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ASSESSMENT REPORT

describing

GEOPHYSICAL SURVEYS AND DIAMOND DRILLING

at the

BOND PROPERTY

Bond 1-4	YC32465-YC32468
5-8	Y97546-Y97549
9-22	YC38937-YC38950
23-62	YC42826-YC42865
63-80	YC48074-YC48091
Plus 1-12	YC50384-YC50395
Vic 1-36	YC48038-YC48073
Vector 1-2	YC02846-YC02847

NTS 106D/10

Latitude 64°40'N; Longitude 134°50'W

in the

Mayo Mining District
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

CASH MINERALS LTD.
and
TWENTY-SEVEN CAPITAL CORP.

by

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January 2007

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INTRODUCTION

The Bond property hosts several zones of iron-oxide copper-gold (IOCG) mineralization, some of which are uraniferous. Cash Minerals Ltd. staked the Vector claims in 2001 and owns 100% of those claims. The remainder of the property is owned by Twenty-Seven Capital Corp. and is under option to Cash Minerals as part of the Yukon Uranium Project (YUP). Twenty-Seven Capital purchased the core of its claim block in December 2004 and staked the remainder of its claims at various times in 2006.

Exploration work in 2006 on the Bond property was conducted in four phases. An airborne magnetic survey was completed in spring from a base in Mayo. Minor prospecting and ground gravity surveys were done between August 3 and August 13 from a camp on the Igor property located 40 km to the north. A helicopter borne radiometric survey was conducted on September 12 and 13 from a camp at the Lumina property, 90 km to the east-northeast. Finally, 652.06 m of diamond drilling was done in three holes between September 21 and October 16 from a camp on the Steel property located 32 km to the east. The last three phases of the program were done with daily helicopter support. The author supervised the work and his Statement of Qualifications appears in Appendix I.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The property is located in east-central Yukon Territory at latitude 64°40'N and longitude 134°50'W on NTS map sheet 106D/10 (Figure 1). It comprises a total of 130 mineral claims covering approximately 2560 hectares. The claims were staked under the Yukon Quartz Mining Act and are registered with the Mayo Mining Recorder in the name of Archer, Cathro & Associates (1981) Limited which holds them in trust for Twenty-Seven. Claim registration data are summarized below while the locations of individual claims are shown on Figure 2.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
Bond 1-4	YC32465-YC32468	March 27, 2010
5-8	Y97546-Y97549	March 27, 2011
9-22	YC42826-YC42865	March 27, 2010
23-62	YC42826-YC42865	March 17, 2007
63-80	YC48074-YC48091	June 6, 2007
Plus 1-12	YC50384-YC50395	August 9, 2007
Vic 1-36	YC48038-YC48073	June 6, 2007
Vector 1-2	YC02846-YC02847	March 23, 2008

*expiry dates do not include 2006 work which has not yet been filed for assessment credit.

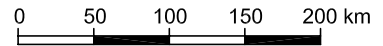
The Bond property is located 130 km northeast of the village of Mayo, which is accessible via the Yukon highway system using the Klondike Highway and Silver Trail. Mayo is situated 407 km by road north of Whitehorse. The closest road access to the property is at McQuesten Lake which lies 87 km by road northeast of Mayo and 67 km southwest of Bond. From McQuesten Lake, an abandoned winter road extends northward to the Peel Basin. This winter road, the Wind River Trail, passes within 8 km of the property. A cat trail branches off the

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FIGURE 1

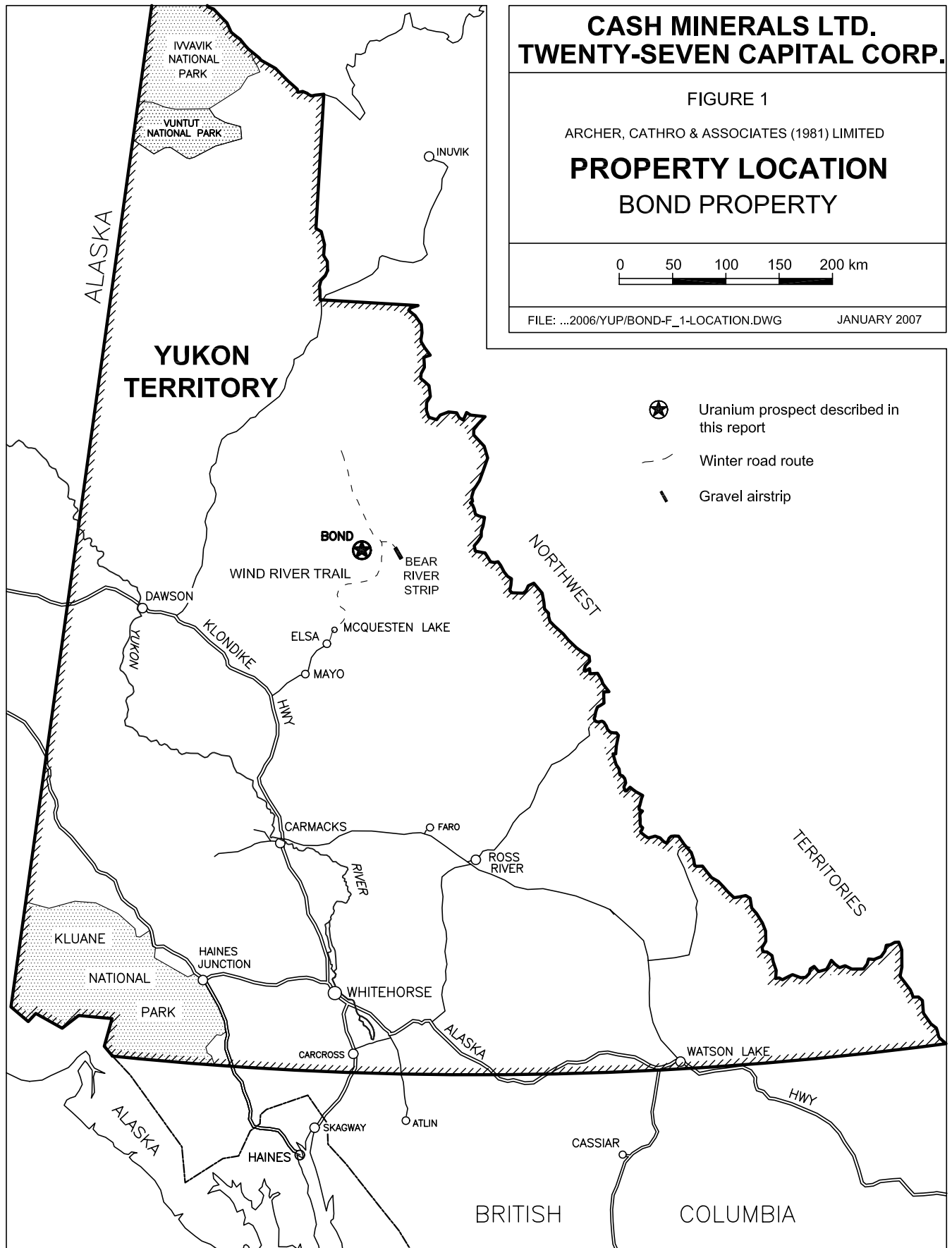
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**PROPERTY LOCATION
BOND PROPERTY**



FILE: ...2006/YUP/BOND-F_1-LOCATION.DWG

JANUARY 2007



- ★ Uranium prospect described in this report
- - - Winter road route
- \\ Gravel airstrip

winter road and leads to the Hart Lake airstrip, a gravel airstrip about 30 km southwest of the property.

Access to the property in 2006 was accomplished using Hughes 500D and Bell 206L helicopters based out of the Igor and Steel camps and operated by Fireweed Helicopters of Whitehorse. The radiometric survey was done using an AStar B2 helicopter based out of the Lumina camp and operated by Trans North Helicopters of Whitehorse. Supplies were flown from Mayo to Bear River airstrip (32 km northeast of the property) using a Britten-Norman Islander and Cessna Caravan operated by Sifton Air of Haines Junction and Alkan Air Ltd. of Whitehorse, respectively.

HISTORY

Regional

The first report of mineralization in the Wernecke Mountains was the discovery of hematite rich float in river gravels by prospectors enroute to the Klondike Goldfields in 1898. A few copper and gold prospects were identified and staked prior to the 1960s, but no serious exploration was undertaken. Following discovery of the Crest Iron Deposit by California Standard Company Ltd. in 1961, several hematite bodies were staked and briefly explored. This wave of exploration coupled with improved access spurred by construction of the Wind River Trail led to new copper discoveries in the mid 1960s, some of which were drilled or bulldozer trenched (Deklerk and Traynor, 2004).

Uranium was first discovered in the Wernecke Mountains in 1974 at the Igor property by Ogilvie Joint Venture (Chevron Canada Ltd., Marietta Resources International Ltd. and Aquitaine Company of Canada Ltd.). The following summer Wernecke Joint Venture (WJV) comprised of Chevron and Aquitaine, conducted helicopter borne radiometric reconnaissance throughout the district and staked a number of other properties based on ground radiometric follow up. Most of these occurrences are associated with large iron oxide rich breccia bodies that are informally known as the Wernecke Breccias. Eldorado Nuclear optioned WJV's properties and regional exploration rights in 1976. It conducted property and regional exploration in 1976 and 1977 along with a number of other companies, notably Noranda Minerals Ltd. and Pan Ocean Oil Ltd. WJV resumed exploration in 1978 after Eldorado Nuclear began to drop its optioned properties. Systematic uranium exploration by various parties continued in the Wernecke Mountains until 1982, when uranium prices fell (Eaton and Wober, 2005).

Another wave of regional and property exploration occurred in the mid 1990s when Westmin Resources Ltd. and Newmont Mining Corp. explored some of the Wernecke Breccias for copper and gold using the IOCG model.

Property

Although iron and copper were noted in the vicinity of the Bond property by the Geological Survey of Canada around 1961, no claims were staked and there is no record of exploration.

The uranium mineralization was discovered in 1974 but was not staked until 1975 by WJV. Exploration that year included prospecting, airborne and ground radiometric surveys, geological mapping, grid soil geochemical surveys, chip sampling and hand trenching (Archer, 1975). Two uranium showings, Bond 1 and 2, and a number of radioactive float occurrences were identified. In 1976, the property was optioned to Eldorado Nuclear, which drilled one 38.7 m diamond drill hole at Bond 1 and two holes totalling 83.7 m at Bond 2 (Riley, 1976). In 1977 Eldorado Nuclear continued to explore at Bond 2 with 347.6 m of diamond drilling in 16 holes and a detailed ground magnetic survey (Olsson, 1977). In spring 1981, the property was returned to WJV, which explored that summer with additional geological mapping, prospecting and grid geophysical surveys including radiometric, soil radon, induced polarization and magnetics (Eaton and Archer, 1981 and Hendrickson, 1981).

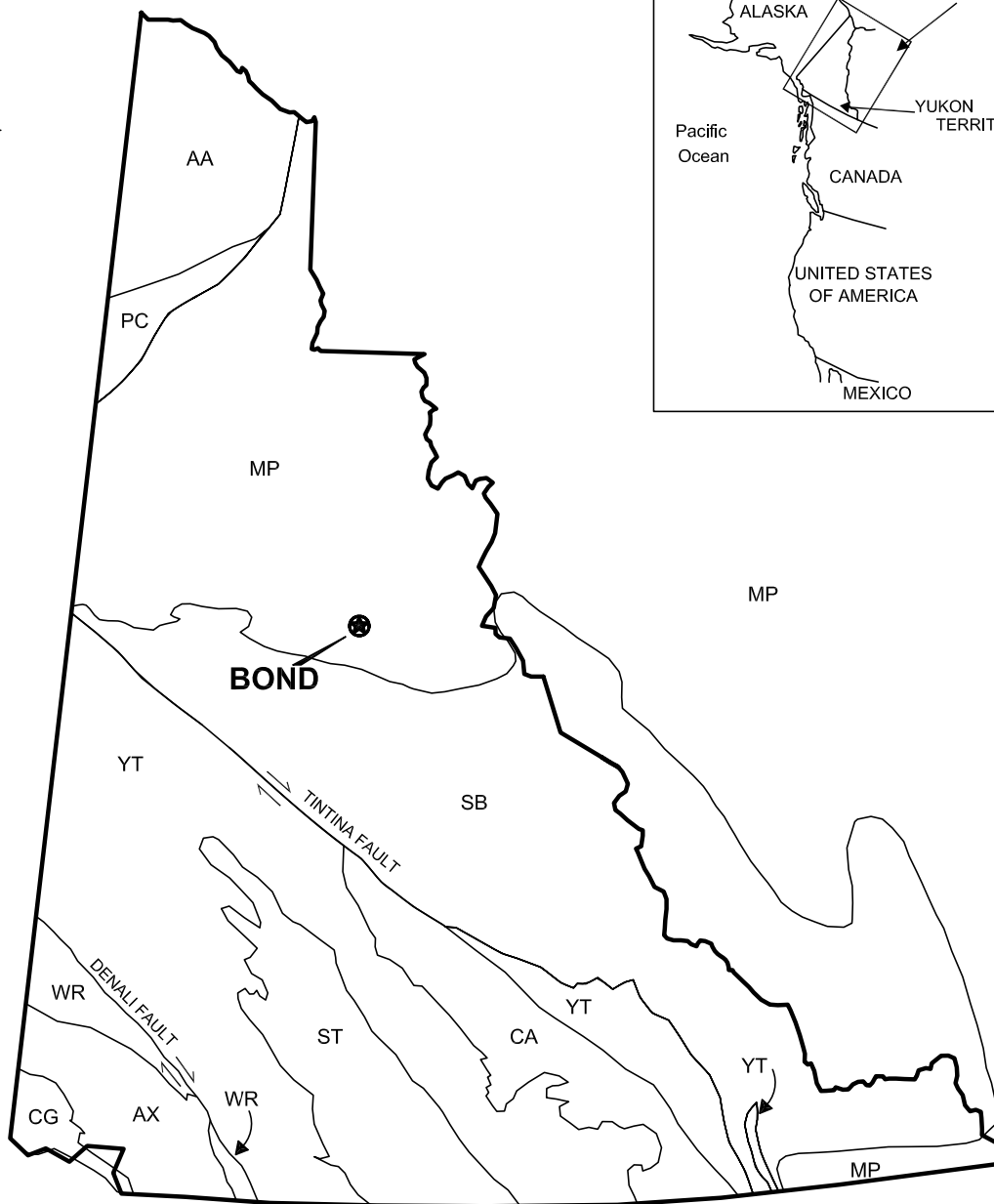
In 1992 the Bond property was sold to Archer Cathro and later that year was optioned to BHP Minerals Canada Ltd., which conducted a cursory geological and geochemical evaluation. In 1995 Archer Cathro sold the property to Nordac Resources Ltd, which subsequently through a name change and share consolidation became Strategic Metals Ltd. The property was dormant until Strategic staked additional claims in fall 2004. Late in 2004, Strategic optioned the Bond property along with other nearby properties to Cash Minerals and then sold its residual interests in the properties to Twenty-Seven. In summer 2005, Cash Minerals funded a total of 735.46 m of diamond drilling in seven holes at the Bond 1 and 2 Showings (Dumala, 2005).

Bornite was discovered 4.5 km east of the Bond Showing by WJV in 1975 but was not staked until 1994 when Expatriate Resources Ltd. staked the JD claims. Expatriate later conducted mapping and prospecting at the JD Showing. This showing was restaked by YUP in spring 2006. Cash Minerals staked the Vector claims, 8 km east of the Bond Showings, in 2001 to cover barite veins. These veins are located near a radioactive breccia that was discovered and staked in 1975 by WJV as the Bozo claims and restaked in 1994 by J. and D. Hajek as the Midas claims. WJV performed mapping, soil sampling and radiometric sampling on the Bozo claims in 1975. The area surrounding the Vector claims was staked by Yup in 2006.

PHYSIOGRAPHY AND GEOMORPHOLOGY

The Bond property is located within the Wernecke Mountains and is drained by Bond Creek, a tributary of the Wind River. The Wind River flows into the Peel River and ultimately the Arctic Ocean via the Mackenzie River.

The climate in the Wernecke Mountains is typical of northern continental regions with long, cold winters, truncated fall and spring seasons and short, cool summers. Average temperatures in January are about -25°C and in July about 10°C. Total annual precipitation is approximately 30 cm, mainly occurring as rain during the summer months. Maximum snow pack averages about 40 cm. Although summers are relatively mild, arctic cold fronts occasionally cover the area and snowfall can happen in any month. Sunlight ranges from 22 hours per day in late June to approximately six hours per day in late December. The property is relatively snow-free from late May until early October.



ANCESTRAL NORTH AMERICA

- | | |
|-----------|--------------------|
| MP | Mackenzie Platform |
| SB | Selwyn Basin |

TERRANES

Displaced Continental Margin

- | | |
|-----------|---------------|
| AA | Arctic Alaska |
| CA | Cassiar |
| PC | Porcupine |

Pericratonic Terranes

- | | |
|-----------|-------------------------------|
| YT | Yukon-Tanana / Slide Mountain |
|-----------|-------------------------------|

ACCREDITED TERRANES

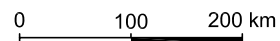
- | | |
|-----------|------------------------|
| ST | Stikinia / Cache Creek |
| AX | Alexander |
| WR | Wrangellia |
| CG | Chugach |

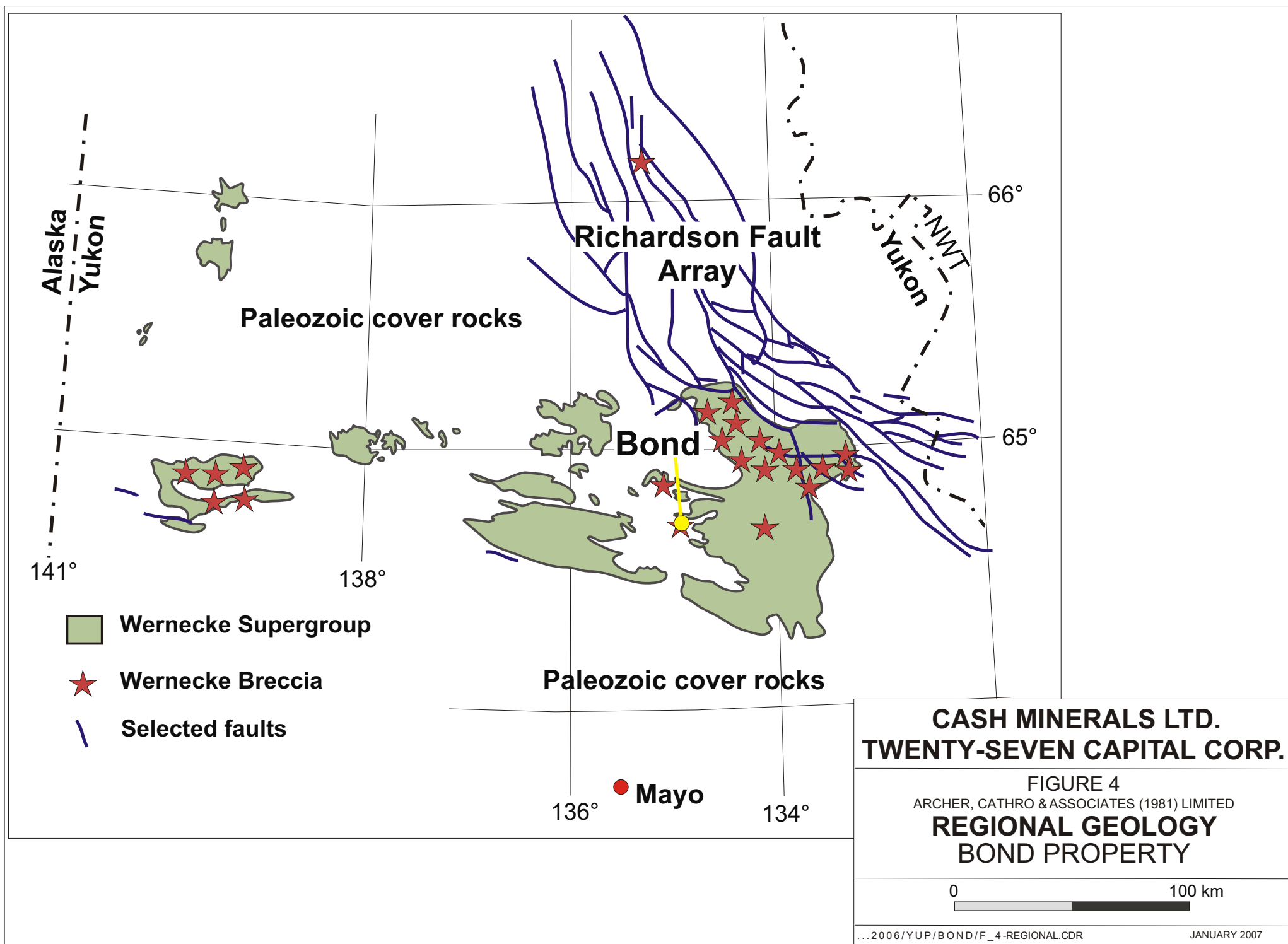
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FIGURE 3

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TECTONIC SETTING BOND PROPERTY





The main area of interest on the Bond claims lies within a broad basin near the junction of several creeks. The floor of the basin is about 1200 m above sea level and is largely till covered. The JD Showing is located in a creek valley about 4 km to the east, while the Vector area is on the floor of a hanging valley about 3.5 km further east. The various valleys are surrounded by ridges reaching elevations of 1850 m. Outcrop is relatively sparse on the valley floors where till cover is typically 1 to 5 m thick. Bedrock exposures are most common on the ridges and along actively eroding creek beds. Vegetation is restricted to grasses, moss and buckbrush with clumps of slide alder and stunted spruce along creek bottoms. There is no commercial timber on the property. Several suitable campsites are present and there is abundant water in creeks for drilling purposes, except in winter.

REGIONAL GEOLOGY

The Bond property lies within the Mackenzie Platform tectonic element (Figure 3). The eastern half of the property lies along the edge of a 2500 sq km window of Lower Proterozoic age rocks, which is the largest in a series of similar exposures stretching westerly across central Yukon from the Northwest Territories to Alaska (Figure 4). The western part covers a 15 sq km window of similar rocks. The Lower Proterozoic rocks are predominantly fine grained clastic sedimentary rocks with lesser carbonate rich units, rare volcanic flows, scattered intrusive dykes of varying ages and widespread, discordant breccia bodies (Wernecke Breccias), which comprise about 3 to 5% of the rocks in each window (Delaney, 1981). The Lower Proterozoic windows are surrounded by Middle Proterozoic to Paleozoic platform carbonates and shales. Recent mapping and age determinations suggest that the Proterozoic sedimentary rocks are about 1850 to 1750 million years old and that the Wernecke Breccias were formed about 1600 Ma (Thorkelson, et al., 2001a). These ages closely resemble those of similar units in Australia, which has led to speculation that Laurentia (proto North America) and Australia were once joined and that the breccia bodies were formed during initial rifting (Bell and Jefferson, 1987 and Thorkelson, et al., 2001a). The various intrusive dyke sets in the Wernecke Mountains have been dated at 1710, 1380, 1270 and 613 Ma (Thorkelson, et al., 2001b and Delaney, 1981).

The Wernecke Breccias have attracted considerable academic and economic interest because of their abundance, size and characteristic mineralogy, which in many respects resemble those in similar age breccia bodies found in Australia (Hitzman, et al., 1992). The Wernecke Breccias are closely related to large scale faults. They vary from irregularly shaped pipes up to 5000 m in diameter to tabular bodies a few metres wide. Their composition typically ranges from: clast supported phases dominantly comprised of angular homolithic clasts; through matrix supported phases with subangular to rounded, variously altered clasts; and, to occasional clast deficient phases that are thought to have been channelways with high fluid flow. The breccia clasts are usually derived from adjacent sedimentary units but also include rare intrusive fragments. Up to 100 m diameter blocks of unbrecciated sediment occur in some breccia bodies. Dolomite, ankerite, sericite, hematite and chlorite are the most abundant matrix materials but albite, potassium feldspar, calcite, magnetite, barite, siderite, quartz, pyrite and chalcopyrite are also common. The size of the breccia bodies and intensity of alteration generally increases with depth.

The sedimentary rocks typically exhibit greenschist facies regional metamorphism and were affected by the Racklan, Corn Creek and Laramide Orogenies. Several generations of faults are present, many of which are associated with a very old set of westerly, northwesterly and northerly trending structures called the Richardson Fault Array (Delaney, 1981). Some researchers have suggested that faults played important roles in breccia formation (Delaney, 1981 and Bell, 1986). However, many of the structures are clearly much younger or reactivated later because they juxtapose Proterozoic and Paleozoic units.

Table I briefly describes the major lithological units in vicinity of the property.

Table I - Regional Lithological Descriptions

Age	Description
Quaternary	Alluvium, colluvium and glacial deposits.
Cretaceous	Continental clastic sediments including shale, conglomerate and coal measures.
Upper Paleozoic-Proterozoic	Marine sediments including carbonate, arenite, pebble conglomerate, siltstone and shale.
Middle Proterozoic	Wernecke Breccia – discordant hematitic breccia largely comprised of variably metasomatized country rock fragments. Contacts can be sharp or gradational. Breccias can include three gradational phases – homoclastic, heteroclastic or clast deficient. Homoclastic breccias consist of angular, lithologically similar fragments with minor carbonate and hematite-rich matrix. Heteroclastic breccias consist of rounded, lithologically diverse fragments supported by a more complex matrix commonly containing carbonate, hematite, magnetite, chlorite, pyrite, chalcopyrite and/or barite. Clast deficient breccias are found in late tabular zones or pipes and are comprised of typical heteroclastic matrix minerals with only a few small wallrock fragments.
Lower Proterozoic	Wernecke Supergroup – a conformable marine sequence approximately 13 km thick consisting of basal Fairchild Lake Group, middle Quartet Group and upper Gillespie Lake Group. Fairchild Lake Group is predominantly siltstone and limy siltstone with minor slate and dolostone. Quartet Group is deeper water shale, siltstone and very fine sandstone. Gillespie Lake Group is dolostone and silty dolostone with minor shale and siltstone.

REGIONAL MINERALIZATION

The Wernecke Breccias are notably enriched in iron, copper, uranium, gold, cobalt, barium and molybdenum and slightly enriched in rare earth elements. Iron oxide mineralization is ubiquitous in the Wernecke Breccias. Magnetite is most abundant in prograding alteration sequences. It normally occurs as disseminated euhedral grains but locally forms semi massive

bands up to 5 m thick. Hematite is found in all breccia phases but is best developed in retrograde alteration assemblages where it appears as specular hematite and as martite replacing magnetite.

Pyrite can occur with the iron oxide minerals but becomes more abundant deeper in the system, particularly within breccia bodies cutting Fairchild Lake Group strata. Iron bearing carbonate minerals such as ferroan dolomite and siderite are also common.

Copper is present in most Wernecke Breccias. Disseminated chalcopyrite is found in breccias cutting Fairchild Lake Group rocks, where it is associated with intense albite alteration, and in those cutting Quartet Group rocks, where it is found in strongly carbonate altered zones. Semi massive chalcopyrite occurs with breccia matrix minerals in late stage channelways within some breccia bodies. Quartz-carbonate veins are reported within the Fairchild Lake Group, Quartet Group and Gillespie Lake Group. These veins often contain chalcopyrite and pyrite. Other copper minerals (chalcocite, bornite and copper carbonate minerals) have been reported in weathered rocks but no significant supergene enrichment has been identified.

Uranium occurs in three main forms in the Wernecke Mountains. Brannerite appears as scattered blebs within most Wernecke Breccias and in quartz veins and fractures peripheral to them. Although pockets of coarse crystals up to 40 cm across have been discovered, no economically significant brannerite occurrence has been identified. Pitchblende is the main uranium mineral in the other two types of showings: (1) uraniferous carbonate-chalcopyrite-barite-magnetite assemblages within late stage channelways in Wernecke Breccias (Hitzman, 1990 and Eaton and Archer, 1982) and (2) much younger structurally controlled uraniferous veins immediately below major unconformities (Eaton and Archer, 1982).

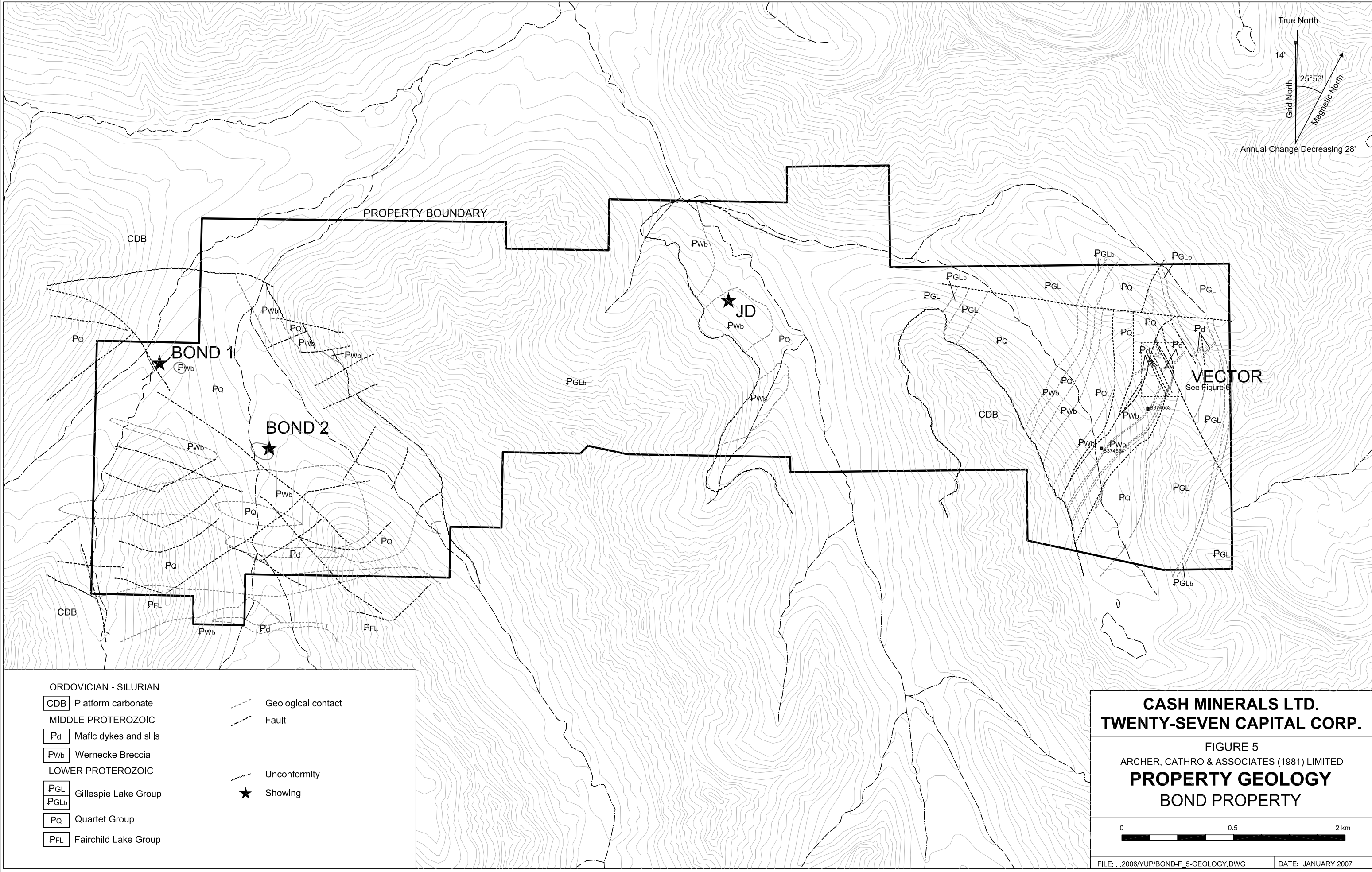
PROPERTY GEOLOGY

The Bond property is largely underlain by Lower Proterozoic age rocks, which include sediments of the Wernecke Supergroup, discordant bodies belonging to the Wernecke Breccias and mafic dykes and sills of uncertain age. These rocks are exposed in the western and eastern portions of the property on the Bond and Vector claims, respectively. Elsewhere, the Lower Proterozoic rocks are overlain by Paleozoic platform carbonates (Figure 5).

West Bond

The western portion of the Bond claims covers part of a 7 km long, up to 3 km wide window of Lower Proterozoic age rocks, which is elongated along the crest of an open, east trending anticline that also affects overlying Paleozoic strata (Figure 5). Proterozoic rocks include sediments of the Wernecke Supergroup, discordant bodies belonging to the Wernecke Breccias and mafic dykes and sills. The Wernecke Supergroup rocks are strongly deformed and are separated from surrounding relatively undeformed Ordovician-Silurian carbonates by an angular unconformity marked by a thin regolith and discontinuous basal conglomerate.

The stratigraphic section of the Wernecke Supergroup within the erosional window includes units from both the Fairchild Lake Group and the Quartet Group. Bedding consistently strikes easterly and is tightly folded. The oldest strata outcrop south of the property and there is a



general younging toward the north. The Proterozoic units on and directly adjacent to the claims are described in the following paragraphs from oldest to youngest.

Fairchild Lake Group consists of slate and carbonate units. The basal slate unit includes a sequence of spotted green phyllites interbedded with siltstones and purple arenites that is overlain by a monotonous sequence of green slates, siltstones and arenites. The carbonate unit is composed of thin bedded dolomites, calc-arenites and quartzites that exhibit differential weathering which causes distinctive banding and highlights sedimentary structures, including cross laminations, flute and groove casts, rip-up clasts and flame structures.

Quartet Group underlies most of the property. It consists of interbedded black argillites, slates, and quartzites plus a thin but laterally extensive sequence of red quartzites interbedded with buff to white shales.

Wernecke Breccias form several bodies ranging up to 2 km long and 800 m wide, which are elongated parallel to the plane of minimum stress for the major phase of deformation. Penetrative cleavage is developed in some bodies and is highlighted by weathering which imparts a foliated appearance to the rock that is not present in fresh specimens or in talus derived from breccias which do not show cleavage. The breccias are predominantly heteroclastic containing wallrock fragments that exhibit a variety of alterations including bleaching, carbonatization, albitization and hematization. Matrix normally makes up 15 to 25% of the breccia and consists of finely comminuted, poorly sorted fragments which are often intensely chloritized and carbonatized. In many areas the chlorite is replaced by hematite. Although hematite rarely exceeds 30% of the matrix, massive pods up to 5 m thick occur on the margins of two breccia bodies.

Mafic dykes and sills are most common south of the property alongside a large breccia body. They are propylitized diabase characterized by relict ophitic textures in chloritized ferromagnetic minerals. No age dating has been done on any of the mafic intrusions.

Four phases of deformation have been identified on the Bond claims. Of these, three involved only the Proterozoic rocks while the fourth affected the entire stratigraphic section. The earliest deformation is almost completely obscured by subsequent events and evidence for it is restricted to lineations on later cleavage planes. The second and dominant deformation consists of a series of tight, east-northeast trending folds that have frequencies of 25 to 100 m and are often overturned toward the south. Strong penetrative axial cleavage associated with these structures is well developed in most Proterozoic strata and some breccia bodies. Evidence for the third deformation event consists of small chevron folds observed on the main slaty cleavage. These folds have northeast striking, subhorizontal axial planes. The last deformation took place during the Cretaceous Laramide Orogeny and consists of broad, east- to southeast-trending open folds. No cleavage is associated with these structures; however, they did cause flexure in the older fold axes which is marked by a general swing toward the southeast.

Three main fault sets are recognized on the Bond claims. The oldest faults are poorly defined, north trending, steeply dipping structures, which coincide with some stream beds and truncate Proterozoic strata and intrusions. The second set consists of southeastern trending, steeply

dipping structures that do not cut the Paleozoic unconformity. Most faults on the property belong to the youngest system, a conjugate set of east trending, normal faults which dip to the north or south at angles of 55° and greater (Eaton and Archer, 1981).

East Bond, Plus, Vic and Vector

The eastern part of the property exhibits Quartet Group rocks which are surrounded by Gillespie Lake Group sediments on all sides except where Paleozoic carbonates cover the Proterozoic rocks. Wernecke Breccias form several elongated bodies within the Quartet Group rocks. Near the Vector Showing the breccia bodies are associated with a northeast trending corridor coincident with a major shear zone. Along this shear zone, breccias show high strain including intense flattening and stretching of the clasts (Baudemont, 2006). The conjugate north-northwest (dextral) and north-northeast (sinistral) trending faults post-date formation of the breccias (Figure 6).

PROPERTY MINERALIZATION AND GEOCHEMISTRY

Three main areas of interest have been identified on the property by past work. These are the Bond, JD and Vector (Figure 5). Prior to 2006, only the showings located on the Bond claims received any diamond drilling.

Bond

Two main showings, Bond 1 and Bond 2, and several smaller areas of radioactive float have been discovered in the western part of the Bond claims (Figure 5).

Bond 1 is exposed on the banks of a creek that has cut through about 3 m of glacial till and another 3 m of bedrock. The mineralization occurs in a quartz-barite-carbonate vein which occupies one of a series of easterly striking, near vertically dipping faults that cut Quartet Group strata. A northerly trending fault, coinciding with the creek bed, has produced about 15 m of sinistral offset on the vein. Mineralization consists of disseminated pitchblende and secondary uranium oxides with minor chalcopyrite and pyrite. A chip sample from a hand trench dug across the vein returned a weighted average of 0.092% U_3O_8 across a true width of 3 m. A 1976 diamond drill hole explored beneath the surface showing. It intersected weak radioactivity at a fault contact. Two holes drilled in 2005 encountered only background radioactivity.

Bond 2 is better exposed and more thoroughly explored. It is located 1150 m southeast of Bond 1 and consists of several radioactive lenses in a 30 by 45 m area of frost-broken Wernecke Breccia and Quartet Group slates, which are surrounded by glacial till and creek gravels. Uranium mineralization at surface is altered to a yellow-green secondary oxide identified by the Geological Survey of Canada as iriginite, a hydrated uranium-molybdenum mineral, which occurs in fractures related to cleavage. A chip sample across the widest radioactive lens averaged 0.098% U_3O_8 over 6.4 m.

A total of 18 diamond drill holes totalling 431.3 m were completed at Bond 2 by Eldorado Nuclear in 1976 and 1977. The holes were drilled on three north-south lines spaced

approximately 45 m apart with the middle line bisecting the radioactive exposure. Holes on the western and middle lines intersected breccia hosting north dipping zones which contain pitchblende with minor amounts of pyrite, chalcopyrite and magnetite. The eastern line encountered breccia containing minor sulphide minerals and magnetite, but no uranium mineralization. The five drill holes on the western and central section lines produced a total of eight intersections grading better than 0.06% U_3O_8 over widths of 0.7 to 11.06 m. Two of the five holes stopped in mineralized breccia. Intersections represent 16.7% of the metres drilled in the five holes and have a weighted average grade of 0.076% U_3O_8 .

Five diamond drill holes (576.96 m) tested downdip and along strike of the mineralization at the Bond 2 Showing in 2005 (Dumala, 2005). Drilling returned background to moderately radioactive results. The highest uranium assay (0.121% U_3O_8 over 1.60 m) came from hole B05-3 and is a part of an interval grading 0.022% U_3O_8 over 17.12 m. The highest copper assay (0.72% over 2.12 m) came from hole B05-5 and is a part of an interval grading 0.067% U_3O_8 and 0.37% copper over 7.44 m. Together these intervals define a weakly mineralized zone with an apparent northerly dip of 40°. A similar trend is seen when other mineralized drill intervals are connected to radioactive outcrops, suggesting that the mineralization is contained within two or more, shallowly north dipping zones.

No trenching or diamond drilling has tested other zones of radioactive float scattered across the western Bond claims. Much of the material in these zones resembles mineralization at the Bond 2 Showing. In addition, isolated blebs of brannerite have been discovered in several areas.

Other mineralization at the property includes hematite, magnetite, barite, pyrite and chalcopyrite. Hematite usually appears as specular hematite in the matrix of breccia bodies where it comprises 3 to 7% of the rock. It also forms massive pods up to 5 m across, at the margins of two breccia bodies. Magnetite occurs as euhedral crystals in the prograding carbonate alteration phase of some breccia bodies and in carbonate-barite veins cutting wallrocks. It is not as common as hematite. Barite occurs with carbonate, magnetite, sulphide minerals and uranium in prograding alteration assemblages in breccia bodies. It also occurs in carbonate veins cutting wallrocks and occasionally forms massive veins up to 1 m wide. Chalcopyrite and pyrite are locally associated with uranium in some carbonate rich veins and breccia alteration zones. They also occur in pods along the unconformity separating the Proterozoic rocks from the overlying Paleozoic strata and in quartz veins cutting Proterozoic rocks.

JD

Up to 1 m wide quartz-carbonate-hematite veins containing lenses of bornite up to 20 cm in diameter were discovered by WJV in 1975. Samples taken from the initial showing assayed up to 62.4% copper. Work in 1994 and 1995 by Expatriate Resources identified two types of mineralization 1) quartz-hematite-bornite veins in Quartet Group sediments; and 2) hematite-magnetite-chalcopyrite-bornite disseminations and fracture fillings in Wernecke Breccias.

The veins are irregular and discontinuous, occurring in weakly to moderately altered Proterozoic sediments and occasionally Wernecke Breccias. Although most veins strike from 108 to 130° and dip from 48 to 89° southwest, a few dip steeply to the northeast. Mineralization typically

consists of hematite, bornite and minor chalcopyrite. Bornite occurs as irregularly distributed pods and lenses, while chalcopyrite forms disseminated grains within quartz and bornite lenses (Becker, 1996). No systematic mapping or sampling has been done at the JD Showing.

Vector

The Vector Showing was originally discovered by WJV in 1975 while conducting regional airborne radiometric surveys and staked as the Bozo claims. Later that year mapping, grid soil sampling, radiometric surveys and chip channel sampling were conducted over a strong gossan bisected by a shallow creek canyon. Assays from this work returned up to 73 ppm uranium and 2080 ppm copper.

Mapping done for Cash Minerals in 2001 identified four en echelon, steeply dipping barite lenses within a 170 by 300 m area. They range from 30 to 100 m in length and typically vary from 2 to 6 m in width, locally widening to 13 m. Two composite samples taken from bedrock and talus across the largest lenses assayed 91.5% and 93.1% barite (Wengzynowski, 2002).

Mapping and prospecting in 2006 in the vicinity of the gossan on the Vector claims identified a 30 by 50 m radioactive zone reading greater than 400 cps and a maximum reading of 3500 cps (Baudemont, 2006). Mineralization lies within a broad shear corridor and appears to be localized at the intersection of north-northwest and north-northeast trending faults. A chip sample collected from this area returned 0.061% U_3O_8 over 1.0 m and a grab sample returned 0.020% U_3O_8 . Samples of Wernecke Breccia collected within the shear corridor 500 m and 900 m to the southwest assayed 0.217% U_3O_8 and 0.191% U_3O_8 , respectively.

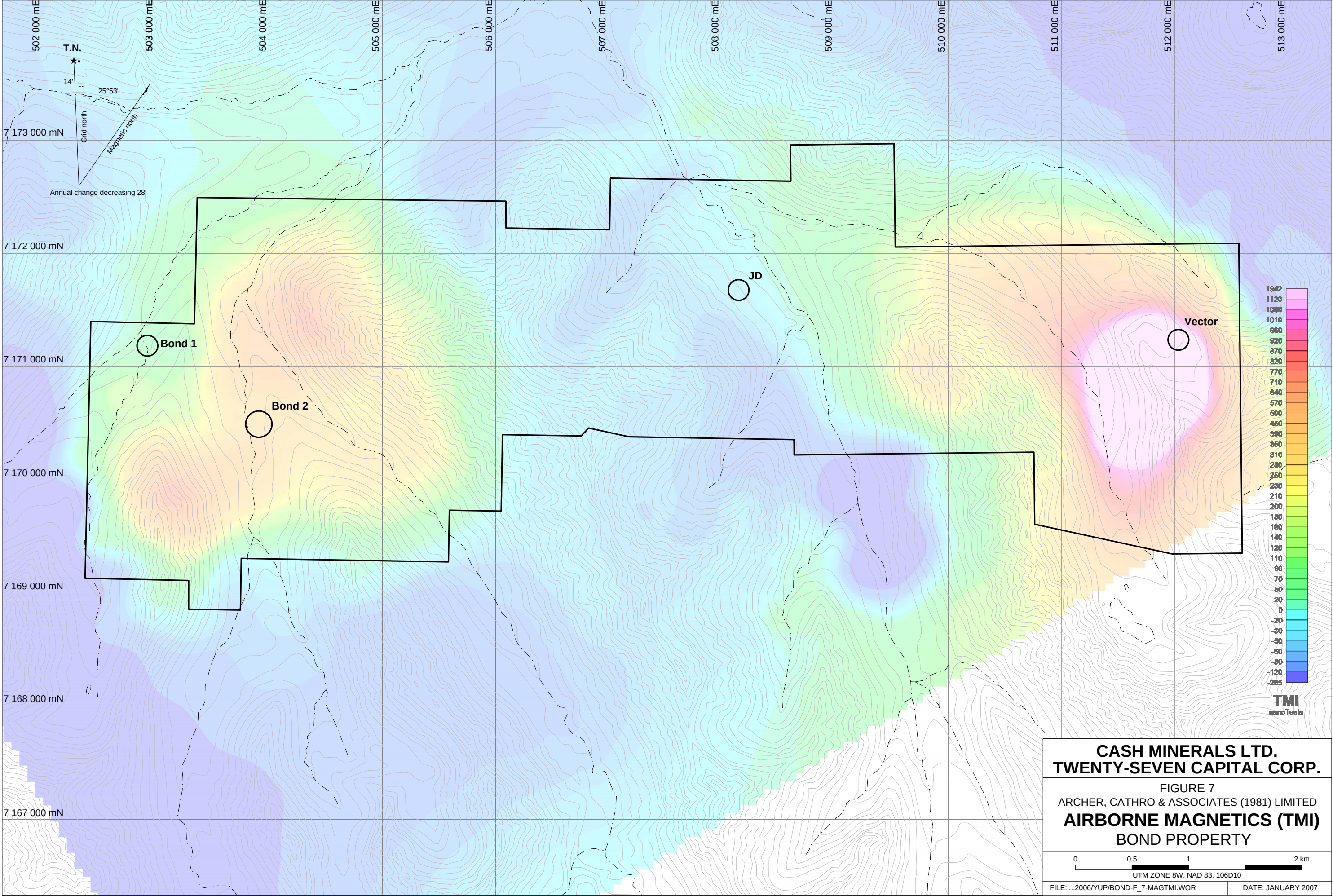
2006 GEOPHYSICAL SURVEYS

An airborne magnetic survey was conducted over the Bond property in spring 2006 by McPhar Geosurveys Ltd. of Newmarket, Ontario using a Piper Navajo based in Mayo. Excerpts from the McPhar report outlining the methods used in the survey can be found in Appendix II. Results are briefly summarized in the following paragraph.

The Bond claims are centred over a magnetic high (Figure 7) that extends east under carbonate cover rocks. A much stronger anomaly is located at the Vector Showing. The main body of this anomaly is elongated along a northwest trend. The strongest portion has an elliptical shape that is elongated to the north-northeast.

A three line ground gravity survey was completed in the vicinity of the Vector Showing by Aurora Geosciences Ltd. of Whitehorse from a camp at the Igor property in early August. Excerpts from the final report outlining the methods used in this survey can also be found in Appendix II. This survey outlined a northeast trending gravity high, which is strongest in the 2006 drill area (Figure 8).

An airborne radiometric survey was completed by McPhar using an AStar B2 helicopter based at the Lumina camp in early September. Excerpts from the final report outlining the methods used

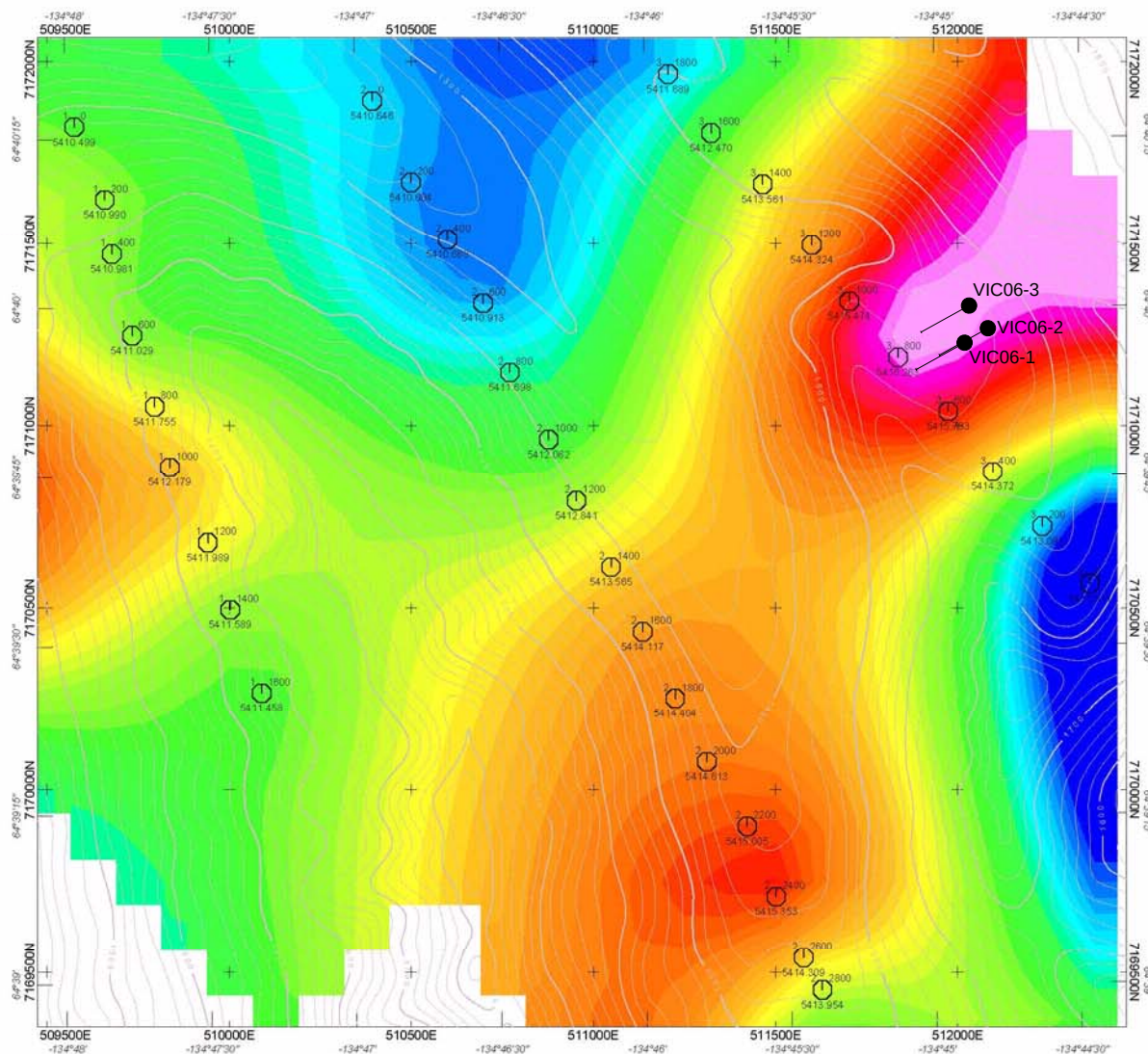


**CASH MINERALS LTD.
TWENTY-SEVEN CAPITAL CORP.**

FIGURE 7
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
AIRBORNE MAGNETICS (TMI)
BOND PROPERTY

0 0.5 1 2 km
UTM ZONE 8W, NAD 83, 106D10

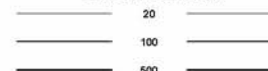
FILE: ...2006/YUP/BOND-F_7-MAGTMI.WOR DATE: JANUARY 2007



LEGEND

ELEVATION (MSL)

CONTOUR INTERVALS (m)



INSTRUMENT - GRAVITY : Scintrex CG-6

INSTRUMENT - GPS : Top Con RTK & POSTPROCESSING

GRIDDING ALGORITHM : MINIMUM CURVATURE

GRID CELL SIZE : 125 m

OPERATOR : JZ

DATA FILE : VIC 2006 GRAVITY.GDB

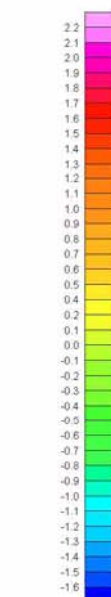
STATIONS SURVEYED THIS SHEET : 34

CORRECTIONS AND PROCESSING APPLIED :

1. Drift
2. Latitude
3. Free Air (datum = MSL)
4. Bouguer Slab (2.67 g/cm³)
5. Bullard-B (2.67 g/cm³)
6. Near Station Terrain (measured elevations < 20 m)
7. Far Station Terrain - 1 (20 m DEM from 20m-3000m)
8. Far Station Terrain - 2 (1000 m DEM from 3km-100km)
9. Trend removal (1000 m upward continued grid)

Line Station

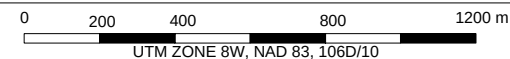
Bouguer Anomaly (mGal)



Bouguer Anomaly
(mGal)

**CASH MINERALS LTD.
TWENTY-SEVEN CAPITAL CORP.**

FIGURE 8
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
**GROUND GRAVITY
VECTOR**
BOND PROPERTY



FILE: ...2006/YUP/BOND-F_8-GRAV.WOR

DATE: JANUARY 2007

in this survey can also be found in Appendix II. Figure 9 shows the apparent uranium concentration over the Bond property.

Airborne radiometrics outlined several anomalies at the Bond property. Strong highs are located at the Bond 1 and 2 Showings. Anomalies with a similar magnitude are located near the Vector Showing and in an area about 1 km southwest of the Bond 2 Showing. Carbonate cover rocks are clearly outlined by the survey as areas of low radiometric background.

2006 DIAMOND DRILLING

General

Drilling was done between September 24 and October 7 by Coretech Diamond Drilling Inc. of Penticton. The work was completed with a Mandrill 1200 hydrostatic drill using BTW equipment. Three holes totalling 652.06 m were completed from hand made drill pads, as illustrated on Figure 6.

The core was flown from the drill site to a logging area at the Steel property, where recovery was measured, geological and geotechnical logging were performed and splitting was done. Geologically and mineralogically favourable intervals from each hole were split with one-half bagged and sent for analysis, and the other half returned to the core box. The core boxes are stored at the Steel property. Appendix III contains the geological and geotechnical logs.

Core samples were flown from the Steel property to Mayo, then transported to Whitehorse by truck escorted by a representative of Archer Cathro. From Whitehorse the samples were shipped by Greyhound Courier Express to ALS Chemex in North Vancouver, B.C. Core samples were dried and crushed to 70% minus 2 mm, before a 250 g split was taken and pulverized to better than 85% minus 75 microns. A split of the pulverized fraction was dissolved in aqua regia and analyzed for 34 elements using the inductively coupled plasma technique (ME-ICP41). Certificates of Analysis are in Appendix IV.

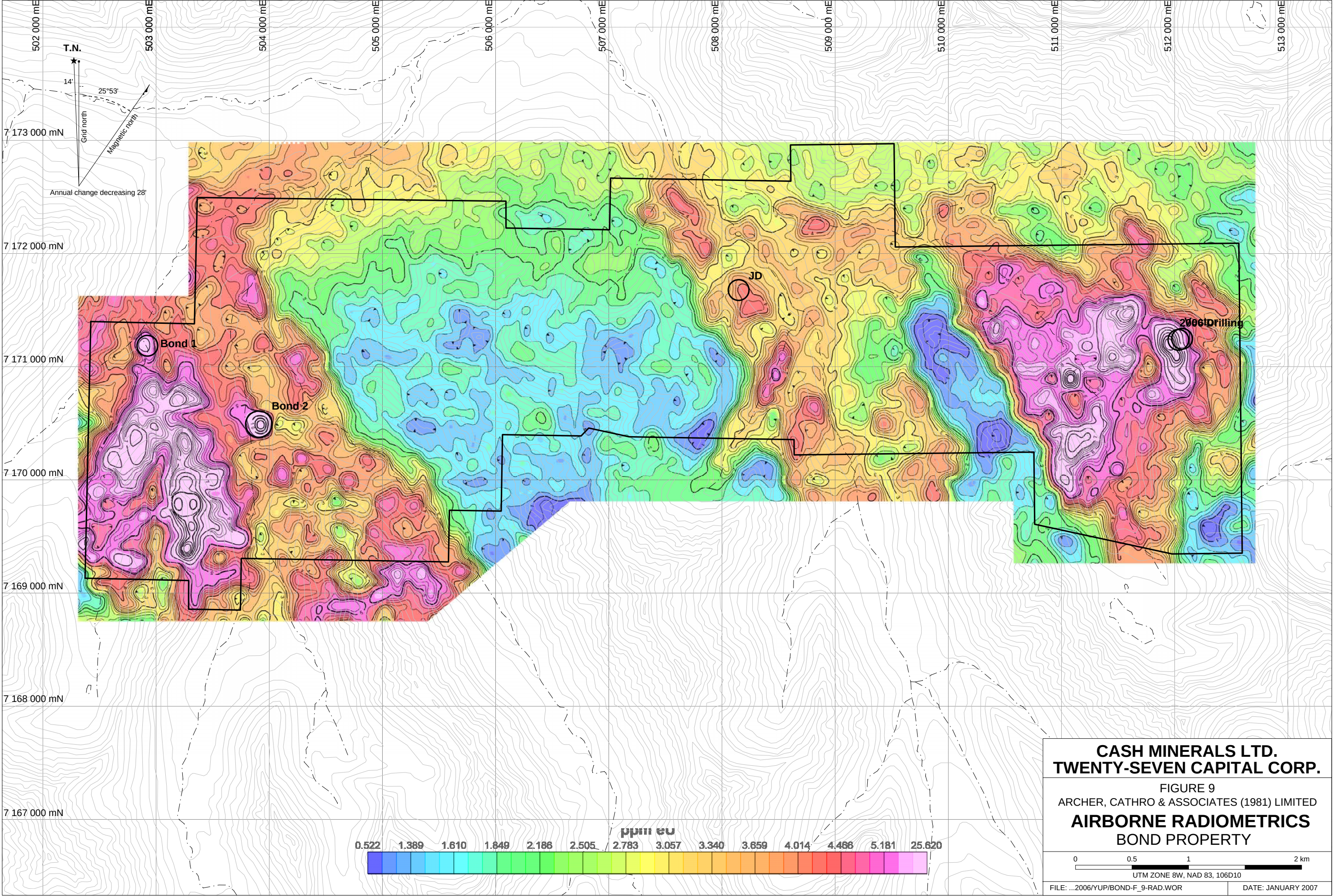
The three holes drilled at the Bond property in 2006 tested beneath the strong gossan exposed along the main creek at the Vector Showing (Figure 6). Drill hole data are listed in Table II.

Table II - Drill Hole Data

Hole	Easting	Northing	Elevation	Azimuth	Angle	Depth (m)
VIC06-1	512020	7171227	1568	241°	-45°	182.65
VIC06-2	512084	7171267	1570	241°	-45°	235.92
VIC06-3	512032	7171329	1565	241°	-45°	233.49

Results

Hole VIC06-1 intersected strongly foliated Wernecke Breccia. Near the top of the hole, the breccia matrix contained abundant pyrite with traces of chalcopyrite. The pyritic breccia averaged 0.014% U₃O₈ over 18.36 m.



Hole VIC06-2 was collared about 60 m behind VIC06-1 and intersected interbedded siltstone and quartzite before entering Wernecke Breccia. Pyritic breccia similar to that in VIC06-1 was intersected near the contact between Wernecke Breccia and quartzite. This intersection averaged 0.012% U_3O_8 over 10.04 m. Several narrow barite veins were also intersected within the Wernecke Breccia.

Hole VIC06-3 is located about 80 m along strike to the north of VIC06-2. It intersected interbedded siltstone and quartzite above Wernecke Breccia. In this hole the breccia contained only minor pyrite. The best interval returned 0.009% U_3O_8 over 1.70 m. A 1.72 m barite vein was intersected within the Wernecke Breccia toward the bottom of this hole.

DISCUSSION AND CONCLUSIONS

Mapping and prospecting at the Vector Showing identified a favourable northeast trending structural corridor, which partially corresponds to one of the many radiometric anomalies outlined by airborne surveys within Lower Proterozoic rocks on the Bond property. Radioactive rock specimens collected within this corridor assayed between 0.020% and 0.217% U_3O_8 .

Diamond drilling within the favourable structural corridor intersected radioactive intervals in holes VIC06-1 and VIC06-2. Together these form a zone that projects to surface near the main radioactive outcrop. This zone has an apparent -55° northeast dip in the drill section.

Breccia intersected at the Vector Showing is highly strained and is very similar to breccia seen at the Bond 2 Showing. It is possible that the Bond 2 Showing lies on an unmapped extension of the structural corridor identified at the Vector Showing.

The radiometric anomalies in various parts of the Bond property should be followed up with detailed mapping and prospecting. Detailed mapping and sampling should also be done to explore copper potential at the JD Showing. Further diamond drilling should attempt to delineate the radioactive zones at the Vector and Bond 2 Showings and should also test the most prospective targets outlined by follow up of the airborne radiometric anomalies.

Respectfully submitted,

Archer, Cathro & Associates (1981) Limited



Matthew R. Dumala, B.A.Sc., EIT

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APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Matthew R. Dumala, geological engineer, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory and residential address in Vancouver, British Columbia, do hereby certify that:

1. I graduated from the University of British Columbia in 2002 with a B.A.Sc in Geological Engineering, Option I, mineral and fuel exploration.
2. I am registered as an Engineer in Training in the Province of British Columbia.
3. From 2003 to present, I have been actively engaged in mineral exploration in the Yukon Territory.
4. I have personally participated in the fieldwork reported herein.



Matthew R. Dumala, B.A.Sc., EIT

APPENDIX II
GEOPHYSICAL SURVEYS

SUMMARY

McPhar Geosurveys Ltd conducted an airborne geophysical survey on the Wernecke Mountain Properties, Yukon, on behalf of Archer, Cathro and Associates, Vancouver, BC.

The project areas were located approximately 180 km northeast of the town 'Mayo' and was flown using a helicopter equipped with a high-resolution radiometric system.

The McPhar crew was in the Lumina camp survey area on August 31, 2006. Instrument calibration flights for spectrometer cosmic stripping coefficients, background effect and radar altimeter calibration (radar stack) were completed on September, 01, 2006, as well as the first two production flights. A total of 1,748 line-kilometres or 179 square kilometres were flown. The survey area was flown with a mean terrain clearance of 50 metres. Flight lines were flown at 90° with spacing of 100 metres.

1. INTRODUCTION

A detailed high-resolution helicopter-borne radiometric survey was conducted during the period between August 31, 2006 to September 15, 2006 on behalf of Archer, Cathro & Associates (1981) Limited, ("Archer") by McPhar Geosurveys Ltd, ("McPhar"), over a portion of the Wernecke Mountains, Yukon.

The purpose of the survey was to acquire high-resolution geophysical data to map the geophysical characteristics of the geology and structure in an effort to provide an insight into geological and geophysical settings.

The geophysical system was mounted in the cabin of a Eurocopter AS-350B2 helicopter. Data acquisition utilized precision differential GPS positioning and a Pico-Envirotec GRS-410 multi-channel gamma-ray spectrometer. This instrument has a 16.8 litres "downward looking" NaI sensor mounted in the cabin inside the side of the helicopter. Ancillary equipment included a differential GPS navigation and positioning system, barometric pressure transducer, temperature and relative humidity probe and a radar altimeter.

Originally the survey area comprised of four separate blocks in the contract. The area known as 'Pay' was unable to be completed due to the presence of substantial snow. So three survey blocks were completed known as "Lumina", "Bonnie/Coma" and "Bond/Vic". The survey lines were flown in an east-west direction (90°) at spacing of 100 metres. The survey comprised a total of 1,748 line kilometres of data acquisition.

Table 1: Survey Areas Description

AREA NAME	APPROX AREA KM ²	LINE SPACING	FLIGHT LINE-KM	PRIMARY FLIGHT DIRECTIONS
Lumina	123	100m	1,178	090°
Bonnie/Coma	19	100m	194	090°
Bond/Vic	37	100m	376	090°
Totals	179		1,748	

Mobilization of the helicopter, equipment and personnel to Whitehorse, Yukon was completed on August, 2006 and final settlement in the Archer, Cathro 'Lumina' camp occurred on August 31, 2006, when fuel and accommodations were established. Pre-survey test and calibration flights for spectrometer cosmic stripping coefficients, aircraft background and for radar altimeter calibration (radar stack) were completed August 11, 2006. The final survey flight was completed on Sept 15, 2006.

Final data processing, map compilation and a report were completed by McPhar at its Newmarket, Ontario office.

2. SURVEY AREAS

The survey consisted of 3 irregular shaped blocks, identified by Archer, Cathro as 'Lumina', 'Bonnie/Coma' and 'Bond/Vic'. These blocks are situated 30 km southeast of Copper point camp and approximately 180 km northeast of the town of Mayo. The primary objective of the survey was to acquire geophysical data in support of uranium exploration.

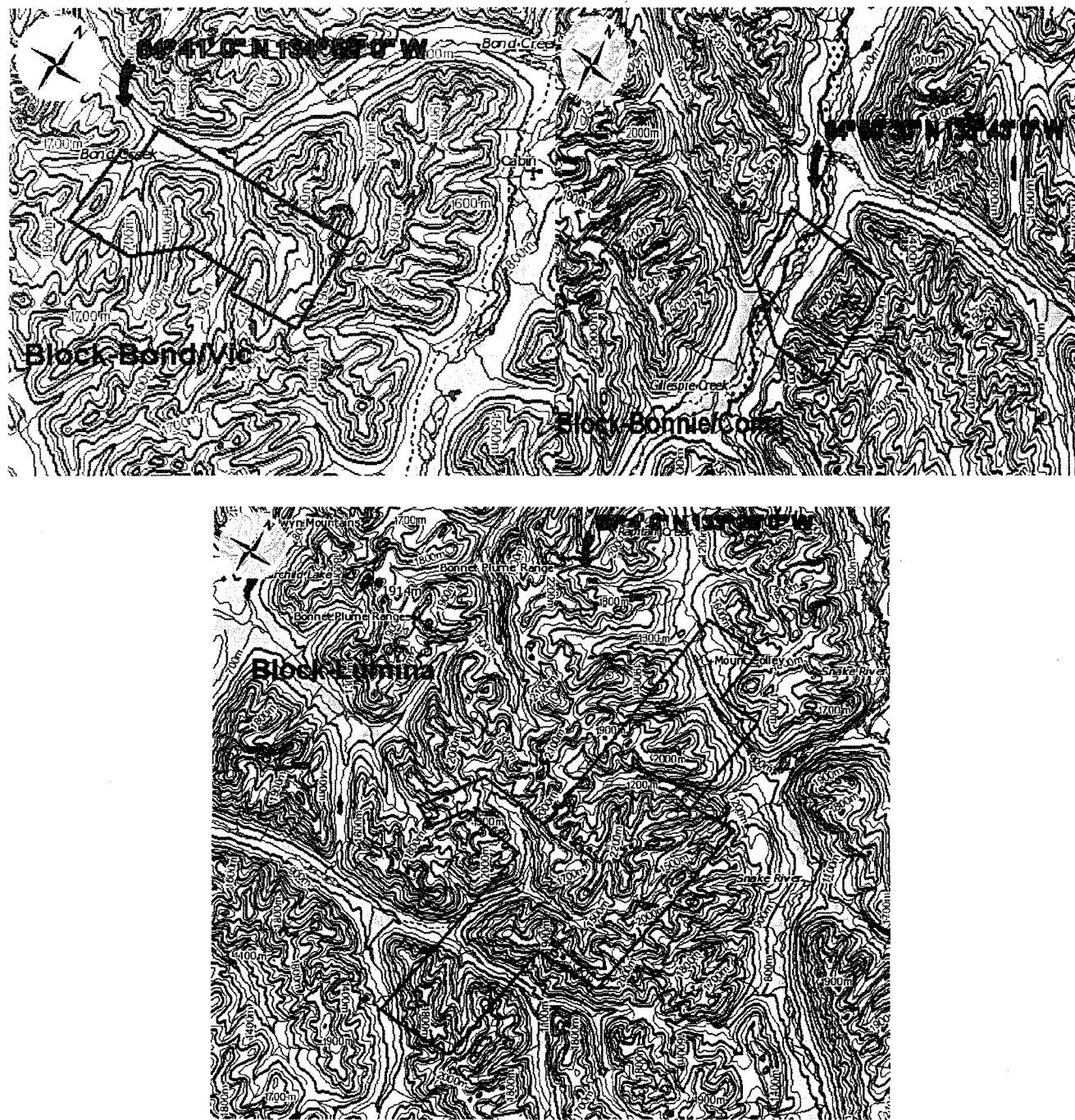


Figure 1: Location of the flown radiometric survey blocks, Yukon.



Figure 2: Typical survey topography, Yukon.

The elevation ranged from approximately 915 metres to over 2400 metres above sea level. Weather conditions were generally favourable, however some 'standby' days were incurred where survey flying was impossible as fog, rain and low ceiling prevailed. Temperatures varied from 5 to 18 degrees Celsius.

Archer, Cathro provided the survey block corner coordinates, in easting and northing. Projections were converted to WGS84, UTM zone 08 N. The geographic location and corner coordinates follows.

Table 2: Survey Area Coordinates

Lumina		Bond/Vic		Bonnie/Coma	
X	Y	X	Y	X	Y
578935	7215310	512710	7172985	561221	7190665
578935	7203885	503290	7172985	565300	7190665
575135	7203885	503290	7171625	565300	7185350
572540	7200675	502315	7171625	563320	7185350
573295	7200030	502315	7168725	561469	7187210
574960	7201970	505372	7168725	561221	7190665
578935	7201970	506658	7169810		
578935	7191500	510575	7169810		
582330	7191500	510575	7169260		
582325	7200620	512710	7169260		
586070	7200620	512710	7172985		
586070	7207230				
584070	7207230				
584070	7211750				
582065	7211750				
582065	7215310				
578935	7215310				

3. SURVEY OPERATIONS

3.1 Operations Base

Survey operations were based from the Archer, Cathro camp inside the 'Lumina' survey block, with daily pre/post flight calibrations performed at the cleared helipad, located adjacent to the camp and the dirt airstrip.



Figure 3: The Lumina camp at survey area.

All quality control and preliminary data processing were performed at the camp.

3.2 Survey Conditions

Of the time spent at the Lumina camp, weather prevented survey production on two occasions. Fog and rain nestled inside the hills surrounding the camp and completely capped the peaks of the survey blocks in the area. When weather conditions were fair, production was obtained. The average temperature over the course of the survey was approximately 11°C.

The topography of the survey area is rugged, consisting of steep mountain slopes and incised river valleys. The presence of snow in the hills of the 'Pay' survey block prevented it from being flown. Of the original 1,885 km scheduled, this area represented 77 km. Also 14 lines of the 'Lumina' block were omitted for being 'too densely snow covered'.

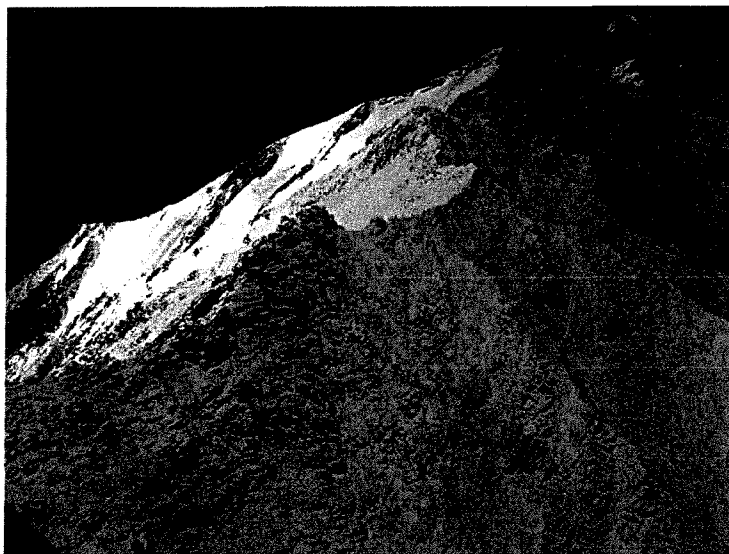


Figure 4: Snow covered conditions of survey block 'Pay'

3.3 Navigation

An air speed of approximately 110 kilometres per hour was maintained during data acquisition. The sampling rate for the spectrometer, radar, barometric altimeters and GPS navigation/positioning system was one measurement every 1.0 second. This resulted in spectrometric spatial sampling and position fixes every 41 metres along the flight path.

Navigation was assisted by a GPS receiver system that reported real-time differentially corrected GPS co-ordinates in WGS-84 latitude and longitude, directing the pilot over a pre-programmed two-dimensional (2-D) survey grid. The x-y position and ellipsoidal altitude of the aircraft, as reported by the GPS system, was recorded together with the terrain clearance, as reported by the radar altimeter. The coordinates of the survey area were submitted as NAD83 then transformed into WGS84, UTM zone 08N coordinates for purposes of navigation.

Vertical navigation along flight lines was effectively controlled through the use of a radar altimeter. The optimum terrain clearance during normal survey flying was 50 metres for the helicopter. However, due to rugged terrain in some areas, and the pilot's judgment of safe flying conditions in these areas, these terrain clearances were not possible 100% of the time.

The final vertical and horizontal survey positions as obtained with onboard real time differentially corrected GPS had a precision of approximately +/- 1.5 metre.

3.4 Field Processing & Quality Control

The survey data was transferred to portable magnetic media on a flight-by-flight basis, and then copied to the field data processing workstation. In-field data processing included reduction of the data to GEOSOFT GDB database format and inspection of the data for adherence to contract specifications. Survey lines that exhibited excessive deviation or that were considered to be of inferior quality were designated to be reflight.

3.5 Survey Statistics and Project Diary

The survey was completed with a total of 30 flights; of which 29 were production flights. The first production flight was Flt# 02 on September 01, 2006, and the last production flight, Flt# 30 on September 15, 2006.

Table 3: Project Diary

Date	Flt #	Hours Flown	Line-Km Accepted	Comments
August 31	1	2.3		Crew mobilized by helicopter with equipment from Whitehorse to Lumina Camp.
September 01	2 & 3	3.9	115.3	Poor weather in the morning. Afternoon two production flights at Lumina block
September 02				Poor weather, standby day
September 03	4, 5 & 6	5.8	238.8	Three production flights at Lumina block
September 04	7	2.3	64.2	Poor weather in the morning, afternoon short production flight at Lumina block
September 05	8 & 9	4.7	158.6	Two production flights at Lumina block
September 06	10, 11, 12 & 13	7.7	259	Flt# 10 was Test and Calibration flight. Remaining three were production flights at Lumina block
September 07	14 & 15	4.5	58.8	Flt# 14 comprised production and reflight lines Flt# 15 contains partial reflight lines and Tests over Fairchild Lake
September 08				Helicopter maintenance
September 09	16	1.8	51.1	Switch the helicopter Short production flight at Bonnie/Coma block
September 10	17, 18 & 19	7.5	180.9	Three production flights at Lumina block
September 11				Poor weather, standby day
September 12	20, 21 & 22	7.1	205.5	Three production flights at Lumina and Bond/Vic blocks
September 13	23, 24, 25 & 26	8.3	277.2	Four production flights, finished the Bond/Vic block and started the Bonnie/Coma block
September 14	27, 28 & 29	7.6	253.6	Three production flights. Completed all blocks including reflight lines
September 15	30	3.1		Ferry to Mayo and then Whitehorse. Demobilization
Totals		66.6	1,863	

- Total are inclusive 115 line-kms of reflights

Table 4: Field Personnel

Title	Name	Days Onsite
Project Manager/QA/QC	Adam Barrett	16
Operator	Adam Barrett	16
Helicopter Pilots	Doug Hladun	16

McPhar Geosurveys Ltd. of Newmarket, Ontario, Canada, was responsible for the field operations, all geophysical matters and the overall coordination and management of the survey.

4. HELICOPTER AND EQUIPMENT

4.1 The Helicopters

The survey was flown using two Eurocopter AS-350B2 A-Star model helicopters, with Canadian registration C-GTNU & C-GTNT provided by TransNorth Helicopters, Yukon. These helicopters featured up to 2.5 hours flight duration with the geophysical system and a crew of 2 persons onboard.

McPhar personnel, at the TransNorth base in Whitehorse, Yukon, did the installation of the geophysical and ancillary equipment. Final adjustments, calibration and testing were completed prior to production survey flights originating at the Lumina base camp.

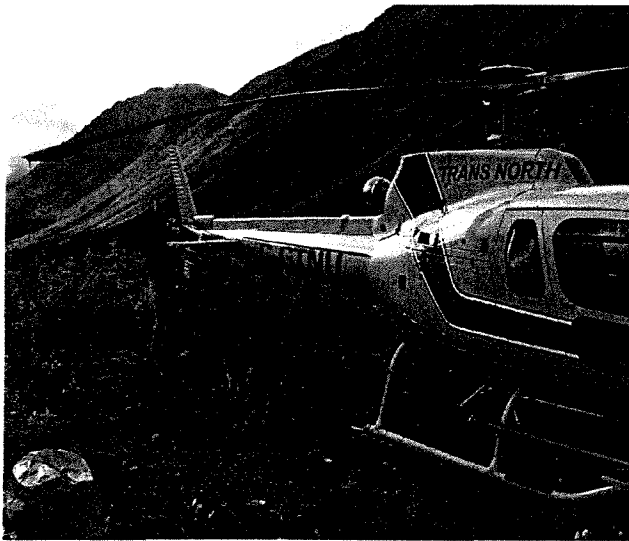


Figure 5: Helicopter C-GTNU fuelling at Lumina camp



Figure 6: Helicopter C-GTNT fuelling at Lumina camp

Table5: Survey Helicopters Specifications

Helicopter Model	Eurocopter AS-350 B2
Registration	C-GTNU
Engine	Turbomeca Arriel 1D1 - 732 shp
Gross Weight	4,991 lb
Empty Weight	2,561 lb
Useful Load	3,530 lb
Useful Fuel Capacity	143 gal /540 liters
Cargo-swing Load	2,557 lb / 1.160 kg
Typical Survey Speeds	45 – 60 knots/ 80 – 120 kph
Survey Fuel Consumption	47 gal/hour / 180 litres/hour
Flight Duration (no reserves)	3 hours
Cruise Speed - Ferry	122 knots
Cruise Range	371 nm / 688 km
Maximum Operating Altitude	18,700 ft / 5,700 m
H.I.G.E. (ISA)	13,450 ft / 4,100 m
H.O.G.E. (ISA)	11,300 ft / 3,450 m
Climb Performance	1,950 ft min / 594 m / min
Power Available for Equipment (28 VDC)	150 amps

4.2 The Survey Instrumentation

4.2.1 Survey System Overview

The equipment installed in the helicopter included:

- A Pico-Envirotec GRS-410 self-stabilizing multi-channel gamma-ray spectrometer with 16.8 litres “downward looking” NaI sensor.
- A navigation system, comprising an CSI Wireless DGPS-MAX and a Pico-Envirotec AGNAV GPS computer with pilot guidance unit (PGU)
- A SETRA model-276 digital barometric altimeter/pressure transducer
- A Campbell Scientific Model-CS500 Temperature and Relative Humidity Probe
- Pico-Envirotec AGIS Data Acquisition System
- A Terra TRA-3000/TRI-30 Radar Altimeter

The processing and base stations included:

- A Field Workstation, consisting of a portable Pentium PC, printer and full data processing software

4.2.2 Gamma-ray Spectrometer System

The gamma ray system included a Pico-Envirotec GRS-410 multi-channel gamma-ray spectrometer with 16.8 litres of “downward looking” NaI sensor with sampling rate of 1 measurement per second. The thermally insulated NaI crystal sensors were installed inside the cabin of the helicopter.

The GRS-410 is a 512 channel, self-stabilizing spectrometer that tracks and corrects for the spectral drift of the system by following a thorium spectral peak. Standard regions of interest for Total Count (TC), potassium (K), uranium (U), thorium (Th) and cosmic radiation were recorded for post survey processing. The averages recorded with window limits in MeV are shown in the following table:

Table 6: Standard Gamma-ray Spectrometer Data Acquisition Windows

Standard Gamma-ray Spectrometer Data Acquisition Windows		
Element	Lower Boundary (MeV)	Upper Boundary (MeV)
Total Count	0.41	2.81
Potassium	1.37	1.57
Uranium	1.66	1.86
Thorium	2.41	2.81
Cosmic	3.00	∞

Recommendations in the International Atomic Energy Agency – IAEA – TECDOC-1363 – *Guidelines for radioelement mapping using gamma ray spectrometry* were followed throughout the survey.

Gamma-ray spectrometer specifications are further described in Appendix 2.

4.2.3 Altimeter

A Terra TRA-3000/TRI-30 radar altimeter was used to record terrain clearance to an accuracy of about 1 ft (30 cm), over a range of 12 metres to 762 metres. The antenna was mounted beneath the bubble of the helicopter cockpit. The altimeter was interfaced to the data acquisition system with an output repetition rate of 0.1 second, and digitally recorded.

A Setra model 276 Barometric Altimeter was utilized to measure height above sea level and barometric pressure changes. The barometric pressure transducer was connected directly to the data acquisition system with an output repetition rate of 1 second, and digitally recorded. The barometric altimeter has a resolution of approximately 30 cm (1 ft) and an accuracy of +/-0.02% full scale at 70°F (19°C).

System specifications are further described in Appendix 2.

4.2.4 Outside Air Temperature System

A Campbell Scientific CS500 Temperature & Relative Humidity Probe was used to record outside air temperature and humidity. The probe was attached to a GRS-410 gamma ray sensor housing.

System specifications are further described in Appendix 2.

4.2.5 The GPS Satellite Navigation/Positioning System

A CSI-Wireless DGPS-MAX GPS receiver input to a Pico-Envirotec AGNAV navigation computer and pilot steering indicator (PGU) provided in-flight real-time navigation control. Mounted on top of the cockpit dashboard, in front of the pilot, it provided steering and cross-track guidance in conjunction with GPS and altimeter data.

This navigation system yielded a real-time positional accuracy of better than ± 2 metre.

Survey co-ordinates were set-up prior to commencement of the survey, the information fed into the airborne navigation system. The co-ordinate system employed in the survey design and digital recording was WGS-84 latitude and longitude. The real time differentially corrected GPS positional data was recorded at one-second intervals.

The GPS receiver is fully described in Appendix 2.

4.2.6 Data Acquisition/Recording System

A PC-based Pico-Envirotec AGIS data acquisition system was used to record the geophysical and ancillary survey data on an internal hard disk drive and comprised of a pilot guidance colour display. Data is displayed on an LCD screen as traces allowing the operator to monitor the integrity of the system. The system records temperature, barometric pressure and humidity by itself using

The Pico-Envirotec AGIS provides for the:

- System control and monitoring
- Data acquisition recording
- Real-time data processing
- Navigation processing, and
- Post flight data playback and analysis

All data collection routines, checking and verification, buffering and recording are software controlled for maximum flexibility both during and after the survey flight. The Pico-Envirotec AGIS is fully described in Appendix 2.

4.2.7 Field Computer Workstations

A Data Processing Field Workstation (FWS) was used on this project, comprising of a dedicated PC-based notebook computer for use at the technical base in the field. The FWS is designed for use with Geosoft OASIS Montaj Data Processing Software. The FWS has a data replot capability, and may be used to produce pseudo-analogue charts from the recorded digital data within less than 12 hours after the completion of a survey flight, if necessary. It is also capable of processing and imaging all the geophysical and navigation data acquired during the survey, producing semi-final, preliminary-levelled maps.

The FWS was used to accomplish the following:

- **Quality Control/Digital Data Verification** - flight data quality and completeness were assured by both statistical and graphical means on a daily basis
- **Flight Path Plots** - flight path plots were generated from the GPS satellite data to verify the completeness and accuracy of each day's flying
- **Preliminary Maps** - the Geosoft software system permitted preliminary maps to be quickly and efficiently created for noise and coherency checks.

The Montaj software is designed for airborne data editing, compilation, processing and plotting. The software reads the portable data media from the airborne system checks them for gaps, spikes or other defects and permits the data to be edited where necessary. GPS flight path plots are created and plotted for both flight planning and flight path verification.

4.2.8 Spares

A normal compliment of spare parts, tools, back-up software, and necessary test instrumentation was available at the field office.

5. INSTRUMENT CHECKS AND CALIBRATIONS

5.1 Airborne Gamma-ray Spectrometer System Tests and Calibrations

All gamma-ray spectrometer system tests and calibrations were carried out according to the standard procedures following the recommendations of

IAEA-TECDOC-1363 - Guidelines for radioelement mapping using gamma ray spectrometry data,
IAEA-TECDOC-323 – Airborne Gamma Ray Spectrometer Surveying,

GSC-TECPAEPER 90-23 – Transportable Calibration Pads for Ground and Airborne Gamma Ray Spectrometers

5.1.1 Spectrometer Calibration on Transportable Pads – Stripping Ratios

The stripping ratios for the gamma-ray spectrometer were determined as a part of seasonal calibration prior to the survey on July 18, 2006 using the Pico Envirotec calibration pads. These pads are stored at the Holland Landing Airpark nearby Newmarket, Ontario. The tests were performed with the crystal box placed on U, Th, K and background pads and data recorded over a minimum of 10 minutes for each pad.

The results of this calibration are included in Appendix 1.

5.1.2 Altitude Attenuation Coefficient

The exponential altitude attenuation coefficients were derived from test flights completed on September 07, 2006 in the survey area and on September 26, 2006 at the Holland Landing Airpark, Newmarket. This was accomplished by flying a test line at various altitudes of approximately 50, 100, 150, 200, 250 and 300 feet. A series of background measurements were made at the same time and same altitudes over the water body to determine the background due to cosmic radiation, radon decay products in the air and the radioactivity of the aircraft and equipment.

The closure altitude attenuation coefficients of this calibration are included in Appendix 1.

5.1.3 Spectrometer System Sensitivity

Sensitivity coefficients were determined during the post-survey seasonal test by hovering at different altitudes over McPhar's calibration spot at Holland Landing Airpark, Ontario on September 26, 2006. A series of background measurements were made at the same time at different altitudes over Lake Simcoe.

These were to determine the background due to cosmic radiation, radon decay products in the air and the radioactivity of the aircraft.

The test flights served to determine system sensitivities through comparison of airborne data with data acquired on the ground, and to determine the variation of the window counts with aircraft altitude.

The ground measurements were made with an Exploranium portable gamma ray spectrometer by the Geological Survey of Canada. Measurements were acquired at 37 stations along 2 diagonal lines crossing the 300 x 300 m calibration spot. Measurements were also made with the portable

spectrometer on the lake located near Holland Landing to determine background radiation due to cosmic radiation, radon decay products in the air and any radioactivity of the equipment. The background was subtracted from the ground measurements. Next ground concentrations of potassium, uranium and thorium were determined by calibration of the portable spectrometer using the Pico Envirotec calibration pads located at Holland Landing Airport.

The sensitivities of the airborne system to potassium, equivalent uranium, and equivalent thorium were calculated by dividing the average count rates corrected to an effective height of 50 m above ground by the ground concentrations of the test spot.

The results of this calibration are included in Appendix 1.

5.1.4 Cosmic Stripping and Aircraft Background

Cosmic stripping coefficients and aircraft background for K, U, Th & TC windows were measured and calculated for the detector crystal packs prior to the survey on August 11, 2006 near Copper point camp and during the survey on September 07, 2006 over Fairchild Lake, Yukon. The coefficients were calculated from a sequence of passes flown at various high altitudes above the ground (approximately 1532, 1843, 2154, 2465, 2772 & 3083 metres and 1528, 1836, 2143, 2443, 2749, & 3051 metres respectively). Each altitude was flown for a minimum of 2 minutes.

Coefficients were determined by linear regression of cosmic counts versus each spectral window (TC, K, Th and U) as described in the IAEA Report 323 (1991).

The results of the calibration are presented in Appendix 1.

5.1.5 Radon Background

No self-sustaining test or calibrations for radon background were made. The radon background was removed using the 'Full Spectrum' method analyzing the survey and test line data.

5.1.6 Test Line

A test line was flown and recorded at survey altitude at the start and end of each survey day to test the repeatability of the gamma-ray spectrometer system and to monitor the effects of soil moisture. The statistics and average deviation of the radiometric data were calculated and inspected for repeatability. After live time, background, and height correction, the average Th window count rate over the test line should be within +/-5% of the mean Th window count rate for all previous flights. No flights were suspended following the criteria of this test.

The statistics of the data acquired on the test line is included in Appendix 1.

5.2 Altimeter & Barometer Calibration Checks

The altimeter and barometer test flight was performed on September 07, 2006. The calibrations were done by comparing the radar altitudes and barometric pressure with a suitable reading from the GPS navigation system, during radar "stack" flown over Fairchild Lake, Yukon. The ellipsoidal height at the lake was determined by GPS. This procedure involved having the helicopter hover for 30 seconds at various altitudes above the ground (69, 96, 118, 142, 180, 206 and 230 metres) and recording the values of the radar altimeter, GPS altimeter and barometric pressure, which were then plotted and compared. These calibrations were checked on a daily basis by completing a vertical calibration test flight during take off and landing.

The results of the test are included in Appendix 1.

6. QC AND DATA PROCESSING

Data quality control and processing were carried out in two stages.

Daily quality control, initial processing and archiving of the data were completed on-site at the base of operations using Geosoft MONTAJ software and a notebook PC computer. All data were verified upon receipt, and checked against the operator's flight logs.

The final data processing was completed in the data processing centre of McPhar in Newmarket, Ontario.

All processing of radiometric and ancillary data was undertaken according to the standard procedures incorporated in Geosoft Radiometric Data Processing and Praga3 software, following the recommendations of :

IAEA-TECDOC-1363 - Guidelines for radioelement mapping using gamma ray spectrometry data,
IAEA-TECDOC-323 – Airborne Gamma Ray Spectrometer Surveying

A summary of the basic actions conducted during each data-processing stage appears below.

Field data QC and pre-processing

- a.) Data pre-processing and extraction with PicoEnvirotec PEIView Extractor software
- b.) Transfer of extracted data into Geosoft Database
- c.) QC and pre-processing of GPS and altimeter data
- d.) Compilation of flight path
- e.) QC and pre-processing and evaluation of test and calibration data
- f.) QC and pre-processing of radiometric data

Final Processing

- a.) Processing of GPS and altimeter data
- b.) Final flight path compilation
- c.) Processing of radiometric data
 - Principal component (NASVD and MNF) analysis and spectra processing
 - Window (ROI) extraction
 - Corrections and levelling of radiometric data
 - Conversion to radioelement concentration
 - Gridding
 - Calculation of radioelement ratios
- d.) Production of radioelement, ratio and ternary maps
- e.) Compilation of final report

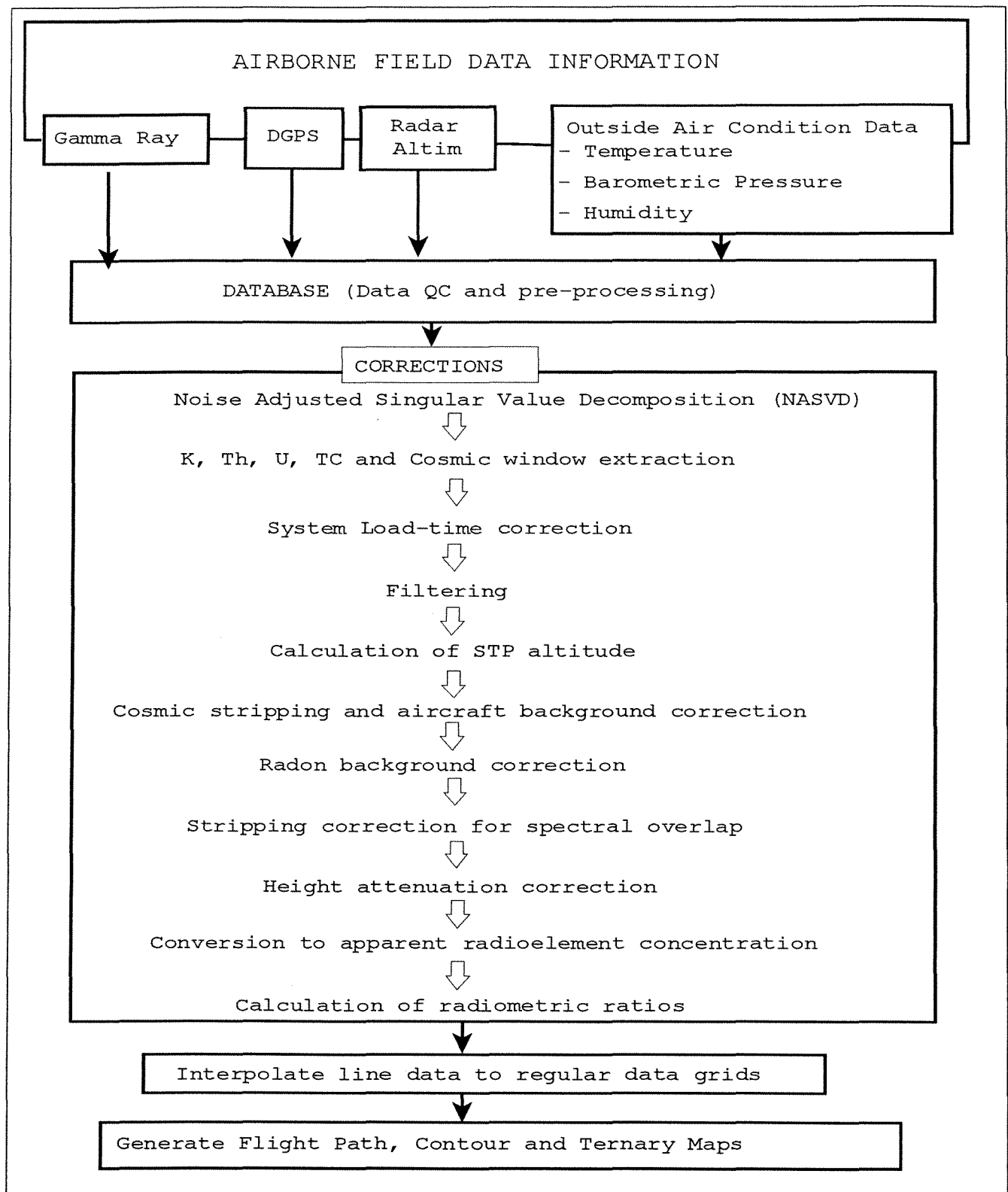


Figure 7: Data Processing Flow Chart

6.1 Data Management

Raw data in binary file format were recorded in the helicopter on portable media. Data duplication was carried out with DVD-ROM burning hardware and software and archived on DVD.

The raw file was comprised of:

- Real-time differentially corrected GPS data defined by WGS84 longitude and latitude, WGS84 ellipsoidal height and GPS time
- Radar Altimeter data
- Outside air condition data – temperature, barometric pressure and humidity
- Radiometric data recorded as gamma ray spectrum resolved into 256 channels over the energy detection range of 50 keV to 3000 keV and the cosmic channel over 3 MeV.

The binary raw file was pre-processed and extracted using PicoEnvirotec PEIView extractor software. The extracted data was loaded on a daily basis into a flight specific Geosoft database.

The pre-processing sequence included the following quality control measures:

- a) Examination and checking of all incoming data to ensure completeness of data sets.
- b) Production of preliminary flight path maps, speed checks, terrain clearance checks and evaluation of test and calibration data
- c) Full profile quality control of all acquired traces for noise levels, data completeness, spike editing, and adherence to contract specifications.

Upon completion of the QA/QC process, the flight specific Geosoft database was merged into the project master database.

Following the survey demobilization, the raw data binary files, daily and master Geosoft databases, flight logs and operational reports were shipped to the Newmarket, Ontario office of McPhar for final processing and archiving.

The project master database was used for basic and advanced data processing and for compilation of final maps and products. Final data processing, map compilation and report generation were completed by McPhar at the Newmarket, Ontario office.

6.2 Positional Data Processing and Flight Path Compilation

The flight path was derived from differentially corrected GPS positions using the recorded real-time airborne GPS data. A position was calculated each second (approx. every 39 meters along the flight path) to an accuracy of +/- 2-3 metres. This position data was merged with gamma ray spectrometry and ancillary data in the Geosoft GDB database.

As part of the QA/QC process, the following parameters were checked during a flight:

- Number of satellites under observation (average of 6, minimum of 4 allowed)
- PDOP (position dilution of precision; maximum value of 3 allowed)

Flight path deviation in position (maximum of +/-15 m over a linear distance of 2,000 metres) was checked on daily basis as a part of QA/QC process after the flight.

If the above specification was not met, a reflight was necessary.

All positional data (X,Y, Z) was recorded in WGS 84 (World) geographic coordinates and converted to the contract specified NAD83 UTM zone 08N projected coordinates.

Parameters for datum used on this project are as follows:

X,Y channels	Lon deg, Lat deg
Datum	WGS 84
Ellipsoid	WGS 84
MajAx,Eccen,PrimeMer	6378137,0.08181919084,0
Local datum transform	[WGS 84] World
X,Y channels	X,Y
Length units	metre
Projection	UTM zone 8N
Type	Transverse Mercator
Lat0,Lon0,SF,FE,FN	0,-135,0.9996,500000,0
Datum	NAD83
Ellipsoid	GRS 1980
MajAx,Eccen,PrimeMer	6378137,0.08181919104,0
Local datum transform	[NAD83] Canada; Central America; Mexico; USA (

6.3 Altimeter Data and Digital Terrain Model

The radar altimeter data was recorded in feet at a frequency of 10 Hz. Data was converted to metres and filtered with a non-linear filter to remove spurious spikes. Additional smoothing of the radar altimeter data was achieved through application of low-pass filtering.

Altimeter data was inspected for criteria given by the contract (nominal 50 m terrain clearance above ground level based on the pilot's judgement of safe flying conditions around man-made structures or tall trees or in rugged terrain, or where prohibited by civil aviation authority regulations). The mean terrain clearance achieved over the entire survey was 47 m AGL.

Barometric pressure data was recorded in system units at a frequency of 1 Hz, and then converted to air

pressure in mbar, following the results of barometric calibrations. Additional smoothing of the barometric data was achieved by low-pass filtering.

A digital terrain model (DTM) channel was calculated by subtracting the filtered radar altimeter data from the GPS elevation defined by the WGS84 ellipsoidal height. This model provided information on the topography for interpretation of the radiometric data.

The DTM channel was gridded using a minimum curvature algorithm with a grid cell size of 20 metres and inspected for continuity. Micro-levelling of the DTM was then completed accompanied by further smoothing utilizing three passes of a 3 x 3 cell Hanning filter prior to contouring and DTM map production.

6.4 Radiometric Data Processing

6.4.1 Background to Corrections and Processing

Gamma-ray spectrometer surveys are utilized for mapping the concentration and distribution of naturally occurring radio elements. The use of an airborne gamma-ray spectrometer allows for the in-situ analysis of radioelement concentrations of naturally occurring potassium (K), uranium (U) and thorium (Th) in the field.

For a geologist, maps showing concentrations of K, U, and Th can be diagnostic in the mapping of rocks and soils, which aid in geological mapping, and exploration for uranium, gold, tin and tungsten. With these deposits, the primary mineralization process is often related to K metasomatism or alteration.

Radioactivity measurements from an airborne platform are dependent upon the detection of gamma rays produced through radioactive decay of the nuclide to be detected. Only three natural radioactive elements emit sufficient gamma radiation to be measured by airborne methods. The three major sources are:

- Potassium-40 (^{40}K) which is 0.011% of all potassium
- Daughter products from the ^{238}U decay series,
- Daughter products from the ^{232}Th decay series.

High-energy cosmic rays of non-terrestrial origin can be detected by airborne gamma-ray spectrometer surveys. This cosmic radiation interacts with molecules in the atmosphere, the aircraft, and the NaI detectors resulting in the production of high-energy radiation. This radiation is detectable and increases exponentially with height above sea level. It must be compensated for to obtain reliable and repeatable measurements and the detection of terrestrial radiation sources.

The traditional energy windows used to detect gamma ray radiation from K, Th, and U sources have overlapping areas where the energy recorded for a given element contains some contribution from all three radio elements. A correction procedure, known as stripping, is applied to the data to compensate for this spectral overlapping.

The natural gamma ray spectrum over the range of 0 to approximately 3000 keV is resolved by the spectrometer into 256 or 512 channels, each channel ranging from 5 to 6.5 keV in width. A separate channel records all high-energy radiation above 3000 KeV, the cosmic radiation contribution. Within the defined radioelement windows, the counts recorded are summed over a given time period.

Care must be taken during the acquisition of gamma-ray spectrometer data because the contribution from radon gas, related to decay products in the atmosphere, can result in misleading count rates. Radon gas can also diffuse from the ground, but only one radon nuclide is directly related to the uranium decay series. In order to minimize the impact of radon “contamination”, radiometric surveys are not completed during rain, which “washes” radon from the air, increasing ground concentrations. Also surveys are not carried out in fog conditions and for a period of not less than 2 hours after precipitation has finished, allowing for dispersion of radon gas to normal background levels.

Radiometric surveys have no depth penetration; most radioactive sources are recorded from the upper 1.5 metres of the ground. Over water bodies or snow-covered areas, these surveys are ineffective, as the presence of water (in either liquid or solid state) effectively masks the radiation.

Spectrometer data are recorded in counts per second. The instrumentation requires a fraction of a second to process the incoming data – during this time period no counts are recorded. This interval is referred to as “*equipment down time or system dead-time*”. A correction is applied to compensate for this time period.

6.4.2 Processing Applied Using GEOSOFT Radiometric Processing System and Praga3

Please refer to Fig.7 for a summary of radiometric data processing.

The reduction of radiometric data follows standard processing steps implemented in the Geosoft Radiometric Processing System with the Praga 3 module, as outlined in the recommendations of IAEA-TECDOC-1363 - Guidelines for radioelement mapping using gamma ray spectrometry data.

The processing of radiometric data involved advanced full spectrum processing of downward looking detectors:

1. Principal component (NASVD and MNF) analysis and spectra processing
2. Extraction of uncorrected data accumulated in K, U, Th, TC and Cosmic windows from NASVD smoothed spectra
3. System dead-time correction
4. Filtering
5. Calculation of STP (Standard Temperature and Pressure) altitude.
6. Cosmic stripping and aircraft background correction
7. Radon background correction
8. Stripping correction for spectral overlap
9. Altitude attenuation correction
10. Reduction to apparent radio elemental concentrations
11. Calculation of radioelement ratios
12. Gridding
13. Production of radioelement, ratio and ternary maps

Principal component (NASVD and MNF) analysis

Principal component (NASVD and MNF) analysis tools allow us to investigate spectrum signatures included in the actual dataset. A spectrum dataset is converted into a limited set of spectral components (eigenvectors) which are ordered by variance (NASVD) or by signal to noise ratio (MNF). NASVD expects noise to be Poisson distributed, while MNF computes a noise model directly from the data. Higher order components can be explained as mixed nuclide responses collected at average survey altitude. They are followed by components that account for the altitude changes. Remaining components contain statistical and instrumental noise.

Principal components can be used for gamma-ray data processing. The approach is very similar to the spectrum fitting technique. However, instead of model responses, a subset of spectrum components, derived directly from the data, is used to replace the input spectrum.

Using *Praga3*, an “*eigenvalue plot*” can be displayed, allowing the user to browse through the individual *components (eigenvectors)* to investigate their shape. *Covariance matrices* can be displayed as well. Spectra can be *interactively composed* from the chosen number of components and compared with input spectra or alternatively, *residual spectra* can be displayed. In a situation where the user chooses to re-process data with another subset of components, there is no need to compute the eigenvectors again.

Energy Window Extraction

The uncorrected data accumulated in K, Th, U and TC energy windows was extracted from the spectra after the principal component analysis and full spectra processing completion. Further standard radiometric processing was applied following the guidelines defined by IAEA technical reports. A summary of coefficients applied for corrections of radiometric data is presented in Appendix 1. For this extraction, standard energy regions of interest (ROI) were used.

Dead-time Correction and filtering

A dead-time system correction of 10 micro seconds/pulse was applied to each window using the following equation:

$$N = n / (1 - TC \ t)$$

where:

N	- corrected count rate (counts/sec);
n	- observed count rate (counts/sec);
TC	- total count rate over all channels(counts/sec);
t	- the equipment dead time per pulse.

The data was subjected to a suitable low pass filter to minimize the statistical noise and to improve the count statistics.

Calculation of the Effective Altitude above Ground Level

The low-pass pre-filtered radar altimetry, barometric pressure and temperature data was used to calculate the effective height AGL for standard temperature and pressure (STP) using the following equation:

$$H_{STP} = (273.15 P H_s) / [101.325 (T + 273.15)]$$

where:

H_s	- observed height above ground level (metres);
H_{STP}	- effective height at STP (metres);
T	- air temperature ($^{\circ}\text{C}$);
P	- barometric pressure (kPa).

Cosmic stripping and aircraft background correction

Cosmic radiation and aircraft background radiation was removed from each spectral window using the cosmic coefficients and aircraft background radiation values determined from test flight data using the following equation:

$$N = a + bC$$

where:

N	- the combined cosmic and aircraft background in each spectral window,
a	- the aircraft background in the window,
b	- the cosmic stripping factor for the window, and
C	- the low-pass pre-filtered cosmic channel count.

Radon background correction

The presence of radon (^{222}Rn) gas in the atmosphere contributes to the measured spectrometric data which constitutes the 'Radon Background' component.

A 'Full Spectrum' method implemented in Praga 3 software was used as the radon detection and removal technique for this survey. The 'Full Spectrum' method is based on the difference in source-detector geometry for the radon spectrum. The atmospheric radon component of the spectrum is defined as the response due to close sources. The terrestrial radiation component of the spectrum is defined as the response due to distant sources. This difference in geometry produces relative differences in the amplitudes of the photo peaks of the uranium disintegration series and also in the contribution of scattered radiation.

Stripping correction for spectral overlap

The stripping correction was used to correct each of the K, U and Th window count rates for gamma rays not originating from their particular radioelement or decay series using the following equations:

$$n_{K,K} = [n_{Th} (\alpha \gamma - \beta) + n_U (a \beta - \gamma) + n_K (1 - a \alpha)] / A$$

$$n_{U,U} = [n_{Th} (g \beta - \alpha) + n_U (1 - b \beta) + n_K (b \alpha - g)] / A$$

$$n_{Th,Th} = [n_{Th} (1 - g \gamma) + n_U (b \gamma - a) + n_K (a g - b)] / A$$

$$A = 1 - g \gamma - a (\alpha - g \beta) - b (\beta - \alpha \gamma)$$

where: n_{Th}, n_U, n_K - unstripped counts in Th, U, K windows
 $n_{Th,Th}, n_{U,U}, n_{K,K}$ - stripped counts in Th, U, K windows

Coefficients α, β, γ are forward stripping ratios and a, b , and g are reverse stripping ratios

Coefficients $\alpha, \beta, \gamma, a, b$ and g were determined by system experiments during the pad calibrations. Summary of the determined coefficients used for processing is presented in Appendix 1.

Altitude attenuation correction

This correction was used to normalize the data to a constant terrain clearance of 50 m above ground level (AGL) at standard temperature and pressure (STP). Attenuation coefficients for each of the energy windows were determined from test flights. The measured count rate is related to the actual count rate at the nominal survey altitude by the equation:

$$N_s = N e^{\mu(h-h_0)}$$

where: N_s - the count rate normalized to the nominal survey altitude, h_0
 N - the background corrected, stripped count rate at effective height
 μ - the attenuation coefficient for that window,
 h_0 - the nominal survey altitude, and
 h - the effective height.

Finally, de-corrugation and micro-levelling techniques were applied to minimize the fine line directional levelling noise.

Reduction to apparent radio elemental concentrations

The final corrected units of the count rates (cps) for each spectral radioelement window (K,Th,U) and Total Count (TC) were converted to "Apparent Radio Element Concentrations" and "Ground Level Dose Rate" using the following equation:

$$C = N / S$$

where: C - concentration of the radio element
 N - count rate for the energy window after dead time, background, stripping and attenuation
 S - sensitivity coefficient

Sensitivities were determined from test flight data and are indicated in Appendix 1.

Potassium concentration is expressed as a percentage, while thorium and uranium as parts per million of the accepted standards. Uranium and thorium are described as "equivalent" since their presence is inferred from gamma-ray radiation from daughter elements (^{214}Bi for uranium, ^{208}Tl for thorium). Total count is expressed as ground level dose rate in nGy/h.

Calculation of radioelement ratios

U/Th, U/K and Th/K ratios were calculated using the final reduced concentration of radio elements.

Gridding

The K, Th, U concentrations, TC dose rate and radio element ratios were gridded using a minimum curvature algorithm with a grid cell size of 20 metres and used for contouring and map compilation.

Ternary Radio Element Maps

Finally ternary radio element maps were produced. A ternary radio element map is a color composite image generated by modulating the red, green and blue colors in RGB color space in proportion to the radio element concentrations of K, Th and U grids. The standard display practice is to use red, green and blue for K, Th and U respectively. The radio element values are scaled to an equal range (0 to 1) to distribute the ranges of K, Th and U equally in RGB color space and the normalization is applied according to the following relations:

$$\begin{aligned}K_n &= K_{01}/(K_{01}+eU_{01}+eTh_{01}) \\eU_n &= eU_{01}/(K_{01}+eU_{01}+eTh_{01}) \\eTh_n &= eTh_{01}/(K_{01}+eU_{01}+eTh_{01})\end{aligned}$$

where subscript n refers to the normalized channel and the subscript 01 refers to the scaled values in (0, 1) range.

The normalization converts the radio element concentrations in to relative abundances and helps in reducing the effects of the attenuation of gamma rays by vegetation, soil and moisture. The ternary radio element maps are generated using the composite display of normalized grids in the RGB color model with histogram equalization stretching.

7. DELIVERABLE PRODUCTS

The survey data are presented as colour/contour maps on paper, produced at a scale of 1:25,000 for Block-Lumina and at scale 1:120,000 for Blocks Bonnie/Coma & Bond/Vic respectively. A set of report-sized colour/contour images, on paper, is included as Appendix 5.

The deliverable items of this survey are:

7.1 Maps

For the Wernecke Properties, the following maps of each block were delivered in two (2) paper copies.

- Differentially Corrected GPS Flight Path
- Digital Terrain Model Calculated from survey data (DTM)
- Calculated Dose rate from Total Count
- Apparent Concentration of Uranium
- Apparent Concentration of Thorium
- Apparent Concentration of Potassium
- Uranium/Potassium Ratio Map
- Uranium/Thorium Ratio Map
- Thorium/Potassium Ratio Map
- Ternary Radio Element Map

7.2 Digital Data

The final processed line and grid data, in GEOSOFT format is also delivered in two (2) copies on CD/DVD-ROM. Full descriptions of the digital data formats are included in this final report.

7.3 Report

Two (2) copies of a survey report were delivered, complete with all final maps as page size maps. This report provides information about the acquisition, processing and presentation of the survey data.

Respectfully submitted,
McPhar Geosurveys Ltd.

A handwritten signature in black ink, appearing to read "Tomas Grand". The signature is written in a cursive, flowing style with a long horizontal line extending to the right.

Dr. Tomas Grand
Chief Geophysicist

SUMMARY

An airborne geophysical survey program was completed over the Wernecke Properties, northern Yukon, situated approximately 200 km to the north east of Mayo, Yukon Territories under contract to Archer, Cathro & Associates (1981) Ltd., signed October 24, 2005 and amendments were made on March 06, 2006. The project consisted of a fixed-wing magnetic survey.

Data acquisition was initiated on November 2005 and was completed June 2006. Mobilization of the equipment and personnel to the survey area was completed on November 09, 2005 and 11% of the area with production flights was completed by December 09, 2005. The data acquisition of remaining 89% area was carried out, again during the period of April 11, 2006 to June 13, 2006.

First tests and calibrations flight was completed on November 20, 2005 and remaining tests and calibrations flights were completed on April, May & June 2006 respectively. The final survey flight was completed on June 12, 2006. A total of 13,092 line-kilometres of data were acquired. The survey was flown over five blocks; Block 'A', Block 'A' Infill, Block 'B' Block 'B' south extension and Block 'B'; west extension with a nominal mean terrain clearance of 100 metres. The flight lines were oriented at specific directions and spacing explained in the table1.

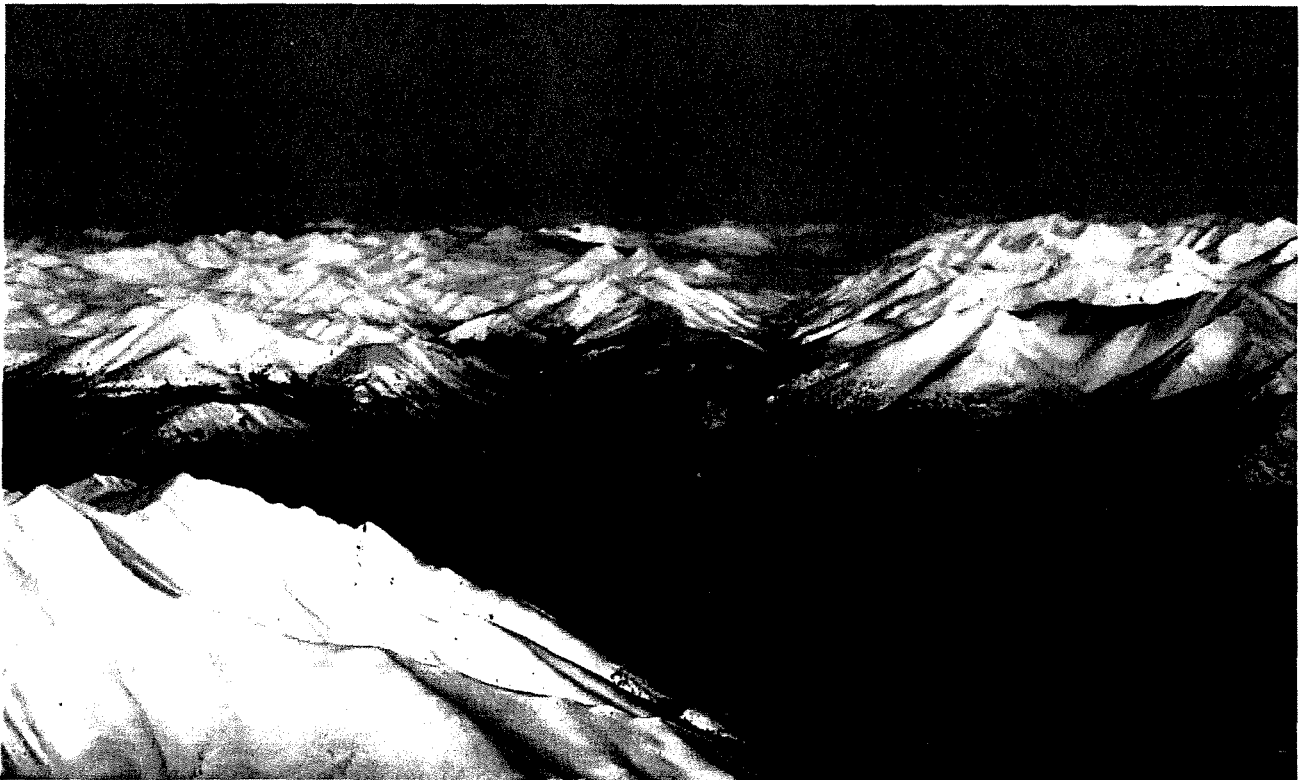


Figure 1: Aerial photograph of survey area

1. INTRODUCTION

A detailed fixed-wing magnetic survey was carried out during the period of November 09, 2005 to June 13, 2006 on behalf of Archer, Cathro & Associates (1981) Ltd., hereinafter referred to as “Archer, Cathro”, by McPhar Geosurveys Ltd, hereinafter referred to as “McPhar”, over five blocks situated Wernecke Properties, northern Yukon, situated approximately 200 km to the north east of Mayo, Yukon Territories, Canada.

The purpose of the survey was to acquire high-resolution geophysical data to map the geophysical characteristics of the geology and structure in an effort to provide an insight into geologic and geophysical settings conducive to (Au) mineralization.

Table 1: Archer, Cathro Project, Yukon Territories, Survey Areas Descriptions

AREA NAME	LINE /T.L. SPACING	FLIGHT LINE-KM	TIE LINE-KM	TOTAL LINE-KM	MAIN FLIGHT DIRECTION
Wernecke Block A	350 x 4,000 m	7,898	724	8,622	NE - SW
Infill Block A	150 m	230	0	230	N - S
Wernecke Block B	350 x 3,500 m	1,303	148	1,451	ENE - WSW
Extension Block B West	350m x 3,650m	1,359	155	1,514	345.5° / 255°
Extension Block B South	350 x 3,500 m	1,119	117	1,236	255° / 344°
Totals		11,909	1,144	13,053	

Magnetic data acquisition involved the use of GPS positioning and one high sensitivity magnetometer installed in the tail stinger of a fixed-wing aircraft to measure the Earth’s magnetic field. In this instance the aircrafts used were PA-31 Piper Navajo aircraft with Canadian registration C-FFRY supplied by Aries Aviation of Calgary, Alberta and C-GPVN Bruce land Air of Wiarton, Ontario, Canada respectively.

Installation of the survey equipment into aircraft C-FFRY was completed in Calgary prior to mobilization. Pre-survey test and calibration flights were undertaken over the period of November 20, 2005 and data acquisition was initiated on November 27, 2005. The last survey flight was conducted on December 09, 2005 and then the client stopped the survey due to poor weather.

Remobilization of aircraft C-GPVN, equipment and personnel to Mayo was accomplished on April 13, 2006. Installation of the survey equipment into the aircraft and pre-survey test flight was undertaken on April 11, 2006 at Norman Wells, NWT, Canada. The final survey flight was completed on June 12, 2006. This report describes the data acquisition and processing procedures, parameters and delivery products for this survey.

2. SURVEY AREA

The survey consisted of five blocks identified as Block 'A', Block 'A' Infill, Block 'B' Block 'B' south extension and Block 'B; west extension approximately 200 km north east of Mayo, Yukon Territories. The primary objective of the survey was to acquire geophysical data in support of (mineral) exploration.



Figure 2: Location of survey areas

The topography of the Wernecke survey areas is variable, from narrow valleys to steep mountain slopes with incised river valleys with steep cliffs. The elevation ranged from approximately 150 metres to over 2800 metres above sea level. Weather conditions during the survey were typically in the -35°C to $+16^{\circ}\text{C}$. Conditions varied from clear to cloudy, freezing rain, snow showers, and at times windy. More often than not, these poor weather conditions kept the survey crew grounded and thus the number of standby days accumulated.

The corner coordinates of the blocks were provided by Archer Cathro, and are presented in the following table. All coordinates are NAD83, UTM Zone 8N.

Table 2: Project Survey Areas Coordinates

Wernecke Block A		
UTM Zone 8, NAD 83		
Corner	Easting	Northing
NE corner	513590E	7239650N
NW corner	473600E	7218000N
SW corner	503600E	7164300N
SE corner	542850E	7188300N

INFILL Area - Wernecke Block A		
UTM Zone 8, NAD 83		
Corner	Easting	Northing
NE corner	515060	7217960
NW corner	518360	7217960
SW corner	515060	7207960
SE corner	518360	7207960

Wernecke Block B - West		
UTM Zone 8, NAD 83		
Corner	Easting	Northing
SE corner	579275	7190075
SW corner	562000	7185500
NW corner	556200	7210750
NE corner	572800	7215125

Wernecke Block B		
UTM Zone 8, NAD 83		
Corner	Easting	Northing
NE corner	590750E	7219400N
NW corner	573200E	7215500N
SW corner	578750E	7190500N
SE corner	596000E	7194500N

Wernecke Block B - South		
UTM Zone 8, NAD 83		
Corner	Easting	Northing
SE corner	599495	7185050
SW corner	564310	7175565
NW corner	562000	7185500
NE corner	596500	7194800

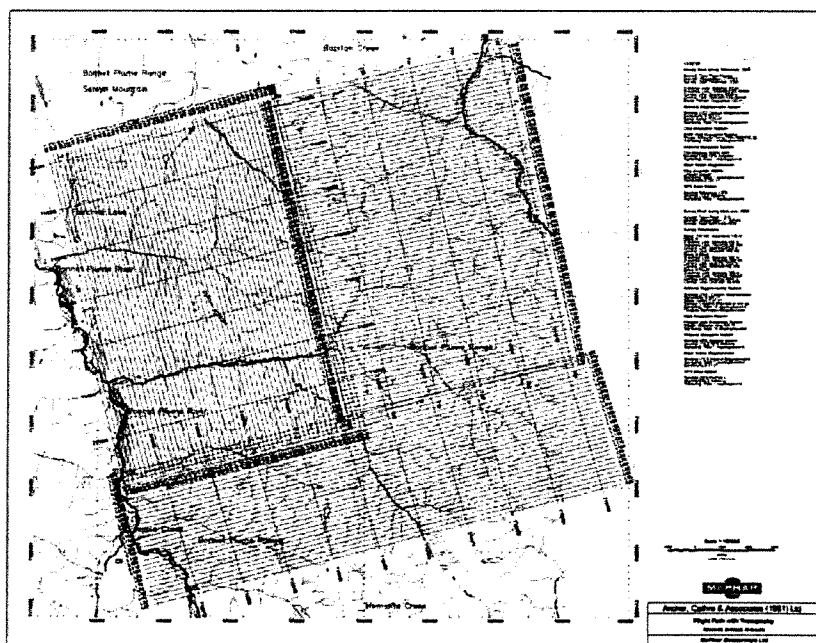
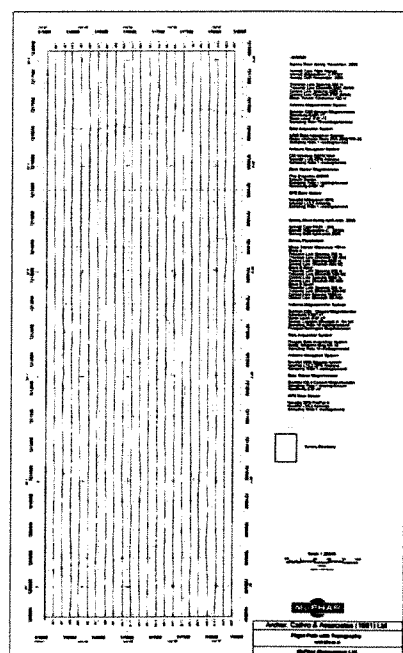
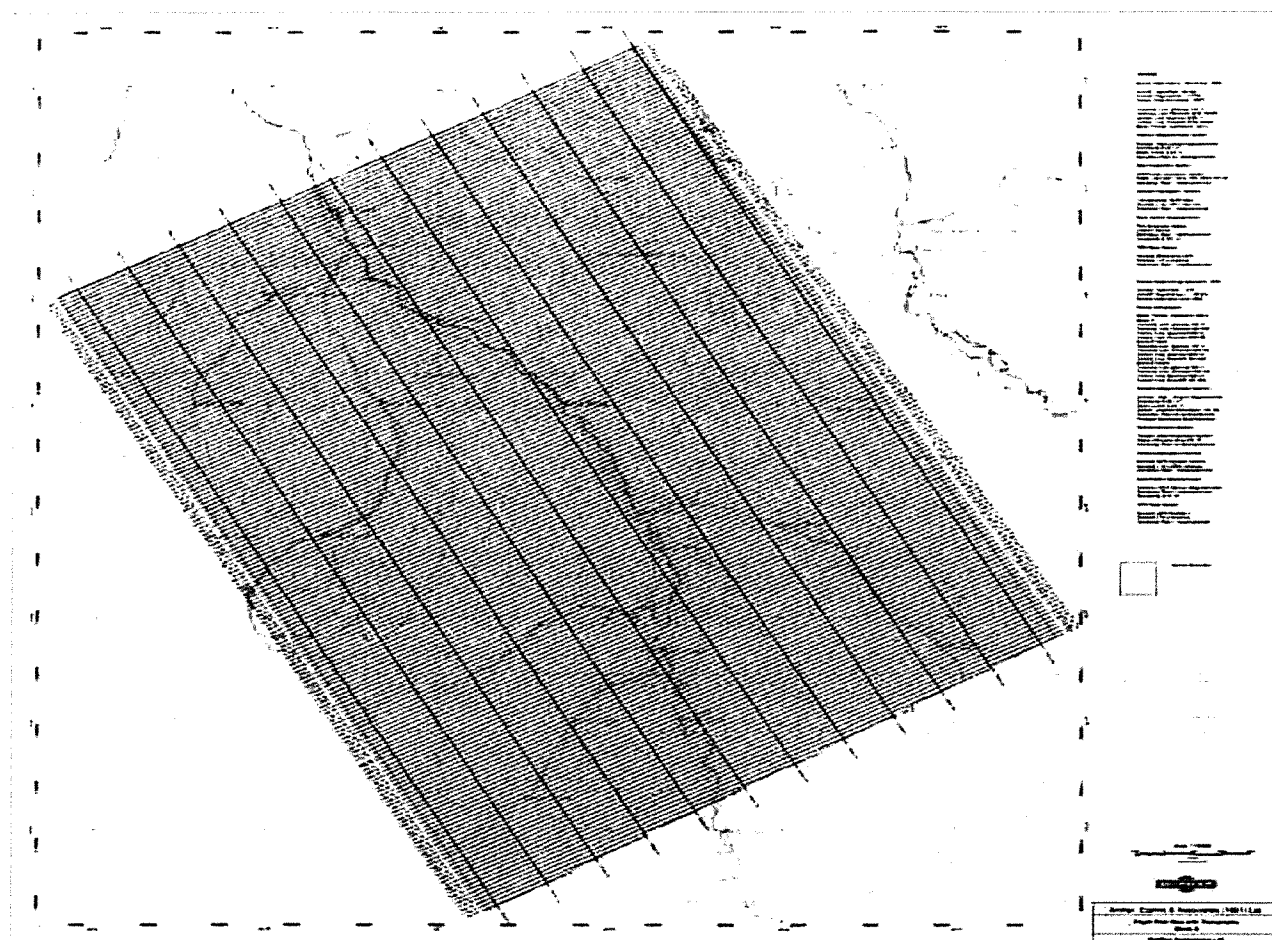


Figure 3: Flight Path with topography, all Blocks

3. SURVEY OPERATIONS

3.1 Operations Base

Survey operations were based out of the airport of the Mayo. Permission was obtained to operate, park and refuel the aircraft at the airport. The GPS base station antenna and the magnetic base station sensor was positioned approximately 5 kilometres from the airport.



Figure 4: Base Station system with Antenna (2005)



Figure 5: GPS Base Station system with Antenna (2006)



Figure 6: Magnetic Base Station system with sensor

Initial Quality Control and Preliminary data processing was undertaken at a temporary data processing centre set up at the Bed Rock Motel in the town of Mayo.

3.2 Survey Conditions

Weather conditions during the survey were varied, ranging from occasionally good with clear skies and cloud cover, to low clouds overcast, freezing rain, snow showers and windy. The temperature ranged from a low -35° Celsius to $+16^{\circ}$ Celsius. During the whole survey, a total of sixty days were lost as the result of bad weather.

Sunspot activity, and hence diurnal geomagnetic activity, varied from quiet to active during the data acquisition period. No data were lost due to the geomagnetic activity being out of contract specification.

3.3 Navigation

The nominal data acquisition speed was 220 kilometres per hour. Scan rates for the magnetic data acquisition was 0.05 second, 0.1 second for the radar altimeter, and 1.0 second for the GPS navigation/positioning system. Therefore, there is a magnetic value recorded at an approximate interval of 3.25 metres and a position fix at an approximate interval of 60 metres along the flight track.

Navigation was assisted through use of a GPS receiver system that reported GPS co-ordinates in WGS-84 latitude and longitude, directing the pilot over a pre-programmed two-dimensional (2-D) survey grid. The x-y position of the aircraft reported by the GPS system was recorded together with the terrain clearance as reported by the radar altimeter. For surveying purposes, the coordinates of the survey area were transformed from WGS84 latitude and longitude to the NAD83, UTM 8N coordinates system.

Vertical navigation along flight lines was enabled by using the radar altimeter. The optimum terrain clearance during normal survey flying was 100 metres for the aircraft and geophysical instrumentation. However, due to rugged terrain in some areas, and the pilot's judgment of safe flying conditions in these areas, these terrain clearances were not possible 100% of the time. The final vertical and horizontal survey positions were differentially corrected in real-time to a precision of approximately +/- 1.5 metres.

Projection information:

Projection type: NAD83, UTM Zone 8N
Spheroid: Transverse Mercator
Base latitude: 0 degree
Base longitude: -135 degree
Scaling factor: 0.9996
False easting: 0
False northing: 500000
Local Transform: World Geodetic System

3.4 Field Processing & Quality Control

The survey data was transferred to portable magnetic media on a flight-by-flight basis, and then copied to the field data processing workstation. In-field data processing included: reduction of the data to Geosoft GDB database format, post-flight compensation of the magnetometer data using McPhar's CCMAG software, and inspection of all data for adherence to contract specifications. Survey lines which showed excessive deviation, or which were considered to be of inferior quality, for whatever reason, were re flown.

3.5 Survey Statistics and Project Diary

The survey entailed a total of 40 flights; of which 26 flights were production flights. The first production flight was Flt #2 on November 20, 2006, with the last production flight, Flt #32 on June 12, 2006.

McPhar Geosurveys Ltd. of Newmarket, Ontario, Canada, was responsible for the field operations, all geophysical matters and the overall coordination and management of the survey.

Table 3: Project Diary

Date	Flt #	Hours	Line-Km	Comments
2006		Flown	Accepted	
10-11-05				Crew arrived at Mayo, Yukon Territories
11-11-05				Waiting for the plane from Whitehorse
12-11-05				Plane arrived from Whitehorse, setup base station And program AGIS
13-11-05				Waiting for drape file from office
14-11-05				Installed drape file and ready for survey, Poor weather
15-11-05				Poor weather, snow storm, Standby Day
16-11-05				Poor weather, snow storm, Standby Day
17-11-05				Poor weather low ceiling, snow storm, Standby Day
18-11-05				Poor weather low ceiling, snow, Standby Day
19-11-05				Poor weather low ceiling, freezing rain, Standby Day
20-11-05	1	1:28		Flight aborted due to bad weather, Back to Mayo and performed the Tests
21-11-05				Poor weather low ceiling, freezing rain and snow Standby Day
22-11-05				Poor weather low ceiling, freezing rain and snow Standby Day
23-11-05				Poor weather low ceiling, freezing rain and snow Standby Day
24-11-05				Poor weather low ceiling, freezing rain and snow Standby Day
25-11-05				Poor weather low ceiling, freezing rain and snow Standby Day
26-11-05				Poor weather low ceiling, freezing rain and snow Standby Day
27-11-05	2	5:25	506	Flown at block 'B'. Production flight
28-11-05	3	1:22		Flight aborted due to high turbulence, Standby Day
29-11-05	4	5:30	751	Flown at block 'B'. Production flight
30-11-05				Low ceiling, less visibility, snow showers and freezing drizzel, Standby Day
01-12-05				Low ceiling, less visibility, snow showers, Standby Day
02-12-05	5	2:05		Flight aborted due to RAD Alt problems
03-12-05				Diurnal active, Standby Day
04-12-05	6	5:37	194	Finished Block 'B' and also started Block 'A'
05-12-05	7	1:17		Flight aborted due to high turbulence, Standby Day
06-12-05				Low ceiling, less visibility, snow showers and gusty wind, Standby Day
07-12-05				Low ceiling, less visibility, snow showers and gusty wind, Standby Day
08-12-05	8	0:31		Flight aborted due to bad weather, Standby Day
09-12-05				Demobilization, project stopped by client and will be started next year
11-04-06				Test and calibration flight at Norman Wells, NWT
12-04-06				Mobilizing to Mayo, QA /QC Geophysicist stuck in Whitehorse and remaing crew in Norman Wells due to bad weather
13-04-06				QA /QC Geophysicist arrived at Mayo, Setup the base station, remaing crew stuck in Norman Wells due to

				bad weather
14-04-06				Crew stuck in Norman Wells due to bad weather
15-04-06				Crew stuck in Norman Wells due to bad weather
16-04-06				Crew stuck in Norman Wells due to bad weather
17-04-06				Crew arrived at Mayo, couldnt have production flight at afternoon due to low ceiling, Standby Day
18-04-06				Low ceiling, less visibility, Standby Day
19-04-06				Low ceiling, less visibility, snow showers, Standby Day
20-04-06	1	1:26		Flight aborted due to bad weather, Standby Day
21-04-06	2	1:04		Flight aborted due to bad weather, Standby Day
22-04-06	3	2:38	182	Flown on Block 'A', Flight aborted due to high turbulence, Production flight
23-04-06				Cloudy with wet snow and light rain, Standby Day
24-04-06				Cloudy with wet snow, rain & high wind, Standby Day
25-04-06				Cloudy with light rain & high wind, Standby Day
26-04-06	4	3:00	152	Flown at Block 'B' south, Flight aborted due to bad weather, Standby Day
27-04-06				Overcast all day, Standby Day
28-04-06				Cloudy with light rain & snow, Standby Day
29-04-06				Overcast all day, Standby Day
30-04-06	5	2:28		Flight aborted due to bad weather, Performed Heading Test, Standby Day
01-05-06	6	4:42	568.2	Flown at Block 'B' south & Block 'B' west, Production flight
02-05-06	7	2:40	241	Flown on Block 'A', Flight aborted due to high turbulence and low ceiling, Production flight
03-05-06				Overcast all day, Standby Day
04-05-06				Overcast all day, Standby Day
05-05-06				Overcast & diurnal active all day, Standby Day
06-05-06				Diurnal stormy to active all day, Standby Day
07-05-06				Overcast & diurnal active all day, Standby Day
08-05-06	8	4:55		Block 'B' south is completed, Production flight
09-05-06	9	0:36	652.5	Second flight aborted due to bad weather
10-05-06				Overcast all day, Standby Day
11-05-06	10	3:03	232.5	Flown at Block 'B' west, Flight aborted due to bad weather, Production flight
12-05-06				Overcast all day, Standby Day
13-05-06				Overcast & diurnal active all day, Standby Day
14-05-06	11	5:06		Two production flights
15-05-06	12	4:09	1126.1	Block 'B' west is completed
16-05-06	13	4:29	640.8	Flown at Block 'A'. Production flight
17-05-06				Heavy rain at AM and low ceiling at PM, Standby Day
18-05-06	14	0:45		Flight aborted due to bad weather, Standby Day
19-05-06				Overcast all day, Standby Day
20-05-06	15	4:54	826.9	Flown at Block 'A'. Production flight
21-05-06	16	5:12	917.7	Flown at Block 'A'. Production flight
22-05-06				Flight aborted due to bad weather, FOM test performed for Block 'B'. Standby Day
23-05-06	17	2:22		Overcast all day, Standby Day
				Overcast all day, Standby Day

24-05-06	18	2:08		Flight aborted due to bad weather, FOM test performed for Block'B'. Standby Day
25-05-06	19	3:57	641.7	Flown at Block 'A'. Production flight
26-05-06	20	2:00	91	Flight aborted due to high turbulence, Standby Day
27-05-06				Overcast all day, Standby Day
28-05-06	21	1:25	91	Flight aborted due to high turbulence, Standby Day
29-05-06	22	4:49	756	Flown at Block 'A'. Production flight
30-05-06	23	1:00		Flight aborted due to bad weather, Standby Day
31-05-06				Overcast all day, Standby Day
01-06-06				Overcast all day, Standby Day
02-06-06	24	4:49	822.4	Flown at Block 'A'. Production flight
03-06-06	25	5:09	915.1	Flown at Block 'A'. Production flight
04-06-06				Overcast all day, Standby Day
05-06-06	26	4:03	366.6	Flown at Block 'A' & Infill 'A'. Production flight
06-06-06	27	2:32	273.8	Flown on Block 'A', Flight aborted due to high turbulence and low ceiling, Production flight
07-06-06	28	0:45		Flight aborted due to bad weather, Radar Test performed, Standby Day
08-06-06	29	4:36	731	Flown at Block 'A'. Production flight
09-06-06				High winds and turbulence all day, Standby Day
10-06-06	30	1:27	45.7	Flight aborted due to high turbulence, Standby Day
11-06-06	31	5:23	593	Flown at Block 'A'. Production flight
12-06-06	32	5:16	735	Flown at Block 'A' & Block 'B' west added tie line Production flight
13-06-06				Demobilization
Totals:		128:05	13,053	

The following personnel comprised the onsite crew for the project at Mayo in 2005 & 2006:

Table 4: Onsite Personnel

Title	Name	Days Onsite
Project Manager (2006)	Kevin Lindsay	57
QC Geophysicist (2005)	Adam Barrett	29
Operator (2005)	Adam Barrett	29
Aircraft Pilot (2005)	Rory Clayton	29
QC Geophysicist (2006)	Asif Mirza	61
Operator (2006)	Kevin Lindsay	57
Operator (2006)	Jan Niemeijer	57
Aircraft Pilot (2006)	Marieke Niemeijer	57

4. AIRCRAFT AND EQUIPMENT

4.1 The Aircraft

The survey was flown using a PA-31 Piper Navajo aircrafts with Canadian registration C-FFRY supplied by Aries Aviation of Calgary, Alberta and C-GPVN Bruce land Air of Wiarton, Ontario, Canada respectively. The aircrafts were modified as a geophysical survey platform, and features one high sensitivity magnetometer installed in a tail stinger. This aircraft can acquire aeromagnetic data at nominal survey airspeed of 135 knots (Approx. 230 km/hour) with has approximately 6 hours flight duration including the geophysical system and a crew of 2 persons onboard.



Figure 7: PA-31 Piper Navajo aircraft with Canadian registration C-FFRY (2005)



Figure 8: PA-31 Piper Navajo aircraft with Canadian registration C-GPVN (2006)

Mobilization of the aircraft, equipment and personnel to Mayo was again accomplished on April 13, 2006. Installation of the survey equipment into the aircraft and pre-survey test flight was undertaken on April 11, 2006 at Norman Wells, NWT, Canada. The final survey flight was completed on June 12, 2006.

McPhar personnel at the Calgary, Alberta and Norman Wells, NWT, CANADA carried out the installation of the geophysical and ancillary equipment, respectively. After the aircraft's arrival, final adjustments, calibration and testing was completed in Mayo, Yukon Territories, prior to production survey flights commencing.

Aircraft Model:	- Piper Navajo
Aircraft Registration:	- Canadian, C-FFRY
Engine:	- 2 x Textron Lycoming TIO-540-A2C
Empty weight:	- 3,759 lbs / 1,709 kg
Gross weight:	- 6,500 lbs / 2,955 kg
Fuel Capacity:	- 350 gal / 1,330 litres
Survey speed:	- 120-160 knots / 220-295 km/h
Survey duration:	- 7.5 hours
Ferry:	- 185 knots / 340 km/h
Cruise range:	- 1.295 nm/ 2300 km
Max. Alt:	- 26,000 ft / 8092 m

Aircraft Model:	- Piper Navajo
Aircraft Registration:	- Canadian, C-PGVN
Engine:	- 2 x Textron Lycoming TIO-540-A2C
Empty weight:	- 4,336 lbs / 1,966 kg
Gross weight:	- 6,770 lbs / 3,070 kg
Fuel Capacity:	- 240 gal / 1,019 litres
Survey speed:	- 120-160 knots / 220-295 km/h
Survey duration:	- 4:45 hours
XC:	- 160 knots
Cruise range:	- 1,040 nm/ 1926 km
Max. Alt:	- 1,000 ft

4.2 The Survey Instrumentation

4.2.1 Survey System Overview

The instrumentation installed in the aircraft included:

- One Scintrex CS-2 high resolution cesium magnetometer (2005)
- One Scintrex CS-3 high resolution cesium magnetometer (2006)
- Pico-Envirotec AGIS 100 Data Acquisition System (2005)
- Fluxgeo Data Acquisition System (2006)
- NovAtel GPS Glonass System
- NovAtel L1/L2 Antenna
- Instrumentation Rack and Power Distribution System

The processing and base stations comprised:

- A Field Workstation, comprising a portable Pentium PC, printer and full data processing software (Waypoint Navigation GrafNav GPS Processing Software, CCMag Magnetic Compensation Software and Geosoft Montaj Processing Software)
- A Magnetometer Base Station, comprising a GEM GSM-19 Proton magnetometer (2005)
- A Magnetometer Base Station, comprising a Scintrex CS-3 High Resolution cesium magnetometer and KMAG 4 mag counter (2006)
- NovAtel ProPak II GPS System
- NovAtel L1/L2 Antenna
- A complement of spare parts and test equipment were maintained at the survey site.

4.2.2 Airborne Magnetometer

A Scintrex CS-2 & CS-3 cesium split-beam total-field magnetometer was installed in the tail stinger of the aircraft, respectively. Sampling rate was ten (10) times per second with an in-flight sensitivity of 0.001 nT. Aerodynamic magnetometer noise was +/- 0.01 nT. The sensitivity of the magnetometer was recorded at 0.001 nT when operated at a sampling rate of 0.1 second.

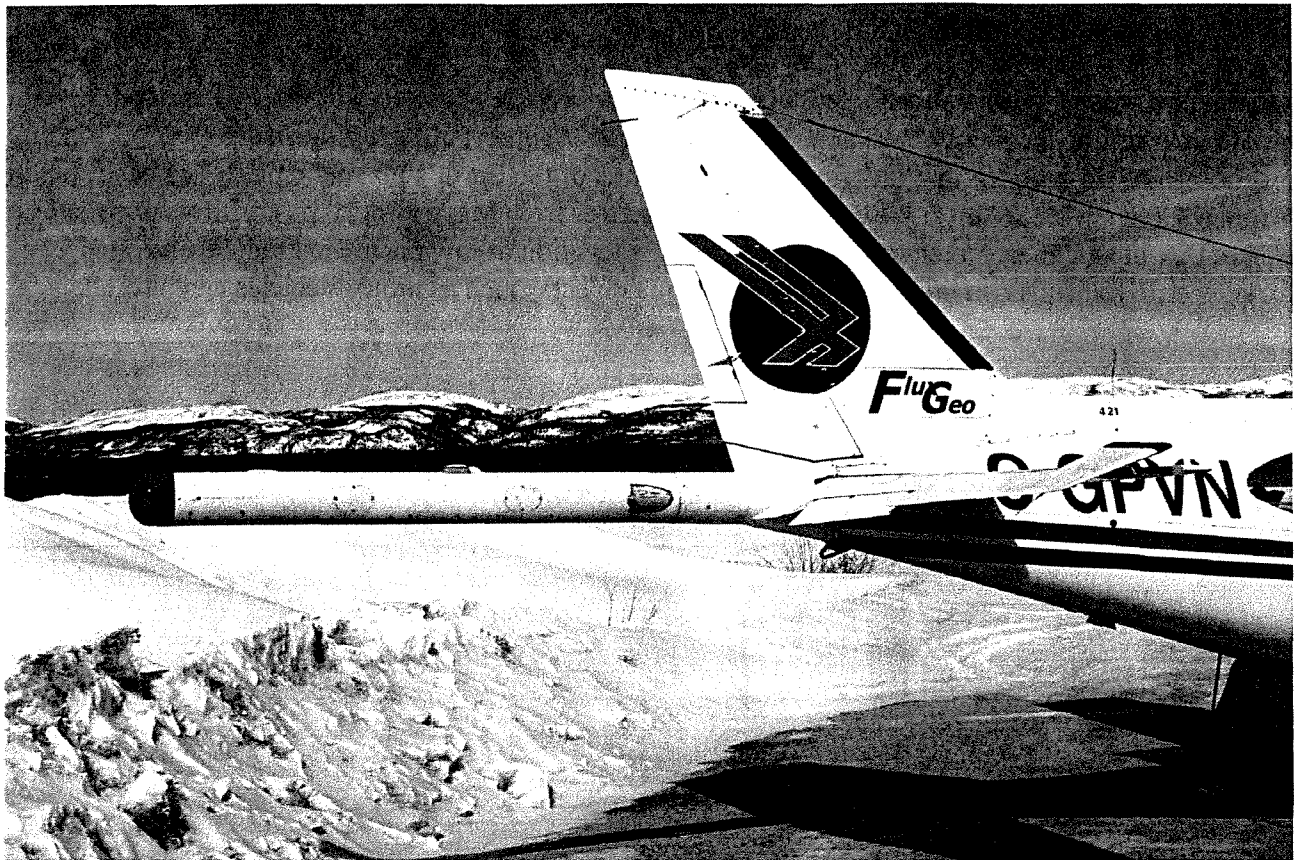


Figure 9: Tail stinger of the aircraft with CS-3 Mag sensor

The magnetic Figure-of-Merit (FOM) of the aircraft was determined using the Geological Survey of Canada's method, and was demonstrated to be better than 1 nT. The Scintrex CS-3 magnetometer is described in Appendix 1.

4.2.3 Magnetic Compensation

Compensation for the orientation and movement of the aircraft in the Earth's ambient magnetic field was undertaken post flight using a proprietary program "CCMAG" installed on the Field Workstation. The Larmor frequency output of the cesium magnetometer sensor was processed by a high precision frequency counter in the Fluxgeo and AGIS 100 / MMS-4 data acquisition systems (resolution of 0.001nT at a sampling rate of 10 times per second). A three-axis Bartington fluxgate magnetometer monitored the attitude and motion of the aircraft in flight. The output from this fluxgate magnetometer, or attitude sensor, was then used in the "CCMAG" processing of the raw magnetic data to produce magnetic data compensated for the orientation and motion of the aircraft in the Earth's magnetic field.

The CCMAG post-flight compensation program is described in Appendix 2.

4.2.4 The Base Station Magnetometer

The magnetometer base stations used were comprised of a GEM System GSM 19 base station data recorder, proton magnetometer and KMAG 4 mag counter utilizing a Scintrex CS-3 cesium magnetometer to monitor and record diurnal variations of the Earth's magnetic field. The base station magnetometers were set up at the distance of 5 kilometres from Mayo airport. Every effort was made to ensure that the magnetometer sensor was placed in a location of low magnetic gradient and sited away from electric transmission lines, and moving ferrous objects, such as motor vehicles and aircraft.

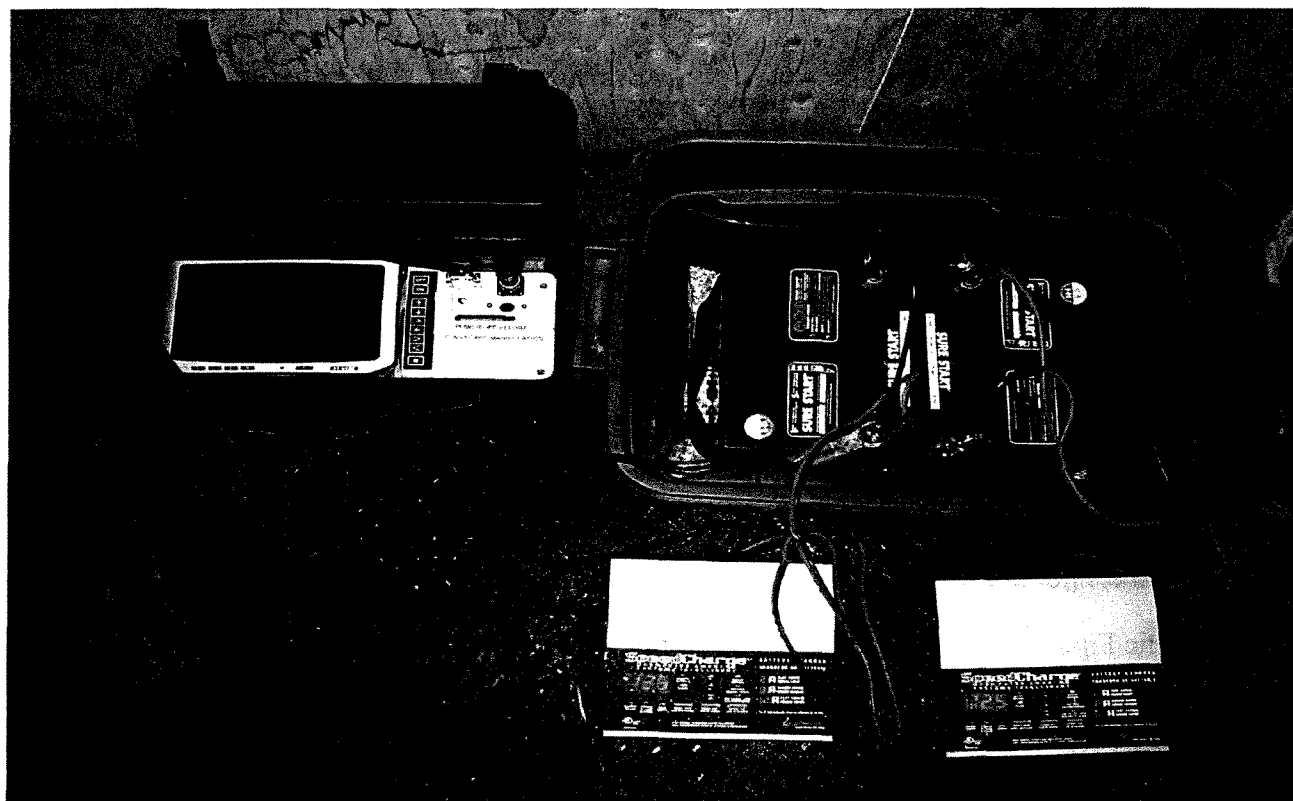


Figure 10: Base station magnetic system (2005)

The base-station magnetometer was operated continuously throughout the airborne data acquisition phase at sample rate at 1.0 second of a sensitivity of 0.01 nT. The ground and airborne system clocks were synchronised using GPS time, to an accuracy of 1 second or better. A continuously updated profile plot of the base station values was presented on the base station screen. At the end of the day, the digital data was transferred from the base station's data-logger to the fieldwork station.

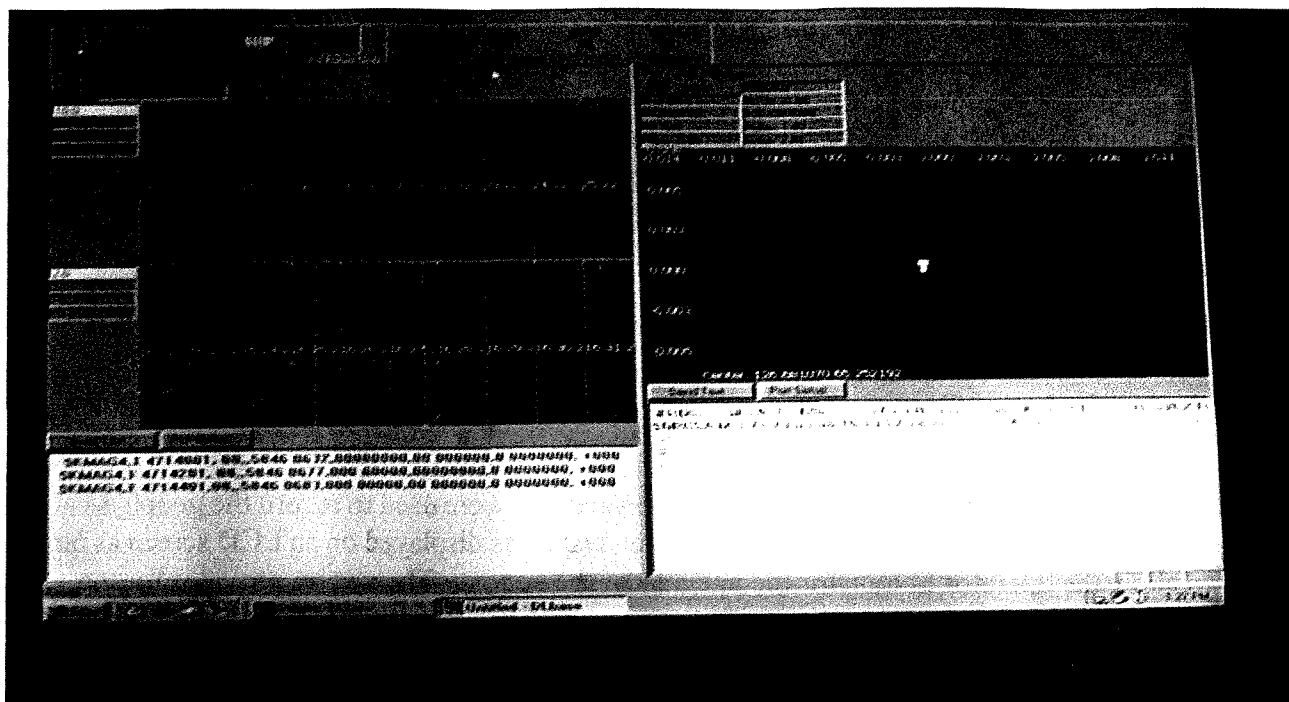


Figure 11: Base station magnetic system (2006)

4.2.5 Altimeter

The Terra TRA-3000/TRI-30 and King KP-10 radar altimeter systems were used to record the aircraft terrain clearance to an accuracy of less than 1 metre (approximately 3 ft), over a range of 40 ft to 2,500 ft. The altimeter was interfaced to the data acquisition system with an output repetition rate of 0.1 second, and were digitally recorded.

4.2.6 The GPS Satellite Navigation System

A CSI-Wireless DGPS MAX navigation system input to a navigation computer and pilot steering indicator (PSI) provided the navigation control. The PSI provided steering and cross-track guidance to the pilot. The pilot was provided with GPS and altimeter data to aid in the flying of the aircraft.

The co-ordinate system employed in the survey design and digital recording was WGS84 latitude and longitude. The GPS positional data was recoded at one second intervals and used with data obtained from three different differential services: Space Based Augmentation Systems (SBAS), OmniSTAR, and DGPS beacon stations, to calculate real-time differentially corrected locations. The GPS ground base station, comprised of NoveAtel ProPak II GPS System with Aero Antenna AT, recorded GPS data on a Pocket PC Based Data Logger (2005).

A NovAtel high-performance navigation/positioning system was used on the aircraft. This system consisted of a NovAtel GPS/GLONASS receiver and NovAtel L1/L2 Antenna. A pilot steering indicator, providing steering instructions to the pilot in three dimensions, was installed on top of the

cockpit dashboard. The indicator was connected to the Fluxgeo data acquisition system. A GPS ground base station, comprising a NovAtel ProPak II GPS receiver and NovAtel L1/L2 Antenna, was set up near a hut in Mayo. The GPS data was recorded on a Notebook PC-data logger for post-survey differential corrections (using GrafNav software). The GPS receivers are fully described in Appendix 2.

Survey co-ordinates were set-up prior to commencement of the survey and the information located into the airborne navigation system. The co-ordinate system employed in the survey design and digital recording was WGS-84 latitude and longitude. The GPS positional data was recorded at one-second intervals and used with the base station data to calculate differentially corrected locations (2006).

This navigation system yielded a real-time positional accuracy of better than ± 2 metres.

4.2.7 Data Acquisition/Recording System

The PC-based AGIS 100 and Fluxgeo data acquisition systems were used to record the geophysical and navigation survey data on an internal hard disk drive. Data was displayed on an LCD screen as profile traces to allow the operator to monitor the integrity of the system. The system provides for the:

- System control and monitoring
- Data acquisition recording
- Real-time data processing
- Navigation processing, and
- Post flight data playback and analysis

All data collection routines, checking and verification, buffering, and recording are software controlled for maximum flexibility both during and after the survey flight.

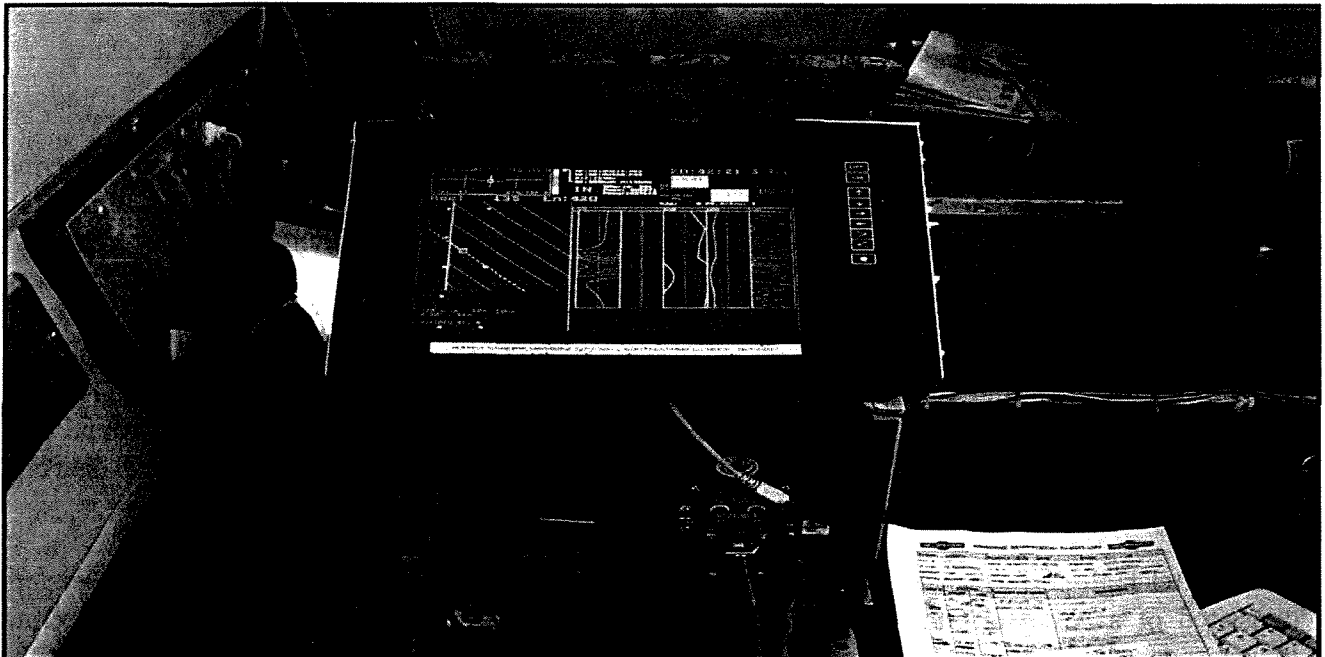


Figure 12: AGIS 100 Data Acquisition System installed in C-FFRY (2005).

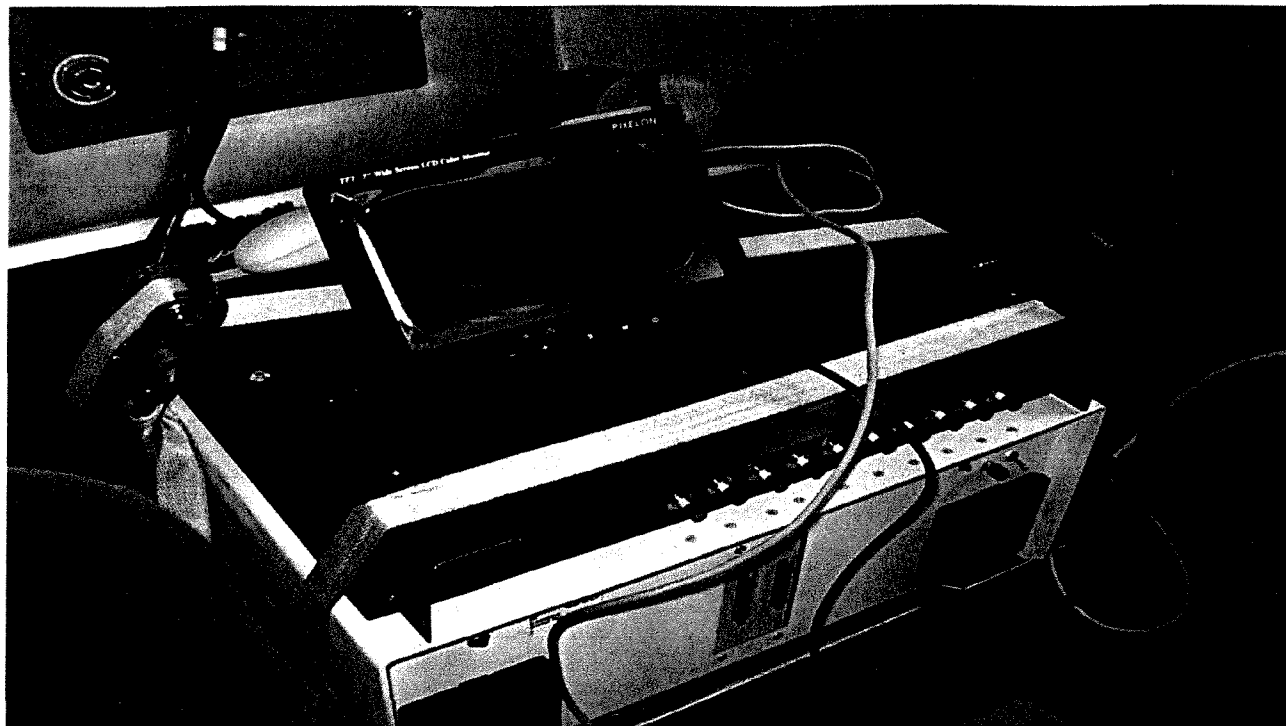


Figure 13: Fluxgeo Data Acquisition System installed in C-GPVN (2006)

4.2.8 Field Computer Workstations

A Data Processing Field Workstation (FWS) comprised of a dedicated PC-based notebook computer for use at the technical base in the field, was used on this project. The FWS is designed for use with Geosoft OASIS/Montaj Data Processing Software. The FWS has a data replot capability, and may be used to produce pseudo-analogue charts from the recorded digital data within less than 12 hours after the completion of a survey flight, if this is necessary. It is also capable of processing and imaging all the geophysical and navigation data acquired during the survey, producing semi-final, preliminary-levelled maps.

The FWS was used to accomplish the following:

- **Quality Control/Digital Data Verification** - flight data quality and completeness were assured by both statistical and graphical means on a daily basis
- **Flight Path Plots** - flight path plots were generated from the GPS satellite data to verify the completeness and accuracy of each day's flying
- **Preliminary Maps** - the Geosoft software system permitted preliminary maps to be quickly and efficiently created for noise and coherency checks.

The FWS is fully described in Appendix 2.

The Geosoft Oasis/Montaj software is designed for airborne data editing, compilation, processing and plotting. The software reads the portable data media from the airborne system checking for gaps, spikes or other defects and permits the data to be edited where necessary. The base station GPS/magnetometer data is checked, edited, processed and then merged with the airborne data by using GrafNav GPS Post-Processing Software. GPS flight path plots are created and plotted for both flight planning and flight path verification.

4.2.9 Spares

A normal compliment of spare parts, tools, back-up software, and necessary test instrumentation was available in the office at the airport.

5. INSTRUMENT CHECKS AND CALIBRATIONS

5.1 Airborne Magnetic System Tests and Calibrations

5.1.1 Manoeuvre Noise

As the magnetometer system sensor, installed in the tail stringer, is still within the magnetic effect of the aircraft structure, tests were conducted at regular intervals to determine the effects of aircraft roll, pitch and yaw. These tests were completed at high altitude over an area of low magnetic gradient by performing $\pm 10^\circ$ rolls, $\pm 5^\circ$ pitches and $\pm 5^\circ$ yaw manoeuvres flown over periods of 4-5 seconds in the same direction as the flight and tie lines. A compensated Figure-of-Merit (FOM) for the aircraft was calculated by summing the peak-to-peak amplitudes of the twelve magnetic manoeuvres. The FOM was determined at the commencement of flight operations on flight # 1 on November 20, 2005, 11 April 2006 and again on May 21 & 24, 2006. The FOM tests were determined to be 1.10 nT, 0.72 nT & 0.27 nT for tail stinger sensor respectively. Detailed information about the FOM tests is provided in Appendix 1.

5.1.2 Magnetic Heading Effect

The magnetic heading effect was determined by flying a cloverleaf pattern oriented in the same direction as the survey lines and tie lines. Two passes in each direction were flown over a recognizable feature on the ground in order to obtain sufficient statistical information to estimate the heading error. The heading errors were determined at the start of the survey on November 11, 2005 and again April 30, 2006. The results of the heading tests are presented in Appendix 1.

5.1.3 Lag Tests

The Lag Tests were performed on November 11, 2005 and on April 30, 2006 respectively to ascertain the time difference between the magnetometer readings and the operation of the GPS System. The tests were flown over an identifiable magnetic anomaly by flying the same line in opposite directions at survey altitude.

5.1.4 GPS Checks & Tests

In addition to carefully selecting a suitable area for the positioning of the base station, care was also taken to ensure that the base station GPS antenna maintained a maximum field-of-view to the GPS satellites, and was not obstructed due to movement and placement of airport equipment.

5.1.5 Altimeter Calibration Checks

Two altimeter tests were performed during the survey, the first on November 20, 2005, and the second on April 11, 2006. The radar altimeter was calibrated by comparing the radar altitudes with suitable readings from the GPS navigation system during radar "stack" flown over Mayo airport runway and the Norman Wells airport runway respectively. The ellipsoidal height of runway was determined by GPS.

The procedure employed involved having the aircraft fly over the runway at various altitudes above the ground (100, 200, 300, 400, 500 and 600 feet) recording the values of the radar altimeter and GPS altimeter, which were then plotted and compared. The results of the tests are included in Appendix 1.

The radar calibration was checked on a daily basis by completing a vertical calibration test flight during take off and landing.

5.1.6 Other Daily Checks

The validity of data on all system channels were checked at the start and end of each survey flight, together with the synchronization of each of the systems (airborne and ground).

6. QC AND DATA PROCESSING

Daily quality control, initial processing and archiving of the data were completed in Mayo at the temporary data processing centre established at the Bed Rock Motel, using Geosoft MONTAJ software and a notebook PC computer. All data were verified upon receipt, and checked against the operator's flight logs.

The pre-processing or infield processing sequence included the following quality control measures:

- Examination of all incoming data to ensure completeness of data set.
- The production of preliminary flight path maps, speed checks, and aircraft terrain clearance checks.
- Full profile quality control of all acquired traces for noise levels, data completeness, spike editing, and adherence to contract specifications.

The final data processing, map generation and report was completed by McPhar at the Newmarket, Ontario office.

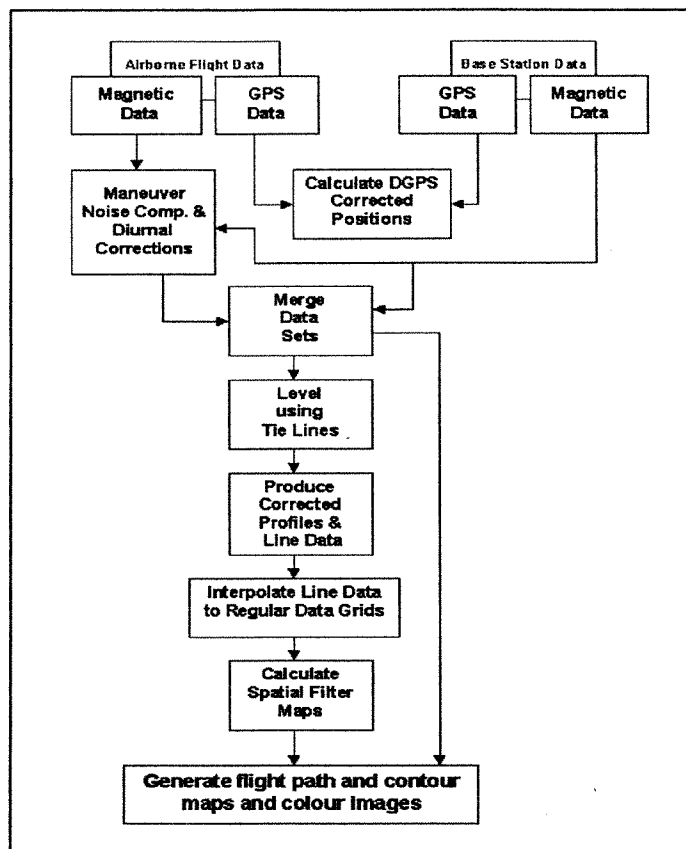


Figure 14: Data Processing Flow Chart

6.1 Flight Path Compilation

The flight path was derived from differentially corrected GPS positions using the airborne and static GPS data. Differential GPS data editing and processing was accomplished using the GrafNav GPS Post-Processing Software as developed by WayPoint Navigation, Inc. A position was calculated each 1.0 second (approx. each 60 metres along the flight path) to an accuracy of better than ± 1.5 metre. The position data was then merged into the magnetic and ancillary data in the Geosoft GDB database.

If the contract specifications were not met, a reflight was deemed necessary. All positional data was projected in NAD83, UTM Zone 8N coordinates as specified by the contact.

6.2 Base Station Magnetic Data

The base station magnetometer data was edited, plotted and merged into the GDB database on a daily basis.

The QA/QC procedure to determine acceptable magnetic base station data involved:

- Despiking of the base station data resulting from cultural activities not associated with the performance of the survey.
- Determination of the maximum noise of the observed total magnetic intensity
- Determination of the average 4th difference noise of the signal
- Determination of the rate of diurnal change

6.3 Processing the Airborne Magnetic Data

Final processing of the magnetic data was completed at the McPhar office in Newmarket, Ontario. The following processing steps were applied to the magnetic data:

6.3.1 Corrections

The processing of the data involved: post-flight compensation for the movement and orientation of the aircraft in the Earth's magnetic field; correcting for diurnal variations by using the digitally recorded ground base station magnetic values; network adjustment using the flight-line and tie-line information to level the survey data set. The corrected data set was used to generate the initial Total Magnetic Products grid and served as a base for all further processing and analysis.

6.3.2 Levelling

Levelling of the magnetic data included the following steps:

- statistically levelling the tie lines;
- levelling the traverse lines using statistically levelled ties (note: this procedure involves editing/adjusting of individual corrections at selected intersections as required in order to obtain the best possible levelled data before microlevelling);
- micro-levelling the traverse lines. After applying the above corrections to the profile data any residual line-direction-related noise was removed through the application of microlevelling. The microlevelling technique consisted of the application of directional and high pass filters to produce a grid containing noise-only in the line direction. The grid is extracted to the profile database, and an amplitude limit and a filter length are determined, so that the final error channel reflects only noise present in the grid without removing or changing geologic signal. The error channel is then subtracted from the initial input magnetic data channel in order to obtain the final micro-levelled channel. The resulting grid is free of line direction noise.

6.3.3 Compudrape Method

In order to be able to merge the different datasets and provide a single merged data and map product, the data was processed using a procedure commonly referred to as CompuDrape.

As a result of the survey being completed in two stages, it was inevitable that the mean terrain clearance between the two survey parts varied considerably from 2005 and 2006. This variance was in part due to:

- Different survey specifications with respect to flying heights and line spacing;
- Different survey aircraft and pilots and hence different levels of experience in flying and aircraft performance characteristics;
- Different weather conditions;
- Similar but different data processing and magnetic compensation procedures.

The application of Compudrape involves computation through the use of upward and downward height continuation on aeromagnetic profile data to transform it from the original magnetic field on an arbitrary observation surface to the magnetic field on a new surface of specified height.

In areas with steep topography such as encountered in some areas of the Project, it was difficult for the survey aircraft to maintain a constant nominal height above the ground. This was further complicated by the fact that the survey was flown in two parts, similar but different aircraft, few months difference apart, and under different survey conditions. The result was large variations in the distance between the magnetic sensor and the ground (from 50 to 500 m), making it very difficult to process the data.

Compudrape attempts to correct this variable terrain clearance effect by generating a magnetic grid that "simulates" the result that would have been obtained had the magnetic sensor been maintained a constant height above ground. In the case of this Project, a sensor height of 100 metres was used for the Compudrape surface.

In this application, the raw profile data was processed for multiple continuation surfaces using a 1D FFT transform to achieve maximum removal of the effects of the variation in terrain clearance from line-to-line and at traverse-tie line intersections.

The Compudrape process was designed to perform a loose drape transformation. The elevation channel is the magnetic sensor elevation above sea level. The Topography channel is the topography (i.e., sensor terrain clearance above ground subtracted from sensor elevation above sea level). The new observation height value is the desired constant drape height above ground. The end result is for a more acceptable merging of the different data sets to produce a relatively contiguous TMI image for the entire area covered by the two surveys. Microlevelling was performed again to get rid of line direction noise.

6.3.4 IGRF Removal

The International Geomagnetic Reference Field (IGRF) is a long-wavelength regional magnetic field calculated from permanent magnetic observatory data collected around the world. The IGRF is updated and determined by an international committee of geophysicists every 5 years. Secular variations in the Earth's magnetic field are incorporated into the determination of the IGRF.

Through the removal of the IGRF from the observed Total Magnetic Intensity (TMI), the resulting residual magnetic intensity provides for more valid modelling of individual near surface anomalies. Additionally, the data can be more easily incorporated into databases of magnetic data acquired in the past or to be acquired in the future.

6.3.5 Gridding

The corrected magnetic line data was interpolated between survey lines using a random point minimum curvature gridding algorithm to yield x-y grid values for a standard grid cell size of $1/5^{\text{th}}$ of the line spacing (70m).

6.3.6 Filter Derivatives

The Total Magnetic Intensity (TMI) data were subjected to:

- Reduction-to-the-Pole
- Calculation of the First Vertical Derivative (1VD)
- Calculation of the Second Vertical Derivative (2VD)
- Calculation of the Analytic Signal
- Calculated Horizontal Derivative

Colour/contour images were produced for all the above listed magnetic products.

All of these spatial filtering techniques were completed using the Oasis/Montaj Magmap and IGRF modules for filtering in the 2D FFT domain.

6.3.6.1 Reduction-to-the-Pole

To compensate for the shift of the true anomaly position over the causative source due to the magnetic inclination and declination, the magnetic data was recomputed so that magnetic anomalies will appear as they would if located at the north magnetic pole. The result of this operation is that in theory the magnetic anomaly is located directly overtop of the causative source. The computation is referred to as "reduction-to-the-pole" (RTP). The reduction-to-the-pole is computed using a FFT (Fast Fourier Transform) operator.

The RTP not only shifts the anomalies to their correct position with respect to the causative magnetic bodies, but assists in the direct correlation and comparison of magnetic anomalies, trends, structural axis, and discontinuities with mapped geologic surface expression.

6.3.6.2 First Vertical Derivative

To "sharpen" magnetic anomalies and to provide better spatial location of source axes and boundaries, a first vertical derivative map was computed from the RTP-TMI. Vertical derivatives compute the rate of change of the TMI as it drops off when measured vertically over the same point (upward continuation). Potential field data obeys Laplace's equation, which allows for the computation, through the application of analysis FFT, to take advantage of this symmetry and solve for the vertical or "z" component of the field.

6.3.6.3 Second Vertical Derivative

To enhance local magnetic anomalies and to outline the edges of anomalous bodies observed in the TMI, a second vertical derivative map was computed of the RTP_TMI. The Second Vertical Derivative map is a powerful interpretive tool and is used to assist in the delineation of causative bodies and accurate location of changes in the potential field gradient. Better definition of discontinuities and their relation to geology can be gained from the use of this tool. A Second Vertical Derivative map will show steep gradients over faults and positive closures over the "up thrown" blocks.

6.3.6.4 Analytic Signal

The Analytic Signal is the square root of the sum of the squares of the derivatives in the x, y, and z directions:

$$asig = \text{sqrt} (dx*dx + dy*dy + dz*dz)$$

where: *asig* is the Analytic Signal
sqrt is the square root of
dx is the horizontal gradient in the x direction
dy is the horizontal gradient in the y direction
dz is the vertical gradient in the z direction

The analytic signal is useful in locating the edges of magnetic source bodies, particularly where remanence and/or low magnetic latitude complicates interpretation.

6.3.6.5 Calculation of the Total Horizontal Derivative (TOTHDRV)

To highlight anomalous areas, which may be the result of a magnetic source of limited strike length, a Total Horizontal Derivative (TOTHDRV) is computed. The TOTHDRV is a powerful interpretive tool that can accurately define the edges of magnetic features such as dykes and vertical cylindrical geologic units that have sharp, but limited in area, magnetic gradients and geometry. A TOTHDRV will indicate peak gradients along the edges of narrow dykes and a circular, donut shaped anomaly over vertical cylinder sources.

7. DELIVERABLE PRODUCTS

The survey data is presented as colour/contour maps on paper, produced at a scale of 1:100,000 for Block 'A' & Block 'B' and 1:20,000 for Block 'A' Infill. A set of report-sized colour/contour images, on paper, is included as Appendix 5. The basic co-ordinate system used was NAD83, Universal Transverse Mercator (UTM) Zone 8N. All digital data are also presented on CD-ROM in ASCII format.

The deliverable items of this survey are:

7.1 Maps

The following maps, at a scale of 1:100,000 for the Block 'A' & Block 'B' and Block 'A' Infill, at a scale of 1:20,000, are delivered in two (2) paper copies.

- Flight Path with Topography
- Digital Terrain Model (DTM)
- Total Magnetic Intensity (TMI)
- Total Magnetic Intensity (IGRF removed)
- Total Magnetic Intensity (CompuDrape)
- Total Magnetic Intensity (IGRF removed) CompuDrape
- Total Magnetic Intensity Reduced to the Pole (CompuDrape)
- First Vertical Derivative (1VD) (CompuDrape)
- Calculated Second Vertical Derivative (2VD) (CompuDrape)
- Calculated Analytic Signal of TMI (CompuDrape)
- Calculated Horizontal Derivative (CompuDrape)

7.2 Digital Data

The edited field and processed digital data are delivered in two (2) copies, in ASCII code, on CD-ROM. The final processed line and grid data, in GEOSOFT format, are also delivered in two (2) copies on CD-ROM. Full descriptions of the digital data formats are included in this final report and as text files on each CD-ROM.

7.3 Report

Two (2) copies of a survey report are delivered, complete with all final maps. This report provides information about the acquisition, processing and presentation of the survey data.

Respectfully submitted,
McPhar Geosurveys Ltd.

Dr. Thomas Grand
Chief Geophysicist
McPhar Geosurveys Ltd.

APPENDIX III

GEOLOGICAL AND GEOTECHNICAL LOGS

Comments:
Contractor: Core Tech Diamond Drilling

Casing: depth: 4.572 m out

Scintillometer: Saphymo Stel SPP_2_NF # 2874

SURVEY	Depth	Azi.	Dip	Method
	Collar	241	-45	Brunton
	NO	ACID	TEST	CONDUCTED

Page: 1 of 4

[illegible]

Comments:
Contractor: Core Tech Diamond Drilling

Casing: depth: 3.048 m out

Core Size: btw

Logger: Ben Gelber

Drilling dates: September 27 - October 4, 2006

SURVEY	Depth	Azi.	Dip	Method
	Collar	241	-45	Brunton
	NO	ACID	TEST	CONDUCTED

[illegible]

Comments:
Contractor: Core Tech Diamond Drilling

Casing: depth: 3.05 m out

Logger: Ben Gelber

Scintillometer: Saphymo Stel SPP_2_NF # 287

SURVEY	Depth	Azi.	Dip	Method
	Collar	241	-45	Brunton
	NO	ACID	TEST	CONDUCTED

Hole: VIC1-06-03

[illegible]

Hole: VIC1-06-03													Section:										Drilling dates: October 2 - 7, 2006																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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	Type	Altitude	From (m)	To (m)	Interval (m)	Type	Colour	Texture	Mod 1	Mod 2	Type	Intensity	Prim.	Sec.	Pyrite	Chalcopyrite	Kennelite	Magnetite	Type	Intensity	Type	Intensity	Primary	Second	Minor	From (m)	To (m)	Interval (m)	Sample	Li (ppm)	Cu (ppm)	From (m)	To (m)	Intvl (m)	Radionuclides (average)	Magnetics	REC (m)	ROD (m)	Percent	Breakage	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Griffing	Width (mm)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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APPENDIX IV
CERTIFICATES OF ANALYSIS



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

TO: TWENTY-SEVEN CAPITAL CORP
C/O ARCHER, CATHRO & ASSOCIATES (1981)
LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Page: 1
Finalized Date: 29-OCT-2006
Account: TWESSEV

CERTIFICATE VA06103989

Project: Recce-Vic

P.O. No.:

This report is for 4 Rock samples submitted to our lab in Vancouver, BC, Canada on 19-SEP-2006.

The following have access to data associated with this certificate:

JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
U-XRF10	Fusion XRF - U Ore Grade	XRF
OA-GRA06	LOI for ME-XRF06	WST-SIM
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: TWENTY-SEVEN CAPITAL CORP
ATTN: JOAN MARIACHER
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

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

Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



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Project: Recce-Vic

Page: 2 - A
Total .. . ages: 2 (A - C)
Finalized Date: 29-OCT-2006
Account: TWSEV

CERTIFICATE OF ANALYSIS VA06103989

Sample Description	Method	WEI-21	Au-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1
B374551		1.70	0.013	3.5	0.53	435	<10	350	<0.5	3	0.06	0.5	56	8	1465
B374552		2.02	0.033	1.2	0.09	162	<10	10	<0.5	14	0.32	<0.5	62	5	659
B374553		0.70	0.213	1.9	0.45	37	<10	560	<0.5	12	0.70	<0.5	53	8	928
B374554		1.06	2.62	11.0	0.29	33	<10	140	<0.5	8	0.09	1.1	58	10	1595



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Project: Recce-Vic

Page: 2 - B
Total Pages: 2 (A - C)
Finalized Date: 29-OCT-2006
Account: TWESEV

CERTIFICATE OF ANALYSIS VA06103989

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc
		ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm
		10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1
B374551		<10	<1	0.28	10	0.08	2330	450	<0.01	62	790	124	0.42	23	8
B374552		10	<1	0.05	10	0.95	6860	67	<0.01	29	1400	32	>10.0	7	3
B374553		<10	<1	0.29	40	1.77	8240	542	<0.01	39	2010	78	0.45	13	12
B374554		<10	<1	0.18	<10	0.43	6980	2650	<0.01	49	310	108	0.65	8	2



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Project: Recce-Vic

Page: 2 - C

Total Pages: 2 (A - C)

Finalized Date: 29-OCT-2006

Account: TWSEV

CERTIFICATE OF ANALYSIS VA06103989

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	U-XRF10
		Ti	Ti	U	V	W	Zn	U
		%	ppm	ppm	ppm	ppm	ppm	%
		0.01	10	10	1	10	2	0.01
B374551		0.08	<10	520	26	60	10	0.05
B374552		<0.01	10	170	29	10	17	0.03
B374553		0.11	<10	1840	16	30	17	0.17
B374554		0.04	<10	1620	18	10	14	0.16



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Page: 1
Finalized Date: 4-JAN-2007
Account: TWESEV

CERTIFICATE VA06122443

Project: VIC/YUP

P.O. No.:

This report is for 54 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 1-NOV-2006.

The following have access to data associated with this certificate:

JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-XRF05	Trace Level XRF Analysis	XRF
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: TWENTY-SEVEN CAPITAL CORP
ATTN: JOAN MARIACHER
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

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

Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



ALS Chemex

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1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: VIC/YUP

Page: 2 - A
Total Pages: 3 (A - C)
Finalized Date: 4-JAN-2007
Account: TWESEV

CERTIFICATE OF ANALYSIS VA06122443

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA23 Au ppm	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
C384501		4.46	0.009	0.6	0.69	210	<10	90	<0.5	11	0.15	<0.5	35	7	80	6.60
C384502		5.22	0.008	0.5	0.64	202	<10	40	<0.5	8	0.09	<0.5	40	6	169	8.92
C384503		3.54	0.009	1.4	0.70	332	<10	40	<0.5	18	0.01	<0.5	71	6	290	11.65
C384504		3.22	<0.005	0.3	0.71	94	<10	210	<0.5	6	0.02	<0.5	35	6	52	4.24
C384505		5.76	0.008	<0.2	0.60	72	<10	200	<0.5	5	0.03	<0.5	30	4	59	3.43
C384506		5.62	<0.005	0.4	0.62	71	<10	140	<0.5	6	0.04	<0.5	37	4	36	3.50
C384507		4.56	<0.005	0.3	0.68	326	<10	250	<0.5	8	0.09	<0.5	159	6	114	3.04
C384508		5.50	0.006	0.3	0.73	439	<10	160	<0.5	12	1.64	<0.5	226	6	302	5.26
C384509		4.74	0.007	0.2	0.59	121	<10	180	<0.5	10	0.90	<0.5	66	4	142	6.87
C384510		5.46	<0.005	0.2	0.75	64	<10	160	<0.5	6	0.26	<0.5	40	5	332	2.38
C384511		5.74	0.009	0.4	0.55	196	<10	60	<0.5	8	0.70	<0.5	55	2	1020	20.7
C384512		2.96	0.021	1.4	0.63	892	10	20	<0.5	28	0.30	<0.5	134	5	2090	18.3
C384513		3.58	0.006	0.4	0.34	105	<10	80	<0.5	5	3.58	<0.5	39	1	603	24.9
C384514		4.54	0.009	0.9	0.23	222	<10	60	<0.5	15	1.14	<0.5	86	<1	1460	32.3
C384515		4.38	0.006	0.9	0.46	115	<10	130	<0.5	8	1.25	<0.5	79	2	1460	24.1
C384516		4.66	0.007	0.7	0.38	207	<10	50	<0.5	11	3.95	<0.5	63	2	583	23.0
C384517		5.40	0.010	0.5	0.33	134	<10	60	<0.5	8	5.73	<0.5	37	3	446	21.3
C384518		3.80	0.005	0.2	0.64	16	<10	170	<0.5	3	0.34	<0.5	19	5	182	17.7
C384519		5.04	0.023	0.9	0.26	119	<10	60	<0.5	15	1.27	<0.5	62	2	1230	27.9
C384520		2.96	<0.005	<0.2	0.06	3	<10	60	<0.5	<2	19.7	<0.5	<1	2	8	0.24
C384521		4.26	0.019	0.8	0.36	78	<10	70	<0.5	13	0.71	<0.5	57	2	1010	26.2
C384522		5.84	0.010	<0.2	0.79	14	<10	360	<0.5	4	0.41	<0.5	26	7	179	13.5
C384523		5.90	0.012	<0.2	0.83	15	<10	450	<0.5	<2	4.27	<0.5	30	6	61	6.40
C384524		7.16	0.007	<0.2	0.71	7	<10	750	<0.5	<2	1.92	<0.5	9	7	94	9.41
C384525		5.70	0.014	0.3	0.80	8	<10	780	<0.5	2	1.68	<0.5	18	7	359	10.05
C384526		5.92	0.009	<0.2	0.74	9	<10	820	<0.5	<2	3.17	<0.5	9	6	197	6.64
C384527		5.08	0.010	<0.2	0.78	6	<10	1310	<0.5	<2	3.17	<0.5	8	6	151	6.23
C384528		6.28	0.007	<0.2	0.75	6	<10	1020	<0.5	<2	4.21	<0.5	10	6	175	5.68
C384529		3.98	0.011	<0.2	0.82	7	<10	830	<0.5	2	3.91	<0.5	19	7	79	7.26
C384530		4.70	0.015	0.3	0.70	11	<10	700	<0.5	<2	2.89	<0.5	16	6	594	11.20
C384531		6.08	0.020	0.3	0.80	9	<10	110	<0.5	3	3.26	<0.5	31	6	500	6.90
C384532		5.14	0.009	<0.2	0.89	4	<10	370	<0.5	<2	3.85	<0.5	20	9	71	5.30
C384533		1.28	0.015	0.2	1.03	7	<10	190	<0.5	<2	2.52	<0.5	48	10	68	7.03
C384534		5.24	0.008	<0.2	0.92	6	<10	1030	<0.5	<2	2.44	<0.5	23	8	23	6.59
C384535		5.16	0.006	<0.2	0.81	7	<10	1520	<0.5	<2	2.36	<0.5	18	7	24	6.61
C384536		5.22	<0.005	<0.2	0.74	7	<10	1130	<0.5	2	3.05	<0.5	27	8	9	7.20
C384537		5.08	0.005	<0.2	0.72	6	<10	1520	<0.5	<2	2.58	<0.5	19	7	66	8.56
C384538		6.90	0.028	0.3	0.41	51	<10	100	<0.5	7	0.42	0.5	127	22	317	28.9
C384539		6.08	0.019	0.2	0.56	35	<10	90	<0.5	3	0.94	<0.5	95	23	129	16.7
C384540		1.72	<0.005	<0.2	0.07	<2	<10	60	<0.5	<2	18.5	<0.5	1	2	2	0.17



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Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr
		ppm 10	ppm 1	% 0.01	ppm 10	% 0.01	ppm 5	ppm 1	% 0.01	ppm 1	ppm 10	ppm 2	% 0.01	ppm 2	ppm 1	ppm 1
C384501		<10	<1	0.42	10	0.28	885	4	<0.01	26	530	10	4.57	2	2	5
C384502		<10	<1	0.38	10	0.38	1190	3	<0.01	34	460	10	7.61	<2	1	2
C384503		<10	<1	0.43	10	0.10	229	4	<0.01	46	80	12	>10.0	2	2	1
C384504		<10	<1	0.43	10	0.32	1175	<1	0.01	16	80	7	2.40	4	1	2
C384505		<10	<1	0.36	10	0.30	1020	<1	<0.01	15	150	5	1.92	2	1	2
C384506		<10	<1	0.38	10	0.24	858	<1	<0.01	15	190	7	2.49	2	1	2
C384507		<10	1	0.39	10	0.23	627	3	0.01	49	160	10	2.13	2	1	4
C384508		<10	<1	0.45	10	1.03	2120	3	0.01	67	140	14	2.92	4	2	34
C384509		<10	<1	0.36	10	1.22	2980	2	0.01	28	130	13	2.83	3	2	18
C384510		<10	<1	0.45	10	0.16	316	3	<0.01	20	190	11	2.19	<2	1	8
C384511		<10	<1	0.33	10	2.13	8400	13	0.01	32	1010	7	5.87	<2	2	16
C384512		<10	1	0.37	10	0.58	1970	66	<0.01	128	700	21	>10.0	<2	3	10
C384513		<10	<1	0.20	10	3.61	9800	31	0.01	27	1260	14	5.37	<2	4	95
C384514		<10	1	0.14	10	2.67	9910	41	0.01	66	860	21	>10.0	<2	5	55
C384515		<10	<1	0.29	10	2.93	8840	37	0.01	46	620	16	7.50	<2	9	49
C384516		<10	<1	0.25	<10	3.16	6160	39	0.01	48	740	21	>10.0	<2	5	96
C384517		<10	<1	0.21	<10	4.01	7320	23	0.01	27	700	16	8.89	<2	4	132
C384518		<10	1	0.43	20	2.24	8110	9	<0.01	14	620	7	1.90	<2	4	12
C384519		<10	1	0.19	<10	2.02	6910	42	0.01	42	590	15	>10.0	<2	5	46
C384520		<10	<1	0.02	<10	10.70	170	<1	0.01	1	510	4	<0.01	<2	<1	129
C384521		<10	1	0.25	10	2.13	8090	101	0.01	35	1180	13	9.64	<2	3	29
C384522		<10	1	0.54	30	1.94	6860	7	0.01	18	660	2	1.12	<2	4	15
C384523		<10	2	0.54	10	2.24	4290	3	0.01	16	690	5	1.09	<2	4	92
C384524		<10	<1	0.47	20	2.16	6730	5	0.01	11	730	3	0.19	<2	4	41
C384525		<10	<1	0.50	20	1.89	5420	7	0.01	11	990	3	0.41	<2	3	31
C384526		<10	<1	0.49	30	2.17	4920	3	0.01	10	640	4	0.26	<2	3	57
C384527		<10	<1	0.51	20	2.13	5020	4	0.01	9	650	4	0.24	<2	3	72
C384528		<10	<1	0.49	20	2.33	4810	4	0.01	9	660	5	0.36	<2	3	107
C384529		<10	<1	0.52	10	2.69	5590	3	0.02	12	680	3	0.51	<2	4	87
C384530		<10	1	0.45	20	2.70	7080	8	0.01	17	750	3	0.40	<2	3	82
C384531		<10	<1	0.48	10	2.23	5210	20	0.01	16	630	4	1.15	2	3	97
C384532		<10	<1	0.50	20	1.99	3610	16	0.02	10	550	3	0.46	<2	3	191
C384533		<10	<1	0.59	10	1.74	3340	13	0.02	18	760	4	1.15	2	3	119
C384534		<10	<1	0.57	20	1.88	4670	10	0.01	12	690	2	0.37	<2	3	88
C384535		<10	1	0.50	20	1.87	4390	6	0.01	10	640	2	0.24	<2	3	93
C384536		<10	<1	0.47	20	2.19	4590	12	0.01	14	610	2	0.21	<2	2	136
C384537		<10	<1	0.47	20	2.24	5360	6	0.01	14	710	3	0.23	<2	4	87
C384538		<10	<1	0.26	20	2.47	11250	39	0.01	45	1180	6	1.77	<2	7	27
C384539		<10	<1	0.38	30	1.84	6720	72	0.01	27	750	4	1.21	2	5	67
C384540		<10	<1	0.02	10	10.30	127	<1	0.01	1	390	<2	<0.01	<2	<1	121



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CERTIFICATE OF ANALYSIS VA06122443

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-XRF05
		Ti	Ti	U	V	W	Zn	U
		% 0.01	ppm 10	ppm 10	ppm 1	ppm 10	ppm 2	ppm 4
C384501		0.01	<10	10	10	<10	2	
C384502		<0.01	<10	<10	7	<10	3	
C384503		<0.01	<10	<10	8	<10	<2	
C384504		<0.01	<10	<10	5	<10	2	
C384505		<0.01	<10	<10	3	<10	2	
C384506		<0.01	<10	<10	3	<10	2	
C384507		<0.01	<10	<10	4	<10	4	
C384508		<0.01	<10	10	4	<10	4	
C384509		<0.01	<10	10	3	<10	5	
C384510		<0.01	<10	10	3	<10	2	
C384511		<0.01	<10	10	19	<10	13	
C384512		0.01	10	350	10	<10	4	360
C384513		0.01	<10	60	21	<10	15	
C384514		0.01	<10	120	26	<10	20	127
C384515		0.01	<10	80	26	<10	12	
C384516		0.01	<10	180	17	<10	12	192
C384517		0.01	<10	120	19	<10	11	127
C384518		0.01	<10	70	15	<10	20	
C384519		<0.01	<10	70	20	<10	12	
C384520		<0.01	<10	<10	1	<10	5	
C384521		0.01	<10	70	14	<10	12	
C384522		0.01	<10	20	14	<10	16	
C384523		0.01	<10	<10	8	<10	8	
C384524		0.01	<10	10	12	<10	12	
C384525		0.01	<10	10	14	<10	12	
C384526		0.01	<10	10	9	<10	10	
C384527		0.01	<10	10	9	<10	9	
C384528		0.01	<10	<10	9	<10	8	
C384529		0.01	<10	<10	10	<10	9	
C384530		0.01	<10	<10	13	<10	15	
C384531		0.01	<10	40	8	<10	9	
C384532		0.01	<10	<10	10	<10	11	
C384533		0.01	<10	20	13	<10	11	
C384534		0.01	<10	<10	11	<10	9	
C384535		0.01	<10	<10	10	<10	8	
C384536		0.01	<10	<10	10	<10	9	
C384537		0.01	<10	10	14	<10	12	
C384538		<0.01	<10	<10	83	<10	23	
C384539		0.01	<10	<10	61	<10	15	
C384540		<0.01	<10	10	2	<10	5	



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CERTIFICATE OF ANALYSIS VA06122443

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt.	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
		kg	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
C384541		5.70	0.013	0.2	0.65	11	<10	70	<0.5	2	2.09	<0.5	31	12	63	12.00
C384542		5.38	<0.005	<0.2	0.65	9	<10	500	<0.5	<2	3.66	<0.5	14	8	6	6.97
C384543		5.24	<0.005	<0.2	0.77	<2	<10	2340	<0.5	<2	4.16	<0.5	8	9	2	4.73
C384544		5.28	<0.005	0.2	0.81	<2	<10	1050	<0.5	<2	4.10	<0.5	15	9	39	5.37
C384545		5.22	<0.005	<0.2	0.75	<2	<10	250	<0.5	<2	3.75	<0.5	15	7	10	4.06
C384546		2.20	0.006	<0.2	0.69	6	<10	220	<0.5	<2	4.75	<0.5	15	7	22	5.02
C384547		3.52	0.006	13.7	0.75	<2	<10	390	<0.5	<2	3.84	<0.5	14	8	232	5.39
C384548		6.36	0.007	0.3	0.73	11	<10	490	<0.5	<2	4.94	<0.5	16	5	3	3.12
C384549		5.40	<0.005	<0.2	0.68	<2	<10	2570	<0.5	<2	4.66	<0.5	5	6	4	3.08
C384550		5.80	0.028	<0.2	0.72	<2	<10	3060	<0.5	<2	3.93	<0.5	4	6	13	2.98
C384551		5.94	0.011	<0.2	0.63	4	<10	150	<0.5	<2	4.43	<0.5	32	5	46	3.15
C384552		3.82	0.091	0.7	0.22	49	<10	30	<0.5	12	2.62	<0.5	159	9	598	27.3
C384553		6.42	0.009	0.2	0.70	9	<10	190	<0.5	<2	3.83	<0.5	30	6	224	4.64
C384554		6.24	<0.005	<0.2	0.68	4	<10	1190	<0.5	<2	4.47	<0.5	14	7	21	4.37



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CERTIFICATE OF ANALYSIS VA06122443

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc
		ppm 10	ppm 1	% 0.01	ppm 10	% 0.01	ppm 5	ppm 1	% 0.01	ppm 1	ppm 10	ppm 2	% 0.01	ppm 2	ppm 1
C384541		<10	<1	0.42	20	1.96	5310	17	0.01	19	870	4	1.68	<2	3
C384542		<10	<1	0.43	20	2.17	4520	2	0.01	15	610	2	0.29	<2	3
C384543		<10	<1	0.49	20	2.00	3700	1	0.02	13	690	<2	0.14	<2	3
C384544		<10	<1	0.52	20	2.04	3690	1	0.01	15	670	3	0.25	<2	3
C384545		<10	<1	0.49	20	1.84	3190	3	0.01	12	740	3	0.49	<2	4
C384546		<10	<1	0.42	20	2.25	3930	7	0.01	15	620	2	0.42	<2	3
C384547		<10	<1	0.38	20	1.96	3490	22	0.01	16	670	5	0.24	<2	3
C384548		<10	<1	0.45	10	2.15	3200	61	0.02	7	660	4	0.25	<2	2
C384549		<10	<1	0.43	20	2.07	3290	1	0.02	9	650	2	0.08	<2	2
C384550		<10	<1	0.46	20	1.82	3040	1	0.02	9	700	2	0.08	<2	3
C384551		<10	<1	0.41	10	1.87	2890	3	0.01	7	630	3	0.58	<2	2
C384552		<10	1	0.11	<10	2.69	8170	17	0.03	40	2780	9	5.24	<2	2
C384553		<10	<1	0.45	10	2.02	3800	12	0.02	13	640	7	0.45	<2	3
C384554		<10	<1	0.44	20	2.22	3670	2	0.02	11	630	3	0.20	<2	3



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Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-XRF05
		Ti	Ti	U	V	W	Zn	U
		%	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	10	10	1	10	2	4
C384541		0.01	<10	<10	20	<10	12	
C384542		0.01	<10	<10	10	<10	9	
C384543		0.01	<10	<10	10	<10	5	
C384544		0.01	<10	<10	11	<10	6	
C384545		0.01	<10	10	9	<10	5	
C384546		0.01	<10	<10	9	<10	7	
C384547		<0.01	<10	<10	11	<10	8	
C384548		0.01	<10	30	8	<10	5	
C384549		0.01	<10	<10	8	<10	5	
C384550		0.01	<10	<10	8	<10	5	
C384551		<0.01	<10	<10	7	<10	5	
C384552		<0.01	<10	<10	46	<10	18	
C384553		0.01	<10	10	8	<10	5	
C384554		0.01	<10	<10	9	<10	5	



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VANCOUVER BC V6B 1L8

Page: 1
Finalized Date: 5-JAN-2007
Account: TWSEV

CERTIFICATE VA06127266

Project: YUP/VIC-3

P.O. No.:

This report is for 2 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 15-NOV-2006.

The following have access to data associated with this certificate:

JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: TWENTY-SEVEN CAPITAL CORP
ATTN: JOAN MARIACHER
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

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

Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



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Page: 2 - A
Total .. . ages: 2 (A - C)
Finalized Date: 5-JAN-2007
Account: TWESSEV

CERTIFICATE OF ANALYSIS VA06127266

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
		kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
		0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
C384636		5.76	0.3	0.58	7	10	170	<0.5	<2	4.22	<0.5	12	7	25	5.24	<10
C384637		8.34	<0.2	0.61	9	<10	130	<0.5	2	3.97	<0.5	21	5	22	6.17	<10



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Project: YUP/VIC-3

Page: 2 - B
Total pages: 2 (A - C)
Finalized Date: 5-JAN-2007
Account: TWESEV

CERTIFICATE OF ANALYSIS VA06127266

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr
		ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
		1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1
C384636		<1	0.40	10	2.08	3280	4	0.01	19	650	4	0.50	3	4	165
C384637		<1	0.40	10	2.12	4110	4	0.01	16	670	5	0.79	<2	3	165



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Page: 2 - C
Total pages: 2 (A - C)
Finalized Date: 5-JAN-2007
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CERTIFICATE OF ANALYSIS VA06127266

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ti	U	V	W	Zn
	Units	ppm	ppm	ppm	ppm	ppm
	LOR	10	10	1	10	2
C384636		<10	<10	10	<10	12
C384637		<10	<10	9	<10	10



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Finalized Date: 4-JAN-2007
Account: TWSEV

CERTIFICATE VA06131216

Project: YUP/VIC-2

P.O. No.:

This report is for 19 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 15-NOV-2006.

The following have access to data associated with this certificate:

JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-XRF05	Trace Level XRF Analysis	XRF
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: TWENTY-SEVEN CAPITAL CORP
ATTN: JOAN MARIACHER
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



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Page: 2 - A
Total # of pages: 2 (A - C)
Finalized Date: 4-JAN-2007
Account: TWSEV

CERTIFICATE OF ANALYSIS VA06131216

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt.	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
		kg	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
C384601		5.22	<0.005	0.2	0.46	60	<10	70	<0.5	4	1.62	<0.5	38	3	230	3.05
C384602		5.34	<0.005	0.3	0.52	63	<10	30	<0.5	6	1.59	<0.5	26	3	105	5.55
C384603		6.78	0.015	0.9	0.52	169	<10	30	<0.5	16	3.29	<0.5	61	5	1245	13.05
C384604		6.74	0.007	0.6	0.32	137	<10	30	<0.5	10	2.24	0.5	42	7	1225	22.9
C384605		4.92	0.007	0.9	0.19	132	<10	40	<0.5	11	1.20	0.6	63	7	724	32.2
C384606		4.48	0.007	0.3	0.71	32	<10	70	<0.5	3	2.88	<0.5	31	6	237	8.79
C384607		4.62	0.012	0.3	0.53	24	<10	50	<0.5	4	2.24	<0.5	21	5	361	14.4
C384608		4.60	<0.005	<0.2	1.00	13	<10	110	<0.5	<2	4.60	<0.5	12	8	62	4.32
C384609		1.34	<0.005	<0.2	0.07	<2	<10	60	<0.5	<2	0.76	<0.5	6	<1	29	4.30
C384610		4.40	0.011	0.2	1.07	15	<10	100	<0.5	4	2.75	<0.5	27	9	21	6.02
C384611		5.80	0.023	0.2	0.63	18	<10	100	<0.5	3	1.35	<0.5	29	6	82	9.64
C384612		6.28	<0.005	0.2	0.79	7	<10	1070	<0.5	<2	0.37	<0.5	7	8	231	11.90
C384613		6.34	<0.005	0.2	0.68	3	<10	530	<0.5	<2	0.29	<0.5	12	6	111	10.95
C384614		4.56	0.007	<0.2	0.59	9	<10	150	<0.5	<2	0.47	<0.5	19	8	119	15.7
C384615		3.02	0.020	0.4	0.59	16	<10	50	<0.5	7	1.77	<0.5	32	10	421	16.3
C384616		1.74	<0.005	<0.2	0.03	5	<10	880	<0.5	<2	0.46	<0.5	2	<1	14	0.90
C384617		6.52	<0.005	<0.2	0.11	<2	<10	210	<0.5	<2	19.3	<0.5	1	1	4	0.36
C384618		5.50	0.006	<0.2	0.48	7	<10	210	<0.5	<2	0.96	<0.5	18	4	61	9.44
C384619		0.98	0.007	<0.2	0.54	8	<10	100	<0.5	<2	0.76	<0.5	26	5	24	13.2



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Page: 2 - B
Total Pages: 2 (A - C)
Finalized Date: 4-JAN-2007
Account: TWESEV

CERTIFICATE OF ANALYSIS VA06131216

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc
		ppm 10	ppm 1	% 0.01	ppm 10	% 0.01	ppm 5	ppm 1	% 0.01	ppm 1	ppm 10	ppm 2	% 0.01	ppm 2	ppm 1
C384601		<10	<1	0.28	10	0.61	725	1	0.01	17	150	10	2.46	<2	1
C384602		<10	<1	0.31	10	0.94	1390	2	0.01	18	120	11	4.10	2	1
C384603		<10	<1	0.31	10	2.11	3490	37	0.02	48	930	8	9.47	2	3
C384604		<10	<1	0.19	10	2.62	9440	30	0.02	40	950	6	6.41	<2	2
C384605		<10	<1	0.11	10	2.93	12050	55	0.02	55	1820	12	9.00	2	3
C384606		<10	<1	0.45	10	2.05	4390	11	0.01	26	590	4	3.02	2	3
C384607		<10	<1	0.35	10	2.88	6930	27	0.01	22	850	4	2.77	<2	3
C384608		<10	<1	0.66	10	2.22	2140	5	0.02	14	660	<2	1.32	<2	3
C384609		<10	<1	0.04	<10	0.48	764	4	<0.01	8	50	<2	1.24	<2	<1
C384610		<10	<1	0.72	10	2.04	2680	5	0.02	20	580	2	1.63	2	3
C384611		<10	<1	0.42	10	1.97	4870	8	0.01	14	660	<2	1.31	4	3
C384612		<10	<1	0.49	30	2.08	6490	4	0.01	16	730	<2	0.34	<2	3
C384613		<10	<1	0.45	20	1.74	5420	6	0.01	18	730	<2	0.50	2	3
C384614		<10	<1	0.38	10	2.31	7420	9	0.01	21	860	<2	1.14	2	3
C384615		<10	<1	0.41	10	2.59	6470	30	0.02	27	510	4	2.75	2	4
C384616		<10	<1	0.01	<10	0.30	524	15	0.01	1	20	<2	0.10	<2	<1
C384617		<10	<1	0.03	10	10.65	217	<1	0.01	2	570	2	0.03	<2	1
C384618		<10	<1	0.33	10	1.84	5300	6	0.01	16	640	<2	0.45	<2	3
C384619		<10	<1	0.36	10	2.15	7160	12	0.01	20	600	<2	1.07	2	3



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Page: 2 - C
Total Pages: 2 (A - C)
Finalized Date: 4-JAN-2007
Account: TWSEV

CERTIFICATE OF ANALYSIS VA06131216

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-XRF05
		Ti	Ti	U	V	W	Zn	U
		% 0.01	ppm 10	ppm 10	ppm 1	ppm 10	ppm 2	ppm 4
C384601		<0.01	<10	<10	4	<10	<2	
C384602		<0.01	<10	10	5	<10	4	
C384603		<0.01	<10	80	10	<10	3	
C384604		<0.01	<10	50	31	<10	16	
C384605		0.01	<10	280	45	<10	20	277
C384606		0.01	<10	50	11	<10	7	
C384607		0.01	<10	40	12	<10	12	
C384608		0.02	<10	10	13	<10	7	
C384609		<0.01	<10	<10	2	<10	2	
C384610		0.02	<10	20	13	<10	9	
C384611		0.01	<10	10	11	<10	11	
C384612		0.01	<10	10	14	<10	16	
C384613		0.01	<10	<10	11	<10	10	
C384614		0.01	<10	10	16	<10	14	
C384615		0.01	<10	10	22	<10	16	
C384616		<0.01	<10	<10	1	<10	<2	
C384617		<0.01	<10	<10	2	<10	5	
C384618		<0.01	<10	10	7	<10	7	
C384619		<0.01	<10	<10	11	<10	10	



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Page: 1
Finalized Date: 2-JAN-2007
Account: TWSEV

CERTIFICATE VA06131217

Project: YUP/VIC-3

P.O. No.:

This report is for 24 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 15-NOV-2006.

The following have access to data associated with this certificate:

JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
----------	-------------

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: TWENTY-SEVEN CAPITAL CORP
ATTN: JOAN MARIACHER
C/O ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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VANCOUVER BC V6B 1L8

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Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



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Project: YUP/VIC-3

Page: 2 - A
Total # Pages: 2 (A - C)
Finalized Date: 2-JAN-2007
Account: TWSESEV

CERTIFICATE OF ANALYSIS VA06131217

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
C384620		4.40	<0.005	0.3	0.42	72	<10	50	<0.5	<2	3.64	<0.5	26	2	170	4.66
C384621		3.32	0.015	0.6	0.38	135	<10	20	<0.5	3	7.73	<0.5	62	3	367	12.20
C384622		3.72	<0.005	<0.2	0.55	18	<10	320	<0.5	<2	5.48	<0.5	12	4	74	5.84
C384623		6.28	0.006	<0.2	0.50	31	<10	230	<0.5	<2	4.48	<0.5	19	4	43	6.68
C384624		5.66	0.006	<0.2	0.56	17	<10	360	<0.5	<2	4.37	<0.5	15	4	138	5.92
C384625		6.00	0.007	0.2	0.54	31	<10	400	<0.5	<2	4.76	<0.5	27	4	160	5.94
C384626		5.34	0.005	<0.2	0.56	13	<10	500	<0.5	<2	3.42	<0.5	22	5	124	5.80
C384627		2.36	0.011	<0.2	0.64	37	<10	640	<0.5	2	3.13	0.5	105	6	63	5.71
C384628		5.72	<0.005	<0.2	0.59	23	<10	350	<0.5	<2	3.15	<0.5	100	7	34	6.57
C384629		4.70	0.009	0.2	0.57	31	<10	110	<0.5	<2	1.83	0.5	73	20	43	13.8
C384630		1.44	<0.005	0.2	0.18	9	<10	420	<0.5	<2	8.45	<0.5	7	13	11	22.1
C384631		5.86	0.021	0.4	0.21	35	<10	70	<0.5	3	0.93	<0.5	63	16	53	32.7
C384632		4.04	0.017	0.3	0.41	21	<10	90	<0.5	3	2.17	0.8	46	12	290	17.1
C384633		4.08	0.006	<0.2	0.63	7	<10	570	<0.5	<2	5.16	<0.5	11	8	42	6.88
C384634		6.62	0.057	0.8	0.31	43	<10	30	<0.5	12	4.30	0.7	57	9	1305	17.8
C384635		5.56	0.005	<0.2	0.61	9	<10	220	<0.5	<2	4.43	<0.5	15	7	30	5.95
C384636		Not Recvd														
C384637		Not Recvd														
C384638		2.82	<0.005	<0.2	0.50	3	<10	380	<0.5	<2	4.45	<0.5	13	5	29	7.06
C384639		0.68	0.005	<0.2	0.48	4	<10	530	<0.5	<2	3.33	<0.5	12	5	13	5.41
C384640		5.42	0.013	0.3	0.47	29	<10	50	<0.5	2	4.97	<0.5	33	4	56	7.64
C384641		5.76	0.006	<0.2	0.53	13	<10	180	<0.5	<2	4.59	<0.5	24	5	23	4.95
C384642		1.96	<0.005	<0.2	0.09	2	<10	1060	<0.5	<2	19.3	<0.5	1	1	3	0.23
C384643		7.14	0.010	<0.2	0.57	16	<10	160	<0.5	<2	4.45	<0.5	31	6	375	6.53



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ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

TWENTY-SEVEN CAPITAL CORP
C/O ARCHER, CATHRO & ASSOCIATES (1981)
LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Project: YUP/VIC-3

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Total # Pages: 2 (A - C)

Finalized Date: 2-JAN-2007

Account: TWSEV

CERTIFICATE OF ANALYSIS VA06131217

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc
		ppm 10	ppm 1	% 0.01	ppm 10	% 0.01	ppm 5	ppm 1	% 0.01	ppm 1	ppm 10	ppm 2	% 0.01	ppm 2	ppm 1
C384620		<10	<1	0.26	10	1.52	1845	6	0.01	14	140	13	3.75	2	1
C384621		<10	<1	0.25	10	3.48	5410	14	0.02	38	550	18	8.80	4	2
C384622		<10	<1	0.36	10	2.62	4830	7	0.02	15	570	3	0.65	<2	3
C384623		<10	<1	0.32	10	2.40	4370	6	0.01	16	590	3	1.55	<2	2
C384624		<10	<1	0.36	10	2.11	4020	8	0.02	16	690	5	0.62	2	3
C384625		<10	<1	0.34	10	2.42	3930	13	0.01	14	630	2	0.73	<2	3
C384626		<10	<1	0.38	20	2.01	4190	3	0.02	12	620	3	0.19	<2	3
C384627		<10	<1	0.41	10	1.78	3450	3	0.02	13	600	3	0.76	3	3
C384628		<10	<1	0.39	10	1.56	2870	4	0.01	17	700	3	0.87	<2	3
C384629		<10	<1	0.35	10	1.79	5690	19	0.01	22	1070	3	1.66	2	3
C384630		<10	<1	0.09	10	4.38	10950	4	0.04	19	250	12	0.22	<2	23
C384631		<10	<1	0.15	10	2.37	10000	31	0.02	39	1230	2	3.43	<2	4
C384632		<10	<1	0.29	10	2.45	7590	11	0.02	24	830	4	2.47	2	4
C384633		<10	<1	0.44	20	2.57	4140	5	0.01	17	690	<2	0.63	2	5
C384634		<10	<1	0.23	<10	2.16	4660	22	0.02	39	750	6	>10.0	<2	3
C384635		<10	<1	0.42	10	2.23	3710	9	0.02	19	720	3	0.60	<2	4
C384636															
C384637															
C384638		<10	<1	0.35	10	2.65	4970	1	0.01	15	590	<2	0.27	2	4
C384639		<10	<1	0.31	20	1.94	4200	4	0.01	11	730	2	0.18	2	3
C384640		<10	<1	0.32	10	2.25	4340	8	0.01	18	660	8	2.02	2	3
C384641		<10	<1	0.36	10	2.11	3650	2	0.01	14	640	3	0.54	<2	2
C384642		<10	<1	0.02	10	10.75	167	1	0.01	4	460	<2	0.07	<2	<1
C384643		<10	<1	0.38	10	2.25	4160	11	0.01	17	630	5	0.87	<2	2



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Finalized Date: 2-JAN-2007

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CERTIFICATE OF ANALYSIS VA06131217

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Ti %	Ti ppm	U ppm	V ppm	W ppm	Zn ppm
		0.01	10	10	1	10	2
C384620		<0.01	<10	30	4	<10	5
C384621		<0.01	<10	80	8	<10	7
C384622		<0.01	<10	20	7	<10	6
C384623		<0.01	<10	10	7	<10	7
C384624		<0.01	<10	20	7	<10	8
C384625		<0.01	<10	40	7	<10	7
C384626		<0.01	<10	<10	8	<10	10
C384627		0.01	<10	10	9	<10	11
C384628		0.01	<10	<10	11	<10	6
C384629		<0.01	<10	10	29	<10	16
C384630		<0.01	<10	<10	38	<10	42
C384631		<0.01	<10	<10	86	<10	28
C384632		<0.01	<10	10	24	<10	19
C384633		0.01	<10	10	14	<10	10
C384634		<0.01	<10	10	19	<10	11
C384635		0.01	<10	10	10	<10	9
C384636							
C384637							
C384638		<0.01	<10	<10	8	<10	11
C384639		<0.01	<10	<10	7	<10	10
C384640		<0.01	<10	10	10	<10	8
C384641		0.01	<10	10	8	<10	7
C384642		<0.01	<10	<10	2	<10	5
C384643		0.01	<10	20	8	<10	9

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

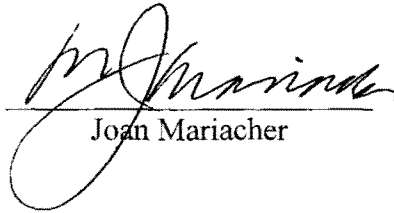
Telephone: 604-688-2568

Fax: 604-688-2578

AFFIDAVIT

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

That to the best of my knowledge the attached Statement of
Expenditures for exploration work on the Bond, Plus, Vector and Vic
mineral claims on Claim Sheet 106D/10 is accurate.


Joan Mariacher

Sworn before me at Vancouver, B.C.

this 17th day of March 2007.


Notary Public, Yukon Territory

Statement of Expenditures
Bond, Plus, Vector and Vic Mineral Claims
March 16, 2007

Contract Diamond Drilling

Coretech Diamond Drilling

\$84,682.44

Three holes drilled on Vector 2 – YC02847.

CORETECH

DIAMOND DRILLING

2016 West Bench Dr. Penticton, B.C. V2A-8Z3

Phone 250-493-9467

Fax 250-493-1602

Invoice # 013513-A

BONNIE-VIC
Cash Minerals
1016-510 Hastings
Vancouver, B.C.
V6iB-1L8

Sept. 21-23, 2006

Man hours	132 @ 50.00 per hour	\$6,600.00	
G.S.T.		<u>369.00</u>	
Total		\$6,996.00	

CORETECH

DIAMOND DRILLING

2016 West Bench Dr. Penticton, B.C. V2A-8Z3

Phone 250-493-9467

Fax 250-493-1602

October 15, 2006

Invoice # 013513-B

A. J.

VIC

Cash Minerals

1016-510 Hastings

Vancouver, B.C.

V6B-1L8

Holes VIC 06-01, Sept 24-26

Chargeable Man Hours	22 hrs.	\$ 50.00 per hr.	1,100.00
Chargeable Drill Hours	6 hrs.	\$ 85.00 per hr.	510.00
Meters 192.6		\$ 80.00 per m.	15,408.00

Materials Consumed

"1" Extreme Blue	\$ 200.00	200.00
"1" Extreme Gold	\$ 200.00	200.00
"1" Pail Rod Grease	\$ 103.50	103.50

Hole Vic 06-02, Sept. 27-Oct. 02

Chargeable Man Hours	93 hrs.	\$ 50.00 per hr.	4,650.00
Chargeable Drill Hours	25.5 hrs.	\$ 85.00 per hr.	2,167.59
Meters 239.53		\$ 80.00 per m.	19,162.40

Materials Consumed

"1" BTW Casing Shoe	\$170.20	170.20
"1" Pail Rod Grease	\$103.50	103.50

Hole Vic 06-03, Oct. 03-07

Chargeable Man Hours	98 hrs.	\$ 50.00 per hr.	4,900.00
Chargeable Drill Hours	20 hrs.	\$ 85.00 per hr.	1,700.00
Meters 240.13		\$ 80.00 per m.	19,210.40
<u>Materials Consumed</u>			
"1" Pail Rod Grease		\$103.50	103.50
"3" Pails Extreme Blue		\$200.00	600.00
"3" Pails Extreme Gold		\$200.00	600.00

Hole Vic 06-04, Oct. 08-

Chargeable Man hours	48 hrs.	\$ 50.00 per hr	<u>2,400.00</u>
Subtotal			73,289.09
GST			<u>4,397.35</u>
TOTAL			\$77,686.44

(G.S.T. # 128209566)