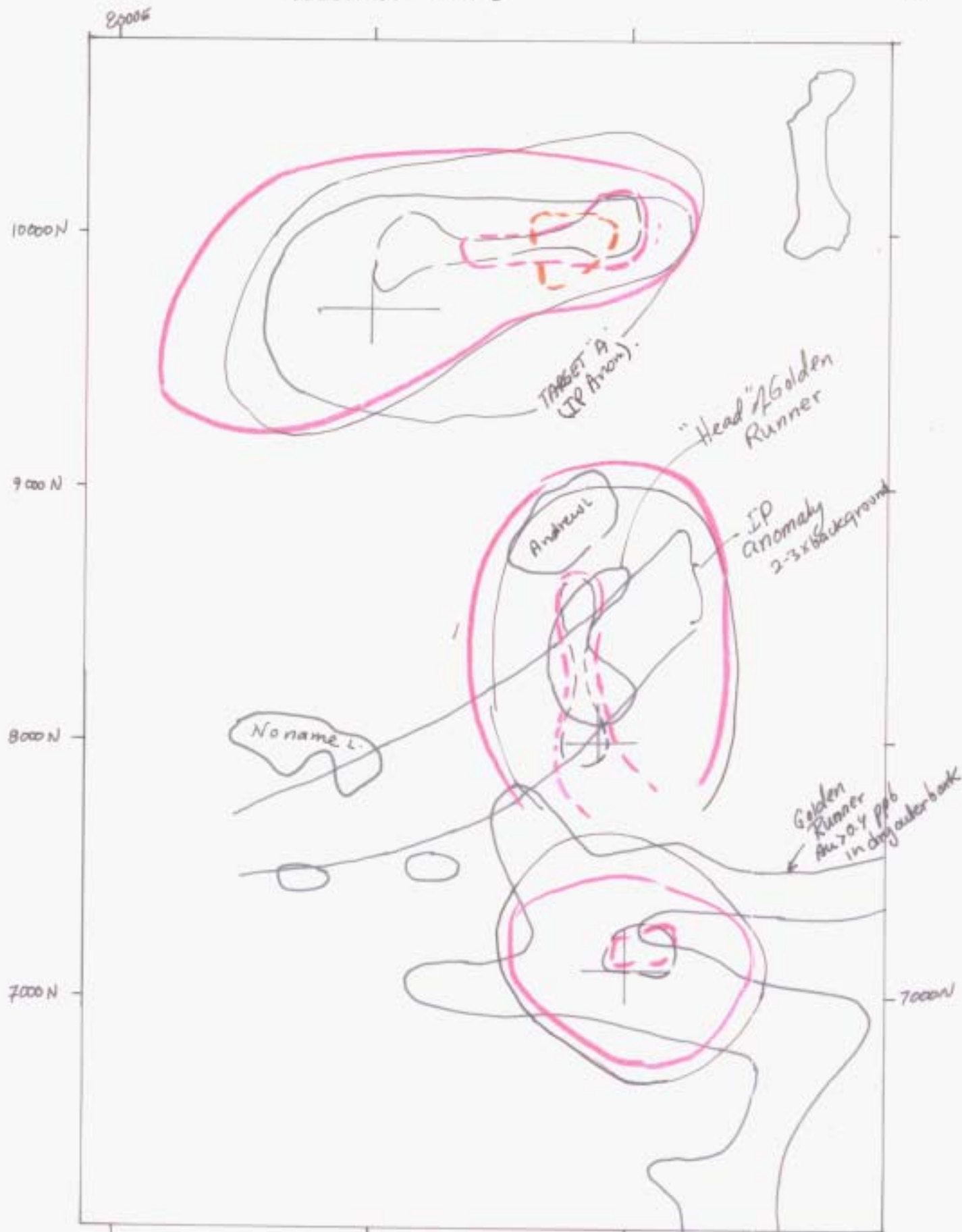
+

Central low: High field strength elements: Y, Zr, Nb, Hf, Ta



+ Centre of oxidation cell Ref. Clark Oct 19/2001

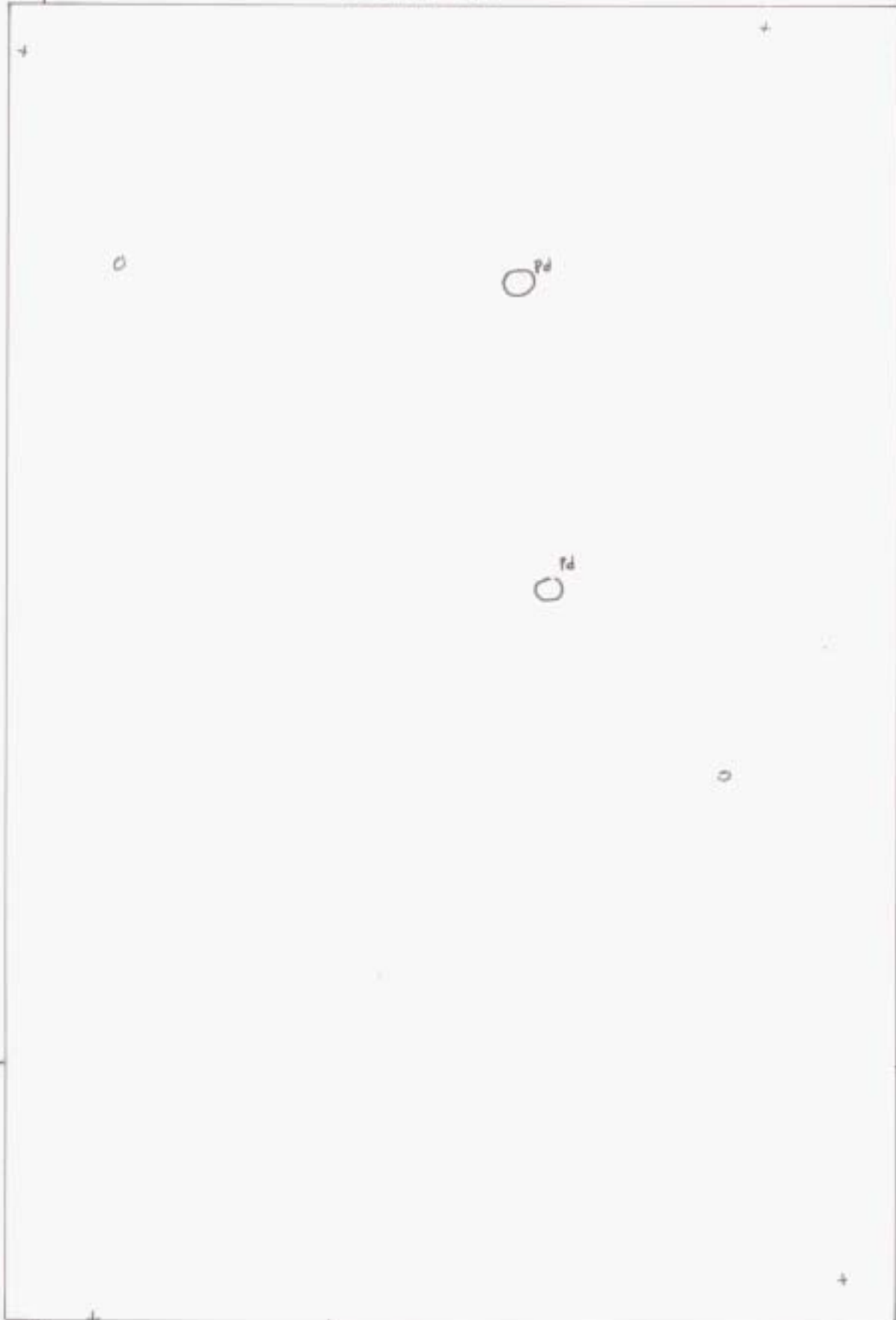
Rare Earth Elements



— helo
 - - - low

— La=Ho=Sm=Nd=Gd=Dy=Er=Tm=Tb=Pr=Y=Lu
 — Ce, — Eu (low) + Common central low Clark Oct 15/2001

Platinum Group: Pd

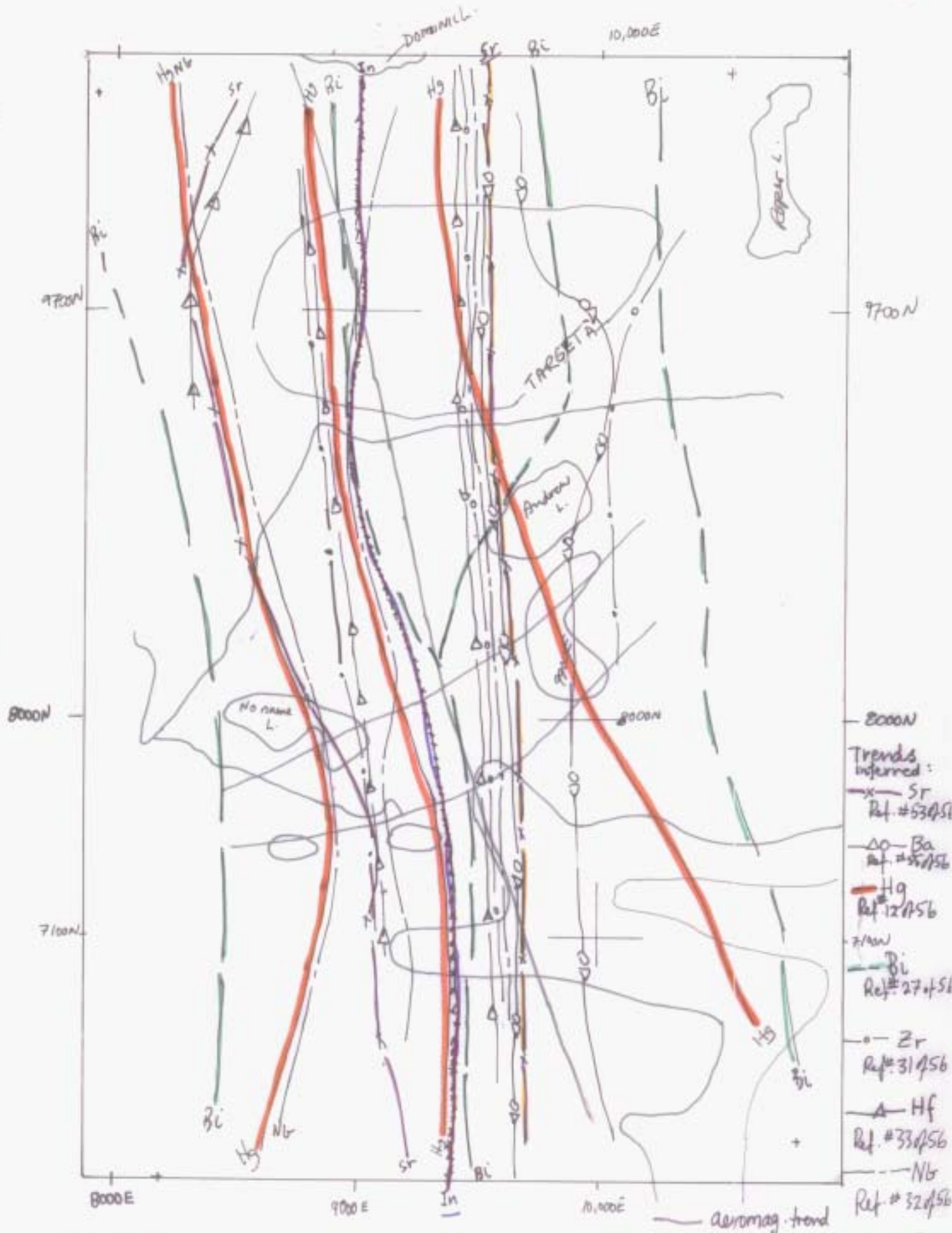


8000 E

9000 E

7000 N

8000 N



Trends

Centre of oxidation zone + Ref. in 7-R. Clark rpt

Ref. #24/56

Enzyme-ACTLABS, LLC

Enzyme-ACTLABS, LLC
7778 Lewis Street
Arvada, CO 80005-3749

Phone: 303-424-4069
FAX: 303-420-7413
e-mail: clark@actlabs.com

15 October 2001

Ragnar U. Bruaset
5851 Halifax Street
Burnaby, B.C. V5B 2P4
CANADA

Dear Ragnar:

I have reviewed the Enhanced Enzyme LeachSM data plots prepared by Greg Hill for the work done on the Golden Runner Project this field season. One strong oxidation halo and one moderately strong halo are readily apparent in the plots of the data. Furthermore, what may possibly be a weak oxidation cell may also be present between the two stronger cells.

The stronger oxidation halo is centered at about 9700N x 9000E, and it can be distinguished in the plots for a number of the oxidation suite elements (Br, I, V, Se, Mo, Sb, W, Re, and Au) as well as the rare earth elements. Copper and Ni also have migrated into this halo pattern, centered on the same location. The Cu and Mo values in this halo are the highest in the survey, and they are high enough to suggest that the cause of the oxidation cell is a sulfide-rich reduced body in the subsurface that contains enrichments of Cu and Mo. Gold values in the Enhanced Enzyme LeachSM data are strong enough to indicate that Au is associated with Cu and Mo in the reduced body.

The second area of interest is defined by another oxidation halo centered at about 7100N x 10000E. Bromine, I, V, Se, Sb, W, Re, U, and weakly Au, define a halo in that area, which is also shown by the rare earth elements. Of the base metals, Ni and Cu also help to define this halo, while Zn forms two N-S linear trends that flank the central low of the halo. The source of this apparent oxidation cell also would appear to be a sulfide-rich zone in the subsurface, that contains some base metal enrichment.

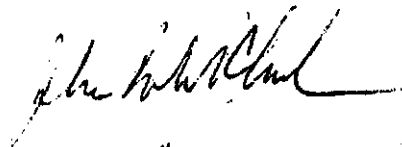
The area shown on your plots as Area "C", is located at about 8000N x 9900E. The pattern for the oxidation suite elements around that point could easily be interpreted as part of an interference pattern between the apparent oxidation cells north and south of that area. However, the pattern for the rare earth elements, Th, and U do form a halo pattern there. If it was not for the coincident IP anomaly you show in your plots, this pattern would be easy to miss. It could easily be associated with mineralized rock in the subsurface, however the levels of metals around this anomaly are not as high as the other two halos.

A number of approximate N-S and E-W linear trends for some elements (e.g. Bi, Hg, Sn, and In) in the data appear to follow the structural grain you show in one of your figures. Based upon the locations of the halos, and these apparent trends, these patterns seem to be indicating structures that may have played a role in the formation of mineralized zones in the subsurface. The levels of Cu, Mo, Au, and Pd would seem to suggest a style of hydrothermal mineralization that could be associated with a porphyry stock somewhere in the vicinity.

Further Work:

I would strongly recommend further work in the areas of the northern and southern anomalies to determine the sources of the metals and the halos patterns they and many other trace elements form. Previous work that has been conducted on the area (IP, conventional soil geochemistry, biogeochemistry, and what rock sampling could be done) provide indications that one or more Cu-Mo-Au mineralized bodies are present in the subsurface. The Enhanced Enzyme LeachSM patterns found with this survey provide targets of that type that need to be tested. Drilling of these targets would be the next step, in order to confirm the composition and nature of the reduced bodies in the subsurface.

Sincerely,

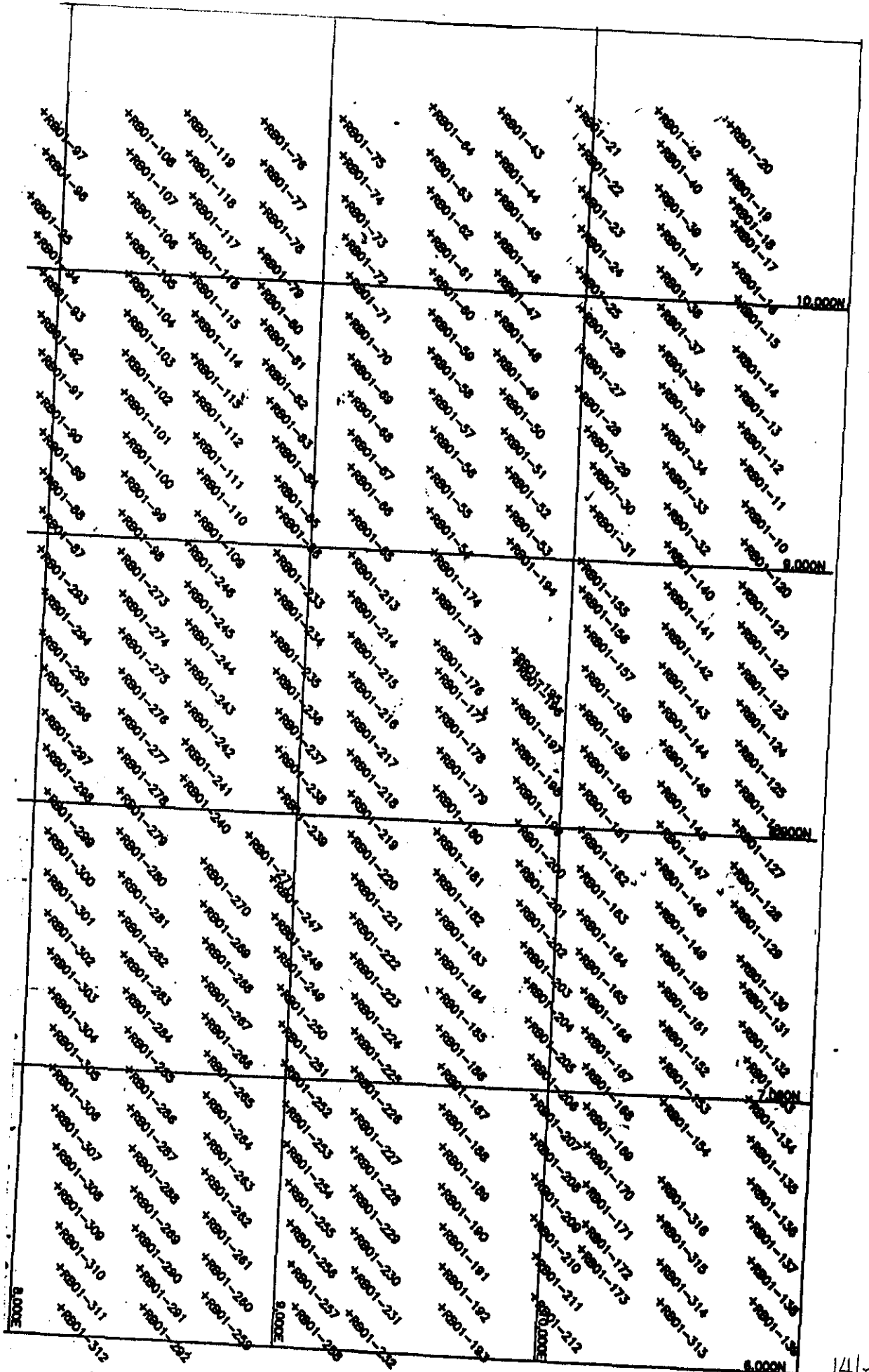


J. Robert Clark, Ph.D.
General Manager

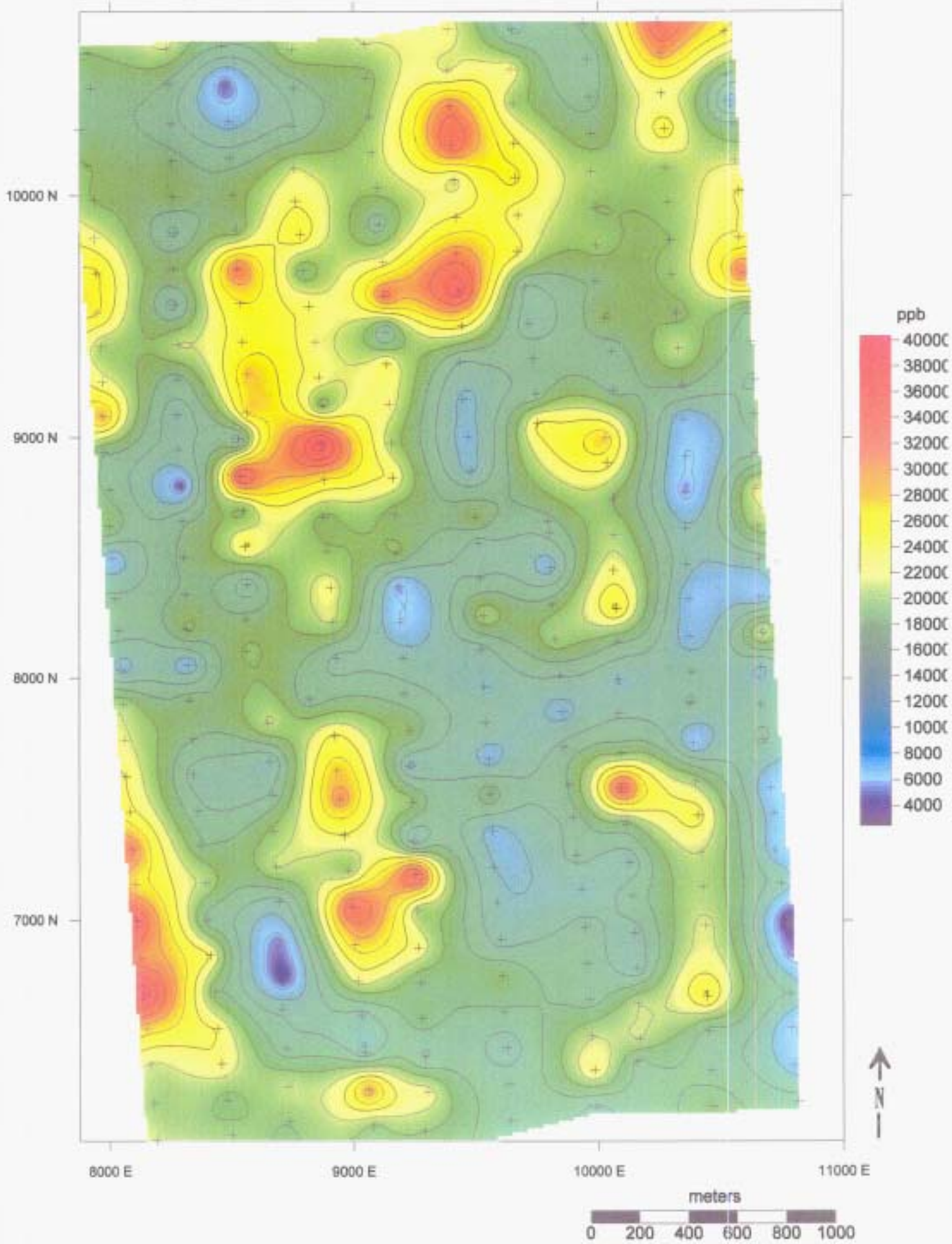
APPENDIX A

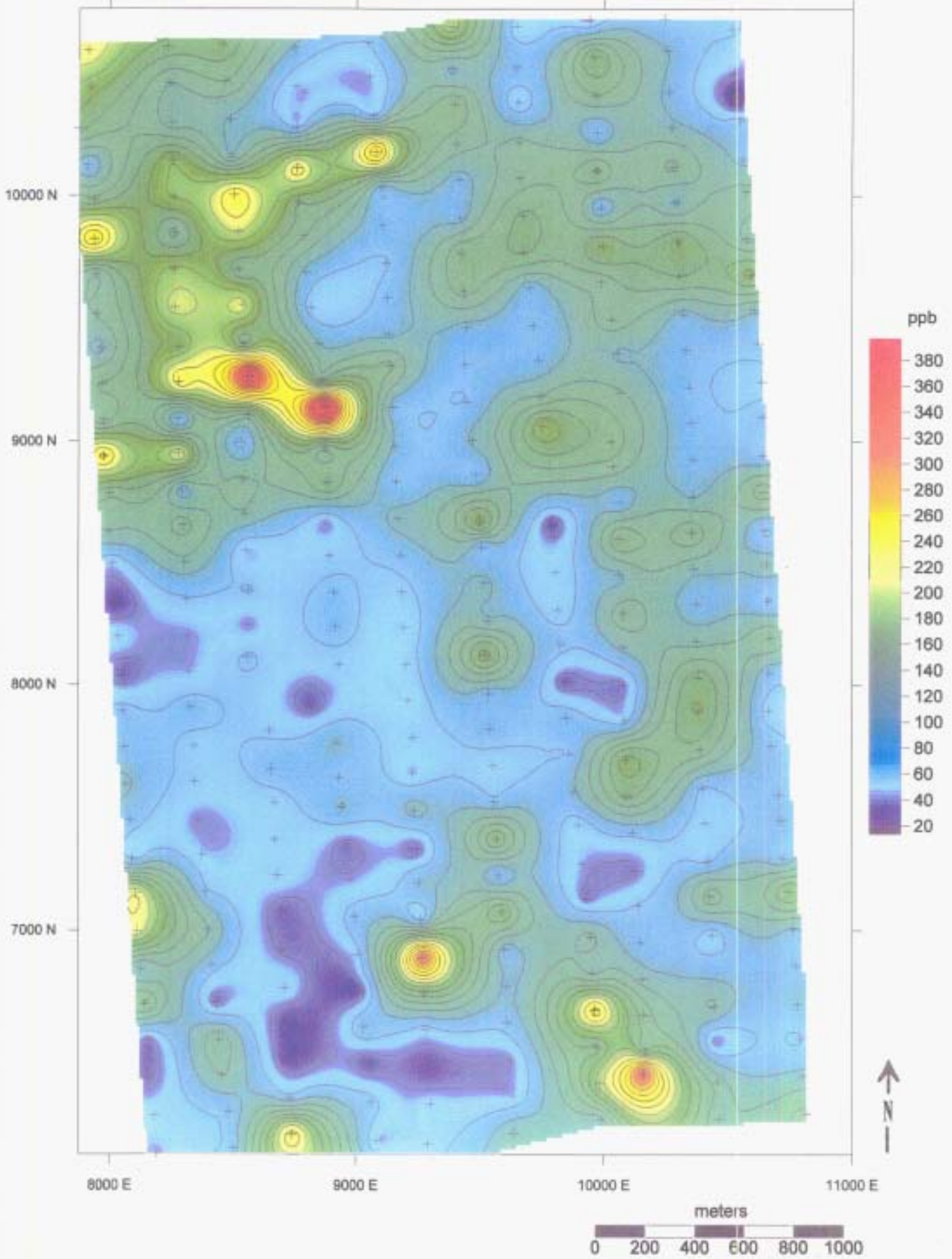
ENHANCED ENZYME LEACH DATA PLOTS

MAPS 14-69

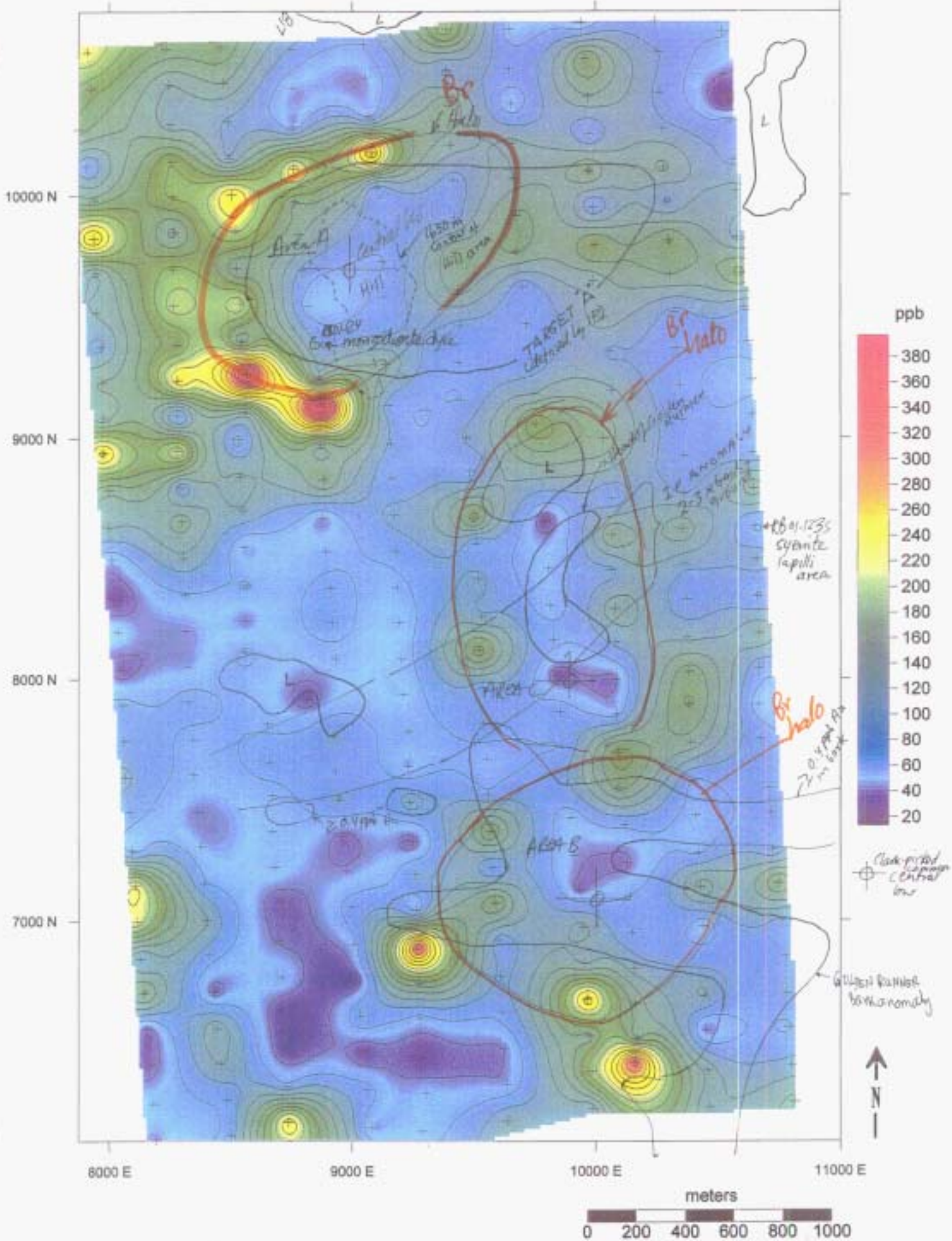


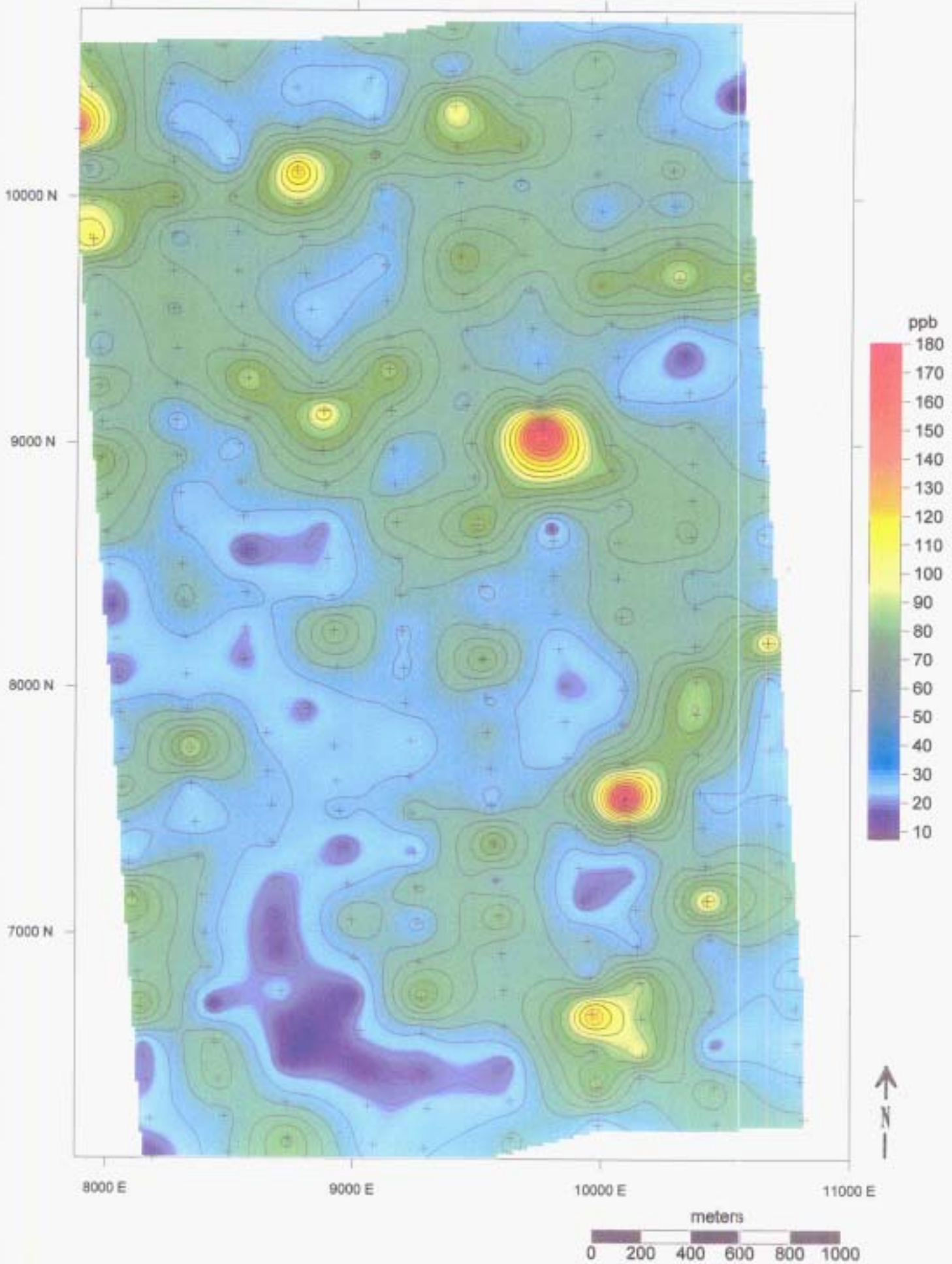
Golden Runner Enhanced Enzyme Leach Grid 2001 scale
 (True - north and)

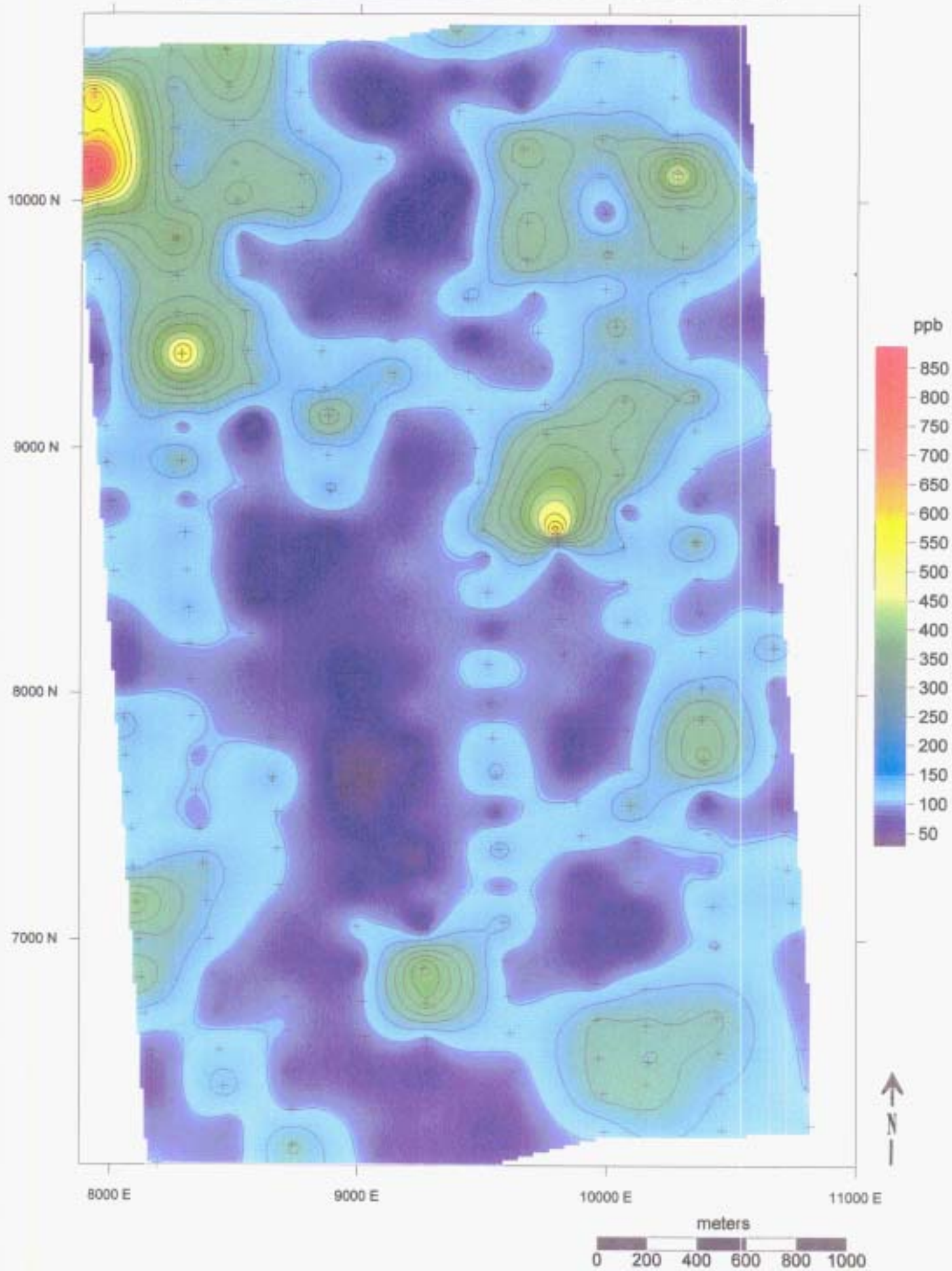


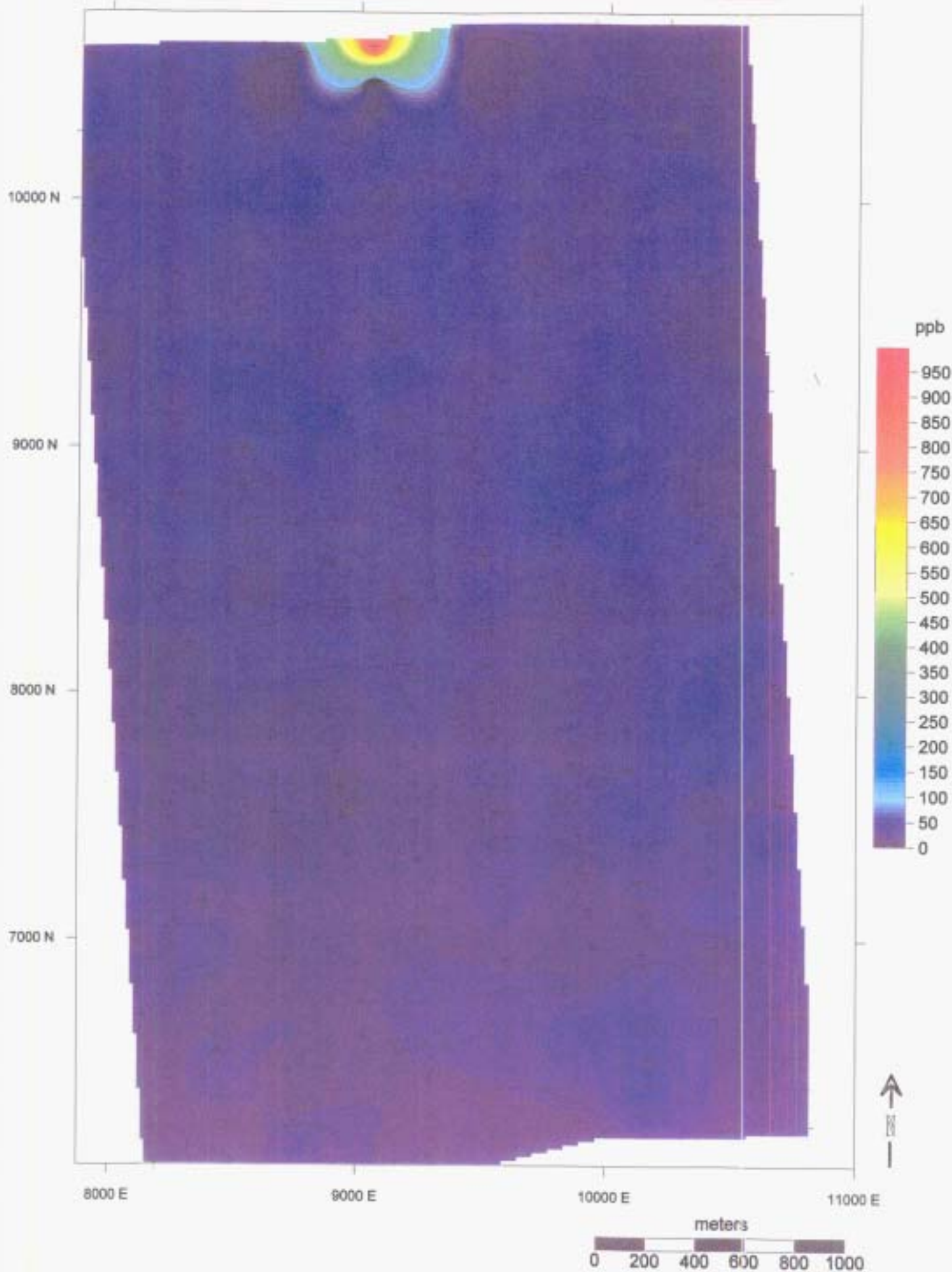


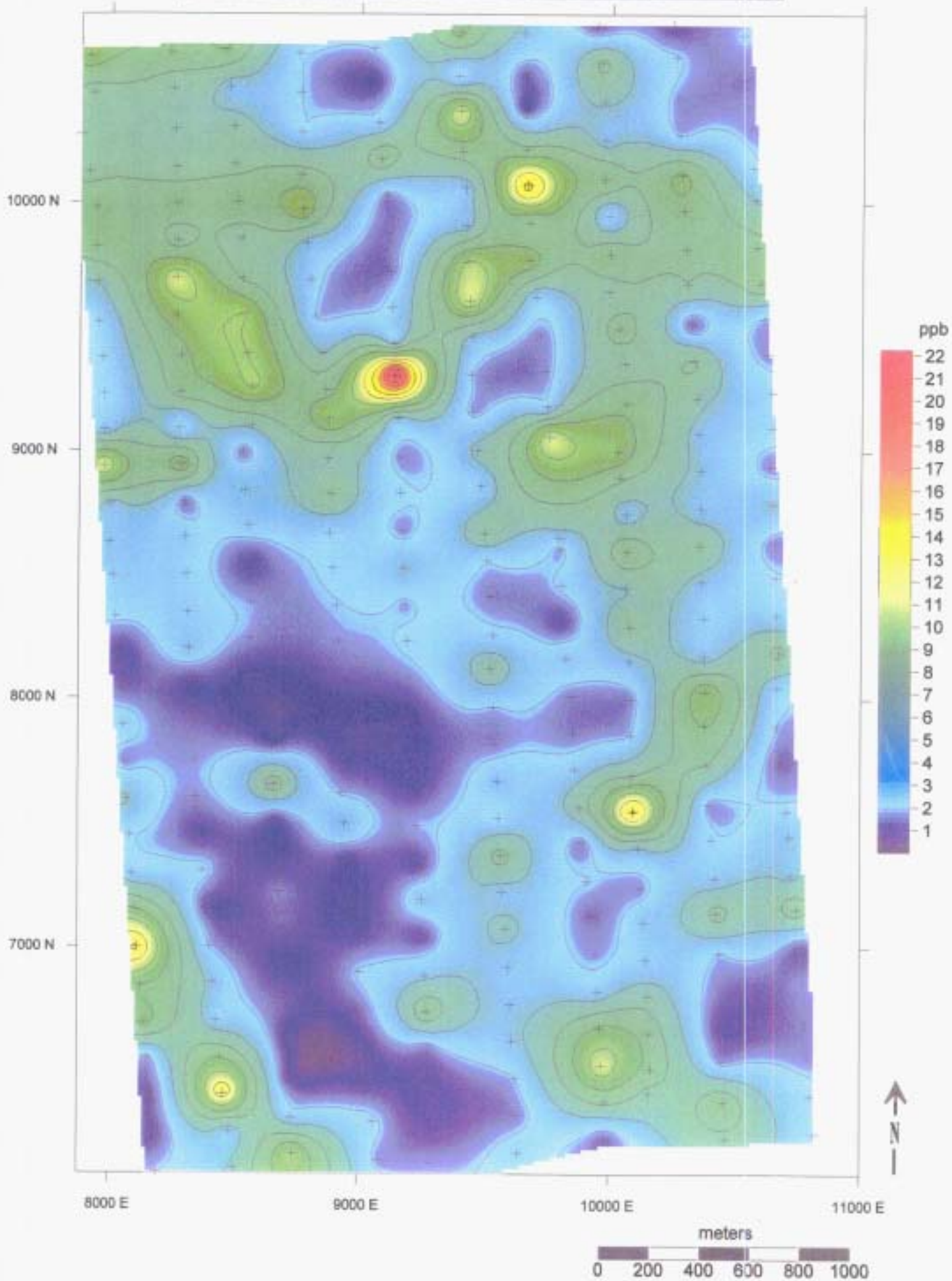
15b

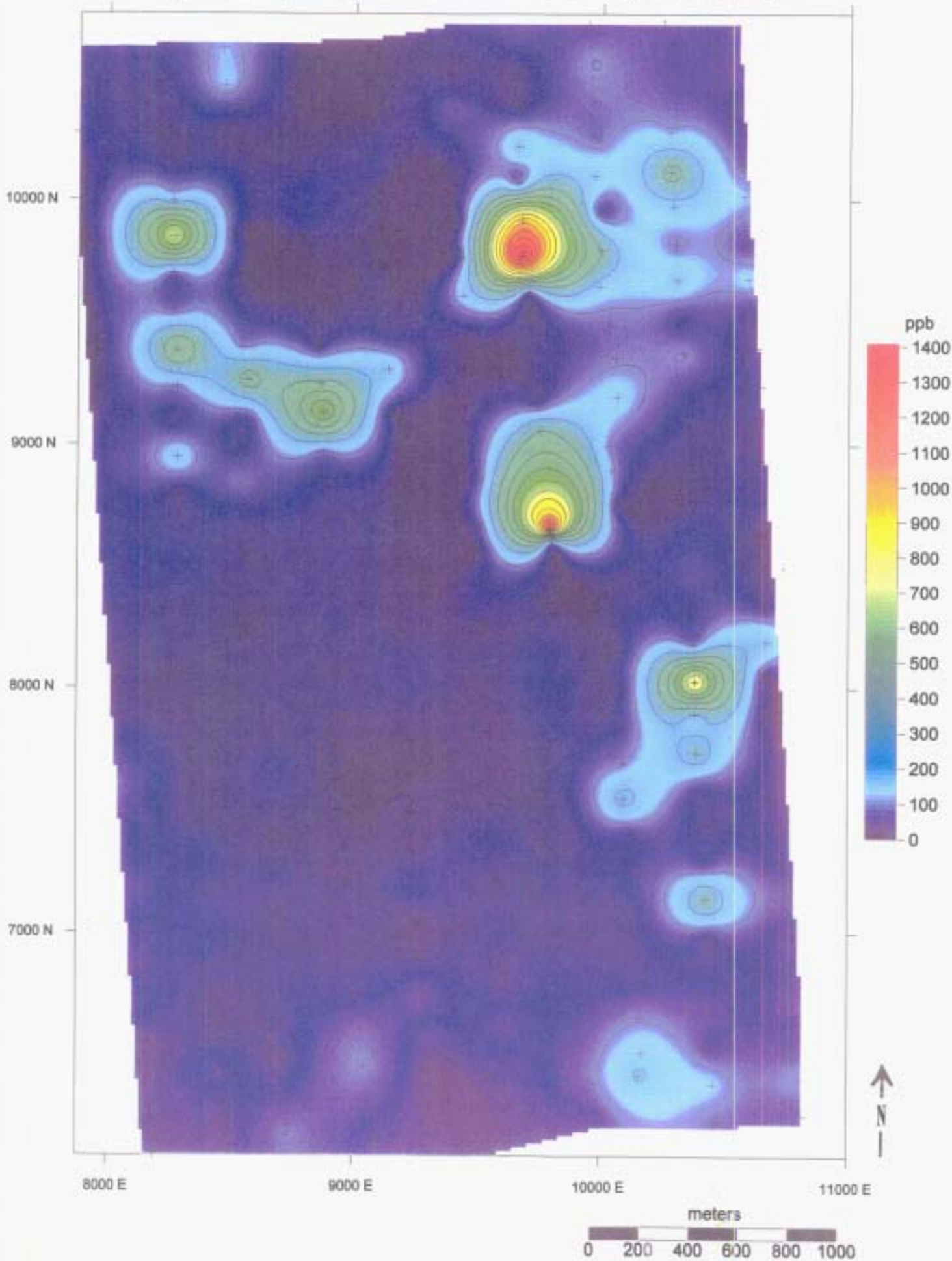


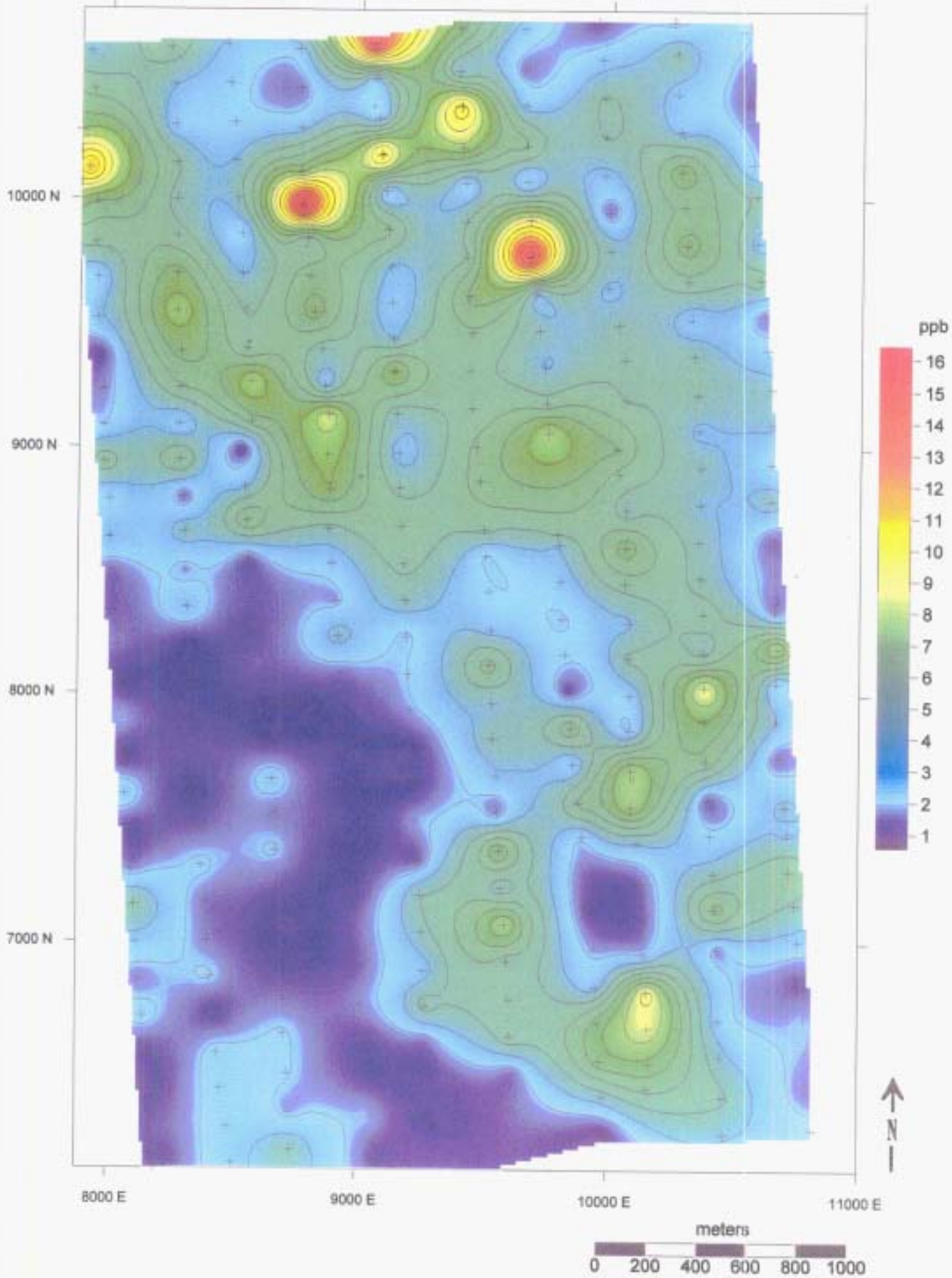


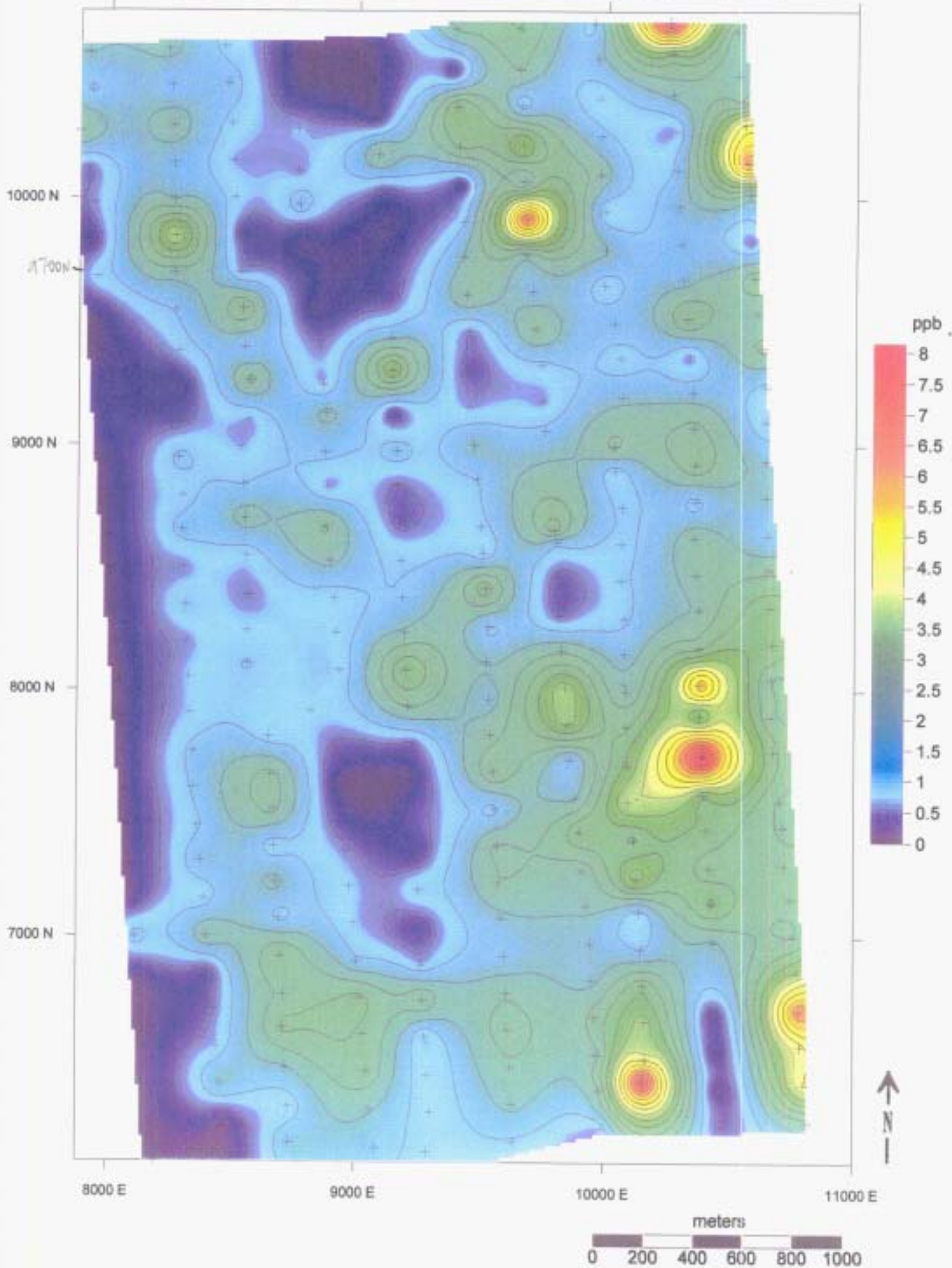


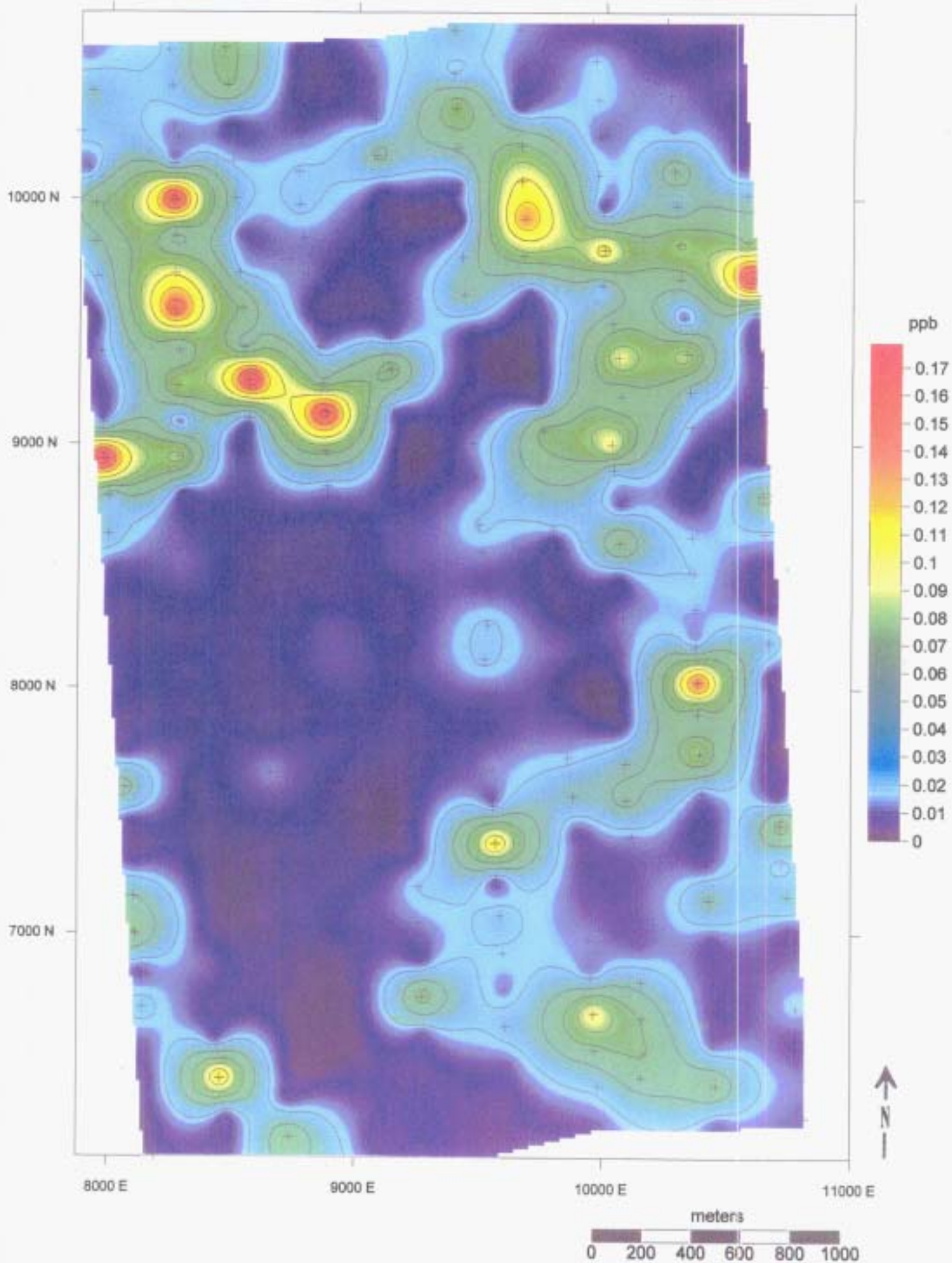


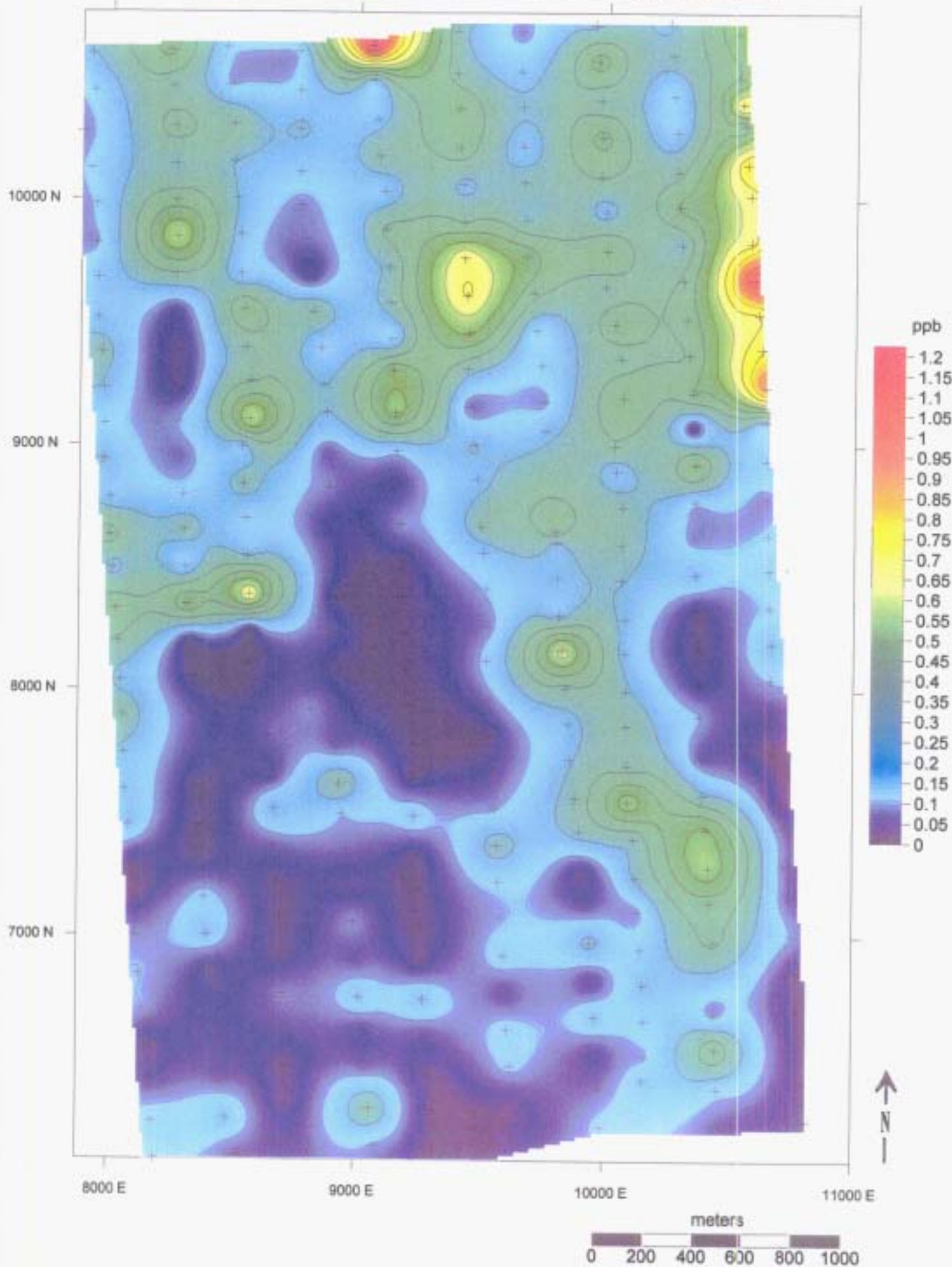


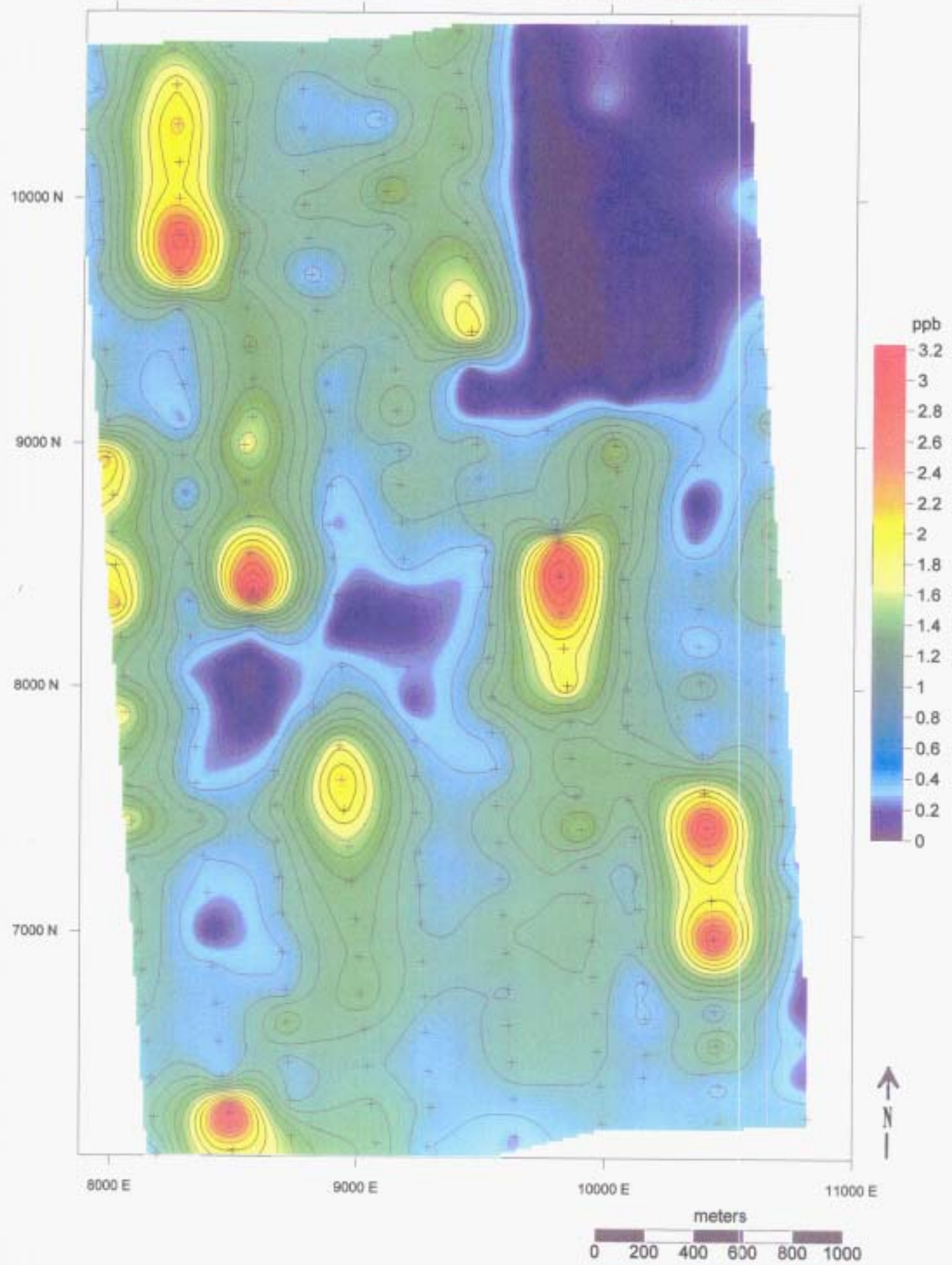


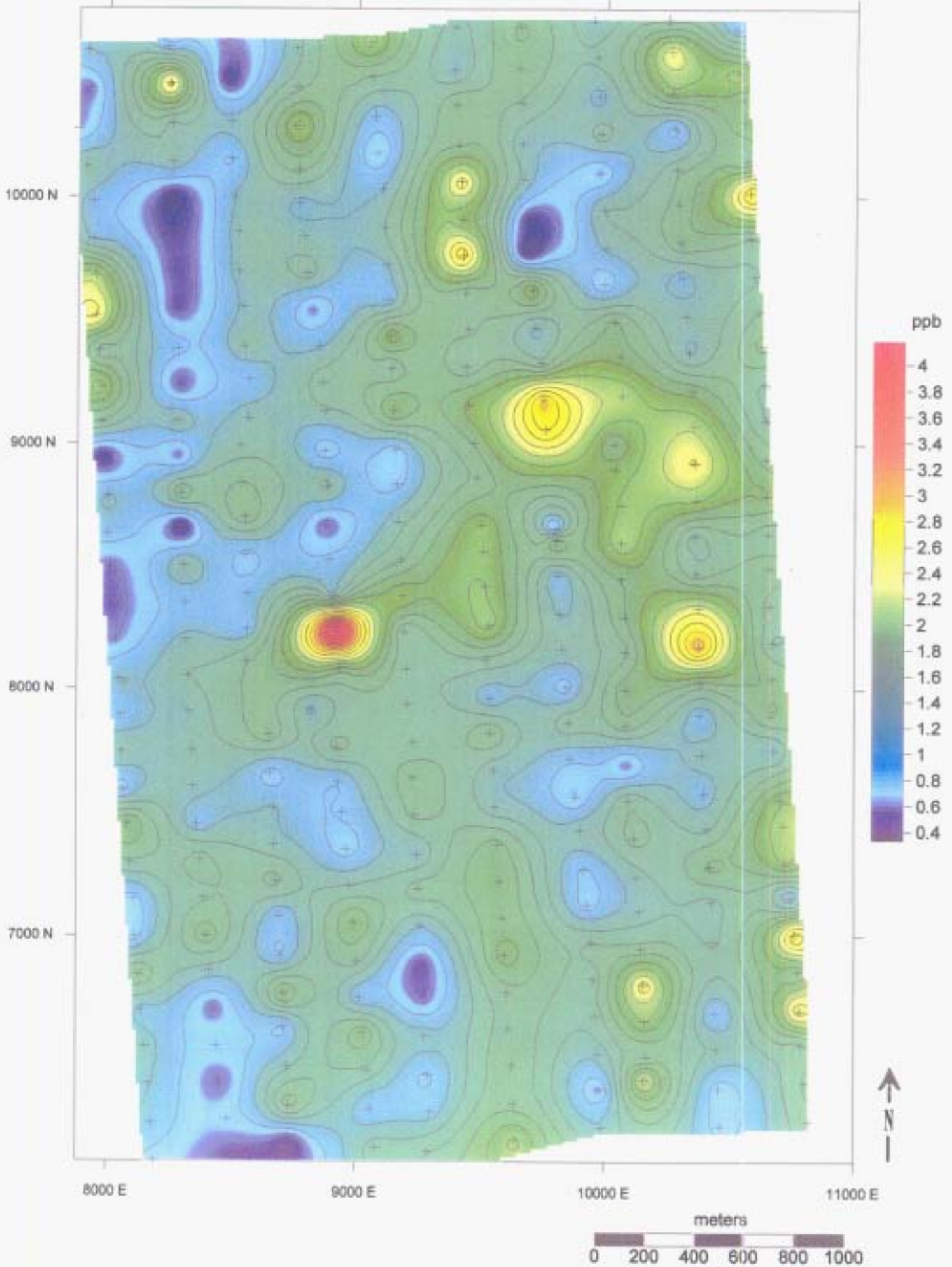


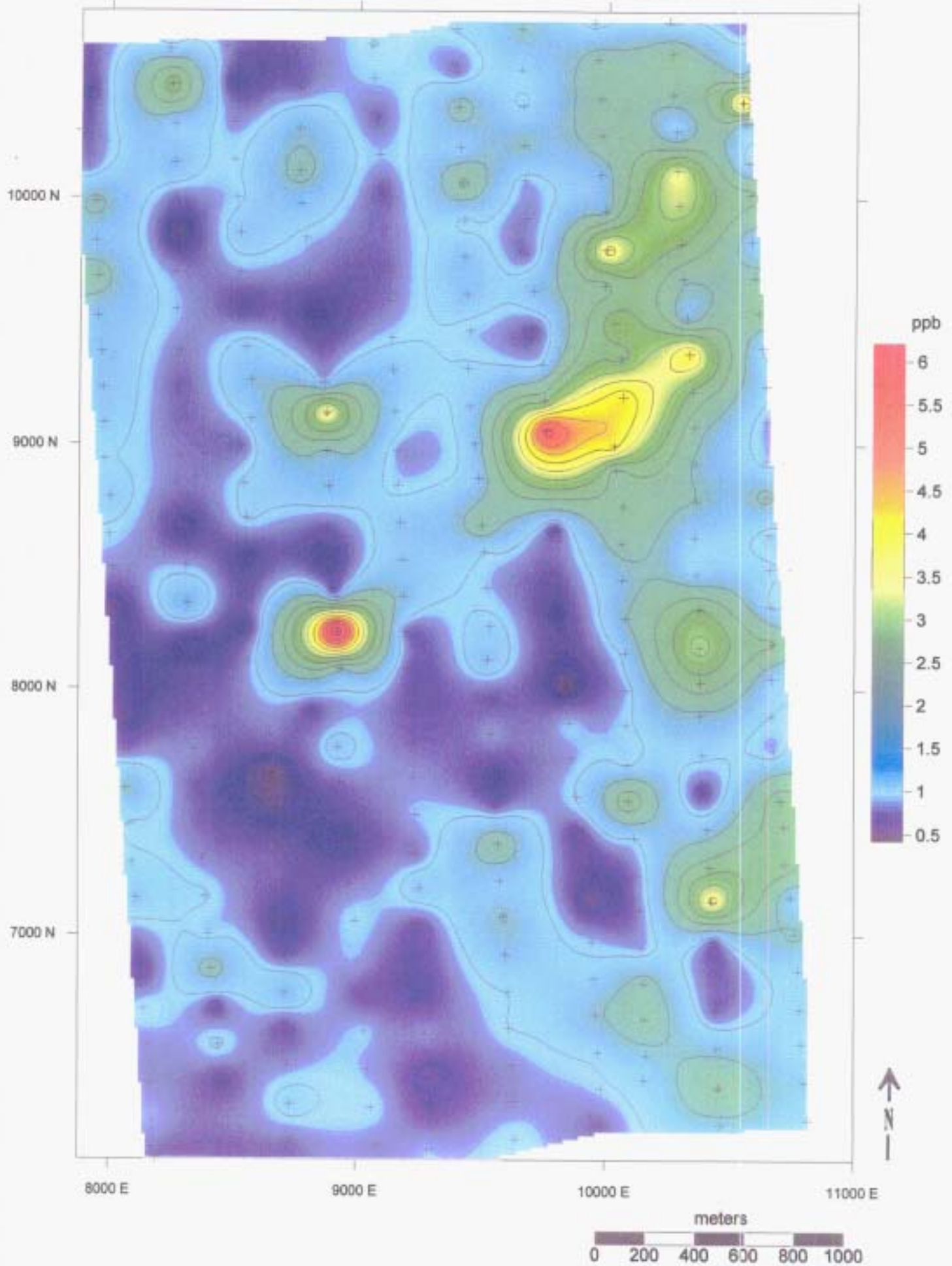


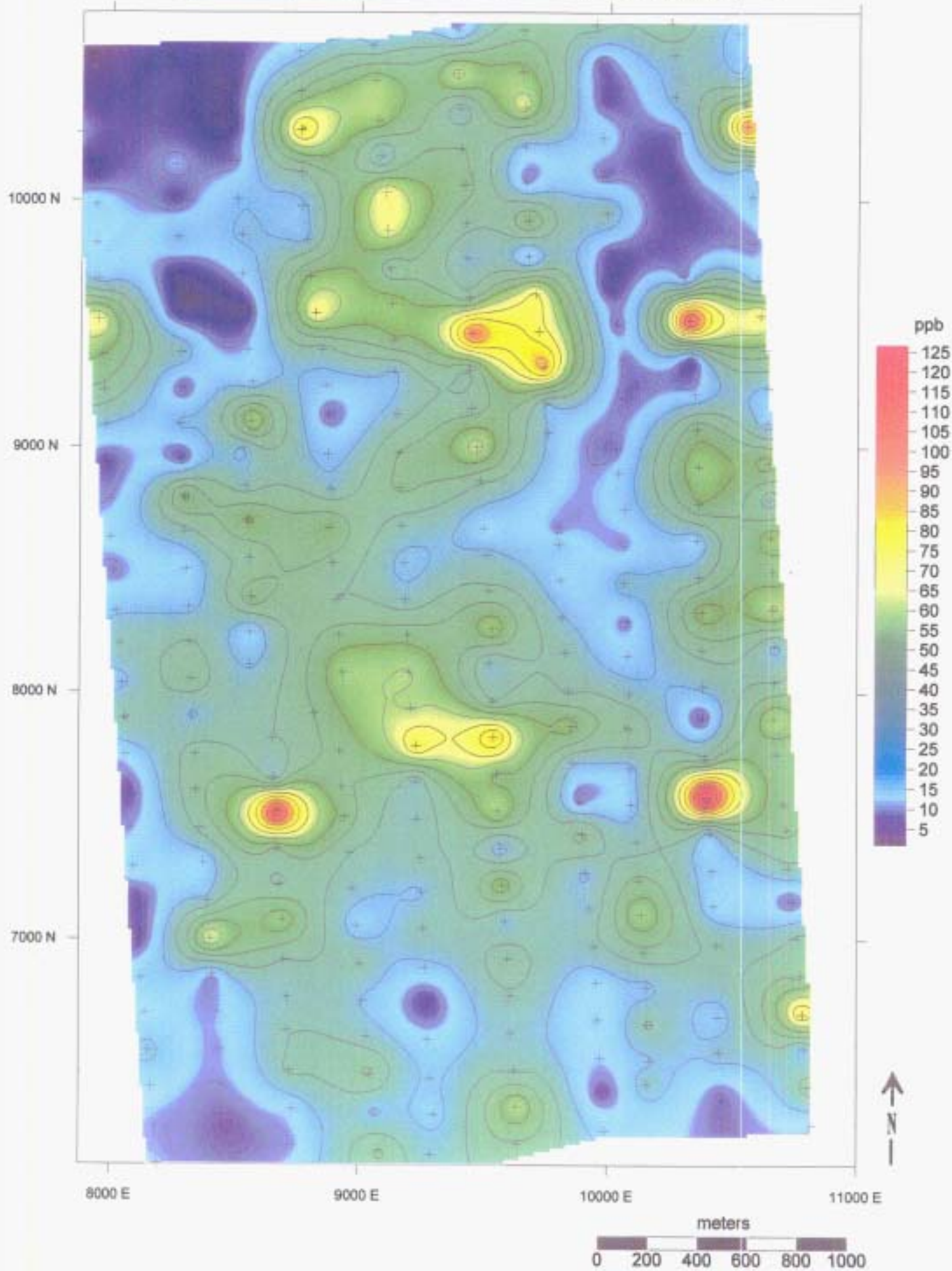


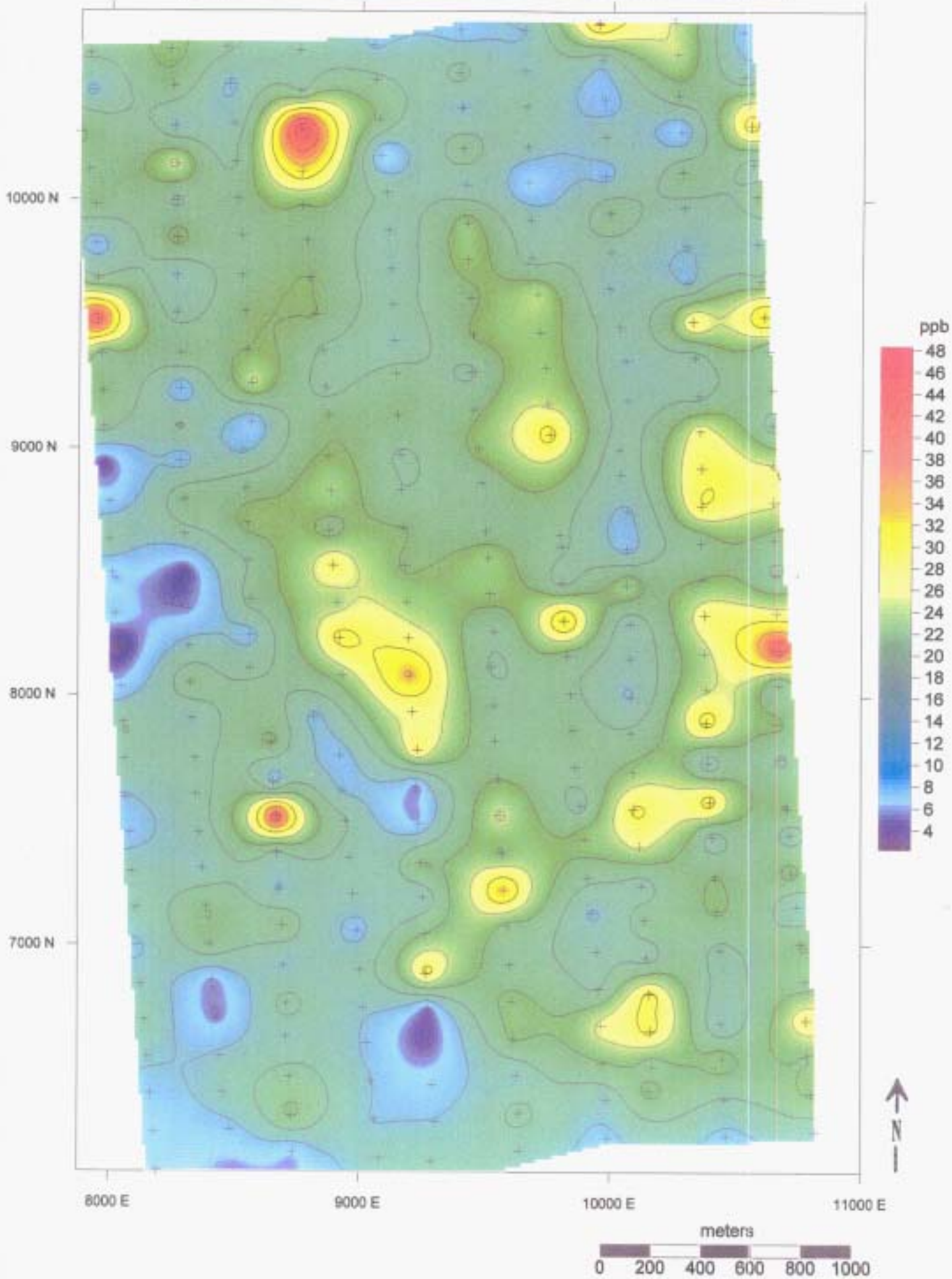


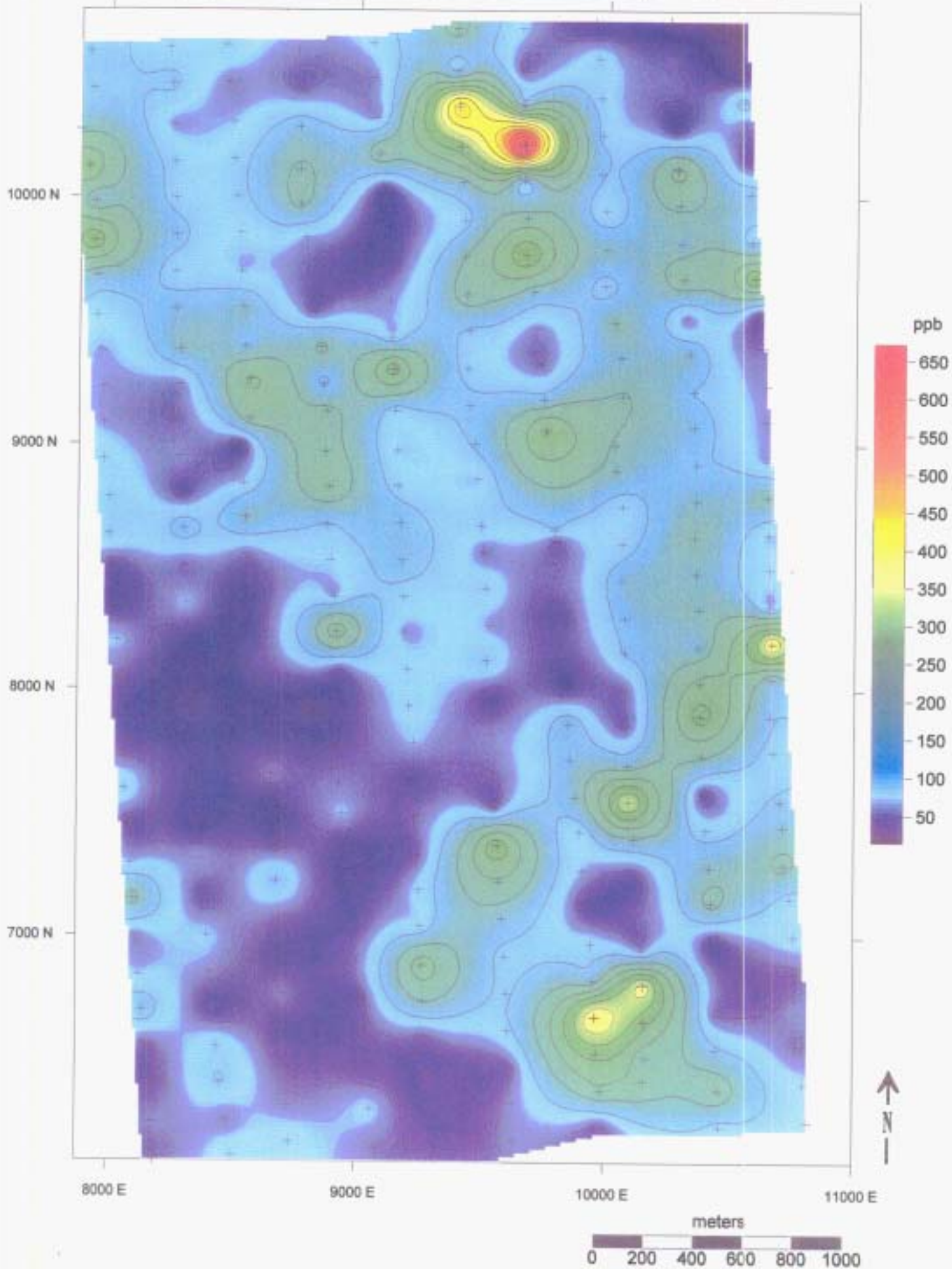


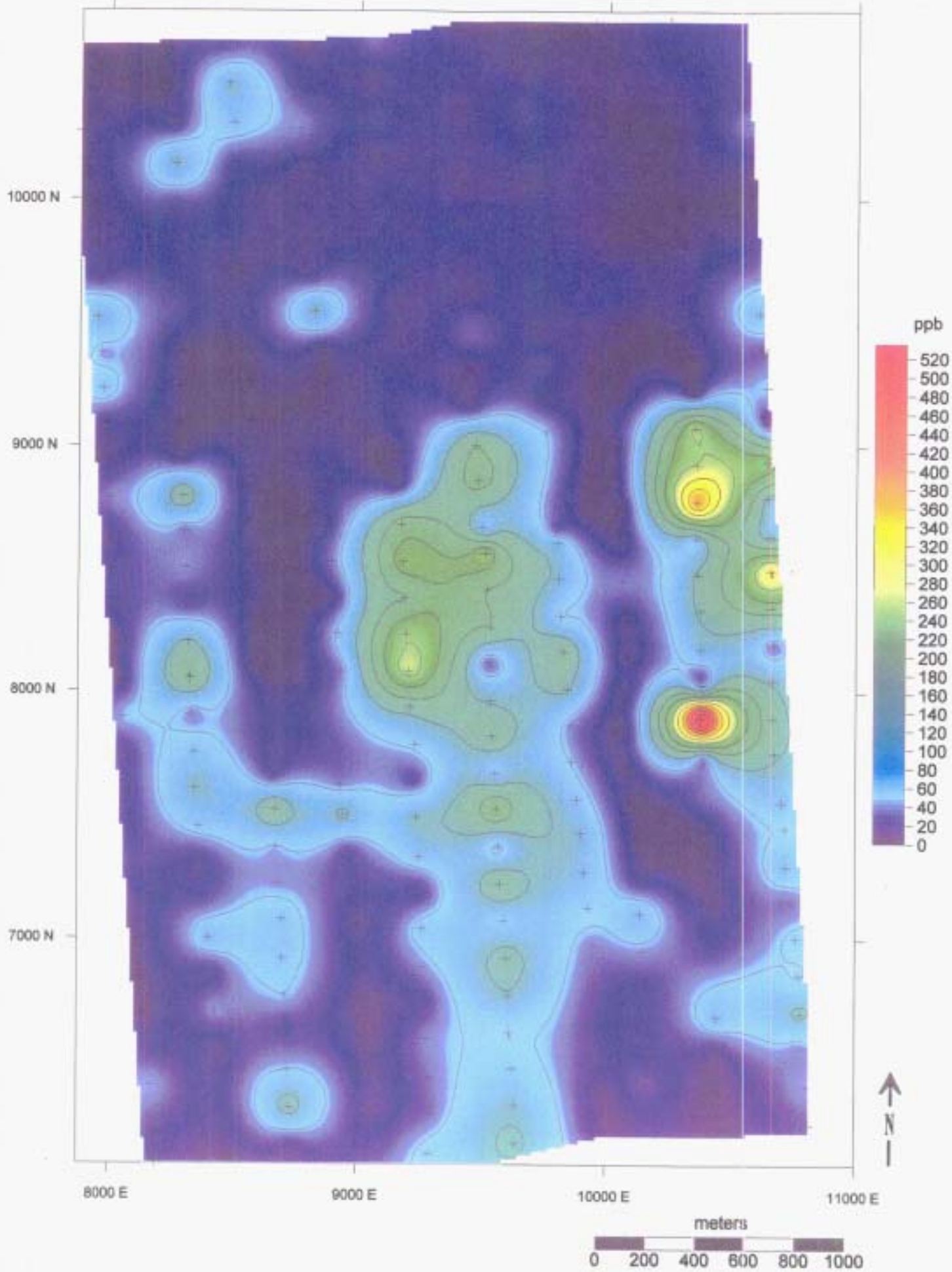


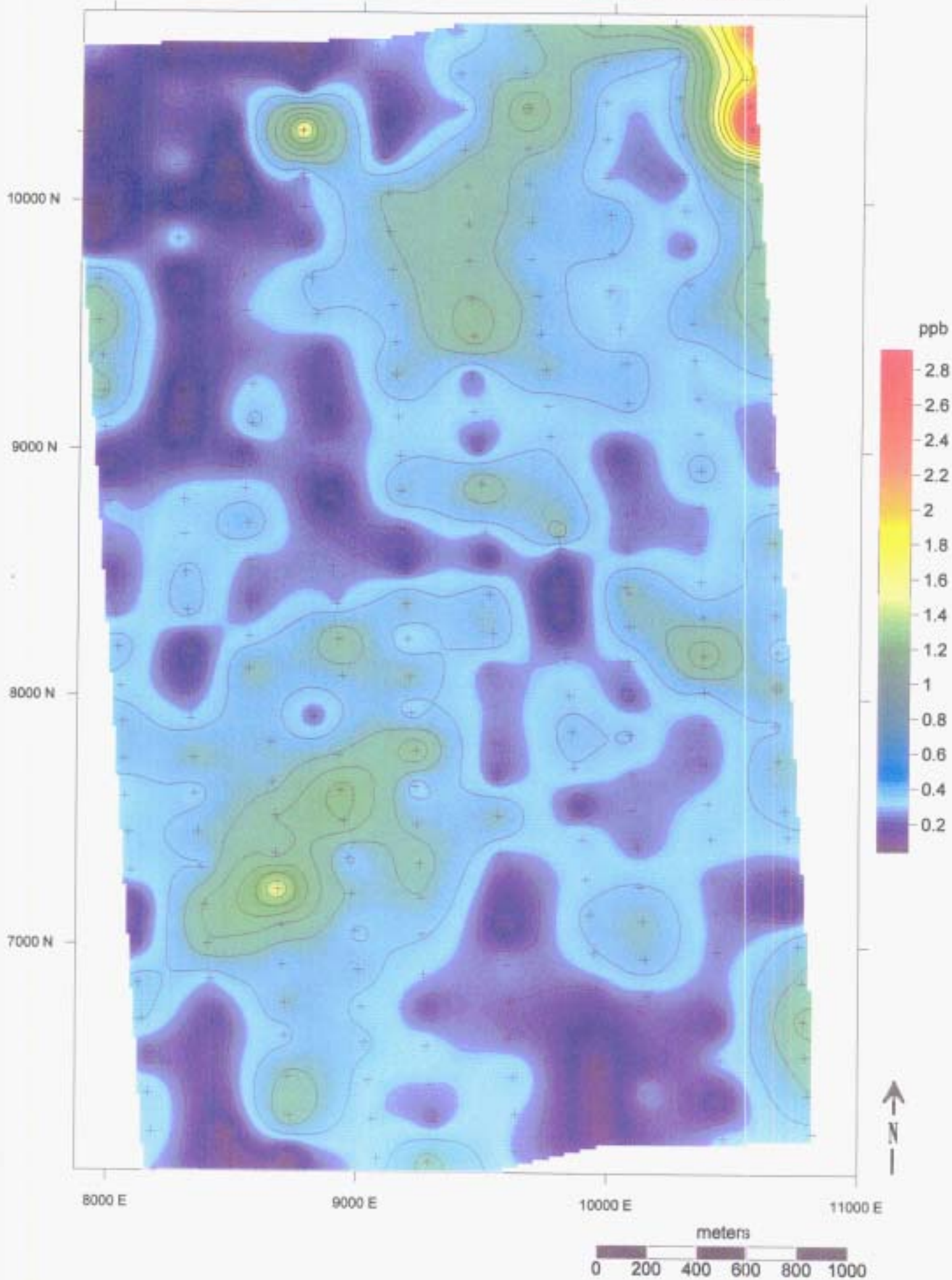






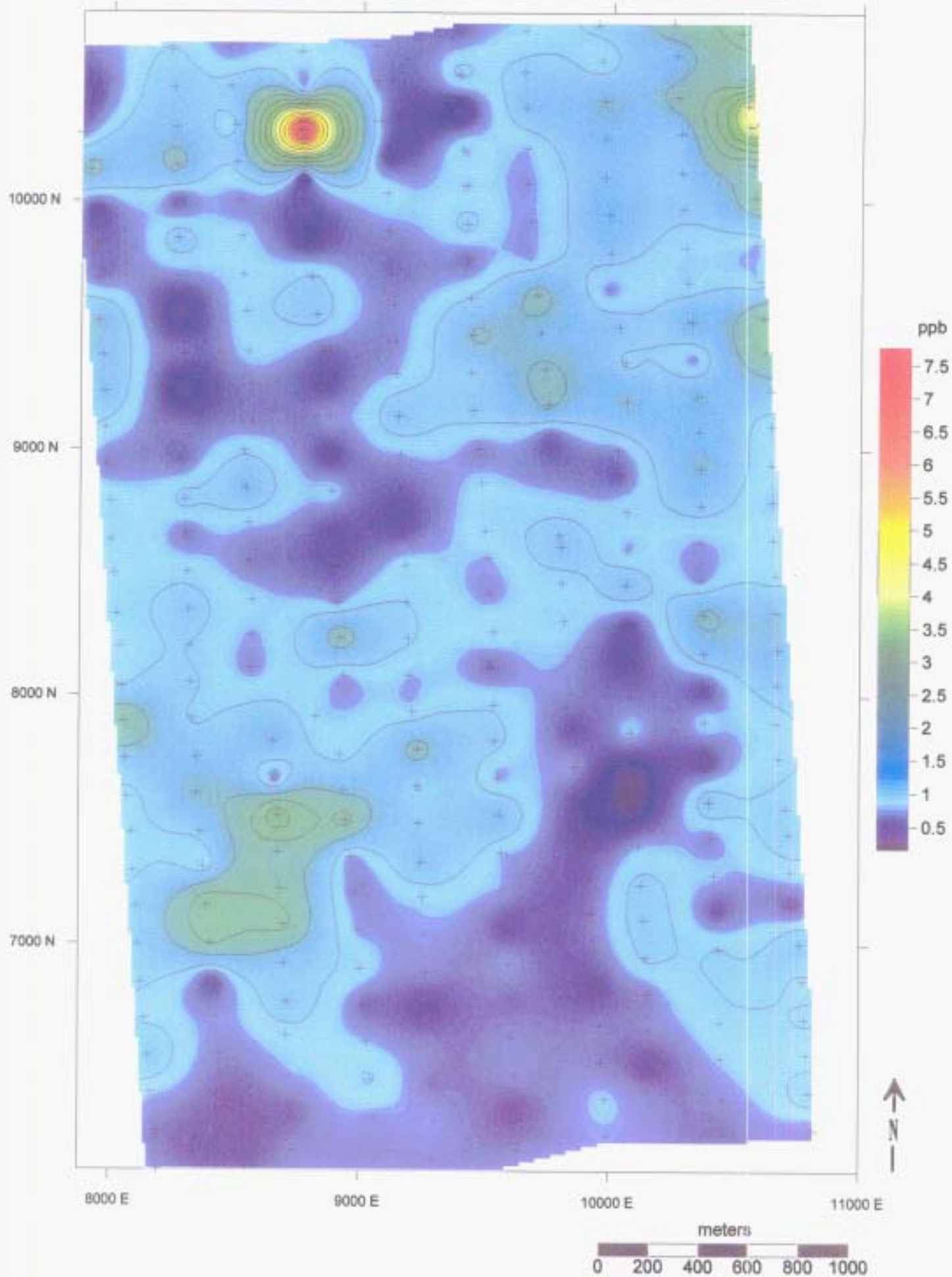


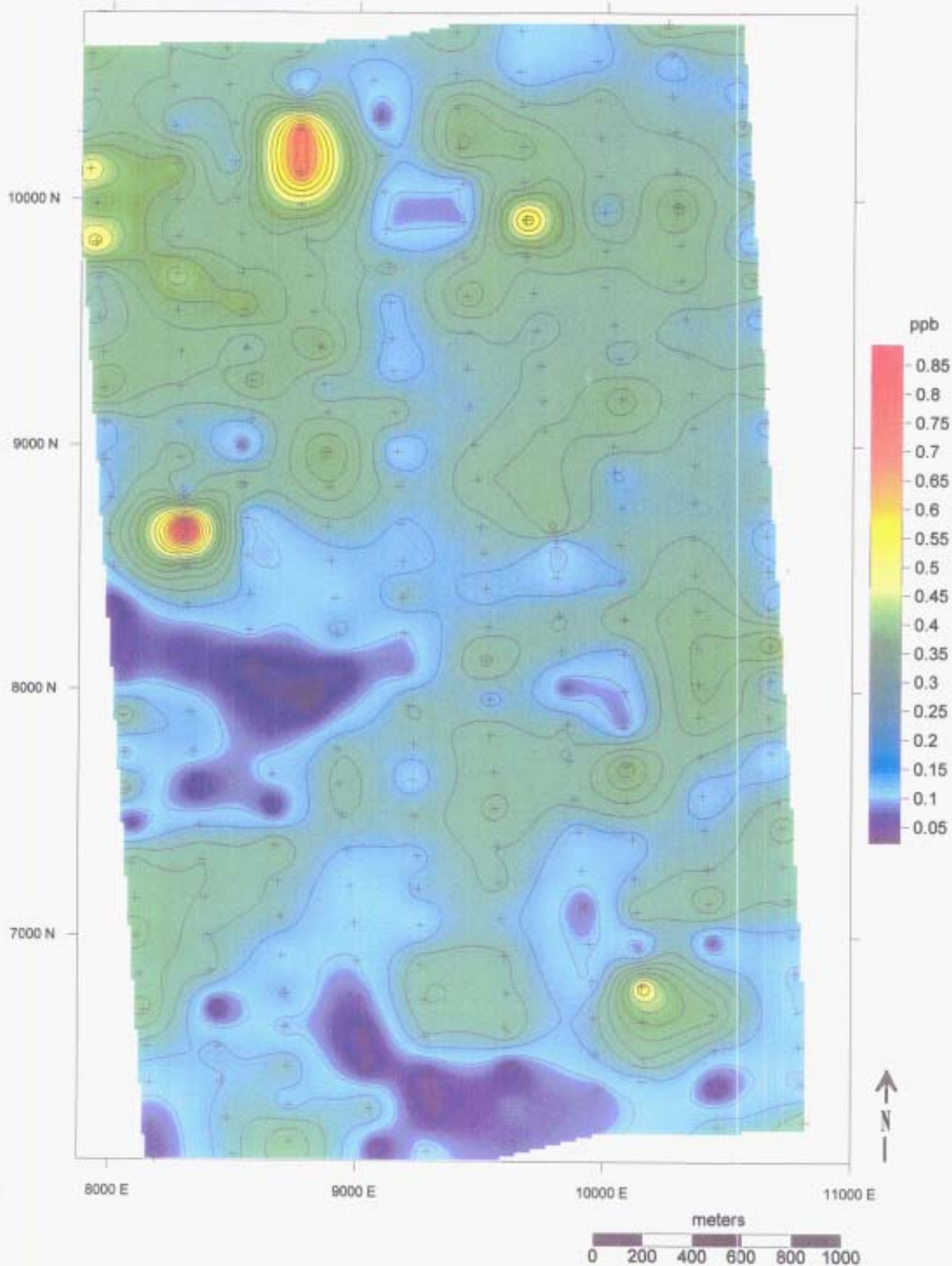


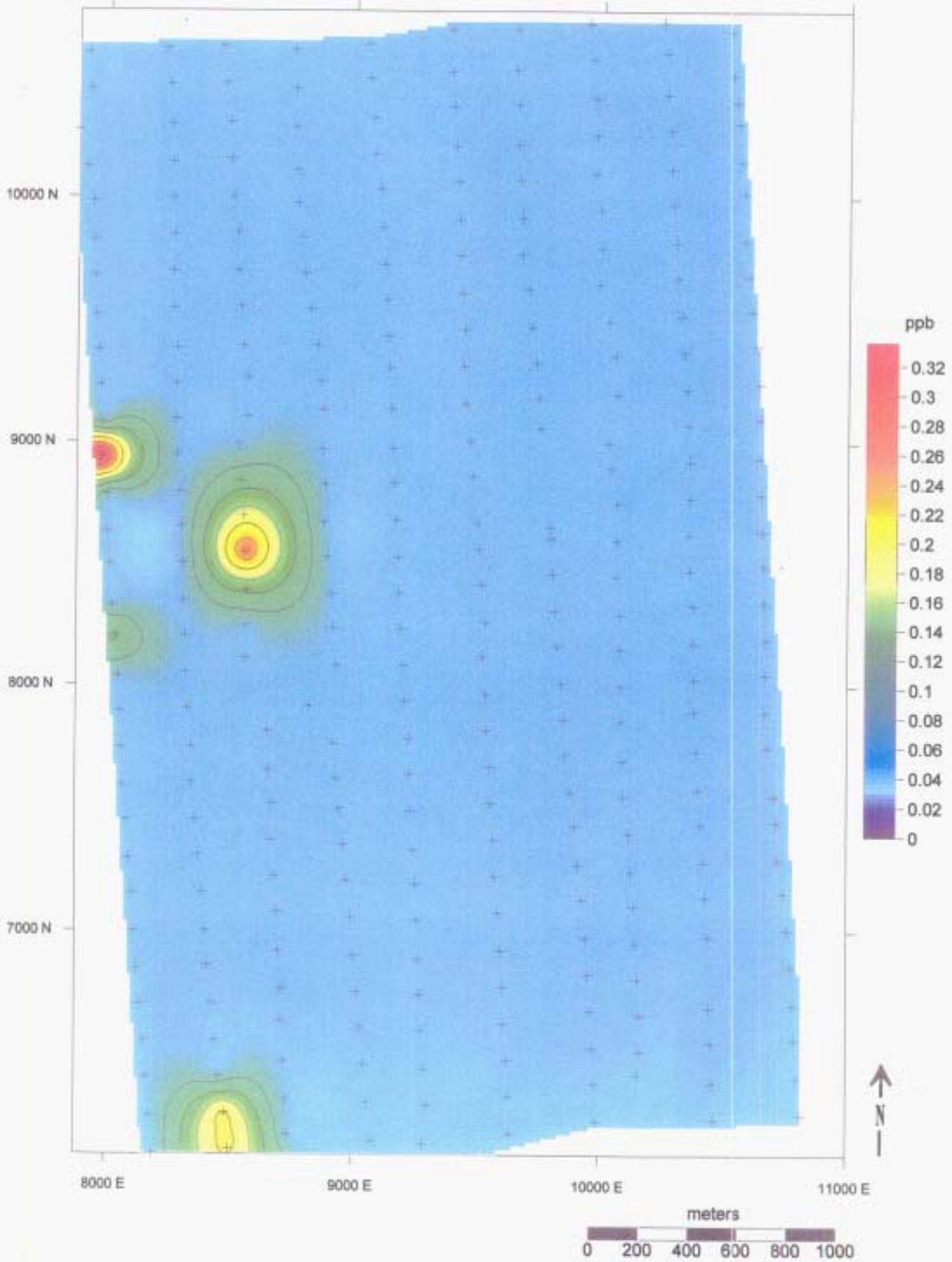


Element Group: Metals
Drawn by: G.T. Hill

Element: Gallium
Date: 21 September 2001

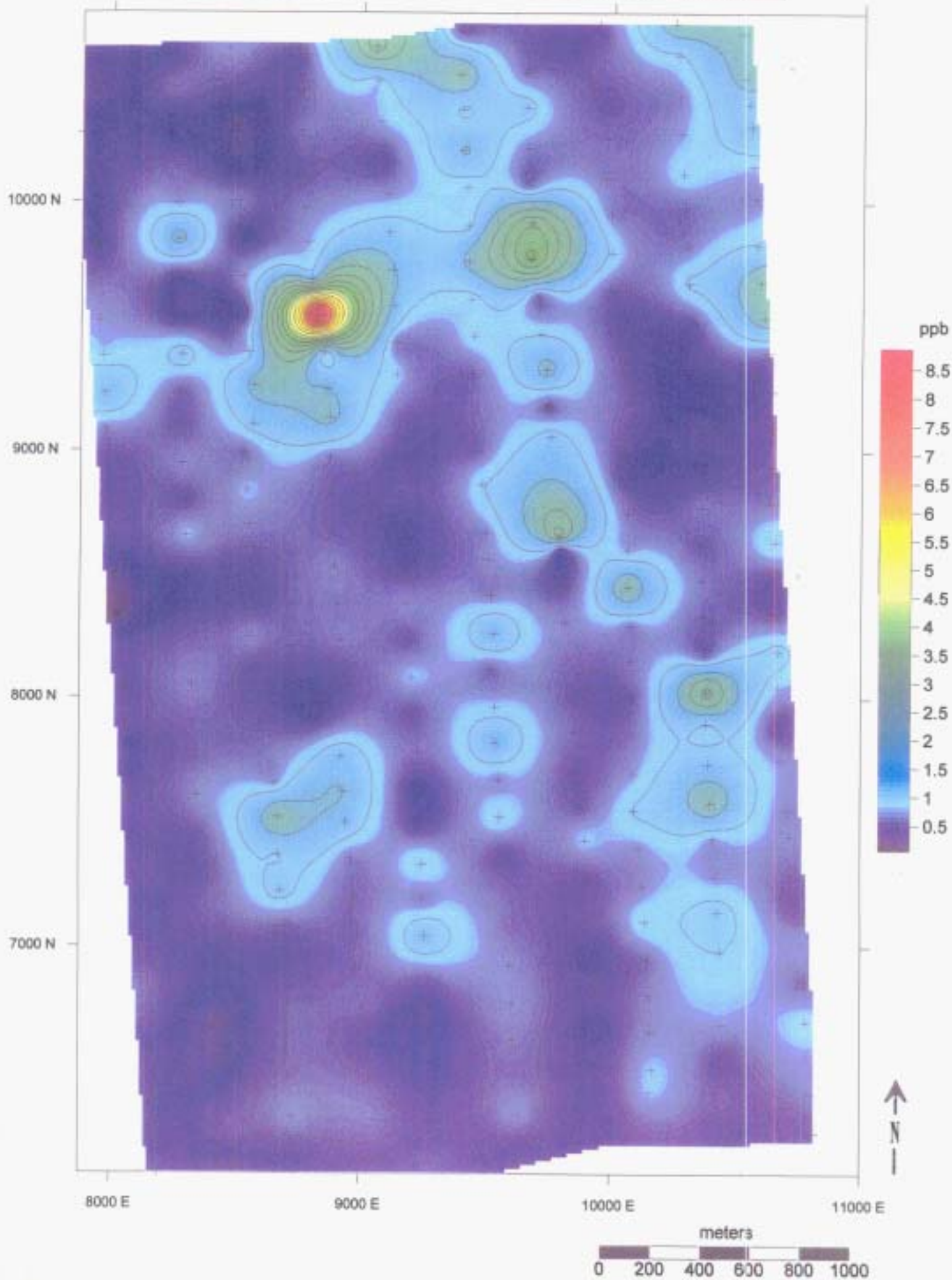


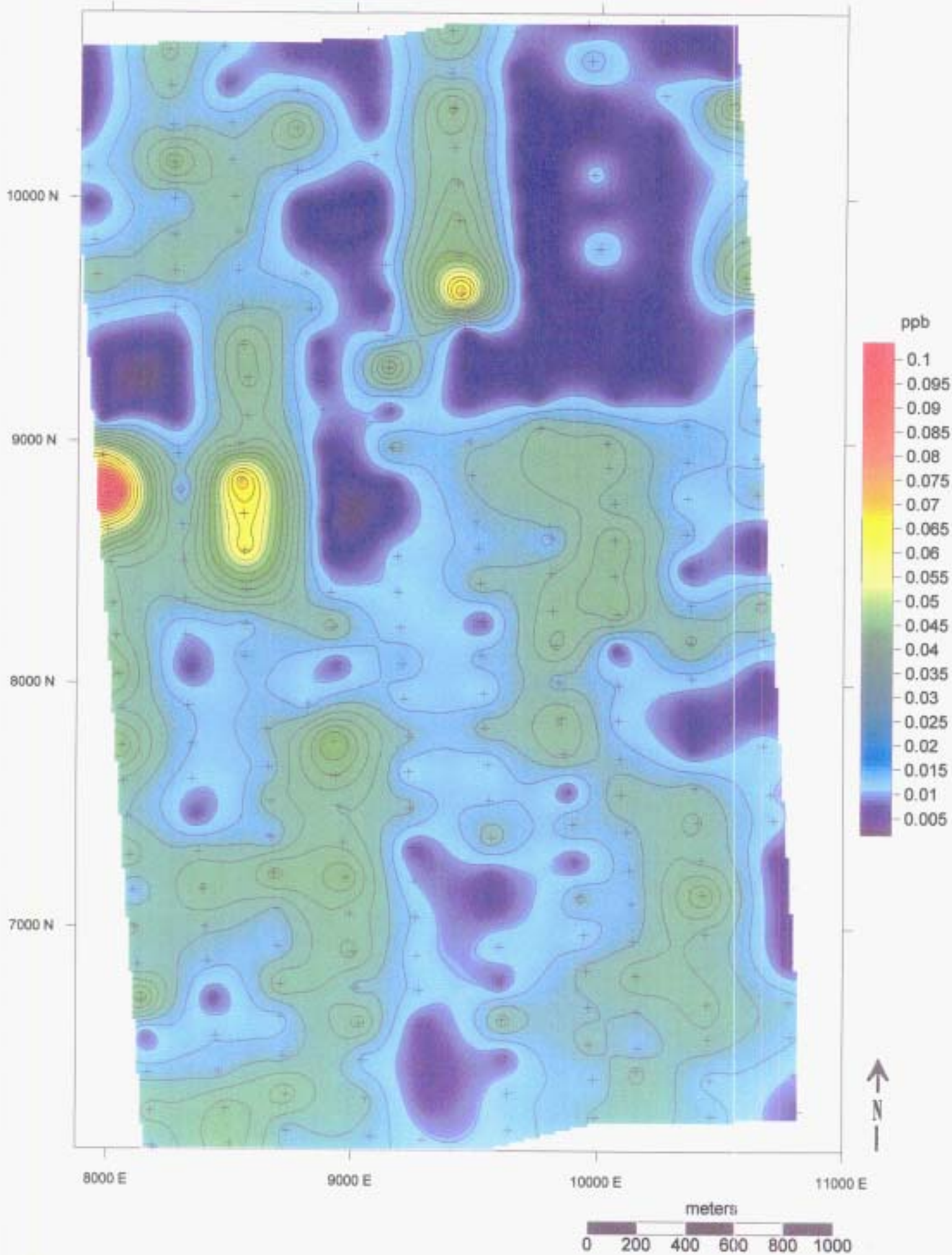


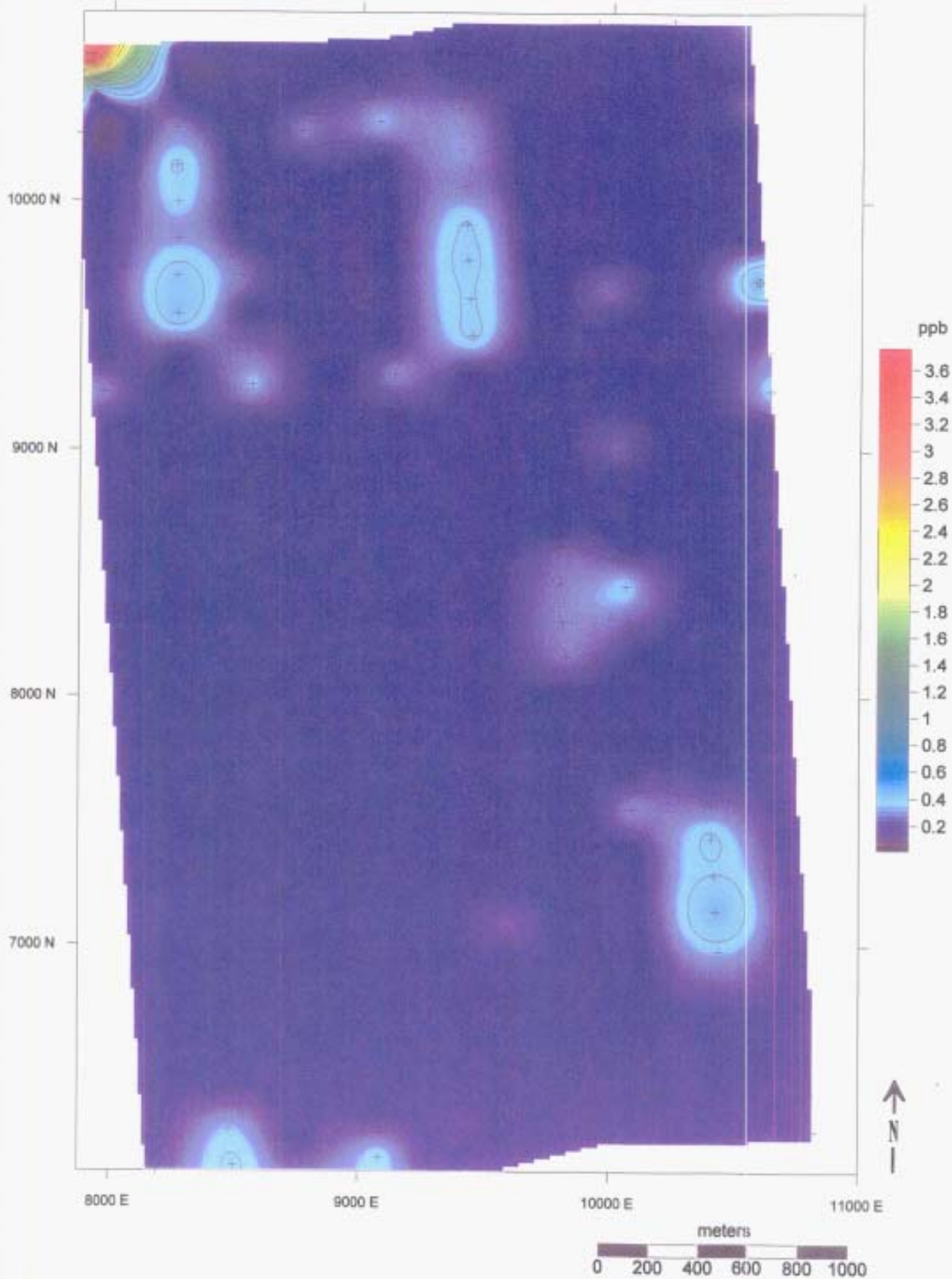


Element Group: Metals
Drawn by: G.T. Hill

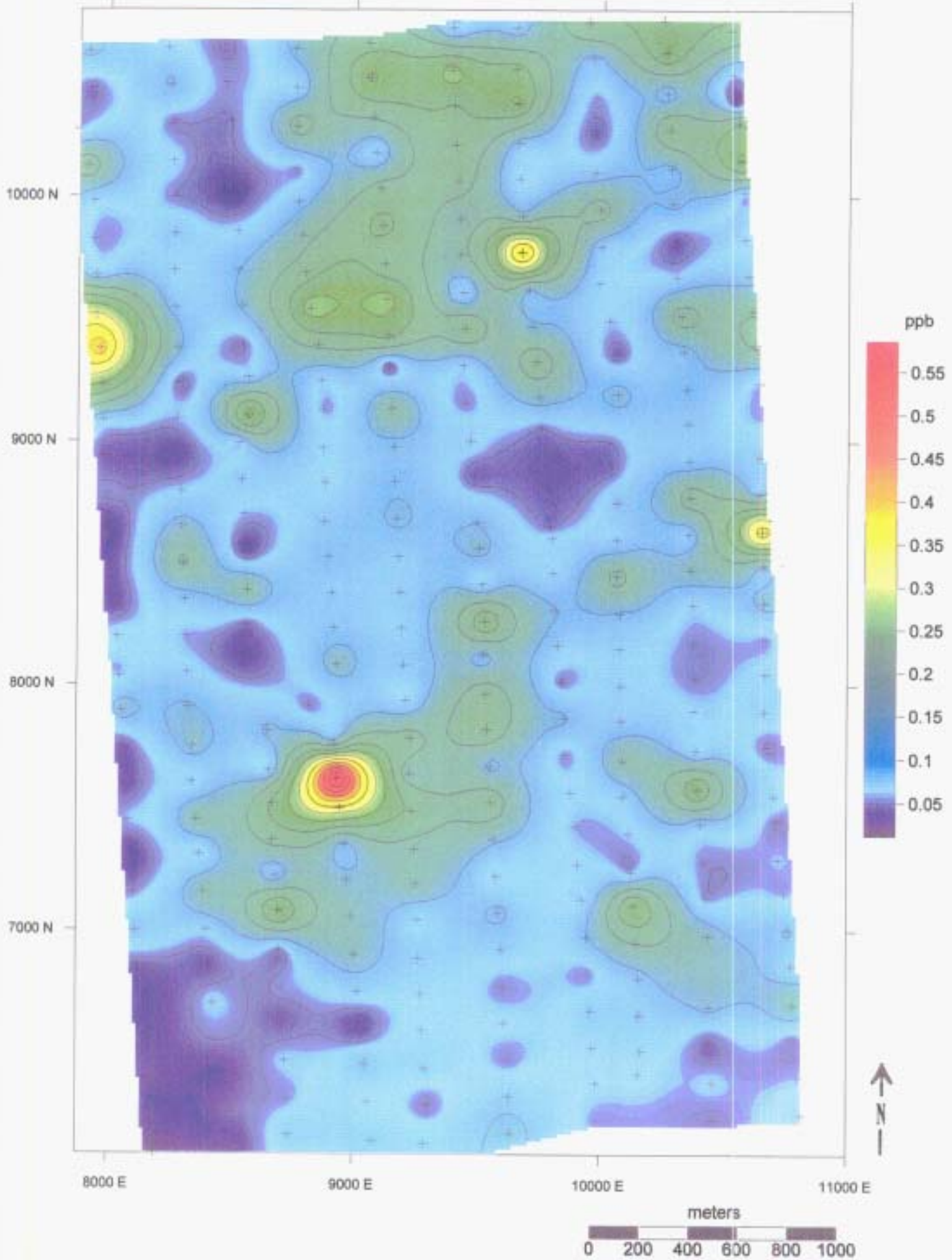
Element: Cadmium
Date: 21 September 2001

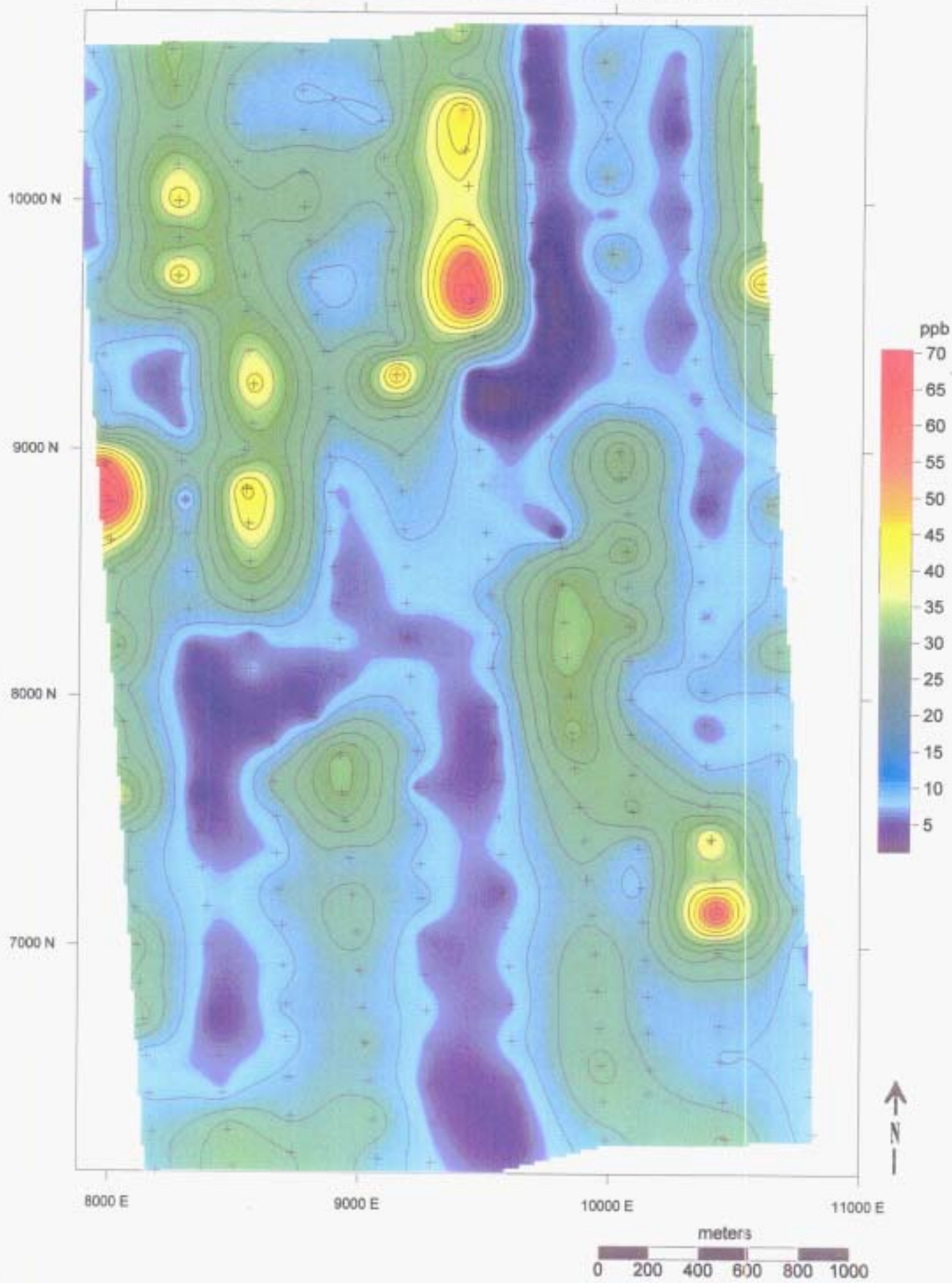


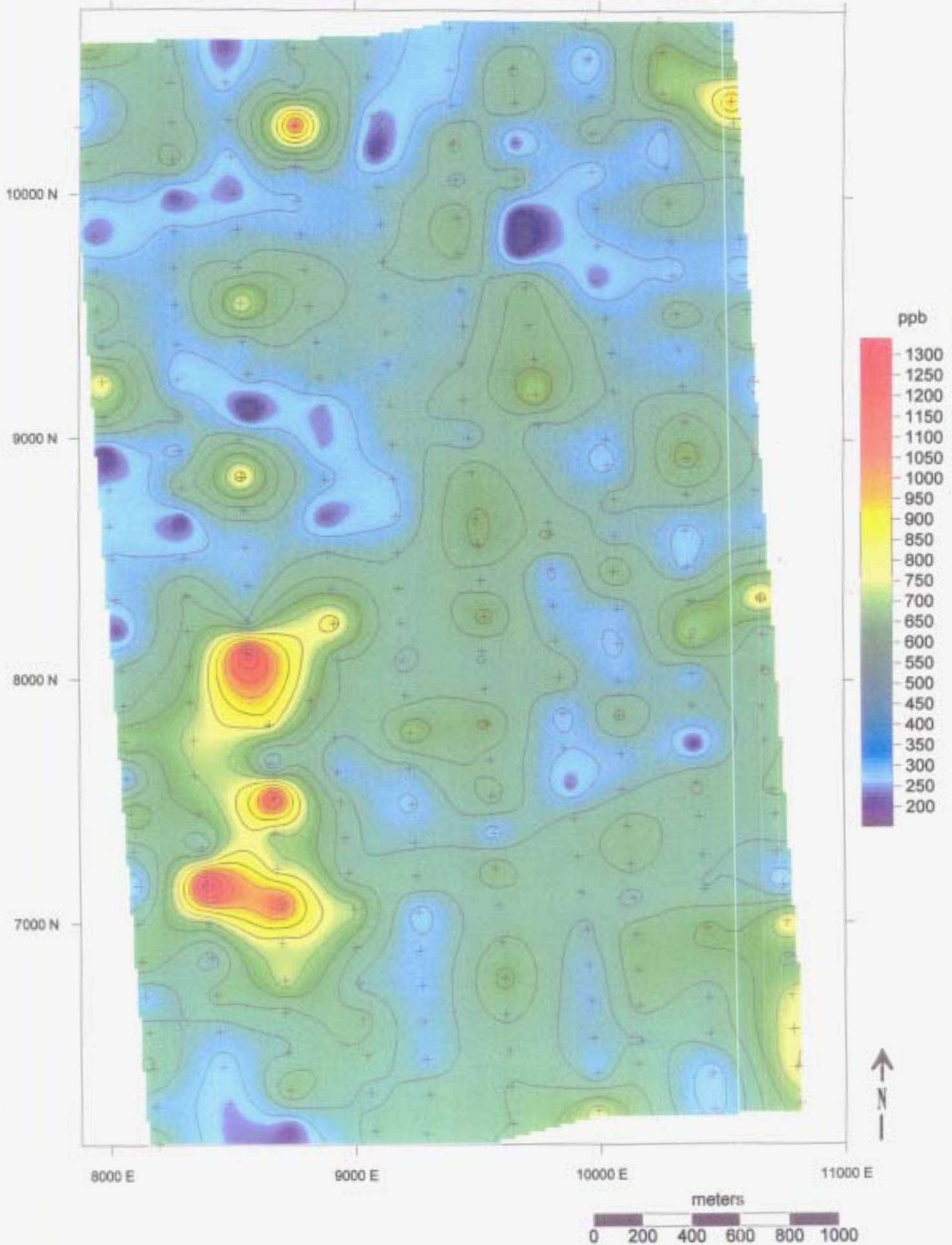


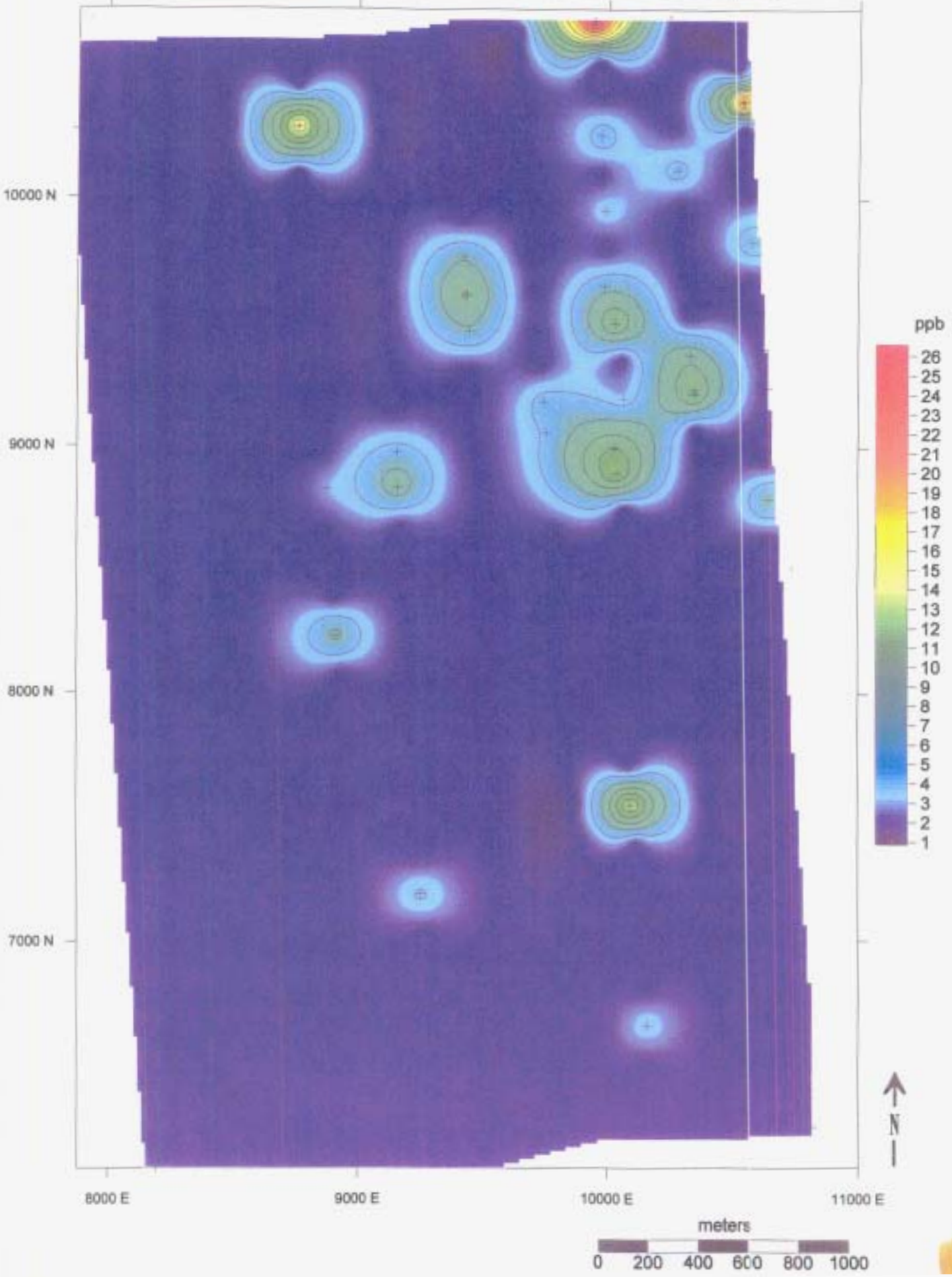


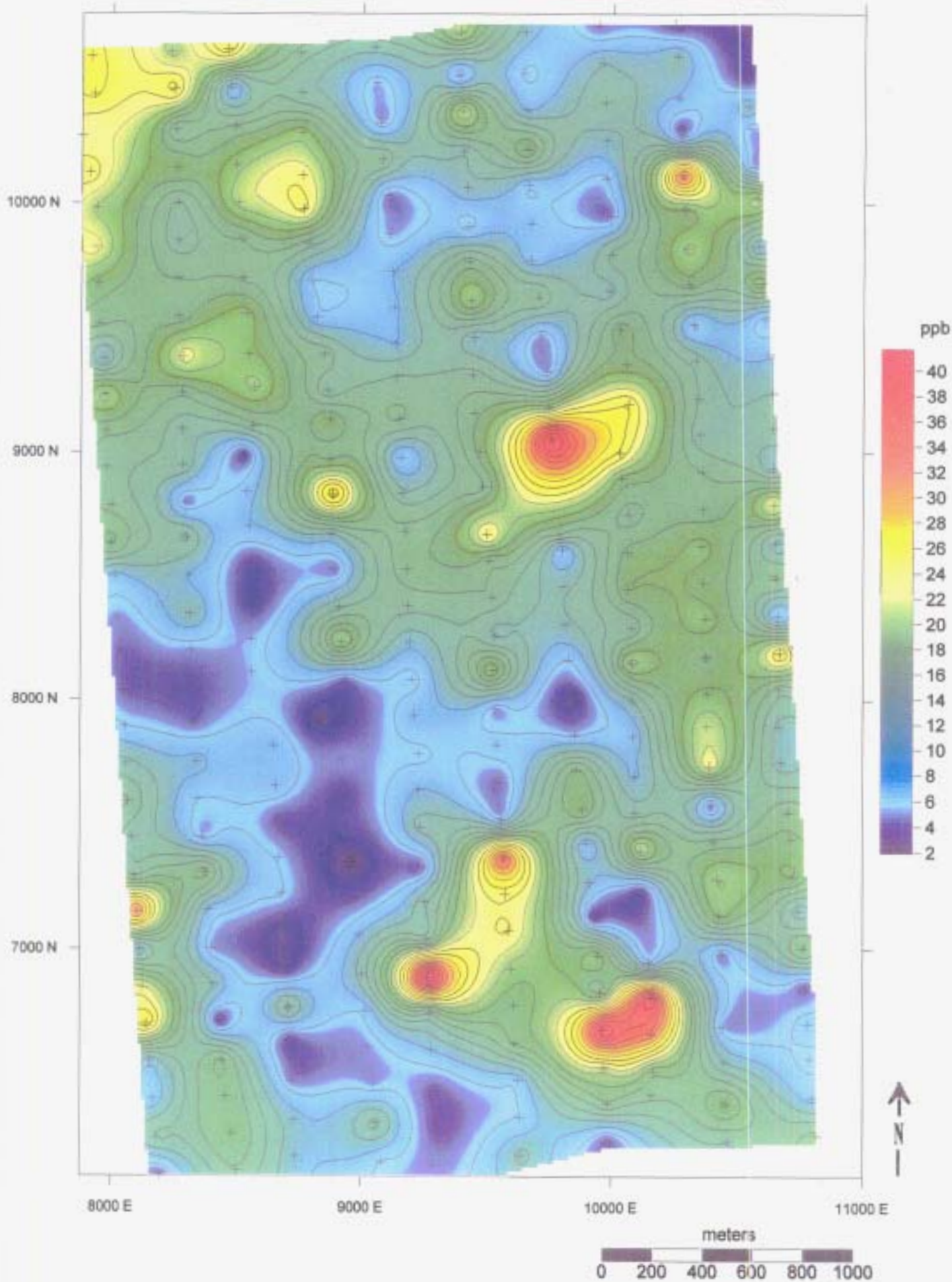
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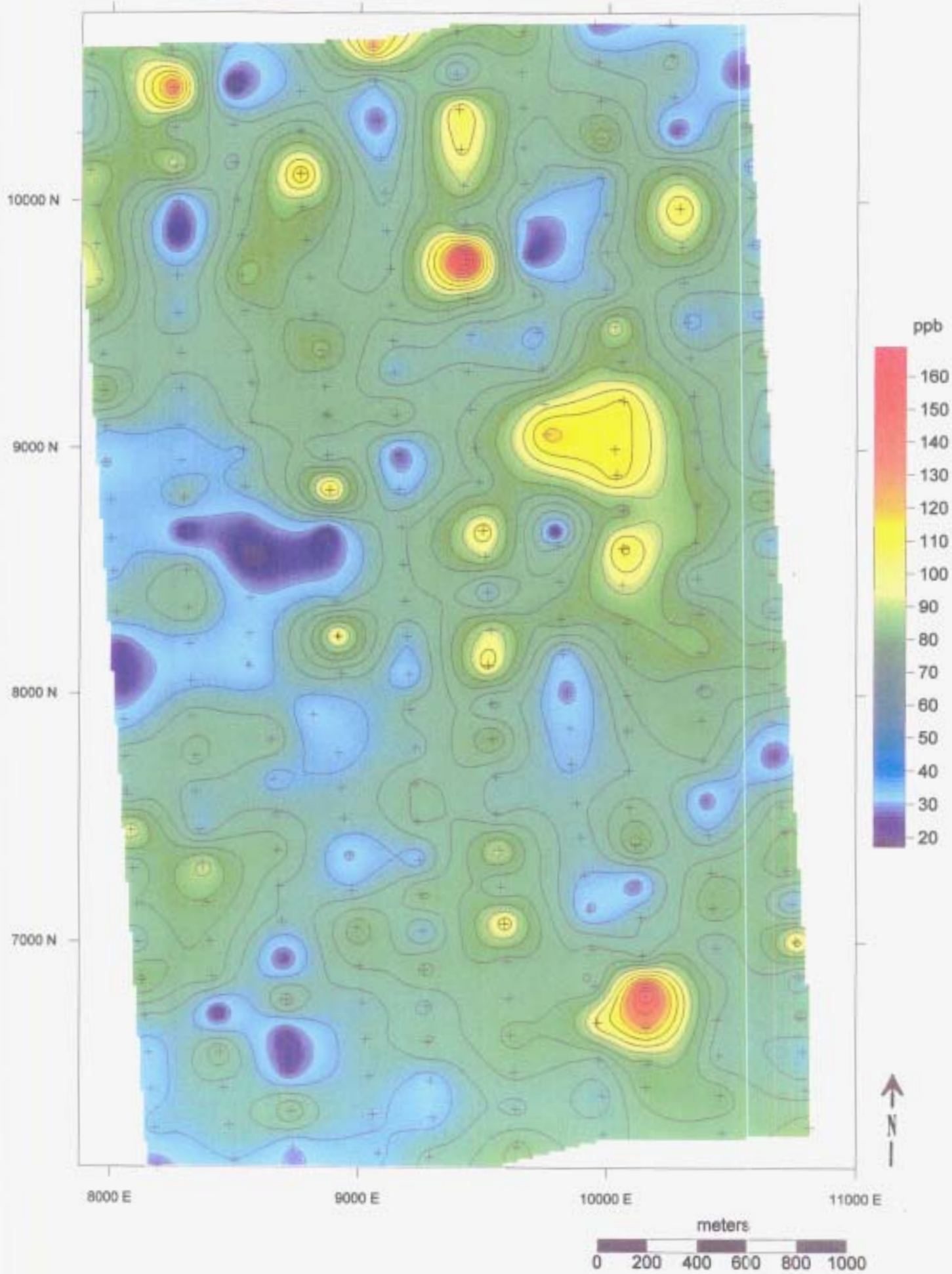


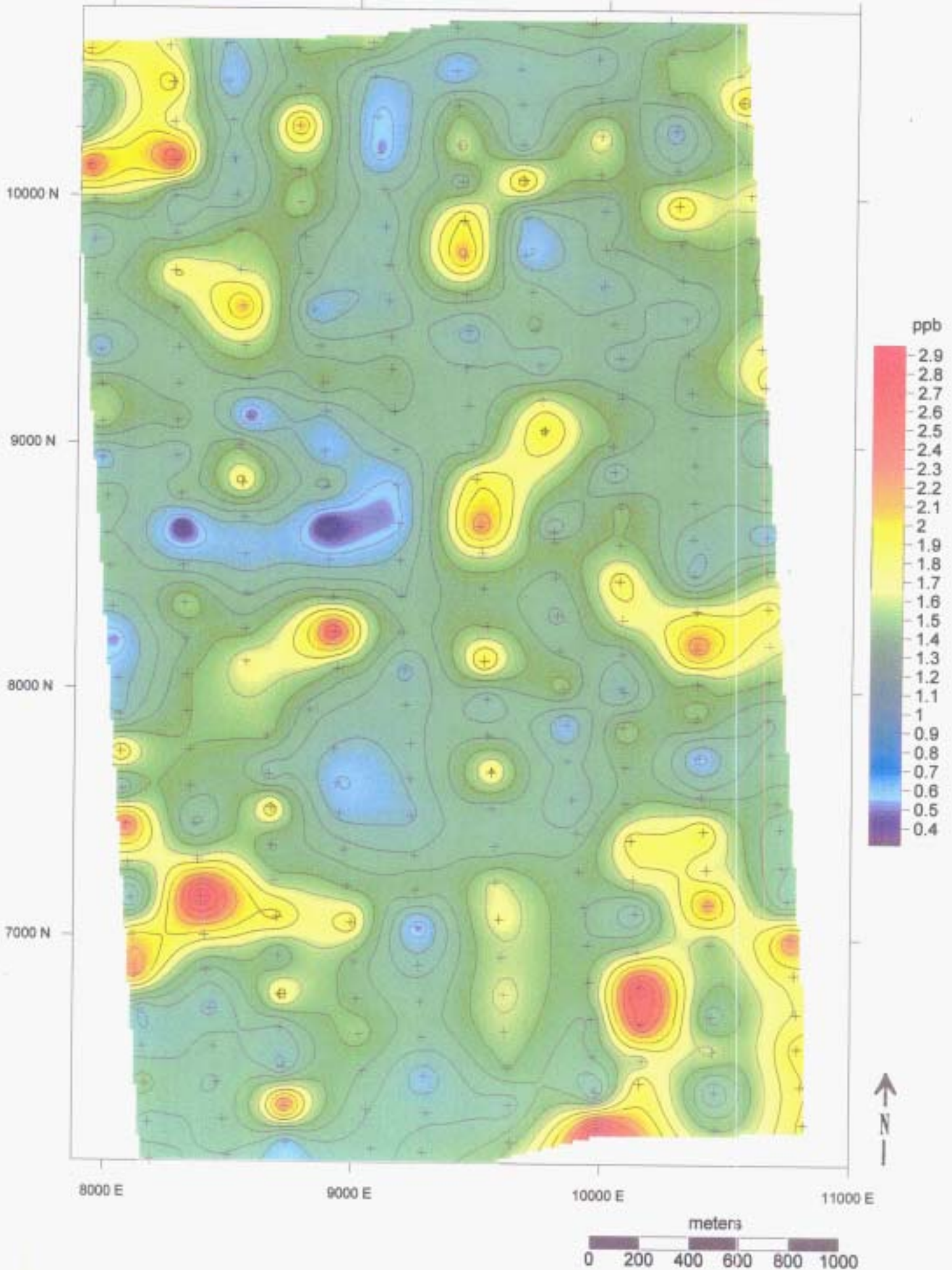




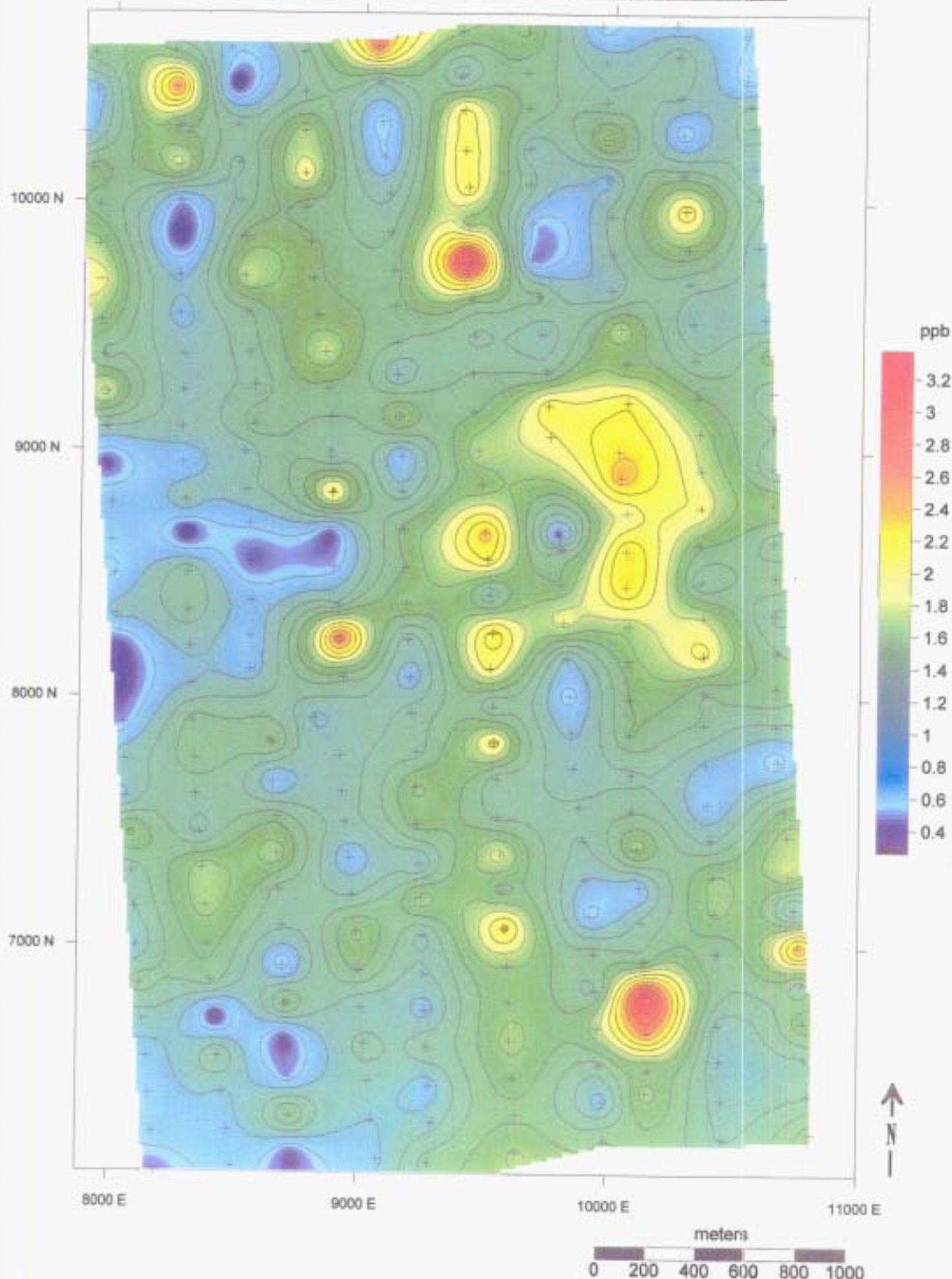


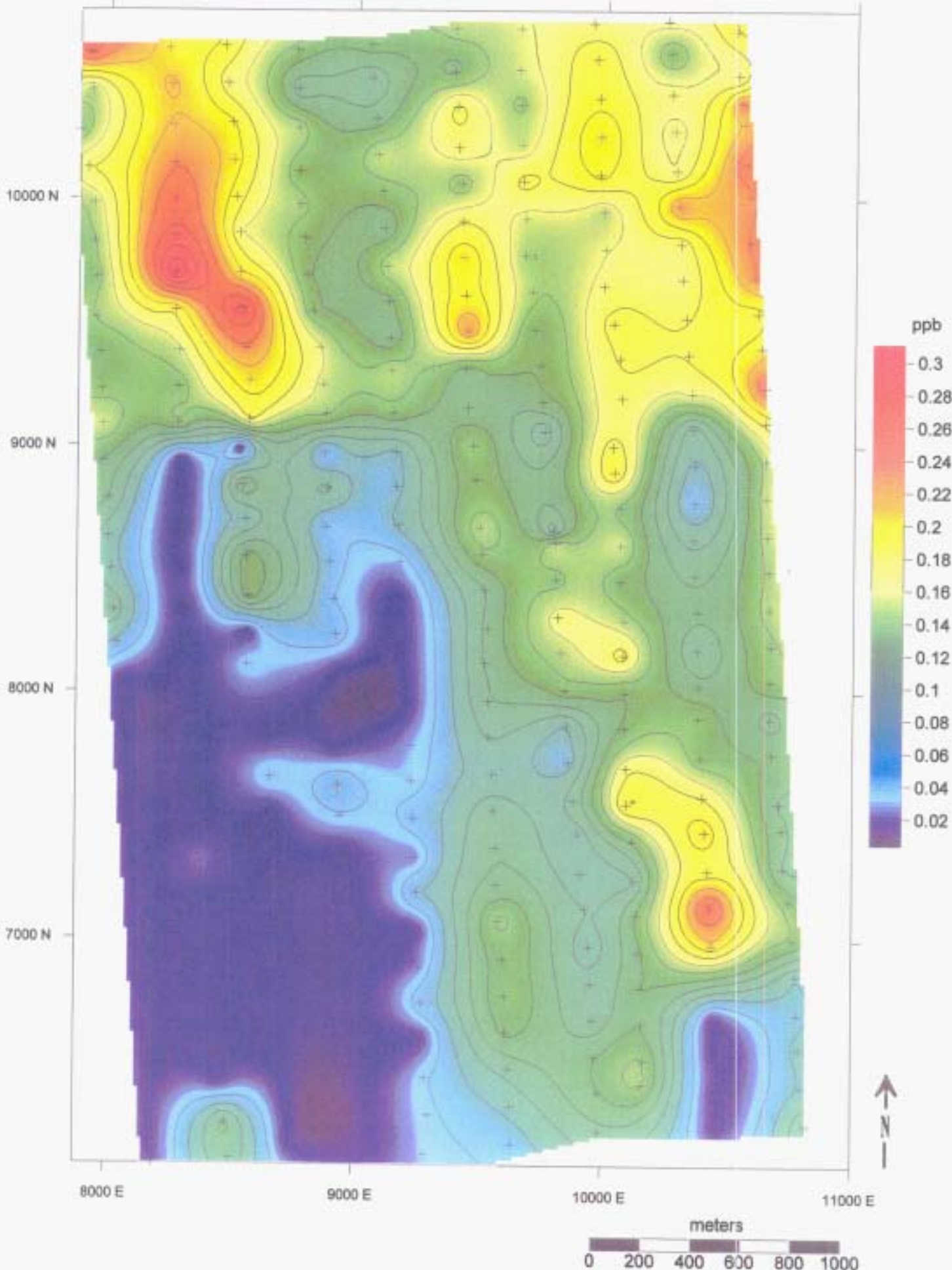


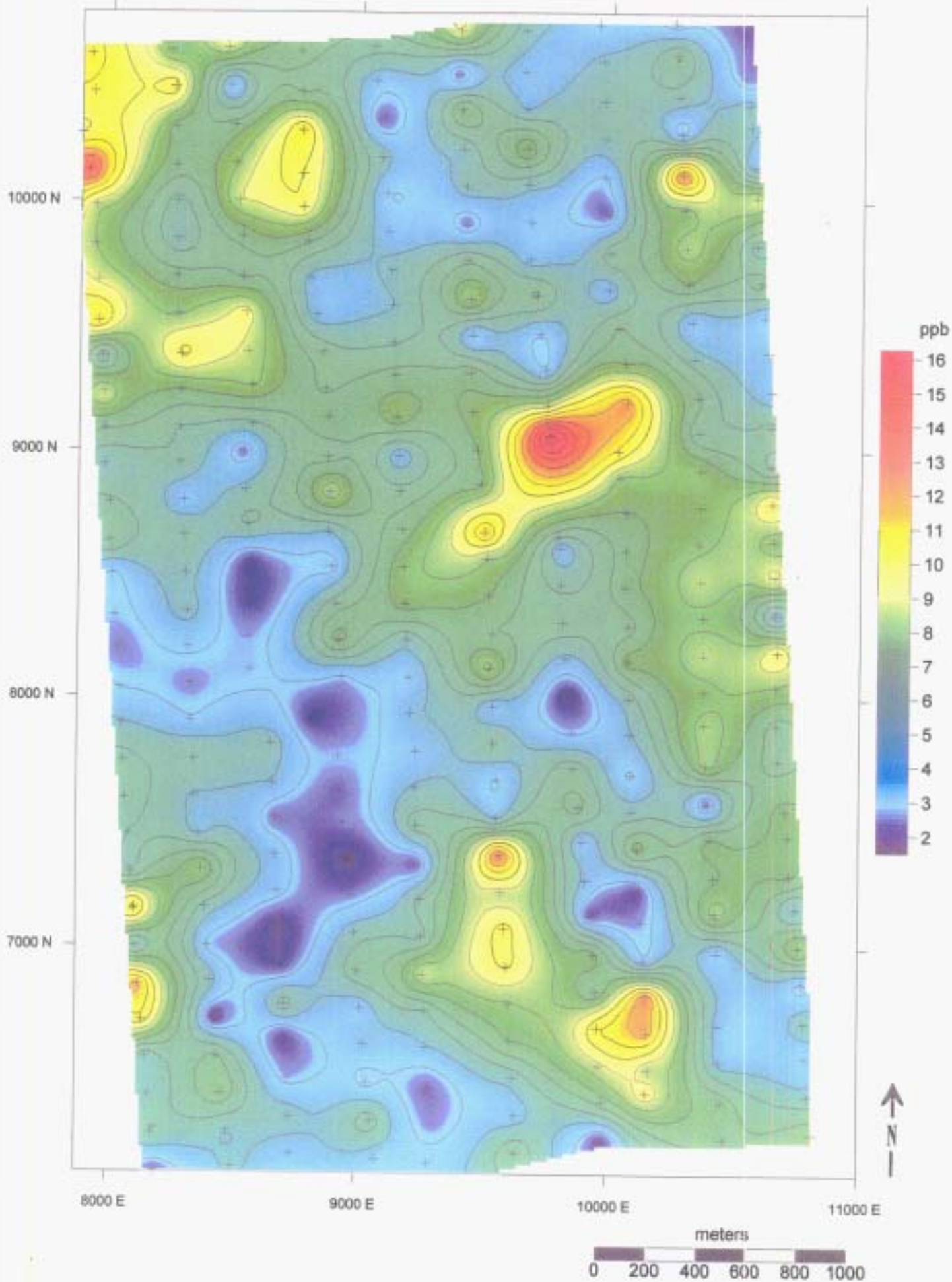


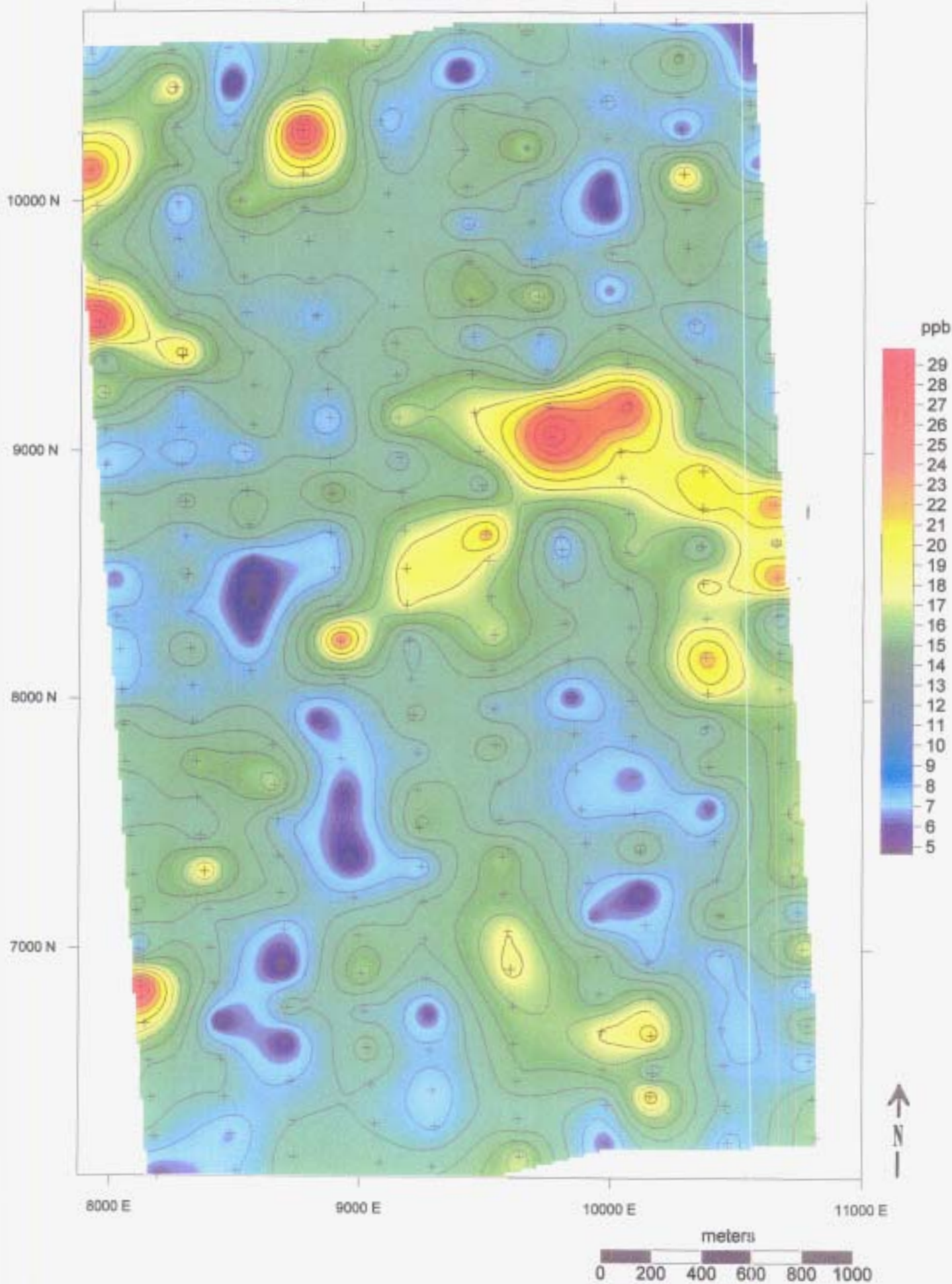


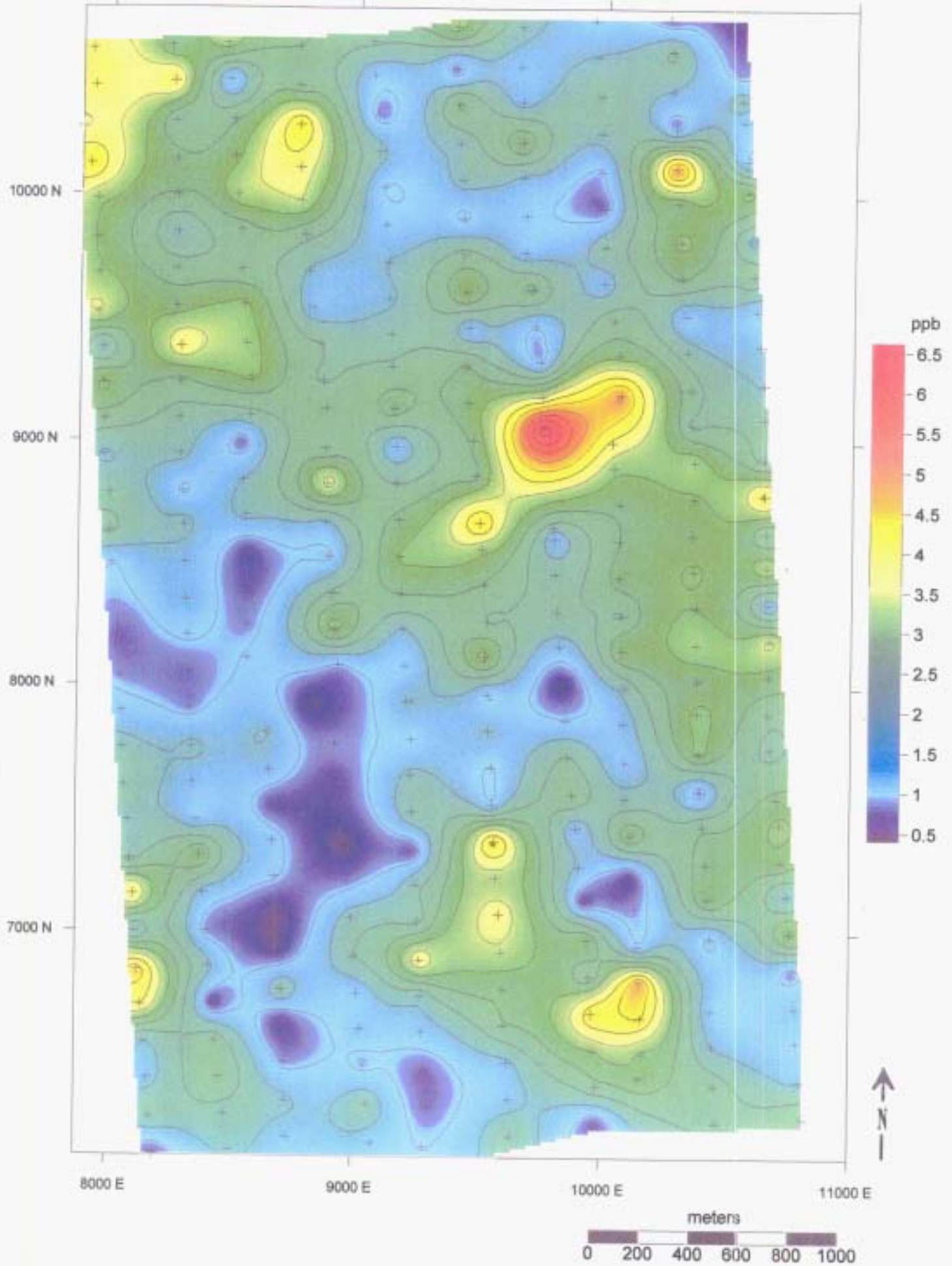
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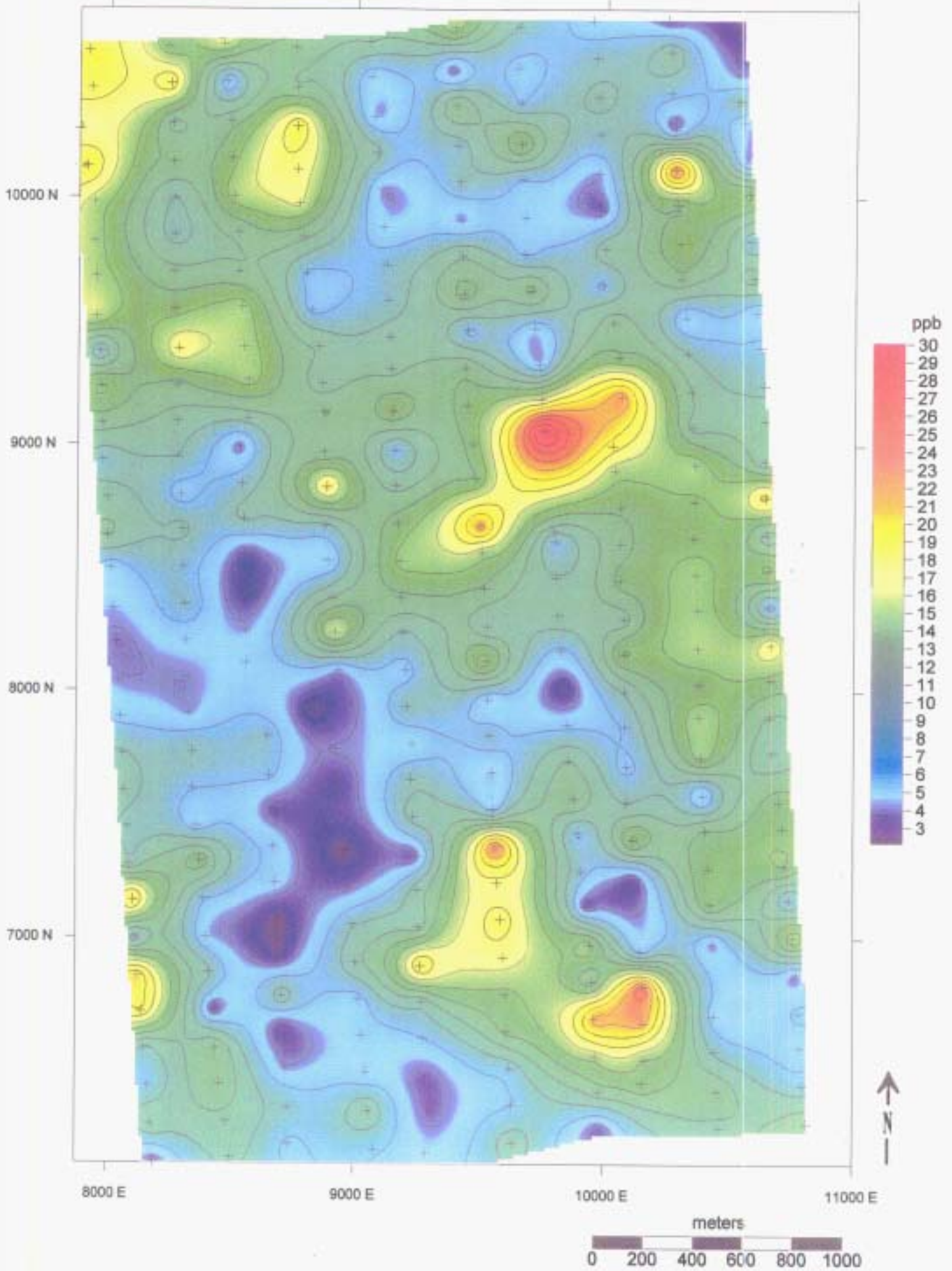


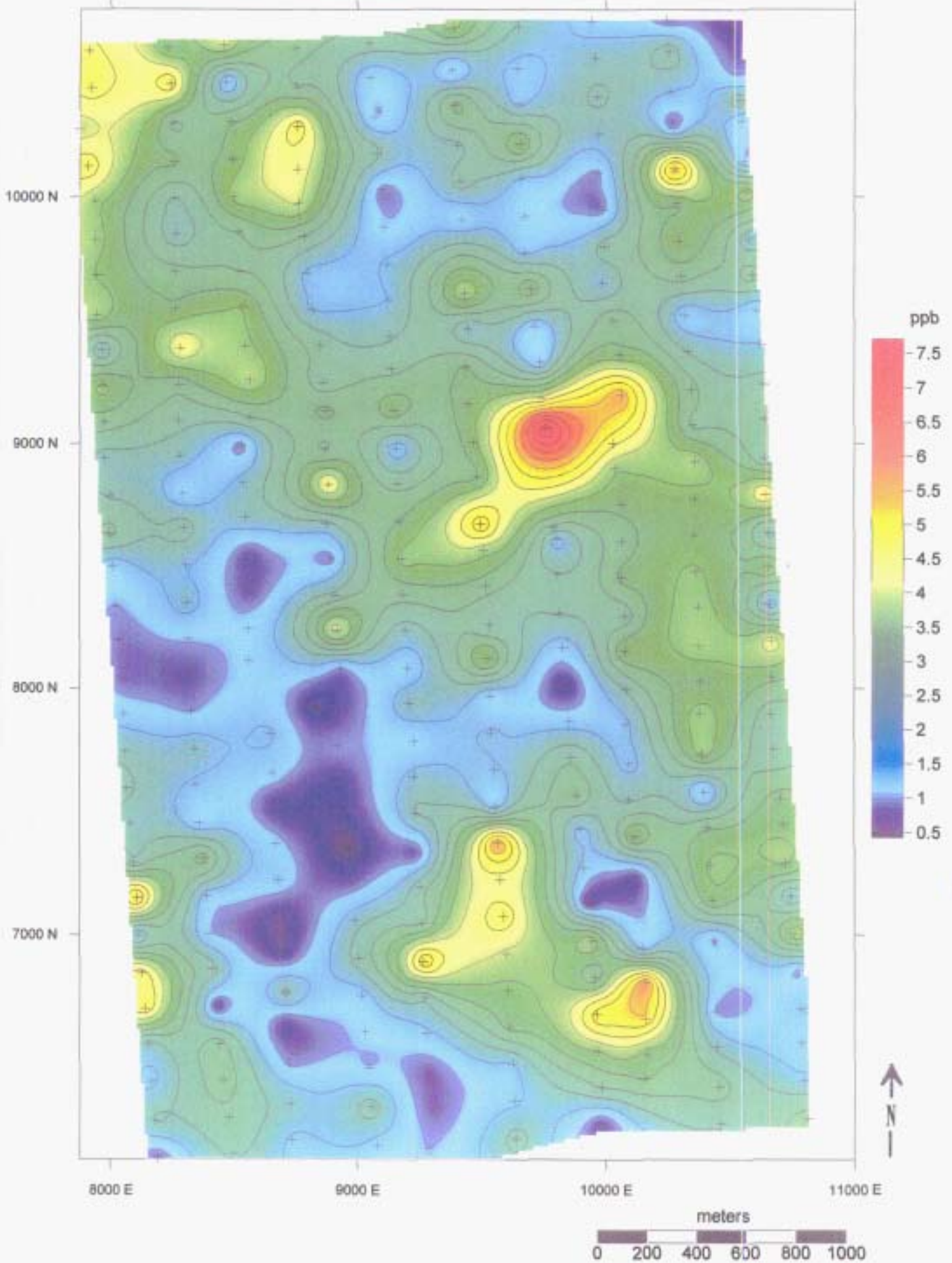


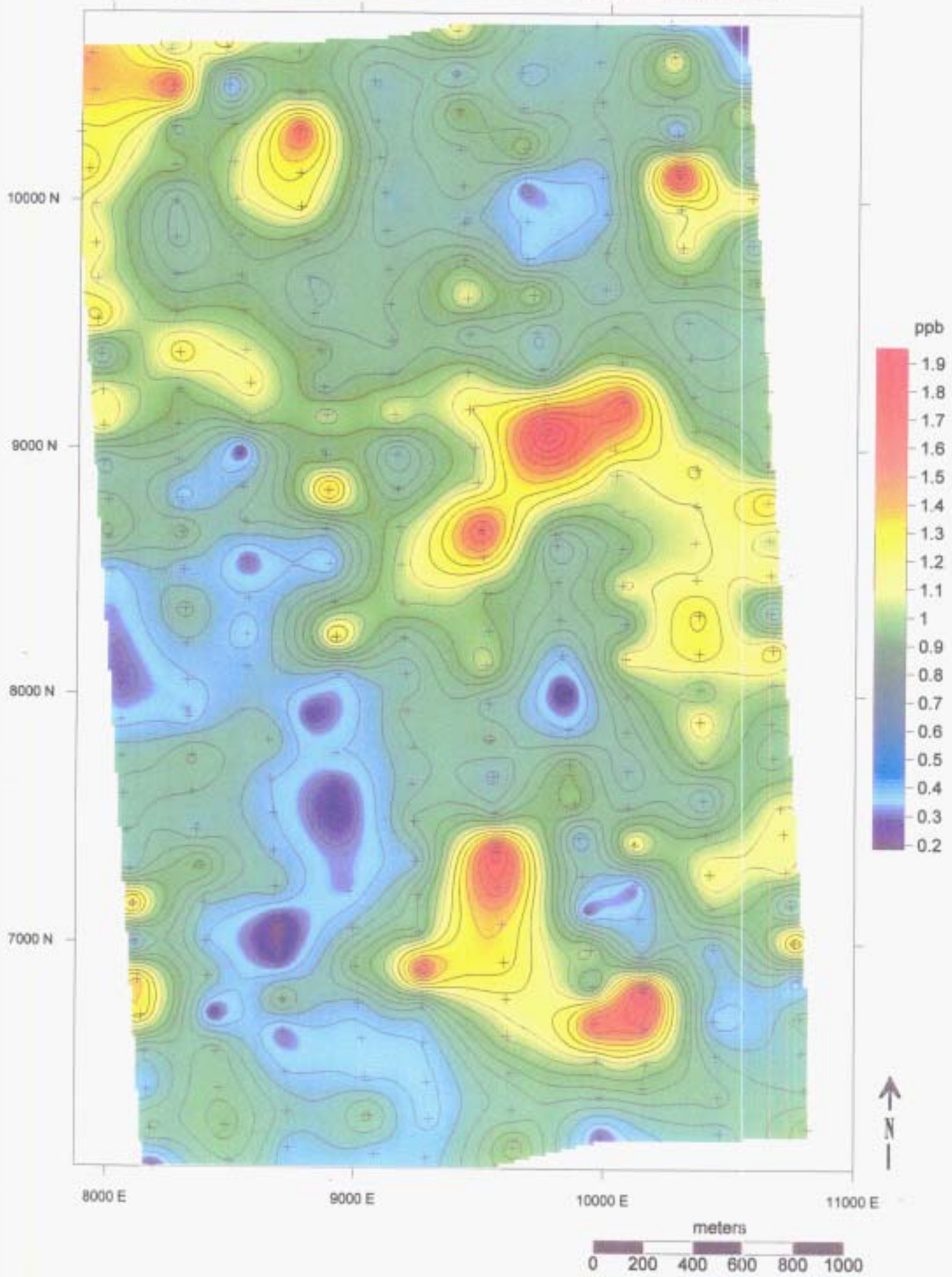


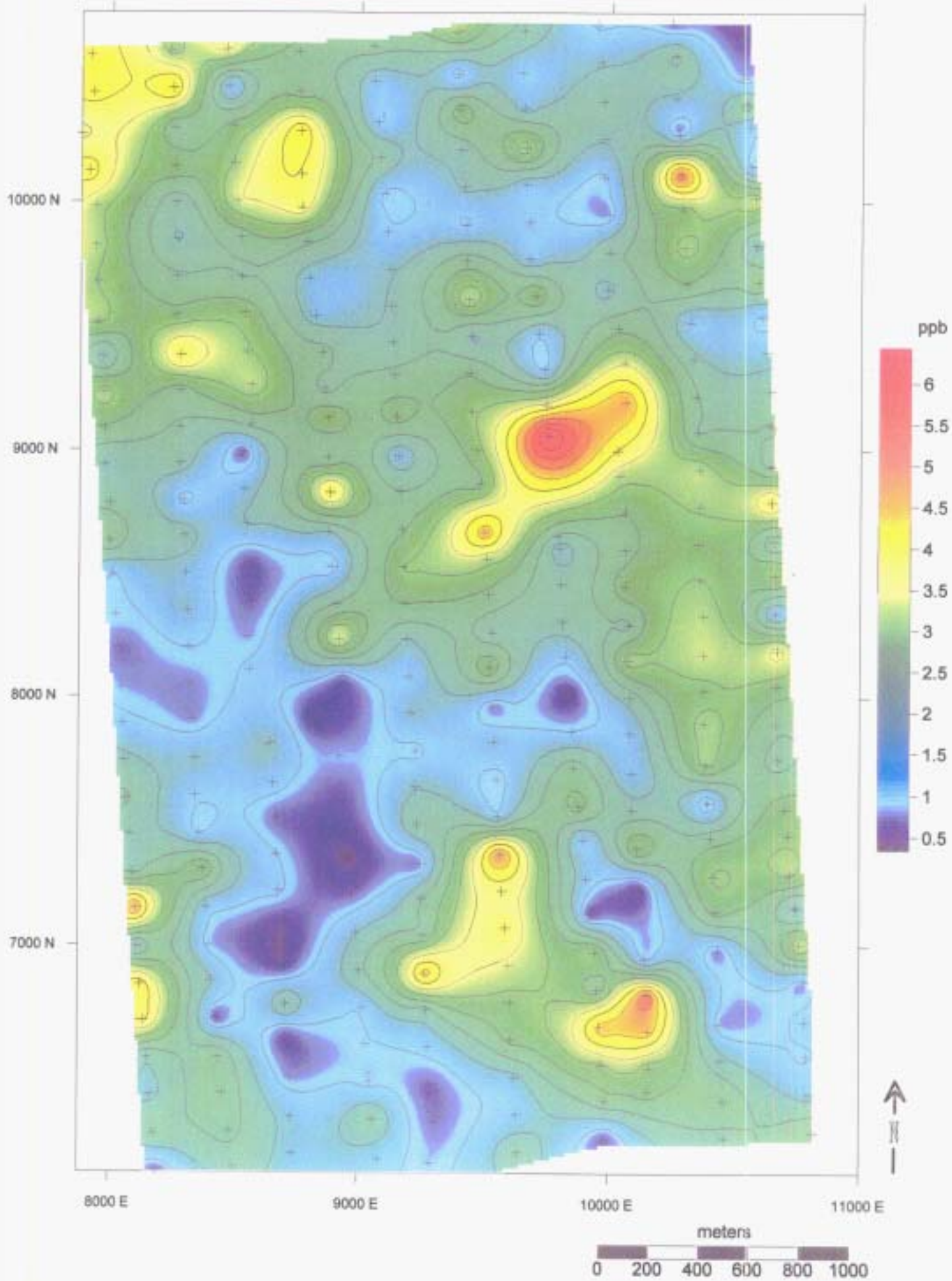


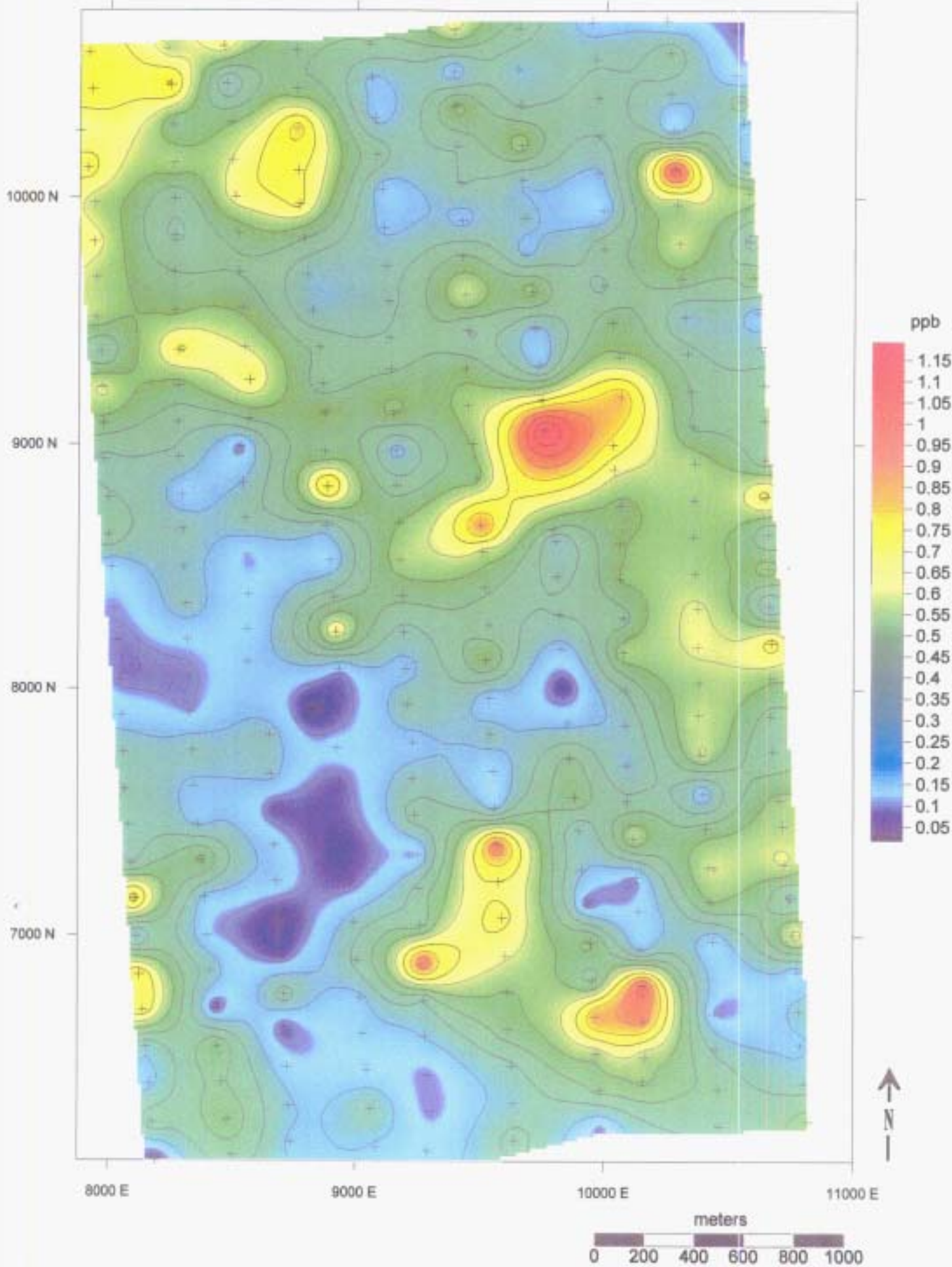


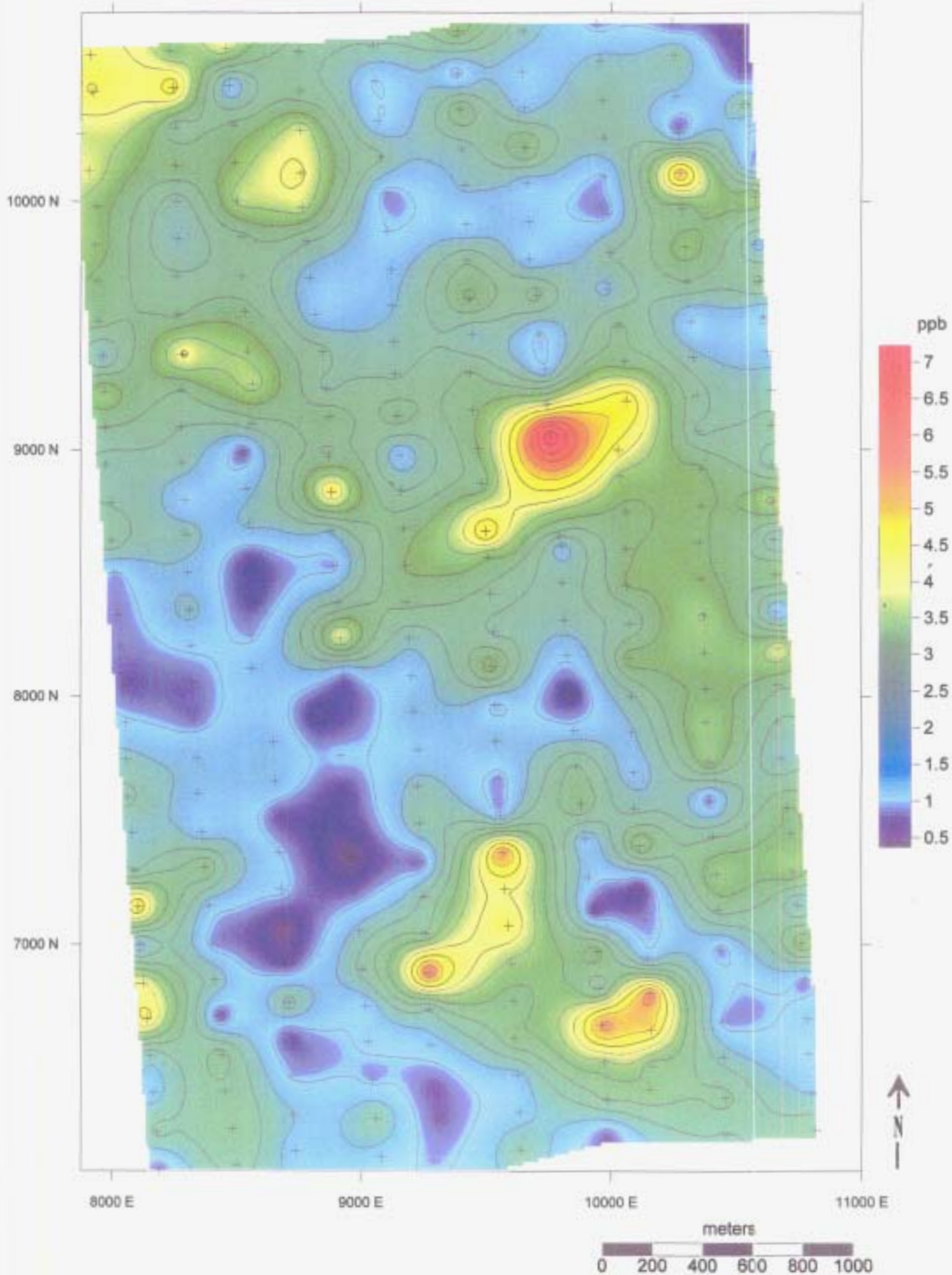


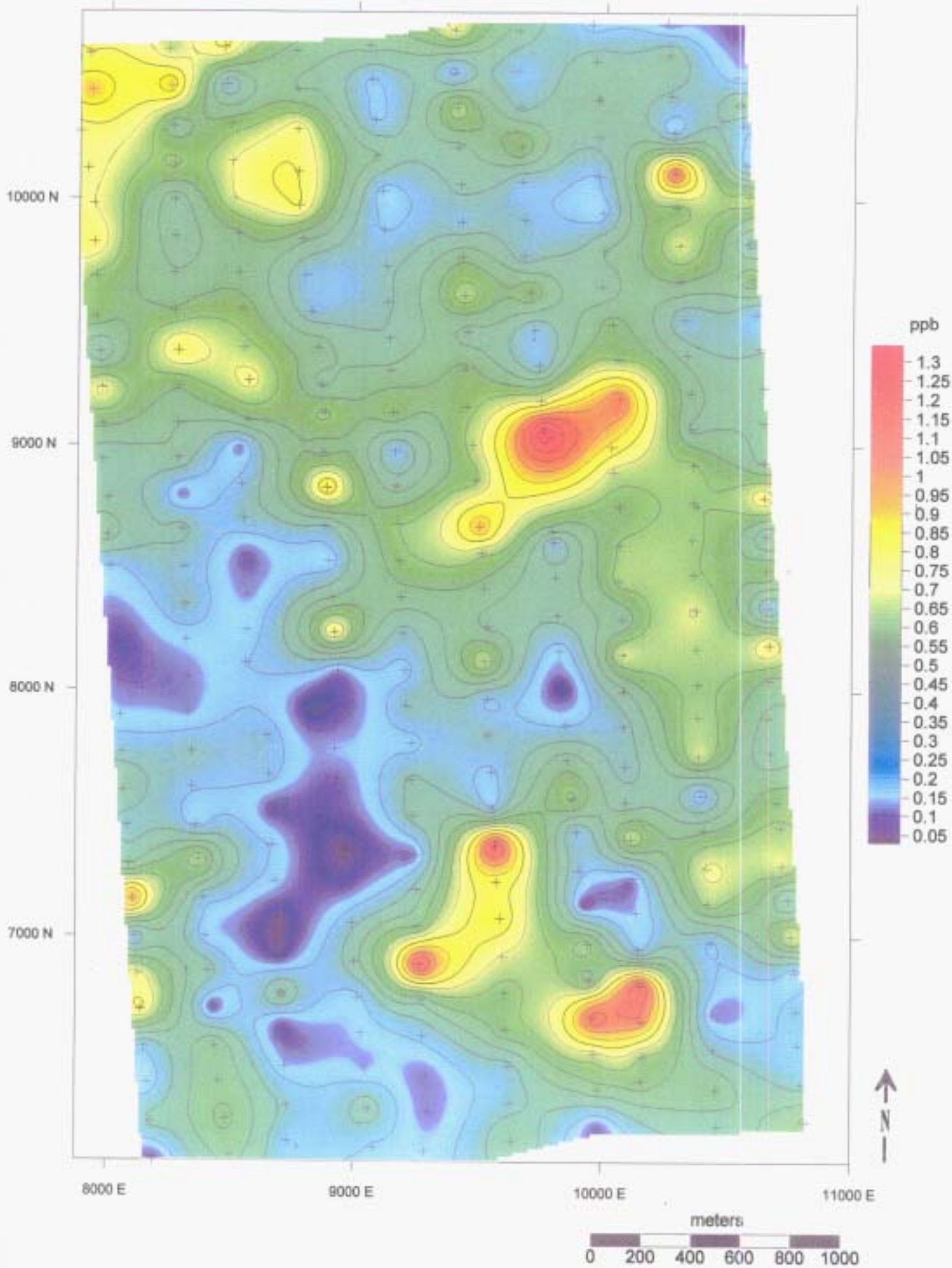


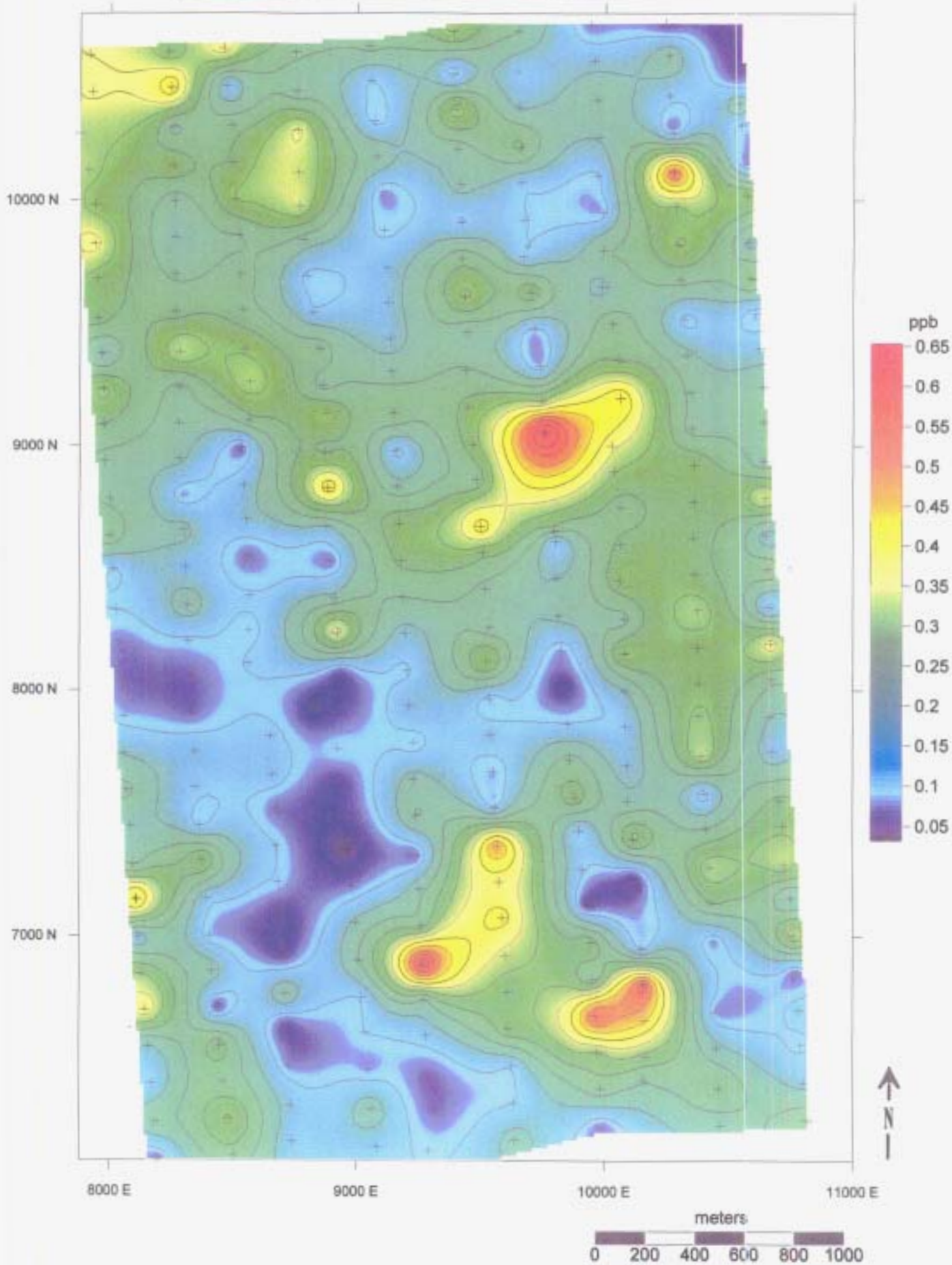




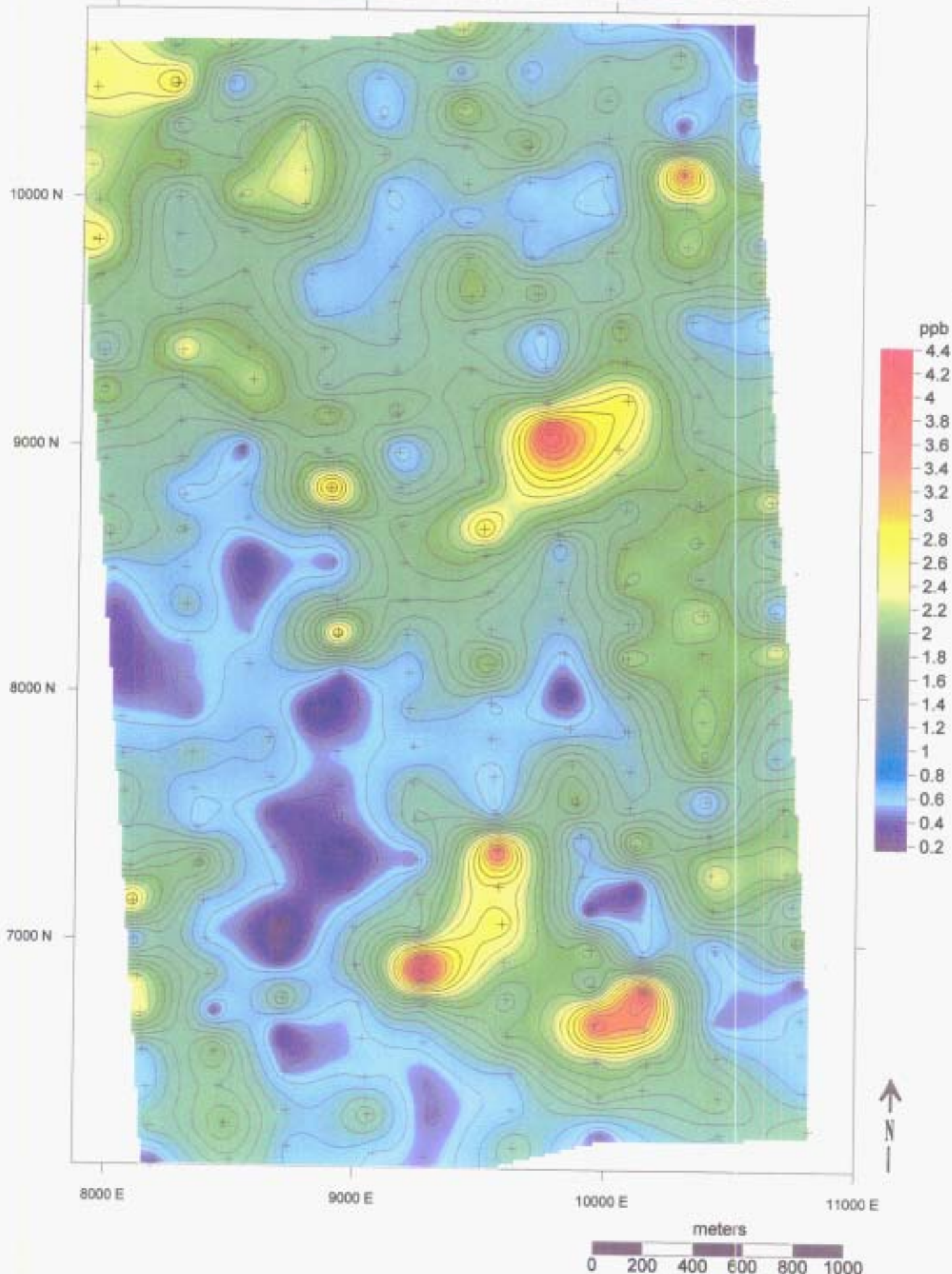




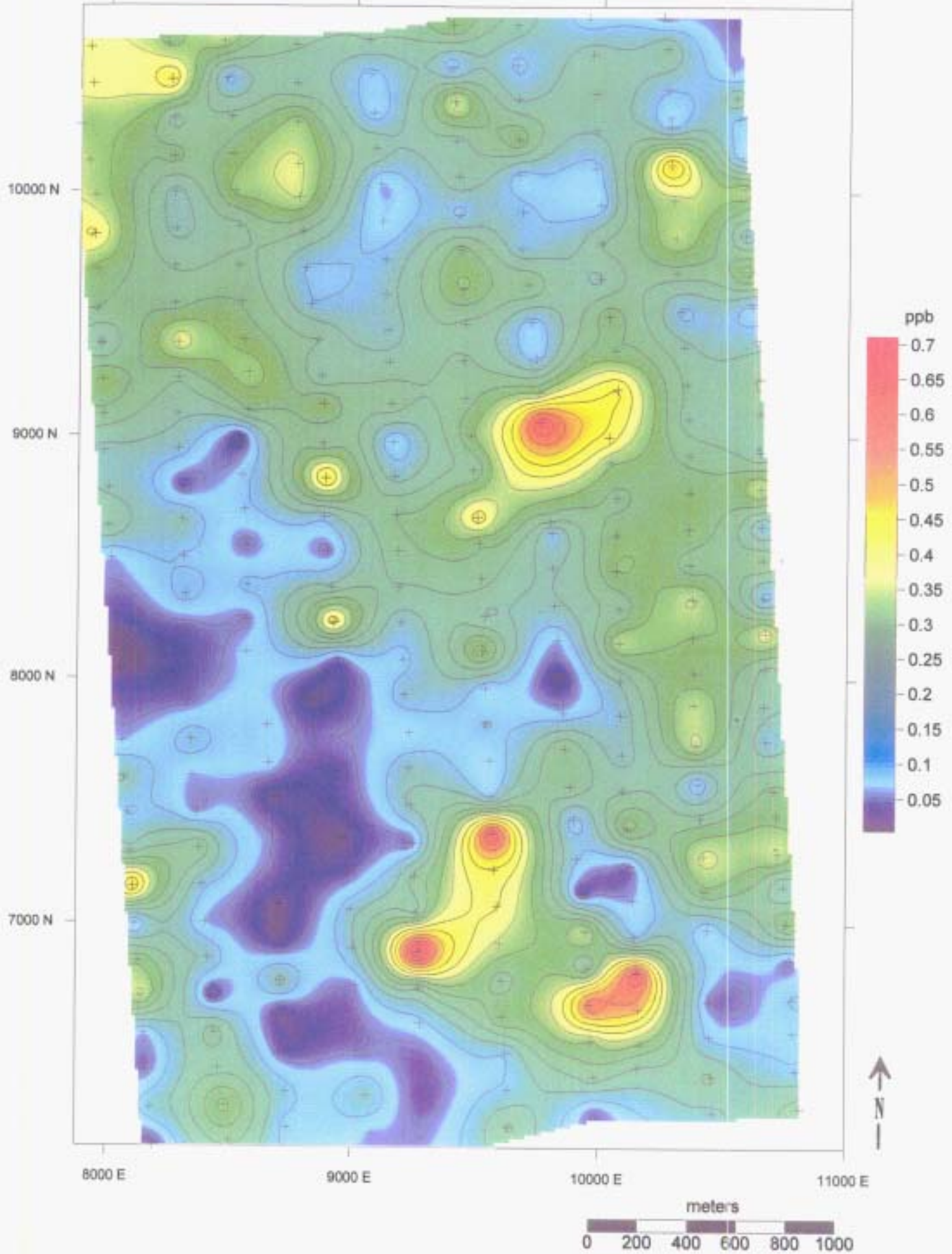


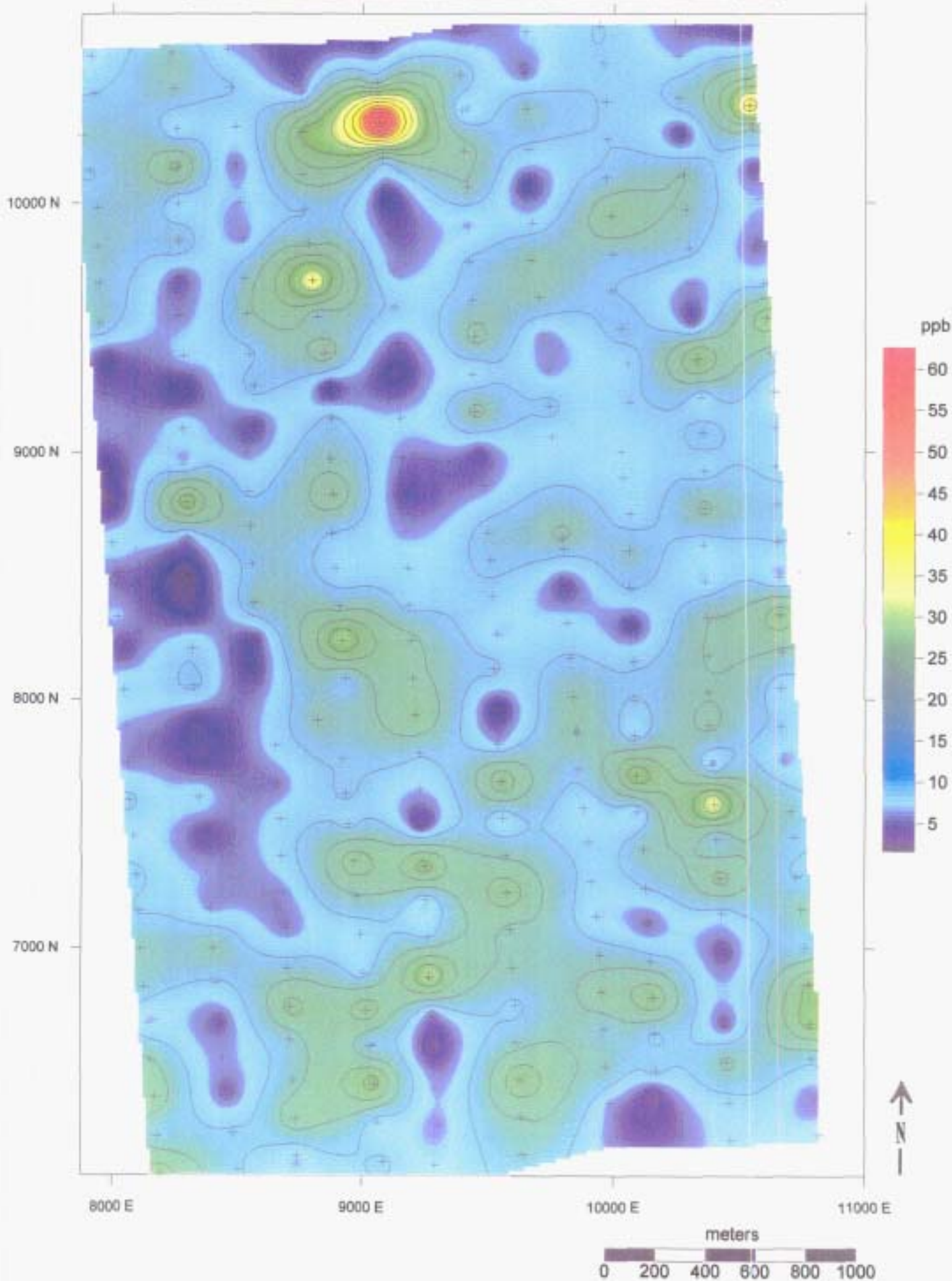


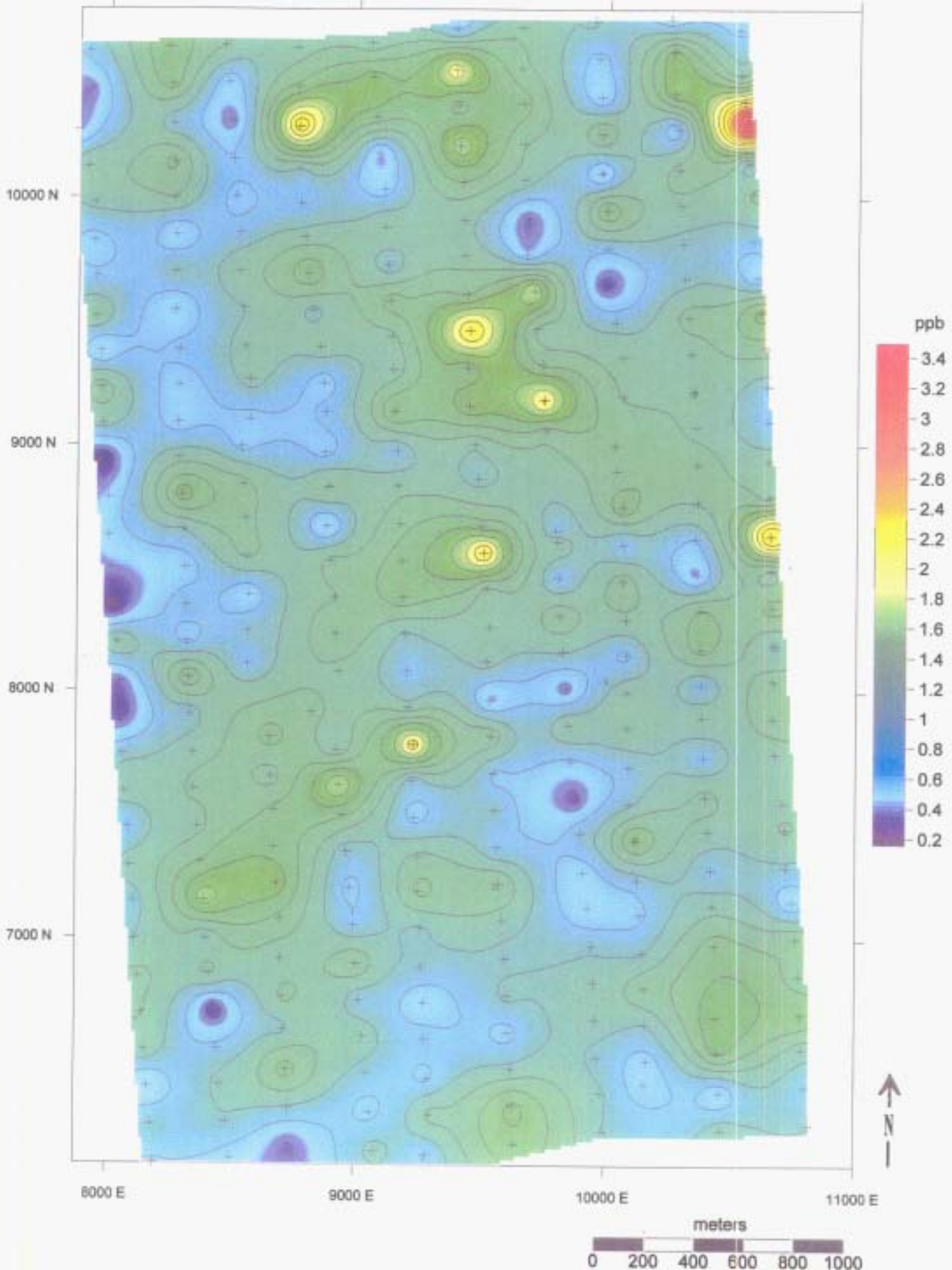
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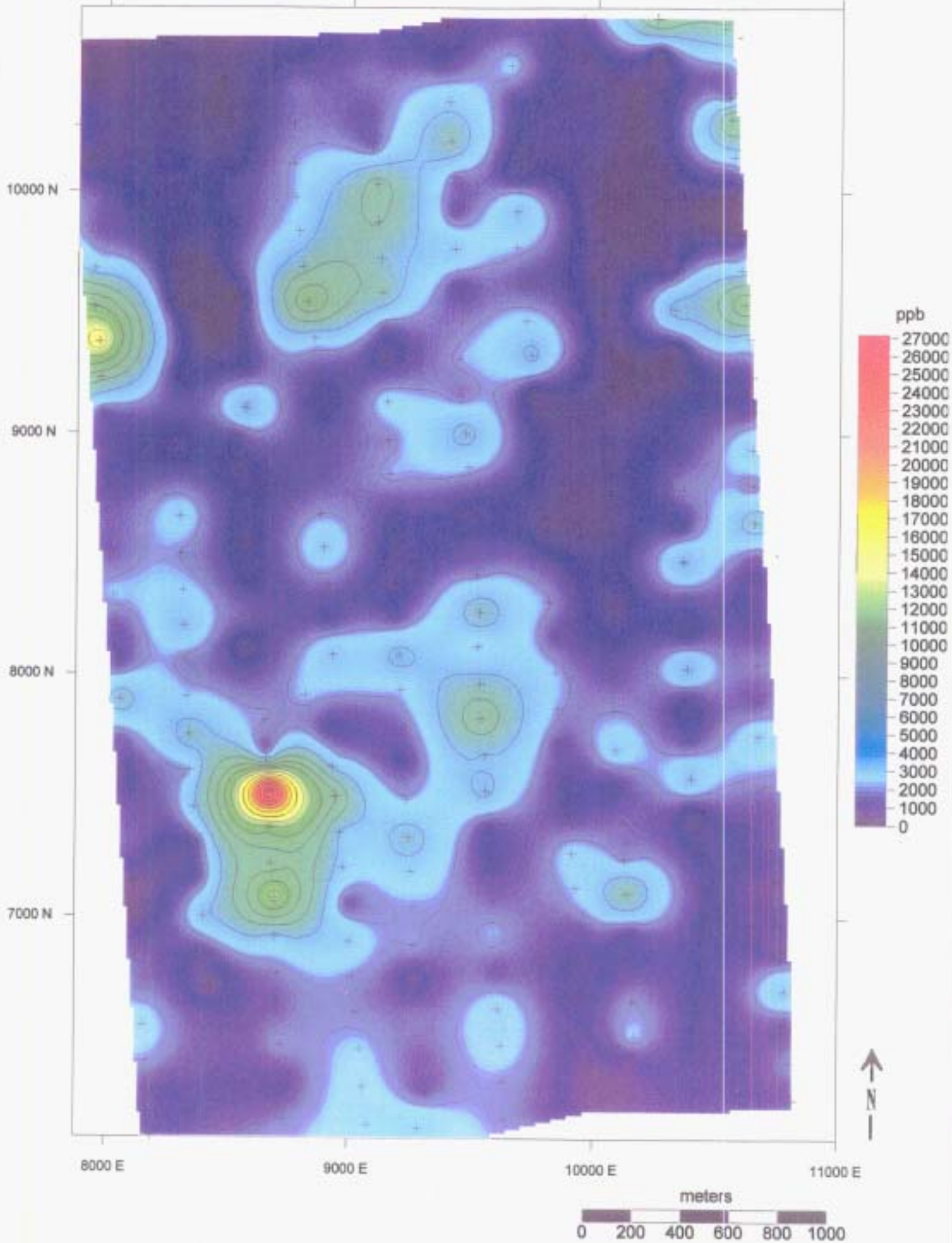
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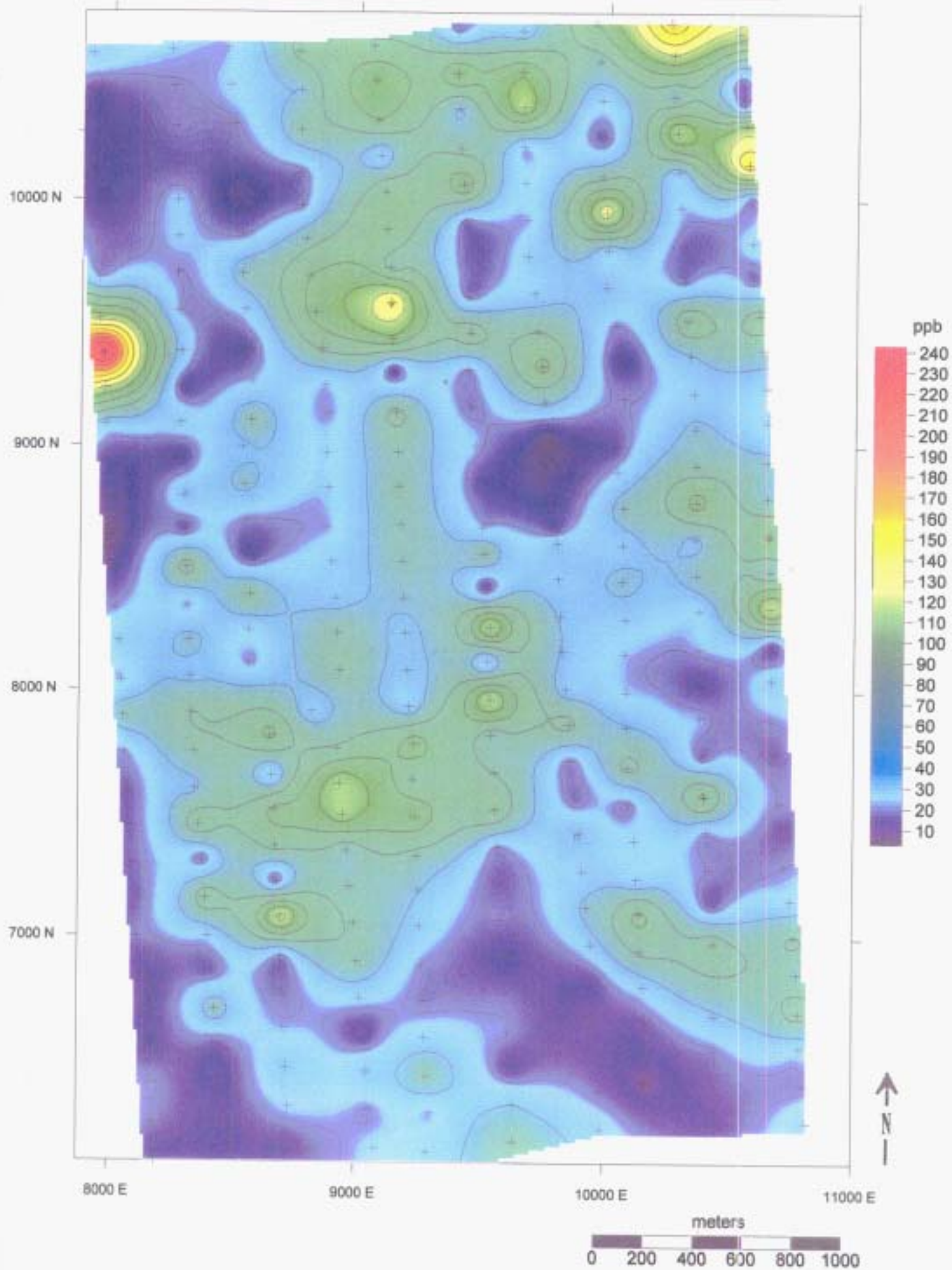


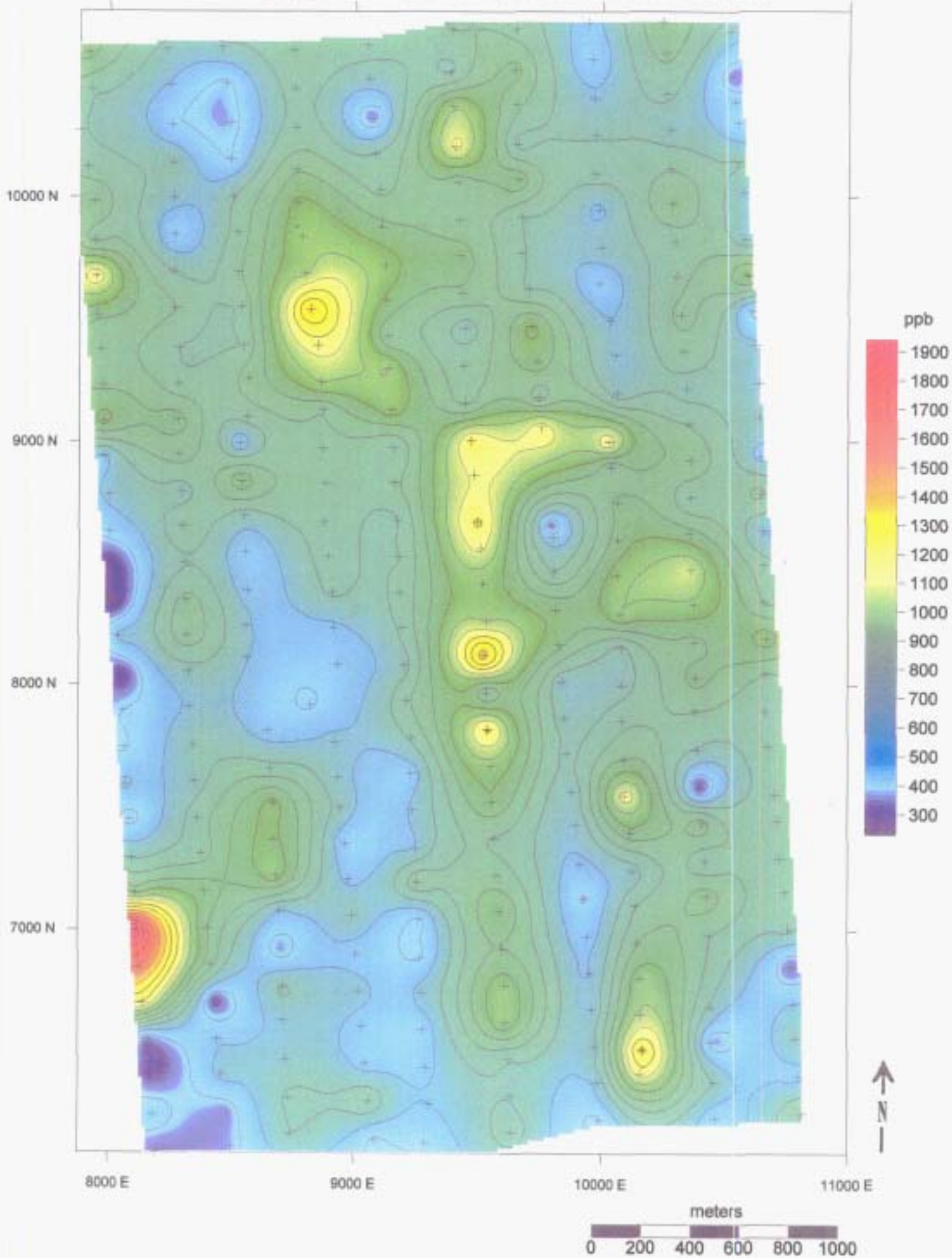


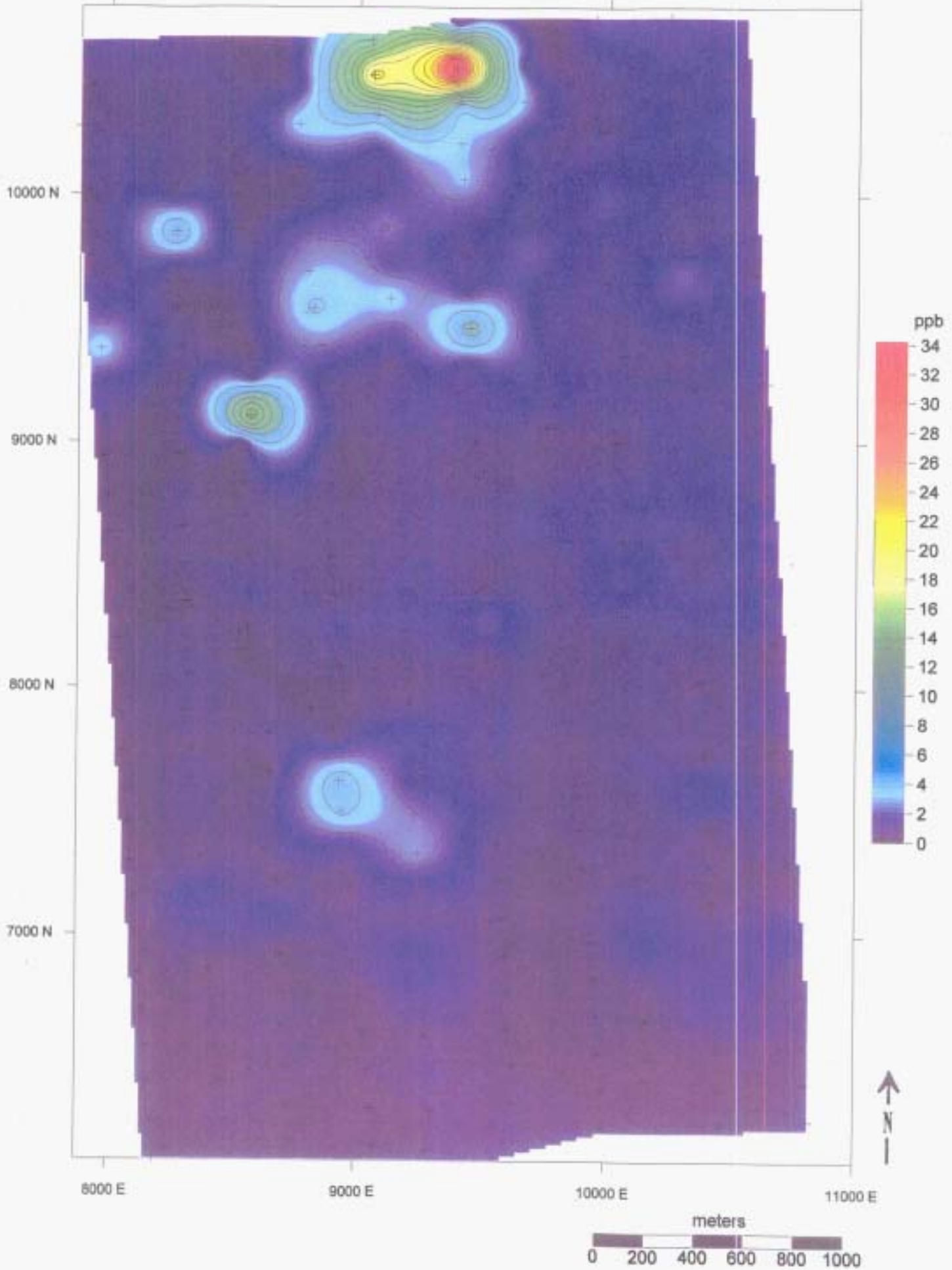


64

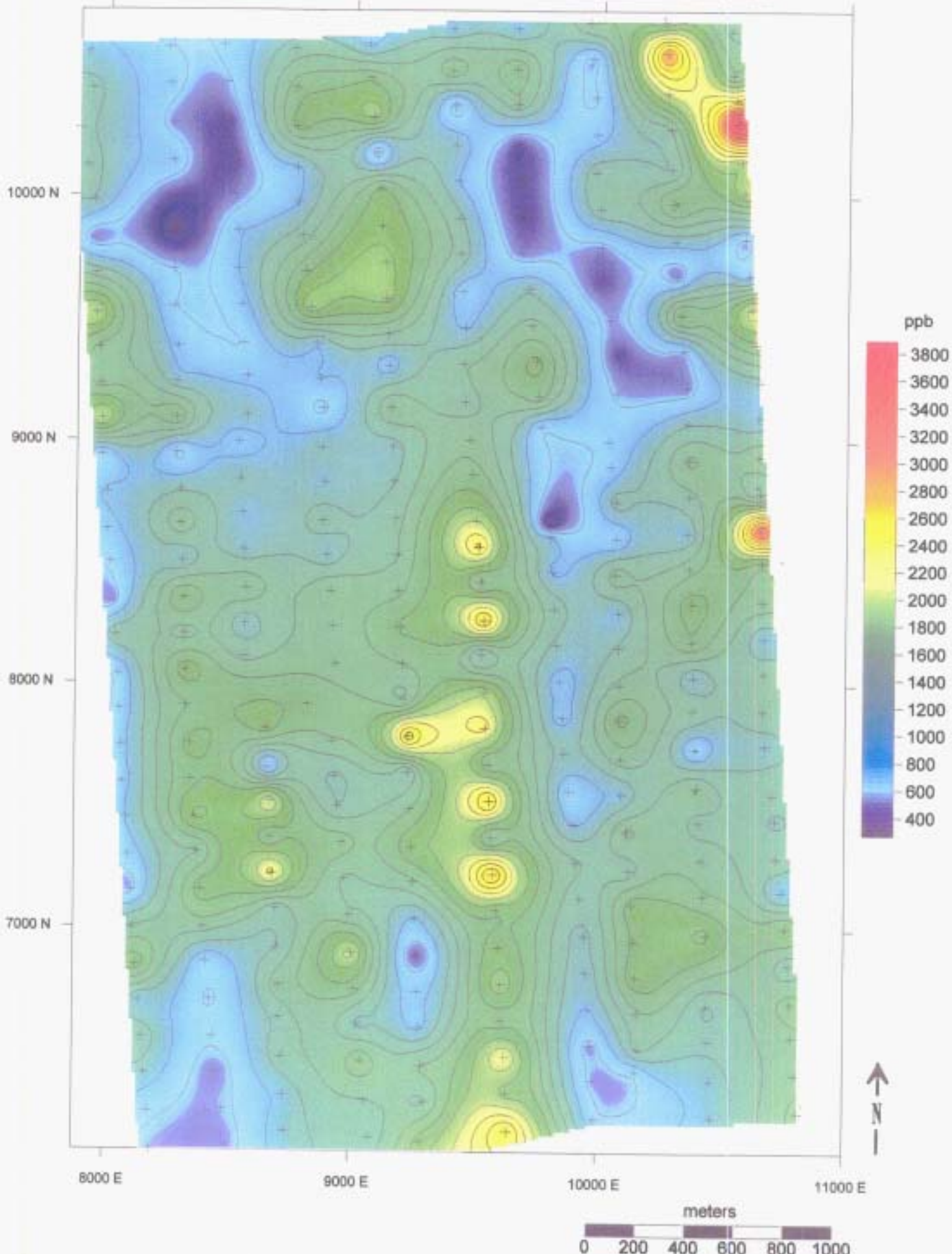




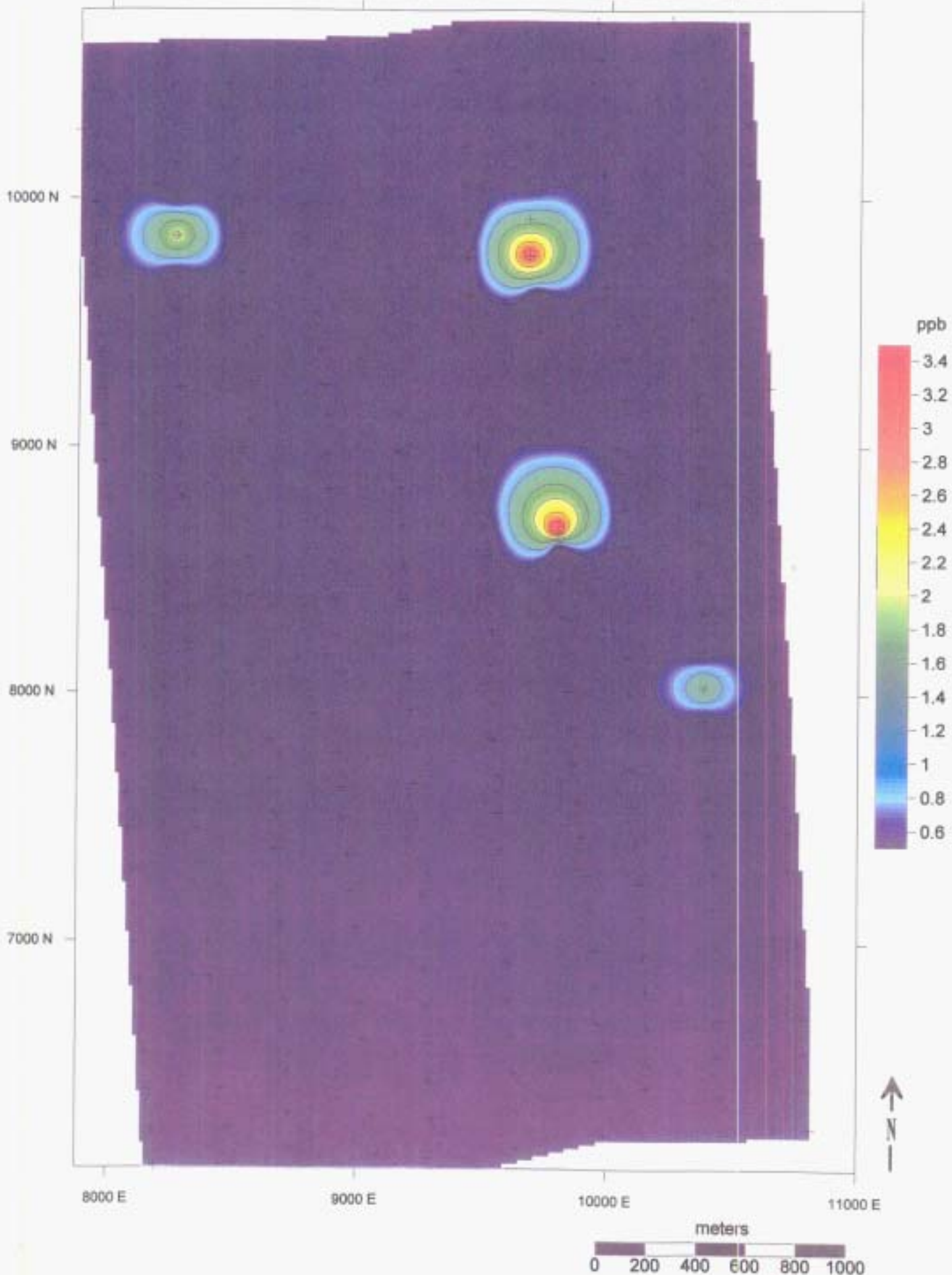




68



69



APPENDIX B

ANALYSES

17-Aug-01

ECO-TECH LABORATORIES LTD.
10041 Dallas Drive
KAMLOOPS, B.C.
V2C 6T4

ICP CERTIFICATE OF ANALYSIS AK 2001-246

RAGNAR BRUASET
5851 Halifax Street
BURNABY, BC
V5B 2P4

Phone: 250-573-5700
Fax : 250-573-4557

ATTENTION: RAGNAR BRUASET

No. of samples received: 2
Sample type: Rock
Project #: None Given
Shipment #: None Given
Samples submitted by: Ragnar Brusset

Values in ppm unless otherwise reported


Et #	Tag #	Sample		Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	TI %	U	V	W	Y	Zn
		Weight (g)	Au(ppb)																												
1	RB 2001-400R	4801	25	<0.2	0.54	5	45	<5	5.98	<1	21	29	210	5.05	<10	2.72	945	<1	0.03	11	1640	<2	<5	<20	409	<0.01	<10	91	<10	<1	32
2	RB 2001-453R	5070	10	<0.2	0.18	5	1460	<5	2.11	<1	6	107	5	1.72	<10	0.50	542	2	0.02	6	870	8	5	<20	107	<0.01	<10	15	<10	<1	44

AT L21W A1565 (2001 ENZYME LEACH GRID)
AT L15W 251165 (2001 ENZYME LEACH GRID)

QC DATA:

Repeat:																																
1	RB 2001-400R		25	<0.2	0.55	15	40	<5	5.83	<1	21	38	213	4.99	<10	2.68	929	2	0.03	13	1640	2	<5	60	394	<0.01	<10	90	<10	<1	32	
Repeat:																																
1	RB 2001-400R			<0.2	0.53	15	40	<5	5.90	<1	21	29	213	5.02	<10	2.69	937	<1	0.03	11	1610	<2	<5	60	399	<0.01	<10	90	<10	<1	32	
Standard:																																
	GEO'D1		125	1.0	1.63	60	140	<5	1.54	<1	19	55	86	3.42	<10	0.88	658	<1	0.02	25	710	20	10	40	62	0.10	<10	70	<10	<1	78	

FP/kk
df/239
XLS/01
Fax: 250-294-3568


ECO-TECH LABORATORIES LTD.
Frank J. Pezzoli, A.Sc.T.
B.C. Certified Assayer

Enzyme Leach Job #: 22897 Report#: 22673 Customer: Ragnar Bruaset Customer's Job #: RB 01-272
 Trace element values are in parts per billion. Negative values equal NOT DETECTED at that lower limit. Elements arranged by suite and by atomic mass.
 Values = 999999 are greater than the working range of the instrument. S.Q. = That element is determined SEMIQUANTITATIVELY.

Sample ID:	Oxidation Suite:															Base Metals:					
	S.Q.	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U	Co	Ni	Cu	Zn
RB 01-10S	11500	56	35	95.7	9.7	3	22.0	3.40	-0.5	0.8	0.006	0.983	0.4	1.14	1.09	17.7	19.0	59.7	51	0.3	
RB 01-11S	13900	65	33	83.0	6.4	1	15.9	2.41	-0.5	2.2	-0.005	0.788	0.5	1.69	0.94	45.3	15.1	50.0	22	0.6	
RB 01-12S	14800	79	31	59.5	6.1	2	18.8	1.46	-0.5	1.5	0.006	0.666	0.3	1.39	1.98	72.3	36.3	27.4	86	0.7	
RB 01-13S	34100	170	88	82.2	9.5	8	141.0	4.51	-0.5	2.4	0.186	1.210	0.2	1.16	1.68	16.3	16.0	299.0	37	0.8	
RB 01-14S	24200	93	41	114.0	8.0	7	44.8	2.65	-0.5	0.4	0.057	0.668	0.2	1.32	1.14	8.8	11.5	82.2	10	0.6	
RB 01-15S	24300	108	49	181.0	14.9	4	123.0	3.94	-0.5	1.7	0.031	0.648	0.4	2.89	2.17	18.7	17.9	124.0	-5	0.7	
RB 01-16S	20600	73	28	85.5	6.9	2	63.6	2.00	-0.5	6.5	-0.005	0.813	0.2	1.36	0.89	19.0	12.0	32.4	6	1.0	
RB 01-17S	14900	70	35	60.8	7.1	2	35.3	1.66	-0.5	4.7	0.006	0.326	-0.1	1.79	1.09	106.0	33.2	51.7	39	3.0	
RB 01-18S	7320	10	6	53.3	7.5	2	17.7	1.42	-0.5	2.1	-0.005	0.708	0.2	1.63	4.27	54.6	26.1	115.0	19	2.7	
RB 01-19S	14400	43	23	53.0	4.2	1	62.7	1.59	-0.5	1.5	0.010	0.379	0.1	2.13	1.42	19.8	11.1	17.4	22	1.8	
RB 01-20S	27300	63	23	62.1	4.5	2	38.1	2.13	-0.5	1.7	-0.005	0.484	0.2	0.81	0.84	16.8	7.3	16.7	22	2.3	
RB 01-21S	15800	37	21	55.0	3.3	-1	46.8	1.11	-0.5	0.8	-0.005	0.174	0.2	1.03	0.87	34.3	36.3	22.3	-5	0.9	
RB 01-22S	12000	167	59	136.0	11.2	7	107.0	2.61	-0.5	1.4	0.017	0.465	0.2	1.24	1.74	5.8	10.2	87.1	-5	0.5	
RB 01-23S	14000	120	47	118.0	8.7	4	82.5	4.18	-0.5	0.7	0.017	0.230	0.3	0.91	1.66	5.8	8.1	81.6	-5	0.3	
RB 01-24S	16000	56	43	211.0	12.0	3	72.8	4.08	-0.5	1.1	0.009	0.448	-0.1	1.32	1.81	16.0	12.8	87.3	-5	0.3	
RB 01-25S	20000	147	44	136.0	10.1	8	163.0	2.68	-0.5	1.9	0.019	0.314	-0.1	0.60	1.24	7.3	8.6	103.0	5	0.3	
RB 01-26S	17800	56	30	62.4	5.0	1	22.8	1.24	-0.5	0.6	-0.005	0.153	0.1	1.24	1.29	29.3	19.4	68.0	-5	0.5	
RB 01-27S	19100	170	49	216.0	13.2	8	303.0	3.35	-0.5	1.6	0.117	0.422	-0.1	1.05	3.87	6.0	12.2	137.0	-5	0.4	
RB 01-28S	15200	103	62	110.0	11.8	5	152.0	2.72	-0.5	0.7	0.020	0.230	-0.1	0.64	1.76	4.0	10.7	81.2	18	0.3	
RB 01-29S	18300	114	41	222.0	18.9	7	79.3	3.64	-0.5	1.3	0.051	0.382	-0.1	1.65	2.91	7.1	13.5	152.0	-5	0.3	
RB 01-30S	13200	76	34	153.0	20.3	5	90.1	3.91	-0.5	0.8	0.097	0.248	-0.1	1.70	2.29	8.6	10.5	120.0	-5	0.5	
RB 01-31S	13800	103	29	289.0	18.5	8	153.0	3.90	-0.5	1.4	0.043	0.412	-0.1	2.19	4.41	7.9	12.4	155.0	-5	0.5	
RB 01-32S	15600	64	26	213.0	15.0	4	42.3	3.82	-0.5	1.3	0.029	0.393	0.2	1.74	2.33	12.8	13.6	99.3	-5	0.3	
RB 01-33S	21800	68	14	98.2	7.6	6	111.0	3.76	-0.5	0.5	0.093	0.297	-0.1	0.93	4.20	5.1	12.0	135.0	-5	0.3	
RB 01-34S	16800	70	36	85.9	4.2	-1	23.5	2.30	-0.5	2.6	-0.005	0.335	-0.1	1.09	1.09	121.0	30.0	46.1	10	0.5	
RB 01-35S	18900	142	96	123.0	8.6	6	183.0	4.68	-0.5	1.3	0.049	0.320	-0.1	0.91	1.57	12.0	8.9	187.0	9	0.4	
RB 01-36S	17900	162	67	243.0	19.0	6	85.6	6.65	-0.5	1.2	0.083	0.191	-0.1	1.58	2.52	8.4	10.2	129.0	-5	0.2	
RB 01-37S	18800	71	30	217.0	10.0	8	158.0	5.04	-0.5	1.3	0.025	0.423	0.1	1.46	3.24	5.7	13.3	155.0	-5	0.3	
RB 01-38S	18600	129	57	507.0	23.4	9	354.0	6.98	-0.5	1.1	0.053	0.267	0.1	1.37	3.52	6.1	19.1	224.0	-5	0.2	
RB 01-39S	21400	74	32	114.0	8.1	2	67.8	2.60	-0.5	1.7	0.013	0.105	-0.1	1.94	1.74	23.8	18.0	54.7	5	0.5	
RB 01-40S	31700	81	44	113.0	6.4	2	57.2	3.99	-0.5	3.0	-0.005	0.234	-0.1	2.41	1.92	24.8	25.0	50.3	16	0.4	
RB 01-41S	26100	84	33	120.0	2.3	2	107.0	2.58	-0.5	0.6	0.013	0.126	0.1	0.66	0.85	8.6	5.5	26.4	-5	0.5	
RB 01-42S	35800	61	22	56.4	3.6	-1	64.9	1.65	-0.5	8.1	-0.005	0.179	0.1	1.30	0.93	38.7	24.3	16.0	13	1.3	
RB 01-43S	10800	46	35	133.0	10.6	4	65.8	2.69	-0.5	2.6	0.014	0.074	-0.1	1.65	1.55	36.6	9.9	76.6	-5	0.6	
RB 01-44S	22900	72	37	58.4	3.9	1	10.1	1.52	-0.5	2.1	0.008	0.164	-0.1	1.59	1.05	53.6	11.4	45.6	-5	0.5	
RB 01-45S	18700	43	54	69.6	8.6	-1	8.9	2.53	-0.5	0.7	-0.005	0.210	-0.1	1.38	0.95	65.6	14.0	115.0	23	1.1	
RB 01-46S	24700	107	78	315.0	15.8	6	195.0	5.32	-0.5	3.8	0.065	0.140	-0.1	1.04	1.55	15.1	12.6	740.0	15	0.6	
RB 01-47S	28100	111	36	202.0	10.1	16	36.3	1.63	-0.5	1.3	0.106	0.241	-0.1	1.16	0.85	7.3	5.7	69.2	-5	0.5	
RB 01-48S	22300	146	53	277.0	13.5	6	990.0	8.97	-0.5	7.1	0.142	0.194	-0.1	0.46	0.77	53.4	12.5	176.0	13	0.5	
RB 01-49S	25100	146	60	271.0	6.5	9	1520.0	16.60	-0.5	1.5	0.073	0.467	-0.1	0.30	0.70	5.4	12.6	304.0	13	0.4	
RB 01-50S	11100	65	37	84.9	9.8	2	12.7	2.54	-0.5	1.2	0.005	0.330	-0.1	2.04	1.34	74.1	24.9	126.0	19	0.5	
RB 01-51S	10100	64	36	107.0	16.4	1	20.5	3.53	-0.5	2.1	-0.005	0.096	-0.1	0.92	0.65	73.0	22.0	56.4	-5	0.5	
RB 01-52S	14500	68	32	82.4	13.1	2	24.6	2.88	-0.5	0.9	-0.005	0.135	-0.1	1.22	0.98	97.3	22.4	46.7	25	0.6	
RB 01-53S	12300	97	50	120.0	11.8	2	13.0	4.36	-0.5	0.6	-0.005	0.084	-0.1	3.04	2.29	19.8	24.2	113.0	10	0.3	
RB 01-54S	8270	59	38	111.0	12.1	2	7.4	4.20	-0.5	0.6	-0.005	0.055	-0.1	1.87	1.14	34.4	18.8	107.0	7	0.3	
RB 01-55S	11500	64	43	103.0	9.9	2	8.5	4.15	-0.5	0.3	0.006	0.228	0.2	1.24	1.05	27.4	13.8	88.2	-5	0.2	
RB 01-56S	24800	72	38	44.4	16.3	3	12.4	4.86	-0.5	0.5	0.005	0.529	2.1	1.44	0.90	107.0	20.8	92.5	35	1.0	
RB 01-57S	38600	129	61	187.0	28.7	12	150.0	6.40	-0.5	2.0	0.043	0.720	1.8	1.41	1.28	32.0	19.1	178.0	-5	0.8	
RB 01-58S	31500	141	79	80.2	16.1	11	31.9	3.90	-0.5	1.5	0.028	0.692	1.4	2.81	1.31	20.4	22.0	150.0	11	0.7	
RB 01-59S	24200	71	54	71.7	30.7	3	8.9	3.98	-0.5	0.9	-0.005	0.290	1.0	1.84	0.91	33.1	22.6	83.2	18	0.7	
RB 01-60S	20200	70	40	40.1	8.3	3	7.3	1.96	-0.5	0.2	0.009	0.177	0.7	2.53	2.13	44.2	11.0	136.0	-5	0.7	
RB 01-61S	35600	109	78	91.4	17.6	7	34.6	7.73	-0.5	2.6	0.043	0.363	1.2	1.55	1.05	40.8	18.9	271.0	9	0.6	
RB 01-62S	32500	142	105	117.0	12.9	12	79.5	11.10	-0.5	3.1	0.080	0.398	1.1	1.61	1.77	21.7	8.8	511.0	-5	0.2	
RB 01-63S	20400	69	27	43.1	11.0	1	3.5	2.60	-0.5	-0.1	0.017	0.261	0.9	0.97	0.69	67.0	17.1	77.7	18	0.5	
RB 01-64S	22500	201	60	213.0	20.5	9	29.5	6.39	-0.5	2.1	0.032	0.232	1.2	1.12	1.03	8.2	7.6	173.0	-5	0.3	

Enzyme Leach Job #: 22897 Report#: 22673

Customer: Ragnar Bruaset

Customer's Job #: RB 01-272

Trace element values are in parts per billion. Negative values equal NOT DETECTED at that lower limit. Elements arranged by suite and by atomic mass.

Values = 999999 are greater than the working range of the instrument. S.Q. = That element is determined SEMIQUANTITATIVELY.

Enhanced Package:

Oxidation Suite:

Sample ID:	S.Q.	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U
RB 01-65S	22500		65	57	86.0	9.2	3	5.2	3.27	-0.5	0.2	0.006	0.567	1.0	1.85	1.13	
RB 01-66S	24000		126	88	196.0	28.0	23	191.0	7.26	-0.5	3.6	0.073	0.474	0.7	1.20	1.25	
RB 01-67S	10700		74	47	99.9	7.7	3	25.2	2.91	-0.5	1.4	0.008	0.089	0.6	1.97	0.95	
RB 01-68S	34200		67	36	63.0	12.5	3	11.0	2.41	-0.5	0.3	-0.005	0.253	1.0	0.85	0.77	
RB 01-69S	22300		58	28	79.9	15.5	1	7.3	2.83	-0.5	0.3	0.006	0.212	1.0	0.99	0.73	
RB 01-70S	13100		72	34	52.2	9.4	1	4.5	5.40	-0.5	-0.1	-0.005	0.331	0.7	1.20	0.76	
RB 01-71S	19200		57	31	67.3	6.0	1	6.4	1.60	-0.5	0.3	-0.005	0.125	1.4	0.99	0.67	
RB 01-72S	19800		302	76	140.0	27.8	8	26.5	11.10	-0.5	2.2	0.047	0.281	0.8	0.62	0.90	
RB 01-73S	18100		48	23	34.3	9.3	3	5.3	2.05	-0.5	-0.1	0.009	0.169	0.3	0.86	0.68	
RB 01-74S	16800		45	22	47.6	5.7	-1	1.5	2.46	-0.5	-0.1	0.008	0.125	0.9	1.38	0.92	
RB 01-75S	21000		61	48	93.8	1020.0	2	3.3	16.10	-0.5	-0.1	0.013	1.250	0.8	2.09	1.01	
RB 01-76S	20400		78	34	111.0	10.6	2	10.7	2.43	-0.5	-0.1	-0.005	0.097	0.7	1.12	0.73	
RB 01-77S	13400		46	27	113.0	9.1	2	3.8	1.53	-0.5	-0.1	-0.005	0.125	0.5	1.33	0.71	
RB 01-78S	12200		46	37	134.0	14.8	2	7.1	2.66	-0.5	0.7	0.007	0.217	0.5	2.10	1.42	
RB 01-79S	21200		236	130	213.0	21.6	7	15.3	6.58	-0.5	0.6	0.022	0.136	0.7	1.46	1.69	
RB 01-80S	23700		139	87	235.0	23.7	10	48.8	17.70	-0.5	1.3	0.024	0.084	0.9	0.93	1.22	
RB 01-81S	26400		126	42	92.2	9.3	3	9.0	3.76	-0.5	-0.1	0.012	0.080	0.7	1.08	0.93	
RB 01-82S	15300		73	38	77.0	15.7	3	6.2	5.81	-0.5	0.3	0.012	-0.005	0.3	1.31	0.80	
RB 01-83S	23500		49	22	64.5	17.4	2	8.6	6.60	-0.5	-0.1	-0.005	0.297	0.8	0.56	0.54	
RB 01-84S	21700		81	31	119.0	10.9	4	22.1	3.52	-0.5	0.5	0.012	0.110	0.7	0.97	0.68	
RB 01-85S	23200		106	45	123.0	13.4	7	317.0	2.35	-0.5	0.6	0.042	0.196	0.4	1.32	0.88	
RB 01-86S	15700		435	110	298.0	28.3	10	632.0	8.86	-0.5	1.7	0.180	0.195	0.5	1.18	3.87	
RB 01-87S	30800		103	42	106.0	11.5	3	24.6	1.96	-0.5	0.2	0.007	0.114	0.6	1.38	1.19	
RB 01-88S	21900		124	67	84.6	10.2	2	10.5	1.67	-0.5	0.2	0.007	0.195	0.6	2.13	1.28	
RB 01-89S	18800		72	34	63.8	3.8	2	2.6	1.13	-0.5	-0.1	0.013	0.242	0.6	1.25	1.28	
RB 01-90S	28000		103	46	89.2	9.2	2	9.5	2.90	-0.5	-0.1	-0.005	0.163	0.4	2.54	1.25	
RB 01-91S	27700		93	47	109.0	14.6	4	31.7	2.07	-0.5	0.9	0.022	0.154	0.6	2.12	1.73	
RB 01-92S	22200		274	113	155.0	13.0	8	12.4	4.34	-0.5	0.2	0.034	0.086	0.5	0.95	1.20	
RB 01-93S	17700		123	88	423.0	17.3	8	28.9	5.56	-0.5	0.6	0.059	0.110	0.5	0.92	1.66	
RB 01-94S	18300		57	30	95.0	3.8	5	10.6	12.50	-0.5	0.4	0.006	0.117	0.5	1.22	0.75	
RB 01-95S	15200		153	161	556.0	26.6	5	42.6	6.89	-0.5	2.1	0.026	0.070	0.7	0.59	0.65	
RB 01-96S	15200		167	88	652.0	26.3	5	26.9	4.61	-0.5	0.9	0.032	0.122	0.4	0.55	0.62	
RB 01-97S	18100		220	73	114.0	6.4	9	34.0	3.01	-0.5	1.5	0.011	0.192	0.5	1.02	0.68	
RB 01-98S	9580		40	24	77.1	9.1	1	9.3	1.98	-0.5	0.4	-0.005	0.107	0.2	1.21	0.73	
RB 01-99S	13300		247	50	300.0	12.0	7	93.0	4.97	-0.5	-0.1	0.087	-0.005	0.4	0.44	0.70	
RB 01-100S	21800		157	55	573.0	21.1	7	430.0	6.42	-0.5	0.8	0.031	-0.005	0.5	0.87	0.80	
RB 01-101S	10200		213	62	276.0	9.6	9	60.6	7.83	-0.5	1.0	0.161	0.029	0.5	0.46	0.91	
RB 01-102S	17800		189	53	239.0	10.5	12	52.1	6.51	-0.5	1.7	0.097	0.298	2.6	0.48	0.83	
RB 01-103S	10600		105	35	373.0	17.0	5	790.0	4.39	-0.5	4.2	0.026	0.632	3.0	0.47	0.42	
RB 01-104S	17900		186	81	219.0	11.8	8	135.0	3.58	-0.5	1.4	0.184	0.345	2.1	0.34	0.74	
RB 01-105S	16300		182	55	158.0	10.7	5	13.9	4.22	-0.5	1.2	0.013	0.209	2.1	1.20	1.34	
RB 01-106S	13000		87	25	184.0	12.1	5	10.1	2.26	-0.5	1.8	0.012	0.353	2.3	1.17	1.04	
RB 01-107S	14300		99	36	169.0	12.9	5	22.9	3.06	-0.5	1.0	0.026	0.241	2.0	2.63	2.93	
RB 01-108S	21600		153	43	241.0	14.9	8	29.7	4.67	-0.5	1.7	0.021	0.445	1.4	0.80	1.01	
RB 01-109S	28600		100	52	21.5	24.5	4	22.6	5.57	-0.5	0.6	0.005	0.650	1.5	1.12	1.10	
RB 01-110S	29400		407	93	198.0	23.9	11	359.0	8.10	-0.5	2.2	0.187	0.281	1.2	0.81	1.38	
RB 01-111S	25300		120	55	179.0	19.9	10	81.5	3.89	-0.5	1.0	0.031	0.255	1.3	1.20	1.14	
RB 01-112S	26700		220	43	199.0	8.5	10	28.6	3.89	-0.5	2.6	0.058	0.395	1.2	1.02	0.56	
RB 01-113S	34100		119	44	96.6	13.8	6	11.7	2.87	-0.5	0.5	0.019	0.122	0.8	1.09	0.88	
RB 01-114S	15800		208	39	76.7	10.1	5	14.1	1.83	-0.5	0.3	0.008	0.159	1.1	1.11	1.21	
RB 01-115S	17200		246	64	276.0	19.9	8	45.8	3.55	-0.5	0.8	0.030	0.199	0.7	1.02	0.92	
RB 01-116S	13600		76	20	227.0	14.1	5	17.9	3.05	-0.5	0.6	0.016	0.196	0.9	0.77	0.94	
RB 01-117S	7690		77	31	189.0	16.0	5	9.2	2.25	-0.5	0.9	-0.005	0.302	0.9	1.06	0.81	
RB 01-118S	3740		122	41	300.0	13.9	3	130.0	2.45	-0.5	1.3	0.065	0.094	1.1	0.34	0.58	
RB 01-119S	15100		180	52	363.0	25.2	8	117.0	2.82	-0.5	0.9	0.068	0.120	0.6	0.59	0.82	

Base Metals:

Co	Ni	Cu	Zn	Pb
23.8	20.1	75.8	18	0.3
19.0	16.5	278.0	13	0.6
48.9	11.2	68.1	6	0.4
55.1	14.4	63.8	6	0.5
33.1	11.6	38.3	14	0.6
68.0	12.1	32.8	10	0.6
70.0	14.7	24.0	12	0.6
16.4	4.6	184.0	-5	0.2
57.3	19.6	52.4	22	0.1
58.1	16.2	56.6	-5	0.2
20.8	9.4	80.9	29	0.3
16.3	13.8	60.2	-5	-0.1
39.7	13.2	42.0	16	0.1
83.1	50.0	124.0	39	1.7
28.4	33.2	157.0	-5	0.3
17.7	19.4	165.0	8	0.3
17.9	18.6	63.6	6	0.2
52.2	20.1	49.1	5	0.4
71.7	20.2	39.5	107	0.4
25.0	14.2	161.0	-5	0.2
16.4	12.6	83.7	-5	0.1
6.2	19.7	164.0	-5	0.1
19.6	16.7	63.4	9	0.3
37.9	20.2	64.7	70	0.7
50.2	16.8	65.5	38	0.5
71.2	44.9	76.0	100	0.8
14.1	15.1	119.0	9	0.6
12.6	7.4	293.0	6	-0.1
15.1	19.6	113.0	-5	-0.1
2.5	16.6	256.0	-5	0.1
10.2	21.3	135.0	-5	-0.1
3.0	8.9	101.0	-5	-0.1
1.1	15.9	117.0	-5	0.2
22.4	16.3	49.4	-5	-0.1
4.9	6.6	53.8	-5	-0.1
26.6	19.5	140.0	-5	0.1
1.6	12.4	120.0	24	0.1
2.3	10.4	77.5	12	-0.1
20.6	22.5	116.0	15	0.4
5.5	13.3	84.4	24	-0.1
12.3	26.9	90.1	104	0.3
6.1	10.3	59.4	6	0.2
7.3	19.0	109.0	-5	0.2
4.2	22.0	80.9	-5	-0.1
63.4	6.2	184.0	-5	0.5
13.0	25.9	208.0	-5	0.3
12.1	19.9	109.0	-5	0.2
1.7	19.4	134.0	10	0.3
14.0	16.9	65.8	-5	0.2
21.9	15.9	73.5	10	0.2
19.5	17.5	89.0	10	-0.1
8.6	14.0	85.2	15	-0.1
3.1	11.6	68.5	72	0.1
2.4	8.9	53.4	98	0.2
3.8	16.1	97.3	14	-0.1

Enzyme Leach Job #: 22897 Report#: 22673

Customer: Ragnar Bruaset

Customer's Job #: RB 01-272

Trace element values are in parts per billion. Negative values equal NOT DETECTED at that lower limit. Elements arranged by suite and by atomic mass.

Values = 999999 are greater than the working range of the instrument. S.Q. = That element is determined SEMIQUANTITATIVELY.

Enhanced Package:

Oxidation Suite:

Sample ID:	Oxidation Suite:															Base Metals:					
	S.Q.	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U	Co	Ni	Cu	Zn
RB 01-120S	13800	66	35	102.0	7.4	3	17.4	3.17	-0.5	0.6	-0.005	0.115	0.7	1.18	0.86	14.0	12.8	63.1	-5	0.2	
RB 01-121S	11400	61	28	83.7	5.5	1	18.7	1.98	-0.5	1.4	-0.005	0.162	0.4	1.51	0.90	55.9	25.1	62.1	237	0.2	
RB 01-122S	22300	138	49	85.3	9.0	4	35.8	3.56	-0.5	1.4	0.047	0.080	0.7	1.84	1.65	22.7	26.0	154.0	83	0.3	
RB 01-123S	19900	51	24	54.4	3.1	1	2.2	1.30	-0.5	1.0	0.017	0.111	0.9	1.26	0.86	57.4	17.9	62.4	70	0.6	
RB 01-124S	10600	93	41	69.6	7.2	2	11.9	1.73	-0.5	1.9	-0.005	0.144	0.7	1.52	1.06	43.0	13.7	83.7	327	0.4	
RB 01-125S	6060	55	27	95.3	9.5	2	18.5	1.30	-0.5	2.9	-0.005	0.104	0.8	1.32	0.92	63.4	26.3	55.6	172	0.5	
RB 01-126S	22300	123	112	184.0	27.6	7	209.0	8.19	-0.5	3.0	0.030	0.191	0.4	1.19	2.08	17.4	44.5	408.0	27	0.3	
RB 01-127S	8110	66	27	85.6	9.8	2	15.4	1.87	-0.5	2.0	-0.005	0.108	0.5	1.58	1.07	29.5	13.6	107.0	95	0.6	
RB 01-128S	11200	49	25	93.4	10.5	2	16.3	3.14	-0.5	2.1	0.008	0.031	0.5	1.62	1.00	62.0	21.4	103.0	117	0.4	
RB 01-129S	12600	69	22	102.0	12.5	1	33.6	1.39	-0.5	2.7	-0.005	-0.005	0.5	0.95	0.83	40.3	14.0	86.2	106	0.6	
RB 01-130S	6160	72	31	64.1	8.5	2	18.2	3.33	-0.5	1.9	0.005	0.019	0.6	1.98	2.36	41.5	20.8	107.0	75	0.4	
RB 01-131S	7700	74	34	99.1	25.7	4	23.5	2.75	-0.5	1.9	0.072	0.068	0.6	2.14	2.02	42.7	12.5	124.0	48	0.4	
RB 01-132S	6960	61	43	119.0	16.5	4	28.9	4.96	-0.5	2.1	0.013	0.074	0.3	2.04	2.30	28.0	22.1	164.0	86	0.2	
RB 01-133S	11500	166	53	154.0	16.3	7	70.2	3.81	-0.5	2.1	0.035	0.047	0.6	0.70	1.09	4.5	9.6	81.3	23	-0.1	
RB 01-134S	2440	73	37	85.8	12.3	-1	13.9	2.56	-0.5	1.9	-0.005	0.101	0.4	2.86	1.59	33.3	20.6	86.1	61	0.5	
RB 01-135S	5210	71	27	80.0	9.7	2	29.0	1.11	-0.5	3.6	0.011	-0.005	0.2	1.60	1.08	37.2	17.5	42.1	45	0.6	
RB 01-136S	11900	81	34	86.9	8.0	1	57.2	1.93	-0.5	6.6	0.018	-0.005	0.1	2.60	1.19	81.4	29.0	60.4	113	0.9	
RB 01-137S	5820	56	21	95.3	9.6	1	25.2	1.85	-0.5	4.2	-0.005	0.008	0.3	1.28	1.03	16.3	19.5	45.4	30	0.7	
RB 01-138S	7380	86	31	97.5	12.2	3	104.0	1.46	-0.5	4.6	0.011	-0.005	0.1	1.45	1.36	35.3	21.4	75.5	43	0.6	
RB 01-139S	13200	129	42	132.0	12.3	3	19.9	2.30	-0.5	1.7	0.006	-0.005	0.6	1.35	1.12	11.4	11.2	82.8	18	0.3	
RB 01-140S	6790	67	43	117.0	11.5	3	17.1	2.79	-0.5	2.2	0.015	-0.005	0.4	2.17	1.67	47.6	27.6	122.0	261	0.3	
RB 01-141S	5640	67	46	104.0	7.8	4	12.6	3.57	-0.5	2.4	-0.005	0.446	0.4	2.44	1.41	57.9	29.2	99.5	249	0.5	
RB 01-142S	4730	75	55	70.4	6.8	3	7.5	3.04	-0.5	0.8	-0.005	0.097	-0.1	2.07	1.51	50.9	30.7	128.0	424	0.3	
RB 01-143S	9340	138	64	213.0	16.0	6	39.3	3.62	-0.5	1.9	0.016	0.081	0.2	1.11	1.07	13.1	16.0	151.0	53	0.3	
RB 01-144S	9890	84	37	98.3	11.4	3	68.5	3.59	-0.5	1.7	0.020	0.184	0.5	1.25	1.02	26.1	20.1	127.0	108	0.3	
RB 01-145S	6680	64	40	79.7	11.3	2	39.4	4.60	-0.5	1.6	0.015	-0.005	0.5	2.33	2.55	56.8	28.4	141.0	108	0.5	
RB 01-146S	7440	92	41	117.0	16.2	3	57.5	3.27	-0.5	2.3	0.014	-0.005	0.3	3.23	3.24	32.8	23.6	114.0	89	1.0	
RB 01-147S	10900	154	89	164.0	23.0	10	882.0	9.44	-0.5	6.2	0.158	0.019	0.7	1.49	2.31	22.6	24.3	220.0	8	0.4	
RB 01-148S	12500	166	93	269.0	28.8	8	149.0	6.92	-0.5	2.7	0.039	0.112	0.5	0.82	1.38	4.4	33.1	277.0	617	0.2	
RB 01-149S	5770	133	67	325.0	35.4	6	267.0	5.73	-0.5	8.4	0.084	0.044	0.5	1.11	1.07	31.7	11.3	157.0	36	0.2	
RB 01-150S	20000	54	29	50.7	5.7	1	15.9	1.15	-0.5	2.9	0.009	0.212	2.0	0.87	0.54	138.0	33.3	31.7	36	0.3	
RB 01-151S	25600	53	35	110.0	12.2	2	24.8	2.17	-0.5	2.9	-0.005	0.533	3.1	1.13	1.24	13.1	11.7	84.0	-5	0.4	
RB 01-152S	21000	53	42	91.1	9.2	3	32.3	3.48	-0.5	2.2	0.006	0.592	2.2	1.68	2.21	15.6	20.2	133.0	-5	0.2	
RB 01-153S	20200	138	114	146.0	18.1	7	315.0	6.63	-0.5	3.2	0.041	0.350	2.0	1.11	3.84	12.7	20.9	169.0	-5	0.2	
RB 01-154S	22000	46	30	95.8	6.6	2	12.5	1.61	-0.5	1.4	0.007	0.323	3.1	1.17	0.62	29.8	13.8	24.4	12	0.2	
RB 01-155S	29300	135	62	239.0	20.4	10	92.8	6.09	-0.5	2.2	0.105	0.293	1.4	1.59	4.27	8.0	12.3	144.0	-5	0.1	
RB 01-156S	25300	112	81	280.0	28.2	6	117.0	4.66	-0.5	0.7	0.021	0.139	1.2	1.92	1.77	14.0	12.2	137.0	-5	0.2	
RB 01-157S	17800	60	44	79.6	14.3	3	13.8	3.39	-0.5	0.9	0.008	0.240	1.1	2.04	1.99	15.8	9.3	76.3	-5	0.2	
RB 01-158S	20800	145	57	154.0	20.6	8	67.5	6.69	-0.5	0.9	0.062	0.246	1.1	2.20	1.74	9.2	7.9	83.5	-5	0.2	
RB 01-159S	23000	73	42	94.4	11.2	4	14.8	4.43	-0.5	0.9	-0.005	0.204	0.9	1.61	1.27	23.9	24.1	124.0	41	0.6	
RB 01-160S	27700	115	53	135.0	11.7	6	24.3	2.82	-0.5	0.9	0.012	0.179	0.8	1.60	1.48	8.9	10.8	114.0	-5	0.5	
RB 01-161S	15200	86	38	71.0	10.0	3	11.4	4.23	-0.5	1.2	0.009	0.166	0.9	1.31	1.08	14.3	11.7	103.0	-5	0.3	
RB 01-162S	8570	36	26	74.4	11.9	1	16.8	2.16	-0.5	1.4	-0.005	0.213	0.7	1.76	0.88	24.1	9.3	48.6	-5	0.2	
RB 01-163S	11600	48	35	87.4	9.7	2	28.8	1.72	-0.5	2.4	-0.005	0.289	0.8	1.56	0.97	42.0	16.0	40.9	-5	0.4	
RB 01-164S	16900	175	71	98.6	9.7	6	88.2	8.15	-0.5	3.1	0.034	0.248	1.1	0.52	0.90	16.5	21.8	123.0	-5	0.3	
RB 01-165S	36200	149	188	197.0	19.3	15	246.0	7.98	-0.5	4.1	0.047	0.583	1.0	1.40	2.48	14.1	31.2	370.0	-5	0.3	
RB 01-166S	16500	63	42	81.5	13.7	4	23.5	2.84	-0.5	2.4	0.013	0.211	0.6	1.49	0.97	24.9	26.2	134.0	-5	0.2	
RB 01-167S	9550	36	19	101.0	10.6	1	43.4	1.27	-0.5	3.9	0.008	0.220	0.6	1.11	0.76	43.1	12.0	31.9	10	0.4	
RB 01-168S	14200	62	34	40.8	5.4	3	15.8	1.16	-0.5	0.6	0.008	0.075	0.6	1.09	0.74	61.5	18.4	49.0	84	0.6	
RB 01-169S	10600	66	27	62.3	7.8	2	17.5	1.94	-0.5	1.0	0.008	0.133	0.7	1.47	0.83	36.8	12.7	49.9	42	0.5	
RB 01-170S	9690	90	92	150.0	16.5	5	25.3	9.42	-0.5	2.9	0.032	0.174	0.4	2.53	1.74	17.0	31.5	379.0	9	0.2	
RB 01-171S	20700	132	84	208.0	19.4	7	93.5	8.78	-0.5	3.7	0.058	0.130	0.4	2.01	1.87	31.4	31.1	266.0	14	0.2	
RB 01-172S	21200	138	98	194.0	17.8	7	159.0	6.65	-0.5	4.2	0.061	0.093	0.5	1.38	1.34	18.9	16.6	156.0	15	0.1	
RB 01-173S	14100	343	43	249.0	31.6	5	216.0	5.29	-0.5	7.7	0.051	0.164	0.5	2.34	1.20	25.5	22.1	189.0	30	0.3	
RB 01-174S	7870	85	57	99.6	9.7	5	21.4	5.28	-0.5	1.6	0.013	0.210	0.7	1.60	1.24	66.8	21.7	106.0	153	0.1	

Enzyme Leach Job #: 22897 Report#: 22673

Customer: Ragnar Bruaset

Customer's Job #: RB 01-272

Trace element values are in parts per billion. Negative values equal NOT DETECTED at that lower limit. Elements arranged by suite and by atomic mass.
 Values = 999999 are greater than the working range of the instrument. S.Q. = That element is determined SEMIQUANTITATIVELY.

Enhanced Package:

Sample ID:	Oxidation Suite:															
	S.Q.	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th
RB 01-175S	7980		54	41	109.0	12.2	2	16.1	5.43	-0.5	1.0	0.009	0.167	0.5	1.42	1.15
RB 01-176S	18500		178	87	202.0	15.5	6	43.3	4.28	-0.5	0.9	0.022	0.261	0.7	1.98	1.83
RB 01-177S	10700		58	53	83.8	9.5	2	6.0	1.89	-0.5	0.7	0.013	0.156	0.3	1.97	0.99
RB 01-178S	12100		87	29	140.0	18.5	1	46.8	2.09	-0.5	2.9	0.006	0.109	0.4	2.01	0.90
RB 01-179S	20700		78	35	58.0	6.6	2	8.7	2.62	-0.5	0.8	0.023	0.075	0.6	2.12	1.11
RB 01-180S	10400		179	76	138.0	10.6	6	14.0	5.58	-0.5	1.5	0.023	0.125	0.7	1.34	1.27
RB 01-181S	9070		65	28	79.4	4.9	2	7.2	3.02	-0.5	1.2	0.007	0.078	1.0	0.84	0.65
RB 01-182S	12300		72	41	122.0	7.0	1	7.0	3.63	-0.5	1.8	0.005	-0.005	0.5	1.63	0.90
RB 01-183S	7000		52	34	165.0	12.4	3	10.0	2.87	-0.5	2.5	0.014	0.040	0.4	1.04	0.56
RB 01-184S	17400		62	27	57.1	4.6	2	6.6	1.33	-0.5	0.8	0.007	0.086	0.7	1.06	0.64
RB 01-185S	7560		166	87	173.0	12.7	7	39.7	7.09	-0.5	2.1	0.130	0.251	0.7	1.69	2.02
RB 01-186S	8840		53	35	80.9	9.3	3	12.5	3.20	-0.5	2.0	-0.005	0.116	0.5	1.80	1.07
RB 01-187S	9680		164	73	166.0	9.0	5	19.6	8.29	-0.5	1.4	0.028	0.096	0.8	1.70	1.56
RB 01-188S	10300		66	39	85.0	7.2	3	19.1	4.41	-0.5	1.1	0.018	0.140	0.8	1.93	1.32
RB 01-189S	18300		77	46	94.9	10.7	3	14.0	4.62	-0.5	2.0	0.010	0.030	0.6	1.53	1.00
RB 01-190S	14500		67	40	120.0	10.7	4	60.1	4.67	-0.5	2.3	0.027	0.129	0.7	1.49	1.01
RB 01-191S	9900		39	16	78.1	10.8	2	25.3	1.28	-0.5	2.0	0.008	0.121	0.7	1.61	0.80
RB 01-192S	13600		43	23	66.4	7.0	1	16.0	1.51	-0.5	1.7	-0.005	0.006	0.5	1.50	0.78
RB 01-193S	12500		102	43	55.4	7.6	3	13.0	1.36	-0.5	0.9	-0.005	0.017	0.2	2.08	1.01
RB 01-194S	25200		183	195	278.0	37.1	12	319.0	8.19	-0.5	1.1	0.068	0.178	0.4	2.85	5.96
RB 01-195S	13900		25	11	617.0	23.3	3	1250.0	4.18	-0.5	2.8	0.018	0.381	0.7	0.60	0.54
RB 01-196S	13000		41	28	98.7	8.5	2	21.1	2.98	-0.5	1.0	-0.005	0.171	2.6	1.87	0.79
RB 01-197S	6940		51	36	72.6	8.3	2	13.3	2.51	-0.5	0.4	-0.005	0.190	3.1	0.81	0.68
RB 01-198S	16500		49	34	89.0	6.0	-1	7.9	1.86	-0.5	0.4	-0.005	0.144	2.6	0.97	0.56
RB 01-199S	20200		66	22	84.8	10.0	3	30.9	2.15	-0.5	1.9	0.010	0.677	1.9	1.15	0.82
RB 01-200S	12200		31	20	95.0	7.4	1	39.0	1.16	-0.5	3.9	-0.005	0.269	2.0	0.70	0.42
RB 01-201S	7760		75	26	56.1	9.4	1	29.4	6.01	-0.5	3.7	0.008	0.162	0.9	1.35	0.96
RB 01-202S	13000		59	24	48.3	7.0	3	19.4	1.75	-0.5	0.8	0.016	0.190	1.2	0.82	0.84
RB 01-203S	15200		78	59	103.0	11.6	5	26.8	5.22	-0.5	1.4	0.036	0.241	1.0	0.61	1.01
RB 01-204S	13000		48	35	127.0	11.6	1	15.4	1.92	-0.5	2.9	0.005	0.241	1.5	1.13	0.59
RB 01-205S	13300		45	23	54.0	6.4	2	27.0	1.39	-0.5	1.6	0.007	-0.005	0.6	0.76	0.63
RB 01-206S	8970		37	16	62.5	6.8	1	19.0	1.09	-0.5	1.6	0.008	0.036	0.9	0.71	0.49
RB 01-207S	13300		110	42	54.0	6.6	2	15.7	1.82	-0.5	1.4	0.014	0.242	0.8	1.43	0.94
RB 01-208S	14100		89	30	76.8	7.8	3	28.6	2.36	-0.5	1.3	0.011	-0.005	0.8	1.27	1.08
RB 01-209S	13200		264	138	210.0	19.9	8	45.1	6.49	-0.5	2.2	0.107	0.176	0.7	1.28	1.46
RB 01-210S	20700		130	67	218.0	17.4	11	74.0	6.50	-0.5	1.8	0.051	0.018	0.6	1.06	1.06
RB 01-211S	24400		194	87	219.0	13.9	6	87.2	3.39	-0.5	2.0	0.024	0.068	0.6	0.58	0.94
RB 01-212S	10700		85	20	108.0	5.1	-1	23.3	0.56	-0.5	0.7	0.007	0.119	0.6	1.04	0.66
RB 01-213S	19100		77	32	63.0	12.7	2	15.6	2.47	-0.5	1.3	-0.005	0.105	0.5	0.68	0.83
RB 01-214S	23900		59	31	70.2	8.0	2	11.1	3.66	-0.5	0.4	-0.005	0.025	0.8	0.74	0.92
RB 01-215S	16100		88	60	67.1	9.2	1	10.2	4.88	-0.5	0.4	0.007	0.099	0.6	1.14	1.24
RB 01-216S	18800		65	40	93.2	9.4	4	9.9	4.28	-0.5	0.9	0.009	-0.005	0.5	1.36	1.20
RB 01-217S	5230		55	41	74.7	7.2	2	8.4	3.60	-0.5	1.0	-0.005	-0.005	0.2	1.98	1.40
RB 01-218S	5840		45	28	78.8	8.5	2	8.3	1.79	-0.5	1.8	-0.005	-0.005	0.1	1.19	0.69
RB 01-219S	10500		50	28	58.8	10.3	2	26.2	2.01	-0.5	3.1	0.006	-0.005	0.3	1.23	0.69
RB 01-220S	13100		47	33	85.0	10.1	-1	20.4	1.88	-0.5	2.1	-0.005	-0.005	0.1	1.31	0.66
RB 01-221S	18000		58	23	44.4	8.5	-1	4.2	0.92	-0.5	0.4	-0.005	-0.005	0.4	1.25	0.72
RB 01-222S	9430		44	30	48.0	6.7	-1	4.2	0.85	-0.5	-0.1	-0.005	-0.005	0.6	1.55	0.85
RB 01-223S	19500		91	45	69.6	5.3	2	9.7	1.91	-0.5	0.4	-0.005	0.152	0.7	1.46	0.92
RB 01-224S	8310		28	17	29.5	4.0	-1	7.0	1.13	-0.5	0.2	-0.005	-0.005	0.5	0.98	0.72
RB 01-225S	39000		84	54	86.2	9.3	3	40.2	4.03	-0.5	1.0	0.021	-0.005	0.6	1.52	1.26
RB 01-226S	18300		42	25	35.2	3.0	-1	3.0	3.66	-0.5	0.2	0.012	-0.005	0.6	1.01	0.60
RB 01-227S	23300		338	51	427.0	9.9	3	12.9	2.47	-0.5	0.6	-0.005	-0.005	0.7	0.44	0.80
RB 01-228S	15000		148	87	336.0	10.7	8	70.2	4.41	-0.5	2.5	0.073	0.183	0.6	0.52	0.55
RB 01-229S	17200		51	29	80.5	10.8	1	22.8	1.29	-0.5	0.6	0.006	0.040	0.5	1.09	0.83

Base Metals:

Co	Ni	Cu	Zn	Pb
31.1	16.2	65.9	177	0.8
11.3	17.1	94.6	50	0.3
22.7	23.1	50.8	240	0.1
32.5	21.9	93.4	144	0.5
59.7	14.8	60.7	152	0.5
19.4	14.2	103.0	14	0.2
28.5	16.2	27.9	97	0.2
92.7	16.5	62.3	133	0.2
46.6	19.7	50.8	54	0.2
63.1	26.4	39.1	205	0.6
12.6	18.9	296.0	31	0.2
59.0	36.7	191.0	145	0.1
18.3	17.9	127.0	52	-0.1
38.4	16.5	87.3	123	0.3
28.8	21.7	94.7	99	0.2
23.6	20.8	91.9	49	0.2
27.5	10.4	38.4	66	0.4
61.7	16.9	57.9	94	0.3
38.0	12.2	58.9	110	0.3
19.4	32.3	266.0	50	0.4
10.1	16.1	98.1	24	0.7
17.1	16.1	41.6	84	0.2
12.8	12.3	54.8	92	-0.1
20.5	36.4	35.0	46	-0.1
28.4	17.4	45.2	147	0.3
27.3	15.9	28.3	105	0.4
55.8	18.4	129.0	38	0.5
20.2	16.0	113.0	48	0.4
6.7	12.8	126.0	71	0.1
45.3	22.1	65.9	89	0.4
17.9	16.1	69.6	82	0.3
22.5	9.4	30.3	57	0.5
27.3	13.5	85.0	34	0.4
12.7	13.8	114.0	24	0.2
10.9	26.7	416.0	16	0.1
11.7	19.4	262.0	19	-0.1
4.0	11.2	191.0	-5	-0.1
17.0	8.9	25.8	-5	-0.1
41.0	14.0	70.4	-5	0.4
42.3	15.1	86.3	-5	0.5
25.2	20.3	121.0	181	0.2
17.0	19.3	121.0	227	0.1
22.5	22.7	87.2	147	0.6
46.2	27.1	60.4	247	0.2
61.4	36.7	77.4	282	0.6
58.0	26.1	80.8	115	0.3
80.7	29.6	70.9	57	1.0
22.5	5.4	34.4	14	0.3
24.4	5.9	51.0	102	0.6
29.8	21.2	41.0	74	0.7
18.3	11.1	81.1	-5	0.6
28.9	19.9	70.4	66	0.4
17.6	31.9	237.0	38	0.3
2.0	3.6	157.0	10	0.1
13.5	3.9	42.8	37	0.3

Enzyme Leach Job #: 22697 Report#: 22673

Customer: Ragnar Bruaset

Customer's Job #: RB 01-272

Trace element values are in parts per billion. Negative values equal NOT DETECTED at that lower limit. Elements arranged by suite and by atomic mass.

Values = 999999 are greater than the working range of the instrument. S.Q. = That element is determined SEMIQUANTITATIVELY.

Enhanced Package:

Oxidation Suite:

Sample ID:	S.Q.	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U
RB 01-230S	11000	27	15	51.3	6.4	-1	5.7	0.87	-0.5	0.7	-0.005	-0.005	0.4	0.75	0.48		
RB 01-231S	22900	51	25	73.6	5.4	-1	7.7	0.91	-0.5	0.8	0.005	-0.005	0.6	0.88	0.58		
RB 01-232S	18000	49	29	61.1	7.4	2	14.1	1.33	-0.5	0.8	0.005	-0.005	0.4	1.39	0.90		
RB 01-233S	42200	107	70	107.0	11.5	4	71.3	7.42	-0.5	1.2	0.064	0.048	0.5	0.65	1.36		
RB 01-234S	26800	150	50	165.0	15.8	6	27.3	7.07	-0.5	0.5	0.014	0.089	0.4	1.31	1.35		
RB 01-235S	16800	38	20	47.4	8.5	2	15.0	3.61	-0.5	2.1	-0.005	0.022	0.2	0.49	0.71		
RB 01-236S	18400	56	23	56.6	10.3	2	19.3	2.34	-0.5	1.6	-0.005	0.050	0.4	0.86	0.54		
RB 01-237S	22800	65	23	69.0	8.4	2	14.8	1.71	-0.5	0.8	-0.005	-0.005	0.2	1.01	0.76		
RB 01-238S	21800	71	73	62.3	15.6	2	21.1	3.50	-0.5	0.8	0.009	0.051	-0.1	4.57	6.92		
RB 01-239S	10700	53	40	47.4	8.9	1	9.3	1.44	-0.5	0.7	0.009	-0.005	0.5	1.63	1.44		
RB 01-240S	18600	64	19	70.2	12.6	-1	14.1	1.42	-0.5	1.0	-0.005	-0.005	-0.1	1.40	0.86		
RB 01-241S	16200	40	21	101.0	10.6	2	8.9	1.13	-0.5	0.8	-0.005	-0.005	0.4	0.81	0.56		
RB 01-242S	9350	62	35	45.2	6.3	2	13.1	1.39	-0.5	0.5	-0.005	0.720	3.4	0.87	0.67		
RB 01-243S	25500	41	14	51.6	9.2	-1	11.2	1.17	-0.5	0.7	-0.005	0.166	2.4	0.71	0.55		
RB 01-244S	16500	100	29	58.3	10.1	3	20.1	6.13	-0.5	1.8	0.005	0.122	1.4	1.60	1.06		
RB 01-245S	38200	104	37	98.7	10.1	4	98.0	2.70	-0.5	1.0	0.007	0.252	1.3	1.41	1.05		
RB 01-246S	10300	51	26	77.1	7.3	1	17.1	0.99	-0.5	0.6	-0.005	0.138	1.7	1.10	0.71		
RB 01-247S	24900	85	30	34.6	4.8	-1	7.6	1.10	-0.5	0.4	0.007	0.049	1.8	1.50	1.18		
RB 01-248S	29100	61	24	30.5	3.4	2	5.9	1.00	-0.5	-0.1	-0.005	0.303	2.3	0.78	0.73		
RB 01-249S	31700	82	34	45.0	4.0	4	6.0	1.12	-0.5	0.2	-0.005	0.106	2.0	0.83	0.65		
RB 01-250S	23800	34	15	65.8	7.0	-1	6.6	0.90	-0.5	0.6	-0.005	0.070	1.6	0.67	0.52		
RB 01-251S	17000	42	28	48.9	6.3	-1	11.2	0.91	-0.5	0.8	-0.005	0.010	1.2	1.19	0.78		
RB 01-252S	37500	70	50	117.0	6.7	-1	15.5	1.35	-0.5	0.7	0.007	0.098	1.1	1.85	0.99		
RB 01-253S	28400	51	29	60.7	6.8	2	16.6	1.26	-0.5	1.0	-0.005	0.048	1.0	1.50	0.90		
RB 01-254S	22400	24	14	93.4	8.0	1	21.6	1.72	-0.5	2.7	-0.005	0.159	1.2	0.80	0.62		
RB 01-255S	10600	80	23	82.8	6.4	-1	77.5	1.03	-0.5	2.4	-0.005	0.025	0.8	1.78	0.93		
RB 01-256S	8980	26	13	55.3	6.3	-1	101.0	0.96	-0.5	2.5	-0.005	0.061	0.6	1.36	0.85		
RB 01-257S	32800	69	23	80.2	9.5	2	56.3	1.96	-0.5	1.5	0.007	0.309	0.8	0.80	1.00		
RB 01-258S	16500	44	22	66.9	8.0	1	20.4	1.05	-0.5	1.3	-0.005	0.085	1.0	1.33	0.77		
RB 01-259S	17900	247	75	217.0	14.3	11	90.3	3.92	-0.5	1.4	0.062	0.037	1.4	0.32	0.71		
RB 01-260S	21300	61	36	91.4	6.8	2	43.6	1.66	-0.5	0.7	-0.005	-0.005	0.5	1.76	1.16		
RB 01-261S	13000	25	14	67.4	5.9	-1	11.1	2.08	-0.5	1.5	-0.005	-0.005	0.5	1.15	0.81		
RB 01-262S	11500	28	14	99.9	9.3	-1	21.5	2.10	-0.5	2.6	-0.005	0.050	1.2	0.73	0.60		
RB 01-263S	2590	58	24	93.7	6.9	1	23.9	1.54	-0.5	2.0	-0.005	0.084	0.5	1.88	1.42		
RB 01-264S	4430	38	15	62.9	6.4	-1	19.4	0.98	-0.5	2.6	-0.005	-0.005	0.4	0.74	0.59		
RB 01-265S	10600	32	16	74.1	4.6	1	10.6	0.79	-0.5	0.8	-0.005	-0.005	0.6	0.79	0.50		
RB 01-266S	21700	56	19	104.0	11.6	2	27.4	1.36	-0.5	1.7	-0.005	-0.005	0.5	1.49	0.73		
RB 01-267S	18800	54	31	108.0	5.6	-1	7.2	2.11	-0.5	0.7	-0.005	0.060	0.6	1.05	0.70		
RB 01-268S	12400	52	32	100.0	6.9	-1	18.8	1.55	-0.5	2.2	0.006	0.195	0.9	1.03	0.49		
RB 01-269S	8590	71	33	159.0	10.9	7	32.4	2.46	-0.5	2.2	0.014	0.007	0.5	0.68	0.41		
RB 01-270S	22000	57	26	84.0	7.3	-1	13.9	0.89	-0.5	0.7	-0.005	0.065	0.2	1.58	0.81		
RB 01-271S	12900	30	18	70.2	5.4	-1	15.5	0.85	-0.5	0.7	-0.005	0.097	0.5	0.92	0.61		
RB 01-273S	11800	229	46	209.0	18.6	10	174.0	5.28	-0.5	1.1	0.093	0.062	0.8	0.51	0.81		
RB 01-274S	3760	66	26	86.3	9.3	1	9.1	1.36	-0.5	0.8	-0.005	0.120	0.3	1.59	0.77		
RB 01-275S	14600	133	29	149.0	19.7	3	16.9	3.57	-0.5	1.2	0.008	0.254	0.7	0.25	0.48		
RB 01-276S	15800	96	39	117.0	7.4	3	35.1	1.68	-0.5	0.5	0.011	0.093	0.7	1.27	0.88		
RB 01-277S	15400	58	43	153.0	12.4	3	15.1	2.92	-0.5	1.0	0.005	0.502	0.4	0.82	1.50		
RB 01-278S	19100	42	30	99.8	7.0	3	15.4	0.86	-0.5	0.6	-0.005	-0.005	0.5	1.07	0.50		
RB 01-279S	6300	44	23	92.2	5.9	-1	9.1	0.99	-0.5	0.7	0.007	-0.005	0.2	1.21	0.66		
RB 01-280S	17000	68	34	108.0	7.3	1	7.6	1.13	-0.5	0.7	-0.005	0.062	0.5	1.03	0.71		
RB 01-281S	15100	54	100	94.7	6.0	2	10.9	1.32	-0.5	1.1	0.006	0.043	0.3	1.14	0.85		
RB 01-282S	10600	56	25	98.6	8.2	2	8.1	0.86	-0.5	1.1	-0.005	-0.005	0.3	1.09	0.69		
RB 01-283S	12900	40	24	93.5	5.0	-1	8.3	1.41	-0.5	0.9	-0.005	-0.005	0.9	0.84	0.72		
RB 01-284S	15300	46	42	178.0	12.1	2	35.8	2.17	-0.5	1.3	-0.005	-0.005	0.4	1.51	0.80		
RB 01-285S	20700	61	38	158.0	5.2	-1	18.8	1.44	-0.5	0.7	-0.005	0.127	0.3	1.36	1.04		

Base Metals:

Co	Ni	Cu	Zn	Pb
19.0	7.5	23.6	30	0.3
15.6	10.1	28.4	26	0.2
23.3	13.9	41.2	65	0.7
17.0	20.6	163.0	12	0.2
21.1	24.2	192.0	14	-0.1
51.5	17.9	92.8	9	0.2
36.8	29.5	75.5	34	0.2
29.6	22.6	61.2	5	0.3
44.3	32.0	242.0	58	0.8
58.6	22.4	41.4	30	0.5
18.8	14.0	43.5	-5	0.6
11.3	8.1	26.9	-5	0.3
48.0	17.2	33.4	11	0.2
28.9	15.1	49.7	9	0.2
53.5	21.7	143.0	5	0.5
23.3	18.1	74.3	8	0.3
19.4	9.2	28.2	5	0.1
43.2	8.0	40.6	24	0.6
40.8	9.3	56.9	31	1.1
47.0	15.6	72.5	110	1.0
29.6	12.9	27.0	15	0.3
24.2	13.1	30.2	19	0.6
14.0	8.1	32.8	-5	0.4
30.5	13.7	54.5	11	0.5
18.8	10.7	36.6	-5	0.3
24.8	9.3	43.1	-5	0.4
42.9	10.2	36.1	6	0.3
16.9	9.6	78.9	-5	0.3
41.9	12.7	50.2	19	0.3
10.1	5.9	83.5	7	-0.1
13.1	21.6	55.6	127	0.8
32.0	16.9	43.9	48	0.7
29.3	11.3	33.5	12	0.3
23.8	17.4	59.8	51	0.6
29.2	9.4	31.0	65	0.4
58.7	19.5	50.3	71	0.8
27.8	9.4	105.0	39	1.6
39.6	12.9	39.7	45	0.7
124.0	45.5	27.5	142	0.8
19.7	6.8	60.0	7	0.5
29.8	21.8	32.9	10	0.5
39.9	8.6	17.8	20	0.2
3.8	8.2	65.2	-5	0.2
52.9	19.1	34.7	136	0.3
26.7	13.4	122.0	33	0.3
11.0	3.4	46.8	44	0.4
17.4	5.2	76.9	14	0.5
31.1	11.6	31.4	107	-0.1
38.5	19.0	26.8	161	0.1
17.7	10.6	22.6	32	0.3
34.7	14.5	33.4	75	0.6
37.1	12.9	35.6	97	0.3
32.9	12.8	24.0	64	0.5
11.6	10.2	68.2	6	0.4
20.9	20.2	32.8	15	0.9

Enzyme Leach Job #: 22897 Report#: 22673

Customer: Ragnar Bruaset

Customer's Job #: RB 01-272

Trace element values are in parts per billion. Negative values equal NOT DETECTED at that lower limit. Elements arranged by suite and by atomic mass.

Values = 999999 are greater than the working range of the instrument. S.Q. = That element is determined SEMIQUANTITATIVELY.

Enhanced Package:

Sample ID:	Oxidation Suite:														Base Metals:						
	S.Q.	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U	Co	Ni	Cu	Zn
RB 01-286S	13000	103	33	135.0	12.5	2	32.9	1.57	-0.5	1.9	-0.005	0.169	-0.1	1.77	0.86	72.2	19.8	76.1	81	0.8	
RB 01-287S	24700	68	39	82.8	8.8	4	22.7	2.14	-0.5	0.2	0.010	-0.005	0.5	1.10	1.80	9.1	4.9	61.5	-5	0.3	
RB 01-288S	15700	32	12	78.8	4.9	3	11.3	0.86	-0.5	0.4	-0.005	0.030	0.5	0.53	0.54	10.9	4.8	23.1	41	0.1	
RB 01-289S	23900	118	55	125.0	10.4	8	18.0	2.31	-0.5	0.7	0.008	0.044	0.5	0.79	1.09	10.3	10.7	90.3	-5	0.2	
RB 01-290S	23600	103	57	178.0	12.4	14	54.0	2.34	-0.5	1.6	0.130	0.052	0.4	0.49	0.52	9.9	12.8	106.0	10	0.1	
RB 01-291S	16600	63	36	82.2	5.1	3	16.9	2.40	-0.5	-0.1	-0.005	0.195	3.4	0.72	0.79	6.4	8.4	51.1	10	-0.1	
RB 01-292S	19000	67	40	83.0	4.5	4	15.7	2.68	-0.5	-0.1	0.005	0.049	2.0	0.46	0.63	8.0	5.5	87.9	-5	-0.1	
RB 01-293S	15000	252	82	154.0	15.4	12	41.6	4.63	-0.5	-0.1	0.185	0.203	2.3	0.33	0.99	5.6	3.5	85.5	-5	-0.1	
RB 01-294S	14100	120	60	74.8	8.5	3	31.5	1.93	-0.5	-0.1	0.023	0.144	1.9	1.05	1.21	9.9	7.2	89.5	38	0.3	
RB 01-295S	18200	103	50	111.0	9.4	4	44.2	3.21	-0.5	-0.1	0.030	0.345	1.3	0.91	0.93	14.1	15.0	101.0	-5	0.3	
RB 01-296S	6220	45	24	118.0	8.1	3	26.8	1.35	-0.5	-0.1	0.007	0.165	2.0	0.54	0.84	8.4	5.6	33.5	19	0.1	
RB 01-297S	12900	27	15	87.1	9.5	2	23.7	1.32	-0.5	-0.1	-0.005	0.364	2.3	0.52	0.47	18.8	8.4	28.3	17	0.2	
RB 01-298S	13700	54	24	58.7	6.8	-1	19.1	1.58	-0.5	-0.1	-0.005	0.294	1.3	0.59	0.59	26.6	1.6	74.7	-5	0.5	
RB 01-299S	7380	31	17	63.9	7.3	1	13.9	0.89	-0.5	-0.1	0.006	0.169	1.0	1.03	0.57	17.1	6.6	46.8	-5	0.3	
RB 01-300S	20500	67	36	167.0	7.0	3	14.3	2.02	-0.5	-0.1	-0.005	0.282	1.8	0.81	0.49	31.9	15.1	32.3	49	0.5	
RB 01-301S	21600	68	30	137.0	9.1	1	41.2	0.81	-0.5	-0.1	-0.005	0.178	1.3	1.21	0.71	13.4	14.6	43.1	9	0.5	
RB 01-302S	24000	84	56	131.0	9.8	4	75.1	2.67	-0.5	-0.1	0.050	0.168	1.0	0.70	1.53	3.7	9.6	92.6	12	0.3	
RB 01-303S	24800	71	33	99.9	7.6	2	43.9	0.96	-0.5	-0.1	-0.005	0.186	1.7	1.88	0.96	10.3	8.4	35.8	12	0.4	
RB 01-304S	32800	43	22	121.0	9.6	3	41.1	1.43	-0.5	-0.1	-0.005	-0.005	0.7	1.37	1.05	17.1	12.3	64.1	23	0.4	
RB 01-305S	27400	226	87	356.0	15.8	8	54.7	4.23	-0.5	-0.1	0.041	-0.005	0.8	0.69	1.30	2.9	13.1	170.0	7	-0.1	
RB 01-306S	37000	217	63	165.0	5.8	15	25.1	2.62	-0.5	1.2	0.063	0.087	0.8	0.68	0.79	1.9	9.1	52.0	-5	0.1	
RB 01-307S	30600	71	51	251.0	13.2	8	21.6	1.54	-0.5	-0.1	-0.005	0.102	0.7	1.65	0.47	18.6	11.7	69.0	-5	0.5	
RB 01-308S	41400	150	84	132.0	9.7	9	44.7	2.40	-0.5	-0.1	0.028	0.100	0.6	0.92	1.01	11.6	14.5	129.0	-5	0.4	
RB 01-309S	28000	30	16	72.6	5.0	1	11.2	0.90	-0.5	-0.1	0.007	-0.005	0.6	1.11	0.80	23.1	10.5	37.6	11	0.2	
RB 01-310S	20200	32	18	59.3	5.2	-1	16.3	0.72	-0.5	-0.1	-0.005	0.032	0.5	1.02	0.78	14.3	8.9	30.4	48	0.4	
RB 01-311S	18600	52	26	83.6	6.0	-1	18.2	1.32	-0.5	-0.1	-0.005	0.138	0.9	0.97	0.91	10.3	7.1	56.3	21	0.4	
RB 01-312S	20700	43	11	99.4	6.4	2	16.2	0.73	-0.5	-0.1	-0.005	0.122	0.5	0.73	0.63	11.4	7.6	36.7	8	0.3	
RB 01-313S	17500	101	46	127.0	10.0	6	64.9	3.10	-0.5	0.4	0.007	0.050	0.6	0.72	1.30	7.3	8.4	81.7	-5	0.3	
RB 01-314S	13400	114	57	145.0	10.4	8	135.0	4.23	-0.5	-0.1	0.061	0.120	0.3	0.66	2.09	6.8	14.3	189.0	-5	-0.1	
RB 01-315S	13400	32	16	188.0	12.8	1	36.7	3.31	-0.5	-0.1	0.008	0.397	1.2	1.21	1.35	23.5	22.6	108.0	-5	0.3	
RB 01-316S	28000	106	41	212.0	10.7	-1	62.2	2.33	-0.5	-0.1	0.006	0.068	0.4	0.73	0.67	14.3	9.8	49.5	78	0.1	

Certified By:



Date Received: Aug-17-01

D. D'Anna, Dipl. T.
ICPMS Technical Manager, Activation Laboratories Ltd.

Date Reported: Sep6-01

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Unless otherwise instructed, samples will be disposed of 90 days from the date of this report.

Enzyme Leadi
Trace element
Values = 9999

Enhanced Pac

Sample ID:	Base Metal - Chalcophile Association Indicators:							
	Ga	Ge	Ag	Cd	In	Sn	Tl	Pb
RB 01-10S	1.3	0.22	-0.1	0.4	0.02	0.4	0.055	21.6
RB 01-11S	1.9	0.19	-0.1	0.5	0.01	0.2	0.158	22.2
RB 01-12S	2.0	0.13	-0.1	1.8	-0.01	-0.2	0.149	20.3
RB 01-13S	0.8	0.28	-0.1	1.9	0.04	0.7	0.084	52.1
RB 01-14S	0.8	0.10	-0.1	1.0	0.03	-0.2	0.063	24.1
RB 01-15S	2.0	0.21	-0.1	0.6	0.02	-0.2	0.058	27.9
RB 01-16S	1.5	0.12	-0.1	0.8	0.01	-0.2	0.264	26.4
RB 01-17S	4.2	0.22	-0.1	1.5	0.03	-0.2	0.200	28.9
RB 01-18S	4.0	0.14	-0.1	1.2	0.04	0.2	0.023	28.5
RB 01-19S	1.3	0.15	-0.1	1.7	-0.01	-0.2	0.057	22.5
RB 01-20S	2.3	0.25	-0.1	1.7	-0.01	0.2	0.192	16.0
RB 01-21S	1.1	0.13	-0.1	0.4	-0.01	-0.2	0.203	9.4
RB 01-22S	0.8	0.13	-0.1	0.6	0.02	-0.2	0.084	15.5
RB 01-23S	1.5	0.23	-0.1	0.5	-0.01	-0.2	0.053	11.3
RB 01-24S	1.3	0.20	-0.1	0.6	-0.01	-0.2	0.039	10.5
RB 01-25S	1.2	0.24	-0.1	0.6	0.01	-0.2	0.082	15.0
RB 01-26S	1.4	0.14	-0.1	0.6	-0.01	-0.2	0.176	5.6
RB 01-27S	1.2	0.28	-0.1	0.9	0.02	-0.2	0.072	16.4
RB 01-28S	0.7	0.21	-0.1	0.5	-0.01	0.3	0.069	8.3
RB 01-29S	1.2	0.23	-0.1	0.4	-0.01	-0.2	0.061	7.8
RB 01-30S	0.9	0.18	-0.1	0.4	-0.01	-0.2	0.037	7.6
RB 01-31S	1.5	0.34	-0.1	0.5	-0.01	-0.2	0.115	8.3
RB 01-32S	1.4	0.23	-0.1	0.2	-0.01	-0.2	0.100	6.5
RB 01-33S	0.6	0.20	-0.1	0.4	-0.01	-0.2	0.082	7.9
RB 01-34S	1.5	0.17	-0.1	0.4	-0.01	-0.2	0.177	5.2
RB 01-35S	0.8	0.29	-0.1	1.1	-0.01	-0.2	0.084	7.2
RB 01-36S	0.9	0.27	-0.1	0.6	-0.01	-0.2	0.035	6.3
RB 01-37S	1.1	0.37	-0.1	0.5	-0.01	-0.2	0.110	5.3
RB 01-38S	1.1	0.24	-0.1	0.9	-0.01	-0.2	0.083	7.1
RB 01-39S	1.7	0.17	-0.1	0.6	0.01	-0.2	0.079	5.2
RB 01-40S	1.2	0.13	-0.1	0.9	-0.01	-0.2	0.249	5.8
RB 01-41S	1.1	0.20	-0.1	0.7	-0.01	-0.2	0.206	4.0
RB 01-42S	1.9	0.34	-0.1	1.9	-0.01	-0.2	0.223	10.4
RB 01-43S	0.8	0.11	-0.1	0.5	0.01	-0.2	0.076	4.6
RB 01-44S	1.1	0.11	-0.1	0.5	-0.01	-0.2	0.217	3.8
RB 01-45S	1.3	0.21	-0.1	1.2	-0.01	-0.2	0.253	4.4
RB 01-46S	0.8	0.33	-0.1	0.6	-0.01	-0.2	0.081	5.6
RB 01-47S	0.7	0.24	-0.1	0.4	-0.01	-0.2	0.061	7.8
RB 01-48S	0.7	0.61	-0.1	3.0	-0.01	-0.2	0.101	5.9
RB 01-49S	0.7	0.27	-0.1	3.7	-0.01	-0.2	0.443	3.5
RB 01-50S	1.7	0.21	-0.1	0.4	-0.01	-0.2	0.089	2.9
RB 01-51S	1.3	0.19	-0.1	1.0	-0.01	-0.2	0.103	2.6
RB 01-52S	1.6	0.21	-0.1	1.8	-0.01	-0.2	0.184	2.8
RB 01-53S	1.6	0.21	-0.1	0.4	-0.01	-0.2	0.119	3.4
RB 01-54S	1.2	0.16	-0.1	0.6	-0.01	-0.2	0.049	2.4
RB 01-55S	1.0	0.19	-0.1	0.5	-0.01	-0.2	0.060	2.7
RB 01-56S	1.6	0.20	-0.1	0.9	-0.01	0.4	0.205	30.6
RB 01-57S	1.0	0.35	-0.1	0.8	0.08	0.4	0.050	71.2
RB 01-58S	0.5	0.22	-0.1	1.6	0.04	0.5	0.139	60.4
RB 01-59S	1.1	0.09	-0.1	0.9	0.04	0.4	0.119	40.5
RB 01-60S	0.8	0.11	-0.1	0.8	0.03	0.2	0.175	39.0
RB 01-61S	1.1	0.36	-0.1	1.6	0.03	0.3	0.191	46.1
RB 01-62S	-0.3	0.32	-0.1	0.9	0.04	0.3	0.193	51.7
RB 01-63S	1.1	0.16	-0.1	2.1	0.02	-0.2	0.275	21.2
RB 01-64S	0.5	0.25	-0.1	0.3	0.03	-0.2	0.054	35.0

High-Field Strength Elements:

S.Q.	Ti	S.Q.	Cr	Y	Zr	Nb	Hf	Ta
278	-3	10.10	48.7	1.9	1.06	0.26		
426	-3	7.83	74.1	1.7	1.52	0.21		
437	-3	4.45	36.1	1.4	0.77	0.19		
259	-3	19.90	57.8	1.4	1.00	0.24		
341	5	7.88	38.8	1.4	0.82	0.24		
369	-3	21.60	53.7	1.7	1.03	0.24		
440	-3	4.43	35.3	1.4	0.77	0.25		
757	-3	5.01	65.4	1.6	1.15	0.22		
1010	22	9.88	45.2	2.1	1.03	0.24		
639	-3	2.90	21.4	1.6	0.49	0.16		
328	-3	2.42	33.4	1.4	0.61	0.20		
438	28	3.80	23.3	1.5	0.49	0.17		
221	-3	10.10	48.6	0.8	0.94	0.20		
326	-3	12.00	61.4	1.1	1.03	0.20		
455	5	9.21	87.3	1.7	1.73	0.22		
252	-3	5.58	38.5	1.5	0.71	0.21		
367	4	3.80	43.4	1.0	1.09	0.14		
266	-3	13.00	56.8	1.2	1.03	0.16		
217	5	8.95	41.6	0.8	0.80	0.17		
363	10	17.30	97.9	1.2	1.80	0.19		
346	-3	16.50	70.2	0.9	1.38	0.18		
392	3	26.20	113.0	1.2	2.18	0.18		
376	10	11.70	67.8	1.3	1.43	0.16		
295	8	11.50	54.8	1.3	1.04	0.18		
462	-3	4.88	36.0	0.8	0.82	0.18		
276	-3	17.10	56.2	1.2	1.06	0.16		
334	-3	20.60	87.2	1.3	1.56	0.17		
519	-3	16.30	112.0	2.1	2.18	0.24		
291	5	35.30	82.8	1.1	1.29	0.16		
693	-3	7.75	44.2	1.4	1.02	0.17		
638	-3	10.20	52.4	1.5	1.16	0.12		
280	-3	3.09	20.0	0.6	0.45	0.15		
517	-3	2.51	27.5	1.0	0.66	0.17		
328	-3	9.14	83.4	1.2	1.65	0.16		
514	-3	5.43	62.0	0.8	1.30	0.15		
477	-3	7.34	63.3	1.0	1.36	0.14		
197	-3	18.60	50.7	0.8	0.83	0.15		
469	-3	5.82	56.4	2.2	1.09	0.19		
153	-3	7.59	29.3	0.7	0.55	0.15		
155	-3	6.67	20.4	0.6	0.42	0.14		
562	-3	14.40	56.0	1.1	1.27	0.14		
554	-3	4.58	36.7	1.3	0.84	0.12		
573	-3	4.39	45.9	0.8	1.09	0.12		
713	5	18.50	94.6	1.7	2.18	0.12		
462	-3	15.40	60.7	1.1	1.36	0.11		
390	-3	13.10	54.7	1.0	1.22	0.11		
362	6	8.11	39.2	0.7	0.95	0.24		
329	9	20.90	76.8	1.3	1.41	0.21		
533	6	15.30	180.0	2.3	3.56	0.22		
591	-3	5.12	60.3	2.0	1.51	0.18		
377	-3	9.76	90.4	1.1	2.17	0.13		
534	-3	10.00	103.0	1.7	2.14	0.18		
306	-3	23.10	114.0	1.4	2.12	0.19		
272	-3	3.93	36.5	0.6	0.82	0.11		
280	-3	21.90	82.2	1.2	1.62	0.15		

Rare-Earth Elements:

La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
3.37	8.04	1.45	7.35	2.19	0.77	1.72	0.35	1.70
3.71	10.60	1.44	6.67	1.55	0.62	1.39	0.25	1.38
2.93	9.90	0.99	4.39	1.05	0.62	0.81	0.15	0.90
6.52	11.90	2.42	11.10	2.80	0.95	2.45	0.48	2.66
4.37	8.25	1.39	6.37	1.60	0.50	1.41	0.26	1.32
9.16	13.80	3.17	14.70	3.80	1.24	3.37	0.58	3.48
3.19	5.52	0.94	3.85	0.96	0.49	0.81	0.16	0.84
4.27	9.60	1.13	4.57	1.09	0.90	1.08	0.19	1.01
4.40	10.70	1.79	8.51	2.31	1.03	2.18	0.35	2.19
2.42	6.00	0.82	3.74	0.87	0.39	0.79	0.12	0.67
2.13	5.10	0.57	2.40	0.52	0.23	0.43	0.08	0.41
2.96	8.08	1.10	4.96	1.28	0.55	0.93	0.15	0.83
4.25	10.20	1.53	7.24	1.81	0.51	1.46	0.29	1.68
4.70	7.46	2.00	8.54	2.10	0.62	1.83	0.34	1.93
4.47	9.85	1.63	7.11	1.72	0.58	1.53	0.30	1.87
2.87	5.43	0.93	4.21	0.94	0.44	0.90	0.18	0.93
2.17	5.07	0.69	3.27	0.79	0.44	0.76	0.11	0.79
5.71	11.00	1.93	9.34	2.25	0.63	1.99	0.38	2.09
3.31	5.67	1.18	5.42	1.47	0.49	1.32	0.27	1.34
6.10	12.80	2.39	11.50	2.92	0.81	2.41	0.48	2.63
6.90	15.10	2.81	12.40	3.18	0.94	3.47	0.52	2.65
12.80	27.10	5.17	23.60	5.93	1.71	4.95	0.88	5.08
6.28	14.20	2.25	10.00	2.66	0.77	2.03	0.39	2.24
4.48	9.76	1.75	8.06	1.96	0.61	1.65	0.35	1.67
2.97	7.33	1.00	4.22	1.10	0.51	0.98	0.18	0.88
7.01	12.30	2.61	11.50	2.74	0.85	2.51	0.46	2.49
8.61	14.00	3.16	14.00	3.50	1.15	3.21	0.61	3.39
7.42	12.30	2.53	11.70	2.91	1.09	2.69	0.50	2.57
13.70	21.40	5.43	25.10	6.08	1.95	5.54	1.13	5.73
4.61	9.48	1.46	6.52	1.49	0.81	1.43	0.24	1.39
6.19	14.90	2.12	9.81	2.40	1.16	2.13	0.39	2.03
2.37	5.27	0.70	2.95	0.67	0.34	0.62	0.09	0.58
2.46	5.48	0.67	2.77	0.65	0.36	0.56	0.10	0.58
4.44	12.50	1.71	7.82	1.94	0.62	1.86	0.37	1.74
3.45	9.41	1.18	5.19	1.34	0.48	1.05	0.20	1.13
3.80	10.20	1.29						

Enzyme Lead
Trace element
Values = 9999
Enhanced Pac

Base Metal - Chalcophile Association Indicators:

Sample ID:	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi
RB 01-65S	1.3	0.24	-0.1	0.5	-0.01	-0.2	0.154	19.4
RB 01-66S	0.8	0.12	-0.1	0.9	0.04	0.3	0.033	51.7
RB 01-67S	0.7	0.14	-0.1	0.6	0.01	-0.2	0.223	15.1
RB 01-68S	0.7	0.13	-0.1	1.3	-0.01	-0.2	0.270	17.2
RB 01-69S	0.6	0.22	-0.1	1.5	0.01	-0.2	0.157	16.9
RB 01-70S	0.7	0.09	-0.1	1.3	-0.01	-0.2	0.217	12.7
RB 01-71S	0.9	0.11	-0.1	0.7	-0.01	-0.2	0.172	17.1
RB 01-72S	0.4	0.19	-0.1	0.3	0.01	-0.2	0.059	23.0
RB 01-73S	0.7	0.05	-0.1	0.8	-0.01	0.4	0.155	8.6
RB 01-74S	0.6	0.12	-0.1	0.8	-0.01	-0.2	0.262	14.2
RB 01-75S	0.7	0.17	-0.1	2.8	-0.01	-0.2	0.179	14.8
RB 01-76S	0.9	0.23	-0.1	0.4	-0.01	-0.2	0.113	13.6
RB 01-77S	0.7	0.08	-0.1	0.5	0.01	-0.2	0.061	9.6
RB 01-78S	8.2	0.74	-0.1	0.6	0.03	0.3	0.178	12.5
RB 01-79S	0.5	0.74	-0.1	0.5	0.02	-0.2	0.051	20.5
RB 01-80S	0.6	0.43	-0.1	0.6	-0.01	-0.2	0.086	22.6
RB 01-81S	0.3	0.25	-0.1	0.8	-0.01	-0.2	0.136	16.0
RB 01-82S	1.1	0.28	-0.1	1.1	0.01	-0.2	0.171	9.1
RB 01-83S	1.2	0.25	-0.1	9.6	0.02	-0.2	0.280	11.2
RB 01-84S	0.6	0.36	-0.1	0.7	-0.01	-0.2	0.160	14.8
RB 01-85S	0.4	0.16	-0.1	1.6	-0.01	-0.2	0.062	16.1
RB 01-86S	0.8	0.23	-0.1	1.7	0.01	-0.2	0.052	14.8
RB 01-87S	0.9	0.13	-0.1	0.6	-0.01	-0.2	0.072	11.5
RB 01-88S	1.4	0.36	-0.1	1.6	-0.01	0.3	0.248	11.5
RB 01-89S	1.3	0.26	-0.1	0.8	-0.01	-0.2	0.435	8.8
RB 01-90S	1.5	0.19	-0.1	0.7	0.01	-0.2	0.310	13.7
RB 01-91S	0.6	0.20	-0.1	0.5	0.03	-0.2	0.068	13.6
RB 01-92S	0.6	0.54	-0.1	0.3	0.01	-0.2	0.055	6.3
RB 01-93S	0.4	0.33	-0.1	0.3	-0.01	-0.2	0.066	7.5
RB 01-94S	1.8	0.52	-0.1	0.4	0.02	-0.2	0.187	6.7
RB 01-95S	0.5	0.23	-0.1	0.3	-0.01	-0.2	0.051	8.9
RB 01-96S	0.4	0.26	-0.1	0.1	-0.01	0.2	0.040	6.3
RB 01-97S	0.6	0.34	-0.1	0.3	-0.01	3.9	0.110	10.2
RB 01-98S	0.7	0.16	-0.1	0.4	-0.01	-0.2	0.060	5.0
RB 01-99S	-0.3	0.25	-0.1	0.5	-0.01	-0.2	0.039	7.1
RB 01-100S	0.7	0.28	-0.1	1.2	-0.01	-0.2	0.109	6.4
RB 01-101S	-0.3	0.32	-0.1	0.2	0.01	0.5	0.084	16.8
RB 01-102S	0.7	0.44	-0.1	0.3	0.03	0.5	0.067	45.8
RB 01-103S	1.2	0.24	-0.1	1.8	0.02	0.3	0.088	25.2
RB 01-104S	0.4	0.31	-0.1	0.7	0.01	0.4	0.048	44.6
RB 01-105S	1.7	0.40	-0.1	0.5	0.04	0.4	0.068	34.4
RB 01-106S	1.3	0.15	-0.1	0.3	0.02	0.3	0.046	22.9
RB 01-107S	1.2	0.25	-0.1	0.6	0.02	-0.2	0.108	30.5
RB 01-108S	1.0	0.25	-0.1	0.3	0.03	-0.2	0.067	31.7
RB 01-109S	0.6	0.16	-0.1	1.2	0.03	-0.2	0.285	32.8
RB 01-110S	0.7	0.33	-0.1	1.7	0.03	0.4	0.066	43.0
RB 01-111S	0.9	0.18	-0.1	0.8	0.03	0.2	0.045	36.1
RB 01-112S	0.9	0.39	-0.1	0.4	0.02	-0.2	0.107	26.0
RB 01-113S	0.8	0.30	-0.1	0.8	0.02	0.3	0.099	23.0
RB 01-114S	0.9	0.26	-0.1	0.2	0.02	-0.2	0.066	20.3
RB 01-115S	0.6	0.26	-0.1	0.7	0.03	-0.2	0.027	22.4
RB 01-116S	1.1	0.15	-0.1	0.2	0.02	-0.2	0.047	17.4
RB 01-117S	0.9	0.21	-0.1	0.1	0.02	-0.2	0.048	11.8
RB 01-118S	1.1	0.22	-0.1	0.5	-0.01	-0.2	0.054	13.5
RB 01-119S	0.6	0.27	-0.1	0.7	0.02	-0.2	0.043	18.6

High-Field Strength Elements:

S.Q.	Ti	Cr	Y	Zr	Nb	Hf	Ta
394	-3	14.60	72.9	1.2	1.73	0.14	
330	-3	12.20	39.9	1.3	0.77	0.15	
402	-3	7.93	52.7	1.1	1.22	0.11	
359	-3	7.51	63.5	0.8	1.35	0.11	
404	-3	7.98	58.6	1.0	1.29	0.15	
331	-3	4.87	52.1	0.8	1.17	0.10	
371	-3	3.79	46.7	1.0	0.94	0.13	
171	-3	14.30	37.4	0.5	0.57	0.15	
238	-3	4.35	22.2	0.5	0.50	0.11	
361	-3	4.96	43.0	0.8	1.01	0.09	
362	-3	11.00	131.0	1.5	2.80	0.13	
428	-3	13.10	49.3	1.4	1.10	0.14	
372	-3	10.10	44.0	1.3	1.07	0.09	
1150	16	19.30	68.7	2.2	1.74	0.15	
365	-3	23.30	120.0	1.4	1.96	0.13	
295	-3	24.90	80.9	1.6	1.27	0.15	
328	-3	12.90	75.3	1.1	1.45	0.13	
464	-3	6.04	60.4	1.2	1.43	0.12	
454	-3	6.19	67.0	0.6	1.48	0.13	
353	-3	13.40	85.1	1.1	1.83	0.16	
400	-3	10.10	58.4	1.4	1.32	0.15	
236	-3	18.00	72.6	0.8	1.20	0.15	
612	-3	14.40	41.9	1.6	0.96	0.16	
807	-3	21.10	82.7	1.5	1.91	0.13	
357	-3	7.23	49.0	0.6	1.12	0.12	
482	-3	14.80	70.5	1.1	1.60	0.14	
359	-3	17.10	93.8	1.2	1.92	0.13	
214	-3	23.10	88.1	0.8	1.67	0.14	
286	-3	19.30	80.7	1.5	1.29	0.15	
526	-3	25.80	89.4	2.6	1.54	0.18	
235	-3	21.70	43.0	0.9	0.64	0.13	
315	-3	26.40	49.9	1.0	0.68	0.14	
686	-3	26.70	78.7	2.2	1.33	0.27	
427	-3	10.50	40.6	1.3	0.99	0.15	
242	-3	14.20	43.2	1.1	0.83	0.13	
310	-3	23.60	57.2	1.1	0.87	0.16	
326	-3	14.30	40.1	1.4	0.72	0.18	
363	-3	14.10	44.6	1.9	0.78	0.32	
328	-3	10.70	17.0	1.0	0.27	0.27	
186	-3	11.30	25.3	0.9	0.46	0.26	
564	-3	18.30	96.4	2.7	1.92	0.24	
422	-3	11.80	58.3	1.6	1.33	0.22	
454	-3	27.60	147.0	2.1	2.80	0.22	
421	-3	18.40	69.1	1.7	1.28	0.21	
122	-3	13.70	61.2	0.3	1.34	0.19	
351	-3	20.70	58.3	1.2	1.03	0.21	
328	-3	18.40	58.5	1.6	1.13	0.24	
804	-3	19.20	65.3	2.2	1.17	0.29	
408	-3	13.50	85.3	1.6	1.84	0.20	
354	-3	14.00	69.8	1.4	1.47	0.16	
220	-3	21.30	61.9	0.8	1.05	0.19	
259	-3	19.20	46.1	0.8	0.94	0.21	
362	-3	14.60	54.7	1.0	1.12	0.20	
260	-3	5.34	15.1	0.6	0.26	0.17	
193	-3	28.70	40.8	0.8	0.66	0.20	

Rare Earth Elements:

La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
7.82	18.20	2.81	13.90	3.38	1.13	2.75	0.54	2.85
6.33	10.70	2.07	9.22	2.32	0.79	2.13	0.39	1.89
4.89	13.30	1.78	9.02	1.95	0.68	1.58	0.31	1.72
3.93	9.94	1.41	6.83	1.49	0.72	1.56	0.27	1.44
4.27	10.90	1.53	7.05	1.58	0.65	1.45	0.26	1.31
3.50	11.30	1.13	4.66	1.05	0.56	1.05	0.18	1.00
2.94	10.70	0.93	3.82	0.79	0.50	0.84	0.14	0.78
4.48	9.54	1.67	8.62	2.19	0.63	1.98	0.37	2.13
2.06	7.39	0.76	4.03	0.94	0.55	0.95	0.16	0.97
3.37	10.30	1.12	4.78	1.12	0.48	1.16	0.18	0.95
5.50	16.70	2.11	10.00	2.30	0.71	2.22	0.39	1.98
6.49	13.40	2.52	11.30	2.70	0.96	2.36	0.43	2.27
5.77	14.80	2.17	9.98	2.49	0.85	2.25	0.42	2.19
11.20	30.80	4.59	19.90	4.83	1.71	4.43	0.85	3.86
10.00	18.60	3.76	17.20	4.22	1.31	3.97	0.72	4.09
9.90	12.20	3.52	16.50	4.10	1.24	3.79	0.73	3.77
6.09	10.30	2.14	10.40	2.47	0.83	2.07	0.40	2.01
3.67	10.40	1.46	5.68	1.39	0.60	1.24	0.22	1.26
3.41	7.77	1.12	5.42	1.43	0.61	1.21	0.21	1.10
5.57	10.20	2.03	9.97	2.38	0.86	2.18	0.39	2.16
5.76	9.55	1.88	8.64	2.13	0.71	1.77	0.33	1.85
6.89	6.60	2.57	12.40	3.19	1.08	2.93	0.52	2.88
6.14	9.21	2.29	11.00	2.75	1.18	2.44	0.47	2.45
9.05	17.20	3.16	14.70	3.70	1.13	3.27	0.63	3.52
3.98	10.90	1.26	5.96	1.49	0.55	1.28	0.26	1.30
11.50	32.20	3.67	16.30	3.90	1.38	3.20	0.58	2.76
8.72	16.40	3.07	14.80	3.44	1.05	2.96	0.56	2.88
7.96	12.80	2.98	14.80	3.74	1.18	3.23	0.65	3.29
8.29	17.30	3.10	15.00	3.61	1.06	3.12	0.55	3.22
14.80	26.70	4.68	20.80	4.91	1.38	4.32	0.76	3.85
9.67	17.40	3.35	15.50	3.68	1.26	3.33	0.61	3.57
10.80	11.60	3.98	19.20	4.77	1.48	4.20	0.78	4.54
11.50	6.42	3.94	20.00	4.61	1.50	4.37	0.77	4.34
4.99	8.43	1.80	9.20	2.15	0.87	1.94	0.34	2.01
6.79	8.18	2.30	11.20	2.61	0.88	2.21	0.45	2.42
10.40	21.60	3.95	17.70	4.47	1.30	4.17	0.73	4.22
7.77	12.40	2.73	13.00	3.07	0.90	2.60	0.47	2.35
6.36	8.37	2.24	10.50	2.65	0.70	2.07	0.41	2.07
4.20	8.74	1.41						

Enzyme Leac/
Trace element
Values = 9999

Enhanced Pxx

Sample ID:	Base Metal - Chalcophile Association Indicators:									High-Field Strength Elements:							Rare Earth Elements:									
	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	S.Q. Ti	S.Q. Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy		
RB 01-120S	0.8	0.14	-0.1	0.5	0.02	-0.2	0.056	10.9	341	-3	11.40	47.1	0.9	1.23	0.18	5.33	10.20	2.00	9.80	2.32	0.74	2.05	0.38	2.21		
RB 01-121S	0.9	0.17	-0.1	0.5	0.01	-0.2	0.086	7.2	396	-3	8.32	41.6	1.0	1.00	0.15	4.75	12.30	1.75	8.29	2.03	0.79	1.83	0.33	1.77		
RB 01-122S	0.8	0.19	-0.1	0.6	0.02	-0.2	0.074	16.9	367	6	23.80	80.0	1.2	1.65	0.15	10.30	24.70	4.29	19.40	4.59	1.46	4.15	0.76	3.77		
RB 01-123S	0.9	0.13	-0.1	1.1	-0.01	-0.2	0.409	10.2	319	-3	8.12	36.2	0.6	1.05	0.15	7.22	16.80	1.95	8.35	1.66	0.98	1.52	0.28	1.48		
RB 01-124S	0.9	0.16	-0.1	0.4	-0.01	-0.2	0.083	10.4	477	-3	15.10	62.9	1.4	1.39	0.14	9.58	25.20	3.46	15.30	3.52	1.25	3.22	0.57	3.13		
RB 01-125S	1.4	0.13	-0.1	0.4	0.03	-0.2	0.113	11.1	854	-3	4.59	43.5	1.9	0.92	0.15	3.11	8.49	1.05	4.61	1.13	0.46	0.89	0.17	0.87		
RB 01-126S	1.4	0.40	-0.1	1.2	0.02	-0.2	0.052	20.0	403	-3	26.80	75.2	1.7	1.21	0.14	10.10	13.10	3.66	17.80	4.35	1.29	3.74	0.76	4.02		
RB 01-127S	1.2	0.14	-0.1	0.8	-0.01	-0.2	0.071	10.2	508	-3	12.50	64.5	1.4	1.40	0.14	7.86	17.30	2.80	13.30	3.11	1.00	2.71	0.52	2.56		
RB 01-128S	0.9	0.26	-0.1	0.3	-0.01	-0.2	0.081	7.2	459	-3	9.14	41.8	1.0	0.97	0.09	5.50	14.30	2.07	9.64	2.18	0.82	2.08	0.36	1.92		
RB 01-129S	0.9	0.09	-0.1	0.7	0.01	-0.2	0.044	11.0	482	-3	8.75	20.8	1.1	0.47	0.12	5.62	14.60	1.85	8.20	2.04	0.72	1.79	0.30	1.51		
RB 01-130S	1.1	0.21	-0.1	0.6	0.01	-0.2	0.075	9.1	515	-3	15.80	66.3	1.3	1.50	0.10	7.42	16.20	2.67	13.40	3.25	1.13	2.85	0.54	3.07		
RB 01-131S	1.2	0.28	-0.1	0.7	0.01	-0.2	0.047	9.4	448	-3	16.20	70.4	1.0	1.67	0.11	7.05	15.10	3.13	13.30	3.35	1.16	2.91	0.55	3.02		
RB 01-132S	0.9	0.20	-0.1	0.5	-0.01	-0.2	0.060	8.2	383	-3	18.40	77.3	1.0	1.79	0.10	7.32	16.50	2.87	14.40	3.71	1.13	3.19	0.62	3.45		
RB 01-133S	0.4	0.21	-0.1	0.3	-0.01	-0.2	0.053	14.5	223	-3	7.96	32.7	0.9	0.62	0.13	3.35	7.12	1.24	5.45	1.45	0.46	1.17	0.23	1.35		
RB 01-134S	1.4	0.14	-0.1	0.7	-0.01	-0.2	0.105	7.1	823	-3	17.40	109.0	2.4	2.68	0.14	8.67	18.60	3.29	18.00	3.98	1.45	3.52	0.67	3.56		
RB 01-135S	0.9	0.09	-0.1	0.4	-0.01	-0.2	0.072	7.2	565	-3	3.58	42.9	1.9	1.05	0.06	2.60	6.21	0.82	3.81	0.95	0.36	0.77	0.13	0.79		
RB 01-136S	1.0	0.10	-0.1	0.9	0.02	-0.2	0.139	9.0	743	-3	7.19	63.2	1.8	1.58	0.06	4.78	13.50	1.48	6.53	1.55	0.64	1.18	0.24	1.35		
RB 01-137S	0.8	0.14	-0.1	0.7	0.02	-0.2	0.042	8.5	781	-3	5.35	40.4	2.1	0.98	0.07	3.18	6.57	1.05	4.88	1.25	0.54	0.93	0.18	0.99		
RB 01-138S	1.2	0.08	-0.1	0.6	0.01	-0.2	0.058	7.9	805	-3	6.78	53.8	2.0	0.97	0.06	4.29	12.50	1.39	6.68	1.55	0.59	1.33	0.24	1.41		
RB 01-139S	0.6	0.25	-0.1	0.3	-0.01	-0.2	0.079	7.8	660	-3	15.10	77.7	2.1	1.55	0.10	6.95	13.80	2.51	11.70	2.80	0.89	2.48	0.46	2.42		
RB 01-140S	1.3	0.18	-0.1	0.4	0.02	-0.2	0.080	6.7	539	-3	10.20	71.7	1.2	1.70	0.07	5.02	12.90	1.89	9.38	2.36	0.92	1.98	0.39	1.89		
RB 01-141S	1.5	0.20	-0.1	0.3	0.02	-0.2	0.078	6.2	661	-3	14.10	72.6	1.2	1.78	0.06	7.95	21.50	3.34	15.30	3.88	1.23	3.31	0.57	3.11		
RB 01-142S	1.1	0.18	-0.1	0.6	0.01	-0.2	0.176	3.9	467	-3	14.50	79.4	1.1	1.97	0.04	7.25	20.70	2.91	13.60	3.27	1.09	3.06	0.54	3.01		
RB 01-143S	0.7	0.20	-0.1	0.4	0.02	-0.2	0.071	7.6	272	-3	19.00	80.4	0.9	1.44	0.07	7.70	11.10	2.78	13.40	3.22	1.07	2.74	0.53	3.07		
RB 01-144S	0.7	0.24	-0.1	0.6	-0.01	-0.2	0.124	9.1	270	-3	17.10	47.9	0.7	0.99	0.10	8.81	18.70	3.07	14.90	3.59	1.11	3.03	0.55	3.10		
RB 01-145S	1.7	0.28	-0.1	0.5	0.02	-0.2	0.062	6.3	588	-3	19.30	76.4	1.8	1.81	0.10	7.70	16.70	2.98	14.80	3.71	1.34	3.26	0.62	3.56		
RB 01-146S	1.2	0.31	-0.1	0.4	0.03	-0.2	0.052	9.1	731	-3	15.40	84.0	2.4	2.10	0.08	8.84	23.30	3.35	15.70	3.86	1.27	3.41	0.62	3.35		
RB 01-147S	0.4	0.32	-0.1	2.9	0.01	-0.2	0.051	11.9	277	-3	18.50	56.3	1.3	1.17	0.11	7.49	19.00	2.63	12.40	2.94	0.91	2.80	0.54	2.95		
RB 01-148S	0.9	0.30	-0.1	0.9	-0.01	-0.2	0.065	5.2	422	-3	22.10	72.0	1.5	1.19	0.14	8.48	9.22	3.16	15.40	3.79	1.18	3.20	0.60	3.55		
RB 01-149S	0.4	0.20	-0.1	1.2	-0.01	-0.2	0.062	9.3	176	-3	23.70	60.0	0.5	0.75	0.13	8.45	14.00	3.12	15.10	3.78	1.02	3.19	0.62	3.43		
RB 01-150S	1.3	0.11	-0.1	2.0	0.02	0.2	0.256	17.8	520	-3	3.19	24.3	1.1	0.60	0.18	1.89	5.23	0.66	3.38	0.75	0.45	0.59	0.11	0.60		
RB 01-151S	0.6	0.17	-0.1	0.7	0.03	0.4	0.070	42.7	449	-3	14.90	42.0	2.0	0.92	0.21	7.37	8.97	2.47	12.50	2.98	0.93	2.31	0.45	2.47		
RB 01-152S	0.8	0.19	-0.1	0.7	0.02	0.4	0.053	31.2	426	-3	20.30	69.3	1.6	1.65	0.19	6.72	9.79	2.68	13.40	3.61	1.20	3.11	0.61	3.43		
RB 01-153S	0.4	0.31	-0.1	1.2	0.04	0.6	0.050	68.2	393	-3	19.10	79.8	2.4	1.65	0.27	8.75	14.70	2.97	14.00	3.43	1.00	2.69	0.51	2.74		
RB 01-154S	1.0	0.05	-0.1	1.0	0.02	0.3	0.120	20.5	631	-3	4.16	49.0	1.4	1.17	0.21	2.83	6.98	0.86	3.81	0.91	0.43	0.68	0.12	0.80		
RB 01-155S	0.7	0.22	-0.1	0.5	0.03	0.2	0.048	29.8	308	10	25.80	115.0	1.4	2.36	0.19	10.80	19.50	3.84	18.90	4.58	1.34	3.96	0.76	4.24		
RB 01-156S	0.5	0.14	-0.1	0.4	0.03	-0.2	0.041	26.0	264	13	16.90	116.0	0.8	2.55	0.20	7.82	18.80	3.09	14.60	3.54	1.03	3.15	0.62	3.34		
RB 01-157S	1.0	0.16	-0.1	0.6	0.02	-0.2	0.085	18.0	432	-3	12.90	75.5	1.5	1.81	0.14	6.95	15.70	2.61	12.40	3.15	1.03	2.52	0.47	2.87		
RB 01-158S	0.7	0.19	-0.1	0.7	0.04	-0.2	0.067	29.8	346	-3	16.80	115.0	1.4	2.41	0.16	6.39	16.60	2.50	11.20	2.74	0.82	2.32	0.49	2.93		
RB 01-159S	1.3	0.14	-0.1	2.0	0.03	0.4	0.169	13.7	608	-3	18.10	94.7	2.0	2.41	0.13	6.79	11.70	2.75	12.90	3.15	1.14	2.87	0.51	3.07		
RB 01-160S	0.4	0.26	-0.1	0.6	0.03	0.2	0.095	28.3	322	-3	12.00	78.1	1.7	1.65	0.15	5.49	10.70	1.95	8.91	2.16	0.74	1.89	0.35	1.98		
RB 01-161S	0.4	0.14	-0.1	0.6	-0.01	-0.2	0.075	12.3	283	-3	21.10	73.0	1.1	1.53	0.19	7.43	12.50	3.06	14.50	3.48	1.17	3.24	0.57	3.32		
RB 01-162S	0.6	0.10	-0.1	0.5	0.02	-0.2	0.074	9.4	311	-3	9.61	61.1	0.7	1.41	0.12	4.43	9.20	1.60	8.05	2.02	0.77	1.66	0.30	1.85		
RB 01-163S	0.9	0.07	-0.1	0.6	0.01	-0.2	0.077	14.9	544	-3	6.37	55.3	1.6	1.42	0.12	3.83	9.20	1.23	6.08	1.36	0.65	1.09	0.22	1.40		
RB 01-164S	-0.3	0.39	-0.1	0.7	0.02	-0.2	0.143	22.1	314	-3	7.43	49.3	1.3	0.95	0.18	2.71	5.95	1.08	5.26	1.32	0.51	1.08	0.19	1.12		
RB 01-165S	-0.3	0.25	-0.1	1.0	0.02	0.3	0.073	26.2	376	15	10.60	64.5	1.3	1.17	0.20	4.37	7.81	1.64	7.78	1.85	0.66	1.65	0.32	1.75		
RB 01-166S	0.8	0.13	-0.1	0.7	0.02	-0.2	0.063	9.7	556	-3	22.40	84.6	1.9	1.74	0.12	7.49	12.80	2.95	14.80	3.57	1.25	3.07	0.61	3.58		
RB 01-167S	1.1	0.16	-0.1	0.6	0.02	-0.2	0.047	9.0	549	-3	2.75	23.2	1.7	0.58	0.08	1.87	4.32	0.53	2.51	0.57	0.29	0.41	0.08	0.49		
RB 01-168S	1.2	0.24	-0.1	1.0	0.02	-0.2	0.269	12.8	353	-3	4.28	50.5	0.7	1.09	0.12	2.66	7.52	0.87	3.89	0.95	0.43	0.79	0.14	0.81		
RB 01-169S	1.1	0.06	-0.1	0.5	0.02	-0.2	0.149	12.5	591	-3	5.12	53.3	1.6	1.26	0.12	2.91	7.76	0.95	4.83	1.07	0.48	0.81	0.15	1.03		
RB 01-170S	0.6	0.54	-0.1	0.6	0.03	-0.2	0.083	10.8	572	-3	39.80	162.0	2.9	3.44	0.12	12.80	16.60	5.03	24.90	6.02	1.89	5.26	1.04	5.73		
RB 01-171S	0.7	0.35	-0.1	0.7	0.02	-0.2	0.085	12.2	536	4	33.00	130.0	2.7	2.84	0.12	12.40	21.30	4.52	22.70	5.39	1.66	4.71	0.93	5.02		
RB 01-172S	0.4	0.26	-0.1	0.8	0.02	-0.2	0																			

Enzyme Leact
Trace element
Values = 9999

Enhanced Pax

Base Metal - Chalcophile Association Indicators:

Sample ID:	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi
RB 01-175S	0.9	0.25	-0.1	1.0	0.02	-0.2	0.037	7.0
RB 01-176S	1.0	0.18	-0.1	0.6	0.02	-0.2	0.100	9.4
RB 01-177S	0.8	0.17	-0.1	0.7	0.02	-0.2	0.113	7.4
RB 01-178S	0.7	0.14	-0.1	0.6	0.02	-0.2	0.058	13.1
RB 01-179S	1.0	0.18	-0.1	1.5	-0.01	-0.2	0.255	7.5
RB 01-180S	0.5	0.27	-0.1	0.5	0.02	-0.2	0.077	9.6
RB 01-181S	1.0	0.13	-0.1	0.8	0.01	-0.2	0.185	5.7
RB 01-182S	1.1	0.25	-0.1	1.5	0.02	-0.2	0.191	4.6
RB 01-183S	0.7	0.21	-0.1	0.6	0.01	-0.2	0.087	5.4
RB 01-184S	1.4	0.28	-0.1	1.0	0.01	-0.2	0.190	7.2
RB 01-185S	0.8	0.20	-0.1	0.4	0.02	-0.2	0.106	7.6
RB 01-186S	0.8	0.22	-0.1	0.6	-0.01	-0.2	0.056	4.6
RB 01-187S	0.4	0.15	-0.1	0.6	-0.01	0.2	0.110	6.9
RB 01-188S	0.8	0.21	-0.1	0.7	0.01	-0.2	0.080	8.0
RB 01-189S	0.6	0.21	-0.1	0.7	-0.01	-0.2	0.049	5.9
RB 01-190S	0.7	0.26	-0.1	0.6	0.03	-0.2	0.068	8.8
RB 01-191S	0.7	-0.05	-0.1	0.5	-0.01	-0.2	0.047	5.5
RB 01-192S	0.4	0.08	-0.1	0.7	0.02	-0.2	0.093	3.8
RB 01-193S	0.6	0.07	-0.1	0.3	0.01	-0.2	0.112	3.5
RB 01-194S	0.5	0.26	-0.1	1.2	0.03	-0.2	0.048	8.4
RB 01-195S	1.2	0.30	-0.1	2.7	0.02	-0.2	0.044	3.5
RB 01-196S	1.3	0.09	-0.1	0.2	0.01	0.2	0.070	17.1
RB 01-197S	0.8	0.10	-0.1	0.4	0.03	0.3	0.065	31.0
RB 01-198S	0.9	0.21	-0.1	0.7	0.03	0.3	0.102	32.5
RB 01-199S	0.8	0.19	-0.1	0.6	0.03	0.3	0.077	34.0
RB 01-200S	0.7	0.06	-0.1	0.5	0.02	-0.2	0.047	28.8
RB 01-201S	0.5	0.20	-0.1	0.6	0.03	-0.2	0.108	32.5
RB 01-202S	0.8	0.20	-0.1	0.4	0.03	-0.2	0.047	23.7
RB 01-203S	0.4	0.22	-0.1	0.5	-0.01	-0.2	0.064	19.8
RB 01-204S	0.5	0.12	-0.1	0.9	0.02	-0.2	0.057	18.1
RB 01-205S	0.5	0.11	-0.1	0.4	-0.01	-0.2	0.068	14.3
RB 01-206S	0.6	0.07	-0.1	0.4	0.02	-0.2	0.062	14.5
RB 01-207S	0.6	0.10	-0.1	0.3	0.01	-0.2	0.098	18.6
RB 01-208S	0.4	0.10	-0.1	0.4	0.02	-0.2	0.047	20.3
RB 01-209S	0.7	0.18	-0.1	0.3	0.02	-0.2	0.089	18.2
RB 01-210S	0.6	0.16	-0.1	0.4	0.02	-0.2	0.064	22.3
RB 01-211S	0.8	0.08	-0.1	0.3	0.02	-0.2	0.064	18.6
RB 01-212S	0.8	0.09	-0.1	0.3	0.02	-0.2	0.052	13.0
RB 01-213S	0.8	0.09	-0.1	0.4	0.02	-0.2	0.089	15.1
RB 01-214S	0.5	0.19	-0.1	0.5	-0.01	-0.2	0.098	12.5
RB 01-215S	0.4	0.14	-0.1	0.3	-0.01	-0.2	0.106	10.9
RB 01-216S	0.9	0.13	-0.1	0.3	0.01	-0.2	0.078	8.2
RB 01-217S	1.0	0.18	-0.1	0.7	0.01	-0.2	0.079	8.0
RB 01-218S	1.1	0.10	-0.1	0.4	0.01	-0.2	0.073	4.7
RB 01-219S	0.8	0.07	-0.1	0.9	0.02	-0.2	0.084	9.2
RB 01-220S	0.8	0.21	-0.1	0.4	0.01	-0.2	0.056	8.9
RB 01-221S	1.7	0.18	-0.1	0.6	0.02	-0.2	0.171	11.9
RB 01-222S	1.0	0.11	-0.1	0.2	0.01	-0.2	0.117	5.7
RB 01-223S	1.1	0.21	-0.1	0.3	0.02	-0.2	0.196	11.8
RB 01-224S	1.4	0.13	-0.1	1.1	-0.01	-0.2	0.128	8.5
RB 01-225S	0.8	0.17	-0.1	0.5	0.01	-0.2	0.141	11.6
RB 01-226S	0.8	0.09	-0.1	1.4	0.01	-0.2	0.064	5.4
RB 01-227S	0.7	0.24	-0.1	0.5	0.01	-0.2	0.088	6.3
RB 01-228S	0.4	0.25	-0.1	0.2	0.01	-0.2	0.068	8.0
RB 01-229S	0.7	0.20	-0.1	0.3	-0.01	-0.2	0.069	6.0

High-Field Strength Elements:

S.Q. Ti	S.Q. Cr	Y	Zr	Nb	Hf	Ta
573	-3	13.00	59.6	1.9	1.44	0.13
620	-3	24.70	108.0	2.4	2.51	0.15
615	-3	14.40	91.2	1.7	2.21	0.14
438	-3	13.80	36.9	1.2	0.95	0.10
657	-3	8.97	95.2	1.4	2.37	0.11
397	-3	20.70	108.0	2.1	2.10	0.10
418	-3	4.46	45.3	0.8	0.97	0.10
627	-3	7.13	82.8	1.2	2.18	0.08
451	-3	3.95	47.4	1.9	1.03	0.06
569	-3	4.77	46.4	1.1	1.12	0.10
241	-3	35.90	96.8	1.1	1.93	0.10
592	-3	24.30	57.4	1.7	1.29	0.11
425	-3	24.40	109.0	1.7	2.32	0.15
517	-3	19.00	64.8	1.6	1.58	0.13
643	-3	15.90	63.4	1.7	1.57	0.14
520	-3	16.60	73.3	1.6	1.68	0.13
465	-3	6.30	64.3	1.4	1.54	0.09
508	-3	6.03	45.7	0.9	1.35	0.07
500	-3	10.90	74.7	1.3	1.64	0.05
363	4	42.50	125.0	2.1	1.95	0.06
433	-3	12.70	15.0	0.8	0.30	0.08
532	-3	5.34	50.6	1.4	1.23	0.16
276	-3	9.75	63.3	1.1	1.41	0.13
320	-3	9.71	78.4	0.9	1.95	0.17
371	-3	5.81	31.8	1.2	0.75	0.15
475	-3	1.95	26.3	1.5	0.52	0.13
263	-3	5.24	33.9	0.5	0.77	0.06
306	-3	17.00	37.7	1.0	0.83	0.05
217	-3	18.60	47.7	0.8	1.04	0.09
435	-3	5.62	44.1	1.1	0.97	0.07
462	-3	8.50	39.6	1.3	0.79	0.07
434	-3	3.15	29.1	1.2	0.55	0.08
387	-3	20.50	63.9	1.2	1.33	0.07
332	-3	13.70	58.6	1.4	1.12	0.08
324	-3	41.10	105.0	1.2	1.74	0.08
353	-3	21.00	56.3	1.2	1.10	0.12
304	-3	15.80	44.6	0.7	0.68	0.12
759	-3	2.80	54.2	3.0	1.41	0.09
384	5	5.11	20.8	0.9	0.55	0.06
293	7	10.40	35.0	0.6	0.85	0.05
274	-3	14.60	58.5	0.5	1.48	0.06
399	-3	15.40	58.1	0.9	1.41	0.03
405	-3	12.60	58.0	1.0	1.60	-0.02
421	-3	8.35	39.9	1.2	0.86	-0.02
382	-3	4.89	30.2	0.7	0.64	-0.02
440	-3	8.04	54.6	1.0	1.11	-0.02
683	-3	5.47	44.0	0.9	1.11	0.03
366	-3	8.11	61.4	0.8	1.63	0.03
280	-3	11.10	61.8	0.8	1.51	0.05
378	-3	3.34	32.8	1.0	0.75	0.02
495	5	11.90	75.2	1.4	1.77	0.06
250	-3	11.00	35.9	0.4	0.93	-0.02
315	-3	44.10	74.7	0.9	0.97	0.02
313	-3	13.20	46.2	1.1	0.70	0.05
342	-3	8.08	62.3	1.1	1.18	-0.02

Rare Earth Elements:

La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
6.63	10.40	2.32	11.70	2.81	1.03	2.29	0.45	2.59
12.20	23.30	4.58	23.20	5.45	1.76	4.90	0.94	5.14
7.97	17.30	3.12	14.70	3.70	1.42	3.18	0.56	2.98
7.07	15.70	2.47	11.80	2.75	0.89	2.37	0.43	2.35
5.90	17.50	1.90	8.01	1.92	0.94	1.62	0.32	1.82
8.65	13.00	3.33	15.80	3.75	1.09	2.98	0.54	3.42
3.05	8.30	0.91	4.13	1.00	0.52	0.66	0.13	0.83
5.28	13.30	1.56	7.11	1.59	0.74	1.34	0.25	1.52
2.82	9.88	0.96	4.27	1.46	0.46	0.86	0.13	0.85
3.41	9.21	0.96	4.64	1.04	0.67	0.97	0.13	0.87
13.60	16.00	4.76	24.80	6.09	1.88	5.22	1.00	5.79
8.40	14.10	3.18	17.00	4.21	1.68	3.64	0.69	3.97
10.40	18.10	3.83	19.10	4.85	1.41	3.96	0.74	4.51
10.20	18.70	3.40	17.10	3.89	1.35	3.38	0.62	3.33
7.82	15.90	2.57	13.30	3.33	1.17	2.78	0.49	2.71
7.09	14.40	2.49	12.50	3.16	1.03	2.84	0.46	2.96
4.30	13.70	1.35	6.57	1.43	0.75	1.33	0.27	1.27
3.47	9.72	1.29	5.86	1.40	0.60	1.13	0.22	1.28
5.97	17.40	2.02	9.39	2.24	0.99	1.97	0.35	1.99
17.10	30.20	6.99	31.60	8.12	2.03	6.77	1.25	7.62
5.24	7.41	1.73	8.90	2.36	0.69	1.90	0.39	2.27
3.09	7.11	1.10	5.44	1.21	0.48	1.18	0.18	1.13
4.77	10.20	1.76	8.16	2.05	0.69	1.74	0.28	1.90
5.63	12.90	2.01	9.31	2.07	0.65	1.71	0.31	1.72
3.70	10.30	1.20	5.45	1.19	0.41	1.07	0.15	1.06
1.53	5.41	0.43	2.19	0.45	0.18	0.39	0.04	0.39
2.81	9.45	1.04	5.53	1.28	0.39	0.99	0.17	1.15
5.76	7.69	2.08	10.30	2.48	0.90	2.33	0.44	2.63
6.44	7.55	2.48	12.30	2.97	0.96	2.74	0.49	2.99
3.00	9.24	1.12	5.28	1.27	0.39	0.89	0.20	1.06
3.83	8.49	1.45	6.82	1.39	0.57	1.26	0.21	1.23
2.14	5.97	0.63	3.25	0.53	0.27	0.56	0.08	0.60
7.68	13.90	3.03	15.40	3.95	1.06	3.17	0.54	3.36
5.67	11.60	2.03	10.00	2.46	0.74	2.04	0.33	2.08
11.00	18.40	4.40	23.00	5.36	1.73	4.76	0.92	5.85
8.57	15.30	2.97	14.60	3.44	1.01	2.88	0.53	3.26
6.44	8.76	2.33	11.20	2.57	0.73	2.34	0.44	2.61
1.66	5.39	0.53	2.66	0.48	0.23	0.47	0.08	0.53
3.19	8.74	1.04	5.46	1.11	0.46	1.06	0.15	1.00
5.32	12.20	1.95	9.28	2.33	0.70	2.00	0.	

Enzyme Lead
Trace element
Values = 9999

Enhanced Pac Base Metal - Chalcophile Association Indicators:

Sample ID:	Ga	Ge	Ag	Cd	In	Sn	Tl	Pb
RB 01-230S	0.6	-0.05	-0.1	0.3	-0.01	-0.2	0.088	4.5
RB 01-231S	0.8	-0.05	-0.1	0.4	-0.01	-0.2	0.038	5.8
RB 01-232S	0.6	0.12	-0.1	0.5	0.01	-0.2	0.089	8.0
RB 01-233S	0.4	0.37	-0.1	0.6	-0.01	-0.2	0.067	10.4
RB 01-234S	0.9	0.29	-0.1	0.5	-0.01	-0.2	0.060	6.6
RB 01-235S	0.5	0.18	-0.1	0.5	-0.01	-0.2	0.082	8.0
RB 01-236S	0.5	0.13	-0.1	0.7	-0.01	-0.2	0.098	6.2
RB 01-237S	0.7	0.10	-0.1	0.6	0.01	-0.2	0.079	5.7
RB 01-238S	1.8	0.17	-0.1	0.6	0.03	-0.2	0.086	8.0
RB 01-239S	0.7	-0.05	-0.1	0.4	-0.01	-0.2	0.122	5.2
RB 01-240S	0.7	-0.05	-0.1	0.4	0.02	-0.2	0.027	7.5
RB 01-241S	0.7	0.12	-0.1	0.7	0.01	-0.2	0.041	5.2
RB 01-242S	0.9	0.14	0.1	0.4	0.04	-0.2	0.150	20.9
RB 01-243S	0.6	0.10	0.3	0.4	0.06	-0.2	0.020	33.5
RB 01-244S	0.8	0.09	0.2	0.7	0.06	-0.2	0.059	42.6
RB 01-245S	1.4	0.27	0.1	0.8	0.08	-0.2	0.083	48.2
RB 01-246S	1.0	0.06	-0.1	0.5	0.03	-0.2	0.062	22.9
RB 01-247S	0.9	0.20	-0.1	1.3	0.05	-0.2	0.091	32.8
RB 01-248S	1.4	0.22	-0.1	1.5	0.04	-0.2	0.650	31.5
RB 01-249S	2.2	0.21	-0.1	1.3	0.03	-0.2	0.336	24.2
RB 01-250S	0.7	0.15	-0.1	0.6	0.03	-0.2	0.081	11.5
RB 01-251S	0.7	0.10	-0.1	0.5	0.04	-0.2	0.108	16.8
RB 01-252S	0.7	0.11	-0.1	0.5	0.03	-0.2	0.124	17.0
RB 01-253S	1.0	0.10	-0.1	0.5	0.03	-0.2	0.122	13.5
RB 01-254S	0.5	0.07	-0.1	0.6	0.02	-0.2	0.083	12.2
RB 01-255S	0.8	-0.05	-0.1	0.3	0.03	-0.2	0.017	15.4
RB 01-256S	1.1	-0.05	-0.1	0.5	0.01	-0.2	0.099	12.2
RB 01-257S	0.7	0.21	-0.1	0.6	0.02	-0.2	0.062	18.9
RB 01-258S	0.7	-0.05	-0.1	0.4	0.02	0.4	0.094	12.0
RB 01-259S	0.7	0.32	-0.1	0.3	0.02	-0.2	0.085	20.1
RB 01-260S	0.5	0.12	-0.1	0.7	0.03	-0.2	0.050	13.7
RB 01-261S	0.8	0.19	-0.1	0.5	0.02	-0.2	0.064	11.3
RB 01-262S	0.9	0.08	-0.1	0.5	0.01	-0.2	0.036	7.8
RB 01-263S	1.3	0.16	-0.1	0.5	0.03	-0.2	0.057	11.3
RB 01-264S	1.1	0.10	-0.1	0.4	0.02	-0.2	0.038	8.2
RB 01-265S	2.2	0.19	-0.1	0.4	0.02	-0.2	0.275	10.6
RB 01-266S	1.8	0.19	-0.1	1.2	0.04	-0.2	0.066	13.4
RB 01-267S	1.6	0.25	-0.1	1.0	0.01	-0.2	0.169	7.1
RB 01-268S	3.0	-0.05	-0.1	2.0	0.02	-0.2	0.212	10.0
RB 01-269S	0.5	0.13	-0.1	0.6	0.02	-0.2	0.054	16.7
RB 01-270S	1.5	0.06	-0.1	0.8	0.02	-0.2	0.109	5.5
RB 01-271S	0.8	-0.05	-0.1	0.2	0.01	-0.2	0.049	5.0
RB 01-273S	0.5	0.24	-0.1	0.7	0.02	-0.2	0.030	16.6
RB 01-274S	1.1	0.15	-0.1	0.4	0.01	-0.2	0.063	4.7
RB 01-275S	0.6	0.93	-0.1	0.8	0.02	-0.2	0.113	12.1
RB 01-276S	0.9	0.30	-0.1	0.3	0.02	-0.2	0.162	9.8
RB 01-277S	1.2	0.16	-0.1	0.4	0.02	-0.2	0.083	13.3
RB 01-278S	1.0	0.05	-0.1	0.6	0.01	-0.2	0.056	4.5
RB 01-279S	1.1	0.06	-0.1	0.7	-0.01	-0.2	0.069	3.6
RB 01-280S	0.9	0.14	-0.1	0.5	0.02	-0.2	0.105	4.8
RB 01-281S	1.2	0.14	-0.1	0.5	0.02	-0.2	0.118	5.1
RB 01-282S	1.5	-0.05	-0.1	0.7	0.01	-0.2	0.055	3.2
RB 01-283S	1.1	0.14	-0.1	0.5	-0.01	-0.2	0.146	5.0
RB 01-284S	0.8	0.25	-0.1	0.4	0.02	-0.2	0.051	7.1
RB 01-285S	2.4	0.24	-0.1	0.5	0.03	-0.2	0.142	7.3

High-Field Strength Elements:

S.Q. Ti	S.Q. Cr	Y	Zr	Nb	Hf	Ta
319	-3	3.49	32.7	0.6	0.67	0.04
471	-3	3.21	34.8	1.0	0.90	0.04
448	-3	4.49	53.7	1.1	1.31	0.03
238	-3	15.10	48.7	0.6	0.96	0.03
334	3	31.30	120.0	1.1	2.22	0.09
191	-3	9.43	17.6	0.3	0.36	0.04
405	-3	3.99	25.8	0.7	0.54	0.05
557	-3	11.40	42.0	1.3	1.00	0.04
871	7	21.30	108.0	2.7	2.88	0.05
493	-3	3.89	52.2	1.4	1.25	-0.02
1350	-3	5.27	29.1	1.7	0.68	0.04
393	-3	5.19	31.6	1.3	0.64	-0.02
323	-3	2.81	32.2	1.0	0.73	0.13
305	-3	2.94	15.9	0.7	0.38	0.13
451	-3	7.86	24.9	0.8	0.64	0.06
867	-3	6.91	44.6	1.9	0.98	0.12
472	-3	3.20	38.7	1.4	0.85	-0.02
400	-3	5.21	35.3	0.8	0.92	-0.02
313	-3	3.15	43.8	0.6	0.86	0.06
457	-3	3.70	48.9	0.7	0.98	0.04
455	-3	1.72	27.1	1.1	0.63	-0.02
410	-3	3.62	42.0	1.3	0.96	-0.02
741	-3	8.00	78.4	2.0	1.68	-0.02
511	-3	11.00	61.4	1.3	1.43	-0.02
371	-3	6.20	43.6	1.3	0.80	-0.02
545	-3	5.01	49.0	1.5	1.10	-0.02
471	-3	4.73	45.6	1.2	0.92	-0.02
371	-3	13.40	41.8	1.0	0.80	-0.02
440	-3	5.74	38.2	0.9	0.75	-0.02
189	-3	8.37	27.6	0.6	0.35	-0.02
620	-3	8.98	72.8	2.6	1.50	-0.02
389	-3	4.37	21.6	0.7	0.48	-0.02
455	-3	2.91	19.1	0.9	0.35	-0.02
764	-3	13.20	67.3	1.9	1.53	-0.02
734	-3	2.34	18.4	1.1	0.42	-0.02
1170	-3	2.37	48.0	2.1	1.05	-0.02
738	-3	6.32	49.2	1.5	1.12	-0.02
684	-3	5.74	67.4	1.2	1.75	-0.02
1290	-3	3.48	51.9	2.0	1.33	-0.02
267	-3	7.81	35.1	0.8	0.53	0.04
844	-3	7.91	60.5	1.5	1.47	-0.02
639	-3	1.82	29.5	1.1	0.74	-0.02
268	-3	12.00	34.8	0.8	0.62	-0.02
485	-3	4.28	48.9	1.2	1.02	-0.02
179	-3	12.50	16.9	0.3	0.24	-0.02
320	-3	7.72	57.4	0.9	1.18	-0.02
516	-3	10.50	61.3	1.6	1.14	-0.02
526	-3	4.89	34.4	1.2	0.86	-0.02
586	-3	3.51	36.7	1.4	0.78	-0.02
647	-3	3.97	54.6	1.4	1.27	-0.02
749	-3	8.84	64.9	1.4	1.34	-0.02
700	-3	6.00	44.0	1.3	1.07	-0.02
615	-3	4.76	40.0	0.9	0.92	-0.02
401	-3	17.40	95.6	1.7	1.71	0.02
1440	-3	7.10	78.4	3.1	1.70	-0.02

Rare Earth Elements:

La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
2.12	6.56	0.66	3.17	0.71	0.37	0.57	0.09	0.64
2.42	7.54	0.71	3.36	0.74	0.36	0.66	0.09	0.68
3.25	11.50	0.98	4.55	1.00	0.44	0.83	0.15	0.89
5.46	9.75	2.07	10.10	2.37	0.76	1.98	0.39	2.44
8.98	15.70	3.89	19.00	4.68	1.52	4.30	0.86	4.70
3.92	7.39	1.38	7.19	1.79	0.55	1.42	0.23	1.48
2.59	7.10	0.88	4.20	0.85	0.31	0.80	0.11	0.85
5.55	11.80	2.12	10.00	2.11	0.80	1.98	0.34	2.02
7.55	25.60	3.30	17.10	4.45	1.38	3.72	0.71	4.27
2.76	10.60	0.86	3.94	0.85	0.39	0.60	0.10	0.70
2.70	8.45	1.03	5.20	1.14	0.46	1.06	0.17	1.32
2.68	5.52	0.83	4.22	1.13	0.33	0.79	0.12	0.89
1.81	4.52	0.67	2.51	0.72	0.42	0.61	0.13	0.56
1.84	4.83	0.57	2.71	0.67	0.25	0.53	0.10	0.49
5.28	13.00	1.67	8.58	1.85	0.63	1.56	0.29	1.65
4.27	12.20	1.53	7.03	1.67	0.53	1.31	0.21	1.35
2.37	6.66	0.73	3.57	0.82	0.22	0.57	0.08	0.66
2.83	6.88	0.88	4.17	1.02	0.41	0.87	0.14	1.05
2.18	5.26	0.63	2.81	0.61	0.24	0.60	0.07	0.57
2.52	5.92	0.65	3.33	0.61	0.23	0.55	0.07	0.59
1.38	4.70	0.38	1.96	0.40	0.32	0.31	0.04	0.34
2.42	8.62	0.79	3.49	0.77	0.32	0.62	0.07	0.71
4.56	13.10	1.75	7.77	1.83	0.53	1.49	0.25	1.66
5.72	16.40	2.00	9.59	2.24	0.86	1.92	0.33	2.18
3.24	8.81	1.07	5.05	1.20	0.45	1.01	0.16	1.03
3.97	13.60	1.32	5.55	1.13	0.36	0.97	0.17	1.15
2.65	9.77	0.86	4.42	0.99	0.37	0.84	0.11	0.83
5.71	9.58	1.95	9.93	2.30	0.76	2.06	0.32	2.12
3.36	11.40	1.28	6.26	1.31	0.42	1.18	0.19	1.25
3.45	11.50	1.24	5.50	1.38	0.44	1.29	0.18	1.21
4.46	9.91	1.61	7.67	1.88	0.58	1.37	0.21	1.52
2.65	7.95	0.82	4.05	0.94	0.40	0.77	0.14	0.93
1.73	4.61	0.45	2.46	0.49	0.26	0.44	0.05	0.55
5.66	11.30	1.95	9.41	2.20	0.76	2.03	0.36	2.30
1.75	4.05	0.43	2.25	0.46	0.21	0.38	0.04	0.49
1.53	6.79	0.39	2.02	0.47	0.17	0.38	0.02	0.36
3.39	11.90	1.07	5.21	1.33	0.60	1.10	0.17	1.13
3.62	10.30	1.21	5.56	1.17	0.46	1.02	0.16	1.03
2.26	8.26	0.59	3.07	0.53	0.41	0.63	0.05	0.61
4.03	17.50	1.40	6.46	1.26	0.40	1.22	0.23	1.48
4.56	12.50	1.54						

Enzyme Lead
Trace element
Values = 9999:

Enhanced Pac - Base Metal - Chalcophile Association Indicators:

Sample ID:	Ga	Ge	Ag	Cd	In	Sn	Tl	Pb
RB 01-286S	2.1	0.20	-0.1	0.3	0.02	-0.2	0.068	5.9
RB 01-287S	0.4	0.22	-0.1	0.3	0.02	-0.2	0.033	5.5
RB 01-288S	0.7	-0.05	-0.1	0.1	-0.01	-0.2	0.067	2.8
RB 01-289S	0.6	0.16	-0.1	0.2	0.02	-0.2	0.052	6.3
RB 01-290S	0.5	0.15	-0.1	0.3	0.02	-0.2	0.024	6.7
RB 01-291S	0.5	0.18	0.2	0.5	0.03	0.3	0.044	23.8
RB 01-292S	0.4	0.18	0.2	0.1	0.03	0.4	0.014	24.2
RB 01-293S	0.6	0.16	0.4	0.4	0.06	-0.2	0.038	59.6
RB 01-294S	0.9	0.14	-0.1	0.4	0.11	-0.2	0.057	72.4
RB 01-295S	1.0	0.21	-0.1	0.4	0.05	-0.2	0.017	41.8
RB 01-296S	0.9	0.15	-0.1	0.2	0.03	-0.2	0.033	22.5
RB 01-297S	1.0	-0.05	-0.1	-0.1	0.03	-0.2	0.029	20.1
RB 01-298S	0.8	0.06	0.1	0.4	0.03	-0.2	0.071	28.4
RB 01-299S	1.0	0.07	-0.1	0.4	0.04	-0.2	0.054	15.6
RB 01-300S	2.0	0.24	-0.1	0.4	0.02	-0.2	0.118	20.3
RB 01-301S	1.3	0.08	-0.1	0.2	0.04	-0.2	0.030	21.5
RB 01-302S	0.9	0.23	-0.1	0.5	0.02	-0.2	0.030	35.4
RB 01-303S	1.0	-0.05	-0.1	0.3	0.02	-0.2	0.063	15.2
RB 01-304S	1.0	0.29	-0.1	0.5	0.03	-0.2	0.015	14.6
RB 01-305S	1.1	0.27	-0.1	0.3	0.02	-0.2	0.050	14.3
RB 01-306S	1.1	0.33	-0.1	0.4	0.03	-0.2	0.101	23.1
RB 01-307S	1.0	0.25	-0.1	0.6	0.02	-0.2	0.032	18.2
RB 01-308S	0.9	0.33	-0.1	0.5	0.05	-0.2	0.023	22.8
RB 01-309S	1.4	0.18	-0.1	0.2	-0.01	-0.2	0.028	6.8
RB 01-310S	0.8	0.12	-0.1	0.2	0.02	-0.2	0.035	9.1
RB 01-311S	0.6	0.07	-0.1	0.3	0.03	-0.2	0.023	13.9
RB 01-312S	0.6	0.05	-0.1	0.2	0.02	-0.2	0.011	12.5
RB 01-313S	0.5	0.19	-0.1	0.3	0.02	-0.2	0.043	20.8
RB 01-314S	0.7	-0.05	-0.1	0.5	0.01	-0.2	0.066	13.5
RB 01-315S	0.8	0.15	-0.1	0.3	0.02	-0.2	0.033	9.7
RB 01-316S	1.0	0.33	-0.1	0.7	0.03	-0.2	0.109	11.5

High-Field Strength Elements:

S.Q. Ti	S.Q. Cr	Y	Zr	Nb	Hf	Ta
662	-3	4.61	68.0	1.9	1.46	-0.02
340	-3	10.40	67.1	1.1	1.36	-0.02
553	-3	2.88	16.7	0.7	0.25	-0.02
331	-3	16.90	70.5	1.2	1.27	-0.02
264	-3	16.00	45.4	1.0	0.77	-0.02
243	-3	16.20	48.4	1.1	0.74	0.11
225	-3	14.10	39.8	1.0	0.73	0.10
148	-3	12.50	28.7	0.6	0.34	0.12
272	-3	13.20	39.5	1.2	0.79	0.10
253	-3	17.00	39.4	1.0	0.66	0.07
312	-3	6.71	36.9	1.2	0.57	0.07
310	-3	4.78	49.7	0.9	0.88	0.09
188	-3	3.95	21.9	0.5	0.32	0.06
430	-3	3.87	20.4	0.7	0.33	-0.02
457	-3	6.00	34.1	0.7	0.49	-0.02
701	-3	10.60	56.1	2.1	0.93	-0.02
280	-3	14.30	49.4	1.0	0.77	-0.02
702	-3	10.80	99.3	2.5	1.71	-0.02
437	-3	12.90	60.8	1.6	1.05	-0.02
227	-3	34.30	70.3	0.7	1.00	-0.02
509	-3	8.21	52.4	2.1	0.79	-0.02
602	-3	22.90	64.3	2.4	1.32	-0.02
283	-3	28.30	48.1	0.8	0.89	-0.02
463	-3	7.97	34.2	0.9	0.73	-0.02
518	-3	6.24	35.2	1.3	0.65	-0.02
326	-3	12.80	42.8	0.9	0.72	-0.02
449	-3	3.27	25.1	1.1	0.42	-0.02
265	-3	12.00	64.0	1.4	0.98	-0.02
242	-3	18.90	76.6	0.8	0.91	-0.02
457	-3	10.10	52.5	1.7	0.83	-0.02
432	-3	4.74	59.5	1.1	0.89	-0.02

Rare Earth Elements:

La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
2.70	10.80	0.81	4.32	0.98	0.40	0.83	0.12	0.81
4.52	10.80	1.68	8.75	2.30	0.63	1.58	0.27	1.94
1.65	4.74	0.51	2.90	0.61	0.21	0.54	0.05	0.57
6.30	10.60	2.39	12.10	2.82	0.79	2.47	0.50	2.81
6.88	9.86	2.56	11.70	2.74	0.78	2.32	0.40	2.43
3.93	6.33	1.77	9.49	2.41	0.88	2.14	0.48	2.50
4.25	7.83	1.64	8.83	2.12	0.71	1.82	0.36	2.30
4.07	6.36	1.41	6.61	1.80	0.55	1.46	0.27	1.74
5.13	11.40	1.83	8.92	1.93	0.74	1.90	0.31	1.96
6.12	11.50	2.16	10.60	2.70	0.83	2.39	0.38	2.40
2.71	5.74	0.97	4.80	1.15	0.34	0.94	0.12	0.85
2.75	8.53	0.90	4.39	0.99	0.32	0.95	0.10	0.81
2.38	6.86	0.68	3.63	0.87	0.29	0.63	0.09	0.81
2.98	7.62	0.85	4.09	0.82	0.27	0.83	0.09	0.66
4.06	12.60	1.18	5.38	1.24	0.35	1.11	0.15	1.07
5.37	12.50	1.68	8.24	1.92	0.58	1.61	0.27	1.67
5.67	10.20	1.93	8.90	2.10	0.61	2.09	0.30	2.17
4.97	12.60	1.59	7.51	1.81	0.61	1.66	0.28	1.49
4.75	12.40	1.71	8.13	1.98	0.50	1.67	0.27	1.88
11.90	14.60	4.26	21.30	5.83	1.54	5.19	0.90	5.20
4.50	7.16	1.37	6.51	1.39	0.39	1.37	0.16	1.12
12.50	29.50	4.90	21.90	4.83	1.46	4.39	0.81	4.12
10.80	19.50	4.02	20.20	4.97	1.38	4.14	0.79	4.70
4.25	12.20	1.40	7.16	1.68	0.52	1.53	0.21	1.57
4.21	11.00	1.28	5.91	1.33	0.41	1.32	0.16	1.22
5.16	9.71	1.94	9.78	2.11	0.75	2.09	0.36	2.19
2.05	5.30	0.55	3.02	0.62	0.21	0.53	0.02	0.63
6.04	7.21	2.06	9.27	2.01	0.54	1.79	0.30	1.94
6.69	9.60	2.32	11.80	2.77	0.75	2.51	0.39	2.70
3.52	8.29	1.45	7.51	1.87	0.61	1.67	0.28	1.79
3.51	7.58	1.10	4.81	0.91	0.34	0.77	0.09	0.85

Enzyme Lead
Trace element
Values = 9999

Enhanced Pac

Sample ID:	Ho	Er	Tm	Yb	Lu
RB 01-286S	0.15	0.52	0.08	0.54	0.05
RB 01-287S	0.36	1.18	0.18	1.21	0.15
RB 01-288S	0.07	0.29	0.05	0.32	-0.01
RB 01-289S	0.50	1.73	0.29	1.92	0.23
RB 01-290S	0.47	1.56	0.21	1.36	0.18
RB 01-291S	0.54	1.69	0.32	1.88	0.33
RB 01-292S	0.45	1.55	0.23	1.34	0.22
RB 01-293S	0.31	0.97	0.18	1.09	0.13
RB 01-294S	0.36	1.29	0.19	1.13	0.14
RB 01-295S	0.46	1.61	0.24	1.49	0.20
RB 01-296S	0.16	0.56	0.09	0.57	0.06
RB 01-297S	0.12	0.52	0.10	0.34	0.04
RB 01-298S	0.05	0.41	0.07	0.30	-0.01
RB 01-299S	0.10	0.39	0.06	0.32	-0.01
RB 01-300S	0.15	0.63	0.08	0.55	0.04
RB 01-301S	0.26	0.82	0.15	0.84	0.06
RB 01-302S	0.40	1.38	0.22	1.16	0.16
RB 01-303S	0.25	0.89	0.15	0.99	0.09
RB 01-304S	0.35	1.26	0.18	1.31	0.16
RB 01-305S	1.09	3.31	0.49	2.91	0.53
RB 01-306S	0.19	0.66	0.11	0.58	0.04
RB 01-307S	0.75	2.43	0.31	2.37	0.30
RB 01-308S	0.83	2.81	0.39	2.40	0.37
RB 01-309S	0.20	0.74	0.14	0.68	0.05
RB 01-310S	0.13	0.65	0.10	0.63	0.03
RB 01-311S	0.34	1.16	0.20	1.13	0.14
RB 01-312S	0.05	0.33	0.06	0.21	-0.01
RB 01-313S	0.31	1.19	0.17	0.99	0.14
RB 01-314S	0.51	1.64	0.26	1.65	0.21
RB 01-315S	0.28	1.01	0.17	1.10	0.09
RB 01-316S	0.11	0.45	0.07	0.44	0.04

Lithophile Elements:

S.Q.	Li	Be	S.Q.	Sc	Mn	Rb	Sr	Cs	Ba
15.8	0.8	-10	3850.0	26.2	789.0	0.59	1310.0		
9.3	1.1	-10	639.0	10.3	748.0	0.04	612.0		
3.9	0.2	-10	111.0	53.0	287.0	0.25	578.0		
6.2	0.7	-10	1140.0	9.9	494.0	0.09	621.0		
3.7	0.8	-10	987.0	6.4	535.0	0.02	492.0		
10.8	0.8	-10	741.0	10.9	342.0	0.32	565.0		
10.2	0.5	-10	1310.0	8.2	368.0	0.03	515.0		
2.6	0.2	-10	1050.0	11.0	477.0	0.05	581.0		
1.8	0.5	-10	853.0	5.7	521.0	-0.01	835.0		
8.7	0.5	-10	1330.0	2.5	445.0	-0.01	734.0		
4.6	0.4	-10	1190.0	5.7	255.0	-0.01	635.0		
7.2	0.1	-10	2420.0	20.7	237.0	-0.01	499.0		
3.2	1.0	-10	1010.0	35.6	531.0	0.13	1130.0		
9.0	0.3	-10	745.0	19.6	255.0	0.05	605.0		
6.3	0.2	-10	5130.0	51.7	408.0	0.15	655.0		
5.3	0.7	-10	1290.0	19.9	385.0	0.03	730.0		
11.0	0.9	-10	444.0	12.1	520.0	-0.01	691.0		
7.1	0.6	-10	1070.0	13.4	359.0	0.04	804.0		
11.1	0.9	-10	1490.0	14.8	590.0	0.01	685.0		
9.5	0.7	-10	173.0	11.8	839.0	0.07	508.0		
14.2	0.8	-10	130.0	18.0	1970.0	0.08	1240.0		
12.5	1.1	-10	1340.0	5.5	1580.0	0.03	1770.0		
6.1	1.0	-10	1590.0	6.8	1200.0	0.02	830.0		
15.7	1.0	-10	2990.0	8.8	302.0	0.07	1130.0		
18.8	0.4	-10	2030.0	22.4	272.0	0.03	947.0		
10.2	0.8	-10	336.0	18.0	483.0	0.02	645.0		
23.8	0.6	-10	773.0	7.5	299.0	-0.01	548.0		
8.3	1.0	-10	727.0	9.5	411.0	-0.01	881.0		
8.1	0.4	-10	553.0	14.2	601.0	0.02	899.0		
16.8	1.5	-10	407.0	17.8	336.0	0.16	1040.0		
3.6	1.5	-10	518.0	37.0	581.0	0.56	956.0		

P.G.E.s:

Ru	Pd	Os	Pt
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5
-0.5	-0.5	-0.5	-0.5

ANALYTICAL PROCEEDURE FOR ENZYME LEACH SAMPLES

Any sample not already completely dry was dried at 40°C then sieved through a -60 stainless steel mesh. Samples were then leached using the Enzyme Leach procedures given in Clark, et al, 1990, and Clark, 1993, 1995. Concentrations for 61 elements at the detection limits indicated in the attached list were determined for each sample on Perkin Sciex ELAN 6000 ICP-MS.

Enzyme LeachSM Services

Code	7	7EnhEL	7SaltEL	7TS	7PGETS
Enzyme Leach SM (ppb)	Enhanced Enzyme Leach SM (ppb)	High Salt Samples (ppb)	TerraSol SM (ppb)	PGE TerraSol SM (ppb)	

Analyte	2	0.5	10	20	2
Li	2	0.5	10	20	2
Be	2	0.1	20	5	0.5
S.Q.Cl	2ppm	1ppm	3ppm	150ppm	25ppm
S.Q.Sc	100	10	1000	500	50
S.Q.Tl	100	10	1000	200	20
V	1	0.1	5	50	5
Cr	20	3	50	400	40
Mn	1	0.4	10	50	5
Co	1	0.2	1	5	0.5
Ni	3	1	5	100	10
Cu	3	1	5	50	5
Zn	10	5	10	200	20
Ga	1	0.3	1	5	0.5
Ge	0.5	0.05	1	10	1
As	1	0.1	5	50	5
Se	5	1	30	200	20
Br	5	1	30		
Rb	1	0.1	1	5	0.5
Sr	1	0.1	1	10	1
Y	0.5	0.05	1	2	0.2
Zr	1	0.1	1	4	0.4
Nb	1	0.1	1	4	0.4
Mo	1	0.1	1	10	1
Ru	1	0.5	1	10	0.2
Rh					5
Pd	1	0.5	1	20	1
Ag	0.2	0.1	0.2	250	25
Cd	0.2	0.1	0.2	5	0.5
In	0.1	0.01	0.2	2	0.2
Sn	0.8	0.2	1	100	10
Sb	0.1	0.01	1	10	1
Te	1	0.5	1	100	10
I	2	0.5	10		
Cs	0.1	0.01	1	1	0.1
Ba	1	0.5	1	100	10
La	0.1	0.01	1	10	1
Ce	0.1	0.01	1	5	0.5
Pr	0.1	0.01	1	2	0.2
Nd	0.1	0.01	1	2	0.2
Sm	0.1	0.01	1	1	0.1
Eu	0.1	0.01	1	0.5	0.05
Gd	0.1	0.01	1	7	0.7
Tb	0.1	0.01	1		
Dy	0.1	0.01	1	1	0.1
Ho	0.1	0.01	1	0.2	0.02
Er	0.1	0.01	1	0.6	0.06
Tm	0.1	0.01	1	0.5	0.05
Yb	0.1	0.01	1	1	0.1
Lu	0.1	0.01	1		
Hf	0.1	0.01	1	1	0.1
Ta	0.1	0.02	1	1	0.1
W	1	0.1	1	100	10
Re	0.01	0.005	0.1	0.5	0.05
Os	1	0.5	1	10	0.1
Ir					10
Pt	1	0.5	1	10	0.1
Au	0.05	0.005	0.1	5	0.1
S.Q.Hg	1	0.1	1	3	0.1
Tl	0.1	0.005	1	5	0.5
Pb	1	0.1	1	50	5
Bi	0.8	0.5	1	5	0.5
Th	0.1	0.01	1	0.5	0.05
U	0.1	0.01	1	0.5	0.05

Price \$26.00 \$33.00 \$30.00 \$26.00 \$33.00

Ref. 2001 Fee Schedule of ActlabsSM

Many ore bodies are buried beneath thick sequences of exotic overburden, lake beds, barren bedrock or younger volcanic rocks. Exploration geologists require a cost-effective method of finding blind mineralisation through deep cover. Enzyme LeachSM, and TerraSolSM, and our other selective extraction products provide the means to do this.

Enzyme LeachSM is the most discriminating of the selective analytical extractions in use today. It is capable of detecting extremely subtle geochemical anomalies developed in B-horizon soils over and around blind deposits. Conventional partial leaches, like aqua regia extraction-ICP, extract metals from sulphides, oxides and silicates, providing a partial composition of the overburden. Enzyme LeachSM on the other hand, tends to detect the very subtle trace element signatures that have been added to the soil by elements migrating to the surface through a variety of mechanisms. Trace amounts of amorphous mixed-oxide coatings in soil act as an effective long-term integrating collector of this subtle flux of cations, anions and polar molecules passing through the soil. By selectively removing the amorphous manganese dioxide from these coatings, the mixed oxide coatings collapse, releasing trapped trace elements (the Cohen model). Thus, Enzyme LeachSM provides an effective method of detecting the most subtle signatures of blind deposits in the subsurface without swamping the signal by dissolving the major components of the overburden. At this time, the greatest depth of penetration for Enzyme LeachSM for a mineral deposit is greater than 800 metres.

TerraSolSM is a more aggressive leach that attacks all components of amorphous mixed-oxide coatings and certain crystalline iron and manganese oxides. The oxidant used in the process also dissolves a substantial portion of the Au and platinum group elements (PGE) in the soil sample. TerraSolSM performs best over shallower mineral deposits. The PGE option is particularly useful for revealing platinum group and associated trace element patterns in buried mafic sequences.

Pattern recognition is the key to proper interpretation of Enzyme LeachSM and TerraSolSM data, since anomaly patterns can be different from conventional geochemical data. Selective extractions have been shown to work effectively in both acidic and alkaline environments, and have been used successfully in desert, tropical, glacial and permafrost terrains. In addition to reporting analytical data from samples submitted by the client, Actlabs offers integrated Enzyme LeachSM Services, turnkey surveys from sample collection, through analysis to interpretation by one of our teams of skilled geochemists.

Preparation and Analysis

After B-horizon soil materials are collected, they are air dried or dried in special rooms kept below 40°C. It is imperative that the samples not be placed in drying ovens as it is impossible to guarantee consistency of drying temperature even in temperature controlled ovens. Samples then undergo the proprietary Enzyme LeachSM and TerraSolSM under rigidly controlled conditions. The resultant solutions are analyzed using a state-of-the-art Perkin Elmer Sciex ELAN 6000 ICP-MS. Discounts may be applicable for larger sampling programs. Sample preparation charges are additional and are listed on page 7.

Fe	1
Ca	0.5
Na	5
Mg	2
K	15
S	10
Al	0.5

Code 7 majors is an option for those wishing data on major elements and S in the leach solution. The request for code 7 MAJ must be made at the same time as the selective extraction. Detection limits shown in ppm.

Price: Code 7 MAJ \$5.00 per sample

Final pH of leach solution \$5.00

Conductivity of leach solution \$5.00

pH and conductivity \$9.00

Other Selective Extractions

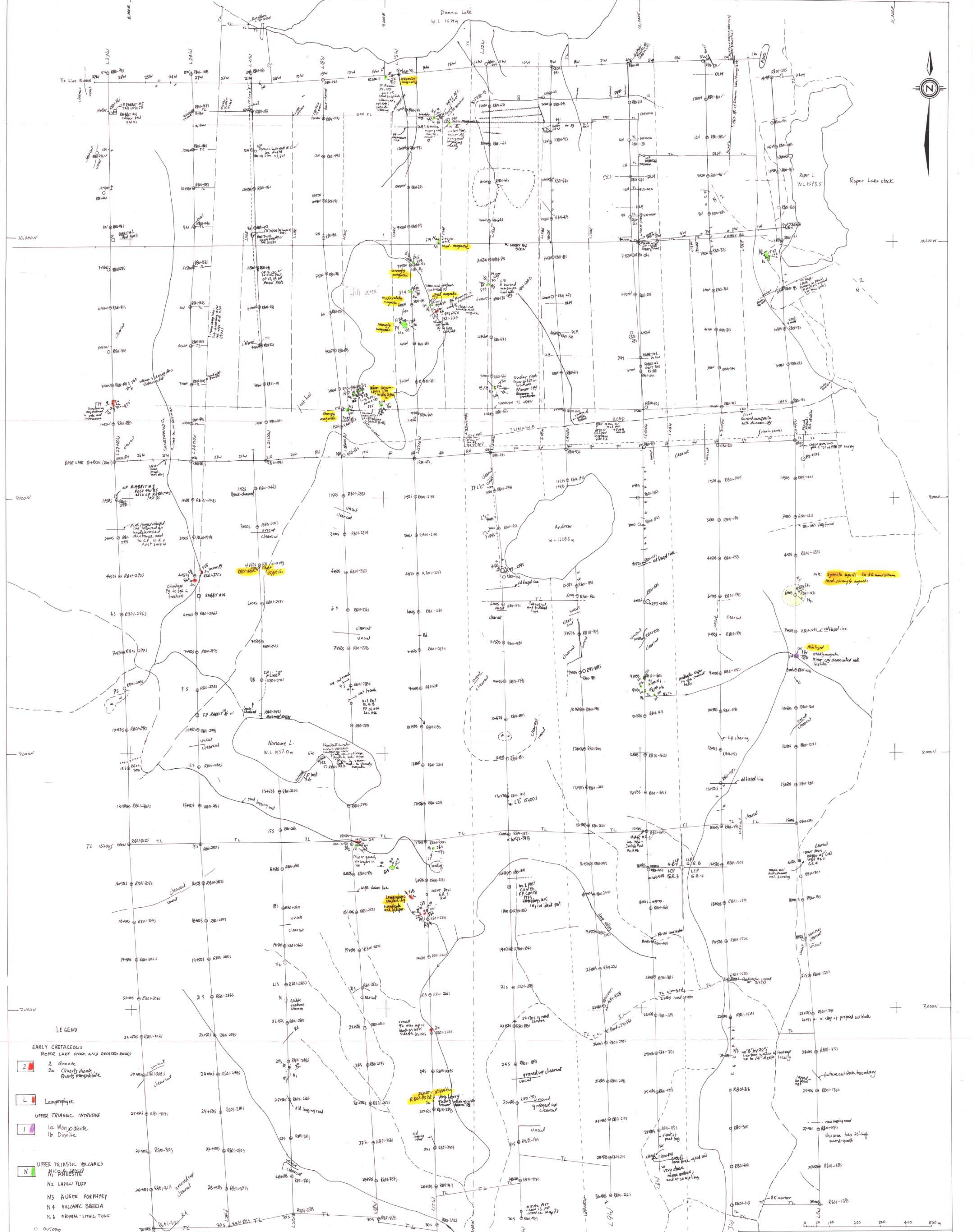
ACTLABS has considerable experience at developing and applying a variety of selective and sequential extractions developed both by ACTLABS and also reported in the literature. A selection of these leaches are described below. ACTLABS' team of skilled geochemists can advise on the applicability of each of these selective extractions. Detection limits and available elements vary depending on background levels of metals in the leach solutions and potential interferences.

Aurzyme Leach SM	similar to Enzyme Leach SM , but dissolves native gold. Background levels for most elements are significantly higher than Enzyme Leach SM which may mask some anomalies.
Dizyme Leach SM	will dissolve both amorphous Fe and Mn oxides. Background levels are going to be significantly elevated over Enzyme Leach SM which will mask some low level anomalies.
Sodium Pyrophosphate Leach	for organic rich materials such as humus and peat.
Hydroxylamine Leach (cold)	dissolves majority of Mn and Fe oxides (amorphous+crystalline)
Hydroxylamine Leach (hot)	dissolves nearly all Mn and Fe oxides
Oxalic Acid Leach	dissolves all oxide coatings and a partial attack on weaker silicates
Multielement-BLEG Leach	for weak cyanide extractable metals (good for Au+PGE)
Potassium Iodide+Ascorbic Acid	dissolves all of Fe, Mn and Al oxide coatings (halogens cannot be analyzed)
Water Leach (hot/cold)	dissolves any water soluble component and metals released by hydrolysis of silicates
Pre Wash	removes water soluble components prior to application of leach solution. It is used to remove the high water-soluble salt content of some soils, reducing potential matrix interferences.

Price: \$26.00 per sample for any one of these leaches.

Pre Wash (if requested) \$2.50 per sample

Volume discounts may be applicable. Preparation charges are additional.



LEGEND

- EARLY CRETACEOUS**
ROPER LAKE STOCK AND RELATED ROCKS
- 2 Granite
- 2a Quartz diorite, Quartz monzonite
- L Lamprophyre
- UPPER TRIASSIC INTRUSIVE**
- 1a Monodiorite
- 1b Diorite
- UPPER TRIASSIC VOLCANICS**
- N1 LAPILLI TUFF
- N3 AUGITE PORPHYRY
- N4 VOLCANIC BEECHIA
- N6 CRINAL-LITHIC TUFF
- Outcrop
- × Small outcrop
- strike-slip faulting
- - - strike-slip fault zone
- ▬ strike-slip fault zone

SYMBOLS
 1500 Grids shown based on 2001 field notes
 1600 Kernco (Assessment Report (AR) 325 + internal reports)
 1700 DLM - Domic Lake Mining (dMAR 410)
 1800 DLM - Domic Lake Mining (dMAR 410)
 1900 DLM - Domic Lake Mining (dMAR 410)
 2000 DLM - Domic Lake Mining (dMAR 410)
 2100 DLM - Domic Lake Mining (dMAR 410)
 2200 DLM - Domic Lake Mining (dMAR 410)
 2300 DLM - Domic Lake Mining (dMAR 410)
 2400 DLM - Domic Lake Mining (dMAR 410)
 2500 DLM - Domic Lake Mining (dMAR 410)
 2600 DLM - Domic Lake Mining (dMAR 410)
 2700 DLM - Domic Lake Mining (dMAR 410)
 2800 DLM - Domic Lake Mining (dMAR 410)
 2900 DLM - Domic Lake Mining (dMAR 410)
 3000 DLM - Domic Lake Mining (dMAR 410)

PHYSICAL
 ○ Percussion drill hole
 TL Chain and compass tie-line
 SW Swamp

OTHER
 ○ R93-226 Orientation Enzyme Leach sample from 1995 unmined
 × W92-78 Center rock site from 1992, unmined
 × R91-165 Conventional soil sample (1992), unmined

BAE MAP: Roads, lakes contours from photo-enlarged 1:15,000 map prepared by McElvaney 979
 Map control included: targets, dedicated aerial photos, surveying, run-logs, tie-in to GMS/MSM. geodetic. Enlargement made by J. J. J. J.

Revised	GOLDEN RUNNER	
	GRIDS, ENZYME LEACH SAMPLES, GEOLOGY	
NIS 921/10E	01-46	①
DWG. No. 3	SURVEY BY: R. U. B. ASET	DATE: NOV. 2001
	DRAWN BY: R. U. B.	SCALE: 1:5000