MAR 20070011: ATHABASCA NORTH

Received date: May 08, 2007

Public release date: Jun 25, 2008

02007001 (
MAY 0 8 2007

STRATHMORE MINERALS CORP.

2005 to 2007 EXPLORATION OF THE ATHABASCA NORTH BLOCK PROPERTY, NORTHEAST ALBERTA

<u>PART B</u>

Metallic and Industrial Mineral Permits
9305031042 and 9305040560

Geographic Coordinates

58°55' N to 59°00' N
110°00' W to 110°13' W

NTS Sheets

74 L/16 and 74 M/1

Owner and Operator:	Strathmore Minerals Corp. #700-1628 Dickson Ave. Kelowna, BC V1Y 9Y2
Consultant:	Dahrouge Geological Consulting Ltd. 18, 10509 - 81 Avenue Edmonton, Alberta T6E 1X7
Authors:	J. Dahrouge, B.Sc., P.Geol D. Smith, M.Sc., Geol. I. T
Date:	May 8, 2007

TABLE OF CONTENTS

LIST OF TABLES

PART C

LIST OF FIGURES

LIST OF APPENDICES

1. SUMMARY

From March 9th, to April 14th, 2005, Strathmore Minerals Corporation acquired two Metallic and Industrial Minerals (MAIM) permits, totaling 10,240 ha, along the southern shore of Lake Athabasca in northern Alberta. The Athabasca North Block Property is situated adjacent to the Alberta-Saskatchewan border, approximately 60 km east of Fort Chipewyan and includes MAIM permits 9305031042 and 9305040560.

Between June 24th and July 6th and between August 25th and 27th 2006, Fugro Airborne Surveys was contracted to fly a MEGATEM electromagnetic and magnetic survey over a portion of their basin holdings, south of Lake Athabasca, including the Athabasca North Block Property. The intent of the survey was to map conductive horizons at depth near the sub-Athabasca unconformity. One potential conductive axis was identified situated overtop Lake Athabasca trending in a northeasterly direction.

In addition to the Fugro interpretation a second interpretation was acquired from Intrepid Geophysics Ltd. and Encom Technology Pty Ltd. for the MEGATEM dataset. Several additional targets were identified that warrant future follow-up.

The 2006 exploration work was authorized by David Miller, President and CEO of Strathmore Minerals Corporation.

Exploration expenditures for the Athabasca North Block Property totalled $71,127.30 (Appendix 1). The expenditures were sufficient to maintain the entirety of the property in good standing; as such, all of MAIM permits 9305031042 and 9305040560 will be retained. Exploration expenditures have been allocated in the following manner (Table 1.1).

TABLE 1.1 ALLOCATION OF EXPENDITURES*

Permit	Assessment Period	Expected Expiry Date	Permit Area (ha)	Required Expenditures	Assigned Expenditures
9305031042	Years 1 & 2	March 9, 2007	1088	$5,440.00	$5,440.00
9305040560	Years 1 & 2	April 14, 2007	9152	$45,760.00	$45,760.00
9305031042	Years 3 & 4	March 9, 2009	1088	$10,880.00	$10,880.00
9305031042	Years 5 & 6	March 9, 2011	1088	$10,880.00	$9,047.30
				Total:	$71,127.30

* Based upon the current permit area; expenditures allocated based on permit area size and Line km of survey flown (Detailed in Part A)

2. INTRODUCTION

The objective of the 2006 exploration was to locate areas of high conductivity associated with graphic units at depth near the sub-Athabasca unconformity. The area was flown with Fugro's MEGATEM system in order to achieve this objective.

3. LOCATION AND ACCESS

MAIM permits 9305031042 and 9305040560 (Fig's. 3.1 and 3.2) are located within National Topographic System Map Sheets 74 L/16 and 74 M/1. The permit area is bounded by geographic coordinates 58°55' N to 59°00' N and 110°00' W to 110°13' W. MAIM 9305040560 primarily overlies Lake Athabasca with MAIM 9305031042 primarily overlying the shore line of the lake.

Fort Chipewyan is located approximately 60 km to the west and Uranium City approximately 110 km to the northeast. Access to the property is not optimal and must be by boat or airborne via float plane or helicopter.

Local vegetation consists of jack pine, black spruce, and tamaracks, with willows and alders in the lower wet areas.

4. WORK PERFORMED

Between June 24th and July 6th and between August 25th and 27th 2006, Fugro Airborne Surveys was contracted to fly a MEGATEM electromagnetic and magnetic survey over a portion of their basin holdings, south of Lake Athabasca, including the North Block Property. The intent of the survey was to map conductive horizons at depth near the sub-Athabasca unconformity.

A total of 3384 line km were flown at a spacing of 600 m with tie lines every 4000 m for the entirety of the survey. Approximately 258 of the 3384 line kilometers were flown over the Athabasca North Block Property, with the remainder flown over other nearby Strathmore holdings south of Lake Athabasca.

In addition to the Fugro interpretation a second interpretation for the MEGATEM dataset was acquired from Intrepid Geophysics Ltd. and Encom Technology Pty Ltd.

5. RESULTS

The results of the MEGATEM survey are presented in Figures 5.1 to 5.7. A full interpretation, with a list of targets, is contained in Appendix 2. The additional interpretation of the MEGATEM dataset by Intrepid Geophysics Ltd. and Encom Technology Pty Ltd. is in Appendix 3.

6. CONCLUSIONS

An airborne MEGATEM electromagnetic survey was completed over MAIM permits 9305031042 and 9305040560 during the summer of 2006. One conductive horizon at depth was identified.

The re-interpretation of the airborne data, completed by Intrepid Geophysics Ltd. and Encom Technology Pty Ltd., identified several additional targets favourable to uranium mineralization.

As expenditure requirements were met, all of MAIM permits 9305031042 and 9305040560 will be retained.

STATEMENT OF AUTHOR

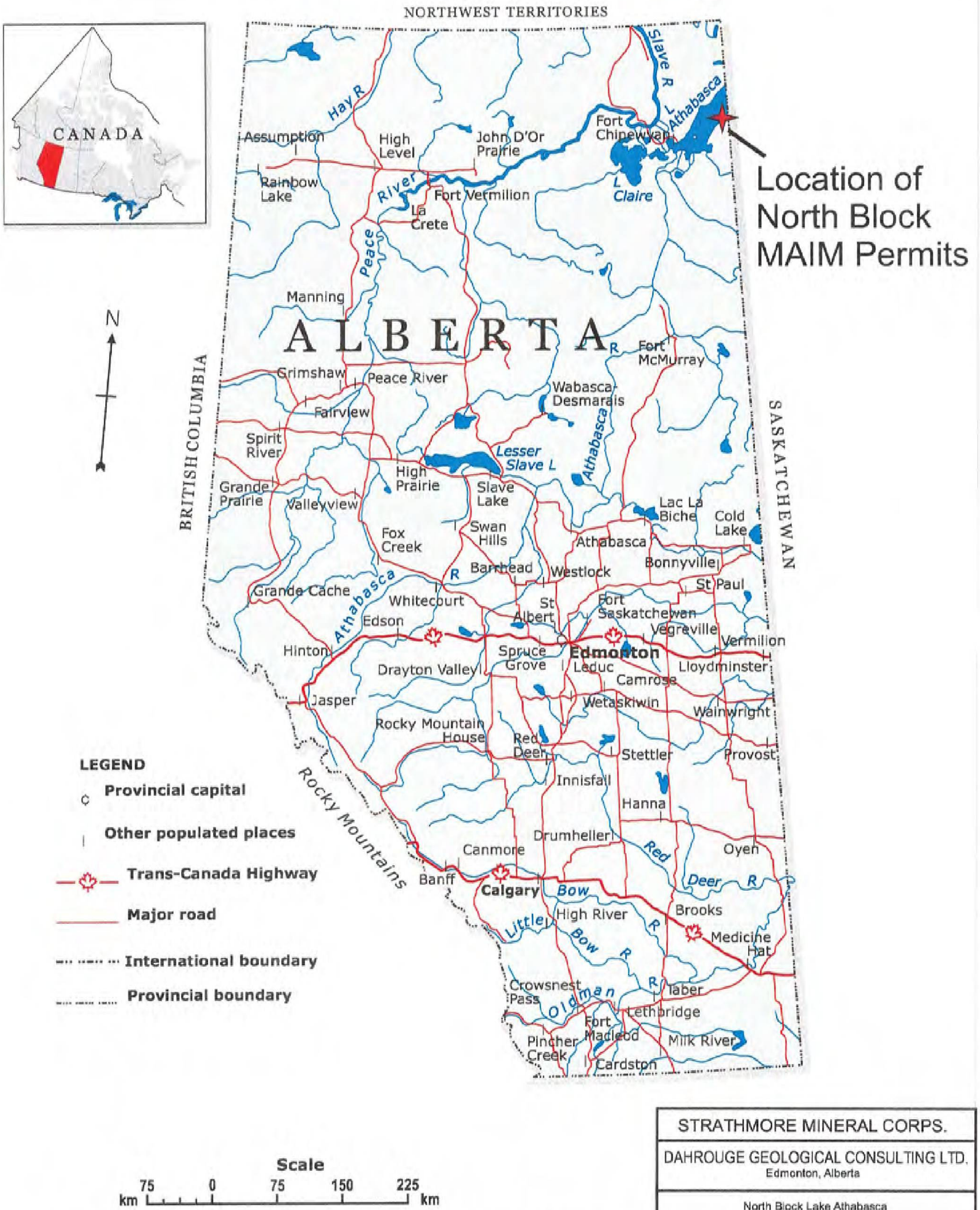
I, Jody Dahrouge, residing at 11 Country Lane, Stony Plain, Alberta, do hereby certify that:

- I am a geologist of Dahrouge Geological Consulting Ltd., Suite 18, 10509 - 81 Ave., Edmonton, Alberta, T6E 1X7.
- I am a graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology, 1988 and a Special Certificate (Sp.C.) in Computing Science in 1994.
- I have practiced my profession as a geologist intermittently from 1988 to 1994, and continuously since 1994.
- I am a registered professional geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, member M48123.
- I hereby consent to the copying or reproduction of this Technical Report following the one-year confidentiality period.
- I am the author of the report entitled "2005 to 2007 Exploration of the Athabasca North Block Property, Northeast Alberta" and accept responsibility for the veracity of technical data and results.

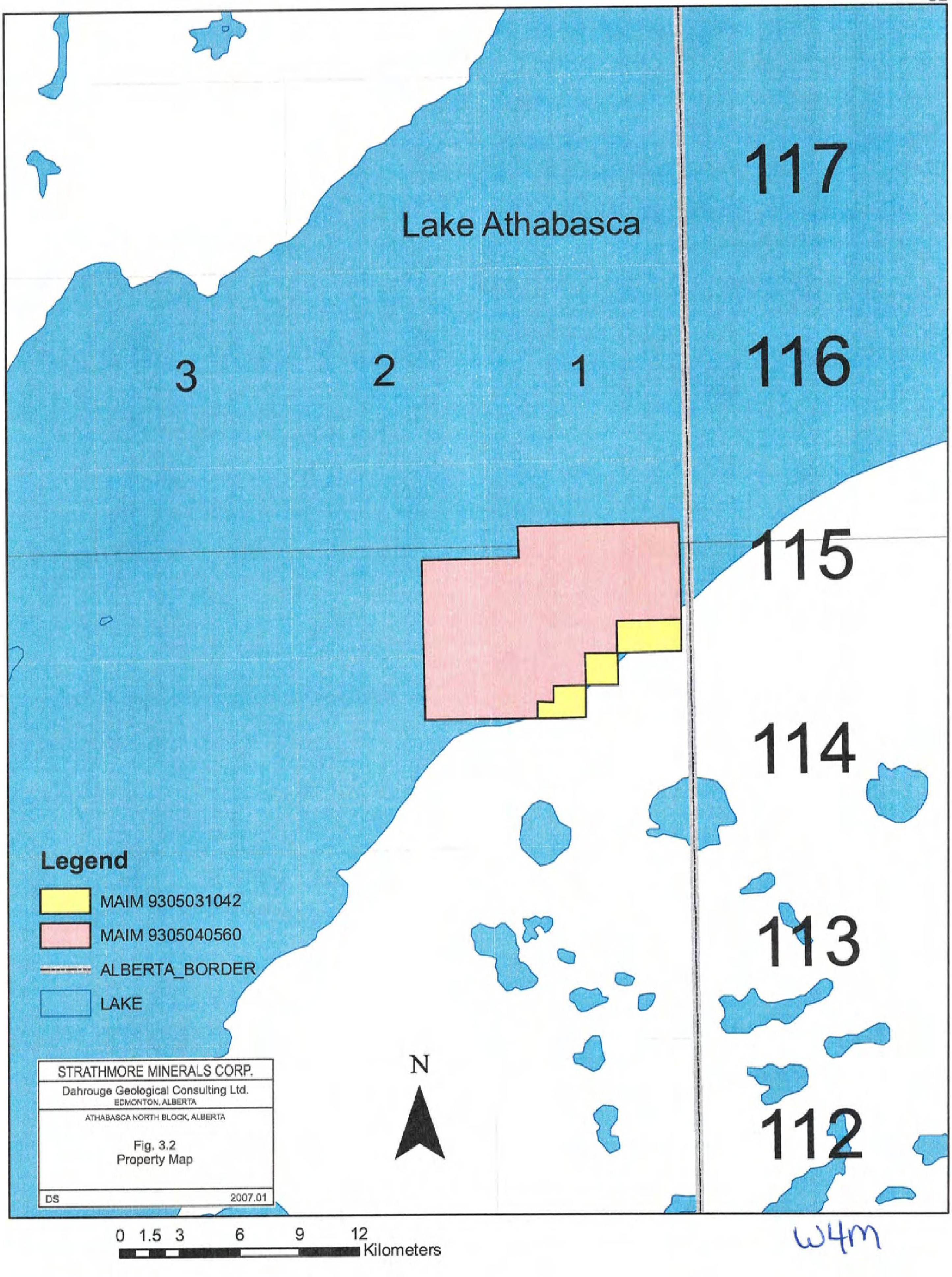
Dated this 8st day of May, 2007.

[redacted]

Jody Dahrouge, BSc, PGeol
APEGGA M48123



STRATHMORE MINERAL CORPS.
DAHROUGE GEOLOGICAL CONSULTING LTD. Edmonton, Alberta
North Block Lake Athabasca MAIM Permits, Alberta Fig. 3.1 Location Map
DS 2006.10


117
Lake Athabasca
3
2
1
116
115
114
113
112
Legend
MAIM 9305031042
MAIM 9305040560
ALBERTA_BORDER
LAKE
STRATHMORE MINERALS CORP.
Dahrouge Geological Consulting Ltd.
EDMONTON, ALBERTA
ATHABASCA NORTH BLOCK, ALBERTA
Fig. 3.2
Property Map
DS
2007.01
N
0 1.5 3 6 9 12
Kilometers
W4M

APPENDIX 1: COST STATEMENT OF THE 2005-7 EXPLORATION

a) Personnel	$	7,482.28
b) Food and Accommodation		n/a
c) Transportation		n/a
d) Instrument Rental		n/a
e) Drilling		n/a
f) Analyses		n/a
g) Geophysics	$	57,126.56
h) Report	$	52.25
i) Other		n/a
Sub Total	$	64,661.09
Administrative (10% of sub total)	$	6,466.11
Total	$	71,127.20

APPENDIX 2:

MEGATEM INTERPRETATION REPORT
(FUGRO)

Fugro Airborne Surveys

MAGNETIC AND ELECTROMAGNETIC INTERPRETATION REPORT

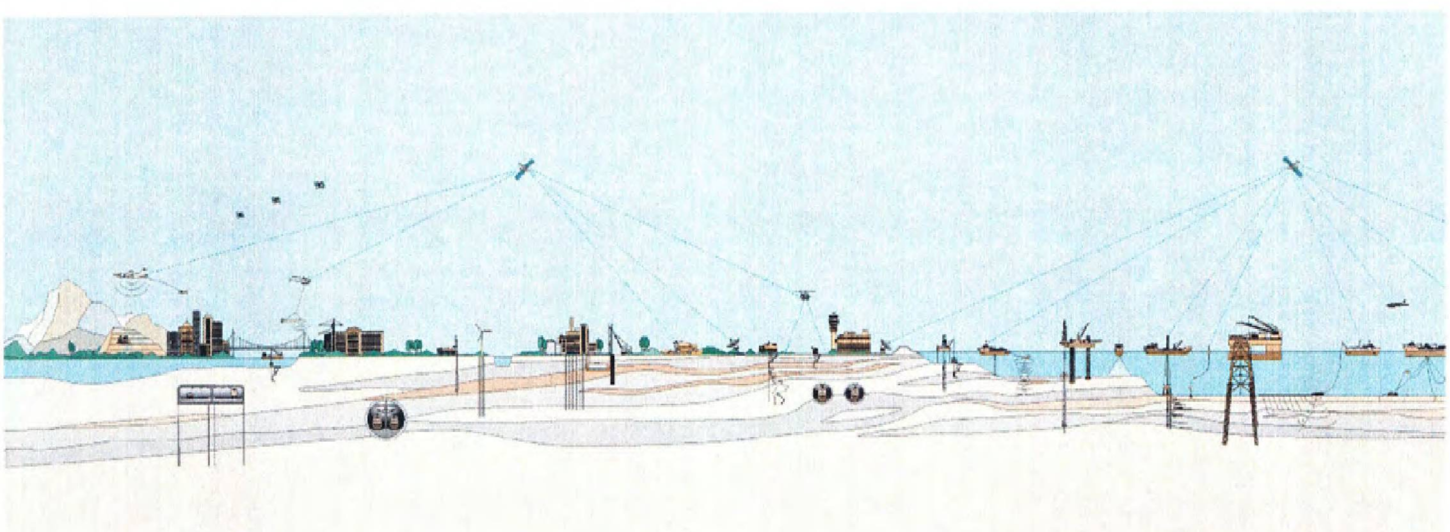
Airborne Magnetic and MEGATEM® Survey

North and South Blocks

Fort McMurray, Alberta

Job No. 06419

Strathmore Minerals Corp.



MAGNETIC AND ELECTROMAGNETIC INTERPRETATION REPORT

AIRBORNE MAGNETIC AND MEGATEM® SURVEY

NORTH AND SOUTH BLOCKS

ALBERTA

JOB NO. 06419

Client: Strathmore Minerals Corp.
810-1708 Dolphin Ave
Kelowna, BC
V1Y 9S4

Date of Report: January, 2007

TABLE OF CONTENTS

I

Introduction

Between June 24th and July 6th and between August 25th and August 27th, 2006, Fugro Airborne Surveys conducted a MEGATEM® electromagnetic and magnetic survey of the North and South Blocks on behalf of Strathmore Minerals Corp. Using Stony Rapids, Saskatchewan and Fort McMurray, Alberta as the bases of operation, a total of 3,384 line kilometres of data were collected using a Dash 7 modified aircraft (Figure 1).

The interpretation is presented in colour on paper and Geosoft digital map files. A complete processing report is presented as a separate document. Refer to the processing report for more details on the survey and system specifications as well as information on the data processing and final products. The following appendices to the processing report are of particular interest to the interpretation:

- The GEOTEM Electromagnetic system
- GEOTEM Interpretation
- Multi-component GEOTEM modeling.
- The Usefulness of Multi-component TDEM Data.

Figure 1: Specially modified Dash-7 aircraft used by Fugro Airborne Surveys.

II

Survey Location

The North and South Blocks (Figure 2) were flown with Stony Rapids Saskatchewan and Fort McMurray, Alberta as the bases of operations. A total of 144 traverse lines were flown ranging in length from 8 kms to 53 kms, with a spacing of 600m between lines; and 15 tie lines were flown with a spacing of 4000m, totalling 3,384 kilometres for the complete survey. Forest fires interrupted the survey and the crew was demobilized from Stony Rapids on July 7th. The survey was resumed from Fort McMurray on August 25th.

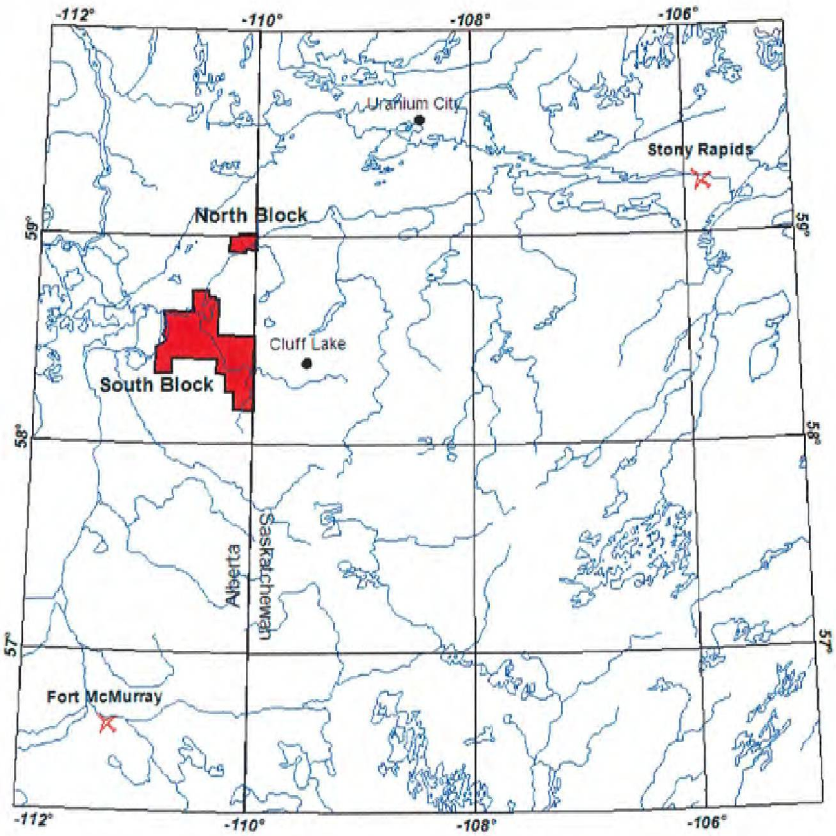


Figure 2: Survey location.

III

Interpretation

General Magnetic Theory

The Earth's magnetic field, which changes from over 60,000 gammas in a vertical direction at the poles to about 30,000 gammas in a horizontal direction at the equator, induces a secondary magnetic field in rock bodies containing ferromagnetic minerals. It is this property to become magnetized by an external field that is described as the susceptibility of a rock.

Some rocks contain a natural or thermoremnant magnetization that was acquired when the rock was last heated above the Curie point and subsequently cooled. The direction of this remnant magnetization is parallel to the magnetic field that prevailed during the cooling period. These fields, both the induced and remnant, disturb the otherwise smooth magnetic pattern of the Earth's field, and it is these perturbations that are of prime interest in aeromagnetic interpretation.

The crystalline rocks of igneous or high-grade metamorphic origin, such as granite, basalt, gneiss and schist, usually contain sufficient quantities of ferromagnetic minerals (mainly magnetite) that their influence on the earth's field can be observed even when covered by sedimentary sections thousands of feet thick.

The magnetic pattern over large areas of a single rock type is generally consistent throughout, and whenever the magnetic character changes, it usually implies a change in the rock composition. For example, the contact between a granitic mass and an ultrabasic unit can usually be precisely positioned where the magnetic pattern begins to change from the usual quiet character of granite to the more disturbed pattern of an ultrabasic rock body.

The study of magnetic anomalies does, to some degree, depend upon the latitude; in high latitudes attention is devoted to positive anomalies, while at the equator negative anomalies are of prime interest. This is due to the inclination of the earth's magnetic field, which is near vertical, 90°, at the poles, horizontal, 0°, at the equator, and about 80° north in this survey area. In such a steep magnetic inclination, the strike of a magnetic body has little effect upon the magnitude and symmetry of the anomaly it produces. An E-W dyke will be primarily positive, with a very weak negative on its north side. The same dyke striking magnetic north (azimuth 018 in this area) will be a symmetrical positive, but only about 95% of its E-W amplitude.

Magnetic Interpretation Procedures

In this qualitative interpretation (no depth estimates) magnetic features on the contour maps are studied with regard to shape, size, strike and grouping. Whenever an anomaly is adequately defined by the contours, the outline of the source is shown as a magnetic/lithologic boundary. These boundaries follow the magnetic contours and can be relied on to represent a definite change in lithology and/or structure. Any of these boundaries, but particularly the linear ones, may represent faults; but as we can rarely be certain (unless it coincides with a geologically mapped fault) the boundary symbol is retained since it is an indication of greater reliability than a fault.

The various levels of magnetic intensity appearing on the interpretation map are based simply on the total field amplitudes, making allowances for background levels and the probable size and depth of the source.

Faults are located by offsets, terminations and strike changes in linear anomalies, or level shifts, or simply changes in character. Since the fault symbol is usually used to join isolated points of disruption, its location is rather subjective.

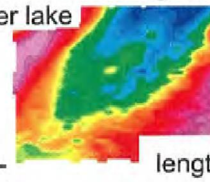
Electromagnetic Interpretation Procedures

The general approach to EM interpretation is two-fold. One is to work from the data in plan form (maps), correlating back to the data in profile form; the other is to work from the profiles back to the maps. The basis of target selection is to look for anomalous responses. Some of these will stand out on the maps as somewhat isolated features along favourable structures (magnetic/lithologic). Conversely, some localized changes in conductivity may only be apparent in profile form and may not stand out on the maps due to surrounding conductivity. So, a general review of the EM anomalies in profile form is done to search for well-defined symmetrical shape, moderate amplitude, slow decay, etc., then checked on the maps for strike length, structural support and overall conductivity pattern.

The conductors were compared with the magnetic signature to separate the basement conductors from those arising from overburden. With the exception of the obvious mafic intrusion into the Athabasca formation in the south block, it was assumed that all magnetic anomalies whose amplitude and wavelength were beyond those of glacial debris (15 nT, a few hundred metres) arose from the crystalline basement surface.

Overview of the Geology and Magnetic Field

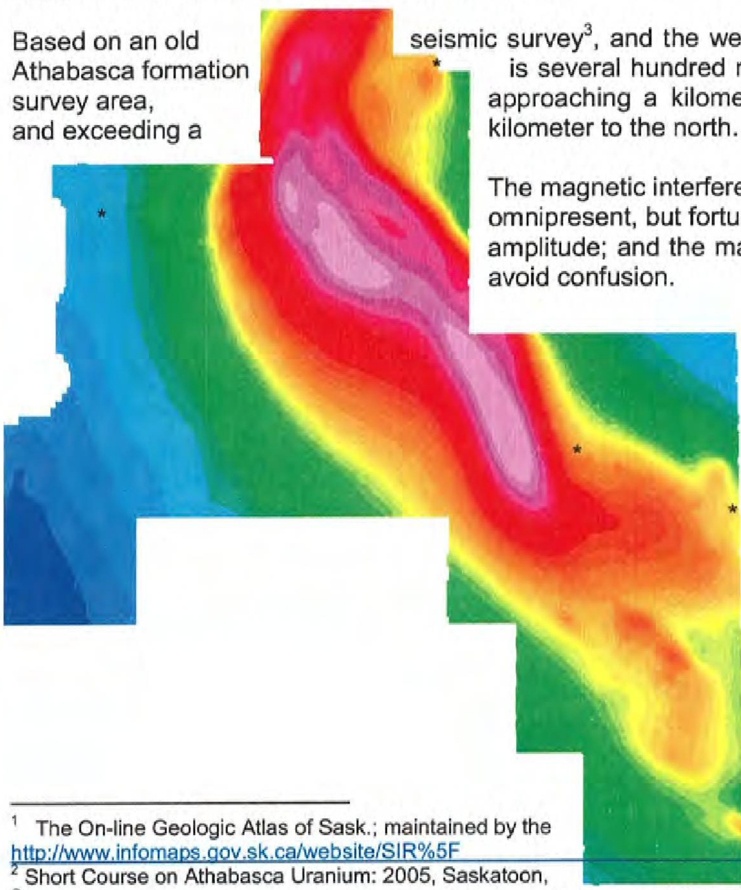
The two survey blocks, pictured below as **remnant magnetic intensity**, lie near the northwestern edge of the Athabasca basin, extending over lake Athabasca. The Athabasca basin is filled with flat-lying Proterozoic (Helikian) sandstone with occasional mafic intrusions of probable MacKenzie dyke-swarm parentage (1100 Ma)[1]. Directly north of the lake the outcropping crystalline Archean (?) is considered to be part of the Taltson-Thelon magmatic zone[2]. These magmatic lithologies are responsible for the long magnetic wave-lengths curving through these survey blocks.



The Grease River shear zone crosses the southern block near its north end – just where the basement trend swings from NNW to NNE (between the asterisks).

The only evident mafic dike is on the east edge of the south block (from * to *). Unlike many of the dykes in the Athabasca, there is no satellite image or topographic expression of this feature, suggesting that it lies somewhat below surface.

Based on an old seismic survey[3], and the wells GE 78-4 and Esso 78-1 & 2, the Athabasca formation is several hundred metres in thickness over most of the survey area, approaching a kilometer near the Saskatchewan border, and exceeding a kilometer to the north.



The magnetic interference from glacial debris is omnipresent, but fortunately limited to about 10 nT amplitude; and the magnetic basement is deep enough to avoid confusion.

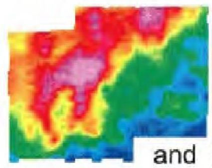
1 The On-line Geologic Atlas of Sask.; maintained by the Geological Survey Of Saskatchewan: http://www.infomaps.gov.sk.ca/website/SIR%5FGeological%5FAtlas/viewer.htm

2 Short Course on Athabasca Uranium: 2005, Saskatoon, Sask.; Sask. Geol. Society.

3 A Seismic Reconnaissance Survey of the Athabasca Formation, Alberta and Saskatchewan; Geol. Surv. Can., Paper 69-18.

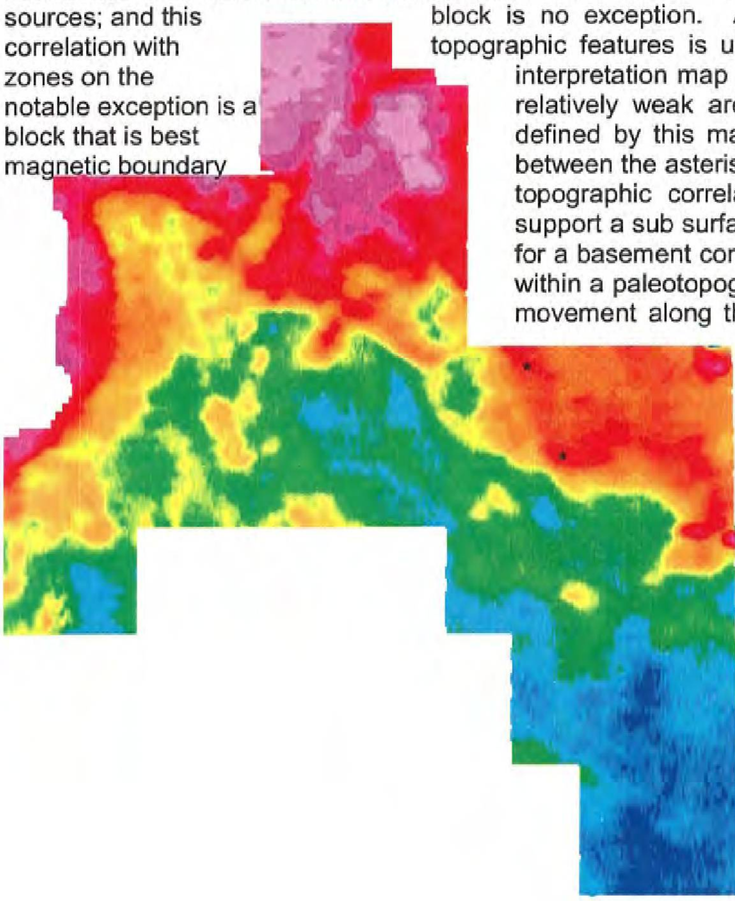
Overview of the Electromagnetic Field

Apparent Conductivity (North Block) and Total Energy Envelope (South Block)



The North block's apparent conductivity is derived from all 20 channels of the dB/dt X & Z coils. It is designed to emphasize near-surface, horizontal conductors; and thus its signal often arises from the recent sediments in lakes, bogs and valleys. These topographic lows naturally give rise to "surficial" conductivity, as the weathering products and glacial debris that collect there are often more conductive than the underlying bedrock. This appears to be the case in this north block, as the highest values are all within the lake, roughly confined to its deepest part. The pair of linear appendages extending south from the central high is likely to arise from the sediments of flooded river channels.

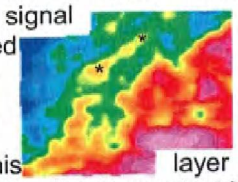
The South block's total energy envelope is derived from channel 8 of the dB/dt X and Z coils. Combining the X & Z data has the potential to enhance subtleties that might otherwise be overlooked. However, the mid-time channel 8 can contain a significant component from surficial sources; and this block is no exception. As in the North block, the inverse correlation with topographic features is undeniable. Most of the conductive zones on the interpretation map lie over topographic depressions. A notable exception is a relatively weak area on the east edge of the South block that is best defined by this map. Its west edge coincides with a magnetic boundary between the asterisks (* to *); and it shows no topographic correlation. Although both these points support a sub surface origin, its rate of decay is atypical for a basement conductor. It may arise from sediments within a paleotopographic low produced by vertical fault movement along the basement boundary, at any time prior to the last glaciation.



Conductors that display good profile shape, suggesting a potential basement origin, are noted with an axis.

Decay Constant (Tau)

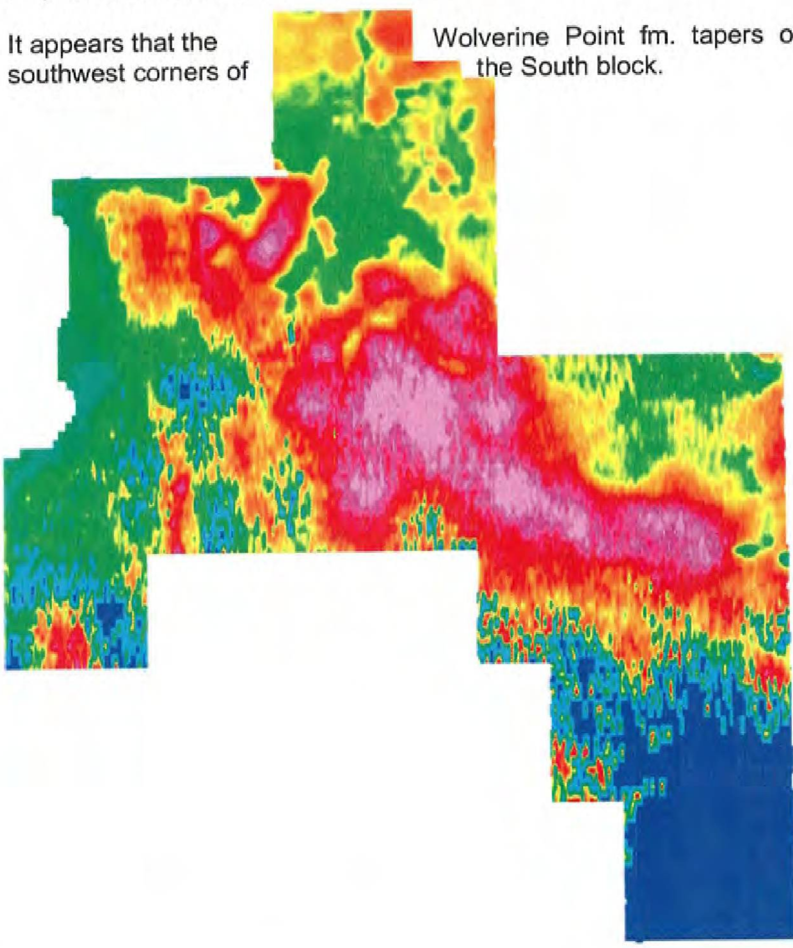
Since the rate of decay commonly separates the better conductors from surficial sedimentary sources, this map is intended to suppress the signal



from the latter and highlight the slow-decaying, deeper sources. It was derived from the B field Z coil channels 8-20. In the North block, this decay constant is largely a mirror image of the apparent conductivity map. This is the result of a conductive layer within the Athabasca basin (Wolverine Point formation) which covers much of this survey area. The essentially infinite dimensions of this layer produce a uniform, almost non-decaying, rise in the late-time channels; thus the decay constant highs arise simply from gaps in the rapidly decaying signal from surficial conductors that suppress the effect of the Wolverine Point fm. A notable exception in this North block lies between the asterisks, where a decay constant high lies beneath a typically surficial apparent conductivity high. A possible basement conductor axis is mapped there because of the exceptional nature of this coincidence.

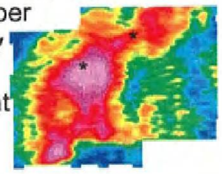
The effect of the Wolverine Point fm. is also evident in the South block, where the decay constant is a mirror image of the total energy envelope. As in the North block, notable exceptions are mapped as possible basement conductor axes.

It appears that the Wolverine Point fm. tapers out beneath the southeast and southwest corners of the South block.

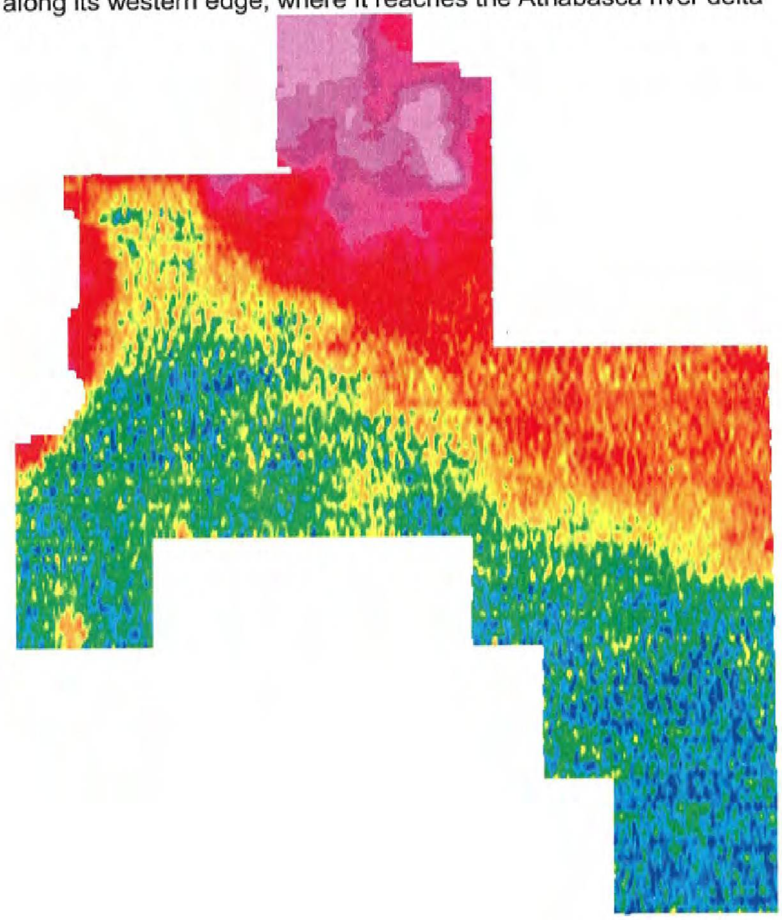


Second Order Moment

B field Z coil data was used in this second order calculation to suppress early-time, surficial, signal and enhance slower decaying, potentially deeper sources. Because of the strength of the surficial conductivity, this map has many similarities with the apparent conductivity in the North block over lake Athabasca. However, it does supply some support for the tenuous basement conductive axis in the area (* to*).



In the South block the strong surficial signal also dominates this map in the north over the lake and along its western edge, where it reaches the Athabasca river delta



Recommendations

All conductors with notable potential for uranium mineralization are numbered on the interpretation map, increasing from the North block to the southeast edge of the South block. This list of follow-up recommendations is in order of priority.

6. This axis is surrounded by a conductive zone, on the southwest edge of the South block's sheet 2. The zone correlates roughly with the edge of the Athabasca river valley, which suggests a surficial origin for the conductivity. The axis is distinguished from the zone by its slow decay, late-channel responses and decay constant high. Although it is not well-defined in profile, its X & Z coil highs are offset; this points to a vertically oriented conductor, which is typically found below the Athabasca formation. A crystalline basement origin is also supported by its strike, which roughly parallels the neighbouring basement magnetic body.

5. This South block conductor axis spans sheets 1 & 2. It has just enough late-channel response to appear on the decay constant map, and distinguish itself from the surrounding, weakly conductive surficial sources. It strikes parallel to neighbouring magnetic basement bodies, which supports a basement origin for the conductivity.

7. The low amplitude and relatively slow decay of this South block sheet 2 axis is much like target 5 in profile; however, as it lies in a total energy low, its decay constant high may be due in part to removal of suppression from the Wolverine Point's conductive layer. This relationship is discussed further in the decay constant overview. The strike of this conductor is in general agreement with neighbouring basement magnetic bodies.

8. This conductive axis, in the center of South block's sheet 2, is best defined in profile, where it is broad, ill-defined and fails to reach the late channels. It is notable because these profile characteristics could be the result of a deep source, it lacks an obvious topographic depression to collect surficial deposits and its decay is slow enough to produce a roughly coincident high on the decay constant map.

3. This axis on sheet 1 of the South block marks a late-channel response that is sufficiently well-defined to create a tenuous decay constant axis, despite the underlying conductive layer in the Wolverine Point fm. and the overlying, widespread and exceptionally powerful surficial conductivity. As discussed in the decay constant map overview, this combination of strong surficial conductivity superimposed upon the deep conductive layer within the Wolverine Point fm. typically produces decay constant negatives. This decay constant positive raises the potential of an exceptional (graphitic?) conductor lying at depth, beneath the surficial sediments. The strike of this conductive axis is similar to the well-defined magnetic bodies to the west, supporting a basement origin.

1. Although not notable in profile, this North block conductor is mapped because, like target 3 above, it marks the only decay constant high within the North block to lie beneath a powerful, rapidly decaying surficial anomaly. This raises the potential of a basement conductor lying beneath the surficial sediments. A basement source for this conductor is supported by the magnetic field which places a parallel body beside it.

2. This South block sheet 1 target is similar to the above targets 1 & 3. Although its late-channel response is slightly better in profile than target 1, its presence on the decay constant map is

very tenuous. The coincident magnetic body supports a basement origin for the late-channel conductivity.

4. As discussed in the overview of the total energy envelope, there is evidence that this magnetic boundary in the South block sheet 1 is a fault with dip-slip movement, and the associated conductive zone has a subsurface origin. Both are factors in the uranium mineralization model.

9. This trio of surficial EM zones in the South block sheet 2 correlates well with lakes; and this, together with their rapid decay, make a surficial origin probable. However, the anomaly on the sheet edge persists into channel 20, raising the remote possibility of a second conductor at depth, beneath the axis symbol. Any follow-up of this conductive trio should begin at this axis. The lakes creating these conductive highs all drain into lake Athabasca through the same river, which is responsible for several more pockets of conductivity.

We trust this data will further your exploration program; and we remain available for questions and any feedback that you are able to provide.

Respectfully Submitted,

Brian Schacht, Consulting Geophysicist

APPENDIX 3:

MEGATEM INTERPRETATION REPORT SUMMARY
(Intrepid Geophysics Ltd. and Encom Technology Pty. Ltd.)

Southshore
North Megatem Project

Airborne Geophysical Data Interpretation

for

Strathmore MINERALS CORP.

by

Encom Technology

April 2007

encom advanced realities

INTREPID GEOPHYSICS LTD

Overview – North Block Interpretation

Interpretation of an airborne electromagnetic (EM) survey is provided in this appendix for the North Block area as shown in Figure A-1. The data is from an airborne time domain EM and magnetic survey flown using 600 metre separated north-south traverse lines. The survey areas were flown by Fugro Airborne Surveys for Strathmore Minenls Corporation during June-July 2006 a nd later in August 2006. The survey used a MEGATEM® electromagnetic and magnetic equipped aircraft. Details of the survey, aircraft and EM system configuration and processing procedures, are detailed in the main portion of this report. The same equipment and processing procedures were applied to the North Block area data as to the South Block survey. A logistics an d processing report (*Logistics and Processing Report – Airborne Magnetic and MEGATEM® Survey North and South Blocks, Fort McMurray, Alberta – Job No 06419*) was also provided by the contractor, Fugro Airborne Surveys.

A geological overview and styles of mineralisation being sought by the survey are also provided in the main body of the report and for additional background, this information should be referred to.

An interpretation was requested to be undertaken by Encom Technology (of Sydney, Australia) with liaison with Intrepid Geophysics (Mr Kit Campbell) of Vancouver, BC. The interpretation involved inversion processing of the EM data to provide Conductivity Depth Images (**CDIs**) for each traverse. These CDIs were then interpreted for structure and significant conductive or resistive zones that represent geological structure, anomalous conductivity or character that could be indicative of potential environments for uranium or graphite development. Comparisons and assistance in the interpretation was provided by processed and enhanced magnetic results and interpretations.

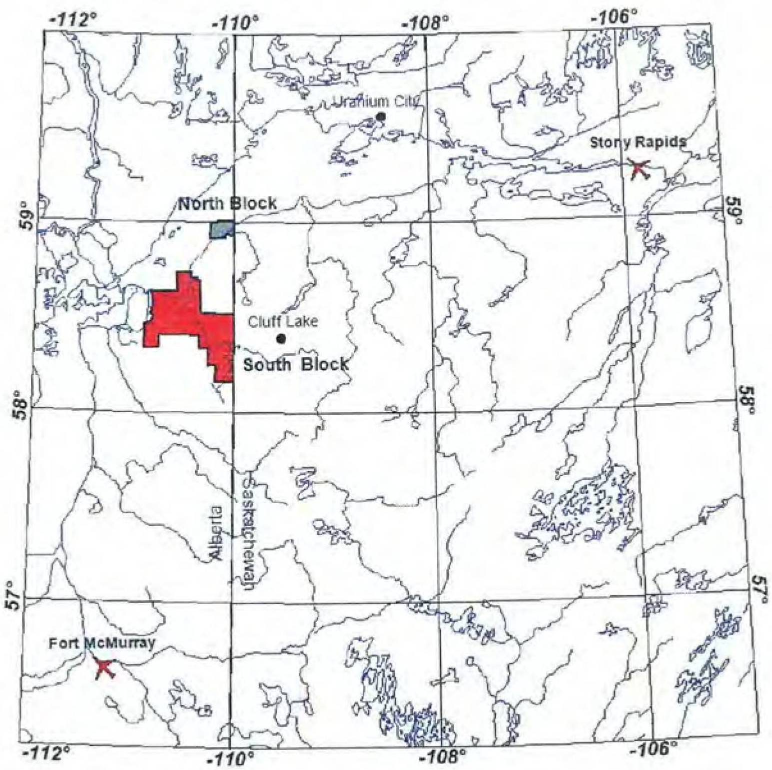


Figure A-1: *Strathmore Minerals airborne survey areas, with operations bases at Stony Rapids to the northeast and Fort McMurray to the south. To the east and within the Athabasca Basin are known occurrences of uranium mineralisation.*

MEGATEM® EM Data Processing

The **Conductivity-Depth** data for the North Block has been gridded after inversion processing at a range of selected depths beneath surface to indicate the changes that occur with structures and faults etc. A range of these is shown in Figure A-2 at different depth slices to indicate how the conductivity alters with depth.

For the interpretation, maps for each 20 metre depth interval were created and used in the interpretation (only every 40 metres is shown here). The traverse CDI section interpretations were then transferred and cross referenced to ensure that the placement and extent of the features were correct.

NOTE: Processing from both X and Z component dB/dT data has been used for the North Block. From these conductivity maps:

1. At the shallowest depth, a conductive NE trending high appears. The trend is discontinuous with as central zone of reduced conductivity that is sharply defined, possibly as the result of a fault or sharp lithological boundary. The boundary trends NW.

2. In the southeast, the conductivity is generally low and is higher over the northwest (and coincident with Lake Athabasca).

3. A strongly conductive anomaly is noted in the southwest corner of the survey that persists from about 60 – 200m depth.

4. In the low conductive eastern half of the survey area, 'levelling' effects can be noticed from about 180m and these become more noticeable with greater depth.

5. Good coherency of conductive features is still evident to a depth of 240m depth. At this depth, the NE trending high conductivity zone is still evident just offshore Lake Atabasca.

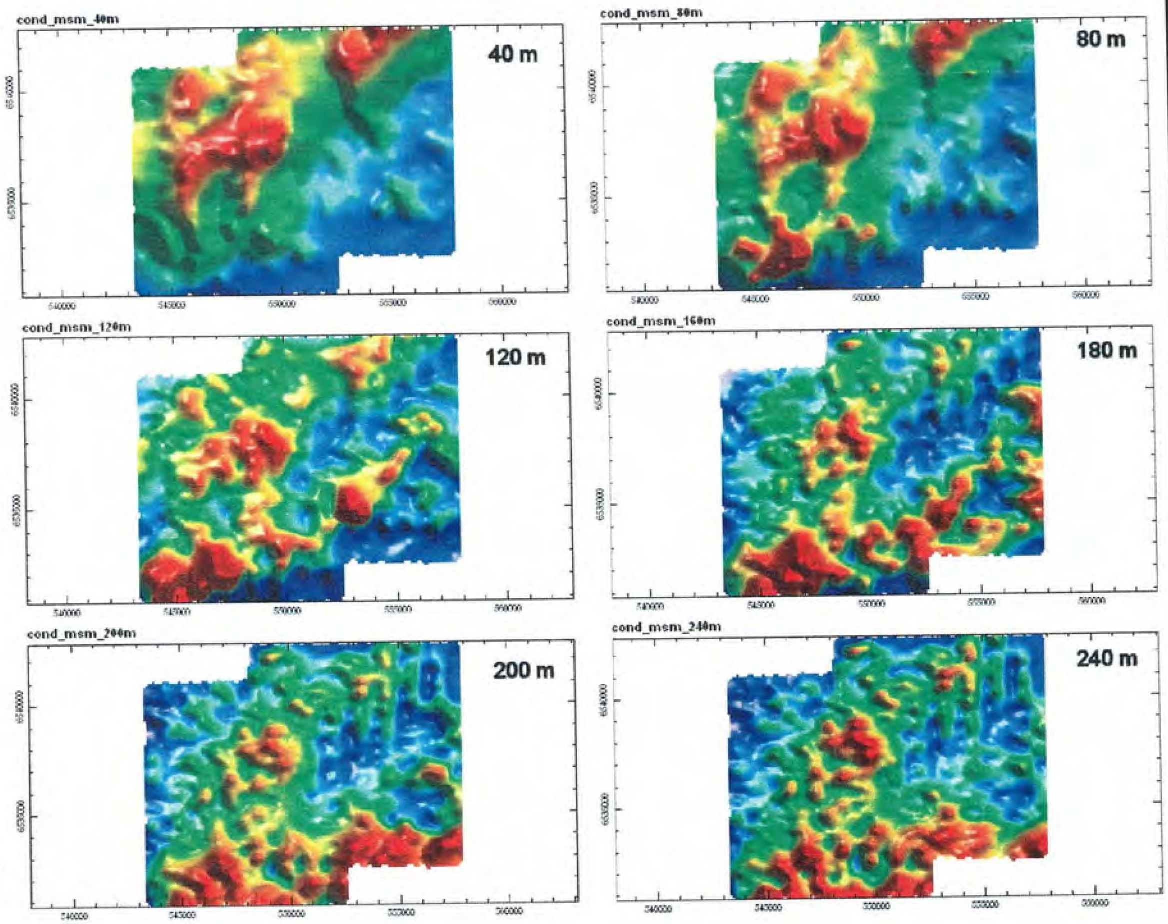


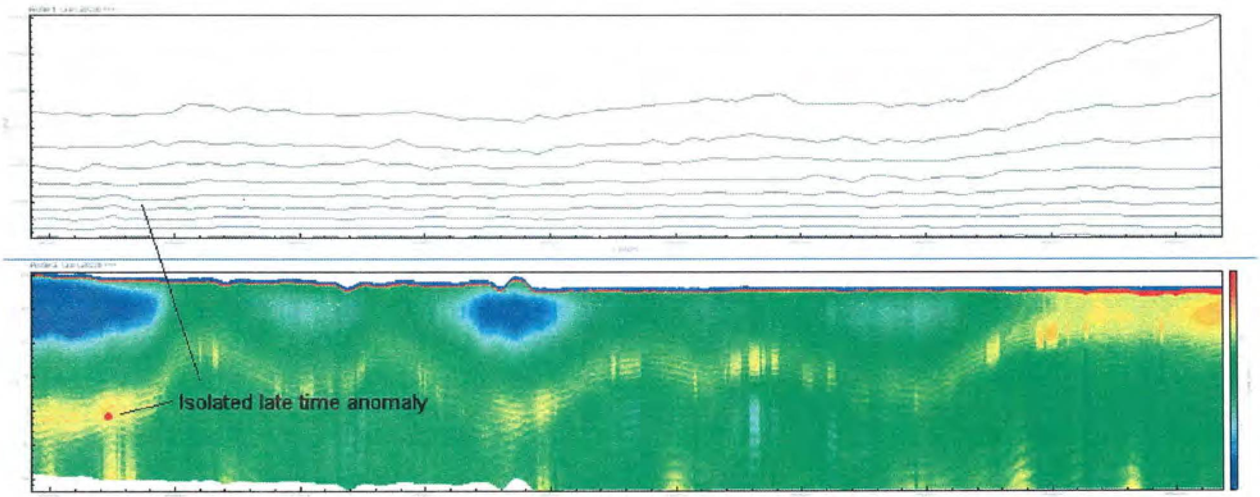
Figure A-2. *The depth-conductivity plan maps are used to verify the features and structures interpreted from the various sections. In the examples shown here, maps at 40 metre depths are shown from depths of 40 to 240 metres.*

Within the interpretation process, depth grids at 10 metre intervals were created and used.

MEGATEM® - North Block - Profiles and Section Analysis

The Figure shows a profile and section for Line 20230. Each traverse has been analysed visually and where late time anomalies have been detected which are possibly related to the approximate depth estimate of the Lake Athabasca unconformity, an anomaly has been picked. Note in the profile below that only the late time data channels from 12 – 20 are displayed. They have also been displayed with individual offset scaling and with significant amplitude enhancement to reveal the most subtle of anomalies.

The Conductivity-Depth inversion results have been presented as a section with low conductivities in cooler (blue) colours. Note that the nearer surface layers are not reflected in the EM data channels shown as only Channels 12-20 are displayed. The location of Line 20230 is indicated in the flight path map shown adjacent the Profile/Section plot. The description and location of similar isolated target anomalies is shown in the following slide. Only targets that are accessible from onshore have been located.



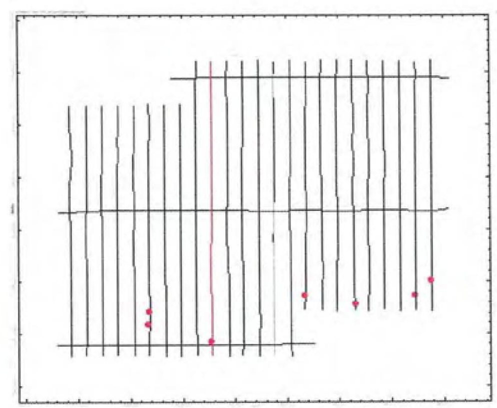


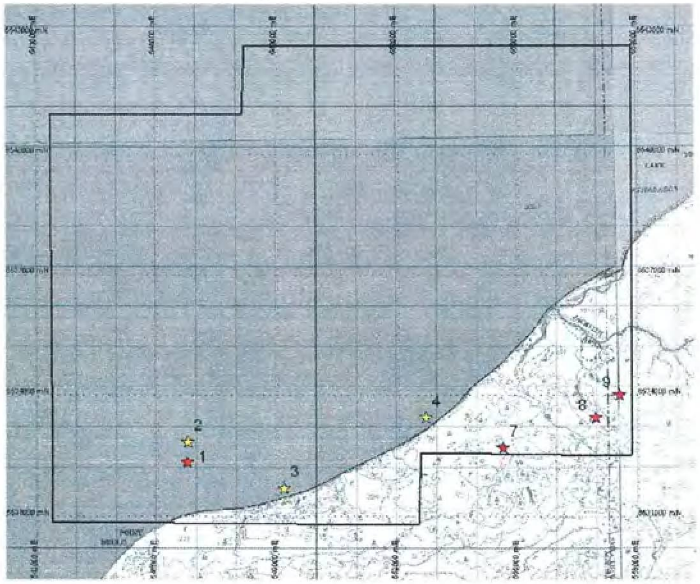
Figure. *Profile and section plot of Line 20230 located in the eastern portion of the North Block survey.*

MEGATEM® - North Block – Isolated Targets

The Figure shows the location of the targets as determined by profile and section analysis. The targets are ranked based on the EM response of the anomaly and the number of data channels over which the anomaly is evident. The isolated targets have been ranked according to the level of priority with Rank 2 being the highest and 3 the lowest. No Rank 1 targets were detected.
Targets having a Rank of 2 have a red star assigned and for Rank 3, a yellow star.

The depth estimates of each target is provided by the DTM values below surface.

The majority of the targets are near or close to the shoreline with Lake Athabasca. Targets 7, 8 and 9 are on land and would represent preferred sites due to their easier access.



Recommendations

Most of the recommendations outlined for the North Block targets are listed for the South Block survey area.

- Drill targeting directly from the airborne EM analysis is not recommended. Although a number of quite discreet target anomalies are highlighted, their existence can be subject to error due to a number of factors, especially where cross-line correlation of anomalies is not available (as is the case with the majority of targets since the nominal traverse spacing of the survey is 600 metres).

- The EM results in the deep Athabasca Basin zones have extended the technology to its approximate limit of about 200-220 metres of depth detection. Although this is significant, greater depth anomalies should be treated with doubt and not relied upon without additional fieldwork or methodology (such as ground EM studies) to verify their existence.

- Highlighted target areas require additional field validation, traverses and appropriate geochemical sampling to adequately test and further evaluate.

ID	LineNumbe	FID	XCentre	YCentre	Ranking	Memo	DTM__Band_	GPS_Z__Band_1
1	L20060	50,097	546,723	6,532,356.9	2	Zone of high conductivity evident in late channels (12-18)	196.39	294.89
2	L20060	50,089	546,736	6,532,857.4	3	Secondary anomaly location with late time anomaly associated (Ch 12-16)	189.28	293.83
3	L20100	48,972	549,136	6,531,706.6	3	Small isolated Channel 17-20 anomaly	186.43	296.38
4	L20160	47,154	552,681	6,533,462.4	3	Late time (Ch 16-20) anomaly but broad.	183.17	297.97
7	L20190	46,200	554,598	6,532,525.2	2	Broad anomaly beneath resistive zone (Ch 16-19)	196.44	328.51
8	L20230	45,173	556,934	6,533,464.6	2	Individual anomalies with low amplitude Ch 16-20	196.72	325.33
9	L20240	45,004	557,513	6,534,015.9	2	Continuing anomaly of adjacent line.	194.34	313.63

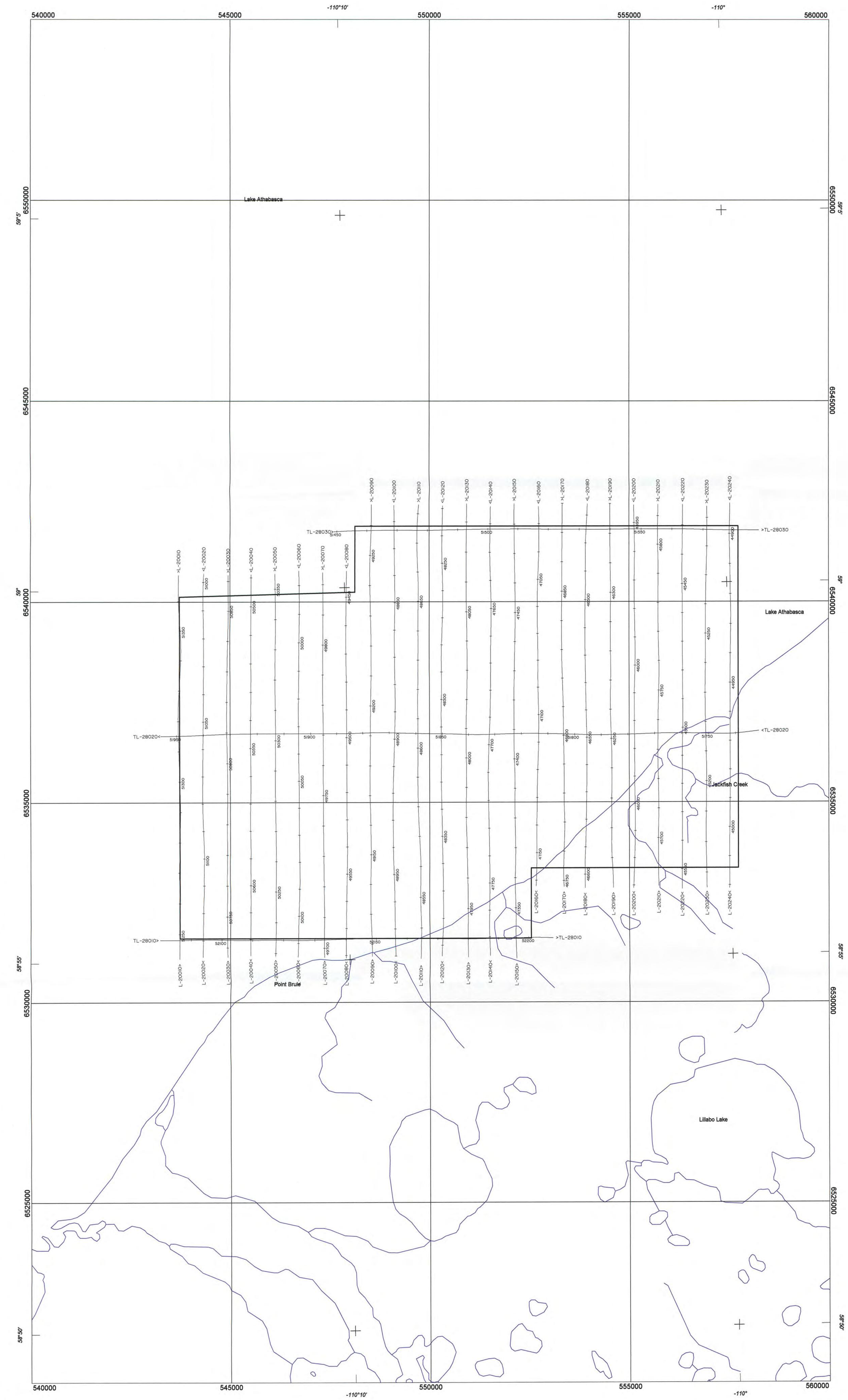
Figure. *Targets defined from profile and section analysis and their locations as defined on the base map.*

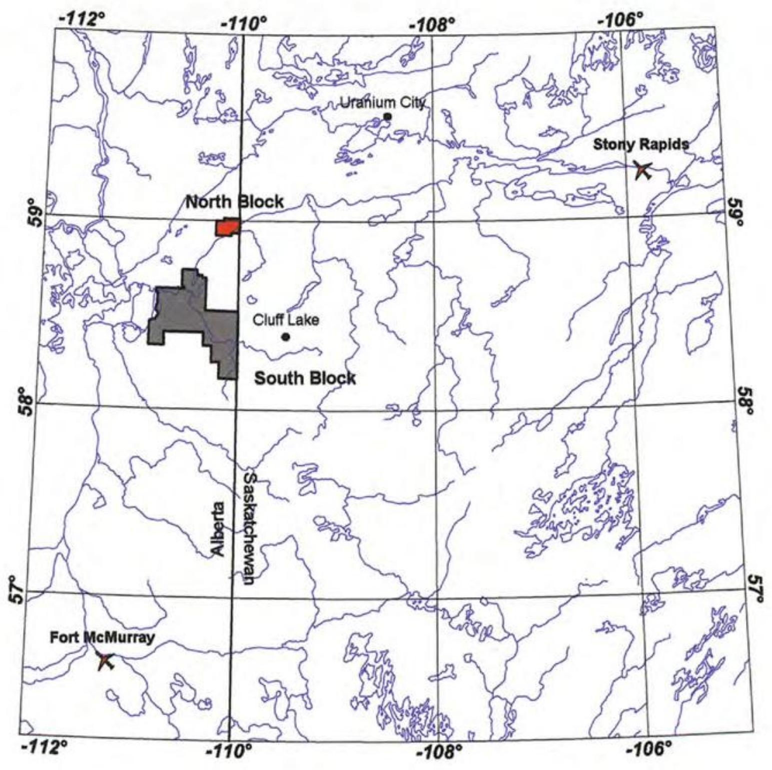
20070011

Strathmore Minerals Corp.

Airborne MEGATEM® Survey
For
Strathmore Minerals Corp.
North Block
Alberta

Flight Path





Survey Specifications

Line Spacing	600m
Line Azimuth	000°-180°
Tie-Line Spacing	4000m
Tie-Line Azimuth	090°-270°

Aircraft Specifications

Aircraft	DHC-7-102
Aircraft Altitude	120m Mean Terrain Clearance
Average Aircraft Speed	70m/sec
GPS Receiver	NovAtel Propak 4E-3151-R
GPS Sample Rate	1.0s

Magnetic Specifications

Magnetometer	Scintrex CS-2 Cesium Vapour
Magnetometer Installation	Towed Bird
Magnetometer Sensitivity	0.1nT
Sample Rate	0.10s
I.G.R.F. Model	2003
I.G.R.F. Correction Date	2006.6

Electromagnetic Specifications

Electromagnetic System	MEGATEM® 20 Channel Multicoil System
Transmitter Installation	Vertical Axis Loop Mounted on Aircraft
Transmitter Loop Area	406m²
Transmitter Loop Turns	5
Transmitter Base Frequency	30Hz
Pulse Width	3806μs
Off-time Period	12761μs
Receiver Installation	Towed Bird
Receiver Coils	Multiple Coils in X, Y, Z Orientation
Receiver Sample Rate	0.25s
Digital Acquisition	Fugro Airborne Surveys Geodas System
Analogue Acquisition	RMS GR-33 Chart Recorder
Video Acquisition	Colour VHS Video

Geodetic Specifications

Map Projection	UTM
Datum	NAD83
UTM Zone	12 North
Central Meridian	111° West
False Easting	500000m
False Northing	0m
Scale Factor	0.9996

N

Inclination 80 degrees
Declination 18 degrees

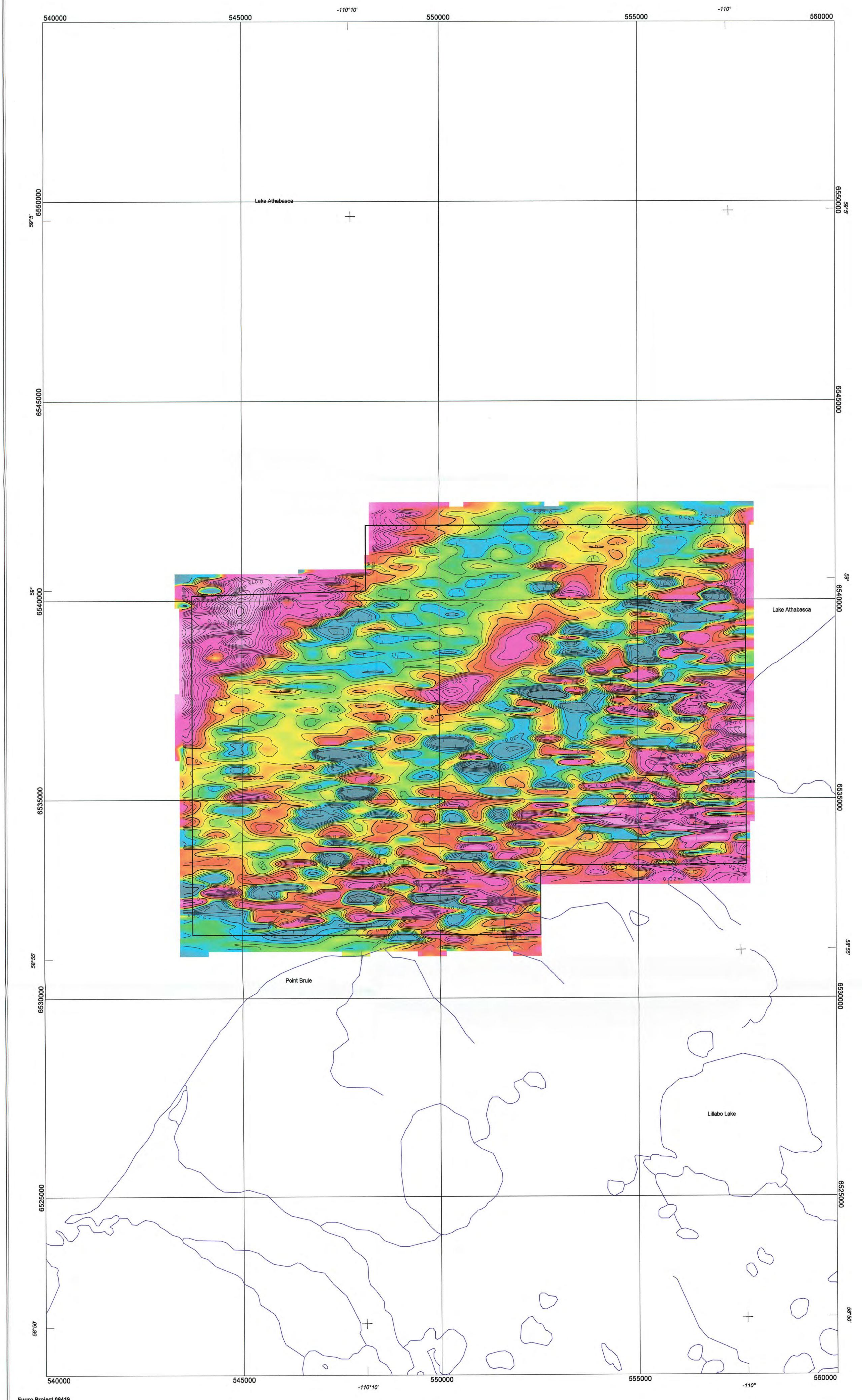
Scale 1:50000

1000 0 1000 2000 3000
metres
NAD83 / UTM zone 12N

Fugro Project 06419
Map Creation 13.10.06

FUGRO AIRBORNE SURVEYS

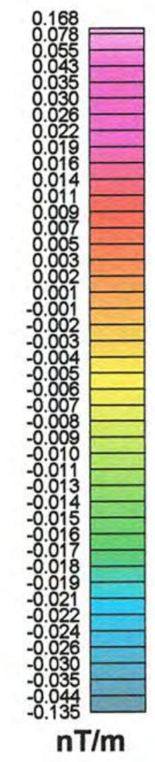
20070011

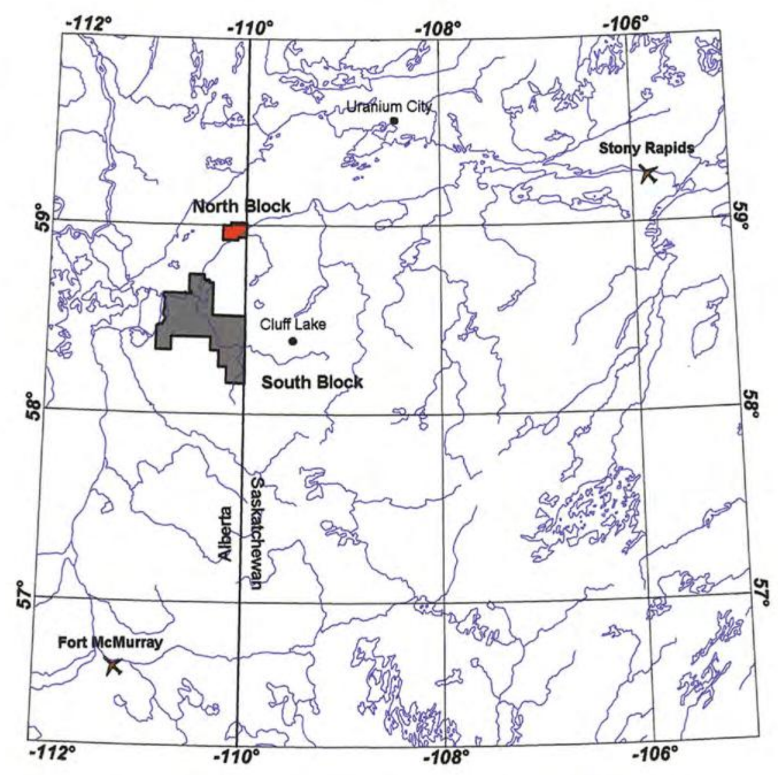


Strathmore MINERALS CORP.

Airborne MEGATEM® Survey
For
Strathmore Minerals Corp.
North Block
Alberta

First Vertical Derivative
of Residual Magnetic Intensity
Contour Interval 0.005 nanoteslas per metre





Survey Specifications

Line Spacing	600m
Line Azimuth	000°-180°
Tie-Line Spacing	4000m
Tie-Line Azimuth	090°-270°

Aircraft Specifications

Aircraft	DHC-7-102
Aircraft Altitude	120m Mean Terrain Clearance
Average Aircraft Speed	70m/sec
GPS Receiver	NovAtel Propak 4E-3151-R
GPS Sample Rate	1.0s

Magnetic Specifications

Magnetometer	Scintrex CS-2 Cesium Vapour
Magnetometer Installation	Towed Bird
Magnetometer Sensitivity	0.1nT
Sample Rate	0.10s
I.G.R.F. Model	2003
I.G.R.F. Correction Date	2006.6

Electromagnetic Specifications

Electromagnetic System	MEGATEM® 20 Channel Multicoil System
Transmitter Installation	Vertical Axis Loop Mounted on Aircraft
Transmitter Loop Area	406m²
Transmitter Loop Turns	5
Transmitter Base Frequency	30Hz
Pulse Width	3806μs
Off-time Period	12761μs
Receiver Installation	Towed Bird
Receiver Coils	Multiple Coils in X, Y, Z Orientation
Receiver Sample Rate	0.25s
Digital Acquisition	Fugro Airborne Surveys Geodas System
Analogue Acquisition	RMS GR-33 Chart Recorder
Video Acquisition	Colour VHS Video

Geodetic Specifications

Map Projection	UTM
Datum	NAD83
UTM Zone	12 North
Central Meridian	111° West
False Easting	500000m
False Northing	0m
Scale Factor	0.9996

N

Inclination 80 degrees
Declination 18 degrees

Scale 1:50000

1000 0 1000 2000 3000
metres
NAD83 / UTM zone 12N

Fugro Project 06419
Map Creation 13.10.06

FUGRO AIRBORNE SURVEYS

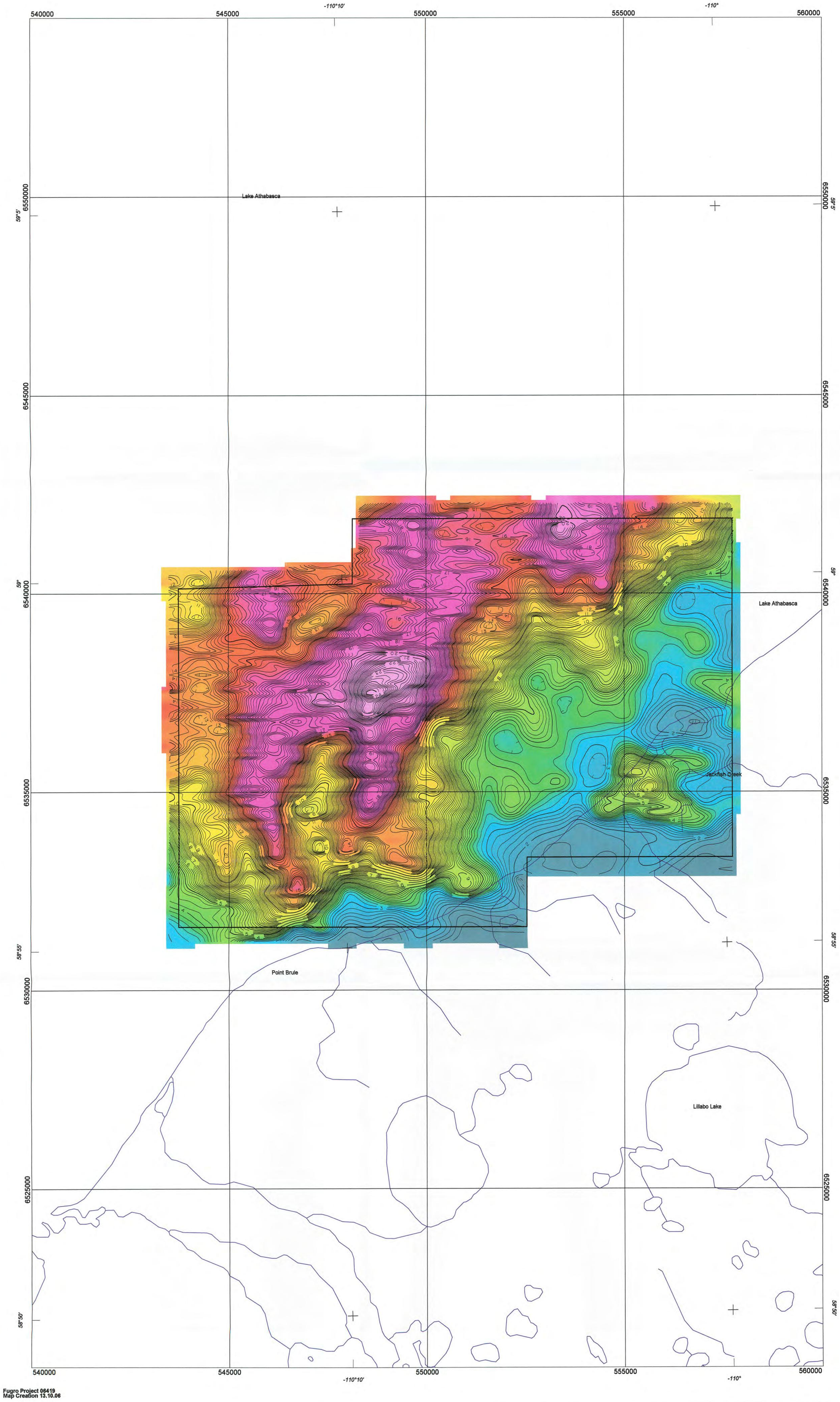
20070011

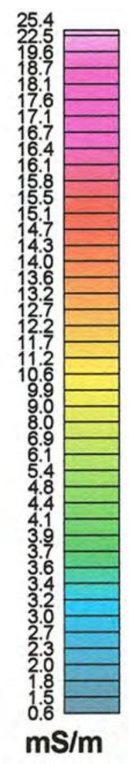
Strathmore Minerals Corp.

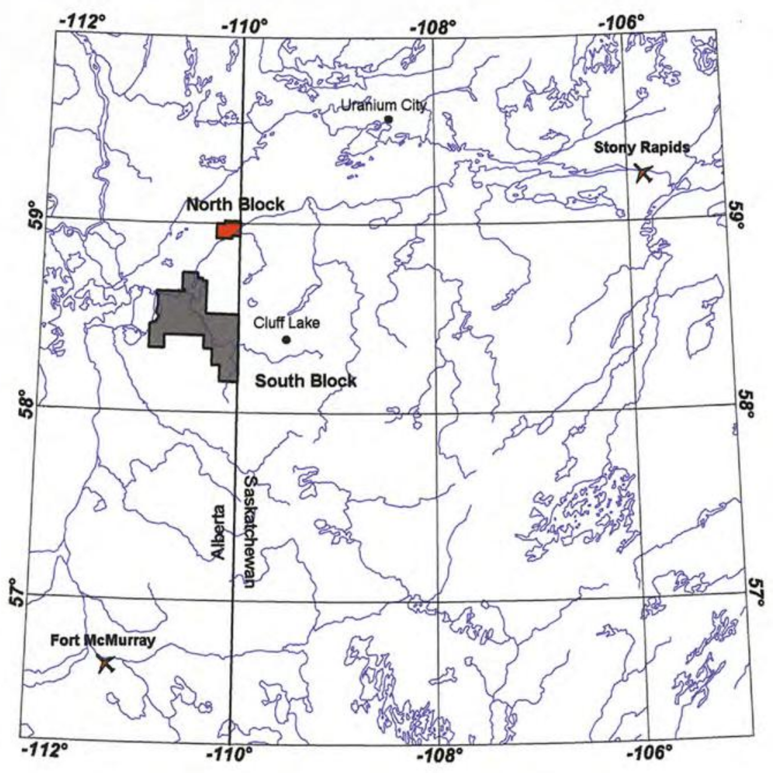
Airborne MEGATEM® Survey
For
Strathmore Minerals Corp.
North Block
Alberta

Apparent Conductivity
Derived from dB/dt X and Z Coils

Contour Interval 0.2 millisiemens per metre







Survey Specifications

Line Spacing	600m
Line Azimuth	000°-180°
Tie-Line Spacing	4000m
Tie-Line Azimuth	090°-270°

Aircraft Specifications

Aircraft	DHC-7-102
Aircraft Altitude	120m Mean Terrain Clearance
Average Aircraft Speed	70m/sec
GPS Receiver	NovAtel Propak 4E-3151-R
GPS Sample Rate	1.0s

Magnetic Specifications

Magnetometer	Scintrex CS-2 Cesium Vapour
Magnetometer Installation	Towed Bird
Magnetometer Sensitivity	0.1nT
Sample Rate	0.10s
I.G.R.F. Model	2003
I.G.R.F. Correction Date	2006.6

Electromagnetic Specifications

Electromagnetic System	MEGATEM® 20 Channel Multicoil System
Transmitter Installation	Vertical Axis Loop Mounted on Aircraft
Transmitter Loop Area	$406m^2$
Transmitter Loop Turns	5
Transmitter Base Frequency	30Hz
Pulse Width	3806μs
Off-time Period	12761μs
Receiver Installation	Towed Bird
Receiver Coils	Multiple Coils in X, Y, Z Orientation
Receiver Sample Rate	0.25s
Digital Acquisition	Fugro Airborne Surveys Geodas System
Analogue Acquisition	RMS GR-33 Chart Recorder
Video Acquisition	Colour VHS Video

Geodetic Specifications

Map Projection	UTM
Datum	NAD83
UTM Zone	12 North
Central Meridian	111° West
False Easting	500000m
False Northing	0m
Scale Factor	0.9996

N

Inclination 80 degrees
Declination 18 degrees

Scale 1:50000

1000 0 1000 2000 3000

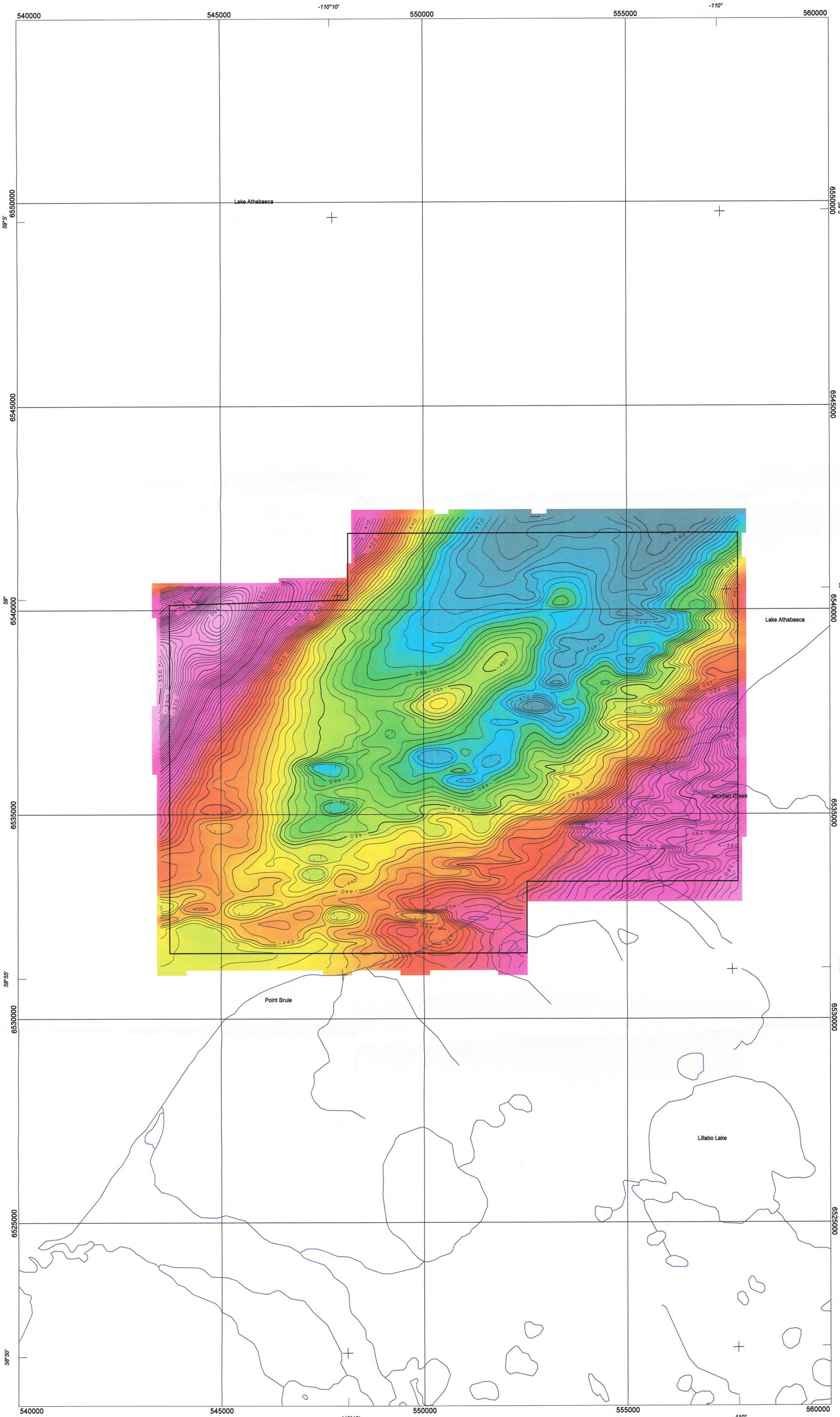
metres

NAD83 / UTM zone 12N

Fugro Project 06419
Map Creation 13.10.06

FUGRO AIRBORNE SURVEYS

20070011

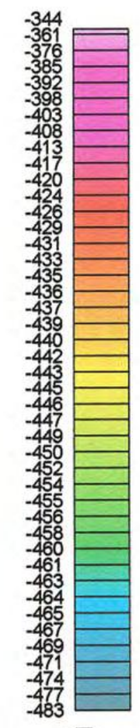


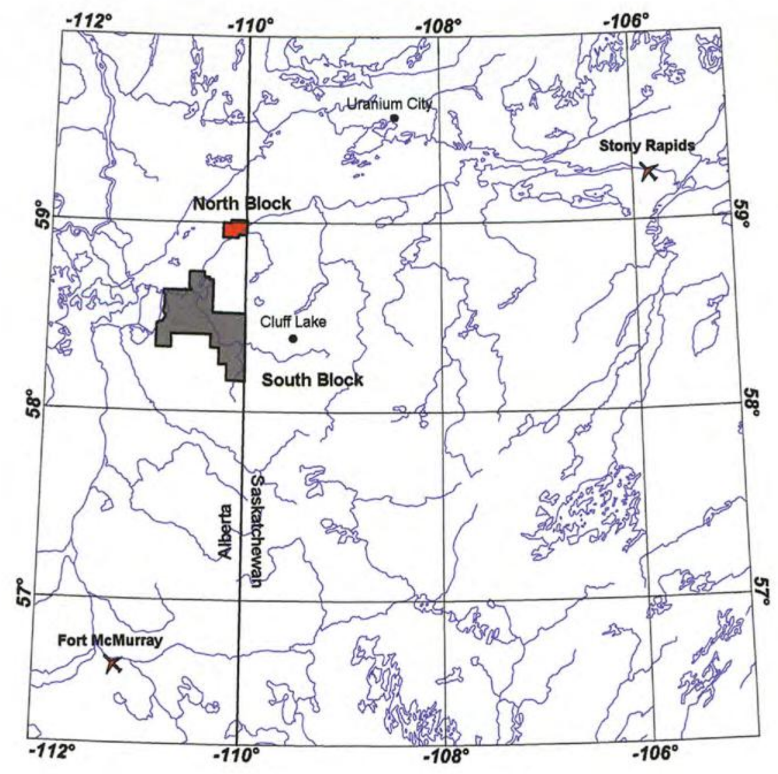
Strathmore MINERALS CORP.

Airborne MEGATEM® Survey
For
Strathmore Minerals Corp.
North Block
Alberta

Residual Magnetic Intensity

Contour Interval 2 nanoteslas





Survey Specifications

Line Spacing	600m
Line Azimuth	000°-180°
Tie-Line Spacing	4000m
Tie-Line Azimuth	090°-270°

Aircraft Specifications

Aircraft	DHC-7-102
Aircraft Altitude	120m Mean Terrain Clearance
Average Aircraft Speed	70m/sec
GPS Receiver	NovAtel Propak 4E-3151-R
GPS Sample Rate	1.0s

Magnetic Specifications

Magnetometer	Scintrex CS-2 Cesium Vapour
Magnetometer Installation	Towed Bird
Magnetometer Sensitivity	0.1nT
Sample Rate	0.10s
I.G.R.F. Model	2003
I.G.R.F. Correction Date	2006.6

Electromagnetic Specifications

Electromagnetic System	MEGATEM® 20 Channel Multicoil System
Transmitter Installation	Vertical Axis Loop Mounted on Aircraft
Transmitter Loop Area	406m²
Transmitter Loop Turns	5
Transmitter Base Frequency	30Hz
Pulse Width	3806μs
Off-time Period	12761μs
Receiver Installation	Towed Bird
Receiver Coils	Multiple Coils in X, Y, Z Orientation
Receiver Sample Rate	0.25s
Digital Acquisition	Fugro Airborne Surveys Geodas System
Analogue Acquisition	RMS GR-33 Chart Recorder
Video Acquisition	Colour VHS Video

Geodetic Specifications

Map Projection	UTM
Datum	NAD83
UTM Zone	12 North
Central Meridian	111° West
False Easting	500000m
False Northing	0m
Scale Factor	0.9996

N

Inclination 80 degrees
Declination 18 degrees

Scale 1:50000

1000 0 1000 2000 3000
metres
NAD83 / UTM zone 12N

Fugro Project 06419
Map Creation DD.MM.06

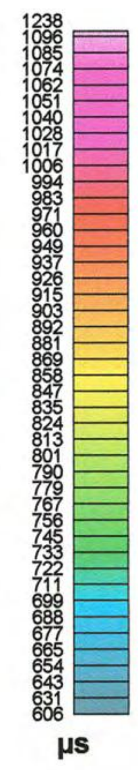
FUGRO AIRBORNE SURVEYS

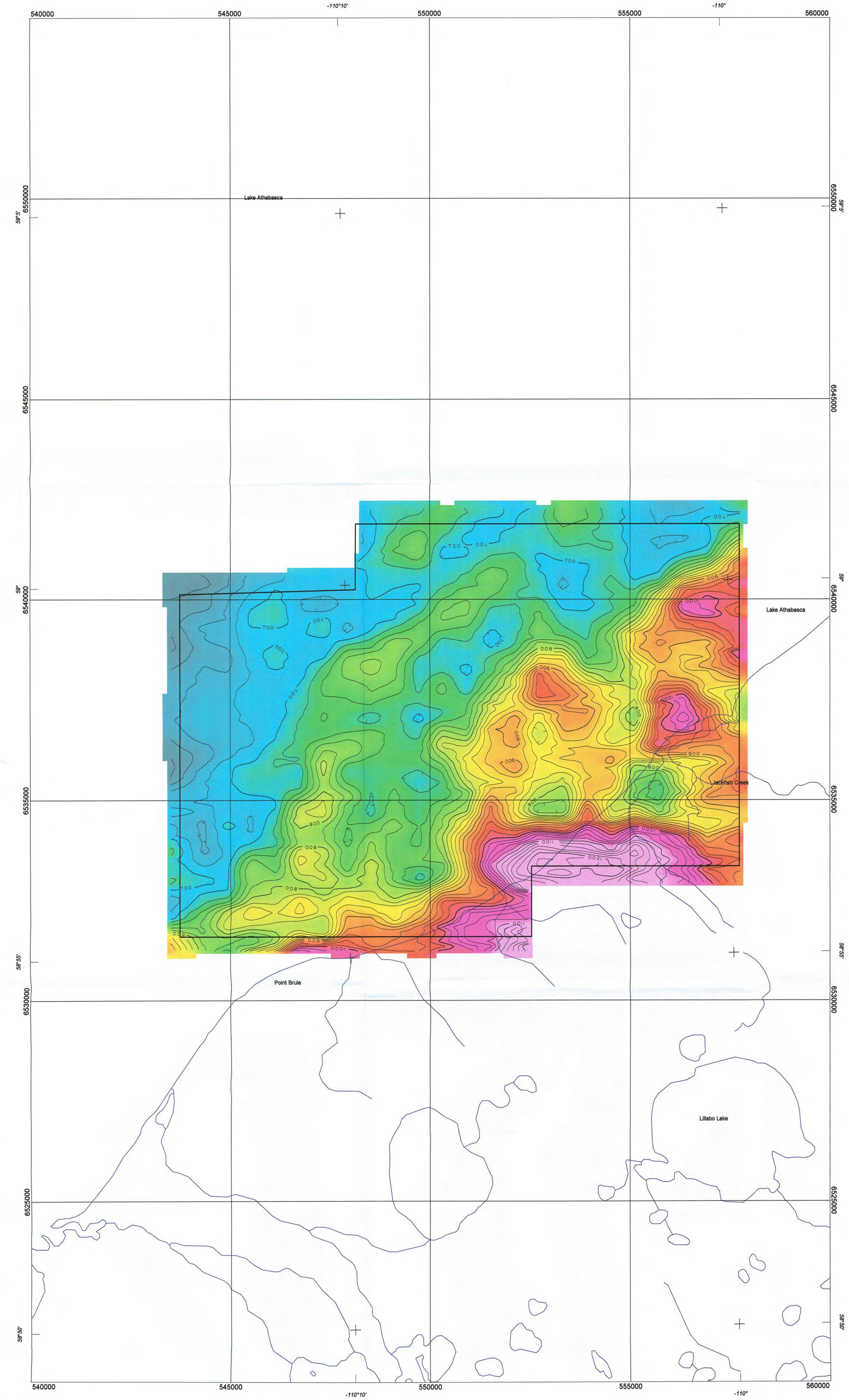
20070011

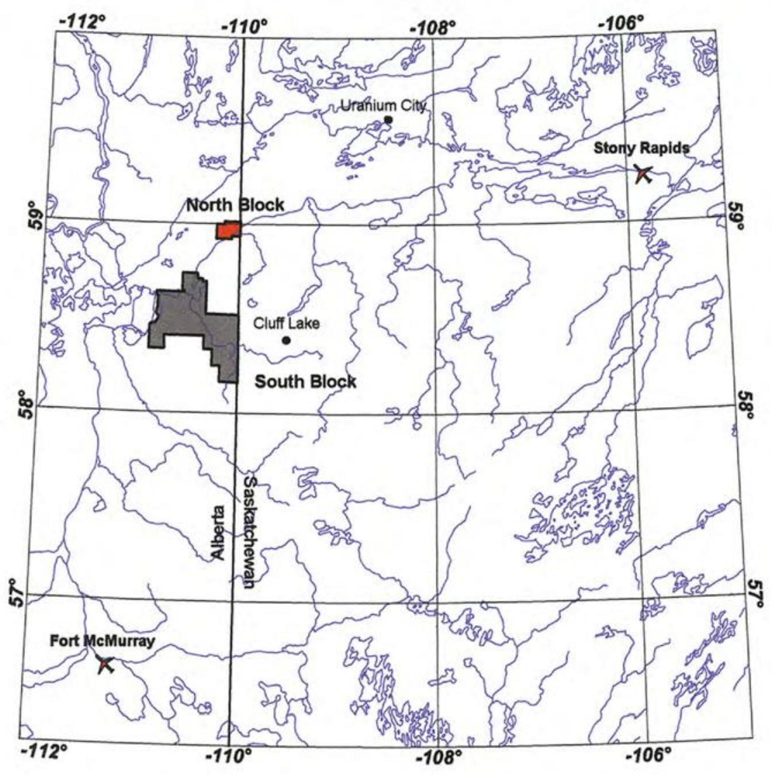
Airborne MEGATEM® Survey
For
Strathmore Minerals Corp.
North Block
Alberta

Decay Constant (Tau)
Derived from B Field Z Coil Channels 08 to 20

Contour Interval 20 microseconds







Survey Specifications

Line Spacing	600m
Line Azimuth	000°-180°
Tie-Line Spacing	4000m
Tie-Line Azimuth	090°-270°

Aircraft Specifications

Aircraft	DHC-7-102
Aircraft Altitude	120m Mean Terrain Clearance
Average Aircraft Speed	70m/sec
GPS Receiver	NovAtel Propak 4E-3151-R
GPS Sample Rate	1.0s

Magnetic Specifications

Magnetometer	Scintrex CS-2 Cesium Vapour
Magnetometer Installation	Towed Bird
Magnetometer Sensitivity	0.1nT
Sample Rate	0.10s
I.G.R.F. Model	2003
I.G.R.F. Correction Date	2006.6

Electromagnetic Specifications

Electromagnetic System	MEGATEM® 20 Channel Multicoil System
Transmitter Installation	Vertical Axis Loop Mounted on Aircraft
Transmitter Loop Area	406m²
Transmitter Loop Turns	5
Transmitter Base Frequency	30Hz
Pulse Width	3806µs
Off-time Period	12761µs
Receiver Installation	Towed Bird
Receiver Coils	Multiple Coils in X, Y, Z Orientation
Receiver Sample Rate	0.25s
Digital Acquisition	Fugro Airborne Surveys Geodas System
Analogue Acquisition	RMS GR-33 Chart Recorder
Video Acquisition	Colour VHS Video

Geodetic Specifications

Map Projection	UTM
Datum	NAD83
UTM Zone	12 North
Central Meridian	111° West
False Easting	500000m
False Northing	0m
Scale Factor	0.9996

Inclination 80 degrees
Declination 18 degrees

Scale 1:50000

1000 0 1000 2000 3000

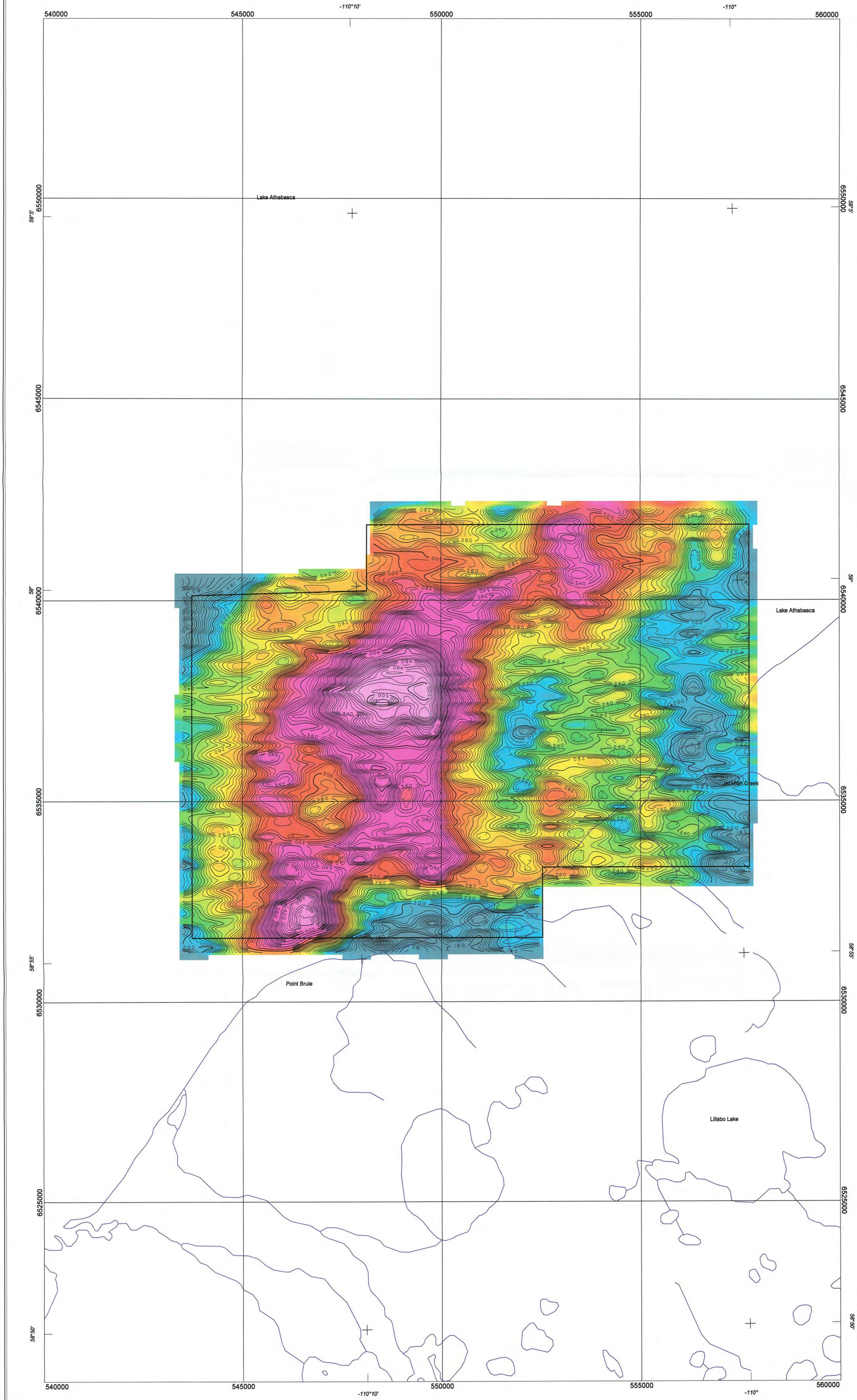
metres

NAD83 / UTM zone 12N

Fugro Project 06419
Map Creation 13.10.06

FUGRO AIRBORNE SURVEYS

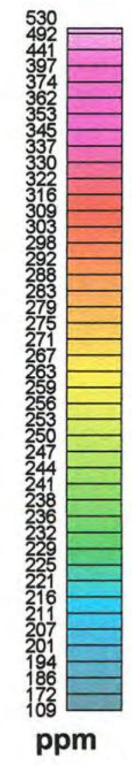
20070011

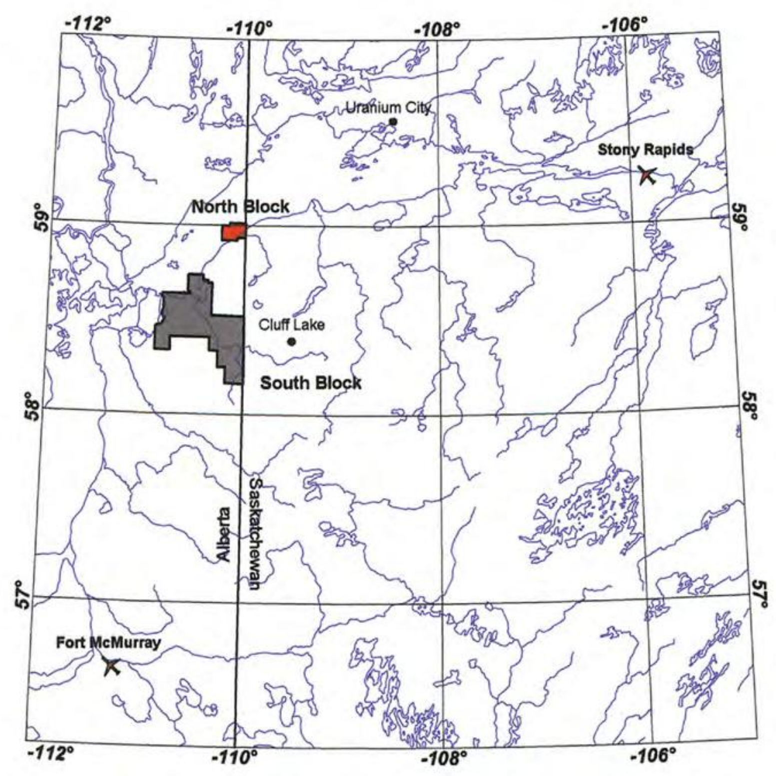


Strathmore Minerals Corp.

Airborne MEGATEM® Survey
For
Strathmore Minerals Corp.
North Block
Alberta

Second Order Moment
Derived form B Field Z Component
Contour Interval 5 parts per million





Survey Specifications

Line Spacing	600m
Line Azimuth	000°-180°
Tie-Line Spacing	4000m
Tie-Line Azimuth	090°-270°

Aircraft Specifications

Aircraft	DHC-7-102
Aircraft Altitude	120m Mean Terrain Clearance
Average Aircraft Speed	70m/sec
GPS Receiver	NovAtel Propak 4E-3151-R
GPS Sample Rate	1.0s

Magnetic Specifications

Magnetometer	Scintrex CS-2 Cesium Vapour
Magnetometer Installation	Towed Bird
Magnetometer Sensitivity	0.1nT
Sample Rate	0.10s
I.G.R.F. Model	2003
I.G.R.F. Correction Date	2006.6

Electromagnetic Specifications

Electromagnetic System	MEGATEM® 20 Channel Multicoil System
Transmitter Installation	Vertical Axis Loop Mounted on Aircraft
Transmitter Loop Area	406m²
Transmitter Loop Turns	5
Transmitter Base Frequency	30Hz
Pulse Width	3806μs
Off-time Period	12761μs
Receiver Installation	Towed Bird
Receiver Coils	Multiple Coils in X, Y, Z Orientation
Receiver Sample Rate	0.25s
Digital Acquisition	Fugro Airborne Surveys Geodas System
Analogue Acquisition	RMS GR-33 Chart Recorder
Video Acquisition	Colour VHS Video

Geodetic Specifications

Map Projection	UTM
Datum	NAD83
UTM Zone	12 North
Central Meridian	111° West
False Easting	500000m
False Northing	0m
Scale Factor	0.9996

N

Inclination 80 degrees
Declination 18 degrees

Scale 1:50000

1000 0 1000 2000 3000
metres
NAD83 / UTM zone 12N

Fugro Project 06419
Map Creation 13.10.06

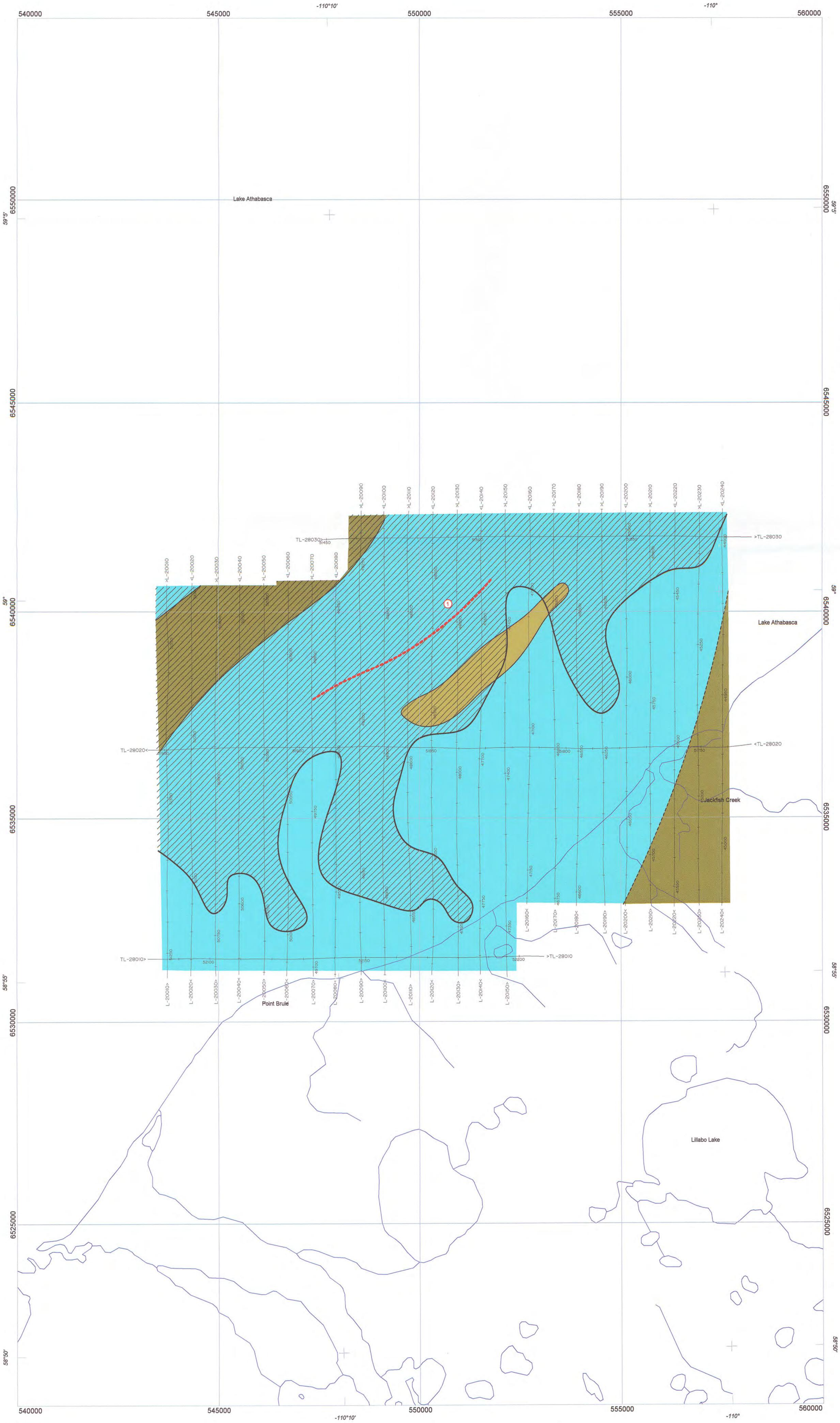
FUGRO AIRBORNE SURVEYS

20070011

Strathmore MINERALS CORP.

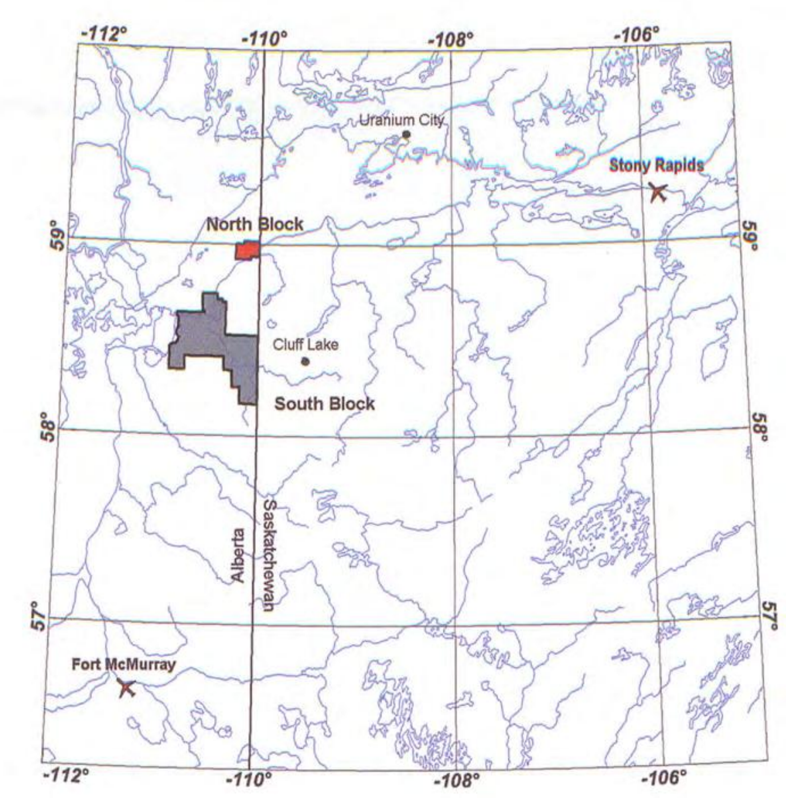
Airborne MEGATEM® Survey
For
Strathmore Minerals Corp.
North Block
Alberta

Interpretation



INTERPRETATION LEGEND

- Magnetic/Lithologic Boundary at or below the Archean basement surface (probable, possible)
- Possible Fault of basement origin
- Mafic Dyke
- Mafic Lithologies at or below the basement surface, in descending magnetic intensity levels, from the left
- Felsic Lithology at or below the basement surface,
- Conductive Zone of probable Surficial Origin; strong early time response, rapid decay, topographic correlation
- Conductive Zone of potential Subsurface Origin; notably lower amplitudes and slower decay than above zone
- Potential Basement Conductive Axis
- Target Discussed in the Report



Survey Specifications

Line Spacing	600m
Line Azimuth	000°-180°
Tie-Line Spacing	4000m
Tie-Line Azimuth	090°-270°

Aircraft Specifications

Aircraft	DHC-7-102
Aircraft Altitude	120m Mean Terrain Clearance
Average Aircraft Speed	70m/sec
GPS Receiver	NovAtel Propak 4E-3151-R
GPS Sample Rate	1.0s

Magnetic Specifications

Magnetometer	Scintrex CS-2 Cesium Vapour
Magnetometer Installation	Towed Bird
Magnetometer Sensitivity	0.1nT
Sample Rate	0.10s
I.G.R.F. Model	2003
I.G.R.F. Correction Date	2006.6

Electromagnetic Specifications

Electromagnetic System	MEGATEM® 20 Channel Multicoil System
Transmitter Installation	Vertical Axis Loop Mounted on Aircraft
Transmitter Loop Area	406m²
Transmitter Loop Turns	5
Transmitter Base Frequency	30Hz
Pulse Width	3806μs
Off-time Period	12761μs
Receiver Installation	Towed Bird
Receiver Coils	Multiple Coils in X, Y, Z Orientation
Receiver Sample Rate	0.25s
Digital Acquisition	Fugro Airborne Surveys Geodas System
Analogue Acquisition	RMS GR-33 Chart Recorder
Video Acquisition	Colour VHS Video

Geodetic Specifications

Map Projection	UTM
Datum	NAD83
UTM Zone	12 North
Central Meridian	111° West
False Easting	500000m
False Northing	0m
Scale Factor	0.9996

N

Inclination 80 degrees
Declination 18 degrees

Scale 1:50000

1000 0 1000 2000 3000
(meters)
NAD83 / UTM zone 12N

Fugro Project 06419
Map Creation 13.01.07

FUGRO AIRBORNE SURVEYS