

MINING RECORDERS  
MAYO, Y.T.  
INDIAN & NORTHERN  
AFFAIRS  
094044

# GEOPHYSICAL REPORT

on the

094044

## SWAN LAKE PROJECT CLAIMS

(Big Time, Got It, Gotcha)

### MAYO MINING DISTRICT YUKON TERRITORY

Latitude: 63° 35'N  
Longitude: 132° 52'W

N.T.S. Map Sheets  
105N/10, 11, 12



for

**PROSPECTOR INTERNATIONAL RESOURCES INC.**

**#422 - 510 West Hastings Street**

**Vancouver, B.C. V6B 1L8**

Vancouver, B.C.  
June, 1999

Brian D. Game, P.Geo.

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 45,000.

*M. B. B.*  
for Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

## **SUMMARY**

The Swan Lake property is located in central Yukon, about 145 kilometres east of Mayo in the Mayo Mining District. The project area consists of 449 mineral claims covering 9,384.1 hectares located near Swan and Pleasant Lakes in the Lansing map area. The claims are 100% optioned and operated by Prospector International Resources Inc. of Vancouver, B.C.

The project area lies within the Selwyn Basin, northeast of the Tintina Fault. The Selwyn Basin consists of a prism of sedimentary rocks of late Proterozoic to Mississippian age deposited along the western margin of ancient North America. The project area is underlain mostly by a thick succession of sedimentary rocks of the Devonian-Mississippian Earn Group, and to a lesser extent by lithologies of the Gull Lake Formation, Road River Group, Keno Hill Quartzite, Tsichu Group and Mount Christie and Jones Lake formations. The most common sedimentary lithologies on the property are shales, calcareous shales, sandstones and chert. Grey resistant chert pebble conglomerate, belonging to the Earn Group, are found in the northern part of the project area.

A suite of granitoid members of the Cretaceous Tombstone Plutonic Suite intrude sedimentary lithologies of the Selwyn Basin as dykes, sills, plugs, plutons and batholiths. A number of rhyolite dykes, related to the Tombstone intrusions, are found on the property. These rhyolite dykes represent good exploration targets for bulk tonnage, intrusion related gold mineralization analogous to Brewery Creek style mineralization.

Interest in the project area developed in 1990 with the release of a regional stream sediment survey by the Geological Survey of Canada (GSC). Results of this survey showed the area to be drained by a number of creeks anomalous in gold, silver, copper, arsenic, antimony, mercury, barite and cadmium.

Reconnaissance prospecting and geochemical sampling of several small claim blocks, staked as a result of the government survey, was conducted in the project area during 1991-1992, with a total of 93 samples collected. A number of strongly anomalous values were returned from these programs, but no further work conducted, and the claims lapsed in 1997. Viceroy Resources subsequently staked a block of 212 claims to partially cover areas of interest generated by the earlier work. The Swan Lake project claims were staked in March 1998 to acquire ground, adjacent to Viceroy's, prospective for intrusion related gold mineralization and stratiform lead-zinc-silver mineralization.

The April 1999 exploration program on the Swan Lake project claims consisted of a helicopter borne high sensitivity aeromagnetic survey conducted by Sanders Geophysics Limited of Ottawa, Ontario. Flights took place between April 1 and 5, 1999. The survey required 17 flights for a total of about 1,100 line kilometres.

Magnetic data from the airborne survey outlined magnetic low features corresponding both with mapped felsic intrusive bodies and mapped gossan zones in black shales, perhaps underlain by a felsic intrusive. In addition, a broad and pronounced magnetic high, likely reflecting a more mafic and/or magnetite/pyrrhotite-rich intrusive and plug, occurs in the southeastern portion of the claim block. A number of faults, contacts and northwest-bearing structural trends are also recognized.

Exploration to date on ground covered by the Swan Lake project claims has identified several areas with anomalous gold, silver, arsenic, antimony and mercury values from stream sediments, soils and rocks closely related to felsic intrusives of the Tombstone Intrusive Suite, and corresponding with geophysically interpreted magnetic high and low features and structural trends.

A phase one exploration program is recommended for the property consisting of detailed stream sediment sampling with concurrent geological mapping, prospecting and contour soil sampling. Contingent upon favourable results, phase two work would concentrate on gridded geochemical, geophysical and geological surveys.

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## **1.0 INTRODUCTION**

The Swan Lake property is located approximately 145 kilometres east of Mayo, Yukon in the Mayo Mining District, and is accessible by floatplane and helicopter.

The 9,384 hectare property is situated within the Selwyn Basin which forms part of ancestral North America. Lithologies within the Selwyn Basin are late Proterozoic to Mississippian in age. Stratigraphy within the Norex project area consists primarily of Devonian-Mississippian Earn Group and to a lesser extent by lithologies of the Gull Lake Formation, Road River Group, Keno Hill Quartzite, Tsichu Group and Mount Christie and Jones Lake formations.

Sedimentary lithologies of the Selwyn Basin are intruded by granitoid dykes, sills, plugs and stocks of the Tombstone Plutonic Suite. This series of intrusions extends from Tungsten in the Northwest Territories to Fairbanks in Alaska (Figure 1). Intrusions of the Tombstone Suite are noted for their potential to host intrusion related gold deposits such as Fort Knox, Dublin Gulch and Brewery Creek.

Exploration work carried out in the project area during 1991 and 1992 consisted of prospecting, geological mapping and geochemical sampling for the purpose of locating gold and massive sulphide deposits. Although initial results were encouraging; no further documented work was conducted until 1997 when Viceroy Resources staked a block of claims to partially cover areas of interest generated by the earlier work. Several target areas remained open around Viceroy's property.

The Swan Lake project claims were staked in March 1998 to acquire ground, adjacent to Viceroy's, prospective for intrusion related gold mineralization and stratiform lead-zinc-silver mineralization. The April 1999 work program consisted of a property wide high sensitivity aeromagnetic survey flown by Sanders Geophysics Limited of Ottawa, Ontario.

## **2.0 LOCATION and ACCESS**

The project area is located in central Yukon, about 145 km east of Mayo (Figure 1). The geographic co-ordinates of a point approximately in the centre of the project is 62° 35'N and 132° 52'W; NTS Sheets 105 N/10, N/11. The property is centred on Pleasant Lake and Swan Lake to the south, Pleasant Creek to the east and Murray Creek to the north.

Access to the property can be gained by floatplane based out of Faro, Yukon, 160 km to the south. Alternatively, helicopters are available in Mayo or Ross River, Yukon.

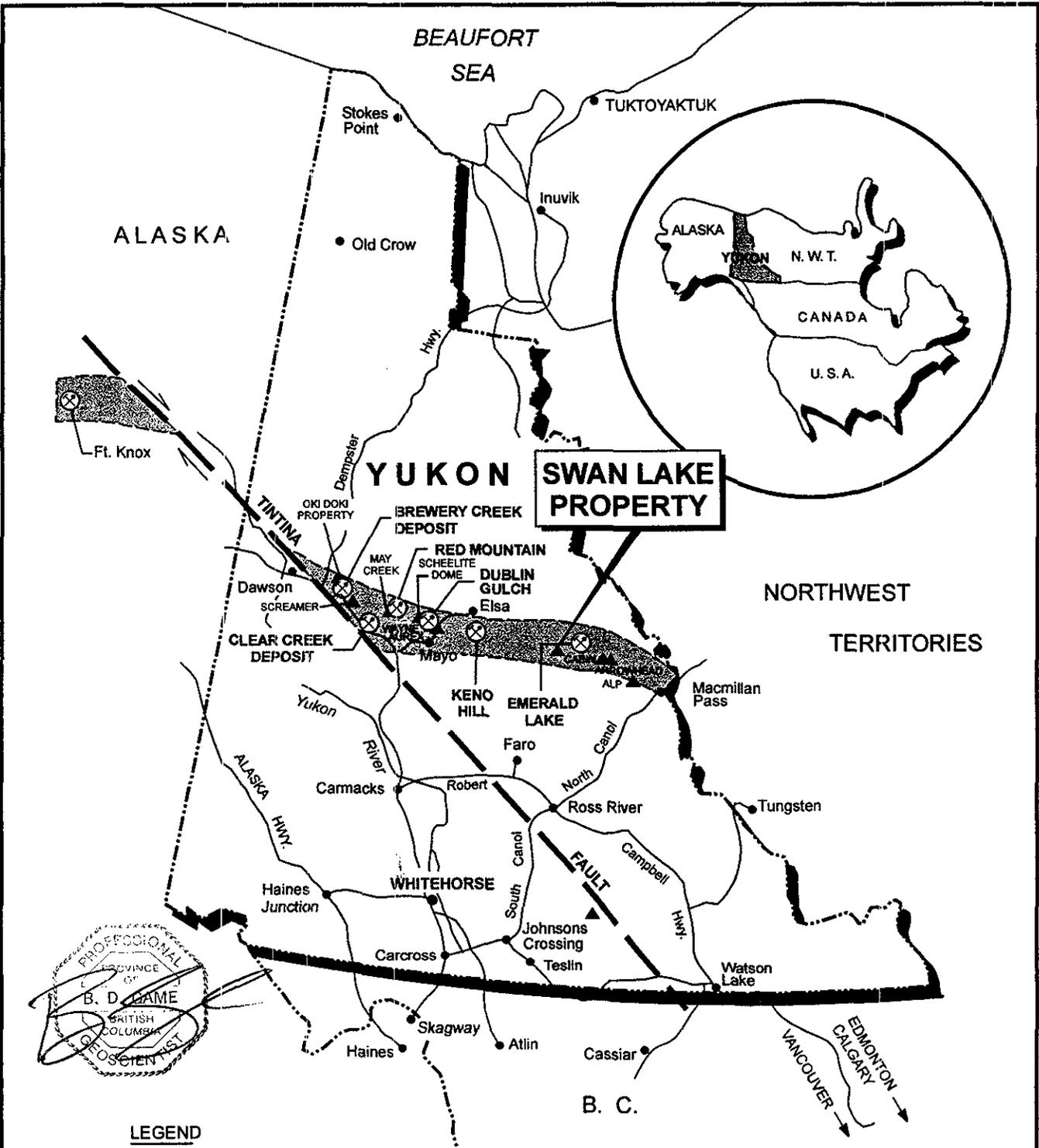
## **3.0 PHYSIOGRAPHY and CLIMATE**

The area of interest covers a range of rounded hills north of Swan Lake and Pleasant Lake in the Stewart plateau. Elevations range from 2,500 feet to about 5,000 feet on ridge tops. The ridges and hills are flanked by moderate slopes with abundant local felsenmeer cover and talus fines.

Recent Pleistocene glaciation scoured the area. As a result, outcrop exposure is generally good (~ 20%) except on forested valley bottoms.

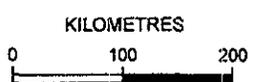
Vegetation changes depending on elevation and direction of slope. Above treeline (4,500' or 1,370 m), cover consists of moss, alpine plants, sparse dwarf willow and birch. Areas below treeline consist of white spruce, aspen and dwarf birch (buckbrush). North facing slopes generally consist of moss and buckbrush. Permafrost is commonly present on the north and east facing slopes.

The climate in the project area is sub-arctic; with short, warm summers and long, cold winters. The summer season occurs between June and September with 24-hour daylight in the third week of June. Summer temperatures range from 20-30° Celsius. Winter temperatures range from 0°C to as low as -50°C. Precipitation is generally low in the region with dry summers and moderately wet falls. Precipitation is low to moderate but in general averages about 30 cm annually.



**LEGEND**

-  **TOMBSTONE SUITE PLUTONIC BELT**
-  **MINING OR DEVELOPMENT PROJECTS**
-  **PRECIOUS METAL EXPLORATION PROJECTS**



<b>PROSPECTOR INTERNATIONAL RESOURCES INC.</b>		
<b>SWAN LAKE PROPERTY</b>		
YUKON TERRITORY		
<b>LOCATION MAP</b>		
DATE: JUNE, 1999	SCALE: AS SHOWN	FIGURE NO. <b>1</b>

## 4.0 CLAIM STATUS

The Swan Lake property consists of 449 unsurveyed two-post mineral claims covering about 9,384 hectares in one contiguous claim block in the Mayo Mining District. The claims were staked by Nicholson and Associates between March 28 and April 05, 1998. A map showing the approximate position of the claim block is located at the back of the report (Figure 2).

Application for assessment work, completed as outlined in this report, places the claims in good standing until 2000.

Claim data is as follows:

CLAIM	#	UNITS	GRANT NO.	EXPIRY DATE	N.T.S.	ha.
Got It	1-30	30	YC00582-611	April 8, 2000	105 N/10	627.0
Got It	31-32	2	YC00890-891	April 21, 2000	105 N/10	41.8
Got It	33-38	6	YC00612-617	April 8, 2000	105 N/10	125.4
Got It	39-40	2	YC00892-893	April 21, 2000	105 N/10	41.8
Got It	41-125	85	YC00618-702	April 8, 2000	105 N/10, 11	1,776.5
Got It	126	1	YC00894	April 21, 2000	105 N/11	20.9
Got It	127-144	18	YC00703-720	April 8, 2000	105 N/10, 11	376.2
Got It	145-186	42	YC00723-764	April 8, 2000	105 N/10, 12	877.8
Got It	187-188	2	YC00895-896	April 21, 2000	105 N/10	41.8
Got It	189-190	2	YC00765-766	April 8, 2000	105 N/10	41.8
Got It	191-194	4	YC00870-873	April 8, 2000	105 N/10	83.6
Got It	195-246	52	YC00767-818	April 8, 2000	105 N/10, 11	1,086.8
Got It	248-298	51	YC00819-869	April 8, 2000	105 N/10	1,065.9
Big Time	1-16	16	YC00487-502	April 8, 2000	105N/10	334.4
Big Time	17-20	4	YC00874-877	April 8, 2000	105N/10	83.6
Big Time	21-22	2	YC00878-879	April 21, 2000	105N/10	41.8
Big Time	23-24	2	YC00503-504	April 8, 2000	105N/10	41.8
Big Time	25-30	6	YC00880-885	April 8, 2000	105N/10	125.4
Big Time	31-32	2	YC00888-889	April 8, 2000	105N/10	41.8
Big Time	33-101	69	YC00513-581	April 8, 2000	105N/10	1,442.1
Gotcha	5	1	YC00435	April 8, 2000	105 N/10	20.9
Gotcha	7	1	YC00436	April 8, 2000	105 N/10	20.9
Gotcha	9	1	YC00437	April 8, 2000	105 N/10	20.9
Gotcha	11	1	YC00438	April 8, 2000	105 N/10	20.9
Gotcha	29-37	9	YC00439-447	April 8, 2000	105 N/10	188.1
Gotcha	39	1	YC00448	April 8, 2000	105 N/10	20.9
Gotcha	51	1	YC00449	April 8, 2000	105 N/10	20.9
Gotcha	53-58	6	YC00450-455	April 8, 2000	105 N/10	125.4
Gotcha	60	1	YC00456	April 8, 2000	105 N/10	20.9
Gotcha	62	1	YC00457	April 8, 2000	105 N/10	20.9
Gotcha	64	1	YC00458	April 8, 2000	105 N/10	20.9
Gotcha	68-71	4	YC00459-462	April 8, 2000	105 N/10	83.6
Gotcha	76-79	4	YC00463-466	April 8, 2000	105 N/10	83.6
Gotcha	81-99	19	YC00467-486	April 8, 2000	105 N/10	418.0
<b>TOTAL</b>		<b>449</b>				<b>9,384.1</b>

## 5.0 EXPLORATION HISTORY

According to the Yukon Minfile, the project area was not subject to any staking prior to 1990. The area was presumably prospected for placer gold in the late 1800's and early 1900's, and for stratiform lead-zinc-silver deposits in the 1960's and 1970's following the discovery of MacMillan Pass, Howard's Pass and other deposits.

In 1968 a new barium phosphate mineral, Jagowerite, was discovered in the southeast corner of the project area (Yukon Minfile). A number of minor Minfile occurrences; the Joy, Dean, Aureole and Bloom prospects, are located about 7 km north of the project area. With the exception of the Joy, all are copper ± lead in quartz veins within weakly calcareous Permian sediments proximal to a large Cretaceous intrusion. The Joy occurrence is classified as a copper skarn, again within the above described geological environment.

Noranda Exploration Company Limited staked the Pleasure 10-15 claims in July 1990 to cover the possible source of anomalous gold values in stream sediment results released by the Geological Survey of Canada (Figure 2).

The Caribou 1-4, Candy 1-4, Flower 1-4, Red 1 and Can 1, 2 claims were staked and explored by Ron Berdahl following the release of a regional stream sediment survey by the GSC (Friske, et al, 1990).

Exploration work carried out in 1991 and 1992 on the above claims, collectively known as the D'Or Aztec Project, consisted of prospecting, geological mapping and geochemical sampling for the purpose of locating gold and massive sulphide deposits. The work was carried out by Mr. R. Berdahl, a Yukon prospector, and J. Duke, M.Sc. (September 5-7, 1991) with Noranda Exploration Co. Ltd. A total of 93 samples (41 rock, 40 stream sediment and 12 soil) were collected, many of which were anomalous in gold, silver, copper, antimony and mercury.

No further work was recorded on the D'Or Aztec project after 1992 and the claims were allowed to lapse. In 1997, Viceroy Resources Corp. staked 212 claims to partially cover areas previously staked by Mr. Berdahl.

## 6.0 REGIONAL GEOLOGY

The Lansing map area lies within the Selwyn Basin. The Selwyn Basin forms part of ancestral North America. This region is characterized by deep water offshore sedimentary strata that are transitional eastward and northward into shelf carbonate and clastic sedimentary rocks of the Mackenzie Platform. To the southwest, the Selwyn Basin is separated from volcanic stratigraphy of the exotic Yukon Tanana Terrane by the Tintina Fault Zone (Green, 1972, Poulsen, 1997).

### 6.1 STRATIGRAPHY

Lithologies within the Selwyn Basin are late Proterozoic to Mississippian in age. Stratigraphy of the East Lansing map area is comprised, in order from oldest to youngest, of Hyland Group, Gull Lake Formation, Road River Group, Earn Group and Keno Hill Quartzite lithologies (Roots et al, 1995) (Figure 2).

#### Hyland Group

Proterozoic to middle Cambrian in age, gritty metaclastic rocks of the Hyland Group can be divided into the Yusezyu and Narchilla Formations. The Yusezyu Formation is a succession of variably deformed fine to coarse grained rocks consisting of calcareous sandstone, quartz grit, graphitic shale, quartz-muscovite schist and chloritic schist. Rocks of the Narchilla Formation differ only in that they are interbedded with variegated shale. Both formations are considered to be turbidite successions.

#### Gull Lake Formation

Overlying and in discontinuity with the Hyland Group, the upper Cambrian to lower Ordovician Gull Lake Formation consists of four members; a basal mafic volcanic and volcanoclastic member, a silty limestone member, a nodular shale member and a laminated mudstone and siltstone member. This suggests basinal sedimentation characterized by localized rifting progressing into marginal platformal outgrowth.

#### Road River Group

Overlying the Gull Lake Formation is the Silurian-Ordovician Road River Group. This group is further subdivided into the Elmer Creek and Steel formations. The Elmer Creek Formation comprises white weathering, thick bedded grey-green-blue chert and grey and brown shale. The Steel Formation consists of green siliceous argillite, thin bedded dolostone, limestone and black calcareous shale. These rocks are generally massive and have distinctive orange weathering. Deposition of both formations was in a deep basinal environment.

### Earn Group

The Devono-Mississippian Earn Group unconformably succeeds the Road River Group and is comprised mostly of dark grey to black shale with subordinate and variable amounts of chert, siltstone, sandstone, limestone, bedded barite, chlorite-muscovite phyllite and chert pebble conglomerate. Deposition was likely deep marine basin in nature.

### Keno Hill Quartzite

Overlying the Earn Group are massive to well foliated and lineated quartzite units of the Mississippian aged Keno Hill Quartzite.

### Younger Rocks

All of the above formations are locally unconformably overlain by early Carboniferous to Triassic shallow marine shelf clastic sediments of the Tsichu Group and Mount Christie and Jones Lake formations.

## **6.2 INTRUSIVE ROCKS**

During the Cretaceous widespread locally large intrusive bodies of the felsic to intermediate Tombstone Intrusive Suite were emplaced (Murphy, 1997). In addition, volumetrically minor Tombstone aged biotite-quartz-feldspar porphyry rhyolite dykes and sills and other felsic dykes intruded stratigraphy in the East Lansing map area.

### Tombstone Suite

The Tombstone intrusions in this area consist predominantly of two compositional and textural types. Quartz poor, massive fine grained hornblende +/- biotite granodiorite and quartz diorite defines one group. A second group is defined by white and rusty weathering, biotite-quartz-feldspar porphyry rhyolite dykes and sills. The intrusions are variably magnetic with aeromagnetic signatures extending into hornfelsed contact aureoles. Tombstone intrusions occur at all stratigraphic levels in the area and were emplaced between 90-94 Ma.

### **6.3 STRUCTURE**

Rocks of the Selwyn Basin occur in three tectonic sheets. These are separated by the Dawson, Tombstone and Robert Service low angle thrust faults. Early Cretaceous NE-SW contraction resulted in upright folding of upper Paleozoic strata, and both high and low angle thrusts within Proterozoic and lower Paleozoic rocks. Slaty cleavage pervades incompetent units such as the Narchill and Gull Lake formations. Overturned strata and southwest verging folds in the Wilson Range (south of Murray Creek) suggests a fundamental structural break that connects the Tombstone Thrust and the Hess Fault (Abbott and Turner, 1990). Late large scale northwest movement of the Robert Service Thrust sheet probably caused the northwesterly cleavage and recrystallization to footwall rocks in the southwestern corner of the Eastern Lansing map area (Roots et al, 1995).

## **7.0 PROPERTY GEOLOGY**

The most recent government mapping (Roots et al, 1995) shows the project area to be underlain by rock of Gull Lake Formation, Road River Group, Earn Group, Keno Hill Quartzite, Tsichu Group, Mount Christie Formation and Jones Lake Formation lithologies. Cretaceous porphyry rhyolite dykes intrude fine to coarse grained sedimentary rocks.

### **7.1 LITHOLOGY**

The project area is underlain mostly by a thick succession of sedimentary rocks of the Earn Group. The most common sedimentary lithologies on the property are shales, calcareous shales, sandstones and chert. Chert pebble conglomerates of the Earn Group outcrop in the northern portion of the project areas and strike northwest. Fine grained clastic sediments of the Gull Lake Formation and Road River Group (Elmer Creek Formation) are shown to underlay the southwest portion of the property. Thin, northwest striking wedges of fine grained quartzite of the Keno Hill Quartzite unit are mapped in the northern and southeastern portions of the project area. Shallow marine clastic sediments of the Tsichu Group and Mount Christie and Jones Lake formations underlie much of the northern portion of the property with a couple of narrow, northwest striking wedges to the southeast.

### **7.2 INTRUSIVES**

The above sedimentary package has been intruded by late Cretaceous rhyolite dykes of the Tombstone Intrusive Suite. The dykes are exposed as northwest trending lines of isolated outcrop in the project area. The main occurrence has been mapped over a length of some five kilometres largely within the Viceroy property extending onto the Gotcha claims to the southeast. A second occurrence has been mapped over a strike length of about two kilometres in the southwest portion of the Got It claims. Strongly anomalous gold in stream sediment samples occur in a creek draining this area.

Although the contacts are not clearly exposed, the dykes appear to be at least 50 metres wide. The rhyolite is reported to be similar to porphyritic rhyolite found elsewhere in the region such as near the Plata Property and the more distant Brick Property (Hulstein, 1992). The dyke found near the Plata Property locally contains strong quartz stockwork and veinlets of massive stibnite. At the Brick Property, the gold-bearing rhyolite dyke is locally strongly clay altered and contains quartz veinlets with realgar and stibnite.

### **7.3 STRUCTURE**

*Regional structure is dominated by thrust faults that bound the trough in which the project area is located. The overall structural trend on the property is northwest, parallel to the orientation of regional folds, thrust faults and regional strike slip faulting. Strata are variably deformed with tight to open folds. Overturned bedding is common.*

Orientations for rhyolite dykes are NW-SE trending. This is in agreement with similar regionally documented occurrences.

## **8.0 EXPLORATION PROGRAM**

### **8.1 GEOPHYSICAL SURVEY**

Sanders Geophysics Limited of Ottawa, Ontario were commissioned to fly and interpret a helicopter borne high sensitivity aeromagnetic survey. Flights took place between April 1 and 5, 1999. The survey required 17 flights for a total of 1,091 line kilometres.

The survey was flown in a Bell 206 Jet Ranger III helicopter at an average terrain clearance of 90 metres. Flight lines were run northeast-southwest (045°/135°) at a nominal spacing of 135 metres.

Geophysical equipment included a Geometrics G822A cesium vapour magnetometer which measured total field magnetic intensity. A GPSNAV microcomputer based GPS navigation system recorded flight line positioning. A more complete description of survey parameters and equipment is available in the Sanders Geophysics Ltd. report in Appendix 2.

### **8.2 SURVEY RESULTS**

Magnetic data from the airborne survey outlined magnetic low features corresponding both with mapped felsic intrusive bodies on the southern Got It claims and mapped gossan zones in black shales on the Gotcha claims. In addition, a broad and pronounced magnetic high with an outlier circular magnetic high, likely reflecting a more mafic and/or magnetite/pyrrhotite-rich intrusive and plug, occurs in the southeastern Got It claims. A number of faults, contacts and northwest-bearing structural trends are also recognized.

A copy of the Project Report, Helicopter Borne High Sensitivity Aeromagnetic Survey Over Got It, Bit Time and Gotcha Claims, Stewart Range Area, Yukon Territory 1999 is available in Appendix 2 along with 1:30,000 scale maps of Total Magnetic Intensity and First Vertical Derivative (Figures 3, 4).

## 9.0 CONCLUSIONS

1. The Swan Lake project claims are underlain primarily by lithologies of the Devonian-Mississippian Earn Group, and to a lesser extent by lithologies of the Cambrian-Ordovician Gull Lake Formation, Silurian-Ordovician Road River Group, Mississippian Keno Hill Quartzite and by lithologies of the Carboniferous to Triassic Tsichu Group and Mount Christie and Jones Lake formations. These sedimentary rocks are intruded by rhyolite dykes of the early to late Cretaceous Tombstone Intrusive Suite. At Viceroy Resource's Brewery Creek Mine, Tombstone sills introduced along thrust faults, and hosted within Road River and Earn Group sedimentary rocks, localize much of the mineralization
2. Creeks draining the project area, sampled by the Geological Survey of Canada, returned highly anomalous values for a number of elements including gold, silver, copper, antimony, arsenic, mercury, barite and cadmium. These anomalous samples have not been adequately explained.
3. Reconnaissance prospecting and geochemical sampling of several small claim blocks, staked as a result of the government survey, was conducted in the project area during 1991-1992. A number of strongly anomalous values were returned from areas presently covered by the Swan Lake claims.
4. Several other creeks draining the property are anomalous in all or part of the elemental suite gold, silver, arsenic, antimony and mercury. Many of the creeks have anomalously low ph values that may have caused the metals (particularly lead and zinc) to be leached out of the stream sediments.
5. Magnetic data from the airborne survey outlined magnetic low features corresponding both with mapped intrusive bodies and mapped gossan zones in black shales, perhaps underlain by a felsic intrusive. In addition, a broad and pronounced magnetic high with an outlier circular magnetic high, likely reflecting a more mafic and/or magnetite/pyrrhotite-rich intrusive and plug, occurs in the southeastern portion of the claim block. A number of faults, contacts and northwest-bearing structural trends are also recognized.

6. Anomalous gold, silver, arsenic, antimony and mercury values in stream sediments, soils and rocks from the Swan Lake claims, are closely related to felsic intrusives of the Tombstone Intrusive Suite, and correspond with geophysically interpreted magnetic high and low features and structural trends.
7. The combination of felsic intrusives within Earn Group sedimentary rocks as well as gold, arsenic, antimony and mercury geochemistry, points to the potential for intrusion-related gold mineralization correlative with other deposits in the Tombstone Belt such as Fort Knox, Brewery Creek and Dublin Gulch.

In addition, anomalous barite values in stream sediments collected by the GSC could reflect possible sources of bedded barite that may be associated with lead-zinc-silver sedex type deposits.

## 10.0 RECOMMENDATIONS

Although previous exploration has been relatively grassroots in nature, several targets with the potential to host intrusion related gold mineralization exist on the property. In addition, favourable lithologies and structures exist for stratiform lead-zinc-silver mineralization. Future exploration should concentrate on a detailed first pass of stream sediment geochemistry, prospecting and geological mapping.

With this in mind, the following phase one program is recommended in order to thoroughly explore the property:

1. Detailed stream sediment and rock geochemistry with concurrent geological mapping, prospecting and some contour soil sampling should be carried out over the entire property.
2. Future geochemical analysis should include a specific analytical technique for barium as barite may be associated with massive sulphides. Emphasis should be placed on possible gold mineralization associated with the rhyolite dykes and defined magnetic high and low features.

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Roots, C.F., Abbott, J.G., Cecile, M.P. and Gordey, S.P. 1995: Bedrock Geology of Lansing Range Map Area (105N) East Half, Hess Mountains, Yukon. Geological Survey of Canada, Open File 3171, 1:125,000 scale.

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Yukon Minfile, 1995: IMS Ltd., Hyperborean Productions Inc. for Ministry of Indian and Northern Affairs.

# APPENDIX 1

## STATEMENT OF QUALIFICATIONS

I, **Brian D. Game**, of Vancouver, British Columbia, hereby certify that:

1. I am a graduate of the University of British Columbia with a Bachelor of Science Degree (1985) in Geology.
2. I have practised my profession as a geologist in Canada, the United States and South America continually since graduation.
3. I am a Consulting Geologist with offices at 310 - 638 West 7<sup>th</sup> Avenue, Vancouver, British Columbia.
4. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (Reg. #19896).
5. The information in this report is based on a review of published and unpublished reports on the property and the surrounding area.
6. I have no interest, direct or indirect, in the subject property or any within a 10 km radius, nor do I expect to receive such interest
7. I have not received, nor do I expect to receive, any interest, direct or indirect, in the properties and securities of Prospector International Resources Inc.
9. Prospector International Resources Inc. and its affiliates are hereby authorized to use this report in any prospectus, statement of material facts, or other public document.

DATED in Vancouver, British Columbia, this 22<sup>nd</sup> day of June, 1999.

  
**Brian D. Game, P.Ge.**



## APPENDIX 2

### STATEMENT OF WORK

Got It Claims:       Got It 1-246, 248-298  
 Big Time Claims:    Big Time 1-101  
 Gotcha Claims:      Gotcha 5, 7, 9, 11, 29-37, 39, 51, 53-58, 60, 62, 64, 68-71,  
                           76-79, 81-99

Prospector International Resources Inc.  
 Swan Lake Project  
 April, 1999

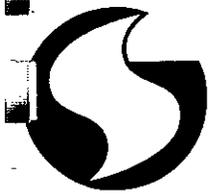
<b>GEOLOGICAL COSTS</b>		
<b>Personnel</b>		
Geologists	4.5 days @ \$300/day	\$ 1,350.00
<b>GEOPHYSICAL COSTS</b>		
Survey costs (all inclusive)		42,500.00
<b>FINAL REPORT</b>		
Report writing		900.00
Drafting		600.00
<b>TOTAL ALL IN</b>		<b><u>\$45,350.00</u></b>

#### List of Personnel

<u>Name</u>	<u>Position</u>
Game, B.C.,	P.Geo.                   Geologist
Desmons, D.	MSc.                    Geophysicist
Kertesz, J.	Cartographer
Puda, Z.	BSc.                    Geologist
Van Damme, V.P.	P.Geo.                  Geologist

## **APPENDIX 3**

**PROJECT REPORT  
HELICOPTER BORNE  
HIGH SENSITIVITY AEROMAGNETIC SURVEY  
OVER GOT IT, BIG TIME AND GOTCHA CLAIMS  
STEWART RANGE AREA, YUKON TERRITORY  
1999**



**PROJECT REPORT**

**HELICOPTER BORNE  
HIGH SENSITIVITY AEROMAGNETIC SURVEY**

**OVER GOT II, BIG TIME, AND GOTCHA CLAIMS**

**STEWART RANGE AREA, YUKON TERRITORY**

**1999**

for

**Prospector International Resources Inc.**

Bernard Desmons, M.Sc., Geophysicist

April, 1999

**SANDER GEOPHYSICS LIMITED**

260 Hunt Club Road, Ottawa, Ontario, K1V 1C1 Canada

Phone: (613) 521-9626 Fax: (613) 521-0215 E-mail: info@sgl.com Website: www.sgl.com

**EXPLORATION**

**RESEARCH**

**INTERPRETATION**

## I. INTRODUCTION

Sander Geophysics Limited (SGL) conducted a high-sensitivity aeromagnetic survey in the Yukon Territory, under contract with Prospector International Resources Inc., of Vancouver, B.C. The survey consisted of one block over Stewart Range, east of Mayo, in central Yukon.

The production flights took place between April 1 and 5, 1999. The survey required 17 flights for a total of 1000 line kilometres.

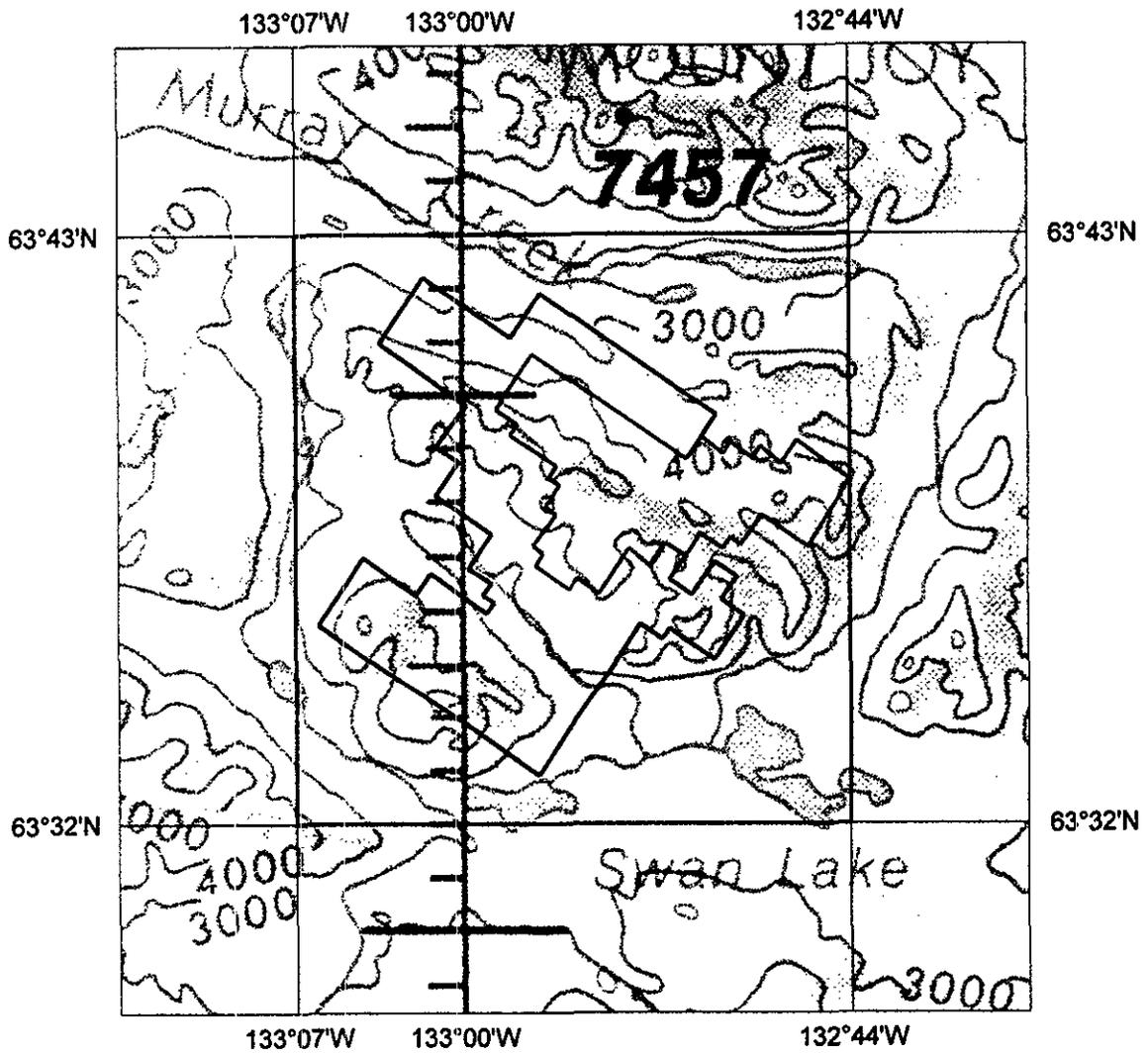
Please refer to *Appendix I* for a company profile of SGL, describing its capabilities and services.

## II. SURVEY AREA

The area of data delivered to Prospector International Resources Inc. is shown in *Figure 1*. The terrain in the survey block is rugged with heights ranging from 800 m to 1700 m.

Coordinates of each of the survey flight lines flown are given in *Appendix II*.

Figure 1  
Survey Area



### III. SURVEY EQUIPMENT

Sander Geophysics Limited provided the following instrumentation for the survey. A full list of survey equipment and their serial numbers can be found in *Appendix III*.

#### MAGNETOMETER SENSORS, AIRBORNE AND GROUND SYSTEMS

##### - *Geometrics G822A*

Both the airborne and the ground magnetometer systems use a non-oriented (strap-down) optically pumped cesium split-beam sensor. The magnetometers have a sensitivity of 0.01 nT or better, and a range of 80,000 nT. The sensor noise level is less than 0.02 nT. The airborne system was mounted in a fibreglass bird towed 30 m below the helicopter. The total field magnetic measurements were digitally recorded 10 times per second.

#### NAVIGATION AND FLIGHT PATH RECOVERY SYSTEM

##### - *GPSNAV*

The GPSNAV system utilizes a navigation computer and a NovAtel 951 12-channel GPS receiver, capable of simultaneous tracking of 12 satellites. The sample rate was 1 reading per second. The GPSNAV system is used to direct the pilot along the desired flight lines at the optimal flight altitude. The GPSNAV system is capable of receiving real time differential corrections and providing real time differential corrected GPS (RTDGPS) data. During this project RTDGPS corrections from an Omnistar unit were used.

#### AIRBORNE DATA ACQUISITION SYSTEM

##### - *Sander NAVDAS*

The airborne data acquisition computer records and displays all the incoming data on a flat panel screen during flight. Data were recorded on 1 GB JAZ cartridges. The time base (UTC) accuracy of the NAVDAS system was provided automatically by the GPS receiver to an accuracy of 1/120 of a second.

#### GROUND DATA ACQUISITION SYSTEM

##### - *Sander GND-ACQ*

The ground data acquisition computer records and displays all the incoming data on a flat panel screen. The computer is a portable PC-486 with a Sander cesium magnetometer frequency counter to process the signal from the cesium sensor and convert the reading to

an nT value. The noise level of the base station magnetometer was less than 0.1 nT. Data were recorded on the internal hard disk of the computer. The base station magnetic data were recorded at a rate of 1 sample per second. The GPS ground data were recorded using the same format as the airborne data. The time base (UTC) of the ground system was also automatically provided by the GPS receiver. Data acquired by the ground system were continuously printed for a period of time before and during each flight. The entire ground data acquisition system was fully automatic and was set for unattended recording and printing.

## GPS BASE STATION RECEIVER

### - *NovAtel 951R*

The NovAtel 12-channel GPS receiver forms an integral part of the Sander GND-ACQ system. It provided averaged position and raw range information of all satellites in view, at an interval of 1 reading per second. It also provided comparative navigation data during all aeromagnetic and spectrometer production flights, allowing Differential GPS (DGPS) for the entire project.

## ALTIMETER

### - *King KRA-10 Radar Altimeter*

The radar altimeter has a resolution of 1 m, and is calibrated to an accuracy of approximately 2%. Its range is 1-2,500 ft.

## SURVEY AIRCRAFT

### - *Bell 206 Jet Ranger III*

### - *Registration: C-GPGH*

The Bell 206 (*Figure 2*) is a modern high performance light helicopter powered by an Allison turbine engine. It was specially outfitted by an SGL technician for low level airborne geophysical surveys. Its endurance is between two and three hours depending on the local conditions.

## DATA PROCESSING EQUIPMENT AND SOFTWARE

### Hardware:

- (a) Pentium 200 MHz desktop computer, equipped with three 1.2 Gigabyte hard drives, a 8mm tape drive, and a 43 cm high-resolution colour monitor.
- (b) Pentium 90 MHz laptop computer connected to a portable 1GB Jaz disk drive.
- (c) One Fujitsu DL3400 24 pin wide carriage dot matrix printer.

**Figure 2**

**SURVEY HELICOPTER**  
Bell 206 Jet Ranger III



**Software:**

- (a) SGL data processing and imaging software capable of processing, displaying, and printing high resolution aeromagnetic and spectrometric data.
- (b) SGL's proprietary GPSofT package (GPSofT); software for processing the raw range information from the aircraft and the base station GPS receivers, and outputting differential GPS position information.

## IV. SURVEY SPECIFICATIONS

### DATA RECORDING

The following parameters were recorded during the course of the survey:

- (a) Terrain clearance - provided by a radar altimeter sampled 4 times per second;
- (b) Airborne GPS position information - Latitude, Longitude, Height, Time, and Raw Range data of each satellite tracked - 1 record per second;
- (c) Airborne Total Magnetic Field - sampled 10 times per second;
- (d) Ground Total Magnetic Field - sampled 1 time per second;
- (e) Ground based GPS position information data - Latitude, Longitude, Height, Time, and Raw Range data of each satellite tracked - 1 record per second; and

### DATA SPECIFICATIONS

The following data specifications were adhered to:

- (a) *Diurnal activity*  
No flying was allowed diurnal activity exceeded +/-7.5 nT peak-to-peak deviation from a long chord equivalent to the average control line spacing.
- (c) *Production flight rejections*  
The specifications for data rejection were:
  - a) The noise level of the aircraft magnetometer exceeded 0.5 nT on any flight line.
  - b) If any of the following channels were not recorded digitally: Time, air mag, raw GPS latitude/longitude, GPS alt, RA.
  - c) If the maximum flight line separation exceeded 800 m or the minimum flight separation was less than 125 m, or if the separation between adjacent traverse lines was greater than 700 m for more than 5 kilometres.
  - d) If there was more than 10 cps inherent noise in any radiometric channel, or if there was more than a 5% drift in channel centres.

It was not necessary to reject any data for deviating from survey specifications, and there were no data drop-outs.

### FLIGHT LINE SPECIFICATIONS

<b>Line Spacing:</b>	Traverse - 135 m	Control - 5000 m
<b>Line Direction:</b>	Traverse - 045°	Control - 135°
<b>Aircraft Sensor Altitude:</b>	90 m mean terrain clearance	

A more complete description of the flight lines is given in *Appendix II*.

## V. SYSTEM TESTS

### LAG TEST

The system magnetometer lag was checked by comparing magnetometer data flown in different directions over the same sharp anomaly (*Figure 3*). The lag between the positional data and the magnetometer data was found to be 0.55 seconds from a test flown on April 1, 1999. This value is similar to the results from lag tests using SGL aircraft with similar equipment over the past several years. The lag was corrected during data compilation.

### RADAR TEST

The radar altimeter in the aircraft was tested by flying at various altitudes over a runway. The test which compares the measured RA altitude against the differentially corrected GPS height measurement ensured that the RA was calibrated and working correctly (*Figure 4*).

Figure 3

Lag Test

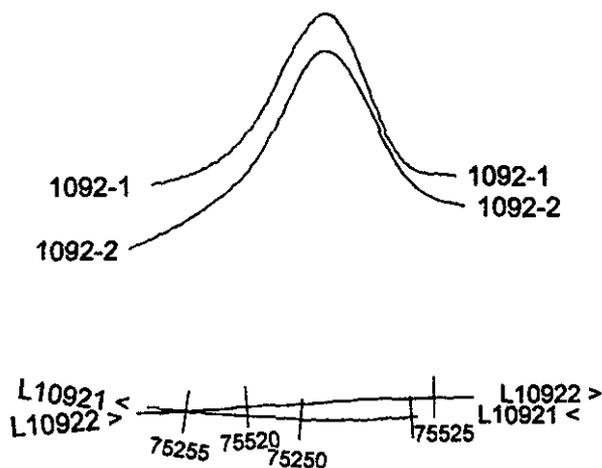
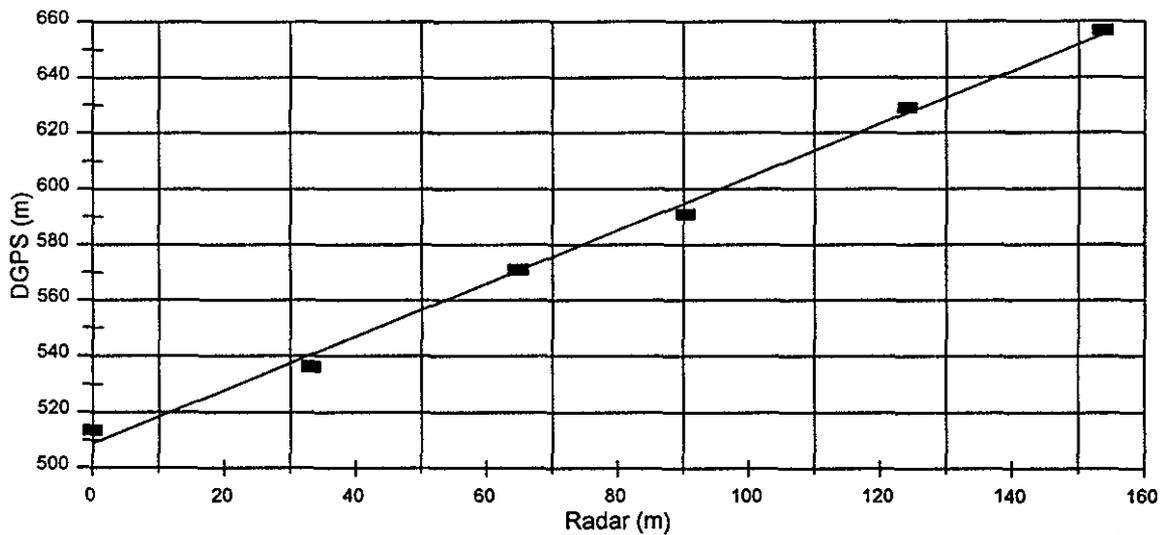


Figure 4

PROS\_99.YT - Radar Test  
Mayo Airport - April 1st 1999



## VI. FIELD OPERATIONS

Mobilization of equipment and personnel to Whitehorse, YT, started on March 27. The geophysical equipment was installed in the leased helicopter at the Trans North Helicopter hangar over the next two days. The equipment was successfully tested in flight on March 30 in Whitehorse. The field crew and the helicopter move to Mayo on March 31. The field office was established at the Bedrock Motel in Mayo, YT, east of the survey block. The combined magnetic/GPS ground station was located at the helicopter base at the airport.

The WGS-84 coordinates of the ground station were:

Mayo	Latitude:	N63:36.9476
	Longitude:	135:52.9069
	Elevation:	513.77 m

The flight crew stayed at the Bedrock motel for the duration of the survey. The helicopter operated from Trans North local helicopter base at the airport.

Jet fuel (Jet B) was obtained locally. Drums of fuel were transported at a fuel cache along Swan Lake, located south of the survey block, by a ski plane operated by Salmon Air. The helicopter refuelled at the fuel cache to minimize survey costs and to save time. A listing of the completed flight lines is given in *Appendix IV*, Weekly Reports in *Appendix V*, and the Flight Log is included in *Appendix VI*.

### WEATHER

Weather in the survey block was generally good during survey operation. Except for the first day, the winds were calm throughout the five days it took to complete the survey. Temperatures were below freezing at night and early morning, with an average of -5 °C, and as high as +10 °C during the days. A small amount of precipitation, a mix of snow and rain, fell one night. No flight was delayed or cancelled due to bad weather.

### FIELD OPERATIONS PERSONNEL

The following technical personnel participated in field operations in Mayo:

Field Manager/Data processing:	Bernard Desmons
Pilot:	Stephane Soulière
Copilot/technician:	Tim Cartwright

## VII. DIGITAL DATA COMPILATION

Data compilation was performed daily at the field office as the survey progressed. Preliminary processing and on-site quality control was performed as each day's flying was completed. This included routine tracing of analog records and plotting of the differentially corrected GPS flight path data. In this way, instrument problems could be identified and corrected before the next day of flying. Final data processing and map production was performed at the SGL head office in Ottawa. Final delivered products are listed in Section VIII.

### AIRBORNE AND GROUND STATION MAGNETOMETER DATA

*Figure 5* summarizes the steps involved in processing the magnetometer data obtained from the survey.

The airborne magnetometer data were recorded at 10 Hz. Air and ground magnetometer data were automatically checked for spikes using a de-spiker, and re-checked manually. All ground station magnetometer data were filtered using a 67-point low pass filter. See *Figure 6* for the characteristics of this filter.

Ground station magnetic readings were subtracted from the airborne data using the following formula.

$$\text{Corrected Total Field} = A_p - G_p + G$$

with  $A_p$  = Airborne magnetic data,

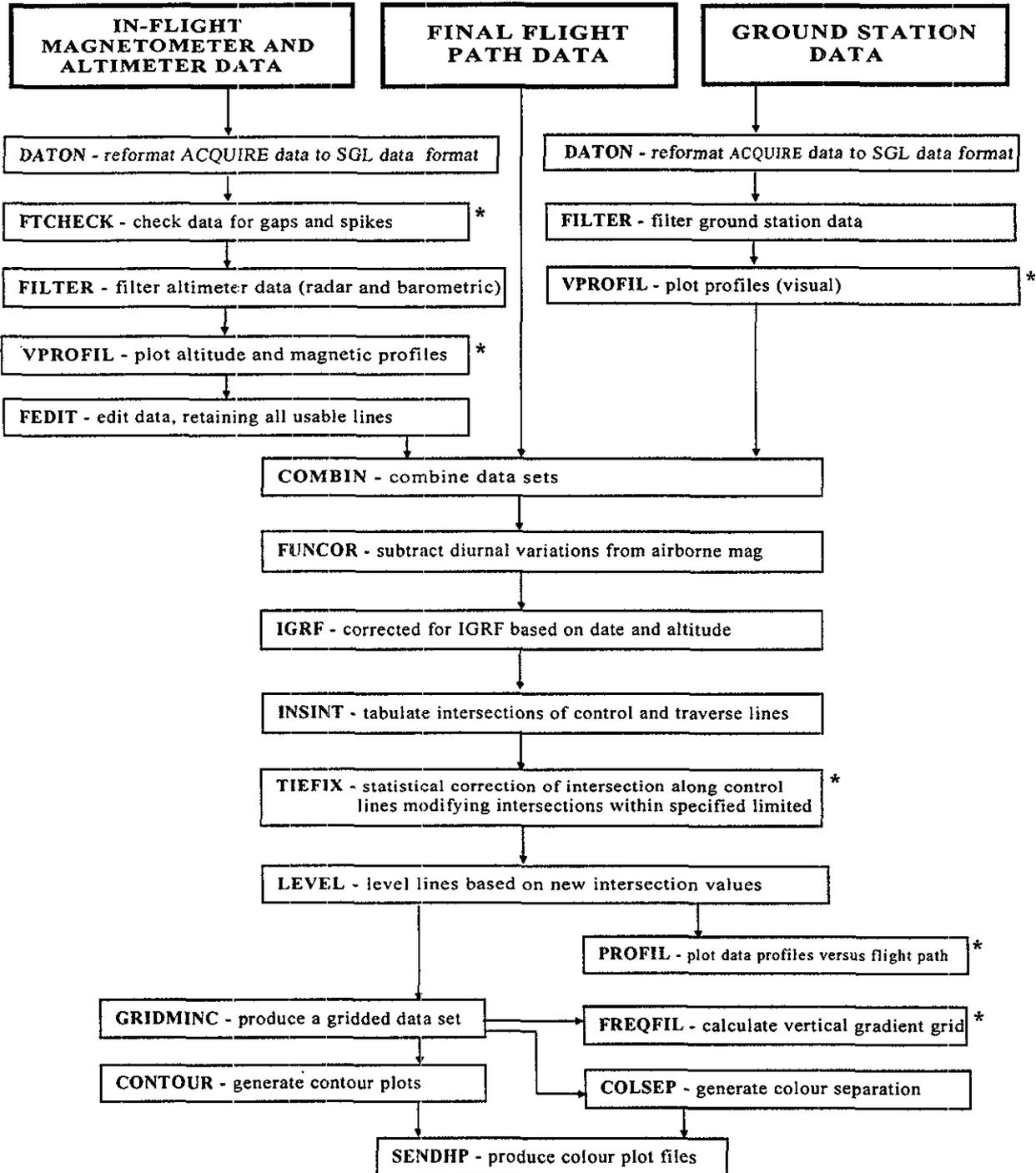
$G_p$  = Corrected ground station data

and  $G$  = Average ground station value

A further correction was applied to remove the International Geomagnetic Reference Field (IGRF). This was done on a point-by-point basis, using the 1995 IGRF coefficients, updated to the recorded time, altitude, and location of each reading.

Figure 5

**MAGNETOMETER DATA PROCESSING**

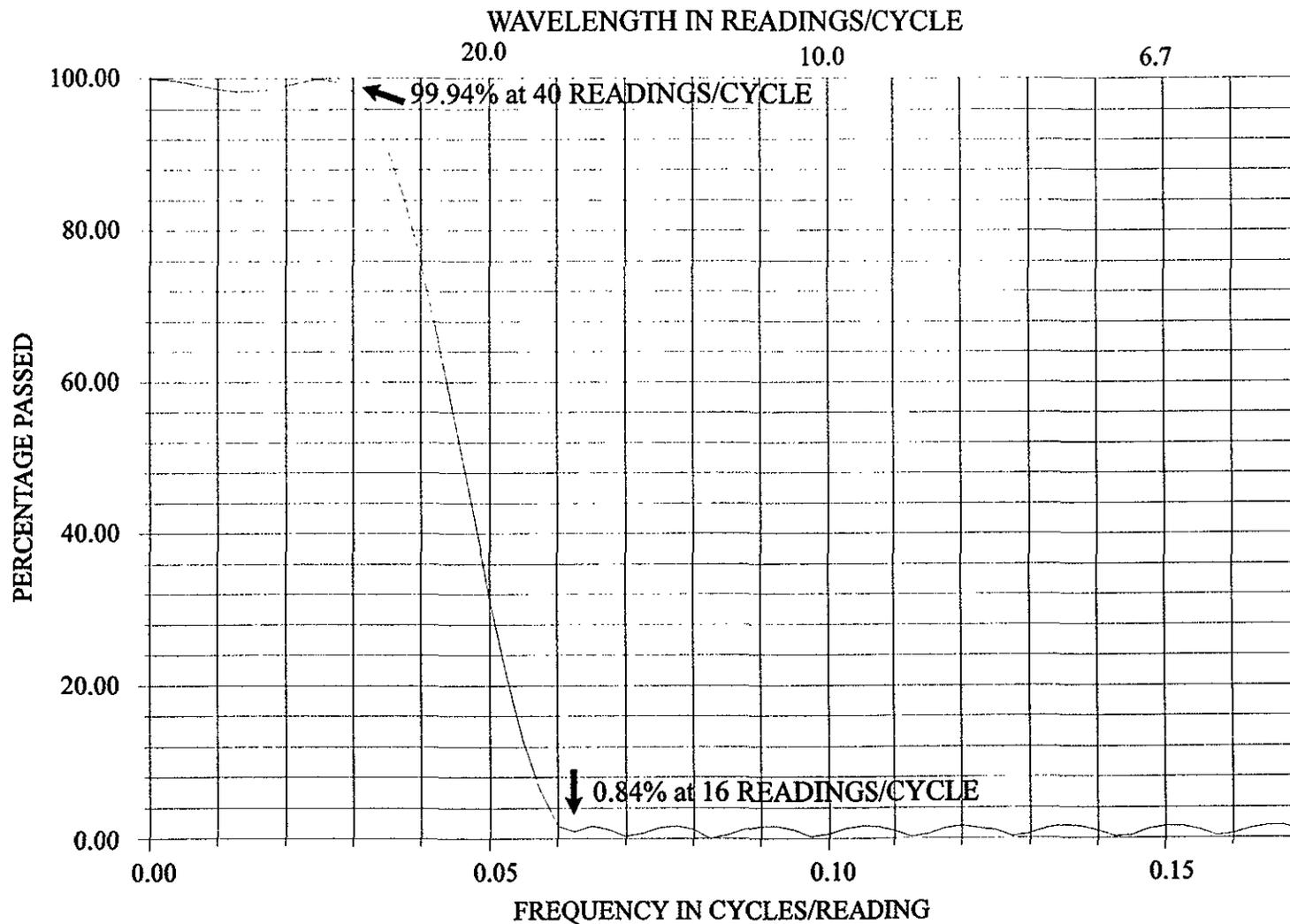


\* Quality Control Check

Figure 6

# 67 POINT FILTER

## FILTER 67 COEFFICIENTS



- 0.073813819
- .0017786870
- .0022008393
- .0028708524
- .0036799926
- .0044552023
- .0050366484
- .0052816825
- .0050482578
- .0042355750
- .0028043608
- .0007561474
- .0018169265
- .0047570802
- .0078405226
- .010776499
- .013235446
- .014878507
- .015358825
- .014386294
- .011729066
- .0072475690
- .0009241524
- .0071362499
- .016706382
- .027417007
- .038819272
- .050368667
- .061476381
- .071564890
- .080079578
- .086310541
- .090552829
- .091944844

The data were gridded using the minimum curvature method. This method creates an equally spaced two-dimensional grid based upon the measured values and the location of each individual measurement. The algorithm produces a smooth grid by iteratively solving a set of difference equations, which minimizes the total second horizontal derivative, and attempts to honour the input data (Briggs, I.C., 1974, Geophysics, v 39, no. 1). A decorrugation filter was applied to the grid. The decorrugated grid was removed from the original to produce a difference grid. This grid was sampled along the flight lines in order to apply a correction factor to the mag line data. A low pass filter was applied to the correction data to remove any high frequency content before the original magnetometer data was adjusted.

## RADAR ALTIMETER DATA

The terrain clearance during flight, as measured by the radar altimeter, was recorded at 4 Hz. The value in feet was converted to metres for processing. The data were plotted and inspected for quality. The data were then filtered to remove high frequency noise using a 67-point filter and spike remover (*Figure 6*).

## POSITIONAL DATA

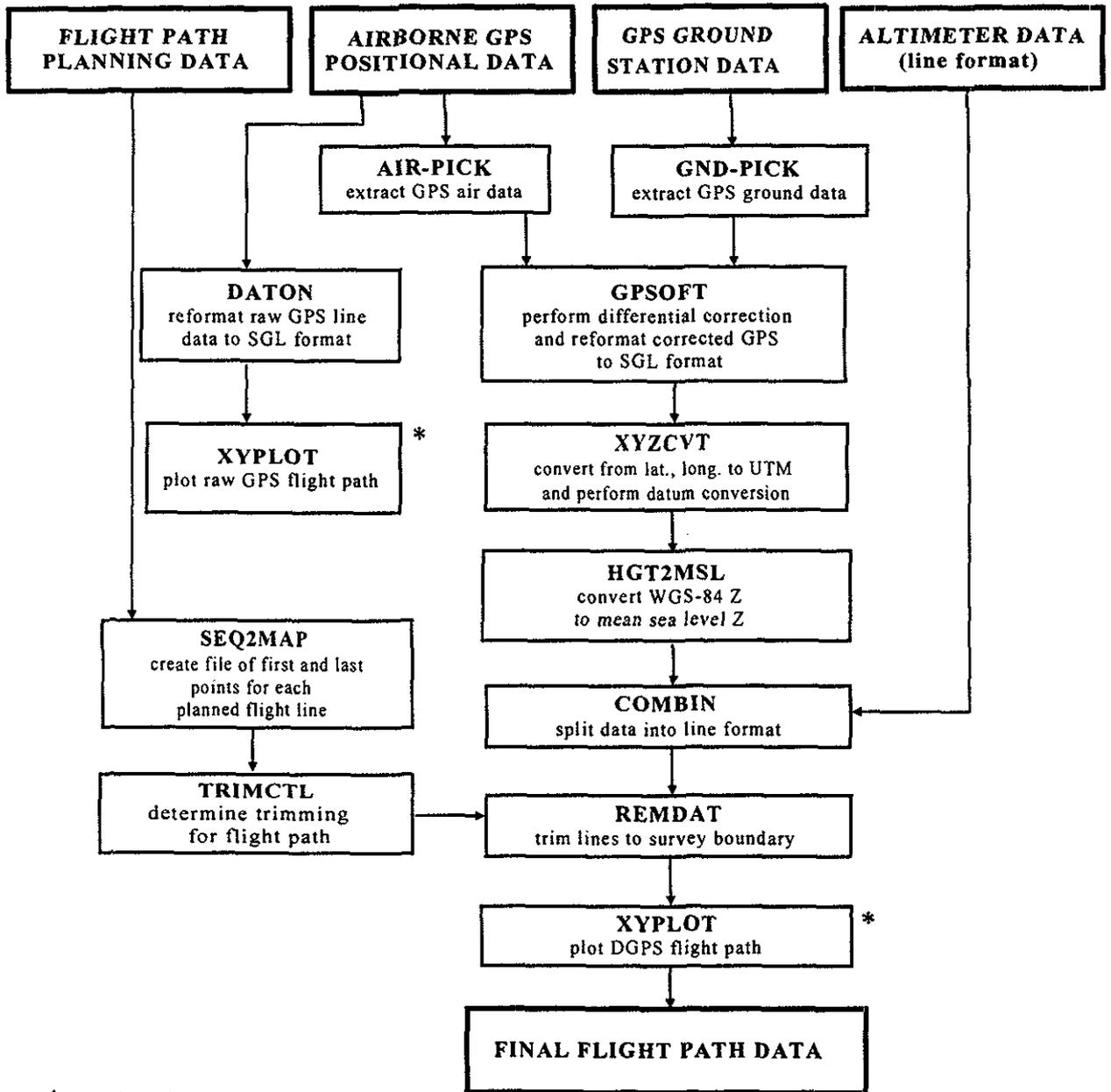
A number of programs were executed for the compilation of navigation data in order to reformat and calculate the more accurate differential GPS (DGPS) positions. Please refer to the enclosed flowchart (*Figure 7*) for Positional Data Processing. SGL's new proprietary DGPS software, GPSoft, was used to calculate DGPS positions from raw range data obtained from both the moving and stationary GPS receivers.

For increase accuracy, the ground station position was recalculated by performing differential correction. The data from the GSC Whitehorse GPS recording station was used.

Positional data were recorded in the WGS-84 datum, then converted to NAD-27-CAN UTM using the standard central meridian for Zone 8N.

Ellipsoid		Semi major axis		Flattening			
CLARKE-1866		6378206.4		0.003390071			
NAD-27-CAN to WGS-84 shift definition format							
X_shift	Y_shift	Z_shift	X_rot	Y_rot	Z_rot	Scale factor	Uncertainty
375	-111	431	0	0	0	0	1

Figure 7  
**POSITIONAL DATA PROCESSING**



\* Quality Control Check

---

**DATA COMPILATION PERSONNEL**

Data compilation and processing was performed by the following SGL personnel:

Bernard Desmons

Jeff Kertesz were in charge of cartography for the project.

## VIII. FINAL PRODUCTS

### I) MAP PRODUCTS

#### **Colour Maps**

**1:50,000**

Two laminated copies of the following maps products was delivered:

- Total Magnetic Intensity (TMI) with contours and flight lines superimposed
- First Vertical Derivative (FVD) of the total magnetic field
- Grey scale shadow map of the FVD

### II) DIGITAL DATA

#### **Line Data**

- Processed digital data in Standard XYZ format, containing all the raw and corrected line data

#### **Grids in GXF format**

- Total Magnetic Intensity (TMI)
- First Vertical Derivative (FVD)

## IX. PROJECT SUMMARY

### PART I - SURVEY

Survey Title:	Helicopter borne High Sensitivity Aeromagnetic Survey		
Client:	Prospector International Resources Inc. 1950 - 400 Burrard St., Vancouver, BC		
Client Contact:	Peter Bryant,		
<b>GENERAL INFORMATION</b>			
Survey Location:	Stewart Range, Yukon Territory		
Survey Duration:	01/04/99 - 05/04/99		
Field Office Location:	Bedrock Motel, Mayo, YT		
Base Ground Station Location:	Trans North Helicopter base at Mayo Airport		
Coordinates in WGS 84 Datum:	Lat: N63:36.9476	Long: W135:52.9069	Elev: 513.77 m
<b>SURVEY SPECIFICATIONS</b>			
Magnetic Field:	Inclination: 78.1°	Declination: 28.9°	Total Field: 58142.5 nT
Line Spacing	Traverse: 135 m	Control: 5000 m	
Line Direction	Traverse degrees true: 045°	Control: 135°	
Total lkm flown	10911km		
Survey Altitude:	90 m AGL (10m lower for the sensor)		
Survey Line Numbers	Traverse: 1001-1119	Control: 101-103	
Survey Flight Numbers	1 - 17		
Datum - Raw Recorded Data	WGS-84		
Datum - Delivered Data:	NAD-27 (Zone 8N)		
Shift determined for SEQ file data	DATUM.CTL (NORMAL SHIFTS)		
<b>SURVEY AIRCRAFT AND EQUIPMENT</b>			
Aircraft used:	C-GPGH Bell 206 Jet Ranger III		
Radar Altimeter:	King KRA-10	Range: 0-2,500 ft.	
Magnetometer (Air):	Geometrics G822-A	Sample rate:	0.1 sec
Magnetometer (Ground):	Geometrics G822-A		0.5/sec
GPS Receiver (Air):	NovAtel 951R, 12 channels		1.0/sec
GPS Receiver (Ground):	NovAtel 951R, 12 channels		1.0/sec
<b>FIELD PERSONNEL</b>			
Field Manager:	Bernard Desmons	Pilot:	Stephan Souliere
Data Processing:	Bernard Desmons	Technicien:	Tim Cartwright

# IX. PROJECT SUMMARY

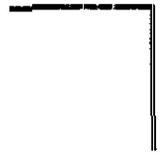
## PART II - DATA PROCESSING

*** DATA PROCESSING ***			
PROCESSING FILE LOCATION			
	Computer	Directory	Final FDT
Processing	PENT-22	C:\PROS_99.YT	
Altimeter Data		VALT	ALT02
Differential GPS		IGPS	DGPS3
Ground Mag Data		IGND	GND02
Air Mag Data		IMAG	MG11
MAJOR PROCESSING ITEMS			
Master Corner File: YUKON.MCF			Survey Origin: 63N 133W
Ground Stations Combined: NA			Diurnals Subtracted: Y
IGRF Removed: Y		Date of IGRF: As of date flown	
Altitude Corrections to Mag Data: N			Data Rotated: N
INSINT - Limit to move intersections: 2 readings			
TIEFIX PARAMETERS	ADJUSTCTL: Y		SHORTFIX: Y
Control File to Adjust Intersections: FAINT9.CTL			

*** SPECIFIC DATA PROCESSED ***						
CH #	Data	Sample Rate	Units	Comment	Filter	Spiker (Y/N)
00	Time	0.01 s	seconds	seconds after midnight UTC	None	N
05	RA	0.25 s	metres	radar altimeter	67Y	Y
11	Gnd Mag	1 s	nT	base station mag	67Y	Y
21	Raw Mag	0.5 s	nT	raw air mag	None	Y
22	Mag	NA	nT	diurnally corrected mag	None	N
23	Mag (IGRF cor)	NA	nT	IGRF corrected mag	None	N
24	IGRF	NA	nT	IGRF value	None	N
25	Levelled Mag	NA	nT	levelled mag	None	N
30	Final Mag	NA	nT	decorrugated levelled mag	None	N
31	FVD	NA	nT/m	first vertical derivative	None	N
63	UTM Y	1 s	m	NAD-27 Zone 8N	None	N

CH #	Data	Sample Rate	Units	Comment	Filter	Spiker (Y/N)
64	UTM X	1 s	m	NAD-27 Zone 8N	None	N
65	UTM Z	1 s	m	NAD-27 Height	None	N
66	MSL	NA	m	MSL Height	None	N
68	Terrain	NA	m	MSL - RA	None	N

*** FINAL PRODUCTS ***		
Name	Description	Units
UTM-X	Northing (NAD-27-CAN, 8N)	metres
UTM-Y	Easting (NAD-27-CAN, 8N)	metres
TIME	Time (UTC)	0.01 sec
DATE	Julian day	NA
WGS-X	Longitude (WGS-84)	1E-07 deg
WGS-Y	Latitude (WGS-84)	1E-07 deg
RA	Radar altimeter	0.1 metres
DGPS-Z	DGPS altitude (WGS-84)	0.1 metres
MSL	Mean sea level altitude	0.1 metres
DTM	Computed digital terrain model	0.1 metres
RAWMAG	Edited raw total magnetic field	0.01 nT
GND	Ground station magnetic field	0.01 nT
IGRF	International Geomagnetic Reference Field	0.01 nT
RESMAG	Residual magnetic field after diurnal and IGRF corrections	0.01 nT
LEVMAG	Levelled residual magnetic field	0.01 nT
FVD	First vertical derivative	0.01 nT/km



APPENDIX I  
COMPANY PROFILE

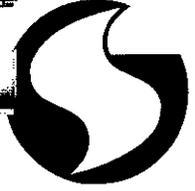
**SANDER GEOPHYSICS LIMITED**

260 Hunt Club Road, Ottawa, Ontario, K1V 1C1 Canada  
Phone: (613) 521-9626 Fax: (613) 521-0215 E-mail: [info@sgl.com](mailto:info@sgl.com) Website: [www.sgl.com](http://www.sgl.com)

**EXPLORATION**

**RESEARCH**

**INTERPRETATION**



# SANDER GEOPHYSICS LIMITED

## COMPANY PROFILE

Sander Geophysics Limited (SGL) specializes in high resolution airborne surveys for the oil and mining industries. The company carries out airborne magnetic, and radiometric surveys using fixed-wing aircraft and helicopters.

### HISTORY

SGL was founded in 1956. The first airborne surveys were performed as early as 1958, and by 1967 airborne geophysical surveying had become the mainstay of the company. Operations have continued and expanded under the same ownership and management since 1956.

### SERVICES

The company currently specializes in surveys using one or more of the following methods:

- Magnetic total field
- Radiometric
- Magnetic gradient
- VLF-EM

All surveys are performed using SGL's specially modified fixed-wing aircraft and helicopter.

The company has extensive experience in working in diverse geographical environments. Surveys have been flown in high mountains, offshore, over deserts and tropical jungle, from the Pampas of Argentina to the tundra of the Canadian Arctic, and to the South China sea.

Each field party is under the direction of a university graduate geophysicist. Field offices are equipped to provide flight path maps as well as contour and colour maps of the geophysical

data. Immediate data processing is part of our standard quality control procedure, and provides our clients with rapid results for evaluation while the survey is in progress.

Among airborne geophysical surveying companies, SGL has long been in the lead in making optimal use of the Global Positioning System. We are now offering a flight management system based on Real Time Differential GPS (RDGPS) to provide steering information to the pilot to an accuracy of 5 m in all three dimensions. This system allows us to produce a drupe flying surface which is unique and flyable. It assures that adjacent flight lines and control lines are flown at the same level resulting in better geophysical maps.

### INTERPRETIVE PRODUCTS

SGL offers a full range of data enhancement programs and provides complete interpretational services by experienced geoscientists.

- Vertical gradient contour and colour maps
- Shaded relief maps of any parameter
- Frequency slices - high-pass, low-pass or band-pass filtered total magnetic intensity
- Directional high-pass, low-pass or band-pass filtering
- Amplitude of the analytic signal
- Reduced-to-the-pole maps
- Upward or downward continued maps
- Three-dimensional modelling of magnetic grid data
- Processed gamma-ray spectrometer data

#### SANDER GEOPHYSICS LIMITED

260 Hunt Club Road, Ottawa, Ontario, K1V 1C1 Canada

Phone: (613) 521-9626 Fax: (613) 521-0215 E-mail: info@sgl.com Website: www.sgl.com

EXPLORATION

RESEARCH

INTERPRETATION

## SGL AIRCRAFT

SGL owns and operates the following geophysical aircraft.

Aircraft	Endurance in Survey Mode (hrs with reserves)	Maximum Gross Weight (kg)
Cessna 208B Grand Caravan (3)	5	3,977
Cessna 402B	6	2,864
Cessna 404 Titan	8	3,818
Queenair B80	6	4,000
BN Islander	8	3,000
AS 350D Astar	5	1,950

All our aircraft are equipped for magnetic and radiometric surveys. Extensive modifications have been made to the fixed-wing aircraft to reduce their magnetic effect. Typical Figures of Merit for SGL's fixed-wing aircraft are less than 1 nT in most regions of the world..

## FACILITIES

The company's head office and aircraft maintenance hangar is located at the Macdonald-Cartier International Airport in Ottawa, Canada. SGL maintains a complete electronics workshop with test equipment consistent with the research and development, and production of geophysical instruments.

SGL has successfully processed all data acquired during the past 25 years. The company has an ongoing program of researching, developing, and refining a full suite of software for geophysical data processing.

SGL's cartographic department is now fully digital with a 36" wide drum colour scanner, raster/vector editing software, several colour plotters and a laminator.

## R & D

SGL is dedicated to research and development. Nearly one-third of the company's resources are devoted to developing new and more efficient instrumentation for airborne geophysical surveying.

In recent years, SGL has been engaged in an R & D project to design an airborne gravimetry system which will offer much better resolution and stability than the existing systems.

## SGL SURVEY EQUIPMENT

### Magnetometers

Sensors: **Scintrex CS-2 & H8** optically-pumped, cesium split beam  
**Geometrics G-822A**

Compensator: **RMS**  
27-term automatic airborne digital compensator

### Gamma-ray Spectrometers

Detectors: **Bicron**  
NaI parallelepipedic crystals,  
60 litres total

Spectrometer: **Exploranium GR-820**  
dual 256-channel analyzers

### Data Acquisition

Computer: **Sander NavDAS**  
micro computer based system  
with **Bernoulli** or **Jaz** drives

### Navigation & Flight Path Recovery

GPS: **NovAtel 3951R**  
12-channel receiver  
post-flight or real-time DGPS

Glonass: **Ashtech GPS/Glonass GG24**  
receiver

Video tracking: **Panasonic**  
CCD video camera

## KEY PERSONNEL

President:  
George W. Sander, Ph.D., P.Eng.

Chief Geophysicist:  
Stephan Sander, M.Sc.

Operations Manager:  
Reed Archer, B.Sc.

Data Processing Manager:  
Luise Archer, M.Sc.

Chief, R & D:  
Stephen Ferguson, M.Sc.

Aeronautical Operations:  
Malcolm Imray, M.Sc., P.Eng.



APPENDIX II  
SURVEY LINE COORDINATES

**SANDER GEOPHYSICS LIMITED**

260 Hunt Club Road, Ottawa, Ontario, K1V 1C1 Canada

Phone: (613) 521-9626 Fax: (613) 521-0215 E-mail: info@sgl.com Website: www.sgl.com

**EXPLORATION**

**RESEARCH**

**INTERPRETATION**

HELICOPTER BORNE HIGH SENSITIVITY  
AEROMAGNETIC SURVEY

STEWART RANGE AREA  
YUKON TERRITORY - 1999

APPENDIX II  
SURVEY LINE COORDINATES  
(WGS-84)

SEGMENT NO	START		END		LENGTH	
	LAT	LONG	LAT	LONG	NM	KM
C0101.0	N63:33.80	W132:55.67	N63:36.56	W133:04.94	4.96	9.18
C0102.0	N63:35.21	W132:49.61	N63:38.50	W133:00.64	5.90	10.94
C0103.0	N63:37.27	W132:45.71	N63:42.06	W133:01.81	8.60	15.93
T1001.0	N63:37.19	W132:45.82	N63:38.40	W132:43.98	1.46	2.71
T1002.0	N63:37.23	W132:45.96	N63:38.44	W132:44.12	1.46	2.71
T1003.0	N63:37.27	W132:46.09	N63:38.49	W132:44.25	1.47	2.72
T1004.0	N63:37.31	W132:46.23	N63:38.53	W132:44.38	1.47	2.72
T1005.0	N63:35.14	W132:49.71	N63:35.95	W132:48.50	0.97	1.80
T1005.1	N63:37.35	W132:46.36	N63:38.57	W132:44.51	1.47	2.73
T1006.0	N63:35.18	W132:49.85	N63:35.99	W132:48.63	0.97	1.80
T1006.1	N63:37.39	W132:46.50	N63:38.62	W132:44.64	1.48	2.73
T1007.0	N63:35.22	W132:49.98	N63:36.03	W132:48.76	0.97	1.80
T1007.1	N63:37.43	W132:46.64	N63:38.66	W132:44.78	1.48	2.74
T1008.0	N63:35.26	W132:50.12	N63:36.07	W132:48.90	0.98	1.81
T1008.1	N63:37.48	W132:46.77	N63:38.70	W132:44.91	1.48	2.74
T1009.0	N63:35.30	W132:50.25	N63:36.11	W132:49.03	0.98	1.81
T1009.1	N63:37.52	W132:46.91	N63:38.75	W132:45.04	1.48	2.75
T1010.0	N63:35.35	W132:50.39	N63:36.16	W132:49.16	0.98	1.81
T1010.1	N63:37.56	W132:47.04	N63:38.79	W132:45.17	1.49	2.75
T1011.0	N63:35.39	W132:50.53	N63:36.20	W132:49.30	0.98	1.81
T1011.1	N63:37.60	W132:47.18	N63:38.84	W132:45.30	1.49	2.76
T1012.0	N63:35.43	W132:50.66	N63:36.66	W132:48.80	1.48	2.75
T1012.1	N63:37.64	W132:47.31	N63:38.88	W132:45.43	1.49	2.76
T1013.0	N63:35.47	W132:50.80	N63:36.70	W132:48.94	1.48	2.75
T1013.1	N63:37.68	W132:47.45	N63:38.92	W132:45.57	1.50	2.77
T1014.0	N63:35.51	W132:50.93	N63:36.74	W132:49.07	1.48	2.74
T1014.1	N63:37.72	W132:47.58	N63:38.97	W132:45.70	1.50	2.78
T1015.0	N63:35.55	W132:51.07	N63:39.01	W132:45.83	4.17	7.72
T1016.0	N63:35.59	W132:51.20	N63:39.05	W132:45.96	4.17	7.73
T1017.0	N63:35.63	W132:51.34	N63:39.10	W132:46.09	4.18	7.73
T1018.0	N63:35.67	W132:51.47	N63:38.71	W132:46.88	3.66	6.78
T1019.0	N63:35.52	W132:51.90	N63:38.76	W132:47.01	3.90	7.22
T1020.0	N63:35.56	W132:52.04	N63:38.80	W132:47.14	3.90	7.23
T1021.0	N63:35.60	W132:52.17	N63:38.85	W132:47.26	3.91	7.24

SEGMENT NO	START		END		LENGTH	
	LAT	LONG	LAT	LONG	NM	KM
T1022.0	N63:35.64	W132:52.31	N63:38.89	W132:47.39	3.92	7.26
T1023.0	N63:35.68	W132:52.45	N63:38.94	W132:47.52	3.92	7.27
T1024.0	N63:35.72	W132:52.58	N63:38.99	W132:47.65	3.93	7.28
T1025.0	N63:32.93	W132:56.99	N63:38.81	W132:48.11	7.08	13.12
T1026.0	N63:32.97	W132:57.12	N63:38.85	W132:48.24	7.09	13.12
T1027.0	N63:33.01	W132:57.26	N63:38.90	W132:48.37	7.09	13.13
T1028.0	N63:33.05	W132:57.39	N63:38.94	W132:48.51	7.09	13.14
T1029.0	N63:33.09	W132:57.53	N63:38.99	W132:48.64	7.10	13.14
T1030.0	N63:33.14	W132:57.66	N63:39.03	W132:48.77	7.10	13.15
T1031.0	N63:33.18	W132:57.80	N63:39.08	W132:48.90	7.10	13.15
T1032.0	N63:33.22	W132:57.93	N63:38.91	W132:49.35	6.85	12.69
T1033.0	N63:33.26	W132:58.07	N63:38.95	W132:49.48	6.85	12.69
T1034.0	N63:33.30	W132:58.20	N63:39.00	W132:49.61	6.86	12.70
T1035.0	N63:33.34	W132:58.34	N63:39.04	W132:49.74	6.87	12.71
T1036.0	N63:33.38	W132:58.47	N63:39.09	W132:49.86	6.87	12.72
T1037.0	N63:33.43	W132:58.61	N63:39.14	W132:49.99	6.88	12.73
T1038.0	N63:33.47	W132:58.74	N63:39.18	W132:50.12	6.88	12.74
T1039.0	N63:33.51	W132:58.87	N63:39.64	W132:49.63	7.38	13.67
T1040.0	N63:33.55	W132:59.01	N63:39.68	W132:49.76	7.38	13.67
T1041.0	N63:33.59	W132:59.14	N63:39.72	W132:49.90	7.38	13.67
T1042.0	N63:33.63	W132:59.28	N63:39.76	W132:50.03	7.38	13.67
T1043.0	N63:33.67	W132:59.41	N63:39.81	W132:50.17	7.38	13.67
T1044.0	N63:33.72	W132:59.55	N63:39.85	W132:50.30	7.38	13.67
T1045.0	N63:33.76	W132:59.68	N63:39.89	W132:50.44	7.38	13.67
T1046.0	N63:33.80	W132:59.82	N63:39.93	W132:50.57	7.38	13.67
T1047.0	N63:33.84	W132:59.95	N63:39.97	W132:50.71	7.38	13.67
T1048.0	N63:33.88	W133:00.09	N63:40.01	W132:50.84	7.38	13.67
T1049.0	N63:33.92	W133:00.22	N63:40.05	W132:50.98	7.38	13.67
T1050.0	N63:33.96	W133:00.36	N63:40.10	W132:51.11	7.38	13.67
T1051.0	N63:34.00	W133:00.49	N63:40.14	W132:51.25	7.38	13.67
T1052.0	N63:34.05	W133:00.63	N63:40.18	W132:51.38	7.38	13.67
T1053.0	N63:34.09	W133:00.76	N63:40.22	W132:51.52	7.38	13.67
T1054.0	N63:34.13	W133:00.90	N63:40.26	W132:51.65	7.38	13.67
T1055.0	N63:34.17	W133:01.03	N63:40.30	W132:51.79	7.38	13.67
T1056.0	N63:34.21	W133:01.17	N63:40.34	W132:51.92	7.38	13.67
T1057.0	N63:34.25	W133:01.30	N63:40.39	W132:52.06	7.38	13.67
T1058.0	N63:34.29	W133:01.44	N63:40.43	W132:52.19	7.38	13.67
T1059.0	N63:34.34	W133:01.57	N63:40.47	W132:52.33	7.38	13.67
T1060.0	N63:34.38	W133:01.71	N63:40.51	W132:52.46	7.38	13.67
T1061.0	N63:34.42	W133:01.84	N63:40.55	W132:52.60	7.38	13.67
T1062.0	N63:34.46	W133:01.98	N63:40.59	W132:52.74	7.38	13.67
T1063.0	N63:34.50	W133:02.11	N63:40.64	W132:52.87	7.38	13.67
T1064.0	N63:34.54	W133:02.25	N63:40.68	W132:53.01	7.38	13.67
T1065.0	N63:34.58	W133:02.38	N63:40.72	W132:53.14	7.38	13.67
T1066.0	N63:34.63	W133:02.52	N63:40.76	W132:53.28	7.38	13.67
T1067.0	N63:34.67	W133:02.65	N63:40.80	W132:53.41	7.38	13.67
T1068.0	N63:34.71	W133:02.78	N63:40.84	W132:53.55	7.38	13.67
T1069.0	N63:34.75	W133:02.92	N63:40.88	W132:53.68	7.38	13.67

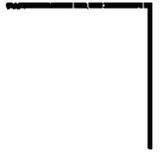
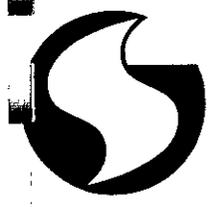
SEGMENT NO	START		END		LENGTH	
	LAT	LONG	LAT	LONG	NM	KM
T1070.0	N63:34.79	W133:03.05	N63:36.42	W133:00.61	1.96	3.63
T1070.1	N63:37.45	W132:59.06	N63:40.93	W132:53.82	4.18	7.75
T1071.0	N63:34.83	W133:03.19	N63:36.46	W133:00.74	1.96	3.64
T1071.1	N63:37.49	W132:59.20	N63:40.97	W132:53.95	4.18	7.75
T1072.0	N63:34.87	W133:03.32	N63:36.51	W133:00.87	1.96	3.64
T1072.1	N63:37.53	W132:59.33	N63:41.01	W132:54.09	4.18	7.75
T1073.0	N63:34.91	W133:03.46	N63:36.55	W133:01.01	1.96	3.64
T1073.1	N63:37.57	W132:59.47	N63:41.05	W132:54.22	4.18	7.75
T1074.0	N63:34.96	W133:03.59	N63:36.59	W133:01.14	1.97	3.64
T1074.1	N63:37.62	W132:59.60	N63:41.09	W132:54.36	4.18	7.75
T1075.0	N63:35.00	W133:03.73	N63:36.63	W133:01.28	1.97	3.64
T1075.1	N63:37.66	W132:59.74	N63:41.13	W132:54.49	4.18	7.75
T1076.0	N63:35.04	W133:03.86	N63:36.68	W133:01.41	1.97	3.64
T1076.1	N63:37.70	W132:59.87	N63:41.17	W132:54.63	4.18	7.75
T1077.0	N63:35.08	W133:04.00	N63:36.31	W133:02.15	1.48	2.74
T1077.1	N63:37.74	W133:00.01	N63:41.22	W132:54.76	4.18	7.75
T1078.0	N63:35.12	W133:04.13	N63:36.35	W133:02.29	1.48	2.74
T1078.1	N63:37.78	W133:00.14	N63:41.26	W132:54.90	4.18	7.75
T1079.0	N63:35.16	W133:04.27	N63:36.39	W133:02.42	1.48	2.74
T1079.1	N63:37.82	W133:00.28	N63:41.30	W132:55.03	4.18	7.75
T1080.0	N63:35.20	W133:04.40	N63:36.44	W133:02.56	1.48	2.74
T1080.1	N63:37.86	W133:00.41	N63:41.34	W132:55.17	4.18	7.75
T1081.0	N63:35.25	W133:04.54	N63:36.48	W133:02.69	1.48	2.74
T1081.1	N63:37.91	W133:00.55	N63:41.38	W132:55.30	4.18	7.75
T1082.0	N63:35.29	W133:04.67	N63:36.52	W133:02.83	1.48	2.74
T1082.1	N63:37.95	W133:00.68	N63:41.42	W132:55.44	4.18	7.75
T1083.0	N63:35.33	W133:04.81	N63:36.56	W133:02.96	1.48	2.74
T1083.1	N63:37.99	W133:00.82	N63:41.46	W132:55.58	4.18	7.75
T1084.0	N63:35.37	W133:04.94	N63:36.60	W133:03.10	1.48	2.74
T1084.1	N63:38.03	W133:00.95	N63:41.51	W132:55.71	4.18	7.75
T1085.0	N63:35.41	W133:05.08	N63:36.64	W133:03.23	1.48	2.75
T1085.1	N63:38.07	W133:01.09	N63:41.55	W132:55.85	4.18	7.75
T1086.0	N63:35.45	W133:05.21	N63:36.69	W133:03.36	1.48	2.75
T1086.1	N63:38.11	W133:01.22	N63:41.59	W132:55.98	4.18	7.75
T1087.0	N63:35.49	W133:05.35	N63:36.73	W133:03.50	1.48	2.75
T1087.1	N63:38.78	W133:00.42	N63:41.63	W132:56.12	3.43	6.36
T1088.0	N63:35.53	W133:05.49	N63:36.77	W133:03.63	1.48	2.75
T1088.1	N63:38.82	W133:00.56	N63:41.67	W132:56.25	3.43	6.36
T1089.0	N63:35.58	W133:05.62	N63:36.81	W133:03.77	1.48	2.75
T1089.1	N63:38.86	W133:00.69	N63:41.71	W132:56.39	3.43	6.36
T1090.0	N63:35.62	W133:05.76	N63:36.85	W133:03.90	1.49	2.75
T1090.1	N63:38.90	W133:00.83	N63:41.75	W132:56.52	3.44	6.36
T1091.0	N63:35.66	W133:05.89	N63:36.89	W133:04.04	1.49	2.75
T1091.1	N63:38.94	W133:00.97	N63:41.80	W132:56.66	3.44	6.37
T1092.0	N63:35.70	W133:06.03	N63:36.94	W133:04.17	1.49	2.75
T1092.1	N63:38.98	W133:01.10	N63:41.84	W132:56.79	3.44	6.37
T1093.0	N63:35.74	W133:06.16	N63:36.98	W133:04.31	1.49	2.75
T1093.1	N63:39.02	W133:01.24	N63:41.06	W132:58.16	2.46	4.55

SEGMENT NO	START		END		LENGTH	
	LAT	LONG	LAT	LONG	NM	KM
T1094.0	N63:39.86	W133:00.18	N63:41.10	W132:58.30	1.50	2.78
T1095.0	N63:39.90	W133:00.31	N63:41.14	W132:58.43	1.50	2.78
T1096.0	N63:39.94	W133:00.45	N63:41.19	W132:58.57	1.50	2.77
T1097.0	N63:39.98	W133:00.58	N63:41.23	W132:58.70	1.50	2.77
T1098.0	N63:40.03	W133:00.71	N63:41.27	W132:58.84	1.50	2.77
T1099.0	N63:40.07	W133:00.85	N63:41.31	W132:58.98	1.49	2.77
T1100.0	N63:40.11	W133:00.98	N63:41.35	W132:59.11	1.49	2.76
T1101.0	N63:40.15	W133:01.11	N63:41.39	W132:59.25	1.49	2.76
T1102.0	N63:40.20	W133:01.25	N63:41.43	W132:59.38	1.49	2.76
T1103.0	N63:40.24	W133:01.38	N63:41.48	W132:59.52	1.49	2.76
T1104.0	N63:40.28	W133:01.52	N63:41.52	W132:59.65	1.49	2.75
T1105.0	N63:40.32	W133:01.65	N63:41.56	W132:59.79	1.48	2.75
T1106.0	N63:40.37	W133:01.78	N63:41.60	W132:59.92	1.48	2.75
T1107.0	N63:40.41	W133:01.92	N63:41.64	W133:00.06	1.48	2.74
T1108.0	N63:40.45	W133:02.05	N63:41.68	W133:00.20	1.48	2.74
T1109.0	N63:40.49	W133:02.18	N63:41.72	W133:00.33	1.48	2.74
T1110.0	N63:40.54	W133:02.32	N63:41.76	W133:00.47	1.48	2.74
T1111.0	N63:40.58	W133:02.45	N63:41.81	W133:00.60	1.48	2.73
T1112.0	N63:40.62	W133:02.58	N63:41.85	W133:00.74	1.47	2.73
T1113.0	N63:40.66	W133:02.72	N63:41.89	W133:00.87	1.47	2.73
T1114.0	N63:40.71	W133:02.85	N63:41.93	W133:01.01	1.47	2.73
T1115.0	N63:40.75	W133:02.99	N63:41.97	W133:01.14	1.47	2.72
T1116.0	N63:40.79	W133:03.12	N63:42.01	W133:01.28	1.47	2.72
T1117.0	N63:40.83	W133:03.25	N63:42.05	W133:01.42	1.47	2.72
T1118.0	N63:40.88	W133:03.39	N63:42.09	W133:01.55	1.47	2.71
T1119.0	N63:40.92	W133:03.52	N63:42.14	W133:01.69	1.46	2.71

Total control line length = 19.46 nautical miles  
= 36.05 kilometers.

Total traverse line length = 569.85 nautical miles  
= 1055.36 kilometers.

Total length of all lines = 589.31 nautical miles  
= 1091.41 kilometers.



APPENDIX III  
EQUIPMENT LIST

**SANDER GEOPHYSICS LIMITED**

260 Hunt Club Road, Ottawa, Ontario, K1V 1C1 Canada

Phone: (613) 521-9626 Fax: (613) 521-0215 E-mail: [info@sgl.com](mailto:info@sgl.com) Website: [www.sgl.com](http://www.sgl.com)

*EXPLORATION*

*RESEARCH*

*INTERPRETATION*

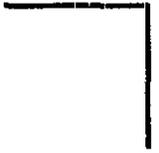
HELICOPTER BORNE HIGH SENSITIVITY  
AEROMAGNETIC SURVEY

STEWART RANGE AREA  
YUKON TERRITORY - 1999

**APPENDIX III  
SURVEY EQUIPMENT**

Item Name	Serial Number	Description	Manufacturer
Miniterminal	236921	ST 2000 RS232 & RJ to DB25 adapter cable, 6'	Termiflex
Amplifier	112	GPS in Line Amp JCA-12-1117LT	JCA
Amplifier	1184	GPS in-line Amp GA-12F	Starlink
Amplifier	2840	GPS inline amplifier GA-12F	Starlink
Antenna	2583	DMC146-10-2	Dorne & Margolin
Antenna	CGA96170027	model 501	Novatel
Antenna	SGA1445	GPS aircraft antenna	Novatel
Antenna	CGA97450031	Novatel GPS-501	Novatel
Computer - Pentium	PENT-22		
Computer-Laptop	NOTE-17	310CDS P 266 32RAM 3.8GB	Toshiba
Coupler	CMC007	SGL Cesium Magnetometer Coupler	SGL
Coupler	CMC016	SGL Cesium Mag Coupler	SGL
External Drive Bernoulli	9411390	Model B190T	Iomega
Flat Panell Display	7N-179004	LMV10 Datalux colour display	Datalux
Fluke Scope Meter	6970036	Fluke 123Industrial Scope Meter Model DM6907005	Fluke
Ground Station Computer	GND-15	Lunchbox	SGL
Ground Station Computer	GND-06	Lunchbox	SGL
Keyboard	M2112158	4725 104 Key	Fujitsu
Keyboard - mini	001723	Model ML4100	
Magnetometer - Cesium	9309123	CS-2 Cesium magnetometer	Scintrex
Magnetometer - Cesium	75214	G-822A Cesium Magnetometer	Geometrics
Magnetometer - Cesium	75116	G-822A Cesium Magnetometer	Geometrics
Miniterminal	263936	ST 2000	Trmiflex
Monitor	AA74700246	Colour LCD 15", Stand alone Flat	Viewsonic
Power Distribution Box	PODB06	SGL	
Printer	MA549980	Fujitsu DL 3400 Wide	Fujitsu
Rack mount computer case	ADAC-001	backplane, power supply, mag coupler	SGL
Receiver	CGP95170028	GPS 3951R 12 channel card	Novatel
Receiver - DGPS	ZE332804	Model 3000LR Reciever	Omnistar
UPS	WS9634337003	Smart-700	APC
UPS	WS9746358963	UPS 1000XL	APC Corp.
<b>ADAC-001</b>			
A/D converter card	660464	AD510	Real Time Devices
Analog Interface Board	SAIB660464	SGL	
Bernoulli Card	BB0B30500L4	for bernoulli multi disk	IOMEGA

Item Name	Serial Number	Description	Manufacturer
Disc Drive, Bernoulli	03192506	150 M Multidisc	IOMEGA
Hard drive	918009-005	Model# ST990A6, 24 sectors, 16 heads, 873 Cylinders	Seagate
Mag/Timer card	MGCT-001	Mag counter and time stamp	SGL
Serial I/O card, 4 port Gnd-06	01286956	PC/4 W/165501SA	Digiboard
4Meg SIMM	B29442	1x32 SIMM, 72 pin 60ns nonparity	
CPU	S40314	486DX4-100 (3.3v)	AMD
Hard Drive	9B5004-005	420 Mb IDE	Seagate
Mag/Timer card	MGCT-020	Mag counter and time stamp	SGL
Motherboard - 486	65307460	PCI/VL 486MB, 128K	ASUS
Receiver	CGP96270012	GPS 3951R 12 channel card	Novatel
Video card GND-15	N80675	LCD Color VGA	
Hard Drive	X212104X01724\$08	1.3 Gb IDE	Seagate
Mag/Timer card	MGCT-03	mag counter and time stamp	SGL
Network Card	SHJ1B6BF7E	PCI Ethernet card	3COM
Receiver	CGP 94400015	GPS 3951R 12 Channel card	Novatel
Video card	N82794	PCX6	Norpak



APPENDIX IV  
SURVEY LOG

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**EXPLORATION**

**RESEARCH**

**INTERPRETATION**

HELICOPTER BORNE HIGH SENSITIVITY  
AEROMAGNETIC SURVEY

STEWART RANGE AREA  
YUKON TERRITORY - 1999

APPENDIX IV  
SURVEY LOG  
(NAD-27 UTM ZONE-8N)

MLINE	START TIME	END TIME	MIN X	MAX X	MIN Y	MAX Y	FLT	DAY	YEAR
101.01	8169758	8194548	598471	603088	7049845	7052712	3	91	1999
101.02	8208278	8221218	595307	598550	7052638	7054717	3	91	1999
102.01	8343958	8386078	598695	607943	7052624	7058428	3	91	1999
103.00	8427398	8494028	597541	611029	7056549	7065005	3	91	1999
1068.00	7180028	7246078	597098	604365	7051328	7062931	4	92	1999
1069.00	7118268	7168708	596985	604251	7051443	7063041	4	92	1999
1070.00	7088678	7107478	596870	598802	7051474	7054583	4	92	1999
1071.00	7064678	7078528	596756	598688	7051547	7054650	4	92	1999
1072.00	7042078	7057028	596643	598576	7051608	7054716	4	92	1999
1073.00	7014638	7030788	596528	598463	7051759	7054808	4	92	1999
1074.00	6986918	7005488	596416	598349	7051815	7054882	4	92	1999
1075.00	6962668	6976768	596302	598236	7051866	7054910	4	92	1999
1076.00	6937268	6953808	596188	598123	7051946	7055013	4	92	1999
1077.00	6902718	6912628	596074	597528	7051960	7054342	4	92	1999
1078.00	6884778	6895198	595959	597415	7052078	7054409	4	92	1999
1079.00	6866588	6875778	595845	597300	7052139	7054503	4	92	1999
1080.00	6848208	6859388	595732	597188	7052225	7054564	4	92	1999
1081.00	6827608	6838428	595617	597074	7052307	7054599	4	92	1999
1082.00	6803478	6816168	595503	596961	7052381	7054705	4	92	1999
1083.00	6780938	6792548	595389	596846	7052487	7054767	4	92	1999
1084.00	6755738	6770258	595276	596734	7052513	7054806	4	92	1999
1085.00	6736058	6746488	595162	596620	7052622	7054948	4	92	1999
1086.00	6710258	6725458	595047	596507	7052636	7054995	4	92	1999
1087.00	6687878	6701558	594934	596394	7052748	7055077	4	92	1999
1088.00	6661398	6677328	594819	596280	7052819	7055152	4	92	1999
1089.00	6640148	6652868	594705	596167	7052888	7055260	4	92	1999
1090.00	6612908	6629018	594591	596053	7052959	7055334	4	92	1999
1091.00	6592028	6604348	594477	595940	7053046	7055393	4	92	1999
1093.00	6545328	6560008	594249	595713	7053176	7055508	4	92	1999
1062.00	7973388	8060858	597782	605048	7050855	7062559	5	92	1999
1063.00	7897388	7965608	597668	604935	7051060	7062629	5	92	1999
1064.00	7798978	7886308	597554	604821	7051026	7062674	5	92	1999
1066.00	7640868	7707568	597326	604593	7051146	7062821	5	92	1999
1067.00	7579838	7630538	597212	604479	7051247	7062938	5	92	1999
1061.00	8598798	8692298	597896	605162	7050545	7062489	6	92	1999
1065.01	8508828	8575018	597440	604706	7051055	7062715	6	92	1999
1054.00	764708	832948	598694	605960	7050251	7061938	7	93	1999
1055.00	688278	757328	598580	605846	7050356	7062044	7	93	1999

MLINE	START TIME	END TIME	MIN X	MAX X	MIN Y	MAX Y	FLT	DAY	YEAR
1056.00	601768	677878	598466	605732	7050497	7062114	7	93	1999
1057.00	506538	593978	598353	605618	7050501	7062163	7	93	1999
1058.00	416428	496958	598238	605504	7050563	7062245	7	93	1999
1059.00	329928	406768	598124	605390	7050663	7062335	7	93	1999
1060.00	224068	304718	598010	605276	7050756	7062396	7	93	1999
1046.00	7053138	7121998	599605	606872	7049456	7061355	8	93	1999
1047.00	6961268	7033178	599491	606758	7049830	7061402	8	93	1999
1048.00	6882978	6951078	599377	606644	7049884	7061506	8	93	1999
1049.00	6784028	6867168	599264	606530	7049971	7061581	8	93	1999
1050.00	6683208	6768308	599151	606416	7050011	7061648	8	93	1999
1051.00	6589958	6669348	599036	606302	7050114	7061715	8	93	1999
1052.00	6493638	6572278	598922	606188	7050168	7061787	8	93	1999
1053.00	6338998	6408368	598808	606074	7050194	7061869	8	93	1999
1040.00	8615908	8691638	600289	607556	7049256	7060922	10	93	1999
1041.00	8541198	8610568	600175	607442	7049360	7061020	10	93	1999
1042.00	8467528	8532498	600061	607328	7049420	7060980	10	93	1999
1043.00	8386638	8462568	599947	607214	7049527	7061146	10	93	1999
1044.00	8298508	8375658	599833	607100	7049576	7061225	10	93	1999
1045.00	8216398	8294118	599719	606986	7049631	7061297	10	93	1999
1025.00	218188	308498	601999	608972	7048190	7059476	11	94	1999
1026.00	309958	383488	601886	608861	7048241	7059467	11	94	1999
1027.00	390098	475598	601771	608750	7048392	7059682	11	94	1999
1028.00	477878	546498	601657	608640	7048406	7059529	11	94	1999
1029.00	552868	617498	601544	608529	7048491	7059858	11	94	1999
1030.00	618938	675118	601430	608418	7048515	7059748	11	94	1999
1031.00	684108	744098	601315	608308	7048622	7059955	11	94	1999
1032.00	6326388	6382568	601202	607944	7048696	7059530	12	94	1999
1033.00	6390728	6445668	601088	607836	7048767	7059565	12	94	1999
1034.00	6454588	6513178	600974	607727	7048847	7059653	12	94	1999
1035.00	6524808	6586648	600860	607618	7048896	7059741	12	94	1999
1036.00	6595288	6659498	600745	607509	7048976	7059820	12	94	1999
1037.00	6668788	6741168	600631	607401	7049053	7059919	12	94	1999
1038.00	6749388	6824078	600518	607291	7049139	7059994	12	94	1999
1039.00	6842498	6917328	600404	607670	7049220	7060865	12	94	1999
1001.00	7093228	7113348	610967	612406	7056409	7058743	13	94	1999
1002.00	7119148	7137978	610852	612294	7056488	7058778	13	94	1999
1003.00	7143208	7171328	610738	612182	7056552	7058891	13	94	1999
1004.00	7175958	7195828	610623	612071	7056658	7058924	13	94	1999
1005.00	7226418	7253308	607883	608839	7052472	7054013	13	94	1999
1005.10	7268628	7285498	610509	611959	7056694	7059176	13	94	1999
1006.00	7514988	7531268	607769	608726	7052560	7054090	13	94	1999
1006.10	7286588	7305728	610395	611847	7056816	7059122	13	94	1999
1007.00	7537208	7555688	607654	608613	7052653	7054186	13	94	1999
1007.10	7309038	7326848	610280	611736	7056826	7059159	13	94	1999
1008.00	7559518	7579868	607540	608500	7052697	7054207	13	94	1999
1008.10	7336858	7359598	610166	611624	7056869	7059246	13	94	1999
1009.00	7585208	7600248	607425	608386	7052736	7054395	13	94	1999
1009.10	7361008	7380518	610051	611513	7056904	7059373	13	94	1999

MLINE	START TIME	END TIME	MIN X	MAX X	MIN Y	MAX Y	FLT	DAY	YEAR
1010.00	7603638	7617898	607311	608273	7052859	7054400	13	94	1999
1010.10	7386558	7401848	609937	611401	7057081	7059370	13	94	1999
1011.00	7622908	7638148	607196	608160	7052815	7054468	13	94	1999
1011.10	7405258	7422598	609822	611289	7057169	7059676	13	94	1999
1012.00	7651678	7675318	607082	608544	7052991	7055351	13	94	1999
1012.10	7423688	7440958	609708	611178	7057197	7059575	13	94	1999
1013.10	7444138	7466358	609594	611065	7057343	7059644	13	94	1999
1014.10	7474718	7493698	609479	610955	7057347	7059666	13	94	1999
1013.00	8216068	8234008	606967	608427	7053233	7055452	14	94	1999
1014.00	8238318	8259508	606853	608311	7053139	7055479	14	94	1999
1015.00	8263608	8328408	606738	610843	7053203	7059793	14	94	1999
1016.00	8335398	8377708	606624	610731	7053259	7059836	14	94	1999
1017.00	8382718	8427388	606509	610620	7053395	7059922	14	94	1999
1018.00	8440018	8469208	606395	609997	7053410	7059195	14	94	1999
1019.00	8475718	8503628	606052	609888	7053152	7059294	14	94	1999
1020.00	8506958	8536498	605936	609779	7053228	7059376	14	94	1999
1021.00	8540708	8570198	605820	609670	7053270	7059459	14	94	1999
1022.00	8573958	8603838	605704	609562	7053369	7059515	14	94	1999
1023.00	8610868	8646298	605589	609453	7053406	7059633	14	94	1999
1024.00	8649458	8681908	605473	609344	7053490	7059681	14	94	1999
1070.10	8710828	8737988	600018	604137	7056532	7063099	14	94	1999
1071.10	8743168	8772238	599904	604023	7056566	7063189	14	94	1999
1072.10	8779748	8808728	599790	603909	7056661	7063297	14	94	1999
1073.10	8812078	8843888	599676	603795	7056730	7063470	14	94	1999
1074.10	355578	386588	599562	603680	7056827	7063410	15	95	1999
1075.10	391188	422648	599449	603567	7056945	7063473	15	95	1999
1076.10	428328	458498	599335	603452	7056968	7063605	15	95	1999
1077.10	462788	495978	599222	603339	7057056	7063679	15	95	1999
1078.10	500778	530958	599107	603224	7057116	7063713	15	95	1999
1079.10	535668	566008	598993	603111	7057217	7063771	15	95	1999
1080.10	571608	601258	598879	602996	7057251	7063819	15	95	1999
1081.10	606868	641928	598766	602883	7057380	7063919	15	95	1999
1082.10	647628	679348	598651	602769	7057450	7064022	15	95	1999
1083.11	6297838	6334608	598537	602654	7057448	7064089	16	95	1999
1084.10	6342798	6374508	598423	602541	7057564	7064139	16	95	1999
1085.10	6379298	6423698	598309	602427	7057624	7064220	16	95	1999
1086.10	6430088	6474708	598196	602313	7057734	7064281	16	95	1999
1087.10	6479138	6516668	598820	602198	7058972	7064356	16	95	1999
1088.10	6524478	6552938	598706	602085	7059039	7064439	16	95	1999
1089.10	6558958	6587998	598591	601971	7059081	7064496	16	95	1999
1090.10	6592578	6617138	598475	601857	7059257	7064571	16	95	1999
1091.10	6622258	6651198	598359	601742	7059230	7064656	16	95	1999
1092.10	6656218	6680958	598244	601628	7059330	7064753	16	95	1999
1093.10	6719288	6750008	598128	600547	7059373	7063247	16	95	1999
1094.00	6782428	6809618	598956	600433	7060943	7063372	16	95	1999
1095.00	6816118	6836898	598843	600318	7061017	7063434	16	95	1999
1096.00	6840678	6856158	598730	600203	7061005	7063471	16	95	1999
1097.00	6880368	6904018	598618	600090	7061189	7063552	16	95	1999

MLINE	START TIME	END TIME	MIN X	MAX X	MIN Y	MAX Y	FLT	DAY	YEAR
1098.00	6909868	6928898	598506	599976	7061273	7063585	16	95	1999
1099.00	6935408	6955758	598393	599863	7061364	7063701	16	95	1999
1100.00	6960538	6983058	598280	599748	7061298	7063993	16	95	1999
1101.00	7009748	7027798	598168	599635	7061489	7063849	16	95	1999
1092.02	7542628	7552478	594363	595825	7053163	7055463	17	95	1999
1102.00	7479478	7498738	598054	599521	7061614	7063912	17	95	1999
1103.00	7459368	7471838	597942	599407	7061649	7064065	17	95	1999
1104.00	7438388	7453578	597830	599292	7061711	7064025	17	95	1999
1105.00	7423548	7433418	597717	599177	7061863	7064128	17	95	1999
1106.00	7404708	7419158	597604	599064	7061900	7064208	17	95	1999
1107.00	7390168	7397358	597492	598948	7062052	7064308	17	95	1999
1108.00	7372408	7384868	597379	598836	7062017	7064380	17	95	1999
1109.00	7359718	7368088	597266	598721	7062122	7064450	17	95	1999
1110.00	7343198	7356098	597153	598608	7062174	7064507	17	95	1999
1111.00	7331278	7339088	597041	598493	7062233	7064581	17	95	1999
1112.00	7315248	7327248	596928	598380	7062321	7064665	17	95	1999
1113.00	7302528	7310578	596816	598264	7062493	7064723	17	95	1999
1114.00	7288538	7299088	596703	598152	7062449	7064799	17	95	1999
1115.00	7277058	7285388	596590	598036	7062517	7064838	17	95	1999
1116.00	7262788	7273078	596478	597922	7062613	7064952	17	95	1999
1117.00	7250648	7258518	596365	597809	7062730	7065031	17	95	1999
1118.00	7236078	7246168	596252	597695	7062751	7065082	17	95	1999
1119.00	7224738	7231878	596140	597581	7062867	7065182	17	95	1999



APPENDIX V  
WEEKLY REPORTS

**SANDER GEOPHYSICS LIMITED**

260 Hunt Club Road, Ottawa, Ontario, K1V 1C1 Canada

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**EXPLORATION**

**RESEARCH**

**INTERPRETATION**

LOCATION: Withhorse, Yukon	PRODUCTION THIS WEEK: 0 LKM
CLIENT: Prospector Intl Resources	TOTAL TO DATE: 0 LKM
TYPE OF SURVEY: HELI-MAG	TOTAL REMAINING: 1,000 LKM
TOTAL SIZE: 1000 km <sup>2</sup>	% COMPLETE: %

AIRCRAFT TYPE: BELL 206 JET RANGER III

REGISTRATION: C-GPGH

DAY	DD/MM	FLT#	FLT HRS	PROD. LKM	PILOT FLT TIME
					Souliere
MON	22/03		0	0	0
GEOMAG: WEATHER: REMARKS:					
TUE	23/03		0	0	0
GEOMAG: WEATHER: REMARKS:					
WED	24/03		0	0	0
GEOMAG: WEATHER: REMARKS: Equipment test in Ottawa.					
THU	25/03		0	0	0
GEOMAG: WEATHER: REMARKS: Equipment shipped to Whitehorse.					
FRI	26/03		0	0	0
GEOMAG: WEATHER: REMARKS:					
SAT	27/03		0	0	0
GEOMAG: WEATHER: Sunny. REMARKS: Bernard Desmons (geophysicist) and Time Cartwright (technician) arrived in Whitehorse.					
SUN	28/03		0	0	0
GEOMAG: WEATHER: Sunny. REMARKS: Survey equipment is installed in the helicopter.					
TOTALS			0	0	0

SUMMARY AND REMARKS: Mobilization for the survey started on Thursday. Survey equipment was installed in the helicopter and ground testing has begin.

**SGL WEEKLY PROGRESS REPORT (WEEK OF March 29 TO April 04, 1999)**

LOCATION: Withhorse-Mayo, Yukon	PRODUCTION THIS WEEK:	904 LKM
CLIENT: Prospector Intl Resources	TOTAL TO DATE:	904 LKM
TYPE OF SURVEY: HELI-MAG	TOTAL REMAINING:	187 LKM
TOTAL SIZE: 1091 km	% COMPLETE:	82.9 %

AIRCRAFT TYPE: BELL 206 JET RANGER III

REGISTRATION: C-GPGH

DAY	DD/MM	FLT#	FLT HRS	PROD. LKM	PILOT FLT TIME
					Souliere
MON	29/03	001	0.5	0	0.5
GEOMAG: WEATHER: Sunny. REMARKS: Flight test of survey equipment. Radar is OK. Mag is OK. Problems receiving Omnistar differential correction. New antenna ordered from Ottawa.					
TUE	30/03		0	0	0
GEOMAG: WEATHER: Sunny. REMARKS: Testing of equipment continue.					
WED	31/03		2.0	0	2.2
GEOMAG: WEATHER: Sunny. REMARKS: Received new antenna from Ottawa. Survey crew moved to Mayo.					
THU	01/04	002,003	4.0	37.5	4.2
GEOMAG: Unsettled. WEATHER: Mostly sunny, light snow in late afternoon. REMARKS: Radar test. Start of survey, control lines flown.					
FRI	02/04	004,005,006	8.7	198.1	8.9
GEOMAG: Quiet with unsettled period. WEATHER: Mostly sunny. REMARKS:					
SAT	03/04	007,008,009,010	8.2	296.9	8.4
GEOMAG: Quiet. WEATHER: Sunny. REMARKS:					
SUN	04/04	011,012,013,014	8.9	371.5	9.1
GEOMAG: Quiet. WEATHER: Sunny. REMARKS:					
TOTALS			32.3	904	33.3

**SUMMARY AND REMARKS:** The helicopter was ready to survey on time. Survey started on Thursday. Rugged terrain make for slow progress.

LOCATION: Withhorse-Mayo, Yukon	PRODUCTION THIS WEEK: 223 LKM
CLIENT: Prospector Intl Resources	TOTAL TO DATE: 1127 LKM
TYPE OF SURVEY: HELI-MAG	TOTAL REMAINING: 0 LKM
TOTAL SIZE: 1091 km	% COMPLETE: 100 %

AIRCRAFT TYPE: BELL 206 JET RANGER III

REGISTRATION: C-GPGH

DAY	DD/MM	FLT#	FLT HRS	PROD. LKM	PILOT FLT TIME
					Souliere
MON	05/04	015,016,017	5.0	223.2	5.2
GEOMAG: Quiet WEATHER: Sunny. REMARKS: Last day of survey. Lag test on line 1092.00. Survey crew moved back to Whitehorse.					
TUE	06/02		0	0	0
GEOMAG: WEATHER: Cloudy, snow. REMARKS: Equipment removed from helicopter. SGL crew left Whitehorse in the afternoon. Survey completed.					
WED	07/04		0	0	0
GEOMAG: WEATHER: REMARKS: Survey crew arrived in Ottawa.					
THU	08/04		0	0	0
GEOMAG: WEATHER: REMARKS:					
FRI	09/04		0	0	0
GEOMAG: WEATHER: REMARKS:					
SAT	10/04		0	0	0
GEOMAG: WEATHER: REMARKS:					
SUN	11/04		0	0	0
GEOMAG: WEATHER: REMARKS:					
TOTALS			5	223.2	5.2

SUMMARY AND REMARKS: The survey was completed on time on Monday afternoon. The crew left Mayo the same day. Demobilization was completed on Tuesday.



APPENDIX VI

FLIGHT LOG

**SANDER GEOPHYSICS LIMITED**

260 Hunt Club Road, Ottawa, Ontario, K1V 1C1 Canada

Phone: (613) 521-9626 Fax: (613) 521-0215 E-mail: info@sgl.com Website: www.sgl.com

**EXPLORATION**

**RESEARCH**

**INTERPRETATION**









# SANDER GEOPHYSICS FLIGHT LOG

PROJECT: Prospector Yukon 1999

FLIGHT NO.	DATE	FLIGHT START	FLIGHT END	AIRCRAFT	CREW	DISK NO.	FIRST FILE
004	April 2			C-GPEH	SS/TC		0925/753

NOTE SIGNIFICANT WEATHER CHANGE DURING FLIGHT IN "COMMENTS"	START	VISIBILITY	CLOUDS	WIND	PRECIP	TURBULENCE	BARO	TEMP
	STOP							

LINE NO.	DIRECTION	FWD/BCK	C	P	P/START DIST/FROM	P/STOP DIST/FROM	COMMENT
1093							1078
1092							1077
1091							1076
1090							1075
1089							1074
1088							1073
1087							1072
1086							1071
1085							1070
1084							1069
1083							1068
1082							
1081							
1080							
1079							

















# SANDER GEOPHYSICS FLIGHT LOG

PROJECT: Yukon 99

FLIGHT NO.	DATE	FLIGHT START	FLIGHT END	AIRCRAFT	CREW	DISK NO.	FIRST FILE
013	April 4			C-660H	SS/TC	SE-61	09451935

NOTE SIGNIFICANT WEATHER CHANGE DURING FLIGHT IN "COMMENTS"	START	VISIBILITY	CLOUDS	WIND	PRECIP	TURBULENCE	BARO	TEMP
	STOP		9220.	few	calm			

LINE NO.	DIRECTION	FWD/BCK	C	P	P/START DIST/FROM	P/STOP DIST/FROM	COMMENT
1001							1006.0
1002							1007.0
1003							1008.0
1004							1009.0
1005.0							1010.0
1005.1							1011.0
1006.1							1012.0
1007.1							
1008.1							
1009.1							
1010.1							
1011.1							
1012.1							
1013.1							
1014.1							



# SANDER GEOPHYSICS FLIGHT LOG

PROJECT: PROSP. VUKAN 99

FLIGHT NO.	DATE	FLIGHT START	FLIGHT END	AIRCRAFT	CREW	DISK NO.	FIRST FILE
<u>014</u>	<u>April 4</u>			<u>C-670H</u>	<u>SS/TC</u>	<u>SGU</u>	<u>09452242</u>

NOTE SIGNIFICANT WEATHER CHANGE DURING FLIGHT IN "COMMENTS"	START	VISIBILITY	CLOUDS	WIND	PRECIP	TURBULENCE	BARO	TEMP
	STOP		<u>good</u>	<u>low</u>	<u>calm</u>			

LINE NO.	DIRECTION	FWD/BCK	C	P	P/START DIST/FROM	P/STOP DIST/FROM	COMMENT
<u>1013</u>							
<u>1014</u>							
<u>1015</u>							
<u>1016</u>							
<u>1017</u>							
<u>1018</u>							
<u>1019</u>							
<u>1020</u>							
<u>1021</u>							
<u>1022</u>							
<u>1023</u>							
<u>1024</u>							
<u>1025</u>							
<u>1026</u>							
<u>1027</u>							
<u>1028</u>							
<u>1029</u>							
<u>1030</u>							
<u>1031</u>							
<u>1032</u>							
<u>1033</u>							

1033





<b>SANDER GEOPHYSICS FLIGHT LOG</b>	<b>PROJECT:</b> Yukon 99.
-------------------------------------	---------------------------

FLIGHT NO.	DATE	FLIGHT START	FLIGHT END	AIRCRAFT	CREW	DISK NO.	FIRST FILE
06	April 5			C-262H	SSTTC	SGL3	09S \$ A14

NOTE SIGNIFICANT WEATHER CHANGE DURING FLIGHT IN "COMMENTS"	START	VISIBILITY	CLOUDS	WIND	PRECIP	TURBULENCE	BARO	TEMP
			good.	few.	calm			
	STOP							

LINE NO.	DIRECTION	FWD/BCK	C	P	P/START DIST/FROM	P/STOP DIST/FROM	COMMENT
1082.1							1097
1083.1							1098
1084.1							1099
1085.1							1100
1086.1							1101
1087.1							
1088.1							
1089.1							
1090.1							
1091.1							
1092.1							
1093.1							
1094							
1095							
1096							



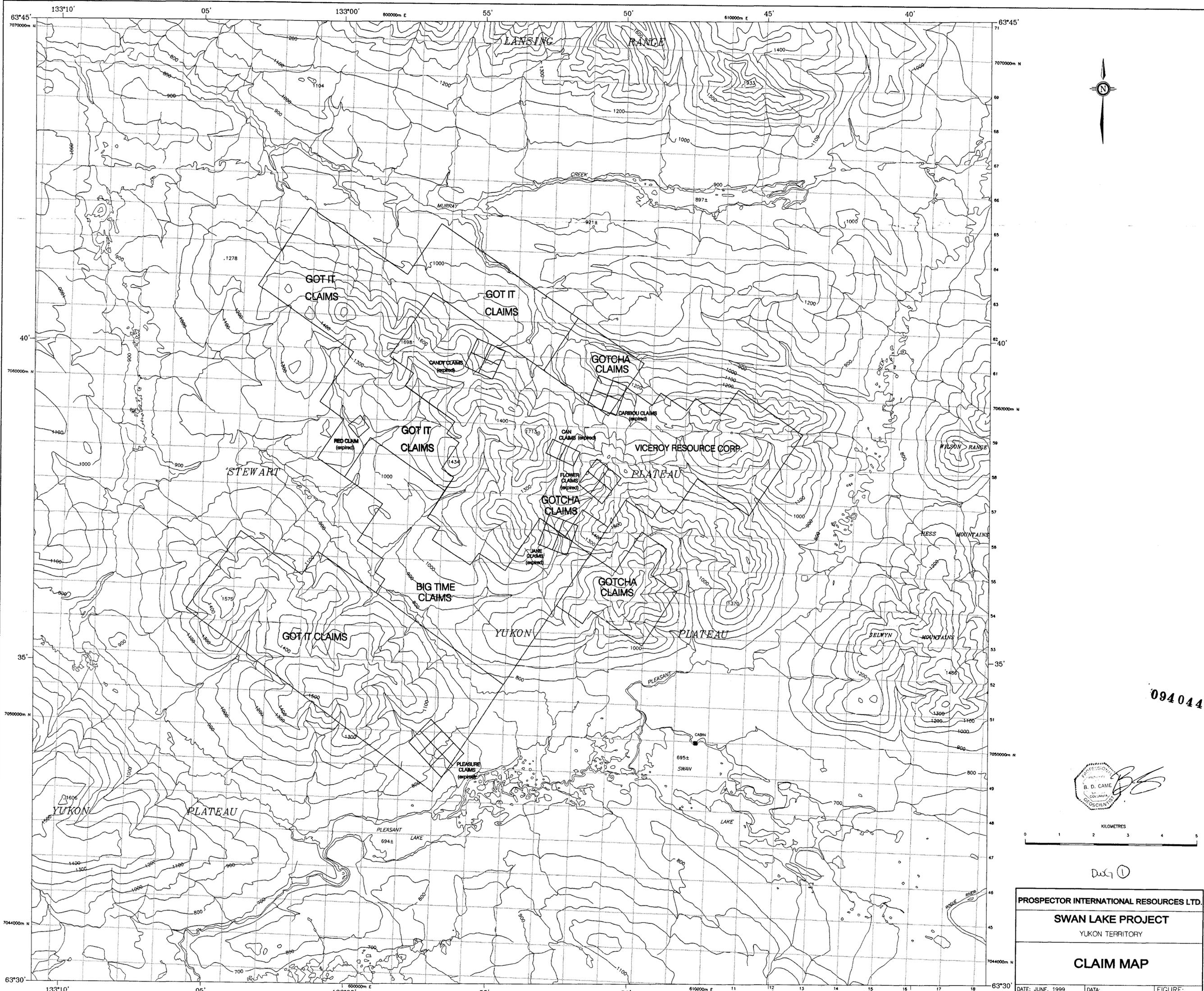
# SANDER GEOPHYSICS FLIGHT LOG

PROJECT: Prospect Yukon 90

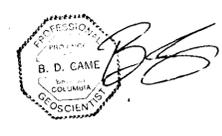
FLIGHT NO.	DATE	FLIGHT START	FLIGHT END	AIRCRAFT	CREW	DISK NO.	FIRST FILE
07	April 5			C-660H	SS/TC	SGL3	09S\$19S3

NOTE SIGNIFICANT WEATHER CHANGE DURING FLIGHT IN "COMMENTS"	START	VISIBILITY	CLOUDS	WIND	PRECIP	TURBULENCE	BARO	TEMP
	STOP		ill	Few	calm	✓		

LINE NO.	DIRECTION	FWD/BCK	C	P	P/START DIST/FROM	P/STOP DIST/FROM	COMMENT
1119			✓				1101
1118			✓				1103
1117			✓				1102
1116			✓				1092 } lag test.
1115			✓				1092
1114			✓				
1113			✓				
1112			✓				
1111			✓				
1110			✓				
1109			✓				
1108			✓				
1107			✓				
1106			✓				
1105			✓				

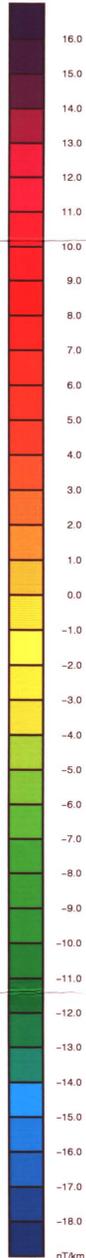
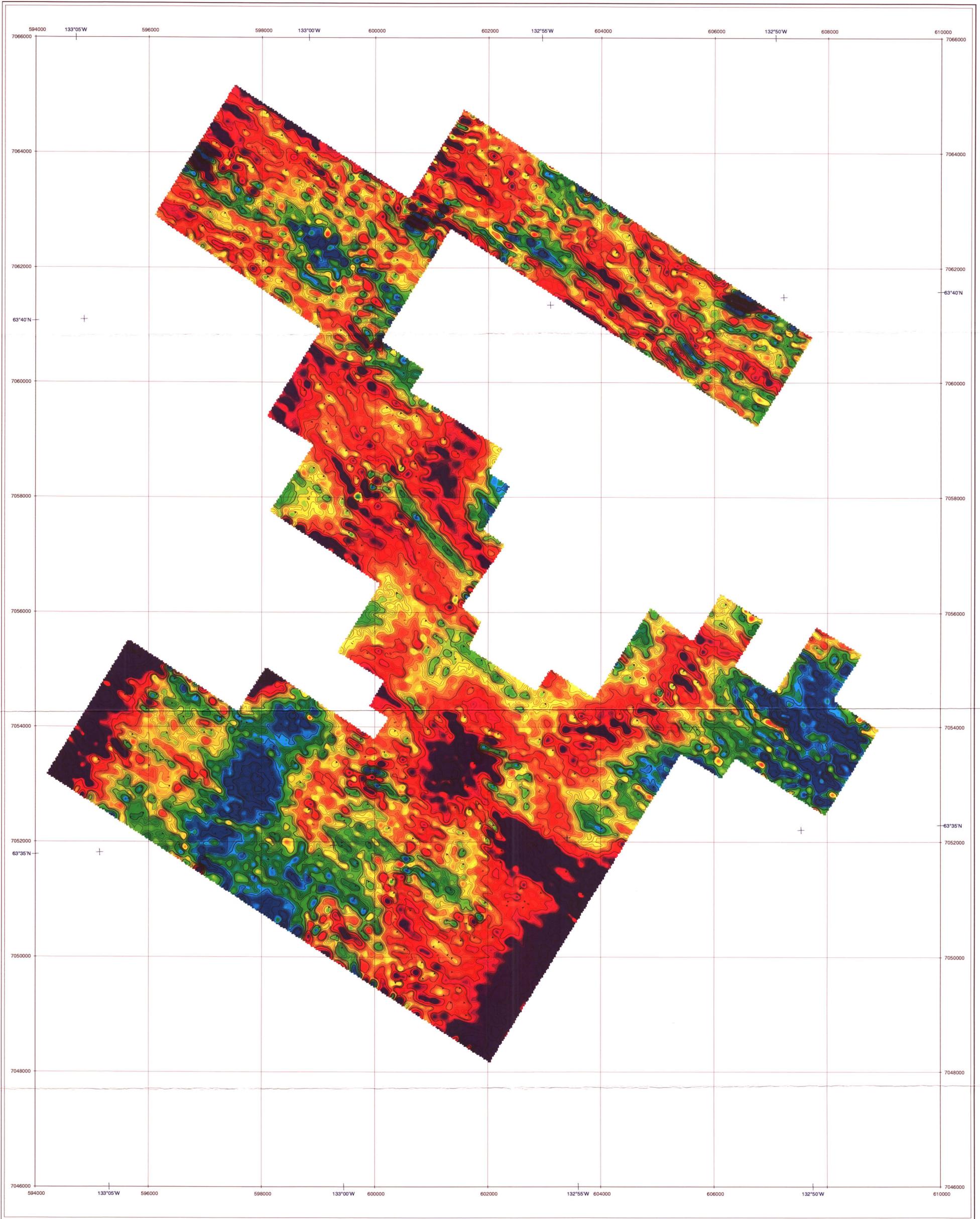


094044



Dwg 1

PROSPECTOR INTERNATIONAL RESOURCES LTD.		
SWAN LAKE PROJECT		
YUKON TERRITORY		
<b>CLAIM MAP</b>		
DATE: JUNE, 1999	DATA:	FIGURE: 2
SCALE: 1:50000	FILE: swan_clm50.dwg	



**First Vertical Derivative  
of the  
Total Magnetic Intensity  
(nT/km)**

2 ..... ~~~~~  
10 ..... ~~~~~  
Depression ..... ~~~~~

094044  
**Prospector International  
Resources Inc.**

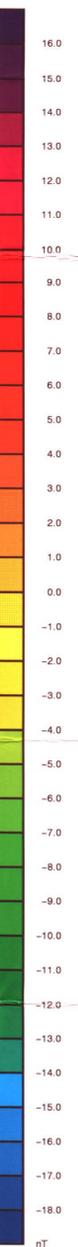
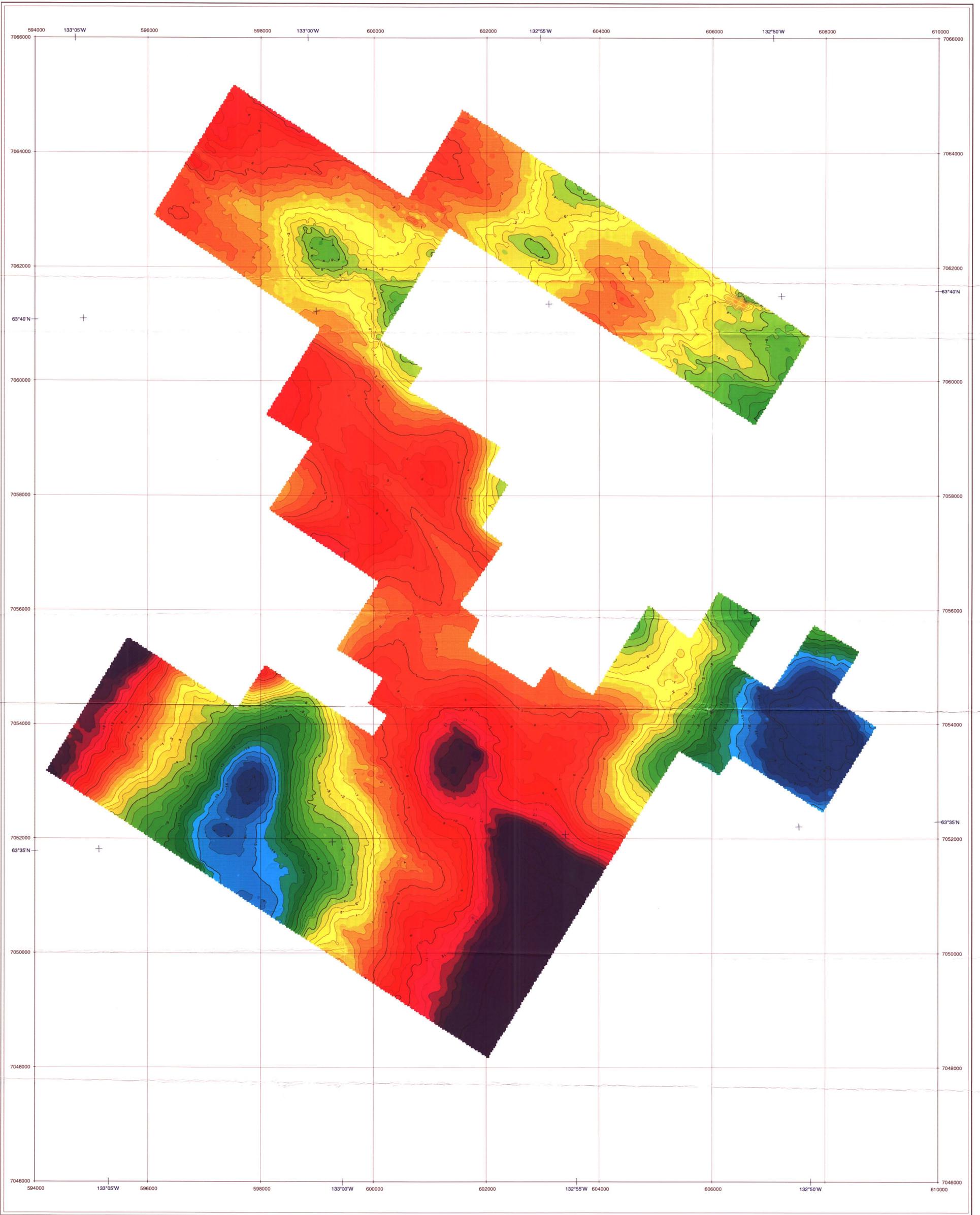
High Resolution Aeromagnetic Survey  
**Stewart Range, Yukon Territory**  
Over the Big Time, Got It and Gotcha Claims



Scale 1:30 000  
metres 500 0 1000 2000 metres

Primary Line Spacing ..... 135 m  
Primary Line Direction ..... 45°  
Control Line Spacing ..... 5000 m  
Control Line Direction ..... 135°  
Aircraft Altitude ..... 90 m AGL  
Magnetometer Sensor ..... Geometrics G-822A, cesium vapour  
Magnetometer Sensitivity ..... 0.01 nT  
Aircraft Positioning ..... Differential GPS  
GPS Receiver ..... NovAtel 3951R, 12 channel  
Aircraft ..... Bell 206 Jet Ranger III, C-GPGH  
Dates Flown ..... April 1 to April 5, 1999  
IGRF Correction ..... As of date flown  
Mean IGRF Correction ..... 38142.51 nT  
Magnetic Inclination at 63°00'N, 135°00'W ..... 78.1°  
Magnetic Declination at 63°00'N, 135°00'W ..... 28.9°  
Grid Cell Size ..... 25 m  
Datum ..... NAD27-CAN  
UTM Zone ..... 8N





**Total Magnetic Intensity (nT)**

094044 1 ..... ~~~~~

5 ..... ~~~~~

Depression ..... ~~~~~

*094044*

**Prospector International Resources Inc.**

High Resolution Aeromagnetic Survey  
**Stewart Range, Yukon Territory**  
 Over the Big Time, Got It and Gotcha Claims



Scale 1 : 30 000

metres 500 0 1000 2000 metres

Primary Line Spacing ..... 135 m  
 Primary Line Direction ..... 45°  
 Control Line Spacing ..... 5000 m  
 Control Line Direction ..... 135°  
 Aircraft Altitude ..... 90 m AGL  
 Magnetometer Sensor ..... Geometrics G-822A, cesium vapour  
 Magnetometer Sensitivity ..... 0.01 nT  
 Aircraft Positioning ..... Differential GPS  
 GPS Receiver ..... NovAtel 3951R, 12 channel  
 Aircraft ..... Bell 206 Jet Ranger III, C-GPCH  
 Dates Flown ..... April 1 to April 5, 1999  
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 Mean IGRF Correction ..... 58142.51 nT  
 Magnetic Inclination at 63°00'N, 135°00'W ..... 78.1°  
 Magnetic Declination at 63°00'N, 135°00'W ..... 28.5°  
 Grid Cell Size ..... 25 m  
 Datum ..... NAD82-CAN  
 UTM Zone ..... 8N



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