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ASSESSMENT REPORT

describing

**GEOCHEMICAL SAMPLING AND
AIRBORNE GEOPHYSICAL SURVEYS**

at the

KING PROPERTY

KING 1-72 YD33993-YD34064

NTS 115H/09

Latitude 61°43'N; Longitude 136°08'W

located in the

Whitehorse Mining District
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

STRATEGIC METALS LTD.

by

H. Smith, B.Sc. Geology, P.Geo.
March 2011

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INTRODUCTION

The King property covers a number of gold±copper±arsenic targets that lie within the Stikinia geological terrane in southern Yukon. It is owned 100% by Strategic Metals Ltd.

This report describes a two-phase program that was conducted at the King property intermittently between July 30 and August 24, 2010. Phase one consisted of a one day geochemical sampling program that was conducted by a three person crew from Archer, Cathro & Associates (1981) Limited. Phase two comprised a high resolution helicopter-borne magnetic and gamma-ray spectrometric geophysical survey performed by New-Sense Geophysics Limited of Markham, Ontario. The author participated in and directed the program, and her Statement of Qualifications appears in Appendix I.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The King property consists of 72 contiguous mineral claims, which are located on NTS map sheet 115H/09 at latitude 61°43' north and longitude 136°08' west (Figure 1). The property covers an area of approximately 1450 ha (14.5 sq km). The claims are registered with the Whitehorse Mining Recorder in the name of Archer Cathro, which holds them in trust for Strategic. Specifics concerning claim registration are tabulated below, while the locations of individual claims are shown on Figure 2.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date</u>
KING 1-72	YD33993-YD34064	April 7, 2011*

* Expiry date does not include 2010 work that has not yet been filed for assessment credit.

The King property is located 40 km southwest of Carmacks and six kilometres southwest of the Klondike Highway. In 2010, access to and from the King property was by a Bell 206B helicopter operated by Trans North helicopters from its year-round base in Carmacks.

HISTORY AND PREVIOUS WORK

The King property hosts two Minfile occurrences (AH and Orloff) that comprise four targets (AH, NAT, Spock and Orloff) as illustrated on Figure 2.

AH Occurrence

The AH occurrence (AH target) lies about two kilometres south of Kirkland Creek. It was originally staked in 1966 by Empress Mines Limited (Atlas Explorations Limited and Nippon Mining Limited) to cover aeromagnetic highs. In 1966, a number of stream sediment samples were collected on the AH claims, and in 1967, follow up stream sediment sampling was done. A small soil sample grid comprising 257 samples was completed and samples returned background to strongly anomalous copper with a peak value of 350 ppm copper-in-soil (Darney, 1967). Geological mapping performed during the 1967 program is discussed in the Property Geology section below.

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FIGURE 1

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

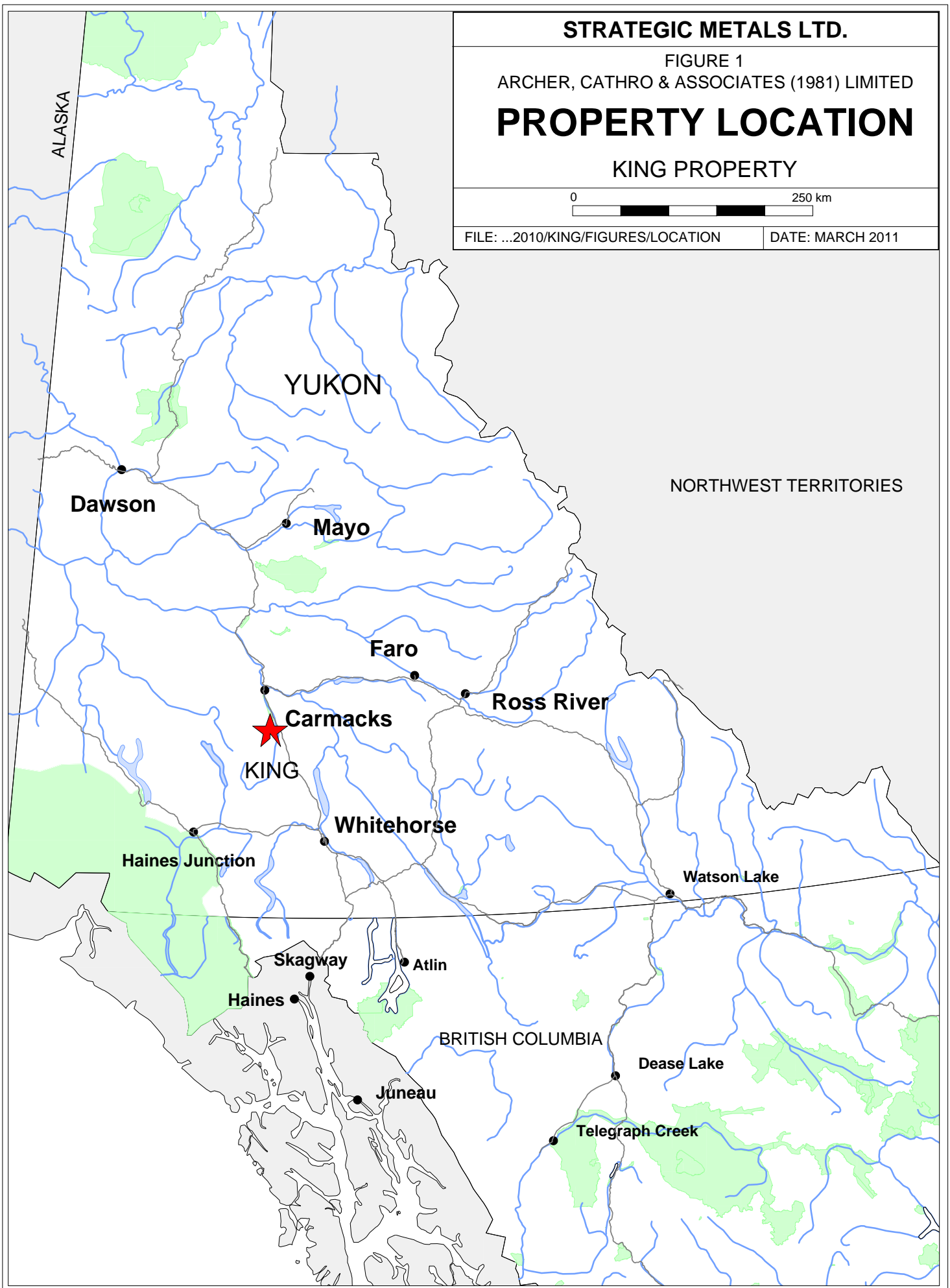
PROPERTY LOCATION

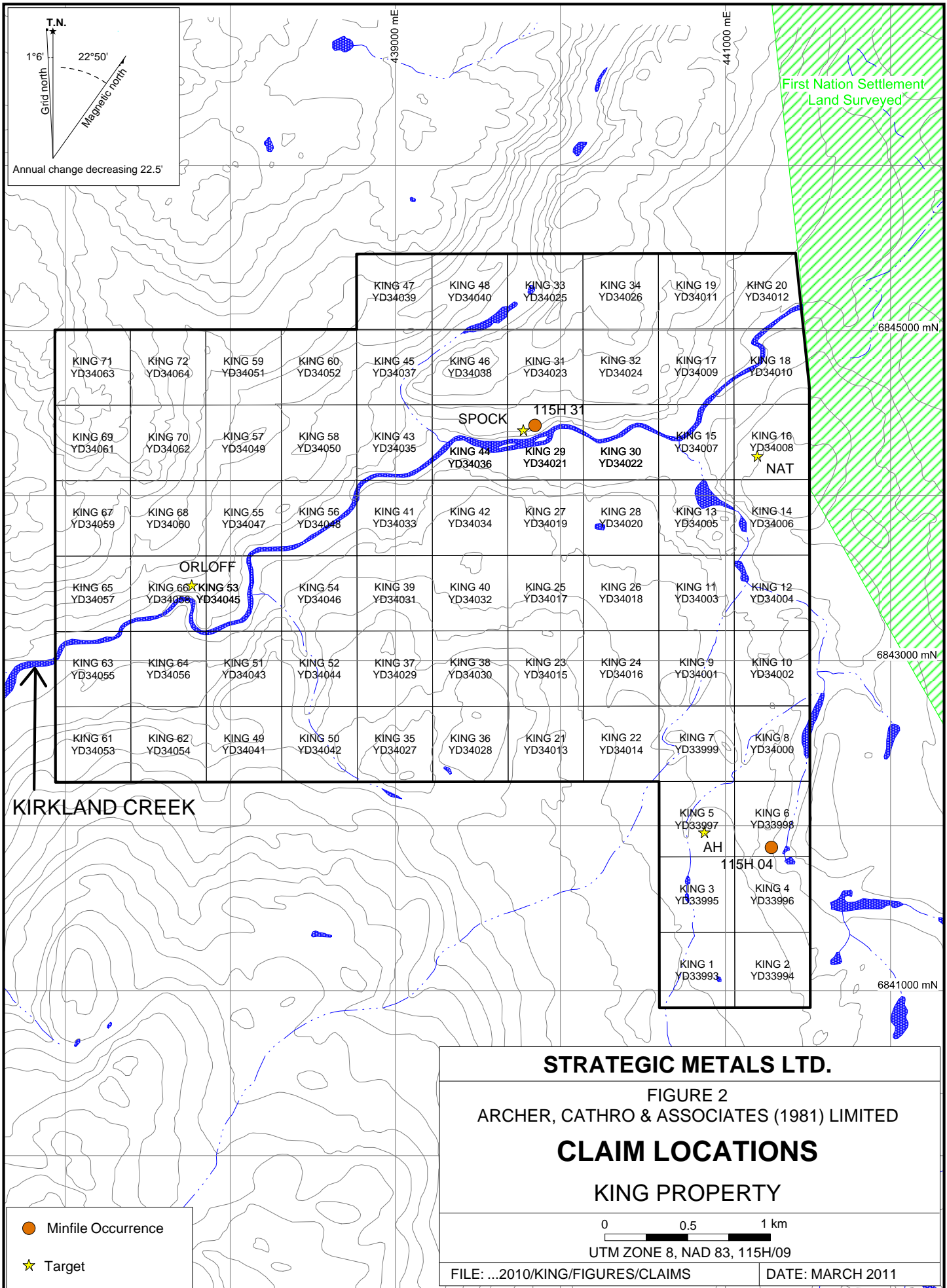
KING PROPERTY

0 250 km

FILE: ...2010/KING/FIGURES/LOCATION

DATE: MARCH 2011





In 1972, the area currently covered by the King property was sampled as part of a regional soil and stream sediment survey performed by the South Yukon Joint Venture. Samples were analyzed for copper, molybdenum and silver. Soil samples collected near the AH occurrence returned 160 and 129 ppm copper-in-soil while a stream sediment sample returned 300 ppm copper-in-silt (Archer and Cathro, 1972). Values for molybdenum and silver were low.

In 1980, Archer Cathro did work in the Dawson Range as part of the NAT Joint Venture (NAT JV), which comprised Chevron Canada Limited and Armco Mineral Exploration Ltd. During that program two more stream sediment samples were collected from the King property. One of those samples were taken within the AH target, and it returned 42 ppb gold (Archer and Onasick, 1980).

In 1985, the Geological Survey of Canada (GSC) performed regional stream sediment sampling as part Open File 1219. Two stream sediment samples were collected from the current King property. These samples returned up to 3 ppb gold, 17 ppm arsenic, 110 ppm copper and 0.3 ppm antimony (Friske et al., 1986).

In 1986, prospecting and geochemical sampling were carried out by Nordac Resources Ltd. (later reorganized to become Strategic) to follow up the anomalous copper soil geochemistry and evaluated the gold potential in the AH area. Fifty-four soil and four stream sediment samples were collected and assayed for gold, arsenic, copper and antimony. Soil samples returned up to 77 ppb gold, 60 ppm arsenic, 130 ppm copper and 5 ppm antimony. Stream sediment samples yielded maximum values of 6 ppb gold, 10 ppm arsenic, 113 ppm copper and 5 ppm antimony (Carne, 1986). Minor pyrite and malachite staining were noted in weakly altered basalt.

Orloff Occurrence

The Orloff Occurrence encompasses the NAT, Spock and Orloff targets. The NAT target lies on the south side of Kirkland Creek and was identified in 1980 during the NAT JV regional exploration program when a silt sample returned 125 ppm arsenic and 235 ppb gold (Archer and Onasick, 1980) surprisingly NAT did not follow up this anomaly. Surprisingly NAT did not follow up this anomaly in 1986, prospecting and geochemical sampling were carried out by Nordac on a knoll within that NAT target that was identified as a possible source for the 235 ppb gold-in-silt anomaly. Soil samples from this area returned peak values of 47 ppb gold, 166 ppm arsenic and 172 ppm copper. However, upon further examination, the anomalous NAT silt sample may have been mislocated because there is no creek at the location shown on the NAT maps (Carne, 1986).

The Spock target lies on the north bank of Kirkland Creek and can only be accessed when water levels are low. This target comprises a 125 m wide, gossanous alteration zone that trends northerly and cuts volcanic rocks. Alteration varies from moderately to extremely pervasive, propylitic to advanced argillic. White gypsum is present as thin stockwork veinlets and as secondary bladed crystals. Massive accumulations of vitreous blue-green sulphate crystals are also scattered throughout the alteration zone. The western edge of the zone is obscured by a massive landslide. Eight rock samples were collected from the Spock target by Nordac in 1986. Those samples returned low gold values up to 7 ppb, strongly anomalous arsenic values exceeding 1%, moderately anomalous copper values up to 210 ppm and strongly anomalous antimony values up to 90 ppm (Carne, 1986).

The Orloff target was originally staked as the King Orloff and Wisner claims in 1921. These claims were reportedly staked for gold potential. No work was reported from this time. In 1981, an independent prospector staked the Kirk claims, which partially covered the old King Orloff and Wisner claims, but again no work was reported. In 1986, Nordac revisited the Orloff target and made the following observations: 1) the target comprises banded chalcedonic and opaline quartz rubble exposed in an old hand pit at the top of a prominent gossan; 2) no sulphides were present, but iron staining was noted; and 3) the gossan and quartz rubble occur along the western edge of a 60 m wide, north-trending fracture and shear zone cutting volcanics. Rock samples collected from the Orloff target by Nordac returned background to weakly anomalous gold values up to 30 ppb, background to weakly anomalous copper values up to 80 ppm, background to moderately anomalous arsenic values up to 2430 ppm, and weakly anomalous antimony values up to 10 ppm (Carne, 1986).

In March 2010, Strategic staked the King claims to cover the AH and Orloff occurrences.

GEOMORPHOLOGY AND CLIMATE

The King property is located on a plateau in the southern part of the Dawson Range. Kirkland Creek runs through the northern half of the property (Figure 2).

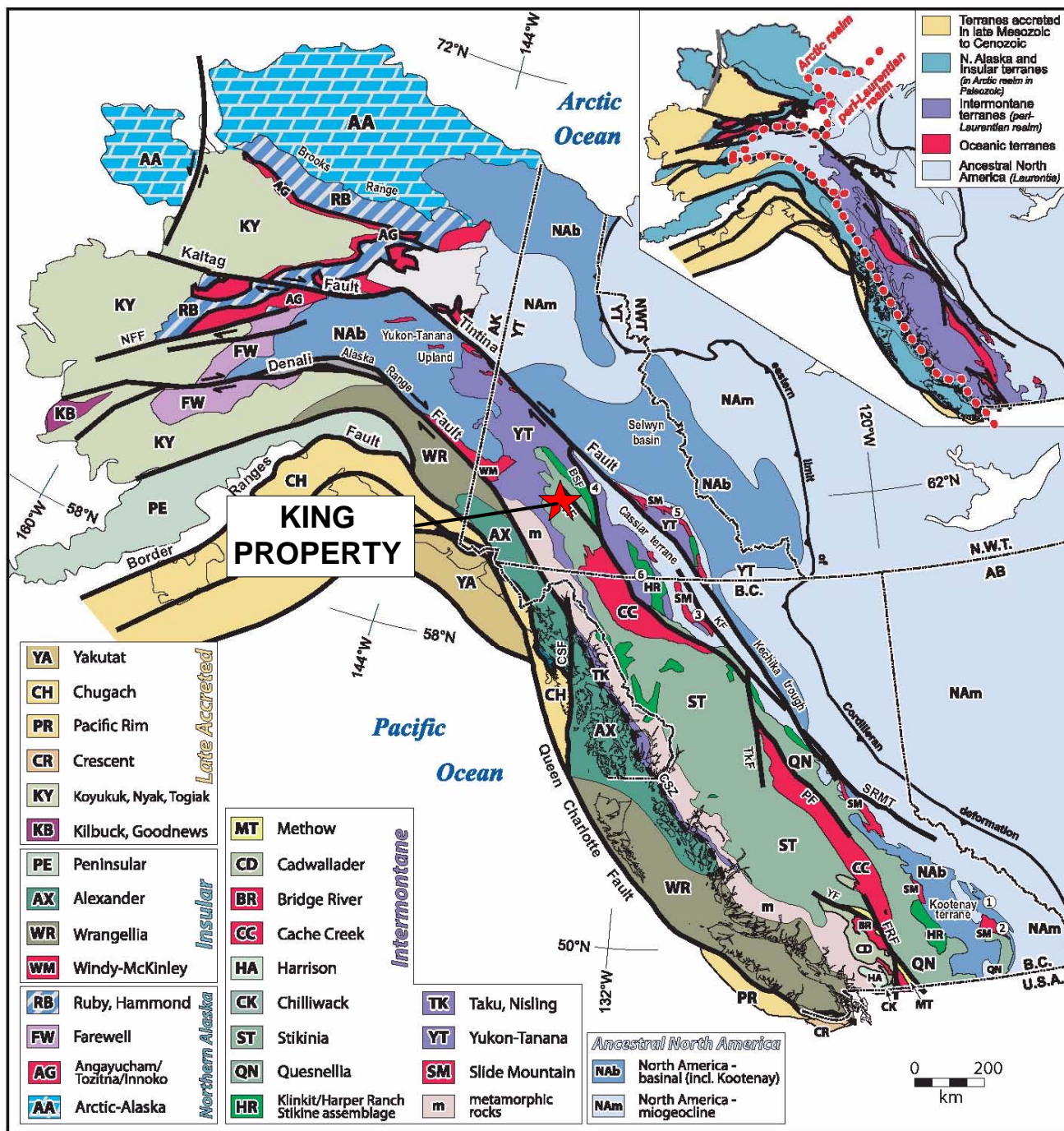
Elevations range from 700 m at Kirkland Creek to 1050 m. Topography on the King property has been influenced by numerous glacial events. Evidence of McConnell age glacial and glaciofluvial deposits predominate. These deposits generally comprise moraine colluvial blankets and moraine veneers along meltwater channels and topographic lows. A major, north-trending meltwater channel parallels Kirkland Creek 15 km west of the property. Several minor meltwater channels on the eastern side of the property also trend north (Hughes, 1989).

The King property lies below treeline. Vegetation comprises thick stands of black spruce, willow and poplar trees. There is at least one old forest fire burn in the southern part of the property. On the plateau away from the creek, local topographic lows are occupied by swamps. Outcrop occurs on steep slopes and cliffs, mostly along the Kirkland Creek. Infrequent bedrock exposures can also be found on glacially scoured hummocks south of Kirkland Creek.

The climate in the King area is typical of northern continental regions with long, cold winters, truncated fall and spring seasons and short, mild summers. Although summers are relatively mild, arctic cold fronts often cover the area and snowfall can occur in any month. The property is mostly snow free from mid-May to mid-September.

REGIONAL GEOLOGY

The King property is located within the Stikinia geological terrane as shown on Figure 3. Stikinia represents an exotic terrane accreted to the ancestral North American continent in Early Mesozoic. Rocks making up this terrane are almost exclusively of intra-oceanic arc affinity (Anderson, 1993). Stikinia is overlain by the Whitehorse Trough, which is an elongate northwest-trending Mesozoic marine sedimentary basin that extends from north of Carmacks to near Dease Lake, British Columbia. The western edge of the Whitehorse Trough is bound by the



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FIGURE 3
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

TECTONIC SETTING

KING PROPERTY

UTM ZONE 7, NAD 83, 115F/15

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DATE: MARCH 2011

Braeburn Fault, which is a dextral strike-slip fault with an estimated eight kilometres of displacement (White et al., 2006).

In 1974, the Geological Survey of Canada published a geological map of the Aishihik Lake area (NTS map sheet 115H) at 1:250,000 scale (Templeman-Kluit, 1974). Gordey and Makepeace (2003) later completed a Yukon-wide geological compilation, which updated the lithological unit names in the King area. Figure 4 illustrates regional geology and the following lithological descriptions are based on the 2003 compilation.

The King property lies five kilometres southwest of the Braeburn Fault. Basement rocks in the area are composed of Upper Triassic arc volcanic and sedimentary rocks of the Lewes River Group. Near the King property, the Upper Triassic Povoas Formation (uTrP) is the primary suite of the Lewes River Group. Povoas Formation comprises: augite or feldspar phyric, locally pillowed andesitic basalt flows, breccia, tuff, sandstone and argillite; local dacite breccia and tuff with minor limestone; greenstone, chlorite schist, chlorite-augite-feldspar gneiss and amphibolite.

Five kilometres west of the King property, a batholith of Early Jurassic Aishihik Suite (EJgA), intrudes uTrP. EJgA comprises: medium- to coarse- grained, foliated biotite-hornblende granodiorite; and foliated hornblende diorite to monzonite with local potassium feldspar megacrysts.

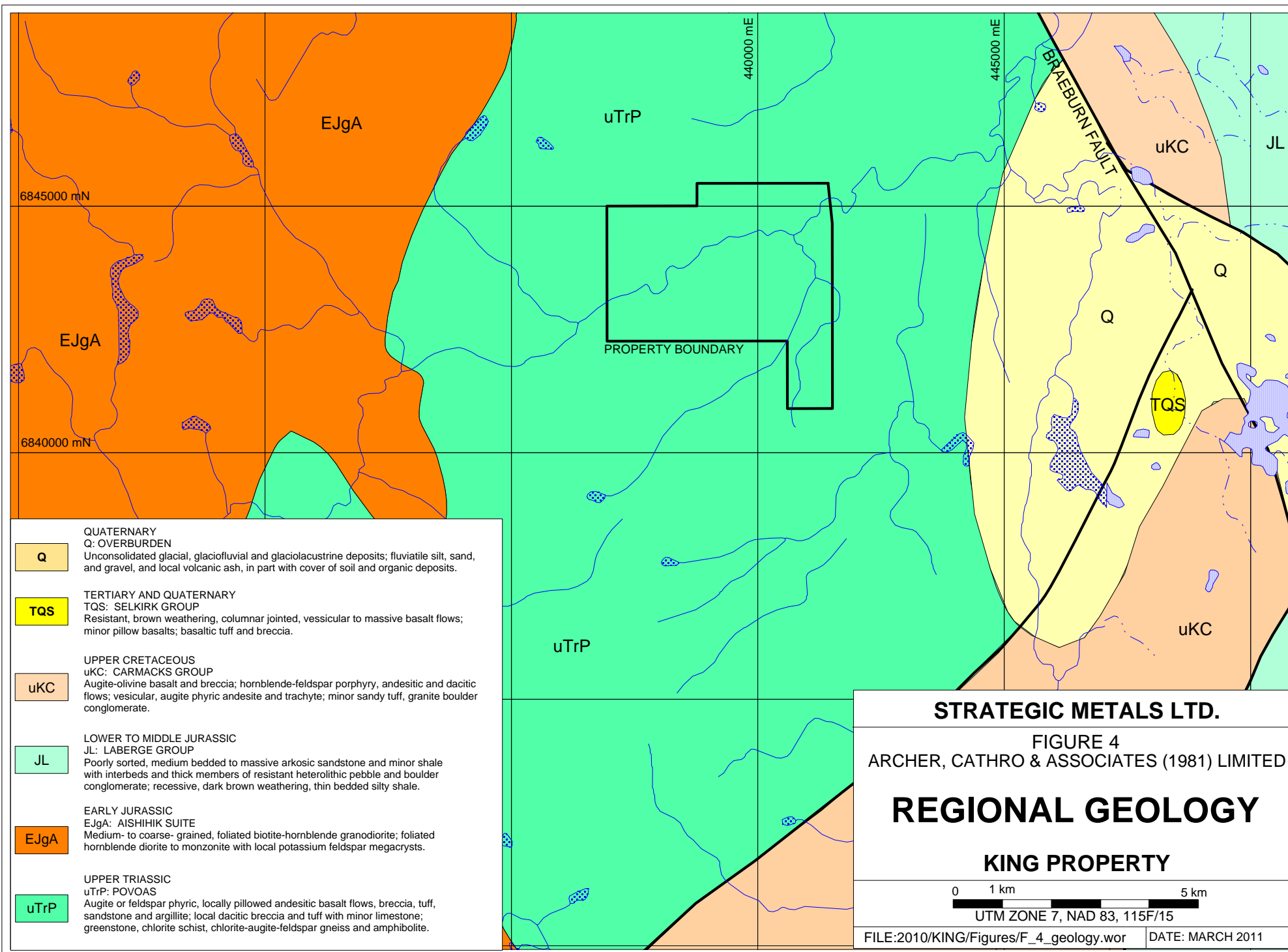
Upper Cretaceous Carmacks Group (uKC) intermediate to mafic flows and related clastic sediments unconformably overlie both uTrP and JL.

A 700 m wide by 1200 m long body of Tertiary and Quaternary Selkirk Group volcanics (TQS) lies about eight kilometres southeast of the property in an area of thick glacial overburden. TQS comprises: resistant, brown weathering, columnar jointed, vesicular to massive basalt flows; and minor pillow basalts; basaltic tuff and breccia.

There are a number of small faults in the area that generally splay northeast or northwest off the Braeburn Fault. Sense of motion and magnitude of offset are not known for these secondary structures.

PROPERTY GEOLOGY

Property-scale mapping on the King property has been done along creek cuts and glacially carved hummocks near the AH target (Figure 5). Based on mapping done by Darney (1967), the main lithological unit is a dark green, porphyritic, equigranular or brecciated basalt, which weathers white to rusty (uTrP). The matrix is dark grey to black or green and aphanitic. Phenocrysts are 1-2 mm, dark green-black augite crystals that comprise 30% of the rock. Epidote is common in veins and fracture fillings. Exposures of volcanic breccia were mapped, but no details on composition were reported. Calcite filled joints were noted in uTrP and the volcanic breccia. A small diorite plug and related dykes, which may belong to the Aishihik Suite, have been mapped intruding uTrP.



Several small faults have been mapped. These faults typically trend north or northeast and are associated with intense shearing, fracturing and alteration that are marked by gossans.

MINERALIZATION

In 1980, NAT JV collected 13 rock samples from the AH and NAT targets (Archer and Onasick, 1980). In 1986, two rock samples were collected from the current King property.

In 2010, nine rock samples were collected from the property and assayed. Rock sample descriptions appear in Appendix II, Sample and Analytical Procedures are explained in Appendix III, and Certificates of Analysis are provided in Appendix IV. Rock sample locations from 1980, 1986 and 2010 are shown on Figure 6. Results from all rock samples collected returned background to moderately anomalous gold values up to 287 ppb, background to moderately anomalous copper values up to 7220 ppm, background to strongly anomalous arsenic values exceeding 17% and background to weakly anomalous values for antimony up to 36 ppm.

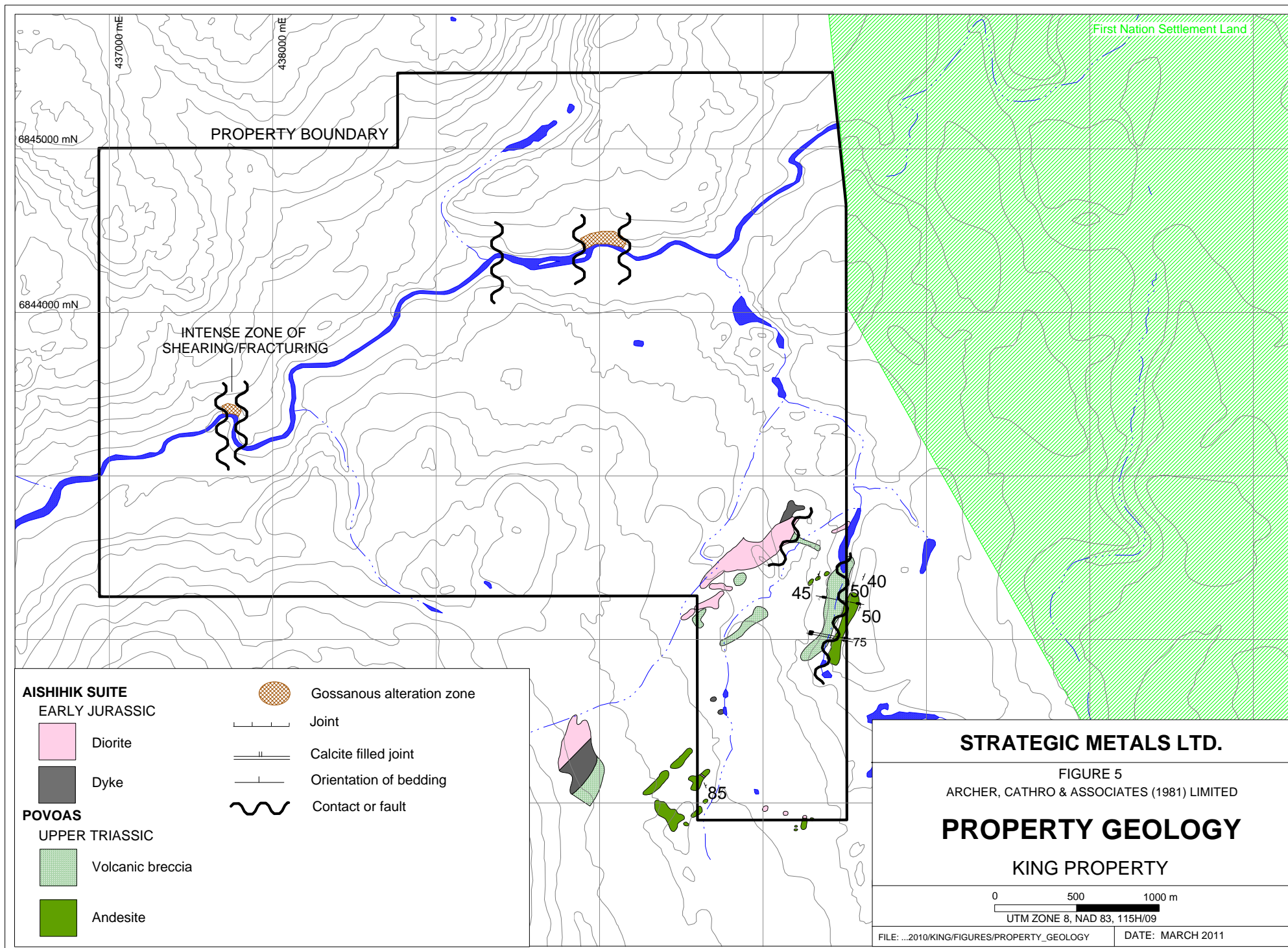
There is no record of rock samples collected from any other parts of the property.

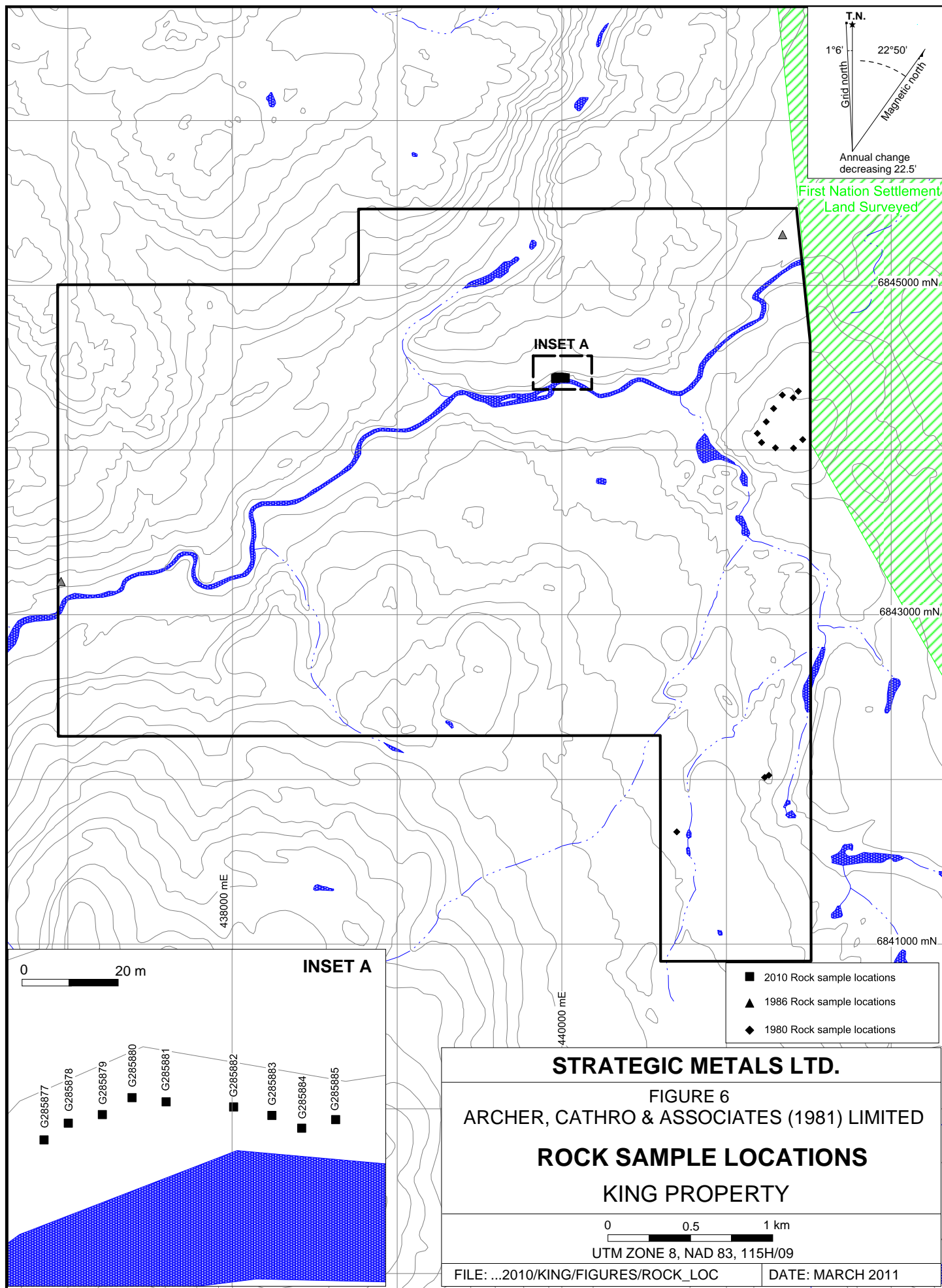
STREAM SEDIMENT AND SOIL GEOCHEMISTRY

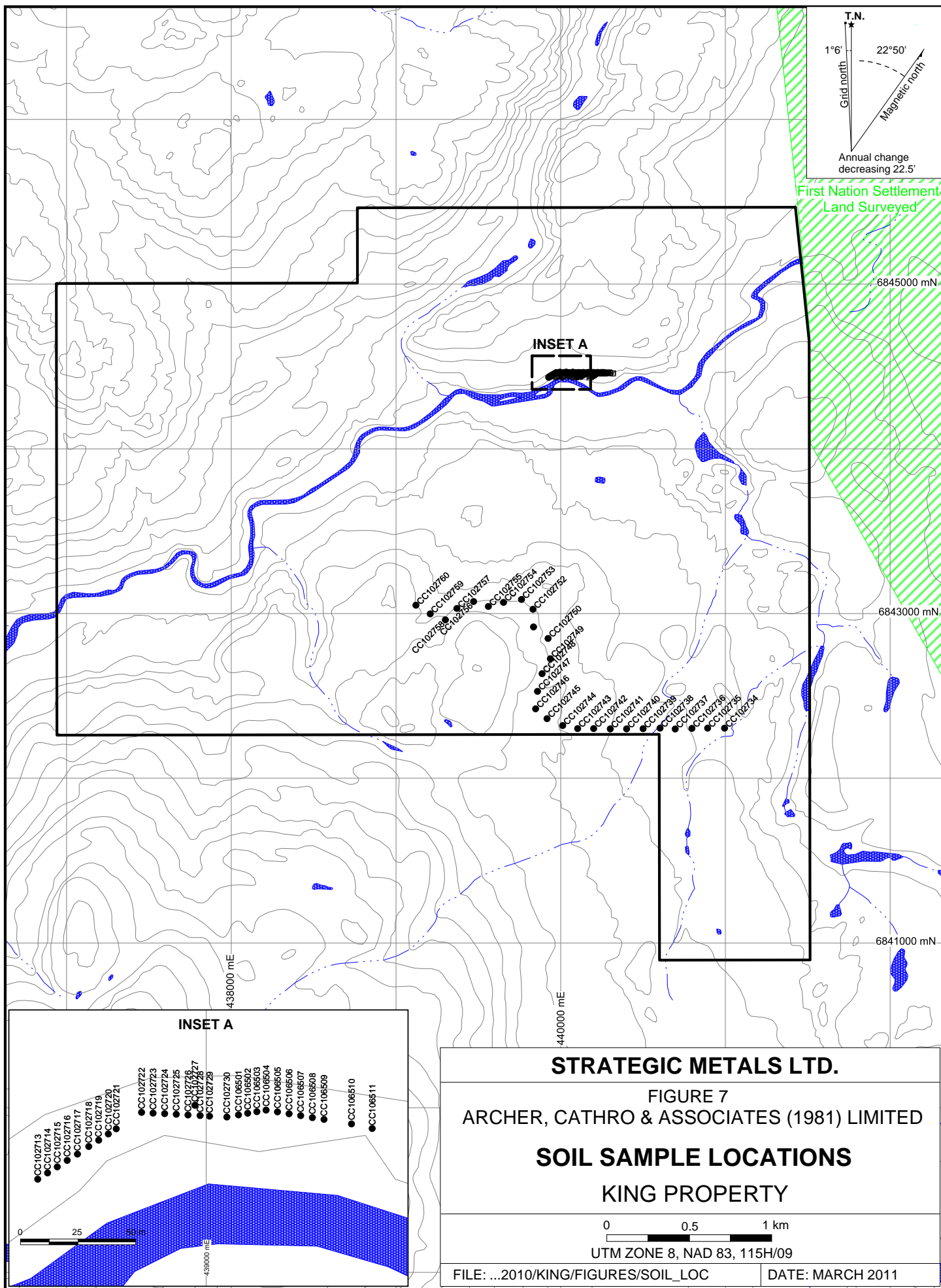
Historically, the King property has received a moderate amount of soil and stream sediment sampling. Programs run intermittently between 1967 and 1986 yielded encouraging peak values of 235 ppb gold, 350 ppm copper, greater than 1% arsenic and 5 ppm antimony.

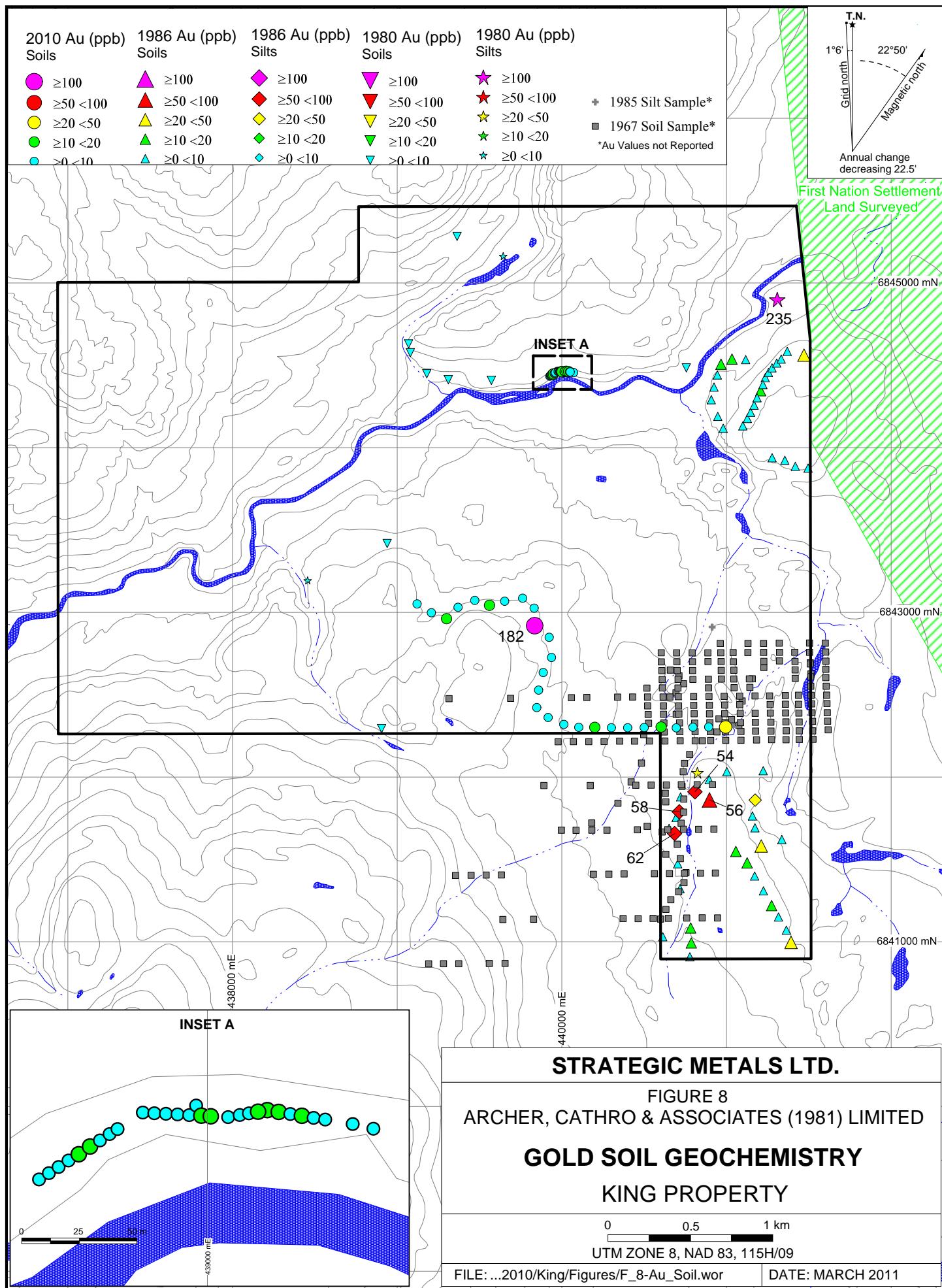
In 2010, a total of 57 soil samples were taken from the Spock target and along a contour line west and northwest of the AH target (Figure 7). Historical and 2010 results for gold, copper, arsenic and antimony are plotted on Figures 8, 9, 10 and 11, respectively. Certificates of Analysis are in Appendix IV. All 2010 soil sample locations were recorded using hand-held GPS units. Sample sites are marked by aluminum tags inscribed with the sample numbers and affixed to 0.5 m wooden lath that were driven into the ground. A hand held soil auger was used to collect material from as deep in the soil profile as ground conditions allowed, which was typically about 30 cm depth. Samples were placed into individually pre-numbered Kraft paper bags. The soil samples were sent to ALS Chemex, where they were dried, screened to -180 microns, dissolved in aqua regia solution and then analyzed for 35 elements using the inductively coupled plasma with atomic emission spectroscopy technique (ME-ICP41). An additional 50 g charge was further analysed for gold by fire assay with inductively coupled plasma-atomic emissions spectroscopy finish (Au-AA24).

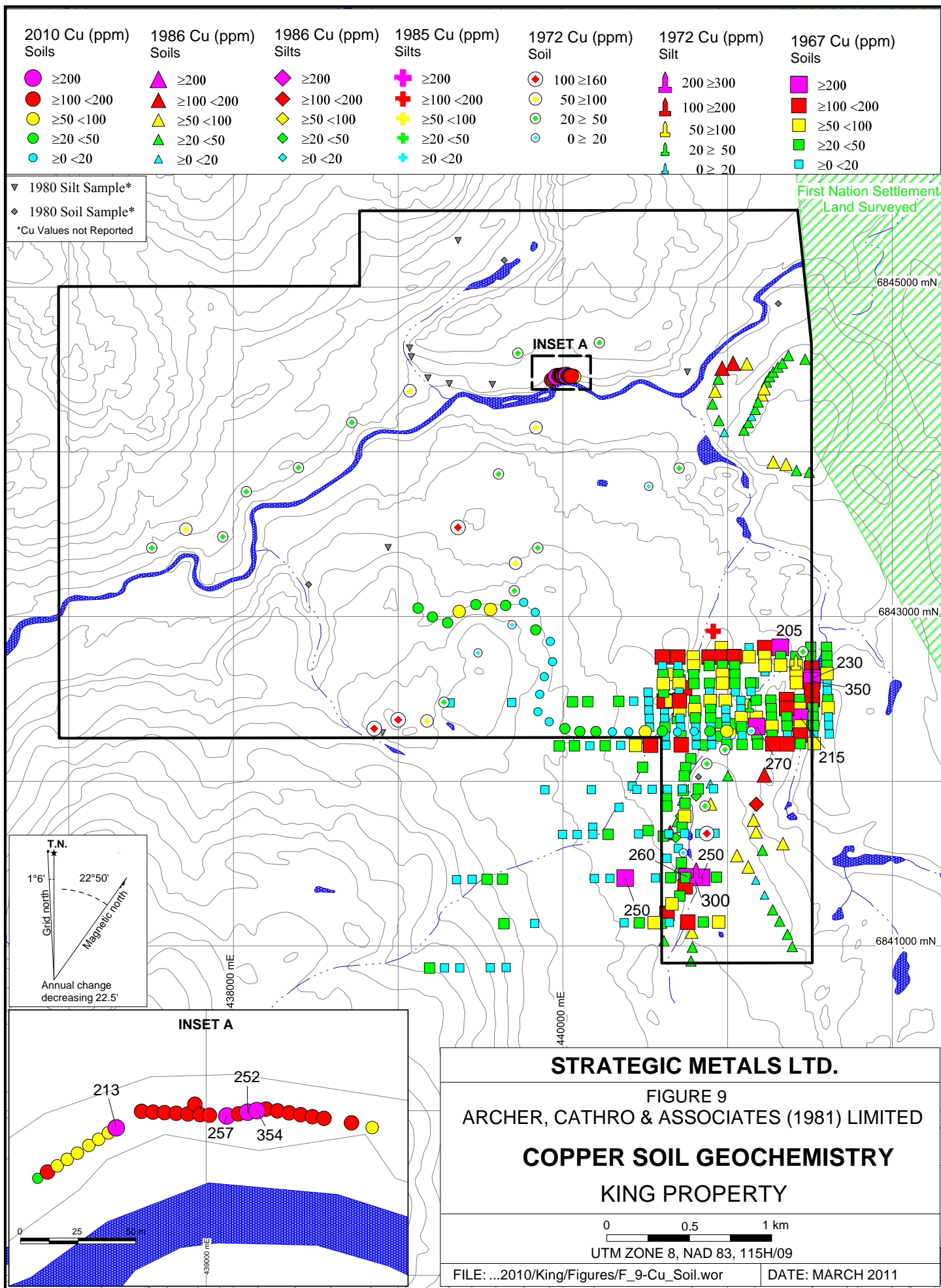
Soil sampling on the King property has confirmed the AH and Spock targets as areas of interest. The AH target hosts moderately to strongly anomalous copper values (up to 350 ppm) with background to strongly anomalous gold values (up to 62 ppb) and background to weakly anomalous arsenic and antimony values. Low density soil sampling performed northwest of this target have returned isolated spot highs of strongly anomalous copper values (123 ppm), strongly anomalous gold values (182 ppb), moderately anomalous arsenic values (88 ppm) and weakly anomalous antimony values.

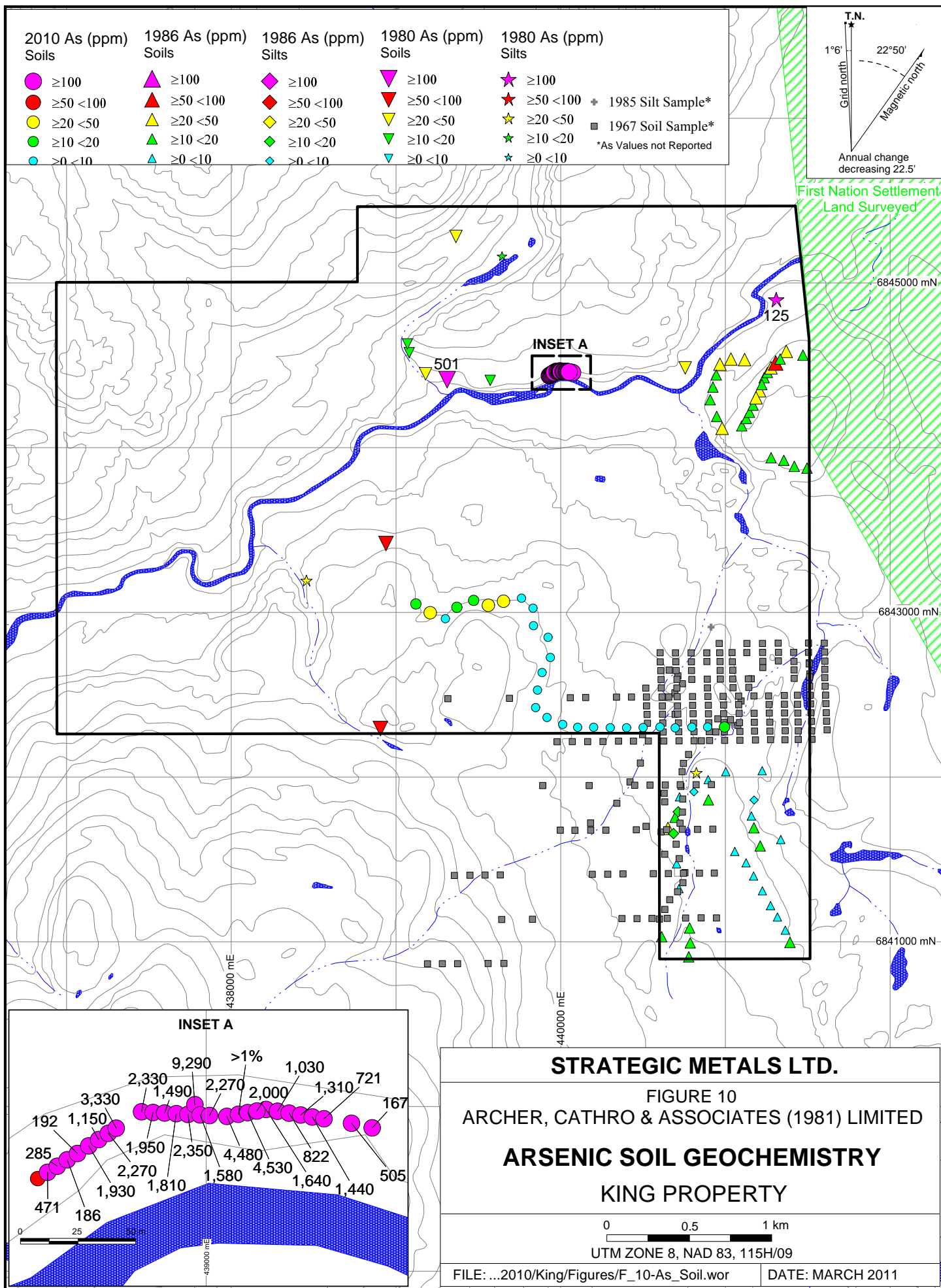


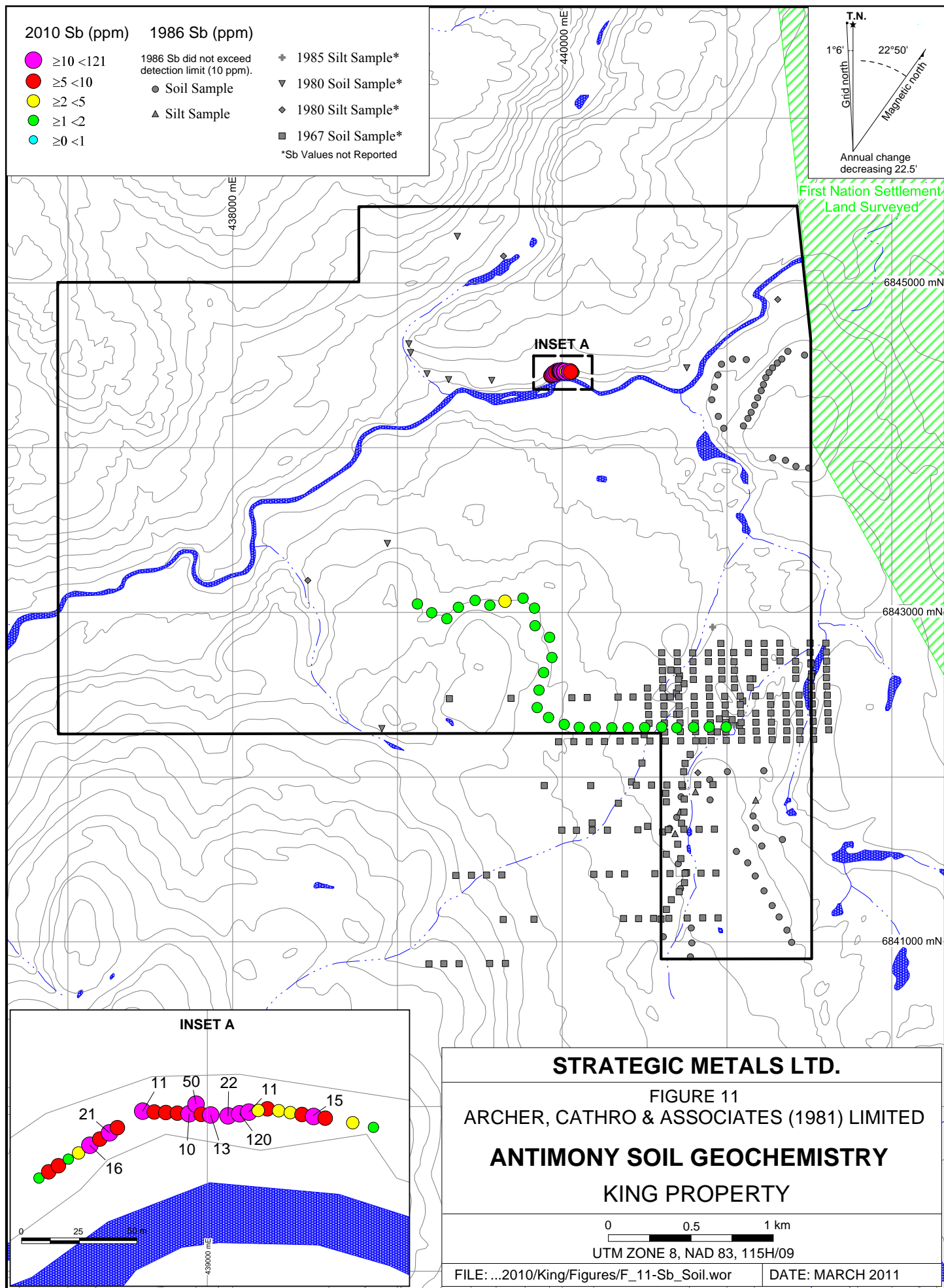












The Spock target is primarily an arsenic-antimony anomaly with arsenic-in-soil values often grading over 1% and averaging 2810 ppm. This target also features moderately to strongly anomalous copper values up to 354 ppm and antimony values up to 120 ppm, but low gold values. A stream sediment sample from a creek about 800 m west of this target returned 501 ppm arsenic, which mark a similar zone that is obscured by glacial overburden.

AIRBORNE GEOPHYSICAL SURVEYS

In 2010, helicopter-borne magnetics and radiometric surveys were contracted to New-Sense Geophysics Limited of Markham, Ontario. Interpretation of the survey data was completed by Condor Consulting Inc. of Lakewood, Colorado.

A total of 231 line kilometres were flown over the King property. Appendix V contains reports by New-Sense and Condor, which describe equipment and procedures that were used during the surveys and interpreted results. CDs containing digital survey data are also attached to this report.

Figure 12 illustrates total field magnetics (TMI), interpreted lineaments and gold soil geochemistry while Figure 13 illustrates TMI, interpreted lineaments and copper soil geochemistry.

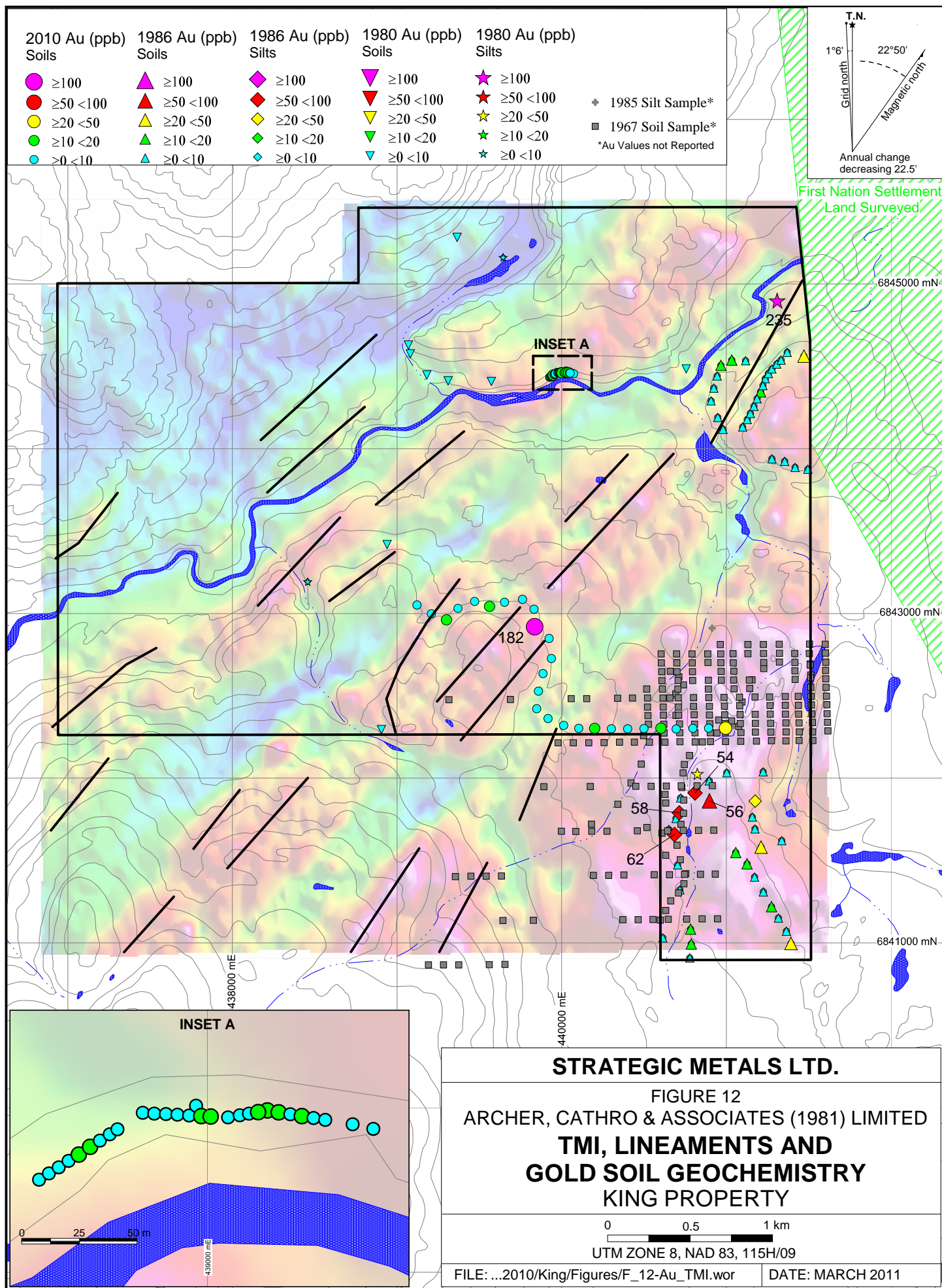
The magnetic response has a range of 1200nT. The survey shows a strong northeast-trend to the magnetic highs and lows with the exception of the southeast corner of the survey area where a large, bulbous magnetic anomaly occurs. A number of northeast-trending lineaments have been highlighted by Condor, which likely represent layering in the volcanic stratigraphy. There are also a number of perpendicular (northwest trending) breaks in the magnetic trends, which are attributed to demagnetized fault zones (Witherly, pers. comm, 2010).

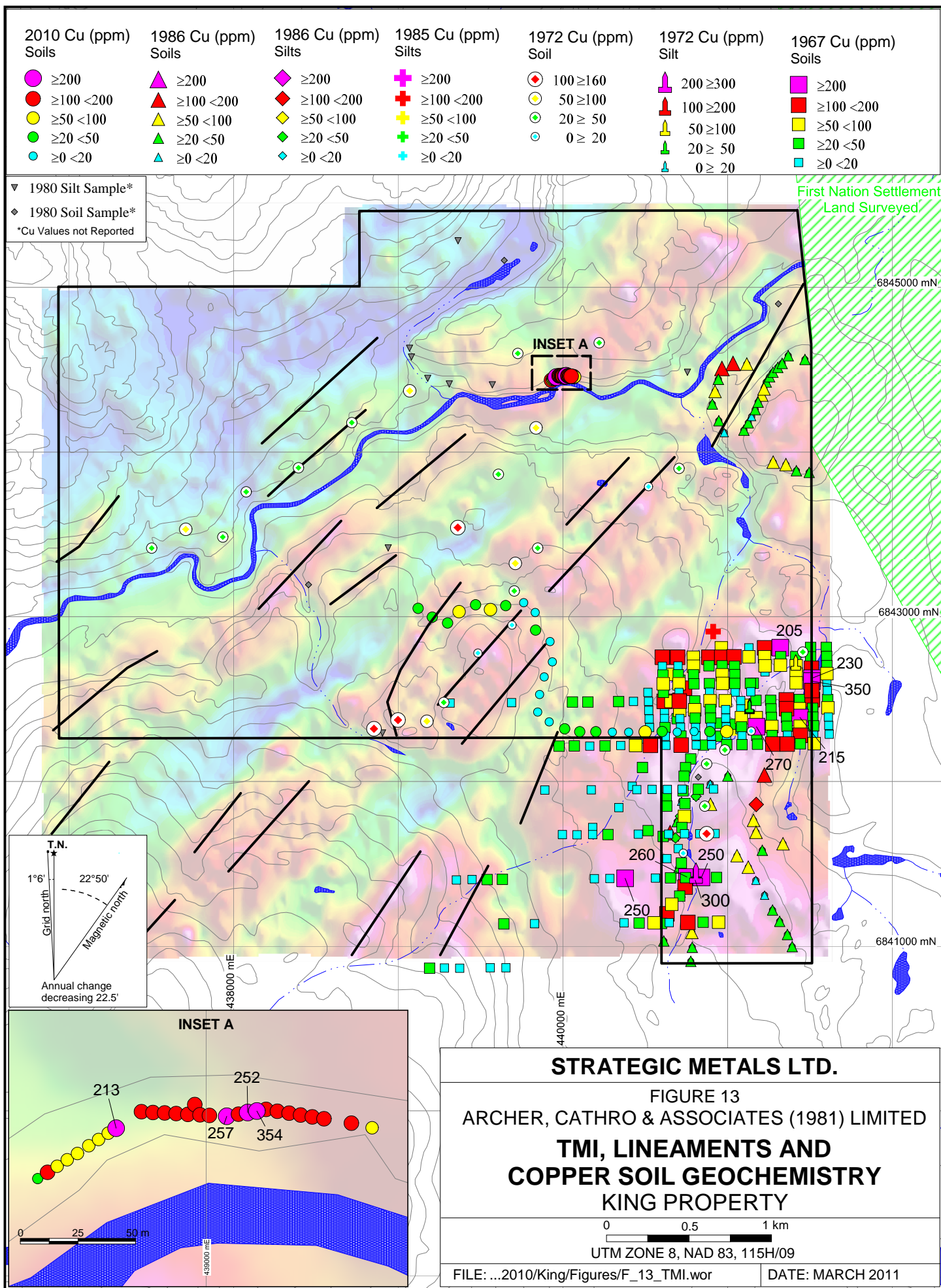
The large, bulbous magnetic anomaly in the southeastern part of the property is associated with the AH target, which generally has a strong copper-in-soil signature. Isolated soil anomalies northwest of the AH target correspond to areas where the magnetic lineaments are broken by a northwest trending feature. The Spock target also lies within a structural corridor where the magnetic lineaments are again broken by a northwest trending feature.

DISCUSSION AND CONCLUSIONS

Due to areas of thick glacial overburden and swampy terrain, much of the King property has not been properly evaluated. A deposit model for the King property has not been determined; but based on the geological, geochemical and geophysical data, structurally hosted epithermal-style gold and alkalic porphyry-style copper-gold mineralization are reasonable possibilities.

Future work on the King property should initially include: additional deep auger soil sampling to test beneath the till layer, particularly along demagnetized breaks in the magnetic lineaments; an Induced Polarization geophysical survey over the AH target to determine its porphyry potential; and follow up mapping and prospecting in the vicinity of the NAT, Spock and Orloff Showings. Epithermal gold deposits are often capped by non-gold bearing arsenic-rich, argillic altered





zones; therefore, diamond drilling may be required to test for a buried gold deposit beneath the gossans alteration zone at the Spock Zone. This drilling should wait until results of soil sampling are received in case an outcropping gold-rich zone is discovered elsewhere along the altered and demagnetized structural corridors.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

Heather Smith, B.Sc. Geology, P.Geo.

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APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Heather Smith, geologist, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory and residential address at #604-175 West 1 Street, North Vancouver, British Columbia, V7M 3N9 do hereby certify that:

1. I graduated from the University of British Columbia in 2006 with a B. Sc in Geological Sciences.
2. From 2004 to present, I have been actively engaged in mineral exploration in the Yukon Territory, British Columbia and Northwest Territories.
3. I am a Professional Geoscientist (P.Geo.) with the Association of Professional Engineers and Geoscientists of British Columbia (Member Number 150000).
4. I have personally directed the fieldwork reported herein and have interpreted all data resulting from this work.

Heather Smith, B.Sc., P.Geo.

APPENDIX II

ROCK SAMPLE DESCRIPTIONS

Rock Sample Descriptions			Project: <u>King</u>		Property: <u>King</u>	
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285877	UTM: 439966	E	UTM: 6844456	N	Sample Width: 2 m	Abundance:
	Elevation:	m				
Comments: Two metre chip sample of broken, oxidized gossan. Pale grey-green with orange and yellow stain (scorodite).						
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285878	UTM: 439973	E	UTM: 6844454	N	Sample Width: 6 m	Abundance:
	Elevation:	m				
Comments: Chip sample taken above soils CC102722 and 102723. Six metre chip sample across scorodite-gossanous shear zone. Orange to grey fragments with irregular 6" pods of competent rock. Bladed calcite crystals fill cavities with rare grey to black metallic sulphides.						
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285879	UTM: See map	E	UTM:	N	Sample Width: 3 m	Abundance:
	Elevation:	m				
Comments: Chip sample of white-orange-brown to grey gossanous rubble zone.						
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285880	UTM: See map	E	UTM:	N	Sample Width: 1.25 m	Abundance:
	Elevation:	m				
Comments: Chip sample across 1.25 m as high up on broken compacted soil-rock as physically possible. Seven metres below 1 metre square white to grey knob of oxidized sulphosalt. Arsenic rich? Chip sample of white-green-yellow and rusty orange rock fragments, soil and gouge. Small clear, pale blue crystals when dug out of hill.						
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285881	UTM: See map	E	UTM:	N	Sample Width: 5 m	Abundance:
	Elevation:	m				
Comments: Chip sample continuous from '880. Same material.						
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285882	UTM: See map	E	UTM:	N	Sample Width: 5 m	Abundance:
	Elevation:	m				
Comments: Chip sample across gossan adjacent to pillow basalt. Orange to yellow scorodite with rare white to grey precipitate.						

Rock Sample Descriptions			Project: <u>King</u>		Property: <u>King</u>	
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285883	UTM: See map	E	UTM:	N	Sample Width: 4 m	Abundance:
	Elevation:	m				
Comments:	Four metre chip sample with 1.5 m grey to white extremely oxidized arsenic-rich material. Bluel-grey-pale green and 'fuzzy'. 2.5 m of red to yellow gossan and broken rock.					
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285884	UTM: 440030	E	UTM: 6844462	N	Sample Width: 4 m	Abundance:
	Elevation:	m				
Comments:	Four metre chip across white to orange gossanous area somewhat layered with respect to colours.					
Sample Number:	Grid East:	E	Grid North:	N	Type: Chip	Dimension:
G285885	UTM: See map	E	UTM:	N	Sample Width: 6 m	Abundance:
	Elevation:	m				
Comments:	Six metre chip sample-same material as previous but now purple with black seams/bands <10 cm wide last gossan subcrop/outcrop.					
Sample Number:	Grid East:	E	Grid North:	N	Type:	Dimension:
	UTM:	E	UTM:	N	Sample Width:	Abundance:
	Elevation:	m				
Comments:						
Sample Number:	Grid East:	E	Grid North:	N	Type:	Dimension:
	UTM:	E	UTM:	N	Sample Width:	Abundance:
	Elevation:	m				
Comments:						
Sample Number:	Grid East:	E	Grid North:	N	Type:	Dimension:
	UTM:	E	UTM:	N	Sample Width:	Abundance:
	Elevation:	m				
Comments:						

APPENDIX III

SAMPLING AND ANALYTICAL TECHNIQUES

2010 Rock Geochemical Samples

Rock geochemical sample sites on the property were marked with orange flagging tape labelled with the sample number. The location of each sample was determined using a handheld GPS unit.

Multi-element analyses for rock samples were carried out at ALS Chemex in North Vancouver, B.C. Each sample was dried, fine crushed to better than 70% passing -2mm and then a 250 g split was pulverized to better than 85% passing 75 micron. The fine fraction was then analyzed for gold using fire assay followed by inductively coupled plasma-atomic emission spectroscopy analysis and for 35 other elements using an aqua regia digestion and inductively coupled plasma-atomic emission spectroscopy analysis (Au-AA24 and ME-ICP41).

2010 Soil Geochemical Samples

All 2010 soil sample locations were recorded using hand-held GPS units. Sample sites are marked by aluminum tags inscribed with the sample numbers and affixed to 0.5 m wooden lath that were driven into the ground. Soil samples were collected from 10 to 30 cm deep holes dug by hand-held auger. They were placed into individually pre-numbered Kraft paper bags.

The soil samples were sent to ALS Chemex, where they were dried, screened to -180 microns, dissolved in aqua regia solution and then analyzed for 35 elements using the inductively coupled plasma with atomic emission spectroscopy technique (ME-ICP41). An additional 50 g charge was further analysed for gold by fire assay with inductively coupled plasma-atomic emissions spectroscopy finish (Au-ICP24).

APPENDIX IV
CERTIFICATES OF ANALYSIS



ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **STRATEGIC METALS LTD.**
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Page: 1
Finalized Date: 22- AUG- 2010
Account: MTT

CERTIFICATE VA10109921

Project: KING

P.O. No.:

This report is for 9 Rock samples submitted to our lab in Vancouver, BC, Canada on 9- AUG- 2010.

The following have access to data associated with this certificate:

JOAN MARIACHER

BILL WENGZYNOWSKI

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- 31	Fine crushing - 70% <2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% <75 um
PUL- QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA24	Au 50g FA AA finish	AAS
ME- ICP41	35 Element Aqua Regia ICP- AES	ICP- AES

To: **STRATEGIC METALS LTD.**
ATTN: JOAN MARIACHER
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:


Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A
 Total # Pages: 2 (A - C)
 Finalized Date: 22- AUG- 2010
 Account: MTT

Project: KING

CERTIFICATE OF ANALYSIS VA10109921

Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg	Au- AA24 Au ppm	ME- ICP41 Ag ppm	ME- ICP41 Al %	ME- ICP41 As ppm	ME- ICP41 B ppm	ME- ICP41 Ba ppm	ME- ICP41 Be ppm	ME- ICP41 Bi ppm	ME- ICP41 Ca %	ME- ICP41 Cd ppm	ME- ICP41 Co ppm	ME- ICP41 Cr ppm	ME- ICP41 Cu ppm	ME- ICP41 Fe %
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
G285877		2.18	<0.005	<0.2	1.52	1385	<10	170	<0.5	<2	1.58	<0.5	59	204	196	7.46
G285878		4.06	<0.005	<0.2	1.40	4770	<10	40	<0.5	<2	4.93	<0.5	44	204	115	8.90
G285879		2.98	<0.005	<0.2	1.73	2680	<10	20	<0.5	<2	1.41	<0.5	53	192	118	7.64
G285880		1.84	<0.005	0.2	1.37	7220	<10	30	<0.5	<2	0.48	<0.5	62	200	129	7.54
G285881		2.78	<0.005	0.2	1.44	5180	<10	70	<0.5	2	0.46	<0.5	16	184	102	8.10
G285882		4.58	<0.005	<0.2	1.85	6620	<10	20	<0.5	<2	0.53	<0.5	54	93	204	7.28
G285883		3.42	<0.005	0.2	1.40	6020	<10	20	<0.5	<2	0.61	<0.5	56	95	202	8.64
G285884		3.42	<0.005	<0.2	1.02	2270	<10	180	<0.5	<2	2.37	<0.5	29	101	120	6.66
G285885		4.40	<0.005	<0.2	1.51	1645	<10	120	0.5	<2	1.70	<0.5	43	103	162	6.84



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Page: 2 - B
 Total # Pages: 2 (A - C)
 Finalized Date: 22- AUG- 2010
 Account: MTT

Project: KING

CERTIFICATE OF ANALYSIS VA10109921

Sample Description	Method Analyte Units LOR	ME- ICP41 Ga ppm 10	ME- ICP41 Hg ppm 1	ME- ICP41 K % 0.01	ME- ICP41 La ppm 10	ME- ICP41 Mg % 0.01	ME- ICP41 Mn ppm 5	ME- ICP41 Mo ppm 1	ME- ICP41 Na % 0.01	ME- ICP41 Ni ppm 1	ME- ICP41 P ppm 10	ME- ICP41 Pb ppm 2	ME- ICP41 S % 0.01	ME- ICP41 Sb ppm 2	ME- ICP41 Sc ppm 1	ME- ICP41 Sr ppm 1
G285877		<10	<1	0.04	<10	1.04	1915	5	0.08	218	920	2	1.26	11	24	46
G285878		<10	<1	0.04	<10	0.90	1080	2	0.12	199	860	<2	3.44	7	20	103
G285879		<10	<1	0.04	<10	1.29	1370	2	0.08	181	1000	<2	1.87	8	24	51
G285880		<10	<1	0.09	<10	0.30	386	3	0.12	176	740	<2	4.63	32	20	60
G285881		<10	<1	0.20	<10	0.29	240	5	0.27	50	920	3	1.43	30	23	134
G285882		<10	<1	0.06	<10	0.29	728	5	0.05	126	850	3	4.04	36	18	20
G285883		<10	<1	0.07	<10	0.39	836	5	0.07	140	980	3	4.70	25	19	33
G285884		<10	<1	0.04	<10	0.91	1120	1	0.05	151	980	2	1.51	<2	23	61
G285885		<10	<1	0.06	<10	0.80	1560	1	0.04	114	1060	<2	1.40	9	23	24



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Page: 2 - C
 Total # Pages: 2 (A - C)
 Finalized Date: 22- AUG- 2010
 Account: MTT

Project: KING

CERTIFICATE OF ANALYSIS VA10109921

Sample Description	Method Analyte Units LOR	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41
		Th	Ti	Tl	U	V	W	Zn
		ppm 20	% 0.01	ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
G285877		<20	0.01	<10	<10	112	<10	78
G285878		<20	<0.01	<10	<10	106	<10	51
G285879		<20	0.01	<10	<10	126	<10	74
G285880		<20	<0.01	<10	<10	114	<10	83
G285881		<20	<0.01	<10	<10	131	<10	54
G285882		<20	<0.01	<10	<10	138	<10	77
G285883		<20	<0.01	<10	<10	128	<10	81
G285884		<20	<0.01	<10	<10	109	<10	68
G285885		<20	<0.01	<10	<10	139	<10	101



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1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Page: 1
Finalized Date: 20- AUG- 2010
Account: MTT

CERTIFICATE VA10108989

Project: KING

P.O. No.:

This report is for 57 Soil samples submitted to our lab in Vancouver, BC, Canada on 9- AUG- 2010.

The following have access to data associated with this certificate:

JOAN MARIACHER

BILL WENGZYNOWSKI

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
SCR- 41	Screen to - 180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA24	Au 50g FA AA finish	AAS
ME- ICP41	35 Element Aqua Regia ICP- AES	ICP- AES

To: **STRATEGIC METALS LTD.**
ATTN: JOAN MARIACHER
C/ O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016- 510 W HASTINGS ST
VANCOUVER BC V6B 1L8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:


Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A
Total # Pages: 3 (A - C)
Finalized Date: 20- AUG- 2010
Account: MTT

Project: KING

CERTIFICATE OF ANALYSIS VA10108989

Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg	Au- AA24 Au ppm	ME- ICP41 Ag ppm	ME- ICP41 Al %	ME- ICP41 As ppm	ME- ICP41 B ppm	ME- ICP41 Ba ppm	ME- ICP41 Be ppm	ME- ICP41 Bi ppm	ME- ICP41 Ca %	ME- ICP41 Cd ppm	ME- ICP41 Co ppm	ME- ICP41 Cr ppm	ME- ICP41 Cu ppm	ME- ICP41 Fe %
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
CC102734		0.16	0.021	<0.2	1.23	12	<10	120	<0.5	<2	1.49	<0.5	9	17	68	2.70
CC102735		0.20	<0.005	<0.2	1.64	3	<10	90	<0.5	<2	0.37	<0.5	8	27	23	2.14
CC102736		0.10	0.007	<0.2	1.03	2	<10	150	<0.5	<2	0.32	<0.5	7	17	15	1.73
CC102737		0.24	<0.005	<0.2	0.81	6	<10	100	<0.5	<2	0.20	<0.5	4	14	15	1.61
CC102738		0.12	0.017	<0.2	0.67	4	<10	150	<0.5	3	2.92	<0.5	4	9	48	0.95
CC102739		0.32	<0.005	<0.2	2.32	8	<10	440	<0.5	2	0.79	<0.5	17	41	79	3.89
CC102740		0.22	<0.005	<0.2	1.29	5	<10	140	<0.5	<2	0.32	<0.5	6	21	18	1.96
CC102741		0.10	<0.005	0.2	0.25	4	<10	40	<0.5	<2	0.43	<0.5	3	3	15	0.64
CC102742		0.26	0.010	<0.2	1.04	4	<10	100	<0.5	<2	0.67	<0.5	5	17	35	1.62
CC102743		0.20	0.008	<0.2	1.05	5	<10	90	<0.5	<2	0.99	<0.5	5	15	29	1.69
CC102744		0.12	<0.005	0.3	0.39	<2	<10	50	<0.5	<2	0.72	<0.5	3	3	27	0.63
CC102745		0.20	<0.005	<0.2	0.90	5	<10	90	<0.5	<2	0.27	<0.5	5	12	19	1.40
CC102746		0.16	<0.005	<0.2	0.18	<2	<10	40	<0.5	<2	0.27	<0.5	2	2	6	0.48
CC102747		0.14	<0.005	<0.2	1.39	4	<10	140	<0.5	<2	0.34	<0.5	6	20	15	1.96
CC102748		0.14	<0.005	<0.2	1.51	5	<10	90	<0.5	<2	0.34	<0.5	7	22	18	2.25
CC102749		0.16	0.005	<0.2	1.69	8	<10	100	<0.5	<2	0.39	<0.5	7	23	16	2.41
CC102750		0.16	<0.005	<0.2	1.37	7	<10	100	<0.5	<2	0.55	<0.5	6	25	16	1.97
CC102751		0.18	0.182	<0.2	1.05	8	<10	130	<0.5	<2	1.59	<0.5	7	17	44	1.77
CC102752		0.16	<0.005	<0.2	1.53	8	<10	90	<0.5	<2	0.30	<0.5	7	20	16	2.10
CC102753		0.12	0.005	<0.2	1.14	4	<10	110	<0.5	<2	0.25	<0.5	5	15	12	1.72
CC102754		0.22	<0.005	<0.2	1.50	25	<10	140	<0.5	<2	0.46	<0.5	7	23	22	2.34
CC102755		0.32	0.017	<0.2	1.42	21	<10	110	<0.5	<2	0.78	<0.5	9	22	51	2.41
CC102756		0.22	<0.005	<0.2	0.84	12	<10	80	<0.5	<2	0.62	<0.5	5	12	39	1.58
CC102757		0.34	0.005	<0.2	1.28	16	<10	90	<0.5	<2	0.65	<0.5	8	16	61	1.93
CC102758		0.18	0.016	<0.2	0.78	5	<10	100	<0.5	<2	0.44	<0.5	4	10	41	1.16
CC102759		0.22	0.008	<0.2	1.85	47	<10	130	<0.5	<2	0.44	<0.5	10	21	37	3.09
CC102760		0.24	<0.005	<0.2	1.60	19	<10	100	<0.5	<2	0.48	<0.5	9	30	31	2.72
CC102713		0.24	0.008	<0.2	1.06	66	<10	110	<0.5	<2	1.59	<0.5	12	23	41	2.56
CC102714		0.20	0.009	<0.2	1.06	471	<10	140	<0.5	2	1.62	<0.5	29	46	123	4.06
CC102715		0.18	0.006	<0.2	1.13	285	<10	110	<0.5	<2	1.58	<0.5	18	35	69	3.29
CC102716		0.26	0.008	<0.2	1.05	186	<10	110	<0.5	<2	1.63	<0.5	15	25	63	3.15
CC102717		0.22	0.010	<0.2	1.08	192	<10	110	<0.5	<2	1.66	<0.5	15	26	66	3.18
CC102718		0.16	0.010	<0.2	1.11	1930	<10	90	<0.5	<2	1.39	<0.5	26	59	98	5.28
CC102719		0.20	0.008	0.2	1.02	1150	<10	110	<0.5	<2	1.73	<0.5	19	36	75	4.40
CC102720		0.20	0.005	<0.2	0.91	2270	<10	90	<0.5	<2	1.21	<0.5	24	61	94	6.16
CC102721		0.22	0.009	0.2	1.76	3330	<10	100	<0.5	<2	2.61	<0.5	90	179	213	8.10
CC102722		0.18	0.008	0.2	1.22	2330	<10	50	<0.5	<2	1.87	<0.5	69	164	167	7.07
CC102723		0.26	0.005	<0.2	1.14	1950	<10	60	0.5	<2	1.81	<0.5	58	137	134	6.52
CC102724		0.20	0.008	0.3	1.70	1490	<10	90	<0.5	<2	2.72	<0.5	80	138	177	6.94
CC102725		0.22	0.005	0.2	1.53	1810	<10	70	<0.5	<2	1.80	<0.5	70	137	173	6.41



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Page: 2 - B
Total # Pages: 3 (A - C)
Finalized Date: 20- AUG- 2010
Account: MTT

Project: KING

CERTIFICATE OF ANALYSIS VA10108989

Sample Description	Method Analyte Units LOR	ME- ICP41 Ga ppm 10	ME- ICP41 Hg ppm 1	ME- ICP41 K % 0.01	ME- ICP41 La ppm 10	ME- ICP41 Mg % 0.01	ME- ICP41 Mn ppm 5	ME- ICP41 Mo ppm 1	ME- ICP41 Na % 0.01	ME- ICP41 Ni ppm 1	ME- ICP41 P ppm 10	ME- ICP41 Pb ppm 2	ME- ICP41 S % 0.01	ME- ICP41 Sb ppm 2	ME- ICP41 Sc ppm 1	ME- ICP41 Sr ppm 1
CC102734		<10	<1	0.08	10	0.47	923	<1	0.04	9	830	<2	0.10	<2	5	75
CC102735		<10	<1	0.04	10	0.37	204	<1	0.03	9	150	3	0.01	<2	5	23
CC102736		<10	<1	0.05	<10	0.23	478	1	0.01	11	380	8	<0.01	<2	2	23
CC102737		<10	<1	0.05	<10	0.20	201	3	0.01	8	210	10	<0.01	<2	2	20
CC102738		<10	<1	0.05	<10	0.25	243	<1	0.03	7	800	<2	0.12	<2	1	113
CC102739		10	1	0.08	10	0.95	505	<1	0.05	25	580	4	<0.01	<2	10	106
CC102740		<10	<1	0.08	<10	0.29	313	<1	0.02	10	300	4	<0.01	<2	2	32
CC102741		<10	<1	0.03	<10	0.10	366	<1	0.05	3	470	<2	<0.01	<2	<1	28
CC102742		<10	<1	0.06	10	0.40	265	<1	0.04	13	430	5	0.01	<2	3	43
CC102743		<10	<1	0.04	10	0.38	209	<1	0.04	9	280	7	0.02	<2	2	65
CC102744		<10	<1	0.03	<10	0.11	178	<1	0.05	4	530	2	0.03	<2	1	35
CC102745		<10	<1	0.05	<10	0.22	211	<1	0.03	7	290	4	<0.01	<2	2	22
CC102746		<10	<1	0.02	<10	0.08	265	<1	0.06	1	440	<2	<0.01	<2	<1	21
CC102747		<10	<1	0.06	<10	0.34	267	<1	0.02	9	160	5	<0.01	<2	3	25
CC102748		<10	<1	0.09	10	0.40	280	<1	0.02	12	170	5	<0.01	<2	4	27
CC102749		<10	<1	0.10	10	0.35	149	1	0.02	11	100	7	<0.01	<2	4	26
CC102750		<10	<1	0.07	10	0.44	226	<1	0.03	12	490	4	<0.01	<2	4	34
CC102751		<10	<1	0.06	10	0.42	459	<1	0.06	11	660	5	0.04	<2	3	82
CC102752		10	<1	0.03	10	0.33	280	1	0.03	9	180	5	<0.01	<2	3	22
CC102753		10	<1	0.05	<10	0.24	157	<1	0.02	7	440	5	<0.01	<2	2	19
CC102754		<10	<1	0.08	10	0.37	254	1	0.03	13	240	5	<0.01	2	5	35
CC102755		<10	<1	0.06	10	0.52	396	<1	0.03	14	490	6	0.01	<2	6	40
CC102756		<10	<1	0.05	10	0.26	274	<1	0.04	8	270	3	<0.01	<2	3	34
CC102757		10	<1	0.06	10	0.31	473	<1	0.04	12	330	3	<0.01	<2	5	35
CC102758		<10	<1	0.04	10	0.14	96	<1	0.04	6	330	<2	0.01	<2	3	35
CC102759		10	<1	0.04	10	0.37	460	1	0.03	12	260	4	<0.01	<2	5	35
CC102760		<10	<1	0.09	10	0.48	343	<1	0.03	18	240	4	<0.01	<2	7	28
CC102713		<10	<1	0.09	10	0.51	626	1	0.04	26	590	5	0.04	<2	6	77
CC102714		<10	1	0.08	10	0.69	898	<1	0.02	80	860	3	0.11	7	12	69
CC102715		<10	<1	0.09	10	0.58	710	1	0.04	39	750	5	0.04	5	8	78
CC102716		<10	<1	0.07	10	0.53	659	1	0.04	25	630	5	0.03	<2	7	74
CC102717		<10	<1	0.07	10	0.53	681	1	0.04	25	660	4	0.03	2	7	77
CC102718		<10	<1	0.09	10	0.49	796	11	0.10	70	810	4	0.44	16	12	100
CC102719		<10	<1	0.09	10	0.50	848	8	0.07	43	780	14	0.33	8	9	97
CC102720		<10	<1	0.11	10	0.45	801	23	0.12	63	910	5	0.51	21	14	107
CC102721		<10	<1	0.10	<10	2.19	1990	10	0.11	279	840	<2	0.66	6	23	135
CC102722		<10	<1	0.07	<10	1.17	1365	6	0.09	238	1090	2	0.47	11	25	101
CC102723		<10	<1	0.06	<10	0.96	1375	4	0.08	204	970	<2	0.43	9	23	105
CC102724		<10	<1	0.07	<10	1.79	2680	3	0.08	221	860	<2	0.22	8	21	130
CC102725		<10	<1	0.07	<10	1.40	2020	2	0.06	211	920	<2	0.17	5	21	88



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Sample Description	Method Analyte Units LOR	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41
		Th	Ti	Ti	U	V	W	Zn
		ppm 20	% 0.01	ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
CC102734		<20	0.04	<10	<10	56	<10	49
CC102735		<20	0.10	<10	<10	60	<10	34
CC102736		<20	0.05	<10	<10	42	<10	27
CC102737		<20	0.05	<10	<10	44	<10	21
CC102738		<20	0.01	<10	<10	23	<10	16
CC102739		<20	0.07	<10	<10	100	<10	38
CC102740		<20	0.06	<10	<10	49	<10	25
CC102741		<20	0.03	<10	<10	19	<10	13
CC102742		<20	0.07	<10	<10	36	<10	31
CC102743		<20	0.05	<10	<10	40	<10	25
CC102744		<20	0.03	<10	<10	17	<10	20
CC102745		<20	0.04	<10	<10	32	<10	22
CC102746		<20	0.03	<10	<10	15	<10	13
CC102747		<20	0.07	<10	<10	49	<10	39
CC102748		<20	0.08	<10	<10	50	<10	34
CC102749		<20	0.07	<10	<10	55	<10	23
CC102750		<20	0.10	<10	<10	49	<10	30
CC102751		<20	0.05	<10	<10	42	<10	34
CC102752		<20	0.07	<10	<10	55	<10	33
CC102753		<20	0.07	<10	<10	46	<10	29
CC102754		<20	0.09	<10	<10	55	<10	32
CC102755		<20	0.07	<10	<10	55	<10	36
CC102756		<20	0.05	<10	<10	38	<10	24
CC102757		<20	0.06	<10	<10	46	<10	26
CC102758		<20	0.04	<10	<10	30	<10	15
CC102759		<20	0.06	<10	<10	78	<10	33
CC102760		<20	0.09	<10	<10	66	<10	37
CC102713		<20	0.05	<10	<10	56	<10	47
CC102714		<20	0.01	<10	<10	76	<10	62
CC102715		<20	0.04	<10	<10	67	<10	51
CC102716		<20	0.04	<10	<10	68	<10	46
CC102717		<20	0.04	<10	<10	67	<10	45
CC102718		<20	0.02	<10	<10	75	<10	66
CC102719		<20	0.03	<10	<10	65	<10	71
CC102720		<20	0.01	<10	<10	70	<10	71
CC102721		<20	0.01	<10	<10	85	<10	75
CC102722		<20	<0.01	<10	<10	81	<10	65
CC102723		<20	0.01	<10	<10	82	<10	63
CC102724		<20	0.01	<10	<10	101	<10	79
CC102725		<20	0.01	<10	<10	87	<10	75



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Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg	Au- AA24 Au ppm	ME- ICP41 Ag ppm	ME- ICP41 Al %	ME- ICP41 As ppm	ME- ICP41 B ppm	ME- ICP41 Ba ppm	ME- ICP41 Be ppm	ME- ICP41 Bi ppm	ME- ICP41 Ca %	ME- ICP41 Cd ppm	ME- ICP41 Co ppm	ME- ICP41 Cr ppm	ME- ICP41 Cu ppm	ME- ICP41 Fe %
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
CC102726		0.20	0.005	<0.2	1.20	2350	<10	60	<0.5	<2	0.95	<0.5	48	103	155	6.11
CC102727		0.26	0.007	0.3	0.44	9290	<10	20	<0.5	<2	0.55	<0.5	18	45	122	5.98
CC102728		0.24	0.015	0.2	1.09	1580	<10	100	<0.5	<2	1.52	<0.5	26	63	101	5.08
CC102729		0.20	0.013	<0.2	1.17	2270	<10	80	<0.5	<2	1.19	<0.5	42	83	166	6.40
CC102730		0.22	0.008	0.2	1.45	4480	<10	60	0.5	<2	0.61	<0.5	53	95	257	9.44
CC106501		0.28	0.008	0.2	1.46	>10000	<10	30	<0.5	<2	0.61	<0.5	37	90	157	9.89
CC106502		0.20	0.009	0.2	1.30	4530	<10	60	<0.5	<2	0.72	<0.5	55	94	252	8.91
CC106503		0.18	0.011	0.4	0.55	2000	<10	20	<0.5	<2	0.54	<0.5	47	49	354	8.77
CC106504		0.24	0.010	0.2	1.55	1640	<10	60	<0.5	<2	1.40	<0.5	55	108	171	7.35
CC106505		0.22	0.012	<0.2	1.31	1030	<10	60	<0.5	<2	2.39	<0.5	43	81	151	5.59
CC106506		0.20	0.007	0.3	0.95	822	<10	40	<0.5	<2	1.39	<0.5	35	78	165	5.85
CC106507		0.20	0.014	0.3	0.97	1310	<10	30	<0.5	<2	1.25	<0.5	35	57	124	6.17
CC106508		0.18	0.009	0.2	1.31	1440	<10	60	<0.5	<2	0.96	<0.5	33	56	177	6.27
CC106509		0.24	0.005	<0.2	1.21	721	<10	80	<0.5	<2	1.21	<0.5	27	43	173	5.22
CC106510		0.20	<0.005	0.3	1.36	505	<10	100	<0.5	<2	1.36	<0.5	28	47	140	5.01
CC106511		0.24	0.006	<0.2	1.18	167	<10	110	<0.5	<2	1.76	<0.5	17	30	75	3.71
CC106512		0.28	0.016	0.4	0.71	3480	<10	70	0.5	<2	8.2	<0.5	32	246	67	9.94



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Sample Description	Method Analyte Units LOR	ME- ICP41 Ga ppm 10	ME- ICP41 Hg ppm 1	ME- ICP41 K % 0.01	ME- ICP41 La ppm 10	ME- ICP41 Mg % 0.01	ME- ICP41 Mn ppm 5	ME- ICP41 Mo ppm 1	ME- ICP41 Na % 0.01	ME- ICP41 Ni ppm 1	ME- ICP41 P ppm 10	ME- ICP41 Pb ppm 2	ME- ICP41 S % 0.01	ME- ICP41 Sb ppm 2	ME- ICP41 Sc ppm 1	ME- ICP41 Sr ppm 1
CC102726		<10	<1	0.10	<10	0.64	1230	2	0.10	139	880	2	0.58	10	19	87
CC102727		<10	<1	0.07	<10	0.18	167	2	0.07	29	740	2	0.80	50	12	143
CC102728		<10	<1	0.11	10	0.53	856	1	0.12	72	820	3	0.48	9	13	94
CC102729		<10	<1	0.09	<10	0.58	1270	2	0.10	113	1030	4	0.36	13	19	87
CC102730		<10	<1	0.11	<10	0.48	903	3	0.13	125	1270	2	0.77	22	26	106
CC106501		<10	<1	0.06	<10	0.16	212	41	0.13	102	1390	<2	9.6	120	24	46
CC106502		<10	<1	0.11	<10	0.54	1355	1	0.10	136	1260	<2	0.83	11	25	95
CC106503		<10	<1	0.11	<10	0.25	399	<1	0.03	100	850	<2	0.27	4	15	60
CC106504		<10	<1	0.07	<10	1.12	1620	<1	0.05	157	1110	2	0.22	7	24	57
CC106505		<10	<1	0.06	<10	1.02	1570	<1	0.04	112	1110	2	0.31	4	20	60
CC106506		<10	<1	0.04	<10	0.88	1480	<1	0.03	88	1260	<2	0.40	3	19	36
CC106507		<10	<1	0.03	<10	0.80	1435	1	0.03	84	670	<2	0.08	7	20	46
CC106508		<10	<1	0.08	10	0.66	1145	1	0.05	72	1140	<2	0.15	15	17	70
CC106509		<10	<1	0.08	10	0.59	1065	<1	0.03	43	1260	4	0.06	6	13	61
CC106510		<10	<1	0.11	10	0.64	1335	<1	0.03	50	1100	3	0.06	2	14	61
CC106511		<10	<1	0.08	10	0.54	835	<1	0.04	30	880	4	0.03	<2	9	82
CC106512		<10	<1	0.05	<10	3.45	2290	<1	0.03	258	440	<2	0.05	<2	19	137



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CERTIFICATE OF ANALYSIS VA10108989

Sample Description	Method Analyte Units LOR	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41	ME- ICP41
		Th	Ti	Tl	U	V	W	Zn
		ppm 20	% 0.01	ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
CC102726		<20	0.01	<10	<10	77	<10	69
CC102727		<20	<0.01	<10	<10	67	<10	40
CC102728		<20	0.02	<10	<10	78	<10	59
CC102729		<20	0.01	<10	<10	90	<10	74
CC102730		<20	<0.01	<10	<10	107	<10	106
CC106501		<20	<0.01	10	<10	119	<10	101
CC106502		<20	<0.01	<10	<10	101	<10	90
CC106503		<20	<0.01	<10	<10	74	<10	86
CC106504		<20	0.01	<10	<10	101	<10	85
CC106505		<20	0.01	<10	<10	93	<10	69
CC106506		<20	0.01	<10	<10	94	<10	64
CC106507		<20	<0.01	<10	<10	85	<10	79
CC106508		<20	0.02	<10	<10	104	<10	85
CC106509		<20	0.02	<10	<10	96	<10	70
CC106510		<20	0.03	<10	<10	99	<10	67
CC106511		<20	0.04	<10	<10	74	<10	54
CC106512		<20	<0.01	<10	<10	74	<10	55

APPENDIX V

AIRBORNE GEOPHYSICAL SURVEY AND INTERPRETATION DATA

Assessment of Airborne Magnetics and Radiometrics Surveys at the King Prospect

A 231 line km helicopter magnetic and radiometric survey has been completed over the King project by New-Sense Geophysics Ltd. (New-Sense) for Strategic Metals Ltd. (Strategic Metals). The survey area covers known base metal prospects (Ah and Orloff) and is located approximately 125 km north-west of Whitehorse in the Yukon Territory. Condor Consulting, Inc. (Condor) has been commissioned to assess the data sets and provide a 3D model of the magnetics. Refer to New-Sense's logistic report (HMR100806) for any additional survey details. Figure 1 shows the location of the survey area and flight path.

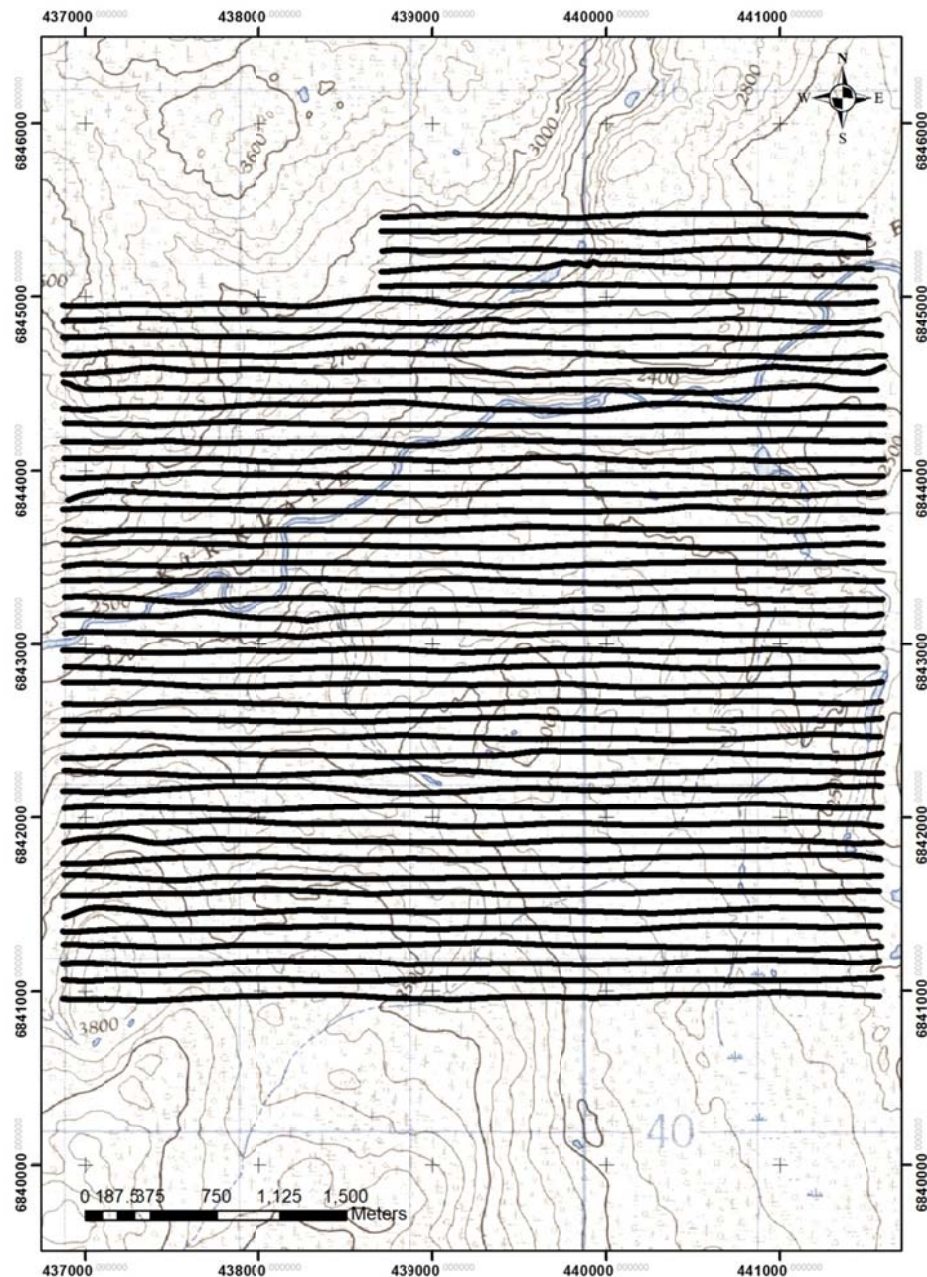


Figure 1: King airborne magnetics and radiometrics survey flight path.

The range of the magnetic response across the survey area is approximately 1,200 nT. The results show a strong north-east orientation throughout the data set which can be seen in Figure 2. Anomalous stream sediment As and Cu samples (up to 17 and 110 ppm respectively) were collected in the south-east portion of the survey area. It is recommended that the zones corresponding to the interpreted structures be followed up with a field check and subsequent mapping and sampling.

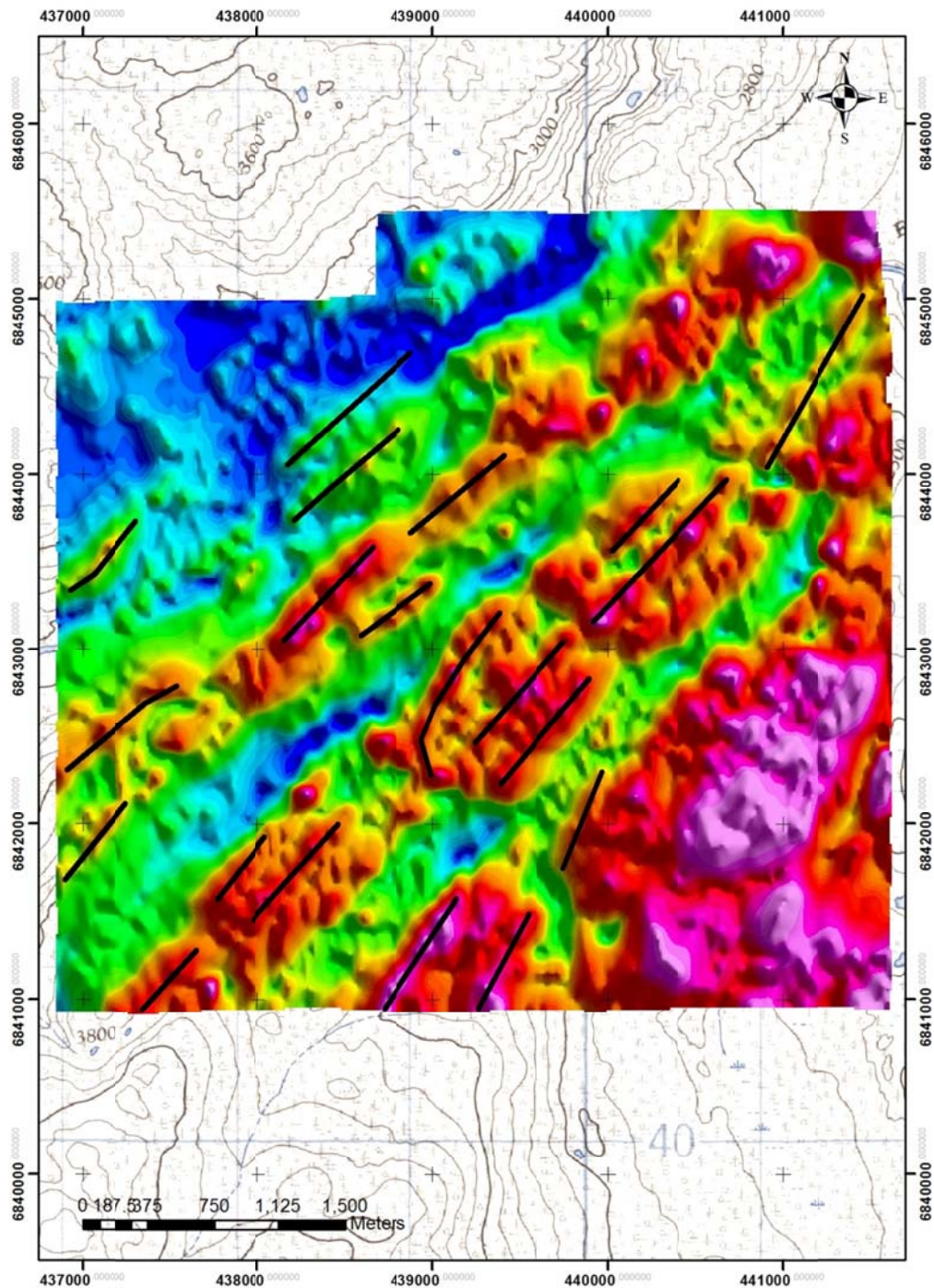


Figure 1: King total magnetic intensity image and interpreted structural lineaments.

The University of British Columbia (UBC) 3D magnetic inversion program MAD3D (version 4.0) was used to produce a model of the magnetics data. MAG3D is a program library for carrying out forward modeling and inversion of surface, airborne, and/or borehole magnetic data in the presence of a three dimensional Earth. Data are assumed to be the anomalous magnetic response to buried susceptible material, not including Earth's ambient field. The model is specified using a mesh of rectangular cells, each with a constant value of susceptibility, and topography is included. The magnetic response can be calculated anywhere within the model volume, including above the topography, simulating ground or airborne surveys, and inside the ground simulating borehole surveys. Figure 3 displays the 3D inversion results of the magnetics data at King.

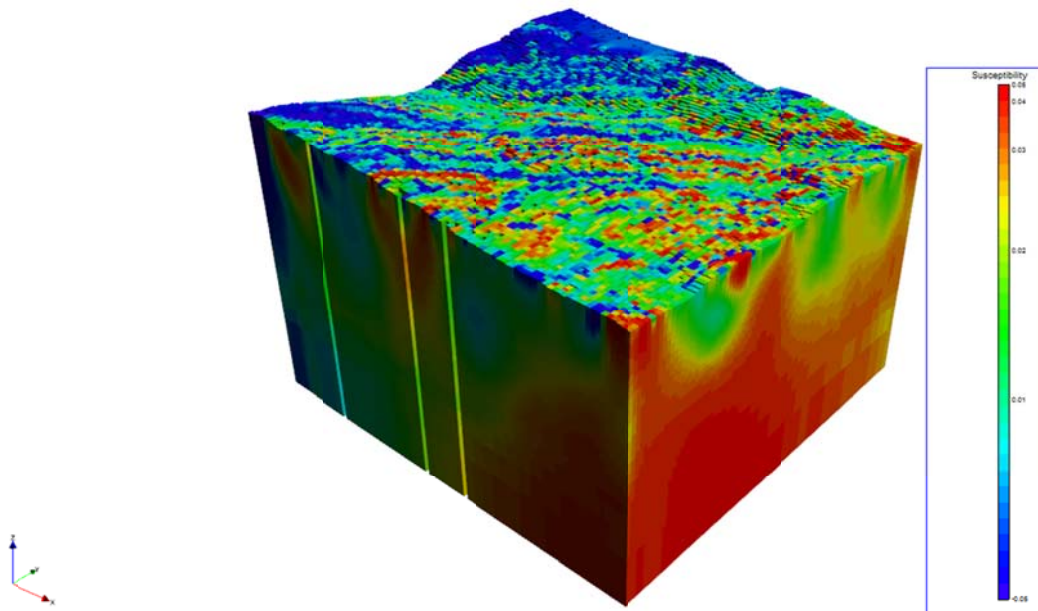


Figure 3: King 3D magnetic model.

The elevated radiometrics response appears for the most part to correlate with drainages and the valley floor.

The following products can be found and downloaded from the Condor ftp site

(<ftp://ftp.condorconsult.com> , user id: archer@condorconsult.com , password: skywalker19):

- Summary report of the assessment
- Registered images of the airborne magnetics and radiometrics (NAD83, Zone 8N)
- 3D magnetic model and associated sections
- ArcGIS formatted .shp file of the interpreted lineaments derived from the magnetics

It is recommended that the results of the airborne magnetics and radiometrics data be compared with any available geologic and geochemical information in order to help advance the exploration program at King.

Respectfully submitted;

Mark Goldie

Condor Consulting, Inc.

November 30, 2010

References:

Li, Y. and Oldenburg, D. W., 1996, 3-D Inversion of Magnetic Data: *Geophysics*, 61, no. 02, 394-408.

Yakovenko, A., Logistics Report for the High Resolution Helicopter Magnetic and Gamma-ray Spectrometric Airborne Geophysical Survey flown over Mint, Nikki, Corky, Meloy, King, and Mars Project Properties, Yukon, from White River Lodge (Mint and Nikki), Burwash Landing (Corky and Meloy), and Braeburn Lodge (King and Mars), Yukon carried out on behalf of Strategic Metals Ltd. by New-Sense geophysics Limited, Project # HMR100806, October 2010.

**Logistics
Report**

For the

**High Resolution Helicopter Magnetic and
Gamma-ray Spectrometric Airborne Geophysical Survey**

Flown over

MINT, NIKKI, CORKY, MELOY, KING, AND MARS Project Properties, Yukon

From

White River Lodge (Mint and Nikki), Burwash Landing (Corkey and Meloy), and Braeburn Lodge (King and Mars), Yukon

Carried out on behalf of

STRATEGIC METALS LTD.

By

New-Sense Geophysics Limited



Toronto, Canada
October 5th, 2010
(HMR100806-report)

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AMENDMENT RECORD

Rev	Date	Description	Report Section	Prepared by

DOCUMENT RECORD

Document Identification	HMR100806-report
Document Custodian	Field Operations Manager
Relates To	Final Deliverables
Original Date Issued	October 5 th , 2010

1. INTRODUCTION

A high sensitivity helicopter magnetic and gamma-ray spectrometric airborne survey was carried out for Strategic Metals Ltd. (Client) over six (6) project areas known as:

Mint and *Nikki*, located ~25 Km west and 30 Km south-west respectively of White River Lodge, Yukon; *Corky* and *Meloy*, located ~21 Km west and ~47 Km north-east respectively of Burwash Landing, Yukon; *King* and *Mars*, located ~32 Km north-west and ~56 Km south-east respectively of Braeburn Lodge, Yukon.

New-Sense Geophysics (NSG) flew the survey under the terms of an agreement with Client dated August 6th, 2010.

The survey was flown between August 8th and August 17th, 2010. A total of 1,207 line kilometers of field magnetic and radiometric data was flown, collected, processed and plotted. These lines were flown in 6 separate blocks listed below:

Mint Property	- 272 km
Nikki Property	- 162 km
Corky Property	- 87 km
Meloy Property	- 293 km
King Property	- 231 km
Mars Property	- 162 km

Geophysical equipment was comprised of 1 high-sensitivity Cesium-3 magnetometer mounted in a fixed stinger assemble and a 1024-channel spectrometer with four downward looking crystals (total 16 liters) and one upward looking crystal (total 4 liters). Airborne ancillary equipment included digital recorders, fluxgate magnetometer, radar altimeter and global positioning system (GPS) receiver, which provided accurate real-time navigation and subsequent flight path recovery. Surface equipment included a magnetic base station with GPS time synchronization and a PC-based field workstation, which was used to check the data quality and completeness on a daily basis.

The technical objective of the survey was to provide high-resolution total field magnetic and radiometric maps suitable for anomaly delineation, detailed structural evaluation, and identification of lithologic trends. Fully corrected magnetic and radiometric maps were prepared by New-Sense Geophysics Limited, in their Toronto office, after the completion of survey activities.

This report describes the acquisition, processing, and presentation of data for the Strategic Metals Ltd. airborne survey over Mint, Nikki, Corky, Meloy, King and Mars blocks, Yukon.

2. SURVEY LOCATION

Datum: NAD83

Projection: Universal Transverse Mercator Zone 7N and Zone 8N

Local Datum Transform: North America (all Canada and USA subunits)

Table 2.1: Mint Property Coordinates

UTN Zone 7N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
503454	6855015	503454	6855015
507048	6855015	507048	6855015
507048	6852165	507048	6852165
508398	6852165	508398	6852165
508398	6849474	508398	6849474
503454	6849474	503454	6849474
503454	6855015	503454	6855015

Table 2.2: Nikki Property Coordinates

UTN Zone 7N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
500000	6881475	500000	6881475
503500	6881475	503500	6881475
503500	6877500	503500	6877500
500000	6877500	500000	6877500
500000	6881475	500000	6881475

Table 2.3: Corky Property Coordinates

UTN Zone 7N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
582177	6806658	582177	6806658
584919	6806658	584919	6806658
584918	6803915	584918	6803915
582176	6803915	582176	6803915
582177	6806658	582177	6806658

Table 2.4: Meloy Property Coordinates

UTN Zone 7N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
647000	6823000	647000	6823000
652000	6823000	652000	6823000
652000	6818000	652000	6818000
647000	6818000	647000	6818000
647000	6823000	647000	6823000

Table 2.5: King Property Coordinates

UTN Zone 8N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
438766	6845463	438766	6845463
441425	6845467	441425	6845467
441509	6844655	441509	6844655
441514	6840897	441514	6840897
436938	6840899	436938	6840899
436938	6845004	436938	6845004
438766	6845004	438766	6845004
438766	6845463	438766	6845463

Table 2.6: Mars Property Coordinates

UTN Zone 8N			
NAD83_X	NAD83_Y	WGS84_X	WGS84_Y
508795	6798209	508795	6798209
512466	6794761	512466	6794761
510594	6792767	510594	6792767
506923	6796215	506923	6796215
508795	6798209	508795	6798209

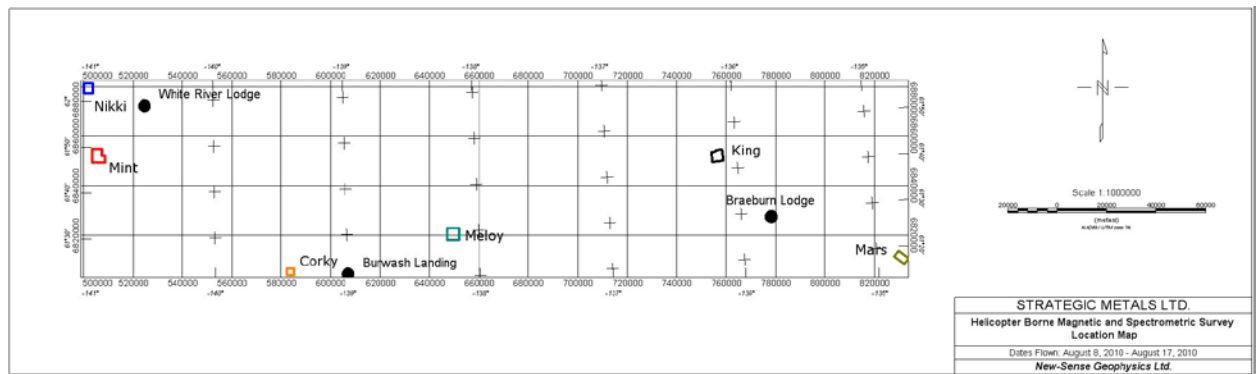


Figure 2.1 Location map depicting the outlines of all six (6) properties: Nikki (blue), Mint (red), Corky (orange), Meloy (grey), King (black), and Mars (green). The coordinate system is NAD83, North America (all Canada and USA subunits), Zone 7N.

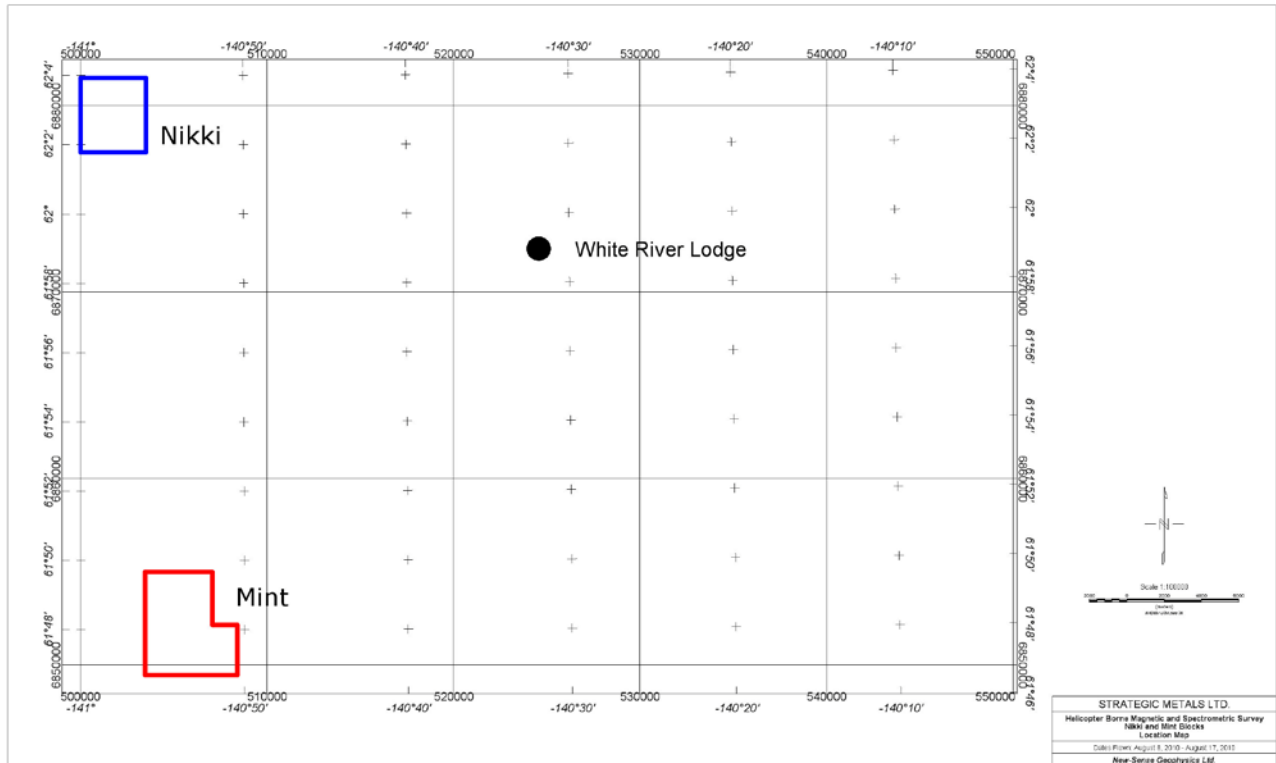


Figure 2.2 Location map depicting the outlines of Nikki (blue) and Mint (red). The coordinate system is NAD83, North America (all Canada and USA subunits), Zone 7N.

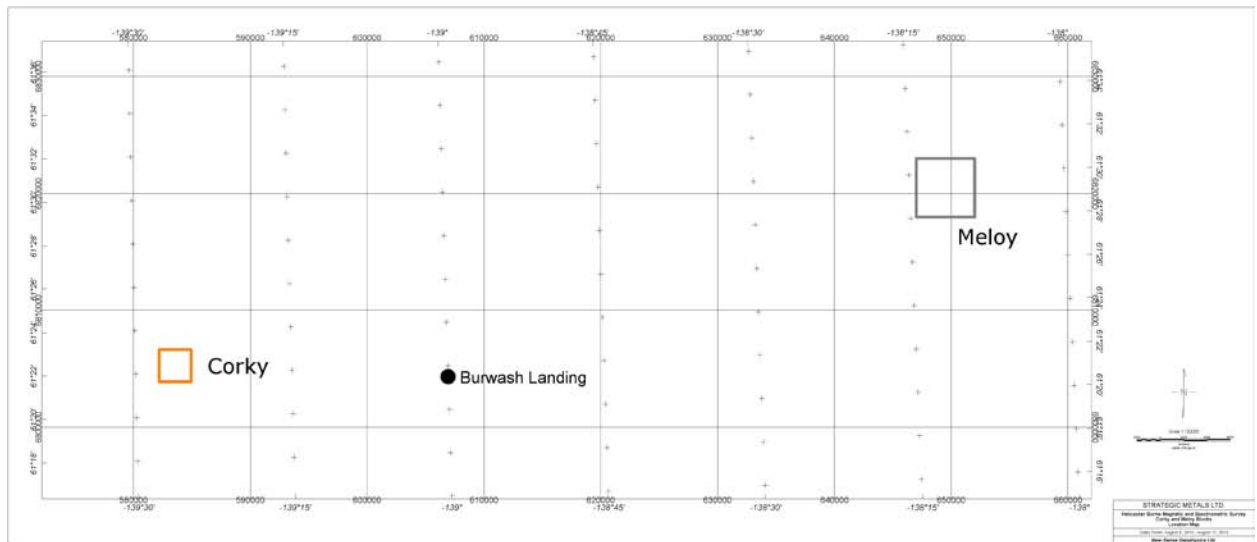


Figure 2.3 Location map depicting the outlines of Corky (orange) and Meloy (grey). The coordinate system is NAD83, North America (all Canada and USA subunits), Zone 7N.

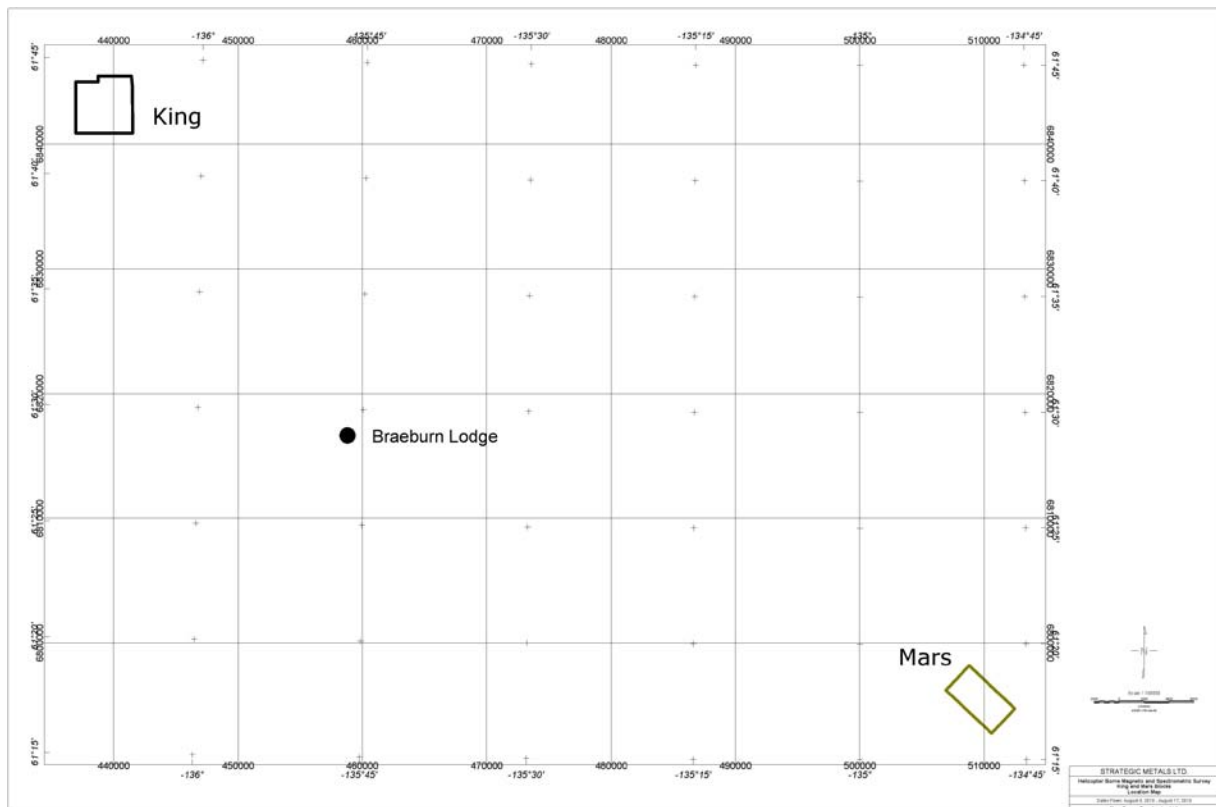


Figure 2.4 Location map depicting the outlines of King (black) and Mars (green). The coordinate system is NAD83, North America (all Canada and USA subunits), Zone 8N.

3. PERSONNEL

3.1 FIELD OPERATIONS

New-Sense Geophysics Ltd., Geophysicist:	Chris Evans
Fireweed Helicopters, Pilot:	Brent Vansickle
Fireweed Helicopters, Pilot:	RJ Price

3.2 OFFICE DATA PROCESSING AND OFFSITE QA/QC

QA/QC (NSG):	Andrei Yakovenko
Data Processing and Grids (NSG):	Andrei Yakovenko Sean Plener Chris Evans
Maps (NSG):	Andrei Yakovenko Sean Plener
Logistics Report (NSG):	Andrei Yakovenko Sean Plener

3.3 PROJECT MANAGEMENT

New-Sense Geophysics Ltd.:	Andrei Yakovenko
Strategic Metals Ltd.:	W. Douglas Eaton

4. SURVEY PARAMETERS

Airborne Digital Record:	Line Number
	Flight Number
	Radar Altimeter
	Total Field Magnetics
	Live Time
	Thorium counts
	Potassium counts
	Uranium counts
	Upward looking Uranium counts
	Cosmic counts
	Down Spectrum
	Total Counts
	Time (System and GPS)
	Raw Global Positioning System (GPS) data
	Magnetic compensation parameters (fluxgate mag.)
Base Station Record:	Ambient Total Field Magnetics
	Raw Global Positioning System (GPS) data
	Time (System and GPS)

Table 4.1 Survey Parameters

Property Name	Mint	Nikki	Corky	Meloy	King	Mars
Traverse Line Spacing (m)	100	100	100	100	100	100
Control Line Spacing (m)	1000	1000	1000	1000	1000	1000
Nominal Terrain Clearance (m)	35	35	35	35	35	35
Observed Terrain Clearance (avrg. m)	33.8	41.0	33.1	39.2	36.5	35.4
Navigation	GPS	GPS	GPS	GPS	GPS	GPS
Traverse Line Direction (deg.)	90, 270	90, 270	90, 270	0, 180	90, 270	132, 312
Control Line Direction (deg.)	0, 180	0, 180	0, 180	90, 270	0, 180	42, 222
Magnetic Data Measurement Interval (sec.)	0.1	0.1	0.1	0.1	0.1	0.1
Radiometric Data Measurement Interval (sec.)	1	1	1	1	1	1
Ground Speed (avrg. km/h)	80.6	76.7	80.3	68.4	107.28	103.7
Magnetic Measurement Interval (avrg. m/0.1sec.)	2.2	2.1	2.2	1.9	3	2.9
Radiometric Measurement Interval (avrg. /1.0sec.)	22.4	21.3	22.3	19	29.8	28.8

5. AIRCRAFT AND EQUIPMENT

5.1 AIRCRAFT

The aircraft used was a Bell 206B3 helicopter (C-FFWH) equipped with a Cesium magnetometer mounted in a fixed stinger assembly and RS-500 airborne spectrometer mounted in the storage compartment. The aviation company providing the aircraft service was Fireweed Helicopters based in Whitehorse, Yukon, Canada.

5.2 AIRBORNE GEOPHYSICAL SYSTEM

5.2.1 MAGNETOMETER

One Scintrex CS-3 optically pumped Cesium split beam sensor was mounted in a fixed stinger assembly. The magnetometer's Larmor frequency output was processed by a KMAG-4 magnetometer counter, which provides a resolution of 0.15 ppm (in a magnetic field of 50,000 nT, resolution equivalent to 0.0075 nT). The raw magnetic data was recorded at 50 Hz, anti-aliased with 51 point COSINE filter and resampled at 10 Hz.

5.2.2 MAGNETIC COMPENSATION

The proximity of the aircraft to the magnetic sensor creates a measurable anomalous response as a result of the aircraft's movement. The orientation of the aircraft with respect to the sensor and the motion of the aircraft through the earth's magnetic field are contributing factors to the strength of this response. A special calibration flight, Figure of Merit (i.e., FOM), was flown to record the information necessary to compensate for these effects.

The FOM maneuvers consist of a series of calibration lines flown at high altitude to gain information in each of the required line directions. During this procedure, pitch, roll and yaw maneuvers are performed on the aircraft (typical angle ranges are 10° pitch, 10° roll, and 10° yaw). Each variation is conducted three times in succession (first pitch, then roll, then yaw), providing a complete picture of the aircraft's effects at designated headings in all orientations.

A three-axis Bartington fluxgate magnetometer (recorded at 50 Hz) was used to measure the orientation and rates of change of the magnetic field of the aircraft, away from localized terrestrial magnetic anomalies. The QC Tools digital compensation algorithm was then applied to generate a correction factor to compensate for permanent, induced, and eddy current magnetic responses generated by the aircraft's movements.

5.2.3 GPS NAVIGATION

A U-BLOX RCB-LJ sixteen channel GPS receiver, which is an integral component of the iNAV V3 computer system, was used to run the flight control system and provide precise positioning of the aircraft.

5.2.4 ALTIMETER

A TRA 3500 radar altimeter was mounted inside the stinger. This instrument operates with a linear performance over the range of 0 to 2,500 feet and records the terrain clearance of the sensors. The raw radar altimeter data was recorded at 50 Hz, anti-aliased with a 21 point COSINE filter and re-sampled at 10 Hz.

5.2.5 GEOPHYSICAL FLIGHT CONTROL SYSTEM

New-Sense's iNAV V3 geophysical flight control system monitored and recorded magnetometer, spectrometer, altimeter, and GPS equipment performance. Input from the various sensors was monitored every 0.005 seconds for the precise coordination of geophysical and positional measurements. The input was recorded fifty times per second (one time per second in the case of GPS and radiometric data).

GPS positional coordinates and terrain clearance were presented to the pilot by means of a panel mounted indicator display. The magnetometer response, forth difference, altimeter profile and profiles of the radiometric windows were also available on the touch screen display, for real-time monitoring of equipment performance.

5.2.6 SPECTROMETER

The RS-500 Airborne Spectrometer with RSX-5 detector pack, manufactured by Radiation Solutions Inc. (RSI), was used for the survey. The RS-500 spectrometer has a multi-peak gain stabilization algorithm and is capable of recording 1024 channels with accuracy of 0.1 to 10 counts/second.

The RS-500 is connected to a crystal pack comprising four downward looking crystals (16 liters total) and one upward looking crystal (4 liters total). The downward crystals record the radiometric spectrum from 410 KeV to 2810 KeV over 1024 discrete energy windows, as well as from a cosmic ray channel that detects photons with energy levels above 3.0 MeV. From these 1024 channels, the standard Total Count, Potassium, Uranium and Thorium channels are extracted. The upward crystal is used to measure and correct for atmospheric Radon interference. The shock-protected Sodium Iodide (Thallium) crystal package is unheated and automatically stabilizes with respect to the multiple peaks. The RS-500 provides raw data that has been automatically corrected for gain, base level, ADC offset, and dead time.

5.2.7 IDAS DIGITAL RECORDING

The output of the CS-3 magnetometer, fluxgate magnetometer, altimeter, temperature, pressure, GPS coordinates, and time (system and GPS), were recorded digitally on a Compact Flash drive at a sample rate of fifty times per second (one time per second for GPS) by the iNAV V3 system.

5.2.8 PRESSURE AND TEMPERATURE

A Honeywell Precision Pressure Transducer, model PPT0020AWN2VA-A, was used to record the ambient pressure and temperature during the survey. The device was mounted in the helicopter stinger. The pressure and temperature outputs units were mbar and degrees Celsius respectively.

5.2.9 SPECTROMETER DIGITAL RECORDING

The output of the RS-500 spectrometer, GPS coordinates and time (UTC) were recorded digitally on an internal RS-500 flash drive at a sample rate of 1 Hz. After each flight the data were copied and synchronized using UTC clock with the iDAS digital records.

5.3 GROUND MONITORING SYSTEM

5.3.1 BASE STATION MAGNETOMETER

A Scintrex CS-3 optically pumped cesium split beam sensor was used at the base of operations within the airport boundaries, in an area of low magnetic gradient and low/free from cultural electric & magnetic noise sources. The sensitivity and absolute accuracy of the ground magnetometer is ± 0.01 nT. Data was recorded continuously at least every one second throughout all survey operations in digital form on a TC-10 data acquisition system. Both the ground and airborne magnetic readings were synchronized based on the GPS clock.

5.3.2 RECORDING

The output of the magnetic and GPS monitors was recorded digitally on a dedicated TC-10 computer. A visual record of the last three hours was graphically maintained on the computer screen to provide an up to date appraisal of magnetic activity. At the conclusion of each production flight raw GPS and magnetic data were transferred to the main field compilation computer.

5.4 FIELD COMPILATION SYSTEM

A field laptop computer was used for field data processing and presentation. The raw data was imported to Geosoft Oasis montaj for QA/QC and processing purposes. After the data was checked for quality control, the database with uncompensated magnetic readings was exported to QC Tools software package for magnetic compensation and base station data merging purposes. The compensated database was then imported back to Oasis for the subsequent and final processing.

6. PRE-SURVEY SPECTROMETER CALIBRATIONS

Pre-survey calibrations and testing of the RS-500 (SN 5503) airborne gamma-ray spectrometry system were carried out on August, 8th, 2010 (from White River lodge, YT), August 15th, 2010 (from Braeburn lodge, YT), and August 20th, 2010 (from Carmacks, YT). For these calibrations and tests, the survey aircraft (registration C-FFWH) was mobilized in survey configuration. The installed equipment and configurations were selected to conform to contract technical specifications.

Calibration of the spectrometer system is a vital process to airborne gamma-ray spectrometry. The calibration of the spectrometer system involved three tests:

- **Calibration Pad** measurements, which are used to determine the “spectral overlap” (Compton scattering) coefficients. The calibration test was performed within a 12 month period before the survey by the manufacturer (Radiation Solutions Inc.), at its headquarters location in Mississauga, Ontario.
- **Cosmic Flight Test**, which is used to determine the aircraft background values and cosmic coefficients for Mint, Nikki, Melody, and Corky was conducted on August 8th, 2010. The Cosmic Flight Test that was used to determine the coefficients for King and Mars was conducted on August 15th, 2010.
- **Height Attenuation Test**, which determined the altitude attenuation coefficients for Mint, Nikki, Melody, and Corky was conducted on August 8th, 2010 and the Height Attenuation Test used to determine the coefficients for King and Mars was conducted on August 15th, 2010.

6.1 ENERGY WINDOWS

The airborne radiometric technique requires measurement of count rates for specific energy regions or windows in the natural gamma-ray spectrum. The standard energy regions (in accordance with the International Atomic Energy Agency (IAEA) 323), and their corresponding channel limits are:

Table 6.1 Downward spectrometer energy windows

Designation	Energy Limit (keV)		Channel Limit (inclusive)	
	Lower	Upper	Unit Values	
			Lower	Upper
Total Count (TC)	410	2810	137	937
K	1370	1570	457	523
U	1660	1860	553	620
Th	2410	2810	803	937
U (upward)	1660	1860	553	620
Cosmic	3200	infinity		

6.2 CALIBRATION PAD TEST

The Compton stripping coefficients as provided by RSI are listed below:

Table 6.2 Compton Stripping coefficients

Stripping Ratios	Spectrometer (SN 5503)	“normal” values
Th into U ($\alpha = a_{23}/a_{33}$)	0.284	0.250
Th into K ($\beta = a_{13}/a_{33}$)	0.432	0.400
U into K ($\gamma = a_{12}/a_{22}$)	0.771	0.810
U into Th ($\alpha = a_{32}/a_{22}$)	0.039	0.060
K into Th ($\beta = a_{31}/a_{11}$)	-0.001	0
K into U ($\gamma = a_{21}/a_{11}$)	0.001	0.003

6.3 COSMIC FLIGHT TEST

In each of the spectral windows, the radiation increases exponentially with height due to radiation of cosmic origin. As well, the aircraft itself contributes a constant background to the count rate. By completing a series of flights within the same region, over a range of altitudes, these background contributions can be determined.

6.3.1 SETUP AND MEASUREMENT PROCEDURE

1. A resolution check was completed at the aircraft base using a Thorium source prior to the cosmic test to insure the sensitivity and accuracy of the spectrometer.
2. Once the aircraft reached the desired altitude (first at ~8000 feet), survey data were recorded for approximately ten minutes.
3. Step 2 was then repeated at the following remaining altitudes: 9,000, 10,000, 11,000 and 12,000 feet above sea level.

Table 6.3 Cosmic Test data from August 8, 2010

Altitude (ft)	Cosmic Test Flight Data (average counts)					
	Cosmic	UU	K	U	Th	TC
8297	197	3	22	13	13	285
9292	228	4	23	14	15	356
10225	262	4	26	16	17	356
11334	310	5	26	16	17	400

Table 6.4 Cosmic Test data from August 15, 2010

	Cosmic Test Flight Data (average counts)					
Altitude (ft)	Cosmic	UU	K	U	Th	TC
7848	176	3	20	12	11	265
8914	203	3	23	13	13	338
9943	238	4	25	15	15	338
11117	381	4	27	17	19	383
12109	328	5	30	19	21	420

6.3.2 RESULTS FROM COSMIC FLIGHT TEST

At each altitude, the raw data for the five windows of interest (Th, K, U, TC, and U upward) were evaluated for quality. The mean values were then extracted and plotted against the cosmic background window (see Appendix A). The result is a linear trend, where the slope and intercept represent the cosmic stripping ratio and the aircraft background respectively. The results from the graphs are summarized below.

Table 6.5 Cosmic and Aircraft Background coefficients used for Nikki, Mint, Corky and Meloy blocks

Cosmic Flight Test Result From August 8, 2010		
Element	Cosmic	Aircraft Background
K	0.0647	8.8788
U	0.0456	3.8854
Th	0.0617	0.8817
TC	1.10161	86.996
UU	0.016	0

Table 6.6 Cosmic and Aircraft Background coefficients used for King and Mars blocks

Cosmic Flight Test Result From August 15, 2010		
Element	Cosmic	Aircraft Background
K	0.0621	9.7817
U	0.0471	3.6567
Th	0.0646	0
TC	1.023	90.165
UU	0.0132	0.5736

6.4 ALTITUDE ATTENUATION TEST

The height attenuation of the spectrometer systems was calculated by flying a series of passes across a line over flat ground with uniform radioelement ground concentration. The test range was flown by acquiring data on a series of seven passes over a set path, at the following altitudes: 100, 150, 200, 250, 300, 400, 600, 800 and 1000 feet above ground.

6.4.1 RESULTS FROM ALTITUDE ATTENUATION TEST

The airborne data from the altitude attenuation test was checked for quality, edited and divided into lines, where each line represents a pass. The radiometric windows were then corrected for background (aircraft and cosmic) and stripped of Compton contributions. After averaging the data for each line, the four windows of interest (K, U, Th, and Total Count) were plotted against the altimeter in order to obtain the height attenuation. The results were obtained using an exponential regression, where the slope represents the attenuation coefficient and the 'y' intercept represents the counts at 0 feet (see Tables 6.7 and 6.8 and Appendix A).

Table 6.7 Height Attenuation coefficients from August 8, 2010: Nikki, Mint, Corky and Meloy blocks

Element	Altitude attenuation coefficients
K	-0.0071
U	-0.0084
Th	-0.0065
TC	-0.0056

Table 6.8 Height Attenuation coefficients from August 15, 2010: King and Mars blocks

Element	Altitude attenuation coefficients
K	-0.0072
U	-0.005
Th	-0.006
TC	-0.0056

6.5 RADON TEST STRIPS

On all survey flights, at least one radon normalization test was flown before or after data collection.

The test consists of the helicopter flying a designated test line at nominal survey altitude near each of the bases of operation: White River Lodge; Burwash Landing; and Braeburn Lodge.

All test line locations were selected in areas of flat and dry terrain, close to survey areas being flown. The tests consists of the pilot being guided using the iDAS navigation system, at fixed speed, and for approximately 5 minutes, to allow for adequate statistics to be collected.

Since no noticeable radon fluctuations were observed on any of the blocks, no test line corrections were applied to the data set.

6.6 RADIOELEMENT GROUND CONCENTRATIONS AND SYSTEM SENSITIVITIES

The radiometric ground concentrations were measured using a calibrated portable spectrometer (RSI-125) during the same time as the airborne altitude attenuation flights took place (i.e., August 8 and 15th, 2010). The sensor was positioned one meter above the soil and away from the operators' body in the vicinity of altitude attenuation test strip. Twenty-three 300-second measurements were taken over the length of the calibration range.



The resulting mean radiometric equivalent ground concentrations for the calibration range on August 8th, 2010 and August 15th, 2010 were as follows:

Table 6.9 Ground Concentrations from August 8th, 2010: Nikki, Mint, Corky and Meloy blocks

Radio Element	Ground Concentration	
Potassium	1.28	%
Equivalent Uranium	1.68	<i>ppm</i>
Equivalent Thorium	5.76	<i>ppm</i>
Total	41.54	<i>nGy / h</i>

Table 6.10 Ground Concentrations from August 15th, 2010: King and Mars blocks

Radio Element	Ground Concentration	
Potassium	1.61	%
Equivalent Uranium	2.4	<i>ppm</i>
Equivalent Thorium	6.14	<i>ppm</i>
Total	50.57	<i>nGy / h</i>

Using these ground concentrations and the altitude attenuation calibration flight data, the System Sensitivities were obtained:

$$S = N/C$$

Where:

- S is the sensitivity for each window
- N is the striped count rate in the window at the survey altitude (i.e, 35m)
- C is the respective ground radioelement concentration.

With the following results:

Table 6.11 Sensitivities @35m from August 8th, 2010: Nikki, Mint, Corky and Meloy blocks

	Sensitivities @ 35m
K	77.47 <i>cps / (%)</i>
U	8.19 <i>cps / (ppm)</i>
Th	2.86 <i>cps / (ppm)</i>
TC	23.12 <i>cps / (nGy / h)</i>

Table 6.12 Sensitivities @35m from August 15th, 2010: King and Mars blocks

	Sensitivities @ 35m
K	86.7 <i>cps / (%)</i>
U	6.08 <i>cps / (ppm)</i>
Th	3.75 <i>cps / (ppm)</i>
TC	23.17 <i>cps / (nGy / h)</i>

Note: Determining of radioelement ground concentrations and system sensitivities were not part of the signed agreement. Such data are made available to the client as a courtesy.

7. OPERATIONS AND PROCEDURES

7.1 FLIGHT PLANNING AND FLIGHT PATH

The block outline coordinates (section 2.0) were used to generate pre-calculated navigation files. The navigation files were used to plan flights at the designated traverse line spacing of 100 meters and control lines of 1000 meters.

Preliminary flight path maps and magnetic maps were plotted and updated, to monitor coverage of the survey area.

7.2 BASE STATION

Magnetic base stations were established in magnetically quiet areas in the vicinity of survey blocks.

For Mint and Nikki blocks: in the vicinity of White River Lodge at Latitude: 61.982645 deg.; Longitude: -140.531458 deg.

For Corky and Meloy: in the vicinity of Burwash Landing at Latitude: 61.358406 deg.; Longitude: -139.000274 deg.

For King and Mars: in the vicinity of Braeburn Lodge at Latitude: 61.481381 deg.; Longitude: -135.773504 deg.

The base station readings were monitored to ensure that the diurnal variation were within the peak-to-peak envelope of 20 nT from a long chord distance equivalent to a period of two minutes.

7.3 AIRBORNE MAGNETOMETERS

An FOM test of the performance of the CS-3 and fluxgate magnetometers was performed in order to monitor the ability of the system to remove the effects of aircraft motion on the magnetic measurement.

The FOM maneuvers consisted of a series of calibration lines flown at high altitude (10,000+ ft above sea level) to gain information in each of the required line directions. During this procedure, pitch, roll and yaw maneuvers were performed on the aircraft.

The following ranges were used:

Pitch: 10-15°

Roll: 10-15°

Yaw: 10-15°

See Appendix B for the FOM results as flown on August 8th, August 13th, August 15th, and August 17th 2010 and were used to compensate the magnetic data.

7.4 THORIUM RESOLUTION TESTS

In order to monitor the resolution of the crystal pack, a daily a resolution test of the spectrometer was performed in RadAssist (RSX-5 spectrometer interface program) using ~2000 thorium background counts per crystal.

The results from the resolution tests were always found to be within the contract specifications (see Appendix D for the daily test results).

7.5 DATA COMPILATION

Data recorded by the airborne and base station systems was transferred to the field compilation system. As each flight was completed, the following compilation operations were carried out:

7.5.1 FLIGHT PATH CORRECTIONS

The navigational correction process yields a flight path expressed in WGS84, World and transformed to correspond to NAD83 UTM ZONE 7N, and ZONE 8N North America.

The following projection parameters were used for Mint, Nikki, Corky, and Meloy:

Coordinate System

X,Y channels: **UTM_X_NAD83,UTM_Y_NAD83**

Coordinate system: ☒ Projected (x,y) ☐ Geographic (long, lat)
☐ Unknown Copy from...

Length units: **metre**

Transformation: none

Orientation: none

Datum: **NAD83**

Ellipsoid: GRS 1980
Major axis radius: 6378137
Inverse Flattening: 298.25722
Prime Meridian: 0

Local datum transform: **[NAD83] (4m) North America - all Canada and USA subur**

None applied

* Projection method: **UTM zone 7N**

New

Type: Transverse Mercator
Latitude of natural origin: 0
Longitude of natural origin: -141
Scale factor at natural origin: 0.9996
False easting: 500000
False northing: 0

OK Cancel

The following projection parameters were used for King and Mars:

Coordinate System

X,Y channels: **UTM_X_NAD83,UTM_Y_NAD83**

Coordinate system: ☒ Projected (x,y) ☐ Geographic (long, lat)
☐ Unknown Copy from...

Length units: **metre**

Transformation: none

Orientation: none

Datum: **NAD83**

Ellipsoid: GRS 1980
Major axis radius: 6378137
Inverse Flattening: 298.25722
Prime Meridian: 0

Local datum transform: **[NAD83] (4m) North America - all Canada and USA subur**

None applied

* Projection method: **UTM zone 8N**

New

Type: Transverse Mercator
Latitude of natural origin: 0
Longitude of natural origin: -135
Scale factor at natural origin: 0.9996
False easting: 500000
False northing: 0

OK Cancel

All 1.0 H z GPS records were linearly interpolated and resampled at 10 H z (0.1 sec) intervals.

7.5.2 DIGITAL TERRAIN MODEL (DTM)

The DTM data were produced by first adjusting the GPS sensor height to that of the radar altimeter height (lowering GPS height by 2.1m). Next the radar altimeter channel (in meters) was subtracted from the GPS height data producing a raw DTM channel.

Due to changing satellite positions (constellation configuration) and varying atmospheric conditions, the receiver may measure slightly varying GPS heights line-to-line. In addition, due to rugged topography, the radar altimeter measures inaccurately when the helicopter is pitched forward position (example: approach a steep hill), as the radar beam would be directed away or down the slope. Because of these inherent errors, the raw DTM channel required leveling.

It was decided to apply a microlevelling technique to the raw DTM data developed by Paterson, Grant & Watson Limited and available through Geosoft Oasis montaj as miclev.GX extension (see Appendix F for full description of the procedure).

The following key microlevelling parameters were used:

Table 7.1 DTM microlevelling parameters per block

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (m)	Amplitude Limit Mode	Naudy Filter Limit
Mint	100	90	10	400	11.4	clip	0
Nikki	100	90	10	400	30.0	clip	0
Corky	100	90	10	400	3.97	clip	500
Meloy	100	0	10	400	8.8	clip	0
King	100	90	10	400	3.6	clip	0
Mars	100	132	10	400	7.0	clip	0

The final DTM data were stored under DTM channel name.

7.5.3 MAGNETIC CORRECTIONS

First the 50 Hz aeromagnetic data from Cesium 3 and fluxgate magnetometers were filtered with a 51 cosine anti-aliasing algorithm and re-sampled at 10 Hz. Then the magnetic data from the Cesium 3 magnetometer was compensated for permanent, induced, and eddy current magnetic noise generated by the aircraft using data from the fluxgate magnetometer. The compensated magnetic data were then stored in the MAG_COMP channel.

7.5.3.1 DIURNAL CORRECTIONS

The compensated magnetic data were adjusted to account for diurnal variations. When the magnetic variations recorded at the base station recognized to be caused by man-made sources, (such as equipment, vehicles passing by the sensor), they were removed and gaps interpolated.

Diurnal variations recorded by the base station were filtered with a 101-point low pass filter. The filtered data was then subtracted directly from the aeromagnetic measurements to provide a first order diurnal correction.

After base station removal, the total magnetic field values become very small. To bring the total magnetic measurements back to 'normal' values, project averages from the base station readings were added back to the magnetic data.

Table 7.2 Base Station project averages per block

Block Name	Average Readings (nT)
Mint	56316.36
Nikki	56293.73
Corky	56664.12
Meloy	56661.30
King	57363.36
Mars	57326.92

The resulting base station corrected data were stored in the MAG_DIURNAL_CORR channel.

7.5.3.2 LAG CORRECTIONS

There are two potential types of Lag offsets when collecting airborne data: time lag and distance lag.

NSG insures that there is no time lag in the data acquisition system by recording unique markers every 1-second based on the GPS time stamp (associated with the

EXACT change in GPS positioning). This information is used to realign (if necessary) the individual data records.

The distance lag is determined by dividing the distance from the GPS antenna to the sensor head by the averaged sample rate distance.

Table 7.3 Lag corrections

Block Name	Horizontal Distance From GPS Antenna to Sensor Head (m)	Average Sample Interval (m)	Lag Applied to Magnetic Data (records)
Mint	9.2	2.2	-4
Nikki	9.2	2.1	-4
Corky	9.2	2.2	-4
Meloy	9.2	1.9	-4
King	9.2	3.0	-3
Mars	9.2	2.9	-3

The lag corrections were applied to the MAG_DIURNAL_CORR channel and stored in the MAG_LAG_CORR channel.

7.5.3.3 HEADING CORRECTIONS

Optically pumped magnetic sensors have an inherent heading error, typically 1 to 2 nT peak-to-peak, as the sensor is rotated through 360 degrees. On flight line directions of the opposite heading, the affect is reasonably predictable.

Three heading test flights were flown at magnetically quite area at 10,000+ ft above sea level altitude on August 13th, 2010 (one) and August 15th, 2010 (two) with the following results:

Table 7.4 Heading Test flight results: August 13th, 2010

Direction (deg.)	Mean on line (nT)	Mean in direction (nT)	Mean on heading (nT)	Error (nT)
360				-4.64
0	57067.72	57067.43	57062.78	-4.64
0	57067.13			
180	57058.52	57058.14		4.64
180	57057.76			
90	57054.26	57054.22	57056.40	2.18
90	57054.17			
270	57058.32	57058.59		-2.19
270	57058.85			

Table 7.5 Heading Test flight results: August 15th, 2010 (N-S and E-W directions)

Direction (deg.)	Mean on line (nT)	Mean in direction (nT)	Mean on heading (nT)	Error (nT)
360				-4.60
0	57198.68	57198.60	57194.00	-4.60
0	57198.52			
180	57189.39	57189.41		4.60
180	57189.42			
90	57198.5	57200.04	57201.38	1.34
90	57201.58			
270	57201.86	57202.72		-1.34
270	57203.58			

Table 7.6 Heading Test flight results: August 15th, 2010 (42-132 deg. and 222-312 deg. dir.)

Direction (deg.)	Mean on line (nT)	Mean in direction (nT)	Mean on heading (nT)	Error (nT)
0				-3.33
42	57198.04	57197.12	57194.73	-2.39
42	57196.2			
222	57193.6	57192.34		2.39
222	57191.08			
132	57220.9	57217.54	57221.96	4.42
132	57214.18			
312	57228.03	57226.37		-4.41
312	57224.71			

The following heading corrections tables were constructed and applied to the data set:

Nikki, Mint, Corky and Meloy blocks:

```

/ Geosoft Heading Correction Table
/= Direction:real:i
/= Correction:real
/   Direction  Correction
0   -4.64
90   2.18
180  4.64
270  -2.19
360  -4.64

```

King block:

```

/ Geosoft Heading Correction Table
/= Direction:real:i
/= Correction:real
/   Direction  Correction
0   -4.60
90   1.34
180  4.60
270  -1.34
360  -4.60

```

Mars block:

/ Geosoft Heading Correction Table

/= Direction:real:i

/= Correction:real

/ Direction Correction

42 -2.39

132 4.42

222 2.39

312 -4.42

360 -3.33

The heading corrected magnetic data were stored in MAG_HEADING_CORR channel.

7.5.3.4 IGRF CORRECTIONS

The total field strength of the International Geomagnetic Reference Field (IGRF, 2010 model) was calculated for every data point, based on the spot values of Latitude, Longitude and altitude. This IGRF was removed from the measured survey data on a point-by-point basis from the lag corrected channel.

After IGRF correction the total magnetic field values become negative. To bring the total magnetic measurements back to 'normal' values an average of IGRF values based on the whole project were added back to the magnetic data.

Table 7.7 IGRF averages per block

Block Name	Average Readings (nT)
Mint	56840.8
Nikki	56896.1
Corky	56884.2
Meloy	57033.5
King	57314.1
Mars	57346.2

The IGRF corrections were applied to the MAG_HEADING_CORR channel and stored in the MAG_IGRF_CORR channel.

7.5.3.5 LEVELING CORRECTIONS

After the data were corrected for IGRF, a survey traverse/control line intercepts array/matrix (i.e., Simple Leveling) was created for determining differences in magnetic field at the intersection points. Somewhat rugged terrain of the survey blocks, which resulted in some line-to-line difference in altitude, and relatively strong magnetic anomalies made magnetic signal at some Traverse/Control line intersection points quite different. As a result, some of those intersection points needed to be manually adjusted in order to reduce line-to-line magnetic differences.

The resulting simple leveled magnetic data were stored in MAG_SIMPLE_LVL channel.

Further it was decided to apply microlevelling techniques to the conventionally leveled magnetic data for Mint, Meloy and Mars blocks only (see Appendix F for full description of the procedure).

The following key parameters were used:

Table 7.8 Total Magnetic Intensity (TMI) microlevelling parameters

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (nT)	Amplitude Limit Mode	Naudy Filter Limit
Mint	100	90	10	400	43.0	clip	100
Meloy	100	0	10	400	8.0	clip	100
Mars	100	132	10	400	32.0	clip	100

The resulting microleveled channels for Mint, Meloy and Mars blocks were stored in MAG_MICLEV channel.

The final Total Magnetic Intensity (TMI) data were stored in TMI_FINAL channel. Note, for the Mint, Meloy and Mars blocks, TMI_FINAL is copied directly from MAG_MICLEV channel; for the Nikki, Corky and King blocks, TMI_FINAL is copied directly from MAG_SIMPLE_LVL channel.

7.5.4 VERTICAL DERIVATIVE

A 1-st Order Vertical Derivative (VDV) data were calculated using 2D FFT2 algorithm based on final TMI grids. The resulting VDV grids were then sampled back to the database.

The VDV data were stored under VDV channel.

7.5.5 GRIDDING

All the magnetic (TMI & VDV) and DTM grids were produced from the corresponding TMI_FINAL, VDV and DTM channels.

The data were gridded using a bi-directional line gridding method with a grid cell size of 15 meters, Akima interpolation method for across and down line spline and trend angles perpendicular to those of traverse line directions.

7.5.6 RADIOMETRIC DATA CORRECTIONS

7.5.6.1 LIVE TIME CORRECTIONS

The spectrometer uses the notion of “live time” to express the relative period of time the instrument was able to register new pulses per sample interval.

The live time correction is applied to the total count, potassium, uranium, thorium and upward uranium channels.

The formula used to apply the correction is as follows:

$$C_{LT} = C_{raw} \times \left(\frac{1000}{LT} \right)$$

Where:

- C_{LT} is the live time corrected channel
- C_{raw} is the raw channel
- LT is the Live Time channel

7.5.6.2 PRE-FILTERING

The cosmic channel data were processed with a 15-point low pass filter to remove spikes.

The radar altimeter channel while recorded at 50Hz was filtered with 21-point COSINE filter and then sampled to 1Hz.

7.5.6.3 AIRCRAFT AND COSMIC BACKGROUND

Aircraft background and cosmic stripping corrections (see section 6.3.2) were applied to the live corrected total count, potassium, uranium, thorium and upward uranium channels using the following formula:

$$C_{ac} = C_{LT} - (ac + bc \times cof)$$

Where:

- C_{ac} is the background and cosmic corrected channel
- C_{LT} is the live time corrected channel
- ac is the aircraft background for this channel
- bc is the cosmic stripping coefficient for this channel
- cof is the filtered cosmic channel

All negative counts after this correction step were replaced with zeroes.

7.5.6.4 RADON CORRECTION

No Radon corrections were applied to the data.

7.5.6.5 COMPTON STRIPPING

Following the background and cosmic corrections the potassium, uranium and thorium were corrected for spectral overlap (see section 6.2). First the stripping ratios α , β , and χ were modified according to altitude. Then an adjustment factor based on the reversed stripping ratio (a), uranium into thorium, was calculated.

$$\alpha h = \alpha + hef \times 0.00049$$

$$\beta h = \beta + hef \times 0.00065$$

$$\chi h = \chi + hef \times 0.00069$$

Where:

- α, β, χ are the Compton stripping coefficients
- $\alpha h, \beta h, \chi h$ are the height corrected Compton stripping coefficients
- hef is the height above ground in meters

The stripping corrections are then carried out using the following formulas:

$$ar = \frac{1}{1 - a\alpha h}$$

$$Th_c = (Th_{bc} - aU_{rc}) \times ar$$

$$U_c = (U_{rc} - Th_{bc}\alpha h) \times ar$$

$$K_c = K_{bc} - \beta h Th_c - \chi h U_c$$

Where:

- U_c , Th_c , and K_c are corrected Uranium, Thorium and Potassium
- αh , βh , χh are the height corrected Compton stripping coefficients
- U_{bc} , Th_{bc} , and K_{bc} are background and cosmic corrected Uranium, Thorium and Potassium
- ar is the backscatter correction
- a is the reverse stripping ratio U into Th

All negative counts after this correction step were replaced with zeroes.

7.5.6.6 EQUIVALENT HEIGHT AT STP

The following formula was used to calculate Equivalent Height at STP:

$$H_e = H \times \left(\frac{273.15}{T + 273.15} \right) \times \left(\frac{P}{1013.25} \right)$$

Where:

- H is the observed height
- H_e is the equivalent height at STP
- T is the temperature in degrees Celsius
- P is the barometric pressure in mbar.

7.5.6.7 ATTENUATION CORRECTIONS

The Total Count, Potassium, Uranium and Thorium data were then corrected to a nominal survey altitude of 35m (see section 6.4.1) using the following equation:

$$C_a = C \times e^{-\mu(h_0 - h_e)}$$

Where:

- C_a is the output altitude corrected channel
- C is the input channel
- μ is the attenuation correction for that channel
- h_e is the STP height
- h_0 is the nominal survey altitude

The altitude attenuation corrected data were then stored in U_CORR, Th_CORR, K_CORR and TC_CORR channels.

7.5.6.8 LEVELING OF ATTENUATION CORRECTED DATA

Microleveling techniques were applied to specific altitude attenuation corrected elements (i.e., some or all of K, Th, U and Total Count) on all of the survey blocks with the exception of Corky.

The following key parameters were used (see Appendix F for full description of the procedure).

Table 7.9 Uranium microlevelling parameters

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (nT)	Amplitude Limit Mode	Naudy Filter Limit
Mint	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nikki	100	90	20	400	1.3	clip	100
Corky	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Meloy	100	0	20	400	2.2	clip	100
King	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mars	100	132	20	400	1.7	clip	0

Table 7.10 Thorium microlevelling parameters

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (nT)	Amplitude Limit Mode	Naudy Filter Limit
Mint	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nikki	100	90	20	400	1.2	clip	100
Corky	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Meloy	100	0	20	400	2.6	clip	100
King	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mars	100	132	20	400	7.0	clip	0

Table 7.11 Potassium microlevelling parameters

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (nT)	Amplitude Limit Mode	Naudy Filter Limit
Mint	100	90	20	400	8.2	clip	0
Nikki	100	90	20	400	10.4	clip	100
Corky	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Meloy	100	0	20	400	21.0	clip	100
King	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mars	100	132	20	400	13.0	clip	0

Table 7.12 Total Count microlevelling parameters

Block Name	Line Spacing (m)	Line Direction (deg.)	Grid Cell Size (m)	Decorrugation Cutoff (m)	Amplitude Limit (nT)	Amplitude Limit Mode	Naudy Filter Limit
Mint	100	90	20	400	23.7	clip	0
Nikki	100	90	20	400	100.0	clip	0
Corky	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Meloy	100	0	20	400	180.0	clip	0
King	100	90	20	400	35.7	clip	0
Mars	100	132	20	400	150.0	clip	0

The resulting microleveled altitude attenuation corrected line data were then stored in the final U_FINAL_CORR, Th_FINAL_CORR, K_FINAL_CORR and TC_FINAL_CORR channels. Note, in the instances where no microlevelling was applied, the data in the final channels were copied directly from U_CORR, Th_CORR, K_CORR and TC_CORR.

7.5.6.9 CONVERSION TO APPARENT RADIOELEMENT CONCENTRATIONS

The next step is to convert the corrected potassium (K_FINAL_CORR channel), uranium (U_FINAL_CORR channel) and thorium (Th_FINAL_CORR channel) to apparent radioelement concentrations (see section 6.6) using the following formula:

$$eE = \frac{C_{cor}}{s}$$

Where:

- eE is the element concentration $K_{\%}$ and equivalent element concentration of U_{ppm} & Th_{ppm}
- s is the experimentally determined sensitivity
- C_{cor} is the fully corrected channel

The resulting apparent concentration data were stored in K_Percent, eU and eTh channels.

Note: Determining of apparent radioelement concentrations were not part of the signed agreement. Such data are made available to the client as a courtesy.

7.5.6.10 AIR ABSORPTION DOSE RATE

Finally the natural air absorption dose rate was determined using the following formula:

$$E = 13.078 \times K_{\%} + 5.675 \times eU_{ppm} + 2.494 \times eTh_{ppm}$$

Where:

- E is the air absorption rate (nGy/h)
- $K_{\%}$ is the concentration of potassium (%)
- eU_{ppm} is the equivalent concentration of potassium (ppm)
- eTh_{ppm} is the equivalent concentration of potassium (ppm)

The resulting natural air absorption rate data were stored in E channel.

Note: Determining of the absorption rate was not part of the signed agreement. Such data are made available to the client as a courtesy.

A detailed description of how most of the procedures, formulae and constants were determined could be found in:

I.A.E.A. *Report, Airborne Gamma Ray Spectrometer Surveying*, Technical Report Series No. 323, 1991.

and

I.A.E.A *Guidelines for Radioelement Mapping Using Gamma Ray Spectrometry Data*, Technical Document No. 1363, 2003.

7.5.6.11 GRIDDING

All the radiometric grids are in counts/sec units and were produced from U_FINAL_CORR, Th_FINAL_CORR, K_FINAL_CORR and TC_FINAL_CORR channels.

The data were gridded using a bi-directional line gridding method with a grid cell size of 25 meters, Akima interpolation method for across and down line spline and trend angles perpendicular to those of traverse line directions.

7.5.6.12 TERNARY MAP

The radioelement ternary map was produced by creating individual grids for each of the three radioelements (potassium, thorium and uranium), then assigning a specific colour to each. Cyan represents thorium, yellow uranium, and magenta potassium. The relative concentrations of the radioelements are represented by the blends of the three colours.

8. MAP PRODUCTS AND DIGITAL DATA DELIVERABLES

The following is the list of items delivered to **STRATEGIC METALS Ltd.**

Hard Copy Maps for Nikki, Mint, Corky, Meloy, King and Mars Blocks @ 1:20,000 scale (x2):

- Maps of Total Magnetic Intensity
- Maps of 1st order Vertical Derivative
- Maps of Digital Terrain Model
- Maps of Ternary Image (Th, U and K)
- Maps of Potassium counts
- Maps of Thorium counts
- Maps of Uranium counts
- Maps of Total Count

Hard Copy Logistics Report (x2):

Digital Copy (DVD) Maps for Nikki, Mint, Corky, Meloy, King and Mars Blocks @ 1:20,000 scale (x2):

- Maps of Total Magnetic Intensity
- Maps of 1st order Vertical Derivative
- Maps of Digital Terrain Model
- Maps of Potassium counts
- Maps of Thorium counts
- Maps of Uranium counts
- Maps of Total Count
- Ternary Map of Th, U and K

Digital Copy Grids (DVD) for Nikki, Mint, Corky, Meloy, King and Mars Blocks (x2):

- Grids of Total Magnetic Intensity (nT)
- Grids of 1st order Vertical Derivative (nT/m)
- Grids of Digital Terrain Model (m above MSL)
- Grids of Potassium (counts/sec)
- Grids of Thorium (counts/sec)
- Grids of Uranium (counts/sec)
- Grids of Total Count (counts/sec)

Digital Copy (DVD) Databases for Nikki, Mint, Corky, Meloy, King and Mars Blocks (x2):

- Magnetism data databases: MAGNETIC_ *blockname* _BK.gdb (See Appendix C for details)
- Radiometric data database: RADIOMETRIC_ *blockname* _BK.gdb (See Appendix C for details)

Digital Copy (DVD) Logistics Report (x2):

Digital Copy (DVD) Weekly and Line Report (x2):

9. SUMMARY

This report describes the logistics of the survey, equipment used, field procedures, data acquisition and presentation of results.

The various maps included with this report display the magnetic and radiometric properties of the survey area. It is recommended that the survey results be reviewed in detail, in conjunction with all available geophysical, geological and geochemical information.

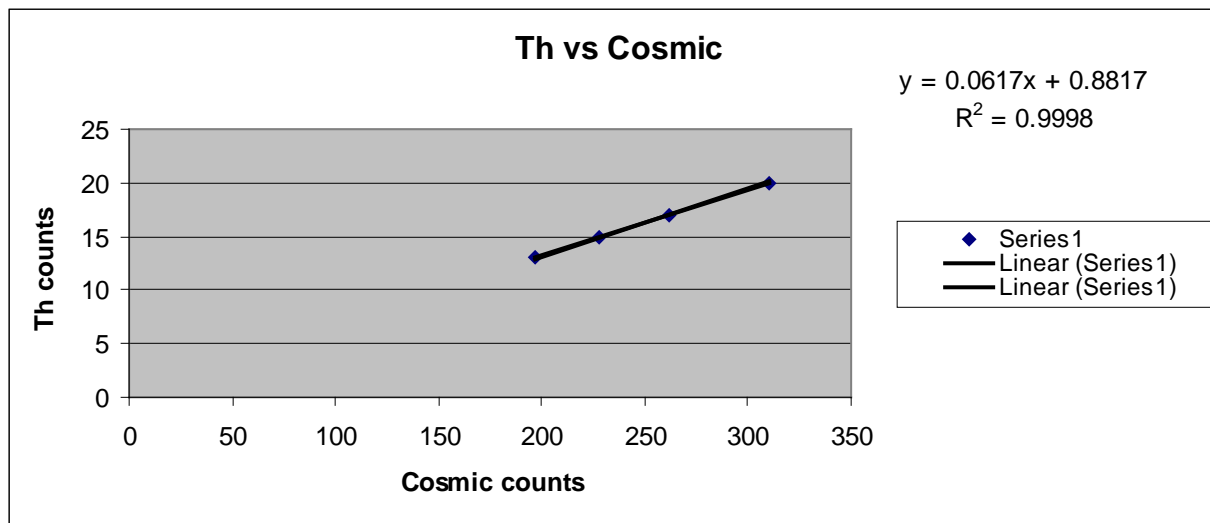
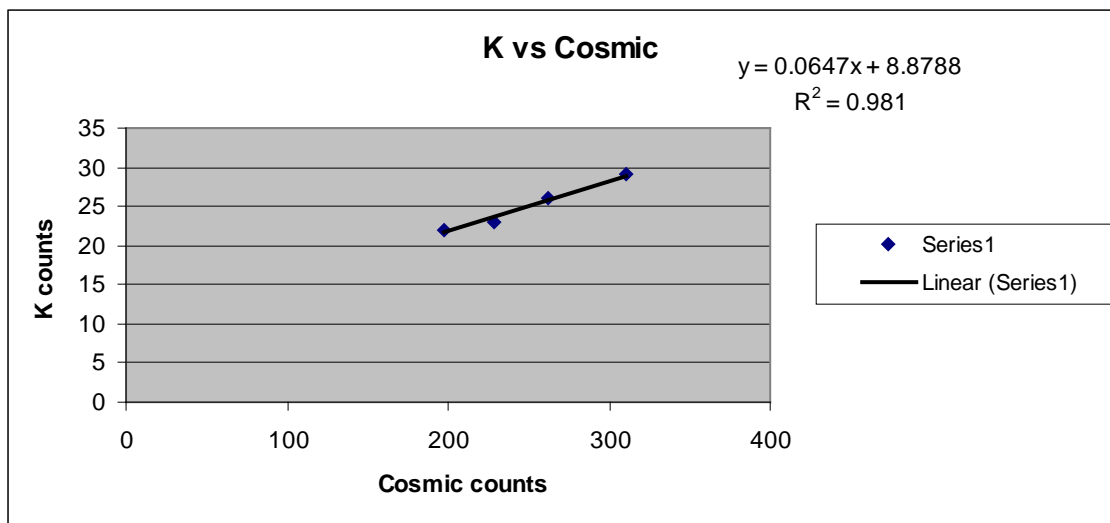
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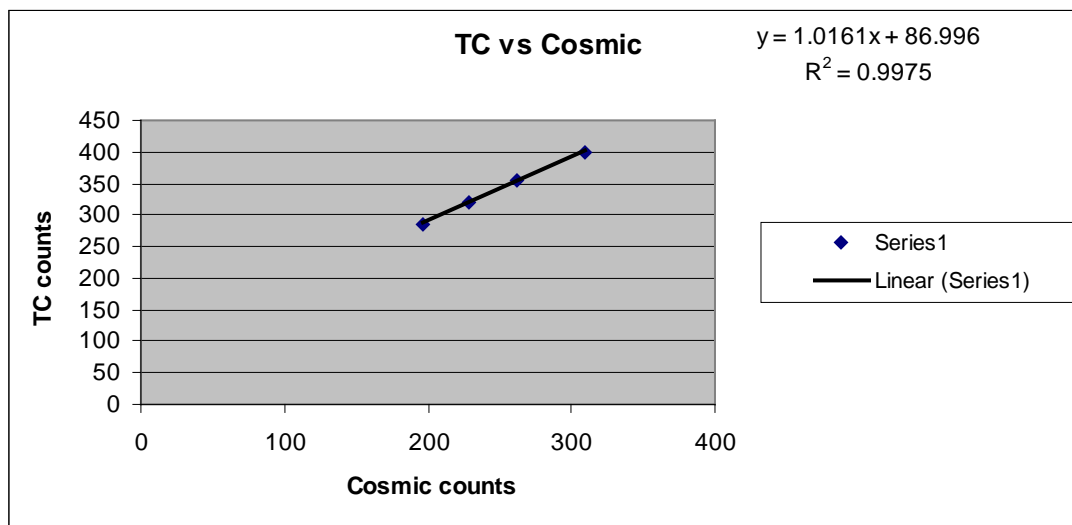
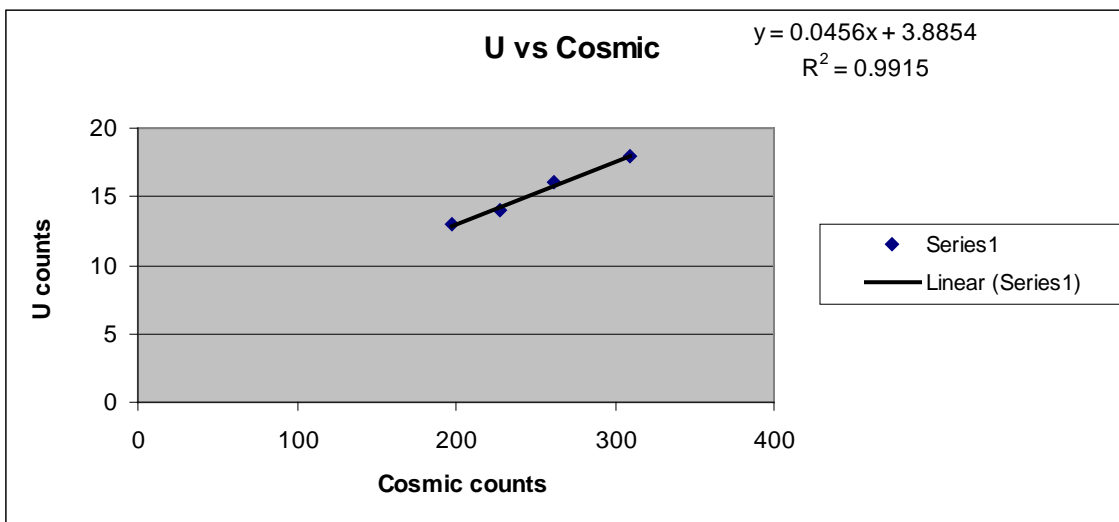
Respectfully submitted,

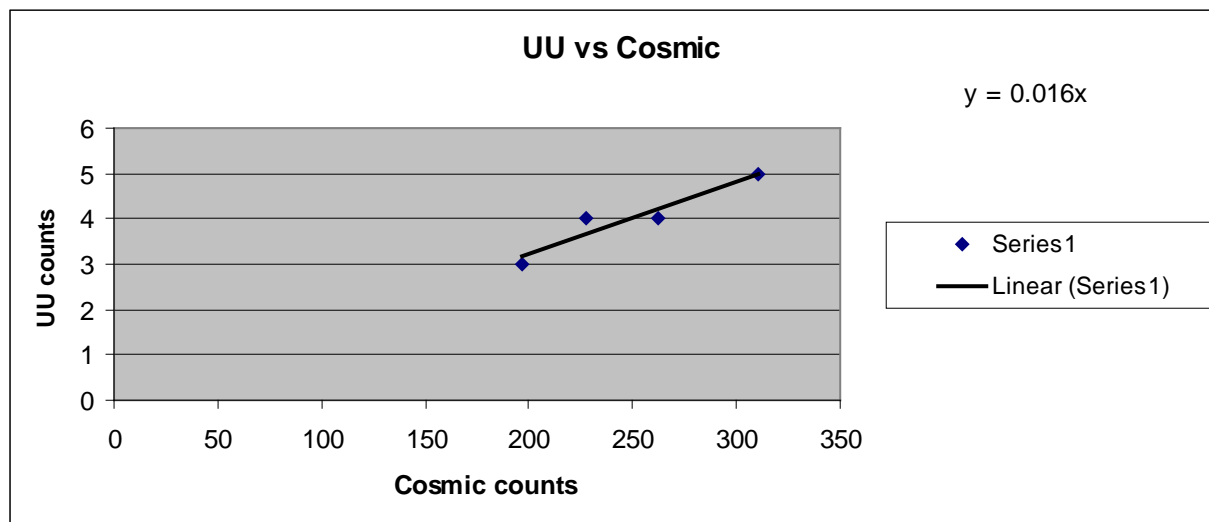
Andrei Yakovenko
New-Sense Geophysics Ltd.
Date: October 5th, 2010

APPENDIX A: BACKGROUND AND COSMIC TESTS CHARTS

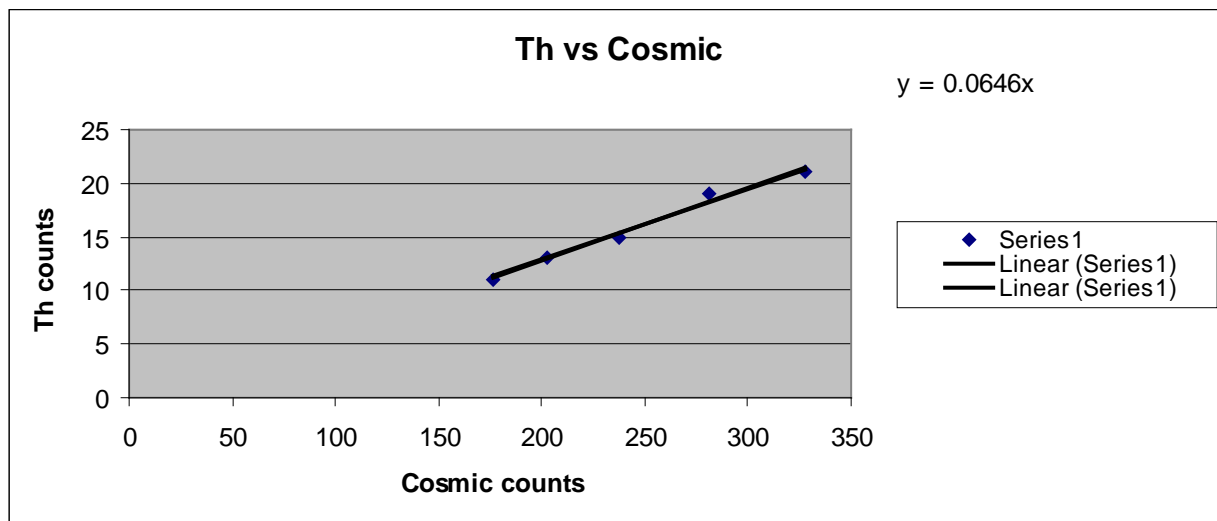
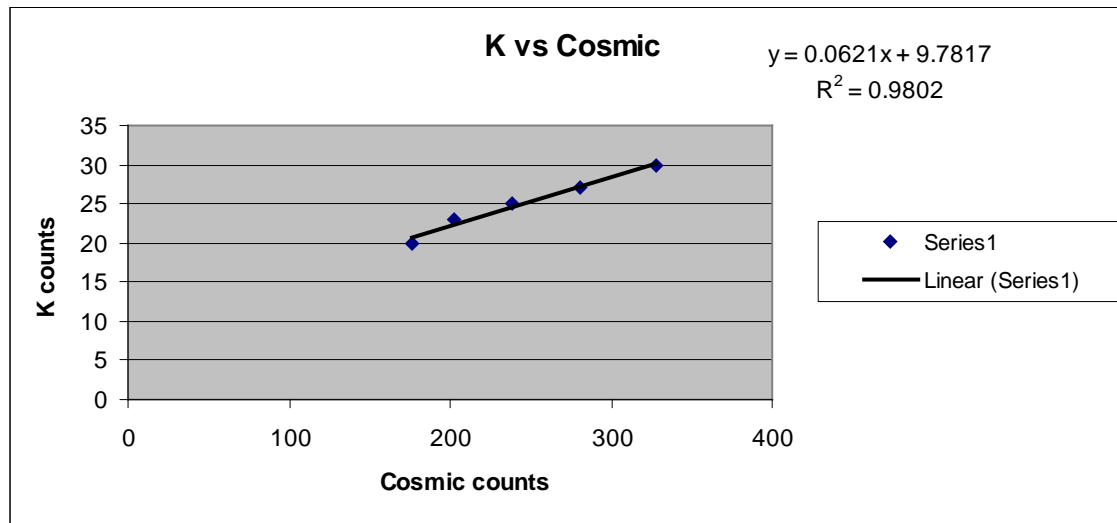
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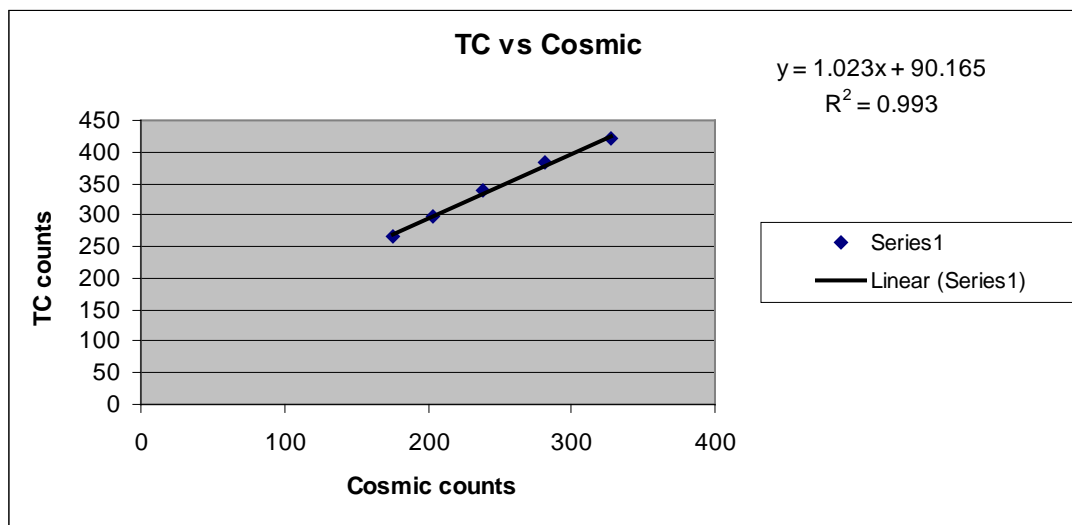
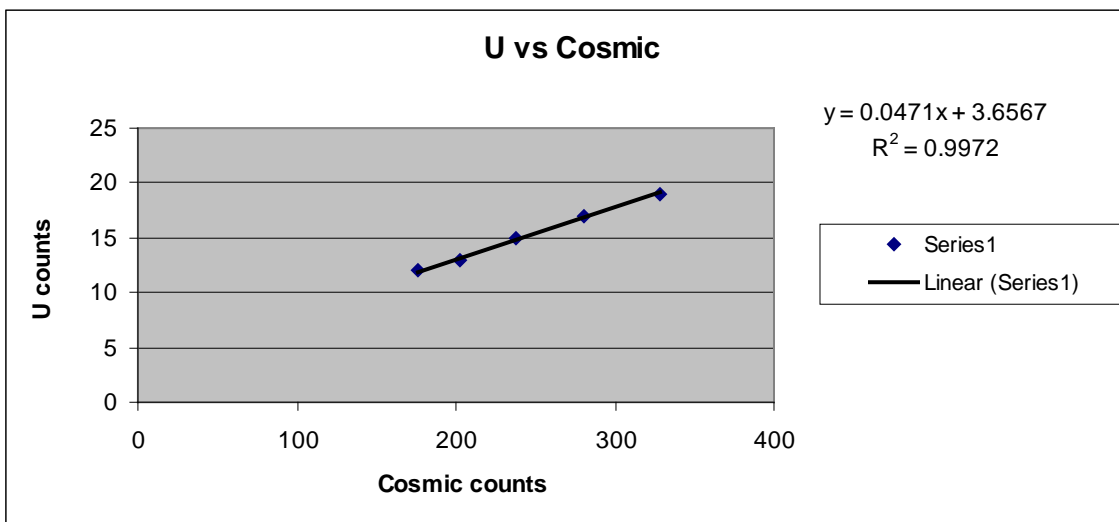


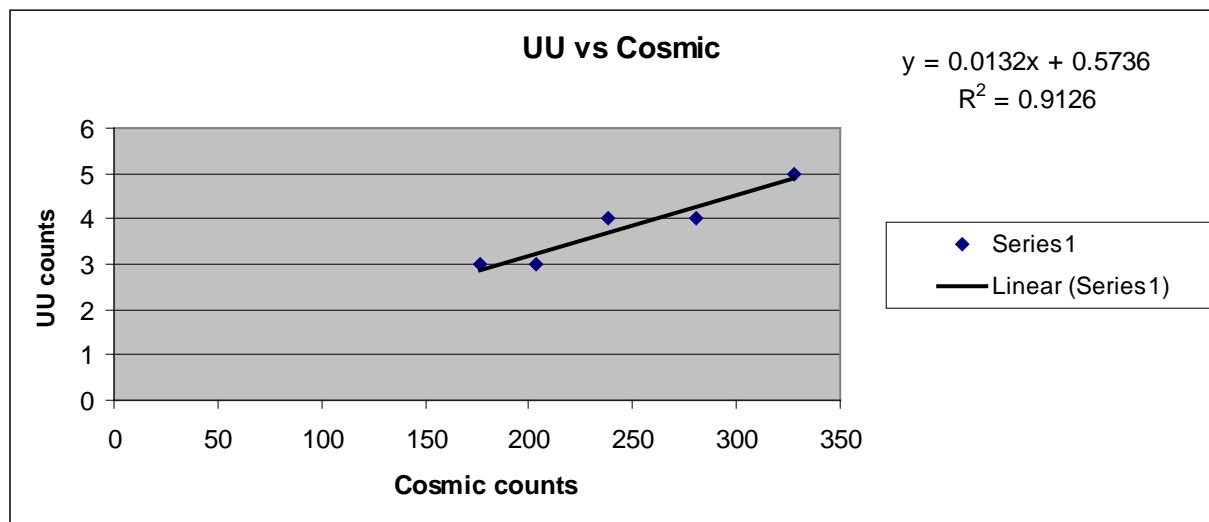




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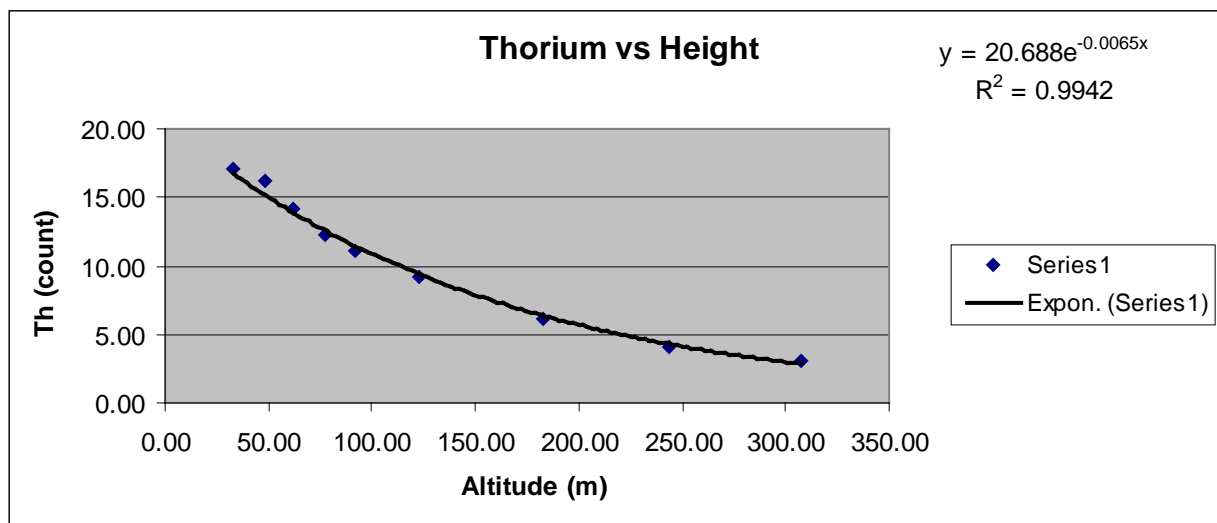
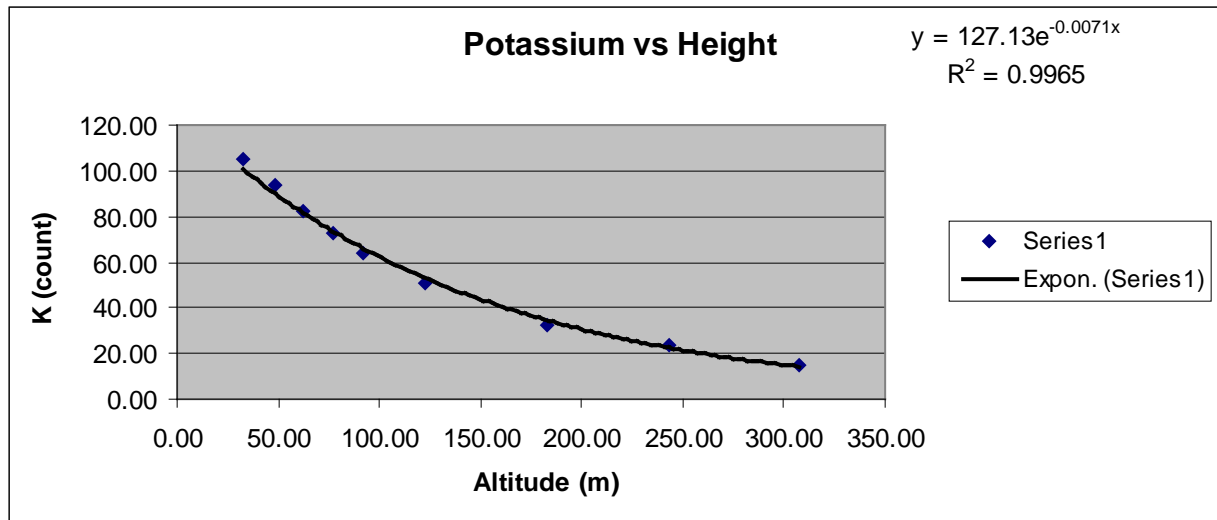


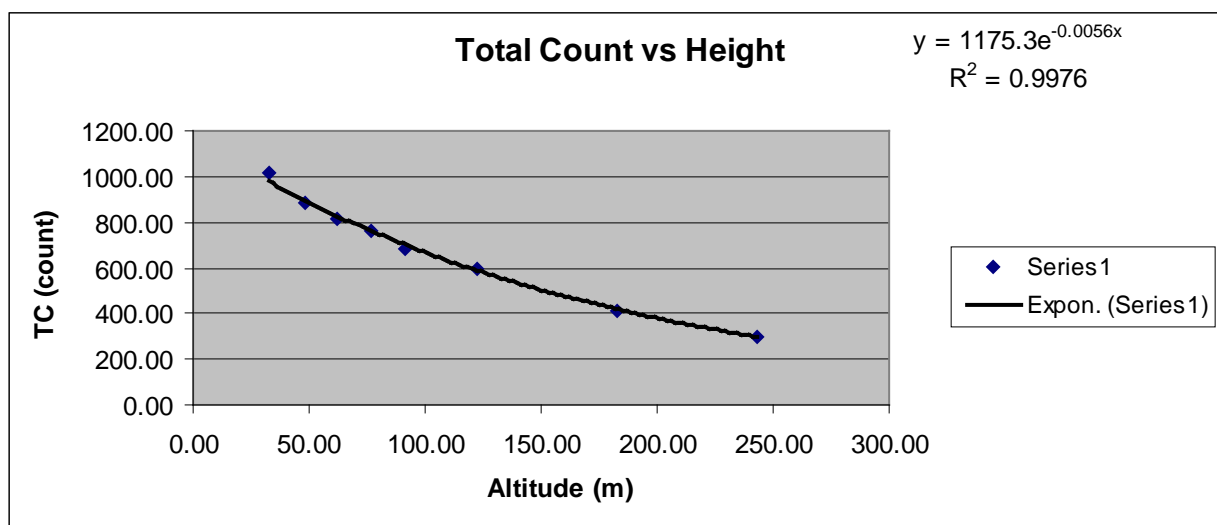
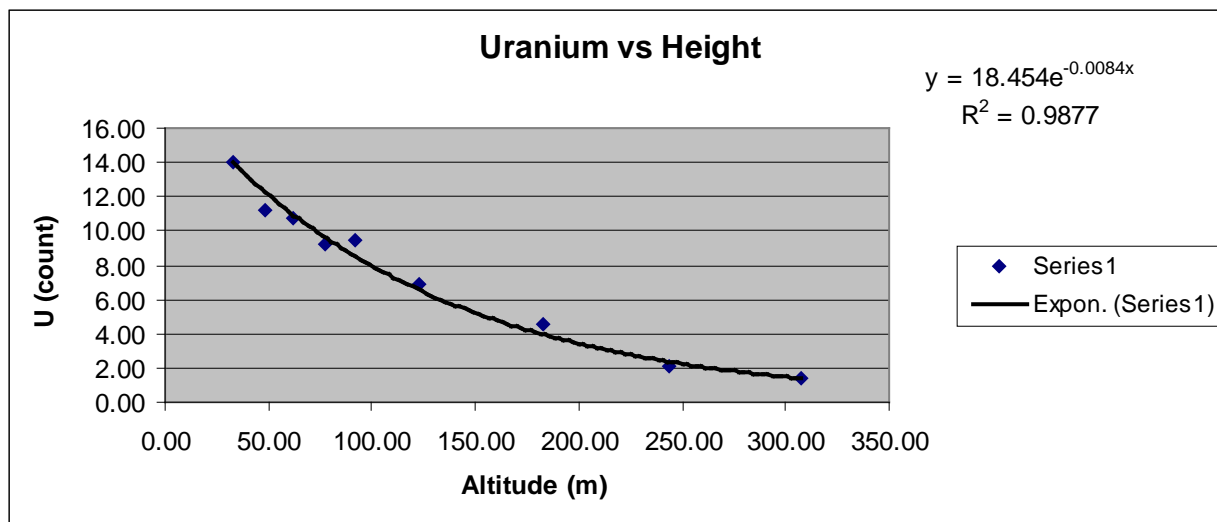




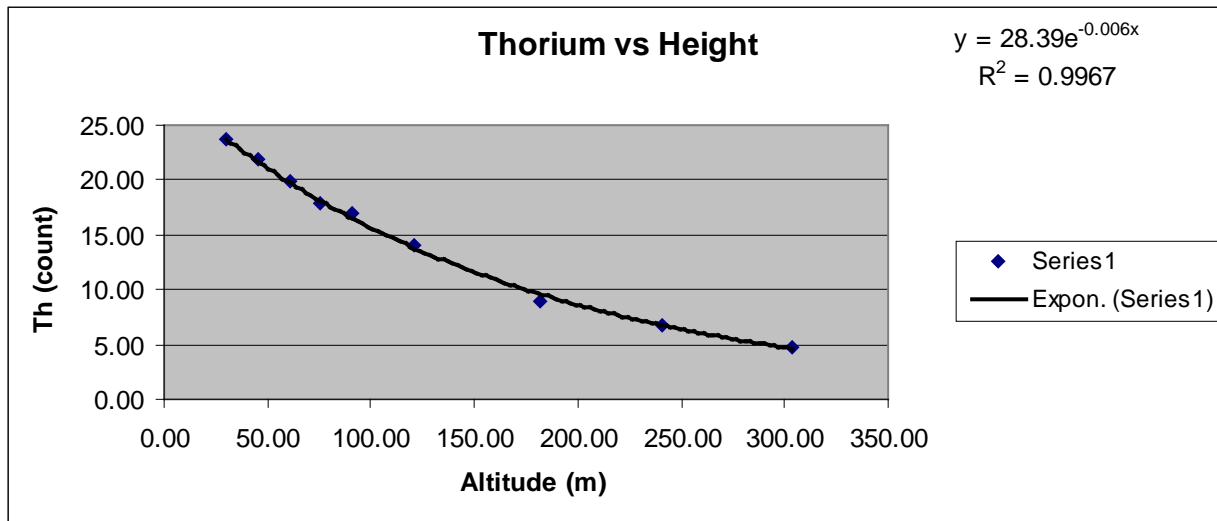
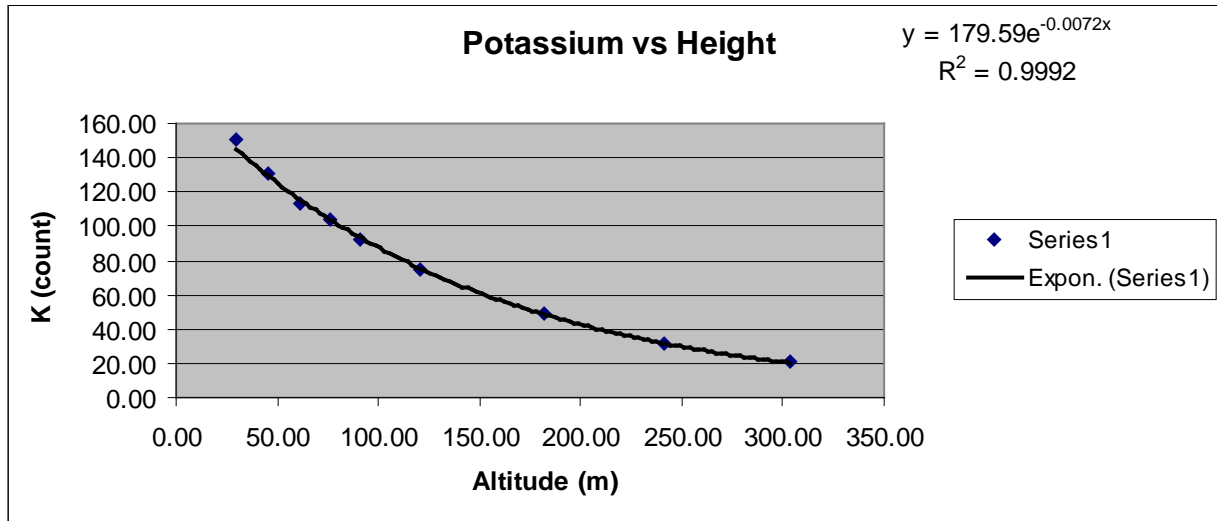
Height Attenuation Test Charts

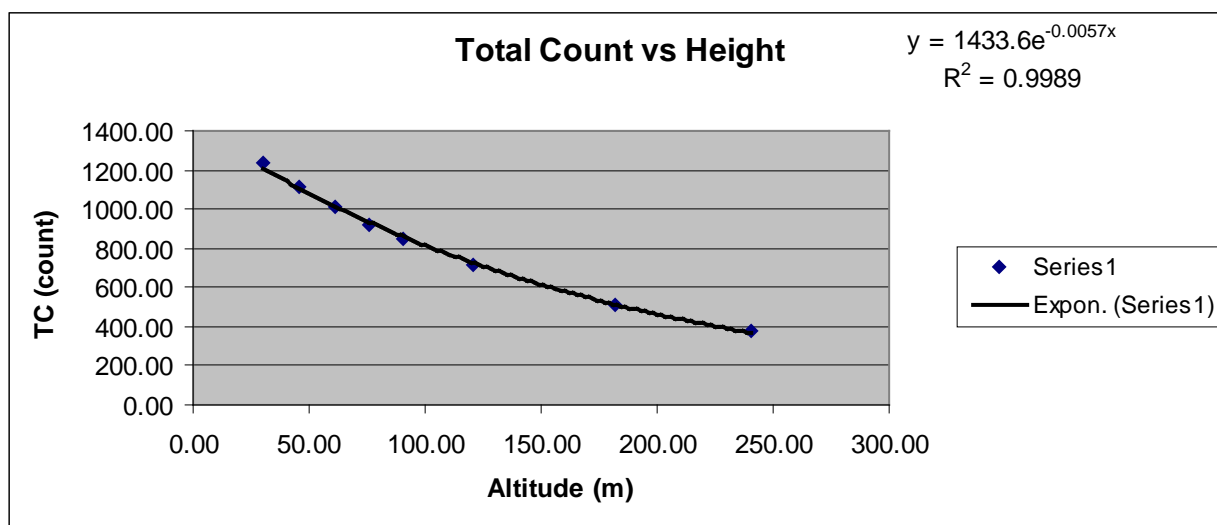
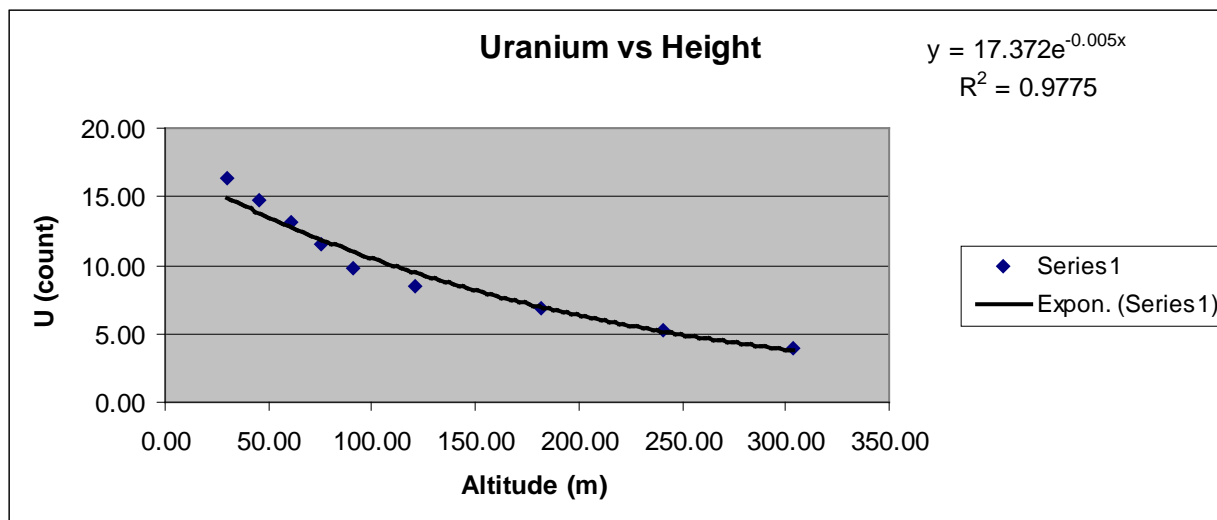
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August 15, 2010

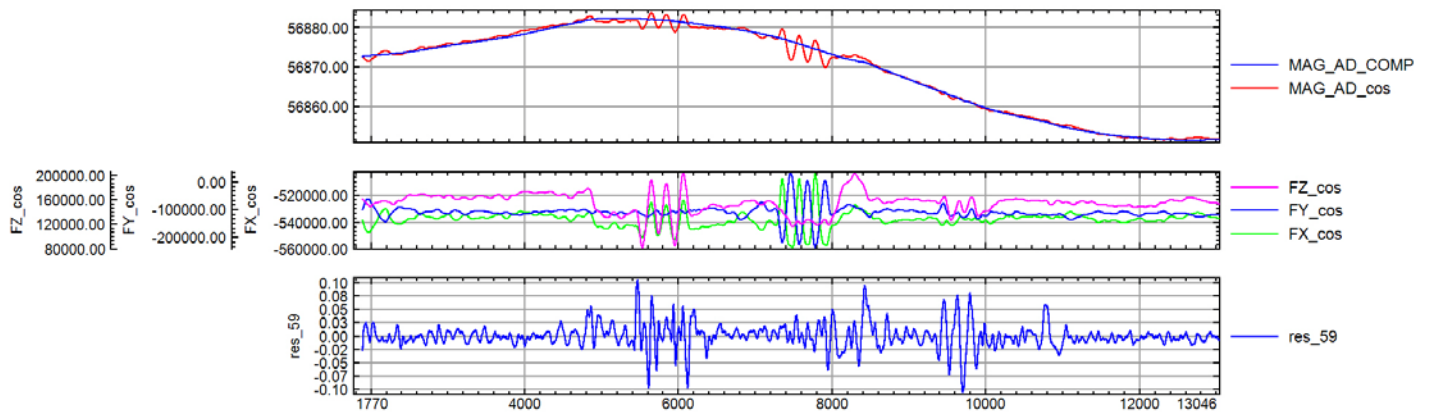




APPENDIX B: FOM RESULTS

Strategic Metals, Yukon, FOM result, August 8 th , 2010					
line	direction	pitch	roll	yaw	total
1000	0	0.175	0.113	0.183	0.470
2000	90	0.275	0.075	0.150	0.500
3000	180	0.163	0.050	0.075	0.288
4000	270	0.200	0.075	0.135	0.410
	total	0.813	0.313	0.543	1.668

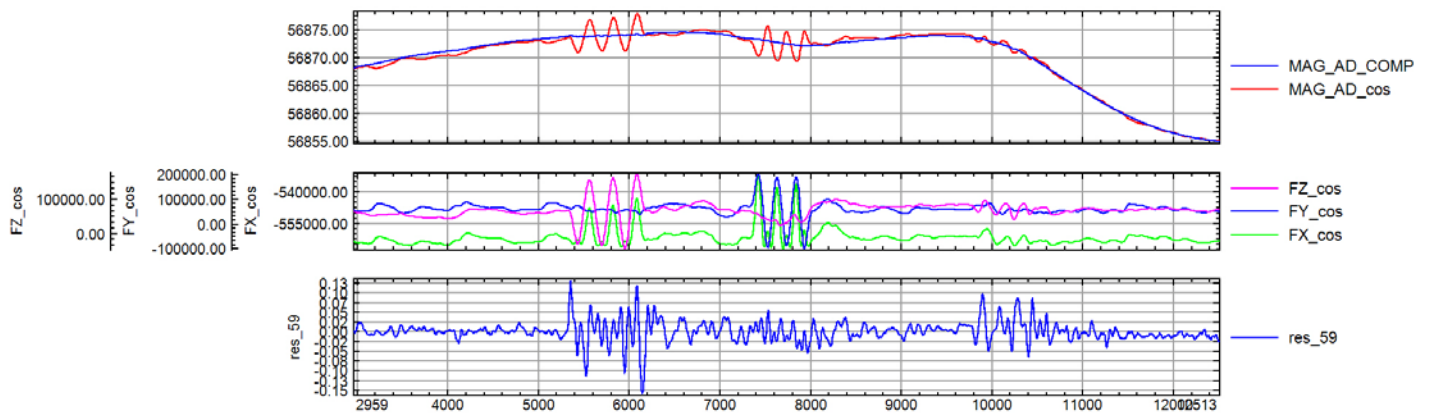
FOM results, August 8th 2010, 0 degree direction



database: D:\Strategic Metals\FOM\FOM west August 9, 2010\FLT01_FOM_08082010_Short.gdb line/group: L1000

2010/08/09

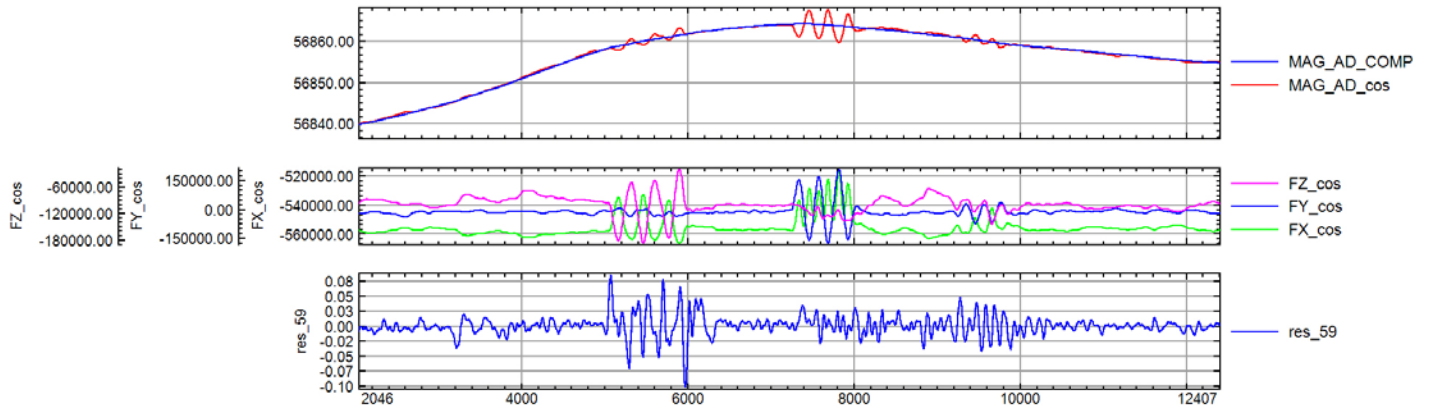
FOM results, August 8th 2010, 90 degree direction



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2010/08/09

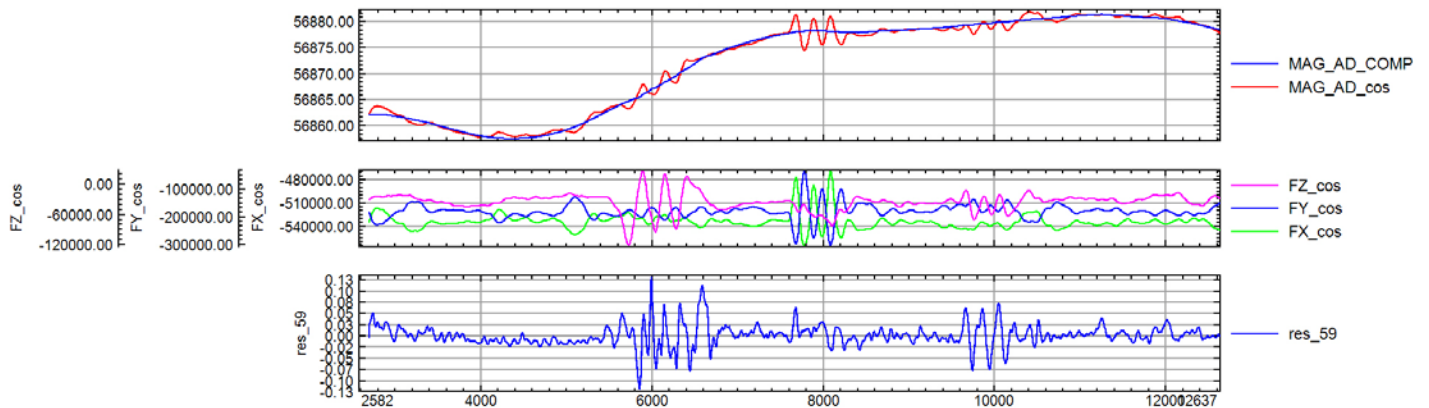
FOM results, August 8th 2010, 180 degree direction



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2010/08/09

FOM results, August 8th 2010, 270 degree direction

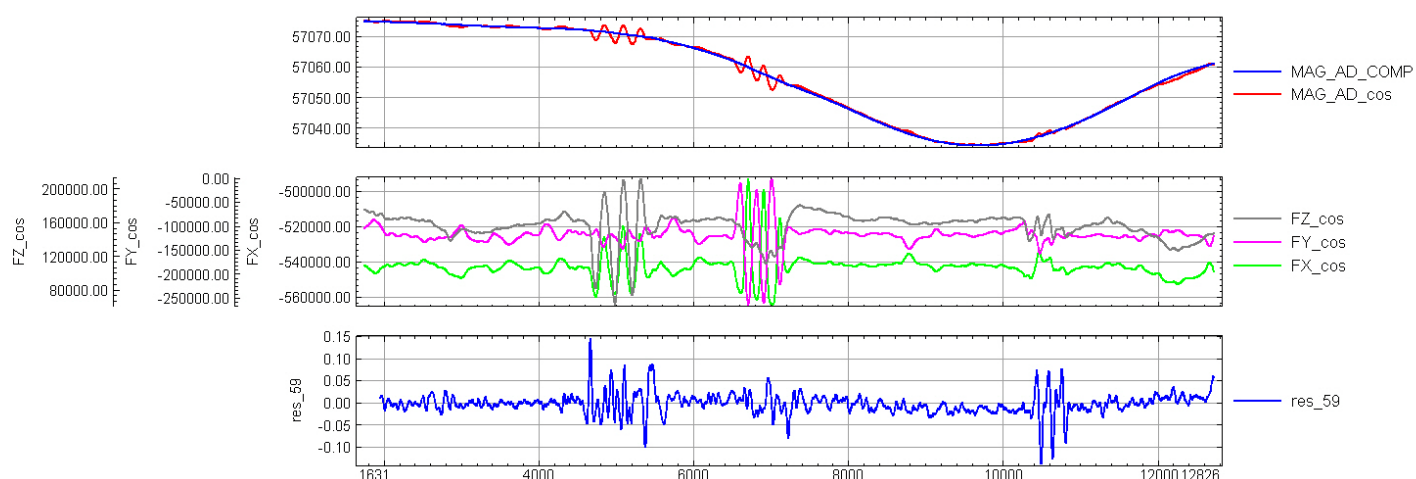


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2010/08/09

Strategic Metals, Yukon, FOM result, August 13, 2010					
line	direction	pitch	roll	yaw	total
1000	0	0.200	0.105	0.200	0.505
2000	90	0.195	0.080	0.150	0.425
3000	180	0.140	0.060	0.085	0.285
4000	270	0.160	0.075	0.180	0.415
	total	0.695	0.320	0.615	1.630

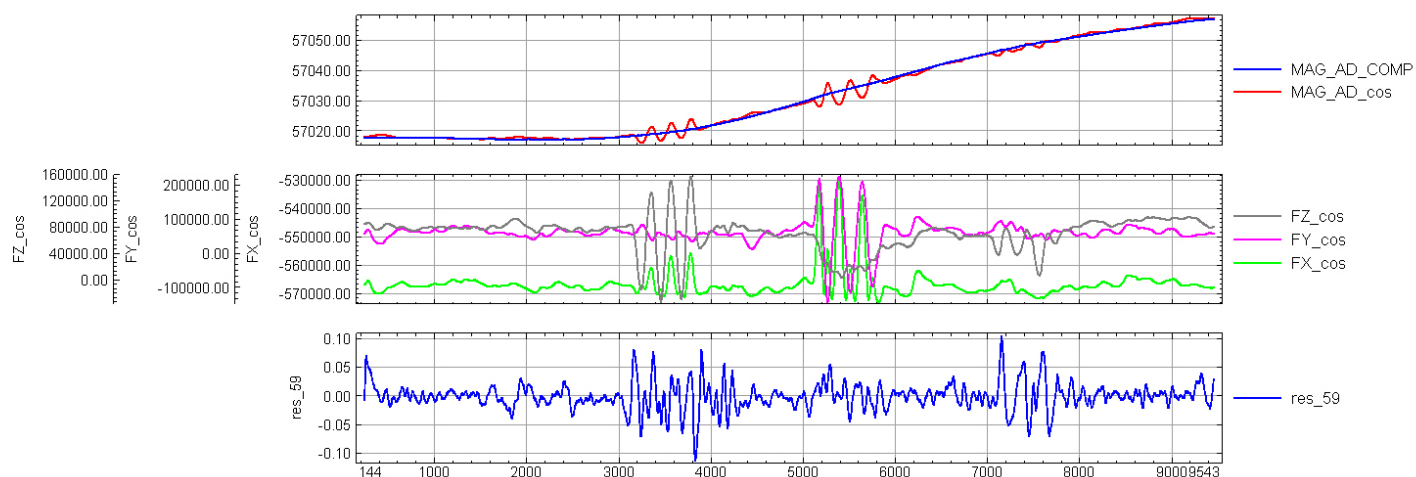
FOM results, August 13th 2010, 0 degree direction



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2010/09/27

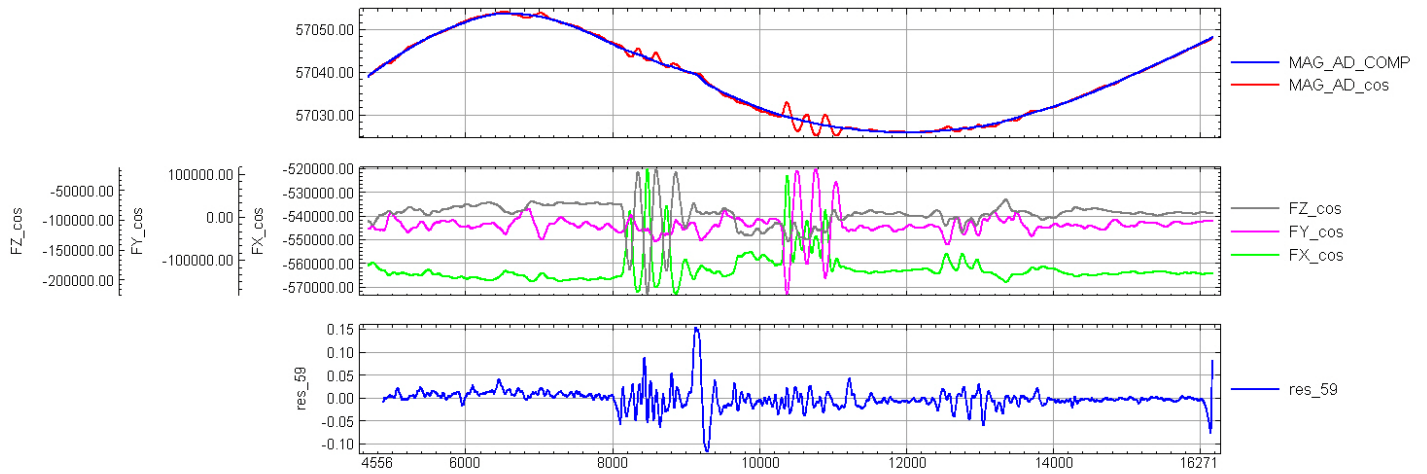
FOM results, August 13th 2010, 90 degree direction



database: D:\Strategic\FOMs\Strategic Metals\FOM west August 13, 2010\FOM_FLT10_08132010_Short.gdb line/group: L2000

2010/09/27

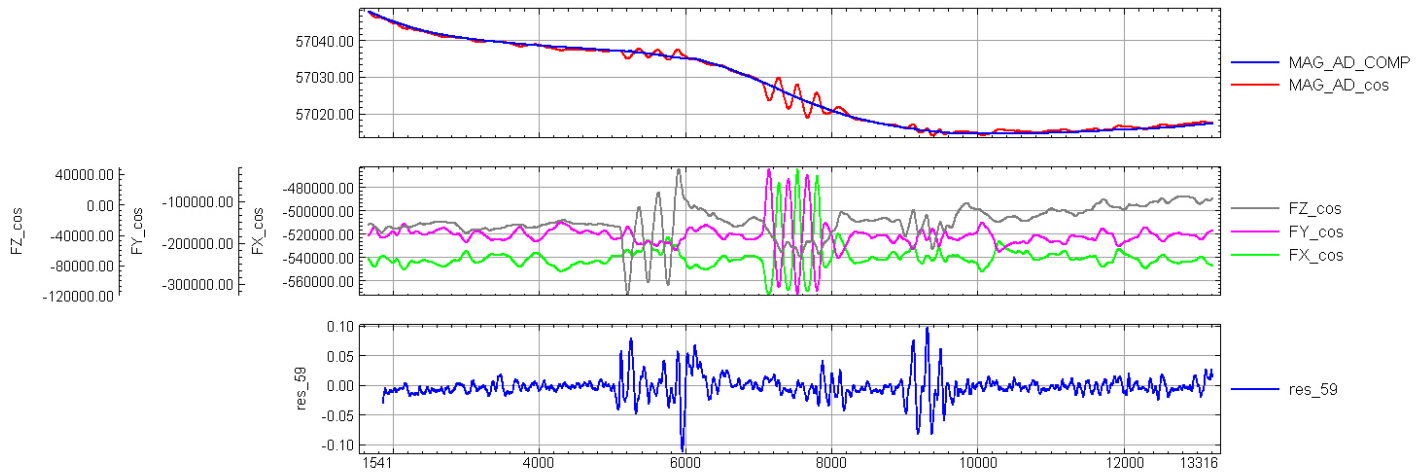
FOM results, August 13th 2010, 180 degree direction



database: D:\Strategic\FOMs\Strategic Metals\FOM west August 13, 2010\FOM_FLT10_08132010_Short.gdb line/group: L3000

2010/09/27

FOM results, August 13th 2010, 270 degree direction

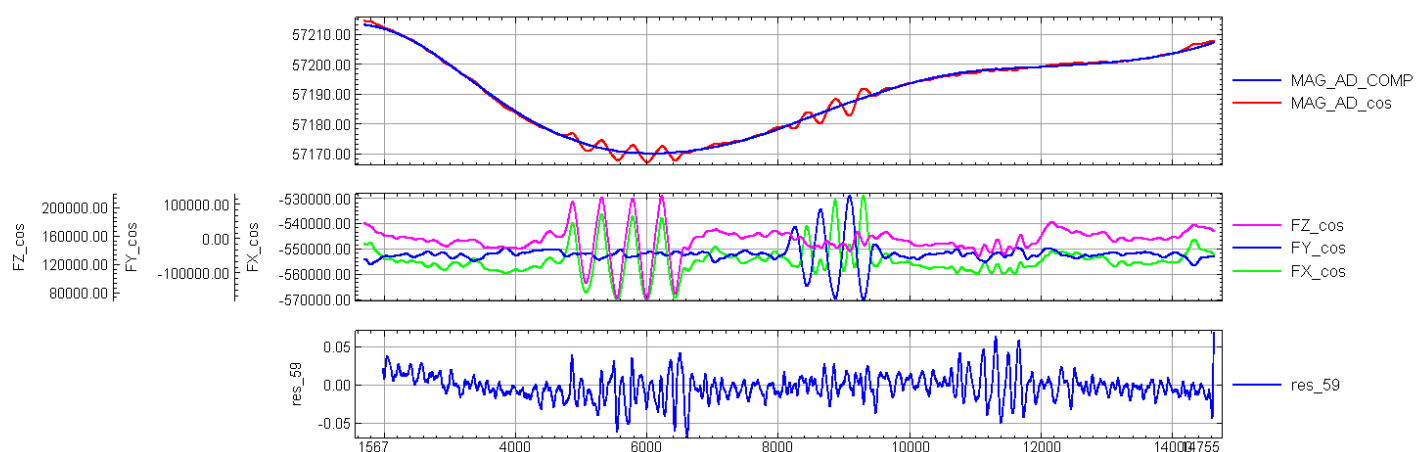


database: D:\Strategic\FOMs\Strategic Metals\FOM west August 13, 2010\FOM_FLT10_08132010_Short.gdb line/group: L4000

2010/09/27

Strategic Metals, Yukon, FOM result, August 15, 2010					
line	direction	pitch	roll	yaw	total
1000	42	0.150	0.050	0.115	0.315
2000	132	0.200	0.100	0.135	0.435
3000	222	0.130	0.050	0.125	0.305
4000	312	0.100	0.070	0.125	0.295
	total	0.580	0.270	0.500	1.350

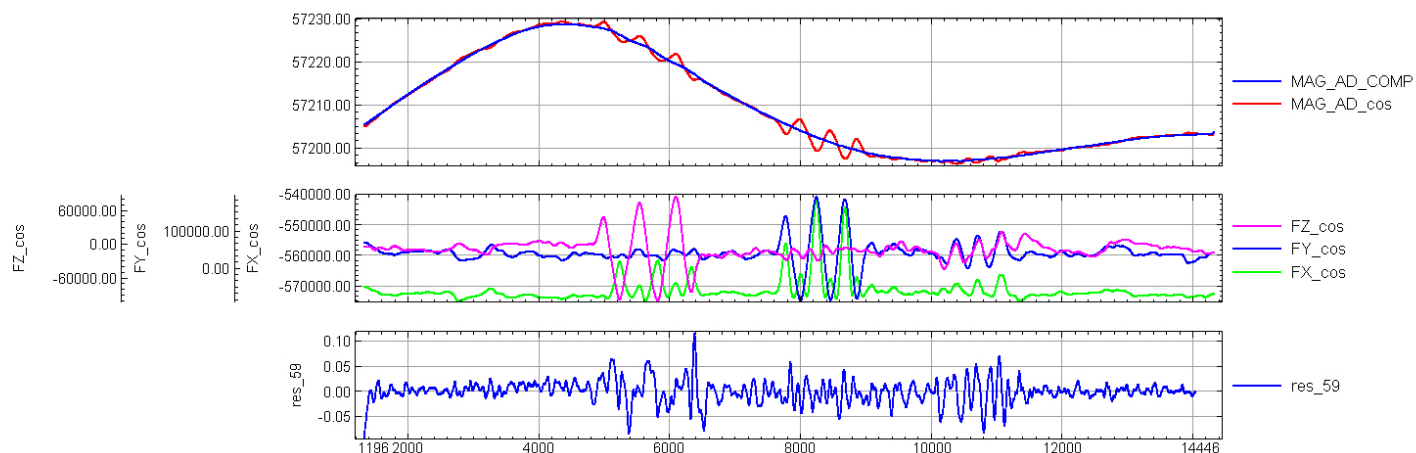
FOM results, August 15th 2010, 42 degree direction



database: D:\StrategicFOMs\Strategic Metals\FOW east August 15, 2010\FOM_FLT13_08132010_Short_2.gdb line/group: L1000

2010/09/27

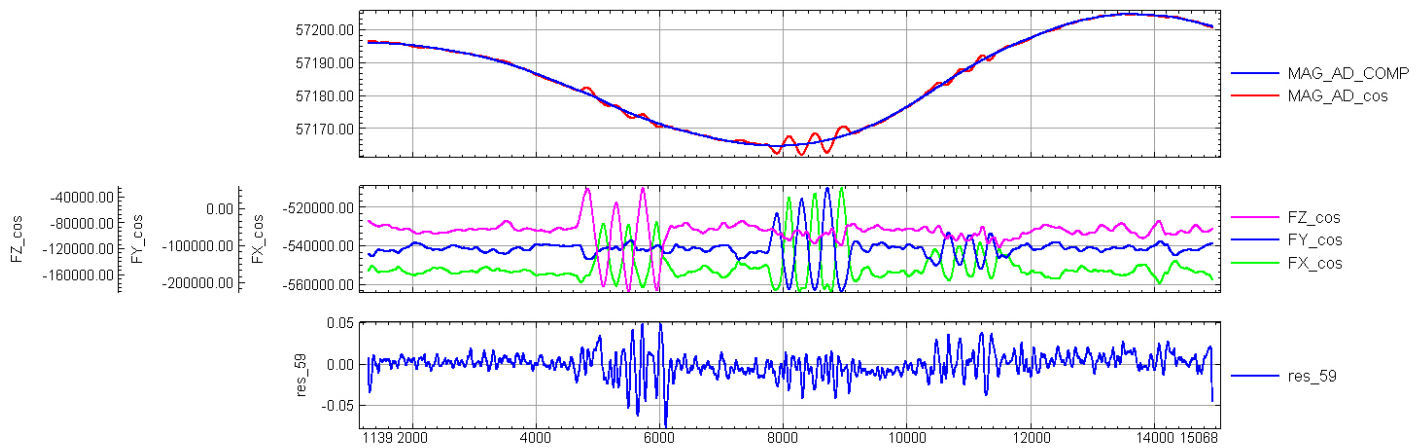
FOM results, August 15th 2010, 132 degree direction



database: D:\StrategicFOMs\Strategic Metals\FOW east August 15, 2010\FOM_FLT13_08132010_Short_2.gdb line/group: L2000

2010/09/27

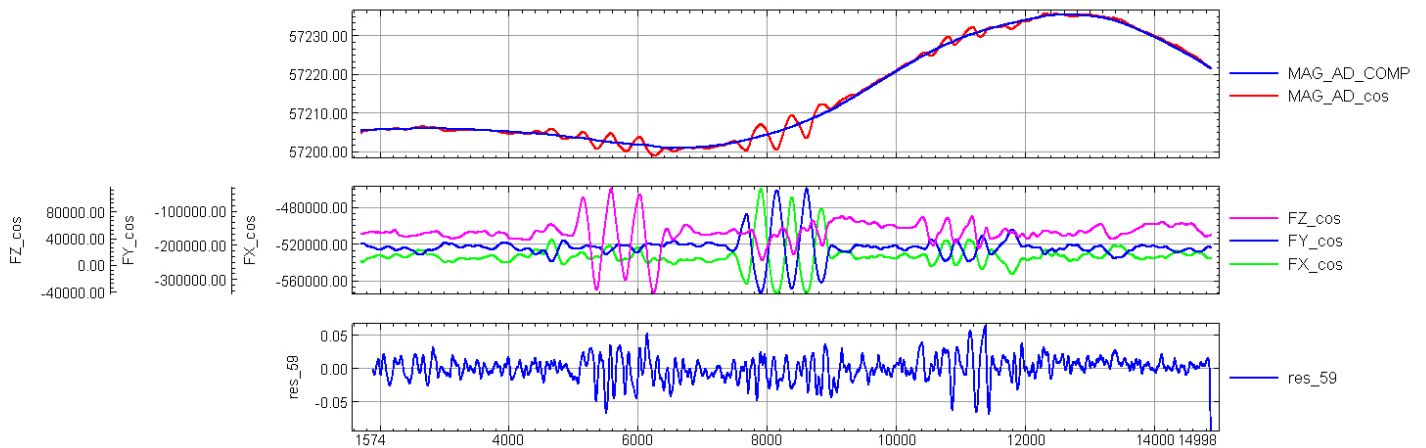
FOM results, August 15th 2010, 222 degree direction



database: D:\Strategic\FOMs\Strategic Metals\FOW east August 15, 2010\FOM_FLT13_08132010_Short_2.gdb line/group: L3000

2010/09/27

FOM results, August 15th 2010, 312 degree direction

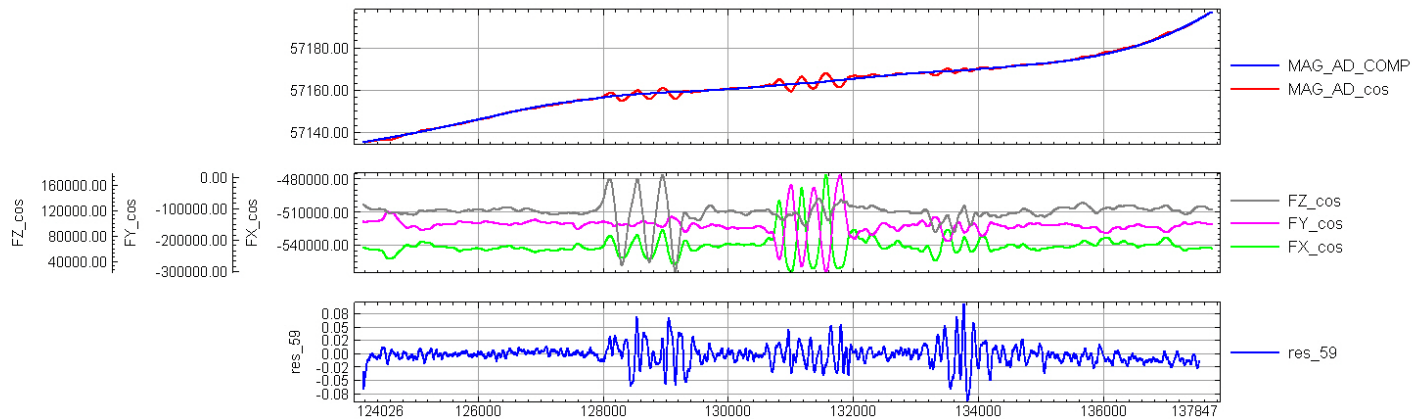


database: D:\Strategic\FOMs\Strategic Metals\FOW east August 15, 2010\FOM_FLT13_08132010_Short_2.gdb line/group: L4000

2010/09/27

Strategic Metals, Yukon, FOM result, August 17, 2010					
line	direction	pitch	roll	yaw	total
1000	0	0.125	0.085	0.175	0.385
2000	90	0.125	0.050	0.138	0.313
3000	180	0.138	0.050	0.055	0.243
4000	270	0.100	0.050	0.108	0.258
	total	0.488	0.235	0.475	1.198

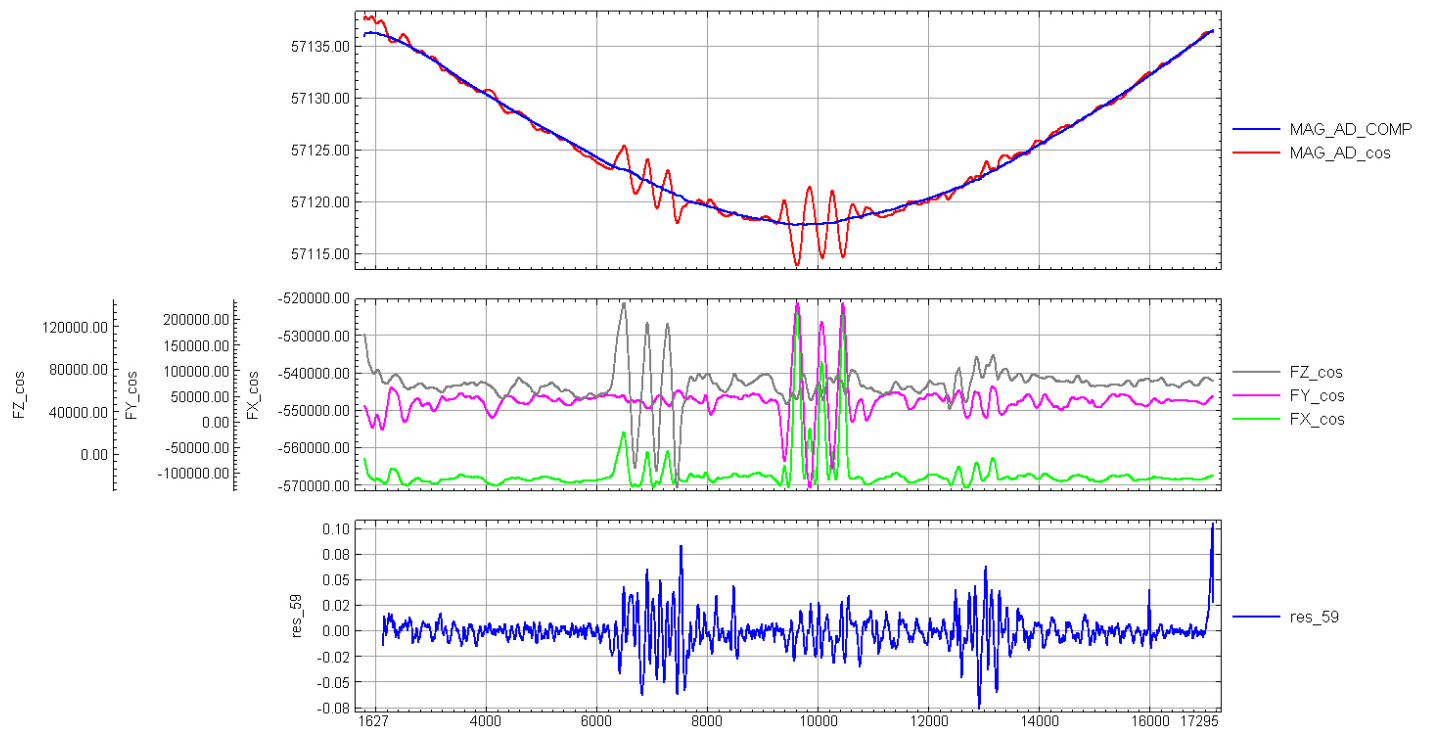
FOM results, August 17th 2010, 0 degree direction



database: D:\Strategic\FOMs\Klassin NS and Klaza\FOM east August 17, 2010\FOM_FLT18_08172010_Short_1.gdb line/group: L1000.1

2010/09/27

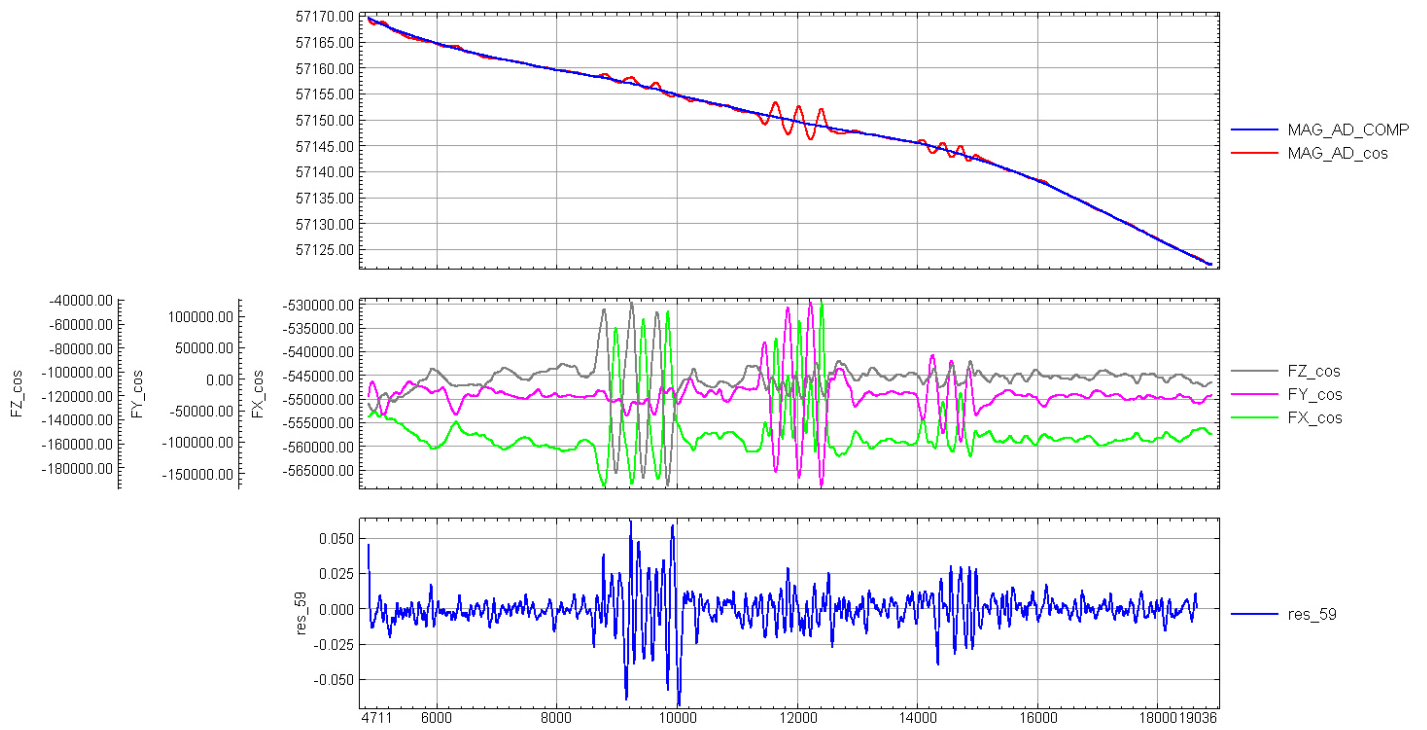
FOM results, August 17th 2010, 90 degree direction



database: D:\Strategic\FOMs\Klotassin NS and Klaza\FOM east August 17, 2010\FOM_FLT18_08172010_Short_1.gdb line/group: L2000.1

2010/09/27

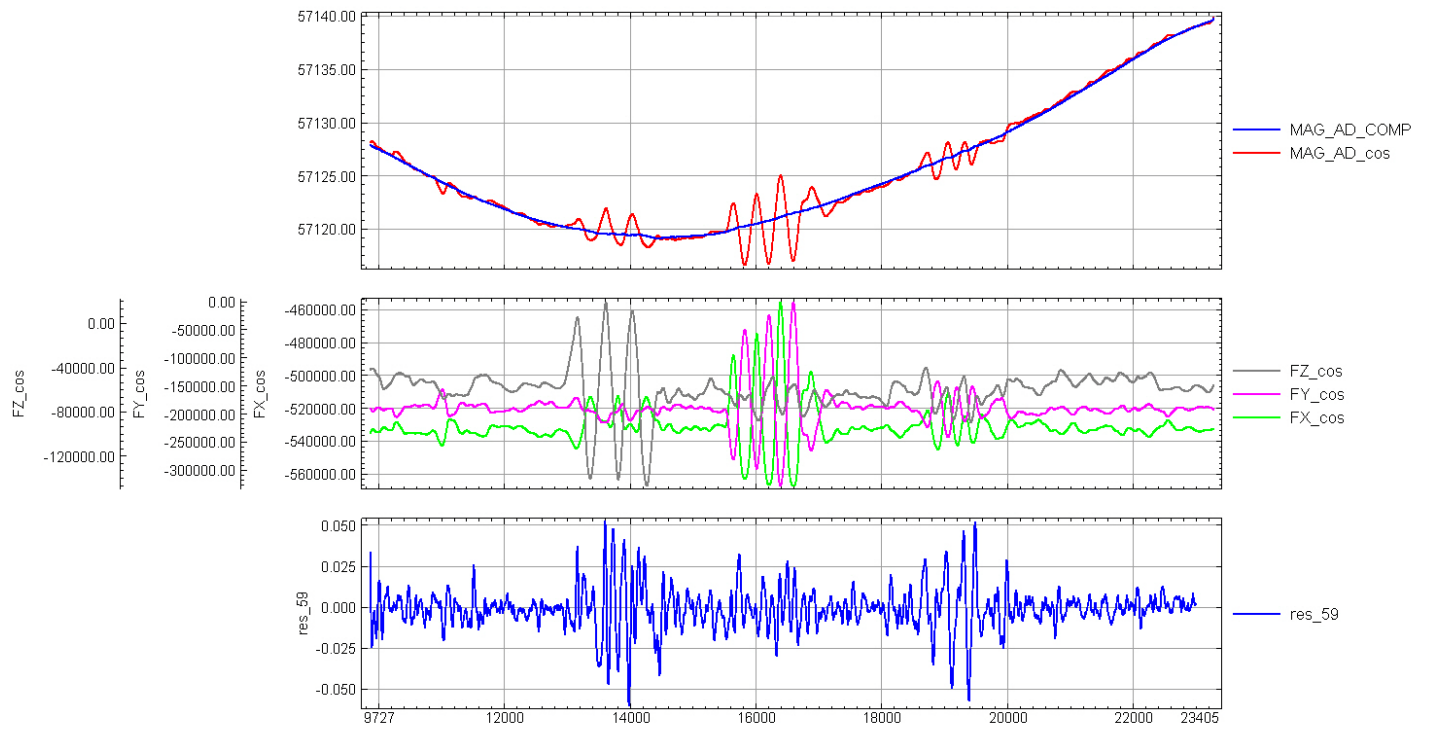
FOM results, August 17th 2010, 180 degree direction



database: D:\StrategicFOMs\Klotassin NS and Klaza\FOM east August 17, 2010\FOM_FLT18_08172010_Short_1.gdb line/group: L3000.1

2010/09/27

FOM results, August 17th 2010, 270 degree direction



database: D:\StrategicFOMs\Klotassin NS and Klaza\FOM east August 17, 2010\FOM_FLT18_08172010_Short_1.gdb line/group: L4000.1

2010/09/27

Appendix C: Database Descriptions

Magnetic Databases for Mint, Nikki, Corky, Meloy, King, and Mars blocks

Database Name: MAGNETIC_blockname_BK.gdb

Format: Geosoft .gdb

Number of Channels: 28

Note: If the database is opened in Oasis montaj, please load included “*Magnetic database channel display.dbview*” file to insure that ALL the channels are displayed in the same order as listed below (Database menu -> Get Saved View).

Channel Name	Units	Description
LINE	number	Line number
FLIGHT	number	Flight number
DATE	date	Date flown (YYMMDD)
FIDUCIAL	number	Fiducial count (flight specific)
SYSTEM_CLOCK	milsec	KANA8 (A/D converter) counter
UTM_X_NAD83	meters	UTM East in NAD83, North America, Zone 7N/Zone 8N
UTM_Y_NAD83	meters	UTM North in NAD83, North America, Zone 7N/Zone 8N
LATITUDE_WGS84	degrees	GPS latitude, WGS 84, World
LONGITUDE_WGS84	degrees	GPS longitude, WGS 84, World
GPS_HEIGHT_WGS84	meters	GPS height (orthometric) above MSL, WGS 84, World
UTC_DAYSEC	decimal seconds	UTC daily second counter (0-86399)
FLUX_X	volts	Fluxgate x-axis
FLUX_Y	volts	Fluxgate y-axis
FLUX_Z	volts	Fluxgate z-axis
RAD_ALT_feet	feet	Radar altimeter, height above ground
MAG_RAW	nT	Raw magnetometer data
MAG_COMP	nT	Compensated magnetometer data
DIURNAL	nT	Base station magnetometer data (filtered with 101point low pass filter)
MAG_DIURNAL_CORR	nT	Base station (diurnal) corrected magnetometer data
MAG_LAG_CORR	nT	Lag corrected magnetometer data
MAG_HEADING_CORR	nT	Heading corrected magnetometer data
IGRF	nT	Calculated IGRF, using 2010 model
MAG_IGRF_CORR	nT	IGRF corrected magnetometer data
MAG_SIMPLE_LVL	nT	Conventionally (simple) leveled magnetometer data
MAG_MICLEV	nT	Microleveled magnetometer data (if applicable)
TMI_FINAL	nT	Final magnetometer data (a copy of either MAG_SIMPLE_LVL or MAG_MICLEV channels)
VDV	nT/m	1 st order Vertical Derivative (VDV)
DTM	meters	Calculated DTM channel

Radiometric Databases for Mint, Nikki, Corky, Meloy, King, and Mars blocks

Database Name: RADIOMETRIC_ *blockname* _BK.gdb

Format: Geosoft .gdb

Number of Channels: 34

Note: If the database is opened in Oasis montaj, please load included “*Radiometric database channel display.dbview*” file to insure that ALL the channels are displayed in the same order as listed below (Database menu -> Get Saved View).

Channel Name	Units	Description
LINE	number	Line Number
FLIGHT	number	Flight Number
DATE	date	Date flown (YYMMDD)
FIDUCIAL	number	Fiducial count (line specific)
UTM_X_NAD83	meters	UTM East in NAD83, North America, Zone 7N/8N
UTM_Y_NAD83	meters	UTM North in NAD83, North America, Zone 7N/8N
LATITUDE_WGS84	degrees	GPS latitude, WGS 84, World
LONGITUDE_WGS84	degrees	GPS longitude, WGS 84, World
GPS_HEIGHT_WGS84	meters	GPS height (orthometric) above MSL, WGS 84, World
UTC_DAYSEC	seconds	UTC daily second counter (0-86399)
RAD_ALT_feet	feet	Radar altimeter, height above ground
PRESSURE	mbar	Ambient pressure output
TEMPERATURE	degrees C	Ambient temperature output
DOWN_LIVE_TIME	seconds	Live time channel
RAW_Potassium	counts/sec	Raw Potassium channel
RAW_Thorium	counts/sec	Raw Thorium channel
RAW_Uranium	counts/sec	Raw Uranium channel
RAW_TotCount	counts/sec	Raw Total Count channel
RAW_UpDet	counts/sec	Raw upward looking crystal Uranium channel
COSMIC	counts/sec	Raw Cosmic channel from downward looking crystals
SPECTRUM	counts/sec	1024 channel down spectrum
EQUIVALENT_HEIGHT_m	meters	Equivalent height above ground at STP
K_CORR	counts/sec	Live Time, Background, Cosmic, Compton Scattering and Altitude Attenuation corrected Potassium counts
Th_CORR	counts/sec	Live Time, Background, Cosmic, Compton Scattering and Altitude Attenuation corrected Thorium counts
U_CORR	counts/sec	Live Time, Background, Cosmic, Compton Scattering and Altitude Attenuation corrected Uranium counts
TC_CORR	counts/sec	Live Time, Background, Cosmic, Compton Scattering and Altitude Attenuation corrected Total Count counts
K_FINAL_CORR	counts/sec	Final Potassium counts; microleveled (if applicable, see section 7.5.6.8 for details)

Th_FINAL_CORR	counts/sec	Final Thorium counts; microleveled (if applicable, see section 7.5.6.8 for details)
U_FINAL_CORR	counts/sec	Final Uranium counts; microleveled (if applicable, see section 7.5.6.8 for details)
TC_FINAL_CORR	counts/sec	Final Total Count counts; microleveled (if applicable, see section 7.5.6.8 for details)
K_Percent	%	Estimated concentrations of Potassium
eTh	ppm	Estimated equivalent concentrations of Thorium
eU	ppm	Estimated equivalent concentrations of Uranium
DOSE_RATE	nGy/h	Natural air absorption Dose Rate

APPENDIX D: RSX-5 SPECTROMETER (SN 5503): DAILY RESOLUTION TESTS RESULTS

Executed 2010/08/08 21:59:25

Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2001	2005	2001	2001	2001	8008
Gain	0.962986	0.953878	0.981236	0.953903	1.021441	-
Peak	871.76 (+/- 0.543)	874.70 (+/- 0.870)	873.30 (+/- 0.602)	871.13 (+/- 0.653)	860.80 (+/- 2.204)	872.82 (+/- 0.324)
FWHM	4.13 (+/- 1.371)	5.75 (+/- 2.547)	4.78 (+/- 1.562)	4.99 (+/- 1.734)	5.91 (+/- 8.576)	4.66 (+/- 0.839)

Executed 2010/08/09 17:47:25

Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2003	2001	2004	2006	2002	8014
Gain	0.988165	0.992147	1.015323	0.990002	1.054202	-
Peak	873.10 (+/- 0.470)	874.73 (+/- 0.764)	872.23 (+/- 0.543)	870.40 (+/- 0.612)	868.10 (+/- 1.097)	872.84 (+/- 0.265)
FWHM	4.07 (+/- 1.209)	5.21 (+/- 2.095)	4.94 (+/- 1.400)	5.11 (+/- 1.581)	6.89 (+/- 3.116)	4.63 (+/- 0.676)

Executed 2010/08/10 07:39:17

Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2003	2002	2002	2005	2004	8012
Gain	0.940138	0.916487	0.950094	0.929034	0.987978	-
Peak	869.25 (+/- 0.535)	876.70 (+/- 0.938)	873.98 (+/- 0.600)	870.59 (+/- 0.673)	868.49 (+/- 1.006)	872.08 (+/- 0.336)
FWHM	4.21 (+/- 1.345)	4.29 (+/- 2.392)	4.73 (+/- 1.594)	4.77 (+/- 1.820)	6.71 (+/- 3.081)	4.49 (+/- 0.840)

Executed 2010/08/11 07:51:16

Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2006	2001	2001	2001	2002	8009
Gain	0.969962	0.948579	0.977909	0.954461	1.013296	-
Peak	871.53 (+/- 0.573)	876.57 (+/- 0.814)	873.60 (+/- 0.753)	872.19 (+/- 0.592)	867.11 (+/- 0.950)	873.16 (+/- 0.403)
FWHM	4.34 (+/- 1.543)	5.16 (+/- 2.319)	4.99 (+/- 2.074)	4.42 (+/- 1.566)	6.34 (+/- 2.804)	4.63 (+/- 1.116)

Executed 2010/08/12 11:03:00

Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2006	2005	2003	2003	2001	8017
Gain	0.975655	0.958596	0.984948	0.96152	1.022175	-
Peak	870.06 (+/- 0.579)	876.22 (+/- 0.769)	873.15 (+/- 0.798)	871.27 (+/- 0.781)	869.11 (+/- 0.892)	872.42 (+/- 0.389)
FWHM	3.94 (+/- 1.506)	4.46 (+/- 2.045)	4.82 (+/- 2.290)	5.17 (+/- 2.069)	6.31 (+/- 2.451)	4.61 (+/- 1.042)

Executed 2010/08/13 16:15:45

Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2001	2003	2001	2001	2001	8006
Gain	0.991344	0.985067	1.008989	0.982447	1.054639	-
Peak	871.28 (+/- 0.484)	881.69 (+/- 1.148)	873.48 (+/- 0.561)	872.15 (+/- 0.749)	870.62 (+/- 1.398)	873.64 (+/- 0.294)
FWHM	3.88 (+/- 1.219)	4.89 (+/- 3.600)	4.49 (+/- 1.467)	5.34 (+/- 2.120)	7.00 (+/- 4.542)	4.63 (+/- 0.770)

Executed 2010/08/15 11:27:34

Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2011	2001	2003	2001	2004	8016
Gain	0.952273	0.931188	0.958818	0.942567	1.003903	-
Peak	871.87 (+/- 0.553)	877.53 (+/- 0.772)	872.17 (+/- 0.611)	870.80 (+/- 0.494)	870.03 (+/- 1.044)	872.13 (+/- 0.295)
FWHM	4.26 (+/- 1.307)	4.55 (+/- 2.180)	4.74 (+/- 1.628)	4.95 (+/- 1.263)	6.93 (+/- 3.149)	4.75 (+/- 0.730)

Executed 2010/08/16 07:57:10

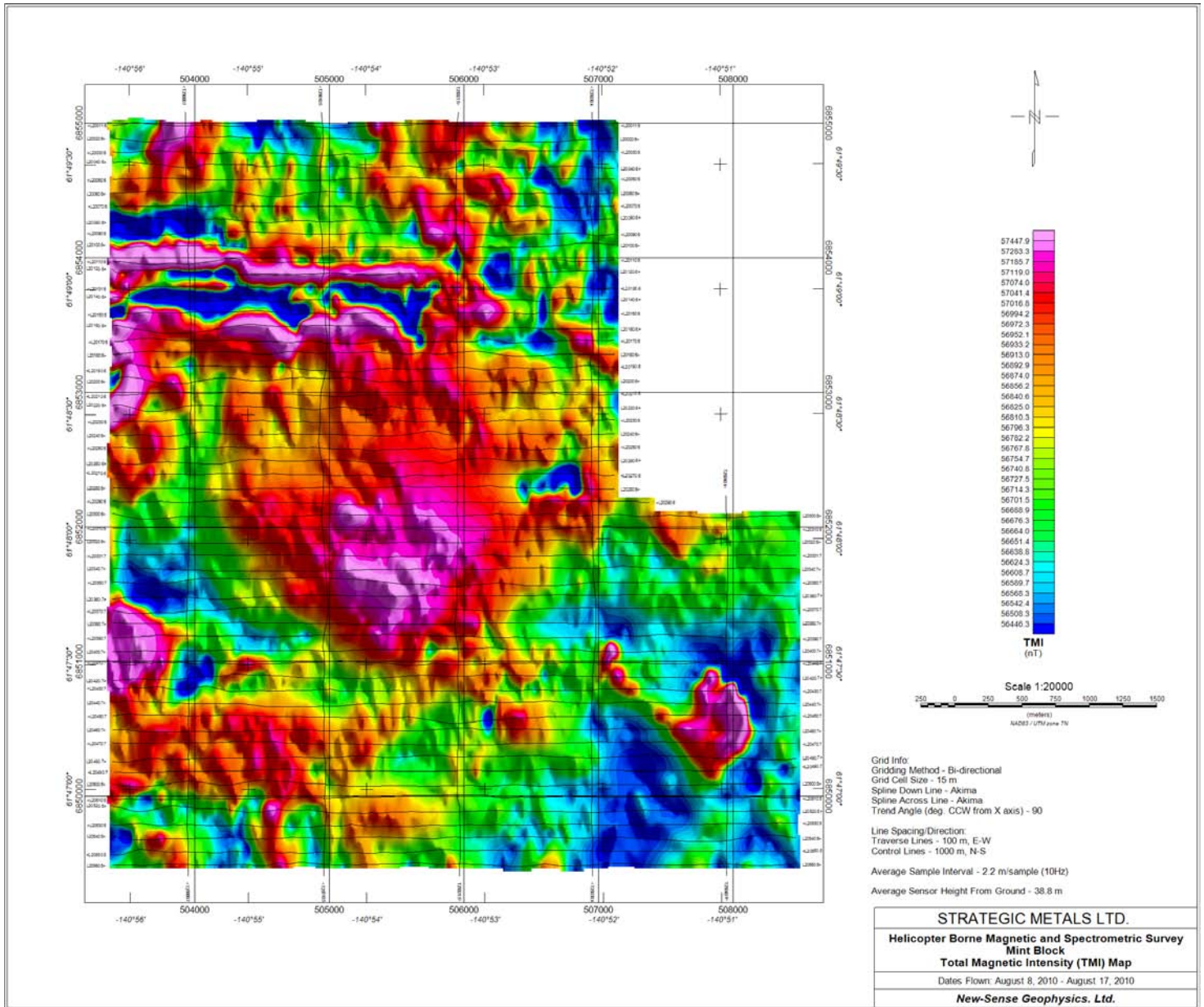
Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2002	2004	2007	2001	2005	8014
Gain	0.930262	0.915566	0.940916	0.920625	0.995206	-
Peak	870.26 (+/- 0.472)	877.55 (+/- 1.109)	872.20 (+/- 0.606)	871.61 (+/- 0.667)	870.10 (+/- 0.998)	872.22 (+/- 0.364)
FWHM	4.28 (+/- 1.250)	4.85 (+/- 3.181)	4.74 (+/- 1.735)	4.81 (+/- 1.765)	6.70 (+/- 2.825)	4.69 (+/- 0.969)

Executed 2010/08/17 08:02:17

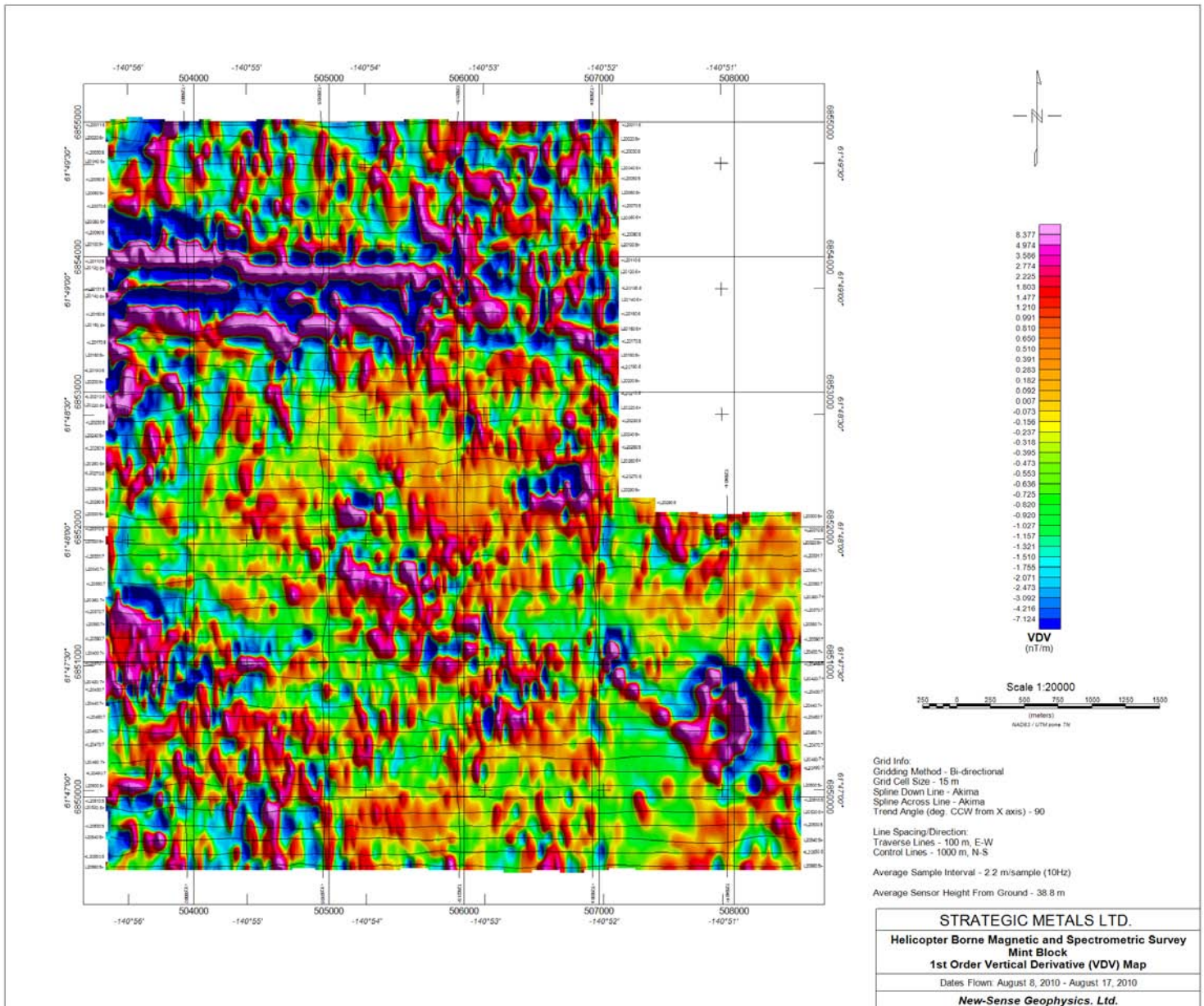
Detector	Det 1 - SN:00318	Det 2 - SN:00037	Det 3 - SN:00040	Det 4 - SN:00032	Det 5 - SN:00038	Det 1 + 2 + 3 + 4
Status	Done	Done	Done	Done	Done	Done
Counts	2001	2004	2005	2005	2004	8015
Gain	0.926781	0.913206	0.938985	0.920016	0.991829	-
Peak	871.25 (+/- 0.475)	875.69 (+/- 1.079)	872.19 (+/- 0.727)	870.29 (+/- 0.673)	868.95 (+/- 0.913)	872.37 (+/- 0.379)
FWHM	4.30 (+/- 1.250)	5.19 (+/- 3.182)	4.78 (+/- 2.097)	4.90 (+/- 1.808)	6.52 (+/- 2.523)	4.52 (+/- 1.044)

APPENDIX E: IMAGES OF FINAL MAPS

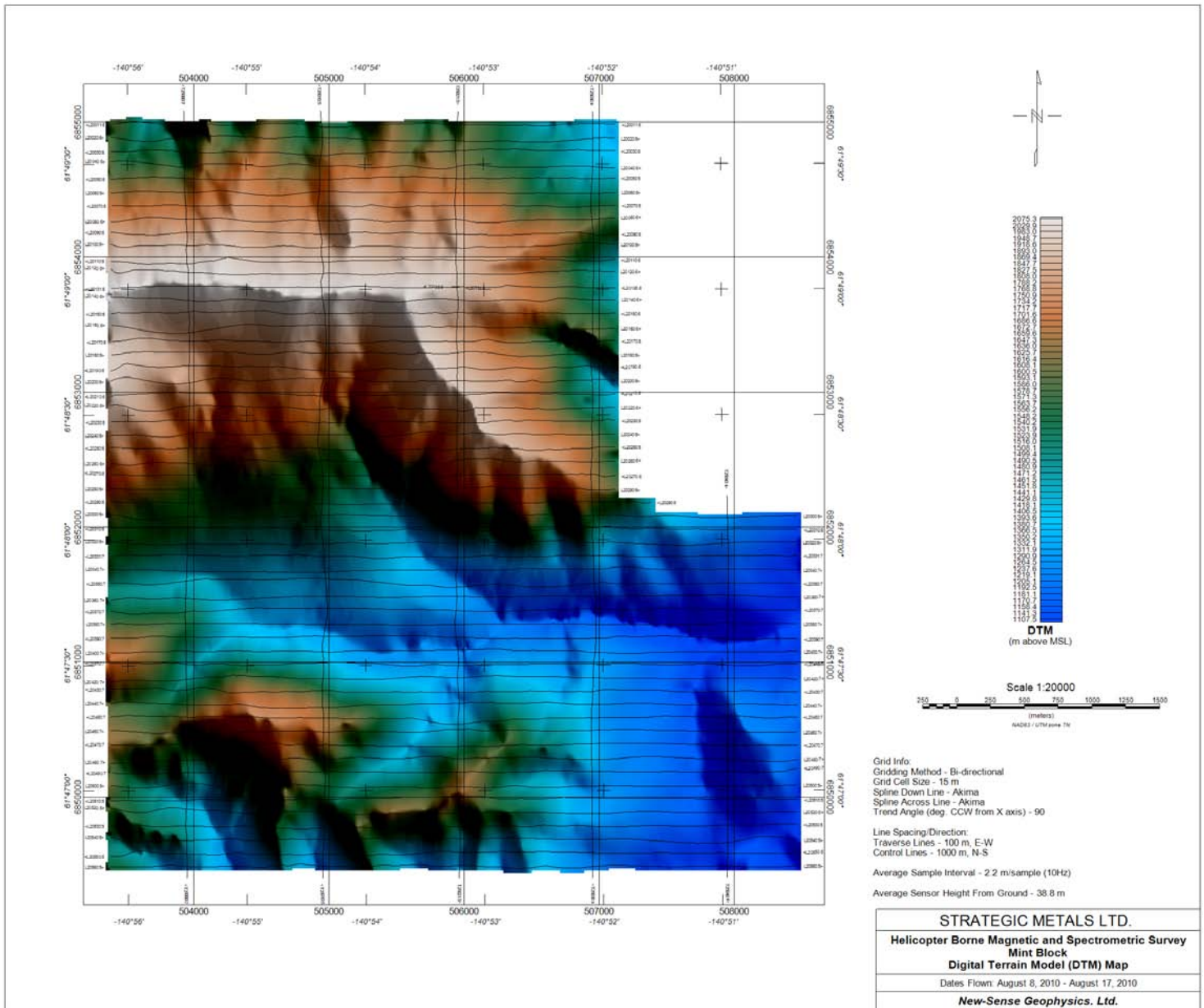
Mint Block Image of TMI FINAL Map



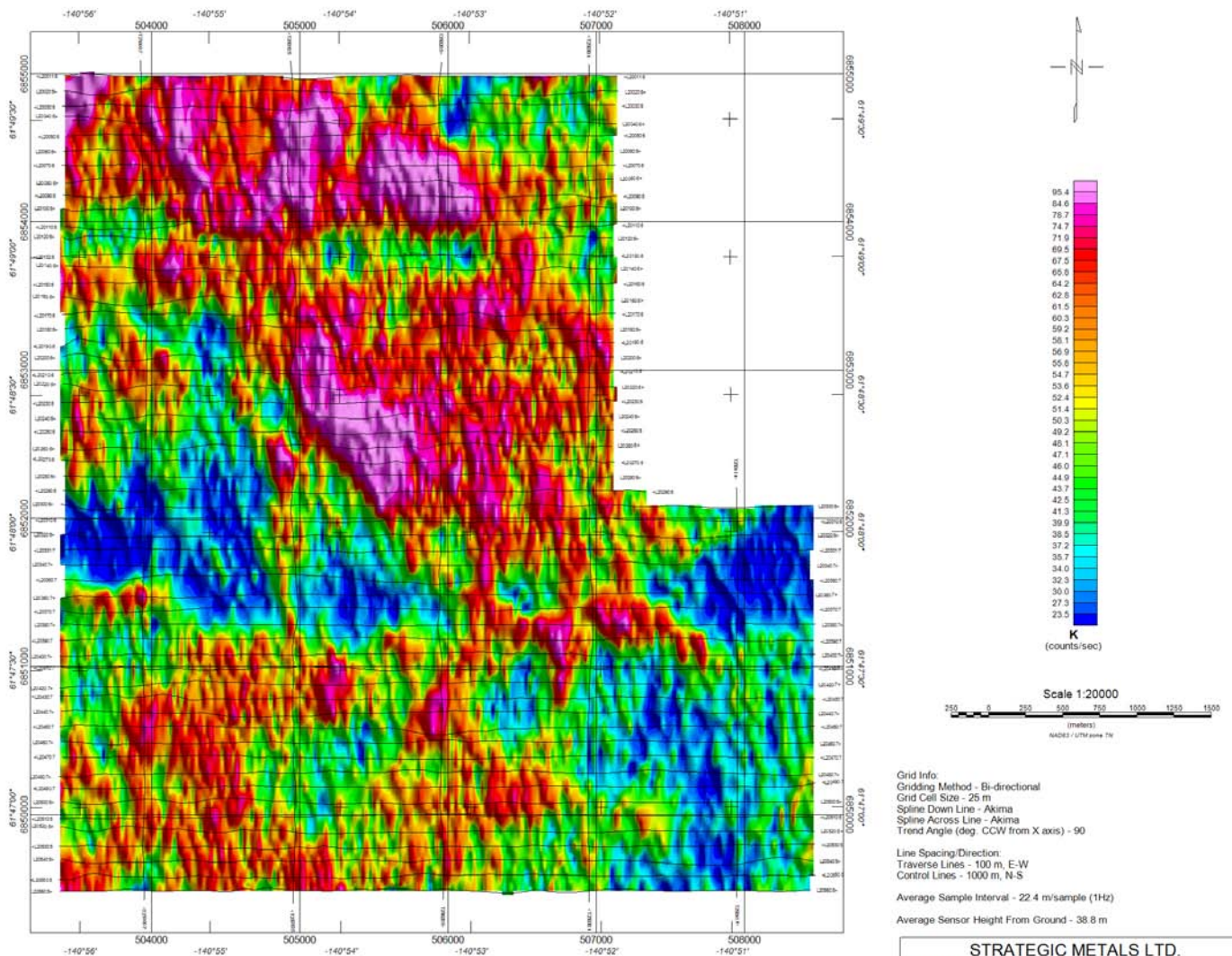
Mint Block Image of VDV Map



Mint Block Image of DTM Map

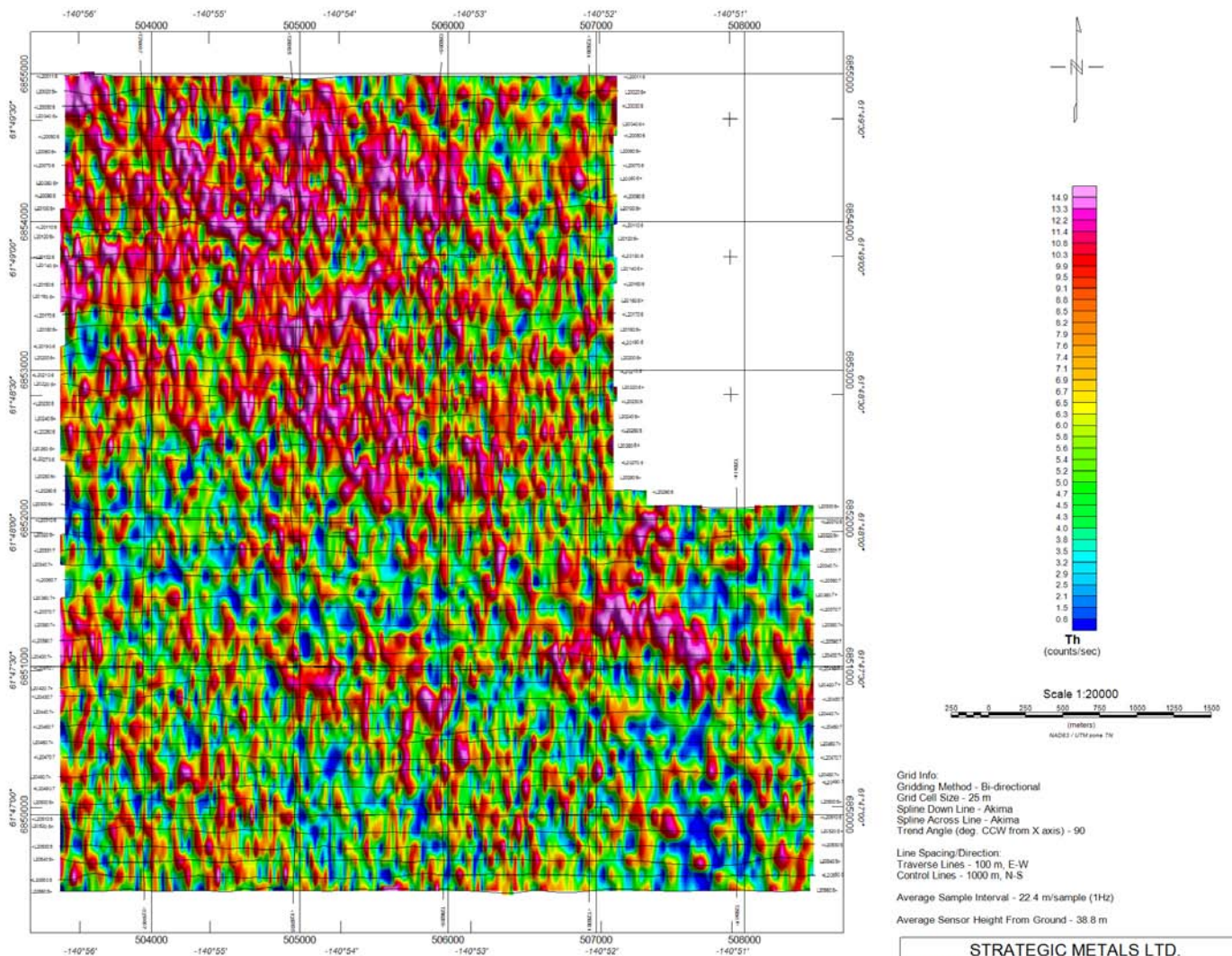


Mint Block Image of Potassium Map



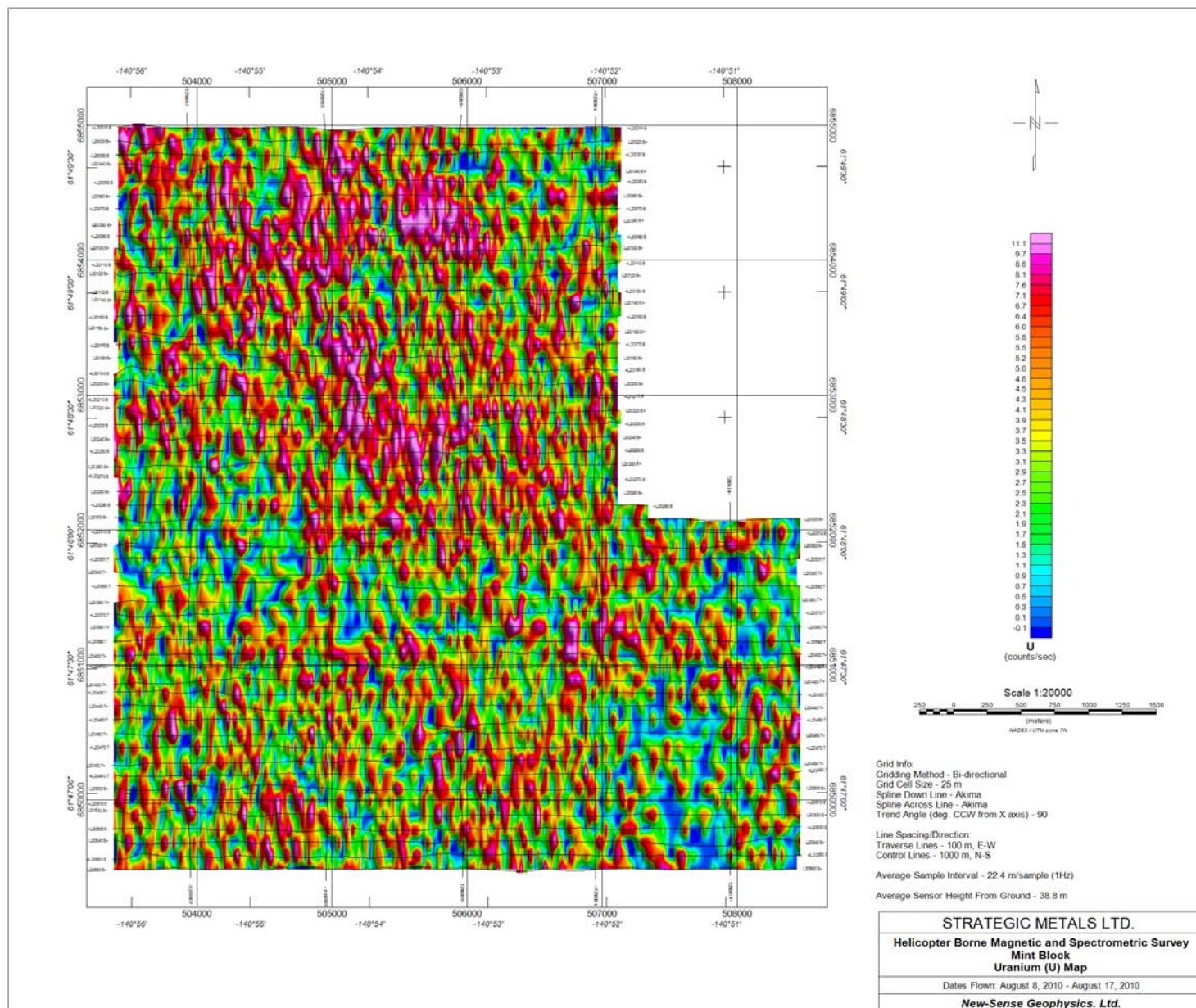
STRATEGIC METALS LTD.
Helicopter Borne Magnetic and Spectrometric Survey
Mint Block
Potassium (K) Map
Dates Flown: August 8, 2010 - August 17, 2010
New-Sense Geophysics. Ltd.

Mint Block Image of Thorium Map

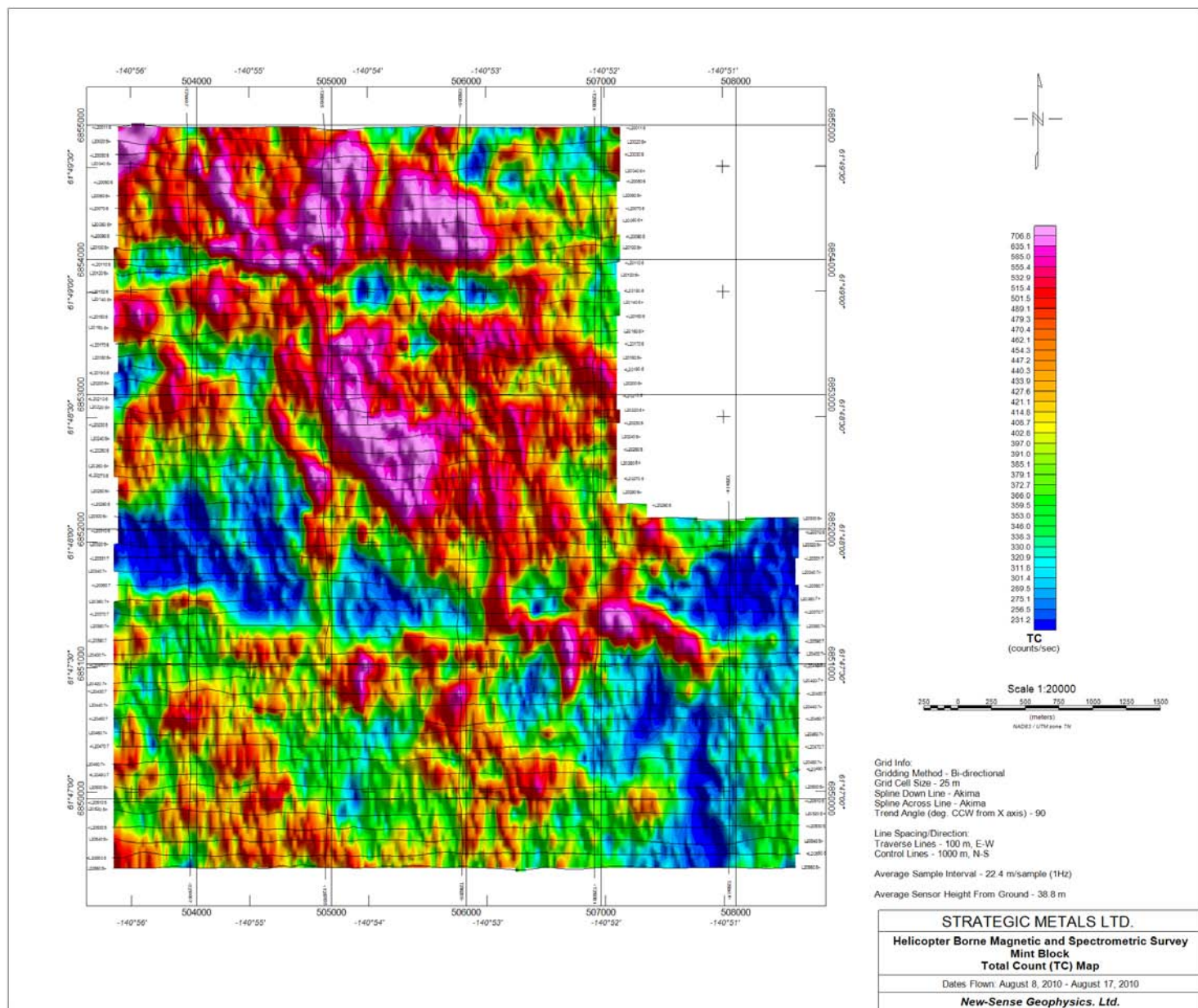


STRATEGIC METALS LTD.
Helicopter Borne Magnetic and Spectrometric Survey
Mint Block
Thorium (Th) Map
Dates Flown: August 8, 2010 - August 17, 2010
New-Sense Geophysics. Ltd.

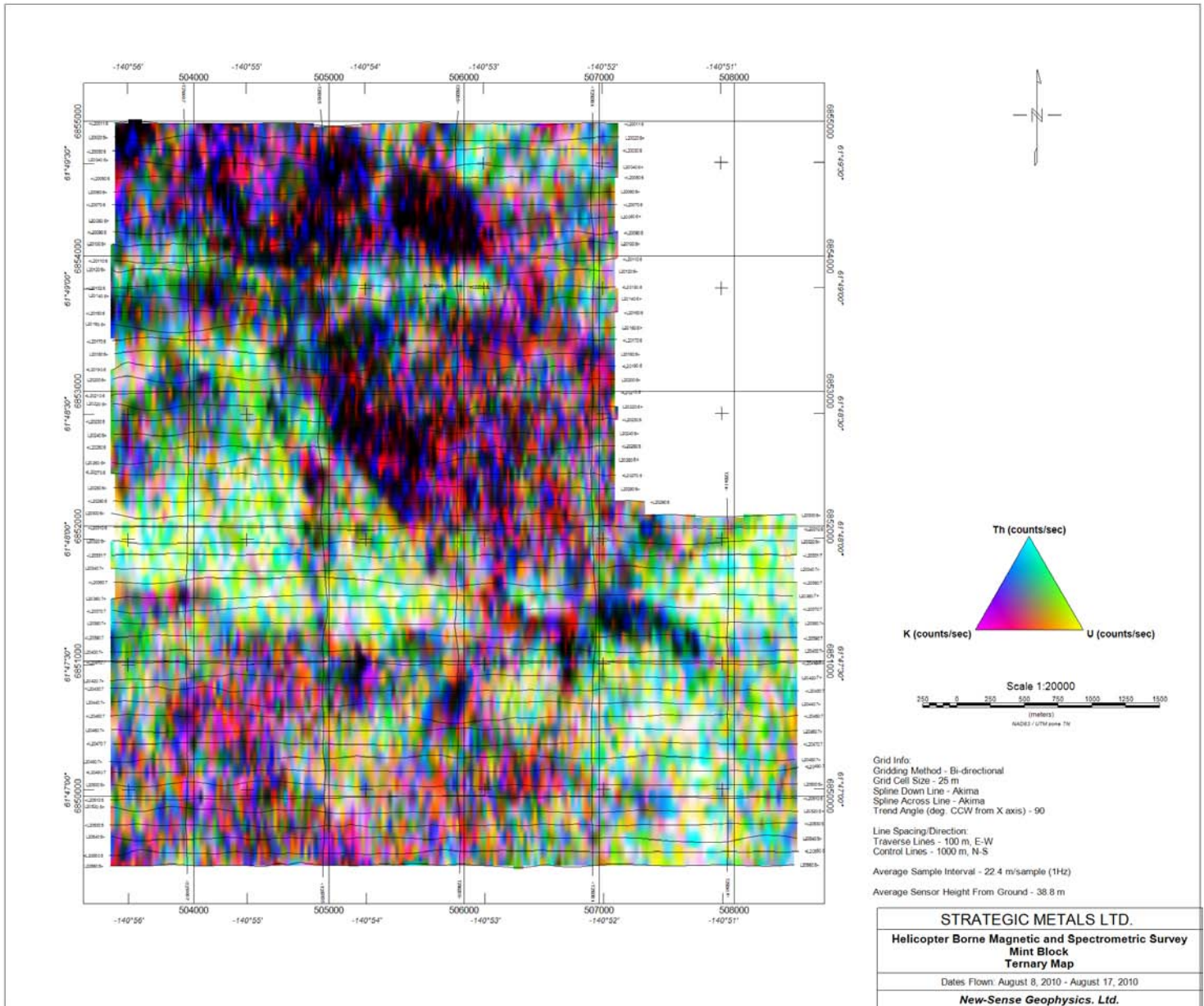
Mint Block Image of Uranium Map



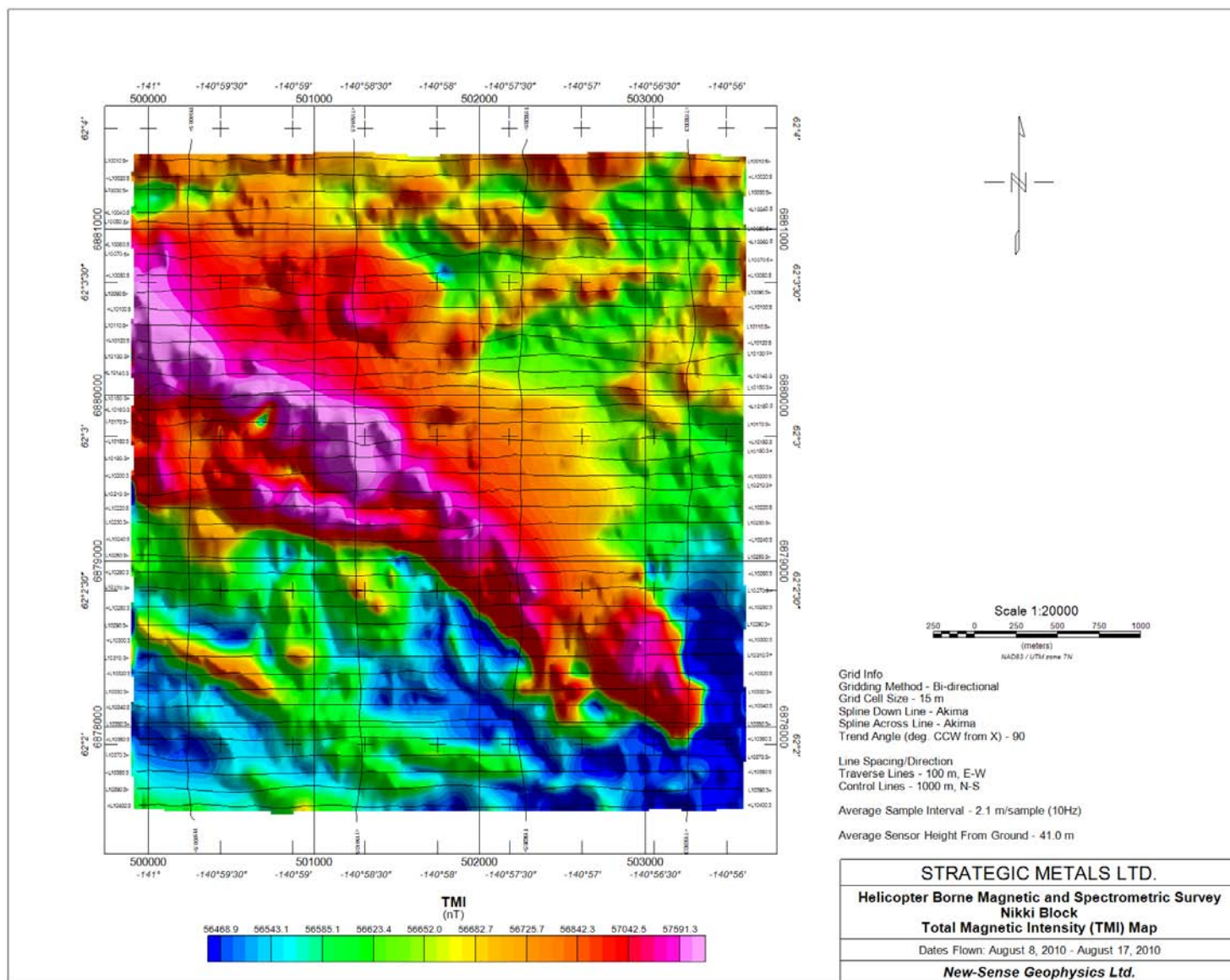
Mint Block Image of Total Count Map



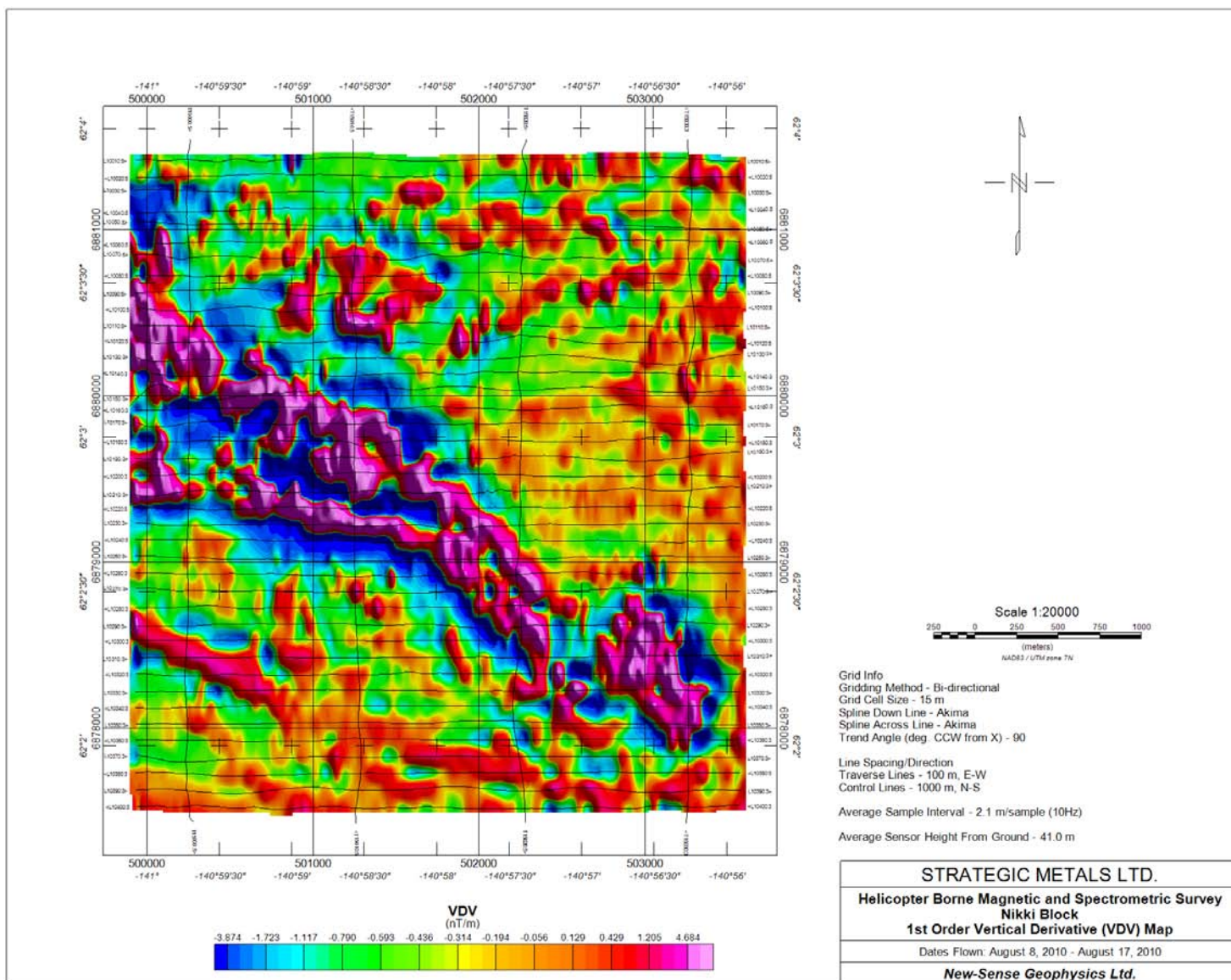
Mint Block Image of Ternary Map



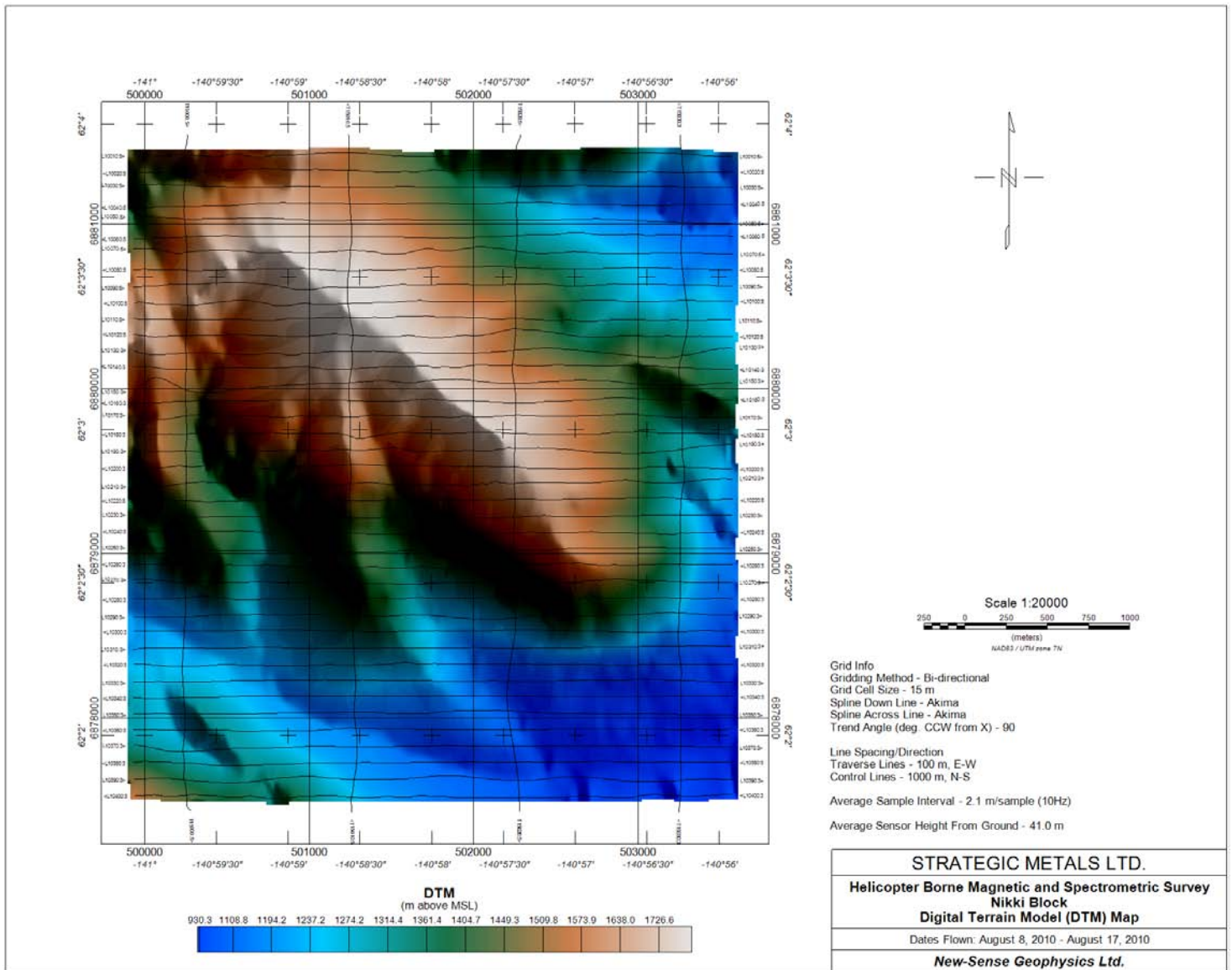
Nikki Block Image of TMI FINAL Map



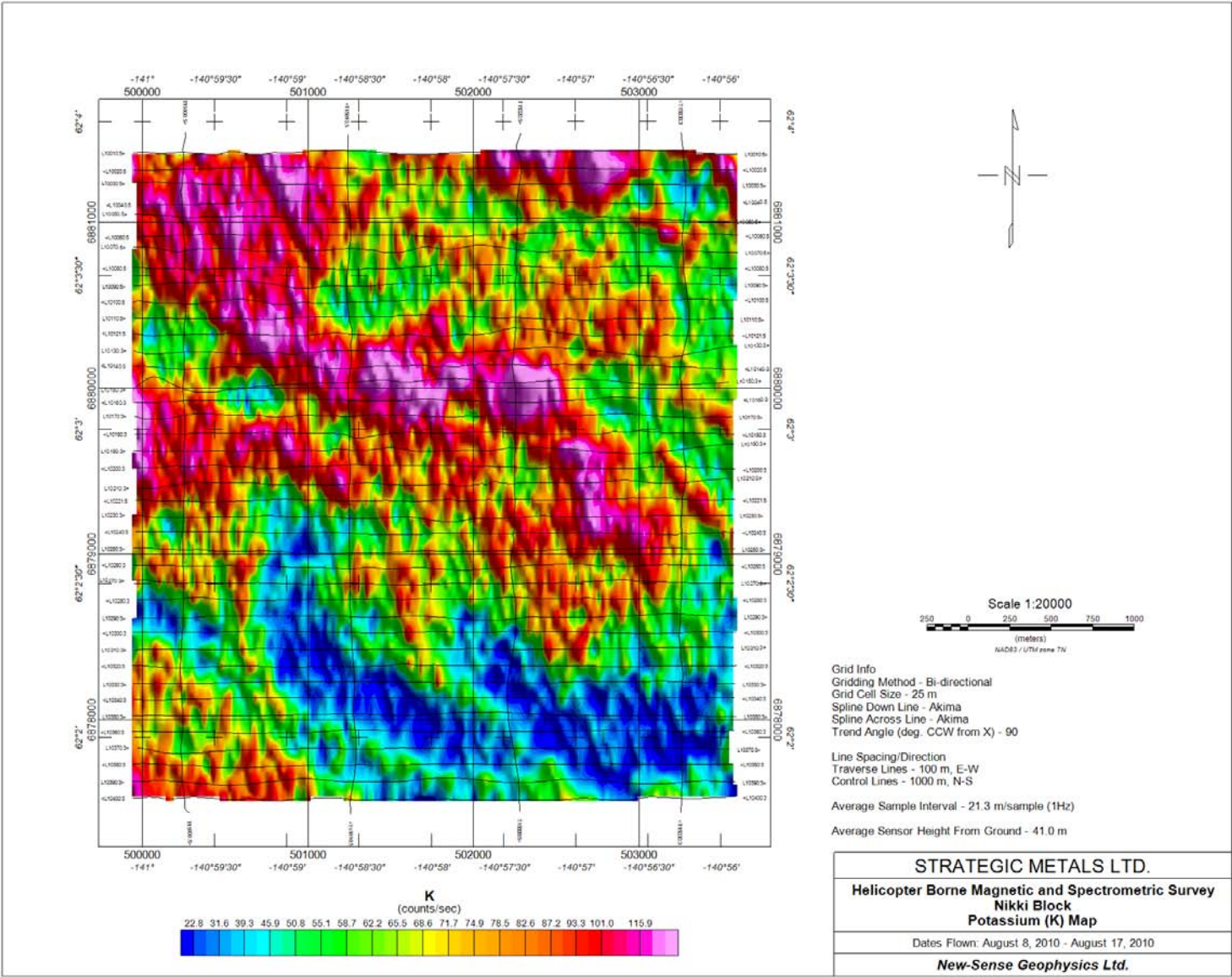
Nikki Block Image of VDV Map



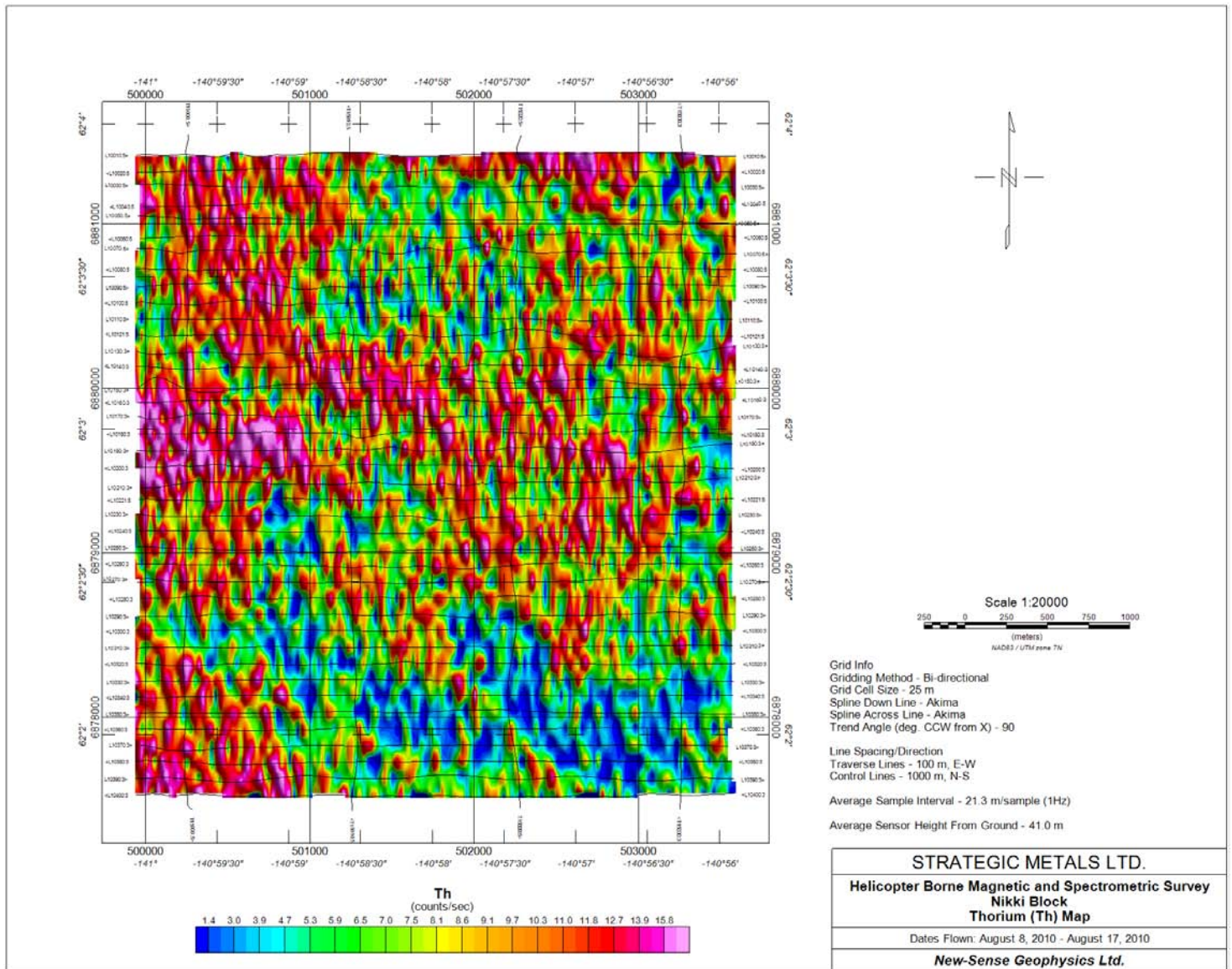
Nikki Block Image of DTM Map



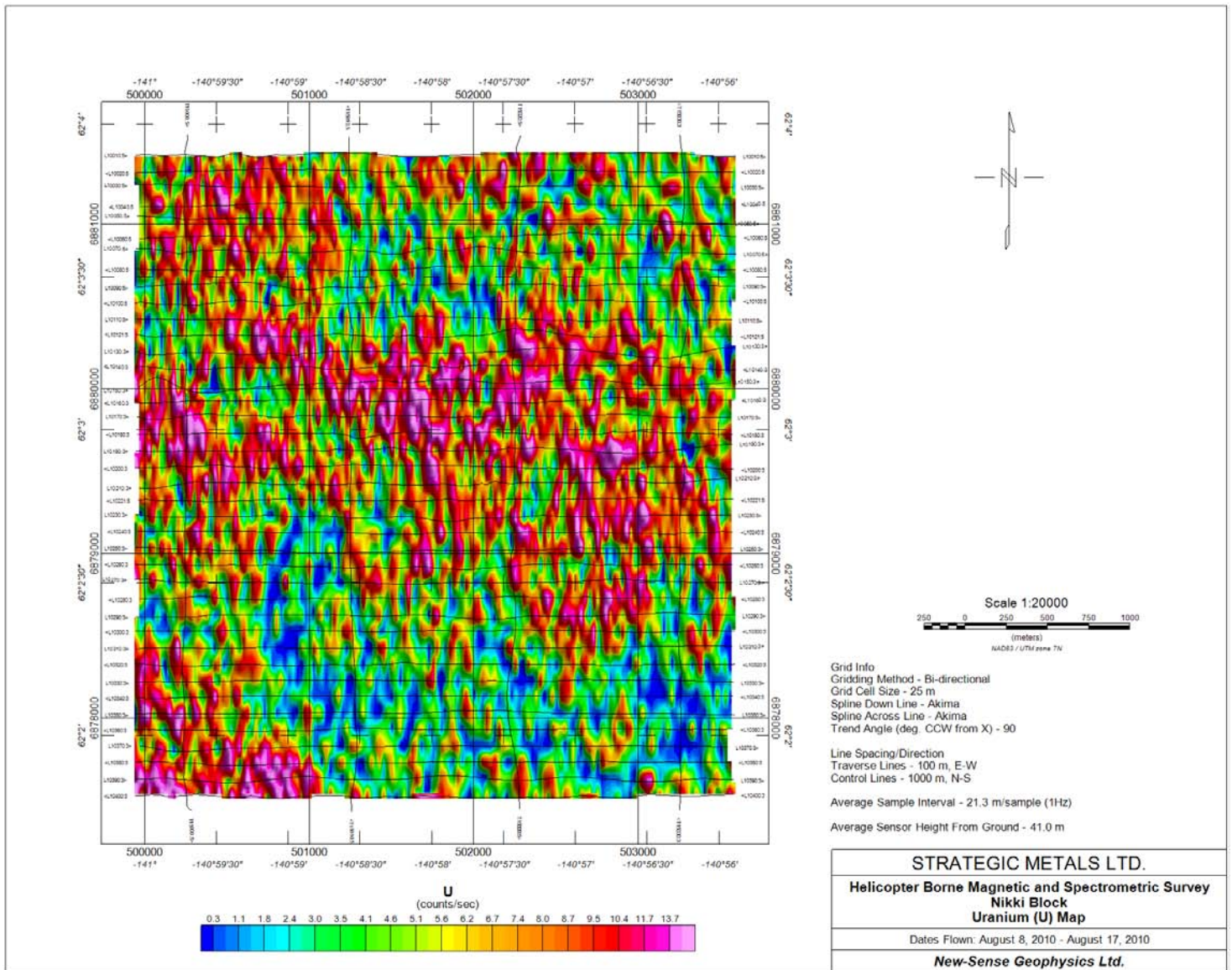
Nikki Block Image of Potassium Map



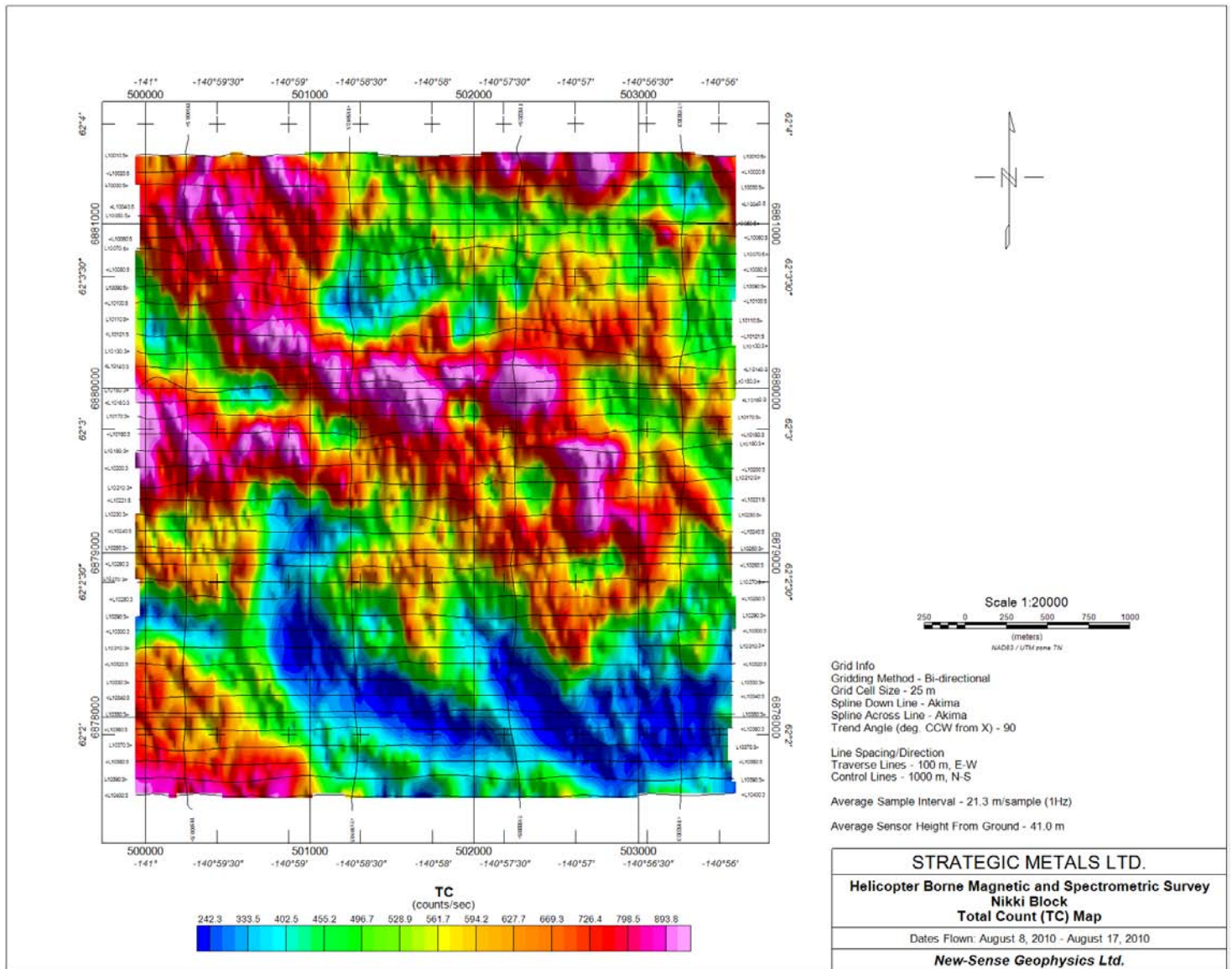
Nikki Block Image of Thorium Map



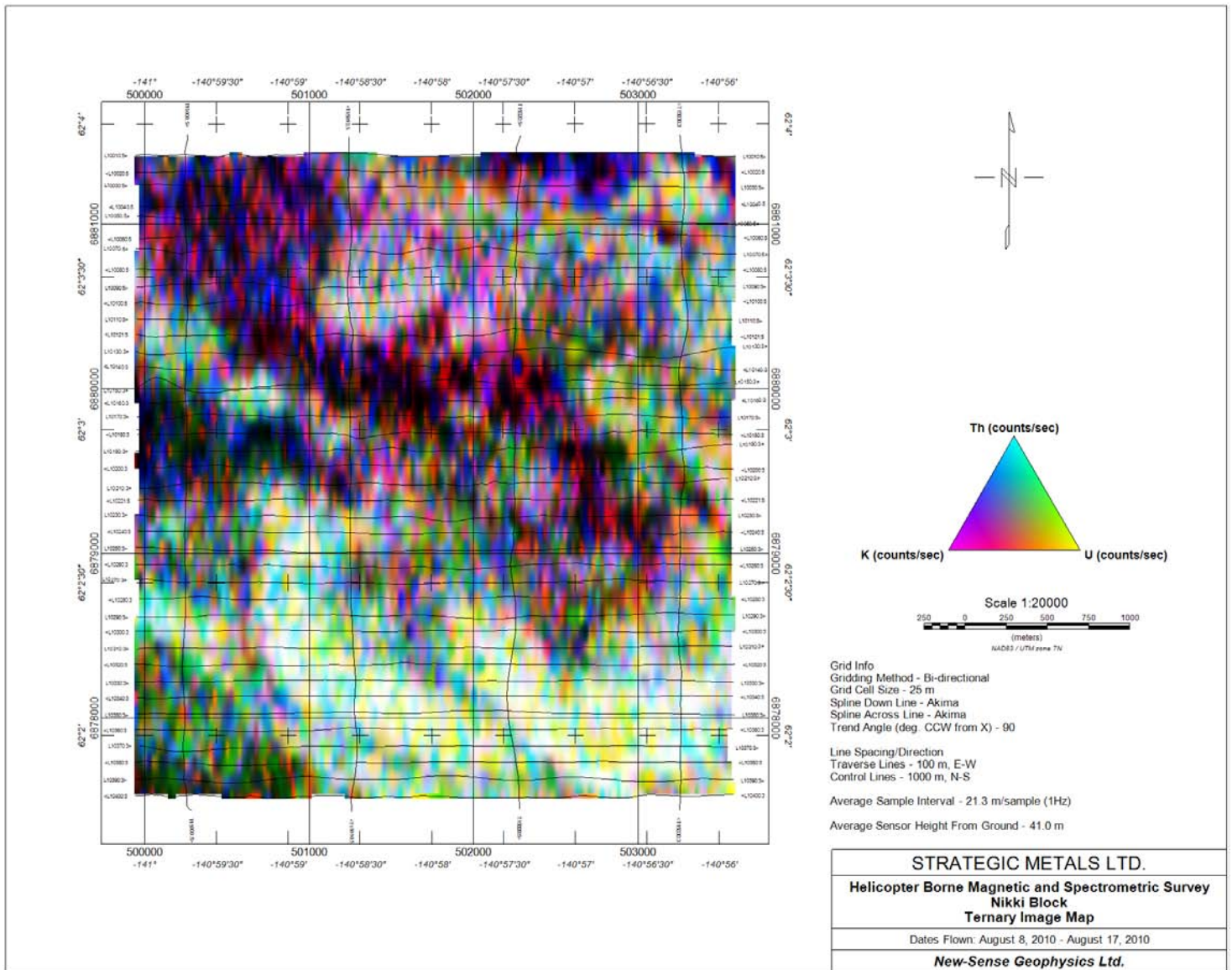
Nikki Block Image of Uranium Map



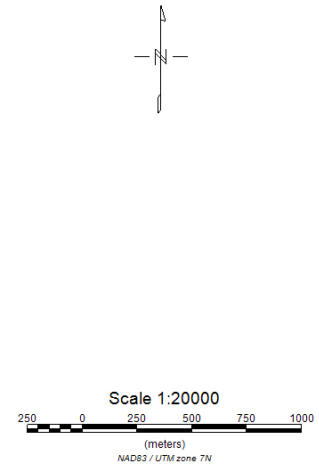
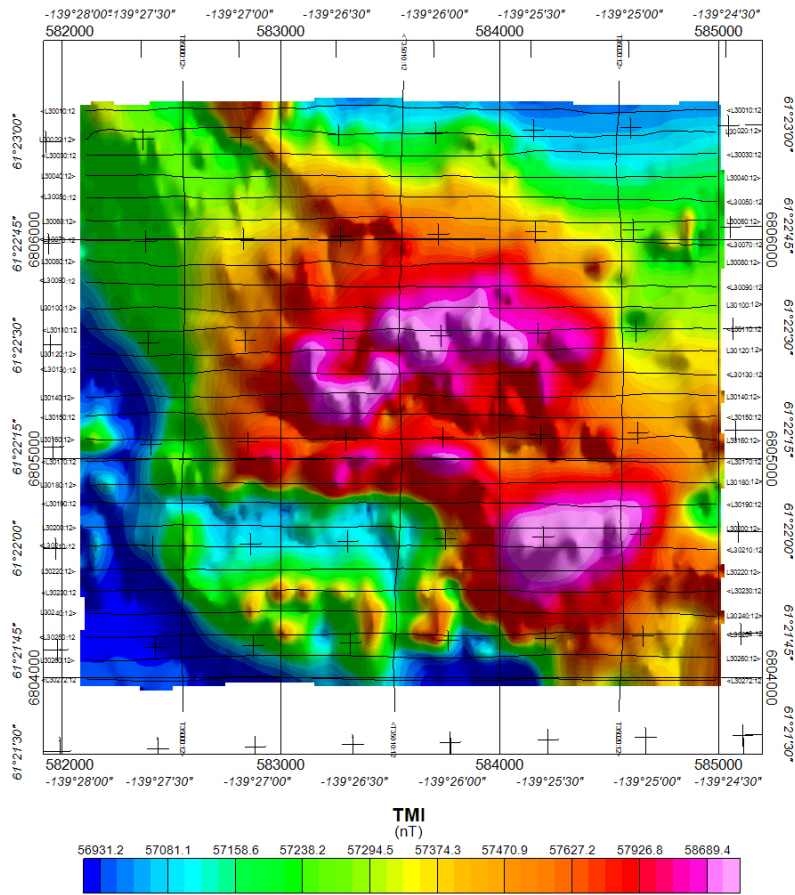
Nikki Block Image of Total Count Map



Nikki Block Image of Ternary Map



Corky Block Image of TMI FINAL Map



Grid Info:
 Gridding Method - Bi-directional
 Grid Cell Size - 15 m
 Spline Down Line - Akima
 Spline Across Line - Akima
 Trend Angle (deg. CCW from X axis) - 90

Line Spacing/Direction:
 Traverse Lines - 100 m, E-W
 Control Lines - 1000 m, N-S

Average Sample Interval - 2.2 m/sample (10Hz)

Average Sensor Height From Ground - 33.1 m

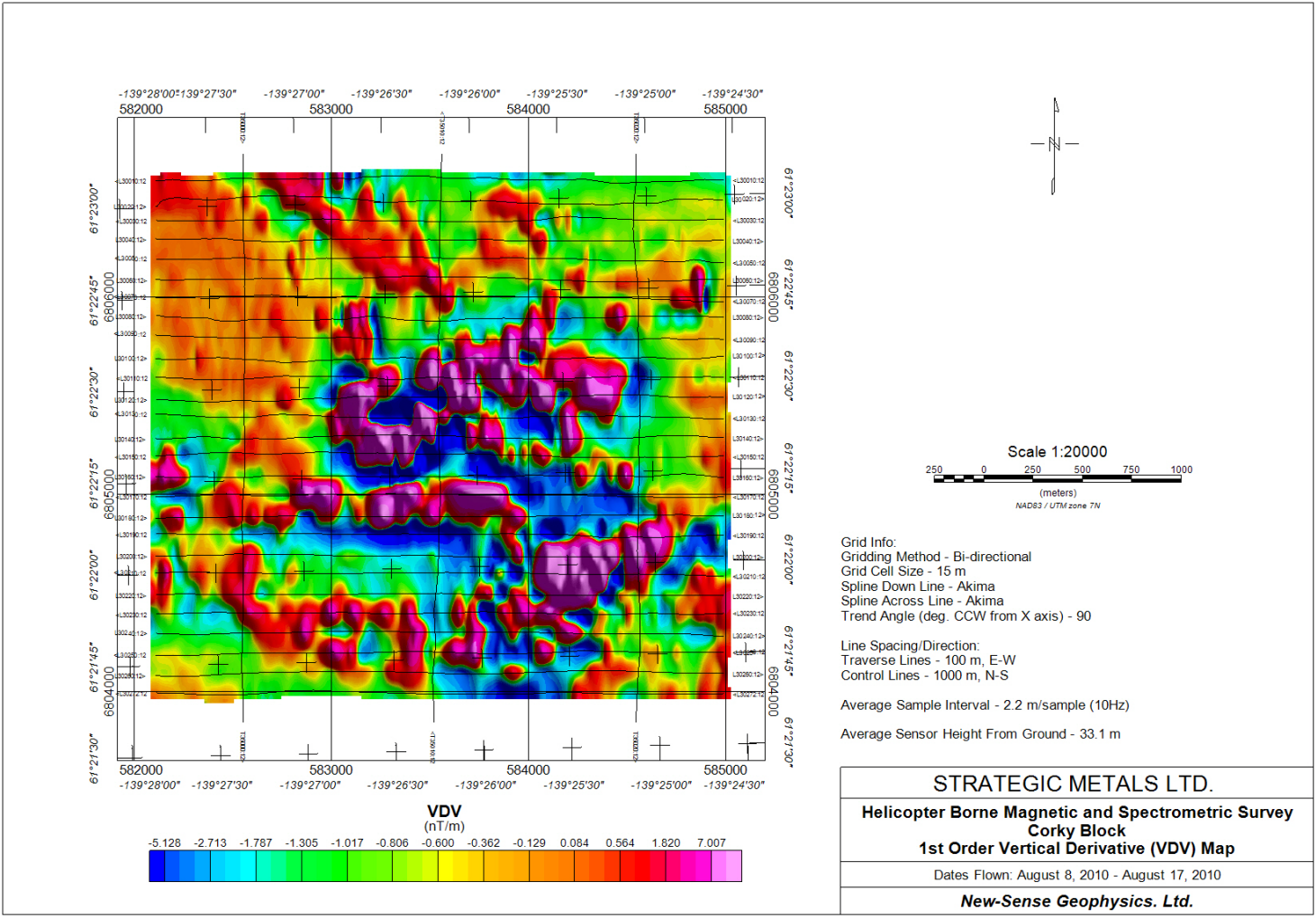
STRATEGIC METALS LTD.

**Helicopter Borne Magnetic and Spectrometric Survey
 Corky Block
 Total Magnetic Intensity (TMI) Map**

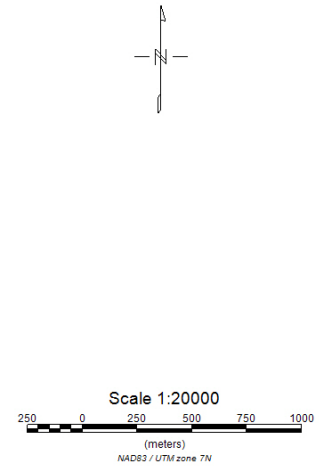
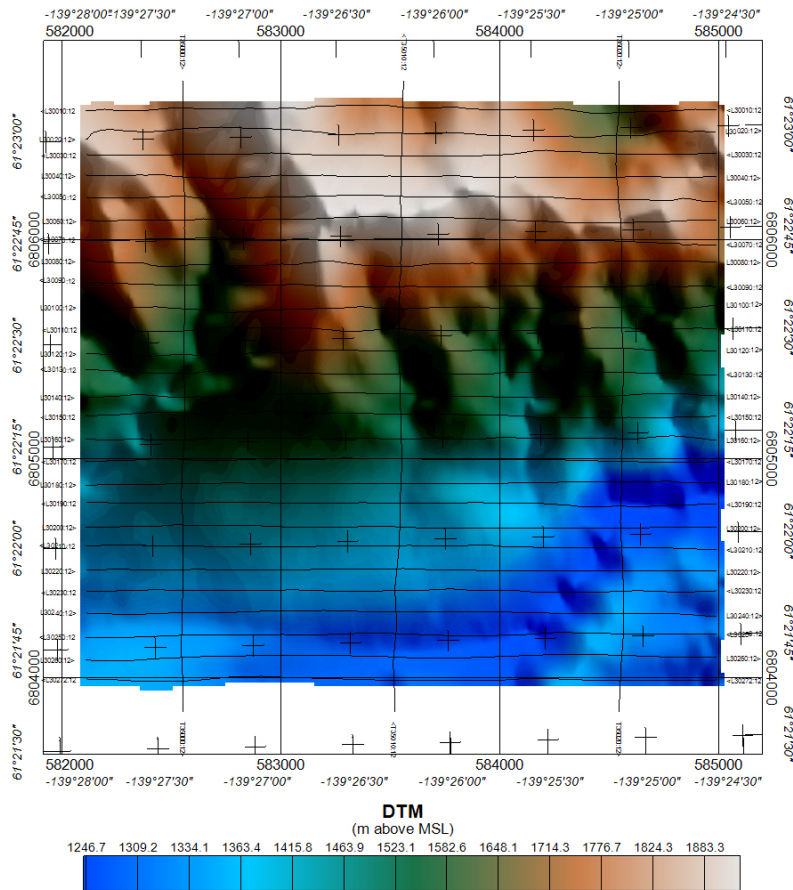
Dates Flown: August 8, 2010 - August 17, 2010

New-Sense Geophysics. Ltd.

Corky Block Image of VDV Map



Corky Block Image of DTM Map



Grid Info:
Gridding Method - Bi-directional
Grid Cell Size - 15 m
Spline Down Line - Akima
Spline Across Line - Akima
Trend Angle (deg. CCW from X axis) - 90

Line Spacing/Direction:
Traverse Lines - 100 m, E-W
Control Lines - 1000 m, N-S

Average Sample Interval - 2.2 m/sample (10Hz)

Average Sensor Height From Ground - 33.1 m

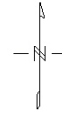
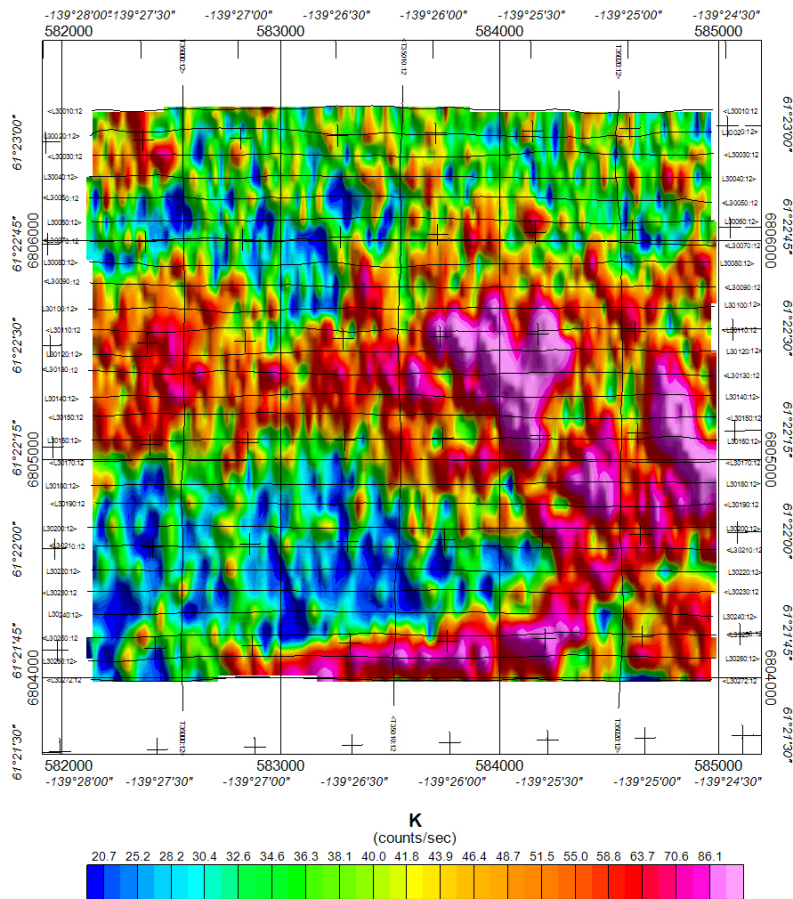
STRATEGIC METALS LTD.

**Helicopter Borne Magnetic and Spectrometric Survey
Corky Block
Digital Terrain Model (DTM) Map**

Dates Flown: August 8, 2010 - August 17, 2010

New-Sense Geophysics. Ltd.

Corky Block Image of Potassium Map



Scale 1:20000

250 0 250 500 750 1000
(meters)
NAD83 / UTM zone 7N

Grid Info:
Gridding Method - Bi-directional
Grid Cell Size - 25 m
Spline Down Line - Akima
Spline Across Line - Akima
Trend Angle (deg. CCW from X axis) - 90

Line Spacing/Direction:
Traverse Lines - 100 m, E-W
Control Lines - 1000 m, N-S

Average Sample Interval - 22.3 m/sample (1Hz)

Average Sensor Height From Ground - 33.1 m

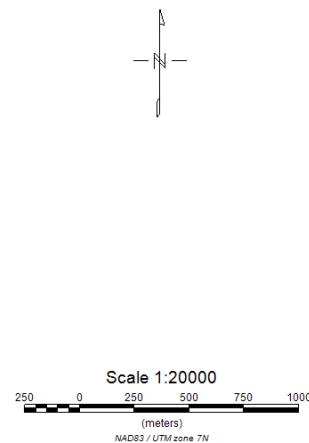
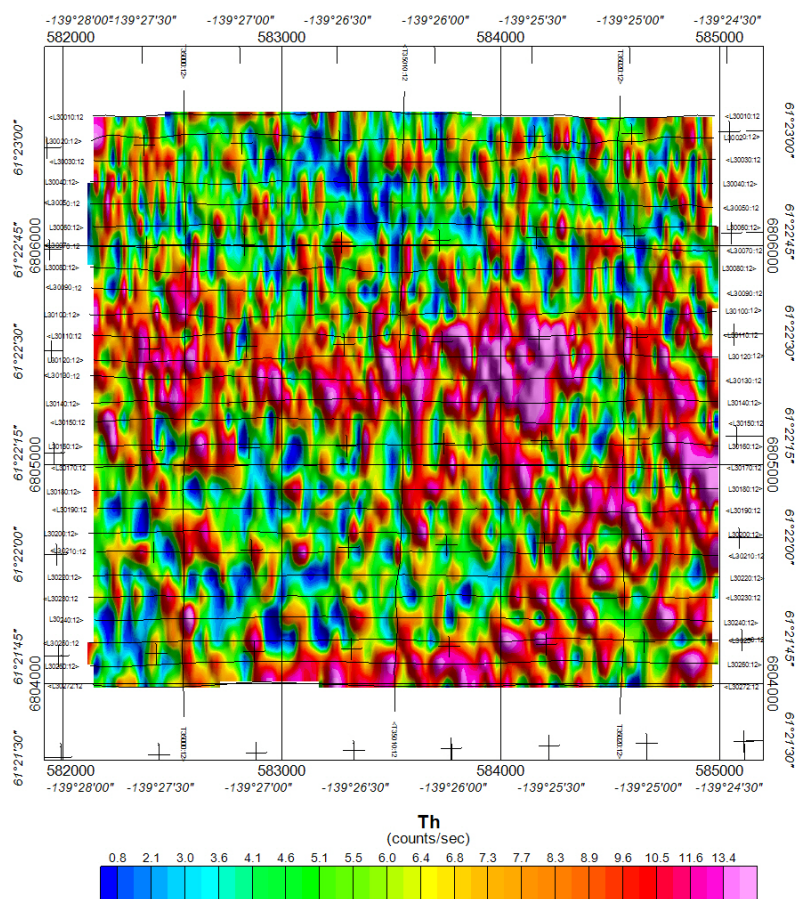
STRATEGIC METALS LTD.

**Helicopter Borne Magnetic and Spectrometric Survey
Corky Block
Potassium (K) Map**

Dates Flown: August 8, 2010 - August 17, 2010

New-Sense Geophysics. Ltd.

Corky Block Image of Thorium Map



Grid Info:
 Gridding Method - Bi-directional
 Grid Cell Size - 25 m
 Spline Down Line - Akima
 Spline Across Line - Akima
 Trend Angle (deg. CCW from X axis) - 90

Line Spacing/Direction:
 Traverse Lines - 100 m, E-W
 Control Lines - 1000 m, N-S

Average Sample Interval - 22.3 m/sample (1Hz)

Average Sensor Height From Ground - 33.1 m

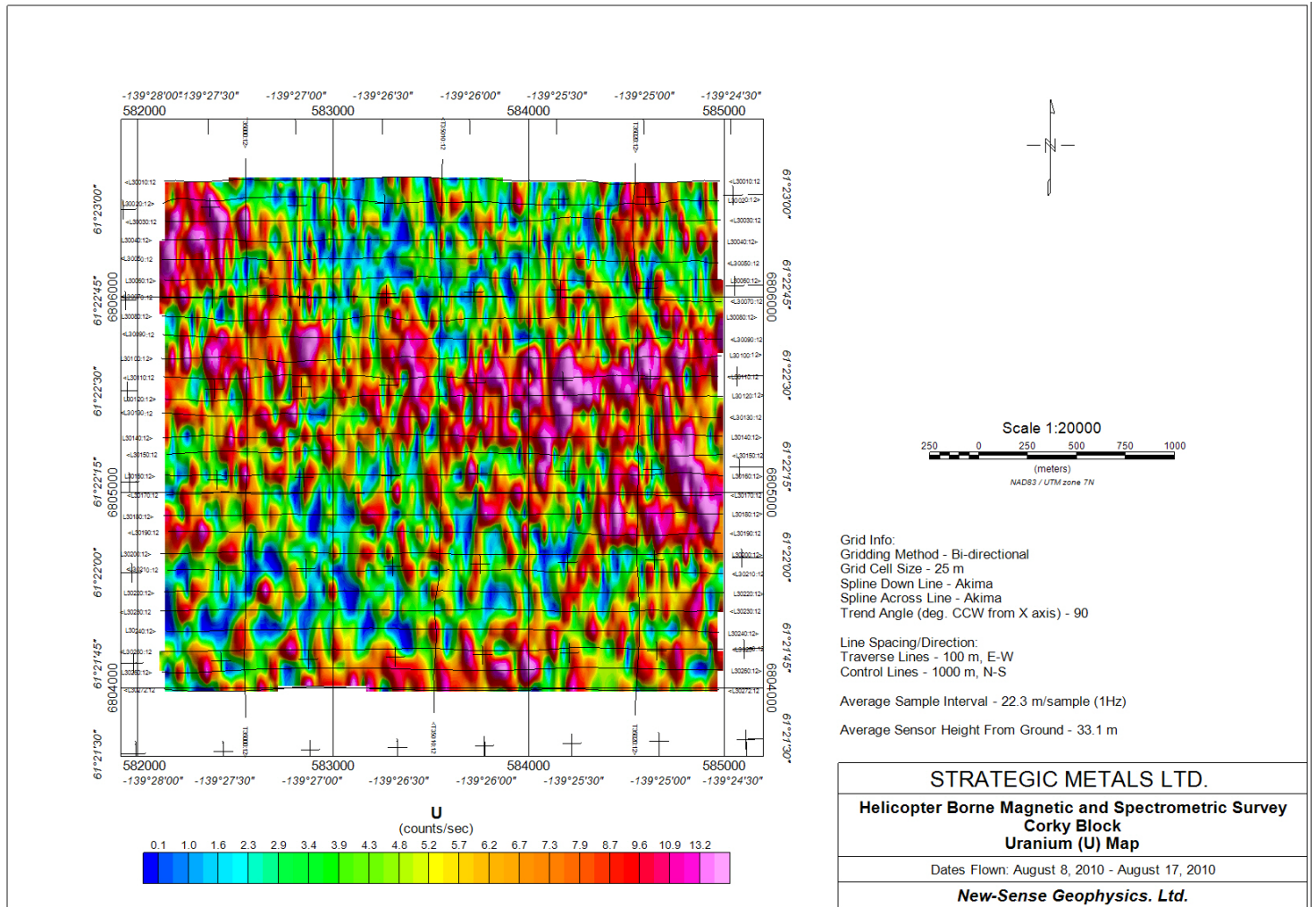
STRATEGIC METALS LTD.

**Helicopter Borne Magnetic and Spectrometric Survey
 Corky Block
 Thorium (Th) Map**

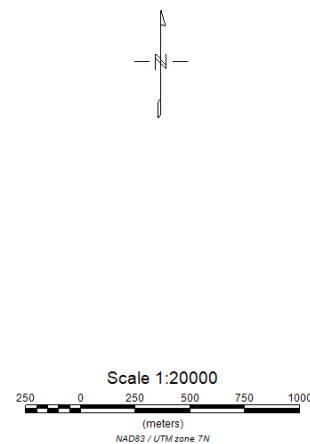
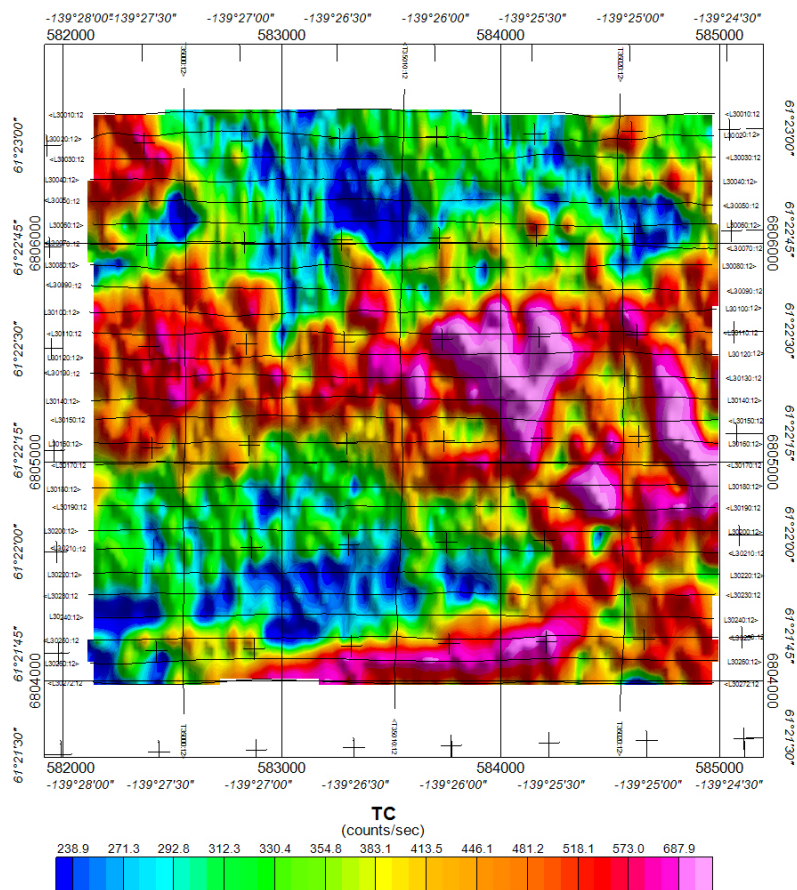
Dates Flown: August 8, 2010 - August 17, 2010

New-Sense Geophysics. Ltd.

Corky Block Image of Uranium Map



Corky Block Image of Total Count Map



Grid Info:
 Gridding Method - Bi-directional
 Grid Cell Size - 25 m
 Spline Down Line - Akima
 Spline Across Line - Akima
 Trend Angle (deg. CCW from X axis) - 90

Line Spacing/Direction:
 Traverse Lines - 100 m, E-W
 Control Lines - 1000 m, N-S

Average Sample Interval - 22.3 m/sample (1Hz)

Average Sensor Height From Ground - 33.1 m

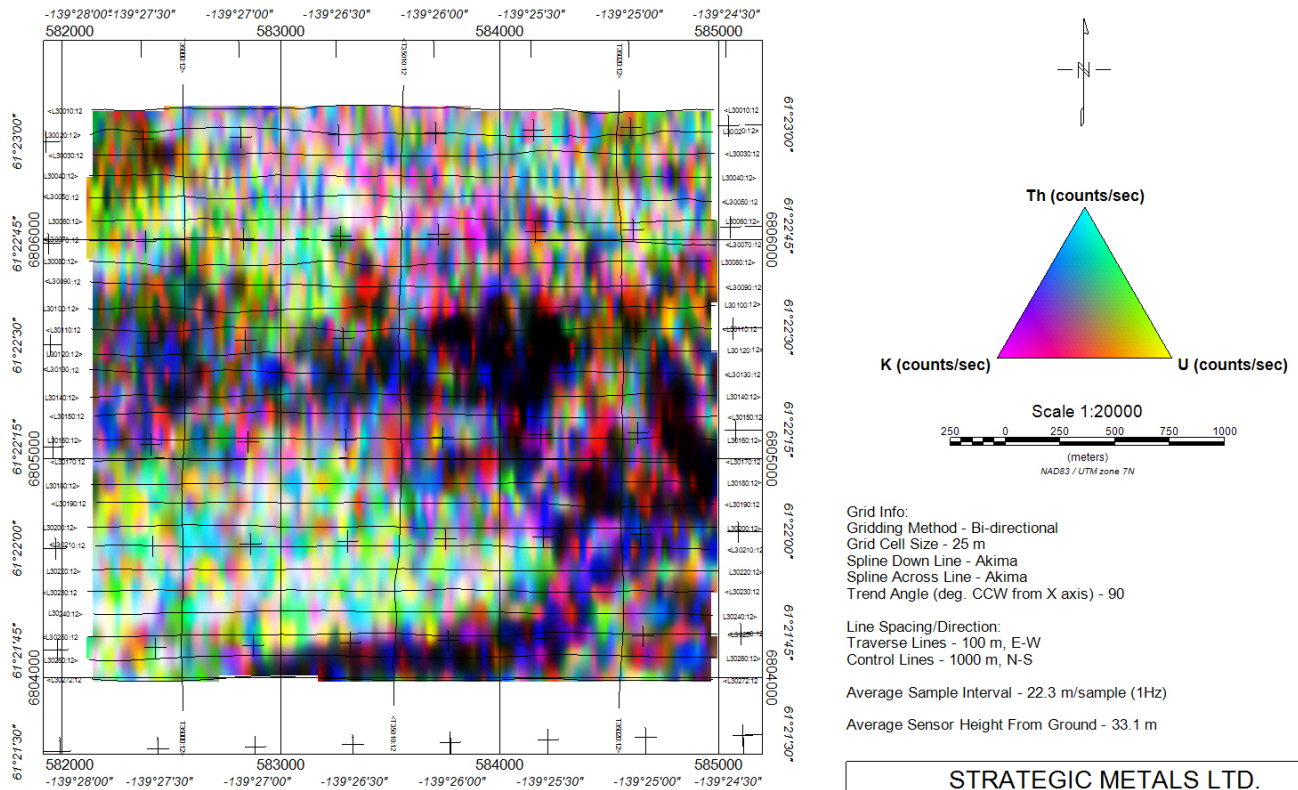
STRATEGIC METALS LTD.

**Helicopter Borne Magnetic and Spectrometric Survey
 Corky Block
 Total Count (TC) Map**

Dates Flown: August 8, 2010 - August 17, 2010

New-Sense Geophysics. Ltd.

Corky Block Image of Ternary Map



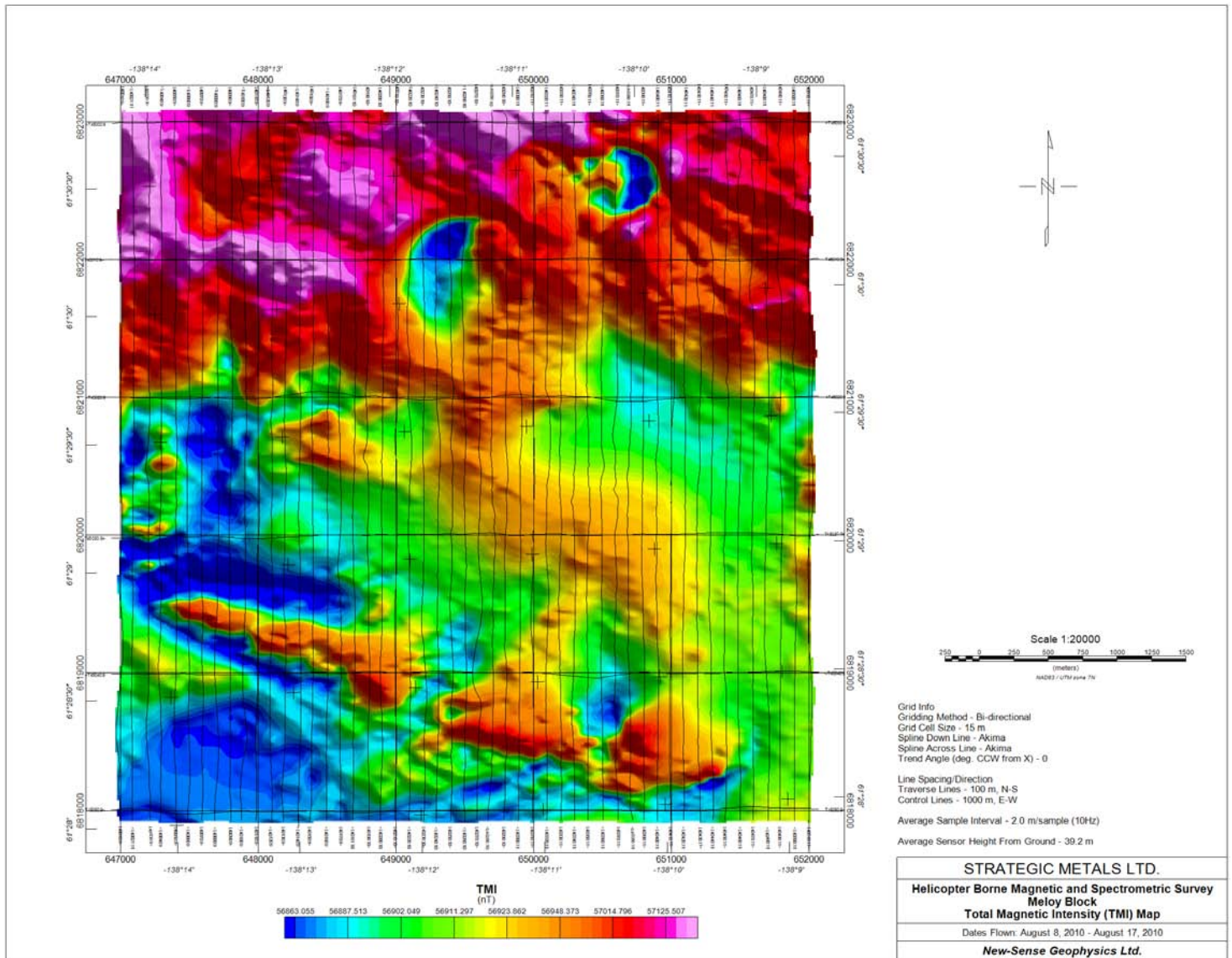
STRATEGIC METALS LTD.

**Helicopter Borne Magnetic and Spectrometric Survey
Corky Block
Ternary Map**

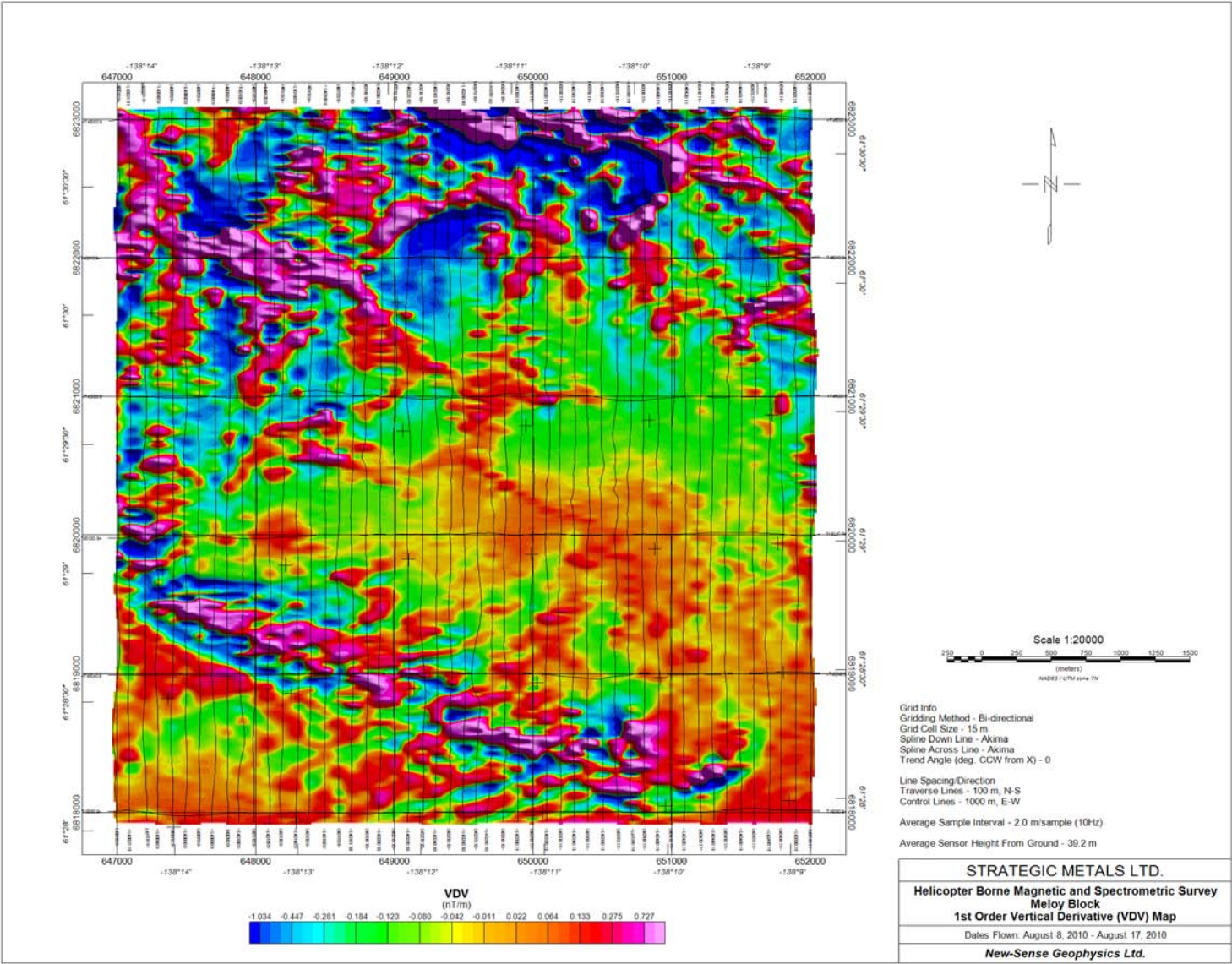
Dates Flown: August 8, 2010 - August 17, 2010

New-Sense Geophysics. Ltd.

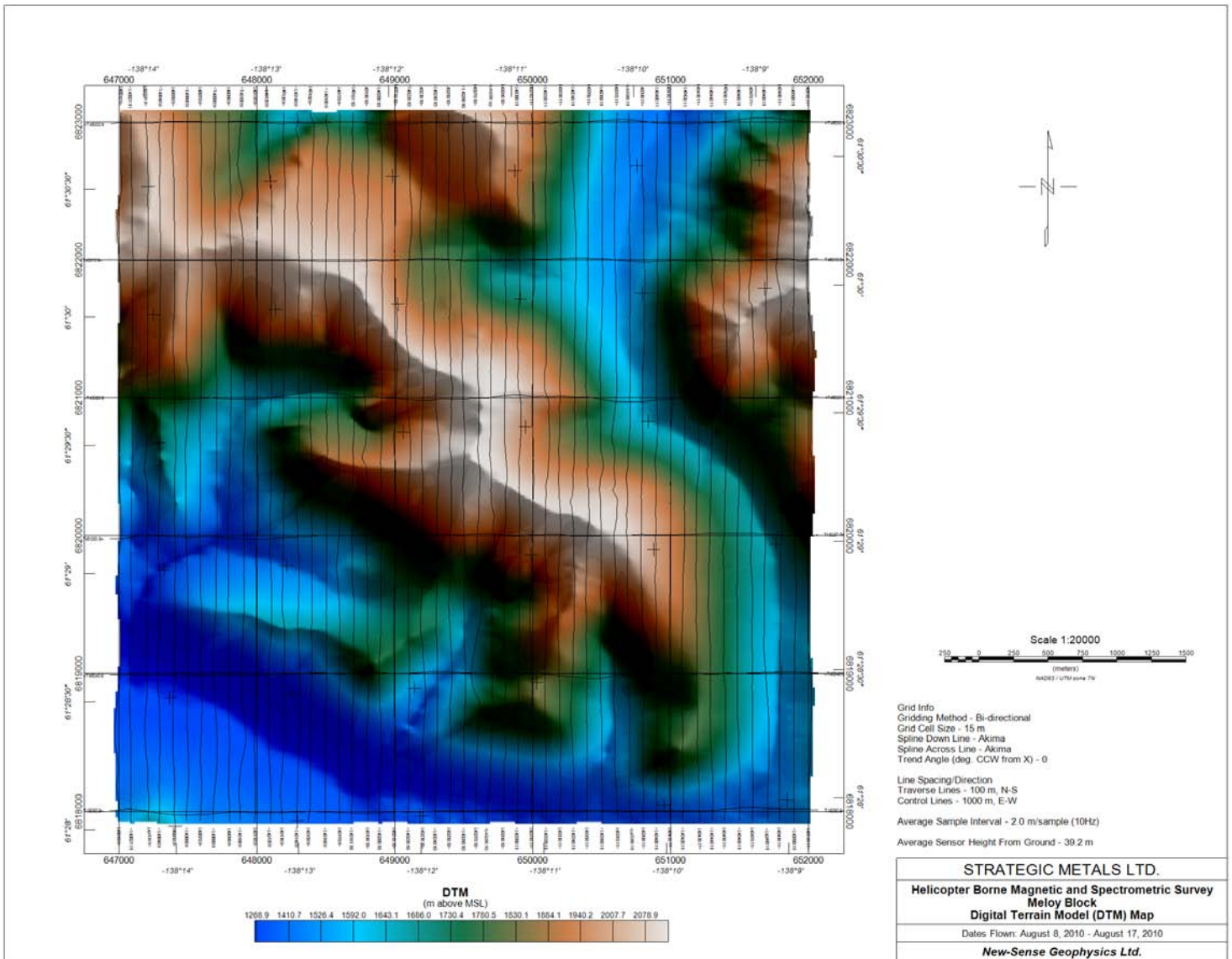
Meloy Block Image of TMI FINAL Map



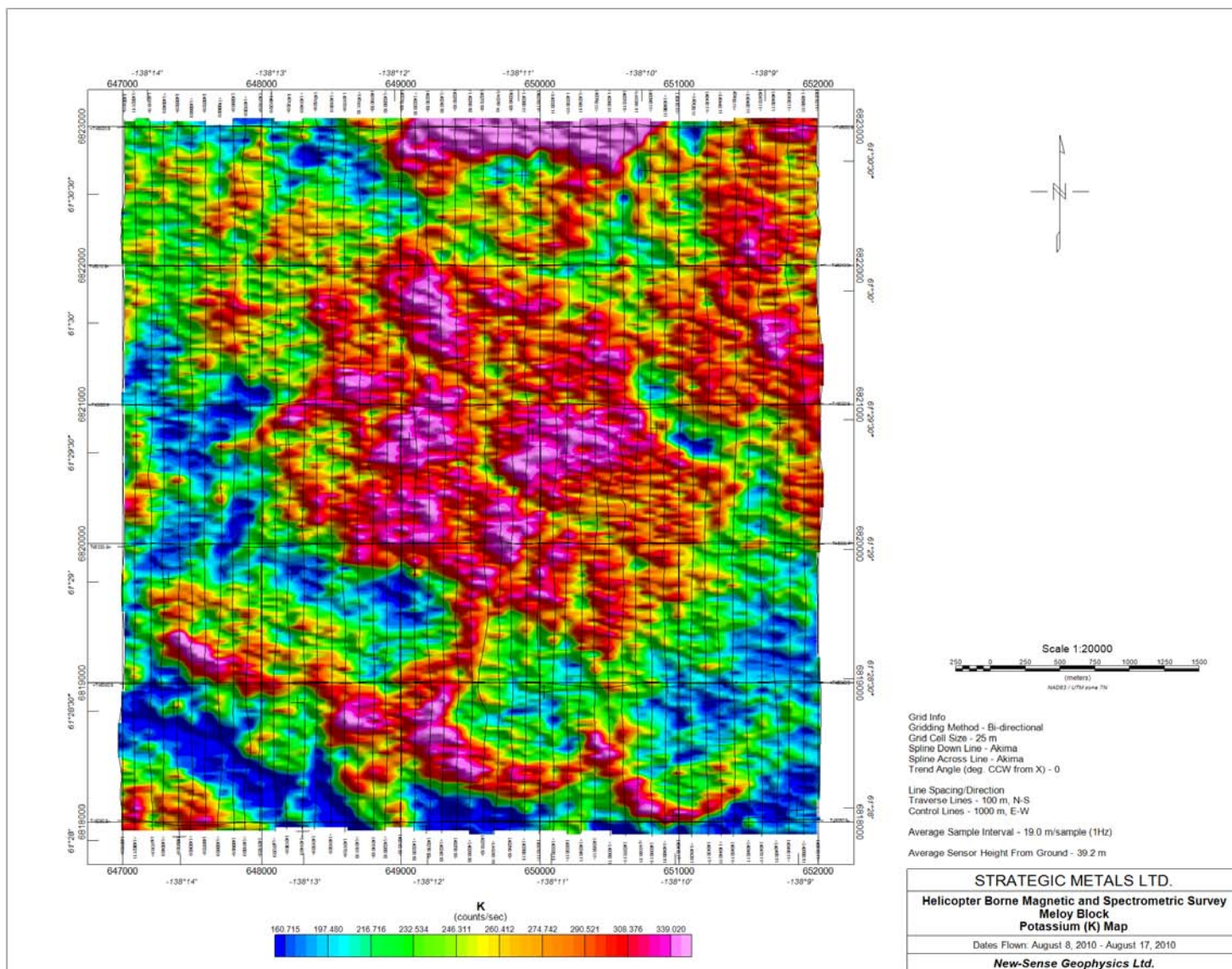
Meloy Block Image of VDV Map



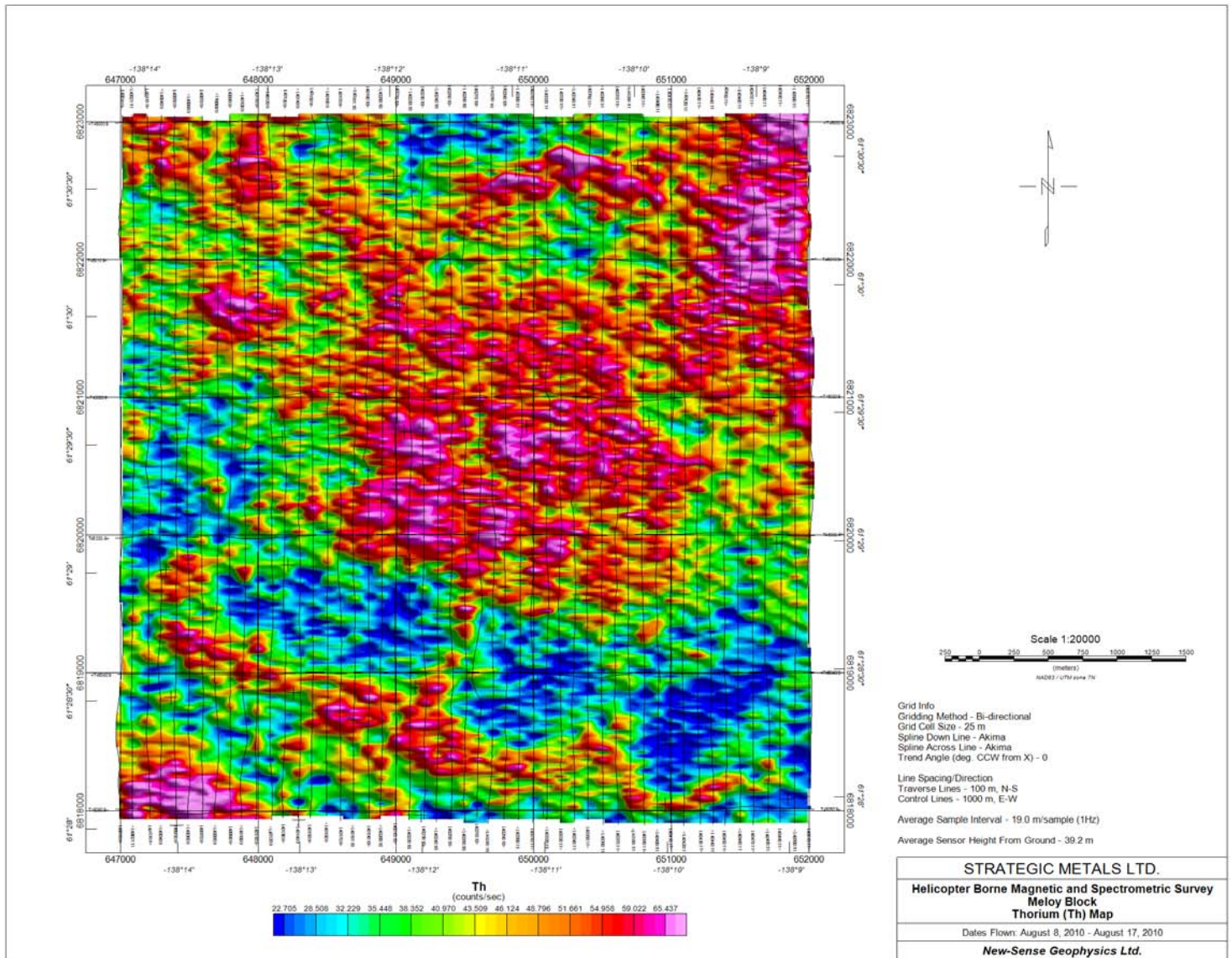
Meloy Block Image of DTM Map



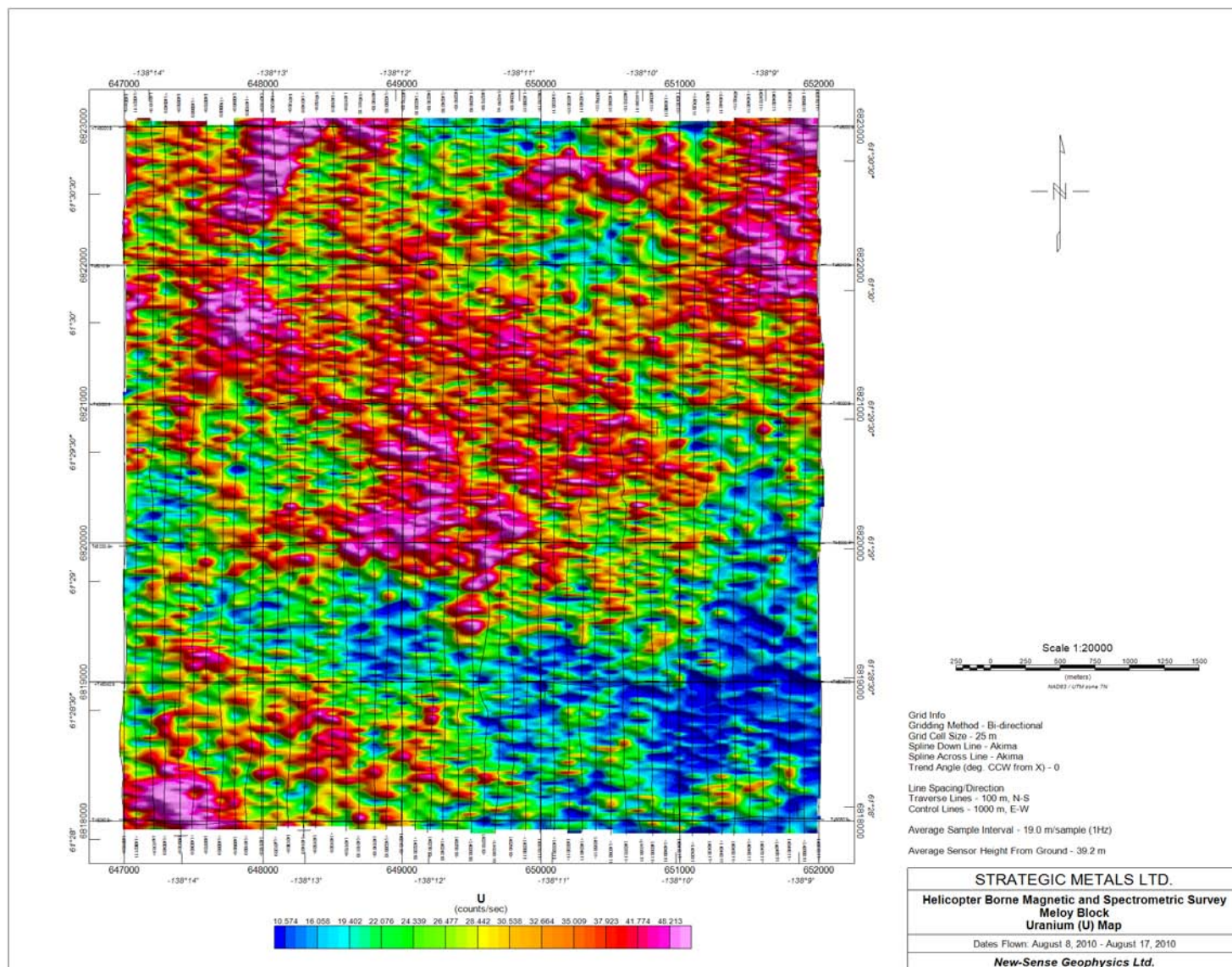
Meloy Block Image of Potassium Map



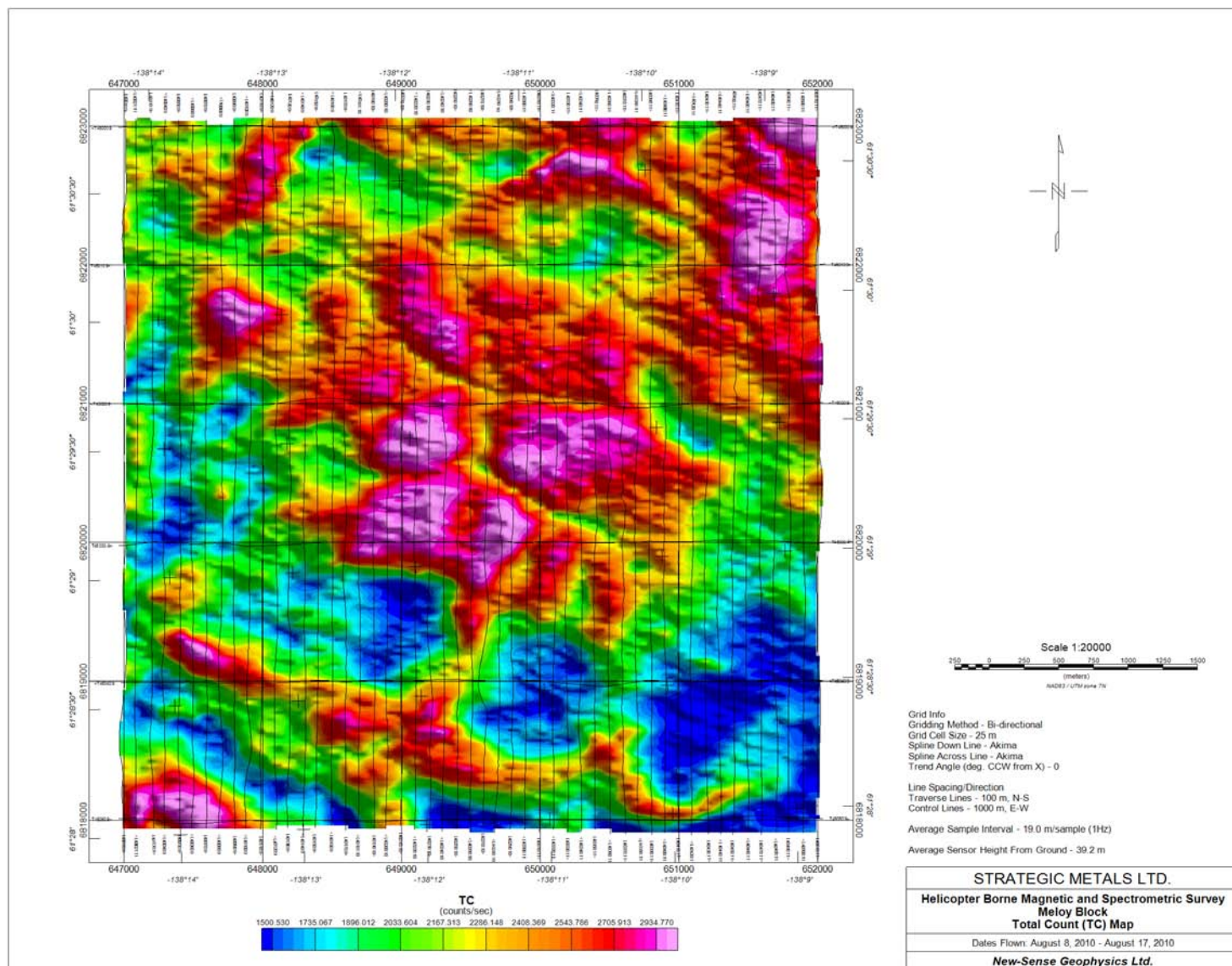
Meloy Block Image of Thorium Map



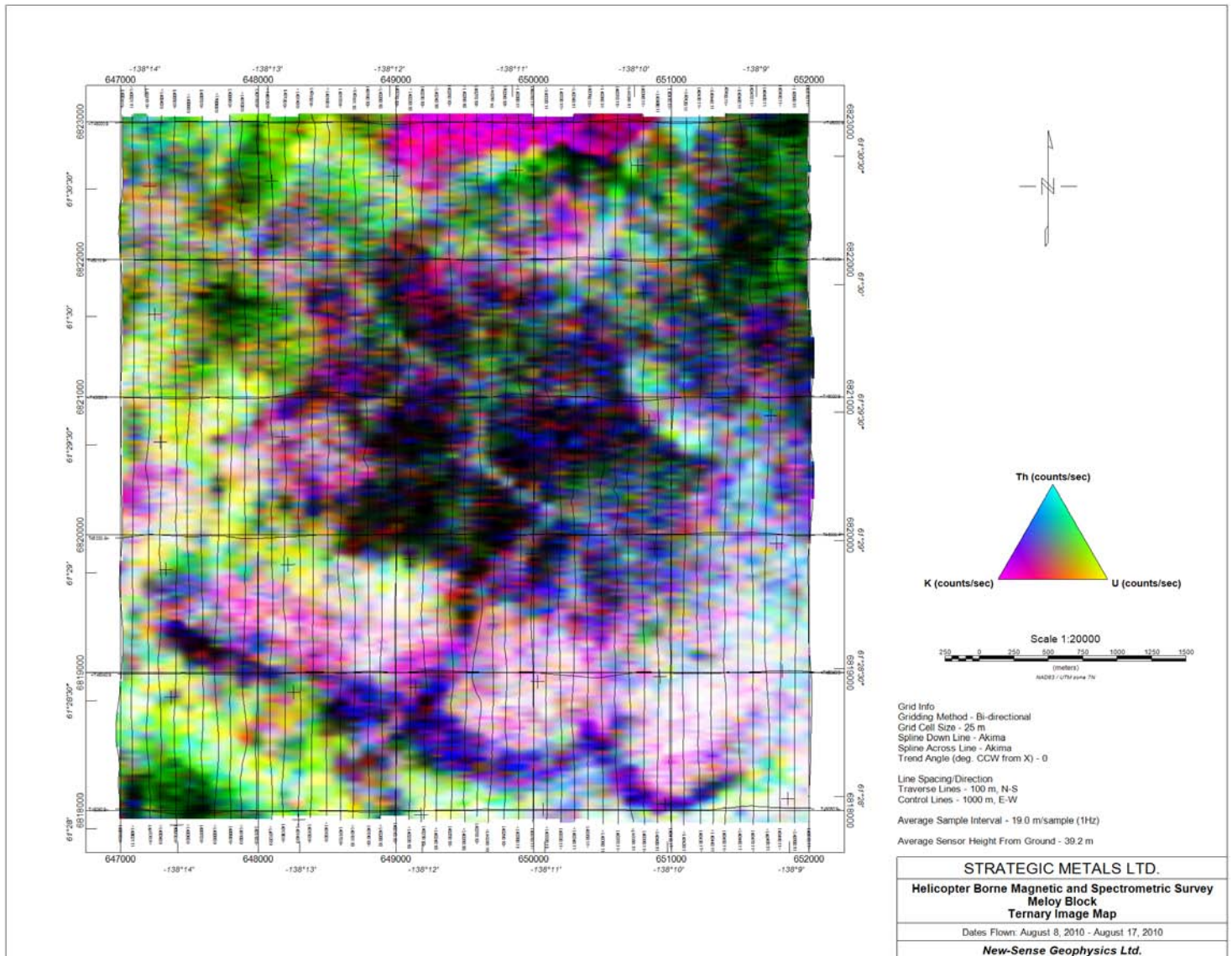
Meloy Block Image of Uranium Map



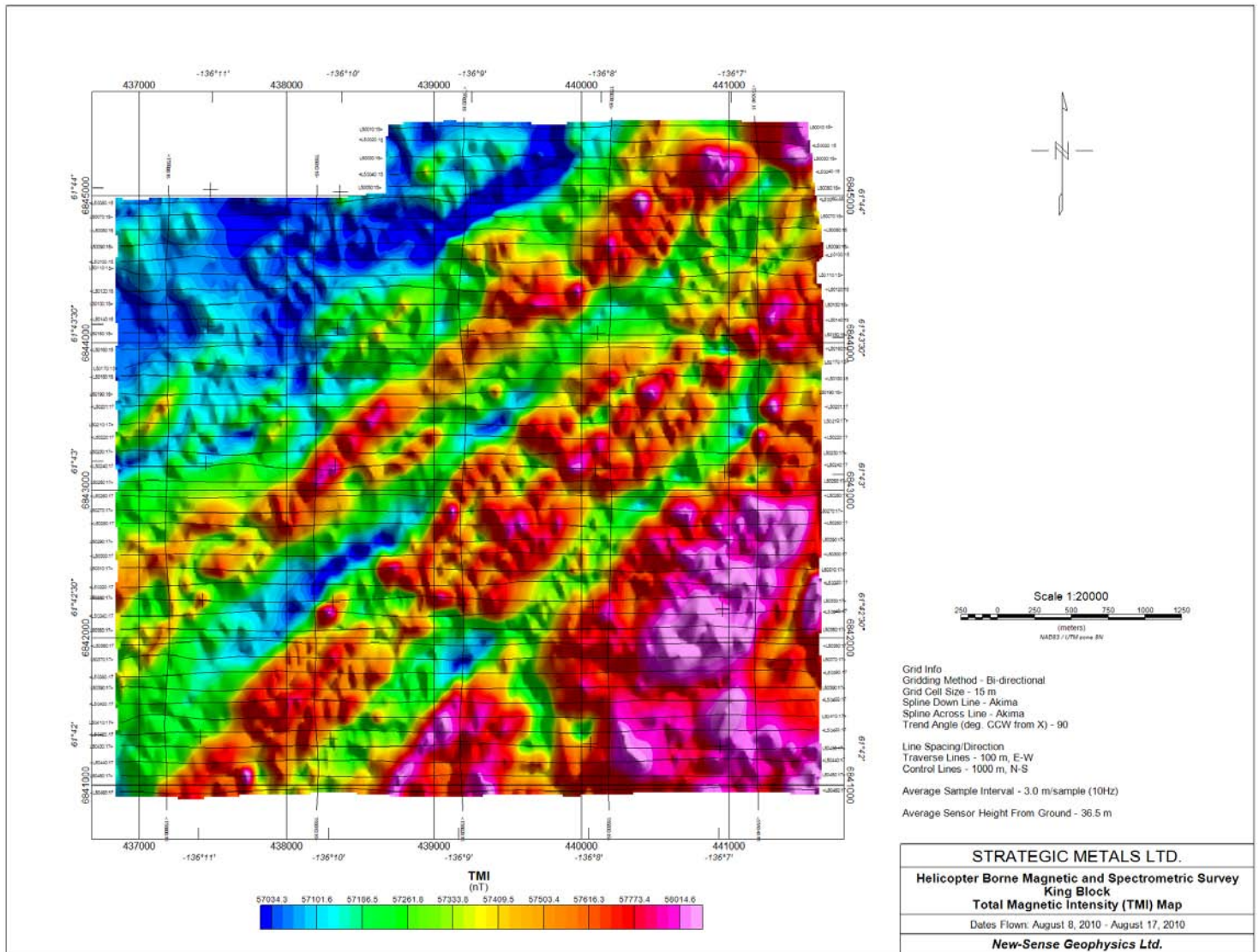
Meloy Block Image of Total Count Map



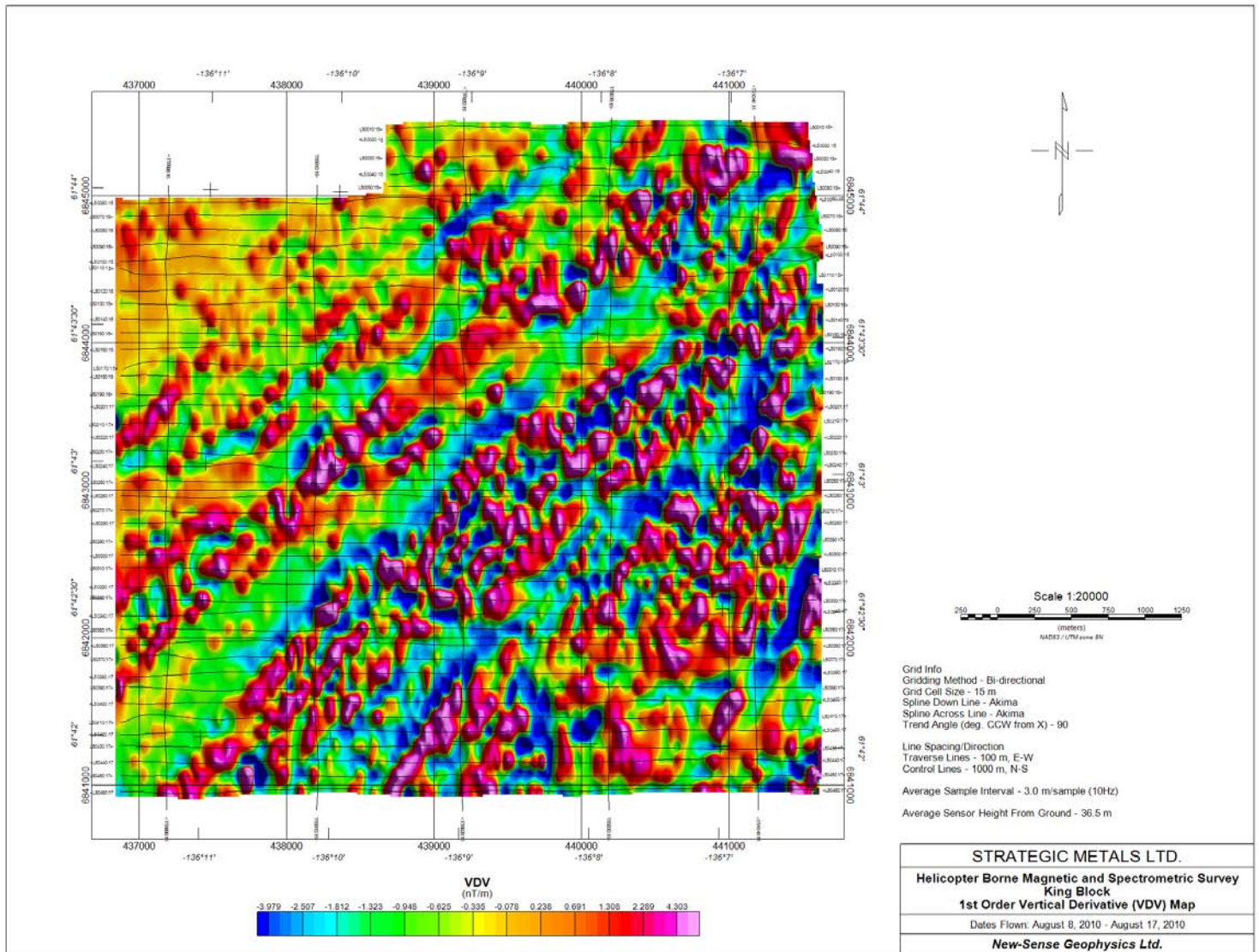
Meloy Block Image of Ternary Map



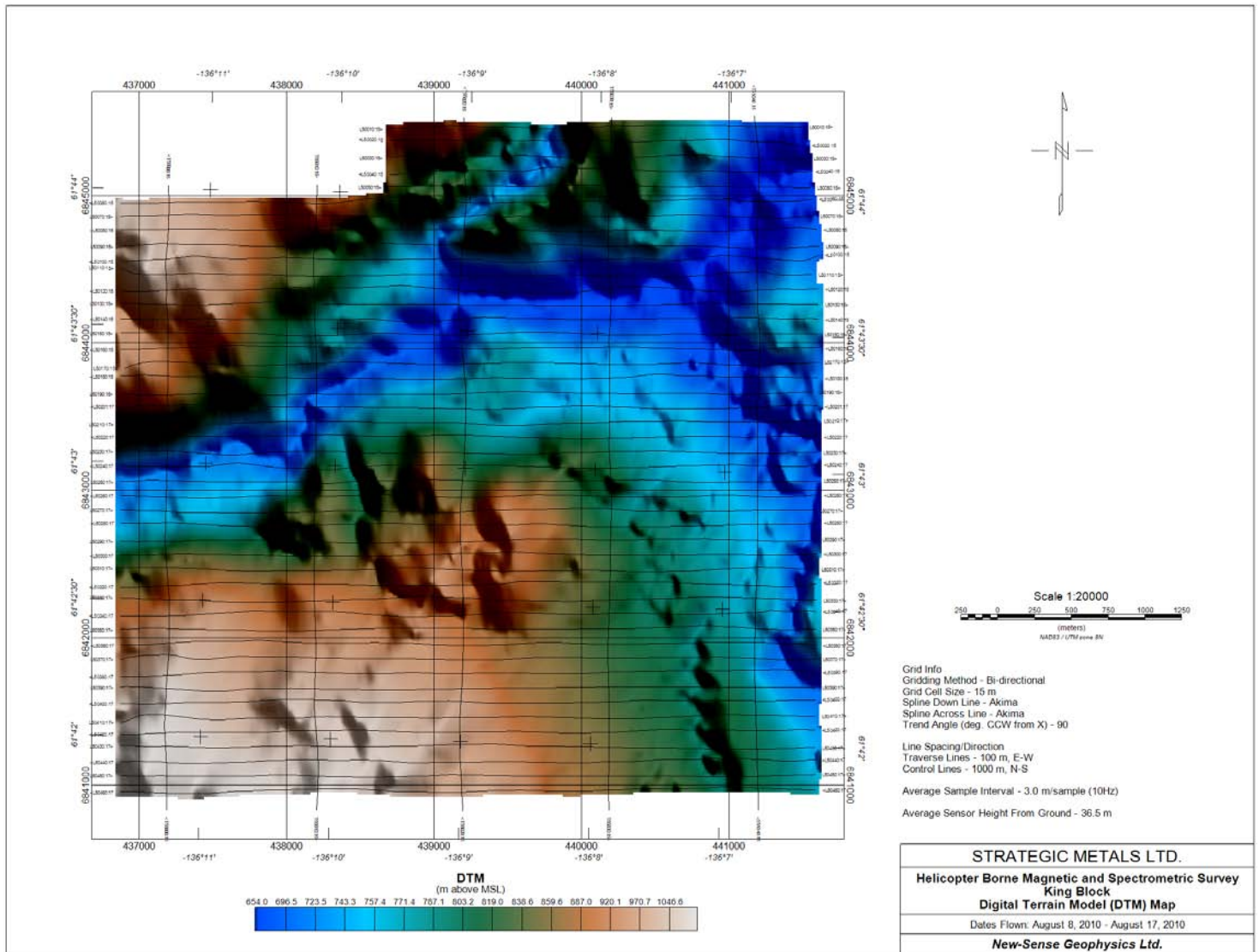
King Block Image of TMI FINAL Map



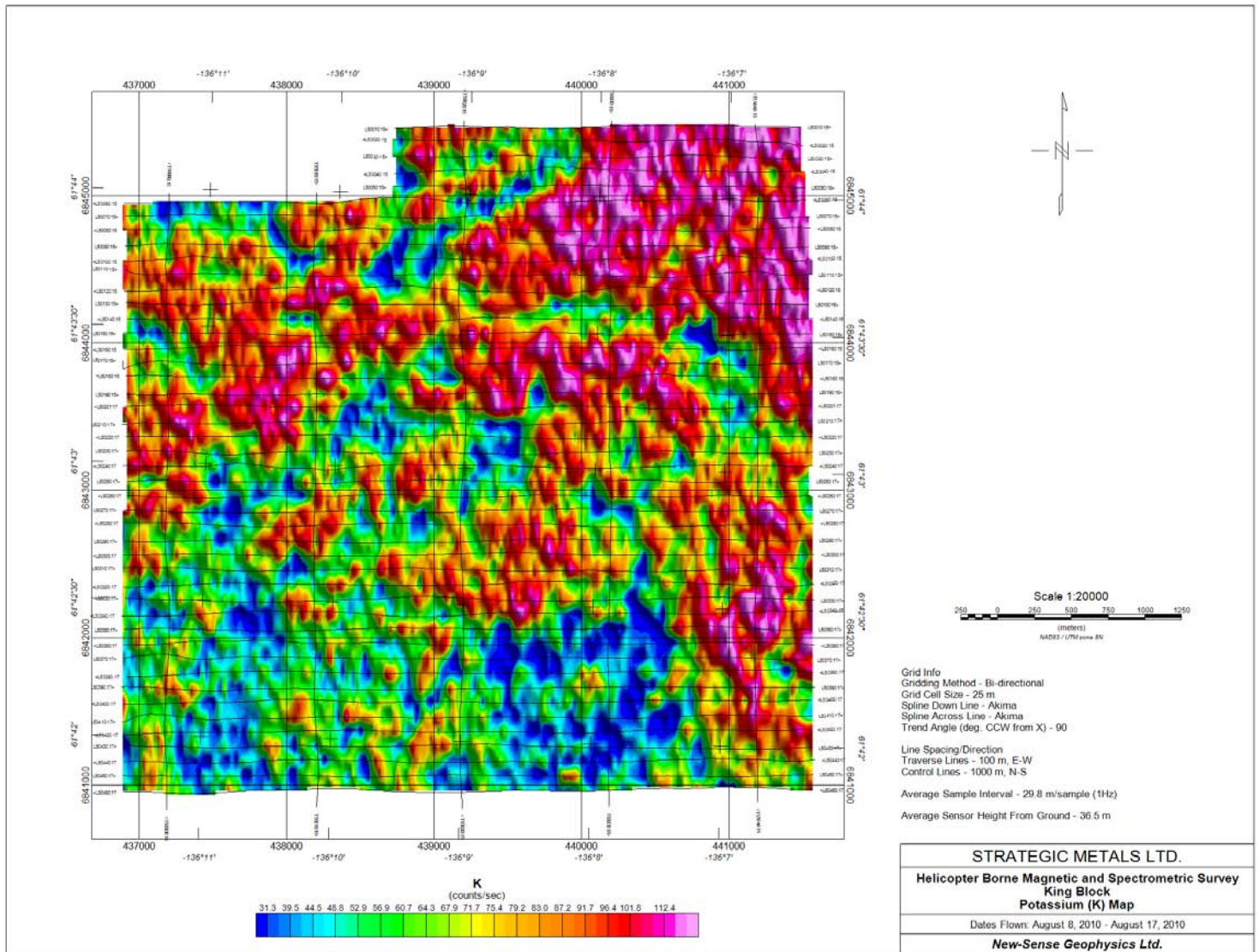
King Block Image of VDV Map



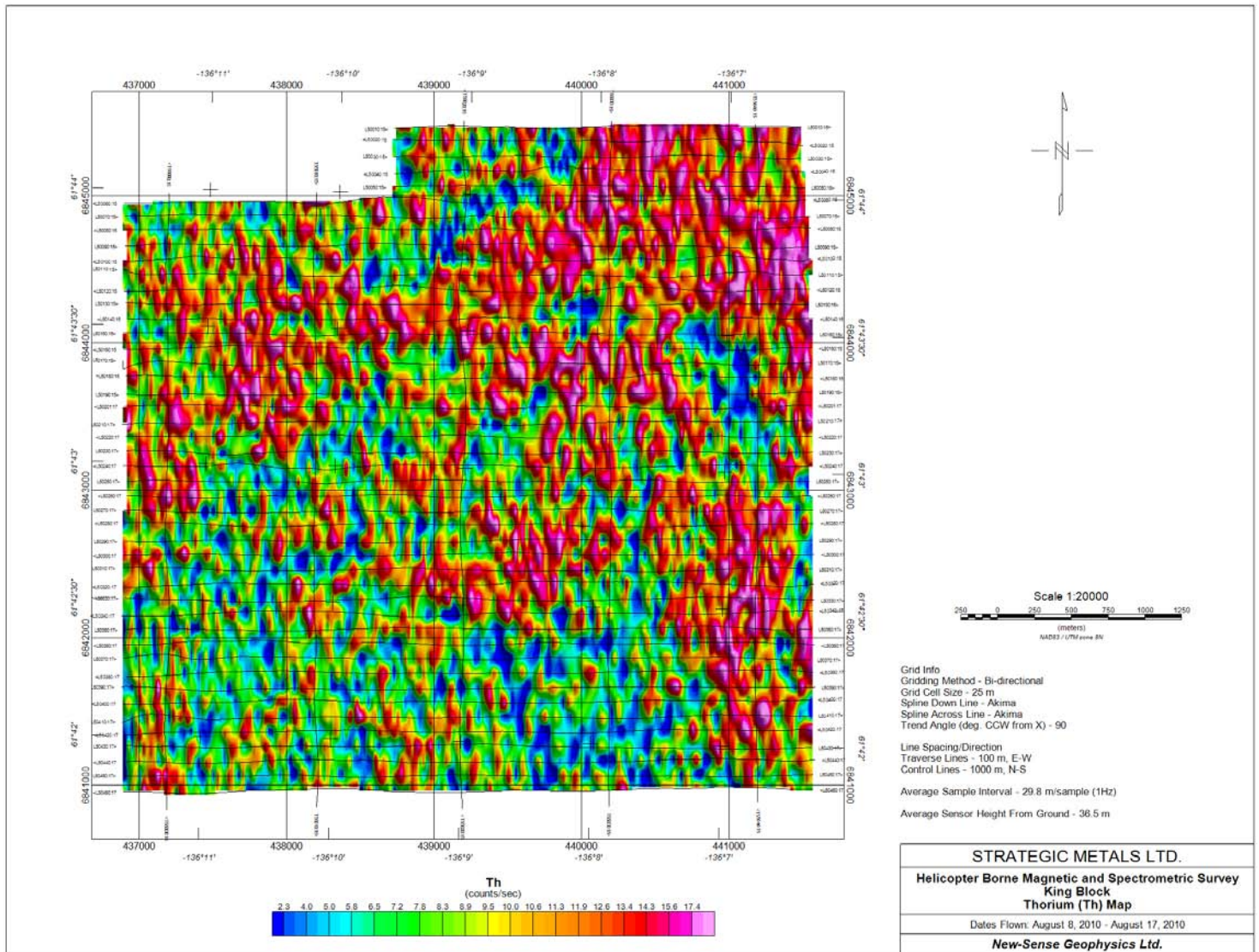
King Block Image of DTM Map



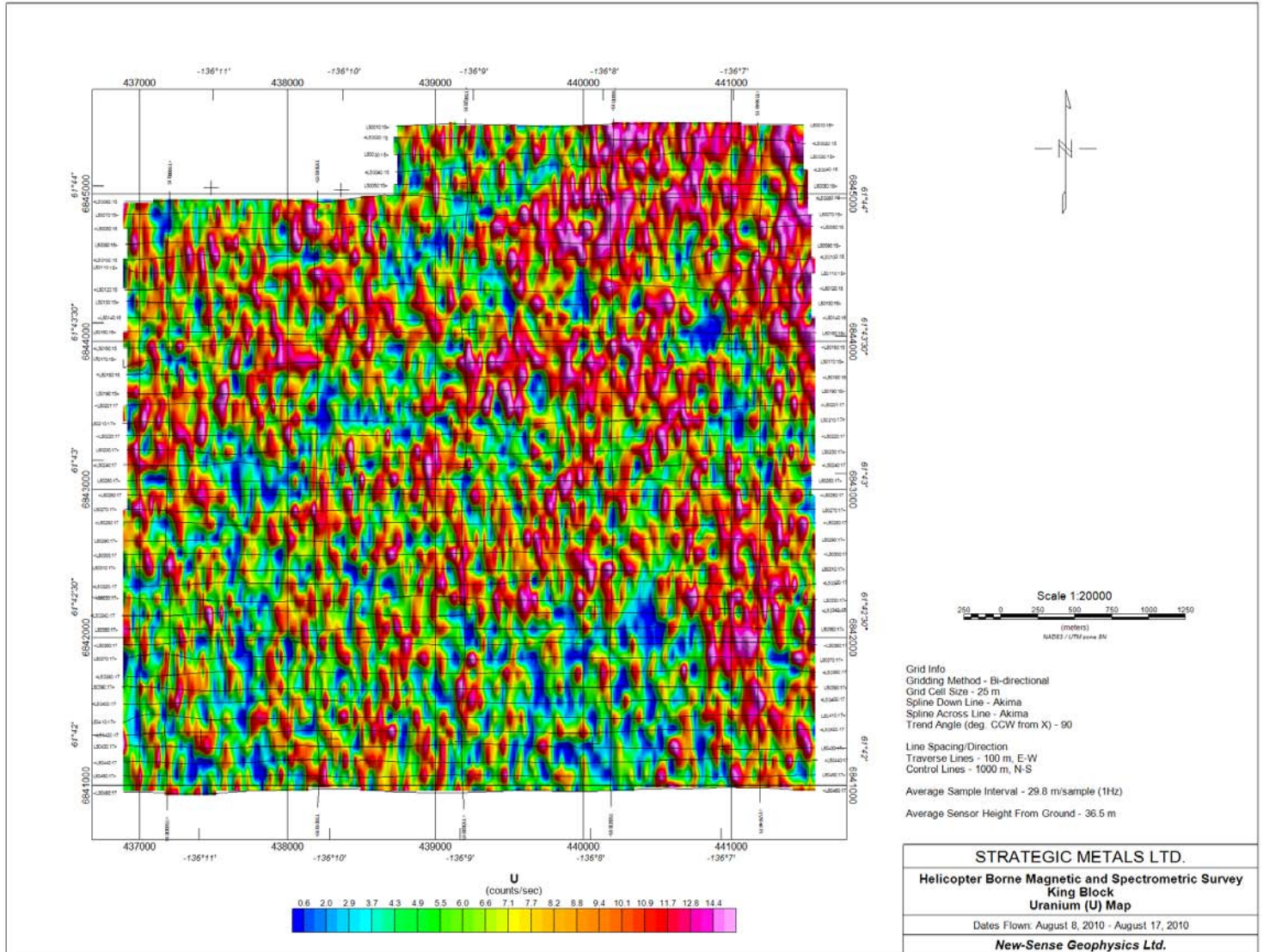
King Block Image of Potassium Map



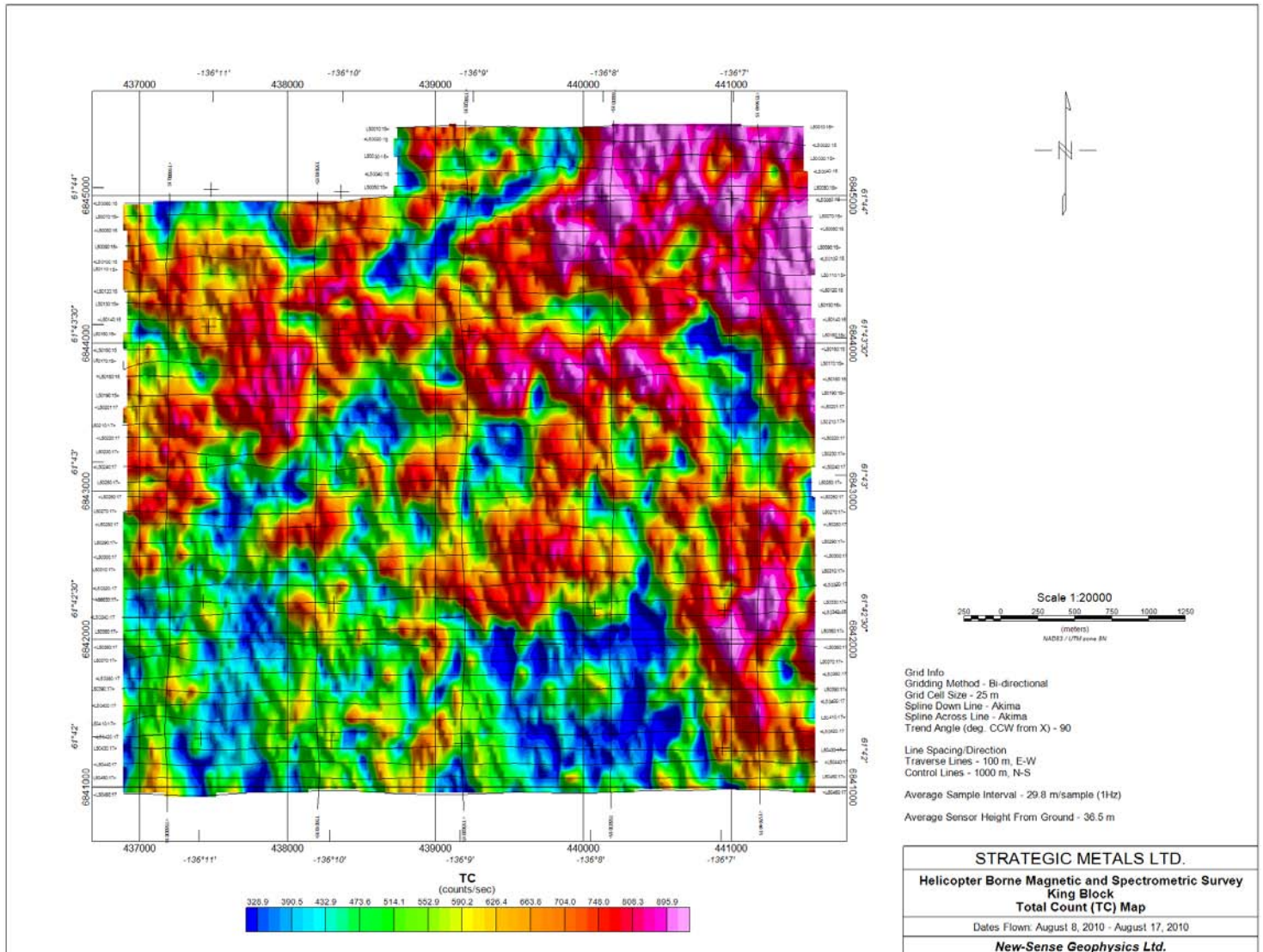
King Block Image of Thorium Map



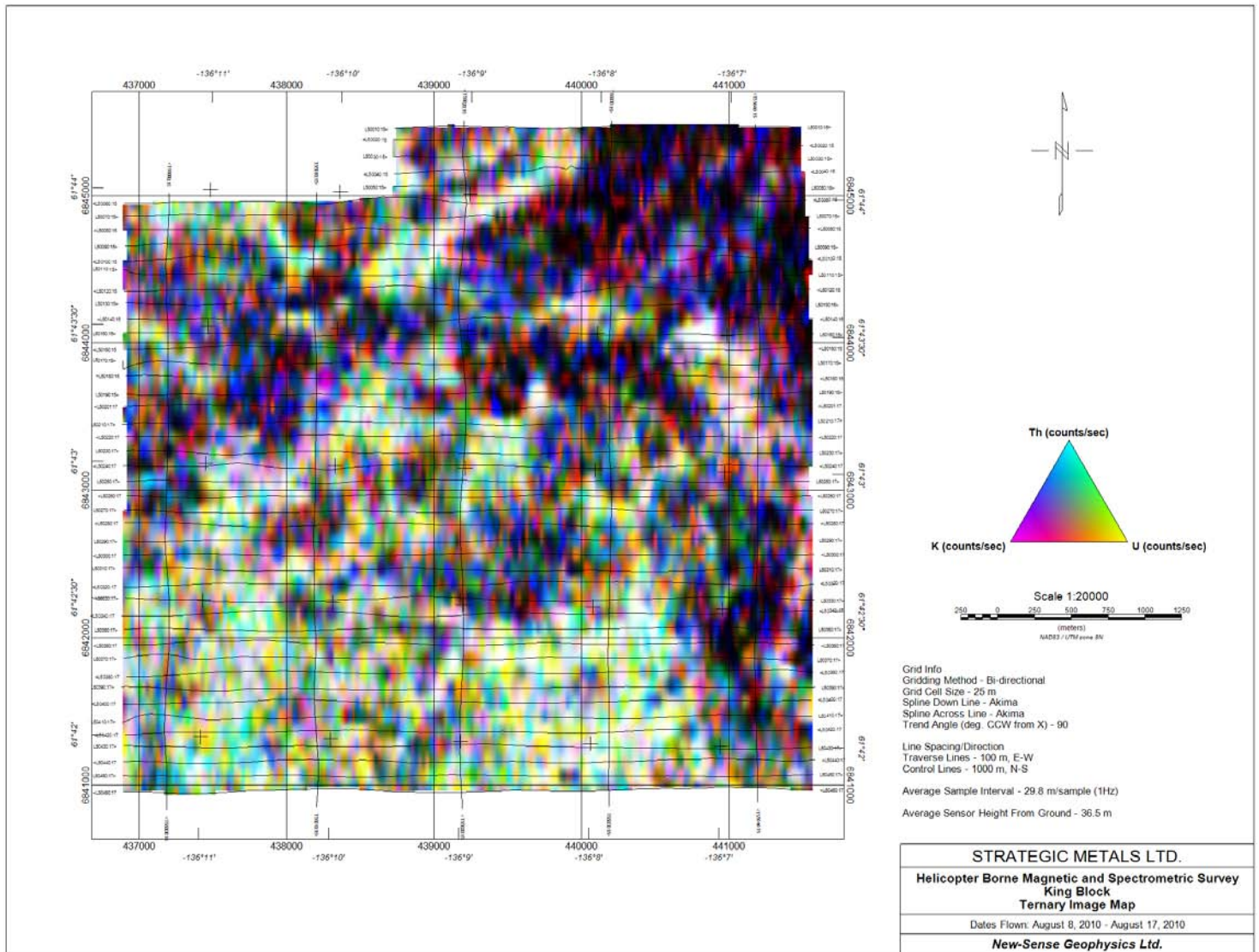
King Block Image of Uranium Map



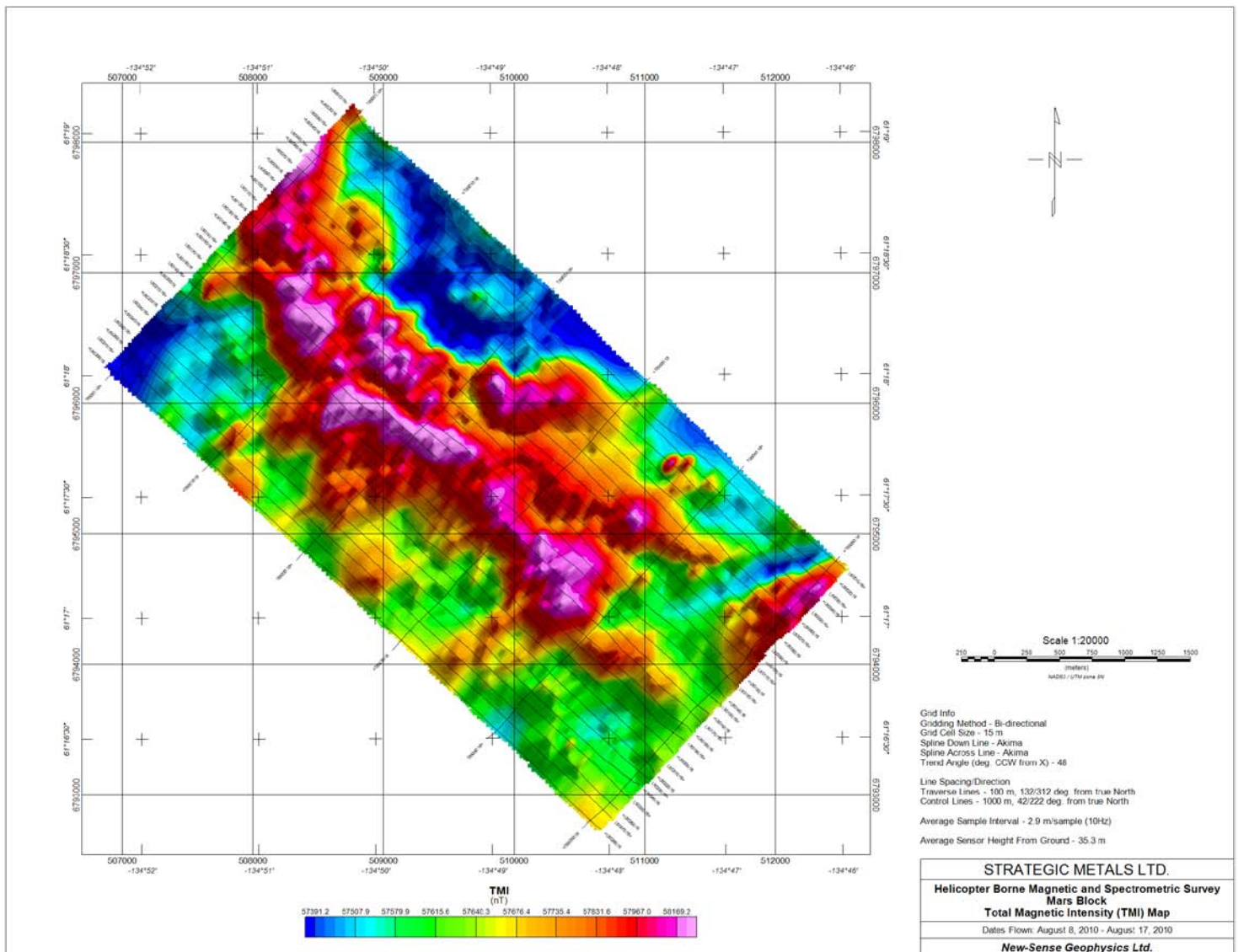
King Block Image of Total Count Map



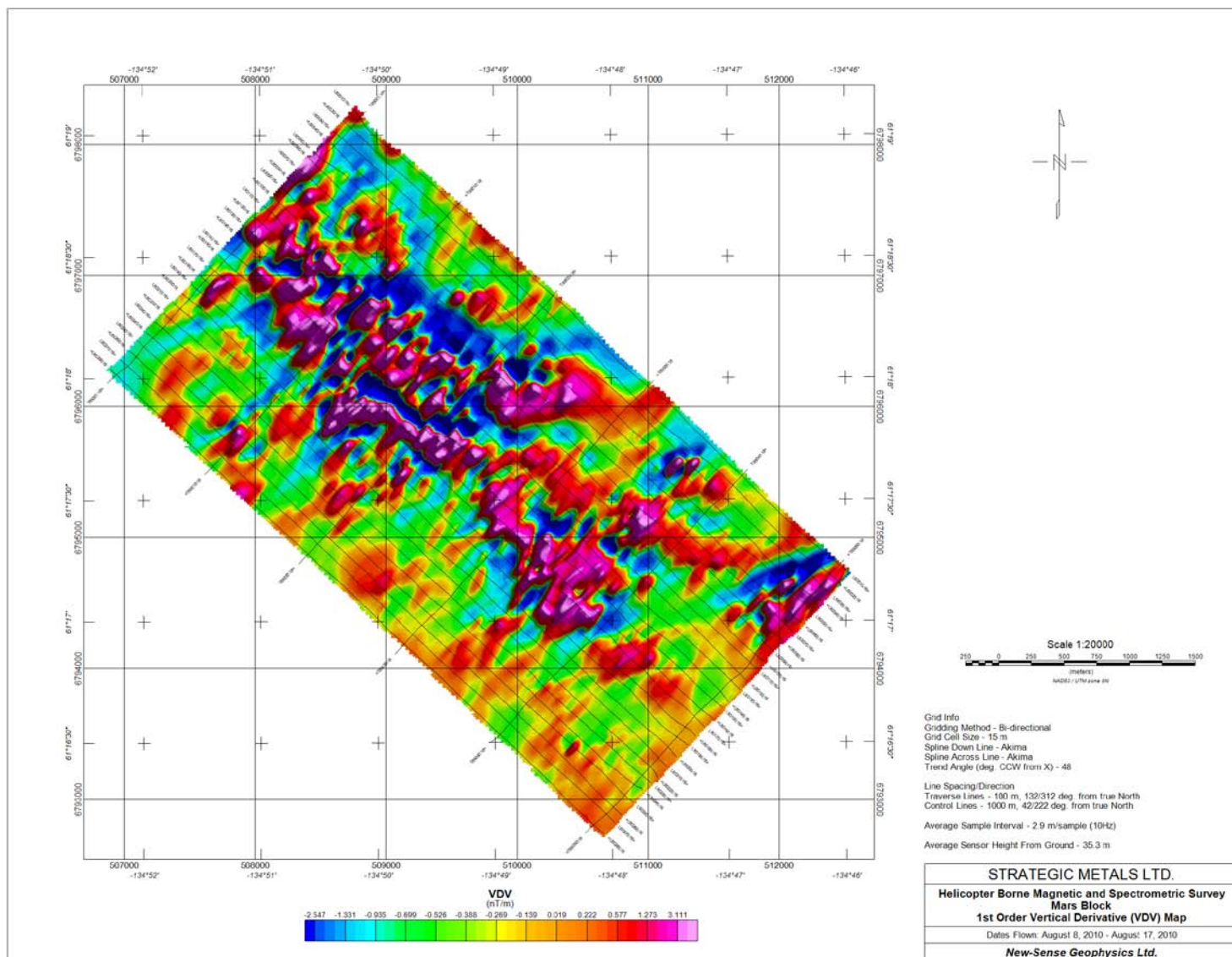
King Block Image of Ternary Map



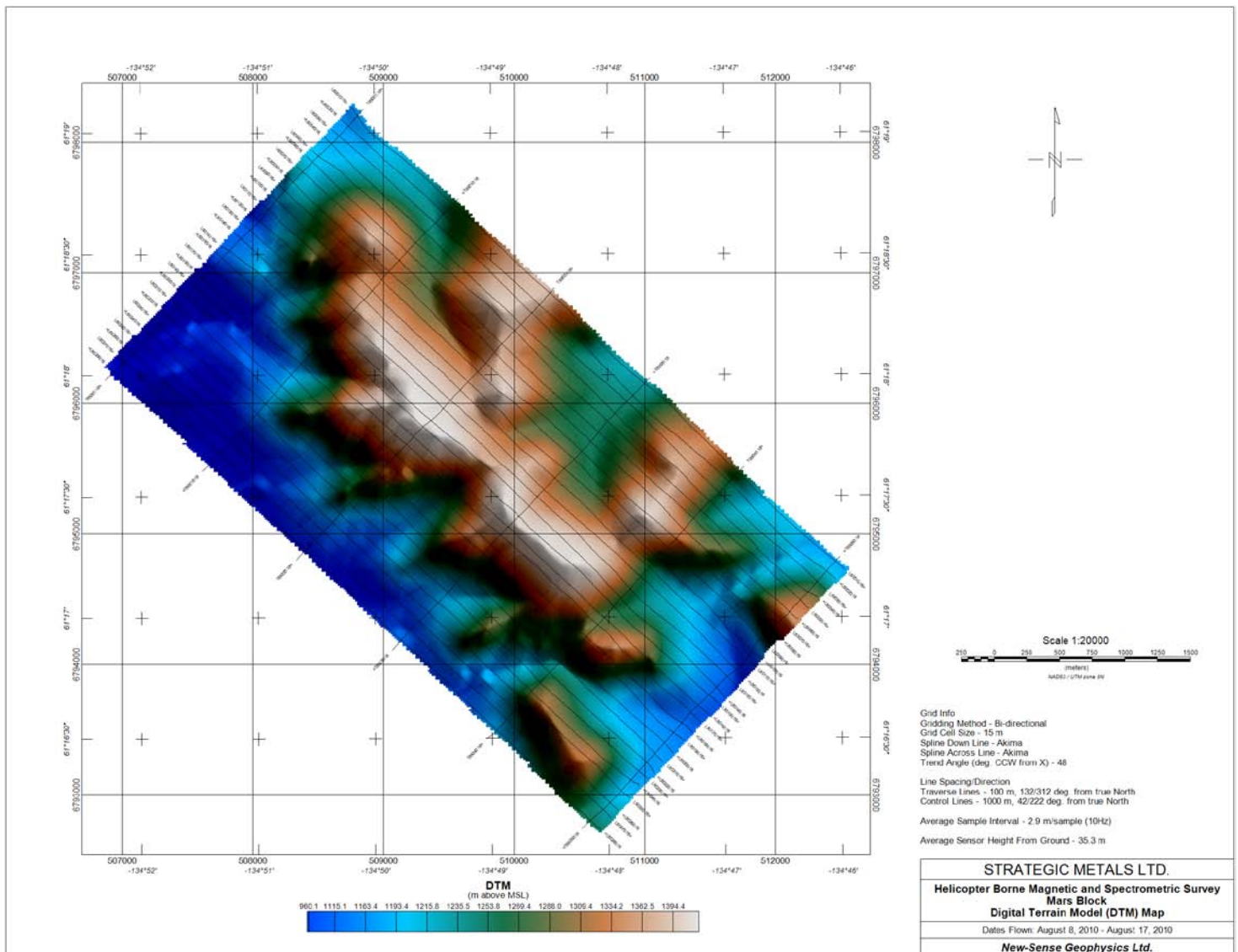
Mars Block Image of TMI FINAL Map



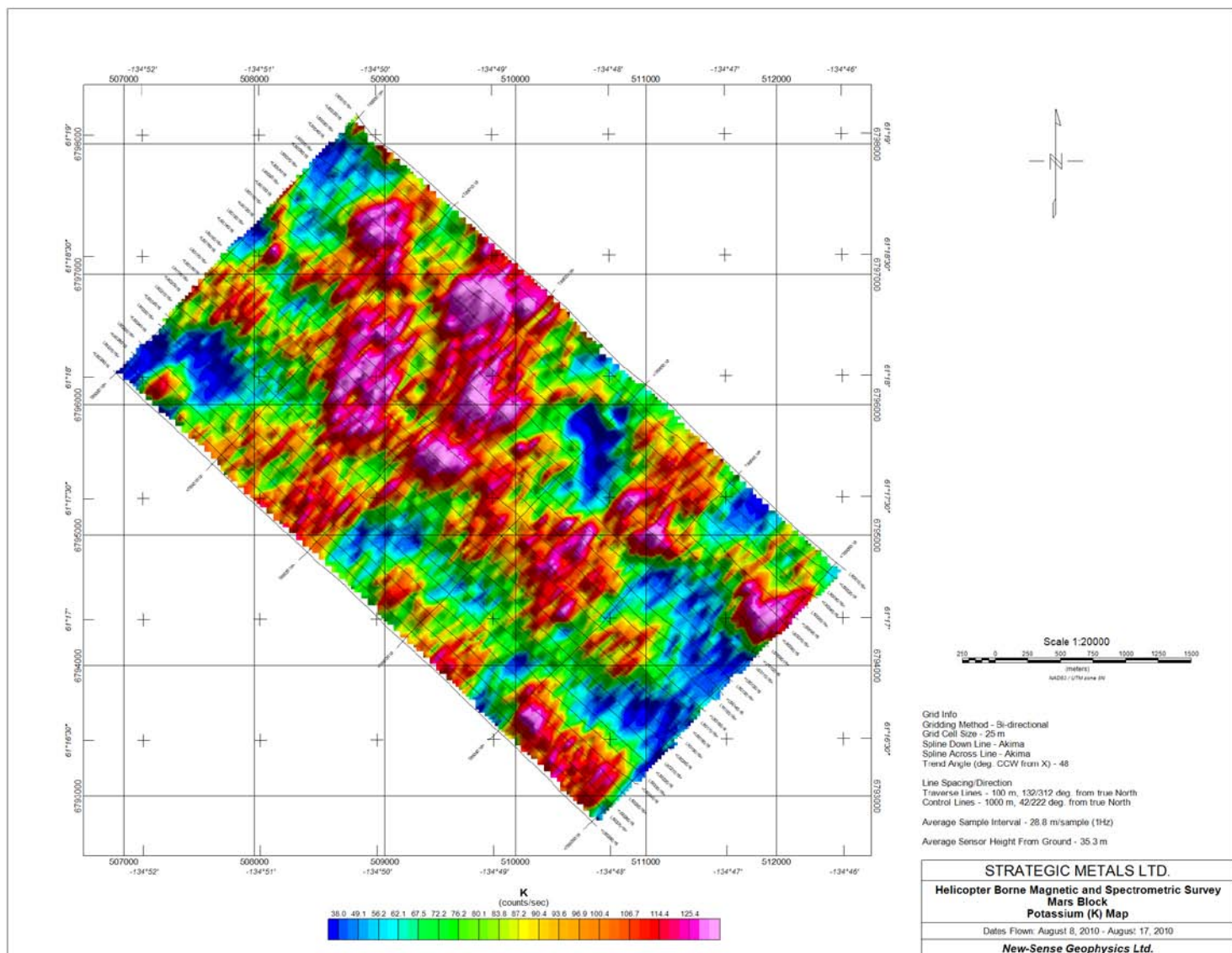
Mars Block Image of VDV Map



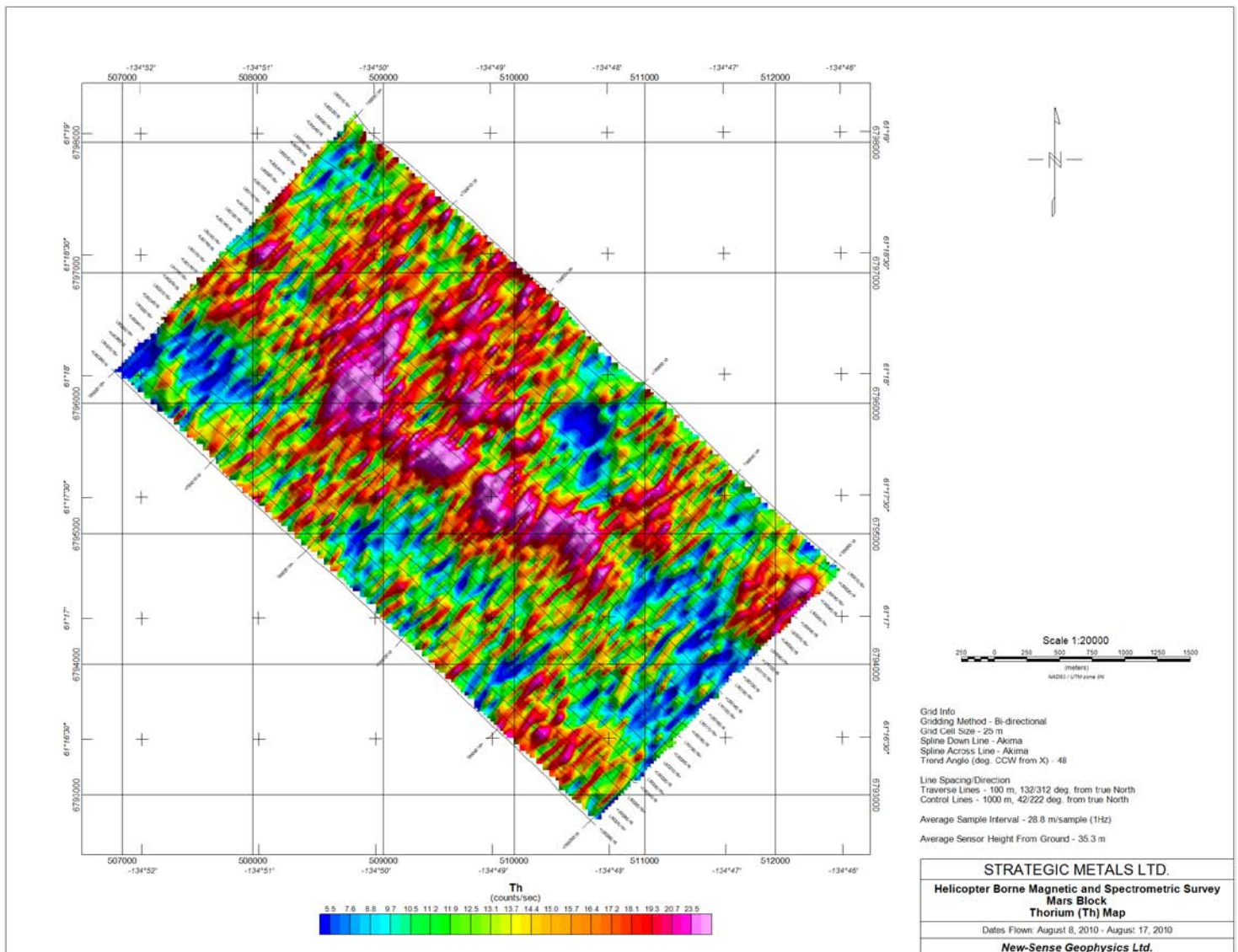
Mars Block Image of DTM Map



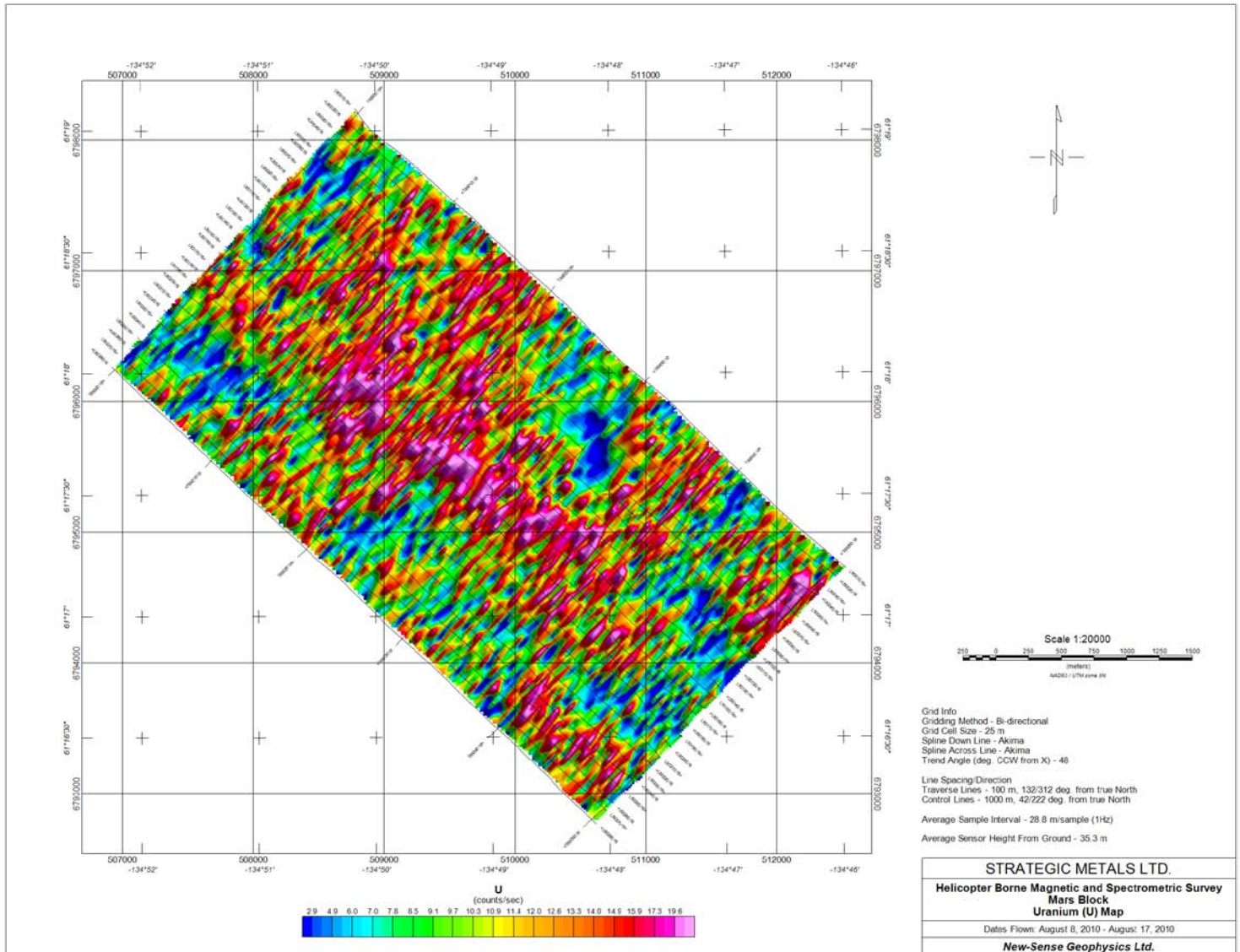
Mars Block Image of Potassium Map



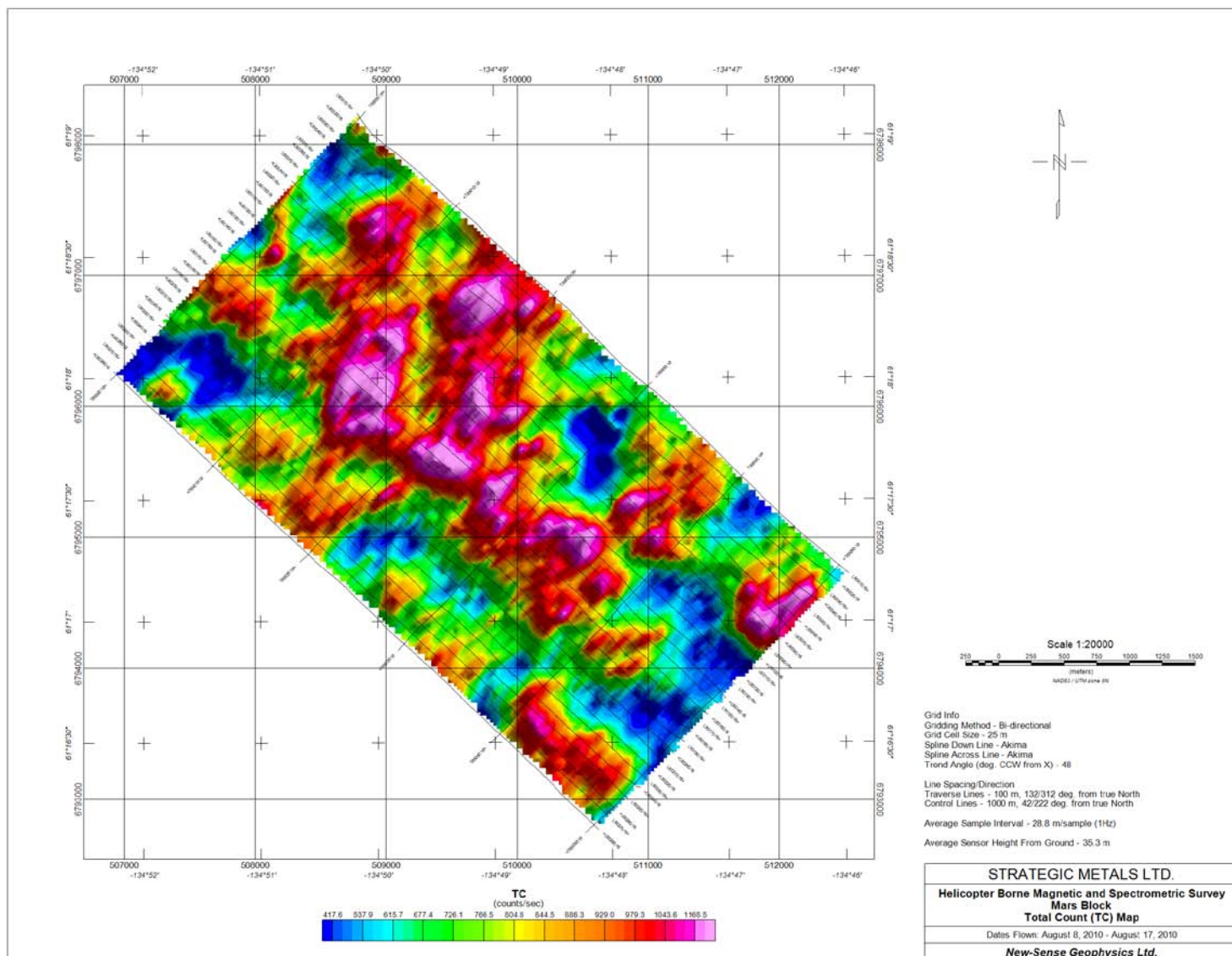
Mars Block Image of Thorium Map



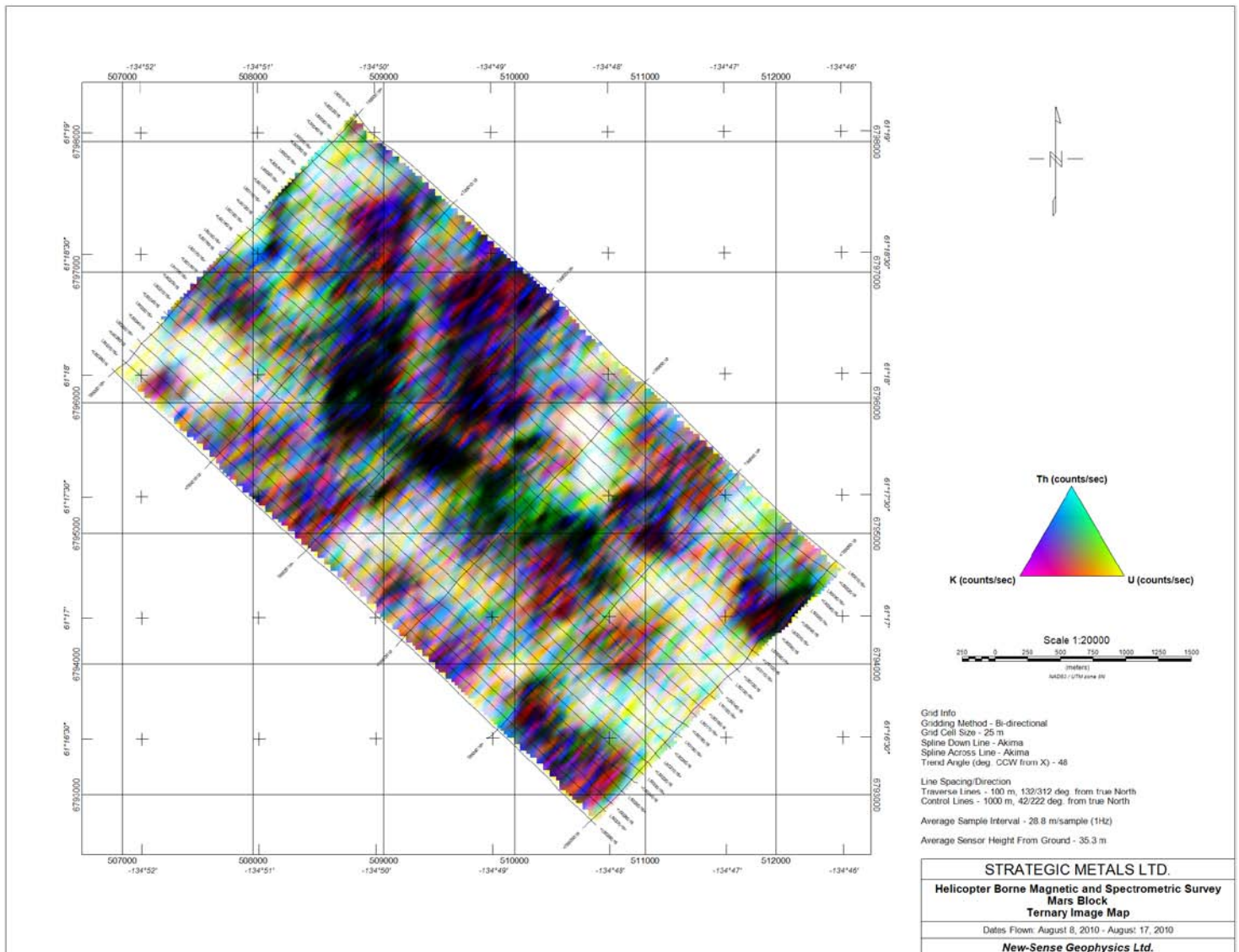
Mars Block Image of Uranium Map



Mars Block Image of Total Count Map



Mars Block Image of Ternary Map



APPENDIX F: MICROLEVELLING DESCRIPTION

As per PGW Microlevelling GX help file available through Geosoft Oasis montaj 7.2

DECORR.GX Version 3.0
 Paterson, Grant & Watson Limited
 March 2003

PARAMETERS: (miclev group parameters are used, so that values set will be passed to MICLEV.GX)

```
miclev.Xchan = x channel (default "x")
.Ychan = y channel (default "y")
.Ochan = original data channel (no default)
.Nchan = decorrugation noise channel (default "dcor_noise")
.Space = flight line spacing
.Dir    = flight line direction in degrees azimuth (clockwise
          from North)
.Cell   = cell size to use for gridding (default = line spacing/5)
.Wlen   = decorrugation high-pass wavelength (default = 4 * line
          spacing)
.Ogrid  = original output grid, new or existing
.Nnoise = decorrugation noise grid
.XY     = Xmin,Ymin,Xmax,Ymax                (optional)
.LOGOPT = Log option                          (optional)
.LOGMIN = Log minimum                        (optional)
.DSF    = Low-pass desampling factor          (optional)
.BKD    = Blanking distance                   (optional)
.TOL    = Tolerance                           (optional)
.PASTOL = % pass tolerance                    (optional)
.ITRMAX = Max. iterations                     (optional)
.ICGR   = Starting coarse grid                (optional)
.SRD    = Starting search radius              (optional)
.TENS   = Internal tension (0-1)              (optional)
.EDGCLP = Cells to extend beyond data         (optional)
```

DESCRIPTION:

decorr.gx and miclev.gx implement a procedure called microlevelling which removes any low-amplitude component of flight line noise still remaining in airborne survey data after tie line levelling. Microlevelling calculates a correction channel and adds it to the profile database. This correction is subtracted from the original data to give a set of levelled profiles, from which a final levelled grid may then be generated. Microlevelling has the advantage over standard methods of decorrugation that it better distinguishes flight line noise from geological signal, and thus can remove the noise without causing a loss in resolution of the data.

To microlevel data, first run decorr.gx, then miclev.gx. decorr.gx offers two options for the grid of the channel to be microlevelled. If a grid prepared from this channel already exists, it may be specified, and when prompted to overwrite, the user should answer no. If the user wishes to prepare a new grid of the channel to be microlevelled, the minimum curvature gridding algorithm (rangrid.gx) is applied. The advanced button provides access to the standard minimum

curvature gridding parameters. Once the gridding is completed, decorr.gx applies a directional high-pass filter (see end note) perpendicular to the flight line direction, in order to produce a decorrugation noise grid. (The default grid cell size is 1/5 of the line spacing. The user may specify a different cell size if desired. A smaller cell size will give a more accurate result, but a larger cell size will make the gx run faster and use less disk space.) The noise grid is then extracted as a new channel in the database (default name is "dcor_noise"). This channel contains the line level drift component of the data, but it also contains some residual high-frequency components of the geological signal. miclev.gx applies amplitude limiting and low-pass filtering to the noise channel in order to remove this residual geological signal and leave only the component of line level drift, which is then subtracted from the original data to produce a levelled output channel named "miclev".

decorr.gx calculates default amplitude limit and filter length values for use in miclev.gx, but the skilled user may be able to set better values for these parameters based on an inspection of the noise grid. (The micro-levelling process is broken up into two separate GXes in order to allow the user to do this.) Flight line noise should appear in the decorrugation noise grid as long stripes in the flight-line direction, whereas geological anomalies should appear as small spots and cross-cutting lineaments, generally with a higher amplitude than the flight line noise, but with a shorter wavelength in the flight-line direction. The user can estimate the maximum amplitude of the flight line noise, and set the noise amplitude limit value accordingly. Similarly the user can estimate the minimum wavelength of the level drift along the flight lines, and set the low-pass Naudy filter width to half this wavelength. The defaults are to set the amplitude limit equal to the standard deviation of the noise grid, and to set the filter width equal to five times the flight line spacing.

There is an option of using either of two kinds of amplitude limiting. In "clip" mode any value outside the limit is set equal to the limit value. In "zero" mode any value outside the limit is set equal to zero. The clip mode makes more sense intuitively, but it has been found in practise that the zero mode may reject geologic signal better, depending on the particular data set. As a rule the zero mode works better on datasets in which the noise grid contains a lot of high-amplitude geological signals (e.g. shallow basement areas). For datasets in which the noise grid contains mainly flight line noise (e.g. sedimentary basins), the clip mode works better.

Microlevelling applies a level correction to the traverse lines only. If it is desired to grid the tie lines together with the micro-levelled traverse lines, then it may be necessary to also apply a level correction to the tie lines so that their values agree with the micro-levelled traverse lines at the intersections. This may be done as follows:

- 1) Copy the tie line values to the microlevelled channel.
- 2) Use intersct.gx to find cross-difference values for the microlevelled data.
- 3) Use xlevel.gx to load these cross-difference values to the tie lines.
- 4) Apply fulllev.gx to the tie lines. The output will be a set of tie lines that matches the microlevelled traverse lines at all intersections.

- 5) Copy the microlevelled traverse line values into the same channel as the corrected tie line values.

Decorrugation Filter:

The decorrugation noise filter is a sixth-order high-pass Butterworth filter with a default cutoff wavelength of four times the flight line spacing, combined with a directional filter. The directional filter coefficient as a function of angle is $F = (\sin(a))^2$, where a is the angle between the direction of propagation of a wave and the flight line direction, i.e. $F=0$ for a wave travelling along the flight lines, and $F=1$ for a wave travelling perpendicular to them. (Note this is the exact opposite of what is usually called a decorrugation filter, since the intention here is to pass the noise only, rather than reject it.)

The default cutoff wavelength ($4 * \text{line spacing}$) gives good results if the data is already fairly well levelled to start with. In cases where many lines are badly mis-levelled, it may be necessary to set a longer cutoff wavelength, at the risk of removing more geological signal.

QW 28745

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016 – 510 West Hastings Street
Vancouver, B.C. V6B 1L8

Telephone: 604-688-2568

Fax: 604-688-2578

AFFIDAVIT



I, Joan Mariacher, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of
Expenditures for exploration work on the King 1-72 mineral claims
on Claim Sheet 115H/9 is accurate.


Joan Mariacher

Sworn before me at Vancouver, B.C.

this 12th day of April 2011.


Barrister & Solicitor

IAN J. TALBOT
Barrister & Solicitor
281 East 5th Street
North Vancouver
British Columbia
Canada V7L 1L8

Statement of Expenditures
King 1-72 Mineral Claims
April 12, 2011

Geochemical Surveys

Labour

D. Eaton (geologist) July to December 2010 – 8 hrs @ \$100/hr	\$ 896.00
H. Smith (geologist) July to December 2010 – 10 1/2 hrs @ \$75/hr	882.00
January to February 2011 – 23 1/2 hrs @ \$90/hr	2,368.80
K. Larsen (field assistant) July 2010 – 8 hrs @ \$60/hr	537.60
S. Howie (field assistant) July 2010 – 5 1/2 hrs @ \$38/hr	234.08
C. Michalewicz (field assistant) July 2010 – 8 hrs @ \$38/hr	340.48
	<u>5,258.96</u>

Expenses including management fee

Field room and board – 3 manday @ \$125/manday	453.60
Trans North Helicopters – 2.1 hrs Bell 206 @ \$1045/hr plus fuel	2,868.63
North 60° – helicopter fuel	2,454.65
ALS Chemex	1,765.10
Norcan Leasing – truck rental plus fuel	329.63
	<u>7,871.61</u>

Labour and Expenses Total 13,130.57

Total of 65 samples = \$202.01/sample

Claim Name	Number of samples
King 7	5
21	6
22	4
23	5
29	38
37	2
38	5
Total	65

Contract ZTEM Survey (including management fee)

New-Sense Geophysics	<u>25,306.48</u>
Total	<u>\$38,437.05</u>



Archer, Cathro & Associates
1016-510 West Hastings Street
Vancouver, B.C.
V6B 1L8

REMIT PAYMENT TO:

TRANS NORTH HELICOPTERS

TRANS NORTH TURBO AIR LTD.

P.O. Box 8, 115 Range Rd.

Whitehorse, Yukon Canada Y1A 5X9

Tel: (867) 668-2177 - Fax: (867) 668-3420

ACCOUNT
NUMBER

Archer

INVOICE
NUMBER

47714

INVOICE DATE

31/07/10

AREA
B.C.
YUKON
N.W.T.
ALTA

A/C TYPE

B406

AIRCRAFT REGISTRATION C

GAW1

FLIGHT
DATE

DAY

MONTH

YEAR

30/07/10

PURCHASE ORDER NO.

Archer, Cathro & Associates
1016-510 West Hastings Street
Vancouver, B.C.
V6B 1L8

FUEL & OIL-X TNTA FUEL USED

TNTA CUST.

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☐ OIL-X

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DECLINED

☐ INT

VALUE

ACCEPTED

☐

TNTA'S TARIFF LIMITS THAT TNTA'S LIABILITY
FOR LOSS OR DAMAGE TO GOODS
CARRIED IS 50¢ PER LB.

FROM *Carnacks*

UP

DOWN

HOURS

REMARKS NO. OF PASS

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0942

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D.G.

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FUEL

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/ LITRE

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FUEL

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/ LITRE

MEALS &
LODGINGS

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OTHER

OTHER

SUB TOTAL

2529 66

GOODS & SERVICES TAX
REGISTRATION NO. R121483135

126 48

TERMS: PAYABLE UPON RECEIPT OF INVOICE.
2% INTEREST PER MONTH (24% PER ANNUM) WILL BE
CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS.
IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A
CASH BASIS.

X *Heather Smith*
CHARTERER'S SIGNATURE

Heather Smith
CHARTERER'S NAME (PRINTED)

INITIALS *DS*
PILOTS SIGNATURE

ENGINEER'S NAME
NEE NICK ESTRADA

SHIPPING NAME & QTY.

CLASS

UN #

PACKING GR.

TOTAL

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ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: STRATEGIC METALS LTD.
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

BILLING INFORMATION

Certificate: **VA10109921**
Sample Type: **Rock**
Account: **MTT**
Date: **22-AUG-2010**
Project: **KING A K**
P.O. No.:
Quote: **ALSM-CW10-030-F**
Terms: **Net 30 Days**
Comments: **C1**

INVOICE NUMBER 2123120

QUANTITY	CODE	ANALYSED FOR - DESCRIPTION	UNIT PRICE	TOTAL
9	Au-AA24	Au 50g FA AA finish	12.67	114.03
9	ME-ICP41	35 Element Aqua Regia ICP-AES	4.92	44.28
9	LOG-22	Sample login - Rcd w/o BarCode	0.66	5.94
9	PUL-31	Pulverize split to 85% <75 um	2.12	19.08
9	GEO-AR01	Aqua regia digestion	2.45	22.05
29.66	CRU-31	Weight Charge (kg) - Fine crushing - 70% <2mm	0.29	8.60
9	CRU-31	Fine crushing - 70% <2mm	1.36	12.24
29.66	SPL-21	Weight Charge (kg) - Split sample - riffle splitter	0.23	6.82
9	SPL-21	Split sample - riffle splitter	0.90	8.10

Kam NA 10

To: STRATEGIC METALS LTD.
ATTN: JOAN MARIACHER
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

SUBTOTAL (CAD) \$ 241.14
R100938885 HST BC \$ 28.94
TOTAL PAYABLE (CAD) \$ 270.08

Payment may be made by: Cheque or Bank Transfer

Beneficiary Name: ALS Canada Ltd.
Bank: Royal Bank of Canada
SWIFT: ROYCCAT2
Address: Vancouver, BC, CAN
Account: 003-00010-1001098

Please Remit Payments To :
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7



ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218

www.alsglobal.com

To: STRATEGIC METALS LTD.
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

INVOICE NUMBER 2123527

BILLING INFORMATION	
Certificate:	VA10108989
Sample Type:	Soil
Account:	MTT
Date:	20-AUG-2010
Project:	KING <i>AN</i>
P.O. No.:	ALSM-CW10-010-F
Quote:	Net 30 Days
Terms:	
Comments:	C1

QUANTITY	CODE	ANALYSED FOR DESCRIPTION	UNIT PRICE	TOTAL
57	PREP-41	Dry, Sieve (180 um) Soil	0.96	54.72
11.72	PREP-41	Weight Charge (kg) - Dry, Sieve (180 um) Soil	1.80	21.10
57	Au-AA24	Au 50g FA AA finish	12.67	722.19
57	ME-ICP41	35 Element Aqua Regia ICP-AES	4.92	280.44
57	GEO-AR01	Aqua regia digestion	2.45	139.65

Lim NARD

To: STRATEGIC METALS LTD.
ATTN: JOAN MARIACHER
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

SUBTOTAL (CAD) \$ 1,218.10
R100938885 HST BC \$ 146.17
TOTAL PAYABLE (CAD) \$ 1,364.27

Payment may be made by: Cheque or Bank Transfer

Beneficiary Name: ALS Canada Ltd.
Bank: Royal Bank of Canada
SWIFT: ROYCCAT2
Address: Vancouver, BC, CAN
Account: 003-00010-1001098

Please Remit Payments To :
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7

New-Sense

Geophysics Limited

Invoice – 1

Job ID: HMR100806

August 6th, 2010

To: STRATEGIC METALS LTD.
1016-510 West Hastings st.
Vancouver, BC, V6B 1L8
Telephone: (604) 687 2522
Email: lorna_xy@telus.net

Attn: W. Douglas Eaton, President and CEO

From: NEW-SENSE GEOPHYSICS LTD.
195 Clayton Drive, Unit 11,
Markham, ON, Canada, L3R 7P3
Telephone: (905) 480-1107 / (905) 480-9989
Fax: (905) 480-1207
GST #: 86982 9283 RT0001

Description: Helicopter aeromagnetic and spectrometric survey over Nikki, Mint, Corky, Meloy, King and Mars properties, Yukon, Canada:

Estimated total contract value due to New-Sense:
1,180 km @ CAD \$104.59 /km: CAD \$ 123,416.20
Mobilization/Demobilization: CAD \$ 7,600.00

CAD \$ 131,016.20

Invoice On Signing (30% contract value):

CAD \$ 39,304.86

GST 5%

POSTED

CAD \$ 1,965.24

Total due on this invoice:

CAD \$ 41,270.10

Wire Transfer instructions:

Beneficiary: New-Sense Geophysics Limited
Bank: The Bank of Nova Scotia
Account #: 02011
Transit #: 11452
Institution Code: 002
Swift: NOSCCATT
ABA Routing: 026002532
Address: 880 Eglinton Avenue E. at Laird Drive
Toronto, Ontario, M4G 2L2, Canada

Andrei Yakovenko
Vice President
New-Sense Geophysics Limited

AM AU
NA //
Corky - 6550.81
King - 6550.81
Mars - 6550.81
Meloy - 6550.81
Mint - 6550.81
Nikki - 6550.81
6878.35

195 Clayton Drive, Unit 11, Markham,
Ontario, Canada, L3R 7P3
Phone: (905) 480-1107 / (905) 480-9989
Fax: (905) 480-1207

San Juan de la Cruz 13631
Las Condes, Santiago, Chile
Tel: (56) 2 326-5116 / Fax: (56) 2 217-5865
E-mail: surveys@new-sense.com

New-Sense

Geophysics Limited

Invoice – 2

Job ID: HMR100806

August 9th, 2010

To: STRATEGIC METALS LTD.
1016-510 West Hastings st.
Vancouver, BC, V6B 1L8
Telephone: (604) 687 2522
Email: lorna_xy@telus.net

Attn: W. Douglas Eaton, President and CEO

From: NEW-SENSE GEOPHYSICS LTD.
195 Clayton Drive, Unit 11,
Markham, ON, Canada, L3R 7P3
Telephone: (905) 480-1107 / (905) 480-9989
Fax: (905) 480-1207
GST #: 86982 9283 RT0001

NA -
Corky - 4585.57
King - 4585.56
Mars - 4585.57
Meloy - 4585.56
Mint - 4585.57
Nikki - 4585.57

Description: Helicopter aeromagnetic and spectrometric survey over Nikki, Mint, Corky, Meloy, King and Mars properties, Yukon, Canada:

Estimated total contract value due to New-Sense:
1,180 km @ CAD \$104.59 /km: CAD \$ 123,416.20
Mobilization/Demobilization: CAD \$ 7,600.00

CAD \$ 131,016.20

Invoice On Mobilization (20% contract value):

CAD \$ 26,203.24

GST 5%

CAD \$ 1,310.16

Total due on this invoice:

CAD \$ 27,513.40

NA 11

Wire Transfer instructions:

Beneficiary: New-Sense Geophysics Limited
Bank: The Bank of Nova Scotia
Account #: 02011
Transit #: 11452
Institution Code: 002
Swift: NOSCCATT
ABA Routing: 026002532
Address: 880 Eglinton Avenue E. at Laird Drive
Toronto, Ontario, M4G 2L2, Canada

Corky - 4367.21
Mars - 4367.20
Meloy - 4367.20
Mint - 4367.21
King - 4367.21
Nikki - 4367.21

Andrei Yakovenko
Vice President
New-Sense Geophysics Limited

195 Clayton Drive, Unit 11, Markham,
Ontario, Canada, L3R 7P3
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Fax: (905) 480-1207

San Juan de la Cruz 13631
Las Condes, Santiago, Chile
Tel: (56) 2 326-5116 / Fax: (56) 2 217-5865
E-mail: surveys@new-sense.com

New-Sense

Geophysics Limited

Invoice – 3

Job ID: HMR100806

August 17th, 2010

To: STRATEGIC METALS LTD.
1016-510 West Hastings st.
Vancouver, BC, V6B 1L8
Telephone: (604) 687 2522
Email: lorna_xy@telus.net

Attn: W. Douglas Eaton, President and CEO

From: NEW-SENSE GEOPHYSICS LTD.
195 Clayton Drive, Unit 11,
Markham, ON, Canada, L3R 7P3
Telephone: (905) 480-1107 / (905) 480-9989
Fax: (905) 480-1207
GST #: 86982 9283 RT0001

Corky - 9171.13
Mars - 9171.13
Mint - 9171.14
Meloy - 9171.13
King - 9171.14
Nikki - 9171.13

Description: Helicopter aeromagnetic and spectrometric survey over Nikki, Mint, Corky, Meloy, King and Mars properties, Yukon, Canada:

Estimated total contract value due to New-Sense:
1,180 km @ CAD \$104.59 /km: CAD \$ 123,416.20
Mobilization/Demobilization: CAD \$ 7,600.00

CAD \$ 131,016.20

Invoice On Completion of Flying (40% contract value):

CAD \$ 52,406.48

GST 5%

CAD \$ 2,620.32

Total due on this invoice:

CAD \$ 55,026.80

\$ NA 11

Wire Transfer instructions:

Beneficiary: New-Sense Geophysics Limited
Bank: The Bank of Nova Scotia
Account #: 02011
Transit #: 11452
Institution Code: 002
Swift: NOSCCATT
ABA Routing: 026002532
Address: 880 Eglinton Avenue E. at Laird Drive
Toronto, Ontario, M4G 2L2, Canada

\$ Corky - 8734.41
\$ Mars - 8734.42
\$ Mint - 8734.41
\$ Meloy - 8734.42
\$ King - 8734.41
\$ Nikki - 8734.41

Andrei Yakovenko
Vice President
New-Sense Geophysics Limited

195 Clayton Drive, Unit 11, Markham,
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Fax: (905) 480-1207

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Las Condes, Santiago, Chile
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New-Sense

Geophysics Limited

Invoice – 4

Job ID: HMR100806

October 15th, 2010

To: STRATEGIC METALS LTD.
1016-510 West Hastings st.
Vancouver, BC, V6B 1L8
Telephone: (604) 687 2522
Email: lorna_xy@telus.net

Attn: W. Douglas Eaton, President and CEO

From: NEW-SENSE GEOPHYSICS LTD.
195 Clayton Drive, Unit 11,
Markham, ON, Canada, L3R 7P3
Telephone: (905) 480-1107 / (905) 480-9989
Fax: (905) 480-1207
GST #: 86982 9283 RT0001

Description: Helicopter aeromagnetic and spectrometric survey over Nikki, Mint, Corky, Meloy, King and Mars properties, Yukon, Canada:

Actual total contract value due to New-Sense:
1,207 km @ CAD \$104.59 /km: CAD \$ 126,240.13
Mobilization/Demobilization: CAD \$ 7,600.00
GST (5%): 6,692.01

CAD \$ 140,532.14

Minus Invoice 1 (GST of \$ 1,965.24 included):
Minus Invoice 2 (GST of 1,310.16 included):
Minus Invoice 3 (GST of 2,620.32 included):
Total:

CAD \$ 41,270.10
CAD \$ 27,513.40
CAD \$ 55,026.80
CAD \$ 123,810.30

Total due on this invoice (balance; GST of \$ 796.29 included):

CAD \$ 16,721.84 *h*

Wire Transfer instructions:

Beneficiary: New-Sense Geophysics Limited
Bank: The Bank of Nova Scotia
Account #: 02011
Transit #: 11452
Institution Code: 002
Swift: NOSCCATT
ABA Routing: 026002532
Address: 880 Eglinton Avenue E. at Laird Drive
Toronto, Ontario, M4G 2L2, Canada

796.29
15925.25
16721.84
Afl
2796.87 Corky
2796.88 King
2796.87 man
2796.88 Meloy
2796.87 Mint
2796.87 Nikki
796.29
2654.25
2654.26
2654.26
2654.26
2654.26
2654.26
2654.26
16721.84

Andrei Yakovenko
Vice President
New-Sense Geophysics Ltd.

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