Assessment Report for the

SAWYER Property

Fort Steele Mining Division
N.T.S. 82 F/ 10E, 15E
Latitude 49˚ 45' N, Longitude 116˚ 34' W

for

Jasper Mining Corporation
1020, 833 - 4th Avenue S.W.
Calgary, Alberta
T2P 3T5

Submitted by:

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of

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V1C 4R5

Submitted: October 15th, 2006

SUMMARY

The Sawyer property is located approximately 65 kilometres northwest of Cranbrook, east of Kootenay Lake in the Purcell Mountains. The property can be reached by utilizing the St. Mary's River Forestry Service Road network west of Marysville. A reasonably well maintained forestry road follows the St. Marys River to the property, with access to the eastern margin of the property available along the Sawyer Creek Forestry Road.

The property covers a mapped exposure of felsic intrusive material interpreted to correlate to the Bayonne Magmatic Belt, comprised of Cretaceous age felsic intrusions extending from the Baldy Batholith north of Kamloops to the International Boundary with the United States south of Creston. The Sawyer Creek Stock may represent an apophyse of the Fry Creek Batholith, a large intrusive complex located eight kilometres to the northwest. Alternatively, it may represent a separate intrusion similar to the Hall Lake Stock, located 14 kilometres to the southeast.

The 2006 program consisted of an airborne geophysical program undertaken by Aeroquest Limited. A total of 204.3 line km were flown with collection of electromagnetic, magnetic and radiometric data over the entirety of the property.

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INTRODUCTION

The Sawyer property is located approximately 65 kilometres northwest of Cranbrook, east of Kootenay Lake in the Purcell Mountains (Fig. 1 and 2). The property can be reached by utilizing the St. Mary's River Forestry Service Road network west of Marysville. A reasonably well maintained forestry road follows the St. Marys River to the property, with access to the eastern margin of the property available along the Sawyer Creek Forestry Road.

The property (Fig. 3) covers a mapped exposure of felsic intrusive material interpreted to correlate to the Bayonne Magmatic Belt, comprised of Cretaceous age felsic intrusions extending from the Baldy Batholith north of Kamloops to the International Boundary with the United States south of Creston. The Sawyer Creek Stock may represent an apophyse of the Fry Creek Batholith, a large intrusive complex located eight kilometres to the northwest. Alternatively, it may represent a separate intrusion similar to the Hall Lake Stock, located 14 kilometres to the southeast.

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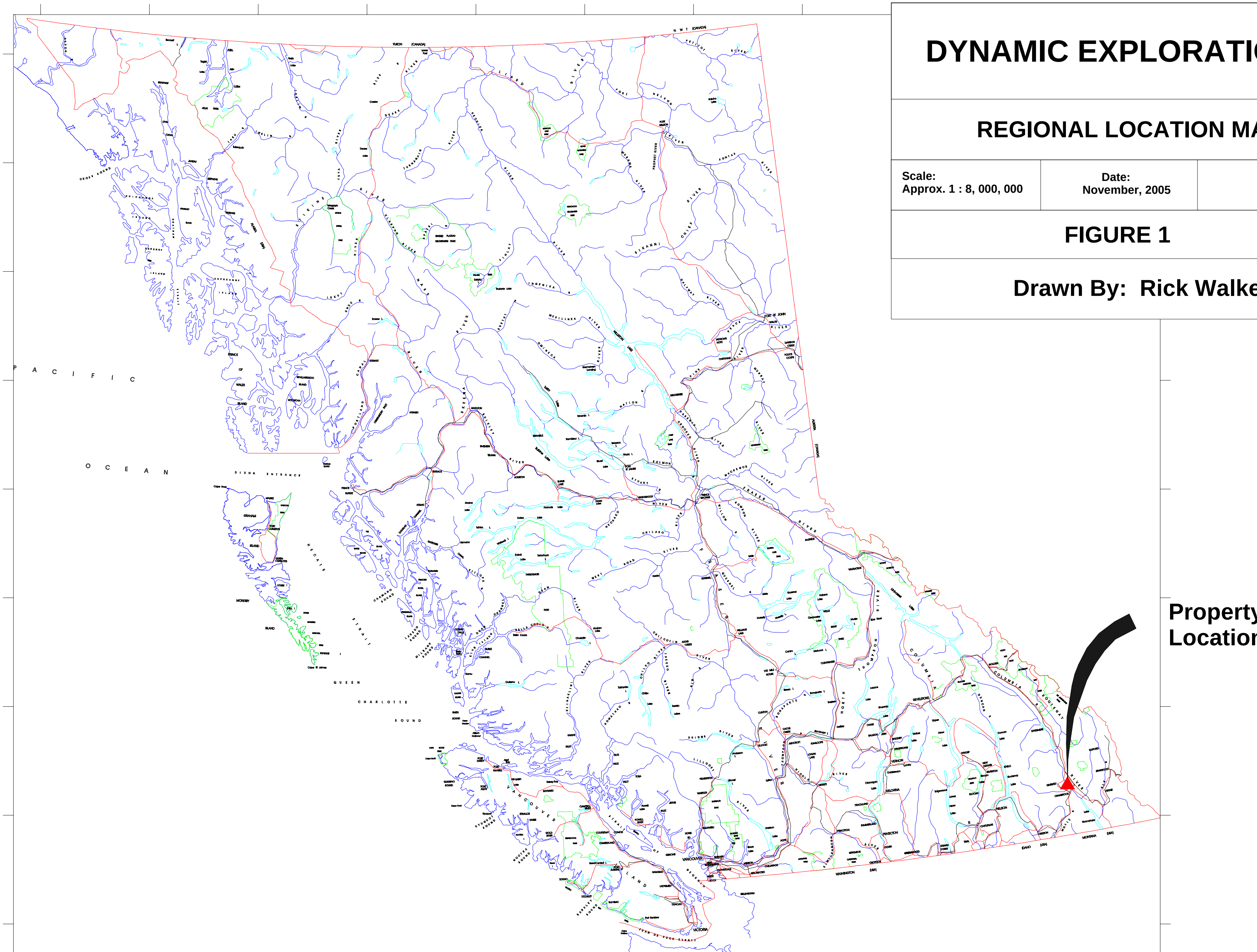
DYNAMIC EXPLORATION LTD

REGIONAL LOCATION MAP

Scale: Approx. 1 : 8, 000, 000	Date: November, 2005	Mapsheet: N.T.S. 82G / 12E BCGS: 082G052

FIGURE 1

Drawn By: Rick Walker



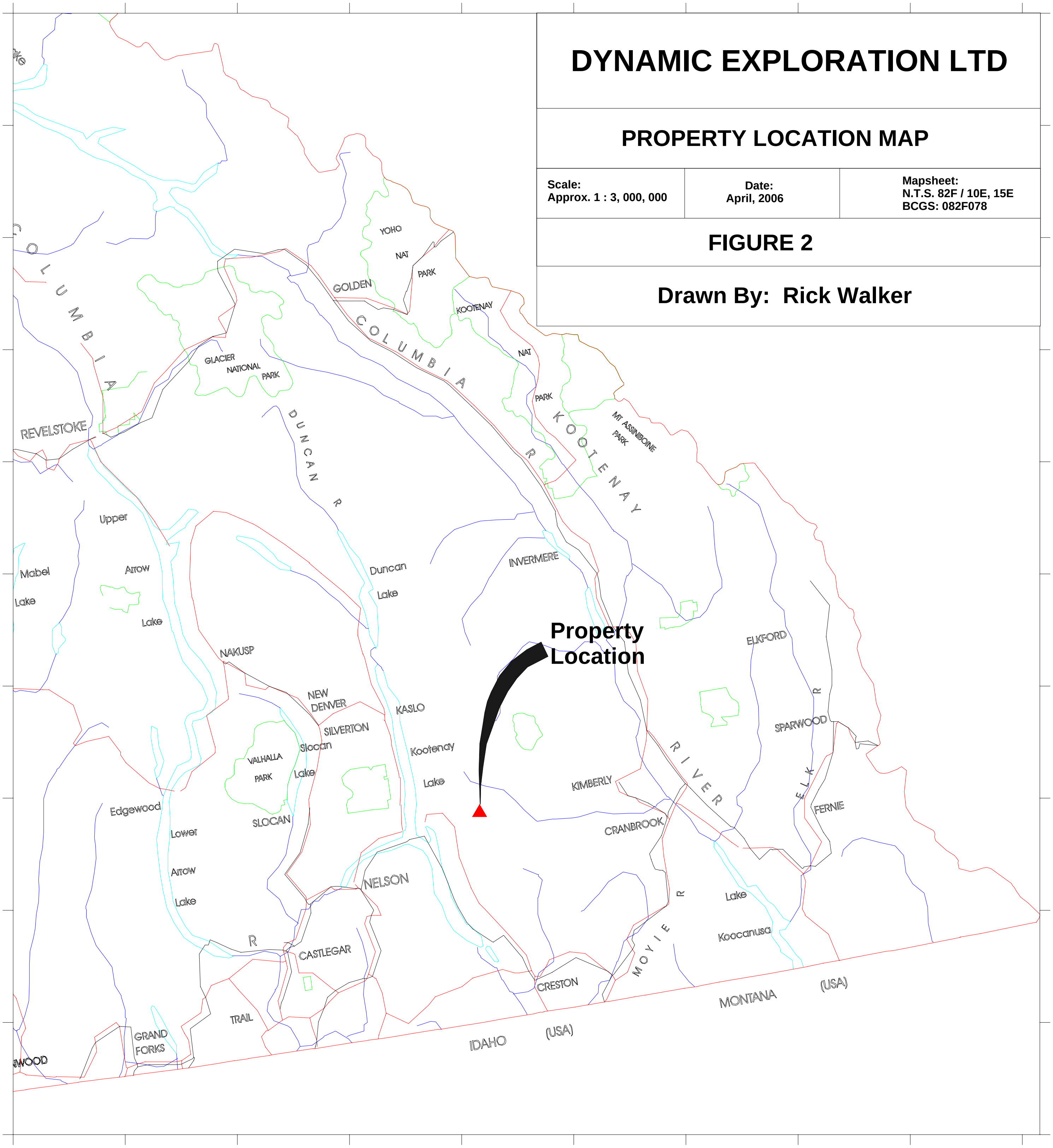
DYNAMIC EXPLORATION LTD

PROPERTY LOCATION MAP

Scale: Approx. 1 : 3, 000, 000	Date: April, 2006	Mapsheet: N.T.S. 82F / 10E, 15E BCGS: 082F078

FIGURE 2

Drawn By: Rick Walker



LOCATION AND ACCESS

The SAWYER property is located in the western Purcell Mountains (Latitude 49˚ 45' N, Longitude 116˚ 34' W), approximately 65 kilometres northwest of Cranbrook, B.C. on N.T.S. mapsheet 82 F/10E, 15E (Fig. 1 and 2). The property consists of 4 Mineral Tenures acquired through Mineral Tenures Online (Fig. 3).

The property can be accessed by gravel Forest Service Roads (FSR) from Cranbrook / Kimberley along the St. Mary's Road. The road is well maintained west of St. Mary's Lake to Km 42. At km 45, continue north along the St. Mary's FSR for approximately 12 km to a fork in the road. Take the left fork and cross over the bridge, then the left fork again, crossing over another bridge. Approximately 3 km farther along, the road crosses another bridge to the south side of the St. Mary's River. Approximately 6 km further along the road, there is a branch road on the south side of the road which provides vehicle access to the east side of the Sawyer property. Continuing along the main logging road, continuing along the St. Mary's River, one crosses another bridge to the north side of the St. Mary's River and vehicle access to the northern portion of the property. All roads are negotiable using a 2WD vehicle although 4WD is recommended for better clearance.

Helicopter access is recommended for the western and central portions of the property.

PHYSIOGRAPHY AND CLIMATE

The SAWYER property is located slightly east of Rose Pass (Fig. 2), approximately 65 km northwest of Cranbrook, on the east side of Kootenay Lake (Fig. 1). Relief in the area varies from 1200 metres (3,930 feet) along the St. Mary's River to approximately 2320 metres (7,611 feet) on an unnamed peak in the core of the property.

The claims are generally characterized by moderately to very steep topography, with generally north and south facing slopes along east-west oriented valleys. Sawyer Creek, along the eastern edge of the property is oriented roughly north-south.

Vegetation in the area consists predominantly coniferous, with deciduous trees preferentially located along the valley bottom. Undergrowth consists largely of small deciduous shrubs, with Devil's Club along watercourses and wet areas.

The claims are located east of Kootenay Lake along a regional topographic high, comprising the local drainage divide, and are therefore subject to heavier precipitation. As a result, the region is characterized by heavy snowfall during the winter months. The property is available for vehicle based, geological exploration from June to late October.

CLAIM STATUS

The property consists of 4 Mineral Tenure On-line (MTO) mineral tenures (Fig. 3), acquired in accordance with existing government claim location regulations. Significant tenure information is summarized below:

Tenure Name	Area (ha)	Tenure #	Expiry Date*
Sawyer East	501.055	520997	Dec. 31, 2010
Sawyer North	375.644	509603	Dec. 31, 2010
Sawyer West	250.551	520998	Dec. 31, 2010
Intrusive	438.339	501293	Dec. 31, 2010
Total:	**1,565.589**		

Assessment was filed only on the Sawyer North and Intrusive Mineral Tenures

*After 2006 assessment credit applied.

HISTORY

1990 - Geological Development Report on the Lapointe Creek Property, M.B. Bapty, 50 pp. (unpub.)

1993 - Nelson (East Half) mapsheet, Geological Survey of Canada Open File 2721, Scale 1:100,000

1994 - Report on Sawyer Property, M.B. Bapty and Walker, R.T., 19 pp. (unpub.)

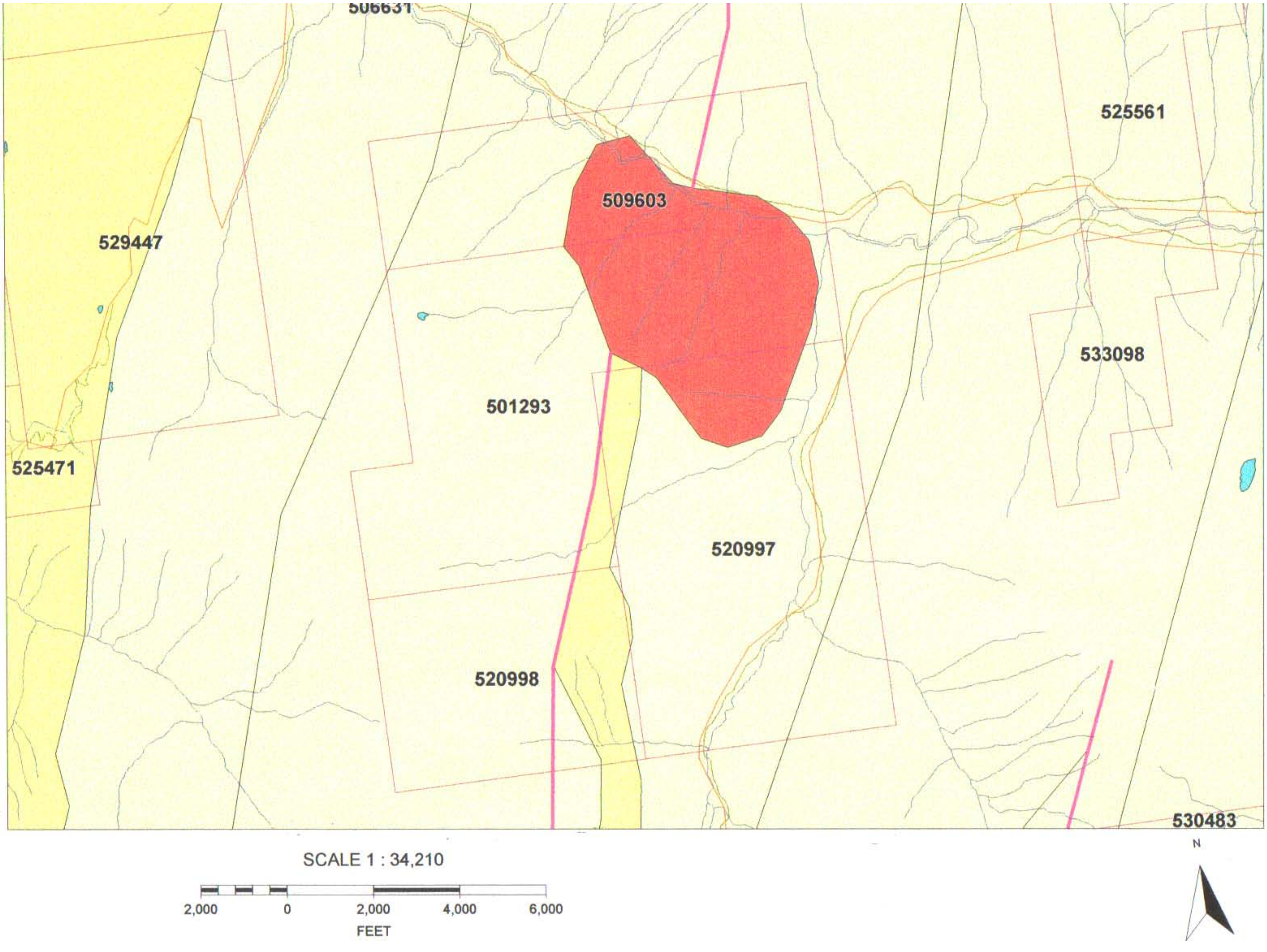
1994 - 1996 - Limited exploration undertaken on Sawyer property by Focal Resources under the direction of M.B. Bapty

1996 - Geology, Kootenay Lake, British Columbia. Geological Survey of Canada, Map 1864A, scale 1: 100 000

- Focal Resources Ltd. completed a limited exploration program with 2 BQ drill holes. The claims comprising the Sawyer property were subsequently allowed to lapse.

2005 - Initial Sawyer claims acquired through Mineral Tenure Online.

2006 - Two additional Mineral tenures acquired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520998
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SCALE 1 : 34,210
2,000
0
2,000
4,000
6,000
FEET
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REGIONAL GEOLOGY

The only previous work undertaken pertaining to the general area of the Sawyer claims was that of Reesor (1996, 1993) for the east side of Kootenay Lake. The stratigraphy of the Purcell Supergroup strata has been well described to the east by Höy (1993) and the Purcell and Windermere Supergroup to the north by Pope (1990).

Stratigraphy

Proterozoic

Belt-Purcell Supergroup

The following has been modified from Höy (1993).

Sheppard Creek Formation (Lower Dutch Creek Formation)

The Sheppard Formation includes up to several hundred metres of stromatolitic dolomite, quartz aretrite, siltstone and argillite lying above the Nicol Creek Formation. A dramatic increase in thickness in the Skookumchuk area is accompanied by prominent facies changes in the Sheppard Formation and in the overlying Gateway and Phillips formations.

The Sheppard Formation is characterized by an assemblage of green siltite, sandy dolomite, quartz wacke, distinctive stromatolitic dolomite and oolitic dolomite layers.

West of Skookumchuk, the formation is still recognizable but is referred to as the lower Dutch Creek Formation. It comprises green siltstone and argillite with minor dolomitic siltstone and, near the top, stromatolitic dolomite. This stromatolitic sequence can be traced north of Bradford Creek and marks the contact between the lower and upper Dutch Creek. It comprises cycles of rounded and gritty quartz wackestone, overlain by oolitic, stromatolitic or massive dolomite. These cycles may contain a few thin purple argillite beds with mud cracks and locally, rip-up clasts. They are overlain by and interbedded with light green siltstone-argillite couplets, usually lenticular, laminated and graded.

Gateway Formation (Upper Dutch Creek Formation)

The Gateway Formation is defined to include siltite, argillite, arenite and dolomite between the Sheppard Formation and red and maroon siltstone and argillite of the overlying Phillips Formation. It correlates with the lower part of the upper Dutch Creek Formation northwest of Skookumchuk. The Gateway Formation comprises dominantly pale green siltstone and minor dolomitic or argillaceous siltstone.

... Salt casts and symmetrical ripples throughout the Gateway Formation suggest deposition in shallow water; dessication cracks, mud-chip breccias and oxidized facies indicate periods of subaerial exposure. ... The formation thickens rapidly to the north in the Skookumchuk area primarily as the result of an increase in the pale green siltstone component. The absence of the overlying Phillips Formation, sparse outcrop and the similarity between lithologies in the upper Gateway and lower Roosville formations make it difficult to determine the thickness and extent of the Gateway Formation to the north and west. ...

Dutch Creek Formation

The Dutch Creek Formation is defined as a group of rocks between the Purcell lavas (Nicol Creek Formation) and the Mount Nelson Formation. The lavas are not exposed in the Lardeau and Nelson east- half map areas and hence it is difficult to determine the exact thickness and extent of the Dutch Creek Formation there. It is estimated to be between 1200 and 1500 metres thick in the Windermere area and a 1300~metre section has been measured east of Kootenay Lake at Rose Pass.

In the Fernie west-half map area, the Dutch Creek Formation is only exposed northwest of Skookumchuck. The lower part of the formation is described in the section on the Sheppard Formation. The upper part includes the Gateway Formation the Roosville Formation and overlying rocks beneath the Mount Nelson Formation. The maximum thickness of the Dutch Creek Formation in the Bradford Creek area is estimated to be 4800 metres, including approximately 3300 metres of upper Dutch Creek.

The upper Dutch Creek is discontinuously exposed north of Skookumchuck. A carbonate marker bed approximately 200 metres thick occurs within the formation some 3000 metres above the Nicol Creek lavas. It is a massive, cream to tan-weathering, thick to medium-bedded dolomite and limestone unit. Crypto-algal features are present locally. The top and the base of the unit consist mainly of argillaceous silty dolomite. It is included within the Dutch Creek rather than the Mount Nelson Formation as the basal quartzite typical of the Mount Nelson is not exposed below it. Furthermore, green siltstone, black argillite and thin oolitic dolomite interbeds higher in the section probably correlate with similar facies in the Roosville Formation at Larchwood Lake.

Mount Nelson Formation

The Mount Nelson Formation comprises a thick sequence of quartzite, dolomitic argillite and siltstone that conformably overlies the Dutch Creek Formation. It was restricted to include only the lower part of the formation. The upper part, informally named the Frances Creek Formation, is separated from the Mount Nelson Formation (new) by a disconformity.

The lower Mount Nelson Formation is divisible into three members in the Mount Forster map: a basal white orthoquartzite 100 to 200 metres thick, 100 to 300 metres of buff and grey dolomites and an upper unit, to 370 metres thick, of purple and red shale with buff dolomite interbeds. The overlying Frances Creek Formation comprises thick-bedded orthoquartzite, grey dolomite and interbedded sandstone and shale.

The total thickness of the Mount Nelson Formation (new) in the Mount Forster area varies from 500 metres to 1950 metres, due partly to erosion prior to deposition of the Frances Creek Formation or Windermere Supergroup and partly to syndepositional tectonics. The Frances Creek Formation varies in thickness from 750 metres to 1020 metres. At Rose Pass east of Kootenay Lake, the entire Mount Nelson Formation is approximately 750 metres thick.

In Fernie west-half map area, the Mount Nelson Formation is only exposed at Lookout Mountain along the northern edge of the map area. It has a gradational contact with the underlying Dutch Creek Formation; phyllitic black argillite-siltstone rocks become increasingly more quartzitic and the interbeds of quartz wacke become cleaner up-section. The basal quartzite of the Mount Nelson is a clean, well-rounded and well-sorted, medium-bedded orthoquartzite containing a few thin beds of sandy dolomite. The basal quartzite is overlain by a mixture of white, green and purple quartz arenite and dolomitic sandstone, locally gritty, as well as some purplish dolomite and argillite. Locally, the diagenetic character of these maroon beds is clearly demonstrated as the colouring crosscuts bedding planes and leaves spotty remnants of light green argillite. A buff weathering sequence of dolomite overlies these quartzwacke, siltstone and argillaceous dolomite beds. This package is overlain by more green siltstone and minor purple siltstone and argillite. The total exposed thickness of the Mount Nelson Formation is approximately 400 metres.

The following has been summarized from Aitken and McMechan (1991).

Middle carbonate division

A distinctive carbonate unit comprises the middle division of the Purcell (Belt) Supergroup. To the east, in the Rocky and eastern Purcell mountains, the middle division consists of the well known Kitchener Formation In the west the middle carbonate division consists of the more basinal facies of the thick, lower subdivision of the Coppery Creek Group. The thick (1400 m) lower unit consists of dolomite interbedded with green, grey or black phyllite which grades upward to silvery and green phyllite, siltite and some carbonate.

Upper division

The strata comprising the Van Creek Sheppard, Gateway and Roosville formations of the Rocky and eastern Purcell Mountains pass laterally into a succession of grey and green siltite, argillite and phyllite, quartzite, argillaceous dolomite and dolomite. The volcanic (Nicol Creek) and red quartzite marker (Phillips) units thin and disappear to the west, making subdivision of the upper division impractical. Therefore, the upper two units of the ‘Coppery Creek’ and ‘La France Creek’ groups are interpreted to comprise the upper division along the western Purcell Mountains.

The upper two divisions of the Coppery Creek group consists of a middle unit approximately 200 m thick comprised of thinly laminated black phyllite and grey siltite. The upper unit consists of silvery phyllite, calcareous dark grey phyllite and dolomite, with a sequence of interbedded dolomite and quartzite at the top and is approximately 300 metres thick.

The ‘La France Creek group’ of the western Purcell is approximately 1000 m thick, comprised of intensely deformed and metamorphosed sediments dominated by siltite, quartzite and phyllite. The group has been subdivided into a lower unit consisting of thinly interbedded, black phyllite and grey siltite and an upper unit of grey siltite and quartzite with black phyllite and carbonate-bearing siltite and phyllite near the top. The ‘La France Creek group’ gradationally overlies the upper unit of the ‘Coppery Creek group’. In most areas, strata of the ‘La France Creek group’ grade into thicker-bedded quartzite at the base of the Mount Nelson Formation.

The Mount Nelson Formation consists of a cliff-forming, basal unit of white, grey or green orthoquartzite with rare argillaceous laminae and partings, overlain by brownish red to grey-weathering impure carbonate interbedded with black, purple or red argillite and grey siltite. Stromatolites and lenses or nodules of chert occur locally within the carbonate unit. The basal orthoquartzite, up to 70 m thick, thins gradually to the south. Interbeds of green, black or red argillite are common within the upper quartzite unit and green and black argillite and siltite form the top of the preserved formation. The carbonate unit is thicker in western exposures, where it is overlain by interbedded black phyllite and grey siltite. Cream-weathering dark-coloured dolomite and brown-weathering, white dolomite, locally interbedded with black phyllite, occur at the top of the formation as preserved. Mud cracks in argillite, ripple marks in quartzite and solution-breccias in dolomite are locally common in both area.

The Mount Nelson Formation, whose maximum preserved thickness is about 1000 m is unconformably overlain by conglomerate of the Toby Formation of the Upper Proterozoic Windermere Supergroup. Evidence for small-scale, pre-Toby block faulting is found locally. Regionally, the unconformity cuts out progressively older Purcell strata southward along the western Purcell Mountains ”.

The following has been modified from Pope (1990):

Van Creek Formation

The Van Creek Formation consists of coarse to medium-grained, light-grey or green to dark-green quartzites, siltstones and silty argillites. The beds have consistent thicknesses of between 20 to 50 centimetres with slightly undulose bases and truncated tops, together with internal cross and planar lamination and grading. Van Creek quartzites grade upward into thinly bedded pale green quartzites and then into thinly interbedded 2 to 20 centimetre pale green quartzites, silts and buff weathering dolomitic silts of the Lower Gateway Formation, Hg 1 member.

Lower Gateway Formation

The Lower Gateway Formation is subdivided into two members Hgl and Hg2.

Hg 1: The contact between the Van Creek and Lower Gateway formations is gradational and in the absence of the Nicol Creek Formation can only be roughly estimated. The lowermost units of the Lower Gateway Formation are identified as where carbonate first occurs in the succession. The thin bedded quartzites in this transitional sequence are characterized by weathered pyrite, which imparts a distinctive red spotted appearance.

The Hgl member is estimated ... to be well in excess of 1000 metres thick. It consists of interbedded packages of quartzite, green siltstone and buff dolomitic siltstone and dolomite. Sedimentary structures such as cross lamination, grading, channelling and dewatering structures, are well preserved and compositional differences frequently enhance exposures. Siltstones in the dolomitic packages usually show an upwards gradation from dolomite free, finely cross-laminated silt and sand to dolomitic cross-laminated siltstone and cryptalgal to stromatolitic-laminated micritic dolomite. Bed thicknesses vary from generally 2 to 10 centimetres in the fine grained quartzite dominated lower part, to 10t o 50 centimetres in the upper dolomite dominated part of the Hg 1 member.

Hg2: The dolomite dominated upper part of the Hgl member passes into a 90-metres thick, cream to buffweathering dolomite unit. The dolomite displays cryptalgal and stromatolitic laminations, cream chert intercalations, rare halite casts and silty and sandy cross lamination. Bed thickness varies between 50 centimetres to 2 metres, and grain size varies from micrite, which is typically blue-grey, to coarse sucrose-textured, light coloured recrystallized dolomite.

Dutch Creek Formation

The boundary between the Lower Gateway Formation and the Dutch Creek Formation is characterized by a narrow zone of rusty weathering. The contact is interpreted as a parallel unconformity and the rusty weathering zone marking a hiatus.

Within the Dutch Creek Formation there is not a clearly defined stratigraphy, but four basic lithofacies (A to D) have been distinguished. Beds are usually between 2 to 20 centimetres thick and consist of fine grained quartzite and argillite in graded couplets. Sedimentary structures include fine herringbone ripple and channel cross-laminations. The Dutch Creek Formation has a marked lack of carbonate.

Lithofacies A - Finely interlaminated green and dark grey to black graded siltstone-argillite couplets. Beds 1 - 10 cm thick.

Lithofacies B - Drab green to grey silt to fine sand quartzite and grey green to black silty argillite interbeds 5 - 20 cm thick.

Lithofacies C - Grey black argillite and siltstone with buff dolomitic siltstones.

Lithofacies D - Dark grey limestone and limey siltstone interbedded with argillite beds 10 cm to 1 m thick.

There is a great variation in thickness of the Dutch Creek Formation from an estimated 1000 metres to less than 300 metres over a lateral distance of 5 kilometres. Although the observed contact with the overlying Mount Nelson Formation is always paraconformable, the contact is very sharp and represents a major change in facies, hydrodynamic energy and sedimentary processes, and is therefore interpreted as an unconformity.

Mount Nelson Formation

The Mount Nelson Formation has been subdivided into the:

a) lower quartzite, a useful 50 to 150 metre thick marker horizon consisting of white, well-sorted, fine- to medium-grained pure quartz arenites,

b) lower main dolomite - an approximately 400 metre thick sequence which conformably overlies and is gradational with the lower quartzite, comprised of cryptalgal to stromatolitic laminated, pale grey weathering dolomites with interbedded carbonaceous argillites capped by a cream-coloured stromatolitic, crystalline cherty-dolomite unit approximately 20 metres thick overlain in sharp contact by,

c) the middle quartzite - an apple green coloured sequence consisting of massive, fine- to coarse-grained quartz arenites, impure sandstones and argillites having A-B to A-E Bouma sequences evident,

d) orange dolomite sequence - approximately 180 metres thick consisting of varicoloured buff weathering dolomitic siltstones, argillites and impure sandstones underlying bright orange-buff weathering silty and sandy crystalline dolomites with abundant cryptalgal and stromatolitic laminations and intercalated chert.

e) white markers conformably overlie the orange dolomite and are up to 70 metres thick. The white markers consist of cream, buff and silver-grey dolomites with purple, green and buff dolomitic mudstones and local interbeds of pure white magnesite up to 1 metre thick,

f) purple sequence - gradationally overlies the white markers, consisting of purple weathering dolomitic sandstones and siltstones which grade upward into purple weathering argillite. Mudchip breccias and monomict pebble conglomerates are interbedded with siltstones and argillites and the sequence is overlain by a pebble to boulder conglomerate with a purple weathering sandy argillitic matrix in sharp contact with the purple shales. The pebble to boulder conglomerate is the interpreted locus of an intraformational unconformity with a thickness between 2 and 10 metres thick,

g) upper middle dolomite - approximately 80 metres thick and similar to the lower main dolomite. It is distinguished by abundant algal allochems which are typically replaced by black chert,

h) upper quartzite - a distinctive cliff-forming unit consisting of white quartzites more than 260 metres thick (equivalent to the upper Mount Nelson Quartzite (Atkinson 1975)). The upper quartzite consists of well sorted medium- to coarse-grained, essentially pure arenites. They are distinguished from the lower quartzite on the basis of massive bedding and poorly preserved sedimentary structures.

i) upper dolomite - the uppermost unit in the Belt-Purcell exposed below the Windermere unconformity. The upper dolomite is gradational with the underlying quartzite over 10 metres consisting of interbedded purple argillite, quartzite and dolomite. The upper dolomite is comprised of pale to dark grey dolomite interbedded with quartz and dolomite pebble conglomerates with dolomitic quartz sands.

Windermere Supergroup

The Windermere Supergroup varies in thickness in the Toby Creek area, from 80 metres to over 3 kilometres and is in sharp contact with the underlying Belt-Purcell Supergroup across an unconformity with considerable topography, interpreted as a result of a local basement high, the "Windermere High" (Reesor 1973). The Windermere Supergroup was deposited above this unconformity and consists of a basal conglomeratic unit, the Toby Formation, and the overlying argillite and pebble conglomerate dominated Horsethief Creek Formation.

Toby Formation

The Toby Formation is the basal unit of the Windermere Supergroup and overlies different levels of the Belt-Purcell stratigraphy in the separate fault panels, interpreted to indicate active faulting during sedimentation (Pope 1990). Four distinct facies have been identified in the Toby Creek area but their stratigraphic position relative to one another is uncertain due to rapid lateral facies changes.

The Toby Formation consists of:

a) a basal boulder breccia lithofacies consisting of monomict clast-supported boulder breccias.

b) a diamictite lithofacies - the most commonly developed facies consisting of rounded quartzite and subangular dolomite boulders (derived from the immediately underlying Mount Nelson Formation) in a sandy argillite matrix.

c) a sparse clast diamictite lithofacies consisting of graded fine to coarse-grained, poorly sorted arenites and argillites with a minor component of rounded quartzite pebbles or cobbles.

d) a siltstone-argillite lithofacies which comprises the bulk of, and is the dominant lithology in, the upper portion of the Toby Formation, consisting of well-sorted and graded fine quartz arenites and argillites which typically exhibit complete Bouma sequences.

The Toby volcanics are the oldest igneous rocks identified in the Toby Creek area and are believed to be altered submarine basalts related to regional Hadrynian extension. The flows are holocrystalline and glomeroporphyritic basaltic andesites, having plagioclase phenocrysts in a fine-grained plagioclase groundmass.

Green metadiabase dykes have also been identified and have been interpreted as the metamorphic equivalent to the Toby volcanics. They are the most common igneous rocks and are always intruded at a high angle to bedding. They are typically altered, consisting of anhedral masses of chlorite, anhedral to euhedral carbonate and sericite and skeletal opaques. Chlorite pseudomorphs after pyroxene and amphibole have been identified. Bulk mineralogical proportions indicate these dykes were most probably originally basaltic in composition and have been subsequently hydrated.

Horsethief Creek Group

The Toby Formation is gradational into the overlying Horsethief Creek Formation, in which five lithofacies have been identified. These lithofacies define a rudimentary stratigraphy of facies within the Horsethief Creek Formation as individual lithological units are inconsistent due to rapid lateral thickness and facies variations.

The lithofacies identified in the Horsethief Creek Formation are as follows:

a) siltstone-argillite - dominant in the lower half of the Horsethief Creek Formation and separate the remaining lithofacies throughout the formation. This lithofacies consists of thick sequences of thin bedded (1 to 10 cm), graded siltstone and argillite and finely laminated (1 to 5 mm), black, green and grey argillite.

b) black carbonate - an easily traced marker used to identify and map the base of the Horsethief Creek Formation consisting of thin bedded (5 to 20 cm), dark grey to black limestone, with variable quartz sand and silt in a calcitic matrix, and thin calcareous quartz-arenite beds.

c) dolomite - buff weathering dolomite, up to 30 metres thick, dolomite pebble-conglomerate beds and dolomite supported quartzite occur throughout the Horsethief Creek Formation.

d) quartz feldspar arenites and pebble conglomerates - consist of pebble conglomerates comprised of grain-supported, moderately sorted crystalline quartz and quartz feldspar clasts with variable red jasper, green to grey argillite, quartzite and dolomite clasts in a quartz, feldspar, carbonate, sericite and chlorite matrix. Clasts are generally 1 to 2 centimetres in diameter but may exceed 10 centimetres in length. Coarse arenite beds are similar to the pebble conglomerates but have a greater proportion of matrix and are generally poorly sorted.

e) red and varicoloured argillites - are present at the top of the Horsethief Creek Formation and consist of variably coloured argillites with interbedded pink carbonate, and varicoloured impure arenites.

Mesozoic

Granitic Intrusions

Cretaceous intrusives of broadly “granitic” composition are present in a belt extending from the westernmost Rocky Mountains to Kootenay Lake, northward to the Baldy Batholith. Intrusions range from small dykes and sills to larger intrusive complexes such as the Mt. Skelly Batholith and are collectively referred to as the Bayonne Magmatic Belt (or Suite).

> “Intrusive rocks ... include a number of small post kinematic mesozonal quartz monzonite, monzonite and syenitic plutons, numerous small quartz monzonite to syenite dikes and sills probably related to these stocks, and late mafic dikes. The Kiakho and Reade Lake stocks, two of the larger of the mesozonal plutons, cut across and apparently seal two prominent east-trending faults that transect the eastern flank of the Purcell anticlinorium, and hence place constraints on the timing of latest movement on these faults.
>
> The Kiakho stock is exposed on the heavily wooded slopes of Kiakho Creek approximately 10 kilometres (west-southwest) ... of Cranbrook ... Exposures consist mainly of large, fresh angular boulders of boulder fields. Although contacts with country rock were not observed, regional mapping indicates that it intrudes clastic rocks of the Aldridge and Creston formations. The distribution of outcrops and a pronounced aeromagnetic anomaly indicate that it cuts the east-trending Cranbrook normal fault with no apparent offset. ...
>
> The Kiakho stock is similar to the Reade Lake stock with the dominant phase being a light grey, medium-grained quartz monzonite. It is generally equigranular but grades into a hypidiomorphic granular porphyritic phase with prominent plagioclase and light grey to flesh-coloured potassic feldspar phenocrysts; both are up to several centimetres in diameter in a granular groundmass of white subhedral plagioclase, light grey potassic feldspar, quartz and black hornblende” (Höy 1993).

The Bayonne Granitic Suite is a composite batholith comprised of a number of smaller Jurassic to Cretaceous age granitoid stocks and plutons which extends from near the International Boundary across Kootenay Lake. On the east side of the Kootenay Lake, the Bayonne Granitic Suite locally includes the Mount Skelly Pluton, a biotite (hornblende) monzogranite with megacrysts of potassium feldspar (Reesor 1996). Rice (1941) grouped these granitoids under the broad heading of the Bayonne Batholith, as described below.

“The Bayonne batholith varies in composition from a granite to a calcic granodiorite; the average composition is that of a fairly alkaline granodiorite. ... Much of the rock has an equigranular texture, but a porphyritic phase occurs in many places, at some of which phenocrysts of potash feldspar 2 or 3 inches long are present. The potash feldspar may be orthoclase or microcline and in some specimens both occur. The plagioclase is oligoclase, generally well twinned and frequently in zoned

crystals. Dark brown biotite is the only ferromagnesian mineral abundant, but grains of hornblende occur in rare instances. The usual accessories are present. Sericite and
epidote are the commonest secondary minerals, but neither occur in significant amounts except where the rock has been altered.

A marked feature of the Bayonne batholith is its highly variable nature. This is observable not only in the range of composition but in the appearance of the rock. Coarse-grained and fine-grained, porphyritic and non-porphyritic, pink and light or dark grey phases may occur in a single exposure, in some places in streaks and patches. Masses of pegmatite and dykes of pegmatite and aplite occur everywhere. Some of the pegmatite dykes are over 100 feet wide. A few large crystals of blue-green beryl, pink garnet, magnetite, and a little black tourmaline were seen in these pegmatites.

Large inclusions of granitized sediments are locally abundant. ... These inclusions vary in size from a foot to some hundreds of feet. Alteration is severe, but the sedimentary nature of the original rock is, in most cases, still recognizable and the boundary between the granite and the inclusion is generally fairly sharp. Other inclusions or zenoliths (sic.) from a few inches to a foot long also occur, which can readily be distinguished from the first type mentioned. They parallel one another, are darker coloured, their original texture and composition has been more or less completely altered, they are fairly uniform in size, and they usually grade imperceptibly into the granite. They are more widely distributed, indeed very few exposures of any size were examined that did not contain some of these zenoliths (sic.), and in places they are extremely abundant. The zenoliths (sic.) are often most common in the porphyritic phases and scarcer in the non-porphyritic phases of the granite ...".

Structure

Four major phases of deformation have been identified in the Toby Creek area, Helikian-Devonian extension (D1), Jurassic-Paleocene contraction (D2-D3) and Eocene extension (D4).

The first phase of deformation resulted in unconformities at the base of the Dutch Creek and Mount Nelson Formations (D1a) and the unconformity at the base of the Windermere Supergroup (D1b). Thinning of Paleozoic strata onto the Windermere High is interpreted to reflect the effects of D1c deformation together with the development of small fault-bounded sub-basins.

Contraction during the Columbian (D2) and Laramide (D3) orogenies resulted in a series of northeast vergent thrust faults and the development of a regional foliation (S1). Three major thrust sheets are evident in the Toby Creek area with one, the Mount Nelson thrust sheet, comprised of four smaller fault panels. The three major thrust sheets represent out-of-sequence faults, having propagated toward the hinterland, carried in the hanging wall of the Purcell Thrust.

Contraction during D2 and D3 produced east-vergent imbricate thrust faults and west vergent backthrusts. Many of these faults were subsequently reactivated during the fourth phase (D4) of deformation. High angle brittle faults are also a result of D4.

LOCAL GEOLOGY

Stratigraphy

The SAWYER property is underlain by south striking, moderately steeply west dipping panel of overturned Late Proterozoic age strata correlated to the uppermost Purcell Supergroup and lower Windermere Supergroup on the western limb of the Purcell Anticlinorium (Fig. 3). Correlations interpret the strata as belonging to the Dutch Creek and Mount Nelson formations, overlain by the Horsethief Creek Group, overthrust onto a continuous panel extending from the Creston Formation to the Horsethief Creek Group (Massey et al. 2005) (Fig. 4). In detail, displacement along the fault separating the two panels diminishes to the north, dying out into the Dutch Creek Formation.

Given the presence of the large Fry Creek Batholith approximately 8 km to the northwest, the Sawyer Creek Stock (Logan 2002) may be a small related satellite intrusion of apophyse. Alternatively, it may be a small unrelated Cretaceous intrusion, having been intruded during a regional Mesozoic intrusive event.

No geological mapping was undertaken on the property during the 2005 field season. As such, the author is not in a position to address possible stratigraphic correlations. The field data (soil sample) have been plotted on the digital geology for the property (Fig.4 - Massey et al. 2005).

Structure

The structure of the SAWYER area is dominated by its position on the western flank of the Purcell Anticlinorium, a north plunging fold of regional significance. The Purcell Anticlinorium is allochthonous with respect to North American cratonic basement, having been transported northeastward in the hanging wall of the Purcell Thrust. This major structure has been complicated slightly by a number of regional and local faults, discussed below with reference to the Kootenay Lake mapsheet of Reesor (1996). An early folding event has been proposed for early structures interpreted to have developed in the Late Proterozoic during the Goat River Orogeny (Höy 1993).

The prominent faults in the SAWYER area are interpreted to be predominantly the result of the Laramide orogeny, characterized by east-verging, west-dipping thrust faults. The major fault system of the area is the St. Mary / Hall Lake fault system, interpreted to be a long lived fault initiated in the Late Proterozoic as a growth fault and periodically active at least into the Laramide orogeny. Eastward directed movement across the St. Mary / Hall Lake fault resulted in steeply dipping strata on the western limb of the Purcell Anticlinorium being juxtaposed against relatively shallowly to moderately dipping strata closer to the hinge axis.

Significant dip displacement is indicated across the fault east of Sanca Creek where Proterozoic lower Creston strata has been juxtaposed against early Paleozoic Cambrian Eager Formation strata. Later thrust faults are evident in the hanging wall of the St. Mary / Hall Lake fault. The Redding

Creek fault is locally significant fault. It is a west dipping, east verging thrust fault that juxtaposes middle Creston strata against the lower member of the Coppery Creek group. A number of smaller, normal faults are indicated in the hanging wall of the Redding Creek Fault, all of which appear to have minor dip (and probably strike-slip) movement. All of the faults in the hanging wall of the St. Mary / Hall Lake fault are interpreted to be older than the Cretaceous Mount Skelly Pluton (Bayonne Magmatic Belt) as all are truncated at the contact of the pluton.

2006 PROGRAM

The 2006 program consisted of an airborne geophysical program undertaken by Aeroquest Limited. A total of 530.2 line km were flown with collection of electromagnetic, magnetic and radiometric data over the entirety of the property.

Electromagnetic ("EM") data is expected to identify and delineate possible conductors, which may include faults and/or mineralized veins. Magnetics is expected to allow differentiation of intrusive phases from sedimentary strata hosting the intrusions and, therefore, allow possible identification of one possible control to mineralization. Finally, the radiometric portion of the survey detects the response of three radioactive elements, specifically, potassium, thorium and uranium. Again, radiometrics may allow the Company to differentiate separate intrusive phases.

A copy of the report is included in Appendix B.

RESULTS (see Appendix B)

The magnetic data documents one large, and several smaller, magnetic anomalies on either side of a small east flowing tributary into Sawyer Creek. Cretaceous intrusions correlated to the Bayonne Magmatic Suite are associated with both strong magnetic anomalies over the corresponding intrusions (i.e Fry Creek Batholith) and magnetic haloes surrounding the intrusion (i.e. White Creek Batholith). Therefore, these anomalies are tentatively interpreted to correlate to the intrusion.

The Electromagnetic data document a number of small EM anomalies on both Z- and X-axis data, although the Z-axis data appears to document several larger anomalies on the south side of the tributary, south of the magnetic anomalies and the interpreted location of the intrusive phases. Of particular interest is the correlation of coincident Z- and X-axis EM anomalies with a UTEM anomaly identified by previous operators in 1997. A ground based UTEM survey identified "... two conductors or conductive zones striking across the small survey grid. The westerly (weak) conductor ... appears to be dipping shallowly to the east ... and has a depth extent of approximately 200 m.

The second conductor ... shallow to the east and appears to have a conductance more than 50 siemens and a depth extent of at least 500 m". Trenching and/or drilling was recommended to further evaluate these anomalies.

The radiometric data appears to document the intrusive lithologies, with correlation between potassium (K), thorium (Th), uranium (U) and Total Count (TC) data. The data appears to indicate east-northeast trending anomalies, moderately to highly oblique to the mapped trend of the host strata. The radiometric anomalies appear to correlate moderately well with the magnetic data, interpreted to suggest that intrusive lithologies occupy topographic highs on the property, possibly associated with more resistant lithologies.

DISCUSSION

The Aeroquest survey was flown in order to provide data suitable for an initial evaluation of the property. Previous work has been limited to soil sampling and the airborne survey was flown in an attempt to identify areas for subsequent follow-up. Ideally, surface soil anomalies would correspond to sub-surface anomalies identified from the airborne survey.

In general, the data document a number of anomalies interpreted to be worthy of follow-up ground work. In particular, a series of prominent anomalies are evident along the northern boundary of the Sawyer Stock, where the Cretaceous intrusive lithologies are in contact with host sedimentary strata of the upper Purcell and lower Windermere Supergroups.

On the basis of mapping by Reesor (1996), the Toby Formation is present in the footwall of the Redding Creek Fault south of the Sawyer Creek Stock and has been cut-out along trend to the north (i.e. north of the Sawyer Creek Stock). Bapty and MacLachlan (1996) described a pod and/or lens of massive galena, sphalerite and tetrahedrite in one of the chutes on the south side of a small tributary into Sawyer Creek. Previous mapping (Bapty and Walker 1994) located evidence of similar mineralization on a ridge top traverse and descent through the north facing cliffs. The pod described by Bapty and MacLachlan (1996) is probably the source of mineralization described in 1994.

Geochemical evidence for mineralization north of the Sawyer Creek Stock, located in the footwall of the Redding Creek Fault, suggests additional pods, or perhaps larger bodies of galena+sphalerite +tetrahedrite mineralization may be present. The mineralization was described in 1996 as being "... a small limestone-replacement deposit with a sedimentary-exhalative origin". The author believes a replacement (manto) style deposit is possible, given the presence of carbonate-bearing intervals (limestone and dolomite) in the Mount Nelson and Dutch Creek formations. Intrusion of the Sawyer Creek Stock along the Redding Creek Fault (given that Reesor (1996) does not extend the fault trace through the stock, indicating the intrusion post dates the fault), would provide a proximal heat source, both to dissolve carbonate-bearing intervals and provide possible metalliferous fluids to precipitate within the resulting void space along, and adjacent to, the Redding Creek Fault.

CONCLUSIONS

Initial interpretation of the Aeroquest Limited airborne geophysical data, together with limited data from previous programs, strongly suggest further evaluation of the property is warranted. Detailed review of the airborne geophysical results is scheduled for early November in order to prioritize anomalies for subsequent follow up work.

Several vein-type mineralized occurrences have been identified and/or documented within, or in the immediate vicinity of, the Sawyer property. These may be polymetallic veins, having low tonnage - high grade potential. Alternatively, they may be veins consistent with an Intrusion-Related Gold model and part of a high tonnage - low grade system with local high grade to bonanza grade gold veins. The preliminary deposit type under consideration in this program is that of a low tonnage, high grade vein type deposit. The narrow sheeted veins characterizing this type of mineralization is not expected to respond to an airborne survey of this type.

The results of the Aeroquest survey are very interesting, particularly with respect to the previous small UTEM survey results. In addition, previous, rather limited, exploration programs resulted in identification of lead-zinc mineralization, from which small hand samples returned grades up to 9.06% lead, 19.87% zinc and 10.05 oz/ton silver. Float "... samples from scree indicate the mineralized horizon is broadly segregated into a lead rich band, combined lead and zinc, and a zinc rich band. The sulphides are contained within well defined bedding planes, with evidence of minor remobilization".

Further evaluation of the Sawyer property is recommended.

RECOMMENDATIONS

1. Compilation of results from previous programs should be undertaken to build an initial database of with which to continue evaluation of the property;

2. Continue the soil sampling program. Additional sampling should include acquisition of contour samples. Samples should be taken along a series of contours throughout the property to provide coarse coverage of the property, with smaller grids established to develop better resolution in areas of anomalous results;

3. Additional soil samples should be taken to better delineate potential mineralization in two areas, specifically, a) the footwall of the Redding Creek Fault, both north and south of the Sawyer Creek Stock and b) along the possible mineralized trend tentatively proposed east of the Sawyer Creek Stock;

4) Geological mapping should be undertaken to:
a) identify and/or re-establish known mineralized horizons,
b) identify and/or confirm the stratigraphy present on the property,
c) provide better structural control for the property, specifically whether the Redding Creek Fault pre- or post-dates the Sawyer Creek Stock, and
d) obtain rock and/or chip samples of mineralized horizons identified on the property;

5. Consider diamond drilling to test surface anomalies identified on the basis of additional soil and rock sampling and/or sub-surface anomalies identified from airborne and/or ground-based geophysical surveys.

PROPOSED BUDGET

Pre-Field		
Permitting, Compilation, mobilization		$ 2,000
Phase I		
Field Program		
		$ 2,250
Mapping		
5 man-days @ $450 / day		
		$ 2,500
Soil Sampling		
10 man-days at $250 / day		
		$ 225
Field Supplies		
15 man-days at $15 / day		
		$ 750
Equipment		$ 975
4WD Truck - 10 days at $75 / day		$ 600
Mileage - 1300 km at $0.75 / km		
Fuel		$ 5,000
Analytical		$ 14,300
250 soil samples at $20 / sample		
	Sub-Total:	
Phase II		
Diamond Drilling		$ 300,000
3,000 metres at $100 / metre (all inclusive)		
Analytical		$ 6,000
300 core samples at $20 / sample		
Post-Field		
		$ 3,150
Report Writing - 7 days at $450 / day		$ 1,350
Reproduction - 3 days at $450 / day		$ 310,000
	Sub-Total:	
		$ 32,480
Contingency on Field Program (10%)		**$ 357,280**
	Total:	

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Appendix A

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I, Richard T. Walker, of 656 Brookview Crescent, Cranbrook, B.C., hereby certify that:

1) I am a graduate of the University of Calgary of Calgary, Alberta, having obtained a Bachelors of Science in 1986,

2) I obtained a Masters of Geology at the University of Calgary of Calgary, Alberta in 1989;

3) I am a member in good standing with the Association of Professional Engineers and Geoscientists of the Province of British Columbia;

4) I am the Vice President of Exploration for Jasper Mining Corporation, with offices at 1020, 833 - 4th Ave South, Calgary, Alberta;

5) I am the author of this report which is based on an Aeroquest Limited airborne geophysical survey completed between July 1st and August 31st, 2006;

6) I have a direct interest in Jasper Mining Corporation; and

7) I hereby grant my permission to Jasper Mining Corporation to use this report, or any portion of it, for any legal purposes normal to the business of the firm, provided the excerpts used do not materially deviate from the intent of this report as set out in the whole.

Dated at Cranbrook, British Columbia this 15th day of October, 2006.

____

Richard T. Walker, P.Geo

<u>APPENDIX B</u>

AEROQUEST LIMITED

GEOPHYSICAL REPORT

Report on a Helicopter-Borne AeroTEM II Electromagnetic, Radiometric & Magnetometer Survey

Aeroquest Job # 07013

Crawford, Sawyer, McFarlane, Storm King and Sanca Properties

Nelson area, Southern British Columbia
NTS 082F07,08,09,10,15

for

Jasper Mining Corporation

by

AEROQUEST LIMITED

4-845 Main Street East
Milton, Ontario, L9T 3Z3
Tel: (905) 693-9129 Fax: (905) 693-9128
www.aeroquestsurveys.com
Report date: October, 2006

Report on a Helicopter-Borne AeroTEM II Electromagnetic and Magnetic Survey

Aeroquest Job # 07013

Crawford, Sawyer, McFarlane, Storm King and Sanca Properties

Nelson area, Southern British Columbia
NTS 082F07,08,09,10,15

for

Jasper Mining Corporation
1020-833 4th Ave S. W.
Calgary, Alberta
T2P 3T5

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Report date: October, 2006

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Appendix 2: Claim Listing
Appendix 3: Description of Database Fields
Appendix 4: Technical Paper: "Mineral Exploration with the AeroTEM System"
Appendix 5: Instrumentation Specification Sheet
Appendix 6: AeroTEM EM Anomaly Listing

1.3. List of Maps (1:10,000)

- MAG Coloured Total Magnetic Intensity (TMI) with line contours and EM anomalies
- First Vertical Derivative of TMI with line contours and EM anomalies
- ZOFF AeroTEM Off-Time Z1 colour grid with line contours and EM anomalies
- Spectrometer – Potassium Percent
- Spectrometer – Thorium to Potassium Ratio

INTRODUCTION

This report describes a helicopter-borne geophysical survey carried out on behalf of Jasper Mining Corporation on the Crawford, Sawyer, McFarlane, Storm King and Sanca Properties, near Nelson, Southern British Columbia.

There are two principal geophysical sensors. The first is Aeroquest's exclusive AeroTEM II time domain helicopter electromagnetic system which is employed in conjunction with a Gamma-Ray Spectrometer(GRS) system and high-sensitivity cesium vapour magnetometers. Ancillary equipment includes a real-time differential GPS navigation system, radar altimeter, video recorder, and a base station magnetometer. Full-waveform streaming EM data is recorded at 38,400 samples per second. The streaming data comprise the transmitted waveform, and the X component and Z component of the resultant field at the receivers.

The second principal sensor was the Aeroquest’s Airborne Gamma Ray Spectrometer (AGRS) system, which utilizes as four downward looking NaI crystals used as the main gamma-ray sensors and one upward looking crystal for monitoring non-geologic sources.

A secondary acquisition system (RMS) records the ancillary data. A PicoDAS acquisition system records the GRS data set.

The total line kms presented in the maps and data totalled 1396.28. The survey flying described in this report took place on June 21st – July 15th, 2006.

2. SURVEY AREA

The project area is lies 50km east of Nelson and and 65km west of Cranbrook, just east of Kootenay lake. It lies approximately 65km north of the US border. The terrain is rugged and mountainous with elevations ranging from approximately 3000-8000 ft. Access to the property is good with a number of smaller and larger roads in the general area. Highway 3A, adjacent to the project area, runs N-S along the eastern shore of Kootenay lake. Highway 3 runs generally E-W to the south of the area and a number of local roads transect the project area.

The surveying conducted consisted of five blocks, Crawford (7km^2), Sawyer (17.3km^2), McFarlane (40.2km^2), Storm King (14.3km^2) and Sanca (46.7km^2). A number of mining claims fall either partly or wholly within this project area. They are outlined in Appendix 2.

The base of operations was at Gray Creek on Kootenay lake, adjacent to the McFarlane block.

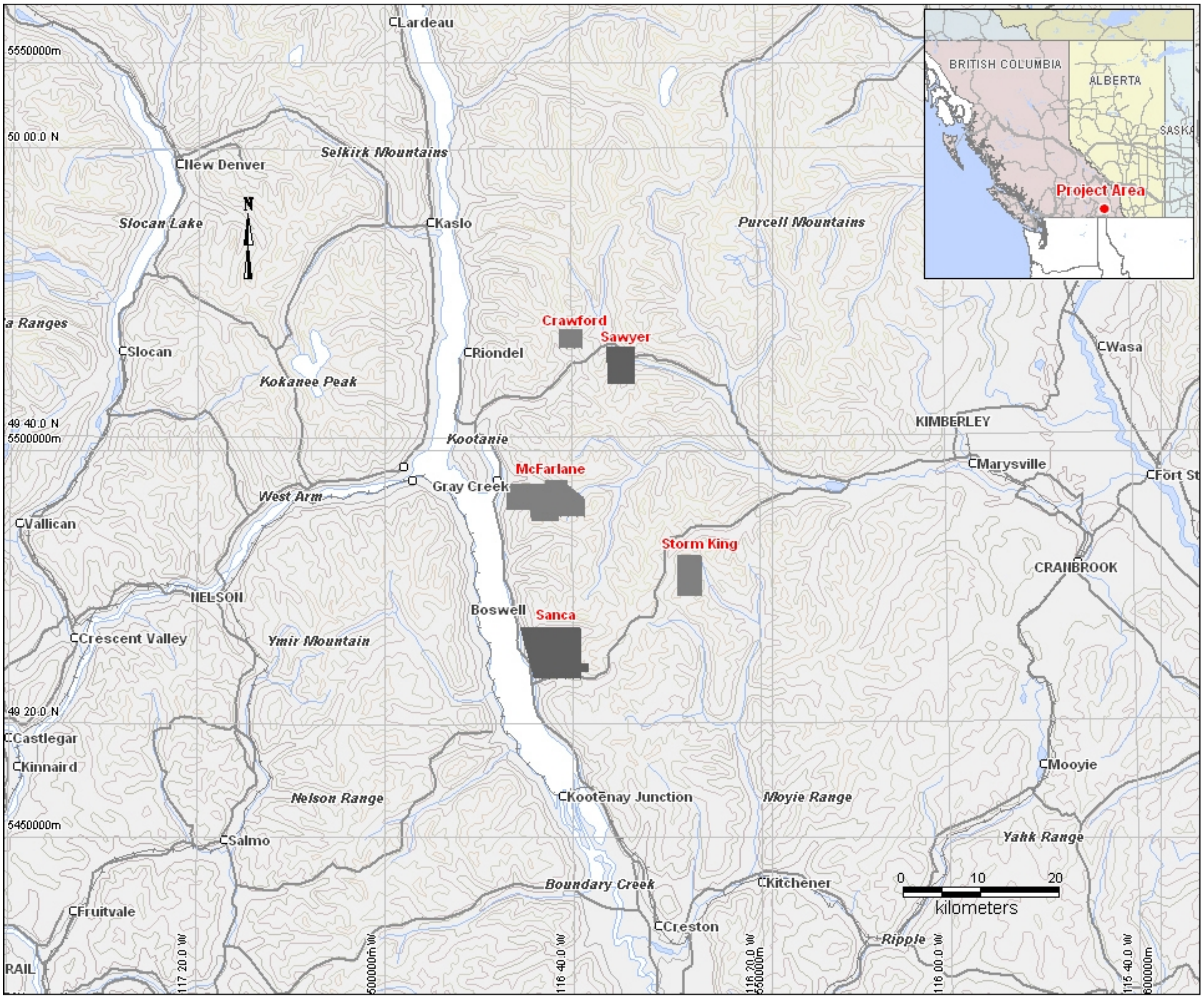


Figure 1. Regional location map of the project area.

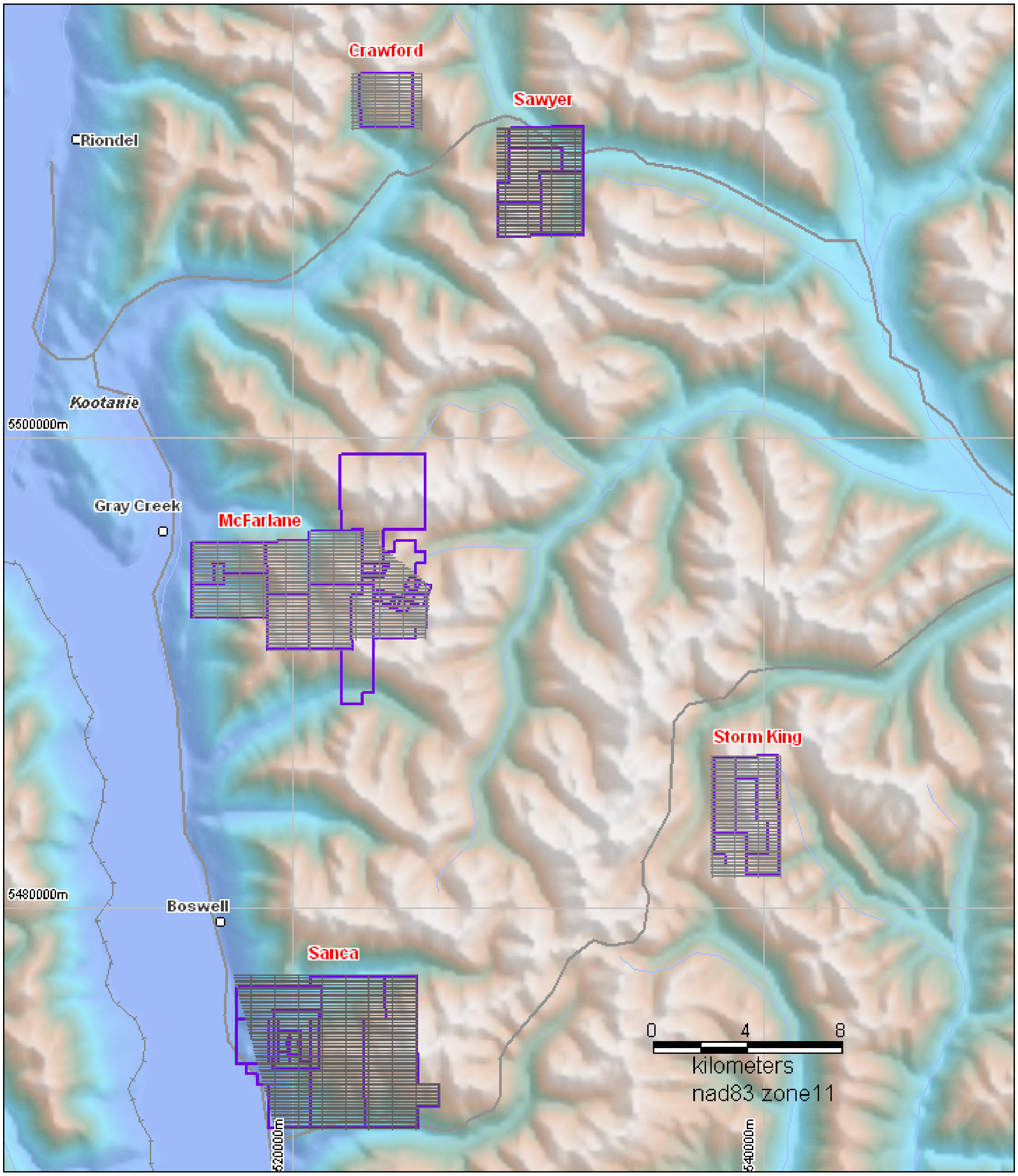


Figure 2. Project Flight Paths and mining claims

3. SURVEY SPECIFICATIONS AND PROCEDURES

The survey specifications are summarized in the following table:

Survey Block	Line Spacing (m)	Line direction	Survey Coverage (line-km)	Dates Flown
Crawford	100	E-W (90º)	82. 5	June 30th July 1st, 2006
Mcfarlane	100	E-W (90º)	455.8	June 21st - 25th, 2006
Sanca	100	E-W (90º)	530.2	July 1st - 8th, 2006
Sawyer	100	E-W (90º)	204.3	June 26th – 29th , 2006
Storm King	100	E-W (90º)	96.2	July 10th - 14th, 2006

The survey coverage was calculated by adding up the along-line distance of the survey lines and control (tie) lines as presented in the final Geosoft database. The survey was flown with a line spacing of 100 m with the tie lines flown perpendicular to the survey lines with a spacing of 1 km.

The nominal EM bird terrain clearance is 30m, but can be higher in more rugged terrain due to safety considerations and the capabilities of the aircraft. Two magnetometer sensors are recording. One is attached to the tail of the EM bird and a second is mounted in a smaller bird connected to the tow rope 17 metres above the EM bird and 21 metres below the helicopter (Figure 4). Nominal survey speed over relatively flat terrain is 75 km/hr and is generally lower in rougher terrain. Scan rates for ancillary data acquisition is 0.1 second for the magnetometer and altimeter, and 0.2 second for the GPS determined position. The EM data is acquired as a data stream at a sampling rate of 38,400 samples per second and is processed to generate final data at 10 samples per second. The 10 samples per second translates to a geophysical reading about every 1.5 to 2.5 metres along the flight path.

3.1. Navigation

Navigation is carried out using a GPS receiver, an AGNAV2 system for navigation control, and an RMS DGR-33 data acquisition system which records the GPS coordinates. The x-y-z position of the aircraft, as reported by the GPS, is recorded at 0.2 second intervals. The system has a published accuracy of under 3 metres. A recent static ground test of the Mid-Tech WAAS GPS yielded a standard deviation in x and y of under 0.6 metres and for z under 1.5 metres over a two-hour period.

3.2. System Drift

Unlike frequency domain electromagnetic systems, the AeroTEM II system has negligible drift due to thermal expansion. The operator is responsible for ensuring the instrument is properly warmed up prior to departure and that the instruments are operated properly throughout the flight. The operator maintains a detailed flight log during the survey noting the times of the flight and any unusual geophysical or topographic features. Each flight included at least two high elevation 'background' checks. During the high elevation checks, an internal 5 second wide calibration pulse in all EM channels was generated in order to ensure that the gain of the system remained constant and within specifications.

3.3. Field QA/QC Procedures

On return of the pilot and operator to the base, usually after each flight, the AeroDAS streaming EM data and the RMS data are carried on removable hard drives and FlashCards, respectively and transferred to the data processing work station. At the end of each day, the base station magnetometer data on FlashCard is retrieved from the base station unit.

Data verification and quality control includes a comparison of the acquired GPS data with the flight plan; verification and conversion of the RMS data to an ASCII format XYZ data file; verification of the base station magnetometer data and conversion to ASCII format XYZ data; and loading, processing and conversion of the steaming EM data from the removable hard drive. All data is then merged to an ASCII XYZ format file which is then imported to an Oasis database for further QA/QC and for the production of preliminary maps.

Survey lines which show excessive deviation from the intended flight path are re-flown. Any line or portion of a line on which the data quality did not meet the contract specification was noted and reflown.

4. AIRCRAFT AND EQUIPMENT

4.1. Aircraft

A Eurocopter (Aerospatiale) AS350B2 "A-Star" helicopter - registration C- FBHK was used as survey platform (Figure 3). The helicopter was owned and operated by Bighorn Helicopters, Calgary, Alberta. The survey aircraft was flown at a nominal terrain clearance of 220 ft (70 m).

Figure 3. Helicopter of the type used for the survey.

4.2. Magnetometer

The Aeroquest airborne survey system employs the Geometrics G-823A cesium vapour magnetometer sensor installed in a two metre towed bird airfoil attached to the main tow line, 17 metres below the helicopter (Figure 4A). The sensitivity of the magnetometer is 0.001 nanoTesla at a 0.1 second sampling rate. The nominal ground clearance of the magnetometer bird is 51 metres (170 ft.). The magnetic data is recorded at 10Hz by the RMS DGR-33.

4.3. Electromagnetic System

The electromagnetic system is an AeroQuest AeroTEM II time domain towed-bird system (Figure 4B). The current AeroTEM transmitter dipole moment is 38.8 kNIA. The AeroTEM bird is towed 38 m (125 ft) below the helicopter. More technical details of the system may be found in Appendix 4.

The wave-form is triangular with a symmetric transmitter on-time pulse of 1.10 ms and a base frequency of 150 Hz (Figure 5). The current alternates polarity every on-time pulse. During every Tx on-off cycle (300 per second), 128 contiguous channels of raw x and z component (and a transmitter current monitor, itx) of the received waveform are measured. Each channel width is 26.04 microseconds starting at the beginning of the transmitter pulse. This 128 channel data is referred to as the raw streaming data. The AeroTEM system has two separate EM data recording streams, the conventional RMS DGR-33 and the AeroDAS system which records the full waveform.

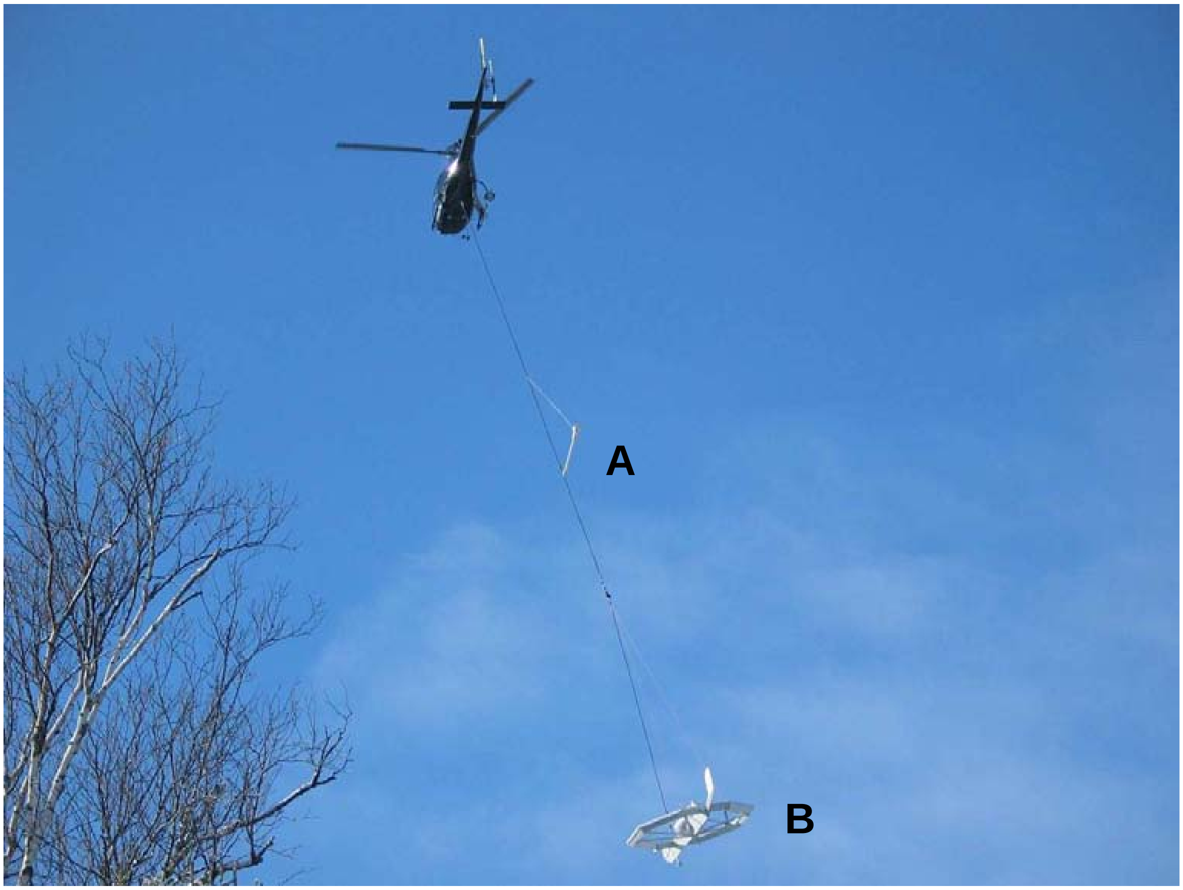


Figure 4. The magnetometer bird (A) and AeroTEM II EM bird (B)

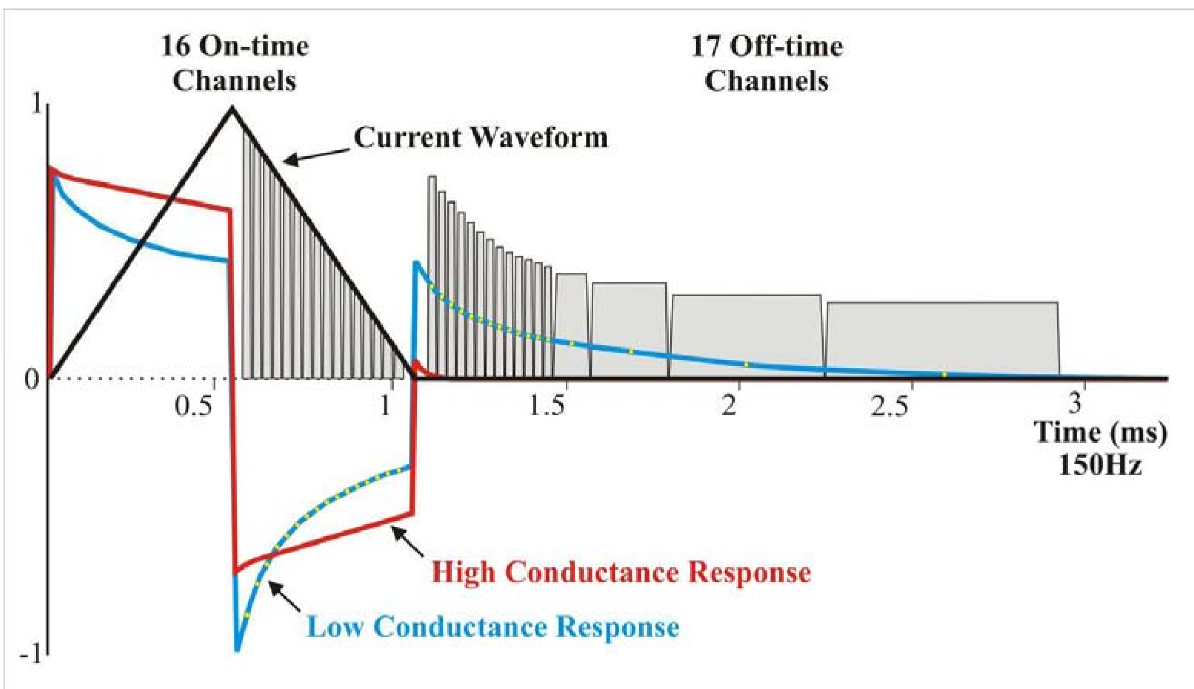


Figure 5. Schematic of Transmitter and Receiver waveforms

4.4. Gamma Ray Spectrometer

A GRS10-5 Intelligent Gamma Ray Spectrometer system manufactured by Pico Envirotec Inc. was used to record radiometric data. The system employs NaI detectors with individual peak detection processors and unique software to help eliminate the problems of zero base shift and deadtime correction. A natural peak detection algorithm anables fast system stabilization and temperature calibration. Individual detector tracking enables linearity correction coefficients to be calculated real time. This linearity is then used to provide a better fit for the individual spectra, maximizing the resolution of the entire spectrum and increasing the sensitivity of lower energy windows.

Technical specifications:

- Downward looking crystal volume: 16.8 Litres (1024 cu. in)
- Upward looking crystal volume: 4 Litres (256 cu. in.)
- Sample interval: 1.0 seconds (0.5 optional)
- Channels: 256 (512 optional) – channel width: 11.71keV
- Sensor location: Left rear of helicopter cabin (nominal ground clearance – 70 metres)
- Total counts window: 295keV to 3000keV
- Potassium counts window: 1306keV to 1588keV
- Uranium counts window: 1588keV to 1841keV
- Upward looking Uranium counts window: 1588keV to 1841keV
- Thorium counts window. 2376keV to 2847keV
- Cosmic counts: 3000keV to 6000keV
- Barometric and temperature sensor type: Honeywell transducer model HPB100
- Barometric and temperature sensor location: aircraft landing skid
- AntiCoincidence: simultaneous pulses recorded on all sensors stored in channel 0
- Spectra Tracking: fully automatic
- Stabilization time: 30 sec. on ground, 3 minutes in air @ 100m altitude
- Spectra Correction: automatic, system to be calibrated once per year
- Data Acquisition System: PicoEnvirotec AGIS - with GPS synchronization

Digital data was recorded as 256 channel spectra of the downward and upward looking detectors at a 1 Hz interval and stored on a compact flash disk.

4.5. AERODAS Acquisition System

The 128 channels of raw streaming data are recorded by the AeroDAS acquisition system (Figure 6) onto a removable hard drive. The streaming data are processed post-survey to yield 33 stacked and binned on-time and off-time channels at a 10 Hz sample rate. The timing of the final processed EM channels is described in the following table:

Channel:	Start Gate	End Gate	Start (us)	Stop (us)	Mid (us)	Width (us)
1 ON	25	25	651.0	677.0	664.0	26.0
2 ON	26	26	677.0	703.1	690.1	26.0
3 ON	27	27	703.1	729.1	716.1	26.0
4 ON	28	28	729.1	755.2	742.1	26.0

5 ON	29	29	755.2	781.2	768.2	26.0
6 ON	30	30	781.2	807.2	794.2	26.0
7 ON	31	31	807.2	833.3	820.3	26.0
8 ON	32	32	833.3	859.3	846.3	26.0
9 ON	33	33	859.3	885.4	872.3	26.0
10 ON	34	34	885.4	911.4	898.4	26.0
11 ON	35	35	911.4	937.4	924.4	26.0
12 ON	36	36	937.4	963.5	950.5	26.0
13 ON	37	37	963.5	989.5	976.5	26.0
14 ON	38	38	989.5	1015.6	1002.5	26.0
15 ON	39	39	1015.6	1041.6	1028.6	26.0
16 ON	40	40	1041.6	1067.6	1054.6	26.0
0 OFF	44	44	1145.8	1171.8	1158.8	26.0
1 OFF	45	45	1171.8	1197.8	1184.8	26.0
2 OFF	46	46	1197.8	1223.9	1210.9	26.0
3 OFF	47	47	1223.9	1249.9	1236.9	26.0
4 OFF	48	48	1249.9	1276.0	1262.9	26.0
5 OFF	49	49	1276.0	1302.0	1289.0	26.0
6 OFF	50	50	1302.0	1328.0	1315.0	26.0
7 OFF	51	51	1328.0	1354.1	1341.1	26.0
8 OFF	52	52	1354.1	1380.1	1367.1	26.0
9 OFF	53	53	1380.1	1406.2	1393.1	26.0
10 OFF	54	54	1406.2	1432.2	1419.2	26.0
11 OFF	55	55	1432.2	1458.2	1445.2	26.0
12 OFF	56	56	1458.2	1484.3	1471.3	26.0
13 OFF	57	60	1484.3	1588.4	1536.4	104.2
14 OFF	61	68	1588.4	1796.8	1692.6	208.3
15 OFF	69	84	1796.8	2213.4	2005.1	416.6
16 OFF	85	110	2213.4	2890.4	2551.9	677.0

4.6. RMS DGR-33 Acquisition System

In addition to the magnetics, altimeter and position data, six channels of real time processed off-time EM decay in the Z direction and one in the X direction are recorded by the RMS DGR-33 acquisition system at 10 samples per second and plotted real-time on the analogue chart recorder. These channels are derived by a binning, stacking and filtering procedure on the raw streaming data. The primary use of the RMS EM data (Z1 to Z6, X1) is to provide for real-time QA/QC on board the aircraft.

The channel window timing of the RMS DGR-33 6 channel system is described in the table below.

RMS Channel	Start time (microsec)	End time (microsec)	Width (microsec)	Streaming Channels
Z1, X1	1269.8	1322.8	52.9	48-50
Z2	1322.8	1455.0	132.2	50-54
Z3	1428.6	1587.3	158.7	54-59
Z4	1587.3	1746.0	158.7	60-65
Z5	1746.0	2063.5	317.5	66-77
Z6	2063.5	2698.4	634.9	78-101

Figure 6. AeroTEM II Instrument Rack

4.7. Magnetometer Base Station

The base magnetometer was a Geometerics G-858 cesium vapour magnetometer. Data logging and UTC time syncronisation was carried out within an external data logging computer, with an external GPS providing the timing signal. That data logging was configured to measure at 0.1 second intervals (10Hz). Digital recording resolution was 0.001 nT. The sensor was placed on a tripod in an area free of cultural noise sources. A continuously updated display of the base station values was available for viewing and regularly monitored to ensure acceptable data quality and diurnal levels.

4.8. Radar Altimeter

A Terra TRA 3500/TRI-30 radar altimeter is used to record terrain clearance. The antenna was mounted on the outside of the helicopter beneath the cockpit. The recorded data represents the height of the antenna, i.e. helicopter, above the ground. The Terra altimeter has an altitude accuracy of +/- 1.5 metres.

4.9. Video Tracking and Recording System

A high resolution colour digital video camera is used to record the helicopter ground flight path along the survey lines. The video is digitally annotated with GPS position and time and can be used to verify ground positioning information and cultural causes of anomalous geophysical responses.

Figure 7. Digital video camera typical mounting location.

4.10. GPS Navigation System

The navigation system consists of an Ag-Nav Incorporated AG-NAV2 GPS navigation system comprising a PC-based acquisition system, navigation software, a deviation indicator in front of the aircraft pilot to direct the flight, a full screen display with controls in front of the operator, a Mid-Tech RX400p WAAS-enabled GPS receiver mounted on the instrument rack and an antenna mounted on the magnetometer bird. WAAS (Wide Area Augmentation System) consists of approximately 25 ground reference stations positioned across the United States that monitor GPS satellite data. Two master stations, located on the east and west coasts, collect data from the reference stations and create a GPS correction message. This correction accounts for GPS satellite orbit and clock drift plus signal delays caused by the atmosphere and ionosphere. The corrected differential message is then broadcast through one of two geostationary satellites, or satellites with a fixed position over the equator. The corrected position has a published accuracy of under 3 metres. A recent static ground test of the Mid-Tech WAAS GPS yielded a standard deviation in x and y of under 0.6 metres and for z under 1.5 metres over a two-hour period.

Survey co-ordinates are set up prior to the survey and the information is fed into the airborne navigation system. The co-ordinate system employed in the survey design was WGS84 [World] using the UTM zone 11N projection. The real-time differentially corrected GPS positional data was recorded by the RMS DGR-33 in geodetic coordinates (latitude and longitude using WGS84) at 0.2 second intervals.

4.11. Digital Acquisition System

The AeroTEM received waveform sampled during on and off-time at 128 channels per decay, 300 times per second, was logged by the proprietary AeroDAS data acquisition system. The channel sampling commences at the start of the Tx cycle and the width of each channel is 26.04 microseconds. The streaming data was recorded on a removable hard-drive and was later backed-up onto DVD-ROM from the field-processing computer.

The RMS Instruments DGR33A data acquisition system was used to collect and record the analogue data stream, i.e. the positional and secondary geophysical data, including processed 6 channel EM, magnetics, radar altimeter, GPS position, and time. The data was recorded on 128Mb capacity FlashCard. The RMS output was also directed to a thermal chart recorder.

5. PERSONNEL

The following AeroQuest personnel were involved in the project:

- Manager of Operations: Bert Simon
- Field Data Processors: Adam Smiarowski
- Field Operator: Tom Szumigaj
- Data Interpretation and Reporting: Jonathan Rudd, Marion Bishop

The survey pilots Clay Wilson, John Jess and Greg Goodison were employed directly by the helicopter operator – Bighorn Helicopters, Calgary, Alberta.

6. DELIVERABLES

6.1. Hardcopy Map Products

The project area is divided into (4) 1:10,000 map sheets. Five (5) geophysical products are delivered as listed below:

- MAG Coloured Total Magnetic Intensity (TMI) with line contours and EM anomalies
- First Vertical Derivative of TMI with line contours and EM anomalies
- ZOFF AeroTEM Off-Time Z1 colour grid with line contours and EM anomalies
- Spectrometer – Potassium Percent
- Spectrometer – Thorium to Potassium Ratio

The coordinate/projection system for the maps is NAD83 Universal Transverse Mercator Zone 11 (for Canada; Central America; Mexico; USA (ex Hawaii Aleutian Islands)). For reference, the latitude and longitude in WGS84 are also noted on the maps. All the maps show flight path trace, skeletal topography, and conductor picks represented by an anomaly symbol classified according to calculated on-time conductance. The anomaly symbol is accompanied by postings denoting the calculated off-time conductance, a thick or thin classification and an anomaly identifier label. The anomaly symbol legend is given in the margin of the maps. The magnetic field data is presented as superimposed line contours with a minimum contour interval of 10 nT. Bold contour lines are separated by 1000 nT.

6.2. Digital Deliverables

Final Database of Survey Data

The geophysical profile data is archived digitally in Geosoft GDB binary format database(s). The databases has also been exported into Geosoft XYZ format, which is text file format offering greater compatibility with other viewing software. A description of the contents of the individual channels in the database can be found in Appendix 3. A copy of this digital data is archived at the Aeroquest head office in Milton.

Geosoft Grid files (GRD)

Leveled Grid products used to generate the geophysical map images. Cell size for all grid files is 25 meters.

- Total Magnetic Intensity (Mag)
- First Vertical Derivative of TMI (1VD)
- AeroTEM Z1 Off-Time (ZOFF)
- Radiometric Percent Potassium (Kcorr)
- Radiometric Ratio –Thorium to Potassium (ThKratio)

Digital Versions of Final Maps

Map files in Geosoft .map and Adobe PDF format

Free Viewing Software

Geosoft Oasis Montaj Viewing Software
Adobe Acrobat Reader

Digital Copy of this Document

7. DATA PROCESSING AND PRESENTATION

All in-field and post-field data processing was carried out using Aeroquest proprietary data processing software, and Geosoft Oasis montaj software. Maps were generated using 36-inch wide Hewlett Packard ink-jet plotters.

7.1. Base Map

The geophysical maps accompanying this report are based on positioning in the datum of NAD83. The survey geodetic GPS positions have been projected using the Universal Transverse Mercator projection in Zone 11N. A summary of the map datum and projection specifications are as follows:

- Ellipse: GRS 1980
- Ellipse major axis: 6378137m eccentricity: 0.081819191
- Datum: North American 1983 - Canada Mean
- Datum Shifts (x,y,z) : 0, 0, 0 metres
- Map Projection: Universal Transverse Mercator Zone 11 (Central Meridian 117ºW)
- Central Scale Factor: 0.9996
- False Easting, Northing: 500,000m, 0m

7.2. Flight Path & Terrain Clearance

The position of the survey helicopter was directed by use of the Global Positioning System (GPS). Positions were updated five times per second (5Hz) and expressed as WGS84 latitude and longitude calculated from the raw pseudo range derived from the C/A code signal. The instantaneous GPS flight path, after conversion to UTM co-ordinates, is drawn using linear interpolation between the x/y positions. The terrain clearance was maintained with reference to the radar altimeter. The raw Digital Terrain Model (DTM) was derived by taking the GPS survey elevation and subtracting the radar altimeter terrain clearance values. The calculated topography elevation values are relative to WGS84 (GPS) altitude and are not tied in to surveyed geodetic heights.

Each flight included at least two high elevation 'background' checks. During the high elevation checks, an internal 5 second wide calibration pulse in all EM channels was generated in order to ensure that the gain of the system remained constant and within specifications.

7.3. Electromagnetic Data

The raw streaming data, sampled at a rate of 38,400 Hz (128 channels, 300 times per second) was reprocessed using a proprietary software algorithm developed and owned by Aeroquest Limited. Processing involves the compensation of the X and Z component data for the primary field waveform. Coefficients for this compensation for the system transient are determined and applied to the stream data. The stream data are then pre-filtered, stacked, binned to the 33 on and off-time channels and checked for the effectiveness of the compensation and stacking processes. The stacked data is then filtered, leveled and split up into the individual line segments. Further base level adjustments may be carried out at this stage.

The final field processing step was to merge the processed EM data with the other data sets into a Geosoft GDB file. The EM fiducial is used to synchronize the two datasets. The processed channels are mergered into 'array format; channels in the final Geosoft database as Zon, Zoff, Xon, and Xoff

The filtering of the stacked data is designed to remove or minimize high frequency noise that can not be sourced from the geology. Apparent bedrock EM anomalies were interpreted with the aid of an auto-pick from positive peaks and troughs in the on-time Z channel responses correlated with X channel responses. The auto-picked anomalies were reviewed and edited by a geophysicist on a line by line basis to discriminate between thin and thick conductor types. Anomaly picks locations were migrated and removed as required. This process ensures the optimal representation of the conductor centres on the maps.

At each conductor pick, estimates of the off-time conductance have been generated based on a horizontal plate source model for those data points along the line where the response amplitude is sufficient to yield an acceptable estimate. Some of the EM anomaly picks do not display a tau value; this is due to the inability to properly define the decay of the conductor usually because of low signal amplitudes. Each conductor pick was then classified according to a set of seven ranges of calculated off-time conductance values. For high conductance sources, the on-time conductance values may be used, since it provides a more accurate measure of high-conductance sources. Each symbol is also given an identification letter label, unique to each flight line. Conductor picks that did not yield an acceptable estimate of off-time conductance due to a low amplitude response were classified as a low conductance source. Please refer to the anomaly symbol legend located in the margin of the maps.

7.4. Gamma-Ray Spectrometer Data

All radiometric processing was completed using the International Atomic Energy Agency (IAEA - 1991) guidelines. The Individual detector processors in the GRS10-5 spectrometer and intelligent peak detection software has virtually eliminated the problem of system drift (and subsequent leveling) and the need for deadtime corrections.

Data Quality Assurance and Control

The spectrometer data are referenced to the other data sets using a GPS time stamp. Merging of the various recorded data sets is done post flight using proprietary Aeroquest software. Preliminary ROI channels are generated and profiles are then plotted from the digital data to check for any missing data, spikes or data corrupted by other noise sources. Where necessary, the data are corrected or flagged for re-flight depending on the severity or duration of the noise.

Spectral Calibration

When calibrated (with thorium source about once a year) linearity of the each detector is measured and linearity correction coefficients are calculated. When operating in real time (collecting data), the linearity of each detector is mathematically corrected for each measurement. Individual detector tracking (tuning) and linearity correction provide better fit of the individual spectra that are being summed and therefore a sharper (better resolution) spectrum is obtained.

Spectra Windowing

The Gamma-Ray spectra were recorded in a 256 channel array at a sample rate of 1 Hz. The standard windows for the GRS10-5 detector are as follows:

- Total counts window: 295keV to 3000keV (channels 25 to 255)
- Potassium counts window: 1306keV to 1588keV (channels 111 to 135)
- Uranium counts window: 1588keV to 1841keV (channels 135 to 165)
- Thorium counts window. 2376keV to 2847keV (channels 202 to 242)
- Cosmic counts: 3000keV to 6000keV (channel 256)

Data Pre-Filtering

The following raw channels were low-pass filtered prior to further processing:

Filter widths:

- Total counts : 4 seconds
- Potassium counts : 5 seconds
- Uranium counts : 7 seconds
- Thorium counts : 7 seconds
- Cosmic counts : 35 seconds
- Radar altimeter : 3 seconds

Filtering to Prepare for Background Corrections

The radar altimeter data are filtered in order to ensure that no noise sources from the altimeter data are introduced to the radiometric data processing. The upward looking data are also filtered to improve the count statistics. A typical filter width ranges from 10 to 20s. In order to establish radon background levels from the upward-looking detector data, temporary heavily filtered upward and downward looking uranium and downward looking thorium data are utilized. The original unfiltered data are, of course, retained.

Standard Pressure and Temperature corrections

Radar altimeter data are used in adjusting the stripping ratios for altitude and to carry out the height attenuation corrections. They are then converted to effective height (he) at STP by the expression $he = (h * 273.15)/(T + 273.15)* (P/1013)$, where h is the observed radar altitude; T is the temperature in degrees C; and P is the barometric pressure in mbars.

LiveTime (DeadTime) corrections

No LiveTime corrections were required for this survey. The GRS10-5 does not generally require corrections for system deadtime. This correction is only applied where the total count rates are extremely high. Dead-time correction is made to each window using the expression $N=n/(1-T)$ where N is the corrected count; n is the raw recorded count; and T is the dead-time. It is estimated that the sytsem deadtime is less than 10 microseconds per pulse.

Cosmic and Aircraft Background

Cosmic and aircraft background expressions are determined for each spectral window as described in chapter 4 of the IAEA Technical Report 323. The general form of these expressions is N = a + bC, where N is the combined cosmic and aircraft background for each window; a is the aircraft background in the window; C is the cosmic channel count; and b is the cosmic stripping factor for the window. The expressions are evaluated for each ROI window for each sample and used as a subtractive correction for the data.

Radon Background

Correction of the data for variations in background due to radon is a multi-step process. First, test flights at various elevations over water are carried out in the field to establish the contribution of atmospheric radon to the ROI windows. A least squares analysis of the data from these test flights yields the constants for equations 4.9 to 4.12 (IAEA Report 323). Second, the response of the upward looking detector to radiation from the ground is established. Here a departure from the IAEA Report has been recommended by Grasty and Hovgaard (1996). The expression for the radon component in the downward looking uranium window is given by Ur =(u – a1U – a2T + a2bT – bu)/(au – a1 – a2aT) (see Eq. 4.3 – IAEA 323) where, Ur is the radon background detected in the downward U window; u is the measured count in the upward uranium window; U is the measured count in the downward uranium window; T is the measured count in the downward thorium window; a1, a2, au and aT are proportionality factors; and bu and bT are constants determined experimentally. Using a1 or a2 (see above) in this equation will result in a good estimate of Ur permitting correction of the other ROI windows.

Survey altitude test data were collected and used to establish atmospheric background and calibrate the upward and downward looking detector systems. Variations in count rates due to soil moisture content and altimeter variations can largely be overcome by a normalization procedure using the thorium count. The procedure correlates the thorium count to the uranium count assuming the contribution to each ROI from the ground is proportional.

Compton Stripping

Readings from pure Uranium, Thorium and Potassium sources can be seen in other ROI's or Regions of Interest (windows). This spectral overlap must be corrected for. The stripping ratios a, b and g are determined during tests over calibration pads. The principal ratios a, β and g should be adjusted for temperature, pressure and altitude (above ground) before stripping is carried out. These stripping ratios are used to remove the contribution in each of the three ROI windows from higher energy sources, leaving only the contribution from potassium, uranium and thorium.

Altitude Attenuation Corrections

The altitude attenuation correction corrects the data in each of the ROI windows for the effects of altitude. The count rates decrease exponentially with altitude and therefore the counts are corrected to a constant altimeter datum at the nominal survey height of 30m.

Apparent Radioelement Concentrations

The corrected count rate data can be converted to estimate the ground concentrations of each of the three radioelements, potassium, uranium and thorium. The procedure assumes an infinite horizontal slab source geometry with a uniform radioelement concentration. The calculation assumes radioactive equilibrium in the U and Th decay series. Therefore the U and Th concentrations are assigned as equivalent concentrations using the nomenclature eU and eTh. An estimate of the air absorbed dose rate can be made from the apparent concentrations, K%, eU ppm and eTh ppm.

Computation of Radioelement Ratios

Standard rationing of the three radioelements (eU/eTh, eU/K and eTh/K) can be carried out and presented in profile or plan map form. In order to ensure statistical confidence in generating these ratios, we generally take the following precautions:

- Reject all data point where the apparent potassium concentration is less than 0.25% as these measurements are likely taken over water.
- Carry out cumulative summing along the survey line of each radioelement, rejecting areas where the summation does not exceed a certain threshold value (no lower than 25 counts for both numerator and denominator).
- Compute the ratios using the cumulative sums.

7.5. Magnetic Data

Prior to any leveling the magnetic data was subjected to a lag correction of -0.1 seconds and a spike removal filter. The filtered aeromagnetic data were then corrected for diurnal variations using the magnetic base station and the intersections of the tie lines. No corrections for the regional reference field (IGRF) were applied. The corrected profile data were interpolated on to a grid using a random grid technique with a grid cell size of 25 metres. The final leveled grid provided the basis for threading the presented contours which have a minimum contour interval of 10 nT.

In order to enhance subtle magnetic trends, the first vertical derivative grid was calculated from the total magnetic intensity (TMI) grid. The first vertical derivative (1VD) of the TMI enhances low amplitude and small wavelength magnetic features which define shallow geologic features that may represent potential mineral exploration targets or target environments.

8. General Comments

The survey was successful in mapping the magnetic, conductive and radiometric properties of the geology throughout the survey area. For a detailed interpretation please contact Aeroquest Limited.

8.1. Magnetic Response

The magnetic data provide a high resolution map of the distribution of the magnetic mineral content of the survey area. This data can be used to interpret the location of geological contacts and other structural features such as faults and zones of magnetic alteration. The sources for anomalous magnetic responses are generally thought to be predominantly magnetite because of the relative abundance and strength of response (high magnetic susceptibility) of magnetite over other magnetic minerals such as pyrrhotite.

8.2. EM Anomalies

The EM anomalies on the maps are classified by conductance (as described earlier in the report) and also by the thickness of the source. A thin, vertically orientated source produces a double peak anomaly in the z-component response and a positive to negative crossover in the x-component response (Figure 8). For a vertically orientated thick source (say, greater than 10m), the response is a single peak in the z-component response and a negative to positive crossover in the x-component response. Because of these differing responses, the AeroTEM system provides discrimination of thin and thick sources and this distinction is indicated on the EM anomaly symbols (N = thin and K = thick). Where multiple, closely spaced conductive sources occur, or where the source has a shallow dip, it can be difficult to uniquely determine the type (thick vs. thin) of the source (Figure 10). In these cases both possible source types may be indicated by picking both thick and thin response styles. For shallow dipping conductors the 'thin' pick will be located over the edge of the source, whereas the 'thick' pick will fall over the downdip 'heart' of the anomaly.

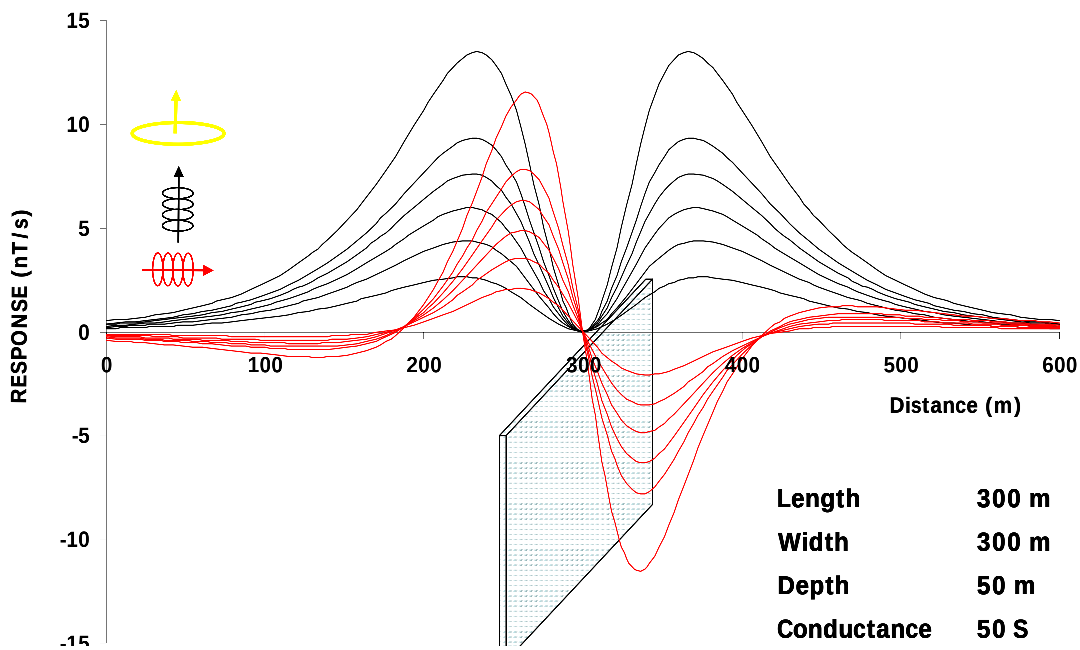


Figure 8. AeroTEM response to a 'thin' vertical conductor.

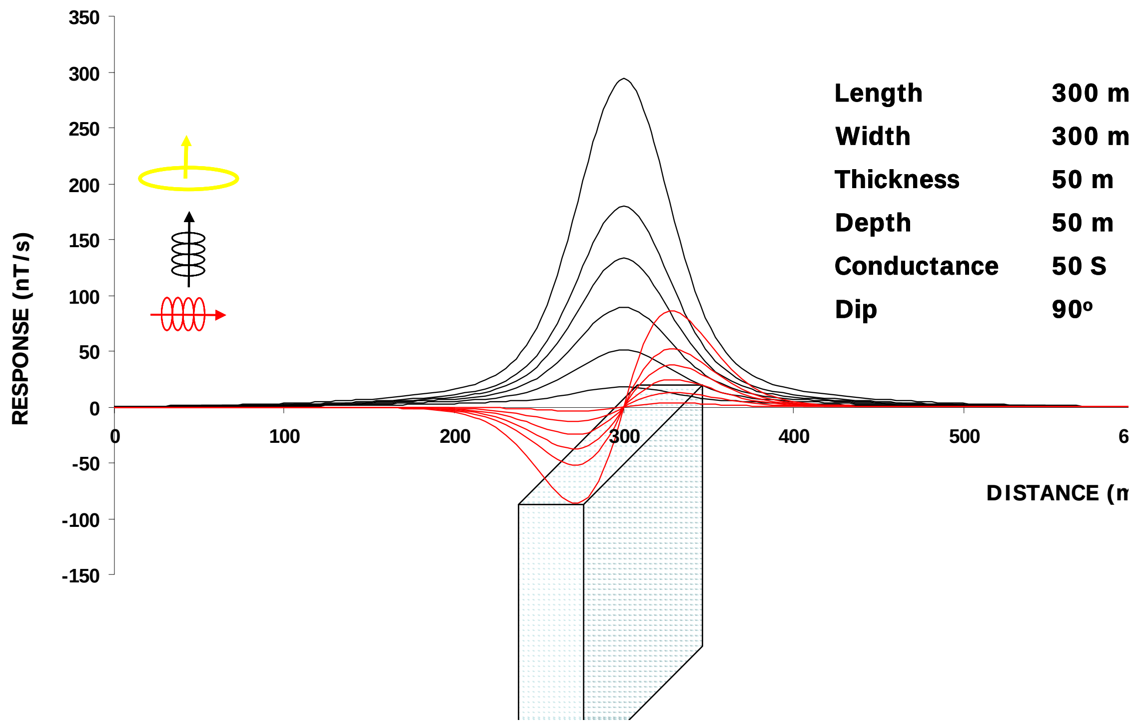


Figure 9. AeroTEM response for a 'thick' vertical conductor.

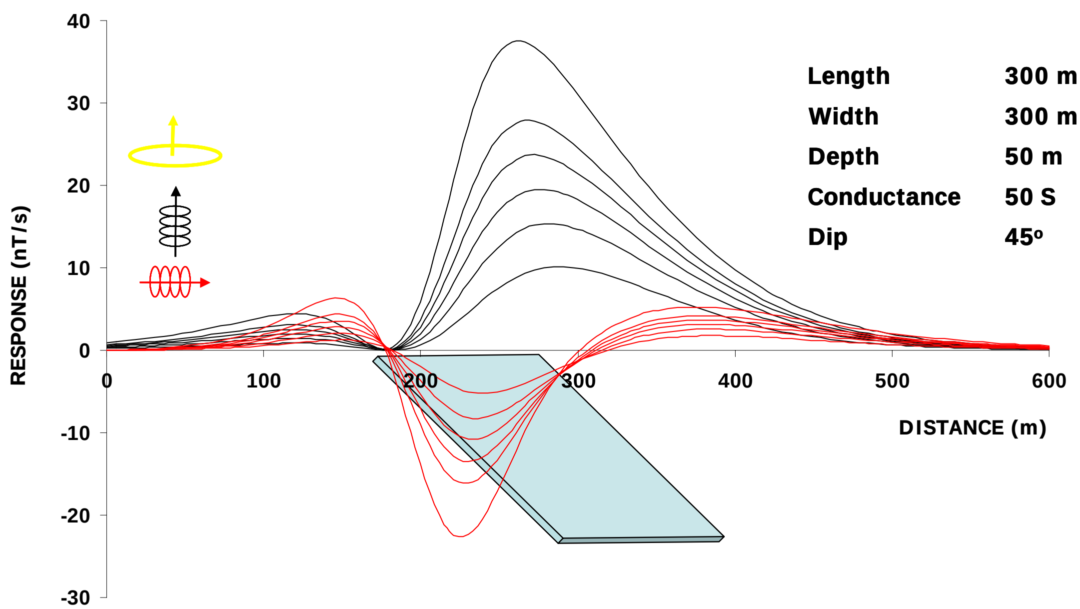


Figure 10. AeroTEM response over a 'thick' dipping conductor.

All cases should be considered when analyzing the interpreted picks and prioritizing for follow-up. Specific anomalous responses which remain as high priority should be subjected to numerical modeling prior to drill testing to determine the dip, depth and probable geometry of the source.

Respectfully submitted,

Jonathan Rudd, P.Eng

Aeroquest Limited
October, 2006

APPENDIX 1 – PROJECT CORNER COORDINATES

The Project consists of 5 blocks with boundaries as defined in the following tables. Positions are in UTM Zone 11 – NAD83.

Crawford

X	Y
522491.0	5515525.0
525499.0	5515525.0
525509.0	5513163.0
522501.0	5513142.0

McFarlane

X	Y
515710.0	5495595.0
520680.0	5495595.0
520690.0	5496065.0
523676.0	5496059.0
523659.0	5495497.0
525875.0	5493710.0
525675.0	5491440.0
522514.0	5491410.0
522525.0	5490950.0
518894.0	5490915.0
518870.0	5492300.0
515710.0	5492310.0

Sanca

X	Y
517470.0	5477105.0
525300.0	5477105.0
525350.0	5472540.0
526300.0	5472540.0
526250.0	5471450.0
525380.0	5471480.0
525360.0	5470500.0
519270.0	5470570.0

Sawyer

X	Y
528670.0	5513220.0
532340.0	5513280.0
532360.0	5508560.0
528690.0	5508540.0

Storm King

X	Y
537749.0	5486438.0
540756.0	5486487.0
540799.0	5481288.0
537790.0	5481291.0

APPENDIX 2 – Mining Claims

Block	Tenure Number	Claim Name	Owner	Good To Date	Mining Division	Area (Ha)
McFarlane	524920	MIR 1	CHRISTOPHER IAN WARREN	2007/JAN/09		523.81
McFarlane	411445	SPHINX 14	EAGLE PLAINS RESOURCES LTD.	2015/NOV/30	NELSON	25.0
McFarlane	411447	SPHINX 16	EAGLE PLAINS RESOURCES LTD.	2015/NOV/30	NELSON	25.0
McFarlane	411449	SPHINX 18	EAGLE PLAINS RESOURCES LTD.	2015/NOV/30	NELSON	25.0
McFarlane	412989	JODI NO 11	EAGLE PLAINS RESOURCES LTD.	2015/AUG/06	FORT STEELE	25.0
McFarlane	503970		EAGLE PLAINS RESOURCES LTD.	2015/AUG/06		377.026
McFarlane	505368		EAGLE PLAINS RESOURCES LTD.	2015/NOV/30		1339.734
McFarlane	522989	SPHINX SW	EAGLE PLAINS RESOURCES LTD.	2006/NOV/30		20.946
Sanca	537407	KT1	GORDON JAMES GOODBRAND	2007/JUL/19		63.047
Sanca	537408	KT2	GORDON JAMES GOODBRAND	2007/JUL/19		42.03
Sanca	537409	KT3	GORDON JAMES GOODBRAND	2007/JUL/19		84.06
Sanca	393796	SPARKY 16	MOUNTAIN STAR RESOURCES LTD	2006/OCT/13	NELSON	500
McFarlane	413243	LYDY 1	MOUNTAIN STAR RESOURCES LTD	2015/JUL/31	FORT STEELE	25
McFarlane	413244	LYDY 2	MOUNTAIN STAR RESOURCES LTD	2015/JUL/31	FORT STEELE	25
McFarlane	413245	LYDY 3	MOUNTAIN STAR RESOURCES LTD	2015/JUL/31	FORT STEELE	25
McFarlane	413246	LYDY 4	MOUNTAIN STAR RESOURCES LTD	2015/JUL/31	FORT STEELE	25
McFarlane	413248	LYDY 6	MOUNTAIN STAR RESOURCES LTD	2015/JUL/31	FORT STEELE	25
McFarlane	413255	LYDY 13	MOUNTAIN STAR RESOURCES LTD	2015/JUL/31	FORT STEELE	25
McFarlane	413256	LYDY 14	MOUNTAIN STAR RESOURCES LTD	2015/JUL/31	FORT STEELE	25
Sawyer	501293	Intrusive	MOUNTAIN STAR RESOURCES LTD	2007/JAN/12		438.339
Storm King	501696	Copper storm	MOUNTAIN STAR RESOURCES LTD	2007/JAN/12		314.681
Sanca	503128	Sparky 1	MOUNTAIN STAR RESOURCES LTD	2010/JUN/13		252.181
Sanca	503131	Sparky 2	MOUNTAIN STAR RESOURCES LTD	2010/JUN/13		504.6
Sawyer	509603	Sawyer North	MOUNTAIN STAR RESOURCES LTD	2007/MAR/24		375.644
McFarlane	512490		MOUNTAIN STAR RESOURCES LTD	2016/JUL/31		377.084
McFarlane	513555	MCFARLANE NORTH	MOUNTAIN STAR RESOURCES LTD	2016/DEC/31		460.637
McFarlane	513556	MCFARLANE SOUTH	MOUNTAIN STAR RESOURCES LTD	2016/DEC/31		523.627
Sanca	516555		MOUNTAIN STAR RESOURCES LTD	2006/OCT/13		504.216
Sanca	516556		MOUNTAIN STAR RESOURCES LTD	2006/OCT/13		567.61
Sanca	516557		MOUNTAIN STAR RESOURCES LTD	2006/OCT/13		420.497
Sanca	516558		MOUNTAIN STAR RESOURCES LTD	2007/OCT/13		630.484
Sanca	516559		MOUNTAIN STAR RESOURCES LTD	2007/OCT/13		630.491
Sanca	516560		MOUNTAIN STAR RESOURCES LTD	2007/OCT/13		525.184
McFarlane	520326	MCFARLANE 1	MOUNTAIN STAR RESOURCES LTD	2016/SEP/22		523.531
McFarlane	520327	MCFARLANE 2	MOUNTAIN STAR RESOURCES LTD	2016/SEP/22		418.847
McFarlane	520328	MCFARLANE 3	MOUNTAIN STAR RESOURCES LTD	2016/SEP/22		523.717
McFarlane	520329	MCFARLANE 4	MOUNTAIN STAR RESOURCES LTD	2016/SEP/22		418.986
Sawyer	520997	SAWYER EAST	MOUNTAIN STAR RESOURCES LTD	2006/OCT/12		501.055
Sawyer	520998	SAWYER WEST	MOUNTAIN STAR RESOURCES LTD	2006/OCT/12		250.551
Storm King	527085	STORM KING SOUTH	MOUNTAIN STAR RESOURCES LTD	2007/FEB/05		167.525
Storm King	527086	STORM KING NORTH	MOUNTAIN STAR RESOURCES LTD	2007/FEB/05		335.573
Storm King	527274	STORM KING EAST	MOUNTAIN STAR RESOURCES LTD	2007/FEB/08		188.865
Storm King	527275	STORM KING WEST	MOUNTAIN STAR RESOURCES LTD	2007/FEB/08		293.653
Crawford	530471	CRAWFORD	MOUNTAIN STAR RESOURCES LTD	2007/MAR/24		521.565
Sanca	518704	CONDOR	NIKOLAY ZHOVTYUK	2006/AUG/03		252.091
McFarlane	513175	BEN DERBY	TOM ELSON CHERRY	2008/MAY/22		41.88

APPENDIX 3 - Description of Database Fields

The GDB file is a Geosoft binary database. In the database, the Survey lines and Tie Lines are prefixed with an "L" for "Line" and "T" for "Tie".

Database (Crawford.gdb, McFarlane.gdb, Sanca.gdb, Sawyer.gdb, StormKing.gdb):

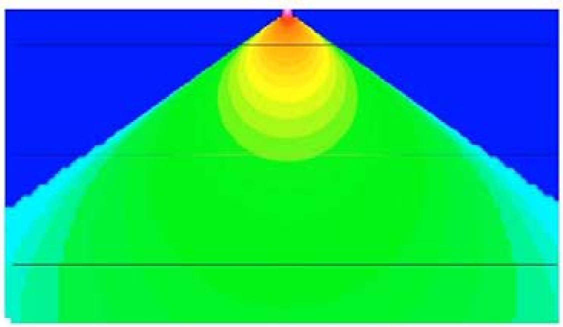
Column	Units	Description
Line		Line number
Flight		Flight #
emfid		AERODAS Fiducial
utctime	hh:mm:ss.ss	UTC time
x	m	UTM Easting (NAD83, zone 11N)
y	m	UTM Northing (NAD83, zone 11N)
bheight	m	Terrain clearance of EM bird
dtm	m	Digital Terrain Model
MOBf	nT	Total magnetic field – top sensor
Magf	nT	Total magnetic field from sensor on EM bird
Basemagf	nT	Base station total magnetic intensity
Zon	nT/s	Processed Streaming On-Time Z component Channels 1-16
Zoff	nT/s	Processed Streaming Off-Time Z component Channels 0-16
Xon	nT/s	Processed Streaming On-Time X component Channels 1-16
Xoff	nT/s	Processed Streaming Off-Time X component Channels 0-16
Anom_labels		Alphanumeric label of conductor pick
Off_Con	S	Off-time conductance at conductor pick
Off_Tau	S	Off-time decay constant at conductor pick
Anom_ID	S	Anomaly Character (K= thicK, N = thiN)
grade		Classification from 1-7 based on conductance of conductor pick
pwrline		powrline monitor data channel
Off_allcon	S	Off-time conductance
Off_AllTau	S	Off-time decay constant
TCcorr	CPS	Total Counts
Kcorr	%	Potassium
Ucorr	Ppm	Equivalent Uranium
Thcorr	Ppm	Equivalent Thorium
THKratio		Ratio – Thorium to Potassium
TCEXP	microR/h	Exposure Rate

APPENDIX 4: AEROTEM DESIGN CONSIDERATIONS

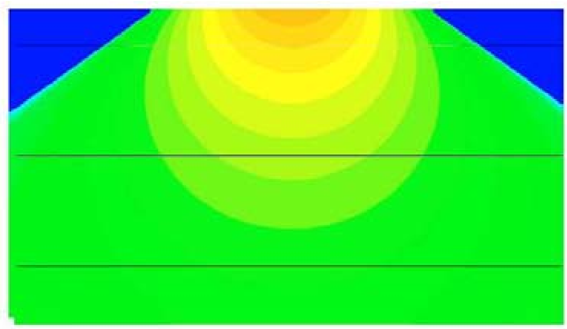
Helicopter-borne EM systems offer an advantage that cannot be matched from a fixed-wing platform. The ability to fly at slower speed and collect data with high spatial resolution, and with great accuracy, means the helicopter EM systems provide more detail than any other EM configuration, airborne or ground-based. Spatial resolution is especially important in areas of complex geology and in the search for discrete conductors. With the advent of helicopter-borne high-moment time domain EM systems the fixed wing platforms are losing their *only* advantage – depth penetration.

Advantage 1 – Spatial Resolution

The AeroTEM system is specifically designed to have a small footprint. This is accomplished through the use of concentric transmitter-receiver coils and a relatively small diameter transmitter coil (5 m). The result is a highly focused exploration footprint, which allows for more accurate "mapping" of discrete conductors. Consider the transmitter primary field images shown in Figure 1, for AeroTEM versus a fixed-wing transmitter.



The footprint of AeroTEM at the earth's surface is roughly 50m on either side of transmitter



The footprint of a fixed-wing system is roughly 150 m on either side of the transmitter

Figure 1. A comparison of the footprint between AeroTEM and a fixed-wing system, highlights the greater resolution that is achievable with a transmitter located closer to the earth's surface. The AeroTEM footprint is one third that of a fixed-wing system and is symmetric, while the fixed-wing system has even lower spatial resolution along the flight line because of the separated transmitter and receiver configuration.

At first glance one may want to believe that a transmitter footprint that is distributed more evenly over a larger area is of benefit in mineral exploration. In fact, the opposite is true; by energizing a larger surface area, the ability to energize and detect discrete conductors is reduced. Consider, for example, a comparison between AeroTEM and a fixed-wing system over the Mesamax Deposit (1,450,000 tonnes of 2.1% Ni, 2.7% Cu, 5.2 g/t Pt/Pd). In a test survey over three flight lines spaced 100 m apart, AeroTEM detected the Deposit on all three flight lines. The fixed-wing system detected the Deposit only on two flight lines. In exploration programs that seek to expand the flight line spacing in an effort to reduce the cost of the airborne survey, discrete conductors such as the Mesamax Deposit can go undetected. The argument often put forward in favor of using fixed-wing systems is that because of their larger footprint, the flight line spacing can indeed be widened. Many fixed-wing surveys are flown at 200 m or 400 m. Much of the survey work performed by Aeroquest has been to survey in areas that were previously flown at these wider line spacings. One of the reasons for AeroTEM's impressive discovery record has been the strategy of flying closely spaced lines and finding all the discrete near-surface conductors. These higher resolution surveys are being flown within existing mining camps, areas that improve the chances of discovery.

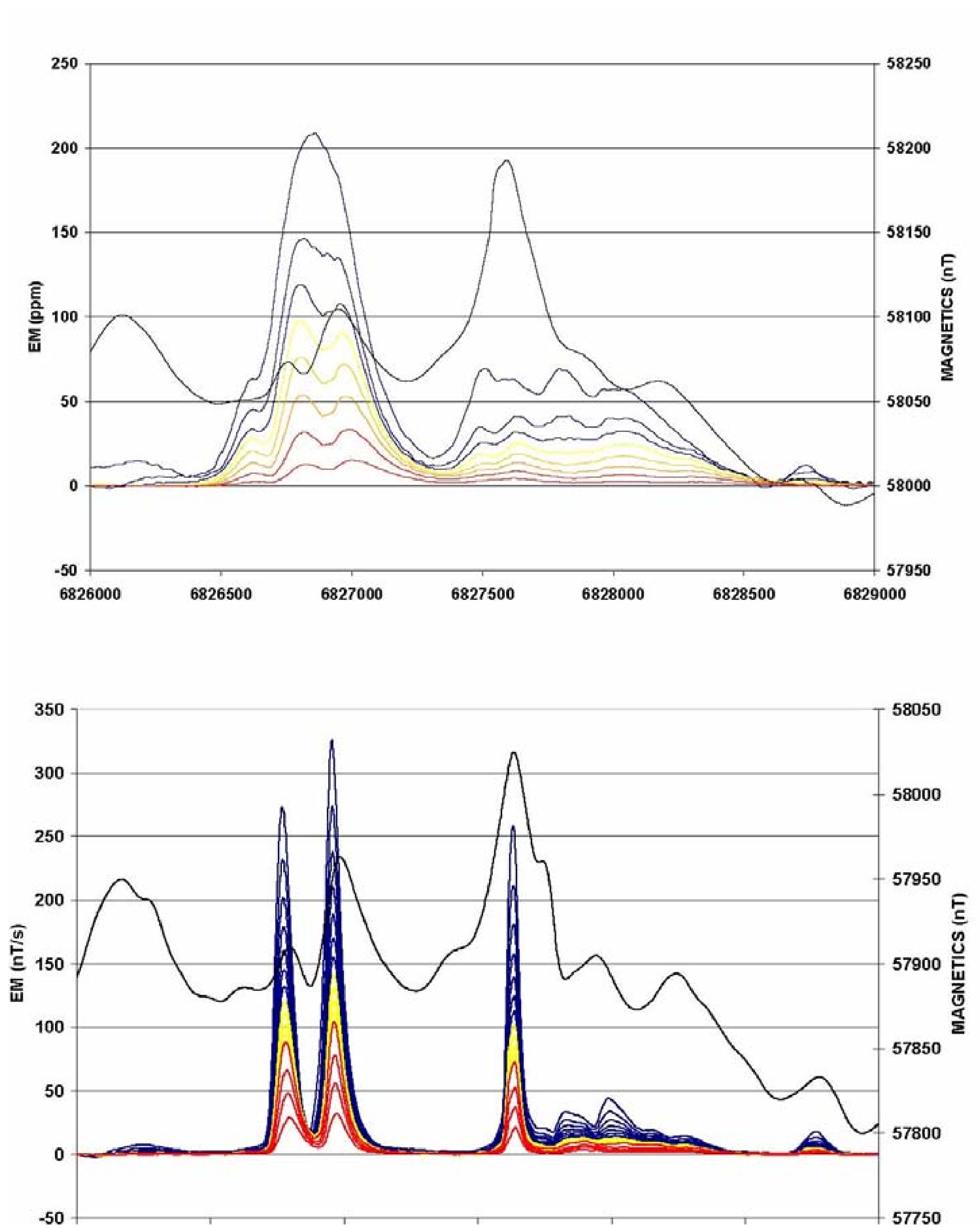


Figure 2. Fixed-wing (upper) and AeroTEM (lower) comparison over the eastern limit of the Mesamax Deposit, a Ni-Cu-PGE zone located in the Raglan nickel belt and owned by Canadian Royalties. Both systems detected the Deposit further to the west where it is closer to surface.

The small footprint of AeroTEM combined with the high signal to noise ratio (S/N) makes the system more suitable to surveying in areas where local infrastructure produces electromagnetic noise, such as power lines and railways. In 2002

Aeroquest flew four exploration properties in the Sudbury Basin that were under option by FNX Mining Company Inc. from Inco Limited. One such property, the Victoria Property, contained three major power line corridors.

The resulting AeroTEM survey identified all the known zones of Ni-Cu-PGE mineralization, and detected a response between two of the major power line corridors but in an area of favorable geology. Three boreholes were drilled to test the anomaly, and all three intersected sulphide. The third borehole encountered 1.3% Ni, 6.7% Cu, and 13.3 g/t TPMs over 42.3 ft. The mineralization was subsequently named the Powerline Deposit.

The success of AeroTEM in Sudbury highlights the advantage of having a system with a small footprint, but also one with a high S/N. This latter advantage is achieved through a combination of a high-moment (high signal) transmitter and a rigid geometry (low noise). Figure 3 shows the Powerline Deposit response and the response from the power line corridor at full scale. The width of power line response is less than 75 m.

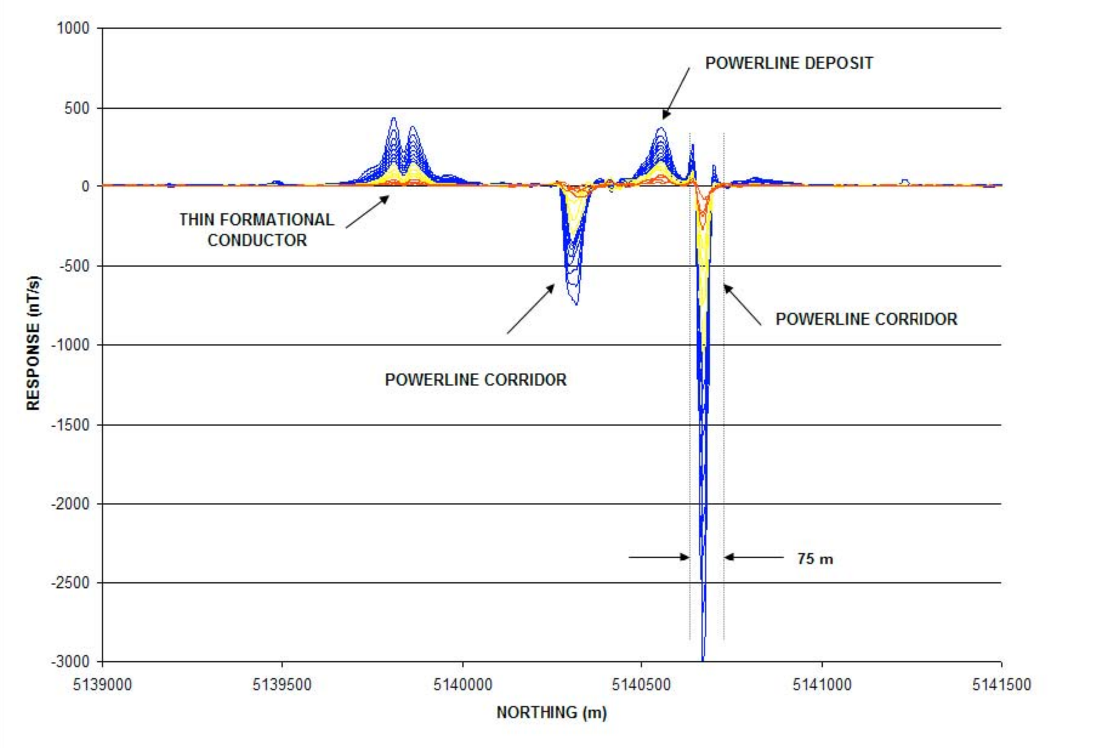


Figure 3. The Powerline Deposit is located between two major power line corridors, which make EM surveying problematic. Despite the strong response from the power line, the anomaly from the Deposit is clearly detected. Note the thin formational conductor located to the south. The only way to distinguish this response from that of two closely spaced conductors is by interpreting the X-axis coil response.

Advantage 2 – Conductance Discrimination

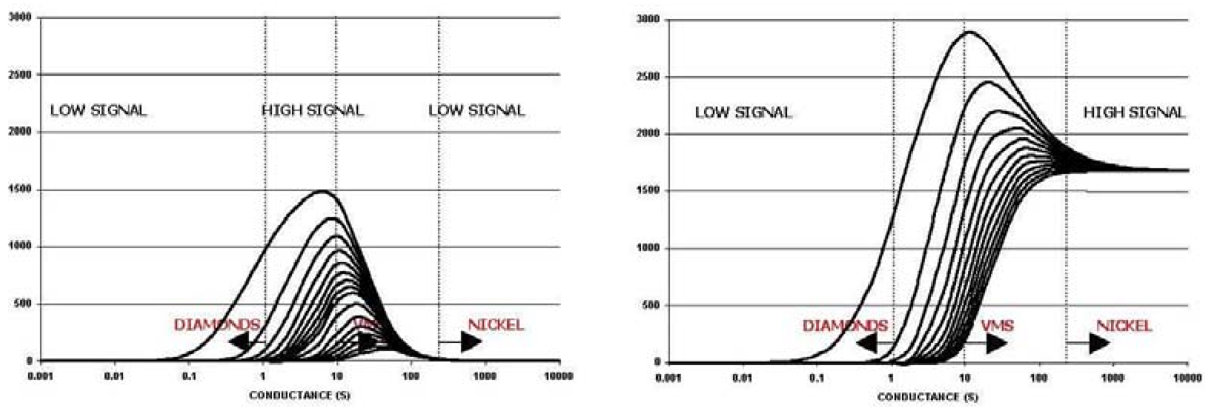
The AeroTEM system features full waveform recording and as such is able to measure the on-time response due to high conductance targets. Due to the processing method (primary field removal), there is attenuation of the response with increasing conductance, but the AeroTEM on-time measurement is still superior to systems that rely on lower base frequencies to detect high conductance targets, but do not measure in the on-time.

The peak response of a conductive target to an EM system is a function of the target conductance and the EM system base frequency. For time domain EM systems that measure only in the off-time, there is a drop in the peak response of a target as the base frequency is lowered for all conductance values below the peak system response. For example, the AeroTEM peak response occurs for a 10 S conductor in the early off-time and 100 S in the late off-time for a 150 Hz base frequency. Because base frequency and conductance form a linear relationship when considering the peak response of any EM system, a drop in base frequency of 50% will double the conductance at which an EM system shows its peak response. If the base frequency were lowered from 150 Hz to 30 Hz there would be a fivefold increase in conductance at which the peak response of an EM occurred.

However, in the search for highly conductive targets, such as pyrrhotite-related Ni-Cu-PGM deposits, a fivefold increase in conductance range is a high price to pay because the signal level to lower conductance targets is reduced by the same factor of five. For this reason, EM systems that operate with low base frequencies are not suitable for general exploration unless the target conductance is more than 100 S, or the target is covered by conductive overburden.

Despite the excellent progress that has been made in modeling software over the past two decades, there has been little work done on determining the optimum form of an EM system for mineral exploration. For example, the optimum configuration in terms of geometry, base frequency and so remain unknown. Many geophysicists would argue that there is no single ideal configuration, and that each system has its advantages and disadvantages. We disagree.

When it comes to detecting and discriminating high-conductance targets, it is necessary to measure the pure inphase response of the target conductor. This measurement requires that the measured primary field from the transmitter be subtracted from the total measured response such that the secondary field from the target conductor can be determined. Because this secondary field is in-phase with the transmitter primary field, it must be made while the transmitter is turned on and the transmitter current is changing. The transmitted primary field is several orders of magnitude larger than the secondary field. AeroTEM uses a bucking coil to reduce the primary field at the receiver coils. The only practical way of removing the primary field is to maintain a rigid geometry between the transmitter, bucking and receiver coils. This is the main design consideration of the AeroTEM airframe and it is the only time domain airborne system to have this configuration.



The off-time AeroTEM response for the 16 channel configuration.

The on-time response assuming 100% removal of the measured primary field.

Figure 4. The off-time and on-time response nomogram of AeroTEM for a base frequency of 150 Hz. The on-time response is much stronger for higher conductance targets and this is why on-time measurements are more important than lower frequencies when considering high conductance targets in a resistive environment.

Advantage 3 – Multiple Receiver Coils

AeroTEM employs two receiver coil orientations. The Z-axis coil is oriented parallel to the transmitter coil and both are horizontal to the ground. This is known as a maximum coupled configuration and is optimal for detection. The X-axis coil is oriented at right angles to the transmitter coil and is oriented along the line-of-flight. This is known as a minimum coupled configuration, and provides information on conductor orientation and thickness. These two coil configurations combined provide important information on the position, orientation, depth, and thickness of a conductor that cannot be matched by the traditional geometries of the HEM or fixed-wing systems. The responses are free from a system geometric effect and can be easily compared to model type curves in most cases. In other words, AeroTEM data is very easy to interpret. Consider, for example, the following modeled profile:

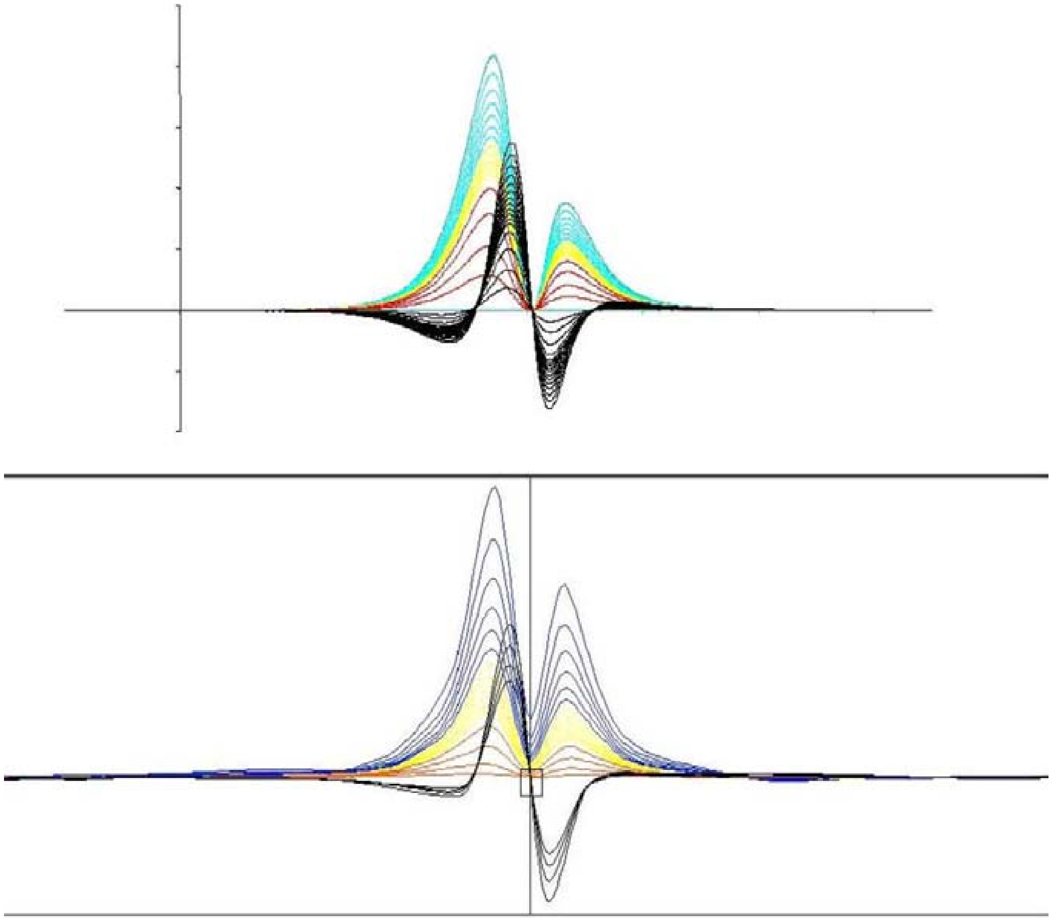


Figure 5. Measured (lower) and modeled (upper) AeroTEM responses are compared for a thin steeply dipping conductor. The response is characterized by two peaks in the Z-axis coil, and a cross-over in the X-axis coil that is centered between the two Z-axis peaks. The conductor dips toward the higher amplitude Z-axis peak. Using the X-axis cross-over is the only way of differentiating the Z-axis response from being two closely spaced conductors.

HEM versus AeroTEM

Traditional helicopter EM systems operate in the frequency domain and benefit from the fact that they use narrowband as opposed to wide-band transmitters. Thus all of the energy from the transmitter is concentrated in a few discrete frequencies. This allows the systems to achieve excellent depth penetration (up to 100 m) from a transmitter of modest power. The Aeroquest Impulse system is one implementation of this technology.

The AeroTEM system uses a wide-band transmitter and delivers more power over a wide frequency range. This frequency range is then captured into 16 time channels, the early channels containing the high frequency information and the late time channels containing the low frequency information down to the system base frequency. Because frequency domain HEM systems employ two coil configurations (coplanar and coaxial) there are only a maximum of three comparable frequencies per configuration, compared to 16 AeroTEM off-time and 12 AeroTEM on-time channels.

Figure 6 shows a comparison between the Dighem HEM system (900 Hz and 7200 Hz coplanar) and AeroTEM (Zaxis) from surveys flown in Raglan, in search of highly conductive Ni-Cu-PGM sulphide. In general, the AeroTEM peaks are sharper and better defined, in part due to the greater S/N ratio of the AeroTEM system over HEM, and also due to the modestly filtered AeroTEM data compared to HEM. The base levels are also better defined in the AeroTEM data. AeroTEM filtering is limited to spike removal and a 5-point smoothing filter. Clients are also given copies of the raw, unfiltered data.

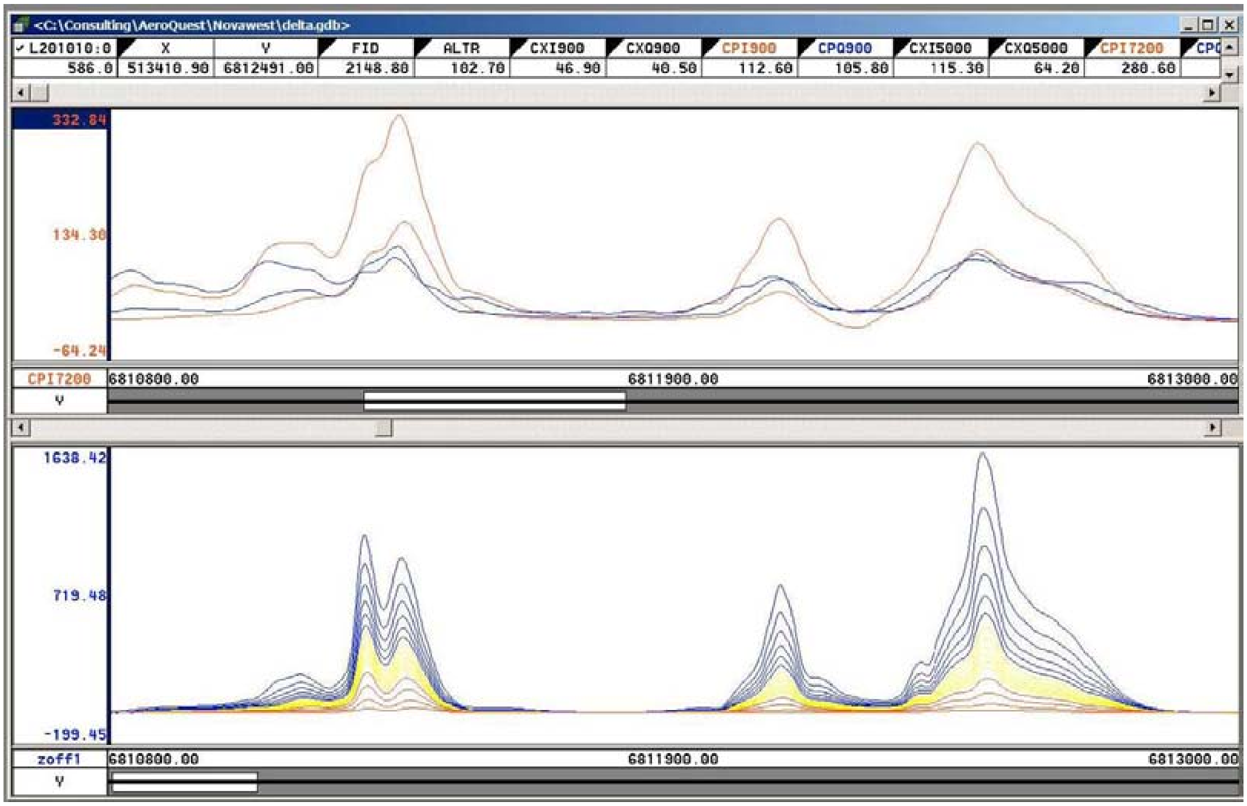


Figure 6. Comparison between Dighem HEM (upper) and AeroTEM (lower) surveys flown in the Raglan area. The AeroTEM responses appear to be more discrete, suggesting that the data is not as heavily filtered as the HEM data. The S/N advantage of AeroTEM over HEM is about 5:1.

Aeroquest Limited is grateful to the following companies for permission to publish some of the data from their respective surveys: Wolfden Resources, FNX Mining Company Inc, Canadian Royalties, Nova West Resources, Aurogin Resources, Spectrem Air. Permission does not imply an endorsement of the AeroTEM system by these companies.

APPENDIX 5: AeroTEM Instrumentation Specification Sheet

AEROTEM Helicopter Electromagnetic System

System Characteristics

- Transmitter: Triangular Pulse Shape Base Frequency 150 Hz
- Tx On Time - 1,150 (150Hz) µs
- Tx Off Time - 2,183 (150Hz) µs
- Loop Diameter - 5 m
- Peak Current - 250 A
- Peak Moment - 38,800 NIA
- Typical Z Axis Noise at Survey Speed = 5 nT peak to peak
- Sling Weight: 270 Kg
- Length of Tow Cable: 40 m
- Bird Survey Height: 30 m nominal

Receiver

- Two Axis Receiver Coils (x, z) positioned at centre of transmitter loop
- Selectable Time Delay to start of first channel 21.3 , 42.7, or 64.0 ms

Display & Acquisition

- AERODAS Digital recording at 128 samples per decay curve at a maximum of 300 curves per second (26.455 µs channel width)
- RMS Channel Widths: 52.9,132.3, 158.7, 158.7, 317.5, 634.9 µs
- Recording & Display Rate = 10 readings per second.
- On-board display - six channels Z-component and 1 X-component

System Considerations

Comparing a fixed-wing time domain transmitter with a typical moment of 500,000 NIA flying at an altitude of 120 m with a Helicopter TDEM at 30 m, notwithstanding the substantial moment loss in the airframe of the fixed wing, the same penetration by the lower flying helicopter system would only require a sixty-fourth of the moment. Clearly the AeroTEM system with nearly 40,000 NIA has more than sufficient moment. The airframe of the fixed wing presents a response to the towed bird, which requires dynamic compensation. This problem is non-existent for AeroTEM since transmitter and receiver positions are fixed. The AeroTEM system is completely portable, and can be assembled at the survey site within half a day.

Tel: +1 905 693-9129. Fax: +1 905 693-9128.
Email: sales@aeroquestsurveys.com

APPENDIX 6: EM ANOMALY LISTING

Crawford

easting	northing	line	Label	Type	bheight	dtm	flight	Grade	Cond	Tau	utctime
525251.2	5515521	5010	B	K	62.4	1917.8	44	7	59.43	771	17:15:31
525170	5515509	5010	C	K	71.5	1928.1	44	6	37.00	610	17:17:22
525195.9	5515422	5020	A	K	55.0	1911.6	43	6	49.89	706	4:43:02
525126.8	5515312	5030	A	K	94.8	1926.4	43	5	24.88	499	4:01:24
525161.6	5515216	5040	C	K	50.7	1990.0	43	4	16.20	403	23:31:50
525033.5	5515216	5040	D	K	58.2	2006.6	43	5	22.00	469	23:34:50
524733.5	5515187	5040	E	K	46.5	2032.1	43	1	0.45	67	23:43:12
523066.5	5515206	5040	F	K	76.6	1708.1	43	1	0.20	44	0:35:12
525035.7	5515118	5050	A	K	72.8	2052.2	43	5	27.94	529	22:48:55
525496.8	5515119	5050	B	K	75.1	1958.7	43	3	9.80	313	22:59:14
525034.1	5515033	5060	C	K	52.4	2069.5	43	5	31.35	560	18:02:26
524984	5515039	5060	D	N	47.1	2087.9	43	5	31.00	560	18:04:02
525473.6	5514896	5070	A	K	50.4	2005.1	42	3	9.00	305	5:24:34
524981.3	5514925	5070	A	K	52.4	2127.8	42	6	37.12	609	6:09:22
524845.1	5514817	5080	A	K	29.2	2244.6	42	3	7.70	277	4:37:48
524908.5	5514798	5080	B	K	38.6	2221.8	42	3	7.70	277	4:40:41
525374.3	5514804	5080	C	K	57.0	2071.3	42	2	4.80	220	4:55:07
525470.1	5514720	5090	A	K	29.3	2011.1	42	3	6.33	252	23:25:31
525442.5	5514716	5090	B	K	23.2	2034.6	42	3	5.30	230	23:30:19
525276	5514721	5090	C	K	46.6	2099.7	42	2	3.90	198	23:53:02
524961.5	5514716	5090	D	K	44.2	2184.9	42	4	12.90	359	0:08:38
524903.5	5514718	5090	E	K	32.8	2212.5	42	3	5.12	226	0:12:48
524770.9	5514613	5100	A	N	30.2	2197.6	42	3	9.88	314	22:31:53
524836.3	5514610	5100	B	K	26.7	2189.1	42	3	9.88	314	22:34:24
525273.2	5514642	5100	C	N	65.8	2080.4	42	2	2.83	168	22:48:19
525328.9	5514633	5100	D	K	60.3	2067.9	42	2	2.83	168	22:49:48
525428.5	5514632	5100	E	K	52.9	2020.2	42	2	4.62	215	22:53:34
525337	5514517	5110	A	K	32.4	2012.2	42	2	3.38	184	18:12:29
524935	5514532	5110	B	K	42.7	2120.6	42	4	16.00	407	18:34:43
524856.2	5514534	5110	C	K	30.8	2155.0	42	4	12.55	354	18:40:05
524757.5	5514529	5110	D	K	30.7	2188.0	42	4	13.00	365	18:49:50
525331.5	5514413	5120	A	K	46.1	1950.2	41	2	3.00	174	6:59:24
524867.5	5514427	5120	B	K	33.9	2094.7	41	2	4.35	209	7:18:07
524761.6	5514426	5120	C	K	30.1	2143.7	41	2	4.25	206	7:24:05
524839.8	5514311	5130	A	K	59.1	2049.2	41	4	17.75	421	6:04:58
525285.8	5514312	5130	B	K	51.8	1925.6	41	2	3.70	192	6:20:53
524818.7	5514213	5140	A	K	59.2	1987.8	41	5	31.11	558	2:06:53
524713.9	5514225	5140	B	K	47.7	2054.5	41	3	9.30	304	2:13:43
524811.2	5514116	5150	A	K	91.3	1935.1	41	5	23.00	482	0:40:46
525206.4	5514111	5150	B	K	56.3	1832.6	41	2	1.00	102	0:53:22
525330.4	5514119	5150	C	K	54.2	1798.7	41	4	11.67	342	0:57:10
525297.1	5514037	5160	B	K	78.7	1735.3	41	3	9.12	302	19:46:53
524765.2	5514016	5160	C		34.2	1904.5	41	4	18.14	426	20:10:41

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
525226.5	5513927	5170	B	K	52.8	1668.4	40	2	3.50	186	6:40:58
524755.7	5513913	5170	C	K	61.3	1860.3	40	4	10.40	322	7:13:26
524726.1	5513811	5180	A	K	93.8	1830.1	40	3	9.70	312	5:34:00
525439.5	5513832	5180	B	K	69.4	1686.9	40	4	10.30	320	5:54:29
525469.5	5513716	5190	B	K	103.0	1686.4	40	4	16.00	401	0:51:34
524635.5	5513710	5190	C	K	46.7	1834.1	40	4	11.00	331	1:41:02
522675.5	5513609	5200	A	K	56.8	1379.7	40	1	0.01	10	21:30:14
524544.1	5513616	5200	B	K	98.3	1825.9	40	3	7.40	272	23:27:43
524490.9	5513507	5210	B	K	45.7	1801.2	40	3	8.50	290	19:52:31
524453	5513435	5220	B	K	56.9	1783.6	39	3	5.50	235	6:49:50
524315.7	5513448	5220	C	K	52.6	1776.2	39	2	2.47	157	6:54:31
524201.5	5513322	5230	A	K	49.0	1716.7	38	1	0.75	87	19:00:38
525377	5513350	5230	B	K	61.1	1659.6	38	2	4.95	222	19:48:31
525431.3	5513343	5230	C	K	66.2	1693.4	38	2	2.98	173	19:53:42
525103.7	5513204	5240	B	K	126.5	1462.6	38	4	11.40	337	16:14:14
524486.1	5513539	5930	A	K	61.2	1812.2	39	3	6.72	259	1:18:05
525438.3	5515196	5940	A	K	42.7	1944.7	39	4	14.86	385	3:55:07
525449	5514750	5940	B	K	35.0	2028.3	39	3	7.64	276	4:20:53
525441.6	5514652	5940	C	K	38.9	2010.5	39	3	7.59	275	4:24:53

McFarlane

Easting	Northing	line	Label	Type	bheight	dtm	flight	Grade	Cond	Tau	utctime
521632.2	5495988	2010	A	K	53.4	1371.5	1	2	3.92	198	1:28:38
521681.3	5495992	2010	B	N	47.0	1397.0	1	2	3.92	198	1:30:05
522359.2	5495991	2010	C	K	59.0	1576.1	1	1	0.01	10	1:48:10
522264.6	5495894	2020	A	N	66.7	1482.9	1	1	0.01	10	3:01:53
521740.3	5495905	2020	B	N	67.5	1374.7	1	1	0.25	50	3:12:29
521682.8	5495798	2030	A	N	71.1	1323.5	1	2	1.21	110	4:42:00
522256.1	5495791	2030	B	N	57.0	1443.1	1	1	0.01	10	4:59:02
523662	5495799	2030	C	K	46.1	1738.6	1	2	1.33	115	5:27:58
523720.5	5495719	2040	A	K	53.4	1729.9	1	2	1.24	111	5:39:05
521730.4	5495693	2040	B	N	54.2	1409.7	1	2	3.08	175	6:17:24
520760	5495692	2040	C	K	34.6	1319.1	1	1	0.01	10	6:54:46
523751.4	5495589	2050	A	K	61.3	1729.3	1	2	1.40	118	8:02:26
521721.8	5495600	2050	B	N	54.4	1470.3	1	2	1.05	102	8:48:02
520696	5495586	2050	C	K	40.0	1342.7	1	1	0.01	10	9:25:00
519327	5495594	2050	D	K	59.3	1506.9	1	3	8.30	287	10:06:41
519241.4	5495600	2050	E	K	59.8	1448.2	1	4	11.90	344	10:09:41
517933.1	5495602	2050	F	K	56.0	1479.3	1	1	0.69	83	10:50:46
519232.4	5495490	2060	A	K	52.1	1493.8	1	2	2.98	172	13:49:07
519257.2	5495502	2060	B	N	48.3	1506.0	1	2	2.98	173	13:50:53
519291.4	5495507	2060	C	K	47.3	1523.1	1	2	4.32	208	13:53:02
519411.1	5495504	2060	D	K	53.2	1593.7	1	2	2.90	170	14:00:14
521779.8	5495489	2060	E	K	56.9	1543.6	1	1	0.01	10	15:25:10
523738.9	5495497	2060	F	K	55.3	1759.6	1	1	0.40	63	16:15:17
523910.3	5495395	2070	A	N	63.5	1828.7	1	1	0.40	62	16:27:58

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
523799.7	5495393	2070	B	K	51.0	1809.1	1	1	0.40	62	16:30:31
520715.1	5495395	2070	C	K	40.5	1324.7	1	2	2.10	144	17:46:00
519250.5	5495390	2070	D	K	73.0	1547.8	1	2	2.54	159	18:30:19
518661	5495381	2070	E	K	63.0	1640.4	1	1	0.01	10	18:49:14
517935	5495395	2070	F	K	67.3	1472.0	1	1	0.01	10	19:08:05
517869.3	5495295	2080	A	K	47.4	1422.3	1	1	0.01	10	21:16:38
519226.5	5495289	2080	B	K	64.9	1584.9	1	2	3.07	175	22:04:19
519321.1	5495299	2080	C	K	45.1	1643.1	1	2	3.80	195	22:09:41
520698.8	5495292	2080	D	K	59.3	1329.2	1	2	1.08	104	22:54:53
523874.8	5495294	2080	E	N	64.2	1863.0	1	2	1.30	114	0:37:48
523824.8	5495187	2090	A	K	53.7	1893.6	1	1	0.33	57	0:57:53
520745	5495197	2090	B	K	61.6	1311.0	1	1	0.97	98	2:16:34
519687	5495187	2090	C	K	46.8	1748.7	1	1	0.01	10	2:50:14
519227.1	5495199	2090	D	K	65.6	1625.3	1	4	11.20	334	3:04:58
517886.8	5495190	2090	E	K	76.5	1408.6	1	1	0.01	10	3:46:34
516470	5495198	2090	F	K	54.6	874.1	1	1	0.75	87	4:18:14
519069.4	5495072	2101	A	K	85.3	1695.1	2	1	0.51	71	17:59:53
519234.2	5495106	2101	B	K	88.0	1673.2	2	2	1.43	120	18:05:34
520693	5495092	2101	C	K	98.6	1340.4	2	2	1.69	130	19:15:26
523868.3	5495094	2101	D	N	68.1	1923.2	2	1	0.01	10	22:05:00
524364.9	5494991	2110	A	K	42.5	2133.4	2	1	0.83	91	22:39:34
523845.2	5494996	2110	B	K	61.9	1935.0	2	1	0.10	31	23:05:22
519163.5	5495002	2110	C	K	63.7	1740.3	2	1	0.60	77	1:54:19
519072.2	5495005	2111	B	K	62.0	1742.7	2	1	0.95	97	2:30:55
518931.7	5495000	2111	C	K	48.4	1781.9	2	1	0.01	10	2:36:00
517961.5	5495004	2111	D	K	78.9	1413.0	2	1	0.14	37	3:20:46
517128	5494983	2111	E	K	70.2	1090.7	2	1	0.25	50	3:40:00
517899.3	5494892	2120	A	K	62.5	1435.0	2	1	0.01	10	5:49:43
519170.9	5494897	2120	B	K	80.3	1792.4	2	2	1.07	104	7:03:58
520685.9	5494888	2120	C	K	85.4	1360.5	2	1	0.21	46	7:50:26
523865.6	5494876	2122	A	N	58.2	1948.1	2	1	0.07	20	10:47:43
524239	5494884	2122	B	K	44.8	2139.1	2	1	0.01	10	11:05:43
524459.6	5494811	2130	A	K	83.9	2040.2	2	2	1.43	120	11:36:55
524325.2	5494792	2130	B	K	31.9	2104.2	2	4	10.00	318	11:42:48
519227.6	5494808	2131	A	K	65.7	1838.9	2	2	1.81	134	14:52:02
519130.3	5494809	2131	B	K	56.2	1853.8	2	1	0.79	89	14:54:48
519024.9	5494798	2131	C	K	65.8	1843.2	2	1	0.79	89	14:57:50
519097.1	5494695	2141	A	K	51.4	1915.1	3	1	0.25	50	5:56:41
524349.1	5494687	2144	A	N	61.5	2052.8	3	2	3.20	179	11:43:26
524431.5	5494689	2144	B	K	72.8	2014.3	3	2	3.20	179	11:46:02
524414.5	5494606	2150	A	K	50.9	1990.0	3	3	6.49	255	12:26:24
524380.5	5494605	2150	B	N	49.5	2010.5	3	3	6.49	255	12:28:22
520693.9	5494602	2152	A	K	80.7	1413.7	3	1	0.25	50	15:06:29
520701.7	5494499	2160	A	K	82.8	1426.0	3	1	0.30	60	20:40:53
524357.5	5494495	2160	B	N	80.9	1968.7	3	2	2.11	145	23:38:58
524396.5	5494489	2160	C	K	58.2	1949.4	3	2	2.11	145	23:40:55
524885.8	5494487	2161	A	K	66.0	1736.4	3	1	0.29	54	0:22:14
518941.5	5494396	2170	A	K	54.3	1872.4	4	1	0.20	40	14:13:26

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
520726	5494404	2170	B	K	83.0	1438.4	4	1	0.01	10	15:00:55
524411.4	5494386	2173	A	K	95.7	1907.5	4	1	0.54	73	19:22:34
524472.7	5494389	2173	B	K	83.1	1870.6	4	2	1.45	120	19:25:05
524749.3	5494380	2173	C	K	71.4	1759.5	4	2	1.56	125	19:32:50
524905.6	5494380	2173	D	K	68.5	1744.8	4	1	0.42	65	19:36:38
524901.4	5494295	2180	A	N	56.5	1754.4	4	2	2.45	156	19:59:50
524839.8	5494304	2180	B	K	46.2	1763.4	4	2	2.45	156	20:01:34
524438.4	5494312	2180	C	K	65.5	1882.9	4	1	0.92	96	20:17:05
518995.6	5494195	2190	A	K	55.2	1775.8	4	1	0.79	89	4:23:29
524389.3	5494197	2190	B	K	73.9	1877.8	4	1	0.24	49	8:36:29
524648.5	5494197	2190	C	K	67.6	1775.2	4	1	0.73	85	8:43:10
524775.8	5494182	2190	D	K	76.4	1767.7	4	2	1.93	139	8:45:58
524915.5	5494198	2190	E	K	69.4	1782.0	4	1	0.88	94	8:48:55
524728.6	5494097	2200	A	N	72.3	1766.7	4	2	1.52	123	10:28:41
520823.7	5494091	2200	B	K	72.5	1468.8	4	1	0.01	10	12:32:07
519109.8	5494098	2200	C	K	88.6	1833.1	4	1	0.01	10	13:30:36
519101.4	5494002	2211	A	K	38.1	1833.1	5	1	0.35	59	11:14:19
524370.8	5493984	2217	A	K	67.9	1821.5	5	1	0.13	36	18:56:12
524649.7	5493974	2217	B	K	58.6	1762.5	5	2	2.46	157	19:02:41
524711.3	5493970	2217	C	N	55.5	1768.8	5	2	3.08	175	19:03:48
524774.4	5493988	2217	D	K	57.5	1779.2	5	2	2.90	171	19:05:07
524831	5494008	2217	E	N	61.1	1792.3	5	2	3.08	175	19:06:36
515748.2	5493890	2220	A	K	53.1	835.7	8	1	0.01	10	14:23:34
519105	5493884	2221	A	K	37.2	1779.2	8	1	0.39	62	17:00:34
519163.1	5493892	2221	B	K	37.1	1815.9	8	1	0.78	88	17:05:10
525024.2	5493899	2223	A	K	61.6	1833.2	5	1	0.19	44	20:03:26
524846	5493907	2223	B	K	57.1	1801.5	5	2	1.51	123	20:07:34
524742.5	5493895	2223	C	K	61.0	1767.4	5	2	2.70	164	20:09:41
524442.4	5493901	2223	D	K	56.5	1797.2	5	1	0.01	10	20:15:19
515619.4	5493800	2230	A	K	52.2	820.2	6	1	0.04	21	19:46:34
520862.8	5493782	2231	A	K	111.0	1513.2	6	1	0.01	10	23:29:43
524425.5	5493800	2231	B	K	91.8	1784.1	6	1	0.37	61	3:11:19
524596.4	5493796	2231	C	K	70.0	1764.7	6	2	1.12	106	3:16:00
524861.1	5493804	2231	D	K	68.4	1811.3	6	1	0.61	78	3:23:17
524916.1	5493699	2240	A	K	59.6	1830.6	6	1	0.47	69	13:49:17
524838.9	5493695	2240	B	K	50.4	1816.6	6	2	2.80	167	13:51:12
524616.8	5493690	2240	C	K	69.9	1765.5	6	1	0.44	66	13:56:26
524473.9	5493711	2240	D	K	72.8	1778.4	6	1	0.01	10	13:59:46
522066.2	5493675	2241	A	K	90.7	1921.1	6	1	0.01	10	17:23:19
520966.7	5493700	2241	B	K	71.0	1547.1	6	1	0.12	35	17:44:55
519275.2	5493702	2241	C	K	69.0	1773.3	6	1	0.01	10	18:34:22
515631.3	5493700	2242	A	K	48.3	831.8	6	1	0.08	28	20:15:17
515708.7	5493604	2250	A	K	73.1	837.6	7	1	0.01	10	11:56:34
517429	5493592	2250	B	N	48.7	1062.0	7	3	5.22	228	12:36:48
519300.9	5493607	2250	C	K	51.7	1757.1	7	1	0.52	72	13:39:36
524031.7	5493587	2252	A	K	73.0	1942.5	7	1	0.01	10	17:55:58
524419.8	5493597	2252	B	K	50.4	1772.5	7	2	1.38	117	18:04:55
524763.9	5493588	2252	C	K	69.1	1809.9	7	1	0.25	50	18:12:14

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
524915.9	5493497	2260	A	K	72.3	1880.6	7	1	0.47	68	20:53:43
524408.1	5493492	2260	B	N	52.1	1776.1	7	2	1.20	110	21:04:12
520931.7	5493493	2260	C	K	105.6	1567.3	7	1	0.01	10	23:42:24
519396.1	5493490	2260	D	K	62.4	1840.5	7	1	0.01	10	0:32:50
517478.4	5493503	2261	A	N	81.6	1095.0	7	3	7.03	265	2:14:58
517395.1	5493519	2261	B	K	65.7	1091.4	7	3	7.03	265	2:16:43
515667.5	5493386	2270	A	K	59.4	886.7	9	1	0.26	51	6:46:48
517425.8	5493385	2270	B	N	66.9	1159.5	9	2	4.93	222	7:35:24
518098.5	5493388	2270	C	K	59.8	1254.3	9	1	0.01	10	7:53:26
519435.1	5493381	2274	A	K	56.1	1839.5	9	1	0.01	10	9:14:38
520837.8	5493394	2275	A	K	85.9	1622.1	9	1	0.01	10	10:27:48
524355.6	5493396	2277	A	N	64.3	1774.5	9	2	1.41	119	13:35:26
524427.8	5493409	2277	B	K	57.7	1773.0	9	2	1.41	119	13:36:48
524831.1	5493410	2277	C	K	55.0	1877.5	9	1	0.01	10	13:53:38
515624.7	5493296	2280	B	K	41.4	874.2	10	1	0.32	57	22:57:05
517397.5	5493286	2280	C	N	57.3	1190.3	10	1	0.53	73	23:40:46
524401.5	5493292	2281	A	N	72.3	1753.8	10	2	1.29	113	5:37:58
525007.6	5493185	2290	A	K	51.5	2010.0	10	1	0.01	10	7:57:07
524480.7	5493176	2290	B	N	76.9	1769.7	10	1	0.98	99	8:08:26
520957.2	5493185	2291	A	K	85.8	1597.7	10	1	0.01	10	11:29:26
517548.4	5493196	2291	B	K	75.4	1227.7	10	2	1.00	100	13:26:00
517289.8	5493194	2291	C	K	45.5	1240.1	10	2	1.10	105	13:38:53
524048.6	5493072	2302	A	N	74.7	1853.5	11	1	0.69	83	8:39:24
524115.2	5493074	2302	B	K	69.2	1817.9	11	1	0.69	83	8:41:02
524460	5493078	2302	C	N	67.4	1779.0	11	1	0.59	77	8:48:07
524522.2	5493010	2310	A	N	65.4	1796.4	11	1	0.47	68	11:36:31
524438.5	5493004	2310	B	K	72.5	1777.8	11	1	0.47	68	11:38:31
524058.5	5492976	2310	C	N	65.7	1849.8	11	1	0.15	39	11:47:55
521050.1	5492985	2310	D	K	83.4	1622.2	11	1	0.04	20	14:22:36
520372.3	5493005	2310	E	K	30.0	1914.7	11	1	0.01	10	14:43:38
519425.7	5492999	2310	F	K	61.2	1812.5	11	1	0.25	50	15:11:05
518354	5492991	2310	G	K	94.8	1367.9	11	1	0.01	10	15:39:07
518083.1	5492996	2310	H	K	53.1	1400.8	11	1	0.03	18	15:45:41
517602.8	5493000	2310	I	K	70.1	1336.9	11	1	0.26	51	16:07:29
517419.8	5493000	2310	J	K	53.3	1323.8	11	1	0.06	25	16:12:17
515610.8	5492975	2310	K	K	44.4	874.5	11	2	2.14	146	16:59:46
517182.8	5492908	2320	A	K	43.7	1297.5	12	1	0.01	10	13:44:17
519542.9	5492901	2320	B	K	66.0	1845.6	12	1	0.01	10	15:53:07
521009.4	5492901	2320	C	K	79.7	1617.5	12	1	0.01	10	16:44:12
524046.3	5492882	2320	D	N	63.1	1844.9	12	1	0.61	78	18:55:46
524100.7	5492889	2320	E	K	66.0	1821.2	12	1	0.62	78	18:57:05
524414.6	5492886	2320	F	K	56.3	1790.5	12	1	0.57	76	19:03:17
524485.8	5492912	2320	G	N	58.3	1798.1	12	1	0.58	76	19:04:48
525038.5	5492805	2330	A	K	65.9	2048.4	12	1	0.01	10	21:35:02
524463.5	5492790	2330	B	K	81.3	1795.6	12	1	0.07	25	21:49:26
521042.4	5492801	2332	A	K	73.3	1641.1	12	1	0.16	39	0:32:26
519553.9	5492815	2332	B	K	60.3	1891.0	12	1	0.01	10	1:31:22
517138	5492809	2332	C	K	50.5	1295.1	12	1	0.01	10	2:51:14

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
515666.4	5492805	2332	D	K	63.4	868.5	12	1	0.30	55	3:27:36
516534.4	5492697	2340	A	K	53.0	1027.9	13	1	0.07	25	14:39:46
519577	5492701	2340	B	K	58.0	1938.5	13	1	0.01	10	17:37:22
521211.1	5492690	2340	C	K	82.5	1656.3	13	1	0.01	10	18:37:41
524168	5492693	2340	D	K	96.6	1792.8	13	1	0.74	86	20:20:10
524116.7	5492600	2350	A	K	63.6	1824.0	13	2	1.10	105	23:30:50
524145.8	5492613	2351	A	K	84.2	1814.9	13	2	2.10	145	23:58:17
524085.5	5492606	2351	B	N	77.2	1838.0	13	2	2.10	145	23:59:31
516383.2	5492507	2360	A	K	35.2	997.8	16	1	0.60	77	17:54:02
516560.9	5492504	2360	B	K	53.0	1035.6	16	1	0.31	55	17:58:46
518596	5492491	2360	C	K	69.7	1611.0	16	1	0.01	10	19:42:00
519574.3	5492503	2361	A	K	65.7	1985.4	16	1	0.25	50	21:19:34
521314.2	5492503	2361	B	K	82.1	1694.6	16	1	0.25	50	22:10:24
524237.3	5492473	2361	C	K	83.2	1796.2	16	2	2.50	159	23:53:14
524189.5	5492415	2370	A	K	73.3	1816.6	16	1	0.25	50	5:08:10
518682.8	5492419	2371	A	K	78.9	1639.7	16	2	1.27	113	8:29:58
516547.2	5492402	2371	B	K	58.5	1044.7	16	2	1.24	111	9:20:48
524060.9	5492092	2403	A	K	68.6	1876.8	18	1	0.25	50	22:13:14
524458.6	5492079	2403	B	K	56.9	1902.8	18	1	0.40	85	22:19:17
524081.1	5492003	2410	A	K	65.6	1873.6	18	1	0.25	50	0:35:17
519711.4	5491992	2411	A	K	54.0	2008.3	18	1	0.29	54	2:59:02
519726.6	5491911	2422	A	K	82.3	2004.1	18	1	0.50	90	5:37:50
521283.7	5491879	2422	B	K	81.7	1862.7	18	1	0.01	10	6:16:05
524310.3	5491694	2441	A	N	59.4	2006.1	19	2	1.57	125	6:24:12
524363.8	5491694	2441	B	K	52.1	2028.0	19	2	1.57	125	6:27:17
524297	5491584	2451	A	K	60.6	2070.5	19	1	0.01	10	9:27:14
515754.9	5493705	29010	A	K	45.3	831.4	17	1	0.01	10	4:08:00
515752.3	5492942	29010	B	K	52.8	869.9	17	2	1.37	117	4:27:10
516735.9	5492348	29020	A	K	67.6	1102.4	17	1	0.01	10	5:37:31
517675.7	5493517	29030	A	K	72.2	1123.6	17	2	1.39	118	8:57:10
519724.8	5491963	29050	A	K	74.6	1988.8	15	1	0.50	85	17:59:29
523678.6	5495413	29090	A	K	66.7	1753.0	14	2	1.38	118	19:05:48
524660.6	5494066	29100	A	K	53.2	1746.4	14	2	2.60	161	22:56:17

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Easting	Northing	line	Label	Type	bheight	dtm	flight	Grade	Cond	Tau	utctime
520327	5477000	1020	A	N	54.0	1158.6	48	2	1.93	139	12:51:17
518814.7	5476914	1030	A	K	60.7	1015.0	48	1	0.97	99	15:31:53
520138.8	5476900	1030	B	K	65.5	1204.9	48	2	1.12	106	16:39:55
520357.2	5476910	1030	C	K	66.9	1113.4	48	2	2.65	163	16:49:00
521219.9	5476794	1040	A	N	55.2	977.6	48	2	1.83	135	21:03:05
521150.7	5476806	1040	B	K	47.9	980.1	48	2	1.83	135	21:04:29
520221	5476795	1040	C	N	61.7	1124.6	48	4	19.00	436	21:30:41
518797.5	5476790	1040	D	K	74.5	989.6	48	2	1.47	121	22:39:46
518822.1	5476690	1053	A	K	51.1	998.0	48	1	0.43	65	0:02:38
520136.8	5476692	1053	B	N	78.2	1117.8	48	3	5.94	244	1:02:24
520877.3	5476710	1053	C	K	63.0	951.5	48	4	13.00	360	1:18:31

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
521024.4	5476707	1053	D	K	58.8	959.3	48	2	1.08	104	1:21:41
521026	5476592	1060	A	N	79.6	955.0	49	2	2.32	152	16:01:00
520143.8	5476604	1060	B	K	63.2	1058.7	49	2	4.53	213	16:17:58
520086.8	5476606	1060	C	N	60.5	1081.9	49	2	4.53	213	16:19:17
519950	5476501	1070	A	N	81.2	1083.0	49	2	1.60	127	19:08:31
520768.6	5476500	1070	B	K	82.2	917.4	49	4	11.30	335	19:24:41
520945.6	5476507	1070	C	K	54.6	954.4	49	2	1.44	120	19:28:38
525210.1	5476482	1070	D	K	90.5	1736.9	49	1	0.01	10	21:47:17
520890.1	5476392	1080	A	K	63.5	966.5	49	5	29.32	541	0:02:05
519909.5	5476390	1080	B	N	64.4	1031.2	49	1	0.79	89	0:20:14
519157.1	5476420	1080	C	K	68.2	1151.3	49	1	0.29	54	0:42:05
518815.9	5476407	1080	D	K	68.2	1001.4	49	1	0.51	71	0:51:02
518814.6	5476298	1090	A	K	40.0	1009.6	50	1	0.47	69	10:06:53
519796.3	5476322	1090	B	N	61.0	1029.9	50	1	0.57	76	10:41:24
519855	5476316	1090	C	K	62.9	1005.0	50	1	0.57	76	10:42:55
520822.4	5476302	1090	D	K	67.3	973.8	50	4	11.20	334	11:03:00
521523.7	5476315	1090	E	K	92.1	1137.9	50	1	0.03	17	11:22:31
520816.8	5476185	1100	A	K	73.4	1017.4	50	3	8.89	298	16:46:24
520491	5476190	1100	B	K	87.5	912.1	50	2	1.05	102	16:51:19
519584.9	5476204	1100	C	K	64.6	1014.9	50	1	0.89	94	17:11:29
518790.6	5476210	1100	D	K	63.3	999.2	50	1	0.20	44	17:34:58
518723.5	5476108	1110	A	K	30.6	983.8	51	1	0.23	48	6:43:53
518774.4	5476106	1110	B	K	29.8	1009.1	51	1	0.08	27	6:46:05
519642.2	5476107	1110	C	N	70.5	958.2	51	2	1.35	116	7:18:38
520766.9	5476083	1110	D	K	60.7	1022.8	51	2	1.16	107	7:49:24
520737.9	5475998	1121	A	K	63.8	1051.9	51	1	0.20	45	16:46:48
519610.6	5475995	1121	B	N	51.6	918.1	51	3	8.77	296	17:13:14
519538.6	5475998	1121	C	K	53.2	928.7	51	3	8.77	296	17:16:17
518828.3	5476012	1121	D	N	52.4	1033.6	51	1	0.44	66	17:52:05
518733.2	5476021	1121	E	K	65.0	992.2	51	1	0.44	67	17:55:02
518617.4	5475900	1130	A	K	42.8	957.8	52	1	0.94	97	6:24:02
518709.3	5475891	1130	B	K	43.4	992.9	52	2	1.87	137	6:28:05
519490.9	5475903	1130	C	K	64.1	889.0	52	3	6.41	253	6:49:31
519550	5475907	1130	D	K	51.8	885.0	52	3	6.41	253	6:50:55
522135.5	5475896	1130	E	K	23.7	1429.3	52	1	0.01	10	8:08:00
519452	5475784	1140	A	N	74.8	835.5	52	2	1.10	105	15:52:12
519384.5	5475787	1140	B	K	73.4	840.6	52	2	1.10	105	15:53:50
518734.4	5475814	1140	C	N	40.4	993.5	52	1	0.47	68	16:15:05
518638.7	5475812	1140	D	K	52.1	963.9	52	1	0.47	68	16:18:26
518408.1	5475813	1140	E	K	76.6	853.3	52	1	0.28	53	16:25:58
518336.5	5475699	1150	A	K	47.2	825.5	52	1	0.22	46	17:07:48
522396	5475634	1161	A	K	64.9	1461.7	53	1	0.01	10	12:51:29
519555.7	5475566	1161	B	K	78.2	806.3	53	1	0.06	25	14:11:58
522123.1	5475409	1180	A	K	59.3	1536.9	53	1	0.01	10	23:09:55
520357.8	5475405	1181	A	K	59.1	1063.4	54	1	0.01	10	9:57:00
519578.4	5475399	1181	B	K	66.7	840.8	54	1	0.01	10	10:15:55
518167.7	5475408	1181	C	K	72.8	741.5	54	1	0.06	23	10:47:50
518096.6	5475311	1190	A	K	55.4	704.0	54	1	0.10	31	11:15:12

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
522051.1	5475303	1191	A	K	84.0	1543.9	54	1	0.01	10	13:52:43
518108.6	5475207	1201	A	K	78.7	674.9	54	1	0.07	27	0:13:07
517924.7	5475112	1210	A	K	55.4	616.5	56	1	0.50	71	7:51:58
522584.8	5475071	1211	A	K	76.0	1628.6	56	1	0.14	38	11:28:12
522606.7	5474990	1221	A	K	60.2	1661.7	56	1	0.25	50	19:07:55
520828.4	5474890	1230	A	K	74.8	1350.7	56	1	0.01	10	22:43:10
521534.3	5474896	1230	B	K	58.3	1593.0	56	1	0.25	50	23:17:12
522137.9	5474894	1230	C	K	52.5	1730.8	56	1	0.07	25	23:48:34
525278.3	5474893	1232	B	K	45.8	2274.7	57	1	0.01	10	14:42:05
520286.4	5474692	1250	A	K	71.5	1303.0	57	1	0.01	10	23:26:14
525357.1	5474590	1260	A	K	65.8	2260.5	58	2	2.55	160	14:47:43
525269.6	5474501	1271	A	N	65.6	2264.6	58	2	2.89	170	1:31:34
525350.8	5474512	1271	B	K	57.6	2249.5	58	2	2.89	170	1:33:17
525417.7	5474419	1280	A	K	65.8	2228.3	58	2	1.88	137	1:49:00
518785	5474299	1294	A	K	72.1	696.1	65	1	0.16	40	14:57:12
518744.4	5474189	1302	A	K	81.8	685.1	67	1	0.24	49	6:36:34
518886.4	5474103	1311	A	N	73.2	741.2	68	1	0.22	47	20:39:58
518785.7	5474095	1311	B	K	65.5	702.6	68	1	0.22	47	20:42:46
518734.6	5473994	1320	A	K	63.8	702.2	68	1	0.35	59	22:16:53
525263	5474011	1321	A	K	19.5	2394.3	68	1	0.01	10	3:53:26
524974.4	5474001	1321	B		11.7	2463.6	68	4	17.31	416	4:20:53
518842.3	5473896	1330	A	N	77.7	729.1	69	1	0.27	52	19:24:34
518762.6	5473897	1330	B	K	61.2	708.4	69	1	0.27	52	19:26:48
518412.9	5473897	1330	C	K	89.0	593.5	69	1	0.29	54	19:35:29
518388.2	5473824	1340	A	K	92.9	580.3	69	1	0.92	96	20:01:12
518671.6	5473807	1340	B	K	63.5	669.2	69	1	0.45	67	20:18:29
518719.7	5473802	1340	C	K	52.1	700.4	69	1	0.59	77	20:22:17
518792.6	5473704	1350	A	N	56.1	709.9	69	1	0.10	31	6:50:34
518712.9	5473713	1350	B	K	50.3	699.1	69	1	0.10	31	6:52:41
519922.1	5473530	1370	A	K	27.0	1198.7	70	2	1.01	100	20:47:19
518503.9	5473322	1390	A	N	62.9	615.6	70	3	6.50	255	3:47:50
521169.7	5473320	1390	B	K	39.8	1763.2	70	1	0.01	10	5:32:10
518579.6	5473197	1400	A	N	67.6	597.2	71	3	5.50	234	1:34:26
518552.7	5473120	1410	A	N	75.3	580.0	71	2	1.00	102	1:51:29
523325.6	5472991	1421	A	K	29.9	1934.8	71	1	0.01	10	8:19:19
522054.8	5473000	1421	B	K	38.2	1805.9	71	1	0.01	10	8:52:26
521966.5	5472805	1440	A	K	42.3	1785.1	71	1	0.16	40	15:45:31
522079.4	5472671	1450	A	K	55.9	1788.1	72	1	0.01	10	5:46:07
522053.8	5472580	1460	A	K	64.0	1779.5	72	1	0.01	10	12:37:53
522043.6	5472483	1470	A	K	48.9	1764.6	73	1	0.01	10	6:56:50
521982	5472398	1480	A	K	45.0	1754.2	73	1	0.01	10	14:07:53
518778.5	5472148	1500	A	K	71.8	530.6	74	1	0.74	86	14:34:22
521994.2	5472118	1510	A	K	31.3	1710.9	74	1	0.01	10	17:42:02
521969.1	5472013	1520	A	K	70.2	1676.2	74	1	0.01	10	23:53:48
518816.2	5471995	1521	A	K	41.2	534.1	74	1	0.73	86	3:34:34
518839.2	5471908	1530	A	K	45.9	535.6	75	1	0.83	91	11:34:10
524613.3	5471797	1540	A	K	40.9	1717.1	66	2	3.48	186	14:02:29
521352.2	5471796	1540	B	K	78.6	1285.4	66	1	0.09	29	17:25:02

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
518920.9	5471627	1560	A	K	38.5	536.1	63	2	2.02	142	21:40:00
519366.6	5470992	1620	A	N	75.3	585.0	59	1	0.31	56	14:57:55
519441.1	5470898	1630	A	N	82.8	580.3	55	2	2.87	170	18:26:43
518221.6	5475319	1910	A	K	31.6	765.0	63	1	0.07	27	23:04:53
520212.6	5476696	1931	A	K	93.0	1064.8	64	4	13.40	367	7:44:19
521211.2	5476479	1940	A	K	70.0	990.0	64	1	0.86	93	21:29:02
521212.1	5476802	1940	B	K	82.1	983.4	64	1	0.76	87	21:39:19
525192.4	5474548	1982	A	K	52.6	2295.1	63	1	0.73	86	12:20:24

Sawyer

Easting	Northing	line	Label	Type	bheight	dtm	flight	Grade	Cond	Tau	utctime
532118.4	5513248	4010	A	K	41.0	1760.6	21	5	23.19	482	10:58:55
532200.8	5513249	4010	B	K	49.3	1734.2	21	5	27.88	528	11:02:26
532175.7	5513127	4020	A	K	61.3	1635.9	21	4	10.51	324	11:39:12
531943.2	5513143	4020	B	K	63.9	1651.1	21	3	7.36	271	11:47:29
531614.1	5513146	4020	C	K	64.5	1565.7	21	4	12.60	354	11:57:31
529856.7	5513021	4030	A	K	86.1	1553.1	21	2	2.56	160	15:16:05
531551.6	5513018	4030	B	K	39.5	1494.9	21	2	2.77	167	16:03:00
531913.2	5513013	4030	C	K	49.6	1571.2	21	2	2.76	166	16:23:10
532144.3	5513037	4030	D	K	54.9	1596.5	21	2	2.88	170	16:35:41
532259.2	5513035	4030	E	K	57.7	1567.4	21	2	4.30	207	16:38:50
531974.1	5512924	4040	A	K	61.4	1529.7	21	2	2.25	150	17:13:00
531958.2	5512929	4040	A	K	77.2	1524.7	21	2	1.99	141	18:13:22
531906	5512927	4040	B	K	76.5	1515.2	21	2	2.15	147	18:15:19
530053.4	5512918	4040	C	K	42.2	1501.8	21	3	7.60	275	19:12:31
529827.1	5512908	4040	D	K	36.7	1631.3	21	2	1.86	136	19:27:48
529740.8	5512820	4050	A	K	78.8	1688.4	22	1	0.40	65	9:06:26
531912.1	5512821	4050	B	K	49.8	1452.7	22	1	0.25	50	10:08:43
528806.2	5512109	4122	A	K	83.2	1981.8	23	1	0.07	25	16:58:00
529591.9	5512018	4131	A	K	68.2	2040.1	24	1	0.20	50	4:57:46
529579.9	5511901	4142	A	K	91.7	1994.9	24	1	0.23	48	8:57:22
529358.9	5511913	4142	B	K	76.2	2081.5	24	1	0.20	50	9:15:07
529035.3	5511803	4150	A	K	66.8	2076.2	24	1	0.23	48	10:10:00
529526.5	5511812	4150	B	K	88.3	2031.7	24	1	0.24	49	10:30:26
529643.5	5511820	4150	C	K	88.2	1972.2	24	1	0.30	55	10:35:26
529630.4	5511716	4161	A	K	80.5	2021.3	24	1	0.01	10	14:50:55
529473.1	5511727	4162	A	K	80.7	2087.4	24	1	0.25	50	15:28:34
529230.2	5511525	4184	A	K	76.4	2070.2	26	2	3.56	189	9:22:14
528978.6	5511517	4184	B	K	67.5	1976.2	26	2	4.96	227	9:28:24
528949.4	5511418	4190	A	K	64.0	1979.4	27	2	4.59	214	21:13:48
529180.3	5511417	4191	A	K	67.2	2062.7	27	2	1.85	136	21:45:22
529589.2	5511413	4193	A	K	87.7	2079.1	27	1	0.59	77	23:00:58
529584.1	5511333	4204	A	K	70.1	2102.6	27	1	0.01	10	5:30:34
529181.3	5511328	4204	B	K	64.1	2126.7	27	2	3.75	193	5:49:36
528740.6	5511213	4210	A	K	104.8	1935.4	28	2	3.67	192	14:46:55
528981.2	5511231	4213	A	K	86.4	2067.3	28	4	14.80	385	16:13:43
529285.6	5511244	4214	A	K	39.2	2225.2	28	2	2.48	157	17:05:41

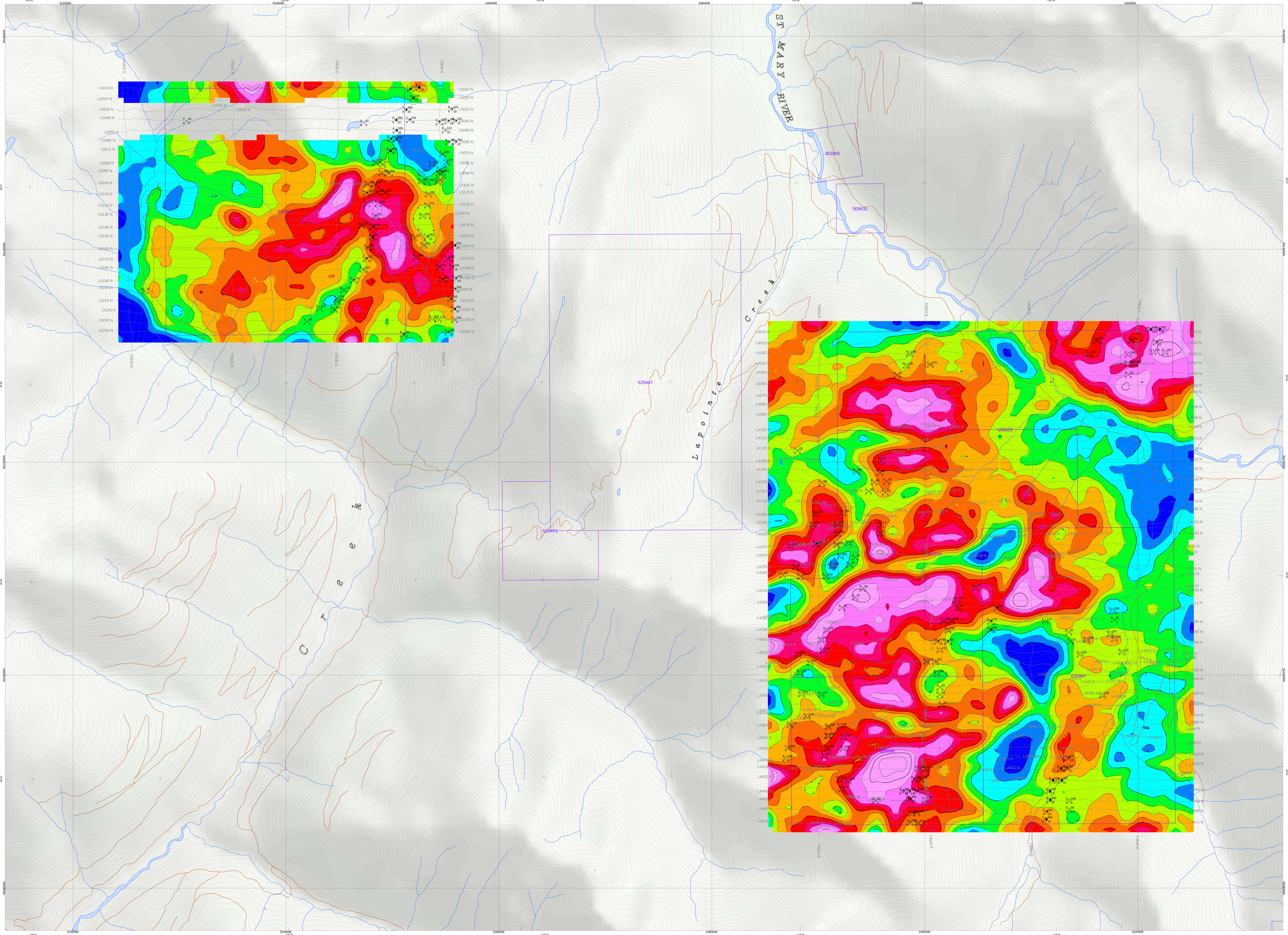
Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
529176.4	5511223	4214	B	K	54.7	2184.5	28	3	8.20	285	17:10:24
529347.9	5511107	4224	A	K	48.5	2295.5	28	1	0.28	53	1:46:29
529209.3	5511118	4224	B	K	55.3	2239.3	28	2	3.82	195	1:51:26
528786.7	5511016	4230	B	K	78.0	2062.3	29	1	0.37	61	14:02:26
529133.4	5511026	4231	A	K	102.7	2247.9	29	2	1.03	102	14:40:58
529296.6	5511038	4231	B	K	88.1	2308.4	29	1	0.29	54	14:44:36
529071.9	5510929	4240	A	K	78.9	2260.7	29	1	0.20	120	22:04:53
528834.4	5510927	4240	B	K	121.1	2095.7	29	1	0.07	25	22:12:53
528666.7	5510941	4240	C	K	69.2	2047.8	29	1	0.78	88	22:18:46
529419.8	5510816	4250	A	K	71.0	2255.2	29	1	0.12	50	23:17:26
530481.1	5510822	4250	B	K	86.1	1974.3	29	1	0.08	27	23:43:31
530303.7	5510706	4260	A	K	60.4	1933.7	29	2	4.30	207	2:30:22
529346.6	5510732	4260	A	K	60.7	2223.7	30	1	0.17	41	14:17:36
529224.1	5510633	4270	A	K	95.7	2193.2	30	1	0.01	10	15:44:26
530313.5	5510633	4270	B	K	89.8	1890.1	30	1	0.07	27	16:05:12
530676.3	5510629	4270	C	K	71.6	1776.2	30	4	11.80	343	16:12:19
531766.9	5510607	4270	D	K	79.9	1407.5	30	2	4.37	209	16:42:48
531781.1	5510521	4280	A	K	105.5	1409.1	30	1	0.83	91	18:43:02
531131.5	5510507	4281	A	K	63.5	1668.1	30	2	2.00	141	19:30:38
530617.6	5510503	4281	B	K	62.5	1734.2	30	4	14.03	375	19:38:31
530252.6	5510512	4281	C	K	55.2	1844.2	30	3	9.48	308	19:45:53
530177.8	5510511	4281	D	N	52.1	1866.3	30	3	9.48	308	19:47:34
529078.4	5510425	4290	A	K	99.2	2130.8	30	2	1.60	126	21:29:38
530219.5	5510423	4290	B	K	87.7	1834.9	30	3	6.00	245	21:53:48
530617.5	5510428	4290	C	K	112.9	1712.8	30	5	30.00	549	22:00:24
531352.5	5510403	4290	D	K	70.1	1675.2	30	1	0.46	67	22:16:48
531743.4	5510393	4290	E	K	105.0	1445.0	30	2	2.80	167	22:37:26
531783.9	5510340	4300	A	K	74.9	1437.0	30	2	3.10	177	0:20:43
531521.1	5510335	4301	A	K	70.5	1622.6	30	2	2.40	154	0:58:24
531370.6	5510317	4302	A	K	104.2	1725.1	30	1	0.01	10	1:49:46
530212.5	5510315	4302	B	K	65.6	1804.3	30	4	17.50	418	2:11:07
530121.2	5510318	4302	C	N	62.6	1821.1	30	4	17.50	418	2:13:05
529028.9	5510334	4303	A	K	81.4	2107.7	30	2	3.60	189	3:07:43
528816.4	5510194	4310	A	K	74.1	2108.8	31	2	2.27	151	1:56:31
529045.9	5510232	4310	B	K	88.5	2049.7	31	2	2.74	166	2:01:05
530143.6	5510237	4310	C	K	59.9	1799.5	31	2	1.70	131	2:18:29
531461.5	5510197	4310	D	K	81.2	1671.9	31	2	2.48	157	2:49:14
531852.7	5510219	4310	E	K	129.1	1393.8	31	2	1.28	113	3:04:24
528924.5	5510120	4321	A	N	70.2	2096.7	31	2	2.78	167	8:24:00
530020.5	5510129	4321	B	N	57.4	1805.6	31	3	5.63	237	8:46:50
530100.3	5510128	4321	C	K	60.0	1794.9	31	3	5.63	237	8:48:14
528828.3	5510024	4331	A	K	99.2	2093.2	31	2	2.76	166	13:39:24
530115.2	5510019	4331	B	K	99.7	1822.1	31	2	3.95	198	14:06:10
530143.4	5509886	4341	A	K	108.3	1930.7	32	1	0.01	10	7:33:10
528843.1	5509823	4351	A	K	78.1	2060.5	32	2	4.07	201	12:23:53
529029.4	5509820	4351	A	K	82.2	2125.5	32	2	1.79	134	12:53:46
530143.2	5509818	4351	B	K	100.5	1985.3	32	1	0.26	51	13:19:50
531670.4	5509812	4351	C	K	74.8	1510.4	32	2	1.56	125	14:15:12

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
530162.4	5509725	4361	A	K	108.2	2073.3	32	1	0.01	10	18:20:02
528895.9	5509615	4370	A	K	71.5	2066.9	34	2	4.60	215	21:19:17
529207.5	5509523	4381	A	K	56.6	2154.4	34	2	1.73	132	5:50:41
529095.4	5509515	4381	B	K	46.4	2137.4	34	3	6.78	260	5:53:22
528736.3	5509531	4381	C	K	77.1	2000.3	34	3	5.69	239	6:01:41
529237.2	5509417	4391	A	K	71.8	2144.4	34	2	2.06	143	12:21:41
529094.8	5509431	4391	B	K	56.3	2124.2	34	2	4.45	211	12:25:46
529092	5509431	4391	C	K	56.2	2123.6	34	2	4.47	211	12:25:50
529234.5	5509312	4401	A	K	74.4	2162.0	35	2	2.75	166	5:11:41
529086.6	5509314	4401	B	K	71.7	2110.4	35	3	5.47	234	5:15:34
528718.2	5509315	4401	C	K	70.3	1991.1	35	3	7.09	266	5:23:22
531348.4	5509223	4410	A	K	74.1	1515.5	35	4	13.80	371	8:35:14
528696.2	5509220	4411	A	K	70.0	1993.8	35	2	3.61	190	11:17:46
529060	5509244	4411	B	K	63.5	2095.6	35	2	4.16	204	11:25:38
531334.1	5509126	4420	A	K	67.6	1490.2	35	4	15.34	391	14:40:43
531275.3	5509123	4420	B	K	64.1	1517.0	35	5	26.20	512	14:42:55
529940.4	5509122	4421	A	N	77.7	2107.6	36	2	1.21	110	4:15:10
530019	5509120	4421	B	K	69.2	2091.9	36	2	1.20	110	4:16:50
531281.4	5509012	4430	A	K	79.3	1486.0	36	5	21.82	467	6:00:10
531198.1	5509014	4430	B	K	69.6	1516.6	36	5	27.35	523	6:02:29
529962.9	5509021	4431	A	N	53.1	2034.4	36	3	5.54	235	8:00:41
529905.7	5509022	4431	B	K	53.4	2045.4	36	3	5.54	235	8:02:00
529283.4	5509011	4431	C	N	48.2	2183.6	36	2	1.25	112	8:19:02
529201.4	5509022	4431	D	K	35.2	2207.9	36	2	1.25	111	8:21:31
529223.3	5508933	4440	A	N	44.8	2187.0	36	2	1.23	111	9:22:58
529795.3	5508910	4440	B	N	61.7	2030.5	36	4	12.57	355	9:37:43
529853.6	5508909	4440	C	K	67.0	2010.8	36	4	12.57	355	9:38:58
529926.1	5508911	4440	D	N	80.2	1981.7	36	4	12.57	355	9:40:26
531169.8	5508911	4440	E	K	82.4	1512.3	36	5	26.85	518	10:16:00
531357.3	5508822	4450	A	K	75.0	1549.8	36	2	3.96	199	11:37:26
531173.1	5508829	4450	B	K	81.0	1509.4	36	5	34.79	590	11:41:58
530004.6	5508833	4450	C	K	59.5	1919.1	36	2	3.58	189	12:41:22
529860	5508839	4450	D	K	52.3	1978.5	36	5	21.66	465	12:46:14
529540.1	5508822	4450	E	N	40.0	2095.0	36	1	0.84	92	12:57:24
529876.7	5508703	4460	A	N	75.8	1987.2	36	2	4.62	215	15:16:41
529928.4	5508705	4460	B	K	77.0	1960.5	36	2	4.62	215	15:18:05
531142.4	5508716	4460	C	K	97.6	1520.9	36	4	15.27	391	15:48:41
531357.2	5508738	4460	D	K	62.3	1587.0	36	1	0.91	95	15:55:22
529862.9	5508618	4471	A	N	79.8	2036.2	37	3	6.42	253	6:31:34
529935.5	5508612	4471	B	K	89.5	1996.9	37	3	6.40	253	6:33:29
531136.7	5508646	4471	C	K	79.5	1541.3	37	5	21.88	468	7:10:31

Storm King

Easting	Northing	line	Label	Type	bheight	dtm	flight	Grade	Cond	Tau	utctime
540196.9	5484347	3221	A	N	52.0	2010.8	83	2	2.50	158	5:37:14
539722.5	5484338	3222	A	N	47.8	2163.1	83	2	1.50	122	6:16:53
540145.3	5484239	3230	A	K	59.5	2049.5	83	5	29.12	540	1:15:19
540093.9	5484238	3230	B	N	59.2	2057.6	83	5	29.12	540	1:16:14

Easting	Northing	Line	Label	Type	Bheight	DTM	Flight	Grade	Cond	Tau	UTCTIME
539869.1	5484234	3230	C	K	68.5	2118.9	83	2	1.39	118	1:21:02
539817.8	5484228	3230	D	N	66.1	2138.5	83	2	1.39	118	1:22:12
540140.4	5484150	3241	A	N	38.7	2127.2	83	1	0.86	93	23:26:19
539695.7	5483698	3280	A	K	65.7	2276.1	82	1	0.32	56	3:48:41
539567.1	5483527	3300	A	K	11.2	2364.0	81	1	0.01	10	13:11:43
539679.9	5483130	3344	A	K	51.8	2216.0	81	1	0.01	10	1:43:36
540404.5	5483054	3350	A	K	12.6	2324.0	80	1	0.01	10	11:38:19
539750.3	5483025	3350	B	K	70.6	2195.2	80	1	0.01	10	12:06:17
539623.8	5482945	3361	A	K	64.8	2211.2	80	1	0.29	53	9:56:22
539671	5482836	3370	A	K	55.7	2193.3	80	1	0.39	63	7:01:46
539513.1	5482828	3370	B	K	42.6	2221.2	80	1	0.28	53	7:09:26
539567.5	5482718	3381	A	K	33.8	2174.4	80	1	0.17	41	4:28:22
539751.2	5482751	3382	A	K	49.7	2149.0	80	1	0.11	32	5:06:26
539830.1	5482623	3390	A	N	75.5	2104.1	80	1	0.71	84	1:11:50
539655.4	5482634	3390	B	K	70.3	2147.2	80	1	0.32	56	1:18:53
539654.5	5482527	3400	A	K	49.4	2100.7	80	3	5.00	224	23:19:07
539827.9	5482545	3400	B	N	64.3	2091.6	80	4	13.00	361	23:26:17
539829.8	5482436	3410	A	K	73.1	2066.2	79	5	21.80	467	11:53:26
539732.5	5482439	3410	B	K	73.9	2067.4	79	5	22.90	478	11:57:50
539070.3	5482330	3421	A	K	91.2	2025.3	79	2	1.83	135	9:44:14
539127.7	5482337	3421	B	N	74.4	2015.3	79	2	1.83	135	9:46:00
539743.8	5482334	3421	C	N	62.7	2037.5	79	5	23.00	477	10:02:34
539826.6	5482340	3421	D	K	71.1	2037.2	79	5	21.80	466	10:05:26
539859.9	5482246	3430	A	K	70.3	2000.4	79	5	23.50	485	6:12:22
539097.5	5482231	3430	B	K	79.3	2009.5	79	2	2.00	141	6:32:46
539110.5	5482116	3440	A	K	83.5	1999.4	79	1	0.46	68	4:06:34
539190	5482114	3440	B	N	85.0	1973.9	79	1	0.46	68	4:08:50
539862.3	5482136	3440	C	K	63.1	1954.9	79	3	6.50	255	4:28:19
539959.8	5482038	3450	A	N	56.6	1916.2	77	1	0.01	10	8:04:07
539891.3	5482031	3450	B	K	63.0	1914.6	77	1	0.01	10	8:05:17
539227.6	5482038	3450	C	N	85.7	1955.9	77	1	0.38	62	8:16:24
539133.7	5482034	3450	D	K	65.0	2002.0	77	1	0.38	62	8:18:29
539117.9	5481924	3460	A	K	67.3	2014.6	77	1	0.17	41	6:24:34
539180.8	5481936	3460	B	N	75.1	1988.7	77	1	0.17	41	6:26:12
539308.1	5481837	3470	A	N	54.0	1991.0	77	1	0.12	34	3:43:14
539189.8	5481839	3470	B	K	57.2	2009.9	77	1	0.12	34	3:45:34
539206.2	5481711	3480	A	K	65.3	1994.4	77	1	0.08	29	1:58:55
539304	5481712	3480	B	N	58.0	1987.0	77	1	0.08	29	2:01:19
539410.2	5481629	3490	A	N	69.7	1968.1	77	1	0.06	25	23:42:31
539275.9	5481625	3490	B	K	63.7	1993.6	77	1	0.06	25	23:45:22
539278.3	5481526	3500	A	K	66.0	2003.9	77	1	0.01	10	22:16:07
539392.2	5481509	3500	B	N	77.0	1960.8	77	1	0.01	10	22:19:02
539448.6	5481438	3510	A	N	58.7	1956.8	76	1	0.01	10	9:15:26
539348.5	5481445	3510	B	K	67.4	1980.8	76	1	0.01	10	9:18:34
539421.1	5481331	3520	A	N	65.2	1949.2	76	1	0.44	66	7:03:14
539490.2	5481336	3520	B	K	61.2	1927.4	76	1	0.44	66	7:04:46



Grid North
NAD83-Zone11

The topographic data base was supplied by the client

Inset data derived from Natural Resources Canada 'Atlas of Canada Base Maps'

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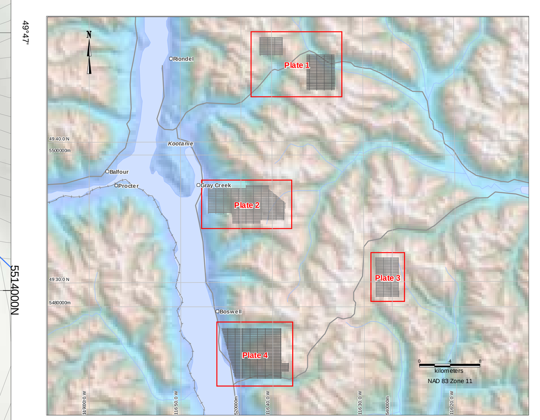
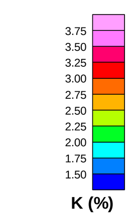




Potassium

0.1%
0.5%
2.5%

Off-Time Anomaly Symbols

>50S
35-50S
20-35S
10-20S
5-10S
1-5S
<1S

anomaly label A
decay constant (µs) 125
thicK/thiN source K
off-time conductance (S) 36

SURVEY SPECIFICATIONS:
Survey flown: June 26 to 29, 2006 & June 30 to July 1, 2006
Traverse line spacing: 100 metres
Traverse line direction: 90° Azimuth (E-W)
Nominal EM bird height: 30 metres
Aircraft: Aerospatiale A-Star 350B2 (C-FBHK)

INSTRUMENTATION:
Data acquisition: ADAS & RMS DGR-33
Magnetometer: Geometrics G-823A cesium vapour
Installation: Towed bird 17 m above EM bird
Sensitivity: .001 nanoTesla
Electromagnetics: AeroTEM II System (GOLF)
Configuration: Towed bird
Gamma Ray Spectometer: PicoEnvirotex AGIS GRS 10-5
Downward looking crystals vol. - 16.8L (1024cu in)
Upward looking crystal vol. - 4L (256cu in)
Sample Interval: 1.0 seconds
Channels: 256

NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING
Magnetics: diurnal, tieline and micro-leveling corrections

POSITIONING
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191

MAP PROJECTION
Projection: Universal Transverse Mercator
Central Meridian: 117°W (Zone 11)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:10,000

200 0 200 400 600
metres
NAD83 / UTM zone 11N

Jasper Mining Corporation
Nelson Area, British Columbia

POTASSIUM (%)

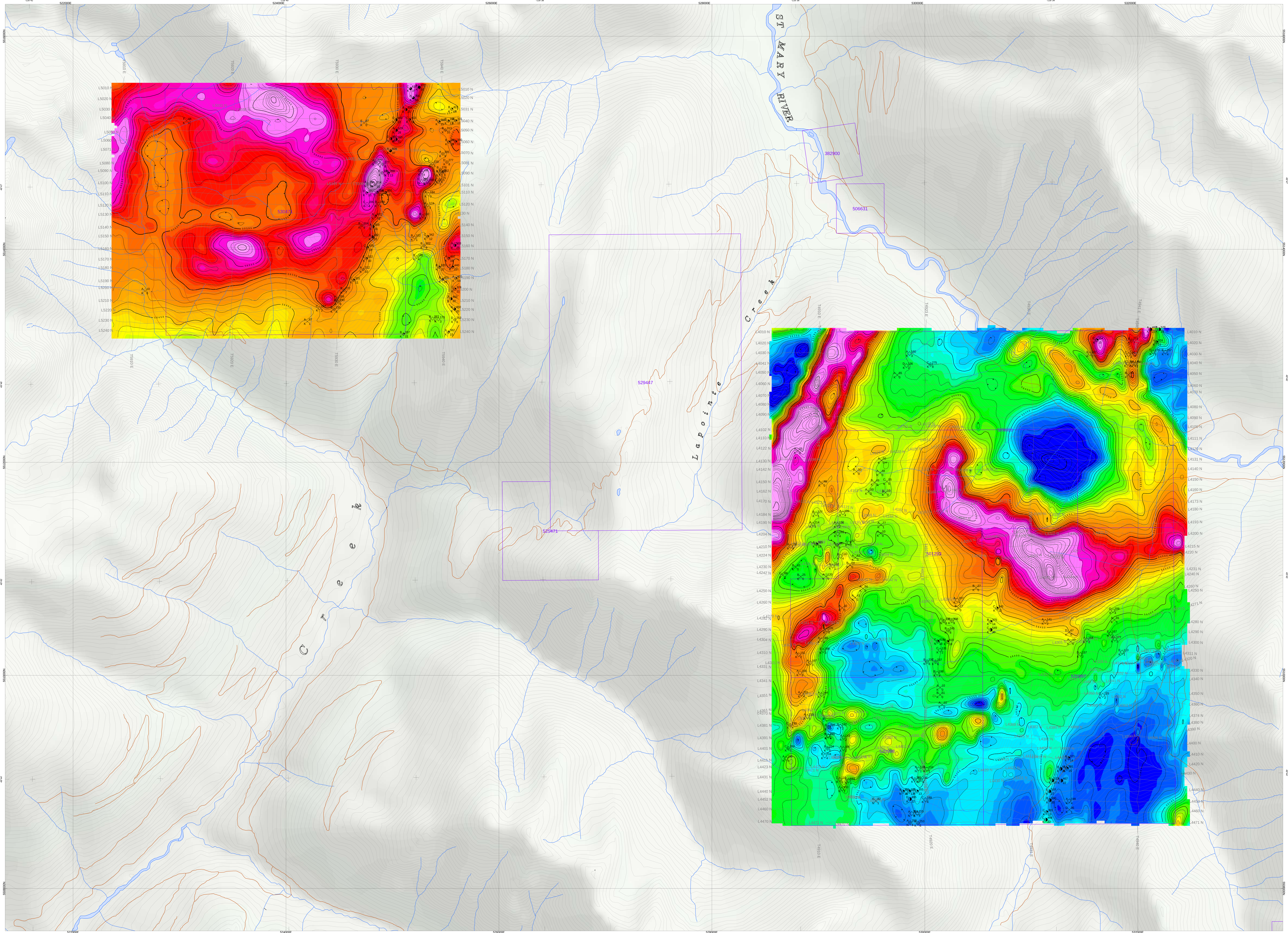
Crawford & Sawyer Block

NTS 082F15, 082F10

AEROQUEST LIMITED
4-845 Main St. East
Milton, Ont., CANADA L9T 3Z3
Tel: (905) 693-9129 Fax: (905) 693-9128
www.aeroquestsurveys.com

August 2006

K (%) Crawford & Sawyer



Grid North
NAD83-Zone11

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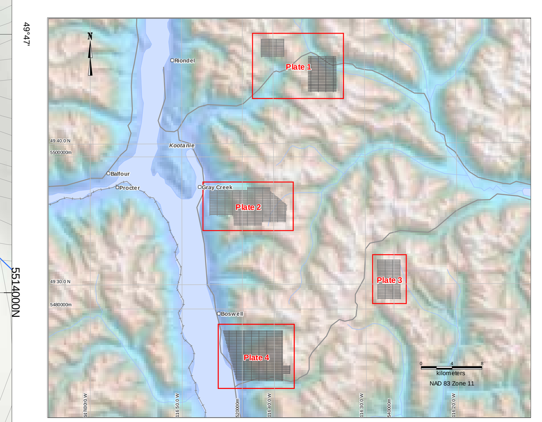

nT

TMI Contour Interval

- Minimum 10nT
- 50 & 250nT
- 1000nT

Off-Time Anomaly Symbols

- >50S
- 35-50S
- 20-35S
- 10-20S
- 5-10S
- 1-5S
- <1S

anomaly label A, 125 decay constant (µs)
thicK/thiN source K, 36 off-time conductance (S)

SURVEY SPECIFICATIONS:
- Survey flown: June 26 to 29, 2006 & June 30 to July 1, 2006
- Traverse line spacing: 100 metres
- Traverse line direction: 90° Azimuth (E-W)
- Nominal EM bird height: 30 metres
- Aircraft: Aerospatiale A-Star 350B2 (C-FBHK)

INSTRUMENTATION:
- Data acquisition: ADAS & RMS DGR-33
- Magnetometer: Geometrics G-823A cesium vapour
  - Installation: Towed bird 17 m above EM bird
  - Sensitivity: .001 nanoTesla
- Electromagnetics: AeroTEM II System (GOLF)
  - Configuration: Towed bird
- Gamma Ray Spectometer: PicoEnvirotex AGIS GRS 10-5
  - Downward looking crystals vol. - 16.8L (1024cu in)
  - Upward looking crystal vol. - 4L (256cu in)
  - Sample Interval: 1.0 seconds
  - Channels: 256

NAVIGATION:
- Navigation: Differential Global Positioning System (DGPS)
- Navigation equipment: AGNAV with MID-TECH RX400p receiver
- Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING
- Magnetics: diurnal, tieline and micro-leveling corrections

POSITIONING
- Datum: NAD83
  - Major Axis: 6378137.000
  - Eccentricity: 0.081819191

MAP PROJECTION
- Projection: Universal Transverse Mercator
- Central Meridian: 117°W (Zone 11)
- Central Scale Factor: 0.9996
- False Easting/Northing: 500,000m/0m

scale 1:10,000

200 0 200 400 600
metres
NAD83 / UTM zone 11N

Jasper Mining Corporation
Nelson Area, British Columbia

TOTAL MAGNETIC INTENSITY

Crawford & Sawyer Block

NTS 082F15, 082F10

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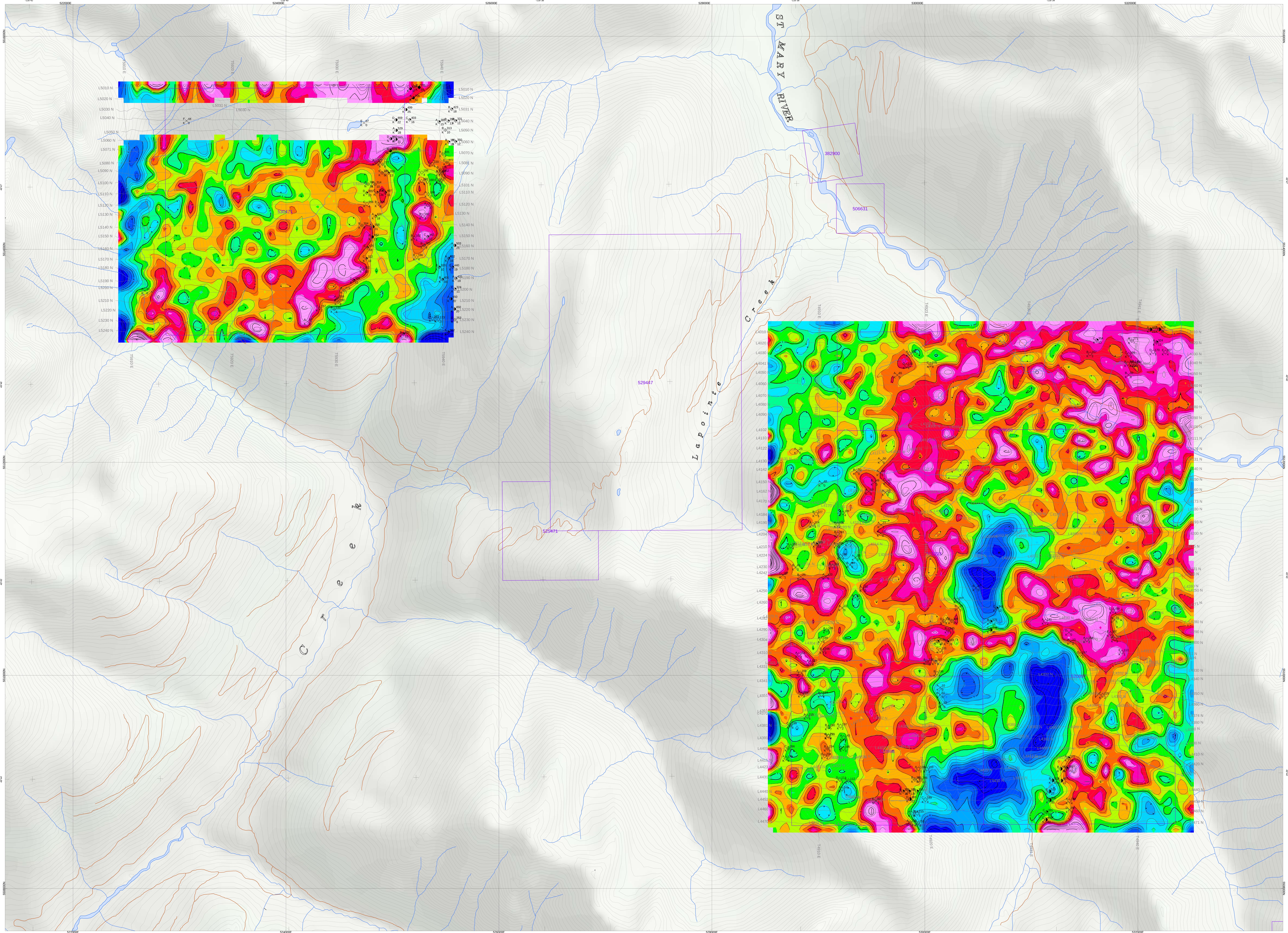
www.aeroquestsurveys.com

August 2006

MAG Crawford & Sawyer



Grid North
NAD83-Zone11

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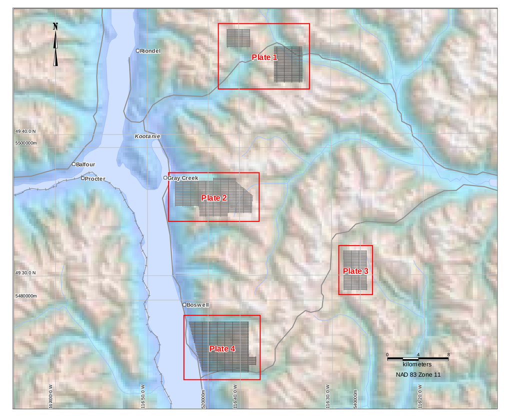

Th/K Ratio	
6.75	
6.50	
6.25	
6.00	
5.75	
5.50	
5.25	
5.00	
4.75	
4.50	
4.25	
4.00	
3.75	
3.25	

Th/K Ratio

Th/K Ratio
- 0.25
- 1
- 5

Off-Time Anomaly Symbols
- >50S ....
- 35-50S ....
- 20-35S ....
- 10-20S ....
- 5-10S ....
- 1-5S ....
- <1S ....

anomaly label A, decay constant (µs) 125, thicK/thiN source K, off-time conductance (S) 36

SURVEY SPECIFICATIONS:
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  - Downward looking crystals vol. - 16.8L (1024cu in)
  - Upward looking crystal vol. - 4L (256cu in)
  - Sample Interval: 1.0 seconds
  - Channels: 256

NAVIGATION:
- Navigation: Differential Global Positioning System (DGPS)
- Navigation equipment: AGNAV with MID-TECH RX400p receiver
- Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING
- Magnetics: diurnal, tieline and micro-leveling corrections

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  - Major Axis: 6378137.000
  - Eccentricity: 0.081819191

MAP PROJECTION
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- Central Meridian: 117°W (Zone 11)
- Central Scale Factor: 0.9996
- False Easting/Northing: 500,000m/0m

scale 1:10,000

200 0 200 400 600
metres
NAD83 / UTM zone 11N

Jasper Mining Corporation
Nelson Area, British Columbia

Th/K RATIO

Crawford & Sawyer Block

NTS 082F15, 082F10

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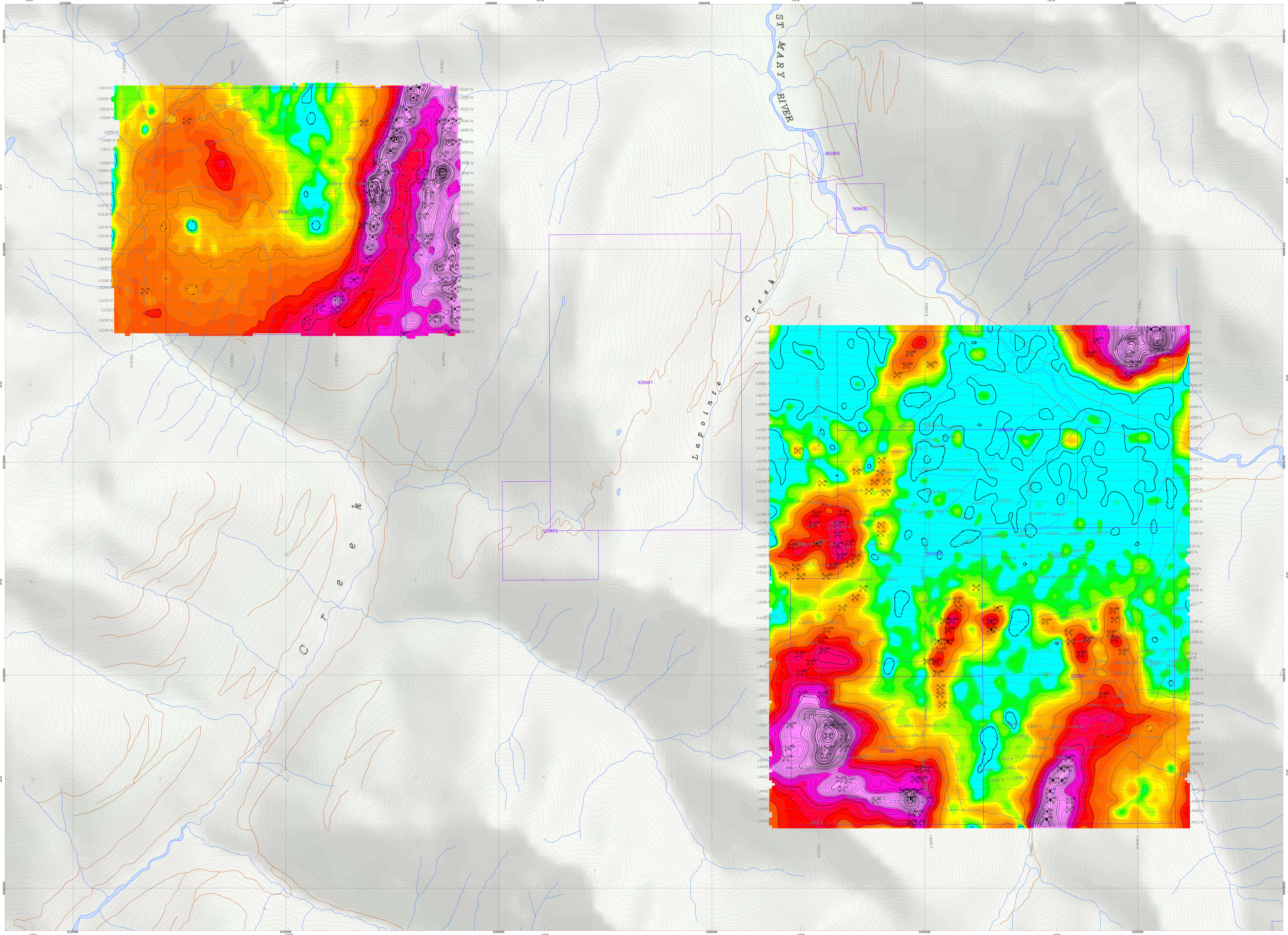
August 2006

THK Crawford & Sawyer



Grid North
NAD83-Zone11

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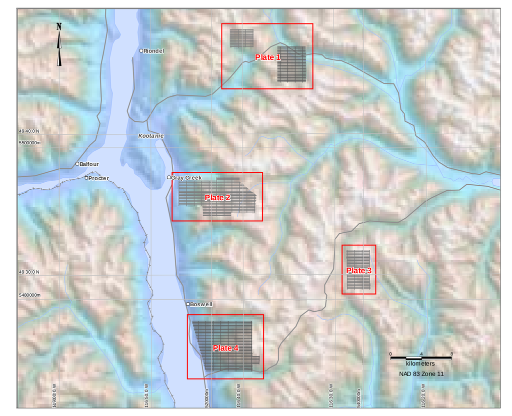

nT/s

ZOFF Contour Interval

- 20nT/s
- 100nT/s
- 500nT/s

Off-Time Anomaly Symbols

- >50S
- 35-50S
- 20-35S
- 10-20S
- 5-10S
- 1-5S
- <1S

anomaly label (A), decay constant (µs) (125), thicK/thiN source (K), off-time conductance (S) (36)

SURVEY SPECIFICATIONS:
Survey flown: June 26 to 29, 2006 & June 30 to July 1, 2006
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Sensitivity: .001 nanoTesla
Electromagnetics: AeroTEM II System (GOLF)
Configuration: Towed bird
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Downward looking crystals vol. - 16.8L (1024cu in)
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Sample Interval: 1.0 seconds
Channels: 256

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Navigation equipment: AGNAV with MID-TECH RX400p receiver
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Magnetics: diurnal, tieline and micro-leveling corrections

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Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191

MAP PROJECTION
Projection: Universal Transverse Mercator
Central Meridian: 117°W (Zone 11)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:10,000

200 0 200 400 600
metres
NAD83 / UTM zone 11N

Jasper Mining Corporation
Nelson Area, British Columbia

AEROTEM Z1 OFF-TIME

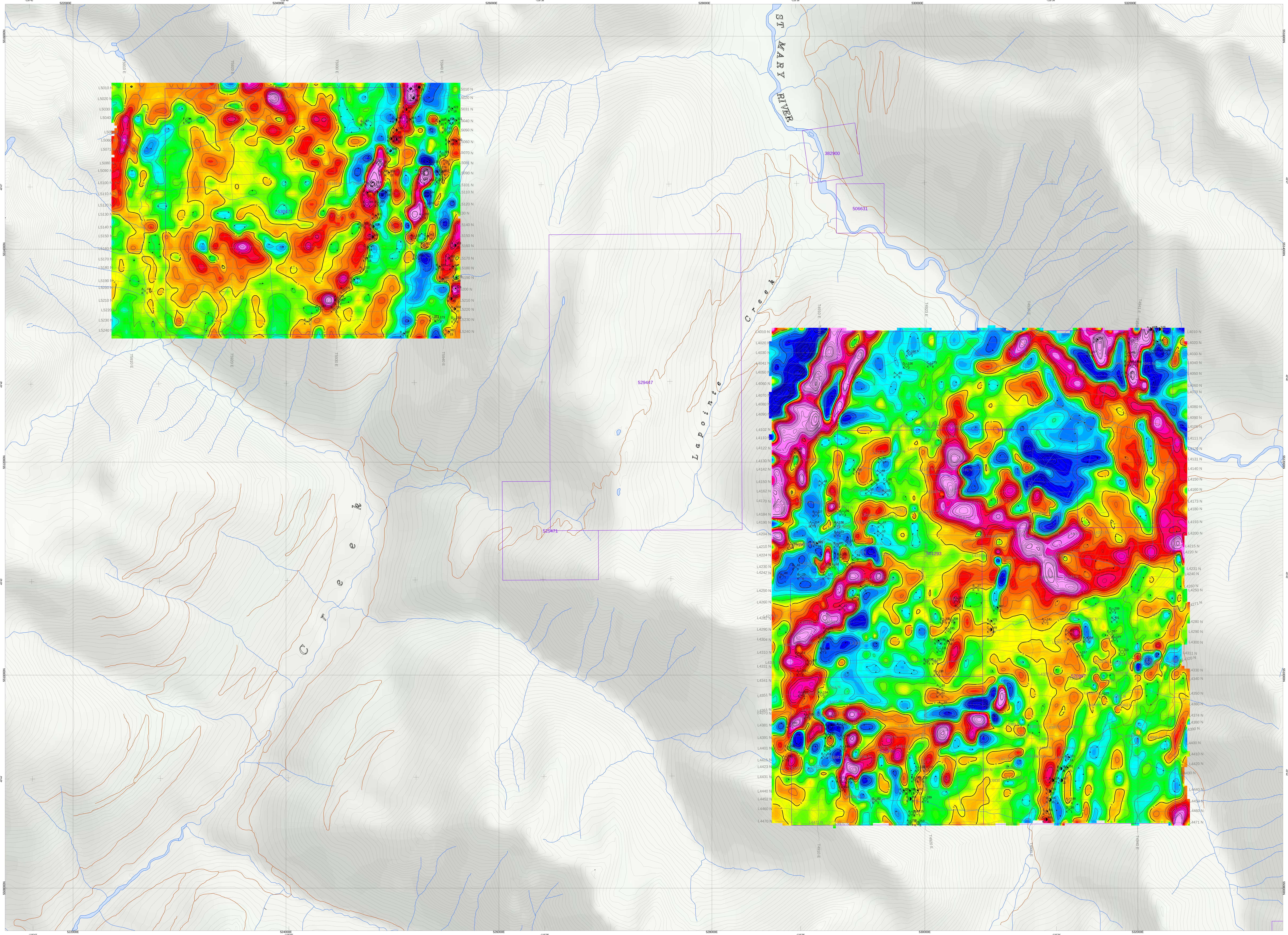
Crawford & Sawyer Block

NTS 082F15, 082F10

AEROQUEST LIMITED
4-845 Main St. East
Milton, Ont., CANADA L9T 3Z3
Tel: (905) 693-9129 Fax: (905) 693-9128
www.aeroquestsurveys.com

August 2006

ZOFF Crawford & Sawyer

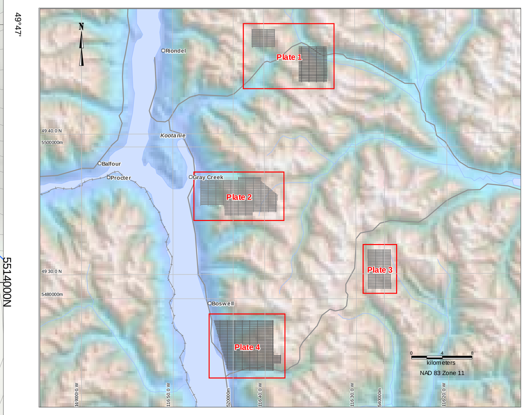


Grid North
NAD83-Zone11

The topographic data base was supplied by the client

Inset data derived from Natural Resources Canada 'Atlas of Canada Base Maps'

This map accompanies the technical report entitled 'Report on a Helicopter-Borne Magnetic and Electromagnetic Survey for the, 'Crawford, Sawyer, McFarlane,Storm King, & Sanca Properties', by Aeroquest Limited, August 2006



nT/m

Contour Interval

Minimum 0.1 nT/m
0.5 & 2.5 nT/m
10 nT/m

Off-Time Anomaly Symbols

>50S ....
35-50S ....
20-35S ....
10-20S ....
5-10S ....
1-5S ....
<1S ....

anomaly label A 125 decay constant (µs)
thicK/thiN source K 36 off-time conductance (S)

SURVEY SPECIFICATIONS:
Survey flown: June 26 to 29, 2006 & June 30 to July 1, 2006
Traverse line spacing: 100 metres
Traverse line direction: 90° Azimuth (E-W)
Nominal EM bird height: 30 metres
Aircraft: Aerospatiale A-Star 350B2 (C-FBHK)
INSTRUMENTATION:
Data acquisition: ADAS & RMS DGR-33
Magnetometer: Geometrics G-823A cesium vapour
Installation: Towed bird 17 m above EM bird
Sensitivity: .001 nanoTesla
Electromagnetics: AeroTEM II System (GOLF)
Configuration: Towed bird
Gamma Ray Spectometer: PicoEnvirotex AGIS GRS 10-5
Downward looking crystals vol. - 16.8L (1024cu in)
Upward looking crystal vol. - 4L (256cu in)
Sample Interval: 1.0 seconds
Channels: 256
NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30
DATA PROCESSING
Magnetics: diurnal, tieline and micro-leveling corrections
POSITIONING
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191
MAP PROJECTION
Projection: Universal Transverse Mercator
Central Meridian: 117°W (Zone 11)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:10,000

200 0 200 400 600
metres
NAD83 / UTM zone 11N

Jasper Mining Corporation
Nelson Area, British Columbia

FIRST VERTICAL MAGNETIC DERIVATIVE

Crawford & Sawyer Block

NTS 082F15, 082F10

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4-845 Main St. East
Milton, Ont., CANADA L9T 3Z3
Tel: (905) 693-9129 Fax: (905) 693-9128
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August 2006

MAG Crawford & Sawyer

Appendix C

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

The following expenses were incurred on behalf of the Sanca project between July 1st and August 3lst, 2006.

Aeroquest Limited airborne geophysical survey (as per Invoice 1158) **$29,280.50**

Appendix D

PROGRAM RELATED DOCUMENTS

BRITISH COLUMBIA

Contact Us ▸ Help

B.C. HOME

Mineral Titles

Mineral Titles Online

Mineral Claim Exploration and Development Work/Expiry Date Change

- Select Input Method
- Select/Input Tenures
- Input Lots
- Data Input Form
- Review Form Data
- Process Payment
- Confirmation

- Main Menu
- Search Tenures
- View Mineral Tenures
- View Placer Tenures

- MTO Help Tips

Exit this e-service

Mineral Claim Exploration and Development Work/Expiry Date Change

Confirmation

Recorder: MOUNTAIN STAR RESOURCES LTD (139398) **Submitter:** MOUNTAIN STAR RESOURCES LTD (139398)

Recorded: 2006/OCT/11 **Effective:** 2006/OCT/11

D/E Date: 2006/OCT/11

Your report is due in 90 days. Please attach a copy of this confirmation page to the front of your report.

Event Number: 4105936

Work Start Date: 2006/JUL/1
Work Stop Date: 2006/AUG/31

Total Value of Work: $ 30000.00
Mine Permit No:

Work Type: Technical Work
Technical Items: Geophysical, PAC Withdrawal (up to 30% of technical work performed)

Summary of the work value:

Tenure #	Claim Name/Property	Issue Date	Good To Date	New Good To Date	# of Days For-ward	Area in Ha	Work Value Due	Sub-mission Fee
501293	Intrusive	2005/JAN/12	2007/JAN/12	2010/DEC/31	1449	438.34	$ 10404.85	$ 696.06
509603	Sawyer North	2005/MAR/24	2007/MAR/24	2010/DEC/31	1378	375.64	$ 8332.09	$ 567.27
520997	SAWYER EAST	2005/OCT/12	2006/OCT/12	2010/DEC/31	1541	501.06	$ 10899.66	$ 846.16
520998	SAWYER WEST	2005/OCT/12	2006/OCT/12	2010/DEC/31	1541	250.55	$ 5450.34	$ 423.12

Total required work value:	$	35086.94
PAC name:		Mountain Star Resources Ltd
Debited PAC amount:	$	5086.94
Credited PAC amount:	$	0.00
Total Submission Fees:	$	2532.62
Total Paid:	$	2532.62

The event was successfully saved.

Please use ***Back*** button to go back to event confirmation index.

Back